PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Oregon State Hospital – North Campus
2575 Bittern St. NE, 2575-2600 Center St. NE
Salem, OR 97301

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Salem, Oregon

EXECUTIVE SUMMARY

Stantec Consulting Services Inc. (Stantec) has completed a Phase I Environmental Site Assessment (ESA) of the Oregon Department of Administrative Services (DAS) property known as the Oregon State Hospital (OSH) North Campus (OSH-NC) located at 2575 Bittern Street NE and 2575-2600 Center Street NE in Salem, OR ("Site" or "Facility"). The Phase I ESA was conducted in general conformance with ASTM E 1527-05 on behalf of Leland Consulting Group (Leland) and Oregon DAS as part of closure of the former psychiatric/medical Facility and in preparation for potential reuse of the Site.

The Site consists of approximately 47.37 acres of land developed with seven buildings, an interconnecting underground tunnel system, associated support structures (mechanical equipment/rooms, backup generators, and sheds/storage areas), roadways, parking lots, parks and lawns/landscaped areas. Formerly occupied as the northern portion of a State psychiatric facility between approximately 1888 and 2012, two of the buildings (Dome Building and Yaquina Hall) are currently occupied as offices. The remainder of the campus is generally vacant.

Historic use of the Site and adjacent properties is summarized as follows:

1890-1911: The majority of the "Oregon State Insane Asylum" buildings were located south of present day Center Street NE, which was named "Asylum Avenue." A building described as "Orphans Home" appears to have been located on the western extent of the Site (west of the current Dome Building). The southern portion of the Site is depicted as having three dwellings in the vicinity of the current Breitenbush Hall. The remainder of the Site appears to have been used for agricultural (orchards) or undeveloped/greenspace.

1912-1946: The Dome Building was constructed in 1912. A garage with capacity for 30 cars was present northeast of the Dome Building. The central and eastern portions of the Site appear to have been used for agricultural/poultry operations. The "Salem Hospital" was present west of the Site. The majority of the residential development neighboring the north and east sides of the Site appears to have occurred during this period.

1947-1970: The remainder of the existing buildings and tunnel system were constructed. The Site continued to develop as a psychiatric hospital. Four additional structures were present on the west side of the Site: "OSH Employees Lodgings" (west of the Dome Building), a U-shaped building described as "Griffith Nurses Home" (west of Yaquina Hall), and two garage buildings north of the "Griffith Nurses Home." The four structures were eventually razed during this period.

1971 – 2010: The layouts of the Site and adjacent properties were similar to present-day conditions. The Site was used as a psychiatric hospital with separate wards for youth, geriatric, adult and corrections patients.

2011 – Present: The Dome Building and Yaquina Hall remain occupied as office space. The remainder of the former psychiatric hospital has been vacated, with portions of the buildings presently used for storage of equipment associated with the former hospital.

The Site was identified approximately 21 times in environmental databases searched as part of the Phase I ESA. The Site reconnaissance and review of historical records, environmental databases and other sources of information identified the following *recognized environmental conditions (RECs)* for the Site:

(1.) Although an asbestos survey was not performed as part of the scope of work for the Phase I ESA, based on a review of previous reports and observations made during the Site visit, significant quantities of asbestos-containing materials (ACMs) are present throughout the buildings and tunnels at the Site. The deteriorating condition of the ACMs present in several areas of the Site, including the accumulation of dusts in tunnels and crawl spaces and documented contamination of soil in some areas, is considered a REC. Previous reports have recommended restricted access in certain areas of the Site until repair/cleanup is completed. It is likely that significant abatement of other ACMs not considered a concern in their current state will be necessary during major maintenance, renovation or demolition activities conducted at the Site.

(2.) Leaking Underground Storage Tank (LUST) #24-99-4050/Existing 2,000-Gallon Diesel UST: The LUST activity appears to be related to a 2,000-gallon UST formerly located in the vicinity of the existing 2,000-gallon diesel UST, located east of Eola Hall. Based on records provided by the Salem Fire Department, upon removal of the former UST in February 1999, it appears as though soil contamination was identified. The LUST activity was granted No Further Action (NFA) status in 2000, however the presence of an existing UST in this location is considered a REC.

(3.) LUST #24-89-4017: This activity is related to a documented release from a former 250-gallon leaded gasoline UST situated south of the west entrance to McKenzie Hall in 1989. The release resulted in the presence of free floating gasoline on the groundwater and soil contamination. Subsequent assessment and remediation activities were conducted between 1989 and 1999, and the activity was granted NFA status in 2000. However, due to impacts left in place in groundwater, a limitation was placed on future use or development of shallow groundwater in the vicinity of the impacts. Impacts, if still present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of this area of the Site.

(4.) Environmental Cleanup Site Information System (ECSI) #1984: This activity is related to the documented release of an estimated 140 gallons of hydraulic oil from the west elevator in Yaquina Hall in 1996. Groundwater was sampled for three quarters and the concentrations detected were reportedly below groundwater cleanup standards. This activity was granted NFA status in 1997, however, it is suspected hydraulic oil remains beneath the building, therefore this activity is considered a REC.

Several adjoining or nearby properties were identified in the environmental databases searched as part of the Phase I ESA, however, given the location and/or other associated conditions regarding those listings, they were not considered RECs for the Site.

The following *other findings of potential environmental concern* were identified:

(1.) Miscellaneous hazardous materials and/or petroleum products were observed throughout the buildings. In addition, the majority of the chemicals and materials formerly used during the Facility's long-term uses as a psychiatric/medical facility (including a pharmacy, X-Ray equipment and two dental areas) had been removed prior to the date of the Site visit. A list of chemicals formerly used at the Facility was not identified during the Phase I ESA, with the exception of the Hazardous Substance Information Survey (HSIS) information provided, which listed the following substances as having been present at the Site: glycol ether, DOWANOL DB (pesticide), sodium hypochlorite, sulfuric acid, propane and petroleum hydrocarbons. Numerous floor drains, sinks and sumps were present throughout the equipment and storage areas in the basement and tunnel areas of the buildings. The floor areas surrounding some of the floor drains, sumps and other surfaces had unidentified staining. It is possible that historical releases of hazardous substances and/or petroleum products may have occurred in these areas in the past, resulting in impacts to soil and/or groundwater beneath structures and other areas across the Site. Impacts, if present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of the Site.

(2.) Electrical rooms marked "High Voltage" throughout the basements and tunnels were inaccessible during the Site visit. As stated in a previous report: "the main electrical power distribution to the campus is served by PGE from a primary line through a series of step-down power transformers. Most of the transformers are located in the tunnel system and are maintained by PGE. It is not known what condition the transformers are in and to what level they have been maintained". The Site was reportedly investigated in 1994 for "Section 6 PCB Federal". No violations were reported, however, the presence of transformers throughout the basement and tunnel system, which are of unknown current condition and contain hydraulic oil with the potential to contain poly-chlorinated biphenyl's (PCBs), is of potential environmental concern.

(3.) Due to the construction dates of the buildings (circa 1912-1956), lead-based paint (LBP) is anticipated to be present at the Site. It is likely that abatement of LBP will be necessary during major maintenance, renovation or demolition activities conducted at the Site.

(4.) Elevator equipment rooms in the basements of Breitenbush Hall and the Dome Building appear to have oil staining on floor areas outside of equipment containment structures. Based on the age of the buildings, it is possible that releases to soil and/or groundwater beneath these areas may have occurred. Impacts, if present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of the Site.

(5.) LUST #24-91-4255: This activity is related to a heating oil or diesel fuel release reported on August 28, 1991. There is no reference to the volume released or specific location, however, the release was reported by a "contractor working on the generator tank." This activity was granted administrative closure in 2000, however, given the uncertainty of the location and lack of details regarding the assessment or cleanup, this activity is of potential environmental concern.

(6.) It appears as though the shed located north of the east yard of McKenzie Hall, may be the location of a 190-foot deep irrigation well (known as Well No. 4). It is unknown whether this well remains active or has been abandoned. If it is active, it may need to be properly abandoned in conjunction with redevelopment of the Site.

(7.) Prior to its development as a psychiatric/medical facility, portions of the Site were used for agricultural purposes including an orchard and large poultry farm. Due to the age and type of agricultural activities that occurred at the Site, the potential for the presence of pesticides, herbicides, fertilizers or other agricultural chemicals to remain in soil or groundwater in quantities of concern is considered to be low.

(8.) At least eight substantial (and several other minor) historic structures were formerly present at various locations across the Site. It is likely that fill materials were imported in conjunction with filling subsurface portions of the former structures. Fill materials, as well as subsurface portions of the historic structures (if left in place) may be encountered in conjunction with redevelopment of the Site.

(9.) Salem Regional Rehabilitation Center/Hospital: This facility neighbors the Site on the west side of 23rd Street NE. A LUST was identified in 1997 and the cleanup appears to be ongoing. The UST listed at the facility appears to have been decommissioned. A 200-499-gallon diesel fuel AST appears to be present. Due to the lack of information provided, the potential for this facility to have impacted the western edge of the Site is of potential environmental concern.

(10.) Center Street Auto SVC and Repair/Spartan Station/Less Arco Service Station: This facility neighbors the Site on the east side of Park Avenue NE. A LUST was identified in 1990 and the cleanup appears to be ongoing. Five USTs listed at the facility appear to have been decommissioned. The facility appears to have been an auto service/repair facility from at least 1961 to 2012. Due to the lack of information provided, the potential for this facility to have impacted the southeastern corner of the Site is of potential environmental concern.

The preceding summary is intended for informational purposes only. The following sections provide detail.

1.0 PROJECT METHODOLOGY

1.1 INTRODUCTION

Stantec has completed a Phase I Environmental Site Assessment (ESA) of the Oregon Department of Administrative Services (DAS) property known as the Oregon State Hospital (OSH) North Campus (OSH-NC) located at 2575 Bittern Street NE and 2575-2600 Center Street NE in Salem, OR (hereinafter referred to as the "Site" or "Facility"). The Phase I ESA was conducted in general conformance with ASTM E 1527-05 on behalf of Oregon DAS as part of closure of the former psychiatric/medical Facility and in preparation for potential reuse of the Site.

1.2 SCOPE

The objective of this ESA was to perform appropriate inquiry into the past ownership and uses of the Site consistent with good commercial or customary practice as outlined by the ASTM in Standard Practice for ESA: Phase I ESA Process, Designation E1527-05. The purpose of this Phase I ESA was to identify, to the extent feasible, adverse environmental conditions including recognized environmental conditions (RECs) of the Site that potentially have and/or may cause an adverse environmental impact to the Site. The project conforms to standards established in 2005 by ASTM E1527-05, as it conforms to definitions and methodology of "all appropriate inquiry" as stipulated by the United States Environmental Protection Agency (EPA) in 40 CFR Part 312. The term REC is defined by ASTM E1527-05 as:

> The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum product into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws.

The term does not include *de minimis* conditions, which generally do not present a material risk to human health and would not likely be subject to enforcement action if brought to the attention of governmental agencies.

This Phase I ESA was conducted in accordance with Stantec's contract with Leland Consulting Group (Leland) dated January 21, 2013 and authorized on February 12, 2013. Each addressee of this Phase I ESA is bound by the terms and conditions of the proposal as if it was the original recipient of the proposal. Each addressee agrees to indemnify, defend and hold harmless Stantec from and against any and all third party claims arising from the addressee's use of or reliance on this Phase I ESA. This Phase I ESA is also subject to the limitations provided in Section 10.0.

This Phase I ESA consisted of five primary components: 1) historical information review, 2) regulatory agency records review, 3) site reconnaissance, 4) interviews, and 5) preparation of this report. The following tasks were completed as part of this assessment:

- Review of historical information sources including reasonably ascertainable aerial photographs, Sanborn maps, City Directories, and United States Geologic Survey (USGS) topographic maps to ascertain general uses of the Site and adjacent properties dating back to 1888 (the earliest reasonably ascertainable historical site use information record).

- Acquisition and review of a regulatory agency database search report for ASTM E 1527-05 specified standard environmental record sources and search distances.

- Interviews with knowledgeable persons regarding current and past uses of the Site, and whether RECs may exist at the Site.

- Review of reasonably ascertainable local, state, and federal government agency files for the Site and nearby properties which may have potential to adversely impact the Site.

- Pre-assessment review of documents made available to Stantec, as well as documents readily available online for the Site.

- Reconnaissance of the Site.

- Review of the USGS 7.5-minute topographic map, titled Salem West, (1986, revised from 1969) that depicts the area of the Site, to assess the physical setting.

- Preparation of this Phase I ESA report.

The scope of work did not include an assessment for historical overall environmental regulatory compliance at the Site or sampling and analysis of environmental media. Stantec was not contracted to perform any independent evaluation of the purchase or lease price of the Site and its relationship to current fair market value. The conclusions presented in this Phase I ESA Report are professional opinions based on the data described herein. The opinions are subject to the limitations described in Section 10.0.

1.3 EXCEPTIONS TO THE SCOPE OF WORK AND CONDITIONS LIMITING THE SITE RECONNAISSANCE

During Site reconnaissance, Stantec attempted to view as many accessible spaces as possible, however, due to locked doors and other access restrictions, we were unable to inspect all areas of the Site. A list of some of the spaces not inspected by Stantec includes:

- Roofs of Santiam Hall (Building #34), McKenzie Hall (Building # 40), Yaquina Hall (Building #33) and the Activities Center (Building #77);
- The upper crawl space/attic in Yaquina Hall;
- Electrical rooms marked “High Voltage” throughout the basements and tunnel system.
- The large “Rainbow Room” located in the basement of McKenzie Hall;
- The communications center located in the basement of Yaquina Hall;
- Numerous other locked rooms in the basements and tunnel system;
- Various other locked rooms throughout the above-ground floors of the buildings;

- Utility structures located west of the Dome Building and near the northwest corner of the Site; and,
- The shed located north of McKenzie Hall.

Weather conditions during the visit to the Site were overcast and cold and included periods of overnight rain and/or significant condensation. De minimis surface staining (if present) might not be obvious or visible under such conditions. This condition is not expected to change the conclusions of this report.

1.4 PREVIOUS ENVIRONMENTAL WORK

Stantec reviewed the following previous environmental reports for the Site:

- Summary of Asbestos and Hard Plaster Surveys, Unknown Author, 2007 (provided in Appendix E); and,
- Several Reports Contained in ODEQ Files Related to Previous Assessment and Remediation Activities, Multiple Authors and Dates (provided in Appendix C).

Information contained within the documents is used throughout this Phase I ESA report.

According to Oregon DAS, a Phase I ESA was reportedly completed by Hall-Kimbrell circa 2006 or 2007, however, a copy was not located.

1.5 CLIENT-PROVIDED DOCUMENTS

Stantec received copies of several historic environmental documents provided by Leland and Oregon DAS, including:

- “Framework Master Plan Phase I Report” completed by KMD Architects and Planners, PC, 2005;
- National Register of Historic Places, Registration Form, 2008;
- Summary of Asbestos and Hard Plaster Surveys, Unknown Author, 2007;
- Various Figures; and,
- Phase I ESA User’s Questionnaire, Oregon DAS, 2013.

Select portions of these documents are provided in Appendix E and the Figures Section. Information contained within the documents is used throughout this Phase I ESA report.

2.0 PROPERTY DESCRIPTION

A description of the location and characteristics of the Site and the surrounding area is presented in the following subsections.

2.1 SITE LOCATION

Site Address:
2575 Bittern Street NE (Yaquina Hall); 2575-2600 Center Street NE (Remainder of Buildings)
Salem, Oregon 97301
(Marion County)

Parcel Number: R76562

Key Contacts:
Mr. Darrin Brightman, AICP, Planner 3 - Real Estate Services
Oregon DAS (Client Manager)
503-373-7065

Mr. Meril Craig, Services/Repair Supervisor
Oregon DAS (Site Supervisor)
503-932-9096

Mr. John Hamilton, OSH
Listed as contact for USTs, LUSTs, RCRA-CESQ and OR Manifest.
503-945-2924

Figures depicting the Site location and general layout are provided in the Figures Section (between the text and Appendix A). Photographs of the Site are presented in Appendix A.

2.2 GENERAL SITE DESCRIPTION AND USE

Site reconnaissance was performed on February 19 and 20, 2013 by Stantec personnel. The Site consists of a single parcel of land:

> R26174: 47.37 acres of land developed with seven buildings, an interconnecting underground tunnel system, and associated smaller support structures (mechanical equipment/rooms, sheds/storage areas/rooms), roadways, parking lots, parks and lawns/landscaped areas. Formerly occupied as a State psychiatric facility, two of the buildings (Dome Building and Yaquina Hall) are currently occupied as offices by the Oregon Department of Corrections (DOC) and Department of Human Services (DHS), respectively. The remainder of the campus is generally vacant, with portions of the buildings used for storage of equipment associated with the former psychiatric facility.

Building Name/No.	Year Built	Const. Sq.Ft.	Floors/Levels	Type of Construction	Historic Usage	Current Usage
McKenzie Hall 40	1948	68,706	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof : Tile	Health, Hospital, Clinic (Children's Ward)	Generally vacant (since approx. 2009); Hallways/ rooms used for storage.
Eola Hall 50	1955	143,448	6 Including Basement	Bldg Frame: Concrete Ext. Wall: Cast in Place Concrete Roof: Other	Health, Hospital, Clinic (Higher security patients)	Vacant (since approx. August 2011)
Breitenbush Hall 35	1948	110,301	4 2 Floors, Basement, Partial 3rd Floor	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Built up Single Ply	Health, Hospital, Clinic, Pharmacy, Medical Laboratory	Vacant (since approx. 2011)
Santiam Hall 34	1951	57,348	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Composition Shingles	Health, Hospital, Clinic (Geriatric Ward), Dental and X-Ray Dept.	Vacant (since approx. March 2012)
Yaquina Hall (MHDDSD) 33	1948	51,720	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Other	Office, Nursing, Admin	Office (occupied by Dept. of Human Services)
Dome Building 36	1912	70,052	4 Including Basement	Bldg Frame: Masonry Ext. Wall: Masonry Roof: Other	Office, Dental Services, Hospital Admin	Office (occupied by Dept. of Corrections)
Activities Center 77	1956	5,600	1	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Built up Single Ply	Sports, Recreational (A gym)	Vacant (since approx. August 2011)

2.3 ADJACENT AND SURROUNDING LAND USE

As part of Stantec's reconnaissance, visual observation of properties adjoining the Site was conducted. The observations were made from the Site or from public thoroughfares. Properties adjacent to the Site are depicted on Figure 2 and included:

- North – D Street NE is located north of and adjacent to the Site. Residential homes are located on the north side of D Street NE in the vicinity of the Site.

- South – Center Street NE is located south of and adjacent to the Site. The recently renovated Oregon State Hospital South Campus (OSH-SC), an active psychiatric facility is located on the south side of Center Street NE in the vicinity of the Site.
- East – Park Avenue NE is located east of the Site. Residential homes are located on the majority of the east side of Park Avenue NE in the vicinity of the Site. A historic auto repair facility (2903 Center Street NE) is located on the northeast corner of the intersection of Park Avenue NE and Center Street NE.
- West – 23rd Street NE is located west of the Site. The Salem Hospital Regional Rehab Center (2561 Center Street NE) and associated medical/health services buildings are located along 23rd Street NE in the vicinity of the Site.

2.4 SITE OPERATIONS

At the time of the Site reconnaissance, two of the former State psychiatric facility buildings (Dome Building and Yaquina Hall) were occupied as offices by the Oregon Department of Corrections and Department of Human Services, respectively. The remainder of the campus was generally vacant, with portions of the buildings used for storage of equipment associated with the former psychiatric facility.

2.5 PROPERTY SIZE

The Site consists of a single parcel of land totaling approximately 47.37 acres.

2.6 CONSTRUCTION DATES/BUILDING MATERIALS/PROPERTY CONDITION ASSESSMENTS

According to files provided by Leland and Oregon DAS (and summarized in the Table in Section 2.2), the construction of the major existing buildings on the OSH-NC appears to have been completed between 1912 (Dome Building) and 1955-56 (Eola Hall/Activities Center). As described in Section 4.0, several historic structures appear to have been formerly located at the Site, including but not limited to the following:

- A former building described as “Orphans Home” and “OSH Employees Lodgings” appears to have been located on the western extent of the Site (west of the Dome Building) between at least 1888 and 1955.
- Three former residential structures were present in the vicinity of the current Breitenbush Hall between at least 1895 and 1939.
- A garage with capacity for 30 cars (and an earth floor) was present northeast of the Dome Building in 1926.
- Several small structures were present on the central and eastern portions of the Site in 1926. The buildings were associated with agricultural (poultry) activities.
- A former building described as “Griffith Nurses Home” was located west of the present day Yaquina Hall building between at least 1950 and 1970. The tunnel system was connected to this building, and the surface portion of the tunnel is still evident (see Photo 29 in the Dome Building Photos, provided in Appendix A). Two garage buildings (capacity 15 cars) were present north of the “Griffith Nurses Home.”

As part of the "Framework Master Plan Phase I Report" (KMD Architects and Planners, PC, 2005), a Site and Facilities Analysis was completed for both the Site and the OSH-SC. Excerpts are provided in Appendix E. "Facilities Assessment" forms are provided for all of the buildings on the Site except Yaquina Hall (Building #33). Some of the key findings of the report are as follows:

- "The presence of lead and asbestos, as reported by the Physical Plant Director, raises significant issues of soil and building contamination." The Breitenbush, Dome and McKenzie buildings were noted as having vinyl asbestos tile;
- Roof leaks are common and occur in buildings occupied by patients. Although mold and mildew were described as being an issue within the buildings at the OSH-SC, they were not described for the buildings at the Site;
- Roof conditions vary from "recently replaced" (McKenzie Hall/Building #40) to "needing replacement" (Santiam Hall/Building #34);
- Eola Hall/Building #50 is the only building on campus with an integrated heating and cooling system;
- In general the structural condition of the buildings is good, however, none of the buildings currently meet seismic code requirements;
- The main electrical power distribution to the campus is served by PGE from a primary line through a series of step-down power transformers. Most of the transformers are located in the tunnel system and are maintained by PGE. It is not known what condition the transformers are in and to what level they have been maintained;
- Most of the building interior lighting is fluorescent fixtures. The fixtures use magnetic ballasts. There are still incandescent lighting fixtures in some areas of the hospital; and,
- The main distribution frame room (for the campus-wide data network system) is located in the basement of Yaquina Hall (Building #33).

Current layouts of the buildings, as observed during the Site reconnaissance, are described in Section 5.2.

2.7 TENANTS

Two of the buildings (Dome Building and Yaquina Hall) are currently occupied as office space by the Oregon Department of Corrections (DOC) and Department of Human Services (DHS), respectively. The remainder of the campus is generally vacant, with portions of the buildings used for storage of equipment associated with the former psychiatric facility.

2.8 POTABLE WATER SUPPLY

Potable water is provided to the Site by the City of Salem, however, as indicated in the document "Facility Assessment – DHS-NC" (provided in Appendix E): "Please note that the DHS-NC property is located in an 'island' outside of the City of Salem's Urban Services Area. This means that the City of Salem is not responsible for ensuring adequate water, sewer, and storm sewer capacity for this property. We have investigated with the City of Salem, and note that the redevelopment of the Oregon State Hospital (i.e. – OSH-SC) has brought with it substantial reconstruction of private utilities and potable water infrastructure in Center Street."

2.9 SANITARY SEWER/SEPTIC SYSTEM

As indicated in the document "Facility Assessment – DHS-NC" (provided in Appendix E):

- The OSH-NC property is currently on a shared private sanitary sewer system with the Oregon State Hospital (i.e. – OSH-SC), a condition not permitted under current code, and which cannot persist when the property is redeveloped;
- A 2,600 LF public sanitary sewer main will need to be constructed from the southwest corner of the DHS-NC property to the nearest public sewer interceptor with adequate capacity; and,
- Some downstream storm sewer improvements may be necessary, depending upon development.

No evidence of a septic system on the Site was identified during completion of this Phase I ESA. However, it is considered likely that prior to the availability of municipal sewer services the Facility would have been served by on-site septic systems.

2.10 ELECTRICITY AND NATURAL GAS

Electricity is supplied by PGE and natural gas is reportedly supplied by North West Natural Gas. Natural gas is used at the Site for heating and other operations.

3.0 PHYSIOGRAPHIC FEATURES

A Site visit was conducted on February 19 and 20, 2013. The Site building and adjoining areas were observed by Stantec personnel. Stantec's understanding of subsurface conditions in the vicinity of the Site is based on observations during the Site visit and review of available documentation regarding regional and local subsurface conditions.

3.1 TOPOGRAPHY

The U.S. Geological Survey (USGS) 7.5-minute topographic map, titled Salem West, (1986) was reviewed to identify physical features in the vicinity of the Site. The Site itself is relatively flat. Topography in the vicinity of the Site generally slopes downward to the west-southwest. The Site is at an elevation of approximately 211 feet above mean sea level (msl).

3.2 SURFACE WATER AND FLOOD ZONE

Surface Water: It appears as though the nearest surface water body is Mill Creek located approximately 0.75 miles southwest of the Site. The nearest major surface water body is the Willamette River, located approximately 2 miles west of the Site.

Storm water catch basins are located throughout paved and grassed areas of the Site.

Flood Zone/Wetlands: According to the FEMA Flood Zone information provided in the Environmental Data Resources (EDR) Radius Map™ Report with Geocheck© (provided in Appendix D), the Site is not located within a flood plain or wetland area.

3.3 REGIONAL AND LOCAL GEOLOGY

According to the information provided in the EDR Radius Map™ Report with Geocheck© (provided in Appendix D), nearby native soils are likely of the "Woodburn" or "Amity" soil component type, with near-surface geology primarily consisting of silt loam. Based on a review of previous environmental reports (provided in Appendix C), near surface soils were classified as silts to a depth of approximately 30 feet below ground surface (bgs), underlain by sands and gravels.

3.4 HYDROGEOLOGY

GW Elevation: Based on previous environmental reports (provided in Appendix C), the depth to groundwater is anticipated to be between 10 to 25 feet bgs.

GW Flow Direction: The EDR report indicates that topographic surface elevation decreases towards the west-southwest. The localized ground

topography suggests that groundwater flow is likely towards the west. However, based on the environmental reports (provided in Appendix C), it appears that shallow groundwater flow is variable across the Site. Shallow groundwater was reported to flow towards the north in the vicinity of Yaquina Hall and was reported as flowing to the southwest in the vicinity of McKenzie Hall (located adjacent to Yaquina Hall).

4.0 HISTORICAL USE INFORMATION

The following is a list of historical Site use information sources reviewed during this assessment.

Aerial Photographs:

Stantec reviewed aerial photographs of the Site and vicinity from the years 1955, 1967, 1970, 1975, 1980, 1984, 1994, 2000, 2005, 2006, 2009 and 2011 that were acquired from EDR. Copies of the aerial photographs reviewed are provided in Appendix B. The following observations were made:

1955: The Site appears to be developed with five of the existing seven major buildings (Santiam Hall, Breitenbush Hall, McKenzie Hall, Yaquina Hall, and the Dome Building). Three former buildings (one U-shaped and two rectangular) appear to be located to the west and northwest of Yaquina Hall. One former building appears to be located near the western extent of the Site west of the Dome Building. A small structure appears to be present near the south end of the existing Eola Hall building, and Eola Hall and adjacent features appear to be under construction. 25th Street NE (an interior road orientated north/south near the center of the Site) does not appear to extend north of McKenzie Hall). 23rd Street NE (the current western boundary of the Site) does not appear to have been constructed. Adjacent properties to the north and east of the Site appear to be developed with residential structures. Adjacent properties to the west appear partially developed for commercial/institutional use. The adjacent property to the south appears to be developed with structures consistent with the known historic layout of the OSH-SC.

1967: The construction of the existing Eola Hall building appears to have been completed. One of two rectangular buildings that were previously located to the northwest of Yaquina Hall appears to have been razed. 25th Street NE (an interior road) appears to have been extended north to D Street NE. 23rd Street NE appears to have been constructed along the western edge of the Site. Adjacent properties appear to be relatively unchanged from the previous aerial photo.

1970: The resolution is relatively poor. The other rectangular structure formerly present northwest of Yaquina Hall appears to have been razed and a parking lot appears to have been left in the footprint of the former building. The remainder of the Site and adjacent properties appear to be relatively unchanged from the previous aerial photo.

1975: The U-shaped building formerly located west of Yaquina Hall appears to have been razed. The remainder of the Site and adjacent properties appear essentially unchanged from the previous aerial photos.
1980-1984: The Site and adjacent properties appear essentially unchanged from the previous aerial photos, with the exception of some additional minor structures present on the east side of Eola Hall.
1994: A newly constructed parking lot was observed to the northwest of McKenzie Hall and a track or exercise field was observed to the west of Eola Hall. The remainder of the Site and adjacent properties appear to be relatively unchanged from the previous aerial photos.
2000-2011: Site conditions appear similar to present day.

Sanborn Fire Insurance Maps:

Stantec requested Sanborn Fire Insurance map records from EDR. Sanborn maps were provided for the Site and/or adjacent areas to the south and west for the years 1888, 1890, 1895, 1926, 1950, and 1978. A copy of the report is provided in Appendix B. The following observations were made:
1888-1890: The Sanborn map depicts the presence/layout of the "Oregon State Insane Asylum" buildings located south of present day Center Street NE (currently referred to as the OSH-SC). The OSH-SC consisted of one large "U" shaped building, and at least five ancillary buildings surrounding the main building. It appears as though the "Orphans Home" that is depicted may have been located near the western extent of the Site (i.e. – OSH-NC), however the exact location cannot be accurately determined from the information provided on the map. The Site itself appears to be located north of the coverage area.
1895: Present day Center Street NE is named "Asylum Av." The southern portion of the Site is depicted as having three "Insane Ayslum Officers'" dwellings in the vicinity of the current Breitenbush Hall. The remainder of the south side of the Site is labeled as "Orchard." It appears as though the "Orphans Home" that is depicted may have been located near the western extent of the Site.
1926: There is a note that the water supply was from wells, however, the location of the wells remains unknown and may have been located on the OSH-SC. The structure formerly labeled as "Orphans Home" is now labeled as "OSH Employees Lodgings" and appears to be located on the western extent of the Site (west of the Dome Building). The Dome Building is present. Three residential structures are present in the vicinity of the current Breitenbush Hall. A

garage with capacity for 30 cars (and an earth floor) is present northeast of the Dome Building. The central and eastern portions of the Site appear to have been used for agricultural/poultry operations. Buildings are labeled as "Egg House," "Feed Mill," two small dwellings and other small related structures. Areas north and east of the structures are labeled as "Poultry Yard" and "Laying Houses." The Sanborn map depicts the presence of "Salem Hospital" and a "Nurses Home" west of the Site.

1950: West Side of Site: There is a note that the water supply was from three wells, however, the location of the wells remains unknown, and may have been located on the OSH-SC. The building labeled as "OSH Employees Lodgings" and appears to be located on the western extent of the Site west of the Dome Building. A U-shaped building labeled "Griffith Nurses Home" is located west of the present day Yaquina Hall building. Two garage buildings (capacity 15 cars) are present north of the "Griffith Nurses Home."

Central Portion of Site: The buildings presently known as the Dome Building (labeled "Receiving Hospital"), Yaquina Hall (labeled "Dormitory Building"), Breintenbush Hall (labeled "Treatment Hospital") and McKenzie Hall (labeled "Ward Building") are depicted on the map. The underground tunnel system is also depicted on the map.

East Side of Site: The building presently known as Santiam Hall (labeled "Treatment Building") is depicted on the map.

1978: West Side of Site: The buildings formerly labeled as "OSH Employees Lodgings," "Griffith Nurses Home," and the two garages north of the "Griffith Nurses Home" are no longer depicted and appear to have been razed.

Central Portion of Site: In addition to the buildings depicted in the 1950 map, the building presently known as "Eola Hall/Activities Center" (labeled "Auditorium" and "Ward Building") is depicted on the map.

East Side of Site: The building presently known as Santiam Hall (labeled "Medical Surgical Hospital") is depicted on the map.

City Directories:

Stantec reviewed the City Directory Abstract for known addresses of the Site and select neighboring properties provided by EDR. A copy of the City Directories report is provided in Appendix B. There were no listings provided for the Site, with the exception of a 2002 listing "Businesses; Mental Health Div I," for the address 2575 Bittern Street NE. None of the listings provided for neighboring properties appear to be of significant potential environmental concern.

USGS Topographic Maps:

Stantec reviewed historical topographic maps provided by EDR for the years and scales 1917 (1:62,500), 1939 (1:50,000), 1957 (1:62,500), 1969 (1:24,000) and 1986 (1:24,000). The maps are provided in Appendix B. The following observations were made:

1917**:** The Site appears developed with one large structure (likely the Dome Building), one smaller structure west of the Dome Building and three smaller structures east of the Dome Building. Internal roads Bittern Street NE and 25th Street NE appear to be present at the Site. The property south of and adjacent to the Site appears developed with portions of the historic OSH-SC structures. Adjacent properties to the north and west appear to be sparsely developed.

1939: The topographic map appears essentially unchanged for the Site and adjacent properties.

1957: The Site appears developed with the present day structures known as the Dome Building, Yaquina Hall, McKenzie Hall, Eola Hall, Santiam Hall and Breitenbush Hall, as well as two structures located on the west sides of the Dome Building and Yaquina Hall. Additional development appears to have occurred on the properties west of the Site. The map depicts the area north of the Site as being in a developed (red-shaded) area of the City of Salem.

1969: The building west of the Dome Building appears to have been razed. Additional internal roads are depicted at the Site. 23rd Street NE (on the west edge of the Site) appears to be present for the first time.

1986: The topographic map appears essentially unchanged for the Site and adjacent properties.

Marion County Assessor's Office:

Stantec obtained online records from the Marion County Assessor's Office for the Site. A copy is provided in Appendix C. The following info of significance was reported:

Parcel R76562: Address is listed as 2600 Center Street NE. Living area is listed as 489,727 sq. ft. Current owner is listed as State of Oregon. Former owner is listed as Hammond Lumber Co. Sale date 01/22/30.

Environmental Lien Report:

Stantec obtained an Environmental LienSearch™ Report from EDR (provided in Appendix B) for the Site. No environmental liens or activity or use limitations (AULs) were identified.

City of Salem: Stantec contacted the City of Salem Public Records Officer requesting records from various City departments (building permits, code enforcement records, environmental etc.) for the Site. No records were provided by the City, who referred us to the Fire Department.

Salem Fire Department: Stantec contacted the Fire Department requesting records of environmental significance including storage tanks, chemical storage, inspections and emergency response The Fire Department provided records relating to the installation and removal of USTs at the Site. Copies of the records are provided in Appendix C and are discussed further in Sections 5.7 and 6.3.

Marion Co. Health Department: Stantec contacted the Marion County Health Department requesting records of environmental concern for the Site. They did not have any records available for the Site.

Environmental Reg. Agencies: Stantec searched online databases maintained by the Oregon Department of Environmental Quality (ODEQ; http://www.ecy.wa.gov/fs/). The Site was listed as having existing and historic underground storage tanks (USTs), previous leaking UST (LUST) activities and a historic release related to leaking elevator equipment. Copies of the online records are provided in Appendix C. ODEQ file reviews were conducted for previous environmental assessment and remediation activities completed at the Site (vs. those listed with the same address but found to pertain to the OSH-SC), and the results are discussed further in Section 6.3.

4.1 SUMMARY OF PRIOR USES – THE SITE AND ADJACENT PROPERTIES

1890-1911 The majority of the "Oregon State Insane Asylum" buildings were located south of present day Center Street NE, which was named "Asylum Avenue." A building described as "Orphans Home" appears to have been located on the western extent of the Site (west of the current Dome Building). The southern portion of the Site is depicted as having three "Insane Asylum Officers'" dwellings in the vicinity of the current Breitenbush Hall. The remainder of the Site appears to have been used for agricultural (orchards) or undeveloped/greenspace.

1912-1946 The Dome Building (known as the "Receiving Building") was constructed in 1912. The structure (west of the Dome Building) formerly described as "Orphans Home" is later described as "OSH Employees Lodgings." Three

	residential structures are present in the vicinity of the current Breitenbush Hall. A garage with capacity for 30 cars is present northeast of the Dome Building. The central and eastern portions of the Site appear to have been used for agricultural/poultry operations. Buildings are labeled as "Egg House," "Feed Mill," two small dwellings and other small related structures. Areas north and east of the structures are labeled as "Poultry Yard" and "Laying Houses." The "Salem Hospital" and a "Nurses Home" are present west of the Site. The majority of the residential development, neighboring the north and east boundaries of the Site, appears to have occurred.
1947-1970	The remainder of the existing buildings (McKenzie, Yaquina, Eola/Activities Center, Santiam and Breitenbush) and tunnel system are constructed. The Site continues to develop as a psychiatric hospital. Four additional structures are present on the west side of the Site: "OSH Employees' Lodgings" (west of the Dome Building), a U-shaped building described as "Griffith Nurses Home" (west of Yaquina Hall), and two garage buildings (each with capacity for 15 cars) north of the "Griffith Nurses Home." The four structures are eventually razed during this period.
1975 - 2010	The Site and adjacent properties are similar to present-day conditions. Minor alterations to the existing buildings and outdoor areas of the Site occur over time. The Site is used as a psychiatric hospital with separate wards for youth, geriatric, adult and corrections patients. The Dome Building and Yaquina Hall are eventually converted into office space for the Department of Corrections and the Department of Human Services.
2011 - Present	The Dome Building and Yaquina Hall remain occupied as office space for the Department of Corrections and the Department of Human Services. The remainder of the psychiatric hospital is vacated, with portions of the buildings used for storage of equipment associated with the former hospital.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

The results of observations made during the Site reconnaissance and information provided by Leland (Phase I ESA User) and Oregon DAS (owner/occupant) are presented in the following subsections. The Site reconnaissance was conducted on February 19 and 20, 2013. Photographs are provided in Appendix A.

5.1 INTERVIEWS

Interviews of persons who are knowledgeable about the Site were conducted during completion of this Phase I ESA. The objective of the interviews was to obtain information indicating the potential for RECs in connection with the Site. The results of these interviews are discussed below.

Site Owner/Key Site Manager: The current owner is Oregon DAS. The Owner's Representative/Key Site Manager, Mr. Meril Craig (Services/Repair Supervisor; has worked at Site for approximately 18 years), was contacted by Stantec to arrange the Site visit. Mr. Craig met Stantec at the Site on February 19 and 20, 2013 to provide a comprehensive tour of the Site and answer questions regarding the history/former use of various areas of the Site. Information provided by Mr. Craig is used throughout Section 5. In addition, Mr. Craig stated that:

- He was unaware of the presence of historic or existing USTs at the Site;
- He was not familiar with previous LUST or other releases of petroleum or hazardous substances at the Site; and,
- Various asbestos testing and abatement projects were conducted throughout the facility (over the past 20 years) in conjunction with maintenance and renovation activities. It is likely that records pertaining to these activities exist; however, they were not identified during the Phase I ESA.

Stantec also contacted Mr. John Hamilton (OSH; Listed as contact for USTs, LUSTs, RCRA-CESQ and OR Manifest; 503-945-2924) on March 11, 2011. Mr. Hamilton provided the following information:

- Mr. Hamilton stated that the only UST he was aware of at the Site (OSH-NC) was the diesel UST associated with the generator for Eola Hall.
- Mr. Hamilton stated that he believed that all former LUST activities (during his time of involvement at the Site during the 1990's) were related to the OSH-SC and not the Site.

Site Occupant: On February 19, 2013, Stantec met with Noe Pequeno (Current Occupant; Maintenance Specialist for Oregon DOC; 503-945-9093), who provided a tour of the Dome Building. In addition to providing the tour, Mr. Pequeno provided the following information:

- The east wing of the first floor of the Dome Building was occupied as a dental clinic until 2012.

Phase I ESA User: Mr. Darrin Brightman (Oregon DAS – Real Estate Services) completed the Phase I ESA User's Questionnaire (provided in Appendix E). Mr. Brightman stated that he was not aware of any environmental cleanup liens or activity and use limitations (AULs). Mr. Brightman provided the following information:

- The Site was used as a psychiatric hospital;
- Asbestos and lead paint is present in buildings. Age of buildings indicates likely lead paint; visible asbestos in steam tunnels;
- There is one above-ground diesel tank (in use); and,
- A Phase I ESA was reportedly completed by Hall-Kimbrell circa 2006 or 2007. A copy could not be located.

Interviews With Local Government Officials: According to ASTM E1527-05 Section 3.2.47, local government agencies are defined as those agencies of municipal or county government having jurisdiction over the property. Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities. Information obtained from local government officials (Salem Fire Department, Marion County Assessor's Office and ODEQ) is provided in other sections of this report where relevant.

5.2 SITE RECONNAISSANCE

Figure 2 provides land use information for the Site and adjoining properties. The Site visit focused on observation of current conditions and indications of past uses and conditions of the Site that may indicate the likelihood of RECs. The Site visit was conducted on foot and visual and/or physical observations from the reconnaissance are noted in the following sections.

Stantec personnel attempted to access all portions of the Site buildings and outside areas, however due to the size, layout and other restrictions of the Site, not all portions of the Site were accessed. A list of spaces that were not accessed is provided in Section 1.3.

Weather conditions during the visit to the Site ranged from sunny to rainy, with temperatures in the 50's. Periods of overnight rain and/or significant condensation were observed. De minimis surface staining (if present) might not be obvious or visible under such conditions. This condition is not expected to change the conclusions of this report.

A description of the layout of the Site as observed during the Site reconnaissance is provided as follows:

<u>Breitenbush Hall (Building #35; see Photos 1-67 in Appendix A):</u>

- First Floor:
  - -Central Area: The main entrance is located near the center of the south side of building. This area was formerly used as a receiving area for visitors, a communications center, offices and a kitchen/cafeteria area. A passenger elevator was located outside the kitchen area, and a small service (food) elevator was located in the kitchen.
  - -East and West Wings: The east and west wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors'

closets and other storage areas. Freight elevators were located near the ends of each wing. The layout of the east wing is depicted in Photo 2 and the layout of the west wing is depicted in Photo 1 in "Other Photos" in Appendix A.

- Second Floor:
  - -Central Area: This area was formerly used as office space and a chapel.
  - -East and West Wings: The east and west wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. Dining areas and small kitchen spaces were located on the ends of each wing. The layout of the west wing is depicted in Photo 13 in Appendix A. The layout of the east wing is depicted in Photo 3 in "Other Photos" in Appendix A.
- Third Floor: A partial third floor was located in the central area of the building (only). The space was formerly used as a pharmacy, common wash area, janitors' closets and other storage areas. The layout of the third floor is depicted in Photo 4 in "Other Photos" in Appendix A.
- Basement: The central area of the basement consisted of an in ground swimming pool (which was being maintained as of the date of the Site visit) and associated mechanical equipment, electrical room (inaccessible due to high voltage equipment), building mechanical equipment room, and storage rooms (many of which were inaccessible due to locked doors). The layout of the basement is depicted in Photo 5 in "Other Photos" in Appendix A. Tunnels going west (towards the Dome Building) and east (towards Santiam Hall) were present on the west and east sides of the central area of the basement. Various storage rooms and mechanical/electrical equipment rooms were located along the tunnels (many of which were inaccessible due to locked doors). The equipment rooms for the east and west freight elevators were present in rooms adjacent to the tunnel spaces.
- Roof: The roof of the building was accessible. The roof area is shown in Photos 19, 20, and 25 in Appendix A.
- Outside Areas:
  - -South of Building: A grassed area and walkway were located south of the west wing of the building. A ground transformer was located south of the southwest corner of the building. A parking lot/driveway and grassed areas were located south of the east wing of the building.
  - -North of Building: A fenced in grassed yard was located north of the west wing of the building. A smaller fenced in grassed yard was located north of the east wing of the building. Paved parking lots were present in the remainder of the area north of the east wing of the building. A former waste storage area was located north of the central area of the building.
  - -West of Building: A paved road/driveway (25th Street NE) was located west of the building, followed by grassed and paved areas leading to the Dome Building. A general garbage waste storage area was located west of the southwest corner of the building.
  - -East of Building: A paved road/driveway (27th Place NE) was located east of the building, followed by grassed and paved areas leading to Santiam Hall.

Tunnel from Breitenbush Hall to Santiam Hall (see Photos 1-4 in Appendix A): The tunnel leading east from Breitenbush Hall to Santiam Hall consisted of utility piping, and various

equipment and storage rooms located adjacent to the tunnel. Flooding was observed in the tunnel leading south towards the OSH-SC.

Santiam Hall (Building #34; see Photos 1-47 in Appendix A):

- First Floor:
  - -Central Area: The main entrance was located near the center of the west side of the building. This area was formerly used as offices/treatment areas, an X-Ray Department and a chemical storage area. The layout is depicted in Photo 10 in "Other Photos" in Appendix A.
  - -North and South Wings: The north and south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the south wing is depicted in Photo 24 in Appendix A.
- Second Floor:
  - -Central Area: This area was formerly used as offices/treatment areas, a dental clinic area and chemical storage area. The layout is depicted in Photos 9 and 10 in "Other Photos" in Appendix A.
  - -North and South Wings: The north and south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the south wing is depicted in Photo 21 in Appendix A. The layout of the north wing is depicted in Photo 8 in "Other Photos" in Appendix A.
- Upper Crawl Space/Attic: The upper crawl space/attic consisted of mechanical equipment, including a fan room. The equipment rooms for the passenger and freight elevators were also present in the upper crawl space/attic.
- Basement: The basement was located beneath the center of the building. The basement consisted of electrical rooms (some inaccessible due to high voltage equipment), building mechanical equipment rooms, and storage rooms. A tunnel going west (towards Eola Hall and Breitenbush Hall) was present on the west side of the basement.
- Roof: The roof was not accessed due to a steep slope.
- Outside Areas:
  - -South of Building: A grassed area and walkway were located south of the building.
  - -North of Building: A grassed/park area was located north of the building.
  - -West of Building: Grassed areas were located on the west side of the building. A paved road/driveway (27th Place NE) was located west of the grassed areas. Mechanical and backup generator buildings associated with Eola Hall were located west of the north wing of the building. Breitenbush Hall was located west of the south wing. A concrete slab of unknown purpose was located south of the south side of the main entrance of the building (see Photo 46 in Appendix A).
  - -East of Building: A grassed area and walkway were located east of the building. A backup generator (which appears to be connected to natural gas) was located east of the central portion of the building. An old propane AST was located far east of the building, on the eastern edge of the Site.

Eola Hall and Activities Center (Buildings #50 and #77; see Photos 1-30 in Appendix A):

- First Floor: The activities center/gym was located on the southwest corner of the first floor of the building. Passenger elevators were located on the east and west sides of the center of the main part of the building.
  - -West/North and East/South Wings: The west/north and east/south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas.
- Second Floor:
  - -West/North and East/South Wings: The west/north and east/south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas.
- Third Floor:
  - -West/North and East/South Wings: The west/north and east/south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the west/north wing is depicted in Photos 2 and 3 in Appendix A.
- Fourth Floor:
  - -West/North and East/South Wings: The west/north and east/south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the west/north wing is depicted in Photo 7 in Appendix A. The layout of the east/south wing is depicted in Photo 11 in "Other Photos" in Appendix A.
- Fifth Floor:
  - -West/North and East/South Wings: The west/north and east/south wings consisted of former patient rooms and common areas, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas.
- Basement: The basement was located beneath the south and center of the building. The basement consisted of electrical rooms (some inaccessible due to high voltage equipment), building mechanical equipment rooms, and storage rooms. A tunnel going south (towards Breitenbush Hall) was present on the south side of the basement.
- Roof: The roof of the building was accessible. Modern air handling/HVAC equipment was present in a large mechanical room area in the central portion of the roof. The equipment rooms for the two elevators were present adjacent to the mechanical room.
- Outside Areas:
  - -South of Building: A parking lot was located south of the activities center/gym. A fenced in yard was located south of the main building. A trash compactor was located east of the fenced in yard. A paved road/driveway (Bittern Street NE) was located south of the parking lot/yard.
  - -North of Building: A fenced in air handling unit area was located north of the main building. A paved road/security entrance was located west of the air handling units. A large grassed/park area (including a disc golf course) was located north of the air handling units.
  - -West of Building: A fenced in yard was located west of the west/north wing of the building. McKenzie Hall is located west of the yard.
  - -East of Building: A fenced in yard was located east of the west/north wing of the building. A parking lot was located east of the central portion of the building. Mechanical and backup generator buildings (including a 2,000-gallon diesel UST; discussed further in Sections 5.7 and 6.3) were located east of the east/south

wing. A paved road/driveway (27th Place NE) was located east of the buildings and parking areas. Santiam Hall was located east of the road/driveway.

McKenzie Hall (Building #40; see Photos 1-56 in Appendix A):

- First Floor:
  - -Central Area: The main entrance is located near the center of the west side of building. The central area included offices, linen rooms, a waiting room, storage room, rest rooms, a passenger elevator and staircases. The layout is depicted in Photo 6 in Appendix A.
  - -North and South Wings: The north and south wings consisted of former patient rooms and common areas, small kitchens, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the north wing is depicted in Photo 28 in "Other Photos" in Appendix A. As of the date of the Site reconnaissance, the hallways and rooms were being used to store couches, washers/dryers, beds, and other furniture/equipment.
- Second Floor:
  - -Central Area: The central area included offices, linen rooms, a waiting room, storage room, rest rooms, a passenger elevator and staircases. The layout is depicted in Photo 6 in Appendix A.
  - -North and South Wings: The north and south wings consisted of former patient rooms and common areas, small kitchens, treatment rooms/offices, rest rooms/wash areas, janitors' closets and other storage areas. The layout of the south wing is depicted in Photo 16 in Appendix A. The layout of the north wing is depicted in Photo 19 in Appendix A.
- Upper Crawl Space/Attic: The upper crawl space/attic consisted of mechanical equipment and storage areas. The equipment room for the passenger elevator was also present in the upper crawl space/attic.
- Basement: This building included a full basement. The basement included rooms associated with a former school, electrical rooms (some inaccessible due to high voltage equipment), building mechanical equipment rooms, and miscellaneous storage rooms. The layout of the south wing is depicted in Photo 42 in Appendix A. As of the date of the Site reconnaissance, the hallways and rooms were being used to store cleaning equipment, miscellaneous supplies and other furniture/equipment. A tunnel going south (with connections to the remainder of the underground tunnel system) was present on the south side of the basement.
- Roof: The roof was not accessed due to a steep slope.
- Outside Areas:
  - -South of Building: Grassed areas and walkways were located south of the building. A paved road/driveway (Bittern Street NE) was located south of the grassed area.
  - -North of Building: A large grassed/park area (including a disc golf course) was located north of the building and east yard. An old shed (inaccessible) was located north of the east yard.
  - -West of Building: Grassed areas are located west of the building. A generator (which appears to be connected to natural gas) is located adjacent to the west side of the north wing of the building. An unknown concrete vault (which

appears to have a fill pipe and vent pipe in the near vicinity) is located on the south side of the west entrance to the building (see Photos 49-51 in Appendix A). Based on these observations, the presence of a UST in this area could not be ruled out. As summarized in Sections 5.7 and 6.3, following the ODEQ file review, it was determined that a gasoline UST was formerly located in this area, but has since been removed. A paved road/driveway (25th Street NE) was located west of the grassed areas. A paved parking lot and road/driveway are located west of the north wing of the building. Yaquina Hall is located west of the south wing of the building.

-East of Building: A fenced in yard is located east of the building. A shed and greenhouse were located on the south side of the east yard. The Eola Hall complex is located east of the yard.

Tunnel from McKenzie Hall to Dome Building (see Photo 1 in Appendix A): The tunnel leading west from McKenzie Hall to the Dome Building consisted of utility piping, and an access point to the communications center in the basement of Yaquina Hall (not accessible).

Dome Building (Building #36; see Photos 1-29 in Appendix A):

- First Floor: The first floor was occupied as office space.
- Second Floor: The second floor was occupied as office space. The layout of the second floor is depicted in Photo 1 in Appendix A.
- Third Floor: A partial third floor was located in the "Dome" portion of the center of the building. The third floor was occupied as office space. The third floor also provided access to the crawl spaces/attics above the north, south and east wings, as well as the roof.
- Basement: The basement was located beneath the center of the building. The basement consisted of electrical rooms (some inaccessible due to high voltage equipment), building mechanical equipment rooms, and storage rooms. The equipment room for the passenger elevator was located in the basement. Tunnels going east (towards Breitenbush Hall) and north (towards Yaquina Hall) were present on the east and north sides of the basement. The layout of the basement is depicted in Photo 13 in Appendix A.
- Roof: The roof of the building was accessible. The roof area is shown in Photos 17-19 in Appendix A.
- Outside Areas:
  - -South of Building: Grassed areas and walkways were located south of the building. Center Street NE is located south of the grassed areas.
  - -North of Building: A paved road/driveway (Bittern Street NE) was located north of the building. Yaquina Hall is located north of Bittern Street NE.
  - -West of Building: The area west of the Dome Building consisted of paved access roads/drives and grassed areas.
  - -East of Building: A parking area was located east of the south wing of the building. A transformer was located near the east face of the southeast corner of the building. The tunnel from the Dome Building to Breitenbush Hall (visible at ground level) was located east of the east wing of the building. A generator was located adjacent to the south side of the tunnel. A paved drive/loading area was located east of the north wing of the building.

Yaquina Hall (Building #33; see Photos 1-25 in Appendix A):

- First Floor: The first floor was occupied as office space. Passenger elevators were located on the east and west ends of the building. The layout of the first floor is depicted in Photo 5 in Appendix A.
- Second Floor: The second floor was occupied as office space. The layout of the second floor is depicted in Photo 1 in Appendix A.
- Basement: The building included a full basement. The basement consisted of electrical rooms (some inaccessible due to high voltage equipment), building mechanical equipment rooms, and storage rooms. The basement also included IT equipment and communications rooms (not accessible). The equipment rooms for the passenger elevators were located in the basement. The layout of the basement is depicted in Photo 6 in Appendix A. A tunnel going south (with connections to the remainder of the underground tunnel system) was present on the south side of the basement.
- Upper Crawl Space/Attic: The upper crawl space/attic was not accessed.
- Roof: The roof was not accessed due to a steep slope.
- Outside Areas:
  - -South of Building: Grassed areas and walkways were located south of the building. A paved road/driveway (Bittern Street NE) was located south of the grassed areas. The Dome Building was located south of Bittern Street NE.
  - -North of Building: Grassed areas are located north of the building. A parking lot is located north/northwest of the grassed areas, followed by a large park area.
  - -West of Building: The area west of the building consisted of paved access roads/drives and grassed areas.
  - -East of Building: Grassed areas were located east of the building. A transformer was located adjacent to the southeast corner of the building. A paved road/driveway (25th Street NE) was located east of the grassed areas. The McKenzie Building is located east of 25th Street NE.

Tunnel from Yaquina Hall to Breitenbush Hall (see Photos 1 and 2 in Appendix A): The tunnel leading east from McKenzie Hall towards Breitenbush Hall consisted of utility piping.

Outdoor Areas West of Buildings: The areas west of the Dome Building and Yaquina Hall consisted of paved access roads/drives, parking and grassed areas. Utility structures (inaccessible) were located west of the Dome Building near the western edge of the Site (see Photos 1 and 2 in the Misc. Outdoor and Museum Photos).

Outdoor Areas North of Buildings: A large park area (including a disc golf course) was located north of the buildings, parking lots and paved access roads/drives. A utility structure (inaccessible) was located near the northwest corner of the Site (see Photo 6 in the Misc. Outdoor and Museum Photos).

5.3 ACTIVITIES/PROCESSES CONDUCTED AT THE SITE

Formerly occupied as a State psychiatric facility, two of the buildings (Dome Building and Yaquina Hall) are currently occupied as offices, predominantly by the Oregon DOC and DHS, respectively. The remainder of the campus is generally vacant, with portions of the buildings used for storage of equipment associated with the former psychiatric facility.

5.4 HAZARDOUS MATERIALS AND/OR PETROLEUM PRODUCTS OBSERVED OR KNOWN TO BE PRESENT AT THE SITE

In addition to the diesel UST associated with the backup generator (discussed further in Section 5.7), the following hazardous materials and/or petroleum products were observed during the Site visit:

- Typical cleaning supplies in numerous janitorial closets and storage areas throughout the buildings.
- 55-Gallon drums of boiler and water treatment chemicals in mechanical equipment rooms throughout the buildings.
- Hydraulic oil and lubricants associated with elevator equipment in each of the buildings.
- Asbestos-containing materials present throughout the buildings and tunnels.
- Swimming pool cleaning and maintenance chemicals in the basement of Breitenbush Hall.
- Bags of anhydrous calcium chloride in storage areas in the basement of Breitenbush Hall.
- A biohazard container (contents unknown) present in the former X-ray area on the 1st Floor of Santiam Hall.
- Anti-freeze containers present in the generator building east of Eola Hall.
- A 55-gallon waste oil drum in basement of Eola Hall.
- Building and equipment maintenance materials present in the shed located in the yard east of McKenzie Hall.
- Building and equipment maintenance materials present in the storage room in the basement of McKenzie Hall.
- Building and equipment maintenance materials, lawn treatment and landscaping chemicals present in the basement storage areas in the Dome Building.

In addition, the majority of the chemicals and materials formerly used during the Facility's long-term uses as a psychiatric/medical facility (including a pharmacy, X-Ray equipment and two dental areas) had been removed prior to the date of the Site visit. A list of chemicals formerly used at the Facility was not identified during the Phase I ESA, with the exception of the Hazardous Substance Information Survey (HSIS) information provided in the EDR Radius Map Report (provided in Appendix D), which listed the following substances as having been present at the Site: glycol ether, DOWANOL DB (pesticide), sodium hypochlorite, sulfuric acid, propane and petroleum hydrocarbons. As documented in Section 5.9, numerous floor drains, sinks and sumps were present throughout the equipment and storage areas in the basement and tunnel areas. The floor areas surrounding some of the floor drains, sumps and other surfaces had unidentified staining. It is possible that historical releases of hazardous substances and/or petroleum products may have occurred in these areas in the past, resulting

in impacts to soil and/or groundwater beneath structures and other areas across the Site. This is considered a potential environmental concern.

In addition, as documented in the Sanborn Maps from 1895 and 1926, prior to its development as a psychiatric/medical facility, portions of the Site were used for agricultural purposes including an orchard and large poultry farm. However, due to the age and type of agricultural activities that occurred at the Site, the potential for the presence of pesticides, herbicides, fertilizers or other agricultural chemicals to remain in soils in dangerous quantities is considered to be low.

5.5 ON-SITE ROADS

The Site is developed with several asphalt-paved driveways/roads and parking areas. Access to the Site is possible from D Street NE (via 25th Street NE) to the north, 23rd Street NE (via Bittern Street NE) to the west, and Center Street NE (via 25th Street NE and 27th Place NE) to the south.

5.6 ABOVEGROUND STORAGE TANKS (ASTs)

An old propane AST is present east of Santiam Hall (see Santiam Hall, Photos 44 and 45 in Appendix A). The AST does not appear to be in use.

Also, a 75-gallon fuel AST is located in the northeast corner of the outdoor mechanical building east of Eola Hall (see Eola Hall, Photo 24 in Appendix A). The AST did not appear to be in use.

No other ASTs were observed at the Site during the Site visit. As noted in the EDR Radius Map Report provided in Appendix D, the Site was listed as having a 10,000-49,999-gallon diesel fuel AST, however, this listing appears to be related to the OSH-SC and not the Site.

5.7 UNDERGROUND STORAGE TANKS (USTs)

A 2,000-gallon fiberglass diesel UST is present east of the east/south wing of Eola Hall (see Eola Hall, Photos 17, 18, 20 and 21 in Appendix A). The UST is associated with the adjacent backup generator for Eola Hall. Based on records provided by the Salem Fire Department (provided in Appendix C), it appears that the current UST was installed in 1999 to replace a UST formerly present in this location. Upon removal of the former UST (also in 1999), it appears as though soil contamination was identified (discussed further in Section 6.3).

An unknown concrete vault (which appears to have a fill pipe and vent pipe in the near vicinity) is located on the south side of the west entrance to McKenzie Hall (see McKenzie Hall, Photos 49-51 in Appendix A). Based on these observations, the presence of a UST in this area could not be ruled out. As summarized in Section 6.3, following the ODEQ file review, it was determined that a gasoline UST was formerly located in this area, but has since been removed.

As noted in the EDR Radius Map Report (provided in Appendix D), 10 historic USTs were listed as being present at the OSH Campus: four are listed as permitted, three are listed as active and seven are listed as having been removed. As described above, it appears as

though at least two of the removed USTs were located at the Site, and one of the active USTs is currently located at the Site. Based on interviews conducted with OSH staff (summarized in Section 5.1) and ODEQ file reviews (summarized in Section 6.3), it appears as though the remainder of the USTs currently/formerly listed at OSH may have been located on the OSH-SC and not the Site.

5.8 UNUSUAL OR NOXIOUS ODORS

No unusual or noxious odors were observed at the Site during the Site visit.

5.9 SUMPS, PITS, FLOOR DRAINS, OR POOLS OF LIQUID

The following sumps, pits and floor drains were observed at the Site during the Site visit:

- Floor drains in rest rooms and wash areas throughout the buildings (see Breitenbush Hall, Photos 7 and 9, 10 and 16; Santiam Hall, Photos 9 and 10).
- Floor drains in basement storage areas (see Breitenbush Hall, Photos 27, 28, 40 and 55; Other, Photos 19, 20 and 21; Santiam Hall, Photo 3).
- Sumps in basement areas (see Breitenbush Hall, Photos 29 and 46).

As documented in several of the photos referenced above, staining of an unknown origin was observed around drains in the basements of Breitenbush Hall, Eola Hall and Santiam Hall. It is possible that historical releases of hazardous substances and/or petroleum products may have occurred in these areas in the past, resulting in impacts to soil and/or groundwater beneath structures and other areas across the Site. This is considered a potential environmental concern.

With respect to pools of liquid (other than water), the following were observed at the Site during the Site visit:

- Oil staining associated with elevator equipment rooms in the basements of several buildings (see Breitenbush Hall, Photos 57, 59, 60 and 61; Other, Photos 24, 25 and 27; Dome Building, Photos 2 and 3).

As documented in these photos, elevator equipment rooms in the basements of the Breitenbush Building and Dome Building appear to have oil staining on floor areas outside of equipment containment structures. Based on the age of the buildings, it is possible that releases to soil and/or groundwater beneath these areas may have occurred, and these are considered RECs.

5.10 TRANSFORMERS OR PCB-SUSPECT HYDRAULIC SYSTEMS

Electrical transformers, hydraulic equipment, capacitors, and similar equipment may contain polychlorinated biphenyls (PCBs) in hydraulic or dielectric insulating fluids within the units. The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacture of PCBs after 1979; therefore, there is a potential for the dielectric fluid in electrical and hydraulic equipment manufactured prior to that date to contain PCBs.

Stantec made the following observations of exterior transformers at the Site:

- Breitenbush Hall: A ground transformer was located south of the southwest corner of the building. The transformer had a label “SF6 Free” and appeared to be relatively new.
- Dome Building: A transformer was located near the east face of the southeast corner of the building. The transformer had a label “Less Than 15 PPM” and appeared to be in good condition.
- Yaquina Hall: A transformer was located adjacent to the southeast corner of the building. The transformer had a label “Less Than 1 PPM” and appeared to be in good condition.

The exterior transformers appeared to be in good condition, and there was no evidence of any spills or leaks.

As noted in Section 1.3, electrical rooms marked “High Voltage” throughout the basements and tunnel system were not accessed during the Site visit, due to access and health and safety concerns. As stated in the “Framework Master Plan Phase I Report” (KMD; see Section 2.6), “the main electrical power distribution to the campus is served by PGE from a primary line through a series of step-down power transformers. Most the transformers are located in the tunnel system and are maintained by PGE. It is not known what condition the transformers are in and to what level they have been maintained.” As noted in the EDR Radius Map Report in Appendix D (and summarized in Section 6.3), the Site was listed in the Federal TSCA Tracking System Database. The Site was reported as being investigated in 1994 for “Section 6 PCB Federal.” No violations were reported, however, the presence of transformers, present throughout the basement and tunnel system, and of unknown current condition is considered a potential environmental concern.

In addition, older fluorescent light fixtures may also have ballasts that potentially contain PCBs. At the time of the Site visit, Stantec observed fluorescent light fixtures at the Site. In addition, as documented in Section 2.6, “Most of the building interior lighting is fluorescent fixtures. The fixtures use magnetic ballasts…” Current PCB regulations do not require the removal of non-leaking ballasts/capacitors; however, the EPA recommends that ballasts in older light fixtures be removed and disposed of as part of a regular maintenance program. Based on the construction date of the Site building, fluorescent light fixtures may contain PCBs.

5.11 STAINED SOIL OR PAVEMENT - EXTERIOR

Staining was not observed in surface soil, or on roads, parking lots or other paved areas, however, it should be noted that the ground surface was wet (due to overnight rain and/or condensation) during the Site visit and if staining were present, it might not be visible under such conditions. This condition is not anticipated to change the findings of this report

5.12 DISTRESSED VEGETATION

No significantly distressed vegetation was observed during the Site visit.

5.13 DISCHARGES TO DRAINS, DITCHES OR STREAMS

Floor drains in interior areas are discussed in Section 5.9. No discharges to exterior drains, ditches or streams were observed during the Site visit.

5.14 WELLS

No water supply, monitoring or irrigation wells were observed at the Site during the Site visit. Potable water is provided to the Site by the City of Salem.

As summarized in Section 6.3, several monitoring wells have been previously installed at the Site in association with previous assessment and remediation activities. It appears as though these wells have been abandoned.

As indicated in Section 4, Sanborn Maps from 1926 and 1950 state that the water supply (at OSH) was from three wells. The locations of the water supply wells were not identified on the maps. As indicated in the *Correction Action Plan for LUST #24-89-4027*, REA Tech Management Inc., 1993 (provided in Appendix C): "Most of the wells which were drilled on the hospital grounds are abandoned and inactive. Two wells which remain in operation, No. 4 and No. 6, are now used to irrigate lawns around the hospital buildings during the summer. The No. 4 well is located 250 feet to the northeast of the former UST site (at McKenzie Hall)… The well is 190 feet deep". Based on this information, it appears as though the shed located north of the east yard of McKenzie Hall, which was not accessible during the Site visit, may be the location of well No. 4. It is unknown whether this well remains active or has been abandoned.

5.15 PIPELINES

Natural gas is reportedly supplied by North West Natural Gas. No other pipelines were identified at the Site.

5.16 LEACH FIELDS/SEPTIC TANKS/CESSPOOLS

No evidence of current or past presence of leach fields, septic systems, or cesspools were observed at the Site during the Site visit. However, it is considered likely that prior to the availability of municipal sewer services the facility would have been served by on-site septic systems.

5.17 INDICATIONS OF FILL SITES OR DUMPING

No indications of fill sites or dumping was observed during the Site visit. However, as summarized in Section 2.6, at least eight significant (and several other minor) historic structures were formerly located at various locations across the Site. As such, it is likely that fill materials were brought to the Site in conjunction with filling subsurface portions of these former structures.

5.18 STAINING/CORROSION ON FLOORS, CEILINGS OR WALLS

As summarized in Section 5.9, staining/corrosion of an unknown origin was observed around drains and on floor spaces in the basements of Breitenbush Hall, Eola Hall and Santiam Hall during the Site visit. This is considered a potential environmental concern.

5.19 SENSITIVE RECEPTORS AND WETLANDS

The Site does not appear to be located near any obvious sensitive receptors or wetlands.

5.20 RADON

Radon is a colorless, tasteless radioactive gas with a United States Environmental Protection Agency (EPA) specified action level of 4.0 picocuries per liter (pCi/L) of air. Radon gas has a very short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly confined areas near to the ground, where vapors can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately ventilated rooms generally present limited risk for radon exposure.

Stantec reviewed the Radon database findings presented in the EDR and found that the Site is located within the Federal EPA Radon Zone 3 and is considered an area of low potential for radon. Information regarding the presence of radon at the Site relies on regional data and does not represent site-specific data. The radon concentrations in buildings and homes depend on many factors, including soil types, temperature, barometric pressure, and building construction (EPA, 1993). To determine site-specific radon levels a radon survey would have to be conducted.

5.21 ASBESTOS-CONTAINING MATERIALS

Stantec did not conduct an asbestos survey as part of the Phase I ESA, however, the following information regarding asbestos at the Site was identified during the Phase I ESA:

- As part of the "Framework Master Plan Phase I Report" completed by KMD in 2005 (provided in Appendix E), the key findings included "The presence of lead and asbestos as reported by the Physical Plant Director raises significant issues of soil and building contamination". As part of the property condition assessments performed as part of this report, the Breitenbush, Dome and McKenzie buildings were also noted as having vinyl asbestos tile.
- As documented in the Summary of Asbestos and Hard Plaster Surveys, Unknown Author, 2007 (provided in Appendix E), fairly comprehensive asbestos sampling was conducted at the Site in 2007. Findings of particular concern included:
  - -Santiam Building (Building #34), Breitenbush Hall (Building #35) and Dome Building (Building #36) – Soil contamination in crawl spaces and accumulation of asbestos containing dusts. The report recommended restricted access in certain areas until repairs/cleanup was completed.
- As documented in the photos provided in Appendix A, numerous areas of asbestos pipe wrap and other asbestos-containing materials were identified during the Site

reconnaissance, particularly in the tunnels, basements, and crawl spaces, as well as other areas containing piping, electric and/or mechanical equipment.

- As stated by the Key Site Manager, Mr. Craig, during the Site visit, various asbestos testing and abatement projects were conducted throughout the facility (over the past 20 years) in conjunction with maintenance and renovation activities. It is likely that records pertaining to these activities exist, however, they were not identified during the Phase I ESA.
- As indicated by the Phase I ESA User, Mr. Brightman, asbestos and lead paint is present in buildings. Age of buildings indicates likely lead paint; visible asbestos in steam tunnels.

The deteriorating condition of the asbestos present in several areas of the Site, including the accumulation of dusts in tunnels and crawl spaces and contamination of soil, is considered a REC. In addition, it is likely that significant abatement of asbestos-containing materials will be necessary during major maintenance, renovation or demolition activities conducted at the Site.

5.22 LEAD-BASED PAINT

Concern for lead-based paint (LBP) is primarily related to structure surfaces with lead-containing paint applied prior to 1977. LBP is recognized as a potential health risk due to the known toxic effects of lead exposure, primarily through ingestion, on the central nervous system, kidneys, and blood stream. The risk of lead toxicity in lead-based paint varies, based upon the condition of the paint and the year of its application. Stantec did not conduct a LBP survey as part of the Phase I ESA. Due to the construction dates of the buildings (circa 1912-1956), LBP is anticipated to be present at the Site.

It is likely that significant abatement of LBP will be necessary during major maintenance, renovation or demolition activities conducted at the Site. The likely presence of LBP is considered a potential environmental concern.

5.23 WATER INTRUSION ASSESSMENT

Stantec performed a limited visual inspection of the building for evidence of moisture intrusion. Stantec did not observe indicators of water damage or micro-biological growth such as stains, standing water or mold-like substances that would indicate a potential concern, other than the following:

- Standing water was observed in the tunnel east of Breitenbush Hall that heads south towards Center Street and the OSH-SC.
- Numerous buckets were present in the upper crawl space/attic in McKenize Hall to collect water that accumulates from a leaky roof.

6.0 REGULATORY AGENCY LIST REVIEW

The following sections include our review of federal, state, local, and tribal environmental databases maintained by regulatory agencies. These regulatory listings include only those sites that are: (a) known to the regulatory agencies to be contaminated, (b) in the process of evaluation for potential contamination, (c) or regulated at the time of publication.

6.1 GENERAL METHODOLOGY

Stantec used a commercial database service, Environmental Data Resources, Inc. (EDR), in the preparation of this report. Research into environmental regulatory agency database listings was performed by this third-party environmental regulatory agency database search firm. The purpose of the review was to identify reported environmental issues for the Site and other properties in the vicinity. The definition of the databases searched, and the associated search distances from the Site, are identified in the regulatory agency database search report.

The regulatory agency database search report lists a number of sites identified as "unmappable." The database search firm was unable to confirm the physical locations of these sites relative to the Site or to assess whether they were located within the designated search radii. Stantec independently reviewed the locations of these "unmappable" sites, to the extent possible, using various maps and our knowledge of the Site area. Any of the "unmappable" sites determined to be within the designated search radii were included in our evaluation of the various listed sites with potential to result in a REC relative to the Site.

Stantec reviewed the results of the database search report to note reported release sites in the vicinity of the Site that were considered to have a potential to have adversely impacted the Site (i.e., are known to have or are expected to result in RECs). Reported release sites identified in the regulatory agency database search report were evaluated with respect to the nature and extent of a given release, the distance of the reported release site from the Site, the stratigraphy of soils, the expected soil permeability, and the position of a reported release site with respect to known or expected local and/or regional groundwater flow direction. Those release sites that were considered likely to have impacted the Site are identified in the report as RECs, as defined in ASTM 1527. Sites that were listed in the database search report, but not identified as a release site (for example, a site listed as a hazardous waste generator but not as having had a release), and sites that were listed as being "closed," were not considered likely to have impacted the Site.

6.2 SUMMARY OF REVIEWED ENVIRONMENTAL DATABASES

The following table summarizes the reviewed environmental databases.

Environmental Agency Lists, Search Distance, Listings

Agency List/Database	Search Radius	Number of Listed Sites
Federal NPL Sites	1.0 mile	0
Federal Delisted NPL Sites	1.0 mile	0
Federal CERCLIS List	0.5 mile	0
Federal CERCLIS NFRAP List	0.5 mile	0
Federal RCRA CORRACTS Facilities	1.0 mile	0
Federal RCRA Non-CORRACTS TSD	0.5 mile	0
Federal RCRA Generators	0.25 mile	1
Federal Institutional Controls/Engineering Controls Registries	0.5 mile	0
Federal ERNS	Site	NR
State and Tribal - Equivalent CERCLIS	1.0 mile	14
State and Tribal Solid Waste Facilities	0.5 mile	0
State and Tribal Registered Storage Tank Sites	0.25 mile	5
State and Tribal Leaking Storage Tank Sites	0.5 mile	157
State and Tribal Institutional Controls/Engineering Controls Registries	0.5 mile	0
State and Tribal Voluntary Cleanup Sites	0.5 mile	0
RCRA-Non Generators	0.25 mile	0
EDR Historical Auto Stations	0.25 mile	7
TSCA	Site	0
FINDS	Site	1

6.3 SITE LISTINGS ON ENVIRONMENTAL DATABASES

As summarized in the following table, the Site was identified approximately 21 times in environmental databases searched:

Listed Sites Name/Address	Database Listings	Summary	REC or HREC? (Yes or No)
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	RCRA-CESQG	The Site is listed as a conditionally exempt small quantity generator of hazardous waste during several years spanning from 1993 to 2006. The Site was formerly listed as a large quantity generator of hazardous waste during 1992. No details regarding substances generated or violations were reported.	No
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	FTTS/Hist FTTS	The Site was listed in the Federal TSCA Tracking System Database. The Site was reported as being investigated in 1994 for "Section 6 PCB Federal." No violations were reported.	No
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	FINDS (Facility Index System)	No site-specific info was provided other than the Registry ID: 110001653425.	No
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	LUST 24-89-4017 LUST 24-91-4255 LUST 24-99-4016 LUST 24-99-4050 LUST 24-09-0826	Five historic LUST activities at OSH were identified. Each appears to be closed.*	Yes* No* No* Yes* No*
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	UST	10 historic USTs were listed. Four are listed as permitted, three are listed as active and seven are listed as having been removed. It appears as though at least two of the removed USTs were located at the Site, and one of the active USTs is currently located at the Site.	Yes*
Oregon State Hospital 2600 Center Street NE, Salem, OR 97301	MANIFEST	This database tracks hazardous waste manifest information. The year is listed as 2006. EPA ID is listed as ORD080968696. No	No

		other information is provided.	
2600 Center Street #34, Salem, OR 97301	OR HAZMAT (Incident 950134)	Salem Fire Dept. reportedly responded to a hazardous materials incident at Santiam Hall (Building #34) in 1995. A staff member reportedly mixed two cleaning agents in a bucket creating toxic fumes. The mixture was flushed down the sink.	No
2575 Center Street Salem, OR 97301	OR HAZMAT (Incident 060055)	Salem Fire Dept. reportedly responded to a hazardous materials incident at Yaquina Hall (Building #33) in 2006. A letter was sent from an inmate to the Director of Corrections. The letter contained a white powder, which was later determined to be chalk.	No
2600 Center Street NE Salem, OR 97301	UIC	The Site is listed as having had an underground injection control permit for storm water discharges. The Site has been granted closure. It is suspected that this listing is related to storm water at the OSH-SC.	No
2600 Center Street NE Salem, OR 97301	AST	The Site is listed as having a 10,000-49,999 gallon diesel fuel AST. This listing appears to be related to the OSH-SC.	No
2600 Center Street NE Salem, OR 97301	OR HAZMAT (Incident 860198)	Salem Fire Dept. reportedly responded to a hazardous materials incident in 1986. The chlorine mixer was reportedly overfilled for the swimming pool and gas was released in the building.	No
2600 Center Street NE Salem, OR 97301	OR HAZMAT (Incident 890139/ 900347)	Salem Fire Dept. reportedly responded to a hazardous materials incident in 1990. A motor vehicle accident reportedly resulted in a spill of sulfuric acid. The location of the incident was not reported.	No

2600 Center Street NE Salem, OR 97301	NPDES	The Site was issued a NPDES Permit for general construction in 2008. This appears to be associated with the renovation of the OSH-SC.	No
2600 Center Street NE Salem, OR 97301	HSIS	The Site was listed as ID 005817 (Physical Plant). The following substances were listed as being present at the Site: glycol ether, DOWANOL DB (pesticide), sodium hypochlorite, propane and petroleum hydrocarbons.	No
2600 Center Street NE Salem, OR 97301	ECSI (#1984)	The Site is listed in the Environmental Cleanup Site Information System due to a reported release of hydraulic fluid from an elevator in Yaquina Hall (Building #33) in 1996. Three monitoring wells were reportedly installed and monitored. The activity was granted No Further Action (NFA) status in 1997.	Yes*
DHS 2575 Bittern St NE Salem, OR 97309	HSIS	The Site was listed as ID 005812 (Yaquina Hall). The following substances were listed as being present at the Site: sulfuric acid.	No

*see details below

Stantec contacted ODEQ regarding listings of potential environmental concern listed in the above table or in the ODEQ online records. ODEQ file reviews were completed (in Salem on March 19, 2013 and in Portland on March 26, 2013). Select documents were photocopied and are provided in Appendix C. Stantec also contacted the Salem Fire Department regarding records of potential environmental concern pertaining to storage tanks, chemical storage, inspections and emergency response. The Fire Department provided records relating to the installation and removal of USTs at the Site. Copies of the records are provided in Appendix C. A brief summary of the documents/information provided is as follows:

LUST #24-89-4017: This file is related to a documented release from a former 250-gallon gasoline UST situated south of the west entrance to McKenzie Hall (Building #40). The UST was connected to a backup generator. The approximate location of the UST is depicted on Figure 2 and in McKenzie Hall, Photos 49-51 in Appendix A. A release to the subsurface of an estimated 240 gallons is reported to have occurred on or before March 13, 1989. The UST was removed immediately thereafter, on March 14, 1989. The release resulted in the presence of free floating gasoline on the groundwater and soil contamination.

Efforts to remediate the impacted soil and groundwater were implemented from shortly after the occurrence of the release through to 1994. In September 1994 a request for closure was submitted to ODEQ based on four quarters of groundwater monitoring. The closure request was based on results of monitoring indicating relatively low concentrations of gasoline constituents remained in groundwater and the excavation of pockets of gasoline contaminated soils.

A March 1999 Information Request Letter from ODEQ requested significant additional documentation regarding remediation and monitoring efforts. The ODEQ letter concluded that additional groundwater investigation would be needed as "the record does not appear to support the conclusion that 240 gallons or more of gasoline contamination has been removed from the environment."

In response to the March 1999 Information Request Letter, in June 1999, three site-assessment push probes were advanced to collect soil and groundwater samples in the vicinity of the former tank pit. The results of groundwater samples indicated concentrations of benzene and lead at relatively low concentrations. This activity was granted No Further Action (NFA) Status by ODEQ in July 2000, however, a limitation was placed on future use or development of shallow groundwater. Based on the presence of petroleum impacts in groundwater and limitations on future use, this activity is considered a REC.

LUST #24-91-4255: This file is related to a heating oil or diesel fuel release reported on August 28, 1991. There is no reference to the volume released or specific location, however, the release was reported by a "contractor working on the generator tank." Correspondence from ODEQ in 1991 referenced a UST permit amendment inferring the release occurred form a UST. Additional correspondence form ODEQ referenced both a "pipeline leak" and release from a "tank;" therefore, the precise source or location remains uncertain. In a July 21, 1999 ODEQ letter to the OSH physical plant manager, ODEQ requested information related to the release and stated the file may be closed "on subsequent decommissioning." OSH responded to ODEQ in an August 3, 1999 letter stating no recollection of the release. The OSH letter indicates further that if the release had occurred, it would have been remediated during tank upgrading or removal activities.

The most recent correspondence in this file is an ODEQ memorandum dated August 7, 2000 containing an opinion that the release has been "dealt with" however, "the problem is the pieces cannot be tied together after 11 years." The memo concludes with the following: "all tanks have been removed and the sites cleaned up. Therefore, there is an excellent chance this release has been resolved." This activity was granted administrative closure in 2000, however, given the uncertainty of the location and lack of details regarding the assessment or cleanup, this activity is considered a potential environmental concern.

LUST #24-99-4016: According to information provided by Mr. Hamilton (see Section 5.1), this activity appears to be related to the removal of multiple heating oil tanks in 1999 at the OSH-SC, not the Site. This activity was granted NFA status in 2000 and is not considered a REC for the Site.

LUST #24-99-4050/Current 2,000-Gallon Diesel UST: This activity appears to be related to the 2,000-gallon UST formerly located in the vicinity of the existing 2,000-gallon diesel UST located east of the east/south wing of Eola Hall (the location is depicted on Figure 2 and in Eola Hall,

Photos 17, 18, 20 and 21 in Appendix A). Based on records provided by the Salem Fire Department (provided in Appendix C), upon removal of the former UST in February 1999, it appears as though soil contamination was identified. According to ODEQ records, this activity was granted NFA status in 2000, however the presence of an existing UST in this location is considered a REC.

LUST #24-09-0826: This activity appears to be related to the removal of a heating oil tank in 2009 at the OSH-SC, not the Site. This activity was granted NFA status in 2011 and is not considered a REC.

ECSI #1984: This activity is related to the documented release of hydraulic oil from the west elevator equipment in Yaquina Hall (Building #33) in 1996. The amount released was estimated to be 140 gallons. In an effort to assess the impacts, three groundwater monitoring wells were installed in July 1996. Benzene, toluene and naphthalene were detected in groundwater during the initial sampling event. Groundwater was sampled for two additional quarters and the concentrations detected were reportedly below the detection limits or the groundwater cleanup standard. This activity was granted NFA status in 1997, however, as indicated in the documents provided, the suspected hydraulic oil remains beneath the building, therefore this activity is considered a REC.

6.4 VICINITY PROPERTY LISTINGS IN ENVIRONMENTAL DATABASES

Stantec evaluated data presented in the environmental agency database search report according to the methodology described in Section 6.1. Based on these criteria, the following 12 individual facilities were identified as the most likely potential sources of impact to the Site. Each was further evaluated to as to whether or not it creates a REC for the Site, and the rationale is provided below.

Listed Sites Name/Address	Database Listings/Info	Distance/Direction from Site	REC or HREC? (Yes or No)
Heating Oil Tank 1212 23rd Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2007.	Appears to be located several properties north of the Site.	No
Salem Regional Rehabilitation Center/Hospital 2561 Center St NE, Salem, OR 97301	LUST* UST* AST* HSIS*	West of and neighboring the Site (across 23rd Street NE)	No*
Heating Oil Tank 2355 D Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2001.	North of and neighboring the Site (across D Street NE)	No

Heating Oil Tank 2645 D Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported in 1996.	North of and neighboring the Site (across D Street NE)	No
Heating Oil Tank 2745 D Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2009.	North of and neighboring the Site (across D Street NE)	No
Heating Oil Tank 2755 D Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2009.	North of and neighboring the Site (across D Street NE)	No
Heating Oil Tank 1221 23rd Street NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2006.	Appears to be located several properties north of the Site.	No
Heating Oil Tank 740 Park Avenue, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 1996.	East of and neighboring the Site (across Park Avenue NE)	No
Center Street Auto SVC and Repair/Spartan Station/Less Arco Service Station 2903 Center Street NE, Salem, OR 97301	EDR Historic Auto Station* LUST* UST*	East of and neighboring the Site (across Park Avenue NE)	No*
Heating Oil Tank 1013 Icel Court NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2004.	North of and neighboring the Site (across D Street NE)	No
Heating Oil Tank 1008 Icel Court NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported in 1997.	North of and neighboring the Site (across D Street NE)	No
Heating Oil Tank 1018 Icel Court NE, Salem, OR.	LUST; Appears to be a home heating oil tank reported as cleaned up in 2007.	North of and neighboring the Site (across D Street NE)	No

*see details below

Numerous Leaking Heating Oil Tanks within 1/8th of a Mile: Numerous heating oil tanks are reported as having leaked at residential properties located in the neighborhoods north and east of the Site. The majority of these properties appear to be listed as cleaned up. Based on the characteristics of heating oil releases and the separation of these properties from the Site (by major roads and/or additional properties), they are not considered RECs for the Site.

Salem Regional Rehabilitation Center/Hospital: This facility neighbors the Site on the west side of 23rd Street NE. A LUST was identified in 1997 and the cleanup appears to be ongoing. The UST listed at the facility appears to have been decommissioned. A 200-499-gallon diesel fuel AST appears to be present. The Site was listed as ID 066331. The following substances were listed as being present at the Site: petroleum mid-distillates. Due to the separation of this facility from the Site, this facility is not considered a REC for the Site. Due to the lack of information provided, it is considered a potential environmental concern.

Center Street Auto SVC and Repair/Spartan Station/Less Arco Service Station: – This facility neighbors the Site on the east side of Park Avenue NE. A LUST was identified in 1990 and the cleanup appears to be ongoing. Five USTs listed at the facility appear to have been decommissioned. The facility appears to have been an auto service/repair facility from at least 1961 to 2012. Due to the separation of this facility from the Site, this facility is not considered a REC for the Site. Due to the lack of information provided, it is considered a potential environmental concern.

6.5 AGENCIES CONTACTED

The following agencies responded to the request for records:

- Salem Fire Department
- ODEQ

The records are provided in Section C and are discussed in Sections 4, 5.7 and 6.3.

7.0 DATA GAPS

The federal AAI rule [40 CFR 312.10(a)] and ASTM E1527-05 identify a "data gap" as the lack or inability to obtain information required by the standards and practices of the rule despite good faith efforts by the Environmental Professional or the User.

Any data gaps resulting from the Phase I ESA described in this report are listed and discussed below.

Deletions or Exceptions From Scope of Work:	None.
Weather-Related Restrictions To Site Reconnaissance:	Weather conditions during the Site visit were overcast and cold, and included periods of overnight rain and/or significant condensation. De minimis surface staining (if present) might not be obvious or visible under such conditions. This condition is not expected to change the conclusions of this report.
Facility Access Restrictions to Site Reconnaissance:	Numerous areas of the Site were not accessed during the Site reconnaissance either due to locked doors, health and safety concerns (high voltage areas and sloped roofs) or other access restrictions (secure communications room). A partial list is provided in Section 1.3. It is possible that hazardous substances or petroleum could be present in the inaccessible areas under conditions that indicate an existing release, a past release, or a material threat of a release. Of particular concern are inaccessible storage areas and high voltage electrical rooms in the basement/tunnel systems (which likely contain transformers). This data gap is considered a potential environmental concern.
Other Site Reconnaissance Restrictions:	None.
Data Gaps From Environmental Records Review:	None.
Data Gaps From Historical Records Review:	None.
Data Gaps From Interviews:	Stantec was unable to interview staff from the DHS who occupy the Yaquina Building as office space. This data gap is not expected to change the conclusions of this report.

Other Data Gaps:	The majority of the former psychiatric facility had been vacated prior to the Site reconnaissance, and sufficient information regarding chemicals historically present at the Site during its long use as a medical facility was not identified during the Phase I ESA. Numerous floor drains, sinks and sumps were present throughout the equipment and storage areas in the basement and tunnel areas. The floor areas surrounding some of the floor drains and sumps had unidentified staining. It is possible that historical releases of hazardous substances and/or petroleum products may have occurred in these areas in the past, resulting in impacts to soil and/or groundwater beneath structures and other areas across the Site. This is considered a potential environmental concern.

8.0 OPINION AND CONCLUSIONS

Stantec has completed a Phase I ESA of the Oregon DAS property known as OSH-NC located at 2575 Bittern Street NE and 2575-2600 Center Street NE in Salem, OR. The Phase I ESA was conducted in general conformance with ASTM E 1527-05 on behalf of Leland and Oregon DAS as part of closure of the former psychiatric/medical Facility and in preparation for potential reuse of the Site.

The Site consists of approximately 47.37 acres of land developed with seven buildings, an interconnecting underground tunnel system, associated support structures (mechanical equipment/rooms, backup generators, and sheds/storage areas), roadways, parking lots, parks and lawns/landscaped areas. Formerly occupied as the northern portion of a State psychiatric facility between approximately 1888 and 2012, two of the buildings (Dome Building and Yaquina Hall) are currently occupied as offices. The remainder of the campus is generally vacant.

The Site was identified approximately 21 times in environmental databases searched as part of the Phase I ESA. The Site reconnaissance and review of historical records, environmental databases and other sources of information identified the following *RECs* for the Site:

(1.) Although an asbestos survey was not performed as part of the scope of work for the Phase I ESA, based on a review of previous reports and observations made during the Site visit, significant quantities of ACMs are present throughout the buildings and tunnels at the Site. The deteriorating condition of the ACMs present in several areas of the Site, including the accumulation of dusts in tunnels and crawl spaces and documented contamination of soil in some areas, is considered a REC. Previous reports have recommended restricted access in certain areas of the Site until repairs/cleanup is completed. It is likely that significant abatement of other ACMs not considered a concern in their current state will be necessary during major maintenance, renovation or demolition activities conducted at the Site.

(2.) LUST #24-99-4050/Existing 2,000-Gallon Diesel UST: The LUST activity appears to be related to a 2,000-gallon UST formerly located in the vicinity of the existing 2,000-gallon diesel UST located east of Eola Hall. Based on records provided by the Salem Fire Department, upon removal of the former UST in February 1999, it appears as though soil contamination was identified. The LUST activity was granted NFA status in 2000; however the presence of an existing UST in this location is considered a REC.

(3.) LUST #24-89-4017: This activity is related to a documented release from a former 250-gallon leaded gasoline UST situated south of the west entrance to McKenzie Hall in 1989. The release resulted in the presence of free floating gasoline on the groundwater and soil contamination. Subsequent assessment and remediation activities were conducted between 1989 and 1999, and the activity was granted NFA status in 2000. However, due to impacts left in place in groundwater, a limitation was placed on future use or development of shallow groundwater in the vicinity of the impacts. Impacts, if still present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of this area of the Site.

(4.) ECSI #1984: This activity is related to the documented release of an estimated 140 gallons of hydraulic oil from the west elevator in Yaquina Hall in 1996. Groundwater was sampled for three quarters and the concentrations detected were reportedly below groundwater cleanup standards. This activity was granted NFA status in 1997, however, it is suspected hydraulic oil remains beneath the building, and therefore this activity is considered a REC.

Several adjoining or nearby properties were identified in the environmental databases searched as part of the Phase I ESA, however, given the location and/or other associated conditions regarding those listings, they were not considered RECs for the Site.

The following *other findings of potential environmental concern* were identified:

(1.) Miscellaneous hazardous materials and/or petroleum products were observed throughout the buildings. In addition, the majority of the chemicals and materials formerly used during the Facility's long-term uses as a psychiatric/medical facility (including a pharmacy, X-Ray equipment and two dental areas) had been removed prior to the date of the Site visit. A list of chemicals formerly used at the Facility was not identified during the Phase I ESA, with the exception of the HSIS information provided, which listed the following substances as having been present at the Site: glycol ether, DOWANOL DB (pesticide), sodium hypochlorite, sulfuric acid, propane and petroleum hydrocarbons. Numerous floor drains, sinks and sumps were present throughout the equipment and storage areas in the basement and tunnel areas of the buildings. The floor areas surrounding some of the floor drains, sumps and other surfaces had unidentified staining. It is possible that historical releases of hazardous substances and/or petroleum products may have occurred in these areas in the past, resulting in impacts to soil and/or groundwater beneath structures and other areas across the Site. Impacts, if present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of the Site.

(2.) Electrical rooms marked "High Voltage" throughout the basements and tunnels were inaccessible during the Site visit. As stated in a previous report: "the main electrical power distribution to the campus is served by PGE from a primary line through a series of step-down power transformers. Most of the transformers are located in the tunnel system and are maintained by PGE. It is not known what condition the transformers are in and to what level they have been maintained." The Site was reported as having been investigated in 1994 for "Section 6 PCB Federal." No violations were reported, however, the presence of transformers throughout the basement and tunnel system, which are of unknown current condition and contain hydraulic oil with the potential to contain PCBs, is of potential environmental concern.

(3.) Due to the construction dates of the buildings (circa 1912-1956), LBP is anticipated to be present at the Site. It is likely that abatement of LBP will be necessary during major maintenance, renovation or demolition activities conducted at the Site.

(4.) Elevator equipment rooms in the basements of Breitenbush Hall and the Dome Building appear to have oil staining on floor areas outside of equipment containment structures. Based on the age of the buildings, it is possible that releases to soil and/or groundwater

beneath these areas may have occurred. Impacts, if present, could be encountered if demolition of subsurface structures and/or excavation activities were conducted in conjunction with redevelopment of the Site.

(5.) LUST #24-91-4255: This activity is related to a heating oil or diesel fuel release reported on August 28, 1991. There is no reference to the volume released or specific location, however, the release was reported by a "contractor working on the generator tank." This activity was granted administrative closure in 2000, however, given the uncertainty of the location and lack of details regarding the assessment or cleanup, this activity is of potential environmental concern.

(6.) It appears as though the shed located north of the east yard of McKenzie Hall, may be the location of a 190-foot deep irrigation well (known as Well No. 4). It is unknown whether this well remains active or has been abandoned. If it is active, it may need to be properly abandoned in conjunction with redevelopment of the Site.

(7.) Prior to its development as a psychiatric/medical facility, portions of the Site were used for agricultural purposes including an orchard and large poultry farm. Due to the age and type of agricultural activities that occurred at the Site, the potential for the presence of pesticides, herbicides, fertilizers or other agricultural chemicals to remain in soil or groundwater in quantities of concern is considered to be low.

(8.) At least eight substantial (and several other minor) historic structures were formerly present at various locations across the Site. It is likely that fill materials were imported in conjunction with filling subsurface portions of the former structures. Fill materials, as well as subsurface portions of the historic structures (if left in place) may be encountered in conjunction with redevelopment of the Site.

(9.) Salem Regional Rehabilitation Center/Hospital: This facility neighbors the Site on the west side of 23rd Street NE. A LUST was identified in 1997 and the cleanup appears to be ongoing. The UST listed at the facility appears to have been decommissioned. A 200-499-gallon diesel fuel AST appears to be present. Due to the lack of information provided, the potential for this facility to have impacted the western edge of the Site is of potential environmental concern.

(10.) Center Street Auto SVC and Repair/Spartan Station/Less Arco Service Station: This facility neighbors the Site on the east side of Park Avenue NE. A LUST was identified in 1990 and the cleanup appears to be ongoing. Five USTs listed at the facility appear to have been decommissioned. The facility appears to have been an auto service/repair facility from at least 1961 to 2012. Due to the lack of information provided, the potential for this facility to have impacted the southeastern corner of the Site is of potential environmental concern.

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 CFR 312.10. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

All information, conclusions, and recommendations provided by Stantec in this document regarding the Phase I ESA have been prepared under the supervision of and reviewed by the professionals whose signatures appear below.

Prepared by:

Chris Gdak,
Senior Associate/PM

Reviewed by:

Marc Sauze, PE
Senior Associate/Practice Leader

10.0 STATEMENT OF LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based upon professional opinions with regard to the subject matter. These opinions were prepared in accordance with generally accepted environmental consulting and engineering standards and practices applicable to this location and existing at this time. The use of this report is subject to the following limitations:

1. The data and findings presented in this report are valid as of the dates when the investigations were performed. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Work, budgetary constraints, site access and schedule, as defined in the contract with Stantec.
3. This report is based, in part, on unverified information supplied to Stantec by third party sources, such as regulatory agencies, prior owners or operators of the property, analytical laboratories, subcontractors, etc. While efforts may have been made to substantiate this third party information, Stantec cannot guarantee the completeness or accuracy of this information.
4. The findings, observations, and conclusions expressed by Stantec in this report are not, and should not be, considered an opinion concerning the compliance of any past or present owner or operator of the Site with any federal, state or local law or regulation.
5. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon Site conditions in existence at the time of investigation.
6. Stantec reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer a legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, state or local governmental agencies. Issues raised by the report should be reviewed by appropriate legal counsel.
7. This report is intended for the use of Stantec's client and the appropriate regulatory agency only; any other use must be approved by Stantec and the client in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to Stantec.

11.0 REFERENCES

American Society for Testing and Materials (ASTM), 2005, *Standard Practice for Environmental Site Assessments: Phase I Environmental Subject Site Assessment Process,* Designation E 1527-05.

Environmental Data Resources (EDR), 2013. Aerial Photographs, City Directory Abstract, Environmental LienSearch Report, Sanborn® Map Report, Topographic Maps, Radius Map with GeoCheck®, OSH-NC, 2575-2600 Center St. NE and 2575 Bittern St. NE, Salem, OR 97301.

U.S. Environmental Protection Agency (EPA), 2005, All Appropriate Inquiry Final Rule

APPENDIX A
PHOTOGRAPHS OF THE SITE AND VICINITY

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Breitenbush Hall, Building 35	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

1st Floor, Central Area – South Entrance, Communications Center

PHOTO No. 2

1st Floor, Central Area – Cafeteria/Kitchen on North side

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Breitenbush Hall, Building 35	**Photographer:** Chris Gdak

PHOTO No. 3

1st Floor, Central Area – Kitchen Service Elevator

PHOTO No. 4

1st Floor, Central Area – Entrance to West Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Breitenbush Hall, Building 35	**Photographer:** Chris Gdak

PHOTO No. 5

1st Floor, Central Area – Passenger Elevator

PHOTO No. 6

1st Floor, West Wing – Door to Former Patient Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013

1st Floor, West Wing – Common Wash Area

PHOTO No. 8

1st Floor, West Wing - Restroom

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9

1st Floor, West Wing – Common Wash Area

PHOTO No. 10

1st Floor, West Wing – Wash/Restroom Area

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

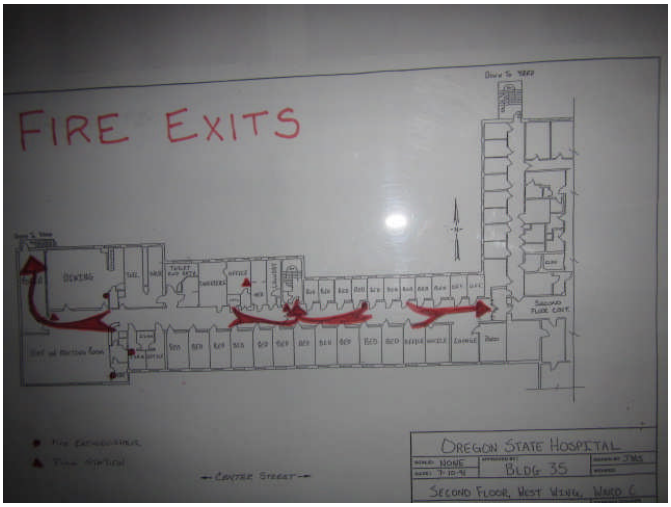
PHOTO No. 11

2nd Floor, West Wing – Kitchen Area on West End

PHOTO No. 12, February 19, 2013

2nd Floor, West Wing – Kitchen Area

PHOTO No. 13



2nd Floor, West Wing – Layout

PHOTO No. 14

2nd Floor, West Wing – Common Wash Area

PHOTO No. 15

3rd Floor – Cleaning Supplies

PHOTO No. 16

3rd Floor – Former Common Wash Area

PHOTO No. 17

3rd Floor – Ceiling

STANTEC CONSULTING SERVICES INC
PHOTOGRAPHIC RECORD

Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 18, February 19, 2013

3rd Floor – Electrical Panels

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19

Roof – Looking West towards Dome Building

PHOTO No. 20

Roof – Looking East-Northeast toward North Central Area of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21

Roof – Looking Northwest at Yard North of West Wing

PHOTO No. 22

Roof – Looking West at dome building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23

Roof – Looking Northwest at Yaquina Hall

PHOTO No. 24

Roof – Looking North at McKenzie Hall

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25

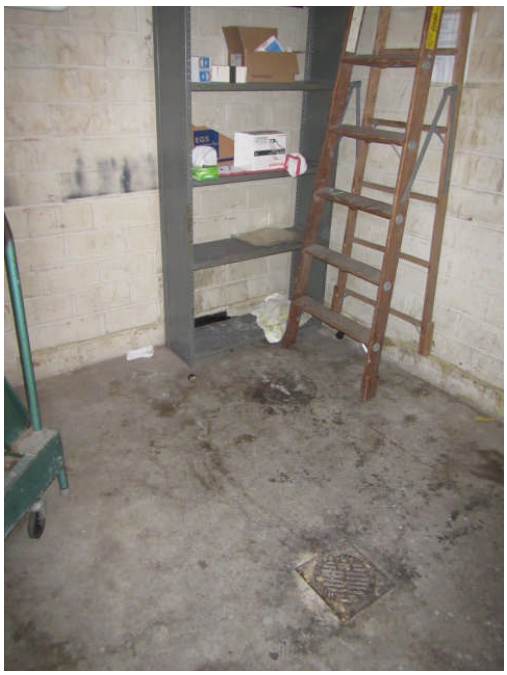
Roof – Air Handling Unit

PHOTO No. 26

Basement – Electrical Room (No Access)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 27



Basement – Floor Drain in Storage Room

PHOTO No. 28

Basement – Floor Drain in Storage Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 29, February 19, 2013

Basement – Sump Pit

PHOTO No. 30

Basement – Pool Equipment

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 31

Basement – Pool Equipment

PHOTO No. 32

Basement – Tunnel system

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 33

Basement – Tunnel system

PHOTO No. 34

Basement – Pool Chemical Containers

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 35, February 19, 2013

Basement – Pool Chemical Containers

PHOTO No. 36

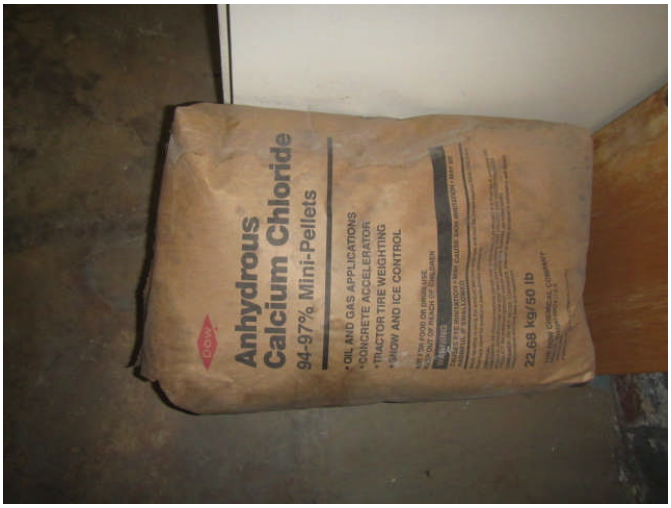
Basement – Pool Chemicals

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 37

Basement – Pool Treatment Room

PHOTO No. 38



Basement – Chemicals

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 39

Basement – Other Materials in Storage Area

PHOTO No. 40, February 19, 2013

Basement – Floor Drain Near Ice Machine

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 41

Basement – Pool Area

PHOTO No. 42

Basement – Chemicals in Storage Area

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 43

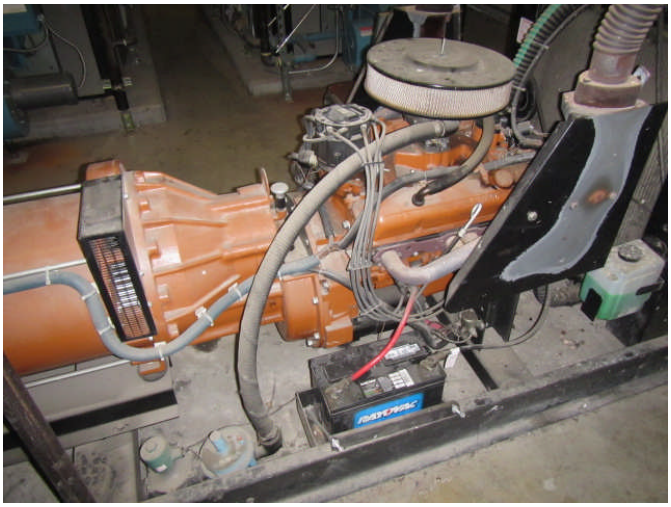
Basement – Mechanical room

PHOTO No. 44

Basement – Mechanical Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 45, February 19, 2013



Basement – Mechanical Room

PHOTO No. 46

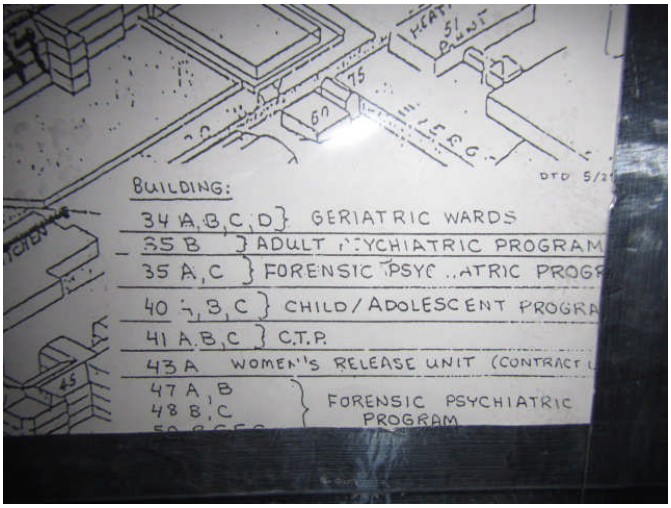
Basement – Mechanical Room Sump

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 47

Basement – 55-Gallon Drum of “Boiler Pro”

PHOTO No. 48



Basement – Tunnel Map

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 49

Basement – Tunnel, Locked Doors (No Access)

PHOTO No. 50

Basement – Tunnel, Locked Doors (No Access)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 51, February 19, 2013

Basement - Tunnel

PHOTO No. 52

Basement – Tunnel Going East, Storage Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 53

Basement – Tunnel Going East, Storage Room, Fire Detectors

PHOTO No. 54

Basement – Tunnel Going East, Storage Room, Door

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 55

Basement – Tunnel Going East, Former Gas Cylinder Storage Area

PHOTO No. 56

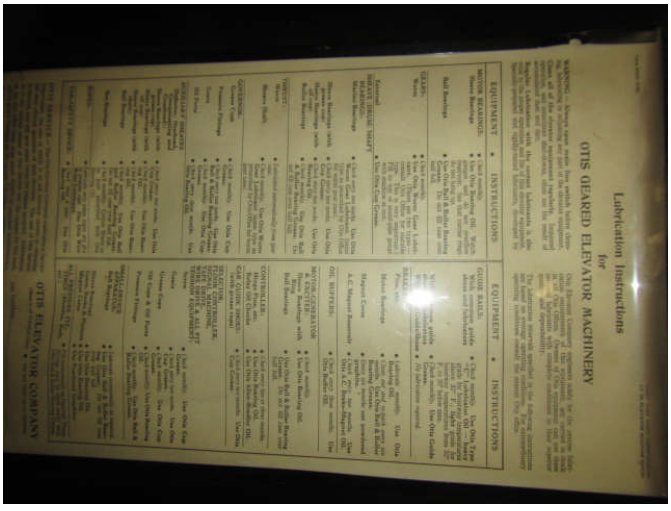
Basement – East Freight Elevator Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 57, February 19, 2013

Basement – East Freight Elevator Room, Inside

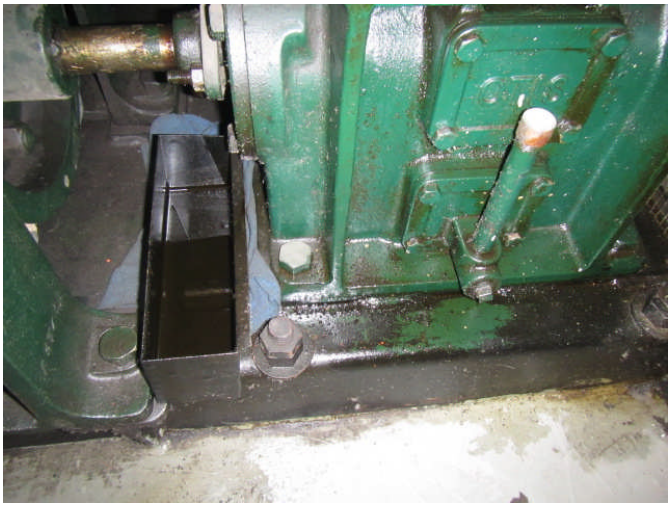
PHOTO No. 58



Basement – East Freight Elevator Room, Sign on Wall

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 59



Basement – East Freight Elevator Room, Oil

PHOTO No. 60

Basement – East Freight Elevator Room, Oil Staining

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 61

Basement – East Freight Elevator Room, Oil Staining

PHOTO No. 62

Yard North of Building – Odd Looking Planter

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 63, February 20, 2013

Yard North of Building – Drain and Cleanout

PHOTO No. 64

Yard North of West Wing of Building – Odd Looking Planters

STANTEC CONSULTING SERVICES INC
PHOTOGRAPHIC RECORD

Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 65, February 20, 2013

Waste Storage Area West of SW Corner of Building

PHOTO No. 66

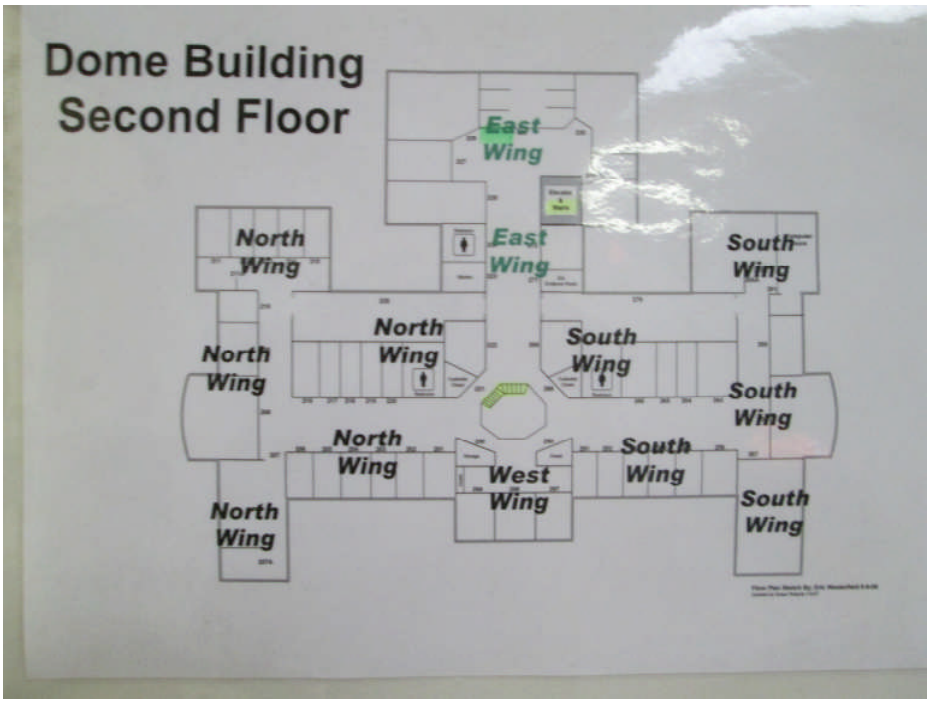
Former Storage Area North of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak
PHOTO No. 67, February 20, 2013	

Looking at North Side of East Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Dome Building #36	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013



2nd Floor – Layout

PHOTO No. 2

Basement – Elevator Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Dome Building #36	**Photographer:** Chris Gdak

PHOTO No. 3, February 19, 2013

Basement – Staining on Floor of Elevator Room

PHOTO No. 4

Basement – Oil in Storage Area

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Dome Building #36	**Photographer:** Chris Gdak

PHOTO No. 5, February 19, 2013

Basement – Mechanical Room

PHOTO No. 6

Basement – Mechanical Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013

Basement – Chemical Storage Room

PHOTO No. 8

Basement – Materials in Storage Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9, February 19, 2013

Basement – Materials in Storage Room

PHOTO No. 10

Basement – Materials in Storage Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 11, February 19, 2013

Basement – Materials in Storage Room

PHOTO No. 12

Basement – Materials in Storage Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 13, February 19, 2013

Basement – Layout

PHOTO No. 14

Dome Area in Center of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 15, February 19, 2013

Upper Crawl Space/Attic

PHOTO No. 16

Upper Crawl Space/Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 17, February 19, 2013

Roof

PHOTO No. 18

Roof

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19, February 19, 2013

Roof

PHOTO No. 20

Equipment in Upper Crawl Space/Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21, February 20, 2013

Generator East of Building

PHOTO No. 22

Generator East of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23, February 20, 2013

Entrance on East Side of Building

PHOTO No. 24

Entrance on West Side of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25, February 20, 2013

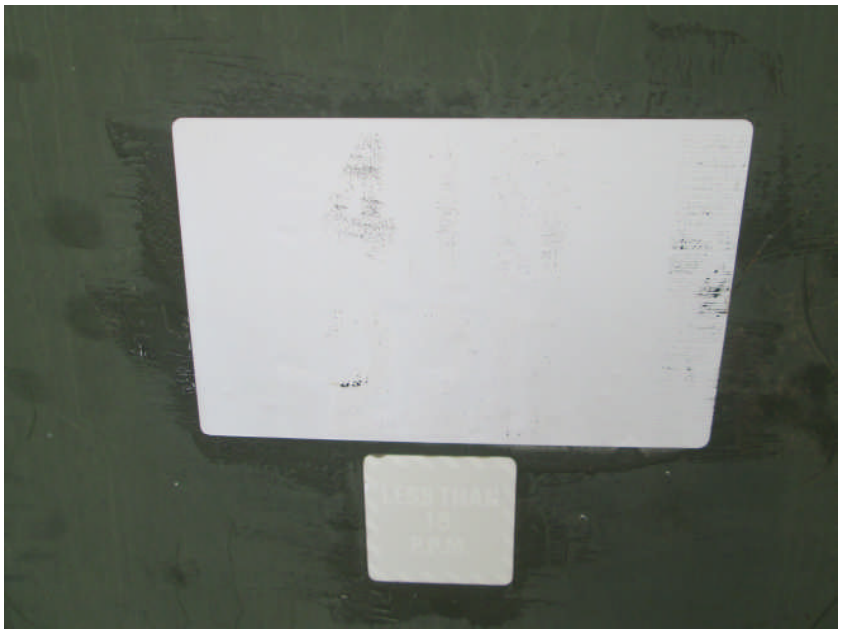
Plaque on Building

PHOTO No. 26

Transformer – Located Near East Face of Southeast Corner of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 27, February 20, 2013



Faded Label on Transformer – “Less than 15 PPM”

PHOTO No. 28

Transformer – Located East of Southeast Corner of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak
PHOTO No. 29, February 20, 2013	

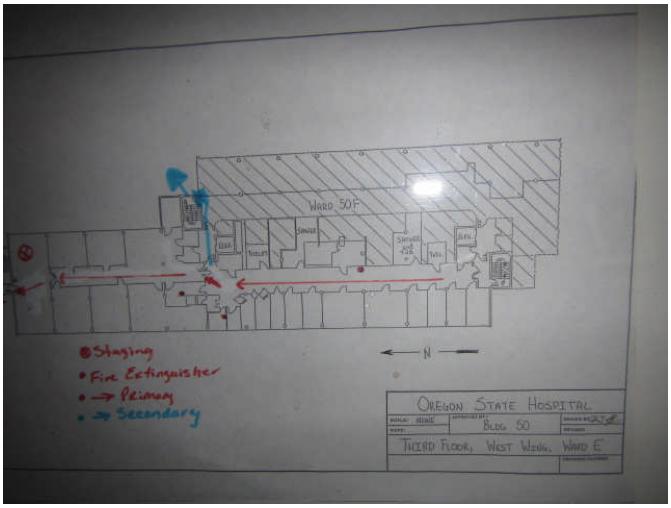
Tunnel from Dome Building NW to Former Nursing Home Building (No Longer Present)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

View of West Yard Outside 2nd Floor Window

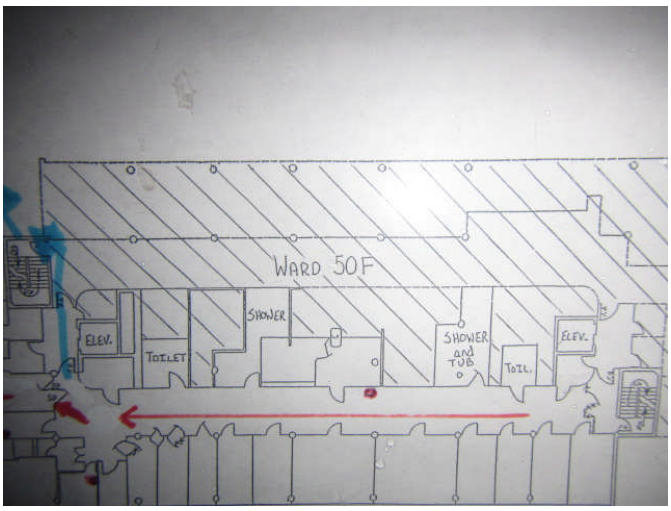
PHOTO No. 2



3rd Floor, West Wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 3, February 19, 2013



3rd Floor, West Wing – Layout

PHOTO No. 4

Janitor Closet

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 5, February 19, 2013

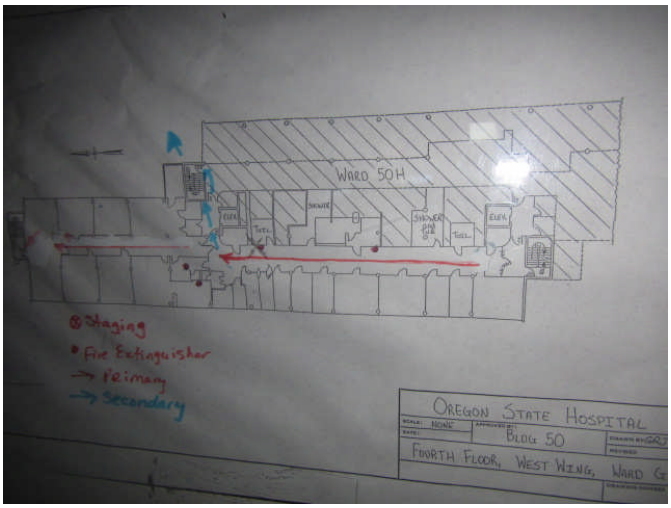
Janitor Closet

PHOTO No. 6

Janitor Closet and Water Lines

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013



4th Floor, West Wing – Layout

PHOTO No. 8

5th Floor, West Wing – North End

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 9, February 19, 2013

5th Floor – Patient Wing

PHOTO No. 10

5th Floor – Common Area

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 11, February 19, 2013

5th Floor – Office Area

PHOTO No. 12

Roof – Material Info

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 13, February 19, 2013

Roof – Looking West at McKenzie Hall

PHOTO No. 14

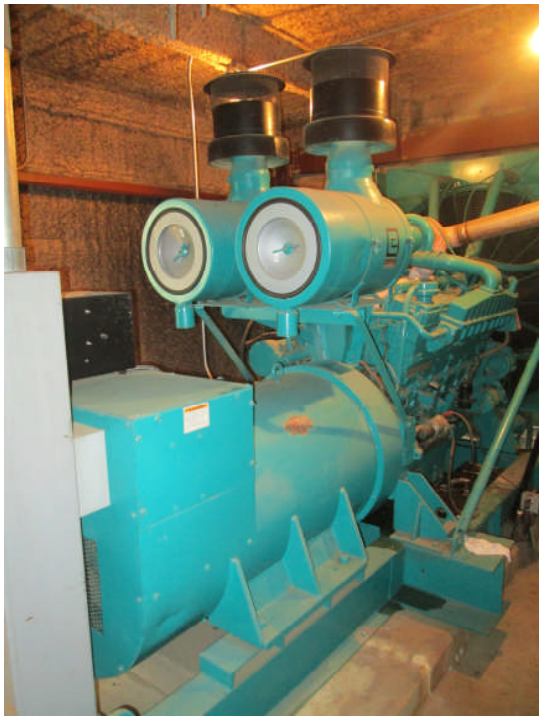
Air Handlers North of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 15, February 20, 2013

Air Handlers North of Building

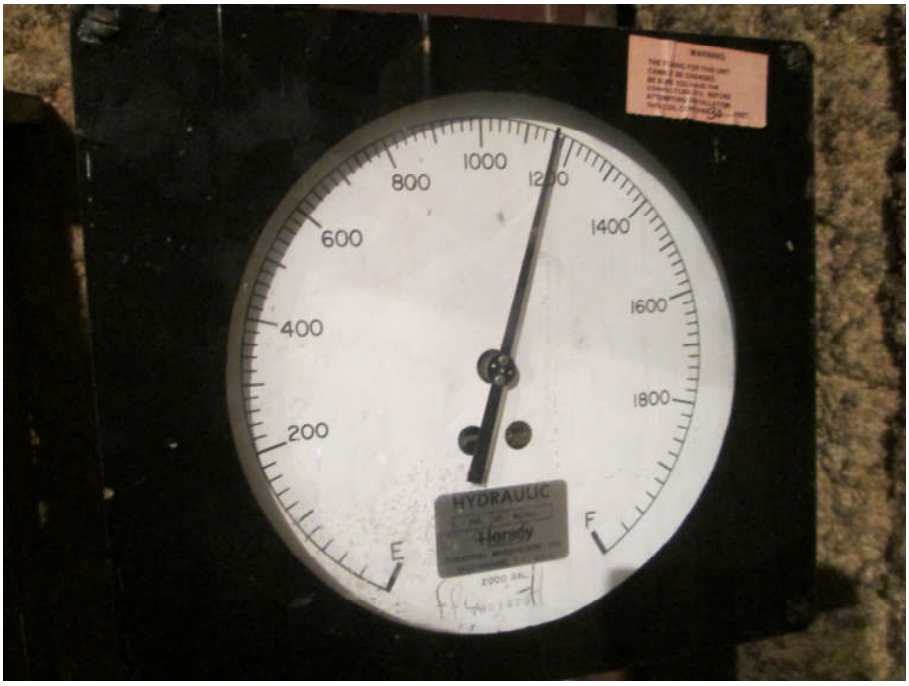
PHOTO No. 16



Generator East of South Side of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 17, February 20, 2013



UST Gauge Associated with Generator

PHOTO No. 18

UST System for Generator

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 19, February 20, 2013

Chemicals in Generator Building

PHOTO No. 20

UST Associated with Generator

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 21, February 20, 2013

UST/Generator Area

PHOTO No. 22

Equipment Inside Mechanical Building East of South Side of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 23, February 20, 2013

Equipment Inside Mechanical Building East of South Side of Building

PHOTO No. 24

Mechanical Building – 75-Gallon Tank in Northeast Corner (Appears to Be Empty)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 25, February 20, 2013

Mechanical Building – Drum on Containment Pad

PHOTO No. 26

Mechanical Building – Close-up of Label on Drum

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak

PHOTO No. 27, February 20, 2013

Mechanical Building – Looking North at Structure

PHOTO No. 28

Trash Compactor Located Approximately 100 Feet SE of SE Corner of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Eola Hall (Building #50)	**Photographer:** Chris Gdak
PHOTO No. 29, February 20, 2013	

Trash Compactor Located Approximately 100 Feet SE of SE Corner of Building

STANTEC CONSULTING SERVICES INC
PHOTOGRAPHIC RECORD

Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – McKenzie Hall, Building #40	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

Generator Located West of Building, North of Main Entrance

PHOTO No. 2

Generator Located West of Building, North of Main Entrance

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – McKenzie Hall, Building #40	**Photographer:** Chris Gdak

PHOTO No. 3 - February 19, 2013

View of West Face of North Side of Building

PHOTO No. 4

Communications at Entrance to Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – McKenzie Hall, Building #40	**Photographer:** Chris Gdak

PHOTO No. 5, February 19, 2013

1st Floor – Hallway

PHOTO No. 6

Layouts of 1st and 2nd Floor, Central Area of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013

1st Floor – Storage Room

PHOTO No. 8

1st Floor – Restroom

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9

Outdoor Storage Area

PHOTO No. 10

1st Floor – Couches Stored in Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 11

1st Floor – Washers/Dryers Etc. Stored in Hallway

PHOTO No. 12

1st Floor – Restroom

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 13, February 19, 2013

1st Floor – Storage Area

PHOTO No. 14

1st Floor – Beds Stored in Hallway

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 15

1st Floor – Janitor Closet

PHOTO No. 16

2nd Floor, South Wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 17

2nd Floor – Restroom

PHOTO No. 18

2nd Floor – Patient Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19

2nd Floor, North Wing - Layout

PHOTO No. 20

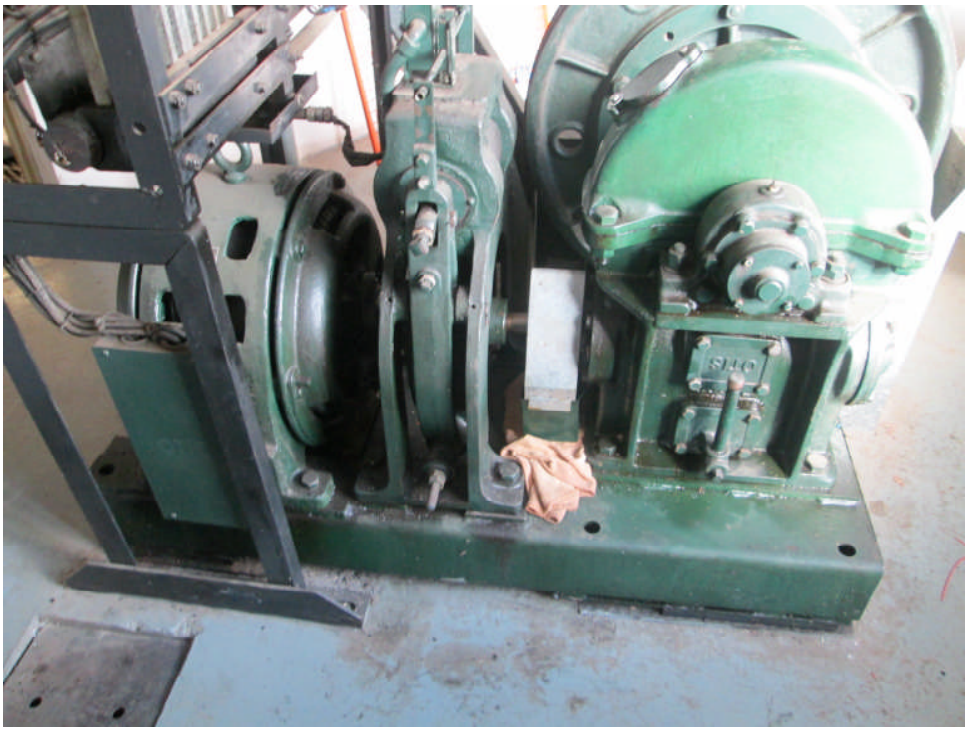
Upper Crawl Space/Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21

Oil Can in Elevator Room in Attic

PHOTO No. 22



Elevator Equipment in Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23, February 19, 2013

Oil Can in Elevator Equipment Room in Attic

PHOTO No. 24

Elevator Equipment in Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25

View of Roof Outside Window

PHOTO No. 26

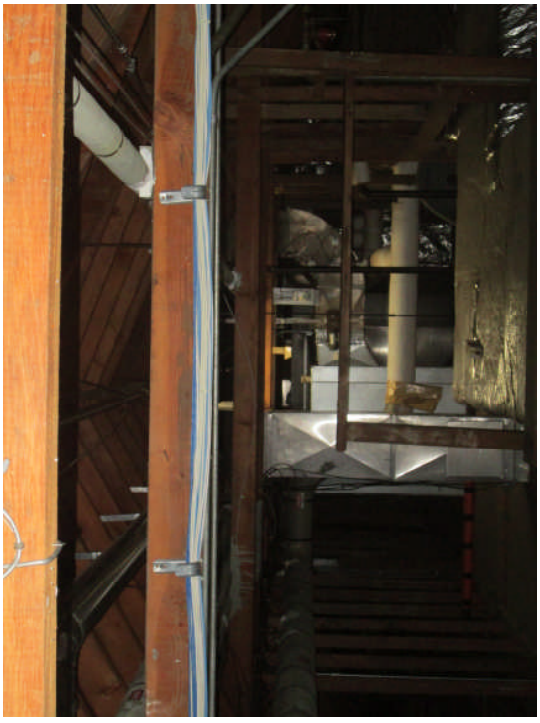
Buckets in Attic to Contain Roof Leaks

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 27

Mechanical Equipment in Attic

PHOTO No. 28



Mechanical Equipment in Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 29, February 19, 2013

Mechanical Equipment in Attic

PHOTO No. 30

Buckets in Attic to Contain Leaks

STANTEC CONSULTING SERVICES INC
PHOTOGRAPHIC RECORD

Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 31, February 19, 2013

Water in Lower Level Window Well

PHOTO No. 32

Electrical Panel in Basement

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 33, February 19, 2013

Door to Electrical Room in Basement

PHOTO No. 34

Equipment in Basement

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 35, February 19, 2013

Electrical Room in Basement (Not Accessed)

PHOTO No. 36

Storage Room in Basement

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 37, February 19, 2013

Basement – Cleaning Stations Stored in Hallway/Tunnel

PHOTO No. 38

Basement – Supplies in Maintenance Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 39, February 19, 2013

Basement – Supplies in Hallway/Tunnel

PHOTO No. 40

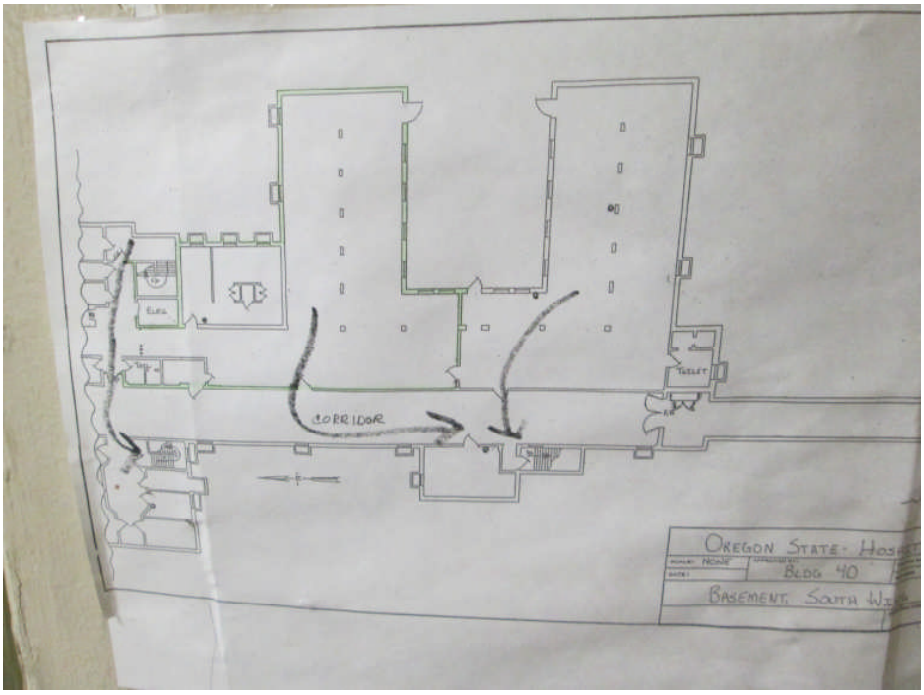
Basement – Storage of Misc. Equipment

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 41, February 19, 2013

Basement – Storage of Chairs

PHOTO No. 42



Basement, South Wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 43, February 19, 2013

Basement – Rainbow Room (No Access)

PHOTO No. 44

Basement – Mechanical Room Door

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 45, February 20, 2013

Basement – Mechanical Room, Boiler Chemical Drums on Containment

PHOTO No. 46

Basement – Mechanical Room, Staining Etc. on Floor

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 47, February 20, 2013

Basement – Mechanical Room

PHOTO No. 48

Storm Drain in Grass West of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 49, February 20, 2013

West Side of Building, South of Main Entrance – Unknown Structure, Possible UST

PHOTO No. 50

West Side of Building, South of Main Entrance – Unknown Structure, possible UST

STANTEC CONSULTING SERVICES INC
PHOTOGRAPHIC RECORD

Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 51, February 20, 2013

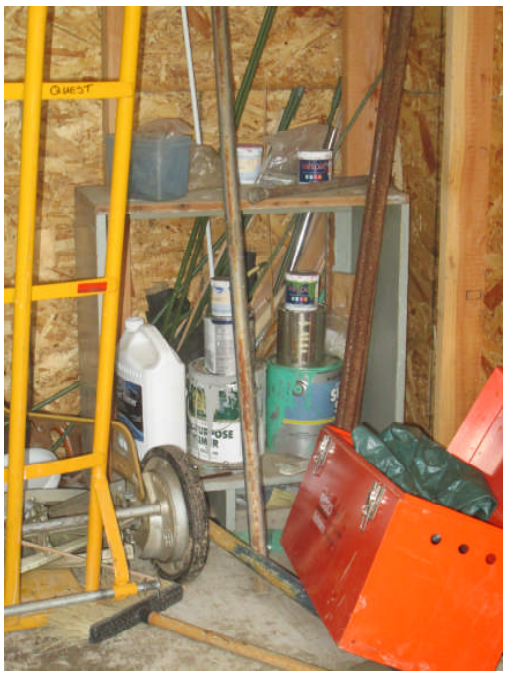
West Side of Building, South of Main Entrance – Unknown Structure, Possible UST

PHOTO No. 52

Storm Drain in Stairwell

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 53, February 20, 2013



Inside of Storage Shed Located in Southeast Corner of East Yard

PHOTO No. 54

Small Generator Inside Shed Located in East Yard

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 55, February 20, 2013

Looking North at Yard East of Building

PHOTO No. 56

Old Shed North of Building (No Access)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Santiam Building #34	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

Basement – Water Filter

PHOTO No. 2

Basement – Water Filter

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Santiam Building #34	**Photographer:** Chris Gdak

PHOTO No. 3

Basement – Water Treatment System

PHOTO No. 4

Basement – Storage Room, Former Gas Cylinder Storage

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Santiam Building #34	**Photographer:** Chris Gdak

PHOTO No. 5

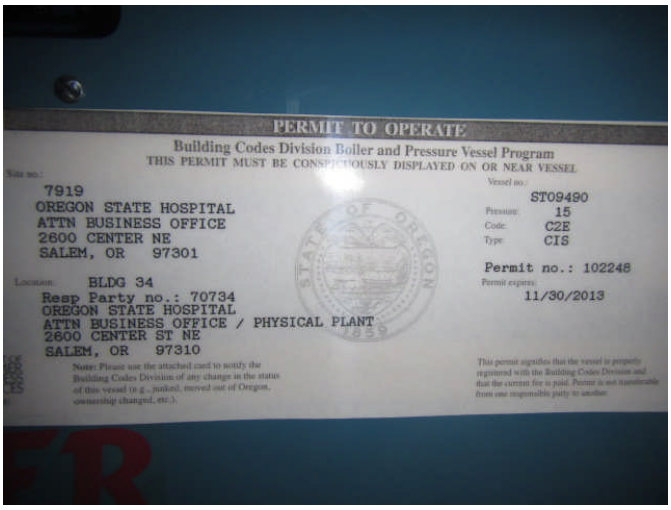
Basement – Electrical Room

PHOTO No. 6

Basement – Mechanical room, Chemical (“Boiler Pro”) on Containment Pad

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013



Basement – Boiler Permit

PHOTO No. 8

Storage Area - Container

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9

2nd Floor – Cleaning Room

PHOTO No. 10

2nd Floor – Treatment Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 11

2nd Floor - Restroom

PHOTO No. 12

2nd Floor – Pressurized Cleaning Machines

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 13, February 19, 2013

2nd Floor – Former Chemical Storage Area

PHOTO No. 14

2nd Floor – Former Chemical Storage Area

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 15

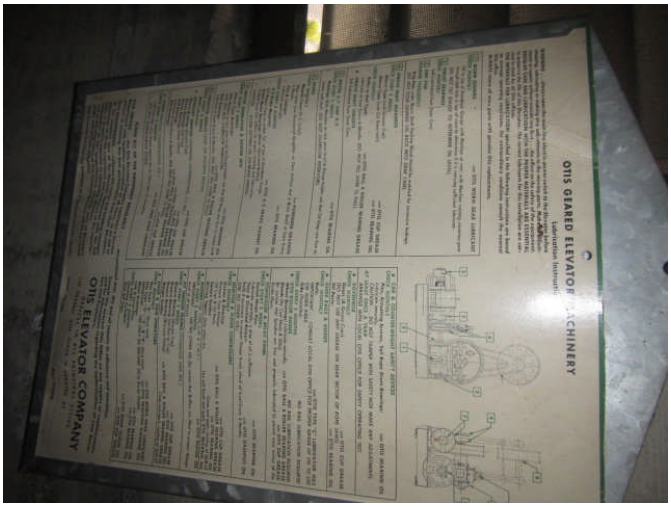
2nd Floor – Dental Room

PHOTO No. 16

Upper Crawl Space/Attic

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 17



Upper Crawl Space/Attic – Elevator Control Room

PHOTO No. 18

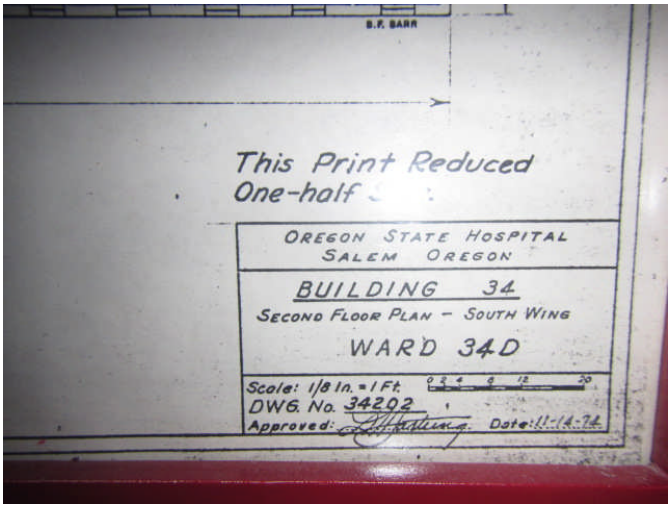
Upper Crawl Space/Attic – Elevator Control Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19, February 19, 2013

Upper Crawl Space/Attic – Elevator Control Room

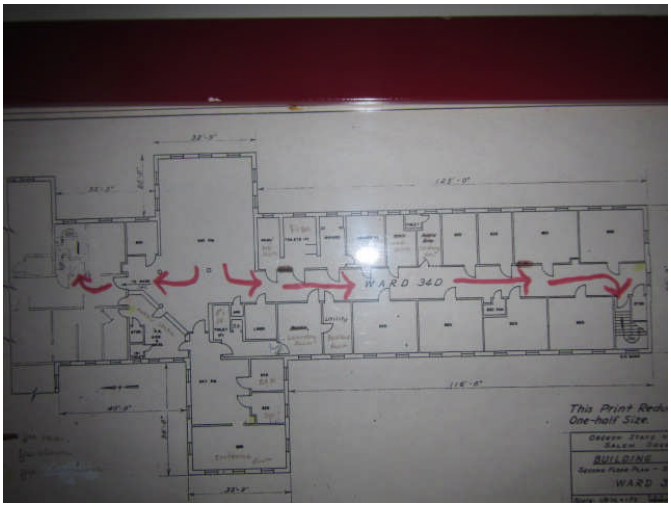
PHOTO No. 20



2nd Floor – South Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21



2nd Floor – Floor Plan of South Wing

PHOTO No. 22

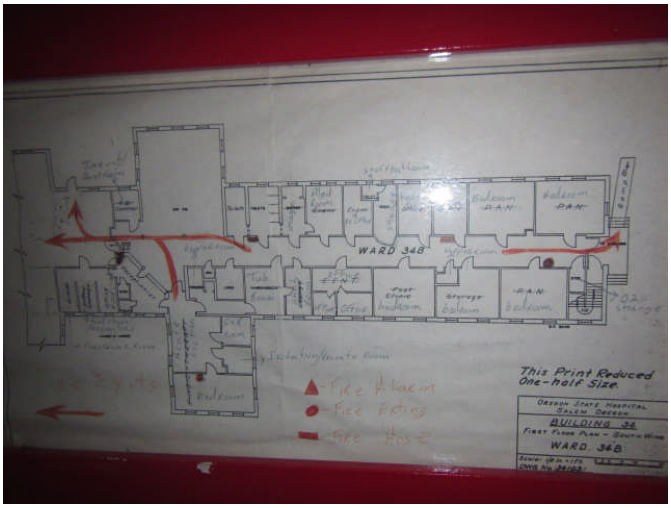
2nd Floor, South Wing - Ceiling

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23

2nd Floor, South Wing - Hallway

PHOTO No. 24



1st Floor, South Wing – Floor Plan

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25, February 19, 2013

1st Floor – Cleaning room

PHOTO No. 26

1st Floor – X-Ray

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 27

1st Floor – X-Ray

PHOTO No. 28

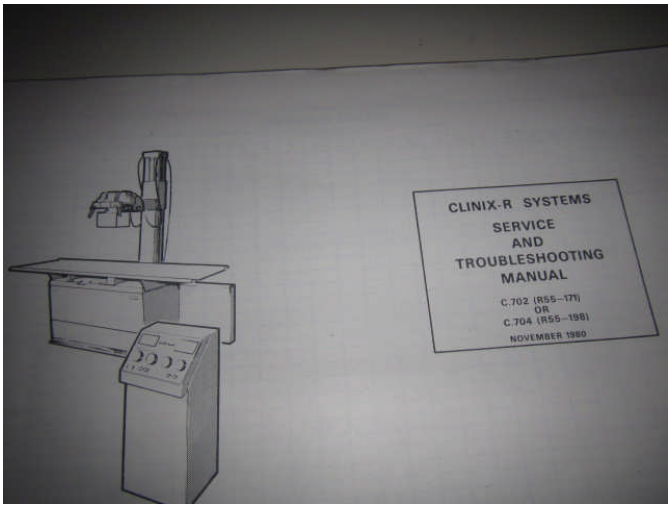
1st Floor – X-ray

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 29

1st Floor – X-ray

PHOTO No. 30



1st Floor – X-Ray

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 31, February 19, 2013

1st Floor – Biohazard Container

PHOTO No. 32

1st Floor – Door to X-Ray Department

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 33

1st Floor – Laundry shoot

PHOTO No. 34

1st Floor – Patient Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 35

1st Floor – Elevator

PHOTO No. 36

1st Floor – Patient Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 37, February 19, 2013

1st Floor – Water Lines in Cleaning Room

PHOTO No. 38

1st Floor – Patient Wing

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 39, February 20, 2013

Main Entrance on West Side of Building

PHOTO No. 40

Unknown Pipe Adjacent to Exterior Wall

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 41, February 20, 2013

Unknown Pipe Adjacent to Exterior Wall

PHOTO No. 42

Generator Located on East Side of Center of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 43, February 20, 2013

Natural Gas Connection to Generator

PHOTO No. 44

Old Propane Tank East of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 45, February 20, 2013

Old Propane Tank East of Building

PHOTO No. 46

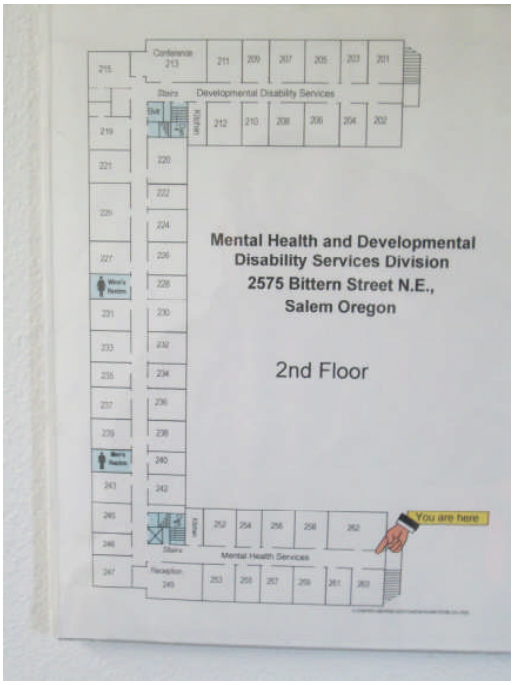
Unknown Concrete Slab Adjacent to South Side of Main (West) Entrance

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak
PHOTO No. 47, February 20, 2013	

Odd Planters Adjacent to Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Yaquina Hall, Building #33	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013



2nd Floor – Layout

PHOTO No. 2

2nd Floor – Elevator (East)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Yaquina Hall, Building #33	**Photographer:** Chris Gdak

PHOTO No. 3, February 19, 2013

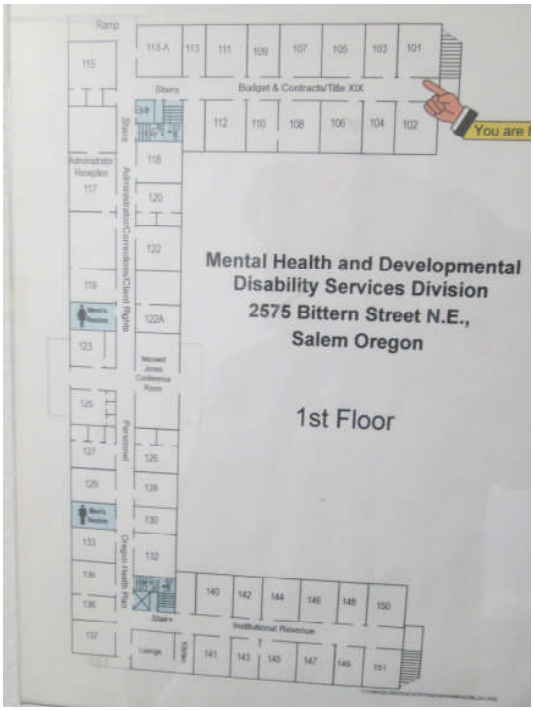
2nd Floor – Storage area

PHOTO No. 4

Communications Room

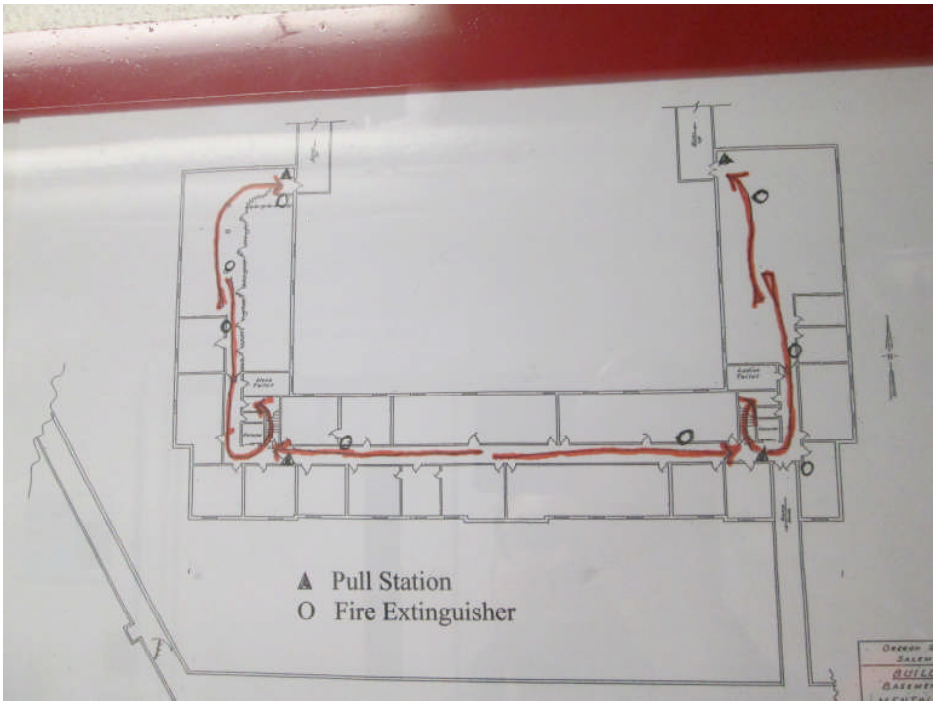
STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Yaquina Hall, Building #33	**Photographer:** Chris Gdak

PHOTO No. 5, February 19, 2013



1st Floor – Layout

PHOTO No. 6



Basement – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013

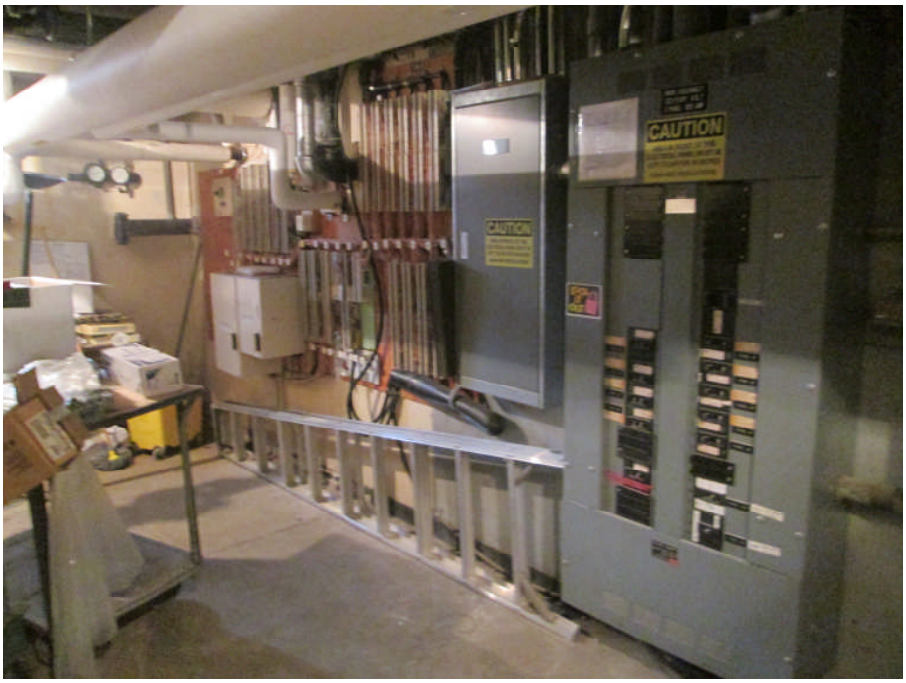
Basement – Mechanical Room, Boiler Chemicals on Containment

PHOTO No. 8

Basement – Mechanical Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9, February 19, 2013



Basement – Electrical Panel

PHOTO No. 10

Basement – Storage in Mechanical Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 11, February 19, 2013

Basement – Mechanical Equipment

PHOTO No. 12

Basement – IT Equipment

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 13, February 19, 2013

Basement – Equipment

PHOTO No. 14

Basement – East Elevator Equipment Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 15, February 19, 2013

Basement – East Elevator Equipment Room

PHOTO No. 16

Basement – Janitor's Closet

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 17, February 19, 2013

Basement – Janitor's Closet

PHOTO No. 18

Basement – IT Room (No Access)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19, February 19, 2013

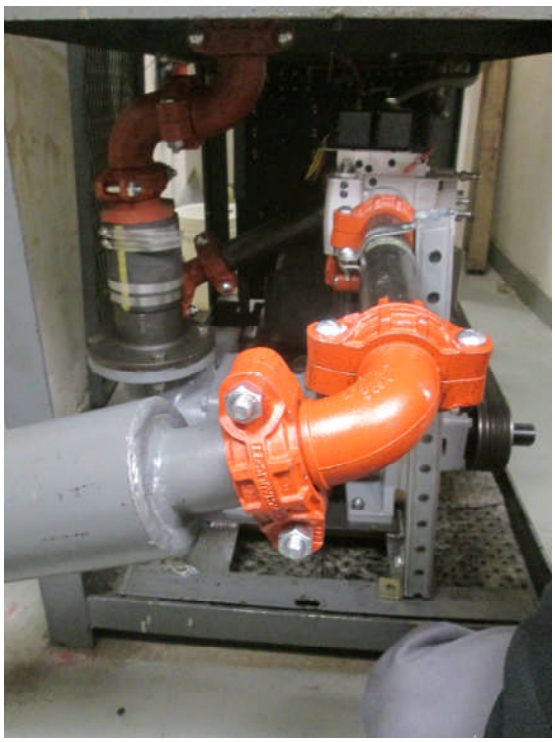
Basement – West Elevator Equipment Room

PHOTO No. 20

Basement – West Elevator Equipment Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21, February 19, 2013



Basement – West Elevator Equipment Room

PHOTO No. 22

Basement – West Elevator Equipment Room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23, February 20, 2013

Basement – West Elevator

PHOTO No. 24

Transformer Located Southeast of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25, February 20, 2013

Transformer Located Southeast of Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Tunnel from Breitenbush to Santiam	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

Flooding in Tunnel East of Breitenbush Leading South Towards OSH-SC

PHOTO No. 2

Asbestos Label on Pipe Wrap in Tunnel

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Tunnel from Breitenbush to Santiam	**Photographer:** Chris Gdak

PHOTO No. 3

Sign on Electrical Room (No Access)

PHOTO No. 4

Asbestos Sign

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR - Tunnel from McKenzie Hall to Dome Building	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

Tunnel from McKenzie Hall to Dome Building

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Tunnel from Yaquina to Breitenbush	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013

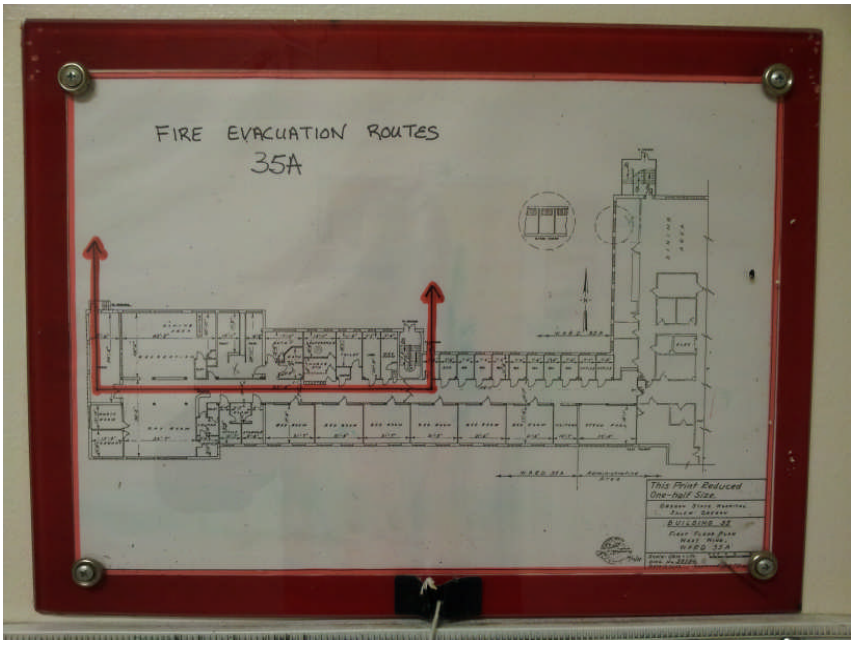
Tunnel from Yaquina Hall to Breitenbush Hall

PHOTO No. 2

Tunnel from Yaquina Hall to Breitenbush Hall

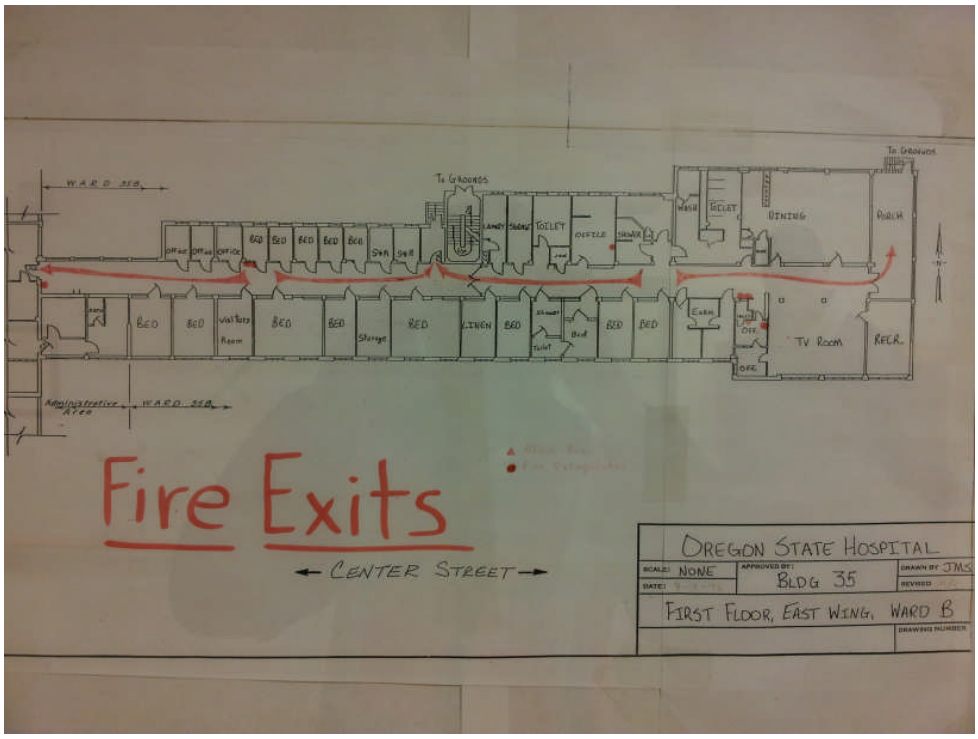
STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Other Photos	**Photographer:** Chris Gdak

PHOTO No. 1, February 19, 2013



Breitenbush Hall, 1st Floor, West Wing – Layout

PHOTO No. 2



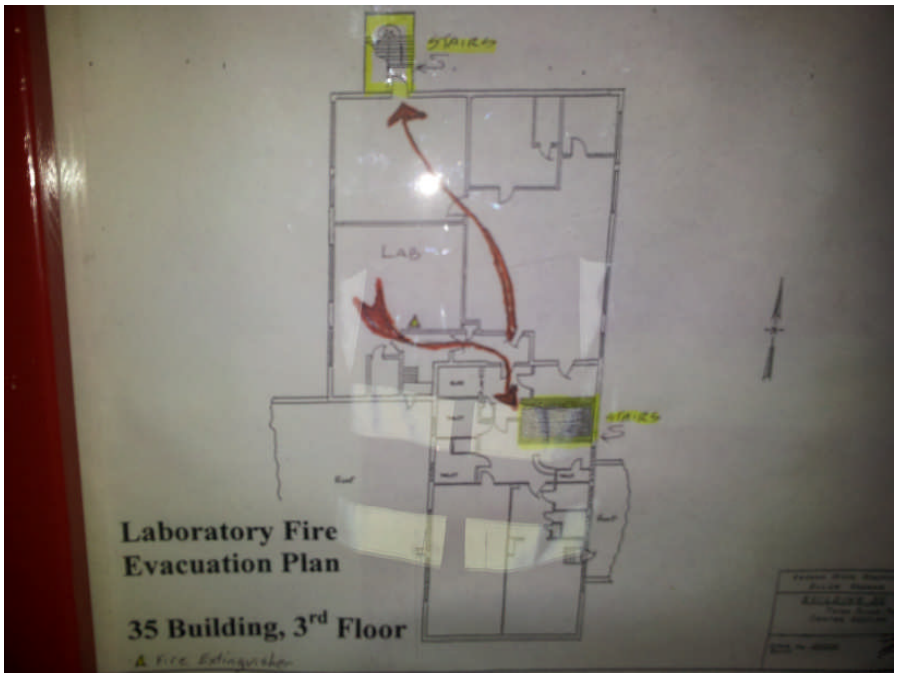
Breitenbush Hall, 1st Floor, East Wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Other Photos	**Photographer:** Chris Gdak

PHOTO No. 3

Breitenbush Hall, 2nd Floor, East Wing – Layout

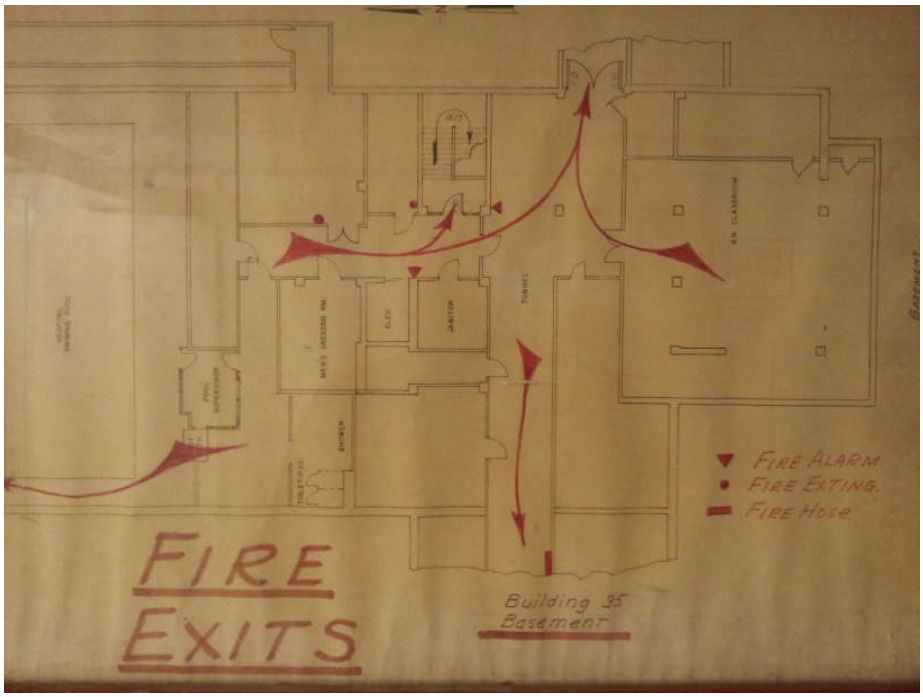
PHOTO No. 4



Breitenbush Hall, 3rd Floor – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 5, February 19, 2013



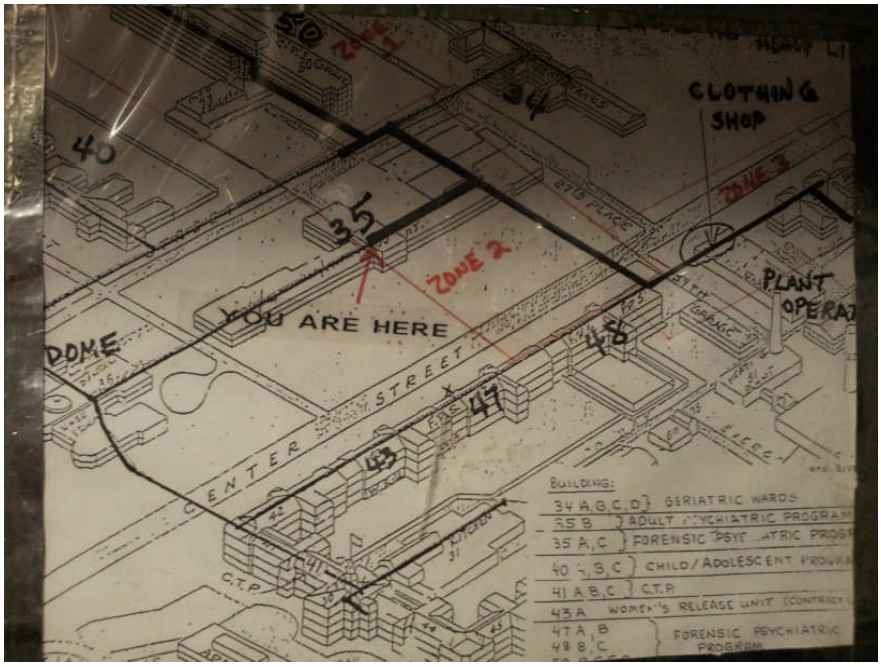
Breitenbush Hall, Basement – Layout

PHOTO No. 6

Breitenbush Hall, Basement – Sump

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 7, February 19, 2013



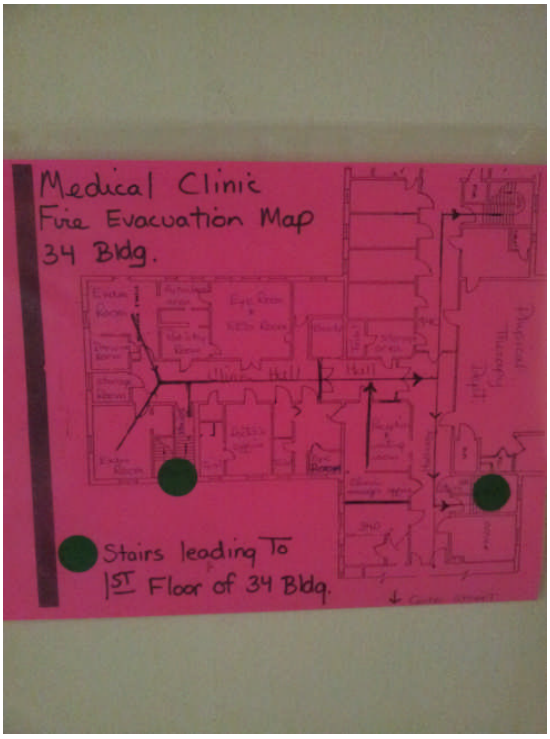
Breitenbush Hall, Basement – Map on wall of tunnel East of basement

PHOTO No. 8

Santiam Hall, 2nd Floor, North wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 9



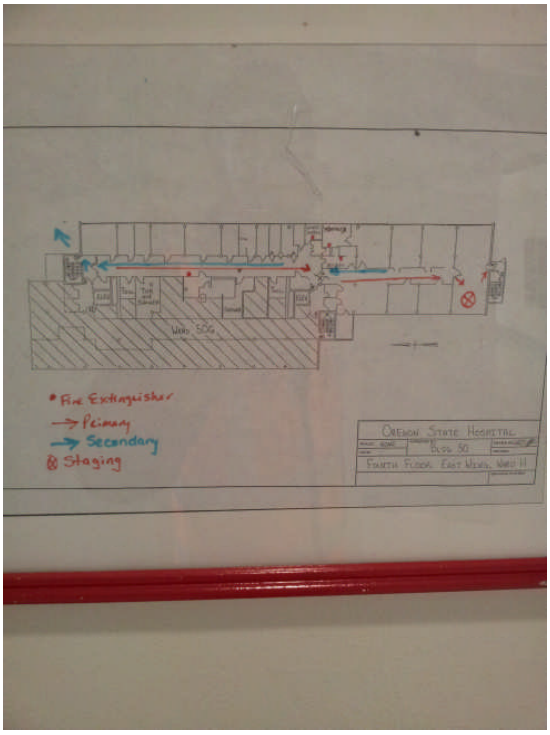
Santiam Hall, 2nd Floor – Layout

PHOTO No. 10

Santiam Hall, Central area – Layout

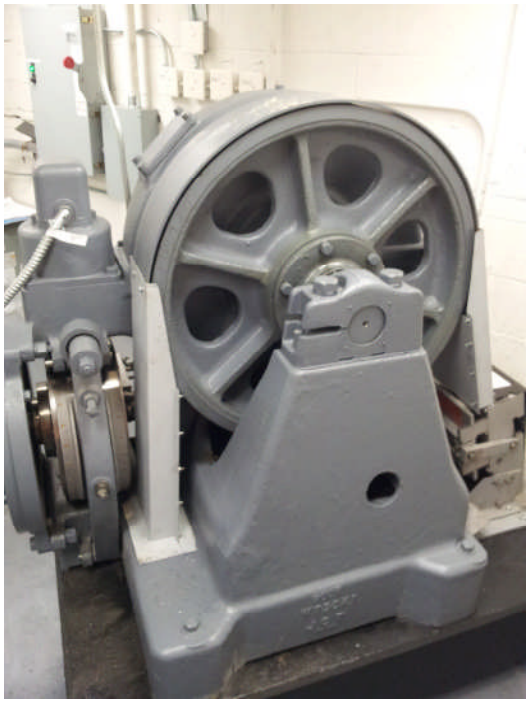
STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 11



Eola Hall, 4th Floor, East wing – Layout

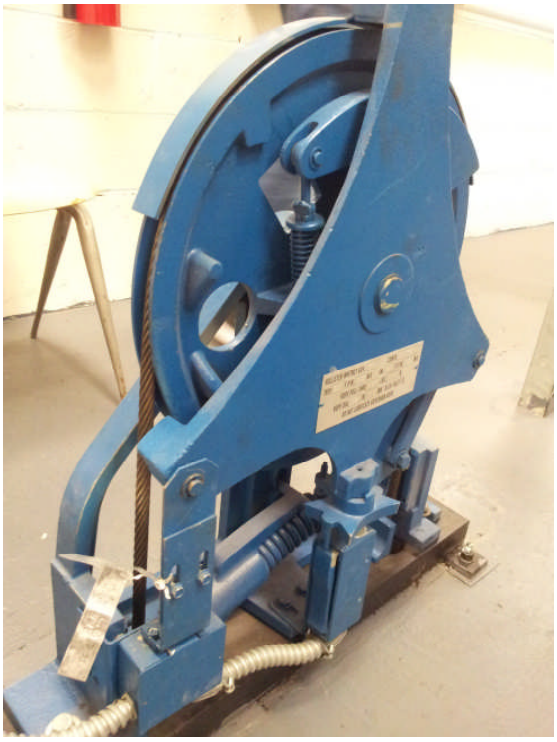
PHOTO No. 12



Eola Hall, Roof – Elevator Equipment

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 13



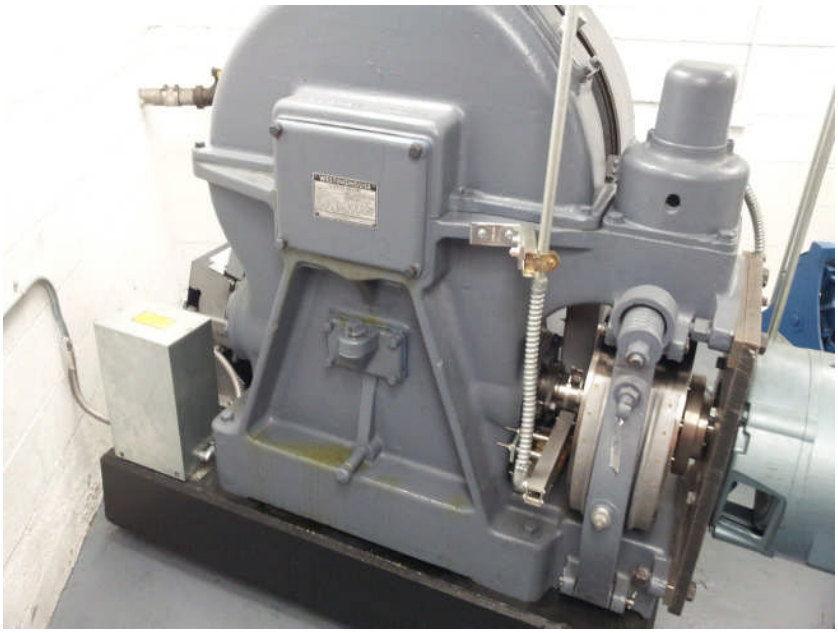
Eola Hall, Roof – Elevator Equipment

PHOTO No. 14

Eola Hall, Roof – Elevator Equipment

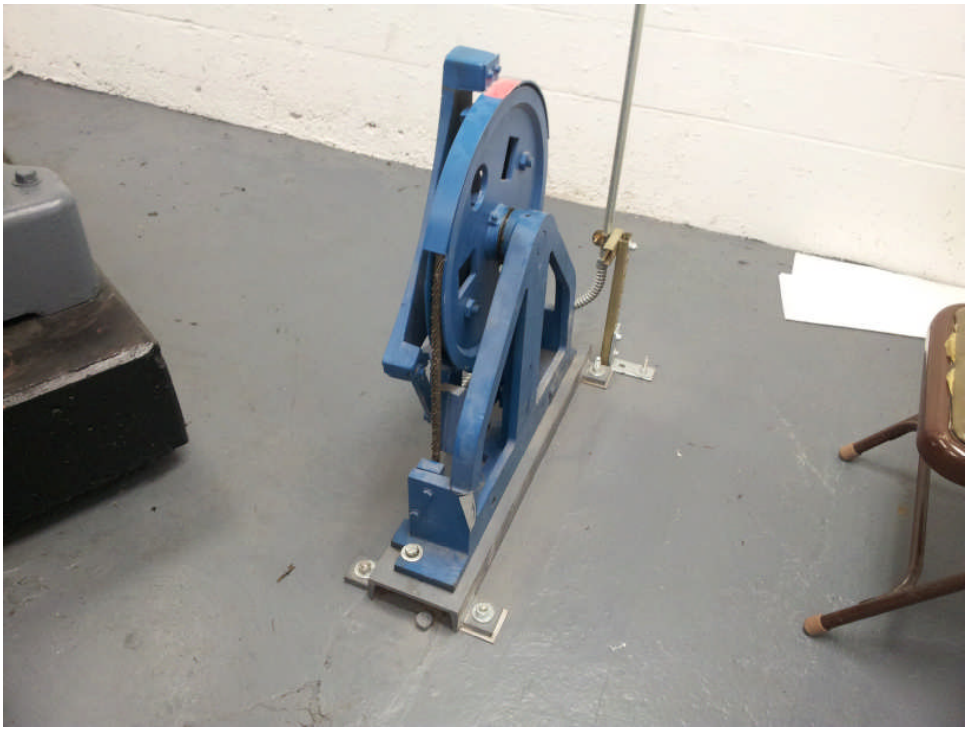
STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 15



Eola Hall, Roof – Elevator Equipment

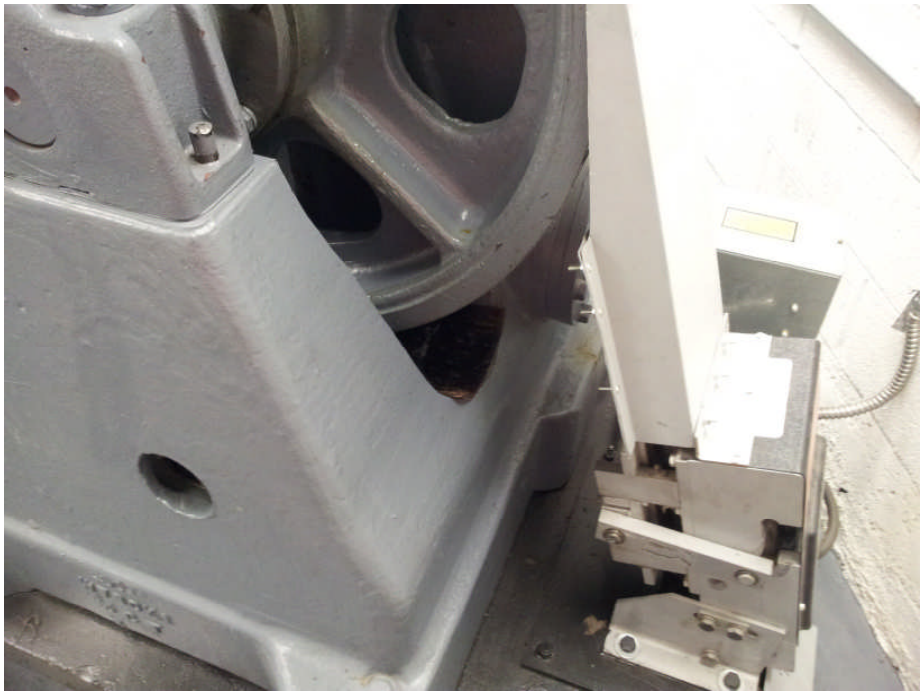
PHOTO No. 16



Eola Hall, Roof – Elevator Equipment

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 17



Eola Hall, Roof – Elevator Equipment

PHOTO No. 18

Eola Hall, Basement – Oil drum in storage room B004

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 19

Eola Hall, Basement – Floor drain in mechanical room

PHOTO No. 20

Eola Hall, Basement – Mechanical room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 21

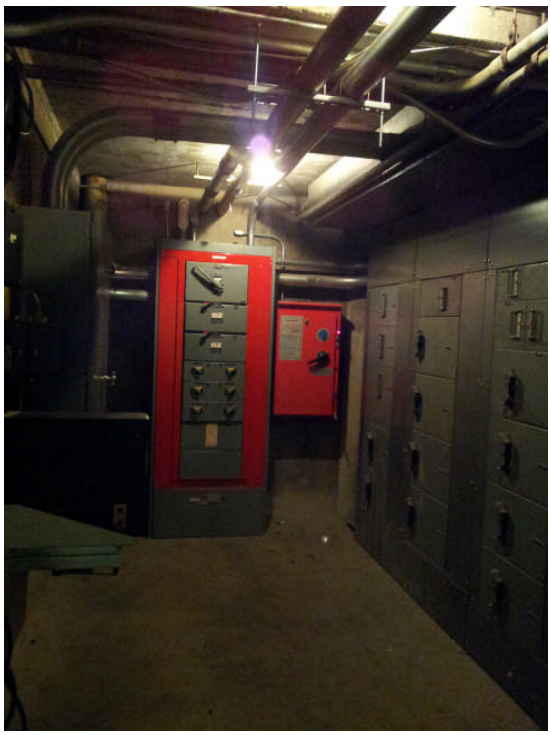
Eola Hall, Basement – Mechanical room

PHOTO No. 22

Eola Hall, Basement – Electrical room

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 23



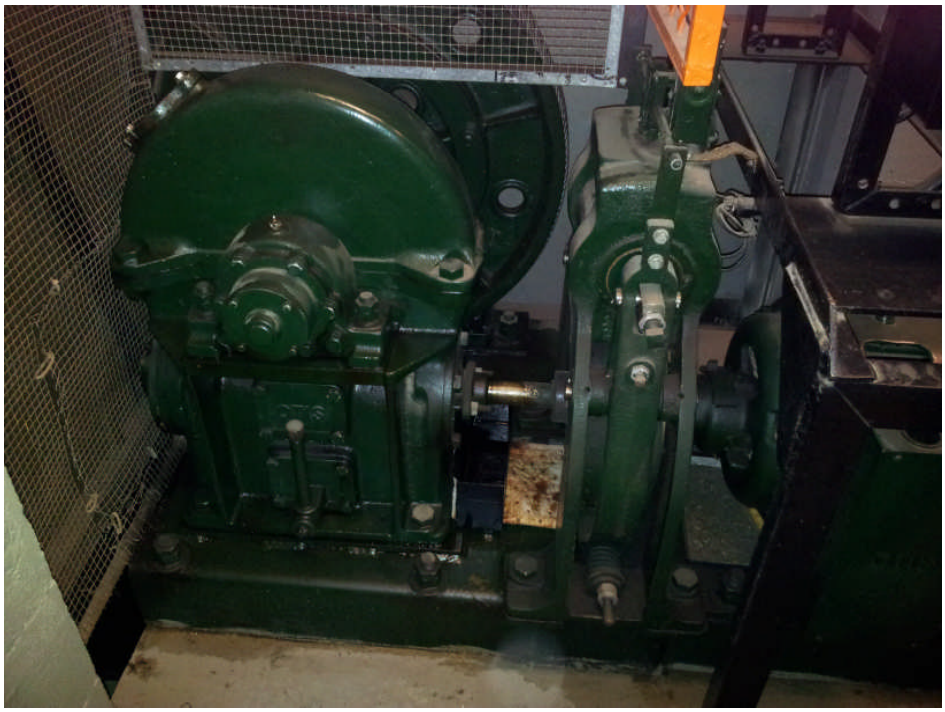
Eola Hall, Basement – Electrical room

PHOTO No. 24

Breitenbush Hall, Basement/West Tunnel – West freight elevator controls

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 25



Breitenbush Hall, Basement/West Tunnel – West freight elevator controls

PHOTO No. 26

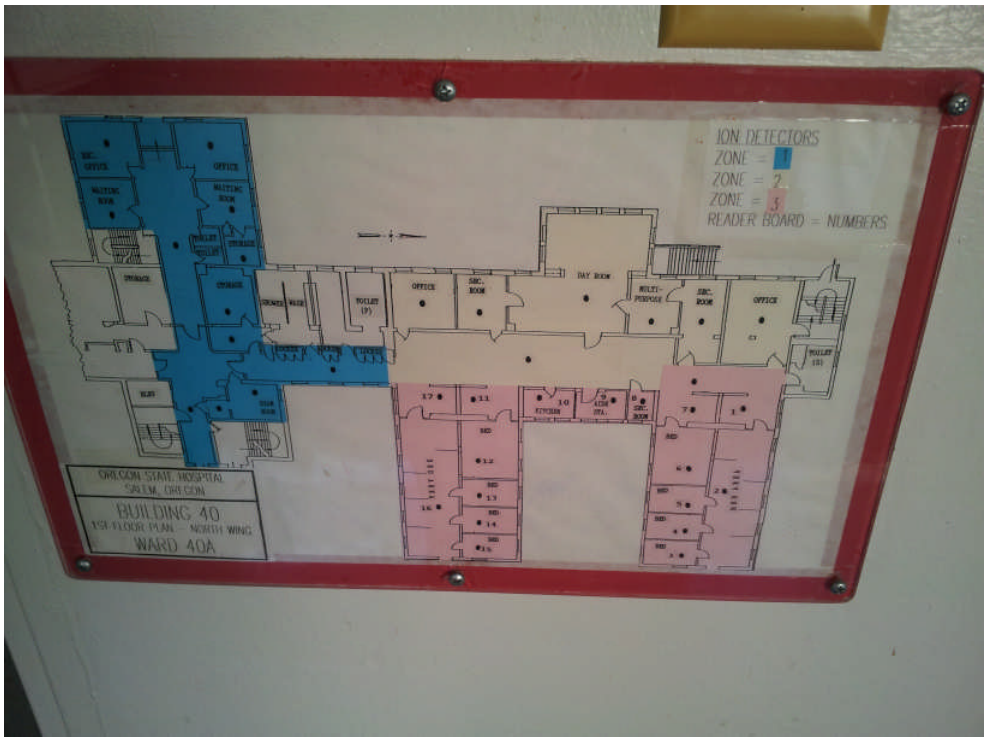
Breitenbush Hall, Basement/West Tunnel – West freight elevator controls

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 27

Breitenbush Hall, Basement/West Tunnel – West freight Elevator Controls

PHOTO No. 28



McKenzie Hall, 1st Floor, North Wing – Layout

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 29

McKenzie Hall, Basement – Storage room B004, containers

PHOTO No. 30

McKenzie Hall, Basement – Storage room B004, containers

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR	**Photographer:** Chris Gdak

PHOTO No. 31, February 19, 2013

McKenzie Hall, Basement – Storage room B004, containers

PHOTO No. 32

McKenzie Hall, Basement – Storage room B004, containers

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Misc.: Outdoor and Museum photos	**Photographer:** Chris Gdak

PHOTO No. 1, February 20, 2013

Utility Structures West of Dome Building

PHOTO No. 2

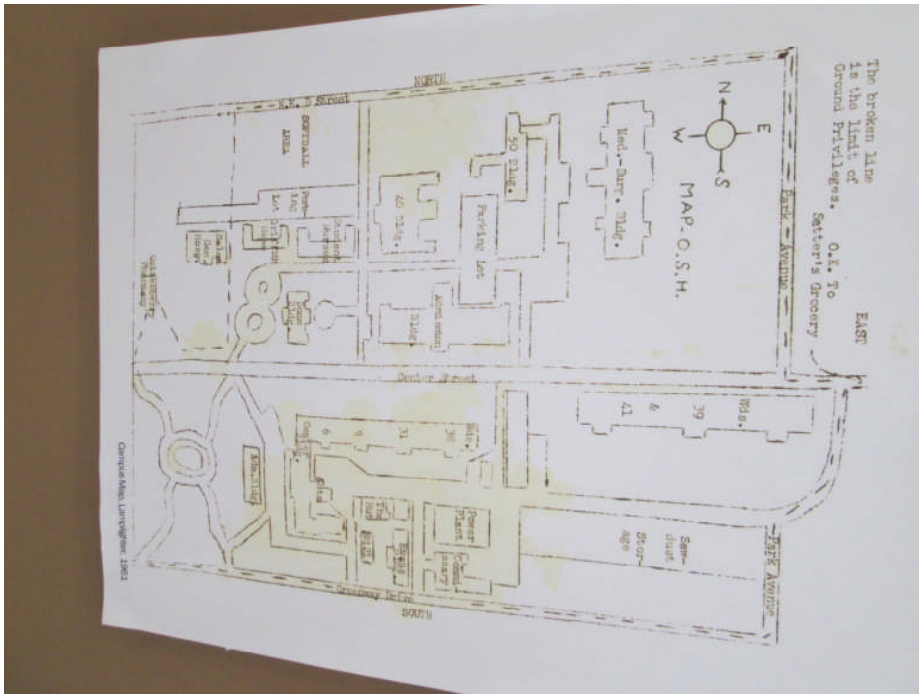
Utility Structures West of Dome Building (No Access)

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Misc.: Outdoor and Museum photos	**Photographer:** Chris Gdak

PHOTO No. 3, February 20, 2013

Old Drawing of Dome Building and North Campus

PHOTO No. 4



Old Sketch (1961) of Layout of OSH

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: Leland/Oregon DAS	**Job Number:** 185750103
Site Name: OSH-NC, Salem, OR – Misc.: Outdoor and Museum photos	**Photographer:** Chris Gdak

PHOTO No. 5, February 20, 2013

Memorial to Interred Remains

PHOTO No. 6

Utility Building Near NW Corner of Site (Inaccessible)

APPENDIX B
RECORDS REGARDING THE SITE:

- HISTORICAL AERIAL PHOTOGRAPHS
- CITY DIRECTORIES SEARCH RECORDS
- SANBORN® MAPS SEARCH REPORT
- HISTORICAL TOPOGRAPHIC MAPS
- ENVIRONMENTAL LIENSEARCH™ REPORT

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.5
February 13, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

Aerial Photography February 13, 2013

Target Property:

2575-2600 Center St. NE and 2575 Bittern St. NE

Salem, OR 97301

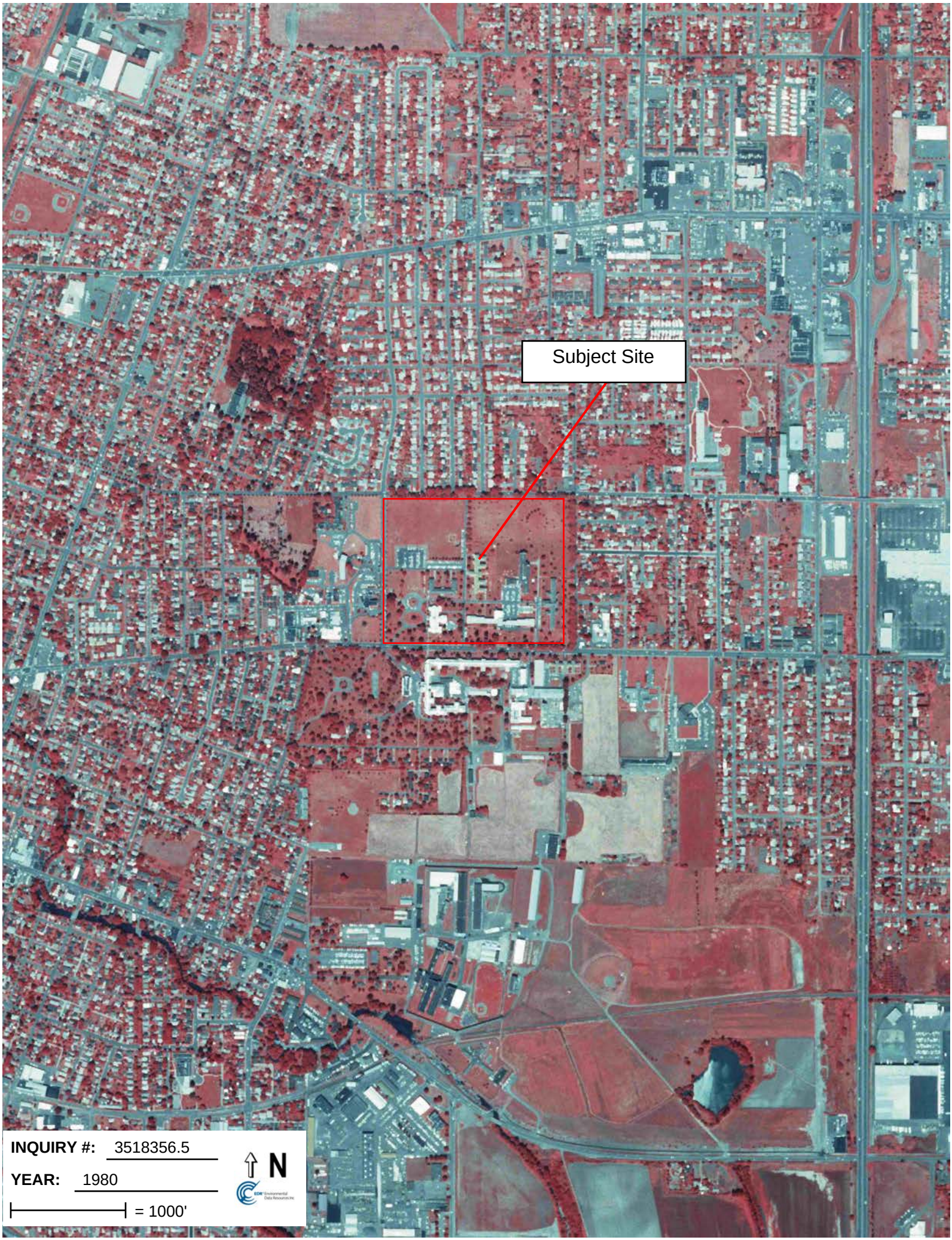
Year	***Scale***	***Details***	***Source***
1955	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Date: June 10, 1955	EDR
1967	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Date: November 19, 1967	EDR
1970	Aerial Photograph. Scale: 1"=750'	Panel #: 44123-H1, Salem West, OR;/Flight Date: July 05, 1970	EDR
1975	Aerial Photograph. Scale: 1"=1000'	Panel #: 44123-H1, Salem West, OR;/Flight Date: September 13, 1975	EDR
1980	Aerial Photograph. Scale: 1"=1000'	Panel #: 44123-H1, Salem West, OR;/Flight Date: June 30, 1980	EDR
1984	Aerial Photograph. Scale: 1"=1000'	Panel #: 44123-H1, Salem West, OR;/Flight Date: September 18, 1984	EDR
1994	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Date: May 23, 1994	EDR
1994,2000	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Composite DOQQ - acquisition dates: May 23, 1994,July 24, 2000,July 30, 2000	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Year: 2009	EDR
2011	Aerial Photograph. Scale: 1"=500'	Panel #: 44123-H1, Salem West, OR;/Flight Year: 2011	EDR


Subject Site
INQUIRY #: 3518356.5
YEAR: 1955
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 1967
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 1970
= 750'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 1975
= 1000'
N


Subject Site
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YEAR: 1980
= 1000'
N

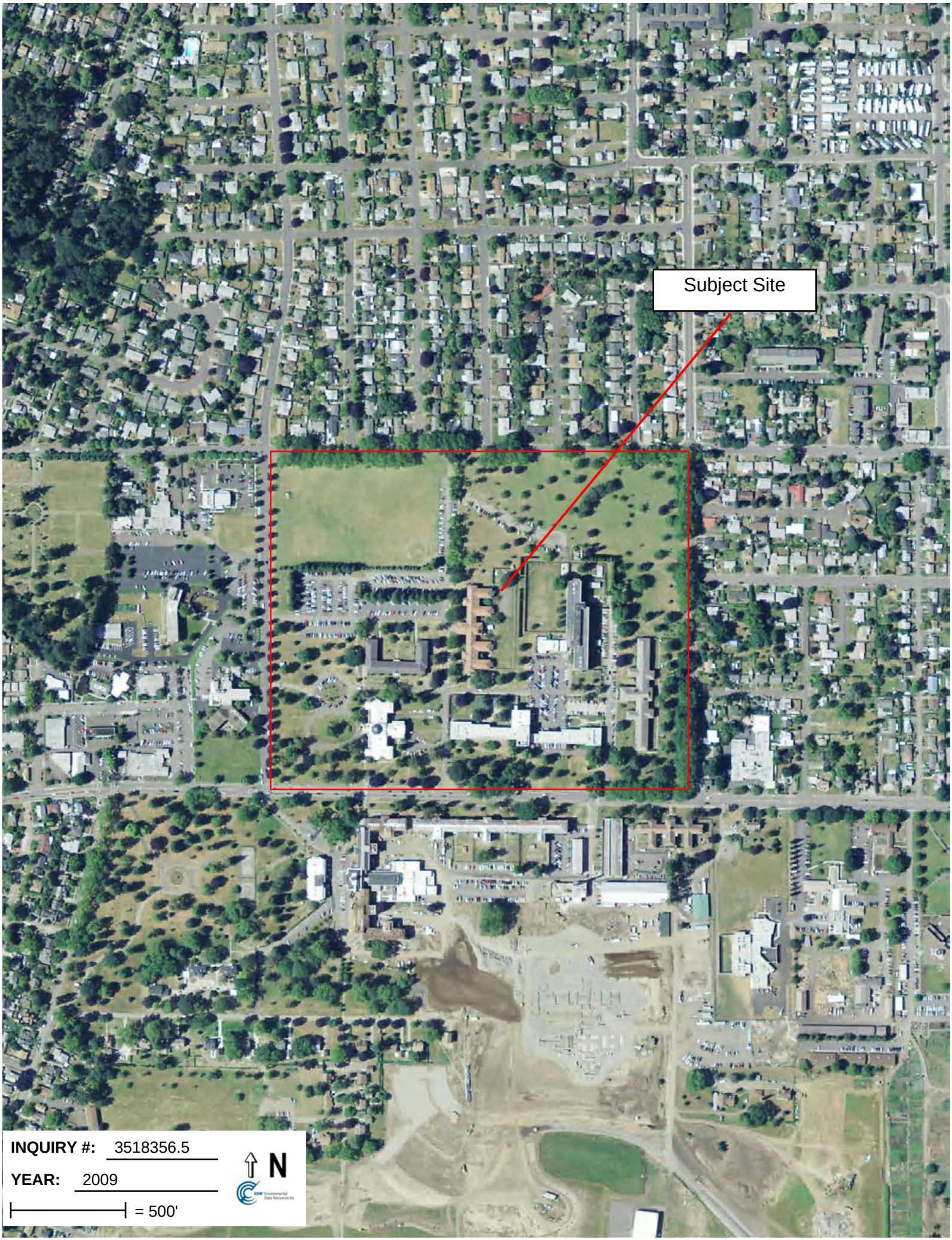

Subject Site
INQUIRY #: 3518356.5
YEAR: 1984
= 1000'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 1994
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 1994,2000 (DOQQ)
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 2005
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 2006
= 500'
N


Subject Site
INQUIRY #: 3518356.5
YEAR: 2009
= 500'
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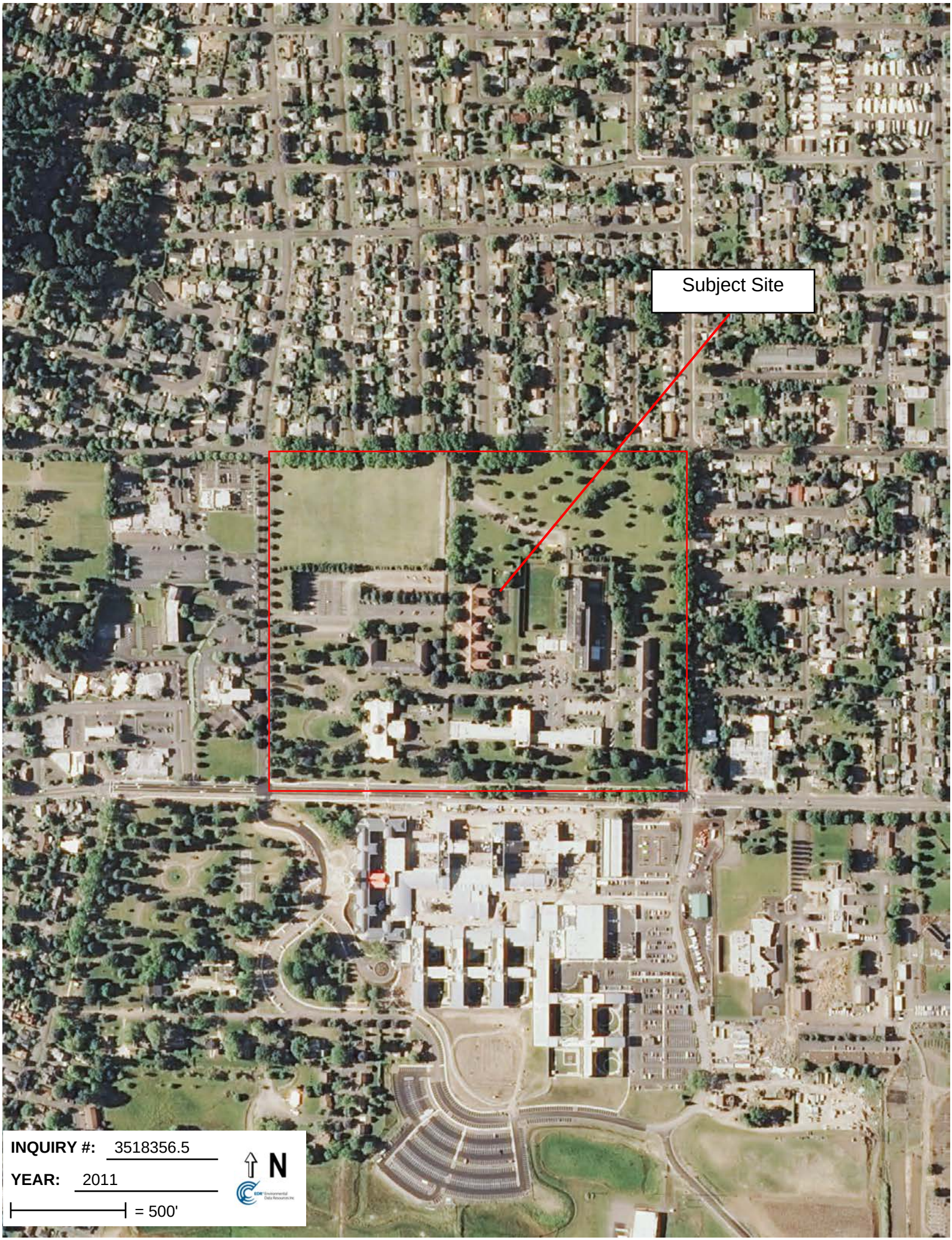

Subject Site
INQUIRY #: 3518356.5
YEAR: 2011
= 500'
N

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.6
March 11, 2013

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1924 through 2012. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

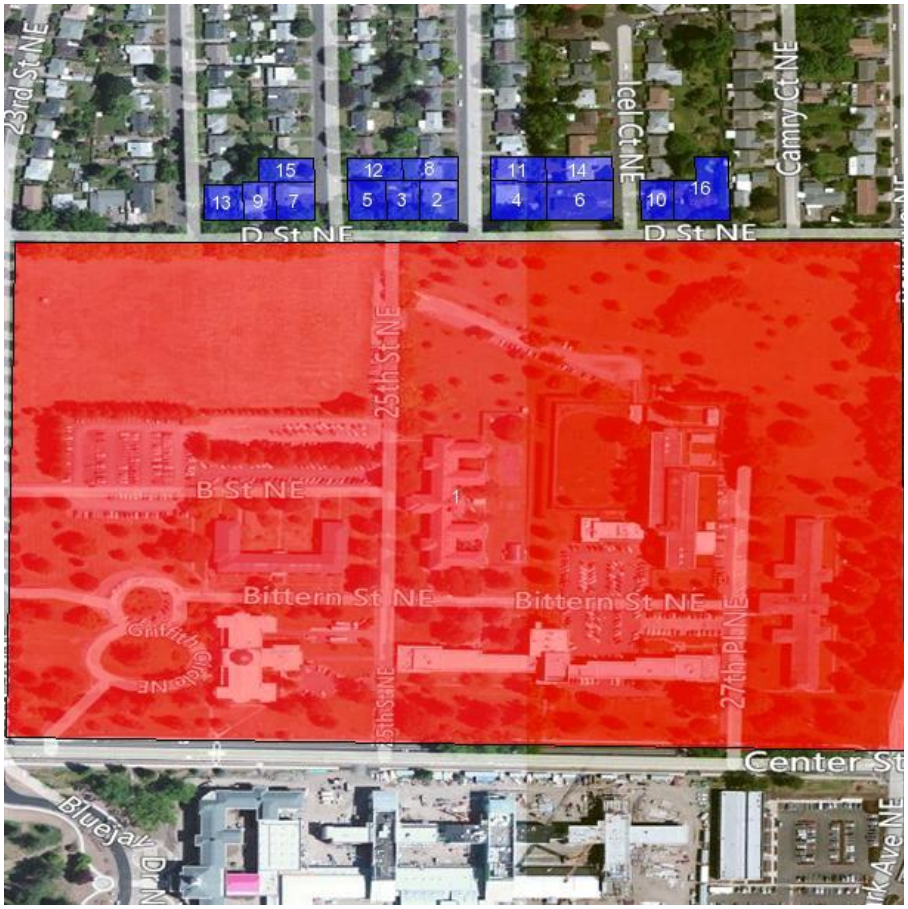
The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2012	Cole Information Services	-	-	-	-
2007	Cole Information Services	-	-	-	-
2002	R. L. Polk Co.	-	X	X	-
	R. L. Polk Co.	X	X	X	-
1996	R. L. Polk Co.	-	X	X	-
1991	U S West Direct	-	-	-	-
1989	R.L. Polk CO.	-	X	X	-
1986	R. L. Polk Co.	-	X	X	-
1980	R. L. Polk Co.	-	X	X	-
1976	R. L. Polk Co.	-	X	X	-
1970	R.L.. Polk Co Publishers	-	X	X	-
1966	R.L.. Polk Co Publishers	-	X	X	-
1961	R.L.. Polk Co Publishers	-	X	X	-
1957	R.L.. Polk Co Publishers	-	-	-	-
1951	R.L.. Polk Co Publishers	-	-	-	-
1947	R.L.. Polk Co Publishers	-	-	-	-
1942	R.L.. Polk Co Publishers	-	-	-	-
1939	R.L. Polk Co Publishers	-	-	-	-
1932	R.L. Polk Co Publishers	-	-	-	-
1927	R.L. Polk Co Publishers	-	-	-	-
1924	R. L. Polk Co.	-	-	X	-
	R. L. Polk Co.	-	X	X	-

EXECUTIVE SUMMARY

MAP INFORMATION

The Overview Map provides information on nearby property parcel boundaries. Properties on this map that were selected for research are listed below the map.



SELECTED ADDRESSES

The following addresses were selected by the client. Detailed findings are contained in the findings section. An "X" indicates where information was identified.

Address	***Type***	***Findings***
1029 EVERGREEN AVE NE	Map ID: 2	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

FINDINGS DETAIL

Target Property research detail.

BITTERN ST NE

2575 BITTERN ST NE

Year	*Uses*	*Source*
2002	BUSINESSES	R. L. Polk Co.
	MENTAL HEALTH DIV I	R. L. Polk Co.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BITTERN ST NE

2600 BITTERN ST NE

Year	*Uses*	*Source*
1924		R. L. Polk Co.

EVERGREEN AVE NE

Map ID: 2

1029 EVERGREEN AVE NE

Year	*Uses*	*Source*
2002	Walker Maiorie M El A	R. L. Polk Co.
1996	Walker M 1616 C	R. L. Polk Co.
1989	Andrews Marie J	R.L. Polk CO.
1986	Andrews Marie J	R. L. Polk Co.
1980	Andrews Lee L	R. L. Polk Co.
1976	Andrews Lee L	R. L. Polk Co.
1970	Andrews Lee L	R.L.. Polk Co Publishers
1966	ANDREWS LEE L	R.L.. Polk Co Publishers
1961	Andrews Lee L em	R.L.. Polk Co Publishers

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
2575-2600 Center St. NE and 2575 Bittern St. NE	2012, 2007, 1996, 1991, 1989, 1986, 1980, 1976, 1970, 1966, 1961, 1957, 1951, 1947, 1942, 1939, 1932, 1927

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1029 EVERGREEN AVE NE	2012, 2007, 1991, 1957, 1951, 1947, 1942, 1939, 1932, 1927, 1924
2600 BITTERN ST NE	2012, 2007, 2002, 1996, 1991, 1989, 1986, 1980, 1976, 1970, 1966, 1961, 1957, 1951, 1947, 1942, 1939, 1932, 1927

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.3
February 14, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/14/13

Site Name:
Oregon State Hospital - North
2575-2600 Center St. NE and
Salem, OR 97301

Client Name:
Stantec
12034 134th Court NE
Redmond, WA 98052

EDR Inquiry # 3518356.3

Contact: Chris Gdak

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Stantec were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St.
City, State, Zip: Salem, OR 97301
Cross Street:
P.O. # 185750103
Project: LCG - OSH-NC - Phase I ESA
Certification # 1539-4ED3-9748

Maps Provided:

1978
1950
1926
1895

Sanborn® Library search results
Certification # 1539-4ED3-9748

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

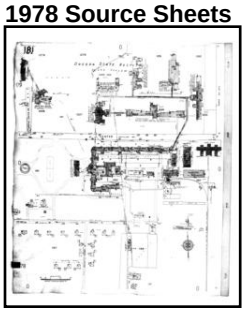
Limited Permission To Make Copies

Stantec (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Sanborn Sheet Thumbnails

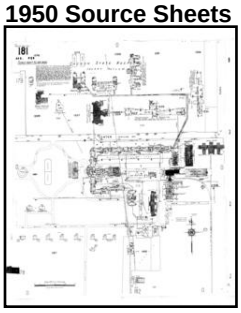
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1978 Source Sheets



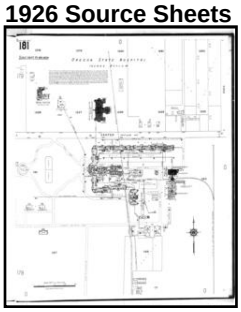
Volume 1, Sheet 181

1950 Source Sheets



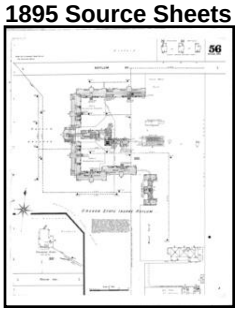
Volume 1, Sheet 181

1926 Source Sheets



Volume 1, Sheet 181

1895 Source Sheets



Volume 1, Sheet 56

1978 Certified Sanborn Map

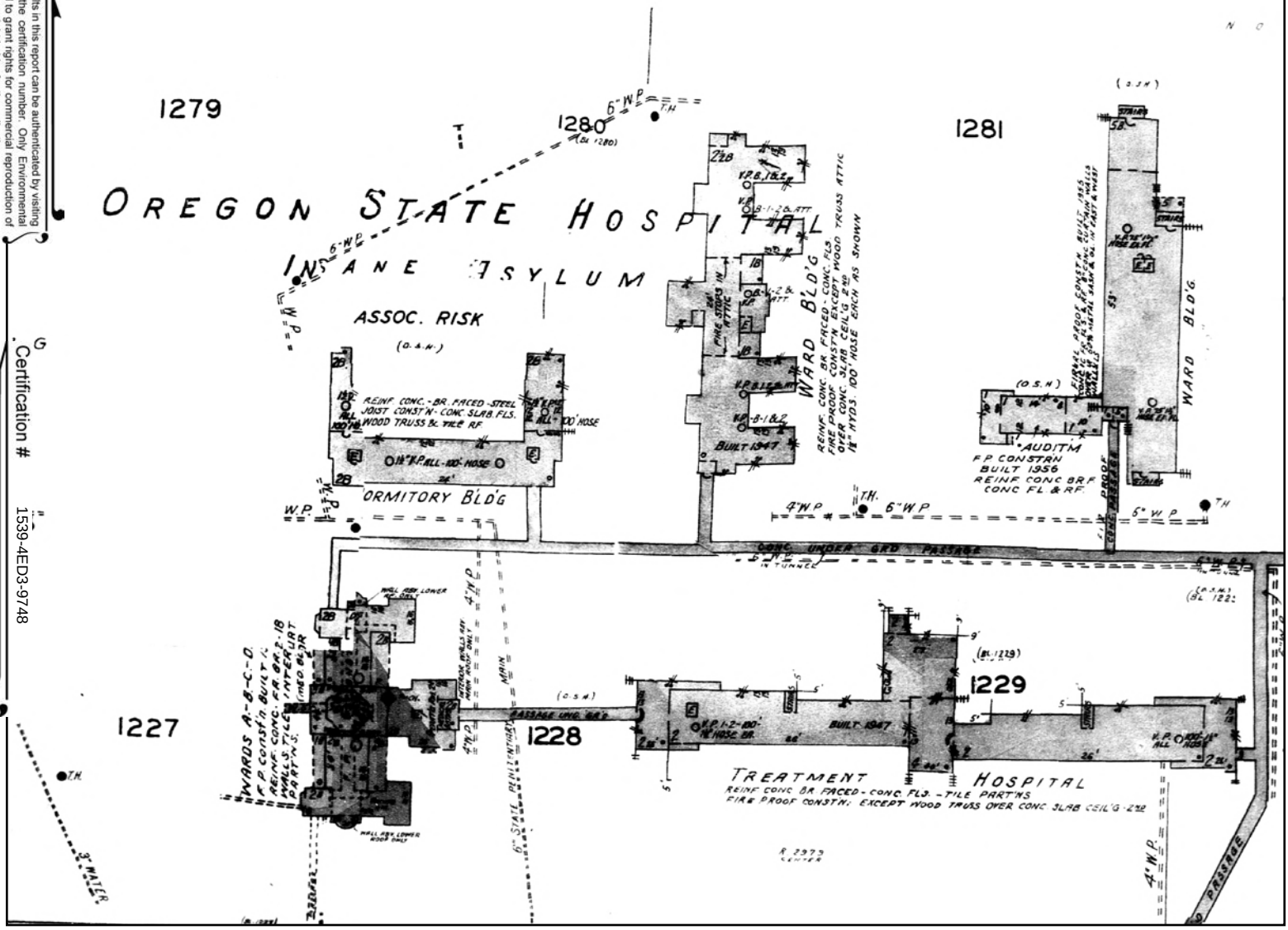
Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP: Salem OR 97301

Client: Stantec

EDR Inquiry: 3518356.3
Order Date: 2/14/2013 1:25:03 PM
Certification #: 1539-4ED3-9748

Copyright: 1978

Certification # 1539-4ED3-9748



This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.

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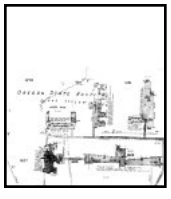
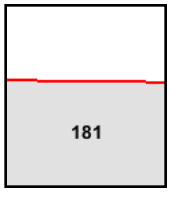




Volume 1, Sheet 181

N

1950 Certified Sanborn Map

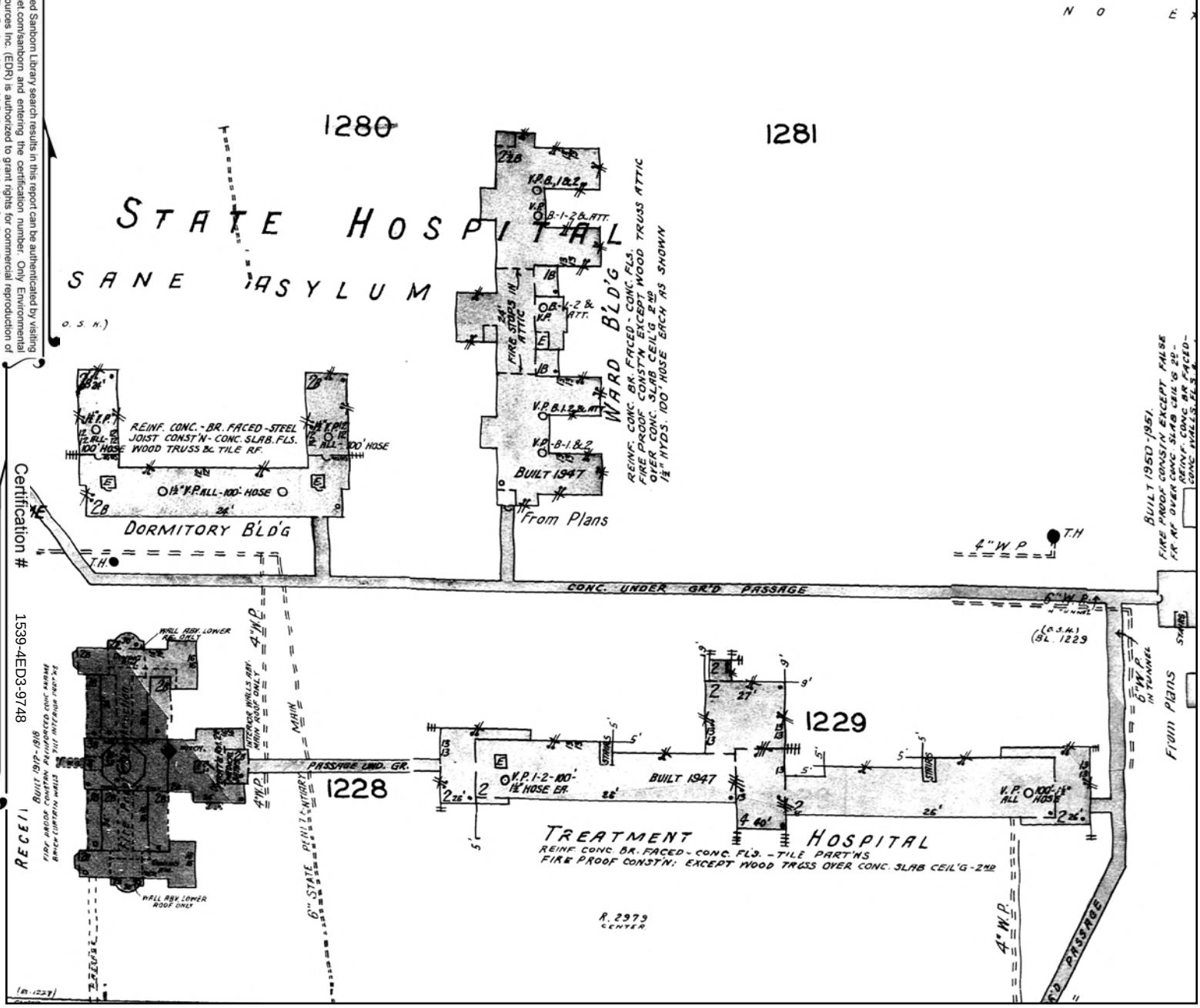
Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP: Salem OR 97301

Client: Stantec

EDR Inquiry: 3518356.3
Order Date: 2/14/2013 1:25:03 PM
Certification #: 1539-4ED3-9748

Copyright: 1950

Certification # 1539-4ED3-9748



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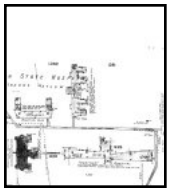
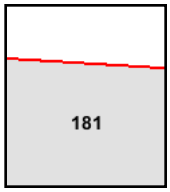




Volume 1, Sheet 181

N

1926 Certified Sanborn Map

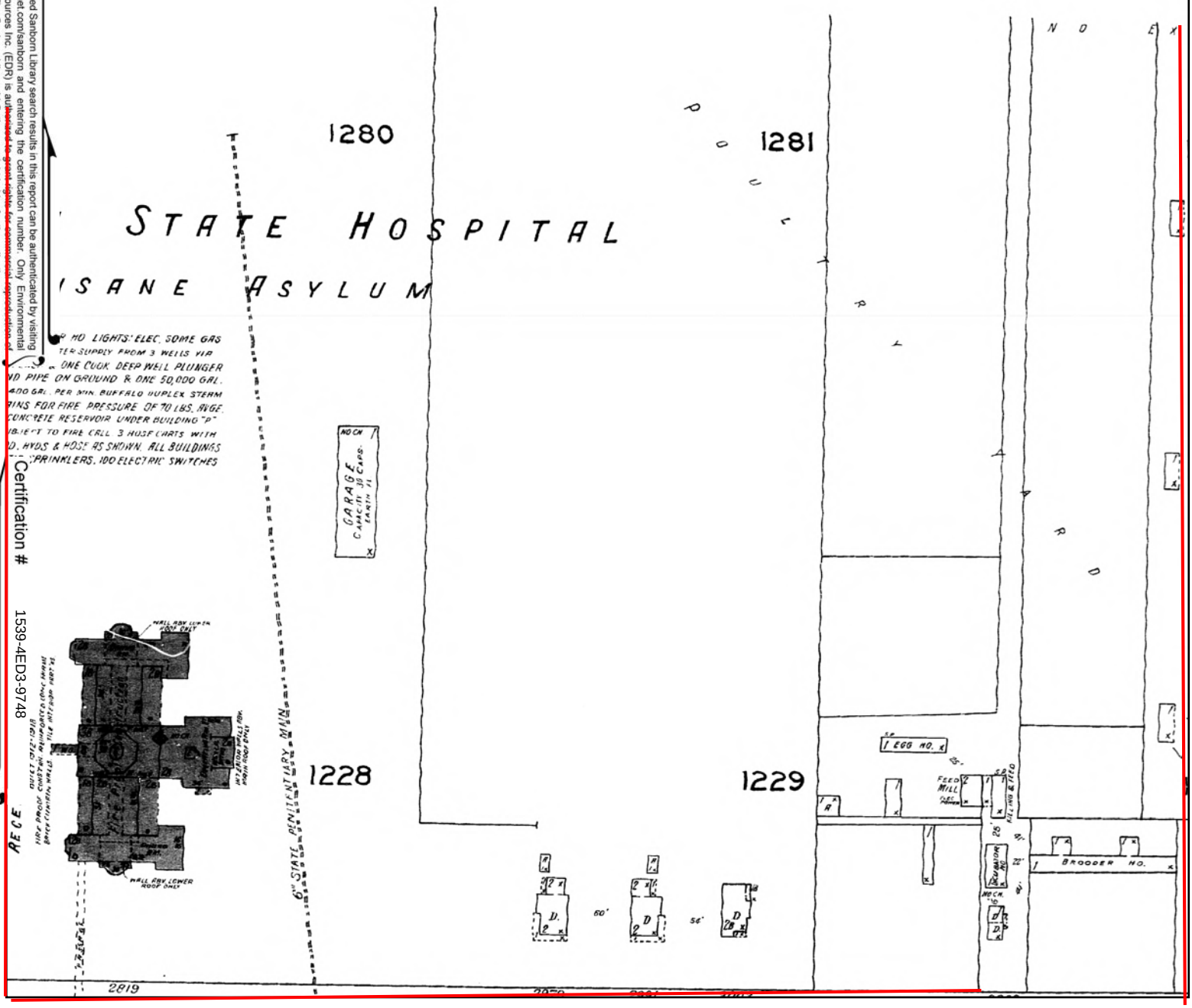
Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP: Salem OR 97301

Client: Stantec

EDR Inquiry: 3518356.3
Order Date: 2/14/2013 1:25:03 PM
Certification #: 1539-4ED3-9748

Copyright: 1926

Certification # 1539-4ED3-9748



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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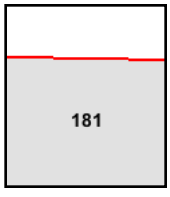


Volume 1, Sheet 181

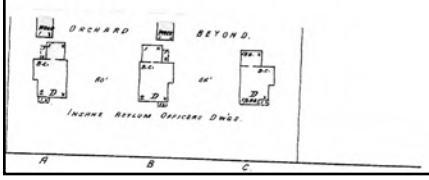
1895 Certified Sanborn Map

Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP: Salem OR 97301

Client: Stantec

EDR Inquiry: 3518356.3
Order Date: 2/14/2013 1:25:03 PM
Certification # 1539-4ED3-9748

Certification # 1539-4ED3-9748



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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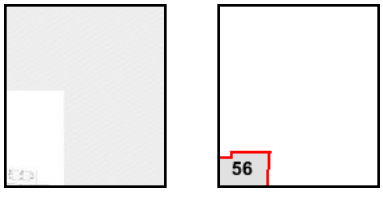

Volume 1, Sheet 56

N

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.3
February 14, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/14/13

Site Name:
Oregon State Hospital - North
2575-2600 Center St. NE and
Salem, OR 97301

Client Name:
Stantec
12034 134th Court NE
Redmond, WA 98052

EDR Inquiry # 3518356.3

Contact: Chris Gdak

EDR® Environmental Data Resources Inc

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Certified Sanborn Results:

Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St.
City, State, Zip: Salem, OR 97301
Cross Street:
P.O. # 185750103
Project: LCG - OSH-NC - Phase I ESA
Certification # 1539-4ED3-9748

Maps Provided:

1978
1950
1926

Sanborn® Library search results
Certification # 1539-4ED3-9748

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- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

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Sanborn Sheet Thumbnails

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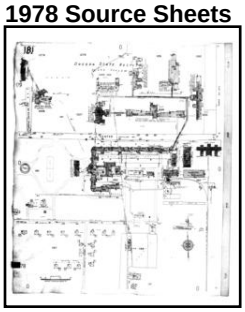
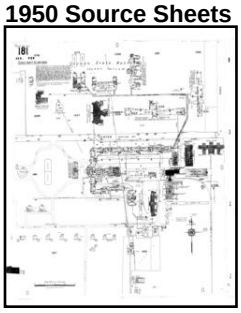
1978 Source Sheets



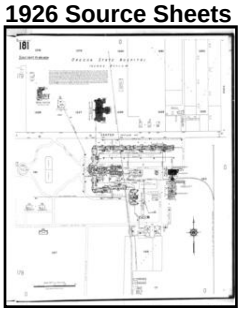
Volume 1, Sheet 181

1950 Source Sheets



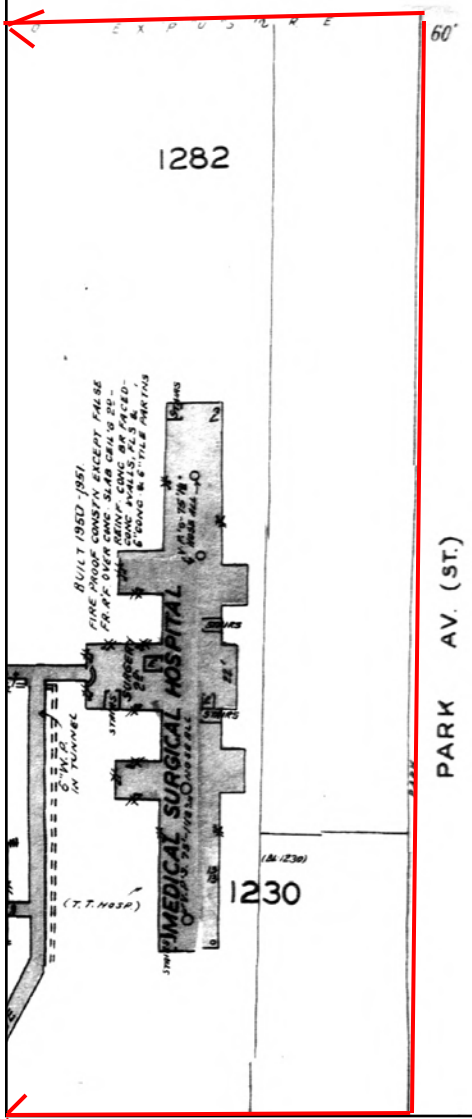
Volume 1, Sheet 181

1926 Source Sheets



Volume 1, Sheet 181

1978 Certified Sanborn Map



Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1978

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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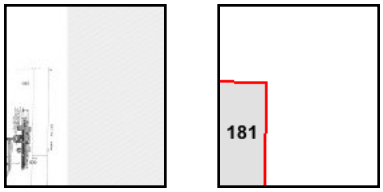
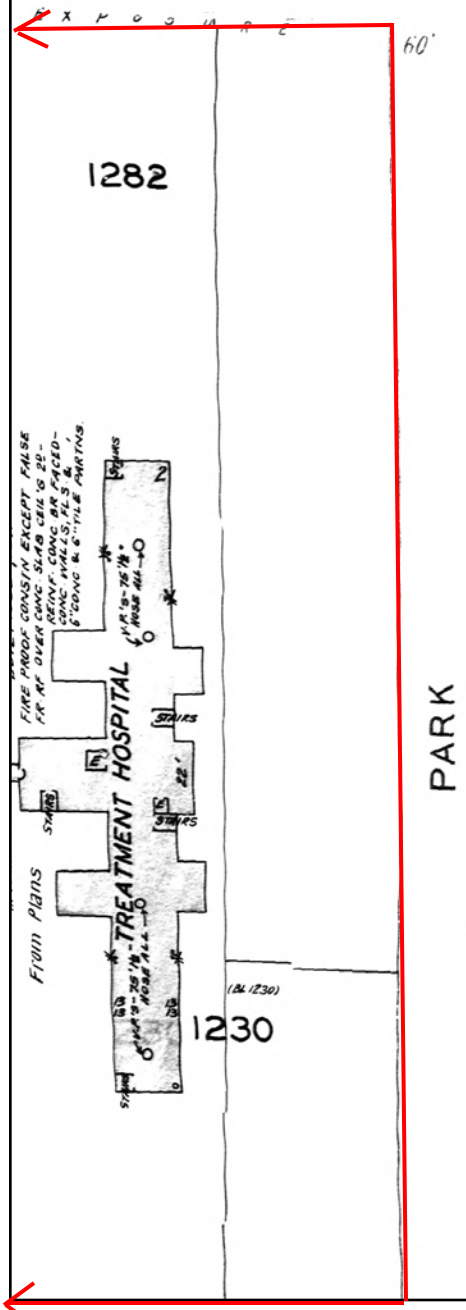


Volume 1, Sheet 181

N

1950 Certified Sanborn Map



Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1950

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

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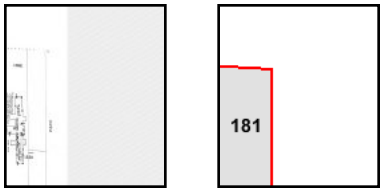
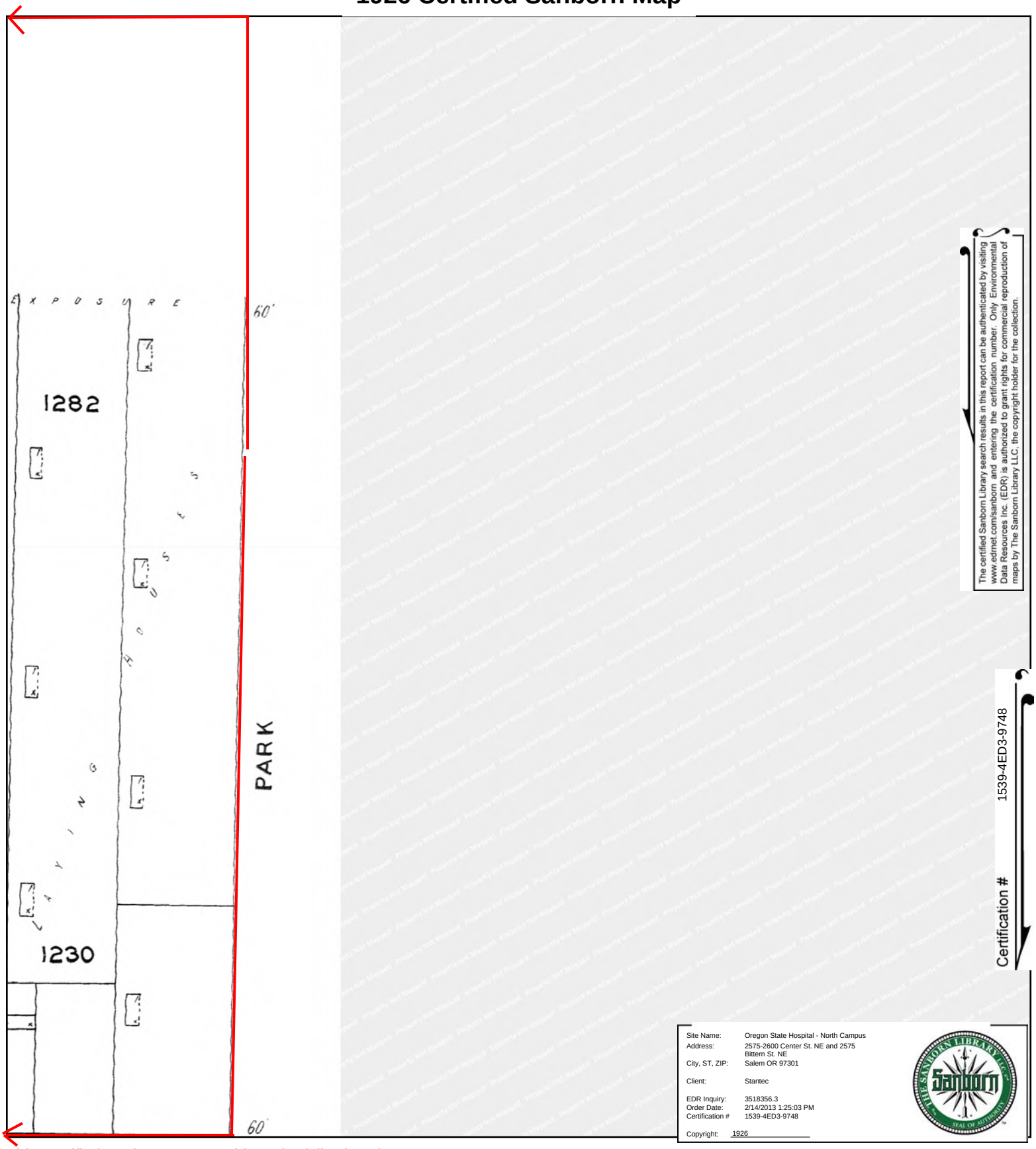


Volume 1, Sheet 181

N

1926 Certified Sanborn Map



Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1926

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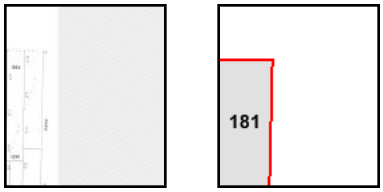

Volume 1, Sheet 181

N

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.3
February 14, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/14/13

Site Name:
Oregon State Hospital - North
2575-2600 Center St. NE and
Salem, OR 97301

Client Name:
Stantec
12034 134th Court NE
Redmond, WA 98052

EDR Inquiry # 3518356.3

Contact: Chris Gdak

EDR® Environmental Data Resources Inc

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Certified Sanborn Results:

Site Name: Oregon State Hospital - North Campus
Address: 2575-2600 Center St. NE and 2575 Bittern St.
City, State, Zip: Salem, OR 97301
Cross Street:
P.O. # 185750103
Project: LCG - OSH-NC - Phase I ESA
Certification # 1539-4ED3-9748

Maps Provided:

1978
1950
1926
1895
1890
1888

Sanborn® Library search results
Certification # 1539-4ED3-9748

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- ✓ EDR Private Collection

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Sanborn Sheet Thumbnails

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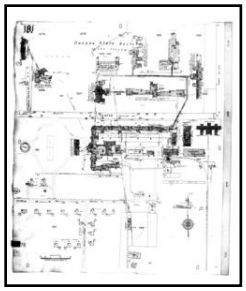
1978 Source Sheets

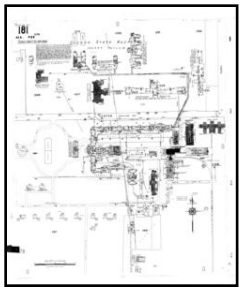
Volume 1, Sheet 179



Volume 1, Sheet 181

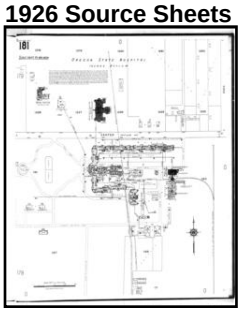
1950 Source Sheets

Volume 1, Sheet 179



Volume 1, Sheet 181

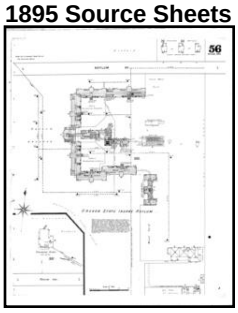
1926 Source Sheets



Volume 1, Sheet 181

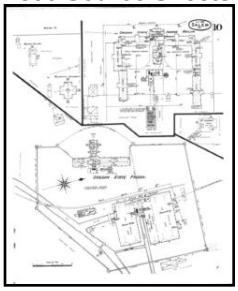
Volume 1, Sheet 179

1895 Source Sheets



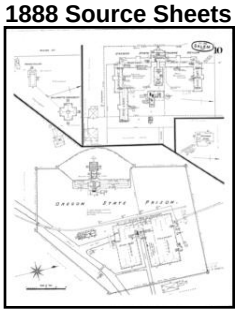
Volume 1, Sheet 56

1890 Source Sheets



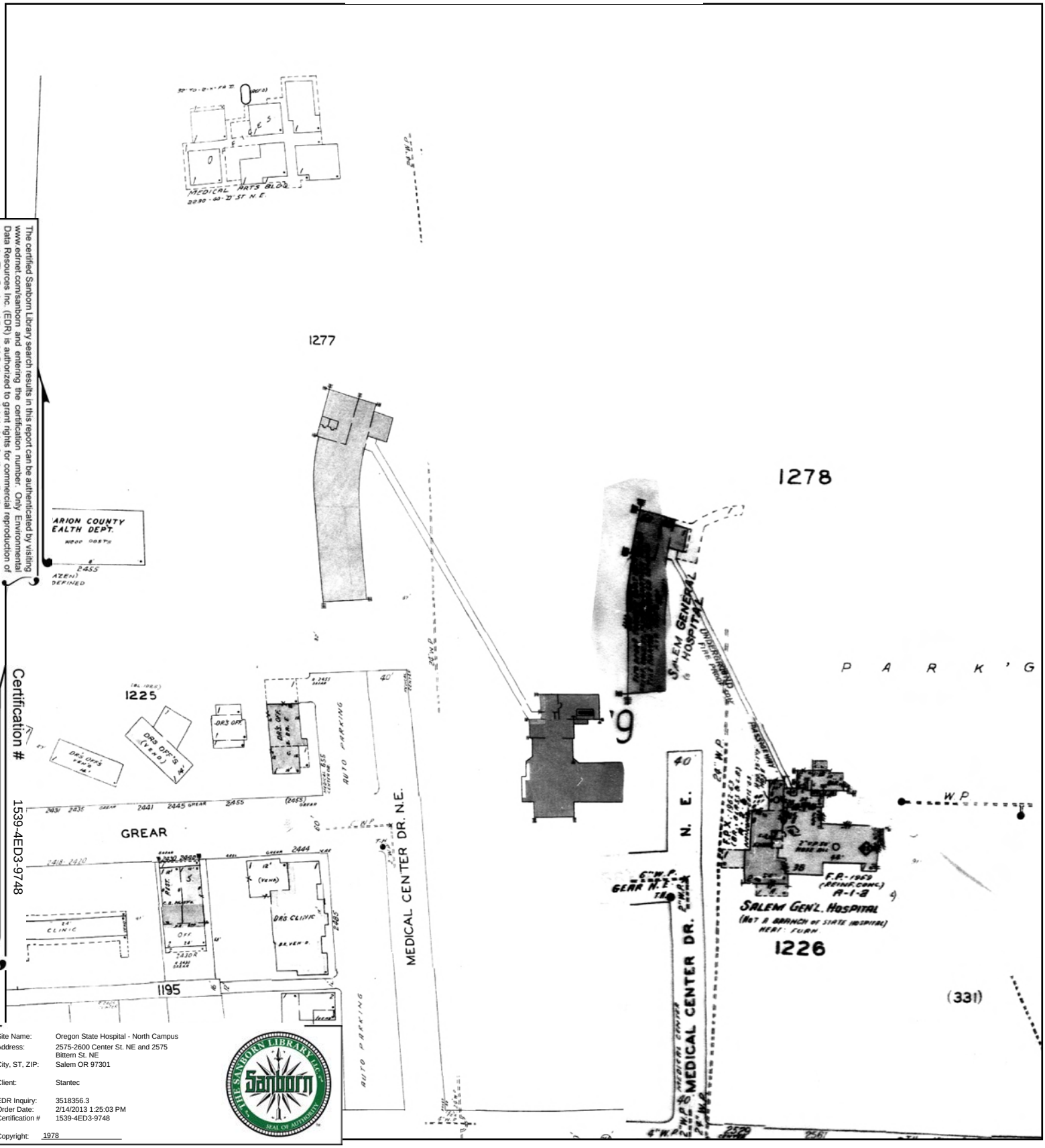
Volume 1, Sheet 10

1888 Source Sheets



Volume 1, Sheet 10

1978 Certified Sanborn Map



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Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1978

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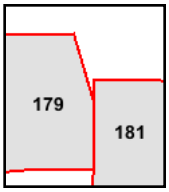
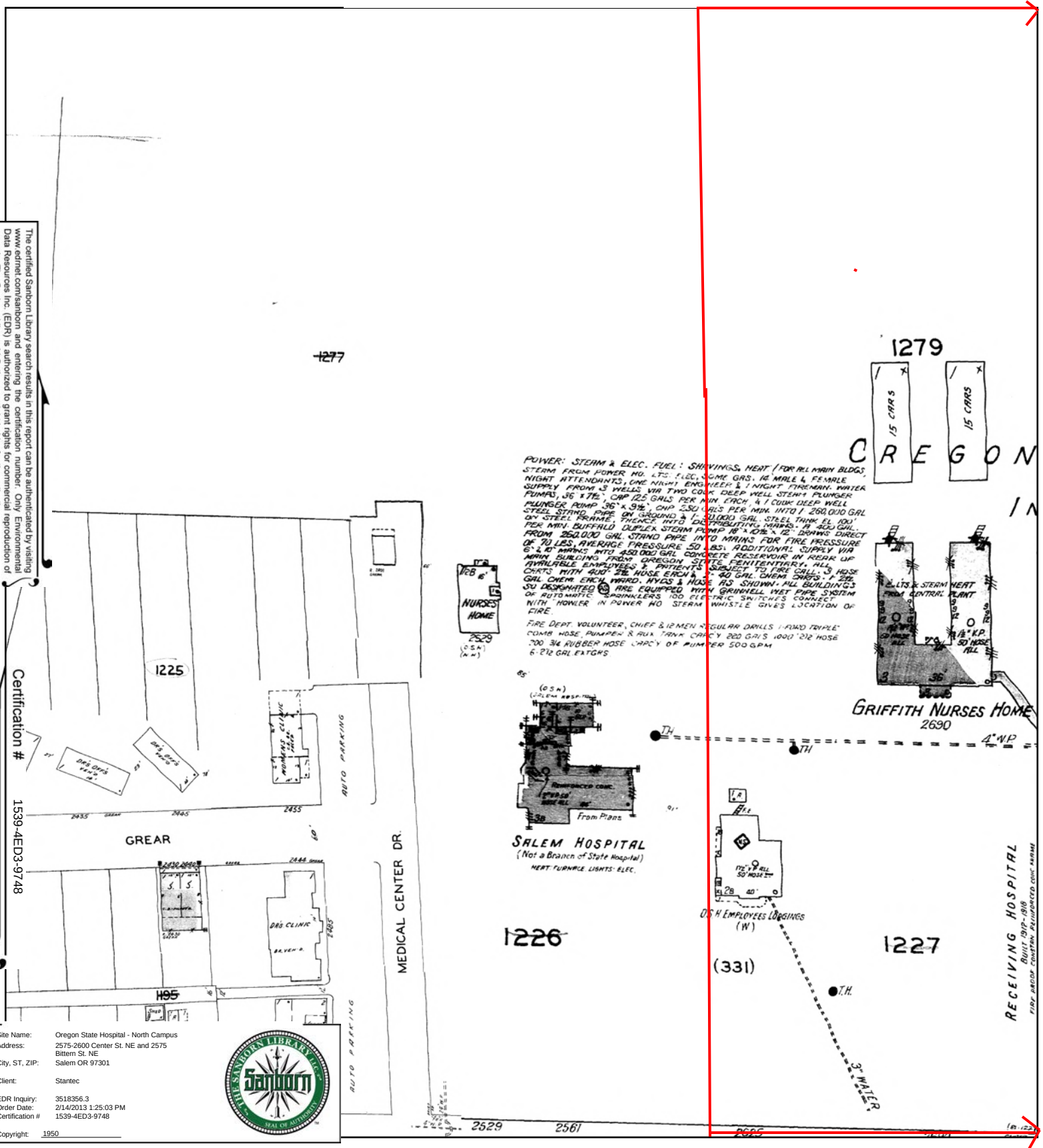


Volume 1, Sheet 179
Volume 1, Sheet 181

0 Feet 165 330 660

N

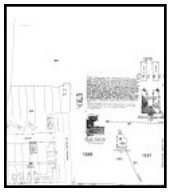
1950 Certified Sanborn Map

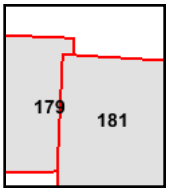


Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1950

This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.





Volume 1, Sheet 179
Volume 1, Sheet 181

0 Feet 165 330 660

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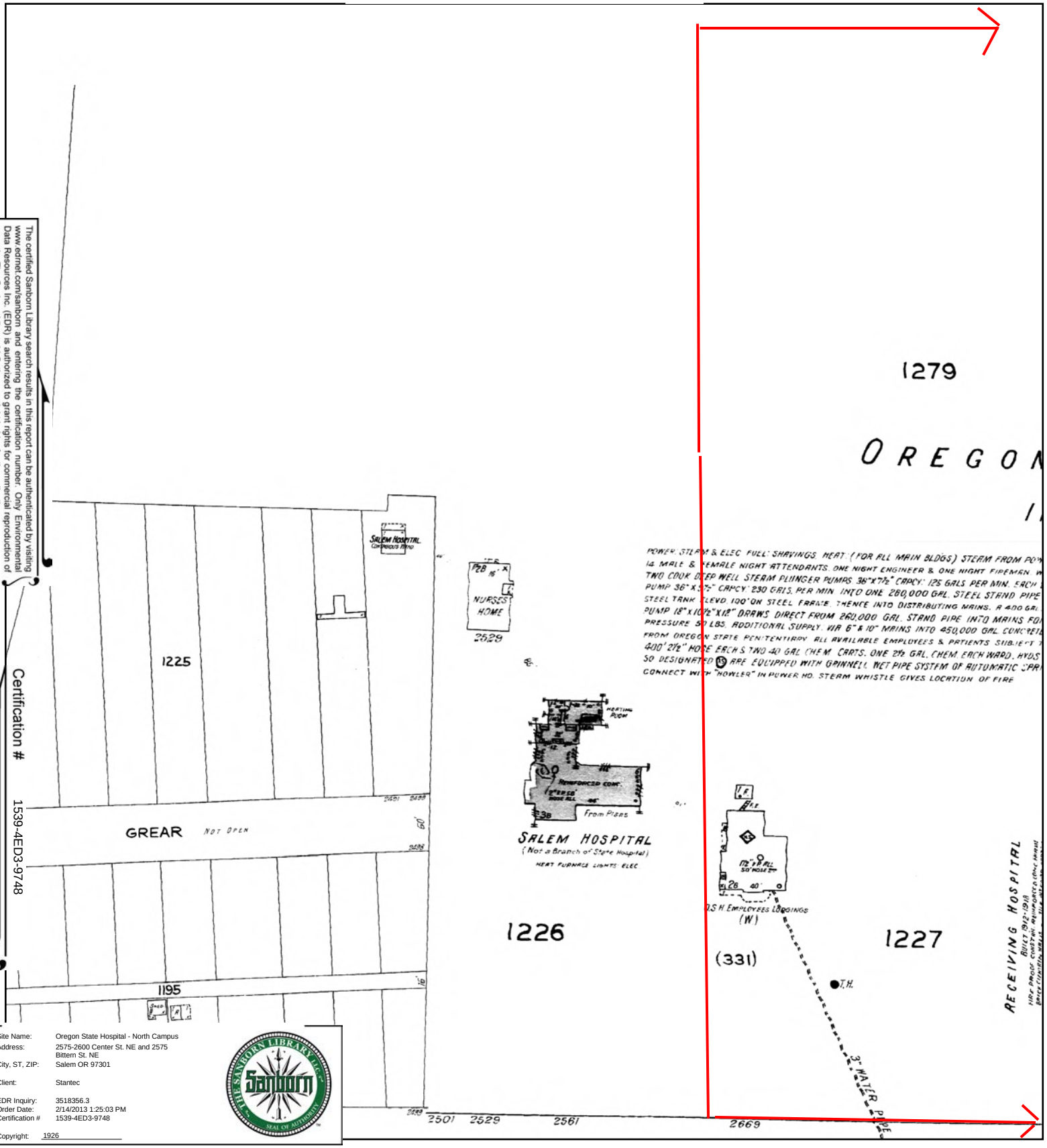
1926 Certified Sanborn Map



Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1926

This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.

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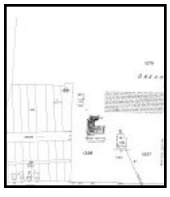

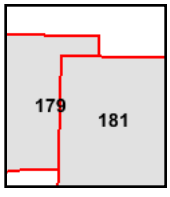

Volume 1, Sheet 181
Volume 1, Sheet 179

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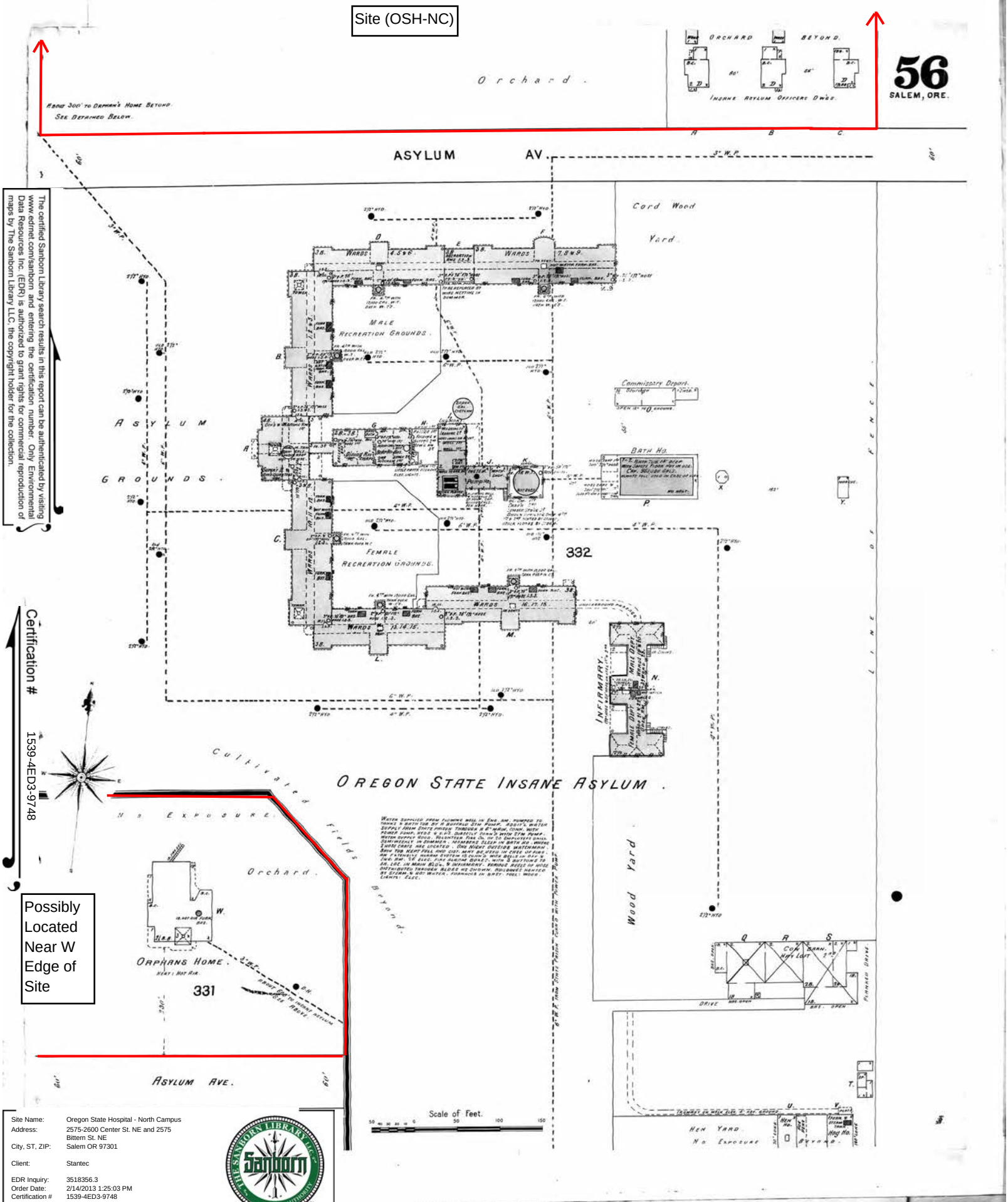
1895 Certified Sanborn Map



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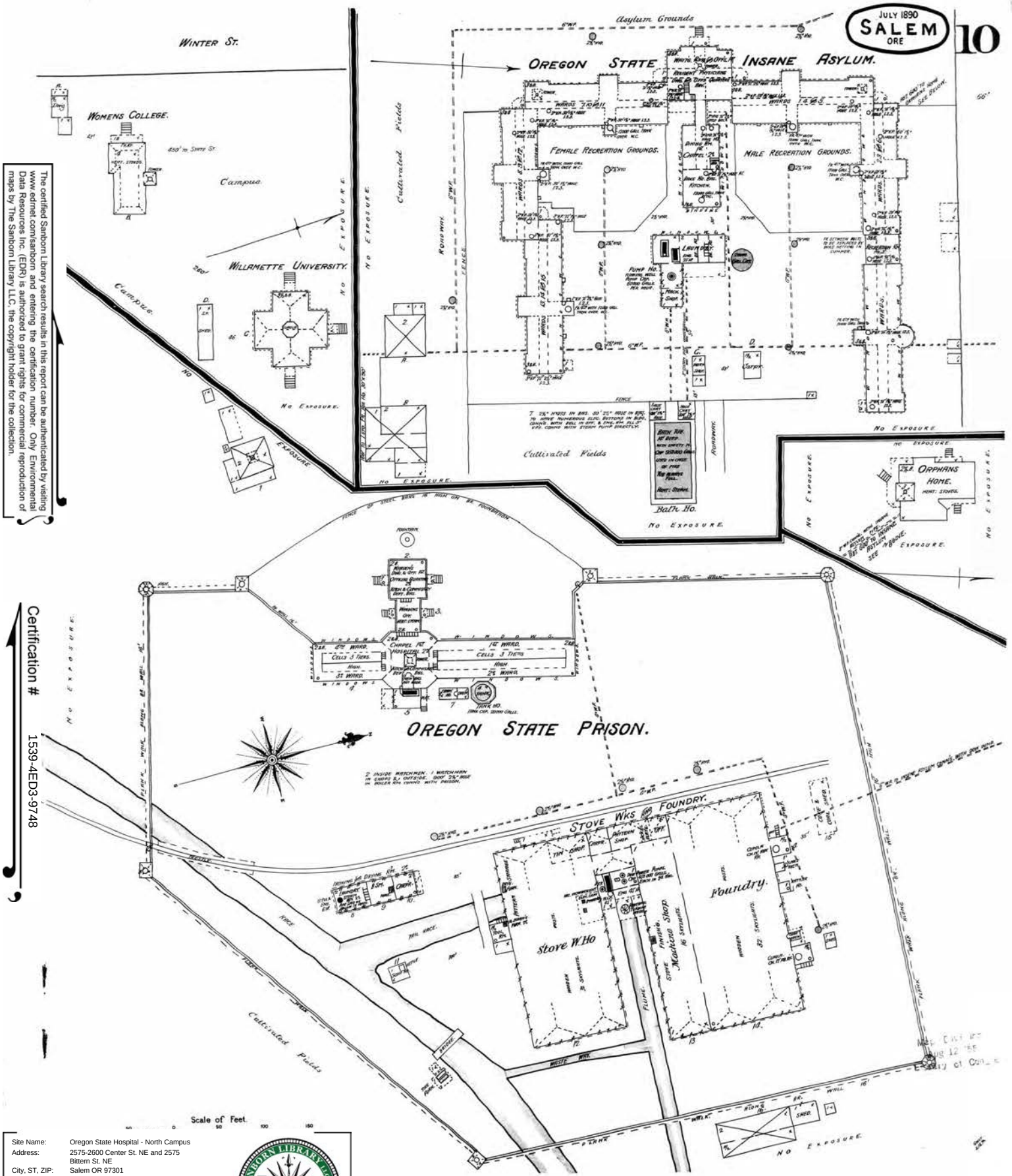
Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1895

1890 Certified Sanborn Map



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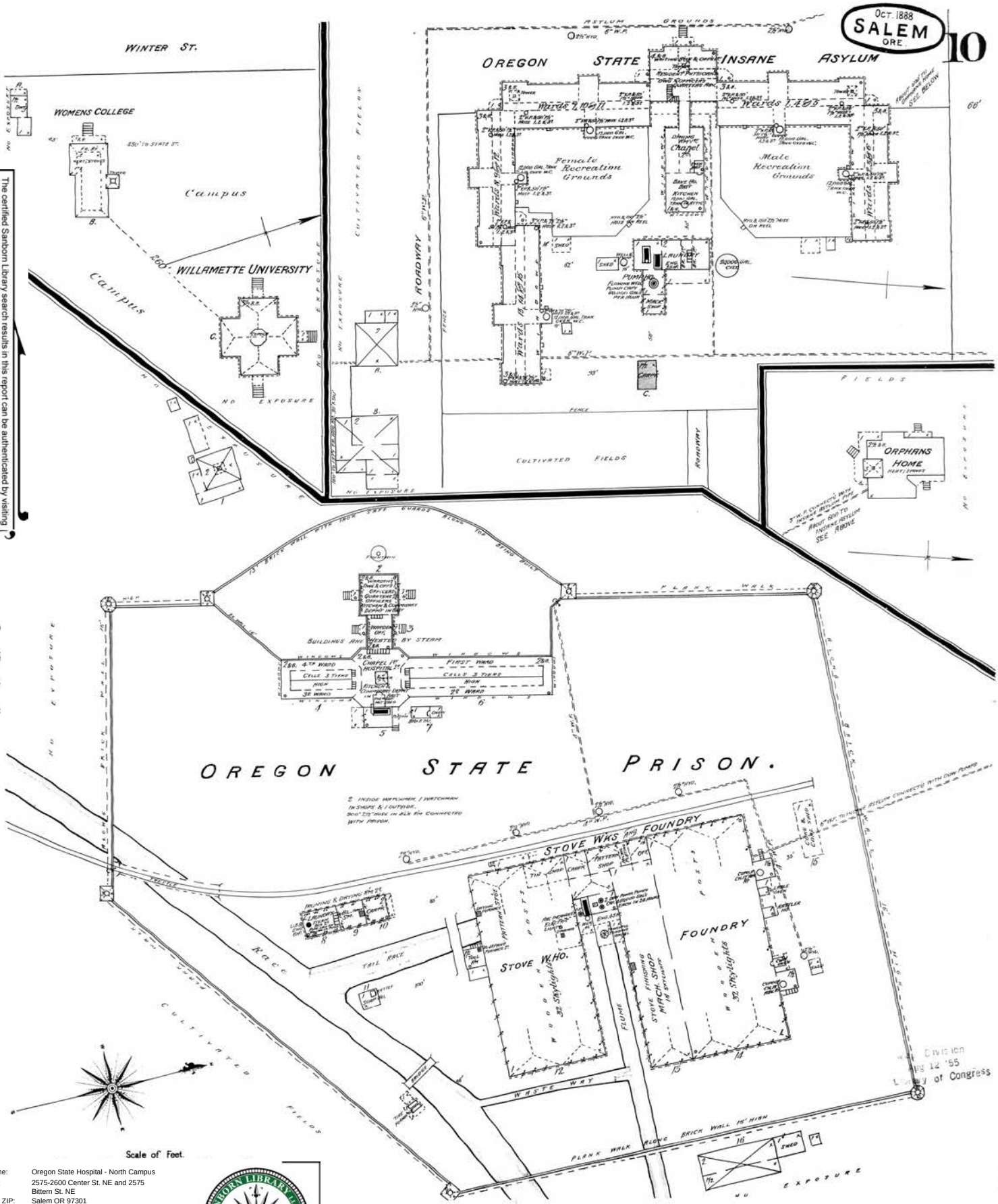
Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748

Copyright: 1890

1888 Certified Sanborn Map



Certification # 1539-4ED3-9748

Site Name:	Oregon State Hospital - North Campus
Address:	2575-2600 Center St. NE and 2575 Bittern St. NE
City, ST, ZIP:	Salem OR 97301
Client:	Stantec
EDR Inquiry:	3518356.3
Order Date:	2/14/2013 1:25:03 PM
Certification #	1539-4ED3-9748
Copyright:	1888

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.4
February 13, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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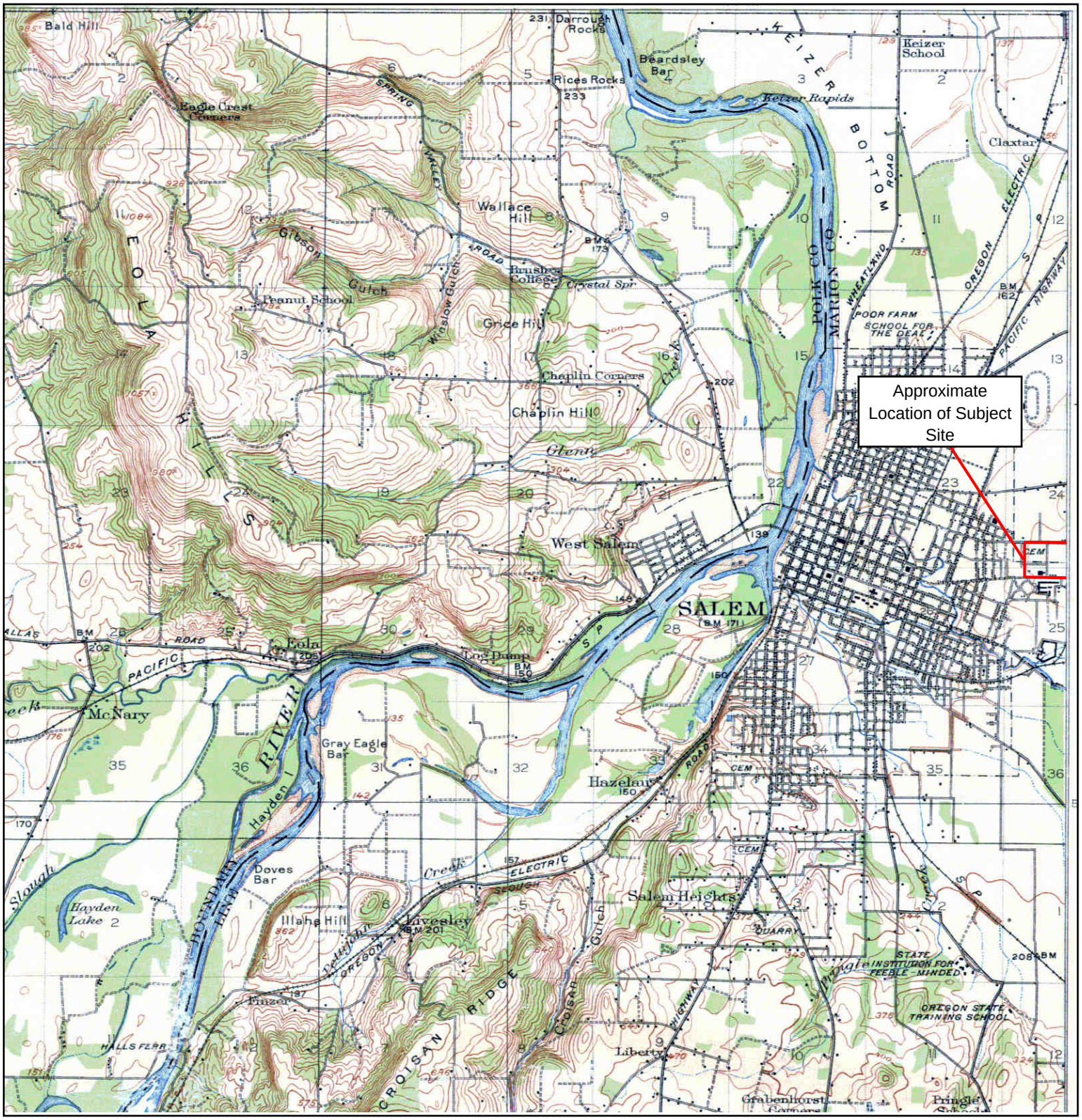
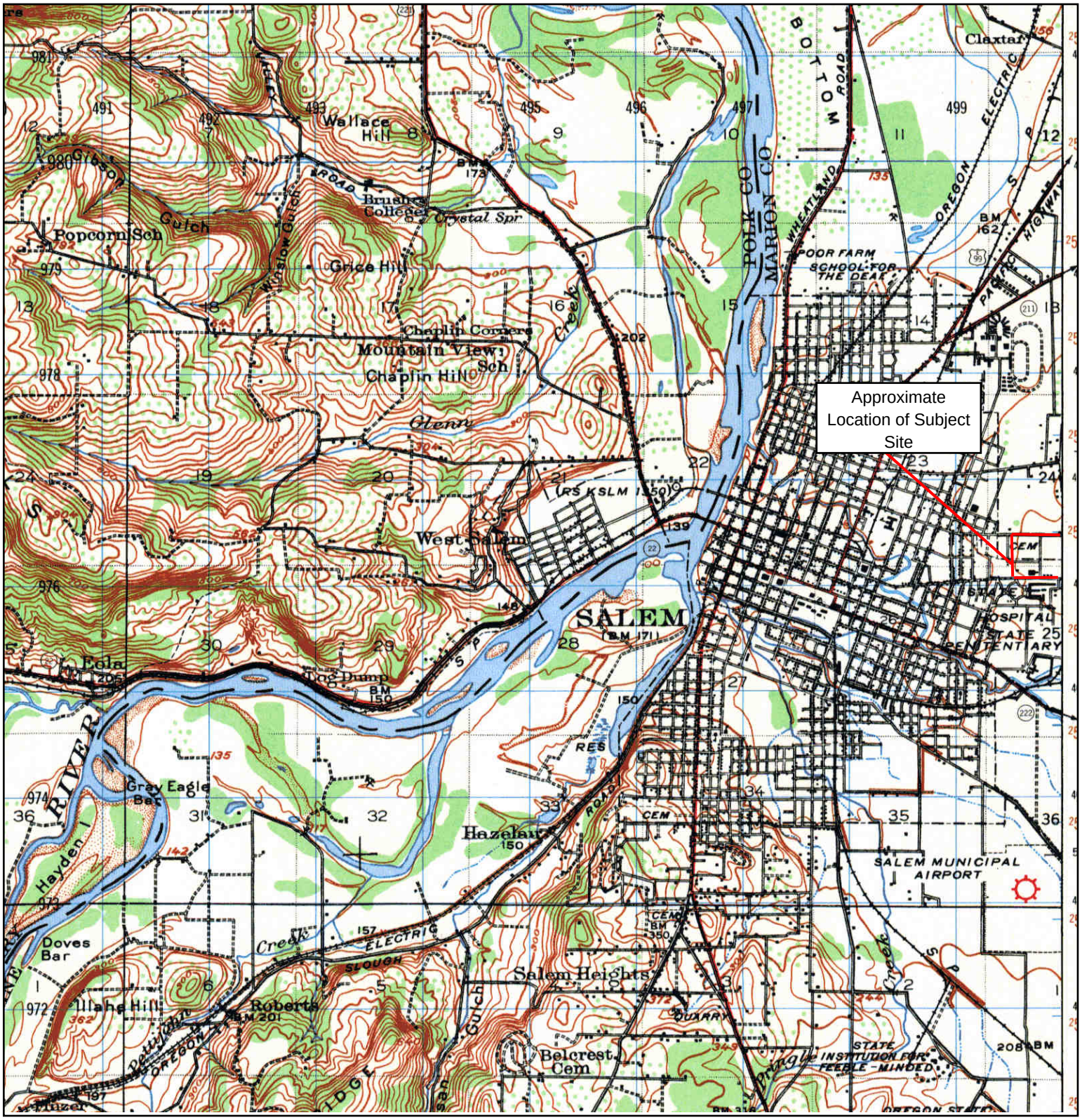
with any questions or comments.

Historical Topographic Map



N	TARGET QUAD		SITE NAME:	Oregon State Hospital - North Campus	CLIENT: Stantec
	NAME:	SALEM			CONTACT: Chris Gdak
	MAP YEAR:	1917	ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE	INQUIRY#: 3518356.4
	SERIES:	15		Salem, OR 97301	RESEARCH DATE: 02/13/2013
	SCALE:	1:62500	LAT/LONG:	44.9416 / -123.003	

Historical Topographic Map



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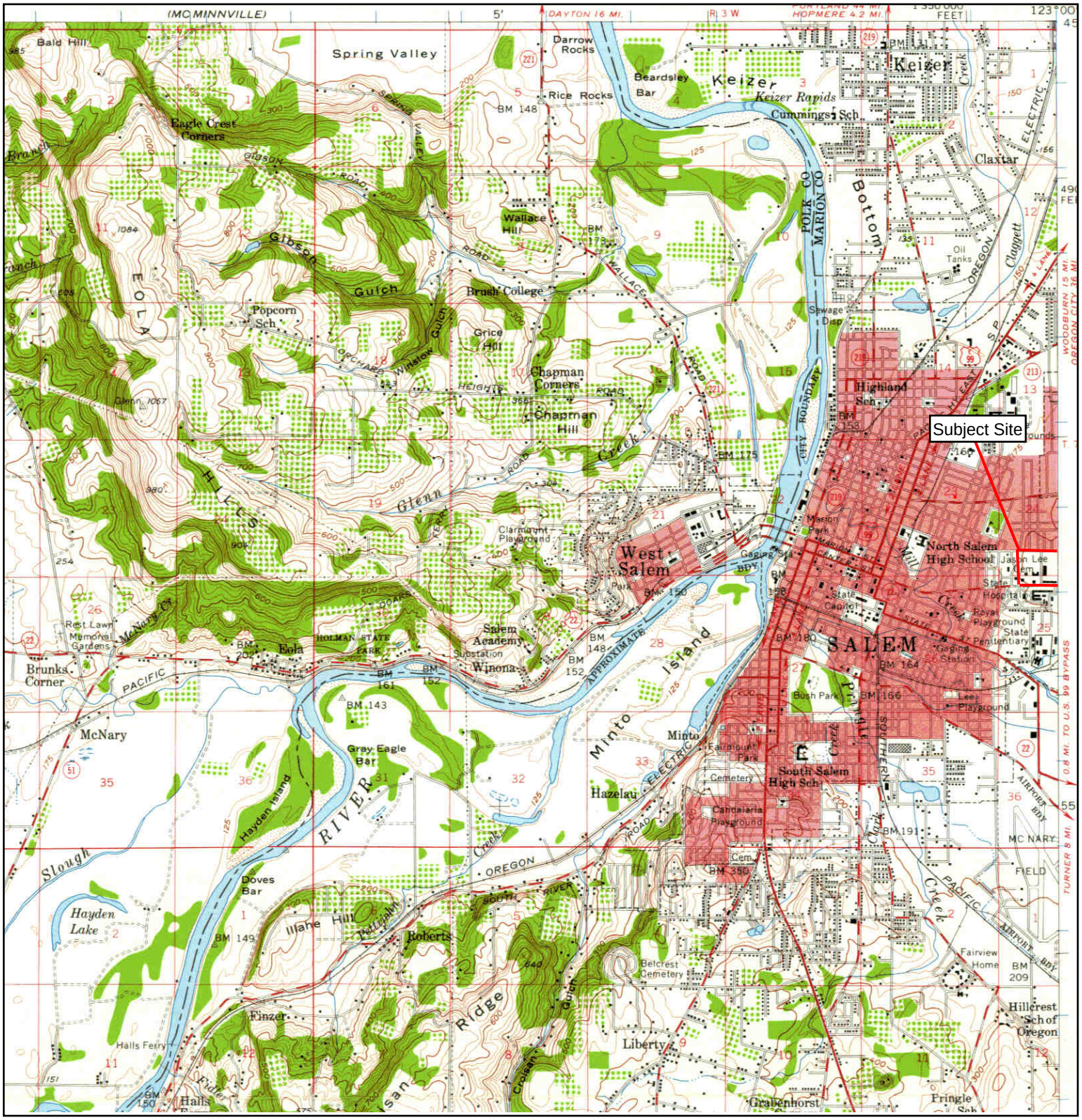
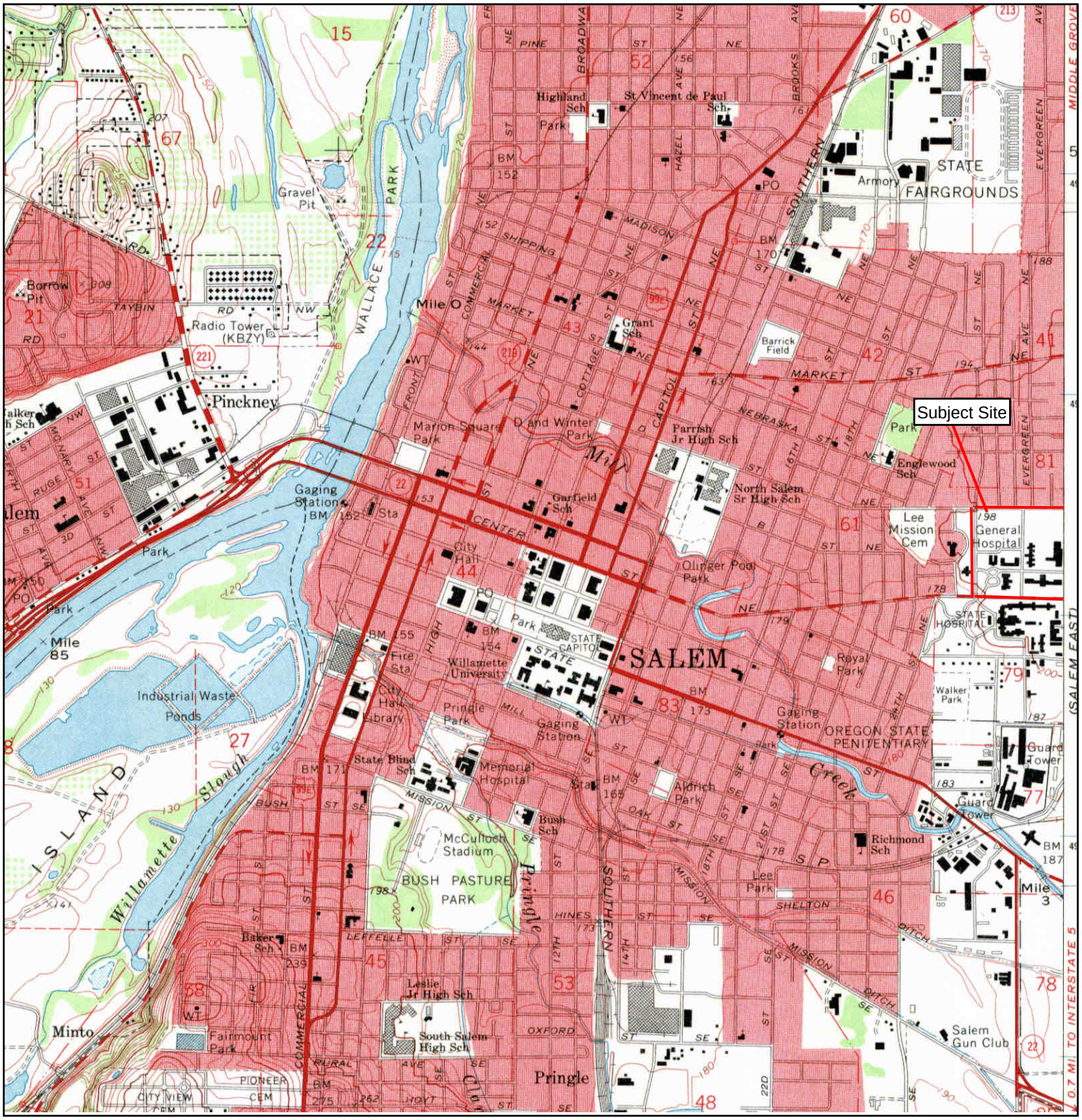
		ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE Salem, OR 97301	CONTACT:	Chris Gdak
		LAT/LONG:	44.9416 / -123.003	INQUIRY#:	3518356.4
				RESEARCH DATE:	02/13/2013

Historical Topographic Map



N	TARGET QUAD		SITE NAME:	Oregon State Hospital - North Campus	CLIENT: Stantec
	NAME:	SALEM			CONTACT: Chris Gdak
	MAP YEAR:	1957	ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE	INQUIRY#: 3518356.4
					RESEARCH DATE: 02/13/2013
	SERIES:	15		Salem, OR 97301	
	SCALE:	1:62500	LAT/LONG:	44.9416 / -123.003	

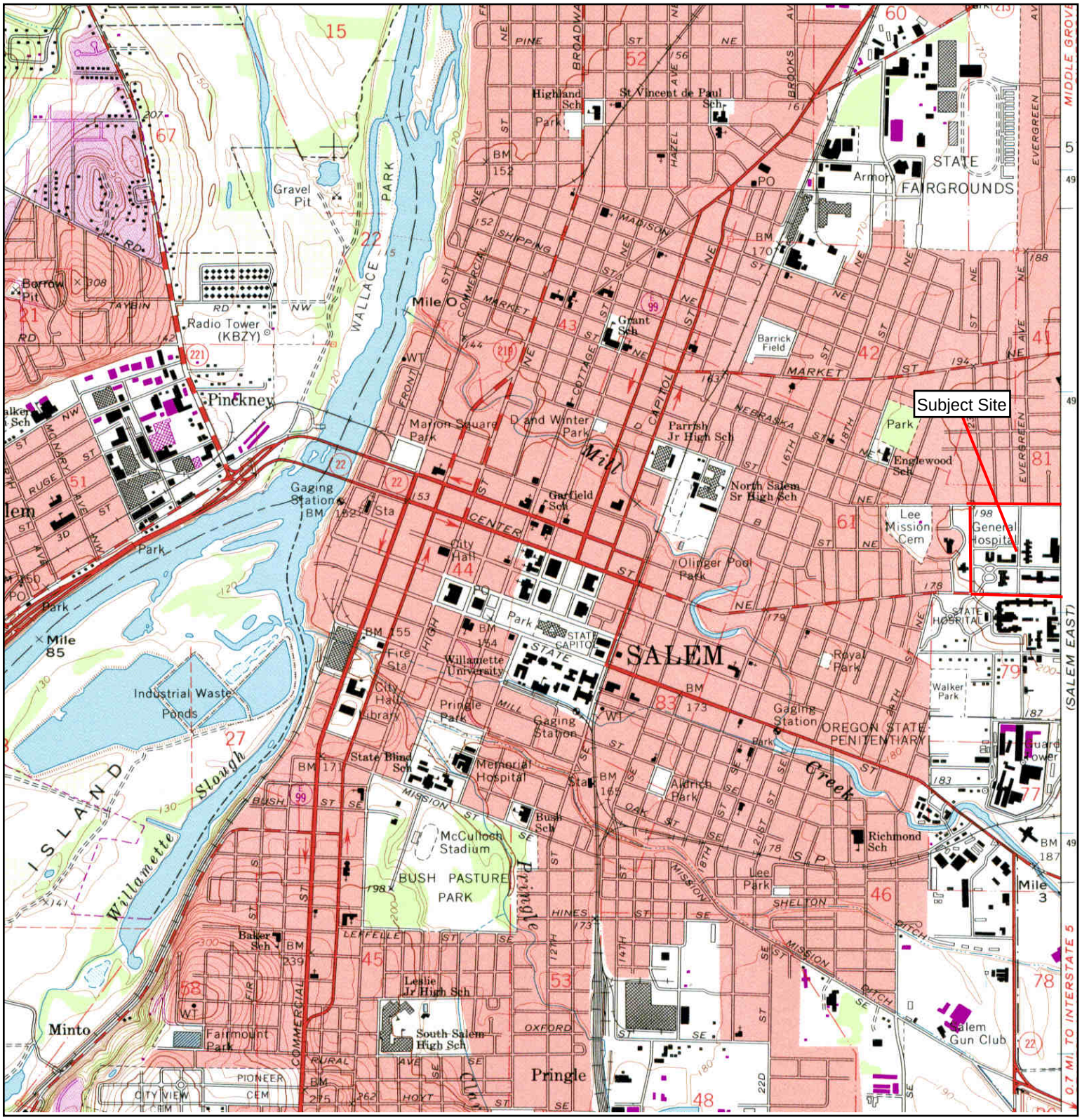
Historical Topographic Map



N	TARGET QUAD			
	NAME:	SALEM WEST	SITE NAME:	Oregon State Hospital - North Campus
	MAP YEAR:	1969	ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE
	SERIES:	7.5		Salem, OR 97301
	SCALE:	1:24000	LAT/LONG:	44.9416 / -123.003

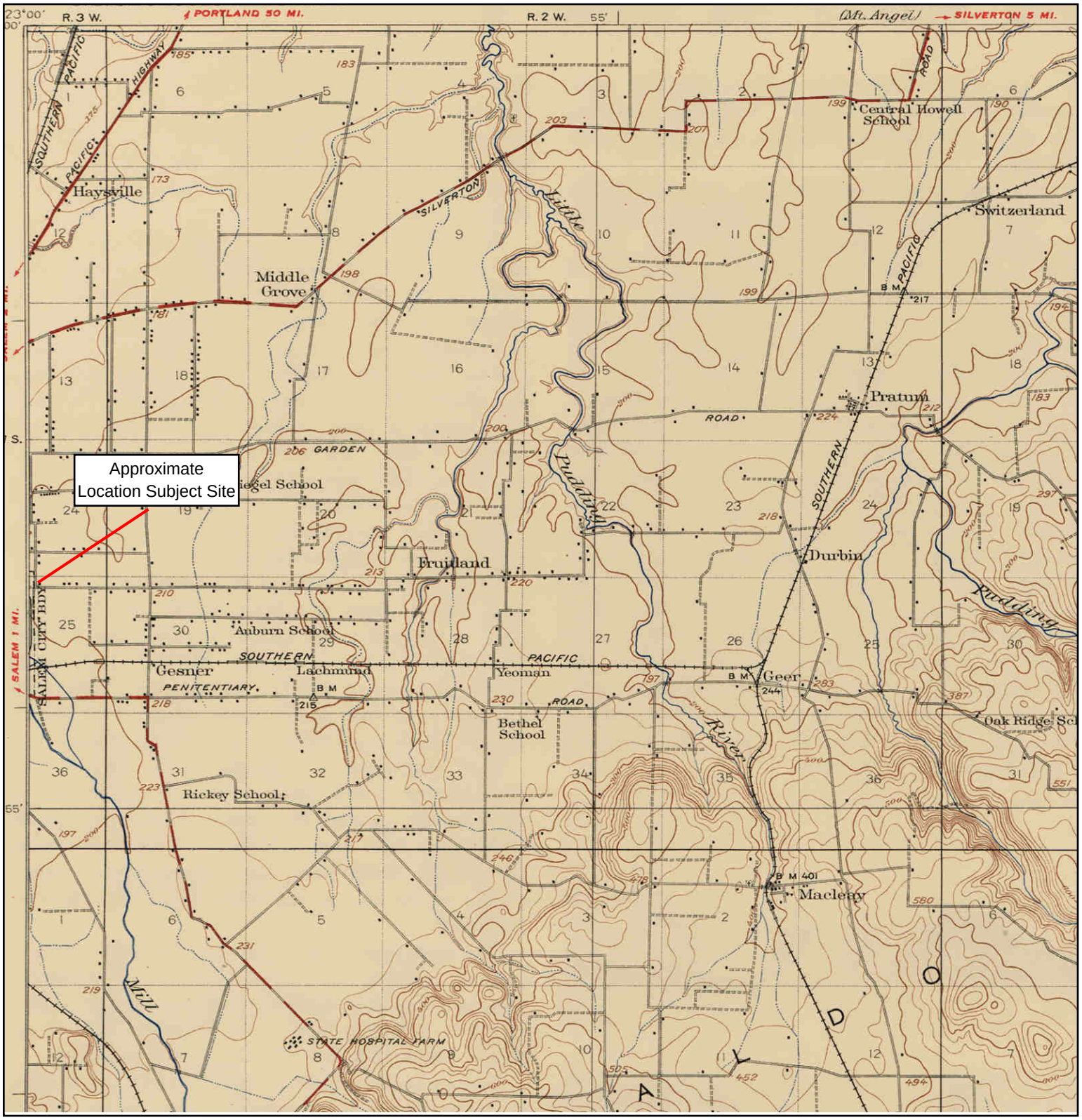
CLIENT:	Stantec
CONTACT:	Chris Gdak
INQUIRY#:	3518356.4
RESEARCH DATE:	02/13/2013

Historical Topographic Map



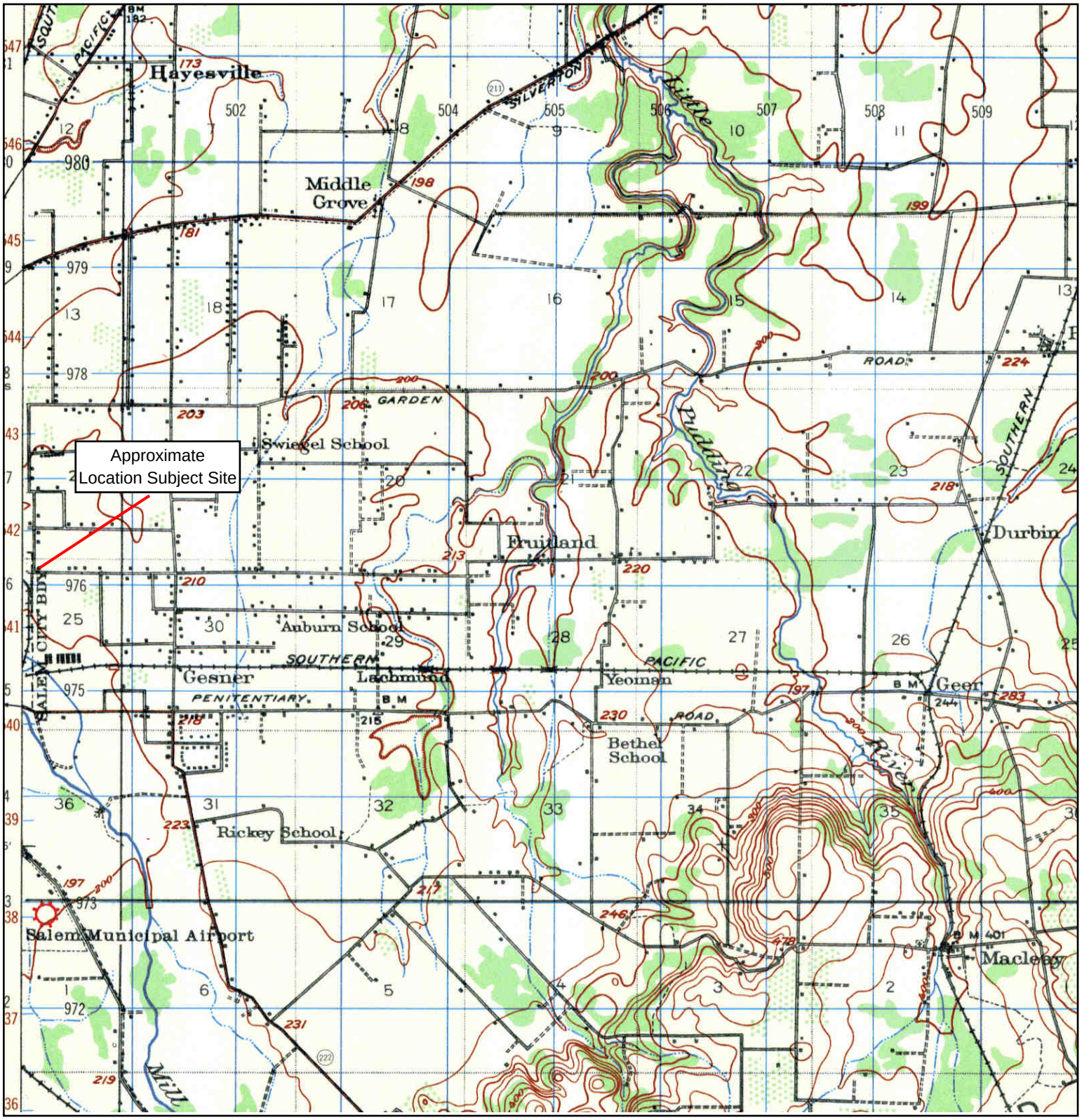
N	**TARGET QUAD** NAME: SALEM WEST MAP YEAR: 1986 PHOTOREVISED FROM :1969 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Oregon State Hospital - North Campus ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem, OR 97301 LAT/LONG: 44.9416 / -123.003	CLIENT: Stantec CONTACT: Chris Gdak INQUIRY#: 3518356.4 RESEARCH DATE: 02/13/2013

Historical Topographic Map



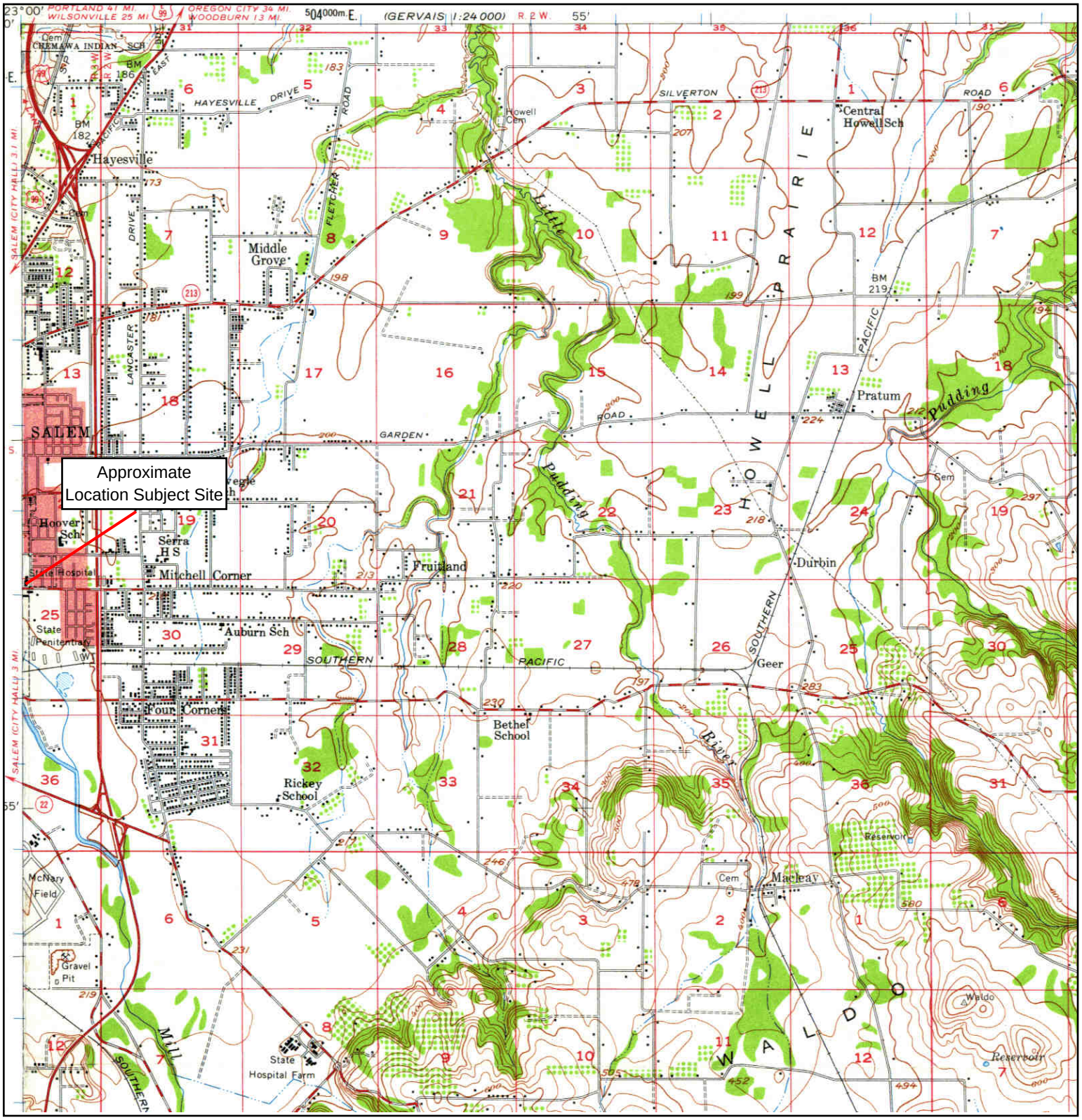
N	ADJOINING QUAD NAME: STAYTON MAP YEAR: 1925 SERIES: 15 SCALE: 1:62500	SITE NAME: Oregon State Hospital - North Campus ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem, OR 97301 LAT/LONG: 44.9416 / -123.003	CLIENT: Stantec CONTACT: Chris Gdak INQUIRY#: 3518356.4 RESEARCH DATE: 02/13/2013	

Historical Topographic Map



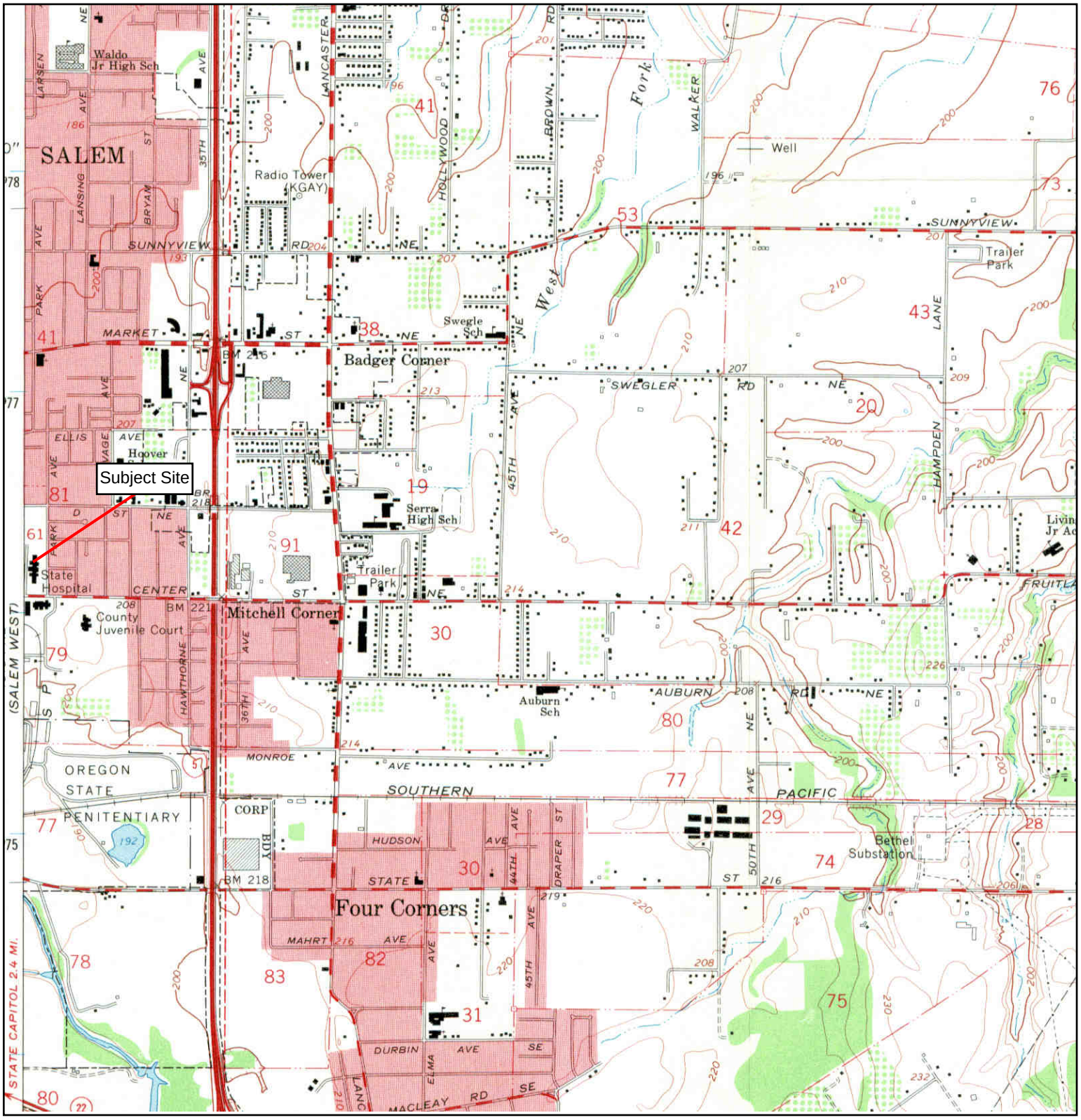
N	ADJOINING QUAD NAME: STAYTON MAP YEAR: 1939 SERIES: 15 SCALE: 1:50000	SITE NAME: Oregon State Hospital - North Campus ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem, OR 97301 LAT/LONG: 44.9416 / -123.003	CLIENT: Stantec CONTACT: Chris Gdak INQUIRY#: 3518356.4 RESEARCH DATE: 02/13/2013

Historical Topographic Map



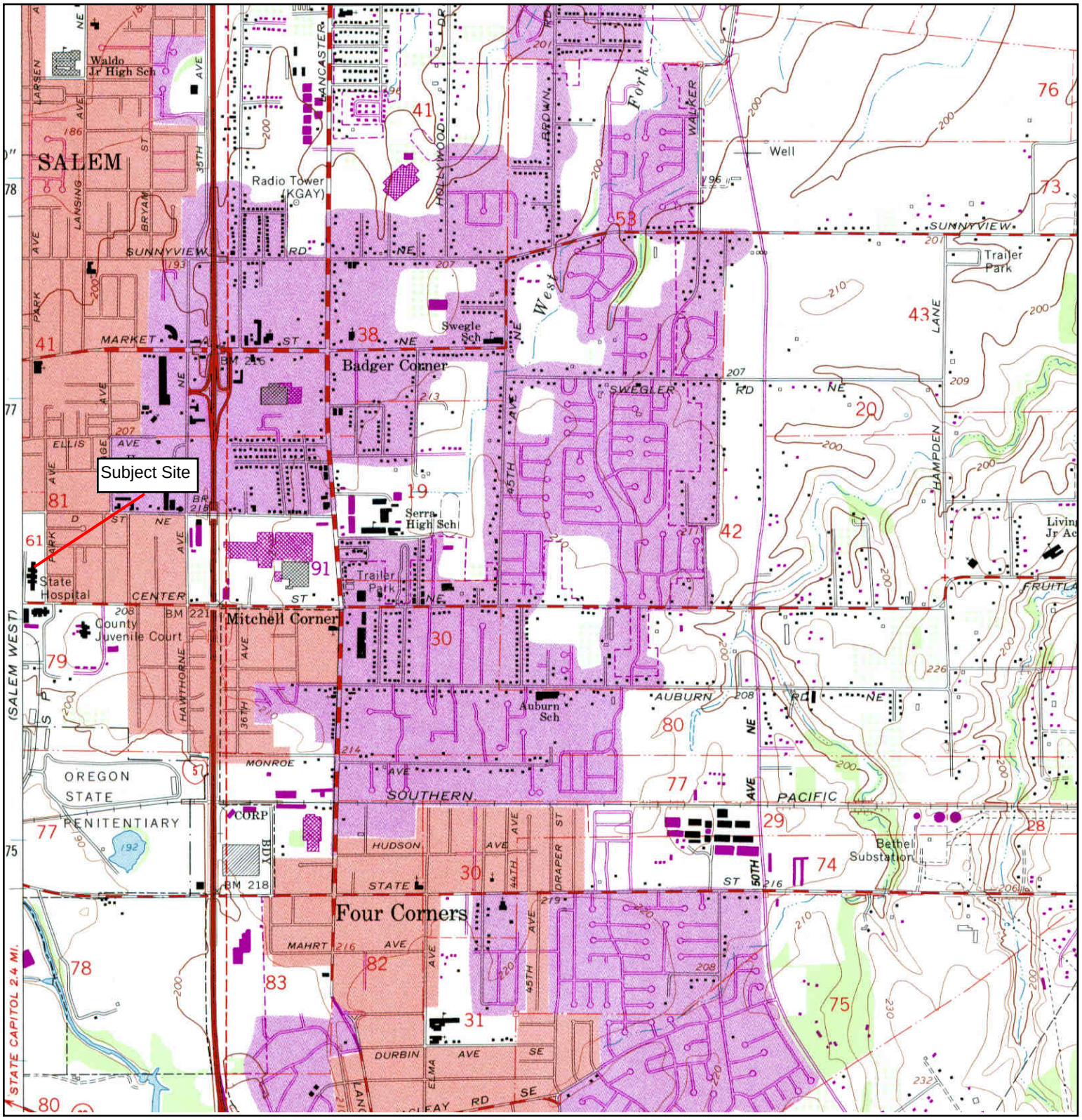
N	ADJOINING QUAD		SITE NAME:	Oregon State Hospital - North Campus	CLIENT: Stantec
	NAME:	STAYTON			CONTACT: Chris Gdak
	MAP YEAR:	1957	ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE	INQUIRY#: 3518356.4
	SERIES:	15		Salem, OR 97301	RESEARCH DATE: 02/13/2013
	SCALE:	1:62500	LAT/LONG:	44.9416 / -123.003	

Historical Topographic Map



N	ADJOINING QUAD NAME: SALEM EAST MAP YEAR: 1969 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Oregon State Hospital - North Campus ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem, OR 97301 LAT/LONG: 44.9416 / -123.003	CLIENT: Stantec CONTACT: Chris Gdak INQUIRY#: 3518356.4 RESEARCH DATE: 02/13/2013

Historical Topographic Map



N	ADJOINING QUAD		SITE NAME:	Oregon State Hospital - North Campus	CLIENT: Stantec
	NAME:	SALEM EAST			CONTACT: Chris Gdak
	MAP YEAR:	1986	ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE	INQUIRY#: 3518356.4
	PHOTOREVISED FROM :	1969		Salem, OR 97301	RESEARCH DATE: 02/13/2013
	SERIES:	7.5	LAT/LONG:	44.9416 / -123.003	
	SCALE:	1:24000			

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.6
March 11, 2013

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1924 through 2012. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

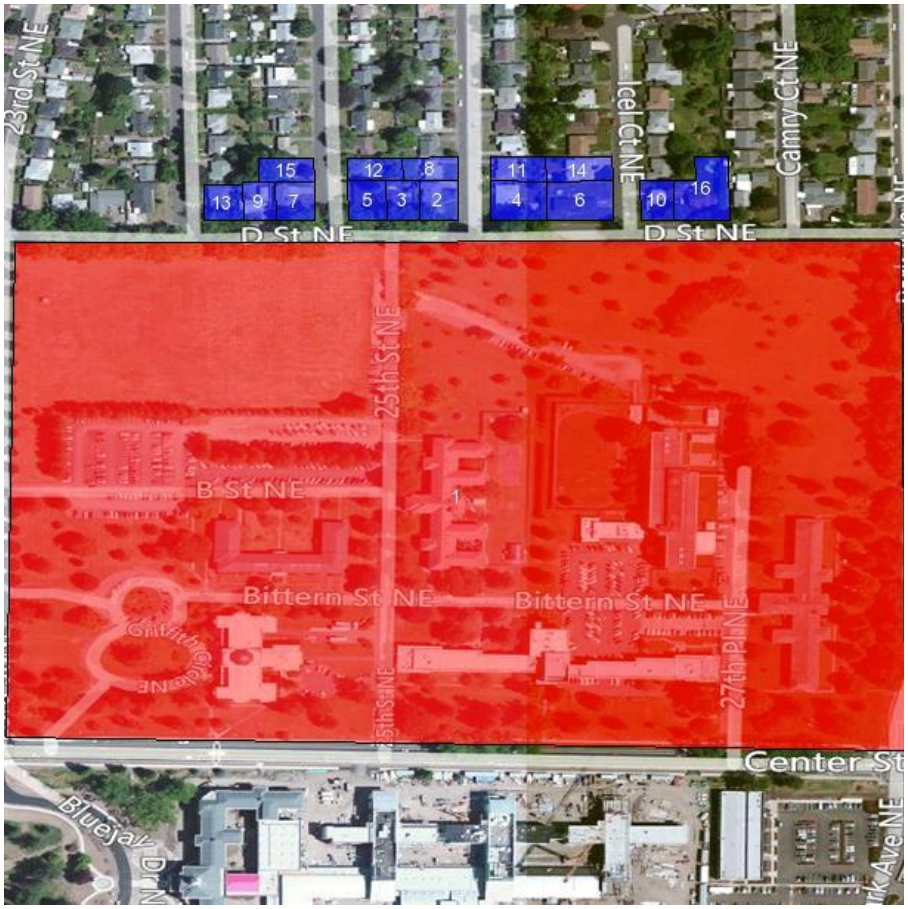
The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2012	Cole Information Services	-	-	-	-
2007	Cole Information Services	-	-	-	-
2002	R. L. Polk Co.	-	X	X	-
	R. L. Polk Co.	X	X	X	-
1996	R. L. Polk Co.	-	X	X	-
1991	U S West Direct	-	-	-	-
1989	R.L. Polk CO.	-	X	X	-
1986	R. L. Polk Co.	-	X	X	-
1980	R. L. Polk Co.	-	X	X	-
1976	R. L. Polk Co.	-	X	X	-
1970	R.L.. Polk Co Publishers	-	X	X	-
1966	R.L.. Polk Co Publishers	-	X	X	-
1961	R.L.. Polk Co Publishers	-	X	X	-
1957	R.L.. Polk Co Publishers	-	-	-	-
1951	R.L.. Polk Co Publishers	-	-	-	-
1947	R.L.. Polk Co Publishers	-	-	-	-
1942	R.L.. Polk Co Publishers	-	-	-	-
1939	R.L. Polk Co Publishers	-	-	-	-
1932	R.L. Polk Co Publishers	-	-	-	-
1927	R.L. Polk Co Publishers	-	-	-	-
1924	R. L. Polk Co.	-	-	X	-
	R. L. Polk Co.	-	X	X	-

EXECUTIVE SUMMARY

MAP INFORMATION

The Overview Map provides information on nearby property parcel boundaries. Properties on this map that were selected for research are listed below the map.



SELECTED ADDRESSES

The following addresses were selected by the client. Detailed findings are contained in the findings section. An "X" indicates where information was identified.

Address	***Type***	***Findings***
1029 EVERGREEN AVE NE	Map ID: 2	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

FINDINGS DETAIL

Target Property research detail.

BITTERN ST NE

2575 BITTERN ST NE

Year	*Uses*	*Source*
2002	BUSINESSES	R. L. Polk Co.
	MENTAL HEALTH DIV I	R. L. Polk Co.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BITTERN ST NE

2600 BITTERN ST NE

Year	*Uses*	*Source*
1924		R. L. Polk Co.

EVERGREEN AVE NE

Map ID: 2

1029 EVERGREEN AVE NE

Year	*Uses*	*Source*
2002	Walker Maiorie M El A	R. L. Polk Co.
1996	Walker M 1616 C	R. L. Polk Co.
1989	Andrews Marie J	R.L. Polk CO.
1986	Andrews Marie J	R. L. Polk Co.
1980	Andrews Lee L	R. L. Polk Co.
1976	Andrews Lee L	R. L. Polk Co.
1970	Andrews Lee L	R.L.. Polk Co Publishers
1966	ANDREWS LEE L	R.L.. Polk Co Publishers
1961	Andrews Lee L em	R.L.. Polk Co Publishers

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
2575-2600 Center St. NE and 2575 Bittern St. NE	2012, 2007, 1996, 1991, 1989, 1986, 1980, 1976, 1970, 1966, 1961, 1957, 1951, 1947, 1942, 1939, 1932, 1927

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1029 EVERGREEN AVE NE	2012, 2007, 1991, 1957, 1951, 1947, 1942, 1939, 1932, 1927, 1924
2600 BITTERN ST NE	2012, 2007, 2002, 1996, 1991, 1989, 1986, 1980, 1976, 1970, 1966, 1961, 1957, 1951, 1947, 1942, 1939, 1932, 1927

APPENDIX C
AGENCY RECORDS:

- MARION COUNTY ASSESSORS OFFICE
- SALEM FIRE DEPTARTMENT
- OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Marion County Assessor's Property Records
Property Summary

Property Identification

Property ID:	R76562	**Manufactured Home ID:**	
Situs Address:	2600 CENTER ST NE SALEM, OR 97301	**Legal Description:**	HENDERSON ADDITION, ACRES 47.37
Map Tax Lot:	073W24C 00100		

Owner Information

Owner:	STATE OF OREGON 1225 FERRY ST SE SALEM, OR 97302	**Previous Owner:**	HAMMOND LUMBER CO ,

Property Details

Year Built:	1950	**Property Code:**	Q30
Living Area:	489727	**Property Class:**	
Bedrooms:	0	**Levy Code Area:**	92401000
Bathrooms:		**Zoning:**	Contact local jurisdiction
Legal Acreage:	47.37	**Apex Sketches:**	None Available
		Property Photos:	None Available

Value Information

RMV Land:	$16,249,570	**Exemption Description:**	STATE GOV'T OWNED PROPERTY, FULL EXEMPT
RMV Improvements:	$48,957,260		
RMV Total:	$65,206,830		
Assessed Value:	$0		

Tax Information

Taxes Levied 2012-13:	$0	**Tax Payoff Amount:**	$0
Tax Rate:	19.003		

Sales Information

Sale Date:	1/22/1930	**Deed Number:**	2060112
Sale Price:	$3,952	**Deed Type:**	RD
Sale Type:	15		

CITY OF SALEM, OREGON
FIRE DEPARTMENT
370 TRADE ST SE, 97301-3454
503-588-6245 Phone
503-588-6371 Fax

ENVIRONMENTAL RESEARCH REQUEST

RESEARCH OF PUBLIC RECORDS RELATING TO HAZARDOUS OR ENVIRONMENTAL PROPERTY CONDITIONS

Completion of hazardous/environmental property research may take up to 10 working days to complete, depending on the complexity of the research and the accessibility of records.

DATE: 2/14/13

SITE ADDRESS: 2600 Center St NE Salem, OR 97301 — Alternative Addresses: • 2575 Bittern St NE • 2575 Center St N

APPLICANT NAME: Stantec Consulting - Brittany Jarnot

APPLICANT ADDRESS: 12034 134th Ct NE Suite 102

CITY/STATE/ZIP: Redmond, WA 98052

EMAIL ADDRESS: brittany.jarnot@stantec.com

PHONE # (425) 298-1000

FAX # (425) 298-1019

Specific Record Study Requests (i.e., Underground Tanks, Emergency Responses, Occupancy Use History)

USTs, ASTs, Chemical Storage, Spills, Emergency Response, Occupancy Use History

Applicant's Signature: _____ Date: _____

Due to the fact that research is address driven, separate requests should be completed for each individual address, regardless of whether it is part of a multiple unit complex.

ENTERED

Research Fee: $ 35.00 Paid: ☑ Cash ☐ Check

Received By: V. Olson Date: 2/19/13

Assigned To: S. Mansfield Date: 2/19/13

SALEM FIRE DEPT FEB 19 RECEIVED

G:\PREV\FORMS\ENVIRONMENTAL RESEARCH REQUEST.doc
Revised 8/8/2011

Salem AT YOUR SERVICE

CITY OF SALEM, OREGON
FIRE DEPARTMENT
370 Trade St. SE, 97301-3454
Telephone: (503)589-2139

Sean M. Mansfield
Deputy Fire Marshal

Brittany Jarnot
Stantec
12034 134th Ct NE, E102
Redmond WA 98052

Re: 2600 Center St NE

Dear Miss. Jarnot,

This letter is being written to address your request for an environmental assessment for the above address.

You requested information pertaining to any ASTs, USTs, Chemical Storage, Emergency Response, and Occupancy Use History at the above listed property. Please be advised that this address serves as a campus address on both the north and south side of Center St NE. Per our phone conversation, research was limited to the north side of Center St NE. Please see the attached records for information. I have also attached an electronic list of emergency responses for the fire department to the requested address. This campus has served as the Oregon State Hospital.

If you have any questions or if I can be of further assistance please call me at 503 589-2139.

Sincerely

Sean Mansfield,
Deputy Fire Marshal

"There's no gamble with 3 Kings

Underground Storage

3 Kings
Environmental

BRIAN MARTELL, Installation Coordinator

21605B N.E. 10th Avenue
Ridgefield, WA 98642
FAX (360) 887-1492

(360) 887-5464
Portland (503) 286-7780
Toll Free 1 (888) 435-4647

Acetank & EQUIPMENT

Eric Liebe
Sales

Portland, Oregon 97218
6125 NE Portland Hwy

503/284-5505
800/452-7437
FAX: 503/284-5829
E-mail: el@acetank.com

MIT NO. DATE ISSUED

DRESS 2600 CENTER ST. NE,

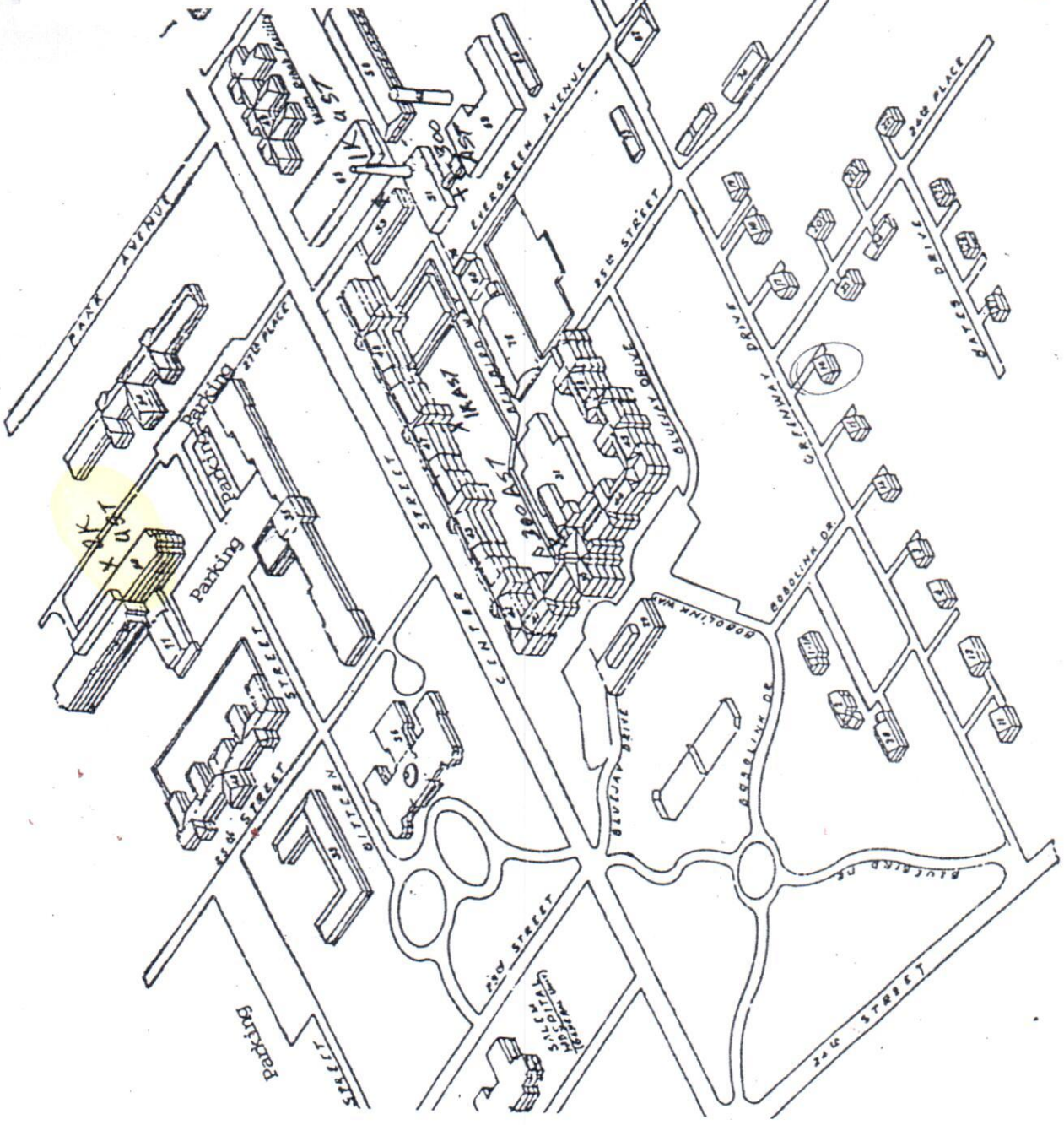
50, 47, 53, 51, 31

FIRE COPY

OREGON STATE HOSPITAL
SALEM OREGON

OBLIQUE DRAWING
SHOWING
BUILDINGS & STREETS
OF THE
OREGON STATE HOSPITAL

Scale: 1"=80'
DWG. No. 00902



Tank Removal Log

PERMIT #	DATE ISSUED	FACILITY/CONTRACTOR REMOVING	ADDRESS OF REMOVAL	AMT/SIZE OF TANK(S)	BY / FOR	DFM
R02-001	8/5/2002	Anderson Environmental	2600 State Street	1 - 2,000 gal heavy oil	MR	Mack

Tank Removal Log

PERMIT #	DATE ISSUED	FACILITY/CONTRACTOR REMOVING	ADDRESS OF REMOVAL	AMT/SIZE OF TANK(S)	BY / FOR
R-99-005	2/9/1999	State Hospital/ Three Kings	2600 Center St Bldg. 50	1-2,000	PI

Tank Install Log

PERMIT #	DATE	FACILITY/CONTRACTOR INSTALLING	ADDRESS OF INSTALLATION	AM/SIZE OF TANK (S)	ISSUED BY/FOR
I-99-007	3/3/1999	Three Kings Environmental	2600 Center St NE Bldg 50	2,000gal diesel	JM/PI

STORAGE TANK DECOMMISSIONING PERMIT

DATE 2/9/99 PERMIT # R99-035

SITE ADDRESS: 2600 Center St N.E. Bld #50

APPLICANT 3 Kings Enviro PHONE 360 887 5464

ADDRESS: 21605-B NE 10th Ave Ridgefield WA

CONTRACTOR 3 Kings Enviro PHONE # 360 887 5464

ADDRESS 21605-B Ridgefield WA DEQ LIC. 14312

CITY Ridgefield STATE WA ZIP 98642

TYPE OF PERMIT: ABOVEGROUND

UNDERGROUND 2,000 gallon Diesel

	TANK SIZE	TANK STATUS	DATE INSPECTED
1.	2000	Active	unknown
2.			
3.			

COMMENTS Soil contamination present

TANK DISPOSAL SITE Cliff Kappe Metals

FEE ABOVEGROUND UNDERGROUND X PE#1587

RECEIVED BY Amount 132.50 DATE 2/9/99

APPLICANT SIGNATURE DATE 2/8/99

FINAL APPROVAL DATE 2/14/99

Deputy Fire Marshal

All Requests for inspection shall be received by the Salem Fire Prevention Division 24-hours in advance.

Copy Distribution: white/customer
yellow/customer
pink/DFM

G:\FORMS\DECOMM.PMT
Revised: August 21, 1997

INSPECTION NOTICE

FIRE PREVENTION DIVISION

SU

Building 50

SALEM FIRE DEPARTMENT
370 Trade St. SE
Salem, OR 97301
588-6245

BUSINESS NAME				PHONE		
OR STATE Hosp						
NUMBER	SUFFIX	STREET NAME	TYPE	DIR	RM	ZIP
2600		Center	St.			
MANAGER				PHONE		
EMERGENCY CONTACT				PHONE		
BUSINESS OWNER				PHONE		
BUSINESS OWNER MAILING ADDRESS				DIR	RM	ZIP
O/UBC	FREQ	NFPA	LARGEST AREA	TOTAL AREA	O/LOAD	
NO. RATING	NO. RATING	SPRINKLER	SPECIAL PROTECTION SYSTEM			
Ext.						

TYPE	FLR	LOC	DESCRIPTION

IN ACCORDANCE WITH THE CITY OF SALEM FIRE PREVENTION ORDINANCES, THE FOLLOWING VIOLATION ORDERS (STAT V) ARE SERVED:

ITEM #	STAT	CODE	DESCRIPTION
1	X		One 2000 gal UST removed Soil contamination present

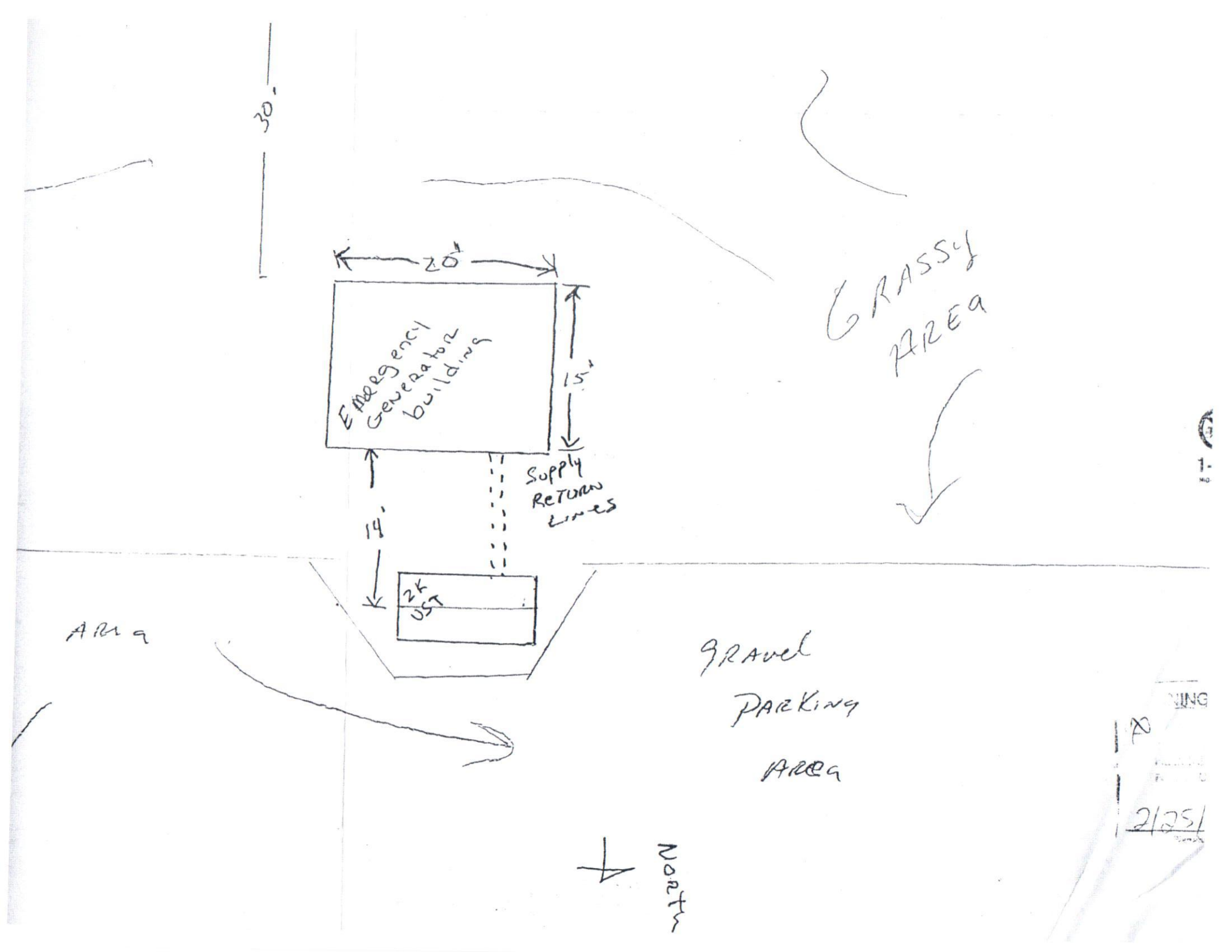
PLEASE SEE REVERSE SIDE FOR CODE DEFINITIONS.

PREV FLAG

A REINSPECTION WILL BE MADE ON OR ABOUT _____ TO DETERMINE COMPLIANCE.

OCCUPANT

PRESENTED TO _____ SIGNATURE _____ DATE 4/14/99


30'
20'
Emergency Generator building
15'
14'
Supply
Return
Lines
2k
UST
GRASSY AREA
GRAVEL PARKING AREA
North

Fire & Life Safety Plan Review

Salem Fire Department
370 Trade Street SE
503-588-6245

Address 2600 Center Street NE, Building 50 Occ Unknown Date 3-4-99
Own State of Oregon - State Hospital, Building 50 New X Install Permit # I-99-007
PC # 394583 Project 1000 Gallon UST - Mechanical
Contractor 3 Kings Environmental Telephone # 360-887-5464

Plans are approved as submitted with the following requirements:

01 Underground storage of flammable and combustible liquids in tanks shall be in accordance with Sections 7902.1 and 7902.6.

02 Underground tanks shall not contain petroleum products containing mixtures of a nonpetroleum nature, such as ethanol or methanol blends, without evidence of compatibility.

03 Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with the following:

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank,

2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar or property line shall not be less than 3 feet (914.4 mm), and

3. A minimum distance of 1 foot (304.8 mm), shell to shell, shall be maintained between underground tanks.

04 Depth and cover. Excavation for underground storage tanks shall be made with due care to avoid undermining of foundations of existing structures. Underground tanks shall be set on firm foundations and surrounded with at least 6 inches (152.4 mm) of noncorrosive inert material such as clean sand or gravel well tamped in place or in accordance with the manufacturer's installation instructions. Tanks shall be covered with a minimum of 2 feet (609.6mm) of earth or shall be covered by not less than 1 foot (304.8 mm) of earth, on top of which shall be placed a slab of reinforced concrete not less than 4 inches (101.6 mm) thick.

05 When underground tanks are, or are likely to be, subjected to traffic, they shall be protected against damage from vehicles passing over them by at least 3 feet (914.4 mm) of earth cover, or 18 inches (457.2 mm) of well-tamped earth plus 6 inches (152.4 mm) of reinforced concrete, or 8 inches (203.2 mm) of asphaltic concrete. When asphaltic or reinforced concrete paving is used as part of the protection, it shall extend at least 1 foot (304.8 mm) horizontally beyond the outline of the tank in all directions.

06 For tanks built in accordance with Section 7902.1.8, the burial depth and the height of the vent line shall be such that the static head imposed at the bottom of the tank will not exceed 10 psig (68.9kPa) if the fill or vent pipe is filled with liquid.

07 If the depth of cover exceeds 7 feet (2133.6 mm) or the manufacturer's specifications, reinforcements shall be provided in accordance with the tank manufacturer's recommendations.

08 Nonmetallic underground tanks shall be installed in accordance with the manufacturer's instructions. The minimum depth of cover shall be as specified above in Section 7902.6.4.

09 Fill pipes shall be equipped with a spill container and an overfill prevention system as specified in Section 7902.6.5.

10 A spill container shall be provided for each fill pipe to collect liquids spilled by overfilling during tank-filling operations. Containers are allowed to be constructed of single-wall construction. Containers shall have a capacity of not less than 5 gallons (18.9 L) and shall be equipped with a drain valve which drains a spill into the primary tank.

11 An overfill prevention system shall be provided for each tank. The system shall either:

1. Have an alarm which provides an audible and visual signal when the quantity of liquid in the tank reaches 90 percent of tank capacity,

2. Automatically shut off the flow when the quantity of liquid in the tank reaches 95 percent of tank capacity, or

3. Reduce the flow rate to not more than 15 gallons per minute (0.95L/s) so that, at the reduced flow rate, the tank will not overfill for 30 minutes, and automatically shut-off flow into the tank so that none of the fittings on the top of the tank are exposed to product due to overfilling.

12 Where a tank could become buoyant due to a rise in the level of the water table or due to location in an area that is subject to flooding, the tank shall be anchored in place. See Appendix II-B or manufacturer's installation instructions.

13 Piping, valves and fittings shall be designed for the working pressures and structural stresses to which they could be subjected. Metallic piping in contact with the ground shall be provided with cathodic protection. Threaded joints or connections shall be made up tight with the use of an approved pipe joint sealing compound. Nonmetallic joints shall be approved and shall be installed in accordance with the manufacturer's instructions.

14 Upon completion of the installation, the system shall be tested in accordance with Section 7901.11.

Before being covered or placed in use, tanks and piping connected to underground tanks shall be tested for tightness in the presence of the chief. For pipe testing, see Section 7901.11.10. The system shall not be covered until it has been approved.

New underground tanks shall be tested for tightness hydrostatically or pneumatically at not less than 3 pounds per square inch (20.7 kPa) and not more than 5 pounds per square inch (34.5 kPa) for 30 minutes. Pneumatic testing shall not be used on a tank containing flammable or combustible liquids or vapors.

When secondary containment tanks are required in accordance with Section 7902.6.11, they shall be tested in accordance with Section 7902.6.11, they shall be tested in accordance with the manufacture's instructions. Both the primary & secondary containment shall be tested.

15 Electrical wiring and equipment shall be installed in a manner which provides reasonable safety to persons and property. Evidence that wiring and equipment are of the type approved for use in the hazardous locations as set forth in Table 5202.6-A and that wiring and equipment have been installed in accordance with the Electrical Code shall be provided.

16 Because five separate installations were submitted under one permit, all sites shall be ready for each required site visit. A total of three site visits are allowed for these five sites. Additional visits will be charged at a rate of $35.00 per hour and shall be made prior to the visit.

HAZARDOUS MATERIALS UNDERGROUND STORAGE TANK INSPECTION CHECKLIST

SITE PRELIMINARIES

1. *Permits*

Owner: _____ Address: _____

_____

_____

		Date	Initial
☐	Proper permits have been secured (i.e. Building, Installation)		
☐	Plan submitted to Permit Application Center		

2. *Installation Layout*

☐	Clearance requirements have been met		
☐	Fire Department emergency access is adequate		

PRIOR TO INSTALLATION

1. *Excavation inspection*

☐	The excavation is free of extraneous materials		
☐	The excavation is large/deep enough for tank/s to be installed		

2. *Tank inspection*

☑	The tank is approved for underground use (check labels UL, etc.) UL A70923		

INSTALLATION

1. *Anchoring*

☐	Anchors are/are not required in your area		
☐	Provisions for anchoring are adequate		
☐	Anchors to be used: concrete pads - deadman - midway anchors		
☐	Anchor straps have been properly separated from the tank surface		

No Site Visit

1. *Tank*

☐	The tank is: steel - fiberglass - composite	4/22/09	
☐	Tank is equipped with an overfill device		
☐	Pumping system remote, using submerged transfer pumps or suction pumps		
☐	Protection		
☐	Leak detection/fuel level monitoring devices		

2. *Piping*

☐	Piping is equipped with a leak detection device		
☑	Piping does not cross over the top of the tanks	4/22/09	
☐	Swing joints/flexible connections are properly installed and of approved materials		
☐	Protection		

(Over)

		Date	Initial
3.	*Vent Piping*		
☐	Vent pipes are properly located and installed	4/22/99	
4.	*Monitoring Wells*		
☐	Number of wells planned:		
☐	Wells are properly located		
☐	Monitoring wells are of proper construction and materials		
5.	*Backfill*		
☐	Appropriate backfill is being used	4/22/99	
☐	Backfill is properly compacted around the tank and piping	4/22/99	
6.	*Record Keeping*		
N/A ☐	Owner has an adequate record system		
☐	Other employees are trained in the record system/monitoring technique		
7.	*Emergency Shut-Off*		
N/A ☐	Switch location is 25-75 feet from pump/dispenser		
☐	Switch is labeled		
8.	*Fire Extinguisher*		
N/A ☐	Extinguisher location 15-50 feet from pump		
☐	Extinguisher correct size: 2A 20BC		
9.	*Distances for Dispensing*		
N/A ☐	Nozzle reach <u>not</u> within 15 feet of building		
☐	25 feet from openings in building, property line, street, alley or public way (Uniform Fire Code 79.806(a))		
10.	*Smoking*		
N/A ☐	Signs posted		
☐	Not permitted within 25 feet of dispensing point (nozzle)		

STORAGE TANK INSTALLATION PERMIT

DATE 2/10/99 PERMIT # I 99-007

SITE ADDRESS: 2600 Center NE, 50

APPLICANT 3 Kings PHONE #

ADDRESS: 2165 B NE 10th Ave

CONTRACTOR 3 Kings Construction PHONE # (360) 557 5460

ADDRESS 2165 B NE 10th Ave DEQ LIC. 14312

CITY Ridgefield STATE WA ZIP 98642

TYPE OF PERMIT:

ABOVEGROUND	
UNDERGROUND	X
NEW	
REPLACEMENT	X
REFURBISH	

MANUFACTURER Ace Tank

APPROVALS

PLANS SUBMITTED BUILDING PERMIT

	TANK SIZE	PRODUCT STORED	DATE INSPECTED
1.	2000	Diesel	
2.			
3.			

COMMENTS

FEE ABOVEGROUND UNDERGROUND

RECEIVED BY AMOUNT DATE

APPLICANT SIGNATURE B. Dyrli DATE 2/10/99

FINAL APPROVAL DATE

Deputy Fire Marshal

All Requests for inspection on new installations must be routed through the City of Salem Permit Application Center

Copy Distribution: white/customer
yellow/customer
pink/DFM

G:\FORMS\INSTALL.PMT
Revised: August 20, 1997

State of Oregon
Department of Environmental Quality — Memorandum

Date: February 25, 1997

To: Judith Hatton, Business Office

From: Tina Leppaluoto, WMCD

Subject: Oregon State Hospital

Attached is a Voluntary Cleanup Agreement with Oregon State Hospital for the Oregon State Hospital project (#706555). The agreement stipulates monthly invoicing from DEQ. The deposit has been waived. Please begin invoicing immediately.

The invoicing address is:

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

Please call me if you have any questions.

NK:m
SM6763B.DOC
Attachment
cc: (memo only): Claudia Johansen, WR, Medford, DEQ
Norm King, WMCD, DEQ

Oregon

February 5, 1997

DEPARTMENT OF
HUMAN
RESOURCES

MENTAL HEALTH AND
DEVELOPMENTAL
DISABILITY
SERVICES DIVISION

Oregon State Hospital

Claudia P. Johansen
Project Manager
Environmental Cleanup Program
201 W. Main St., Suite 2-D
Medford, OR 97501

Dear Ms. Johansen:

Enclosed is a signed copy of the Letter Agreement between the Oregon State Hospital and the Department of Environmental Quality. If you have any further concerns please call me at (503) 945-2863.

Sincerely,

Susan H. Riley
Manager, Fiscal Services

Enclosure
SHR:bq

John A. Kitzhaber
Governor

2600 Center Street NE
Salem, OR 97310
(503) 945-2800 (Voice/TDD)
FAX (503) 945-2807

Oregon

July 22, 1996

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

SUBJECT: Voluntary Cleanup Agreement

This letter responds to your request to investigate and/or clean up contaminated property under the review and oversight of the Oregon Department of Environmental Quality (DEQ) Voluntary Cleanup Program. This letter also serves as an agreement between DEQ and Oregon State Hospital regarding DEQ review and oversight of the investigation and/or cleanup of hazardous substances at 2600 Denter Street, Salem. As part of DEQ's assessment of the investigation and/or cleanup required at the site, DEQ will determine if a more formal Agreement outlining site specific findings and including a Scope of work detailing specific deliverables and time frames is warranted.

DEQ agrees to review environmental documents submitted by you or on your behalf regarding the investigation and/or cleanup of the above referenced site. Additional DEQ oversight details will be established upon review of the initial site data.

When you have signed this letter to formalize your request a sub-account of the Hazardous Substances Remedial Action Fund will be established to record all project costs incurred by DEQ.

DEQ project costs will include direct costs and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ and of the Waste Management and Cleanup Division (WMCD). Indirect costs are those allocable to DEQ oversight of this Letter Agreement which are not charged as direct, site-specific costs. Indirect charges are based on actual costs and are applied as a percentage of direct personal services costs. Review and oversight costs shall not include any unreasonable costs or costs not otherwise recoverable by DEQ under ORS 465.255.

DEQ will provide you with a monthly statement, a sample of which is attached. Because of the limited scope of work envisioned under this Letter Agreement, accounting details above the level of the sample attached will not be provided by DEQ.

John A. Kitzhaber
Governor

1102 Lincoln
Suite 210
Eugene, OR 97401
(541) 686-7838

Either DEQ or Oregon State Hospital may terminate this Letter Agreement by giving 15 days advance written notice to the other. Only those costs incurred or obligated by DEQ prior to the effective date of any termination of this Letter Agreement shall be recoverable under this Agreement. Termination of this Letter Agreement will not affect any other right DEQ may have for recovery of costs under any applicable law.

Oregon State Hospital shall hold DEQ harmless for any claims (including but not limited to claims of property damage or personal injury) arising from activities of Oregon State Hospital reviewed or overseen under this Letter Agreement.

This Letter Agreement is not and shall not be construed as an admission by Oregon State Hospital of any liability under ORS 465.255 or any other law or as a waiver of any defense to such liability. This Letter Agreement is not and shall not be construed as a waiver, release or settlement of claims DEQ may have against Oregon State Hospital or any other person or as a waiver of any enforcement authority DEQ may have with respect to Oregon State Hospital or the property. Upon DEQ's request and as necessary to oversight of your work under this Letter Agreement, Oregon State Hospital shall provide DEQ with data and records related to investigation and cleanup activities at the property, excluding any privileged documents identified as such by you.

Claudia Johansen is the DEQ Project Manager for the review and oversight of the investigation and cleanup activities associated with your property. Please refer all inquiries to her at 541-776-6010 ext. 228

Department of Environmental Quality
201 W. Main, Suite 2-D
Medford, OR 97501

DEQ appreciates your interest in the Voluntary Cleanup Program and looks forward to working with you.

Sincerely,

Steve Greenwood
Administrator
Western Region

If the terms of this Letter Agreement are acceptable to Oregon State Hospital, please have it executed by an authorized representative in the space provided below and returned to us.

Accepted and agreed to this 4th day of Feb, 1997

By: B. P. Jacobsen

Title: Director OF Support Services
Oregon State Hospital

Attachment

Oregon

July 22, 1996

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

Re: Voluntary Cleanup Agreement
Oregon State Hospital

Dear Mr. Suchy:

Enclosed please find two (2) copies of the Letter Agreement for participation in the Voluntary Cleanup Program administered by the Department of Environmental Quality. Please have both copies signed by your organization's officer or representative; keep one copy for your records, and return one signed copy to my attention at the following address:

Department of Environmental Quality
Western Region
201 W. Main Suite 2-D
Medford, Oregon 97501

If you have any questions regarding the Letter Agreement or the Voluntary Cleanup Program, please call me at (541)776-6010, extension 228.

Sincerely,

Claudia Johansen
Project Manager
Voluntary Cleanup Program

Enclosure

cc: Kerri Nelson, DEQ-Eugene
Mike McCann, DEQ-Eugene

John A. Kitzhaber
Governor

1102 Lincoln
Suite 210
Eugene, OR 97401
(541) 686-7838

Oregon

July 22, 1996

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

SUBJECT: Voluntary Cleanup Agreement

This letter responds to your request to investigate and/or clean up contaminated property under the review and oversight of the Oregon Department of Environmental Quality (DEQ) Voluntary Cleanup Program. This letter also serves as an agreement between DEQ and Oregon State Hospital regarding DEQ review and oversight of the investigation and/or cleanup of hazardous substances at 2600 Denter Street, Salem. As part of DEQ's assessment of the investigation and/or cleanup required at the site, DEQ will determine if a more formal Agreement outlining site specific findings and including a Scope of work detailing specific deliverables and time frames is warranted.

DEQ agrees to review environmental documents submitted by you or on your behalf regarding the investigation and/or cleanup of the above referenced site. Additional DEQ oversight details will be established upon review of the initial site data.

When you have signed this letter to formalize your request a sub-account of the Hazardous Substances Remedial Action Fund will be established to record all project costs incurred by DEQ.

DEQ project costs will include direct costs and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ and of the Waste Management and Cleanup Division (WMCD). Indirect costs are those allocable to DEQ oversight of this Letter Agreement which are not charged as direct, site-specific costs. Indirect charges are based on actual costs and are applied as a percentage of direct personal services costs. Review and oversight costs shall not include any unreasonable costs or costs not otherwise recoverable by DEQ under ORS 465.255.

DEQ will provide you with a monthly statement, a sample of which is attached. Because of the limited scope of work envisioned under this Letter Agreement, accounting details above the level of the sample attached will not be provided by DEQ.

John A. Kitzhaber
Governor

1102 Lincoln
Suite 210
Eugene, OR 97401
(541) 686-7838

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Oregon State Hospital shall hold DEQ harmless for any claims (including but not limited to claims of property damage or personal injury) arising from activities of Oregon State Hospital reviewed or overseen under this Letter Agreement.

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Claudia Johansen is the DEQ Project Manager for the review and oversight of the investigation and cleanup activities associated with your property. Please refer all inquiries to her at 541-776-6010 ext. 228

Department of Environmental Quality
201 W. Main, Suite 2-D
Medford, OR 97501

DEQ appreciates your interest in the Voluntary Cleanup Program and looks forward to working with you.

Sincerely,

Steve Greenwood
Administrator
Western Region

If the terms of this Letter Agreement are acceptable to Oregon State Hospital, please have it executed by an authorized representative in the space provided below and returned to us.

Accepted and agreed to this _____ day of_____, 19_.

By:_____

Title: _____
Oregon State Hospital

Attachment

OREGON STATE HOSPITAL

2600 CENTER STREET NE
SALEM, OR 97310

SENDING TO:

NAME Claudia Johansen

DEPARTMENT/AGENCY Dept. Of Environmental Quality

PHONE NUMBER (FAX) 1-541-686-7551

NUMBER OF PAGES SENT (INCLUDING THIS COVER PAGE) 4

SENDING FROM:

NAME Doug Suchy

DEPARTMENT Physical Plant

PHONE NUMBER (FAX) (503)945-2807 REG: (503)945-2800

SPECIAL INSTRUCTIONS:

Post-It® Fax Note 7671 | Date 8/6 | # of pages ▶ 4
To Claudia J. | From Sara
Co./Dept. Medford | Co. Eugene
Phone # | Phone # (Oops, here
Fax # | Fax # by mistake)

DATE DOCUMENT SENT 8/6/96

TIME SENT

OREGON STATE HOSPITAL Estab. 1883

OREGON STATE HOSPITAL

2600 CENTER STREET NE
SALEM, OR 97310

SENDING TO:

NAME Claudia Johansen

DEPARTMENT/AGENCY Dept. Of Environmental Quality

PHONE NUMBER (FAX) 1-541-686-7551

NUMBER OF PAGES SENT (INCLUDING THIS COVER PAGE) 4

SENDING FROM:

NAME Doug Suchy

DEPARTMENT Physical Plant

PHONE NUMBER (FAX) (503)945-2807 REG: (503)945-2800

SPECIAL INSTRUCTIONS:

DATE DOCUMENT SENT 8/6/96

TIME SENT

VOLUNTARY CLEANUP PROGRAM
INTENT TO PARTICIPATE

Identification of Site

Site Name: Oregon State Hospital

Address: 2600 Center St. NE; Salem

Owner/Operator: State of Oregon

Township:____ Range:____ Section:____ Tax Lot#:____

Estimation of Oversight Needed

Based on your information about the site, what is your initial estimation of the level of oversight needed from the Department:

X Voluntary preliminary assessment - A Preliminary Assessment (PA) is the initial investigation of a site to determine whether a release of a hazardous substance requires further investigation or cleanup to protect public health, safety, welfare, and the environment.

___ Level 1 (simple(cleanup) Level 1 sites are those where: (a) hazardous substances are limited to containers or to the unsaturated soil zone only; (b) the extent and type(s) of contamination is well-defined; (c) there are few contaminants of concern; and (d) the selected treatment option is a conventional technology.

___ Level 2 (moderately complex) or Level 3 (complex) cleanup - This category includes all sites that do not meet Level 1 criteria, particularly those involving groundwater contamination.

___ Unknown at this time because:_____

_____

_____

SUMMARY OF POTENTIAL CONTAMINATION

Briefly describe the source, volume and type of contaminant(s) present on the property (or attach statement): Elevator hydraulic system releases fluid to ground. Estimate Vol. 120 - 140 gal.

Are hazardous substance contaminants present in the groundwater?

___ Yes ___ No X Unknown

Intent to Participate

The undersigned requests oversight by the Department of Environmental Quality (DEQ) of investigation and cleanup activities of possible contamination at the property described above and requests the site be placed on DEQ's list of sites for oversight.

The undersigned intends to negotiate in good faith a written agreement with DEQ to provide for voluntary oversight. However, this Intent to Participate does not constitute such an agreement, and neither DEQ nor the undersigned will be bound to proceed with voluntary oversight unless such an agreement is executed. The agreement will describe the project activities of each party and will require the undersigned to reimburse DEQ for all of its oversight costs.

As DEQ moves sites from the waiting list to active status, DEQ will notify the undersigned in writing. Following receipt of such a notice (or earlier), the undersigned will submit a report to DEQ summarizing existing conditions, activities and status at the site. The undersigned understands that DEQ will move sites from the list to active status based on various considerations, only one of which will be the timing of the original placement of a site on the waiting list.

With this Intent to Participate, the undersigned does not admit or assume liability for investigation or cleanup of the site. In addition, the undersigned may terminate the Intent to Participate at any time.

Please execute this Intent to Participate in the space below and return to :

Kerri L. Nelson
Department of Environmental Quality
Environmental Cleanup Division
1102 Lincoln, Suite 210
Eugene, OR 97401

By: Doug Suchy
(signature of authorized officer)

Name: Doug Suchy
(print or type)

Title: Dir. Phy. Plt.

Company: Oregon State Hospital

Date: 8-5-96

Telephone: 503-945-2924

FAX

Date 7-18-96

Number of pages including cover sheet

TO: Doug Spuchy
Oregon State Hospital

Phone 503-945-2924
Fax Phone 503-945-~~2907~~ 2867

CC: —

FROM: Mike McCann
State of Oregon
Department of Environmental Quality
1102 Lincoln Street,
Suite 210
Eugene, OR 97401

Phone (541) 686-7838
Fax Phone (541) 686-7551

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

* Attached are copies of forms to sign up for DEQ Voluntary Cleanup Program Oversight.
→ Please sign & return.

* Claudia Johansen (541-776-6010 ext 228) will be your project manager & will arrange for Monday's phone meeting.

VOLUNTARY CLEANUP PROGRAM
INTENT TO PARTICIPATE

Identification of Site

Site Name: Oregon State Hospital

Address: 2600 Center St. NE ; Salem

Owner/Operator: State of Oregon

Township:____ Range:____ Section:____ Tax Lot#:____

Estimation of Oversight Needed

Based on your information about the site, what is your initial estimation of the level of oversight needed from the Department:

X Voluntary preliminary assessment - A Preliminary Assessment (PA) is the initial investigation of a site to determine whether a release of a hazardous substance requires further investigation or cleanup to protect public health, safety, welfare, and the environment.

___ Level 1 (simple(cleanup) Level 1 sites are those where: (a) hazardous substances are limited to containers or to the unsaturated soil zone only; (b) the extent and type(s) of contamination is well-defined; (c) there are few contaminants of concern; and (d) the selected treatment option is a conventional technology.

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___ Unknown at this time because:_____

_____

_____

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Are hazardous substance contaminants present in the groundwater?

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Please execute this Intent to Participate in the space below and return to :

Kerri L. Nelson
Department of Environmental Quality
Environmental Cleanup Division
1102 Lincoln, Suite 210
Eugene, OR 97401

By:_____ Name:_____

(signature of authorized officer) (print or type)

Title:_____ Company:_____

Date:_____ Telephone:_____

Oregon

June 11, 1997

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: Building 33, Oregon State Hospital
Salem, Oregon
Marion County
ECSI ID # 1894

Dear Mr. Suchy:

The Oregon Department of Environmental Quality (DEQ) has completed a review of the spill investigation for the elevator shaft located at Building 33, Oregon State Hospital, Salem.

Based on the information presented, DEQ has determined that under the Oregon Environmental Cleanup Law, Oregon Revised Statutes (ORS) 465.200, no further action is required for this site at this time. Furthermore, DEQ's determination will not be applicable if new or undisclosed facts show that the cleanup does not comply with the referenced rules. DEQ's determination also does not apply to any conditions at the site other than the release of the petroleum product specifically addressed in your report.

We will update the Environmental Cleanup Site Information (ECSI) database to reflect this decision.

If you have questions regarding this site, please contact me at (541) 776-6010 ext. 228.

Sincerely,

Claudia P. Johansen, Project Manager
Voluntary Cleanup Program
DEQ Western Region

201 W Main, Suite 2-D
Medford, OR 97501
(541) 776-6010
FAX (541) 776-6262

cc: Voluntary Cleanup Program - Eugene
Ms. Susan Riley, OSH
ECSI file # 1894

Oregon Department of Environmental Quality

Oregon State Hospital

General Site Information

Site:	**Oregon State Hospital (ECSI Site ID: 1894)**	**CERCLIS (EPA) Id**	
Project Manager:	**N/A - Project Completed.**	**Investigative Status:**	**No Further Action needed**
PM Phone:		**NPL(National Priority Listing):**	**No**
Address:	**2600 Center Street NE**	**Is this site an Orphan?**	**No**
	Salem, 97301	**Is this site a brownfield?**	**No**
County:	**MARION**	**Action Underway or Needed:**	**NO FURTHER STATE ACTION REQUIRED**
Region:	**Western Region**	**Click for more details ...**	

Site Documents

Click the link to view the document.

File Name	Category	File Size MB	Upload Date
1894_NFA_04-06-2009.pdf	Signed NFA letters	0.0575	4/6/2009

Oregon Department of Environmental Quality
Headquarters: 811 Sixth Ave., Portland, OR 97204-1390
phone: 503-229-5696 or toll free in Oregon 800-425-4011
TTY: 503-229-6993 FAX: 503-229-6124

The Oregon Department of Environmental Quality is a regulatory agency authorized to protect Oregon's environment by the State of Oregon and the Environmental Protection Agency.

DEQ Web site privacy notice

OREGON STATE HOSPITAL (COMM) #1894
SALEM
VCS

Oregon

June 11, 1997

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION

Mr. Doug Suchy
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: Building 33, Oregon State Hospital
Salem, Oregon
Marion County
ECSI ID # 1894

Dear Mr. Suchy:

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We will update the Environmental Cleanup Site Information (ECSI) database to reflect this decision.

If you have questions regarding this site, please contact me at (541) 776-6010 ext. 228.

Sincerely,

Claudia P. Johansen, Project Manager
Voluntary Cleanup Program
DEQ Western Region

201 W Main, Suite 2-D
Medford, OR 97501
(541) 776-6010
FAX (541) 776-6262

cc: Voluntary Cleanup Program - Eugene
Ms. Susan Riley, OSH
ECSI file # 1894

Oregon

March 28, 1996

DEPARTMENT OF ENVIRONMENTAL QUALITY

Western Region - Salem Office

Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

Re: Request for Spill Containment, Cleanup and Spill Report
OERS No. 96-1407
Marion County

Dear Mr. Suchy:

The Department of Environmental Quality received a report of a spill of a hazardous material at the Oregon State Hospital elevators on March 28, 1996. Information indicates that the Oregon State Hospital has been identified as the responsible party. You are requested to take and/or continue all containment and cleanup actions as are possible to prevent the spread of the spill to public waters, groundwater or soils beyond the original spill site.

Oregon Administrative Rules (OAR 340-108-070) states that any person liable for a spill or release or threatened spill or release shall immediately cleanup the spill or release. The Department may require the responsible party to undertake such investigations, monitoring, surveys, testing and other information gathering as the Department considers necessary. In order to assure the proper disposal of the material from the release, it will be necessary for a hazardous waste determination to be conducted. The results of this determination will determine what type of disposal can be allowed for the material that has accumulated as a result of the cleanup of the spill or release.

We are requesting that the hospital take any action necessary to prevent the further release of hydraulic fluid from the elevator system. During your phone conversation with Jim Glass of this office, you indicated that modifications could be made to the elevator that would allow the continued operation of the elevator but would eliminate any further releases. These modifications should be made as soon as possible.

In addition, the hospital should immediately make any attempts possible to recover any of the spilled material. If the spilled material is accessible at any time, particularly if the old equipment is abandoned or removed,

Post-it® Fax Note 7671
To Claudia Johansen
Co./Dept. Mestons DEQ
Phone #
Fax #
Date 7-12-96 # of pages 8
From Mike McCann
Co. Eugene DEQ
Phone #
Fax #

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TDD

the removal of the product should be a priority. Once the initial actions are taken, the hospital should begin to take steps to assess the impacts of the release.

You are also requested to submit a written report. OAR 340-108-040 states that the Department may require a person responsible for a spill or other incident to submit a written report describing the spill or other incident. At a minimum, you should complete the enclosed Spill Report. Other relevant information including, but not limited to, consultant reports and analytical data should also be submitted. In addition, I have enclosed a Spill Report Checklist to ensure that all applicable items are forwarded to the Department. Please direct the spill report to me. I request that the spill report be submitted to me by April 19, 1996.

Responsible parties are also required to pay costs incurred by DEQ for oversight of investigation and cleanup of a spill or release (Oregon Revised Statute 465.255). DEQ costs include direct and indirect costs. Direct costs include site specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ allocable to Department oversight of this cleanup and not charged as direct, site-specific costs. DEQ costs must be paid by check to the Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon, 97204, within forty-five (45) days of issuance of the monthly statement.

Failure to cleanup a release and/or failure to submit a timely cleanup report are Class I violations of the Department's Enforcement Rules and may be referred to our Enforcement Section for formal enforcement action.

If you have any questions about this request, please contact Cheryll Woods at (503) 378-8240 ext 237.

Sincerely,

Cheryll Woods

Cheryll Woods
Environmental Specialist
Hazardous Waste Section

CAW:
x:\cwoods\osh.spl

enc: Spill Report
Checklist

OREGON STATE HOSPITAL (RPTS) #1894
SALEM
VCS

OREGON DEPARTMENT of ENVIRONMENTAL QUALITY

SITE ASSESSMENT ACTION - WESTERN REGION

Facility Name: Oregon State Hospital Building 33 **ECSI #:** 1894
Address: 2600 Center Street NE Building 33
Salem, Oregon

PRP:
Company: Oregon State Hospital
Name: Susan Riley **Phone:** _____
Address: 2600 Center Street NE
Salem, OR 97310

Action Date: 4/9/97

Report Type: _____

Preliminary Assessment:
____ State ____ Federal ____ Voluntary __x_ PAE ____ XPA

Screening:
__x_ State ____ Federal ____ Spill

Note: Spill screenings may not require Strategy Recommendation

Recommended Action:

__x_ **NFA [Need management approval]**

____ **Add to CRL**

____ **Add to Inventory**

____ **High Priority--Requires immediate response**

____ **Other**
Describe:

Report Writer: Claudia Johansen

	Headquarters	EPA	Other

Transmittal Date(s):

Report Supplement(s):

Sample Analysis	Photos	Plans	Operating Other

Supplemental Date(s):

Checklist:
__x_ Strategy Recommendation ____ Letter to RP ____ SAPS __x_ Map
____ Data (if applicable) ____ Spill Report (if applicable) ____ Site Report

Manager's approval: 

DEQ SITE ASSESSMENT SECTION -- STRATEGY RECOMMENDATION

Site Name:	Oregon State Hospital
Site CERCLIS Number:	
DEQ ECSI Number:	#1894
Site Address:	Building 33, Oregon State Hospital 2600 Center Street NE Salem, Oregon 97310
Recommendation:	No Further Action
Recommendation By:	Claudia P. Johansen
Approved By:	Kerri L. Nelson, Manager Cleanup Program Western Region
Date:	January 31, 1997

Note: This strategy recommendation represents a Preliminary Assessment Equivalent (PAE) per OAR 340-122-426 (1).

Background:

The elevator in Building 33 of the Oregon State Hospital failed March 26, 1996. It was assumed that hydraulic fluid released from the system and a spill was reported to the Department of Environmental Quality (DEQ). Oregon State Hospital (OSH) entered into a Voluntary Agreement with the DEQ to oversee the investigation.

The following report summarizes available site information and evaluates the need for further investigation or remedial action at the OSH, as well as the priority for such action based on potential impacts to human health and the environment.

Site Description:

The spill site was inside the housing for an elevator in Building 33 at the Oregon State Hospital, at the corner of Bittern and 25th Street, Salem (Figure 1). OSH comprises a 40 acre campus for mentally and physically handicapped patients (Figure 2). The building was built in the 1940s and served as a dormitory. It is currently used the headquarters for the mental health program. The elevator failed to hold its lift and it was assumed that an unknown amount of hydraulic fluid had

leaked out of the casing of the elevator jack causing the failure. The amount lost is estimated to be less than 140 gallons.

Regional Geology/Hydrogeology:

The OSH is located in the Willamette Valley on the west flank of the Cascade Mountain Range. The valley is partially filled with course sand and gravel moved out of the mountains by glacial melt water, floods and volcanic eruptions. OSH sits on a alluvial fan comprised of coarse-grained volcanic sands and gravels. The gravels are mostly cemented and sand s and gravels become coarser with depth.

The groundwater in the area of the hospital moves toward Mill Creek (Figure 1). Well logs show that the usual fluctuation in the water table in the area is approximately 5 feet. The nearest well is an irrigation well on the hospital grounds located to the northeast of the site. The depth of this well is 190 feet. The well log for this well indicates the site is underlain by approximately 30 feet of silt underlain by the above mentioned sand and gravels.

Investigations:

As the release was assumed to have been by injection under pressure of hydraulic fluid from the elevator jack casing, three monitoring wells were installed outside the building (Figure 3) July 10, 1997. The wells were hand augured and completed at 20 feet with a 10 foot screen from 10 to 20 feet. There was no evidence of contamination from hydraulic fluid, however, benzene, toluene and naphthalene were detected (Table 1). When the replacement work was done on the elevator jack, ground-water was encountered. Samples of the water were nondetect for BTEX and PAH. Groundwater was monitored using the three monitoring wells for two additional quarters. BTEX and PAH levels were all below the detection limit or the groundwater cleanup standard.

Table 1

	Well 1 July 96	Well 1 Nov 96	Well 1 Jan 97	Well 2 July 96	Well 2 Nov 96	Well 2 Jan 97	Well 3 July 96	Well 3 Nov 96	Well 3 Jan 97
Benzene	5.1	ND	ND	1.0	ND	ND	5.4	ND	ND
Toluene	1.4	8.3	ND	ND	ND	ND	1.0	ND	ND
Ebenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH Naphthalene	6.3	ND	ND	17.2	ND	ND	ND	ND	ND

All units in ug/l

Shallow groundwater appears to flow from monitoring well 3 (MW - 3) toward wells 1 and 2. MW -1 is closest to the elevator.

Pathways

Groundwater in the area is not used for drinking. The OSH and surrounding residences receive drinking water from the municipal water service. There may be shallow wells used for irrigation at 3/4 mile downgradient in residential neighborhoods.

The suspected spill is beneath a two story building and there is no concern of contact with contaminated soil. There are no other pathways of concern.

Recommendation/Action:

The Site Assessment Section has reviewed the Spill Report and results of groundwater monitoring activities. Based on the data presented no further action is required at this site.

Referrals Within or Outside DEQ:

This site was referred from the DEQ Spill Program. No other referrals have been made. OSH has several LUST projects in various stages of investigation.

Other:

The ECSI database will be updated to reflect the recommendation of no further action.

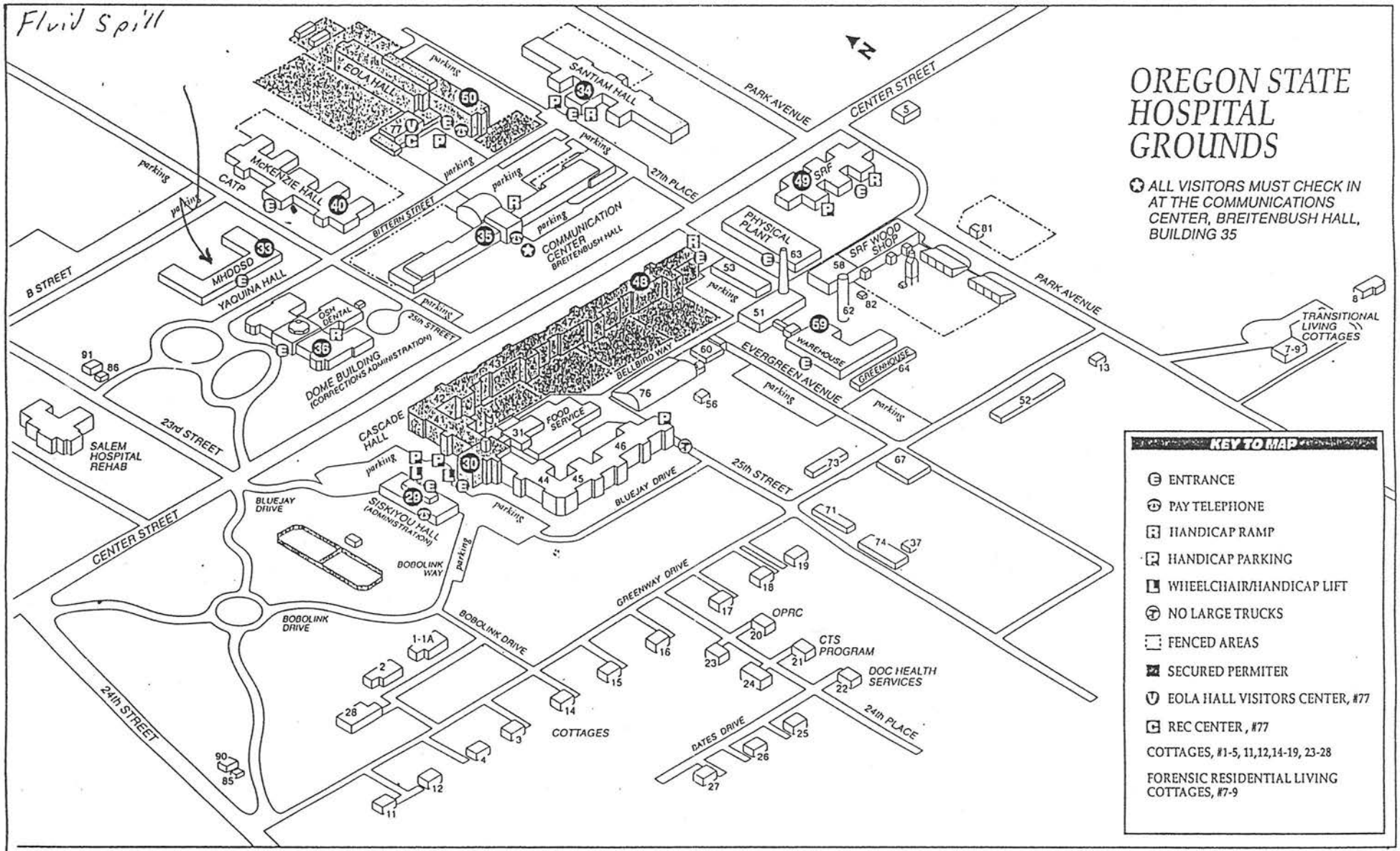
References:

Letter Reports, REA Tech Management, Inc., September 25, 1996, November 11, 1996, and January 7, 1997.

Figure 1
Oregon State Hospital
Salem, Oregon

Mill Creek ↓ ≈ 1mi

Fluid Spill

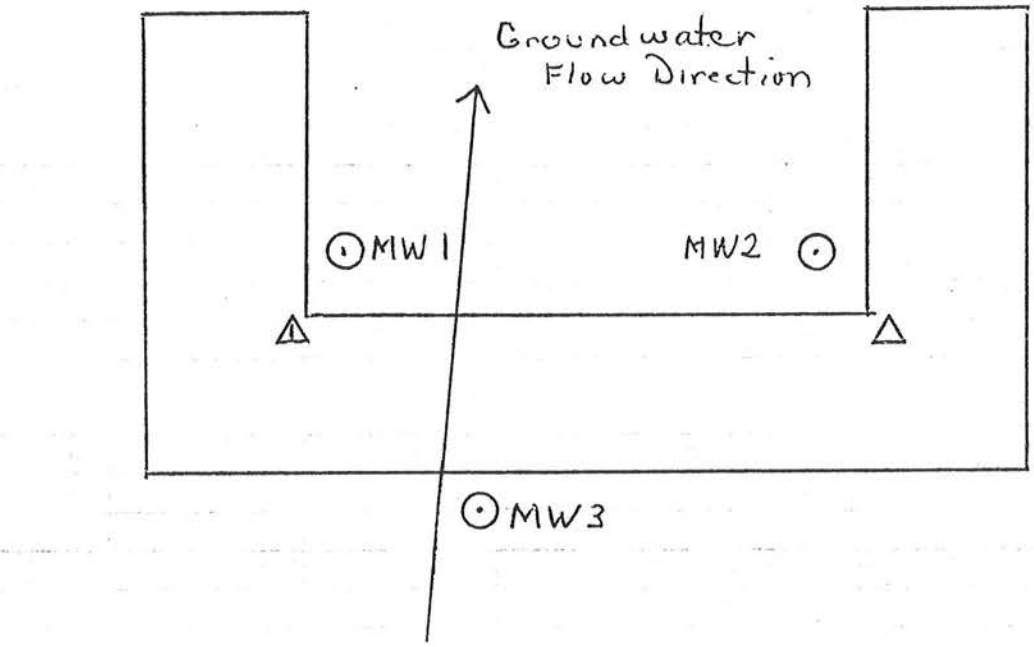


MAIN BUILDINGS

- 29 Oregon State Hospital Administration
- 30 Forensic Residential Treatment Services Administration
- 33 Mental Health & Developmental Disability Services Division
- 34 Geropsychiatric Treatment Services
- 35 Oregon State Hospital Communications Center
- 35 Adult Treatment Services
- 36 Department of Corrections Administration Offices
- 40 Child & Adolescent Treatment Services
- 40 CAGTS Administration
- 48 Forensic Hospital Treatment Services Administration
- 49 Oregon State Hospital/Salem Rehabilitation Facility
- 50 Forensic Hospital/Forensic Residential Treatment Services
- 59 Warehouse/Shipping & Receiving

OSH-STK-14442

Figure 2



Building 33
Oregon State Hospital
Salem, Oregon

Figure 3

(OSHNFA) Tax 5435 1894

Oregon

DEPARTMENT OF
HUMAN
RESOURCES

MENTAL HEALTH AND
DEVELOPMENTAL
DISABILITY
SERVICES DIVISION

Oregon State Hospital

January 14, 1997

Claudia Johansen
Project Manager
Department of Environmental Quality
201 West Main, Suite 2-D
Medford, OR 97501

Subject: Finalized Spill Containment, OERS No. 96.1407 Marian County.

Dear Claudia Johansen:

Please find enclosed the laboratory reports for samples submitted on January 2, 1997, November 4, 1996 and November 8, 1996 from project OERS No. 96-1407, Oregon State Hospital located in Salem, Oregon.

After carefully analyzing the data which results indicate no hazardous materials listed in 40 CFR part 302-table 302.4 and OAR 340-108-010 (1) (d) exists.

Oregon State Hospital requests, no further remediation be done and project OERS No. 96-1407 be closed.

Sincerely,

Doug Suchy

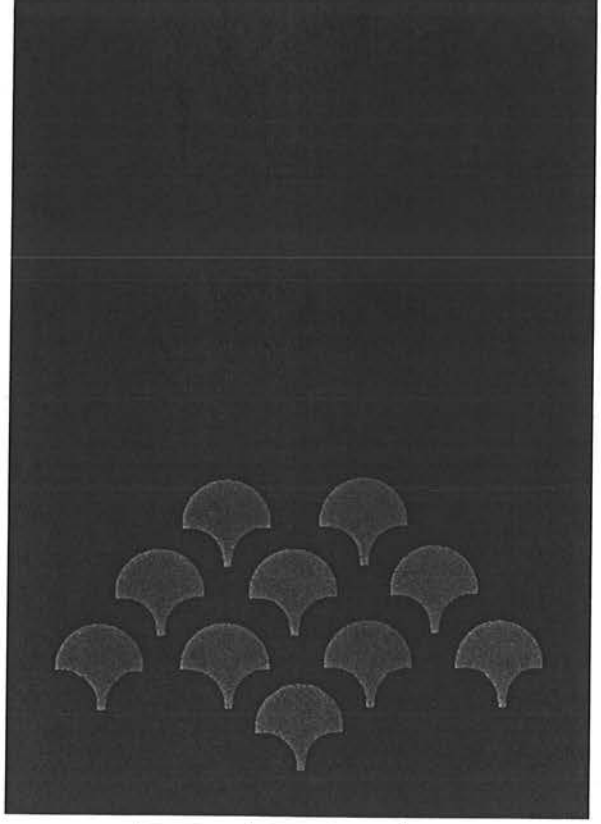
Doug Suchy, Director
Physical Plant
Oregon State Hospital

Enclosures

RECEIVED
JAN 16 1997
Dept. Environmental Quality
MEDFORD

John A. Kitzhaber
Governor

2600 Center Street NE
Salem, OR 97310
(503) 945-2800
FAX (503) 945-2807



REA

Tech Management, Inc.

Project No: Suchy/Salem/wmonrpt

ENVIRONMENTAL WELL MONITORING REPORT: FALL QUARTER

Winter

This Professional Services Work Product Prepared for the Exclusive Use By REA Client:

Doug Suchy
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

On the Subject Property Located at:
Building 33 of the Oregon State Hospital which is located in Salem, Oregon

200 Hawthorne Avenue S.E., Suite C-320
Salem, Oregon 97301 • (503) 370-7230

REA

Tech Management, Inc.
Environmental Monitoring Since 1979

1/7/97

Doug Suchy
Facilities Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Phone: 503-945-2924
Fax: 503-373-7350

Dear Doug:

RE: QUARTERLY WELL MONITORING REPORT (Suchy/Salem/wmonrpt)

The following is the last well monitoring report for the property located at Building 33 of the Oregon State Hospital which is located in Salem, Oregon.

We are enclosing an extra copy for you to mail copies of the lab data to the Oregon Department of Environmental Quality (DEQ) for closure.

We are completed with the scheduled work at this time. We appreciate the opportunity to be of service to you on this important project.

If you have any questions, please call.

Sincerely,
REA Tech Management, Inc.

Charles D. (Chuck) Getter, Ph.D.
Senior Technical Advisor
i:\apps\actwin\Suchy8.wpd

I. TECHNICAL INFORMATION

I. Background

REA Tech Management, Inc. (REA), was contracted to perform Well Monitoring Services on the property located at Building 33 of the Oregon State Hospital which is located in Salem, Oregon.

The following scope of work was completed:

a. **Sampling Plan**: REA collected three (3) sample(s), one from each of the three (3) groundwater monitoring wells on the subject property.

b. **Analytical Analysis Plan:** These samples were analyze for target compounds associated with reported or suspected environmental liabilities identified in earlier investigations, including:

Process/Suspected Chemical	*Well No.*	*Analyses Conducted*
Water soluble fractions of gasoline	MW-1,2,3	BTEX
Water soluble fractions of gasoline/diesel	MW-1,2,3	PAH

A. Sampling Plan---Sampling Parameters

Three (3) locations were identified on the subject property to be sampled by REA in the effort to characterize a release from a leaking underground storage tank system, which has been previously decommissioned.

1. Water Sampling

On 1/2/97 REA personnel purged each well, and took samples. Water samples from a developed well included the following. A hand vacuum pump with a Teflon collection container and disposable tubing was used to collect the water. Fresh tubing was placed down the well. Then the end was attached to the Teflon container and a hand pump was attached to the container. A vacuum was created within the container bringing the water sample into the container. After enough water was collected the container was carefully emptied into a vol vial or amber liter container with no head space to ensure that there was no volatile loss. Finally, the tube was disposed of and the Teflon container was washed before sampling the next well.

Each sample thus taken was placed on blue ice in a cooler and then stored at 4 degrees Celsius until analyzed. Each sample was given a unique identification number. This unique sample number was recorded in the well log and on a site sketch. The sample identification number and a description of the sample collection location was also included on the Chain-of-Custody form. This Chain-of-Custody form accompanied the samples at all times from the sampling event, through transport to REA and into the labs where they were relinquished. The length of time between sampling and analysis was less than one (1) day. The chain-of-custody form used on this project is included as an enclosure. A total of three (3) water samples were taken and analyzed from the groundwater monitoring wells on the subject property. The location of these wells was:

2. Analytical Methods

These water samples were transported promptly to REA's analytical laboratory, together

with sampling information and Chain-of-Custody documentation. All samples taken were analyzed by EPA Method 8020 for volatiles and EPA Method 8100 for semivolatiles.

3. Results

1. Presentation of Data

TABLE 1. ANALYTICAL RESULTS

Sample Number	Analytical Method (Analyte)	Analytical Result
Well 1	EPA 8020 (Volatile Aromatics)	
	Benzene	ND
	Toluene	ND
	Ethylbenzene	ND
	Xylene	ND
	EPA 8100 (Semivolatiles)	
	Naphthalene	ND
	AcenaphthleneND	
	Acenaphthylene	ND
	Fluorene	ND
	Phenanthrene	ND
	Anthracene	ND
	Flouanthene	ND
	Pyrene	ND
	Benzo(a)anthracene	ND
	Chrysene	ND
	Benzo(b)flouranthene	ND
	Benzo(k)flouranthene	ND
	Benzo(a)pyrene	ND
	Indeno(1,2,3-cd)pyrene	ND
	Dibenz(a,h)anthracene	ND
	Benzo(g,h,i)perylene	ND
Well 2	EPA 8020 (Volatile Aromatics)	
	Benzene	ND
	Toluene	ND
	Ethylbenzene	ND
	Xylene	ND
	EPA 8100 (Semivolatiles)	
	Naphthalene	ND
	AcenaphthleneND	
	Acenaphthylene	ND
	Fluorene	ND
	Phenanthrene	ND
	Anthracene	ND
	Flouanthene	ND
	Pyrene	ND
	Benzo(a)anthracene	ND
	Chrysene	ND

		Benzo(b)flouranthene	ND
		Benzo(k)flouranthene	ND
		Benzo(a)pyrene	ND
		Indeno(1,2,3-cd)pyrene	ND
		Dibenz(a,h)anthracene	ND
		Benzo(g,h,i)perylene	ND
Well 3	EPA 8020 (Volatile Aromatics)		
		Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylene	ND
	EPA 8100 (Semivolatiles)		
		Naphthalene	ND
		AcenaphthleneND	
		Acenaphthylene	ND
		Fluorene	ND
		Phenanthrene	ND
		Anthracene	ND
		Flouanthene	ND
		Pyrene	ND
		Benzo(a)anthracene	ND
		Chrysene	ND
		Benzo(b)flouranthene	ND
		Benzo(k)flouranthene	ND
		Benzo(a)pyrene	ND
		Indeno(1,2,3-cd)pyrene	ND
		Dibenz(a,h)anthracene	ND
		Benzo(g,h,i)perylene	ND

ND means 'non detect'
All results reported in parts per billion (ppb)

II CONCLUSIONS

Of the samples taken, all were ND, or below the following DEQ cleanup levels.

Benzene (3 ppb)
Toluene (1,000 ppb)
Ethylbenzene (700 ppb)
Xylene (7,000 ppb)
Naphthalene (100 ppb)
Acenaphthlene (200 ppb)
Fluorene (100 ppb)
Anthracene (10,000 ppb)
Flouranthene (1,000 ppb)
Pyrene (1,000 ppb)
Benzo(a)anthracene (.01 ppb)
Chrysene (.01 ppb)
Benzo(b)flouranthene (.01 ppb)
Benzo(k)flouranthene (.01 ppb)
Benzo(a)pyrene (.01 ppb)

Indeno(1,2,3-cd)pyrene (.01 ppb)
Dibenz(a,h)anthracene (.01 ppb)

III. LIMITATIONS

Subject to the Terms and Conditions signed in connection with the preparation of this report, all opinions which we give verbally and in written form are based on the information collected during our survey, our present understanding of the site conditions and our professional judgment in light of such information at the time of preparation of this opinion. We are not responsible for the accuracy of information at the time of preparation of this opinion. We are not responsible for the accuracy of information provided by individuals or entities which are used by us or others in connection with the preparation of this opinion. This report is an opinion work, and no warranty is either expressed, implied, or made as to the conclusions, advice, and recommendations offered in this report. Neither this opinion nor any extract herefrom or reference to hereto shall be furnished to, or quoted to any other person, firm or corporation without our express written permission.

ENCLOSURES

1. Chain-of-Custody
2. Lab results

REA

January 7, 1997

Dr. Charles D. Getter
REA Tech Management
200 Hawthorne Ave. SE
Suite C-320
Salem OR 97301

Re: Project: Suchy

Dear Dr. Getter:

Please find enclosed the laboratory report for samples submitted on January 2, 1997 from project Suchy located at Oregon State Hospital, Salem, Oregon.

We appreciate the opportunity to be of service to you on this important project. If you have any questions about the enclosed information or other aspects of your project, please call.

Sincerely,

REA Tech Management, Inc.

Eric Phillips
Laboratory Chemist

Enclosures

REA

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy
Location: Oregon State Hospital, Salem, Oregon
Attention: Dr. Charles D. Getter
Analyzed By: Eric Phillips

Date Samples Received: January 2, 1997
Date of Report: January 7, 1997
Report Number: 01071144.097

Sample Number: Analyte	SUC MW1 (4591-1)	PQL	**Sample Number:** Analyte	SUC MW2 (4591-2)	PQL
Benzene	ND	5.0	Benzene	ND	5.0
Toluene	ND	5.0	Toluene	ND	5.0
Ethylbenzene	ND	5.0	Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0	Total Xylenes	ND	5.0

Sample Number: Analyte	SUC MW3 (4591-3)	PQL	**Sample Number:** Analyte	Method Blank V010297W	PQL
Benzene	ND	5.0	Benzene	ND	5.0
Toluene	ND	5.0	Toluene	ND	5.0
Ethylbenzene	ND	5.0	Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0	Total Xylenes	ND	5.0

ND: Not detected at or above the PQL.
PQL: Practical Quantitation Limit

Approved By:
REA Tech Management, Inc.

Eric Phillips
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis
for Polynuclear Aromatic Hydrocarbons*
Using Gas Chromatography/Mass Spectroscopy (GCMS)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy
Location: Oregon State Hospital, Salem, Oregon
Attention: Dr. Charles D. Getter
Analyzed By: Eric Phillips

Date Samples Received: January 2, 1997
Date of Report: January 7, 1997
Report Number: 01071144.097

Sample Number: SUC MW1 (4591-1) Analyte		PQL	Sample Number: SUC MW2 (4591-2) Analyte		PQL
Naphthalene	ND	5.0	Naphthalene	ND	5.0
Acenaphthene	ND	5.0	Acenaphthene	ND	5.0
Fluorene	ND	5.0	Fluorene	ND	5.0
Anthracene	ND	5.0	Anthracene	ND	5.0
Fluoranthene	ND	5.0	Fluoranthene	ND	5.0
Pyrene	ND	5.0	Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0	Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0	Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0	Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0	Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0	Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0	Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenzo(a,h,)anthracene	ND	5.0	Dibenzo(a,h,)anthracene	ND	5.0

ND: Not detected at or above the PQL.
PQL: Practical Quantitation Limit.
*Analytes selected from semivolatile list, Oregon Cleanup Table, Appendix G, OAR 340-122-045, OAR 340-122-046, pages G8-G9.

Approved By:
REA Tech Management, Inc.

Eric Phillips
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis
for Polynuclear Aromatic Hydrocarbons*
Using Gas Chromatography/Mass Spectroscopy (GCMS)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy
Location: Oregon State Hospital, Salem, Oregon
Attention: Dr. Charles D. Getter
Analyzed By: Eric Phillips

Date Samples Received: January 2, 1997
Date of Report: January 7, 1997
Report Number: 01071144.097

Sample Number:	SUC MW3 (4591-3)		Sample Number:	Method Blank S010697W	
Analyte		PQL	Analyte		PQL
Naphthalene	ND	5.0	Naphthalene	ND	5.0
Acenaphthene	ND	5.0	Acenaphthene	ND	5.0
Fluorene	ND	5.0	Fluorene	ND	5.0
Anthracene	ND	5.0	Anthracene	ND	5.0
Fluoranthene	ND	5.0	Fluoranthene	ND	5.0
Pyrene	ND	5.0	Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0	Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0	Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0	Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0	Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0	Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0	Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenzo(a,h,)anthracene	ND	5.0	Dibenzo(a,h,)anthracene	ND	5.0

ND: Not detected at or above the PQL.
PQL: Practical Quantitation Limit.
*Analytes selected from semivolatile list, Oregon Cleanup Table, Appendix G, OAR 340-122-045, OAR 340-122-046, pages G8-G9.

Approved By:
REA Tech Management, Inc.

Eric Phillips
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA Environmental Science and Testing, Inc.
200 Hawthorne Avenue SE
Suite C-320
Salem, OR 97301
(503) 370-7230 FAX (503) 370-7151

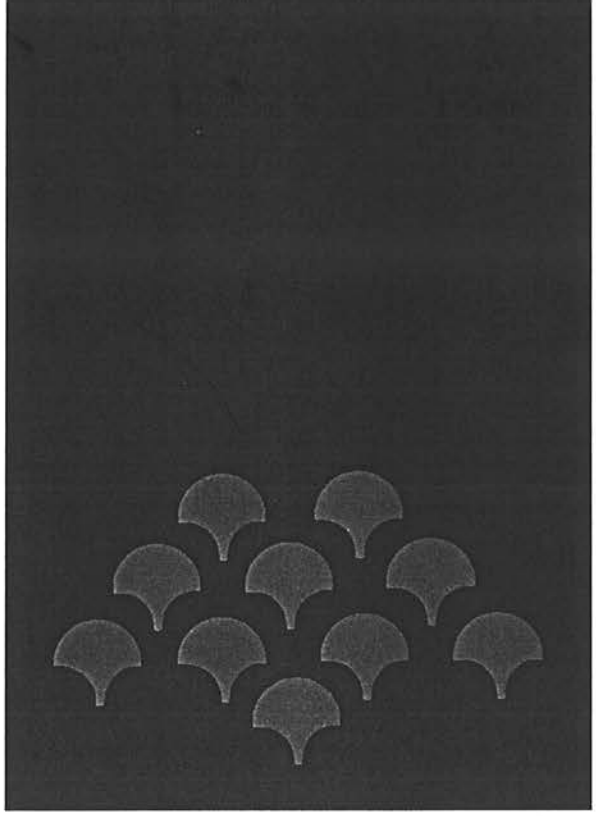
Chain of Custody / Analysis Request

Sampling Method: hand vac Pump	Shipped VIA: Delivery Date: 1/2/97	Samplers Signature: Heather Myers
Project Name / Number: Suchy	Condition Received: Good	Report Results To: Chuck
Project Location: OR St. Hospital, Salem	Custody Seal: OK.	Company: REX
Special Instructions:		Address:
		Phone ( ) - FAX ( ) -

Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	HCID TPH:	TPH-G	TPH-D	TPH-418m	BTEX	EDB/EDC Ox Addy	EDC EDB	PCB 8021	PCB 8082	PAH	PLM Asbestos
SUC MW1	4591-1	1/2/97		water	3 vials 2 liter	MW 1					X				X		
SUC MW2	4591-2	"		"	"	MW 2					X				X		
SUC MW3	4591-3	"		"	"	MW 3					X				X		

Relinquished By	Received By	Sample Turn Around	Invoice Information	Sample Tracking	Laboratory Tracking
Signature: Heather Myers	Signature: Ramona Kleen	☐ Same Day (Rush Charges Apply)	P.O. #	Smp EXP Date:	Lab # 4591
Print Name: Heather Myers	Print Name: Ramona Kleen	☐ 24 Hours (Rush Charges Apply)	Bill To:	Extract Date:	Report # 0107144.097
Company: RES	Company: REA	☒ Normal (5 days)		Ext EXP Date:	Other:
Date: 1/2/97 Time: 11:18	Date: 1-2-97 Time: 3:50			Acquisition Date:	
				QA/QC:	

Relinquished By	Received By	Field Notes:
Signature	Signature	
Print Name	Print Name	
Company	Company	
Date Time	Date Time	



REA

Tech Management, Inc.

Project No: Suchy/Salem/wmonrpt

ENVIRONMENTAL WELL MONITORING REPORT: FALL QUARTER

This Professional Services Work Product Prepared for the Exclusive Use By REA Client:

Doug Suchy
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

On the Subject Property Located at:
Building 33 of the Oregon State Hospital which is located in Salem, Oregon

200 Hawthorne Avenue S.E., Suite C-320
Salem, Oregon 97301 • (503) 370-7230

REA

Tech Management, Inc.
Environmental Monitoring Since 1979

11/11/96

Doug Suchy
Facilities Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Phone: 503-945-2924
Fax: 503-373-7350

Dear Doug:

RE: QUARTERLY WELL MONITORING REPORT (Suchy/Salem/wmonrpt)

The following is the next to last well monitoring report for the property located at Building 33 of the Oregon State Hospital which is located in Salem, Oregon.

Doug, the wells have been dry for the last three (3) weeks, and have just now produced enough water to sample. In fact, we were unable to get enough sample to do the PAH's for all of the wells. We are enclosing an extra copy for you to mail copies of the lab data to the Oregon Department of Environmental Quality (DEQ).

We do not anticipate that DEQ will have a problem with doing only 2 of the 3 PAH's in this round, since all of the samples also came out very low or non-detect in BTEX. Also, we are sure that in January, we will get enough sample volume to complete all of the BTEX's and PAH's which DEQ needs to close the site.

If you have any questions, please call.

Sincerely,
REA Tech Management, Inc.

Charles D. (Chuck) Getter, Ph.D.
Senior Technical Advisor
i:\apps\actwin\Suchy8.wpd

I. TECHNICAL INFORMATION

I. Background

REA Tech Management, Inc. (REA), was contracted to perform Well Monitoring Services on the property located at Building 33 of the Oregon State Hospital which is located in Salem, Oregon.

The following scope of work was completed:

a. **Sampling Plan**: REA collected three (3) sample(s), one from each of the three (3) groundwater monitoring wells on the subject property.

b. **Analytical Analysis Plan:** These samples were analyze for target compounds associated with reported or suspected environmental liabilities identified in earlier investigations, including:

Process/Suspected Chemical	*Well No.*	*Analyses Conducted*
Water soluble fractions of gasoline	MW-1,2,3	BTEX
Water soluble fractions of gasoline/diesel	MW-1,2	PAH

A. Sampling Plan---Sampling Parameters

Three (3) locations were identified on the subject property to be sampled by REA in the effort to characterize a release from a leaking underground storage tank system, which has been previously decommissioned.

1. Water Sampling

On 11/4/96 and 11/8/96 REA personnel purged each well, and took samples. Water samples from a developed well included the following. A hand vacuum pump with a Teflon collection container and disposable tubing was used to collect the water. Fresh tubing was placed down the well. Then the end was attached to the Teflon container and a hand pump was attached to the container. A vacuum was created within the container bringing the water sample into the container. After enough water was collected the container was carefully emptied into a vol vial or amber liter container with no head space to ensure that there was no volatile loss. Finally, the tube was disposed of and the Teflon container was washed before sampling the next well.

Each sample thus taken was placed on blue ice in a cooler and then stored at 4 degrees Celsius until analyzed. Each sample was given a unique identification number. This unique sample number was recorded in the well log and on a site sketch. The sample identification number and a description of the sample collection location was also included on the Chain-of-Custody form. This Chain-of-Custody form accompanied the samples at all times from the sampling event, through transport to REA and into the labs where they were relinquished. The length of time between sampling and analysis was less than one (1) day. The chain-of-custody form used on this project is included as an enclosure. A total of three (3) water samples were taken and analyzed from the groundwater monitoring wells on the subject property. The location of these wells was:

2. Analytical Methods

These water samples were transported promptly to REA's analytical laboratory, together

with sampling information and Chain-of-Custody documentation. All samples taken were analyzed by EPA Method 8020 for volatiles and EPA Method 8100 for semivolatiles.

3. Results

1. Presentation of Data

TABLE 1. ANALYTICAL RESULTS

Sample Number	Analytical Method (Analyte)	Analytical Result
Well 1	EPA 8020 (Volatile Aromatics)	
	Benzene	ND
	Toluene	8.3 ppb
	Ethylbenzene	ND
	Xylene	16 ppb
	EPA 8100 (Semivolatiles)	
	Naphthalene	ND
	AcenaphthleneND	
	Acenaphthylene	ND
	Fluorene	ND
	Phenanthrene	ND
	Anthracene	ND
	Flouanthene	ND
	Pyrene	ND
	Benzo(a)anthracene	ND
	Chrysene	ND
	Benzo(b)flouranthene	ND
	Benzo(k)flouranthene	ND
	Benzo(a)pyrene	ND
	Indeno(1,2,3-cd)pyrene	ND
	Dibenz(a,h)anthracene	ND
	Benzo(g,h,i)perylene	ND
Well 2	EPA 8020 (Volatile Aromatics)	
	Benzene	ND
	Toluene	ND
	Ethylbenzene	ND
	Xylene	ND
	EPA 8100 (Semivolatiles)	
	Naphthalene	ND
	AcenaphthleneND	
	Acenaphthylene	ND
	Fluorene	ND
	Phenanthrene	ND
	Anthracene	ND
	Flouanthene	ND
	Pyrene	ND
	Benzo(a)anthracene	ND
	Chrysene	ND

	Benzo(b)flouranthene	ND
	Benzo(k)flouranthene	ND
	Benzo(a)pyrene	ND
	Indeno(1,2,3-cd)pyrene	ND
	Dibenz(a,h)anthracene	ND
	Benzo(g,h,i)perylene	ND
Well 3	EPA 8020 (Volatile Aromatics)	
	Benzene	ND
	Toluene	ND
	Ethylbenzene	ND
	Xylene	ND
	EPA 8100 (Semivolatiles)	
	Insufficient water quantity	

ND means 'non detect'
All results reported in parts per billion (ppb)

II CONCLUSIONS

Of the samples taken, all were ND, or below the following DEQ cleanup levels.

Benzene (3 ppb)
Toluene (1,000 ppb)
Ethylbenzene (700 ppb)
Xylene (7,000 ppb)
Naphthalene (100 ppb)
Acenaphthlene (200 ppb)
Fluorene (100 ppb)
Anthracene (10,000 ppb)
Flouranthene (1,000 ppb)
Pyrene (1,000 ppb)
Benzo(a)anthracene (.01 ppb)
Chrysene (.01 ppb)
Benzo(b)flouranthene (.01 ppb)
Benzo(k)flouranthene (.01 ppb)
Benzo(a)pyrene (.01 ppb)
Indeno(1,2,3-cd)pyrene (.01 ppb)
Dibenz(a,h)anthracene (.01 ppb)

III. LIMITATIONS

Subject to the Terms and Conditions signed in connection with the preparation of this report, all opinions which we give verbally and in written form are based on the information collected during our survey, our present understanding of the site conditions and our professional judgment in light of such information at the time of preparation of this opinion. We are not responsible for the accuracy of information at the time of preparation of this opinion. We are not responsible for the accuracy of information provided by individuals or entities which are used by us or others in connection with the preparation of this opinion. This report is an opinion work, and no warranty is ei-

ther expressed, implied, or made as to the conclusions, advice, and recommendations offered in this report. Neither this opinion nor any extract herefrom or reference to hereto shall be furnished to, or quoted to any other person, firm or corporation without our express written permission.

ENCLOSURES

1. Chain-of-Custody
2. Lab results

REA

Tech Management, Inc.
Professional Environmental Services
Since 1979

9/25/96

Doug Suchy
Facilities Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Phone: 503-945-2924
Fax: 503-373-7350

Dear Doug: (33 Building Elevator Cleanup)

In regard to the 33 Building Elevator Cleanup on the property located at the Oregon State Hospital in Salem, Oregon, please regard the following:

A. This letter transfers to you the following nine (9) documents:

1. Site Sketch Showing Wells
2. Well Data and Flow Direction
3. Monitoring Well Data 7/23/96 which was input to RBCA model
4. Pollutant Depth-vs-Time at 12' Depth
5. Concentration-vs-Time at 12' Depth
6. Photos at Well Shaft
7. Closure Data From Elevator Shaft
8. Final Risk Analysis
9. RBCA Input Data

B. We need to review these data with DEQ and follow-up as they direct.
C. Also attached is the final bill for this phase of our purchase order.

Please call if you have any questions. Thank you.

Sincerely:
REA Tech Management, Inc.

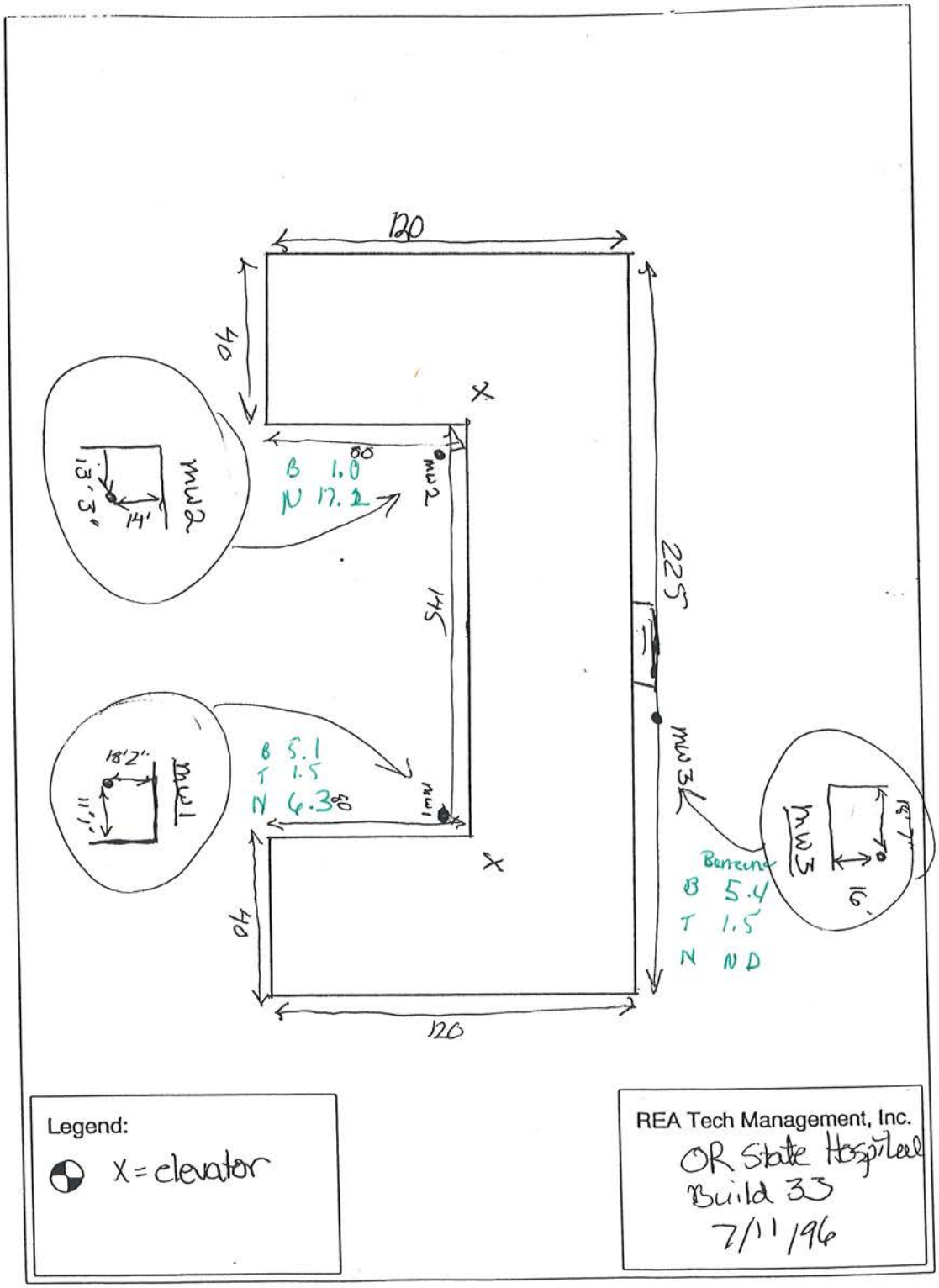
Charles D. (Chuck) Getter, Ph.D.
Project Manager

Suchy6.wpd

REA

1

SITE SKETCH SHOWING WELLS



200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

2 WELL DATA AND FLOW DIRECTION

NEIL SHAW CONSULTING GEOLOGIST, INC.

11305 SE Nancy Road
Vancouver, WA 98664

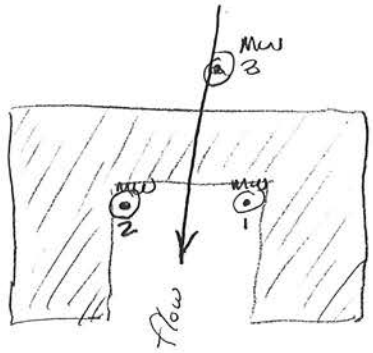
(360) 253-9030 tel
(503) 283-1153 fax

07/25/96

Oregon State Hospital soil and groundwater investigation, Salem

Table I Groundwater Elevation Data (ft.)

well	*start card*	*LO #*	*cover elevation*	*cover to water*	*water elevation*	corrected
MW-1	89048	LO4737	-10.20	-16.07	-26.27	- 0.45
MW-2	89049	LO4738	-09.82	-16.49	-26.31	- 0.49
MW-3	89050	LO4739	-10.10	-15.72	-25.82	0.00



STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

L04737

Start Card # 89048

(1) OWNER/PROJECT:

WELL NO. MW-1

Name State Hospital Bldg. 33

Address 2600 Center Street, Salem, OR 97310

City State Zip

(2) TYPE OF WORK:

☑ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☒ Other Hand auger

(4) BORE HOLE CONSTRUCTION

Special Standards Yes ☐ No ☑ Depth of completed well 20 ft.

Land surface

Vault 0.0 ft. TO 0.5 ft.

Water-tight cover

Surface flush vault

Locking cap

Casing diameter 1½ in.

material CPVC

Welded ☐ Threaded ☒ Glued ☐

Liner diameter NA in.

material NA

Welded ☐ Threaded NA Glued ☐

Seal 0.5 ft. TO 12.0 ft.

Well seal:

Material Bentonite

Amount 0.9 ft³

Grout weight dry

Borehole diameter 4½ in.

Bentonite plug at least 3 ft. thick

Filter pack 12.0 ft. TO 20.0 ft.

Screen material CPVC

interval(s):

From 10 ft. To 20 ft.

From — To —

Slot size 0.020 in.

Filter pack:

Material silica sand

Size 8-10 in.

(5) WELL TEST:

☐ Pump ☐ Bailer NA ☐ Air ☐ Flowing Artesian

Permeability NA Yield NA GPM

Conductivity NA PH NA

Temperature of water 15°C °F/C Depth artesian flow found NA ft.

Was water analysis done? ☑ Yes ☐ No

By whom? REI Laboratory

Depth of strata to be analyzed. From 15 ft. to 20 ft.

Remarks: Assumed to be free of petroleum hydrocarbons

Name of supervising Geologist/Engineer Neil Thomas

(6) LOCATION OF WELL By legal description

Well Location: County Marion

Township T7S (N or S) Range R3W (E or W) Section 25

1. NW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location

or Tax lot number of well location 700

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

15 Ft. below land surface. Date 7/10/96

Artesian Pressure NA lb/sq. in. Date NA

(8) WATER BEARING ZONES:

Depth at which water was first found 15 ft.

From	To	Est. Flow Rate	SWL
15 ft.	20 ft	NA	15 ft.

(9) WELL LOG:

Ground elevation ≈200 ft.

Material	From	To	SWL
Brown silty fine sand	0.0	20.0 ft	15 ft

Date started 7/10/96 Completed 7/10/96

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number NA

Signed NA Date NA

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 10296

Signed [signature] Date 7/11/96

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

204738

Start Card # 89049

(1) OWNER/PROJECT:

WELL NO. MW-2

Name State Hospital Bldg. 33

Address 2600 Center Street, Salem Oregon 97310

City State Zip

(2) TYPE OF WORK:

☒ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☒ Other hand auger

(6) LOCATION OF WELL By legal description

Well Location: County Marion

Township T7S (N or S) Range R3W (E or W) Section 25

1. NW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location

or Tax lot number of well location 700

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

15 Ft. below land surface. Date 7/10/96

Artesian Pressure NA lb/sq. in. Date NA

BORE HOLE CONSTRUCTION

Special Standards ☐ Yes ☒ No

Depth of completed well 20 ft.

Land surface

Vault 0.0 ft. TO 0.5 ft.

Water-tight cover

Surface flush vault

Locking cap

Casing diameter 1/2 in.

material cPVC

Welded ☐ Threaded ☒ Glued ☐

Liner

diameter NA in.

material NA

Welded ☐ Threaded NA ☐ Glued

Seal 0.5 ft. TO 12.0 ft.

Well seal:

Material bentonite

Amount 0.9 ft3

Grout weight dry

Borehole diameter 4 1/2 in.

Bentonite plug at least 3 ft. thick

Filter pack 12 ft. TO 20.0 ft.

Screen

material cPVC

interval(s):

From 10 ft To 20. ft

From — To —

Slot size 0.020 in.

Filter pack:

Material silica sand

Size 8-10 in.

(8) WATER BEARING ZONES:

Depth at which water was first found 15 ft.

From	To	Est. Flow Rate	SWL
15 ft.	20 ft	NA	15 ft.

(9) WELL LOG:

Ground elevation ~200 ft

Material	From	To	SWL
Brown, silty, fine sand	0 ft	20 ft	15 ft

Date started 7/10/96 Completed 7/10/96

(5) WELL TEST:

☐ Pump ☐ Bailer None ☐ Air ☐ Flowing Artesian

Permeability NA Yield NA GPM

Conductivity NA PH NA

Temperature of water 15° °F/C Depth artesian flow found ft.

Was water analysis done? ☒ Yes ☐ No

By whom? RMA Laboratory

Depth of strata to be analyzed. From 15 ft. to 20 ft.

Remarks: requested to be free of petroleum contamination

Name of supervising Geologist/Engineer

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number NA

Signed NA Date NA

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 1024X6

Signed Date 7/15/96

ORIGINAL & FIRST COPY WATER RESOURCES DEPT.

STATE OF OREGON

MONITORING WELL REPORT

(as required by ORS 537.765 & OR 690-240-095)

L04737

Start Card # 89050

Instructions for completing this report are on the last page of this form.

(1) OWNER/PROJECT: WELL NO. MW-3

Name State of Oregon Hospital, Building 33

Address 2600 Center Street

City Salem State Oregon Zip 97310

(2) TYPE OF WORK:

☒ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Hollow Stem Auger ☒ Other hand auger

(4) BORE HOLE CONSTRUCTION

Special Standards ☐ Yes ☒ No Depth of completed well 20 ft.

Land surface

Vault 0.0 ft. TO 0.5 ft.

Seal 0.5 ft. TO 12.0 ft.

Filter pack 12.0 ft. TO 20.0 ft.

Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2 in. material CPVC

Welded ☐ Threaded ☒ Glued ☐

Liner diameter NA in. material NA

Welded ☐ Threaded NA Glued ☐

Well seal: Material bentonite Amount 0.9 ft³ Grout weight dry

Borehole diameter 4½ in.

Bentonite plug at least 3 ft. thick

Screen material CPVC

interval(s): From 20 ft To 10 ft. From — To —

Slot size 0.020 in.

Filter pack: Material 8-10 silica sand Size — in.

(5) WELL TEST:

☐ Pump ☐ Bailer None ☐ Air ☐ Flowing Artesian

Permeability NA Yield NA GPM

Conductivity NA PH NA

Temperature of water 15 °C °F/C Depth artesian flow found NA ft.

Was water analysis done? ☒ Yes ☐ No

By whom? REH Laboratory, Salem

Depth of strata to be analyzed. From 15 ft. to 20 ft.

Remarks: Waived to be free of petroleum contamination

Name of supervising Geologist/Engineer Del Shaw

(6) LOCATION OF WELL By legal description

Well Location: County Marion

Township T7S (N or S) Range R3W (E or W) Section 25

1. NW 1/4 of SE 1/4 of above section.

2. **Either** Street address of well location —

or Tax lot number of well location 700

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:

15 Ft. below land surface. Date 7/10/96

Artesian Pressure NA lb/sq. in. Date NA

(8) WATER BEARING ZONES:

Depth at which water was first found 15 ft.

From	To	Est. Flow Rate	SWL
15 ft.	20 ft.	NA	15 ft.

(9) WELL LOG: Ground elevation 220 ft.

Material	From	To	SWL
Brown silty fine sand	0 ft.	20 ft.	15 ft.

Date started 7/10/96 Completed 7/10/96

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

MWC Number NA

Signed NA Date NA

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

MWC Number 1028

Signed [signature] Date 7/25/96

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

REA

3 MONITORING WELL DATA 7/23/96

INPUT INTO RBCA MODEL

August 1, 1996

Chuck Getter
REA
200 Hawthorne Ave. SE
Suite C-320
Salem, OR 97301

Re: Project: Oregon State Hospital

Dear Dr. Getter:

Please find enclosed the laboratory report for samples submitted on July 26, 1996 from project Oregon State Hospital located at Salem, Oregon.

We appreciate the opportunity to be of service to you on this important project. If you have any questions about the enclosed information or other aspects of your project, please call.

Sincerely,

REA Tech Management, Inc.

Michael Bowman

Laboratory Chemist

Enclosures

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatiles
Using Gas Chromatography
Results Reported in Parts Per Billion (µg/L)

Project: Oregon State Hospital
Location: Salem, Oregon
Attention: Chuck Getter
Analyzed By: Michael Bowman

Date Samples Received: July 26, 1996
Date of Report: August 1, 1996
Report Number: 08010843.096

Sample Number: Analyte	MW-1 (4202-4)	MW-2 (4202-5)	MW-3 (4202-6)
Benzene	5.1	1.0	5.4
Toluene	1.5	ND	1.0
Ethylbenzene	ND	ND	ND
Total Xylene	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND

Quality Assurance Analyte	Method Blank	Lab Reporting Limit
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
Total Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

ND means not-detected at or below the lab reporting limit.

Approved By:
REA Tech Management, Inc.

Michael Bowman
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis By
EPA Method 8100 for Polynuclear Aromatic Hydrocarbons
Using Gas Chromatography (GC/FID)
Results Reported in Parts Per Billion (µg/L)

Project: Oregon State Hospital
Location: Salem, Oregon
Attention: Chuck Getter
Analyzed By: Michael Bowman

Date Samples Received: July 26, 1996
Date of Report: August 1, 1996
Report Number: 08010843.096

Sample Number: / Analyte	MW-1 (4202-1)	MW-2 (4202-2)	MW-3 (4202-3)	Method Blank	Lab Reporting Limit
Napthalene	6.3	17.2	ND	ND	5
Acenaphthylene	ND	ND	ND	ND	5
Acenaphthene	ND	ND	ND	ND	5
Fluorene	ND	ND	ND	ND	5
Phenanthrene	ND	ND	ND	ND	5
Anthracene	ND	ND	ND	ND	5
Fluoranthene	ND	ND	ND	ND	5
Pyrene	ND	ND	ND	ND	5
Benzo(a)anthracene	ND	ND	ND	ND	5
Chrysene	ND	ND	ND	ND	5
Benzo(b) & (k) fluoranthene	ND	ND	ND	ND	5
Benzo(a)pyrene	ND	ND	ND	ND	5
Dibenzo(a,h)anthracene	ND	ND	ND	ND	5
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	5
Benzo(g,h,i)perylene	ND	ND	ND	ND	5

ND means not detected at or below the lab reporting limit.

Approved By:
REA Tech Management, Inc.

Michael Bowman
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

Suite C-320
Salem, OR 97301
(503) 370-7230 FAX (503) 370-7151

Chain of Custody / Analysis Request

Page ____ of ____

Sampling Method	Shipped VIA Date	Samplers Signature
Project Name / Number Oregon State Hospital	Condition Received:	Report Results To: Charles Getler
Project Location	Custody Seal:	Company: REA TECH Mgt.
Special Instructions:		Address:
		Phone ( ) ____-____ FAX ( ) ____-____

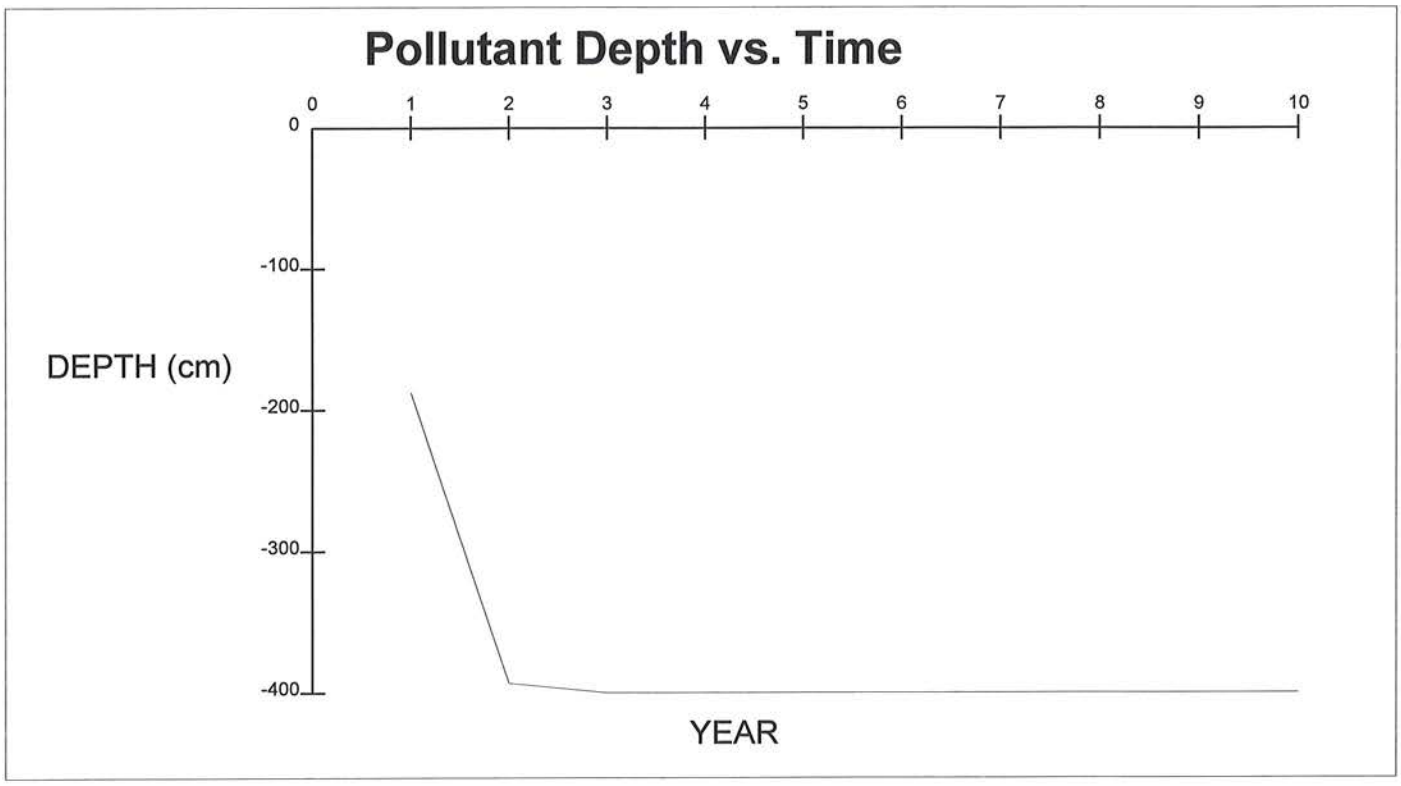
Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	HCID w/ TPH	TPH-G	TPH-D	TPH-418.1m	BTEX	EDB/EDC Gas Adds	8015	8021 8020	BTEX EPA	PLM Asbestos
MW 1	4202-1	7-23-96												✓		
MW 2	4202-2	7-23-96												✓		
MW 3	4202-3	7-23-96												✓		
MW-1	4202-4	7-23-96											✓			
MW-2	4202-5	7-23-96											✓			
MW-3	4202-6	7-23-96											✓			

Relinquished By	Received By	Sample Turn Around	Invoice Information	Sample Tracking	Laboratory Tracking
Signature	Signature Ramona Kleen	☐ Same Day (Rush Charges Apply)	P.O. #	Smp EXP Date:	Lab #
Print Name	Print Name Ramona Kleen	☐ 24 Hours (Rush Charges Apply)	Bill To:	Extract Date	Report # 08010843.096
Company	Company REA TECH	☐ Normal (5 days)		Ext EXP Date:	Other
Date Time	Date 7-26-96 Time 8:45			Acquisition Date	
				QA/QC:	

Relinquished By	Received By	Field Notes:
Signature	Signature	
Print Name	Print Name	
Company	Company	
Date Time	Date Time	

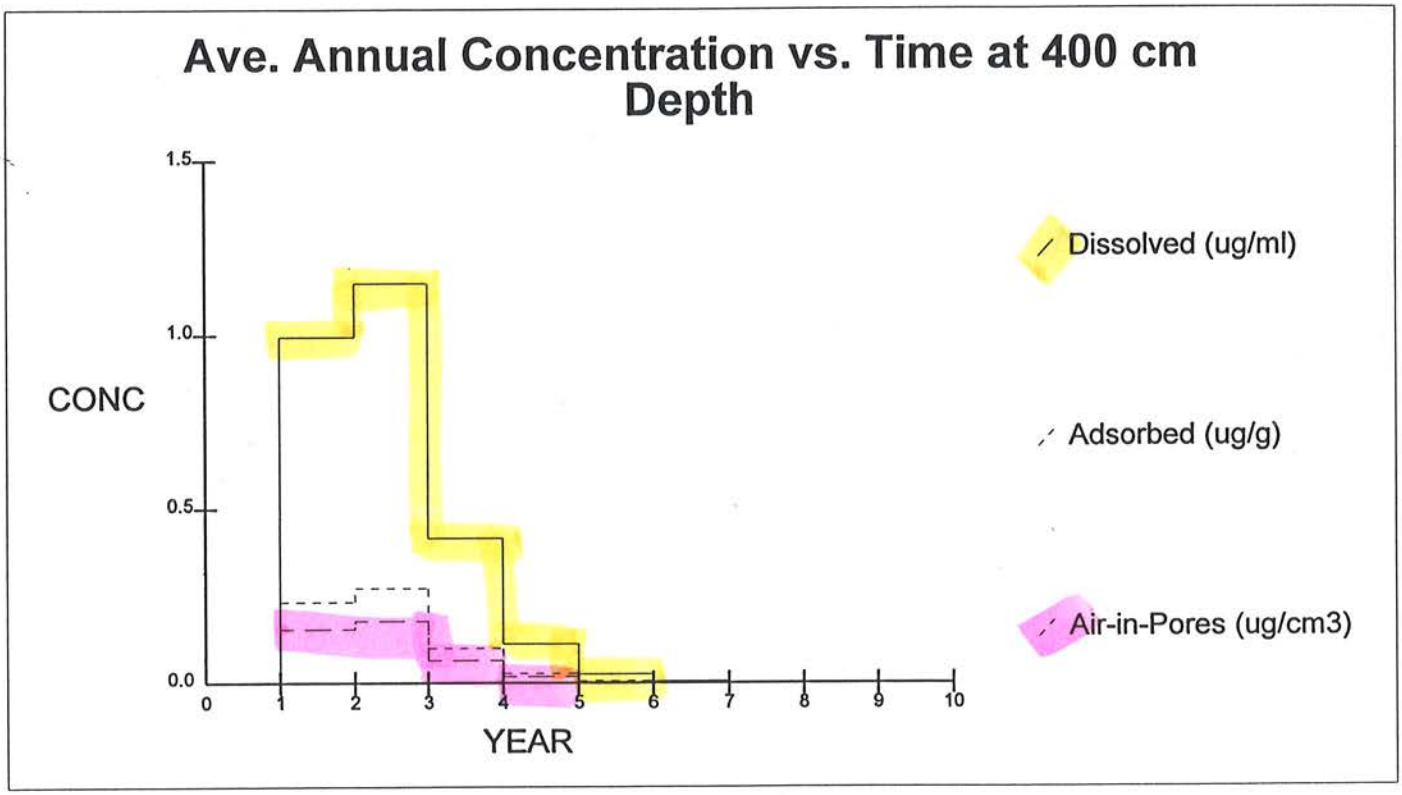
RBCA

4 POLLUTANT DEPTH-VS-TIME



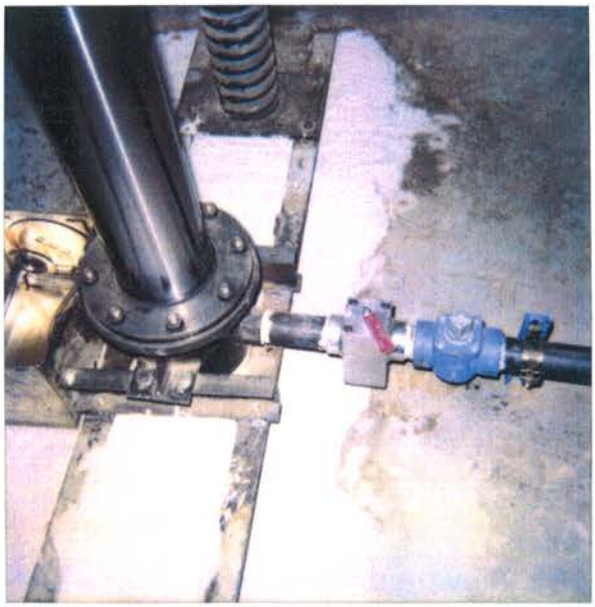
RBCA

5 CONCENTRATION - VS - TIME AT 12' DEPTH

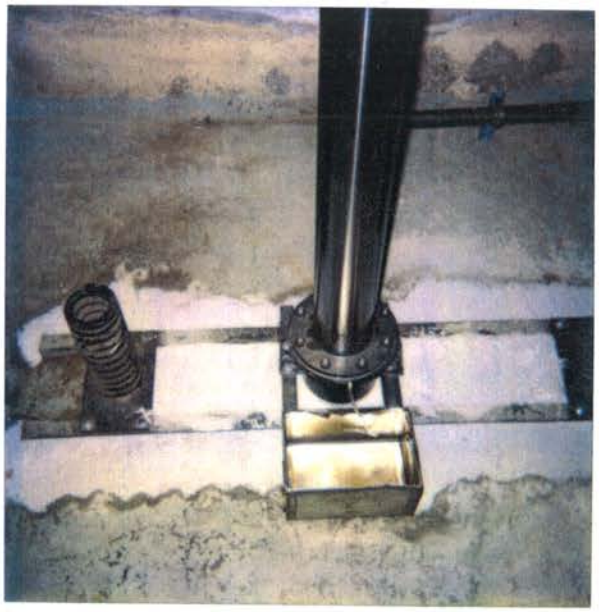


REA

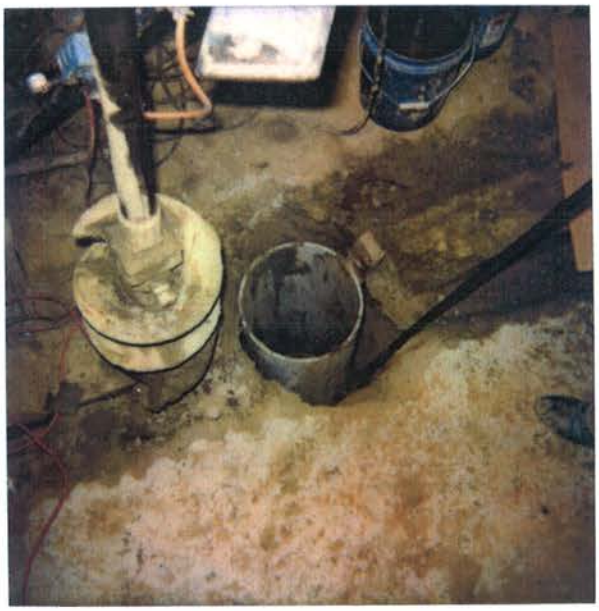
6 PHOTOS OF WELL SHAFT



#33 Sept 1996



#33 Sept 1996



#33 Sept 1996

#33 Sept 1996

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

7 CLOSURE DATA FROM ELEVATION SURVEY

September 8, 1996

Chuck Getter
REA
200 Hawthorne Ave. SE
Suite C-320

Re: Project: Suchy

Dear Mr. Suchy:

Please find enclosed the laboratory report for samples submitted on September 4, 1996 from project Suchy located at Oregon State Hospital Building 33.

We appreciate the opportunity to be of service to you on this important project. If you have any questions about the enclosed information or other aspects of your project, please call.

Sincerely,

REA Tech Management, Inc.

Michael Bowman

Laboratory Chemist

Enclosures

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy
Location: Oregon State Hospital Building 33
Attention: Chuck Getter
Analyzed By: Michael Bowman

Date Samples Received: September 4, 1996
Date of Report: September 8, 1996
Report Number: 09081138.096

Sample Number:	Elev. Shaft
Analyte	4270-1
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Total Xylene	ND

Quality Assurance	Lab Reporting	Method Blank
Analyte	Limit	
Benzene	0.5	ND
Ethylbenzene	0.5	ND
Toluene	0.5	ND
Total Xylene	0.5	ND

ND means not detected at or above the lab reporting limit.

Approved By:
REA Tech Management, Inc.

Michael Bowman
Lab Chemist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

REA

Report of Sample Analysis for Polynuclear Aromatic Hydrocarbons
Using Gas Chromatography (GC/MS)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy
Location: Oregon State Hospital Building 33
Attention: Chuck Getter
Analyzed By: Michael Bowman

Date Samples Received: September 4, 1996
Date of Report: September 8, 1996
Report Number: 09081138.096

Sample Number: / Analyte	Elev. Shaft 4270-1		Elev. Shaft 4270-1
Acenaphthene	ND	Chrysene	ND
Acenaphthylene	ND	Dibenzo(a,h,)anthracene	ND
Anthracene	ND	Fluoranthene	ND
Benzo(a)anthracene	ND	Fluorene	ND
Benzo(a)pyrene	ND	Indeno (1,2,3-cd)pyrene	ND
Benzo(b)fluoranthene	ND	Napthalene	ND
Benzo(g,h,i)perylene	ND	Phenanthrene	ND
Benzo(k)fluoranthene	ND	Pyrene	ND

Detection Limits / Analyte			
Acenaphthene	5	Chrysene	5
Acenaphthylene	5	Dibenzo(a,h,)anthracene	5
Anthracene	5	Fluoranthene	5
Benzo(a)anthracene	5	Fluorene	5
Benzo(a)pyrene	5	Indeno (1,2,3-cd)pyrene	5
Benzo(b)fluoranthene	5	Napthalene	5
Benzo(g,h,i)perylene	5	Phenanthrene	5
Benzo(k)fluoranthene	5	Pyrene	5

ND means not detected at or above the lab reporting limit.

Approved By:
REA Tech Management, Inc.

Michael Bowman
Lab Chemist

REA Environmental Science and Testing, Inc.
200 Hawthorne Avenue SE
Suite C-320
Salem, OR 97301
(503) 370-7230 FAX (503) 370-7151

Chain of Custody / Analysis Request

Page ____ of ____

Sampling Method: Bailer	Shipped VIA: Date:	Samplers Signature: Michael Bowman
Project Name / Number: Survey	Condition Received:	Report Results To: C Geller
Project Location: OSU Building 53	Custody Seal:	Company: REA
Special Instructions:		Address:
		Phone ( )___-___ FAX ( )___-___

Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	HCID w/ TPH	TPH-G	TPH-D	TPH-418.1m	BTEX	EDB/EDC Gas Alone	8010 8000	8021 8020	8081 8141	PCB Aroclor						
Elev Shaft	4270-1	9/4/96		water	5	22' ~ 5' water					X			X								

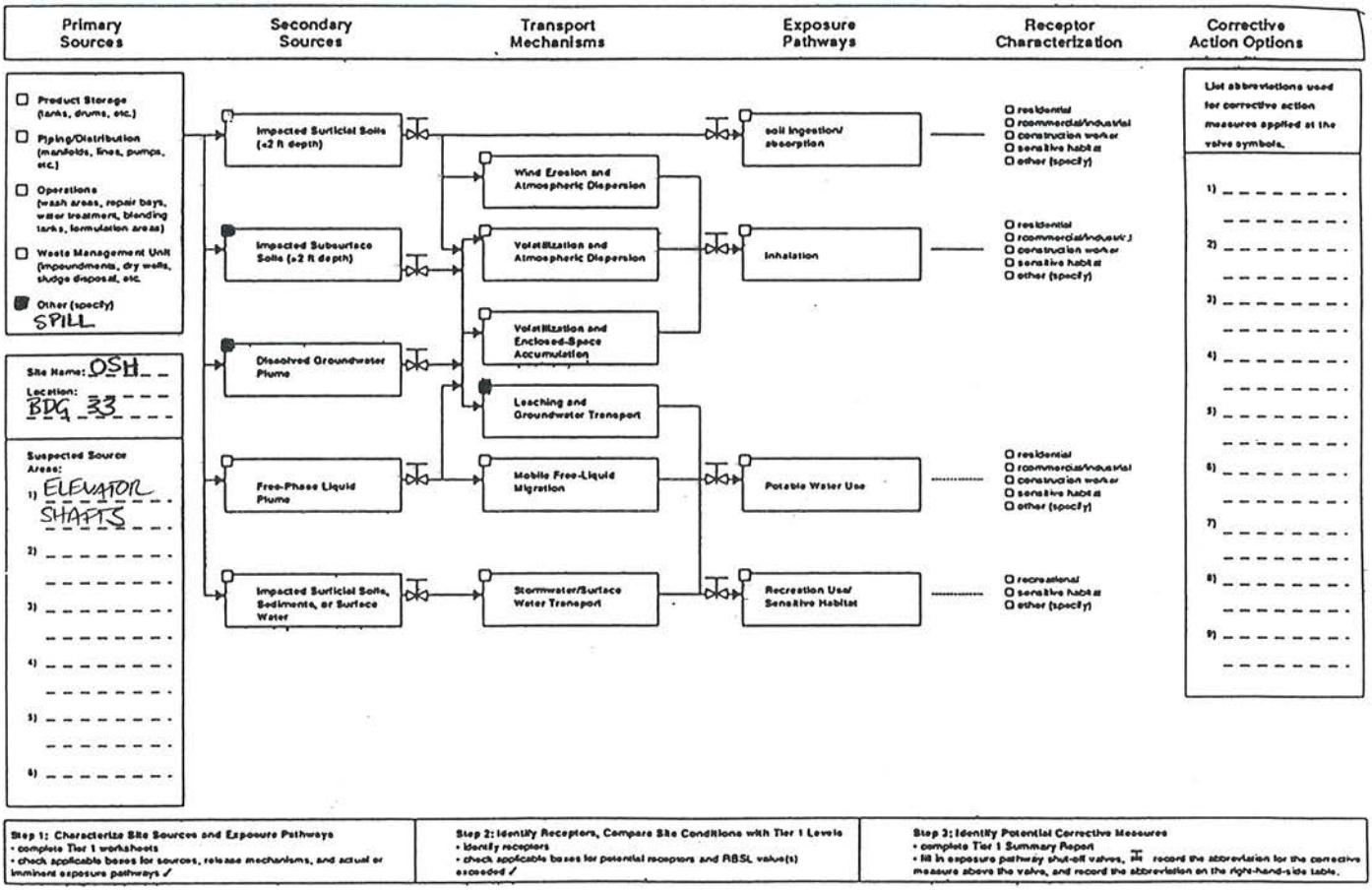
Relinquished By	Received By	Sample Turn Around	Invoice Information	Sample Tracking	Laboratory Tracking
Signature: Michael Bowman	Signature: Ramona Kleen	☐ Same Day (Rush Charges Apply)	P.O. #	Smp EXP Date:	Lab #
Print Name: Michael Bowman	Print Name: Ramona Kleen	☐ 24 Hours (Rush Charges Apply)	Bill To:	Extract Date:	Report # 0908 1138.096
Company: REA	Company: REA	☐ Normal (5 days)		Ext EXP Date:	Other:
Date: 9/4/96 Time: 9:30	Date: 9-4-96 Time: 9:30			Acquisition Date:	
				QA/QC:	

Relinquished By	Received By	Field Notes:
Signature	Signature	
Print Name	Print Name	
Company	Company	
Date Time	Date Time	

8 Firm Risk Analysis

REA

Exposure Scenario Evaluation Flowchart



200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

9 RBCA DMH

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**********************************************************************
*****
***** SESOIL-84 :  SEASONAL CYCLES OF WATER, SEDIMENT, AND POLLUTANTS IN SOIL E
*****
***** DEVELOPERS:  M. BONAZOUNTAS,ARTHUR D. LITTLE INC.   ,(617)864-5770,X5871
*****             J. WAGNER     ,DIS/ADLPIPE, INC.       ,(617)492-1991,X5820
*****
***** MODIFIED EXTENSIVELY BY:
***** D.M. HETRICK
***** OAK RIDGE NATIONAL LABORATORY
***** (615) 576-7556
***** VERSION    :  JANUARY 1995
*****
**********************************************************************
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****** MONTHLY SESOIL MODEL OPERATION ******
MONTHLY SITE SPECIFIC SIMULATION

REGION	:	MILWAUKEE WSO AP
SOIL TYPE	:	SAND
COMPOUND	:	benzene
WASHLOAD DATA	:	
APPLICATION AREA:		Preliminary data run for Oregon State Hospital

GENERAL INPUT PARAMETERS
==========

-- SOIL INPUT PARAMETERS --

SOIL DENSITY (G/CM**3):	1.70
INTRINSIC PERMEABILITY (CM**2):	.100E-07
DISCONNECTEDNESS INDEX (-):	4.00
POROSITY (-):	.250
ORGANIC CARBON CONTENT (%):	.500
CATION EXCHANGE CAPACITY (MILLI EQ./100G DRY SOIL):	.000
FREUNDLICH EXPONENT (-):	1.00

1

-- CHEMICAL INPUT PARAMETERS --

SOLUBILITY (UG/ML):	.178E+04
DIFFUSION COEFFICIENT IN AIR (CM**2/SEC):	.770E-01
HENRYS LAW CONSTANT (M**3-ATM/MOLE):	.555E-02
ADSORPTION COEFFICIENT ON ORGANIC CARBON(KOC):	31.0
ADSORPTION COEFFICIENT ON SOIL (K):	.000
MOLECULAR WEIGHT (G/MOL):	78.1
VALENCE (-):	.000
NEUTRAL HYDROLYSIS CONSTANT (/DAY):	.000
BASE HYDROLYSIS CONSTANT (L/MOL-DAY):	.000
ACID HYDROLYSIS CONSTANT (L/MOL-DAY):	.000
DEGRADATION RATE IN MOISTURE (/DAY):	.000
DEGRADATION RATE ON SOIL (/DAY):	.000
LIGAND-POLLUTANT STABILITY CONSTANT (-):	.000
NO. MOLES LIGAND/MOLE POLLUTANT (-):	.000
LIGAND MOLECULAR WEIGHT (G/MOL):	.000

-- APPLICATION INPUT PARAMETERS --

NUMBER OF SOIL LAYERS:	4		
YEARS TO BE SIMULATED:	10		
AREA (CM**2):	0.100E+06		
APPLICATION AREA LATITUDE (DEG.):	45.0		
SPILL (1) OR STEADY APPLICATION (0):	1		
MODIFIED SUMMERS MODEL USED (1) OR NOT (0) FOR GWR. CONC.:	1		
INITIAL CHEMICAL CONCENTRATIONS GIVEN (1) OR NOT GIVEN (0)	1		
DEPTHS (CM):	0.10E+03	0.10E+03	0.
NUMBER OF SUBLAYERS/LAYER	1	1	
PH (CM):	7.0	7.0	7
INTRINSIC PERMEABILITIES (CM**2):	0.00	0.00	0.
KDEL RATIOS (-):	1.0	1.0	1
KDES RATIOS (-):	1.0	1.0	1
OC RATIOS (-):	1.0	1.0	1
CEC RATIOS (-):	1.0	1.0	1
FRN RATIOS(-):	1.0	1.0	1
ADS RATIOS(-):	1.0	1.0	1

1

YEAR - 1 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
TEMP. (DEG C)	11.670	7.220	4.720	3.500	5.780	7.060	9.6
CLOUD CVR (FRAC.)	0.600	0.800	0.850	0.800	0.800	0.800	0.7
REL. HUM.(FRAC.)	0.800	0.850	0.900	0.850	0.800	0.900	0.7

ALBEDO (-)	0.150	0.150	0.170	0.210	0.160	0.160	0.1
EVAPOT. (CM/DAY)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
PRECIP. (CM)	8.070	13.430	16.420	15.250	10.550	9.220	5.7
M.TIME RAIN(DAYS)	0.560	0.670	0.740	0.730	0.700	0.630	0.5
M. STORM NO. (-)	7.090	9.790	10.750	9.890	8.470	8.660	6.5
M. SEASON (DAYS)	30.400	30.400	30.400	30.400	30.400	30.400	30.4

INITIAL POLLUTANT CONCENTRATIONS IN UG/ML, INPUT FOR MONTH 8 OF YEAR 1

LAYER 1:
SUBLAYER 1
INITIAL CONC. (UG/ML) 0.00E+00

LAYER 2:
SUBLAYER 1
INITIAL CONC. (UG/ML) 1.02E+01

LAYER 3:
SUBLAYER 1
INITIAL CONC. (UG/ML) 0.00E+00

LAYER 4:
SUBLAYER 1
INITIAL CONC. (UG/ML) 0.00E+00

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	3.00E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.

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YEAR - 2 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 3 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

1

YEAR - 4 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 5 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 6 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 7 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 8 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 9 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

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YEAR - 10 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
LIG.INPUT-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.
VOLATILIZATION MULT.-L	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

--MODIFIED SUMMERS MODEL PARAMETERS --
(INPUT FOR CALCULATION OF CONTAMINANT IN GROUNDWATER)

SATURATED HYDRAULIC CONDUCTIVITY (CM/DAY):	8.64E+01
HORIZONTAL HYDRAULIC GRADIENT:	1.00E-02
THICKNESS OF SATURATED CONE (CM):	2.00E+02
WIDTH OF CONTAMINATED ZONE PERPENDICULAR TO FLOW (CM):	1.00E+02
BACKGROUND CONTAMINANT CONCENTRATION IN AQUIFER (UG/ML):	0.00E+00

1

YEAR - 1 MONTHLY RESULTS (OUTPUT)
======== ========================

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.551	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.551	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.060	13.381	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.060	13.381	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.170	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.108	0.542	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.782	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.782	12.068	15.936	15.068	9.164	6.080	2.5

PAU/MPA (GZU)	0.999	0.996	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.999	0.996	1.002	1.001	0.998	1.002	1.0

***WARNING-: MONTH 1 ITERATION 1
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 2
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 3
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 4
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 5
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 6
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 7
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 8
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 9
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 10
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 11
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 12
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 13
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 14
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 15
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 16
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 17
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 18
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 19
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 20
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 21
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 22
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 23
INSUFFICIENT POLLUTANT MASS FOR

SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 24
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 25
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 26
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 27
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 28
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 29
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO

***WARNING-: MONTH 1 ITERATION 30
INSUFFICIENT POLLUTANT MASS FOR
SPECIFIED SINKS AND TRANSFORMATIONS OTHER SINKS SET TO ZERO,OTHER TRANSFORMATIO
1 -- POLLUTANT MASS INPUT TO COLUMN (UG) - INCLUDES INITIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

VOLATILIZED 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
IN SOIL MOI 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
ADS ON SOIL 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
IN SOIL AIR 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

SOIL ZONE 2:

SUBLAYER 1

DIFFUSED UP 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
IN SOIL MOI 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
ADS ON SOIL 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
IN SOIL AIR 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
%SOLUBILITY 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
ADSORBED 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
SOIL AIR 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

SOIL ZONE 2:

SUBLAYER 1

MOISTURE 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

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%SOLUBILITY 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
ADSORBED    0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
SOIL AIR    0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

     SOIL ZONE 3:

     LOWER SOIL ZONE:


POL DEP CM  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
1                          YEAR -   1 ANNUAL SUMMARY REPORT
                           ================================


        -- TOTAL INPUTS (UG) --


UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  1.020E+08
SOIL ZONE 3                  0.000E+00
LOWER SOIL ZONE              0.000E+00


          -- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)                5.504
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)          5.504
TOTAL PRECIPITATION (CM)                       95.899
TOTAL INFILTRATION (CM)                        95.899
TOTAL EVAPOTRANSPIRATION (CM)                  23.823
TOTAL SURFACE RUNOFF (CM)                       0.000
TOTAL GRW RUNOFF (CM)                          72.417
TOTAL MOISTURE RETENTION (CM)                  -0.341
TOTAL YIELD (CM)                               72.417
0         -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I
          ------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN
-------------------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

               TOTAL VOLATILIZED                  8.765E+07

     SOIL ZONE 2:
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SUBLAYER 1

TOTAL DIFFUSED (UP) 9.951E+07

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.691E+00
ADSORBED SOIL (UG/G)	2.621E-01
SOIL AIR (UG/ML)	3.931E-01

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.026E+00
ADSORBED SOIL (UG/G)	4.690E-01
SOIL AIR (UG/ML)	7.039E-01

SOIL ZONE 3:

LOWER SOIL ZONE:

MAX. POLL. DEPTH (M) 1.876E+00

1

YEAR - 2 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

```
IN SOIL MOI 6.627E+05 5.959E+05 4.198E+05 2.821E+05 1.910E+05 1.384E+05 9.852E+
ADS ON SOIL 3.203E+06 2.188E+06 1.414E+06 9.528E+05 7.428E+05 6.004E+05 5.379E+
IN SOIL AIR 5.616E+05 3.554E+05 2.232E+05 1.515E+05 1.244E+05 1.041E+05 9.800E+

     SOIL ZONE 2:

          SUBLAYER  1

IN SOIL MOI 1.404E+06 1.479E+06 1.222E+06 9.327E+05 6.889E+05 5.417E+05 4.081E+
ADS ON SOIL 6.789E+06 5.429E+06 4.114E+06 3.150E+06 2.679E+06 2.349E+06 2.228E+
IN SOIL AIR 1.190E+06 8.818E+05 6.497E+05 5.008E+05 4.488E+05 4.074E+05 4.059E+

     SOIL ZONE 3:

          SUBLAYER  1

IN SOIL MOI 8.084E+04 6.496E+05 1.288E+06 1.401E+06 1.139E+06 9.709E+05 7.698E+
ADS ON SOIL 3.907E+05 2.385E+06 4.336E+06 4.733E+06 4.430E+06 4.210E+06 4.203E+
IN SOIL AIR 6.850E+04 3.874E+05 6.848E+05 7.524E+05 7.423E+05 7.303E+05 7.658E+

     LOWER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 0.000E+00 0.000E+00 0.000E+00 3.040E+05 5.711E+05 7.059E+05 6.487E+
ADS ON SOIL 0.000E+00 0.000E+00 0.000E+00 1.027E+06 2.221E+06 3.061E+06 3.542E+
IN SOIL AIR 0.000E+00 0.000E+00 0.000E+00 1.633E+05 3.721E+05 5.309E+05 6.453E+


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A
     ------------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

MOISTURE    1.216E+00 8.303E-01 5.364E-01 3.616E-01 2.819E-01 2.278E-01 2.041E-
%SOLUBILITY 6.830E-02 4.665E-02 3.014E-02 2.032E-02 1.584E-02 1.280E-02 1.147E-
ADSORBED    1.884E-01 1.287E-01 8.315E-02 5.605E-02 4.369E-02 3.532E-02 3.164E-
SOIL AIR    2.873E-01 1.994E-01 1.300E-01 8.808E-02 6.829E-02 5.503E-02 4.858E-

     SOIL ZONE 2:

          SUBLAYER  1
```

MOISTURE	2.576E+00	2.060E+00	1.561E+00	1.196E+00	1.017E+00	8.914E-01	8.455E-
%SOLUBILITY	1.447E-01	1.158E-01	8.771E-02	6.717E-02	5.711E-02	5.008E-02	4.750E-
ADSORBED	3.993E-01	3.194E-01	2.420E-01	1.853E-01	1.576E-01	1.382E-01	1.310E-
SOIL AIR	6.088E-01	4.948E-01	3.783E-01	2.912E-01	2.463E-01	2.153E-01	2.012E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	1.483E-01	9.052E-01	1.645E+00	1.796E+00	1.681E+00	1.598E+00	1.595E+
%SOLUBILITY	8.331E-03	5.085E-02	9.244E-02	1.009E-01	9.446E-02	8.977E-02	8.961E-
ADSORBED	2.298E-02	1.403E-01	2.550E-01	2.784E-01	2.606E-01	2.477E-01	2.472E-
SOIL AIR	3.504E-02	2.174E-01	3.987E-01	4.375E-01	4.073E-01	3.859E-01	3.796E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	0.000E+00	0.000E+00	0.000E+00	3.897E-01	8.427E-01	1.162E+00	1.344E+
%SOLUBILITY	0.000E+00	0.000E+00	0.000E+00	2.189E-02	4.734E-02	6.526E-02	7.551E-
ADSORBED	0.000E+00	0.000E+00	0.000E+00	6.041E-02	1.306E-01	1.800E-01	2.083E-
SOIL AIR	0.000E+00	0.000E+00	0.000E+00	9.492E-02	2.042E-01	2.806E-01	3.199E-

POL DEP CM	2.052E+02	2.384E+02	2.805E+02	3.199E+02	3.448E+02	3.623E+02	3.704E+

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YEAR - 2 ANNUAL SUMMARY REPORT

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067

TOTAL MOISTURE RETENTION (CM) 0.000
TOTAL YIELD (CM) 72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.721E-01
ADSORBED SOIL (UG/G)	5.768E-02
SOIL AIR (UG/ML)	8.864E-02

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.154E+00
ADSORBED SOIL (UG/G)	1.789E-01
SOIL AIR (UG/ML)	2.745E-01

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.420E+00
ADSORBED SOIL (UG/G)	2.201E-01
SOIL AIR (UG/ML)	3.364E-01

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	9.942E-01
ADSORBED SOIL (UG/G)	1.541E-01
SOIL AIR (UG/ML)	2.328E-01
MAX. POLL. DEPTH (M)	3.934E+00

1

YEAR - 3 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5

PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	5.992E+04	5.387E+04	3.796E+04	2.551E+04	1.727E+04	1.252E+04	8.907E+
ADS ON SOIL	2.896E+05	1.978E+05	1.278E+05	8.615E+04	6.715E+04	5.428E+04	4.863E+
IN SOIL AIR	5.077E+04	3.213E+04	2.018E+04	1.370E+04	1.125E+04	9.415E+03	8.861E+

SOIL ZONE 2:

SUBLAYER 1

IN SOIL MOI	3.116E+05	3.011E+05	2.288E+05	1.640E+05	1.167E+05	8.925E+04	6.622E+
ADS ON SOIL	1.506E+06	1.106E+06	7.704E+05	5.538E+05	4.537E+05	3.870E+05	3.615E+
IN SOIL AIR	2.640E+05	1.796E+05	1.217E+05	8.804E+04	7.602E+04	6.714E+04	6.587E+

SOIL ZONE 3:

SUBLAYER 1

IN SOIL MOI	7.248E+05	7.610E+05	6.321E+05	4.880E+05	3.663E+05	2.953E+05	2.275E+
ADS ON SOIL	3.503E+06	2.794E+06	2.128E+06	1.648E+06	1.424E+06	1.280E+06	1.242E+
IN SOIL AIR	6.141E+05	4.539E+05	3.361E+05	2.620E+05	2.387E+05	2.221E+05	2.263E+

LOWER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	9.873E+05	1.144E+06	1.057E+06	8.913E+05	7.088E+05	6.009E+05	4.787E+
ADS ON SOIL	4.772E+06	4.200E+06	3.559E+06	3.011E+06	2.756E+06	2.606E+06	2.614E+
IN SOIL AIR	8.366E+05	6.822E+05	5.621E+05	4.786E+05	4.618E+05	4.520E+05	4.762E+
GWR. RUNOFF	4.295E+05	2.014E+06	2.324E+06	1.872E+06	1.012E+06	6.225E+05	2.511E+

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.099E-01	7.507E-02	4.850E-02	3.269E-02	2.549E-02	2.060E-02	1.846E-
%SOLUBILITY	6.175E-03	4.217E-03	2.725E-03	1.837E-03	1.432E-03	1.157E-03	1.037E-
ADSORBED	1.704E-02	1.164E-02	7.518E-03	5.068E-03	3.950E-03	3.193E-03	2.861E-
SOIL AIR	2.597E-02	1.803E-02	1.175E-02	7.963E-03	6.174E-03	4.976E-03	4.392E-

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	5.715E-01	4.196E-01	2.924E-01	2.102E-01	1.722E-01	1.469E-01	1.372E-
%SOLUBILITY	3.211E-02	2.357E-02	1.643E-02	1.181E-02	9.674E-03	8.252E-03	7.708E-
ADSORBED	8.858E-02	6.503E-02	4.532E-02	3.258E-02	2.669E-02	2.277E-02	2.127E-
SOIL AIR	1.351E-01	1.008E-01	7.085E-02	5.119E-02	4.172E-02	3.548E-02	3.265E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	1.329E+00	1.060E+00	8.076E-01	6.255E-01	5.406E-01	4.859E-01	4.714E-
%SOLUBILITY	7.469E-02	5.958E-02	4.537E-02	3.514E-02	3.037E-02	2.730E-02	2.649E-
ADSORBED	2.061E-01	1.644E-01	1.252E-01	9.696E-02	8.379E-02	7.532E-02	7.307E-
SOIL AIR	3.142E-01	2.546E-01	1.957E-01	1.524E-01	1.310E-01	1.174E-01	1.122E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.811E+00	1.594E+00	1.351E+00	1.143E+00	1.046E+00	9.888E-01	9.919E-
%SOLUBILITY	1.017E-01	8.955E-02	7.589E-02	6.419E-02	5.876E-02	5.555E-02	5.572E-
ADSORBED	2.807E-01	2.471E-01	2.094E-01	1.771E-01	1.621E-01	1.533E-01	1.537E-

SOIL AIR 4.280E-01 3.828E-01 3.273E-01 2.783E-01 2.534E-01 2.388E-01 2.361E-

POL DEP CM 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC. 8.288E-01 1.111E+00 1.016E+00 8.472E-01 6.648E-01 5.305E-01 3.199E-
1

YEAR - 3 ANNUAL SUMMARY REPORT

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 9.189E+06

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.365E-02
ADSORBED SOIL (UG/G)	5.215E-03
SOIL AIR (UG/ML)	8.014E-03

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.114E-01
ADSORBED SOIL (UG/G)	3.276E-02
SOIL AIR (UG/ML)	5.029E-02

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.237E-01
ADSORBED SOIL (UG/G)	9.668E-02
SOIL AIR (UG/ML)	1.482E-01

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.148E+00
ADSORBED SOIL (UG/G)	1.779E-01
SOIL AIR (UG/ML)	2.722E-01

MAX. POLL. DEPTH (M) 4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 5.246E-01

1

YEAR - 4 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

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LOAD ZONE 2 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
LOAD ZONE 3 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
LOAD LOWER  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

TOTAL INPUT 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
0          -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I
           ------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 5.417E+03 4.871E+03 3.432E+03 2.306E+03 1.561E+03 1.132E+03 8.053E+
ADS ON SOIL 2.618E+04 1.788E+04 1.155E+04 7.789E+03 6.072E+03 4.908E+03 4.397E+
IN SOIL AIR 4.590E+03 2.905E+03 1.825E+03 1.238E+03 1.017E+03 8.513E+02 8.011E+

     SOIL ZONE 2:

          SUBLAYER  1

IN SOIL MOI 4.783E+04 4.505E+04 3.330E+04 2.331E+04 1.634E+04 1.236E+04 9.110E+
ADS ON SOIL 2.312E+05 1.654E+05 1.121E+05 7.872E+04 6.356E+04 5.359E+04 4.973E+
IN SOIL AIR 4.053E+04 2.687E+04 1.770E+04 1.251E+04 1.065E+04 9.297E+03 9.062E+

     SOIL ZONE 3:

          SUBLAYER  1

IN SOIL MOI 1.927E+05 1.912E+05 1.492E+05 1.094E+05 7.967E+04 6.279E+04 4.782E+
ADS ON SOIL 9.315E+05 7.019E+05 5.023E+05 3.697E+05 3.098E+05 2.723E+05 2.610E+
IN SOIL AIR 1.633E+05 1.140E+05 7.934E+04 5.877E+04 5.191E+04 4.723E+04 4.756E+

     LOWER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 4.677E+05 4.918E+05 4.090E+05 3.168E+05 2.400E+05 1.968E+05 1.544E+
ADS ON SOIL 2.261E+06 1.806E+06 1.377E+06 1.070E+06 9.332E+05 8.536E+05 8.429E+
IN SOIL AIR 3.963E+05 2.933E+05 2.175E+05 1.701E+05 1.563E+05 1.481E+05 1.536E+
GWR. RUNOFF 3.916E+05 9.072E+05 9.463E+05 6.935E+05 3.507E+05 2.072E+05 8.159E+


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A
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UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	9.937E-03	6.787E-03	4.385E-03	2.956E-03	2.304E-03	1.862E-03	1.669E-
%SOLUBILITY	5.583E-04	3.813E-04	2.463E-04	1.661E-04	1.295E-04	1.046E-04	9.374E-
ADSORBED	1.540E-03	1.052E-03	6.797E-04	4.582E-04	3.572E-04	2.887E-04	2.586E-
SOIL AIR	2.348E-03	1.630E-03	1.063E-03	7.200E-04	5.582E-04	4.499E-04	3.971E-

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	8.773E-02	6.278E-02	4.254E-02	2.987E-02	2.412E-02	2.034E-02	1.887E-
%SOLUBILITY	4.929E-03	3.527E-03	2.390E-03	1.678E-03	1.355E-03	1.143E-03	1.060E-
ADSORBED	1.360E-02	9.731E-03	6.594E-03	4.630E-03	3.739E-03	3.153E-03	2.926E-
SOIL AIR	2.073E-02	1.508E-02	1.031E-02	7.276E-03	5.843E-03	4.913E-03	4.492E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	3.535E-01	2.664E-01	1.906E-01	1.403E-01	1.176E-01	1.033E-01	9.907E-
%SOLUBILITY	1.986E-02	1.496E-02	1.071E-02	7.882E-03	6.605E-03	5.805E-03	5.566E-
ADSORBED	5.479E-02	4.129E-02	2.955E-02	2.175E-02	1.822E-02	1.602E-02	1.536E-
SOIL AIR	8.354E-02	6.396E-02	4.620E-02	3.417E-02	2.848E-02	2.496E-02	2.358E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	8.579E-01	6.852E-01	5.226E-01	4.061E-01	3.541E-01	3.239E-01	3.199E-
%SOLUBILITY	4.820E-02	3.850E-02	2.936E-02	2.282E-02	1.990E-02	1.820E-02	1.797E-
ADSORBED	1.330E-01	1.062E-01	8.100E-02	6.295E-02	5.489E-02	5.021E-02	4.958E-
SOIL AIR	2.027E-01	1.645E-01	1.266E-01	9.892E-02	8.580E-02	7.824E-02	7.613E-

POL DEP CM	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.	3.926E-01	4.774E-01	3.930E-01	3.011E-01	2.251E-01	1.738E-01	1.032E-

1 YEAR - 4 ANNUAL SUMMARY REPORT

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 3.788E+06

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.042E-03
ADSORBED SOIL (UG/G)	4.715E-04
SOIL AIR (UG/ML)	7.246E-04

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.050E-02
ADSORBED SOIL (UG/G)	4.728E-03
SOIL AIR (UG/ML)	7.259E-03

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.430E-01
ADSORBED SOIL (UG/G)	2.217E-02
SOIL AIR (UG/ML)	3.400E-02

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	4.160E-01
ADSORBED SOIL (UG/G)	6.448E-02
SOIL AIR (UG/ML)	9.877E-02

MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 1.978E-01

1

YEAR - 5 MONTHLY RESULTS (OUTPUT)
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-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

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IN SOIL MOI 4.898E+02 4.404E+02 3.103E+02 2.085E+02 1.412E+02 1.023E+02 7.281E+
ADS ON SOIL 2.368E+03 1.617E+03 1.045E+03 7.042E+02 5.490E+02 4.437E+02 3.975E+
IN SOIL AIR 4.150E+02 2.626E+02 1.650E+02 1.120E+02 9.198E+01 7.697E+01 7.243E+

     SOIL ZONE 2:

          SUBLAYER  1

IN SOIL MOI 6.418E+03 5.973E+03 4.353E+03 3.010E+03 2.095E+03 1.574E+03 1.156E+
ADS ON SOIL 3.102E+04 2.193E+04 1.466E+04 1.017E+04 8.146E+03 6.827E+03 6.313E+
IN SOIL AIR 5.438E+03 3.562E+03 2.315E+03 1.616E+03 1.365E+03 1.184E+03 1.150E+

     SOIL ZONE 3:

          SUBLAYER  1

IN SOIL MOI 3.867E+04 3.736E+04 2.829E+04 2.022E+04 1.448E+04 1.128E+04 8.532E+
ADS ON SOIL 1.869E+05 1.372E+05 9.526E+04 6.830E+04 5.632E+04 4.890E+04 4.658E+
IN SOIL AIR 3.277E+04 2.228E+04 1.504E+04 1.086E+04 9.436E+03 8.482E+03 8.488E+

     LOWER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 1.417E+05 1.427E+05 1.129E+05 8.382E+04 6.190E+04 4.988E+04 3.880E+
ADS ON SOIL 6.850E+05 5.240E+05 3.802E+05 2.831E+05 2.407E+05 2.163E+05 2.118E+
IN SOIL AIR 1.201E+05 8.510E+04 6.004E+04 4.501E+04 4.033E+04 3.752E+04 3.860E+
GWR. RUNOFF 1.199E+05 2.689E+05 2.678E+05 1.874E+05 9.161E+04 5.296E+04 2.059E+


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A
     ------------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

MOISTURE    8.985E-04 6.137E-04 3.965E-04 2.673E-04 2.083E-04 1.684E-04 1.509E-
%SOLUBILITY 5.048E-05 3.448E-05 2.227E-05 1.501E-05 1.170E-05 9.460E-06 8.475E-
ADSORBED    1.393E-04 9.512E-05 6.145E-05 4.143E-05 3.229E-05 2.610E-05 2.338E-
SOIL AIR    2.123E-04 1.474E-04 9.608E-05 6.510E-05 5.047E-05 4.067E-05 3.590E-

     SOIL ZONE 2:
```

SUBLAYER 1

MOISTURE	1.177E-02	8.322E-03	5.562E-03	3.859E-03	3.091E-03	2.591E-03	2.396E-
%SOLUBILITY	6.614E-04	4.675E-04	3.125E-04	2.168E-04	1.737E-04	1.456E-04	1.346E-
ADSORBED	1.825E-03	1.290E-03	8.621E-04	5.981E-04	4.792E-04	4.016E-04	3.713E-
SOIL AIR	2.782E-03	1.998E-03	1.348E-03	9.399E-04	7.490E-04	6.258E-04	5.702E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	7.094E-02	5.206E-02	3.615E-02	2.592E-02	2.137E-02	1.856E-02	1.768E-
%SOLUBILITY	3.985E-03	2.925E-03	2.031E-03	1.456E-03	1.201E-03	1.043E-03	9.932E-
ADSORBED	1.100E-02	8.070E-03	5.603E-03	4.018E-03	3.313E-03	2.876E-03	2.740E-
SOIL AIR	1.676E-02	1.250E-02	8.760E-03	6.313E-03	5.178E-03	4.482E-03	4.207E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	2.600E-01	1.988E-01	1.443E-01	1.074E-01	9.134E-02	8.209E-02	8.039E-
%SOLUBILITY	1.460E-02	1.117E-02	8.105E-03	6.036E-03	5.132E-03	4.612E-03	4.516E-
ADSORBED	4.029E-02	3.082E-02	2.236E-02	1.665E-02	1.416E-02	1.272E-02	1.246E-
SOIL AIR	6.143E-02	4.775E-02	3.496E-02	2.617E-02	2.213E-02	1.983E-02	1.913E-

POL DEP CM	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.	1.190E-01	1.385E-01	1.085E-01	7.967E-02	5.806E-02	4.404E-02	2.593E-

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 1.061E+06

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.750E-04
ADSORBED SOIL (UG/G)	4.263E-05
SOIL AIR (UG/ML)	6.551E-05

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.972E-03
ADSORBED SOIL (UG/G)	6.156E-04
SOIL AIR (UG/ML)	9.453E-04

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.678E-02
ADSORBED SOIL (UG/G)	4.150E-03
SOIL AIR (UG/ML)	6.367E-03

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.118E-01
ADSORBED SOIL (UG/G)	1.733E-02
SOIL AIR (UG/ML)	2.656E-02

MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 5.415E-02

1

YEAR - 6 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	4.428E+01	3.981E+01	2.805E+01	1.885E+01	1.276E+01	9.245E+00	6.577E+
ADS ON SOIL	2.140E+02	1.462E+02	9.443E+01	6.365E+01	4.961E+01	4.009E+01	3.591E+
IN SOIL AIR	3.752E+01	2.374E+01	1.491E+01	1.012E+01	8.312E+00	6.954E+00	6.543E+

SOIL ZONE 2:

SUBLAYER 1

IN SOIL MOI	8.033E+02	7.423E+02	5.366E+02	3.684E+02	2.551E+02	1.910E+02	1.400E+
ADS ON SOIL	3.883E+03	2.725E+03	1.806E+03	1.244E+03	9.921E+02	8.282E+02	7.641E+
IN SOIL AIR	6.807E+02	4.427E+02	2.853E+02	1.978E+02	1.662E+02	1.437E+02	1.392E+

SOIL ZONE 3:

SUBLAYER 1

IN SOIL MOI 6.726E+03 6.401E+03 4.762E+03 3.351E+03 2.376E+03 1.836E+03 1.384E+
ADS ON SOIL 3.251E+04 2.350E+04 1.603E+04 1.132E+04 9.239E+03 7.962E+03 7.555E+
IN SOIL AIR 5.699E+03 3.817E+03 2.532E+03 1.799E+03 1.548E+03 1.381E+03 1.377E+

LOWER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI 3.442E+04 3.382E+04 2.600E+04 1.881E+04 1.368E+04 1.090E+04 8.437E+
ADS ON SOIL 1.663E+05 1.242E+05 8.753E+04 6.355E+04 5.319E+04 4.729E+04 4.606E+
IN SOIL AIR 2.916E+04 2.017E+04 1.382E+04 1.010E+04 8.912E+03 8.202E+03 8.393E+
GWR. RUNOFF 2.927E+04 6.452E+04 6.257E+04 4.261E+04 2.040E+04 1.164E+04 4.488E+

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE 8.122E-05 5.547E-05 3.584E-05 2.416E-05 1.883E-05 1.521E-05 1.363E-
%SOLUBILITY 4.563E-06 3.117E-06 2.013E-06 1.357E-06 1.058E-06 8.547E-07 7.656E-
ADSORBED 1.259E-05 8.599E-06 5.555E-06 3.744E-06 2.918E-06 2.358E-06 2.112E-
SOIL AIR 1.919E-05 1.332E-05 8.685E-06 5.884E-06 4.561E-06 3.675E-06 3.243E-

SOIL ZONE 2:

SUBLAYER 1

MOISTURE 1.473E-03 1.034E-03 6.856E-04 4.722E-04 3.765E-04 3.143E-04 2.900E-
%SOLUBILITY 8.278E-05 5.811E-05 3.852E-05 2.653E-05 2.115E-05 1.766E-05 1.629E-
ADSORBED 2.284E-04 1.603E-04 1.063E-04 7.319E-05 5.836E-05 4.872E-05 4.495E-
SOIL AIR 3.482E-04 2.484E-04 1.661E-04 1.150E-04 9.122E-05 7.592E-05 6.902E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE 1.234E-02 8.919E-03 6.084E-03 4.295E-03 3.506E-03 3.022E-03 2.867E-

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%SOLUBILITY 6.931E-04 5.011E-04 3.418E-04 2.413E-04 1.970E-04 1.698E-04 1.611E-
ADSORBED    1.912E-03 1.382E-03 9.431E-04 6.657E-04 5.435E-04 4.684E-04 4.444E-
SOIL AIR    2.915E-03 2.142E-03 1.474E-03 1.046E-03 8.495E-04 7.299E-04 6.824E-

     LOWER SOIL ZONE:

          SUBLAYER  1

MOISTURE    6.313E-02 4.713E-02 3.322E-02 2.412E-02 2.019E-02 1.795E-02 1.748E-
%SOLUBILITY 3.547E-03 2.648E-03 1.866E-03 1.355E-03 1.134E-03 1.008E-03 9.821E-
ADSORBED    9.785E-03 7.305E-03 5.149E-03 3.738E-03 3.129E-03 2.781E-03 2.710E-
SOIL AIR    1.492E-02 1.132E-02 8.049E-03 5.874E-03 4.890E-03 4.334E-03 4.160E-


POL DEP CM  4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+


      -- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.  2.889E-02 3.283E-02 2.498E-02 1.788E-02 1.283E-02 9.627E-03 5.638E-
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                           ==================================


        -- TOTAL INPUTS (UG) --


UPPER SOIL ZONE              0.000E+00
SOIL ZONE 2                  0.000E+00
SOIL ZONE 3                  0.000E+00
LOWER SOIL ZONE              0.000E+00


          -- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)              5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)        5.495
TOTAL PRECIPITATION (CM)                     95.872
TOTAL INFILTRATION (CM)                      95.872
TOTAL EVAPOTRANSPIRATION (CM)                23.805
TOTAL SURFACE RUNOFF (CM)                     0.000
TOTAL GRW RUNOFF (CM)                        72.067
TOTAL MOISTURE RETENTION (CM)                 0.000
TOTAL YIELD (CM)                             72.067
0          -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I
           ------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN
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UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 2.468E+05

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.486E-05
ADSORBED SOIL (UG/G)	3.853E-06
SOIL AIR (UG/ML)	5.920E-06

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	4.884E-04
ADSORBED SOIL (UG/G)	7.570E-05
SOIL AIR (UG/ML)	1.162E-04

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	4.475E-03
ADSORBED SOIL (UG/G)	6.936E-04
SOIL AIR (UG/ML)	1.064E-03

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.537E-02
ADSORBED SOIL (UG/G)	3.933E-03
SOIL AIR (UG/ML)	6.029E-03

MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 1.242E-02

1

YEAR - 7 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5

PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	3.995E+00	3.590E+00	2.527E+00	1.695E+00	1.146E+00	8.294E-01	5.891E-
ADS ON SOIL	1.931E+01	1.318E+01	8.509E+00	5.726E+00	4.457E+00	3.597E+00	3.216E+
IN SOIL AIR	3.386E+00	2.141E+00	1.344E+00	9.103E-01	7.468E-01	6.239E-01	5.860E-

SOIL ZONE 2:

SUBLAYER 1

IN SOIL MOI	9.636E+01	8.864E+01	6.372E+01	4.354E+01	3.005E+01	2.244E+01	1.642E+
ADS ON SOIL	4.658E+02	3.255E+02	2.145E+02	1.471E+02	1.169E+02	9.730E+01	8.962E+
IN SOIL AIR	8.166E+01	5.286E+01	3.388E+01	2.338E+01	1.958E+01	1.688E+01	1.633E+

SOIL ZONE 3:

SUBLAYER 1

IN SOIL MOI	1.073E+03	1.012E+03	7.440E+02	5.181E+02	3.650E+02	2.806E+02	2.109E+
ADS ON SOIL	5.188E+03	3.715E+03	2.505E+03	1.750E+03	1.419E+03	1.217E+03	1.152E+
IN SOIL AIR	9.095E+02	6.033E+02	3.956E+02	2.782E+02	2.378E+02	2.111E+02	2.098E+

LOWER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	7.325E+03	7.087E+03	5.347E+03	3.805E+03	2.738E+03	2.167E+03	1.671E+
ADS ON SOIL	3.541E+04	2.602E+04	1.800E+04	1.285E+04	1.065E+04	9.397E+03	9.122E+
IN SOIL AIR	6.207E+03	4.227E+03	2.843E+03	2.043E+03	1.784E+03	1.630E+03	1.662E+
GWR. RUNOFF	6.253E+03	1.363E+04	1.299E+04	8.691E+03	4.105E+03	2.321E+03	8.902E+

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A

UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	7.329E-06	5.002E-06	3.229E-06	2.173E-06	1.691E-06	1.365E-06	1.221E-
%SOLUBILITY	4.117E-07	2.810E-07	1.814E-07	1.221E-07	9.503E-08	7.669E-08	6.857E-
ADSORBED	1.136E-06	7.753E-07	5.005E-07	3.368E-07	2.622E-07	2.116E-07	1.892E-
SOIL AIR	1.732E-06	1.201E-06	7.825E-07	5.293E-07	4.098E-07	3.297E-07	2.905E-

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	1.768E-04	1.235E-04	8.142E-05	5.581E-05	4.435E-05	3.693E-05	3.401E-
%SOLUBILITY	9.931E-06	6.939E-06	4.574E-06	3.135E-06	2.492E-06	2.075E-06	1.911E-
ADSORBED	2.740E-05	1.914E-05	1.262E-05	8.650E-06	6.874E-06	5.724E-06	5.272E-
SOIL AIR	4.177E-05	2.966E-05	1.973E-05	1.359E-05	1.074E-05	8.919E-06	8.094E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	1.969E-03	1.410E-03	9.506E-04	6.641E-04	5.386E-04	4.618E-04	4.370E-
%SOLUBILITY	1.106E-04	7.920E-05	5.340E-05	3.731E-05	3.026E-05	2.595E-05	2.455E-
ADSORBED	3.052E-04	2.185E-04	1.473E-04	1.029E-04	8.349E-05	7.158E-05	6.774E-
SOIL AIR	4.653E-04	3.385E-04	2.304E-04	1.618E-04	1.305E-04	1.116E-04	1.040E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	1.344E-02	9.876E-03	6.832E-03	4.878E-03	4.041E-03	3.566E-03	3.462E-
%SOLUBILITY	7.549E-04	5.548E-04	3.838E-04	2.740E-04	2.270E-04	2.003E-04	1.945E-
ADSORBED	2.083E-03	1.531E-03	1.059E-03	7.561E-04	6.263E-04	5.527E-04	5.366E-
SOIL AIR	3.175E-03	2.371E-03	1.656E-03	1.188E-03	9.790E-04	8.613E-04	8.239E-

POL DEP CM 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC. 6.149E-03 6.881E-03 5.138E-03 3.617E-03 2.569E-03 1.913E-03 1.116E-

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 5.110E+04

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.237E-06
ADSORBED SOIL (UG/G)	3.467E-07
SOIL AIR (UG/ML)	5.328E-07

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	5.790E-05
ADSORBED SOIL (UG/G)	8.974E-06
SOIL AIR (UG/ML)	1.378E-05

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.960E-04
ADSORBED SOIL (UG/G)	1.079E-04
SOIL AIR (UG/ML)	1.656E-04

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	5.174E-03
ADSORBED SOIL (UG/G)	8.020E-04
SOIL AIR (UG/ML)	1.230E-03

MAX. POLL. DEPTH (M) 4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 2.551E-03

1

YEAR - 8 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

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LOAD ZONE 3 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
LOAD LOWER  0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+

TOTAL INPUT 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+
0          -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I
           ------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 3.565E-01 3.194E-01 2.238E-01 1.486E-01 9.894E-02 7.170E-02 5.034E-
ADS ON SOIL 1.723E+00 1.173E+00 7.536E-01 5.020E-01 3.847E-01 3.109E-01 2.748E-
IN SOIL AIR 3.021E-01 1.905E-01 1.190E-01 7.980E-02 6.446E-02 5.393E-02 5.008E-

     SOIL ZONE 2:

          SUBLAYER  1

IN SOIL MOI 1.123E+01 1.029E+01 7.369E+00 5.014E+00 3.451E+00 2.570E+00 1.877E+
ADS ON SOIL 5.427E+01 3.779E+01 2.481E+01 1.694E+01 1.342E+01 1.114E+01 1.025E+
IN SOIL AIR 9.513E+00 6.138E+00 3.918E+00 2.692E+00 2.248E+00 1.933E+00 1.867E+

     SOIL ZONE 3:

          SUBLAYER  1

IN SOIL MOI 1.618E+02 1.515E+02 1.105E+02 7.639E+01 5.356E+01 4.103E+01 3.078E+
ADS ON SOIL 7.820E+02 5.562E+02 3.720E+02 2.580E+02 2.083E+02 1.779E+02 1.680E+
IN SOIL AIR 1.371E+02 9.034E+01 5.876E+01 4.102E+01 3.490E+01 3.086E+01 3.062E+

     LOWER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 1.430E+03 1.369E+03 1.019E+03 7.169E+02 5.121E+02 4.031E+02 3.101E+
ADS ON SOIL 6.910E+03 5.025E+03 3.431E+03 2.421E+03 1.991E+03 1.748E+03 1.693E+
IN SOIL AIR 1.211E+03 8.162E+02 5.420E+02 3.849E+02 3.336E+02 3.032E+02 3.084E+
GWR. RUNOFF 1.223E+03 2.645E+03 2.493E+03 1.647E+03 7.705E+02 4.330E+02 1.654E+


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A
     ------------------------------------------------------------------------
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UPPER SOIL ZONE:

SUBLAYER 1

MOISTURE	6.540E-07	4.450E-07	2.860E-07	1.905E-07	1.460E-07	1.180E-07	1.043E-
%SOLUBILITY	3.674E-08	2.500E-08	1.607E-08	1.070E-08	8.202E-09	6.629E-09	5.860E-
ADSORBED	1.014E-07	6.897E-08	4.433E-08	2.953E-08	2.263E-08	1.829E-08	1.617E-
SOIL AIR	1.545E-07	1.069E-07	6.931E-08	4.640E-08	3.537E-08	2.850E-08	2.482E-

SOIL ZONE 2:

SUBLAYER 1

MOISTURE	2.059E-05	1.434E-05	9.415E-06	6.427E-06	5.092E-06	4.229E-06	3.888E-
%SOLUBILITY	1.157E-06	8.057E-07	5.289E-07	3.611E-07	2.861E-07	2.376E-07	2.184E-
ADSORBED	3.192E-06	2.223E-06	1.459E-06	9.962E-07	7.893E-07	6.555E-07	6.027E-
SOIL AIR	4.867E-06	3.444E-06	2.282E-06	1.565E-06	1.234E-06	1.021E-06	9.254E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	2.968E-04	2.111E-04	1.412E-04	9.792E-05	7.904E-05	6.753E-05	6.377E-
%SOLUBILITY	1.667E-05	1.186E-05	7.932E-06	5.501E-06	4.441E-06	3.794E-06	3.582E-
ADSORBED	4.600E-05	3.272E-05	2.189E-05	1.518E-05	1.225E-05	1.047E-05	9.884E-
SOIL AIR	7.013E-05	5.069E-05	3.422E-05	2.385E-05	1.915E-05	1.631E-05	1.518E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	2.622E-03	1.907E-03	1.302E-03	9.189E-04	7.557E-04	6.634E-04	6.424E-
%SOLUBILITY	1.473E-04	1.071E-04	7.316E-05	5.162E-05	4.246E-05	3.727E-05	3.609E-
ADSORBED	4.065E-04	2.956E-04	2.019E-04	1.424E-04	1.171E-04	1.028E-04	9.957E-
SOIL AIR	6.197E-04	4.579E-04	3.156E-04	2.238E-04	1.831E-04	1.602E-04	1.529E-

POL DEP CM	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.	1.200E-03	1.329E-03	9.794E-04	6.814E-04	4.804E-04	3.559E-04	2.072E-

1 YEAR - 8 ANNUAL SUMMARY REPORT

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 9.788E+03

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.994E-07
ADSORBED SOIL (UG/G)	3.091E-08
SOIL AIR (UG/ML)	4.748E-08

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	6.679E-06
ADSORBED SOIL (UG/G)	1.035E-06
SOIL AIR (UG/ML)	1.590E-06

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.031E-04
ADSORBED SOIL (UG/G)	1.597E-05
SOIL AIR (UG/ML)	2.452E-05

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	9.807E-04
ADSORBED SOIL (UG/G)	1.520E-04
SOIL AIR (UG/ML)	2.331E-04

MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 4.858E-04

1

YEAR - 9 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR
MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

```
IN SOIL MOI 3.652E-02 3.158E-02 2.113E-02 1.482E-02 1.288E-02 1.155E-02 9.170E-
ADS ON SOIL 1.765E-01 1.159E-01 7.114E-02 5.006E-02 5.006E-02 5.006E-02 5.006E-
IN SOIL AIR 3.095E-02 1.883E-02 1.124E-02 7.959E-03 8.388E-03 8.684E-03 9.122E-

     SOIL ZONE 2:

          SUBLAYER  1

IN SOIL MOI 1.273E+00 1.164E+00 8.305E-01 5.617E-01 3.863E-01 2.874E-01 2.085E-
ADS ON SOIL 6.153E+00 4.274E+00 2.796E+00 1.897E+00 1.502E+00 1.246E+00 1.138E+
IN SOIL AIR 1.079E+00 6.942E-01 4.416E-01 3.016E-01 2.516E-01 2.162E-01 2.074E-

     SOIL ZONE 3:

          SUBLAYER  1

IN SOIL MOI 2.341E+01 2.181E+01 1.581E+01 1.087E+01 7.595E+00 5.799E+00 4.343E+
ADS ON SOIL 1.132E+02 8.009E+01 5.324E+01 3.672E+01 2.953E+01 2.515E+01 2.371E+
IN SOIL AIR 1.984E+01 1.301E+01 8.409E+00 5.837E+00 4.948E+00 4.362E+00 4.321E+

     LOWER SOIL ZONE:

          SUBLAYER  1

IN SOIL MOI 2.625E+02 2.494E+02 1.840E+02 1.283E+02 9.116E+01 7.148E+01 5.487E+
ADS ON SOIL 1.269E+03 9.158E+02 6.195E+02 4.334E+02 3.545E+02 3.100E+02 2.996E+
IN SOIL AIR 2.225E+02 1.487E+02 9.784E+01 6.889E+01 5.939E+01 5.377E+01 5.458E+
GWR. RUNOFF 2.250E+02 4.840E+02 4.522E+02 2.961E+02 1.375E+02 7.692E+01 2.930E+


     -- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A
     ------------------------------------------------------------------------


     UPPER SOIL ZONE:

          SUBLAYER  1

MOISTURE    6.700E-08 4.400E-08 2.700E-08 1.900E-08 1.900E-08 1.900E-08 1.900E-
%SOLUBILITY 3.764E-09 2.472E-09 1.517E-09 1.067E-09 1.067E-09 1.067E-09 1.067E-
ADSORBED    1.038E-08 6.820E-09 4.185E-09 2.945E-09 2.945E-09 2.945E-09 2.945E-
SOIL AIR    1.583E-08 1.057E-08 6.543E-09 4.628E-09 4.603E-09 4.589E-09 4.522E-

     SOIL ZONE 2:

          SUBLAYER  1
```

MOISTURE	2.335E-06	1.622E-06	1.061E-06	7.200E-07	5.700E-07	4.730E-07	4.320E-
%SOLUBILITY	1.312E-07	9.113E-08	5.962E-08	4.045E-08	3.202E-08	2.657E-08	2.427E-
ADSORBED	3.619E-07	2.514E-07	1.645E-07	1.116E-07	8.835E-08	7.332E-08	6.696E-
SOIL AIR	5.518E-07	3.895E-07	2.572E-07	1.754E-07	1.381E-07	1.142E-07	1.028E-

SOIL ZONE 3:

SUBLAYER 1

MOISTURE	4.295E-05	3.039E-05	2.021E-05	1.394E-05	1.121E-05	9.544E-06	8.999E-
%SOLUBILITY	2.413E-06	1.707E-06	1.135E-06	7.829E-07	6.296E-07	5.362E-07	5.056E-
ADSORBED	6.657E-06	4.711E-06	3.132E-06	2.160E-06	1.737E-06	1.479E-06	1.395E-
SOIL AIR	1.015E-05	7.298E-06	4.897E-06	3.394E-06	2.715E-06	2.305E-06	2.142E-

LOWER SOIL ZONE:

SUBLAYER 1

MOISTURE	4.816E-04	3.476E-04	2.351E-04	1.645E-04	1.345E-04	1.176E-04	1.137E-
%SOLUBILITY	2.706E-05	1.953E-05	1.321E-05	9.239E-06	7.557E-06	6.609E-06	6.387E-
ADSORBED	7.465E-05	5.387E-05	3.644E-05	2.549E-05	2.085E-05	1.823E-05	1.762E-
SOIL AIR	1.138E-04	8.346E-05	5.697E-05	4.006E-05	3.259E-05	2.841E-05	2.706E-

POL DEP CM	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+02	4.000E+

-- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.	2.204E-04	2.421E-04	1.768E-04	1.219E-04	8.550E-05	6.311E-05	3.666E-

1 YEAR - 9 ANNUAL SUMMARY REPORT

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-- TOTAL INPUTS (UG) --

UPPER SOIL ZONE	0.000E+00
SOIL ZONE 2	0.000E+00
SOIL ZONE 3	0.000E+00
LOWER SOIL ZONE	0.000E+00

-- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)	5.495

AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)	5.495
TOTAL PRECIPITATION (CM)	95.872
TOTAL INFILTRATION (CM)	95.872
TOTAL EVAPOTRANSPIRATION (CM)	23.805
TOTAL SURFACE RUNOFF (CM)	0.000
TOTAL GRW RUNOFF (CM)	72.067
TOTAL MOISTURE RETENTION (CM)	0.000
TOTAL YIELD (CM)	72.067

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 1.774E+03

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.575E-08
ADSORBED SOIL (UG/G)	3.991E-09
SOIL AIR (UG/ML)	6.105E-09

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	7.495E-07
ADSORBED SOIL (UG/G)	1.162E-07
SOIL AIR (UG/ML)	1.784E-07

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.471E-05
ADSORBED SOIL (UG/G)	2.280E-06
SOIL AIR (UG/ML)	3.499E-06

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.763E-04
ADSORBED SOIL (UG/G)	2.733E-05
SOIL AIR (UG/ML)	4.192E-05

MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 8.765E-05

1

YEAR - 10 MONTHLY RESULTS (OUTPUT)

-- HYDROLOGIC CYCLE COMPONENTS --

OCT	NOV	DEC	JAN	FEB	MAR	APR

MOIS. IN L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
MOIS. BELOW L1 (%)	5.451	7.176	7.826	7.801	6.776	6.076	4.8
PRECIPATION (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
NET INFILT. (CM)	8.000	13.414	16.457	15.268	10.528	9.236	5.7
EVAPOTRANS. (CM)	3.151	0.771	0.304	0.209	1.706	3.390	3.7
MOIS. RETEN (CM)	0.417	0.575	0.217	-0.008	-0.342	-0.233	-0.4
SUR. RUNOFF (CM)	0.000	0.000	0.000	0.000	0.000	0.000	0.0
GRW. RUNOFF (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
YIELD (CM)	4.432	12.068	15.936	15.068	9.164	6.080	2.5
PAU/MPA (GZU)	0.991	0.999	1.002	1.001	0.998	1.002	1.0
PA/MPA (GZ)	0.991	0.999	1.002	1.001	0.998	1.002	1.0

1 -- POLLUTANT MASS INPUT TO COLUMN (U

	OCT	NOV	DEC	JAN	FEB	MAR	APR
PRECIP.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD UPPER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD ZONE 3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
LOAD LOWER	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+
TOTAL INPUT	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+

0 -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I

UPPER SOIL ZONE:

SUBLAYER 1

IN SOIL MOI	9.813E-03	1.220E-02	1.252E-02	1.248E-02	1.084E-02	9.722E-03	7.722E-
ADS ON SOIL	4.743E-02	4.480E-02	4.216E-02	4.216E-02	4.216E-02	4.216E-02	4.216E-
IN SOIL AIR	8.315E-03	7.276E-03	6.659E-03	6.702E-03	7.064E-03	7.313E-03	7.682E-

SOIL ZONE 2:

SUBLAYER 1

IN SOIL MOI	1.368E-01	1.270E-01	9.267E-02	6.709E-02	4.744E-02	3.403E-02	2.751E-
ADS ON SOIL	6.614E-01	4.664E-01	3.120E-01	2.266E-01	1.845E-01	1.476E-01	1.502E-
IN SOIL AIR	1.159E-01	7.575E-02	4.927E-02	3.603E-02	3.090E-02	2.560E-02	2.737E-

SOIL ZONE 3:

SUBLAYER 1

```
IN SOIL MOI 3.275E+00 3.037E+00 2.191E+00 1.499E+00 1.044E+00 7.955E-01 5.933E-
ADS ON SOIL 1.583E+01 1.115E+01 7.375E+00 5.064E+00 4.059E+00 3.449E+00 3.239E+
IN SOIL AIR 2.775E+00 1.811E+00 1.165E+00 8.051E-01 6.801E-01 5.984E-01 5.902E-
```

LOWER SOIL ZONE:

SUBLAYER 1

```
IN SOIL MOI 4.610E+01 4.354E+01 3.189E+01 2.209E+01 1.562E+01 1.221E+01 9.361E+
ADS ON SOIL 2.228E+02 1.599E+02 1.074E+02 7.460E+01 6.075E+01 5.296E+01 5.111E+
IN SOIL AIR 3.906E+01 2.597E+01 1.695E+01 1.186E+01 1.018E+01 9.186E+00 9.312E+
GWR. RUNOFF 3.956E+01 8.473E+01 7.866E+01 5.114E+01 2.362E+01 1.316E+01 5.002E+
```

-- POLLUTANT CONCENTRATIONS (UG/ML) OR (UG/G) -- NOTE: IF CONCENTRATIONS A

UPPER SOIL ZONE:

SUBLAYER 1

```
MOISTURE     1.800E-08 1.700E-08 1.600E-08 1.600E-08 1.600E-08 1.600E-08 1.600E-
%SOLUBILITY 1.011E-09 9.551E-10 8.989E-10 8.989E-10 8.989E-10 8.989E-10 8.989E-
ADSORBED     2.790E-09 2.635E-09 2.480E-09 2.480E-09 2.480E-09 2.480E-09 2.480E-
SOIL AIR     4.254E-09 4.082E-09 3.877E-09 3.897E-09 3.876E-09 3.865E-09 3.808E-
```

SOIL ZONE 2:

SUBLAYER 1

```
MOISTURE     2.510E-07 1.770E-07 1.184E-07 8.600E-08 7.000E-08 5.600E-08 5.700E-
%SOLUBILITY 1.410E-08 9.944E-09 6.652E-09 4.831E-09 3.933E-09 3.146E-09 3.202E-
ADSORBED     3.890E-08 2.743E-08 1.835E-08 1.333E-08 1.085E-08 8.680E-09 8.835E-
SOIL AIR     5.931E-08 4.250E-08 2.869E-08 2.095E-08 1.696E-08 1.353E-08 1.357E-
```

SOIL ZONE 3:

SUBLAYER 1

```
MOISTURE     6.008E-06 4.232E-06 2.799E-06 1.922E-06 1.540E-06 1.309E-06 1.229E-
%SOLUBILITY 3.375E-07 2.378E-07 1.572E-07 1.080E-07 8.654E-08 7.354E-08 6.906E-
```

```
ADSORBED     9.312E-07 6.560E-07 4.338E-07 2.979E-07 2.388E-07 2.029E-07 1.905E-
SOIL AIR     1.420E-06 1.016E-06 6.783E-07 4.681E-07 3.732E-07 3.162E-07 2.925E-

      LOWER SOIL ZONE:

           SUBLAYER  1

MOISTURE     8.456E-05 6.067E-05 4.074E-05 2.831E-05 2.306E-05 2.010E-05 1.940E-
%SOLUBILITY  4.750E-06 3.408E-06 2.289E-06 1.590E-06 1.295E-06 1.129E-06 1.090E-
ADSORBED     1.311E-05 9.403E-06 6.315E-06 4.388E-06 3.574E-06 3.115E-06 3.006E-
SOIL AIR     1.998E-05 1.457E-05 9.872E-06 6.895E-06 5.585E-06 4.854E-06 4.616E-


POL DEP CM   4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+02 4.000E+


      -- POLLUTANT CONCENTRATION IN GROUNDWATER (UG/ML) --

GWR. CONC.   3.870E-05 4.227E-05 3.064E-05 2.099E-05 1.465E-05 1.078E-05 6.255E-
1                          YEAR -  10 ANNUAL SUMMARY REPORT
                           ================================


        -- TOTAL INPUTS (UG) --


UPPER SOIL ZONE                0.000E+00
SOIL ZONE 2                    0.000E+00
SOIL ZONE 3                    0.000E+00
LOWER SOIL ZONE                0.000E+00


           -- HYDROLOGIC CYCLE COMPONENTS --

AVERAGE SOIL MOISTURE ZONE 1 (%)                  5.495
AVERAGE SOIL MOISTURE BELOW ZONE 1 (%)            5.495
TOTAL PRECIPITATION (CM)                         95.872
TOTAL INFILTRATION (CM)                          95.872
TOTAL EVAPOTRANSPIRATION (CM)                    23.805
TOTAL SURFACE RUNOFF (CM)                         0.000
TOTAL GRW RUNOFF (CM)                            72.067
TOTAL MOISTURE RETENTION (CM)                     0.000
TOTAL YIELD (CM)                                 72.067
0          -- POLLUTANT MASS DISTRIBUTION IN COLUMN (UG) -- NOTE: IF COMPONENT I
           ---------------------------------------------------------------------
FOR FINAL MASS IN SOIL MOI., ADS. ON SOIL, SOIL AIR, IMMOBIL CEC, COMPLEXED, AN
 ---------------------------------------------------------------------------------
```

UPPER SOIL ZONE:

SUBLAYER 1

SOIL ZONE 2:

SUBLAYER 1

SOIL ZONE 3:

SUBLAYER 1

LOWER SOIL ZONE:

SUBLAYER 1

TOTAL IN GROUNDWATER RUNOFF 3.082E+02

1 -- AVERAGE POLLUTANT CONCENTRATIONS -- NOTE: ONLY NON

UPPER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	1.625E-08
ADSORBED SOIL (UG/G)	2.519E-09
SOIL AIR (UG/ML)	3.847E-09

SOIL ZONE 2:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	9.170E-08
ADSORBED SOIL (UG/G)	1.421E-08
SOIL AIR (UG/ML)	2.179E-08

SOIL ZONE 3:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	2.032E-06

ADSORBED SOIL (UG/G)	3.149E-07
SOIL AIR (UG/ML)	4.834E-07

LOWER SOIL ZONE:

SUBLAYER 1

SOIL MOISTURE (UG/ML)	3.046E-05
ADSORBED SOIL (UG/G)	4.721E-06
SOIL AIR (UG/ML)	7.241E-06
MAX. POLL. DEPTH (M)	4.000E+00

AVE. CONTAMINANT CONCENTRATION IN GROUNDWATER (UG/ML) 1.518E-05

**********EXECUTION COMPLETED**********

FAX

Date 7-18-96

Number of pages including cover sheet

TO: Doug Souchy
Oregon State Hospital

Phone 503-945-2924
Fax Phone 503-945-~~2907~~ 2867

CC: —

FROM: Mike McCann
State of Oregon
Department of Environmental Quality
1102 Lincoln Street,
Suite 210
Eugene, OR 97401

Phone (541) 686-7838
Fax Phone (541) 686-7551

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

* Attached are copies of forms to sign up for DEQ Voluntary Cleanup Program Oversight.
→ Please sign & return.

* Claudia Johansen (541-776-6010 ext 228) will be your project manager & will arrange for Monday's phone meeting.

VOLUNTARY CLEANUP PROGRAM
INTENT TO PARTICIPATE

Identification of Site

Site Name: Oregon State Hospital

Address: 2600 Center St. NE ; Salem

Owner/Operator: State of Oregon

Township:____ Range:____ Section:____ Tax Lot#:____

Estimation of Oversight Needed

Based on your information about the site, what is your initial estimation of the level of oversight needed from the Department:

X Voluntary preliminary assessment - A Preliminary Assessment (PA) is the initial investigation of a site to determine whether a release of a hazardous substance requires further investigation or cleanup to protect public health, safety, welfare, and the environment.

___ Level 1 (simple(cleanup) Level 1 sites are those where: (a) hazardous substances are limited to containers or to the unsaturated soil zone only; (b) the extent and type(s) of contamination is well-defined; (c) there are few contaminants of concern; and (d) the selected treatment option is a conventional technology.

___ Level 2 (moderately complex) or Level 3 (complex) cleanup - This category includes all sites that do not meet Level 1 criteria, particularly those involving groundwater contamination.

___ Unknown at this time because:_____

_____

_____

SUMMARY OF POTENTIAL CONTAMINATION

Briefly describe the source, volume and type of contaminant(s) present on the property (or attach statement): Elevator hydraulic system releases fluid to ground. Estimate Vol. 120 - 140 gal.

Are hazardous substance contaminants present in the groundwater?

____ Yes ____ No _X_ Unknown

Intent to Participate

The undersigned requests oversight by the Department of Environmental Quality (DEQ) of investigation and cleanup activities of possible contamination at the property described above and requests the site be placed on DEQ's list of sites for oversight.

The undersigned intends to negotiate in good faith a written agreement with DEQ to provide for voluntary oversight. However, this Intent to Participate does not constitute such an agreement, and neither DEQ nor the undersigned will be bound to proceed with voluntary oversight unless such an agreement is executed. The agreement will describe the project activities of each party and will require the undersigned to reimburse DEQ for all of its oversight costs.

As DEQ moves sites from the waiting list to active status, DEQ will notify the undersigned in writing. Following receipt of such a notice (or earlier), the undersigned will submit a report to DEQ summarizing existing conditions, activities and status at the site. The undersigned understands that DEQ will move sites from the list to active status based on various considerations, only one of which will be the timing of the original placement of a site on the waiting list.

With this Intent to Participate, the undersigned does not admit or assume liability for investigation or cleanup of the site. In addition, the undersigned may terminate the Intent to Participate at any time.

Please execute this Intent to Participate in the space below and return to :

Kerri L. Nelson
Department of Environmental Quality
Environmental Cleanup Division
1102 Lincoln, Suite 210
Eugene, OR 97401

By:_____ Name:_____

(signature of authorized officer) (print or type)

Title:_____ Company:_____

Date:_____ Telephone:_____

Oregon

March 28, 1996

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

Western Region -
Salem Office

Doug Suchy
Oregon State Hospital
2600 Center Street
Salem, OR 97310

Re: Request for Spill Containment, Cleanup and Spill Report
OERS No. 96-1407
Marion County

Dear Mr. Suchy:

The Department of Environmental Quality received a report of a spill of a hazardous material at the Oregon State Hospital elevators on March 28, 1996. Information indicates that the Oregon State Hospital has been identified as the responsible party. You are requested to take and/or continue all containment and cleanup actions as are possible to prevent the spread of the spill to public waters, groundwater or soils beyond the original spill site.

Oregon Administrative Rules (OAR 340-108-070) states that any person liable for a spill or release or threatened spill or release shall immediately cleanup the spill or release. The Department may require the responsible party to undertake such investigations, monitoring, surveys, testing and other information gathering as the Department considers necessary. In order to assure the proper disposal of the material from the release, it will be necessary for a hazardous waste determination to be conducted. The results of this determination will determine what type of disposal can be allowed for the material that has accumulated as a result of the cleanup of the spill or release.

We are requesting that the hospital take any action necessary to prevent the further release of hydraulic fluid from the elevator system. During your phone conversation with Jim Glass of this office, you indicated that modifications could be made to the elevator that would allow the continued operation of the elevator but would eliminate any further releases. These modifications should be made as soon as possible.

In addition, the hospital should immediately make any attempts possible to recover any of the spilled material. If the spilled material is accessible at any time, particularly if the old equipment is abandoned or removed,

Post-it® Fax Note 7671

To Claudia Johansen	Date 3.12.96	# of pages ▶ 8	
Co./Dept. Mexpus DEQ	From Mike McCorn		
Phone #	Co. Eugene DEQ		
Fax #	Phone #	Fax #	

730 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TDD

the removal of the product should be a priority. Once the initial actions are taken, the hospital should begin to take steps to assess the impacts of the release.

You are also requested to submit a written report. OAR 340-108-040 states that the Department may require a person responsible for a spill or other incident to submit a written report describing the spill or other incident. At a minimum, you should complete the enclosed Spill Report. Other relevant information including, but not limited to, consultant reports and analytical data should also be submitted. In addition, I have enclosed a Spill Report Checklist to ensure that all applicable items are forwarded to the Department. Please direct the spill report to me. I request that the spill report be submitted to me by April 19, 1996.

Responsible parties are also required to pay costs incurred by DEQ for oversight of investigation and cleanup of a spill or release (Oregon Revised Statute 465.255). DEQ costs include direct and indirect costs. Direct costs include site specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ allocable to Department oversight of this cleanup and not charged as direct, site-specific costs. DEQ costs must be paid by check to the Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon, 97204, within forty-five (45) days of issuance of the monthly statement.

Failure to cleanup a release and/or failure to submit a timely cleanup report are Class I violations of the Department's Enforcement Rules and may be referred to our Enforcement Section for formal enforcement action.

If you have any questions about this request, please contact Cheryll Woods at (503) 378-8240 ext 237.

Sincerely,

Cheryll Woods

Cheryll Woods
Environmental Specialist
Hazardous Waste Section

CAW:
x:\cwoods\osh.spl

enc: Spill Report
Checklist

State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY MEMORANDUM

DATE: April 29, 1996

TO: Pat Troxel

FROM: Cheryll Woods

SUBJECT: Spill at the Oregon State Hospital

Attached is the information on a spill that recently occurred at the State Hospital. I believe that we talked to you about it during the initial stages of the event. This is the one where a release had occurred from an elevator shaft and hydraulic fluid was released into the ground below the building.

The Hospital has responded with their report. Basically, they have given us a little more detail on the site and indicated that no cleanup has been done. They have indicated that the contamination is under the building and they are unable to remove it. I believe that this site has gone beyond the initial stages and any cleanup that is done would be in a long term type situation so I am passing this file on to you..

SPILL REPORT ROUTING

Routing	Date
Spill Date	3-28-96
SPIN Entry	4-1-96
Set Up TAS	
Spill Letter Sent	3-28-96
Spill NON Sent	—
Spill Report Received	4-16-96
Enforcement Referral	—
SPIN Update	
Cleanup Staff Review	
Mgr. Review	5/1 5/6
Referred To ~~Kerri Nelson~~	
Close SPIN	
Final Invoice Sent	
Support Staff Make File	

OERS #: 96-1407

RP or Site Name : OR State Hospital

County : Marion

TAS # : _____

Spill Coordinator:

C Woods

Phone: 378-8240 x237

\SPILLROU.SLP

DEQ Spill/Release Form

NOTIFICATION INFORMATION * OERS Number 96-1407 OERS Contact _____

Report Status - Cancelled____ Completed____ Ongoing X Referred____

* DEQ Person Receiving Report J. Taylor Date Reported 3-28-96 Time Reported _____

Reporting Agency _____ Phone _____ Office Reference _____

SOURCE Unknown___ Multiple (also check all that apply)___ AST X Bulk Petroleum Storage___ Construction Site___ Container___
Drug Lab___ Drum___ Electrical Equipment___ Farm___ Industrial Plant___ Heating Oil AST___ Heating Oil UST___ Landfill___
Mine___ Motor Vehicle - [Private]___ [Commercial]___ [Tank Truck]___ Pipeline___ Railway___ Sewer Bypass___ UST___
Vessel - [Cargo]___ [Tanker]___ [Fishing]___ [Public]___ [Recreational]___ [Barge]___ Well___ Other (describe below)___

*CAUSE Unknown___ Multiple (also check all that apply)___ Abandonment/Dumping___ Collision___ Derailment___ Equipment Failure X
Fire___ Human Error___ Vandalism___ Vessel - [Grounding]___ [Sinking]___ Other (describe below)___

ACTIVITY Unknown___ Bilge Pumping___ Bunkering___ Dam Construction/Maint.___ Lightering___ Mining___
Material Handling - [Application]___ [Storage]___ [Transfer]___ [Transport]___ Refueling___ Other (describe below)___

WEATHER Cold___ Fog___ Hot___ Rain___ Snow/Ice___ Other (describe below)___

* Release Start Time/Date 3-26-96 * Release Stopped Time/Date (if different) 3-28-96

Describe (additional information on Source, Cause, Activity and Weather) Small hole in Elevator hydraulic system released fluid

*REPORT REQUIRED? Yes X No____ Date Required _____ Date Received 4-16-96

NEAREST STREAM AND RIVER (Watershed Information) Mill Creek 1mi away flows to Willamette

*SPILL SITE OR State Hospital Contact Doug Suchy Phone 945-2924

Address 2600 Center St. NE City Salem Zip 97310 County Marion

Where on site? Building # 33

Directions if no address _____

RESPONSIBLE PARTY St of OR Contact Doug Suchy Phone 945-2924

Address _____ City/State _____ Zip _____

Mailing Address _____ City/State _____ Zip _____

RP Notified? Yes___ No___ Assumed Responsibility? Yes___ No___ Contractor Hired? Yes___ No___

CLEANUP CONTRACTOR _____ Field Rep _____ Phone _____

Address _____ City/State _____ Zip _____

ON-SITE CONTACT _____ Affiliation _____ Phone _____

Address _____ City/State _____ Zip _____

*SUBSTANCE(S) RELEASED Unknown___ Multiple (also check all that apply)___ Animal Waste___ Chemical Product___
Drug Lab Waste___ Food Waste___ Hazardous Waste___ Herbicide___ Insecticide___ Medical Waste___ Oil - [Crude]___ [Diesel]___
Oil - [Fuel]___ [Gasoline]___ [Heating]___ [Hydraulic] X [Lube]___ [Transformer]___ [Waste Oil]___ Oil - [Unknown]___ PCBs___
Radioactive___ Sewage___ Solid Waste___ Wastewater (non-sewage)___ Other (describe below)___

DESCRIPTION - Name, Volume (actual/potential) and Physical State (gas/liquid/solid/semi-solid) for each substance:

120 - 140 gallons

UPDATES:

◂ MORE ON BACK ▸

LOG NBR: 24-96-

UST FAC NBR:

SITE NAME: Oregon

SITE ADDRESS:

SITE CITY: Salem

SITE COUNTY: Marion

PROJECT MANAGER:

D UST
LATED UST
IL TANK

☑ HSRAF
☐ FINANCIAL ASST

TART ☐ INVOICE STOP
☐ NFA SENT

REPORTED BY

NAME:

COMPANY:

ADDRESS:

CITY:

STATE: PHONE:

INVOICE CONTACT

NAME:

COMPANY:

ADDRESS:

CITY: ZIP:

STATE: PHONE:

DATE DISCOVERED: 26th

☐ EMERGENCY RESP.

☐ ENFORCEMENT

CONFIRMATION:

☐ SI) STAFF
☐ LD) LAB:DEQ
☐ LR) LAB:RP
☐ LO) LAB:OTHER
☐ RR) RP REPORT
☐ CN) CONTRACTOR
☐ OT) OTHER

DISCOV

☐ RM
☐ DC
☐ CP
☐ IC
☐ SA
☐ T
☑ O

LEAK under

- Ebate Hospital Call-ors Doug Euchi - Ebate Hospital
140 gallons of Hydraulic Fluid lost.
- elevators shut down
- Above ground storage tank - Cylinder is underground.
Elevato
<10%

- Plan to call the elevator company to see about getting the elevators back into service
Want to leave old system in place

SPILL REPORT

General Information **WR Spill No:** 96-1407

Company/Individual Name Oregon State Hospital
Address 2600 Center Street NE. Salem, OR 97310

Contact Person at Company (if applicable) Doug Suchy
Phone Number 945-2924
Location of Spill (if different from address above):
Building #33

(Please provide a map of the site showing area(s) where spill occurred, areas sampled (if any), location of road and waterways).

Spill Information
(Please complete all applicable sections)
1. General Information:
Date and Time of Spill 3/26/96 - Time unknown
Date and Time Spill was reported 3/26/96 - 11:50 a.m.
Person(s) reporting spill Doug Suchy
DEQ Contact Person Gil Hangraves, Bruce DeCillia, Patty, John Taylor, Kerri Nelson Jim Glass: Jim Pann on 3/29/96. Letter from Cheryll Woods received 3/29/96.

2. Name, Quantity and Physical State (solid, liquid, gas) of material released:
Extreme Pressure Hydrolic Fluid, Liquid 120 - 140 gallons
(Please attach a material safety data sheet (MSDS))

3. How did the release occur:
It is assumed that a small hole developed in the Hydrolic Elevator jack casing. Upon operation of the elevator, fluid was injected into the earth.

4. Which of the following Public Agencies were notified:

X	DEQ	X	EPA
	State Health Dept.		State Fire Marshall
X	Others (please list	Volunteer Cleanup Section - Oregon Emergency Response	
	EMD		

5. Which, if any, of the above agencies responded to the spill?
None

Site Information

1. Adjacent land uses include (check all that apply):
X Residential ____ Commercial ____ Light Industrial
____ Heavy Industrial ____ X Agricultural
X Other (please specify) "I" occupancy State Penitentiary

2. What is the population density surrounding the site: Very light in Agricultural area to High density in State Penitentiary.
3. Is the site secured by fencing or other means? Yes or No No
4. Soil types (check all that apply):

X alluvial ____ sandy ____ silt ____ clay
____ silty loam ____ bedrock

5. Describe site topography:
Flat

6. Estimated volume of contaminated soil removed: None

7. Estimated volume of contaminated soil in place: 120 - 140 gallons

8. Name and distance to nearest surface water: (Note: Include ditches that discharge to a creek, stream, or river. Please locate ditches, creeks, streams, and rivers on maps).
Mill Creek (Name of water body) 1 Mile (Distance)

9. Has the release reached the surface water identified above?:
Yes or (No) (please circle)

10. Does the release have the potential to reach the surface water identified above? Yes or (No) (please circle)

11. Depth to nearest aquifer: Unknown

12. Is nearest aquifer potable? Yes or (No) (please circle)

13. Has the release impacted the nearest aquifer? Yes or (No)
Explain:

14. Latitude 45 n and Longitude 122 of release site.

15. Release or potential release to the air exists: Yes or (No)
Explain:

16. Other Impacts from release (i.e. emergency evacuation, fish kill) Yes No N/A (Please circle). Describe n/a

Sampling Data

1. Was sampling conducted? Yes or (No.)

2. Was a hazardous waste determination completed on the material from the spill cleanup? (Yes) or No (please circle)

3. Based on the determination, is the spill material a hazardous waste? Yes or (No) (please circle)

4. Were samples of contaminated soil collected? Yes, (No) N/A. **If yes, please attach sample data and indicate on site map where the sample(s) was (were) collected.**

5. Were samples of contaminated water collected? Yes, (No) N/A
If yes, please attach sample data and indicate on site map where the sample(s) was (were) collected.

6. Were samples collected to show that all contamination had been removed? Yes, (No) N/A
If yes, please attach sample data and describe where final samples were collected and rationale for sampling method selected.

_____
_____
_____
_____

7. Was contaminated soil or water disposed of at an off-site location? Yes, No, (N/A)
If yes, provide the name and address of the facility and attach any applicable receipts.

_____ _____
Facility Name Facility Contact

_____
Street Address City ST ZIP

_____
Phone Number

8. Is contaminated soil or water being stored and/or treated on-site? Yes, No, (N/A)
If yes, please describe storage and/or treatment area and methods utilized (attach additional sheets if necessary):

_____
_____
_____
_____

9. Has all contamination been removed from the site?
Yes, (No) N/A
Describe: _____
_____
_____
_____

Site Cleanup

1. Was site cleanup performed? Yes or (No.) If No, please explain.
Explanation: Almost impossible without major damage to building.

2. Who performed the site cleanup?

N/A
Name Company

Street Address City St Zip

Phone Number Owner/Contractor/other (specify)

3. Please provide a complete narrative of the cleanup activities including items such as who were the first responders and what actions were taken, the date and time actions were first taken to contain and cleanup the spill, the volume of contaminated soil and water removed (attach additional sheets or contractor report if necessary or more convenient):

Plan has not been developed.

SPILL REPORT CHECKLIST

To ensure that you have gathered all the information requested by the Department in the Spill Report, please complete the following checklist.

_____ Completed Spill Report attached.

_____ A map of the site, showing roads, waterways, spill site and sampling points attached.

_____ Material Safety Data Sheet (MSDS) for spilled material attached.

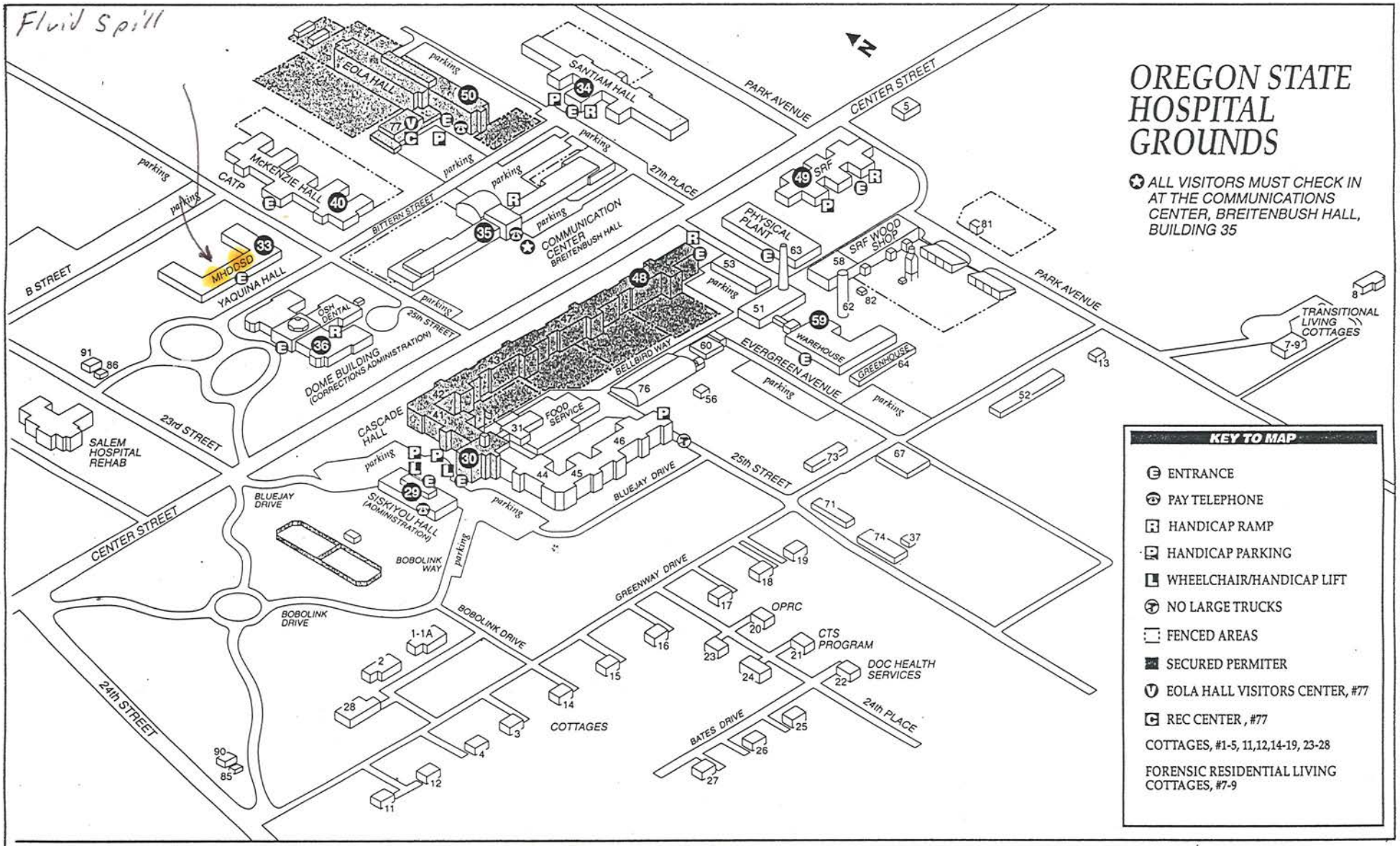
_____ Sampling data attached.

_____ Receipts for soil and/or water disposal, if any, attached.

_____ Contractor reports, if any, attached.

Mill Creek ↓ ≈ 1mi

Fluid Spill



MAIN BUILDINGS

- 29 Oregon State Hospital Administration
- 30 Forensic Residential Treatment Services Administration
- 33 Mental Health & Developmental Disability Services Division
- 34 Geropsychiatric Treatment Services
- 35 Oregon State Hospital Communications Center
- 35 Adult Treatment Services
- 36 Department of Corrections Administration Offices
- 40 Child & Adolescent Treatment Services
- 40 CAGTS Administration
- 48 Forensic Hospital Treatment Services Administration
- 49 Oregon State Hospital/Salem Rehabilitation Facility
- 50 Forensic Hospital/Forensic Residential Treatment Services
- 59 Warehouse/Shipping & Receiving

OSH-STK-14442

Material Safety Data Sheet

CHEVRON Hydraulic Oil AW ISO 32 CPS255675

Print Date: July 21, 1992

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS.

This revision updates Section 1 (Product Identification), Section 5 (Fire Fighting Measures), and Section 6 (Special Precautions).

1. PRODUCT IDENTIFICATION

CHEVRON Hydraulic Oil AW ISO 32

PRODUCT NUMBER(S): CPS255675
PRODUCT INFORMATION: (800)582-3835

Revision Number: 1 Revision Date: 06/03/92 MSDS Number: 004613
NDA - No Data Available NA - Not Applicable

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by the Chevron Environmental Health Center, Inc., P.O. Box 4054, Richmond, CA 94804.

2. FIRST AID MEASURES

EMERGENCY NUMBER (24 hr): (800)457-2022 or (510)233-3737 (International)
EYE CONTACT:
No first aid procedures are required. However, as a precaution flush eyes with fresh water for 15 minutes. Remove contact lenses if worn.
SKIN CONTACT:
Note to Physician: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended. No first aid procedures are required. As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.

INHALATION:
Since this material is not expected to be an immediate inhalation problem, no first aid procedures are required.
INGESTION:
If swallowed, give water or milk to drink and telephone for medical advice. Consult medical personnel before inducing vomiting. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)

EYE CONTACT:
This substance is not expected to cause prolonged or significant eye irritation. This hazard evaluation is based on the data from similar materials.
SKIN IRRITATION:
This substance is not expected to cause prolonged or significant skin irritation. This hazard evaluation is based on data from similar materials.
DERMAL TOXICITY:
The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin. This hazard evaluation is based on data from similar materials.
RESPIRATORY/INHALATION:
The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if inhaled. This hazard evaluation is based on data from similar materials.
INGESTION:
The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if swallowed. This hazard evaluation is based on data from similar materials.

4. PROTECTIVE EQUIPMENT

EYE PROTECTION:
No special eye protection is usually necessary.
SKIN PROTECTION:
No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing.
RESPIRATORY PROTECTION:
No special respiratory protection is normally required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards, the use of an approved respirator is required.
VENTILATION:
Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

5. FIRE FIGHTING MEASURES

SPECIAL NOTES: Leaks/ruptures in high pressure systems using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs.)
FLASH POINT: (COC) >374F (190C)
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NA Upper: NA
EXTINGUISHING MEDIA:
CO2, Dry Chemical, Foam and Water Fog.
FIRE FIGHTING PROCEDURES:
For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor and may produce oxides of sulfur and phosphorus. Incomplete combustion can produce carbon monoxide.
NFPA RATINGS: Health 0; Flammability 1; Reactivity 0; Special NDA;
(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association.

6. STORAGE, HANDLING, AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
NDA.
STABILITY:
Stable.

HAZARDOUS POLYMERIZATION:
Polymerization will not occur.
INCOMPATIBILITY:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
SPECIAL PRECAUTIONS:
DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

DO NOT weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. CAUTION! Do not use pressure to empty drum or drum may rupture with explosive force.

7. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.
APPEARANCE: Pale yellow liquid.
BOILING POINT: 360 - 540+C
MELTING POINT: NA
EVAPORATION: NA
SPECIFIC GRAVITY: 0.87 @ 15.6/15.6C
VAPOR PRESSURE: NA
PERCENT VOLATILE (VOLUME %): NA
VAPOR DENSITY (AIR=1): NA
VISCOSITY: 28.8 cSt @ 40C (Min.)

8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (202)483-7616
SPILL/LEAK PRECAUTIONS:
This material is not expected to present any environmental problems other than those associated with oil spills.

Stop the source of the leak or release. Clean up releases as soon as possible. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.
DISPOSAL METHODS:
Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m3, the OSHA PEL is 5 mg/m3.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

PERCENT/CAS#	COMPONENT/REGULATORY LIMITS
100.0 %	CHEVRON Hydraulic Oil AW ISO 32
CONTAINING	
> 99.0 %	LUBRICATING BASE OIL 5 mg/m3 mist ACGIH TWA 10 mg/m3 mist ACGIH STEL 5 mg/m3 mist OSHA TWA

The BASE OIL may be a mixture of any of the following: CAS 64741884, CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525, CAS 64742536, CAS 64742547, CAS 64742627, CAS 64742650, or CAS 72623837.

< 1.0 %	ADDITIVES

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	CPS - CUSA Product Code
CC - Chevron Chemical Company	CAS - Chemical Abstract Service Number

10. REGULATORY INFORMATION

DOT SHIPPING NAME: NOT DESIGNATED AS A HAZARDOUS MATERIAL BY THE FEDERAL DOT
DOT HAZARD CLASS: NOT APPLICABLE
DOT IDENTIFICATION NUMBER: NOT APPLICABLE

SARA 311 CATEGORIES:

1.	Immediate (Acute) Health Effects:	NO
2.	Delayed (Chronic) Health Effects:	NO
3.	Fire Hazard:	NO
4.	Sudden Release of Pressure Hazard:	NO
5.	Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

01=SARA 313	02=MASS RTK	03=NTP Carcinogen
04=CA Prop. 65	05=MI 406	06=IARC Group 1
07=IARC Group 2A	08=IARC Group 2B	09=SARA 302/304
10=PA RTK	11=NJ RTK	12=CERCLA 302.4
13=MN RTK	14=ACGIH TWA	15=ACGIH STEL
16=ACGIH Calculated TLV	17=OSHA TWA	18=OSHA STEL
19=Chevron TWA	20=EPA Carcinogen	21=TSCA Sect 4(e)
22=TSCA Sect 5(a)(e)(f)	23=TSCA Sect 6	24=TSCA Sect 12(b)
25=TSCA Sect 8(a)	26=TSCA Sect 8(d)	28=Canadian WHMIS
29=OSHA CEILING	30=Chevron STEL	

The following components of this material are found on the regulatory lists indicated.

LUBRICATING BASE OIL
is found on lists: 14,15,17,

11. TOXICOLOGICAL INFORMATION

EYE IRRITATION:
No product toxicology data available. The hazard evaluation was based on data from similar materials.

SKIN IRRITATION:
No product toxicology data available. The hazard evaluation was based on data from similar materials.

DERMAL TOXICITY:
No product toxicology data available. The hazard evaluation was based on data from similar materials.

RESPIRATORY/INHALATION:
No product toxicology data available. The hazard evaluation was based on data from similar materials.

INGESTION:
No product toxicology data available. The hazard evaluation was based on data from similar materials.

12. ADDITIONAL HEALTH DATA

ADDITIONAL HEALTH DATA COMMENT:
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Oregon
John A. Kitzhaber, MD, Governor

Department of Environmental Quality
NWR Gresham Office
1550 NW Eastman Pkwy Ste 290
Gresham OR 97030
(503) 667-8414
Fax: (503) 674-5148

May 11, 2011

OREGON STATE HOSPITAL
DEPT OF HUMAN SERVICES, PHYSICAL PLANT
SALEM, OR 97301

Re: Oregon State Hospital
File No.: 24-09-0826

Dear Oregon State Hospital:

The Department of Environmental Quality has received a report and Evren Northwest, Inc. certification concerning the heating oil underground storage tank (HOT) assessment and/or cleanup conducted at 2600 Center Street NE, in Salem, Oregon.

Evren Northwest, Inc. was licensed to provide heating oil tank services and has certified that the cleanup has met the Department's requirements. The Department has registered this report and certification and closed its file on the project.

The decision to register the report and certification and to close the Department's file will no longer apply if new or undisclosed facts show that the project does not comply with the rules governing heating oil tank cleanups.

Although the site cleanup has met the Department's requirements, if petroleum contamination remains on your property you are required by state law (ORS 105.464) to provide potential buyers a disclosure statement that includes information regarding the remaining petroleum contamination on your property.

We recommend that you keep a copy of this information with the permanent property records.

Your efforts to comply with Oregon's environmental rules and regulations to ensure that your heating oil tank has been adequately addressed have been appreciated. Proper decommissioning and cleanup helps ensure protection of the environment from future heating oil tank leaks and ensures that the heating oil does not adversely impact human health or the environment. If you have any questions, please feel free to contact the HOT Program at (503) 667-8414 ext. 55026.

Sincerely,

Bruce Gilles, Manager
HOT Program

cc: Contractor
LustHotSP.doc

Oregon Department of Environmental Quality

Heating Oil Tank

Summary Information

General Site Information

24-09-0826

Site Name:	Heating Oil Tank
Address:	2600 Center Street NE SALEM, 97301
County:	MARION
Site Type:	Risk Based Standards
Project Manager	N/A - Project Completed.

Basic Incident Information

Received Date:	08/28/2009
Status:	CLOSED
Tank Type:	Home Heating Oil Tank
File Status:	Certification
UST Facility Id:	

Assessment Information

Cause of Release:	OVERFILL	**Source of Release:**	DELIVERY PROBLEM	**Discovery Method:**	SITE ASSESSMENT

Media Effected	**Contaminants Released**
>Soil	>Heating Oil

Management Information

Release Stopped Date:	09/09/2009	**Cleanup Start Date:**		**Cleanup End Date:**	05/11/2011

Work Reported Information

Work Reported	Reported Date
Risk Based Evaluation	5/3/2011

Site Documents

Click the link to view the document.

File Name	Category	File Size MB	Upload Date
HOTS24-09-0826.pdf	Closure Letter	0.0387	5/16/2011

Oregon Department of Environmental Quality
Headquarters: 811 Sixth Ave., Portland, OR 97204-1390
phone: 503-229-5696 or toll free in Oregon 800-425-4011
TTY: 503-229-6993 FAX: 503-229-6124

The Oregon Department of Environmental Quality is a regulatory agency authorized to protect

Oregon's environment by
the State of Oregon and the Environmental Protection Agency.

DEQ Web site privacy notice

Oregon Department of Environmental Quality

OREGON STATE HOSPITAL

Summary Information

General Site Information

24-89-4017

Basic Incident Information

Site Name:	OREGON STATE HOSPITAL	**Received Date:**	03/13/1989
Address:	2600 CENTER ST NE	**Status:**	CLOSED
	SALEM, 97310	**Tank Type**:	Regulated Tank
County:	MARION	**File Status:**	No Further Action
Site Type:	Generic Remedy	**UST Facility Id:**	10761
Project Manager	N/A - Project Completed.		

Assessment Information

Cause of Release:	NOT REPORTED	**Source of Release:**	TANK	**Discovery Method:**	DECOMMISSIONING

Media Effected	**Contaminants Released**
>Soil >FreeVapor >FreeProduct	>LeadedGas

Free Product Removed	YES	**Free Vapor Removed**	YES	**Delineate Soil**	YES
Delineate Ground Water	YES	**Soil Delineated**	YES	**Groundwater Delineated**	YES
Compliance Monitoring	YES	**CAP Requested**	YES	**CAP Submitted**	YES

Management Information

Release Stopped Date:	03/14/1989	**Cleanup Start Date:**	03/08/1992	**Cleanup End Date:**	07/20/2000

Work Reported Information

Work Reported	Reported Date
Low Impact Evaluation	3/21/2000
Site Assessment	7/15/1999
Groundwater Investigation	6/23/1999
Other	10/27/1994
Corrective Action Plan	10/27/1994
Groundwater Monitoring	5/23/1994
Groundwater Monitoring	2/25/1994
Groundwater Monitoring	7/6/1993
Site Assessment	4/15/1993
Groundwater Monitoring	2/17/1993
Groundwater Monitoring	9/3/1992
Site Assessment	2/14/1992
Groundwater Monitoring	2/14/1992
Site Assessment	10/16/1989

Work Reported Information

Site Assessment	3/14/1989
Tank Decommissioning	3/14/1989
Initial Response	3/13/1989

Oregon Department of Environmental Quality
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the State of Oregon and the Environmental Protection Agency.

DEQ Web site privacy notice

LUST - OREGON STATE HOSPITAL MARION
Salem 24-89-4017

VOLUME 2

SEE ALSO:24-91-4255 OREGON STATE HOS
24-99-4016 OREGON STATE HOSPITAL HO
24-99-4050 OREGON STATE HOSPITAL II

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

March 11, 1999

B. P. Jacobsen, Director
Support Services
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Information Request Letter

Dear Mr. Jacobsen:

I have recently been assigned as the project manager for the above referenced site. The source of the release was a 240-gallon gasoline tank used to fuel a standby emergency generator. It appears some 240 gallons or more was lost in a very short period of time, on or before March 13, 1989. I have reviewed the file and have the following observations and requests for additional information:

Submitted 4-9-99

1. In a list of background documents in the June 17, 1993, "Corrective Action Plan" by REA Tech Management, there is reference to an OMNI Environmental Services report of October 16, 1989, entitled "Site Characterization and Remediation Design for Gasoline Contamination at Oregon State Hospital, Building # 40. The Department has not received a copy of this report.

See Reports 10-16-89 2-14-92 by Omni Submitted 4-9-99

2. Apparently, groundwater extraction and treatment occurred between April 1989 and September 1991 out of two recovery wells (wells that eventually became MW-1 and MW-2). There is no report in the file identifying the treatment facility design or any information on the facility operation and effectiveness over this period of more than two years.

3. On February 17, 1994, we received an REA groundwater monitoring report for samples apparently collected February 8, 1994. The report did not contain a Chain-of-

Custody/Request for Analysis form documenting sample collection. The report suggests that samples were collected from monitoring wells 1 to 4. When the data was displayed in Table 1 of the "Closure Report" dated September 15, 1994, the data was assigned to monitoring wells 2 to 5. This discrepancy between reports needs to be explained and clarified.

4. On May 15, 1994, an REA groundwater monitoring report was sent in that again lists monitoring wells 1 to 4. When the data was displayed in Table 1 in the September 15, 1994, "Closure Report" the data was assigned to monitoring wells 2 to 5. This discrepancy between reports needs to be explained and clarified. At this time, DEQ is not inclined to view either sampling event as valid.

5. On October 20, 1994, you forwarded a September 15, 1994, REA report entitled "Closure Report – Oregon State Hospital." Attachment 4 in that report was a June 17, 1993, REA report entitled "Corrective Action Plan – Oregon State Hospital." The following pages or documents were missing from the Corrective Action Plan (CAP):

   a. Page 15 was missing from the report;

   b. There was no Chain-of-Custody/Request for Analysis form for the sample (92VOIIA) collected associated with the east-west trench (see Appendix VI);

   c. There was no Chain-of-Custody/Request for Analysis form for the five samples (VO7B1, VO7B2, VO7B3, VO7B4 & VO7B5) collected associated with the boring drilled through the basement floor (see Appendix VII); and

   d. There was no Chain-of-Custody/Request for Analysis form for the three samples (MW5-3, MW5-4 & MW5-5) collected associated with installation of monitoring well #5 (see Appendix VIII).

6. It does not appear the June 17, 1993, Corrective Action Plan was ever submitted for DEQ review and approval on or after June 17, 1993. Consequently, DEQ never reviewed or commented on the plan before the monitoring wells were decommissioned in August 1994. What is of significant concern to us is that the Corrective Action Plan recommended additional remediation in the form of five soil vapor extraction wells and one groundwater extraction well to lower the groundwater table during remediation. Additional remediation was recommended because of the continuing groundwater contamination in (former) MW-1 and MW-2. It does not appear these recommendations were ever implemented.

7. On October 20, 1994, you submitted REA's September 15, 1994, "Closure Report" and requested DEQ to review and close the file. We are disturbed to learn that the groundwater

monitoring wells were decommissioned on August 8, 1994, a full month before the closure report was completed and two months before the report was forwarded to DEQ. It is highly unusual for monitoring wells to be decommissioned before DEQ determines that a cleanup has been completed to appropriate environmental standards and issues a No Further Action letter. Based on the incomplete record in the file, it does not appear the numeric cleanup standards have been met, most specifically, four quarters of groundwater data demonstrating compliance with the numeric standards.

8. The September 15, 1994, closure report refers to an October 21, 1993, groundwater sampling event. No Chain-of-Custody/Analysis of Samples form or lab sheets were supplied to document this work. Yet, information was included in Table 1.

9. OMNI Environmental's February 14, 1992, "Site Characterization Report" states 2 cubic yards of petroleum contaminated soil were treated on-site. No documentation on its final disposal has been provided. REA Tech Management's April 15, 1993, "Investigation for Soil and Groundwater Cleanup" report describes the excavation of two exploratory trenches up to 15 feet in depth (an east-west trench and a north-south trench). Petroleum contaminated soil was encountered. No documentation was provided as to the final disposition of this contaminated material.

10. REA Tech Management's April 15, 1993, report discusses encountering "pea gravel" in the east-west trench at 11 feet and speculates that it may be backfill for a sanitary sewer line. REA Tech Management's June 17, 1993, Corrective Action Plan speculates that this "pea gravel" may actually be evidence of a dry well installed at the time the hospital was built in 1947. Figure 9 is a copy of the original dry well design drawing. If either of these hypotheses is correct, it may explain the apparent rapid dissipation of some 250 plus gallons of gasoline via a preferential pathway. It seems that additional investigation should have occurred immediately to rule out these potential preferential pathways.

11. It is likely that additional data is needed to document that the hazardous constituent EDB complies with the numeric groundwater standards. The last time it was tested for in MW-2 on January 13, 1992, it slightly exceeded the standard. No additional testing for EDB and EDC has been done since that sampling event.

In order for DEQ to continue and complete its review, please provide information in response to items 1 through 10 by no later than April 5, 1999. After reviewing the additional documentation, DEQ will determine if additional investigation is necessary. At the moment, and without the benefit of the requested information, DEQ currently believes that additional groundwater investigation will be needed. As it stands, the record does not appear to support the conclusion that 240 gallons or more of gasoline contamination has been removed from the environment.

On a related matter, on August 28, 1991, Dwight Linville (378-2361) reported a diesel release from a pipeline leak. The leak was apparently discovered by a contractor by the name of PEMCO who worked on a generator tank the previous day, August 27, 1991. We sent a release acknowledgment letter on August 29, 1991, requesting that an investigation be initiated and to report the investigation and cleanup results to DEQ. The file (USTC No. 24-91-4255) contains no follow-up information from the hospital. **By April 5, 1999, please provide DEQ with any information you have regarding investigation and cleanup of this reported diesel release.**

If there are any questions regarding the above matters, please feel free to contact me in Salem at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region – Salem Office

RPR:gad
x:/rreiter/24-89-4017.inforeq

cc: Charles D. Getter
REA Tech Management
200 Hawthorne Avenue SE Suite C-320
Salem, OR 97301

Michael Greene, Project Manager
OMNI Environmental Services, Inc.
PO Box 743
Beaverton, OR 97075

ROUTE	
STEVE G	
GIL H	
JOHN B	
BART C	
JOE P	
DAVE R	
JOHN T	
CHERYLL W	
KERRI N	
STEVE F	
ALICIA V	
MERLYN H	
VIRGINIA E	
JIM G	
HOLLY H	
JIM P	
BRUCE S	
CHUCK D	
BOB B	
BRUCE D	
MONTY M	
JUANITA R	
NANCY S	

ROUTE	
BARBARA B	
JACK A	
DAN B	
JENNIFER C	
BOB D	
TOM F	
LINDA F	
MARK H	
TIM M	
GARY M	
GARY A	
JIM B	
STEVE C	
CLAUDIA D	
PATTY H	
BOB H	
BARBARA M	
FRITZ S	
BERTA B	
DONNA H	
KAREN W	

LOCATION	PROG	FILE
BENTON	HW	CORRES
LANE	AQ	PERMIT
LINCOLN	WQ	DATA
LINN	SW	CONFIDENTIAL
MARION	SS	DEAD
POLK	AW	PORTABLE-AQ
YAMHILL	WW	PROGRAM
ADMIN	STW	SPECS
COOS	GNDW	PEND
CURRY	SLDG	MOBILE-WQ
DOUGLAS	LUST	SOURCE TEST
JACKSON	UST	
JOSEPHINE	ECD	

SPECIAL INSTRUCTIONS:

FILE NAME: Oregon State Hospital

LOCATION Marion

PERMIT/FILE NO: 24-89-4017

Oregon

DEPARTMENT OF
HUMAN
RESOURCES

MENTAL HEALTH AND
DEVELOPMENTAL
DISABILITY
SERVICES DIVISION

Oregon State Hospital

October 20, 1994

Jim Parr
Oregon Department of Environmental Quality
Western Region - Salem
750 Front St. N.E., Suite 120
Salem, Oregon 9710

Dear Mr. Parr:

This is to notify you that we are requesting closure on the "40 Building Underground Storage Tank" project.

If there are any questions, please contact Doug Suchy at 945-2924.

Sincerely,

B. P. Jacobsen, Director
Support Services

BPJ:kh
Enclosure

Barbara Roberts
Governor

2600 Center Street NE
Salem, OR 97310
(503) 945-2800
FAX (503) 945-2807

REA

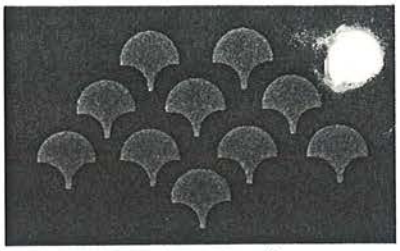
CLOSURE REPORT
LUST #24-89-4027
Oregon State Hospital
Salem, Oregon
Marion County

September 15, 1994

Prepared for

Oregon State Hospital
2600 Center St. NE
Salem, Oregon 97301

200 Hawthorne Avenue S.E., Suite C-320
Salem, Oregon 97301 • (503) 370-7230



REA

Tech Management, Inc.

September 15, 1994

Mr. Jim Parr
Oregon Department of Environmental Quality
Western Region - Salem
750 Front Street NE, Suite 120
Salem, Oregon 97310

RE: REQUEST FOR CLOSURE
LUST #24-89-4017
Oregon State Hospital
25th Street NE
Salem, OR 97310
Marion County

Dear Mr. Parr:

Please find enclosed a Request for Closure for the petroleum hydrocarbon release and subsequent clean up of the aerially-limited soil and groundwater impacted by releases from underground storage tanks, LUST #24-89-4017, located at the Oregon State Hospital, 901 25th Street NE in Salem, Oregon. The information gathered from the drilling and sampling of the soil borings, monitoring wells, and previous activities on the subject site and adjacent sites were combined together with the information gathered from research of pre-existing reports on the geology and hydrogeology of the area into a Corrective Action Plan presenting the results of the field exploration, laboratory analyses and recommendations for remediation.

This Request for Closure has been prepared in accordance with DEQ cleanup rules for leaking underground storage tank systems (OAR 340-122-250).

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this project, please call.

Sincerely,
REA Tech Management, Inc.

Anthony R. Rago
Project Manager

Charles D. (Chuck) Getter Ph.D.
Environmental Specialist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

1.0 INTRODUCTION

This report is a Request for Closure in an Oregon-DEQ recommended format (OAR 340-122-250) for the closure of remediated pockets of gasoline contamination near Building 40 at the Oregon State Hospital (OSH) in Salem, Oregon. The source of contamination was an approximate 250 to 500 gallon leak from an underground storage tank (UST) which fueled an emergency electric generator. The leak occurred in March of 1989.

In December 1992, REA Tech Management, Inc. (REA) was asked to address this issue by OSH. All work contracted by OSH since that time to date was reported to DEQ in a Corrective Action Plan (CAP) dated June 15, 1993 (Attachment 5). Quarterly groundwater monitoring events since January 28, 1993 to date have been recorded and submitted to OSH.

1.1 PROGRESS SUMMARY

Since preparation of the CAP, four wells were installed to monitor pockets of contamination. These wells were sampled for an additional four quarters above and beyond the three occasions reported in the CAP.

The following is a summary of the four additional quarters of monitoring and the decommissioning of the monitoring wells. The wells were sampled on May 23, 1993, October 21, 1993, February 8, 1994 and May 11, 1994.

After measuring the static water level of the wells and before sampling, REA personnel purged at least three well volumes of water using a 1 3/4" disposable bailer. A new disposable bailer and new rope were used for each sampling event which limited the chance for contamination of the wells. The samples were placed into clean VOA vials with minimum agitation, the sampling technician also assured that no head space was left in the vials. The samples were placed on ice and then stored at 4°C in a refrigerator until analyzed. The samples were labeled in the field with unique sample identification numbers. The sample identification numbers were included on the chain-of-custody form and sample analysis report (Chain-of-Custody forms and Sample Results, Attachment 1).

All samples were analyzed by EPA Method 8020 for BTEX. The Maximum Contaminant Levels in groundwater allowed by DEQ are as follows (OAR 340-122-090):

Benzene	5 ppb
Toluene	2,000 ppb
Ethylbenzene	700 ppb
Xylenes	10,000 ppb

Sample results and dates for the four additional quarters of monitoring are summarized in Table 1 below.

TABLE 1 SUMMARY OF ANALYTICAL RESULTS

MAY 24, 1993				
Well	Benzene	Toluene	Ethylbenzene	Xylene
2	12.50	ND	ND	ND
3	ND	ND	ND	1.51
4	ND	ND	ND	ND
5	1.03	ND	ND	.68
OCT. 21, 1993				
Well				
2	2.37	104.62	58.91	263.84
3 DRY				
4 DRY				
5 DRY				
FEB. 8, 1994				
Well				
2	ND	ND	ND	ND
3	ND	ND	ND	ND
4	ND	ND	ND	ND
5	ND	ND	ND	ND
MAY 11, 1994				
Well				
2	ND	ND	ND	ND
3	ND	ND	ND	ND
4	ND	ND	ND	ND
5	ND	ND	ND	ND

On June 14, 1994, REA was requested to provide formal inclusive closure of Building 40 from DEQ, dispose of purged monitoring well water, and decommissioning the four wells.

On August 8, 1994, REA contracted with Crisman Drilling, Inc. of Tualatin to decommission the monitoring wells. All decommissioned monitoring well materials were disposed of at Hillsboro Landfill in Hillsboro, Oregon (see Attachment 2).

On August 8, 1994, REA contracted with Spencer Environmental, Inc. to dispose of the purged monitoring well water properly (see Attachment 3).

2.0 CONCLUSIONS

At this time, REA Tech Management, Inc, acting for Oregon State Hospital, respectfully requests closure from DEQ regarding the leaking underground storage tank and soil clean up of remediated pockets of gasoline contamination near Building 40 at the Oregon State Hospital in Salem, Oregon.

3.0 LIMITATIONS

Subject to the Terms and Conditions signed in connection with the preparation of this report, all opinions which we given verbally and in written form are based on the information collected during our survey, our present understanding of the site conditions and our professional judgement in light of such information at the time of preparation of this opinion. We are not responsible for the accuracy of information provided by individuals or entities which are used by others in connection with the preparation of the opinion. This report is an opinion work, and no warranty is either expressed, implied or made as to the conclusions, advice and recommendations offered in this report. Neither this opinion nor any extract herefrom to reference hereto shall be furnished to, or quoted to any other person, firm or corporation without express written permission.

ATTACHMENT 1

REA
Environmental Science
and Testing, Inc.

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy - V07
Location: OSH Building 40
Attention: Tony Rago, Project Manager
Analyzed By: Zachariah J. Purdie

Date Samples Received: May 12, 1994
Date of Report: May 13, 1994
Report Number: 05131056.094

Sample Number: Analyte	MW-1	MW-2	MW-3	MW-4
Benzene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Total Xylene	ND	ND	ND	ND

Quality Assurance Analyte	Lab Reporting Limit	Method Blank
Benzene	0.10	ND
Ethylbenzene	0.15	ND
Toluene	0.10	ND
Total Xylene	0.15	ND

ND means not detected at or above the lab reporting limit.

Approved By:
Environmental Science and Testing, Inc.

Zachariah J. Purdie
Chemist

Approved By:
Environmental Science and Testing, Inc.

Charles D. (Chuck) Getter, Ph.D.
President

Environmental Science and Testing
REA Environmental Science and Testing, Inc.
200 Hawthorne Avenue, Suite C-320
Salem, Oregon 97301
(503) 370-7230 FAX 370-7151

Chain of Custody / Analysis Request Form

Sampling Method: DISPOSABLE BAILERS
Project Name / Number: SUCHY – V07
Sampling Location: OSH BUILDING 40
Special Instructions: IN TRIG.

Shipped Via: HAND
Date Shipped: 5/11/94
Condition Received: GOOD
Condition of Custody Seal: GOOD

Samplers Signature:
Report Results To: TONY
Company: TECH, REA
Address:
Phone ( )
FAX ( )

Sample Information / Analysis Requested By Method

Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	HCID w/TPH	HCID Only	TPH-Only	601/8010	602/8020	7000 Metal	1311 TCLP	8310 PAH	9002 PLM	N7400 PCM	BTEX	
W-1	2183-1*	5/11		WAT	2												X	
MW-2	2183-2	5/11		"	2												X	
MW-3	2183-3	5/11		"	2												X	
MW-4	2183-4	5/11		"	2												X	
						* SAMPLES CONSUMED IN ANALYSIS												

Relinquished by
Signature: Cur Rayo
Print Name: ANTHONY R. RAGO
Company: REA TECH
Date 5/11 Time 5:00

Received By
Signature:
Print Name: ZACH PURDIE
Company: REA EST
Date 5/12/94 Time 09:20

Relinquished by
Signature
Print Name
Company
Date Time

Received By
Signature
Print Name
Company
Date Time

Sample Analysis Turn Around
☐ Same Day
☐ 24 Hours
☒ Normal (3 to 5 working days)

Invoice Information
P.O. #
Bill To: V07

Sample Tracking
Smp EXP Date: 5/25/94
Ext EXP Date: 5/25/94
Extract Date:
Acquisition Date: 5/12/94
QA/QC

Laboratory tracking
Lab # 2183
Report # 0513105G,094
Other:

Field Notes:

CRy

REA
Environmental Science
and Testing, Inc.

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy OSH
Location: Building 40
Attention: Tony Rago
Analyzed By: J.M. Aaron Spall

Date Samples Received: February 8, 1994
Date of Report: February 9, 1994
Report Number: 02092015.094

Sample Number: Analyte	MW-1	MW-2	MW-3	MW-4
Benzene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Total Xylene	ND	ND	ND	ND

Surrogate Recoveries:

Quality Assurance Analyte	Reporting Limit	Method Blank
Benzene	0.10	ND
Ethylbenzene	0.15	ND
Toluene	0.10	ND
Total Xylene	0.15	ND

ND means Not Detected at or above the reporting limit.

Approved By:
Environmental Science and Testing, Inc.

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing, Inc.

Kathleen J. Thorpe
Laboratory Director

Environmental Science
and Testing, Inc.

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/L)

Project: Suchy - V07
Location: OSH Building 40
Attention: Tony Rago, Project Manager
Analyzed By: Zachariah J. Purdie

Date Samples Received: May 12, 1994
Date of Report: May 13, 1994
Report Number: 05131056.094

Sample Number: Analyte	MW-1	MW-2	MW-3	MW-4
Benzene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Total Xylene	ND	ND	ND	ND

Quality Assurance Analyte	Lab Reporting Limit	Method Blank
Benzene	0.10	ND
Ethylbenzene	0.15	ND
Toluene	0.10	ND
Total Xylene	0.15	ND

ND means not detected at or above the lab reporting limit.

Approved By:
Environmental Science and Testing, Inc.

Zachariah J. Purdie
Chemist

Approved By:
Environmental Science and Testing, Inc.

Charles D. (Chuck) Getter, Ph.D.
President

Environmental Science and Testing
REA Environmental Science and Testing, Inc.
200 Hawthorne Avenue, Suite C-320
Salem, Oregon 97301
(503) 370-7230 FAX 370-7151

Chain of Custody / Analysis Request Form

Sampling Method: DISPOSABLE BAILERS	Shipped Via: HAND	Samplers Signature:
Project Name / Number: SOCHY – V07	Date Shipped: 5/11/94	Report Results To: TONY
Sampling Location: OSM BUILDING 40	Condition Received: GOOD	Company: TECH, REA
	Condition of Custody Seal: GOOD	Address:
Special Instructions: IN TRIG.		Phone (.)
		FAX ( )

Sample Information							Analysis Requested By Method											
Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	HCID w/TPH	HCID Only	TPH-Only	601/ 8010	602/ 8020	7000 Metal	1311 TCLP	8310 PAH	9002 PLM	N7400 PCM	*BTEX	
MW-1	2183-1*	5/11		WAT	2												X	
MW-2	2183-2	5/11		"	2												X	
MW-3	2183-3	5/11		"	2												X	
MW-4	2183-4	5/11		"	2												X	
						* SAMPLES CONSUMED IN ANALYSIS												

Relinquished by	Received By	Sample Analysis Turn Around	Invoice Information	Sample Tracking	Laboratory tracking
Signature:	Signature:	☐ Same Day	P.O. #	Smp EXP Date: 5/25/94	Lab # 2183
Print Name: ANTHONY R RAGO	Print Name: ZACH PURDIE	☐ 24 Hours	Bill To: V07	Ext EXP Date: 5/25/94	Report # 05131056.094 TP
Company: REA TECH	Company: REA EST	☒ Normal (3 to 5 working days)		Extract Date:	
Date 5/11 Time 5:00	Date 5/12/94 Time 09:20			Acquisition Date: 5/12/94	
				QA/QC	Other:

Relinquished by	Received By	Field Notes:
Signature	Signature	
Print Name	Print Name	
Company	Company	
Date Time	Date Time	

CRy

ATTACHMENT 2

292116

Hillsboro Landfill Inc.

P2

Account Rea/Tech REA002
Fleet # Tag #
Loop Tag 22
Transaction # 816476 Site P2
Transtn Type = DISPOSAL - 3rd Party
Payment Type = Charge
Vehicle Type = Not Specified
Origin Type = Marion
Materl. Type = Special Wastes P#
Destin. Type = Hillsboro Landfill

Permit# P#2035

	----In----	---Out--	B2
Date	09-14-94	09-14-94	IN
Time	10:34	10:50	16
Scale Op	AMS	JLW	
	lbs	tons	
Gross Wt	9,260	4.630	S12
Tare Wt	7,040	3.520	S13
Net Wt	2,220	1.110	TN

Rate $ 37.14/TN MIN. FEE

Tip Fee	$	50.00
Spec Fee	$	0.00
Sales Tax	$	0.00 % 0.000
Total Fee	**$**	**50.00**

Remark : 2600 CENTER STREET, SALEM

ATTACHMENT 3

(503) 655-0896 **Spencer, Inc.** FAX: ( ) 657-3395
PO BOX 5207
OREGON CITY, OREGON 97045-8207

ORDER # 1527

W O R K O R D E R

Aug 8 94
MON OR TUE

BILL TO:
REA TECHNOLOGIES
200 SE HAWTHORNE AVENUE
SUITE C320
SALEM OR
97301

LOCATION:
OREGON STATE HOSPITAL
BUILDING #40
2600 CENTER ST. N.E.
SALEM OR
97301

CUST #		PO #	ORDER DATE
516153	KS	T. RAGO	Aug 4 94

DRIVER KIRK
TRUCK # 33

PUMP OUT (1) DRUM OF WATER FROM MONITORING WELL.
0001-00NT-0033-0SHR TRUCK #33 TRANSPORTATION 2.0HR
0006-0NLQ-SE3 -0SUR NON-HAZARDOUS LIQUID DISPOSAL ~~1.0GAL~~
SEE MAP INCLUDED. DRUM IS IN BUSHES ALONG SIDE OF BLDG #40 (SEE MAP).

**SIGNATURE X Tony P. Rago

SHIPPING PAPERS: MANIFEST LAND BAN HAZ BILL OF LADING SHORT FORM (BOL) LABELS

PERMIT (HILLSBORO/SES) PROVIDED BY: S/I CLIENT N/A

ORDERED BY: TONY RAGO @ 370-7230

A FINANCIAL CHARGE of 1½% per month may be applied to any Past Due amount. Past Due Accounts may be placed on C.O.D. without notification. If outside collection action is necessary purchaser shall pay all costs of collection including reasonable attorney fees.

PAY THIS AMOUNT →

ATTACHMENT 4

REA

Tech Management, Inc.

June 17, 1993

WILLAMETTE VALLEY REGION UST CLEANUP SECTION
Department of Environmental Quality
210 Front Street NE
Suite 120
Salem, Oregon 97310

RE: LUST #24-89-4027
Oregon State Hospital

CORRECTIVE ACTION PLAN

Please find enclosed the Corrective Action Plan for the petroleum hydrocarbon release discovered at 901 25th Street NE in Salem, Oregon. The focus of this Corrective Action Plan is to address the clean up of the aerially-limited soil and groundwater impacted by releases from the underground storage tanks. The information gathered from the drilling and sampling of the soil borings, monitoring wells, and previous activities on the subject site and adjacent sites were combined together with information gathered from research of pre-existing reports on the geology and hydrogeology of the area into a Corrective Action Plan presenting the results of the field exploration, laboratory analyses and recommendations for remediation. The purpose of this work is to develop an environmentally appropriate, practicable, and agency-accepted plan for cleaning up the Oregon State Hospital Building 40 site that protects human health and the environment.

This Plan has been prepared in accordance with the DEQ cleanup rules for leaking underground storage tank systems (OAR 340-122-250), and the guidance for Corrective Action Plans, dated January 16, 1991. It has been prepared in response to a request by Paul S. Rosenberg, P.G. of your office to Mr. B.P. Jacobsen of the Oregon State Hospital, dated October 5, 1992.

We appreciate the opportunity to be of service to you on this important project and look forward to working with you on future projects. If you have any questions regarding this project, please call us.

Sincerely:
REA Tech Management, Inc.

John M. Rehm, Jr., P.G.
Project Manager

Charles D. (Chuck) Getter Ph.D.
Environmental Specialist

200 Hawthorne Avenue S.E., Suite C-320, Salem, Oregon 97301 • Phone (503) 370-7230 • FAX (503) 370-7151

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1.0 INTRODUCTION

This report is a Corrective Action Plan in an Oregon DEQ-recommended format (OAR 340-122-250) for the final remediation of pockets of gasoline contamination near Building 40 at the Oregon State Hospital in Salem, Oregon. The source of contamination was a 250 to 500 gallon leak from an underground storage tank (UST) which fueled an emergency electric generator. The leak occurred in March of 1989.

1.1 PROGRESS SUMMARY

On March 13, 1989, gasoline fumes were discovered generally throughout Building No. 40 (Appendix I). Oregon State Hospital employees had started to have trouble keeping leaded gasoline fuel in a nearby underground storage tank in the previous two weeks. Beginning on March 5, 1989, two 250 gallon loads had been run into the tank (Randall Bailey, former consulting environmental engineer, presently with DEQ Air Quality Division, Portland office personal communication). Approximately 500 gallons of leaded gasoline had been lost from the tank in the previous two week period. The tank was found to be empty only a few days before fumes were noticed in the building. The underground storage tank (UST) was decommissioned by removal on March 14, 1989 (Figure 1). There was no groundwater in the tank excavation and the tank exterior was free of corrosion. However, a 1/4 inch hole was found in the tank bottom and appeared to have been created from the inside. Two cubic yards on contaminated soil were removed from directly underneath the tank location (OMNI Environmental, Report No. HW501, dated October 16, 1989).

During the same time period, on March 15, 1989, OSH employees found gasoline free product floating on top of water in a sump which drained the building foundation footings (Figure 1). The sump contents were subsequently run through an oil water separator at an initial rate of 60 gallons per hour and released under a special DEQ permit to the City storm sewer (Appendix II). Discharge volumes of this and later sump pumping activity are shown on Figure 2. TPH analyses were run on a daily and later on a weekly basis on the discharge water to insure that the gasoline concentration did not exceed 50 ppm TPH.

On April 5, 1989, two shallow monitoring wells were installed within 25 feet of the former tank location (Figure 3). At the time of well installation, the water level was 13.5 feet below the land surface. The screened interval of each well was from 10 to 20 feet. Free product was noticed floating in one of these wells, Monitoring Well No. SH1 (now designated MW1). Laboratory analysis of soil samples from when the wells were installed indicated contamination at 15 feet in both monitoring well locations. The contamination ranging between 1 and 0.4 parts per million in Benzene and 18 and 22 parts per million in gasoline by EPA Method 3810 (Table 1).

On April 19, 1989, five test borings (SH3 - SH7) were drilled to a depth of 15 feet in the area of the tank to determine the extent of soil contamination (Figure 4). The lateral extent of contamination, based on laboratory analyses of the soil from these borings, is

shown by a dashed line. Gasoline concentrations by modified EPA Method 3810, ranged between 1500 and 530 parts per million at 12 to 15 feet in depth in SH3 and SH4 (Table 1).

On May 9, 1989, a diaphragm vacuum pump system was set in the building sump and a groundwater treatment system was started again using the oil water separator (Figure 5). Initially, seven gallons of free product were removed. The sump pump was triggered by floats, an explosion-proof air blower exhausted the sump air space and a combustible gas monitor was set up near the sump electric pump (OMNI Environmental, Report HW501, dated October 16, 1992). Treated groundwater was discharged to the City storm sewer under the same DEQ special permit. Ten days later, on May 19, 1989, an OMNI Environmental employee noticed that three feet of gasoline free product had accumulated in Monitoring Well No. 2 and three inches had accumulated in Monitoring Well No. 1 (OMNI Environmental, Report No. HW501, dated October 16, 1989). Immediately, new soil borings were hand augered near the locations of the original borings that are shown on Figure 4 (Stan Jones, former OMNI Environmental geologist, now with Hart Crowser, personal communication). It was concluded that contamination in the soil had not increased significantly above the levels found on April 19, 1989 (OMNI Environmental, Report HW501, dated October 16, 1989). On May 19 and May 23, 1989, a series of slug tests were performed on Monitoring Well No. 2. Data from these tests were used in the design of an additional groundwater extraction and treatment system outside Building No. 40.

On May 31, 1989, two air-operated pulse pumps were installed in the two monitoring wells. The total fluid pumps discharged groundwater and free product to the oil/water separator. Their effect was to briefly raise the TPH level in the treated effluent from 13 parts per million to 27 parts per million (Figure 2). The groundwater treatment system continued to operate under the special discharge permit.

As of October 13, 1989, 3/4 of an inch of free product remained in Monitoring Well No. 1 (OMNI Environmental, Report HW501, dated October 16, 1989). The gasoline recovery system of the wells and the building sump continued operating until August 19, 1991. Free product and gasoline vapors were absent in the system after February of 1990 (OMNI Environmental, Report No. 60501-05, dated February 14, 1992). However, water samples taken out of Monitoring Well Nos. 1 and 2 on September 3, 1991, indicated high levels of Benzene and Toluene (Table 2).

Five confirmatory soil borings were drilled into the original contaminated area during the period between September 13, 1991 and December 9, 1991 (Figure 6). The boring logs are shown in Appendix III. Only the 13 foot soil sample from Soil Boring No. 5 between the monitoring wells tested 11.0 parts per billion of Ethyl Benzene and 9.3 parts per billion of Xylene by EPA Method 8020 (Table 3). The other soil samples tested

clean. A small pocket of contamination remained in the soil near Monitoring Well No. 1.

Two additional monitoring wells were installed on December 11, 1991 (Figure 6). The well logs are shown in Appendix IV. On January 13, 1992, static water levels were measured in all of the wells and water samples were taken. BTEX levels dropped by an order of magnitude and Total Lead levels were not measured or not detected (Table 2). Groundwater flow again appeared to move southwest toward Mill Creek.

The wells have been sampled on several occasions since January 1992. Water levels have not been consistently measured, however. The wells were sampled on May 5, 1992, August 5, 1992 and on January 28, 1993. The summer 1992 BTEX levels were one order of magnitude higher than the winter 1993 levels (REA Tech Management letter, dated April 15, 1993).

In December, 1992, REA Tech Management, Inc. was asked to address the issue by OSH. REA continued quarterly monitoring and began a new effort to locate and remediate remaining contamination.

Monitoring Well No. 1 was damaged by movement of heavy equipment during servicing of an electrical utility box adjacent to the former UST site. The well was decommissioned on February 5, 1993 and was not replaced.

Since assuming an environmental contract with the Oregon State Hospital to clear low level gasoline contamination from around Building No. 40, REA Tech Management, Inc. has completed additional delineation tasks. These tasks were requested by Max Rosenberg, P.G. of the Salem office of DEQ in his letter to Mr. B.P. Jacobsen of Oregon State Hospital on October 7, 1992. Some of this work is described in our report to you dated April 15, 1993. This work included backhoe exploration of the former UST site, the top of a nearby sanitary sewer line, and nearby native soil. Additional work since that report, includes a hand augered soil boring in the building basement and installation of a downgradient groundwater monitoring well (Figure 7). The soil boring encountered gasoline vapor just below the basement floor. The monitoring well (No. 5) was clean in all aspects.

1.2 SITE LOCATION

Building No. 40 is located in the middle of a 40 acre campus of the Oregon State Hospital for mentally and physically handicapped patients. It is one of about 50 large buildings. The State Hospital lies in a five or six square mile area of 1/5 to 1/6 acre-sized residential properties. The Oregon State Women's Correctional facility and its

open grounds lie within one mile to the south. The site is a generally rectangular-shaped property located on the west side of Building No. 40 (Figure 1).

Inspection of the Salem East and Salem West 7-1/2 minute topographic quadrangle maps for the area indicates that the site is located at approximately 205 feet above Mean Sea Level. The site slopes very gently toward Mill Creek to the northwest. Total topographic relief over the planar site surface is less than one and one/half foot.

Surface runoff from the area is via storm and roof drains which run along the east side of 25th Street NE. These ditches eventually empty into the City of Salem storm water system, which in turn flows into Mill Creek.

1.3 BACKGROUND

In 1947, Building No. 40 was constructed as a residence ward in the Oregon State Hospital complex. The building has a concrete floored basement with a floor surface level that is eight feet below the outside land surface. The entire building is supported on footings which drain to a 20 foot deep sump through a pipe at 18 feet below the land surface. The sump is drained by an electrical submersible pump (Randall Bailey, environmental engineering consultant, personal communication). During construction of the building, an emergency electric generator was installed. That generator was turned by a automobile engine manufactured by the Willys Jeep Company. The tank was fueled from a 250 gallon capacity underground storage tank which contained leaded gasoline.

2.0 HYDROGEOLOGY

2.1 GEOLOGIC SETTING

The site is located in the Willamette Valley, a pull-apart basin on the west flank of the active volcanic Cascade Mountain Range in the northwestern United States. The valley has opened above a moderately active subduction zone that plunges eastward into the roots of the mountain range. The valley is partially filled with coarse sand and gravel that was once moved out of the mountains by glacial meltwater, flash floods and volcanic eruptions. Fine grained sediments were deposited above the sand and gravel by ash falls from volcanic eruptions such as the eruption of Mount Mazama (now Crater Lake) and by glacial meltwater lakes.

Fast-flowing streams with steep gradients flowed into the east side of the Willamette Valley from the Cascade Mountains (Rueben C. Newcomb, retired US Geological Survey geologist, personal communication). The streams deposited coarse-grained volcanic sands and gravels in coalescing alluvial fans. The Oregon State Hospital sits on one such alluvial fan.

The site sits on the ancient alluvial fan of the Santiam River where it flowed through Turner Gap south of Salem, Oregon (Piper, 1942). This river drained the Cascade Mountain Range around Mount Jefferson and Three Fingered Jack Mountain when those mountains were volcanically active and when their alpine glaciers were more extensive. Weathering products came through the gap at Turner, Oregon and northward over the site area and the surrounding valley. The river gravels now lie considerably below the present land surface because they were covered by clay, silt and fine grained sand belonging to the Willamette Silt Formation (Qws). This silt is composed of a series of ash falls from Mt. Mazama (now Crater Lake) that was interbedded with fine-grained lake bed and slow moving stream sediments.

The strata are composed of sands and gravels with occasional thin layers of blue or brown clay. The layers spread out toward the north and northeast. The last channel of the fan is now occupied by Mill Creek. One of the first deeper channels laid basalt rock cobbles down on top of weathered basalt bedrock (Tom DeSouza, Pit Operations Manager, River Bend Sand and Gravel Company, Salem, personal communication). The Oregon State Hospital sits on this older part of the alluvial fan. The south side has been scoured by the last river channel to give a left dogleg appearance to the hill on which the hospital sits as one looks at it from the south end. Mill Creek is an underfit stream that flows along part of the ancient river channel (Eugene R. Hampton, US Geological Survey, Reston, VA, personal communication).

The gravels are mostly cemented and the sands and gravels become coarser with depth. This trend seems to be consistent between the River Bend Quarry and private wells located approximately a mile north of the Hospital, on Evergreen Street. There drillers stopped their wells in coarse gravel at 40 feet in depth as opposed to completing the wells in finer grained sands above that level.

2.2 REGIONAL HYDROGEOLOGY

During heavy rainfall, much of the water moves overland toward storm sewers, streams and rivers. Water that does penetrate the ground, reaches the water table that is well within the Willamette Silt. Groundwater within the silt and in the underlying coarser-grained sands and gravels moves toward the streams from higher ground. In the Oregon State Hospital area, groundwater moves toward Mill Creek.

Water level fluctuations are not widely documented in shallow wells in the Salem area. State of Oregon Water Resources Department records show that the usual fluctuation in the water table is approximately 5 feet (Bartholomew and others, 1973).

Water well logs for water wells drilled within one mile of the project site were obtained from the Oregon Department of Water Resources in Salem. There are records of 86 wells

within this area. Fifty six wells are less than 100 feet deep and produce from the shallow cemented sand and gravel. Twenty wells produce from deeper sand and gravel zones and water levels are similar to the water levels in the shallower wells. Ten wells produce from the deeper Basalt aquifer. Representative wells were plotted on the topographic map of the Salem area based on street addresses located by driving around the area (Figure 8). Copies of the well logs are presented in Appendix V and a water well summary is presented in Table 4. The Oregon State Hospital wells were located on a plat provided by Oregon State Hospital personnel.

When the shallow wells were first drilled in the 1940's through the 1960's, the wells were used for drinking water. Since public water supplies have reached the entire part of east Salem, the shallower wells have been mostly abandoned or now serve only backyard gardens. Production from house wells appears to be on the order of 20 or less gallons per minute, with drawdown ranging between 15 and 30 feet. The water table is commonly twenty to thirty feet below the land surface. The wells produce water from loose gravel zones between 45 and 80 feet below the land surface.

Industrial and municipal wells in the area are typically 200 feet deep or more, with casings set to about 190 feet, and the remainder of the hole left without liner or casing. In several cases, however, the wells have been cased to total depth with water entering through Mills Knife perforations.

Most of the wells which were drilled on the hospital grounds are abandoned and inactive. Two wells which remain in operation, No. 4 and No. 6, are now used to irrigate lawns around the hospital buildings during the summer (Doug Suchy, OSH Physical Plant Manager, personal communication). The No. 4 well is located 250 feet to the northeast of the former UST site. This is the closest operating water well to the UST site. The well is 190 feet deep. Perforations are not reported in the 190 foot casing but water bearing zones are reported at 57 to 62 feet and 177 feet to 181 feet below the surface. The average discharge of the well is 200 gallons per minute and the drawdown is approximately 87 feet. The well pumps water for lawn irrigation between the middle of June and early October. The direction of Hospital Well No. 4 from the UST site is up the hydraulic gradient but its summer pumping may influence the area under the site. No nearby water wells are reported from Oregon Water Resources Department files in a down-gradient direction. However, domestic wells drilled earlier than the first reporting date in 1955 may exist in neighborhoods 3/4 of a mile to the southwest.

2.3 LOCAL GROUNDWATER SETTING

The top of the UST was buried 2 feet below the land surface in the Willamette Silt Formation. The bottom of the tank was at 5 feet. There was no groundwater in the pit.

The water table probably fluctuates between 12 and 20 feet in depth. It is highest in March and April and lower in August and September.

The test borings and monitoring wells drilled for this project, did not go out of the Willamette Silt Formation which covers the site. The deepest boring was 25 feet. The well log of the nearby Hospital Well No. 4 indicates that the silt is 30 feet thick in this area. Alluvial sands and gravels extend to a depth of 199 feet, based on the well log of Hospital Well No. 5 approximately 1/3 of a mile to the south.

The site land surface slopes southwestward toward the flood plain of Mill Creek, which flows northwestward into the Willamette River. The natural groundwater table slopes in the same direction but may change directions at the UST site and slope toward the nearby Hospital well or the sump in Building No. 40 when the pumps are operating.

3.0 SOIL AND WATER SAMPLING

Soil and groundwater continue to be sampled around the decommissioned UST site as part of characterization/remediation of an underground gasoline leak (REA Tech Management, Inc. letter to DEQ, dated April 15, 1993). Low levels of gasoline continue to be found in the soil as part of the latest characterization phase. More serious levels of Benzene reappear on a seasonal basis.

3.1 SOIL SAMPLING

As part of a characterization phase, three separate soil sampling events occurred. On February 11, 1993, two intersecting backhoe trenches were dug at the former location of the underground storage tank. On March 5, 1993, a hand augered soil boring was drilled to the north of the trenches through the basement floor of the building. On March 25, 1993, soil samples were taken during the installation of a downgradient groundwater monitoring well.

3.1.1 BACKHOE TRENCHING

Two trenches were dug over the site of the former underground storage tank and nearby contaminated soil on February 11, 1993 (REA Tech Management, Inc. letter, dated April 15, 1993). These trenches went to a maximum depth of 15 feet, with an average depth of 11 feet. One trench ran east-west approximately 6 feet to the south of and parallel to the building wall (Figure 7). The center of the trench encountered pea gravel backfill at a depth of 11 feet. This gravel could have been part of a dry well shown in building plans from July 1947 (Figure 9). OSH personnel report that the sewer pipe is buried 16 feet below the land surface. Soil samples were taken from the backhoe bucket and cooled in Teflon capped glass jars.

3.1.2 AUGER BORING IN BUILDING 40 BASEMENT

On March 5, 1993, REA Tech Management, Inc. drilled a soil boring through the building basement floor near the UST location. The basement floor is 8 feet below the nearby land surface grade. The boring went down another 8 feet for a total depth below land surface grade of 16 feet. The water table was encountered 5 feet below the basement floor. Only natural silt material was encountered by the boring. Soil samples were taken and submitted to an analytical laboratory under Chain of Custody. A Photo Ionic Gas Detector was used to field test the soil samples for gasoline hydrocarbons.

3.2 MONITORING WELL CONSTRUCTION

On March 25, 1993, Monitoring Well No. 5 well was drilled in a down-gradient position to the UST site. The purpose of the well was to determine if gasoline contamination was following the groundwater gradient toward Monitoring Well No. 3. Laboratory analysis of a water sample from Monitoring Well No. 3 had recently shown Benzene contamination at 2.63 parts per billion on January 28, 1993. Precautions had been taken to prevent cross-contamination between Monitoring Wells by using dedicated disposable bailers and by sampling in order of least likely contaminated well to most likely contaminated well.

The groundwater monitoring well was drilled under the direct supervision of an REA State of Oregon Registered Geologist. The well was drilled using 8-inch O.D. hollow stem augers. The drilling contractor was Hogate Drilling Company from Albany, Oregon. All tools, monitoring equipment, and the augers were thoroughly steam-cleaned prior to setting up on the monitoring well location.

Soil samples were obtained by decontaminated, stainless steel Split Spoon samplers using the Standard Penetration Test as designated in American Society of Testing Methods (ASTM) Method D 1586. The sampler and all sampling implements were decontaminated prior to reuse by scrubbing off all visible particulates in a tap water/Alconox solution, rinsed in deionized water, rinsed with laboratory-grade hexane, and then allowed to air dry.

The soil samples were logged according to the Unified Soil Classification and were field screened for gasoline contamination by a Photo Ionization gas detector. Each sample was placed into three laboratory-cleaned, 4-ounce, clear glass, wide mouth jar fitted with Teflon-lined screw cap lids. All of the jars were filled to maximum capacity to minimize headspace volatile losses.

The well was completed according to Oregon Administrative Rules 690-240. Under the supervision of the REA Registered Geologist, monitoring well materials were removed from their protective plastic bags prior to installation in the well. The 2-inch I.D., flush-threaded, machine-slotted, PVC well screen was 15 feet in length. The blank riser pipe, also

composed of PVC, was similarly 2-inch I.D. and flush-threaded. No solvents or glues were used at any time during monitoring well construction. The bottom of the casing was sealed using a threaded, 2-inch PVC cap, and the top was sealed using a locking, 2-inch neoprene expansion pressure seal.

At the completion of the drilling of the well, the well screen and its bottom cap were lowered into the hole to the depth specified by the supervising geologist. The expansion seal was then set onto the top of the monitoring pipe. A select sand backfill was placed in the drill hole annulus from the bottom of the hole to a level specified by the geologist and Oregon Administrative Rules, approximately 1 foot above the top of the slotted well screen. During sand placement, the auger was left in the hole and lifted gradually out of the hole to insure that the filter pack was continuous. A coarse-ground bentonite seal was placed above the permeable backfill to within about 3 foot of the surface and hydrated with distilled water. A seal of neat cement was then installed to the surface. The upper foot of the seal was widened in order to stabilize its bond with the soft soil. A flush-mounted steel monitoring well cover was set in the neat cement seal of the well to secure against vandalism and potential surface contamination. The expansion seal was locked in place with a Dolphin lock. The well cover was set about one-half inch higher than the surrounding lawn surface to facilitate drainage of surface water away from the wellhead and to permit lawn mowing. Well completion specifications are included in the well log in Appendix IV.

3.3 WATER SAMPLING

On January 28, 1993, four monitoring wells around the UST site were sampled and the samples were delivered to an analytical laboratory under Chain of Custody. This sampling was the most recent quarterly sampling event to monitor remaining gasoline concentrations in the groundwater.

A disposable one-meter long, 1-3/4 inch O.D., Teflon, bottom-filling bailer was used to surge and remove water from each well until the water in the well became free of sediment or four gallons of water was removed, whichever was greater. Only one bailer was used in each monitoring well. A new cord was used to lower the bailer into the well bore. Due to the fine-grained nature of the soil the well could not be developed to a sediment-free condition.

Each water sample was then collected by transferring the water from the bottom of the bailer at a trickling rate into laboratory-prepared VOA bottles. Care was taken to not allow even small bubbles at the top of each bottle. Each sample was carefully labeled, and immediately placed on ice and transferred into the custody of an off-site analytical laboratory, together with proper Chain-of-Custody documentation.

4.1.3 MONITORING WELL NO. 5 SOIL SAMPLE ANALYSIS

Three soil samples were analyzed by EPA Method TPH-G (Appendix VIII). No gasoline concentrations were detected above the 5 part per million detection limit.

4.3 WATER LEVEL GAGING

On April 2, 1993 water levels in Monitoring Wells 2-4 were measured by the REA Geologist. The results of those measurements are presented below.

Water levels and elevations on April 2, 1993 in Monitoring Wells near the UST site, west side of Building 40, Oregon State Hospital Salem, Oregon.

Well Number	Depth to Water	Wellhead Elevation	Water Level Elevation
MW1	---	200.00	----
MW2	13.02	199.90	186.88
MW3	13.83	199.66	185.83
MW4	16.11	199.20	183.09

notes* all measurements are in feet.
MW1 was abandoned on February 5, 1993.

Interpretation of this data by a three-point graphical solution indicates that groundwater was flowing to the southwest at a gradient of 0.014. The three-point graphical method is described in Compton (1962).

This plotting of groundwater elevations indicates the direction of groundwater movement is to the southwest as in the fall of 1991 (Figure 6). This indicates that the shallow water table parallels the slope of the land surface toward Mill Creek. Coincidentally, the sanitary sewer line follows and appears to be slightly steeper than the land grade toward the south.

Depth to the water table was measured using an ACTAT electric water level meter which allows for an accuracy of $\pm$ 0.01-foot in measuring shallow groundwater depth. The weighted electric water level measuring line was decontaminated between wells. The water level depths were measured several times in each well with the last three times agreeing.

5.0 CONTAMINATION

5.1 NATURE AND EXTENT

The laboratory analytical results described in Section 4.0 indicate that the nature of the underground storage tank release at the site can be characterized as water and soil contaminated with low levels of gasoline constituents. The affected area is a small 75 by 75 foot area in a corner on the west side of Building No. 40 and under the building, itself. Drilling and laboratory results indicate there is some residual soil contamination after excavation around the previously-existing underground tank. The concentration of contamination at any time is controlled by movement of the water table.

5.1.1 SOIL CONTAMINATION

Low levels of soil contamination persist near the location of the decommissioned Monitoring Well No. 1 and around Monitoring Well No. 2 (Section 4.1.1 and VI). Equally low levels of gasoline contamination exist under the nearby west side of Building 40 (Section 4.1.2 and Appendix VII). The lateral extent of contamination appears to be limited in the southwest direction. Soil at the location of Monitoring Well No. 5 was not contaminated (Section 4.1.3 and Appendix VIII). Lead and other components of leaded gasoline also remain in trace amounts, but are in concentrations below DEQ action levels (Oregon DEQ Environmental Cleanup Division, 1992).

5.1.2 GROUNDWATER CONTAMINATION

Low levels of groundwater contamination remain near the former UST site. Using data from the August 1992 quarterly sampling and the January 1993 sampling, it was found that Benzene levels range between 1.03 ppb and 2300 ppb in Monitoring Well No. 1 and between 950 ppb and 194 ppb in Monitoring Well No. 2 (Section 4.2 and REA Tech Management, Inc. letter to DEQ, dated April 15, 1993). Gasoline additives and Total Lead were below detection limits in all samples taken.

5.1.3 GASOLINE CONCENTRATION FLUCTUATIONS

The concentration of gasoline contamination, expressed as concentrations of Benzene, depends on the change in positions of the water table. When the water table is high, as in the January 28, 1993 quarterly measurement, the Benzene concentration in the groundwater is lowest (REA Tech Management letter to DEQ, dated April 15, 1993). When the water level is low in August, the Benzene concentration is two orders of magnitude higher, a concentration that equals concentrations when the leak was first discovered.

These observations could be interpreted in the following manner. When the water table is

high, the adsorbed gasoline is drowned and Benzene does not vaporize. When the water table drops, and the gasoline pockets in the soil are exposed to air in the formation, Benzene vaporizes and enters into solution in the groundwater.

5.2 EXPOSURE PATHWAYS

There are natural and manmade exposure pathways for subsurface gasoline contamination to move at this site. The natural pathway of soil pores is restricted by the small size of the silt grains and a large percentage of interlocking effectively impermeable clay between the grains. Hence, soil and groundwater contamination through the soil has only extended a short distance from the UST leak. The areal extent of contamination was further restricted by a short time period from the occurrence of the leak to its initial cleanup.

In this case, manmade exposure pathways most likely guided gasoline free product and its liberated vapor to hazardous contact with people. The gasoline tank lying next to the building, was connected to porous backfill and permeable footing sand (Figure 10). In turn, the footing sand was drained by a pipe into the building sump where gasoline free product and vapors were discovered in March of 1989.

There are other manmade pathways that are less certain but no less important. The most significant of these lesser understood pathways is the sanitary sewer line leading into the building below and to the south of the UST location. Monitoring Well Nos. 1 and 2 accidently were located along the path of the sewer line. On May 19, 1989, gasoline free product was found in the wells. It appears to have been drawn into the wells by pumping of free product from the sump by a newly installed vacuum pump. Therefore, the sewer line probably provides a pathway through the tighter soil toward the sump. Inspection of the sewer line during a repair of a break in the line (April 9, 1993), however, showed no continuous leveling sand pad for the laying of the pipe.

An unknown vertical pathway for gasoline contamination may be an old dry well, which was located on July 1947 building plans near the UST site (Figure 9). Pea gravel was encountered in the middle of the east-west backhoe trench by REA Tech Management on February 11, 1993. The gravel was encountered at a depth of 11 feet below the land surface. It may have belonged to the dry well. No concrete structure remains of the dry well which would usually be composed of stacked perforated concrete rings.

5.3 CURRENT AND POTENTIAL FUTURE PATHWAYS

The site is still ~~hazardous~~ of concern because the contaminated area lies under and against a residence treatment ward at the Oregon State Hospital. Approximately 120 teenaged patients reside

in the building. Gasoline vapor from the initial UST leak permeated the wards. At present, the remaining gasoline is adsorbed on the soil particles, dissolved in the groundwater and, moving through more permeable manmade backfill as vapor (Bruce, 1993). There is apparently little free product. However, a hazard remains that adsorbed gasoline and dissolved gasoline compounds (notably Benzene) would vaporize and reenter the building as vapor.

6.0 CORRECTIVE ACTION MEASURES

6.1 SITE CLEANUP OPTIONS

There are a few cleanup options to remove the remaining gasoline contamination. These options include excavation, bioremediation, and in-situ aeration of soil. Groundwater treatment includes air stripping, sparging units or absorbsion by activated charcoal.

6.1.1 SOIL CLEANUP OPTIONS

The volume of contamination exclusive of the contaminated soil under Building No. 40 measures 30 feet x 30 feet by 15 feet deep. This volume equals 13,500 cubic feet or 500 cubic yards of soil. The upper five feet are clean, equaling 170 cubic yards. The lower 330 cubic yards of this soil volume (from 5 feet in depth to 15 feet in depth) are contaminated with adsorbed gasoline. The water table fluctuates within the lower three feet of this volume, from 12 feet in Spring to deeper than 15 feet in July and August. Handling of the total 500 cubic yards of soil would require 55 dump truck loads at 10 yards per load.

This volume could be excavated successfully if excavating and backfilling were done using a pair of shoring caissons, one caisson for backfilling next to another for excavating. Excavation without caissons would undermine the west facade of Building No. 40. However, handling of the caissons would be too time consuming. The task would be further complicated near the building by passage of underground utilities.

Bioremediation would be a passive means of handling the adsorbed soil contamination. However, the introduced bacterial microbes would fail to penetrate the soil due to its very low permeability (Dave Emery, President, Bioremediation, Inc., personal communication).

Soil aeration (VES - Vapor Extraction System) would be successful if the aeration wells are drilled on short radius centers. The extraction wells would have to be drilled close together to effectively evacuate vapors from the tight clayey soil. Groups of aeration wells could be set around and within concentrated contamination areas.

5) There are many receptors who could be affected, and they are near to the site. **(10 points)**

This adds up to a point total of 37 points for the site. A point total of 37 indicates that a site for which the matrix applies must be cleaned up to exceed Level 2 standards. The Level 2 standard for a site that has gasoline as the major contaminant is that it must be cleaned up to a background TPH level of less than 80 ppm.

6.2.2 GROUNDWATER CLEANUP

All soil contamination at the Building No. 40 site is less than the 80 ppm required through the matrix evaluation for gasoline contamination. Therefore, there would seem to be no required cleanup action to be taken with the soil. However, adsorbed gasoline within the soil adds enough gasoline compounds to the groundwater to raise groundwater contamination concentrations to hazardous and unacceptable levels.

The Maximum Contaminant Levels in groundwater allowed by the DEQ before action is required are as follows:

Benzene	5 ppb
Toluene	2,000 ppb
Ethylbenzene	700 ppb
Xylenes	10,000 ppb

Clearly, groundwater contamination levels as shown in Section 4.0, exceed the levels for Benzene. This fact is particularly significant when it is true that groundwater has been the transport medium of gasoline free product into the Building No. 40 sump.

6.3 CLEANUP ACTIONS ALREADY TAKEN

Gasoline free product at the site has been almost fully abated by a skimmer system in the building sump and by total fluid pumps in two nearby groundwater monitoring wells. The UST was decommissioned in March of 1989. Approximately two yards of contaminated soil was removed from under the UST site. The major exposure pathway, the Building 40 footings drain, was thoroughly pumped for 18 months via the building sump. Free product around the sewer line was also pumped from Monitoring Well Nos. 1 and 2.

6.4 FUTURE CLEANUP ACTIVITIES

Pockets of soil contamination must be remediated near Monitoring Well Nos. 1 and 2. Gasoline or gas vapor concentrations under Building No. 40 must also be removed. The

following are recommendations of appropriate measures for removing the contamination.

Soil contamination can be removed by a VES (Vapor Extraction System). Three extraction wells could be rapidly drilled between and near Monitoring Well Nos. 1 and 2 with an orientation preference along the sewer line (Figure 11). Total depth of these vapor extraction wells would be 15 feet to avoid holing the sanitary sewer line. Two other vapor extraction wells would be drilled on an angle under the south side of the west wing of Building 40 and under the west side of the main building.

At the same time, a wide diameter groundwater extraction well served by a stripper tray and a vent stack would be put into operation, west of and near Monitoring Well No. 2. The water treatment well would prevent the seasonal Spring water table from rising and ending the vapor extraction process between the months of October through June.

Quarterly monitoring, now part of Phase V in the present contract, would become part of monitoring the success of the combined VES/Stripper Tray system.

7.0 CONCLUSIONS

Soil and groundwater contamination persist around and near the former UST site at Building No. 40. Under Oregon DEQ Soil Matrix Cleanup regulations (OAR 340-122-335), the soil at this site in itself is not a hazard. Groundwater contamination, however, is more serious. Cleanup levels for Benzene are exceeded by two orders of magnitude. The source of these higher Benzene concentrations is nearby pockets of adsorbed gasoline contamination in the soil.

Cleanup of the remaining pockets of contamination is limited by the impermeability of the silty clay material and by man-made features. The contamination is too close to the building for a simple excavation type cleanup and there are numerous underground service lines.

The upward fluctuation of the water table in late Fall through late Spring shuts off removal of adsorbed gasoline. The gasoline is effectively drowned and put out of reach by conventional in-situ remediation systems. Therefore, an extraction water well is recommended to lower the water table during the wet seasons and to capture and remediate contaminated groundwater.

Soil test borings and backhoe trench diggings have shown that soil contamination is limited to small areas. These areas can be reached without damage to the building foundation and to buried underground service lines by installing a Vapor Extraction System (VES). Three VES wells are recommended in the area of former Monitoring Well No. 1 and Monitoring Well No. 2. Two angle VES wells are recommended to draw gasoline vapors from under the nearby foundation of Building No. 40. This vapor extraction system could be installed without the groundwater extraction well in July or August, when the water table is deeper than 15 feet below the land surface.

8.0 LIMITATIONS

Subject to the Terms and Conditions signed in connection with the preparation of this report, all opinions which we have given verbally and in written form are based on the information collected during our survey, our present understanding of the site conditions and our professional judgement in light of such information at the time of preparation of this opinion. We are not responsible for the accuracy of information provided by individuals or entities which are used by us or others in connection with the preparation of the opinion. This report is an opinion work, and no warranty is either expressed, implied or made as to the conclusions, advice and recommendations offered in this report. Neither this opinion nor any extract herefrom to reference hereto shall be furnished to, or quoted to any other person, firm or corporation without express written permission.

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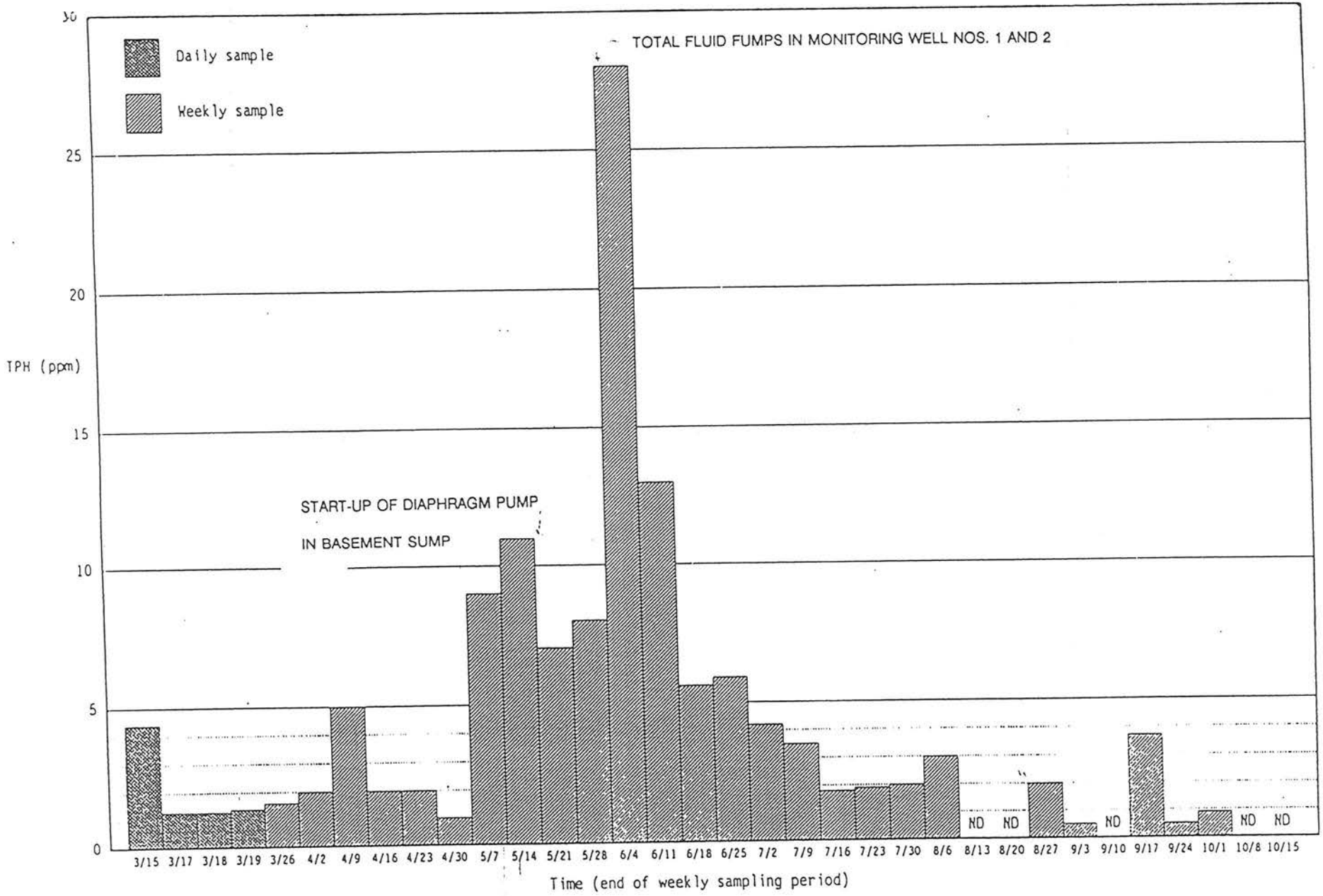
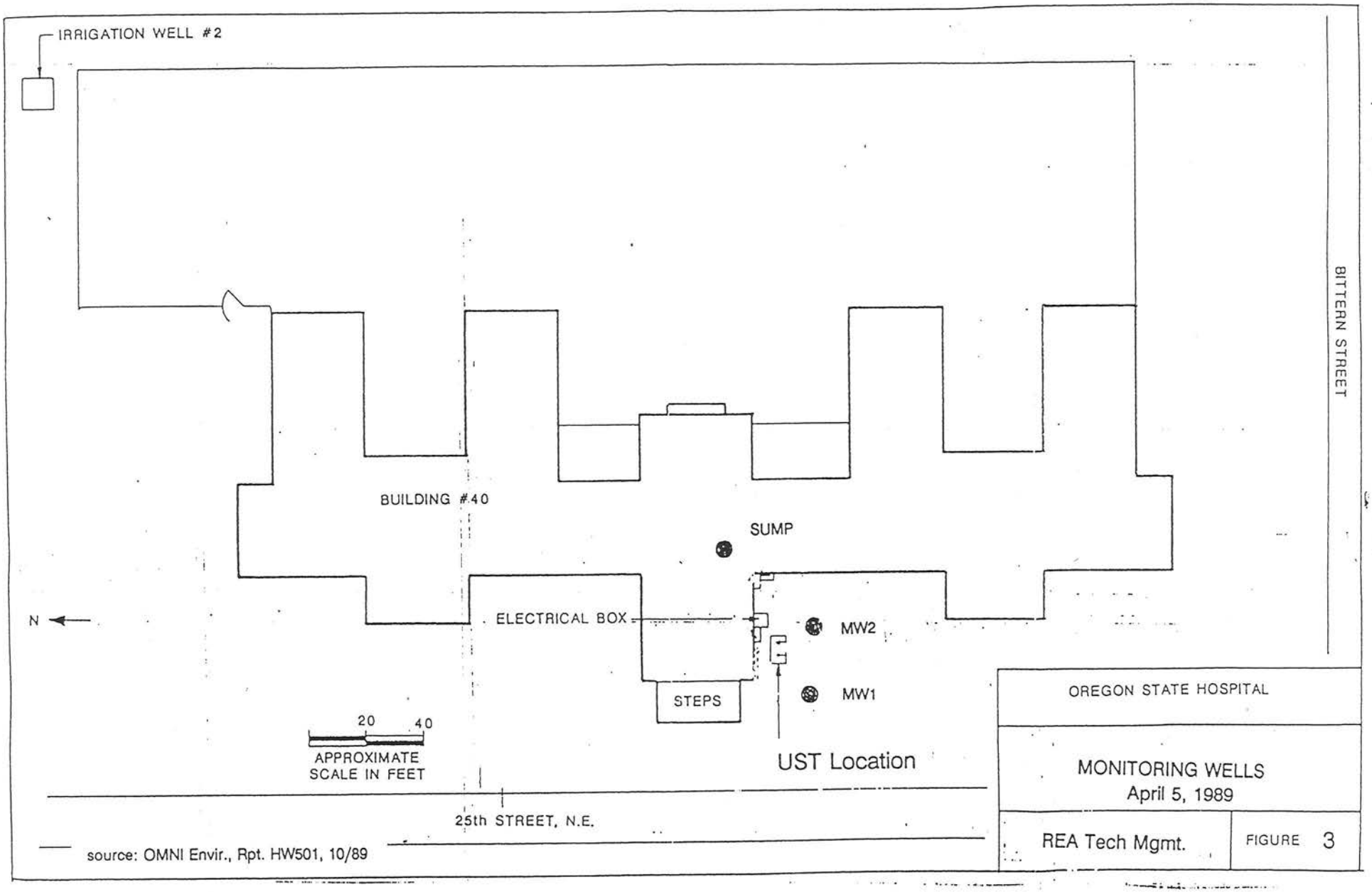


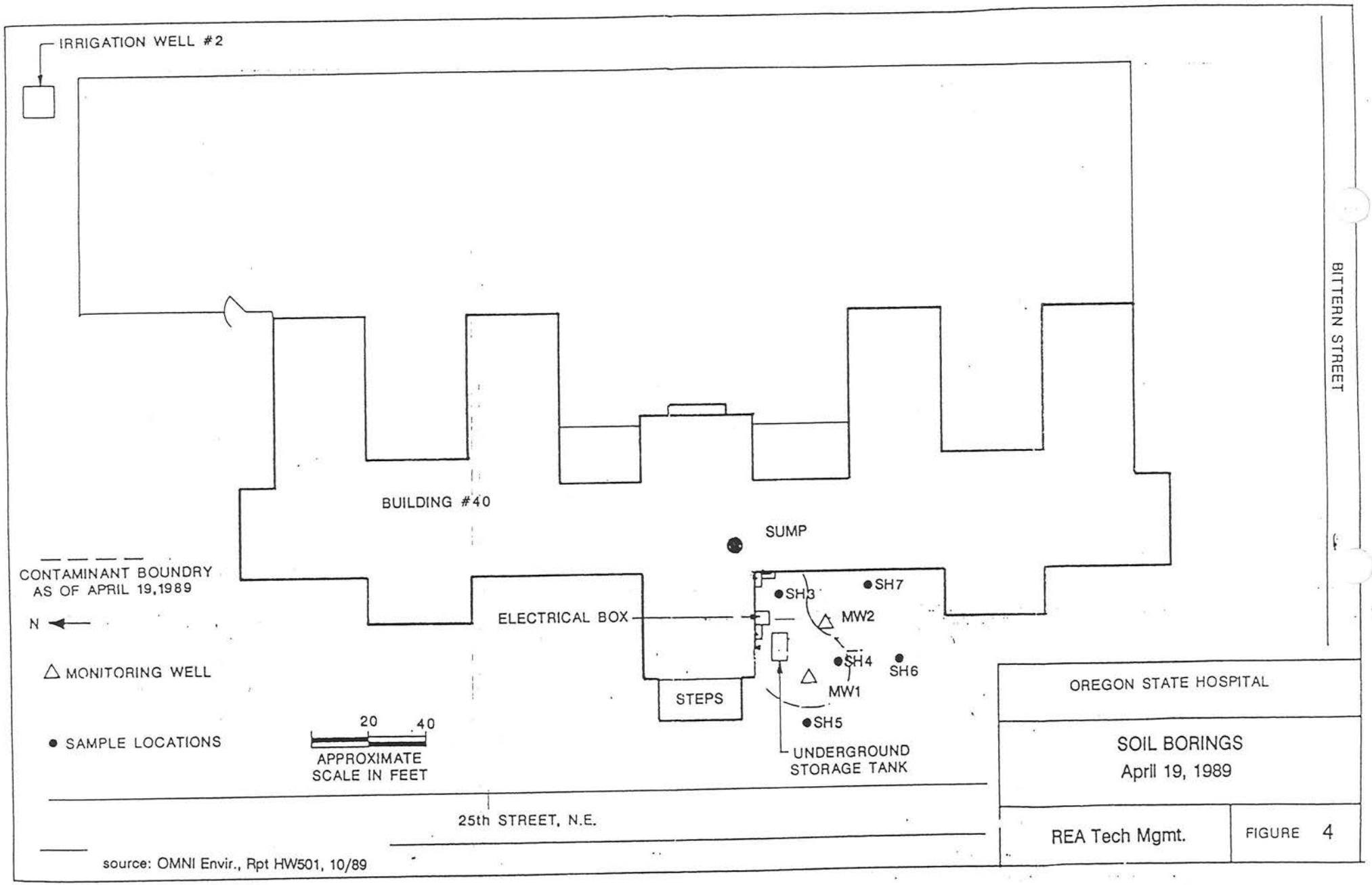
source: OMNI Envir., Rpt. HW501, 10/89

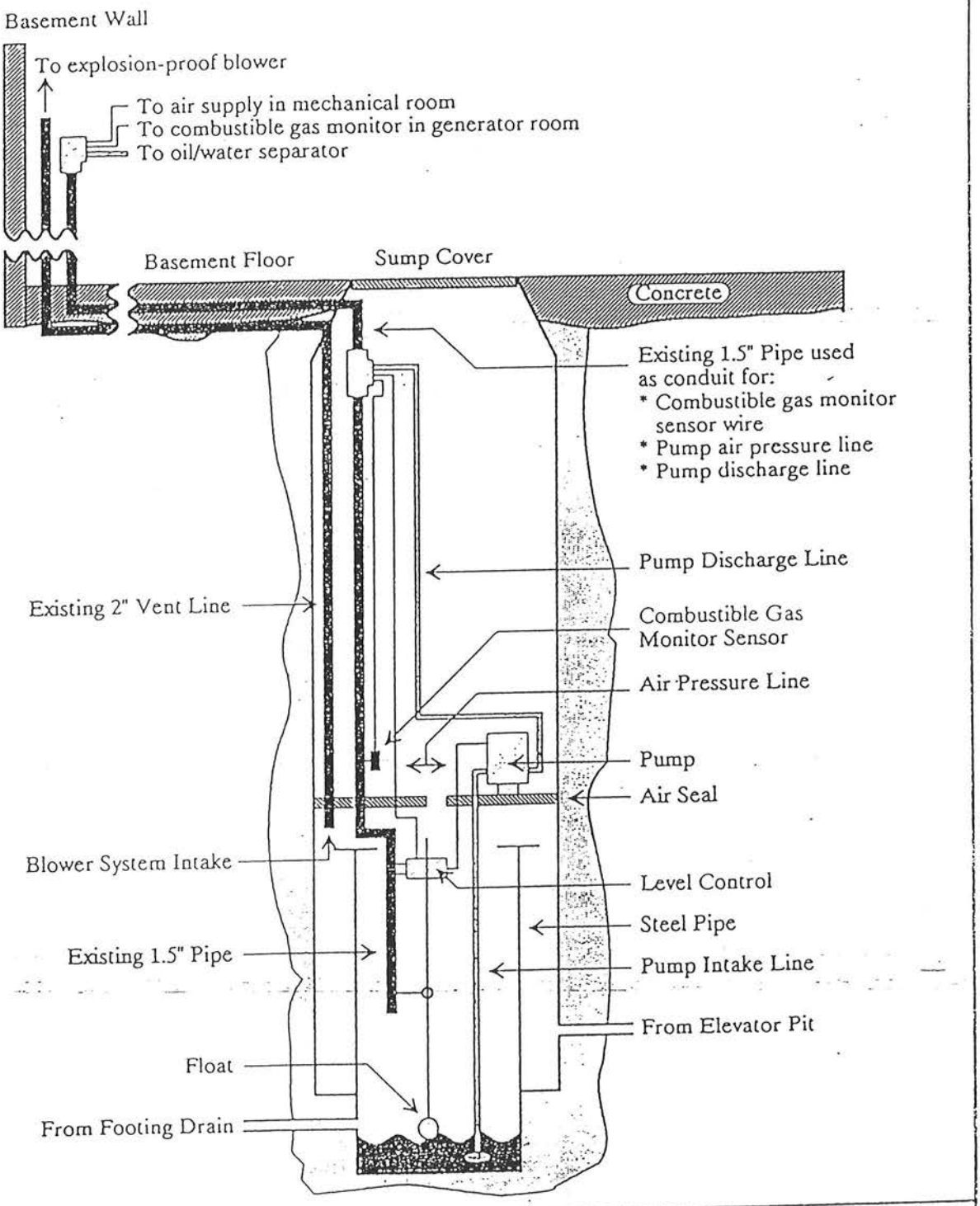
Sump TPH Discharge

Building 40

Figure 2


IRRIGATION WELL #2
BITTERN STREET
BUILDING #40
SUMP
ELECTRICAL BOX
MW2
MW1
STEPS
N
20
40
APPROXIMATE
SCALE IN FEET
UST Location
25th STREET, N.E.
source: OMNI Envir., Rpt. HW501, 10/89
OREGON STATE HOSPITAL
MONITORING WELLS
April 5, 1989
REA Tech Mgmt.
FIGURE 3


IRRIGATION WELL #2
BUILDING #40
SUMP
ELECTRICAL BOX
STEPS
SH3
SH7
MW2
SH4
SH6
MW1
SH5
UNDERGROUND STORAGE TANK
BITTERN STREET
CONTAMINANT BOUNDRY AS OF APRIL 19,1989
N
MONITORING WELL
SAMPLE LOCATIONS
20
40
APPROXIMATE SCALE IN FEET
25th STREET, N.E.
source: OMNI Envir., Rpt HW501, 10/89
OREGON STATE HOSPITAL
SOIL BORINGS
April 19, 1989
REA Tech Mgmt.
FIGURE 4



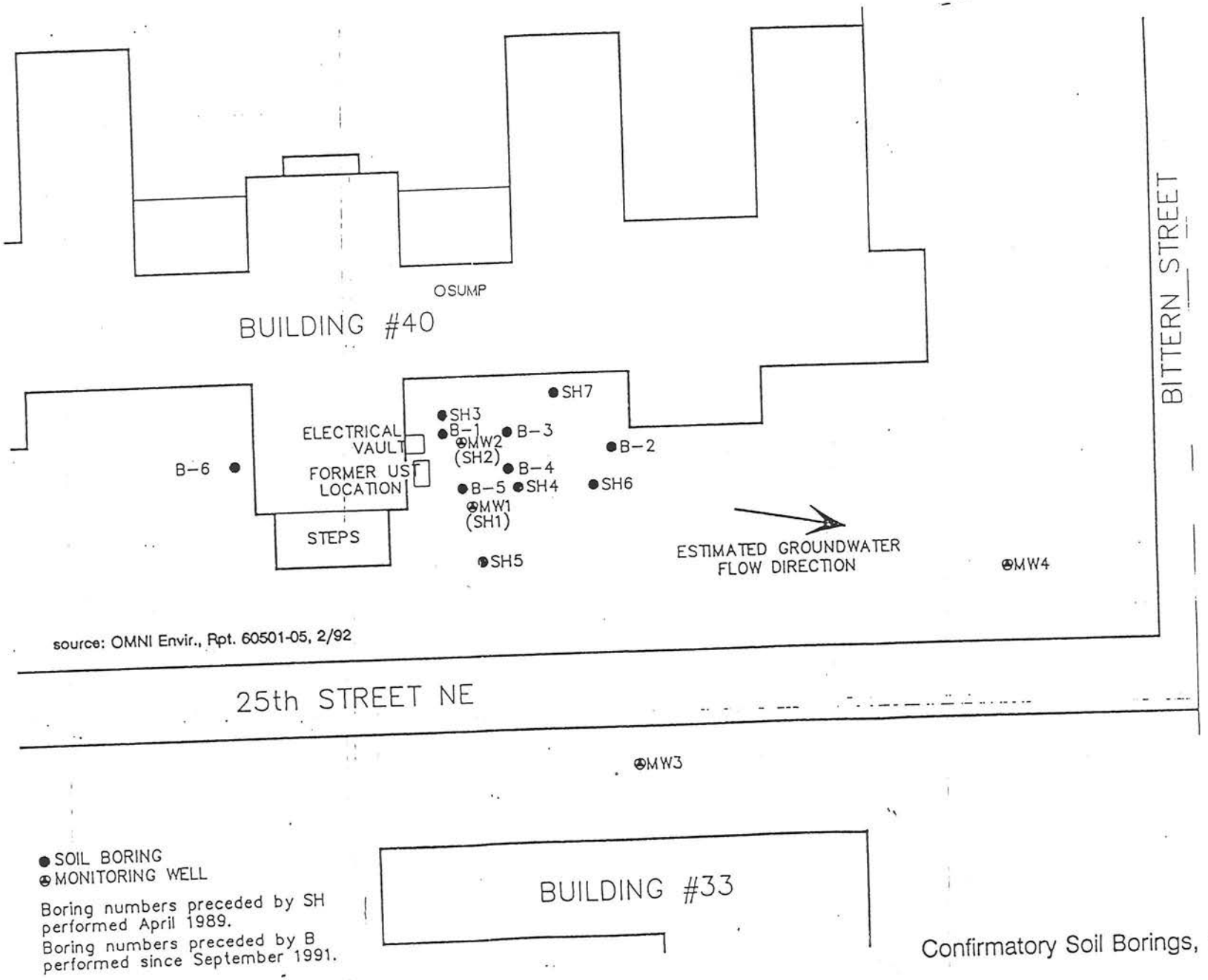
Oregon State Hospital

Schematic of Sump Cross-Section

source: OMNI Envir., Rpt. 60501-05, 2/92

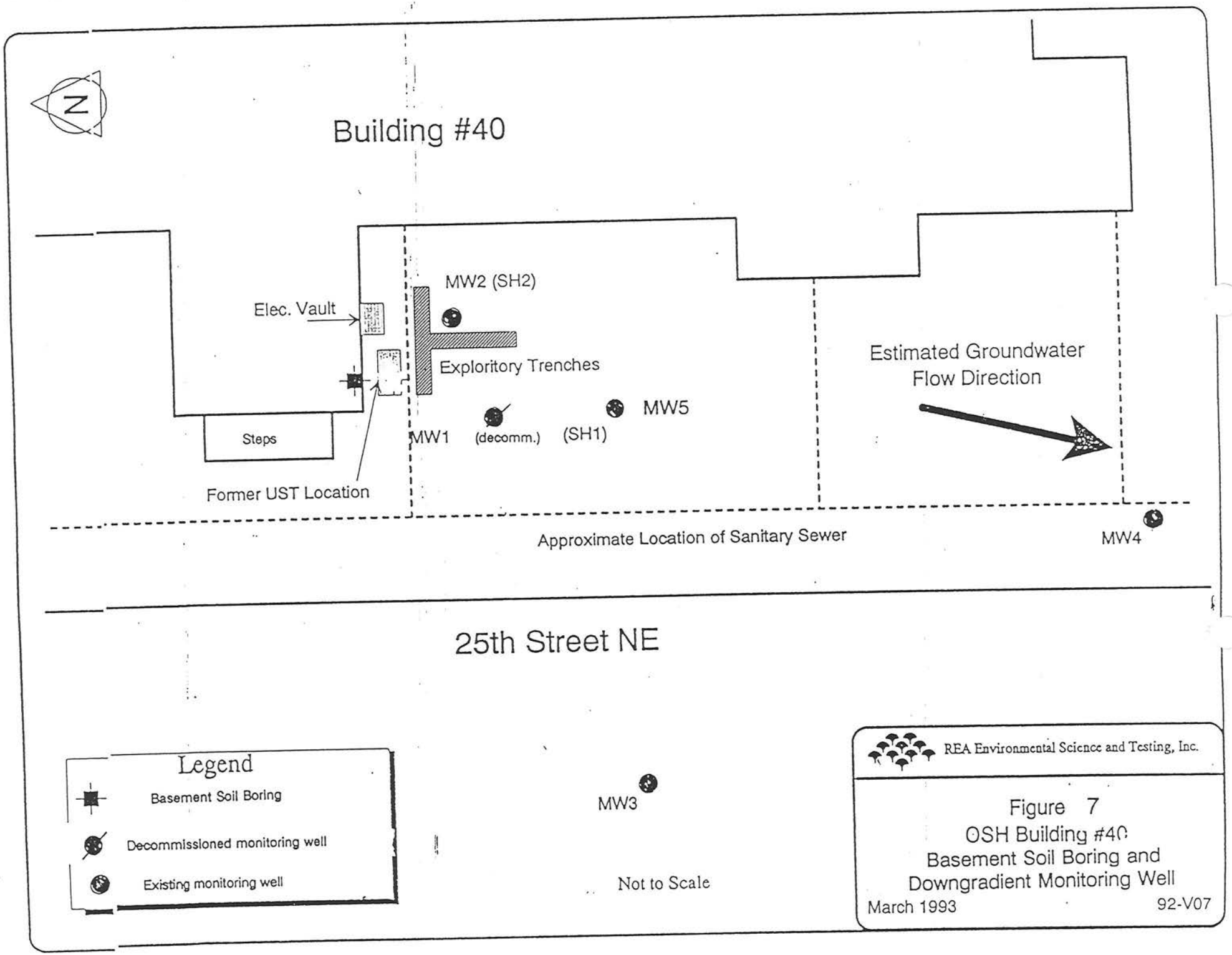
REA Tech Management, Inc.

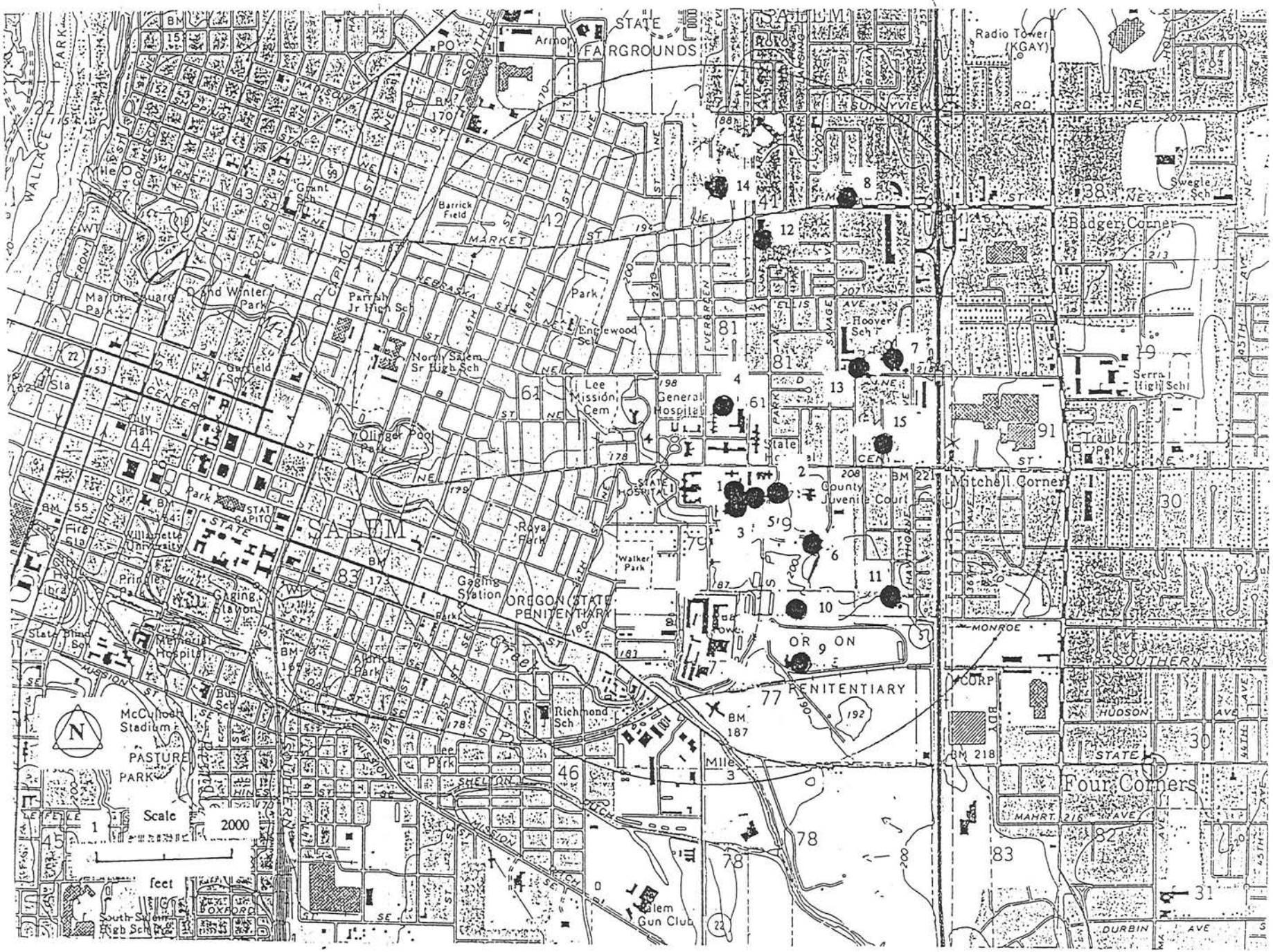
Figure 5



Confirmatory Soil Borings, Fall 1991

Figure 6

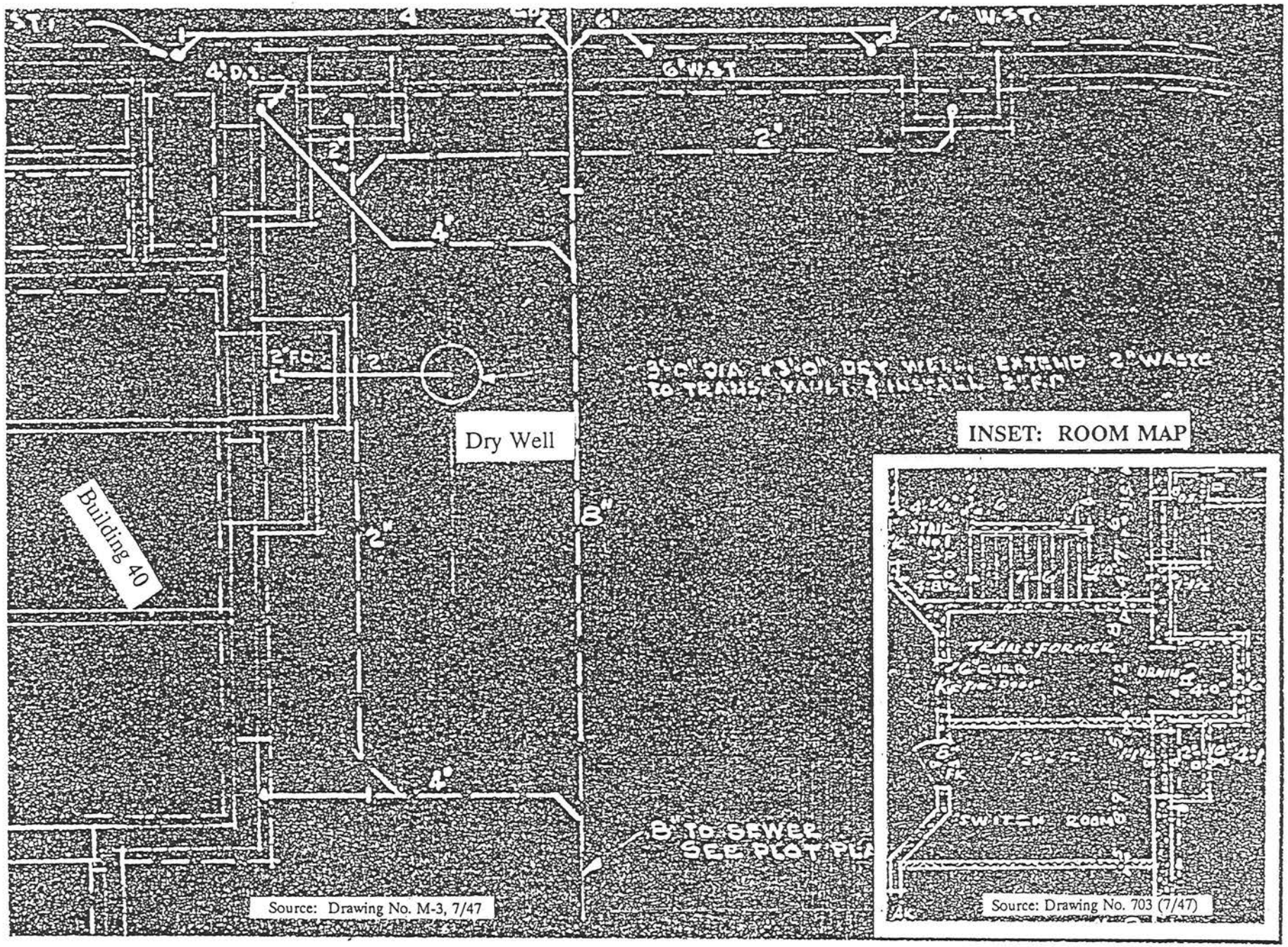

N
Building #40
MW2 (SH2)
Elec. Vault
Exploritory Trenches
Estimated Groundwater
Flow Direction
MW5
MW1
(decomm.)
(SH1)
Steps
Former UST Location
Approximate Location of Sanitary Sewer
MW4
25th Street NE
Legend
Basement Soil Boring
Decommissioned monitoring well
Existing monitoring well
MW3
Not to Scale
REA Environmental Science and Testing, Inc.
Figure 7
OSH Building #40
Basement Soil Boring and
Downgradient Monitoring Well
March 1993
92-V07



REPRESENTATIVE WATER WELLS WITHIN 1 MILE OF BUILDING 40

Figure 8

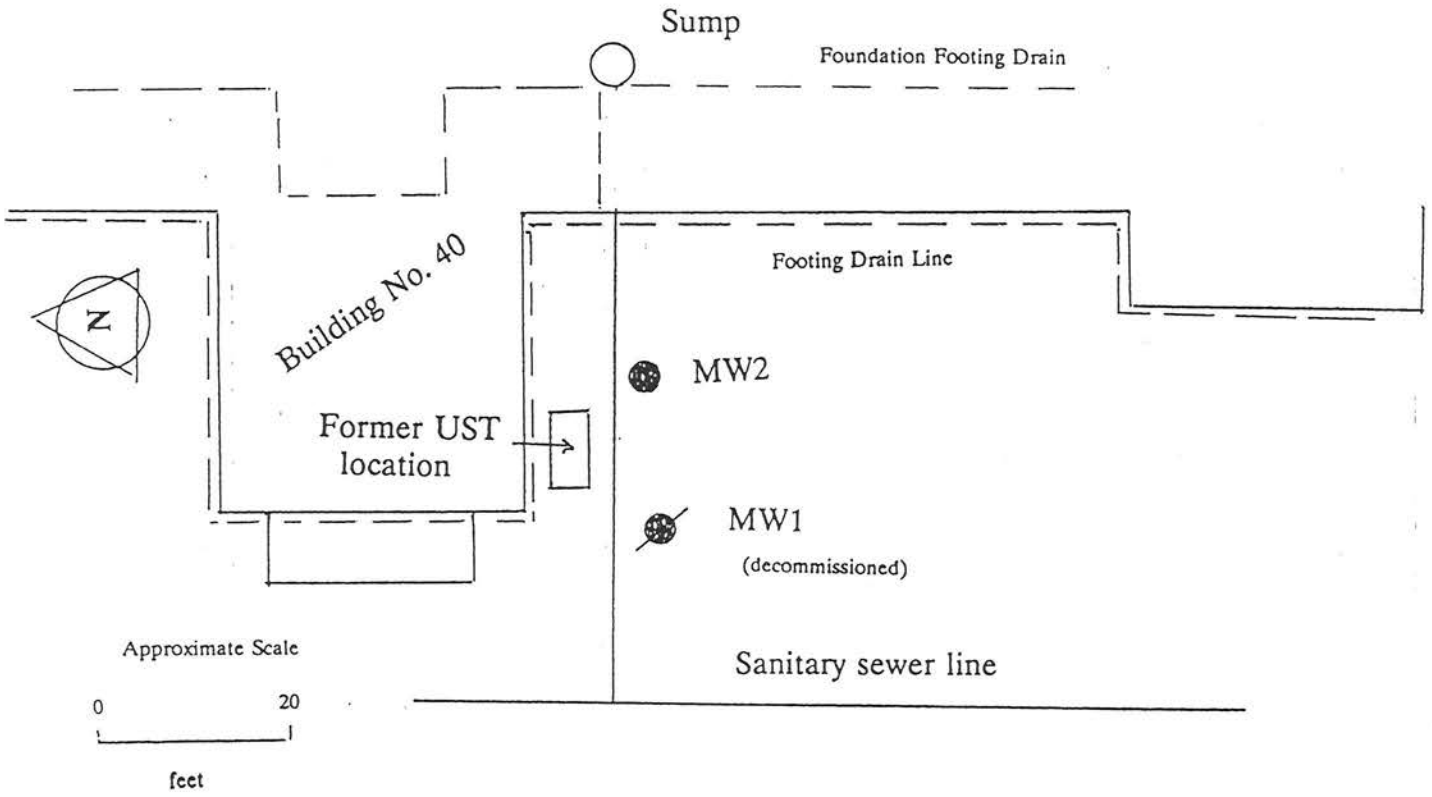
REA Tech Mgt., Inc.



REA Tech Mgt., Inc.
92-V071V

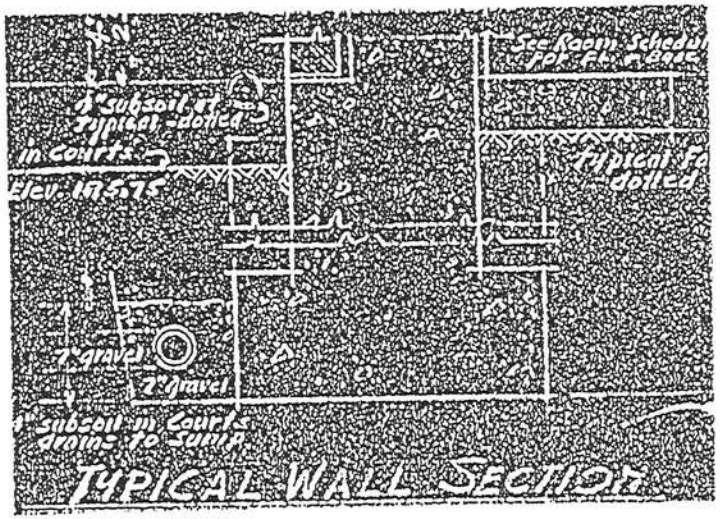
DRY WELL LOCATION
BUILDING 40

Figure 9



25th Street NE

Footing Cut-away Diagram →

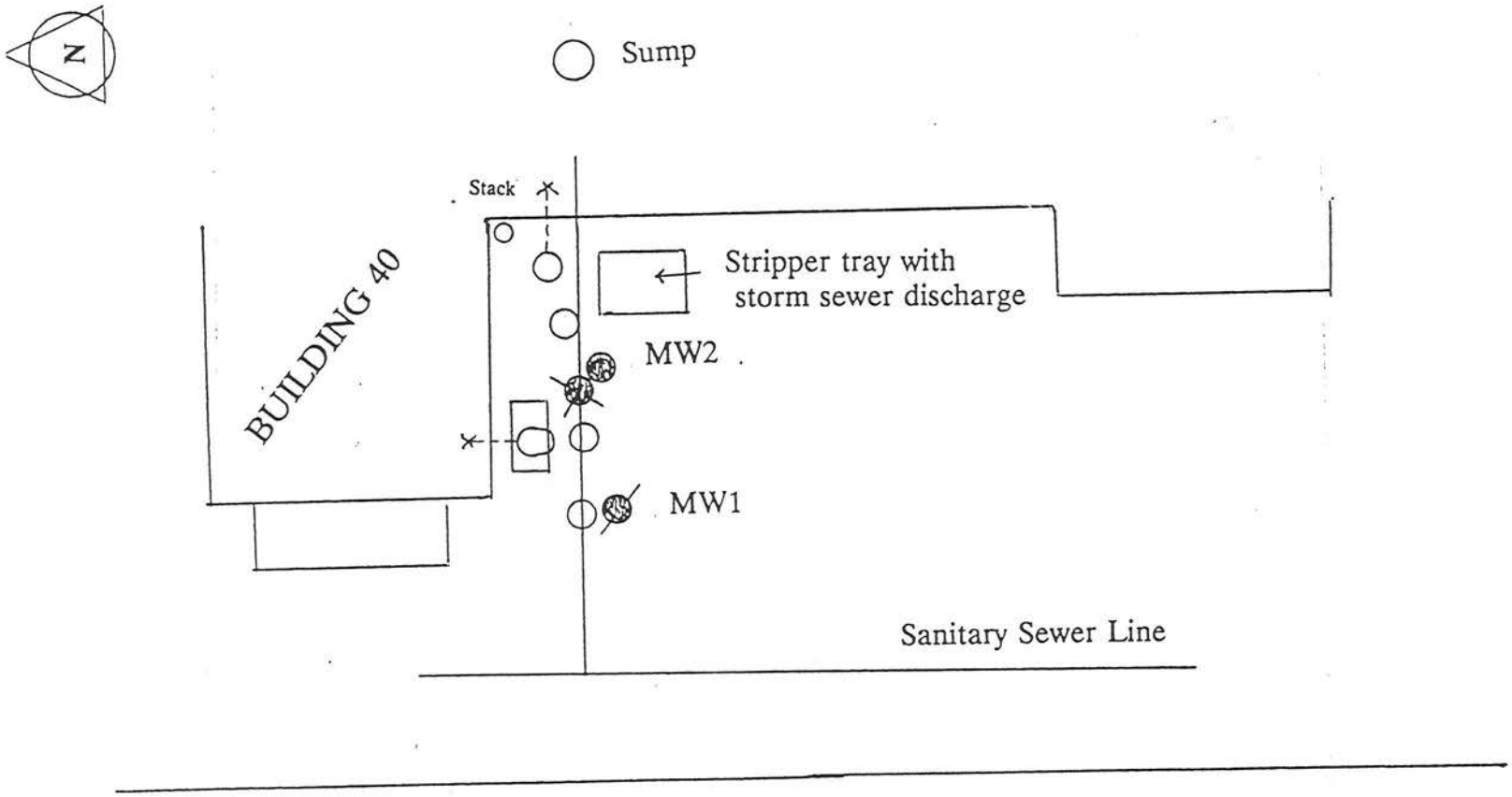


Building 40 Drwg. No. 9 (7/47)

FOOTING DRAIN ROUTES BUILDING 40

REA Tech Mgt., Inc.
92-VO7IV

Figure 10



REA Tech Mgt., Inc.

92-VO7IV

VES/STRIPPER TRAY SYSTEM

Building 40

Figure 11

TABLE 2
ANALYTICAL LABORATORY RESULTS
GROUNDWATER SAMPLES FROM MONITORING WELLS
September 3, 1991 to January 13, 1992

Results in Parts Per Billion (ppb), except for Total Lead (ppm).

Well	Date	Benzene	Toluene	Ethyl Benzene	Xylene	Ethylene Dibromide	Ethylene Dichloride	Total Lead
MW 1	9/3/91	2,600	3,300	570	4,600	ND	ND	0.054
MW 2		1,700	2,300	790	7,800	ND	ND	0.010
MW 1	1/13/92	ND	ND	ND	ND	ND	2.5	NT
MW 2		230	120	71	1,100	1.2	ND	ND
MW 2 (dup)		180	83	17	870	1.2	ND	NT
MW 3		ND	ND	ND	ND	ND	ND	0.062
MW 4		ND	ND	ND	ND	ND	ND	0.10
QA/ QC		ND	ND	ND	ND	ND	ND	NT
Detect. limit		1.0	1.0	1.0	1.0	1.0	1.0	0.005 ppm

Notes: BTEX analysis by EPA Method 8020.
ND indicates not detected at or above detection limit.
NT indicates not tested.
Method detection limits (MDL) for BTEX samples dated (9/13/91) of MW1 and MW2 were 50 ppb. For MW2 and MW2 (dup) samples dated 1/13/92, the MDL was 5.0 ppb.
Information source: OMNI Environmental, Report 60501-05, dated February 14, 1992.

TABLE 3
ANALYTICAL LABORATORY RESULTS
SOIL SAMPLES FROM CONFIRMATORY SOIL BORING NOS. B1 - B6
AND MONITORING WELL NOS. 3 AND 4
September 13, 1991 to January 13, 1992

Results in Parts Per Billion (ppb) except for TPH-HCID (ppm)

Well/ Boring	Date	Depth (ft)	TPH - HCID	Benzene	Toluene	Ethyl Benzene	Xylene
B 1	9/13/91	13 - 13.5	ND	NT	NT	NT	NT
B 2	12/6/91	13 - 13.5	ND	NT	NT	NT	NT
B 3	12/6/91	13 - 13.5	ND	NT	NT	NT	NT
B 4	12/6/91	13 - 13.5	ND	NT	NT	NT	NT
B 5	12/9/91	7.0 - 7.5	ND	NT	NT	NT	NT
		13 - 13.5	ND	ND	ND	11.0	9.3
B 6	1/13/92	13- 13.5	ND	NT	NT	NT	NT
MW 3	12/11/91	12.5 - 13	ND	ND	ND	ND	ND
MW 4	12/11/91	12.5 - 13	ND	NT	NT	NT	NT
Detect. limit			20 ppm	2.0	2.0	2.0	2.0

Notes: TPH-HCID analysis by Oregon DEQ Method, BTEX analysis by EPA Method 8020. ND indicates not detected at or above detection limit. NT indicates not tested. Information source: OMNI Environmental, Report 6050105, dated February 14, 1992.

APPENDIX I

INITIAL RESPONSE AND ABATEMENT MEMORANDUM

STATE OF OREGON

OFFICE OF STATE FIRE MARSHAL

INTEROFFICE MEMO

March 17, 1989

TO: File

FROM: Roger Severson RES

SUBJECT: Gasoline Leaching into Building Sump at Oregon State Hospital

March 13, 1989

Approximately 2:15 p.m. - Don Lowe received a call from Oregon State Hospital regarding the presence of gasoline in the sump of Building #40. Don Lowe advised them to call Salem Fire Department and to shut down any electrical equipment in the immediate area.

Approximately 2:17 p.m. - I called Bob Fresh, Director of Support Service, Oregon State Hospital, to advise him of the situation. He was already aware. I advised him to evacuate the immediate area and to plan on the possibility of further evacuation.

Responding to Building #40, I found Salem Fire Department (including Salem Pollution Control) at the scene with Bob Fresh and Dwight Linville, Maintenance Person for Oregon State Hospital. Shortly after my arrival D.E.Q. representative Cheryll Woods arrived.

A flooding control sump in the corridor floor, basement level of Building #40 was found, by maintenance, to have gasoline in it. The product was leaching into the sump along with ground water. The gasoline was believed to be coming from an inground tank approximately 25 feet away on the west side of Building #40 under the lawn (see plot plan of tank location and sump). The tank was empty on this date.

Maintenance, discovering the tank to be empty March 9, 1989, had the tank filled this date. The tank holds 240 gallons of product, which was last dipped approximately 2 months earlier. Maintenance stated the earlier dipping indicated approximately 100 gallons of fuel at that time.

Salem Pollution Control, using a volatile gas meter, was unable to detect any readings of an explosive mixture. Northwest Natural Gas was called requesting gas meter readings be taken for us. Al Pond and Tom Stuart responded with two meters. They took readings in and around Building #40. A one percent reading was found in cracks of the basement floor. All other locations had no traceable readings from their meters. The fire department returned to quarters at this time.

Maintenance, using a dip stick with paste to differentiate the water level from the depth of fuel, determined the depth of fuel to be approximately once inch.

Salem Pollution Control provided Oregon State Hospital with absorbent pads to remove the fuel from the sump, upon my request. Five pads were used. The last two picking up very little fuel product.

As added precaution I advised Bob Fresh of Oregon State Hospital, to maintain the exit doors open for ventilation, discontinue use of the basement, post no smoking signs in all directions of the sump, and provide a person to observe conditions in the sump and any increase of vapors in the area until the tank was dug up and the removal of fuel was completed.

March 14, 1989

Met with Bob Fresh and Dwight Linville of Oregon State Hospital at 9:00, to discuss conditions occurring through the night and determine plans for the tank removal. A private consultant and contractor arrived at this time. The advised precautions of the day before remained in affect with the exception of allowing staff to use the north end of the basement.

I returned at 3 p.m. to check on any changes which may have occurred. D.E.Q. and Salem Pollution Control were on-site at this time. There was still a noticeable trace of gasoline vapor in the basement. However, there was no measurable amount increase of product in the sump. An absorption pad has been in the sump from the day before.

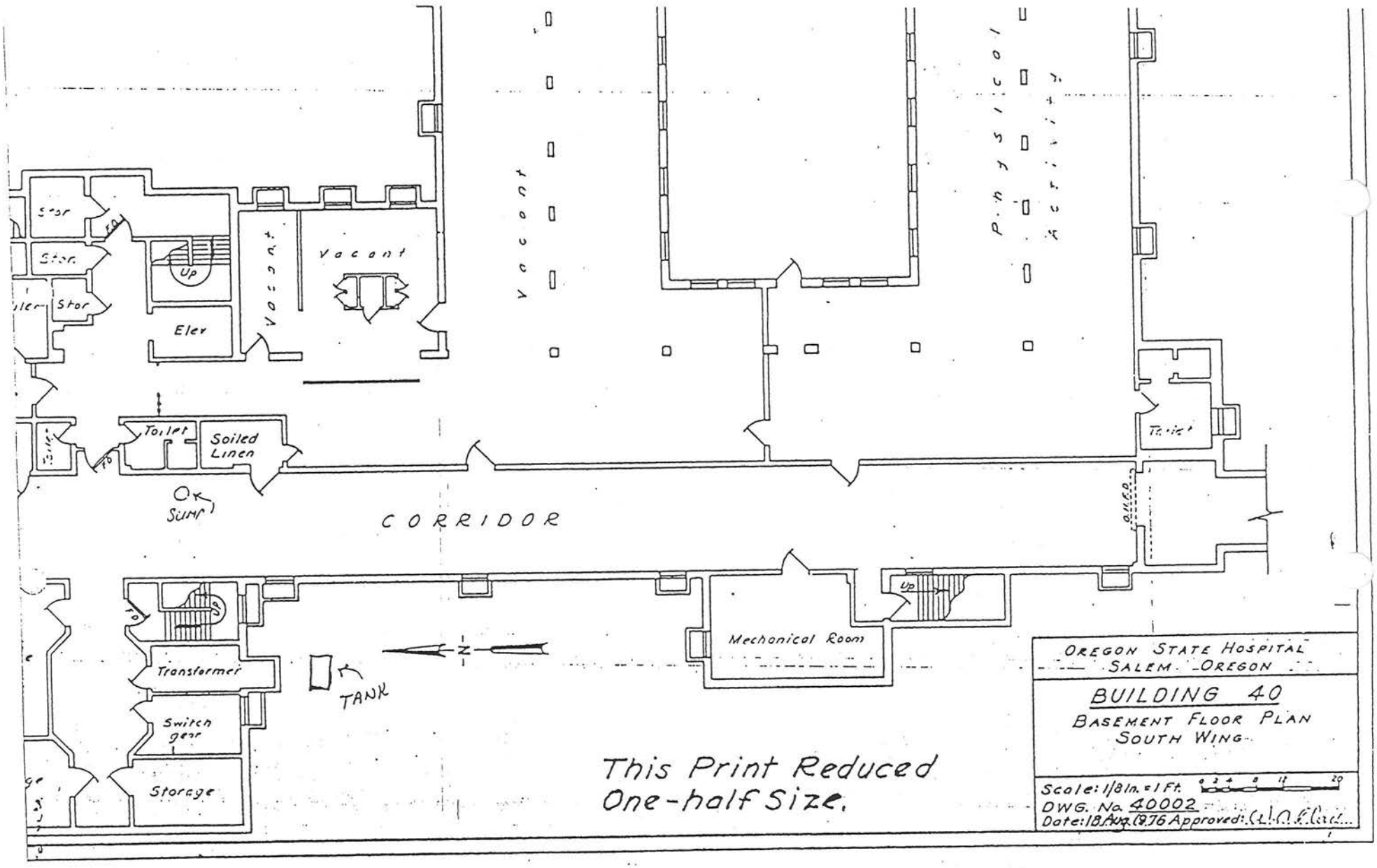
The tank had been removed before my arrival. An approximate 3/8" hole was found in the bottom of the tank. The hole appeared to be a mechanical break from the inside. The hole is directly under the fill cap, where the dip stick would be dropped in for measurement. The area beneath the tank was dug until reaching clay. It was determined that the product must have spread laterally on the clay surface. Digging ceased for the day. Safety precautions remained the same due to the possibility of fuel pocketing against the basement foundation walls.

March 15, 1989

2 p.m. - Update on conditions at Building #40 Oregon State Hospital. Dwight Linville informed me that there was still non measurable amount of fuel in the sump and there was no increase of gasoline odor. There was no digging conducted today, but plans to take core samples around the west side of the building may be conducted the following day.

Having no increase of product in three days, the observation person was discontinued. All other safety precautions remain in effect until the location of the fuel is determined and possibly until the fuel is removed.

RS:gjl322P


Stor
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Physical Activity
Toilet
Soiled Linen
SUMP
CORRIDOR
Toilet
Up
Mechanical Room
Transformer
Switch gear
Storage
TANK
This Print Reduced One-half Size.
OREGON STATE HOSPITAL
SALEM, OREGON
BUILDING 40
BASEMENT FLOOR PLAN
SOUTH WING
Scale: 1/8 in. = 1 Ft.
DWG. No. 40002
Date: 18 Aug. 1976 Approved:

APPENDIX II

SPECIAL DISCHARGE PERMIT

NEIL GOLDSCHMIDT
GOVERNOR

Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

March 15, 1989

Dwight Linville
Supervisor, Plant Operator
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

RE: WQ-Special Permit
Oregon State Hospital
Cleanup Project
Marion County

Dear Mr. Linville:

By letter, dated March 15, 1989, you requested a special permit to dispose of gasoline contaminated groundwater into the City of Salem's storm sewer system. You propose to pass all pumped groundwater through a oil/water separator in order to remove any free product prior to discharge.

Your consultant, Wayne Coppel of OMNI, projects that the pumping rate will range from 10-100 gallons per hour. They anticipate that any dissolved product is minimal due to the release occurring so recently.

Plans for the oil/water separator must be approved by the Department prior to construction.

This letter authorizes you to construct an approved treatment system and to dispose of the treated water to the storm sewer system in accordance with the following conditions:

1. Prior to discharge, contaminated groundwater shall be treated to not exceed the following limitations:

Parameter	Limitations
Free Product	No visible discharge
Total Dissolved Hydrocarbons	Shall not exceed 50 mg/L
pH	Shall be with 6 - 9

2. To confirm that adequate treatment is occurring, the above parameters shall be monitored daily for the first five days of discharge and weekly thereafter.

3. If the oil water separation does not remove the gasoline hydrocarbons to the permitted level, additional treatment must be provided.

4. The permittee shall notify the Department within 24 hours of any breakdown or failure of the treatment system to consistently meet the effluent limitations.

5. All free product shall be removed and disposed in a manner approved by the Department. No free product shall be disposed into the storm sewer system.

6. Prior to discharge, you must receive approval from the City of Salem to discharge to the storm sewer.

This Special Permit is only good for 60 days. If the groundwater remediation project will last more than 60 days, the permittee must apply for and receive a regular NPDES waste disposal permit.

Sincerely,

Richard Nichols
Administrator
Water Quality Division

RJN:CKA:crw
IW\WC4697

cc: Willamette Valley Region, DEQ
Air Quality Division, DEQ
Environmental Cleanup Division, DEQ

NEIL GOLDSCHMIDT
GOVERNOR

Department of Human Resources
MENTAL HEALTH DIVISION
Oregon State Hospital
2600 CENTER STREET NE, SALEM, OREGON 97310 PHONE 378-2348

March 15, 1989

Gil Hargrave
Dept. of Environmental Quality
750 Front St. NE
Salem, Ore. 97310

Dear Mr. Hargrave,

This letter is to request permission to discharge water from a "ground water sump pit" in our Bldg. #40 to the storm sewer. This is due to a recent incident in which a 240 gallon fuel tank for an emergency generator lost 240 gallons of gasoline into the soil. Some of this gasoline found its way to our sump (we think approx. 1 gal.) This gasoline was removed with absorbent pads. The sump contains a submersible pump which was piped to the sanitary sewer system. Mr. Jim Corcoran, a Pollution Control Inspector, informed us that we could be fined $10,000 per day if we continued to pump into the sewer. We have disconnected the pipe from the sewer and have piped it out of the window. We are currently filling 55 gallon barrels at the rate of 35 gallons per hour.

We would like to pump to an open barrel in which we would have a small pump which would pull water from the bottom of the barrel. We would remove any gasoline with absorbent pads before pumping into the storm sewer.

Respectfully,

Dwight L. Linville
Supervisor
Plant Operations
Oregon State Hospital

DL:cf

APPENDIX III

SOIL BORING LOGS - SEPTEMBER, 1991

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital						Boring/Well No. B-1
Drilling Contractor:	NA						Sheet 1 of 1
Purpose:	Soil Samples & Lithology					Elev. MP	GR
Driller:	NA		Drill Method	Sample	Core	Well	Date: 9/13/91
Supervisor:	Mike Greene	Type	Hand				Started: 0935
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
5				0-12 ft: brown clayey silt		No visual or olfactory evidence of contamination
10			▽	12-13 ft: saturated sandy clayey silt		
	B-1					
15						
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital					Boring/Well No. B-2	
Drilling Contractor:	NA					Sheet 1 of 1	
Purpose:	Soil Samples & Lithology					Elev. MP / GR	
Driller:	NA		Drill Method	Sample	Core	Well	Date: 12/6/91
Supervisor:	Mike Greene	Type	Hand				Started: 1215
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
				0-10 in: top soil, loamy		No visual or olfactory evidence of contamination
				10 in - 6 ft: brown silty clay (fine grain)		No visual or olfactory evidence of contamination
5						
	B2-1					
				6-13.5 ft: fine grain brown clayey silt		No visual or olfactory evidence of contamination
10						
	B2-2		▽	13-13.5 ft: saturated brown silty clay		No visual or olfactory evidence of contamination
15						
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital					Boring/Well No.	B-3
Drilling Contractor:	NA					Sheet	1 of 1
Purpose:	Soil Samples & Lithology					Elev. MP / GR	
Driller:	NA		Drill Method	Sample	Core	Well	Date: 12/6/91
Supervisor:	Mike Greene	Type	Hand				Started: 1330
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
				0-8 in: loamy top soil, roots & grass		
				8 in - 3 ft: fine grain brown silty clay		
				3-4.5 ft: dark gray clay		No visual or olfactory evidence of contamination
5						
	B3-1			4.5-13.5 ft: fine grain brown clayey silt		No visual or olfactory evidence of contamination
10						
	B3-2					
15						
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital					Boring/Well No. B-4	
Drilling Contractor:	NA					Sheet 1 of 1	
Purpose:	Soil Samples & Lithology					Elev. UP / GR	
Driller:	NA		Drill Method	Sample	Core	Well	Date: 12/6/91
Supervisor:	Mike Greene	Type	Hand				Started: 1415
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
				0-8 in: loamy top soil		No visual or olfactory evidence of contamination
				8 in - 3 ft: fine grain brown silty clay		
5						
	B4-1			3-13.5 ft: fine grain brown clayey silt		No visual or olfactory evidence of contamination
10						
	B4-2		▽			No visual or olfactory evidence of contamination
15						
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital					Boring/Well No.	B-5
Drilling Contractor:	NA					Sheet	1 of 1
Purpose:	Soil Samples & Lithology					Elev. MP / GR	
Driller:	NA		Drill Method	Sample	Core	Well	Date: 12/9/91
Supervisor:	Mike Greene	Type	Hand				Started: 0935
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
				0-8 in: loamy top soil		No visual or olfactory evidence of contamination
				8 in - 3.5 ft: fine grain brown silty clay		No visual or olfactory evidence of contamination
5						
	B5-1					
				3.5-13.5 ft: fine grain brown clayey silt		Slight odor, may be hydrocarbon
10						
			▽			
	B5-2					
15	B5-2D					
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Oregon State Hospital, Building No. 40					Project No. 60501.05	
Client:	Oregon State Hospital					Boring/Well No. B-6	
Drilling Contractor:	NA					Sheet 1 of 1	
Purpose:	Soil Samples & Lithology					Elev. MP / GR	
Driller:	NA		Drill Method	Sample	Core	Well	Date: 1/13/92
Supervisor:	Mike Greene	Type	Hand				Started:
Comments:		Diameter	2½"	2½"			Completed:

Hand auger boring, stainless steel hand auger

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	OVA or HNU (ppm)	Remarks
				0-6 in: loamy top soil		
				6 in - 2.5 ft: gravelly sandy silt		
5				2.5-8 ft: fine grain brown clayey silt		No visual or olfactory evidence of contamination
				8-10.5 ft: fine grain brown silty clay		
10						
				10.5-13.5 ft: sandy silty clay		
	B6-1		▽			
15						
20						

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

APPENDIX IV

MONITORING WELL NOS. 3, 4 and 5 LOGS

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project: Monitoring Well Installation					Project No. 60501.01	
Client: Oregon State Hospital						Boring/Well No. 3
Drilling Contractor: Greg Van De Hey Soil Sampling						Sheet 1 of 1
Purpose: Groundwater Investigation						Elev. WP / GR
Driller: Norb Van De Hey		Drill Method	Sample	Core	Well	Date: 12/11/91
Supervisor: John Baker	Type	Hollow	SSS	3.75"	PVC	Started:
Comments:	Diameter	7.5"	1.75"	3.75"	2"	Completed:

Silica sand #10-#20; 2" PVC well screen #10; flush well monument; locking cap

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	Water Level	Remarks
5	1211-MW3-1	5 5 8		Moist, med. brown, fine-grained silty clay; Medium-high plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.		
10	1211-MW3-2	4 5 6		Saturated, med. brown, fine-grained silty clay; Medium-high plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.	▼	Groundwater after installation 12.75'
15						
20	1211-MW3-3	2 2 5		Saturated, med. brown, fine-grained silty clay; Medium-high plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.		

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

Test Boring/Well Construction Log

OMNI Environmental Services, Inc.

Project:	Monitoring Well Installation					Project No. 60501.01	
Client:	Oregon State Hospital						Boring/Well No. 4
Drilling Contractor:	Greg Van De Hey Soil Sampling						Sheet 1 of 1
Purpose:	Groundwater Investigation						Elev. MP / GR
Driller:	Norb Van De Hey		Drill Method	Sample	Core	Well	Date: 12/11/91
Supervisor:	John Baker	Type	Hollow	SSS	3.75"	PVC	Started:
Comments:		Diameter	7.5"	1.75"	3.75"	2"	Completed:

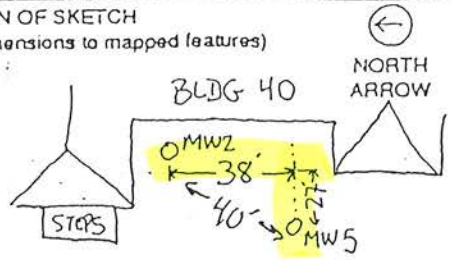
Silica sand #10-#20; 2" PVC well screen #10; flush well monument; locking cap

Depth (ft.)	Sample No.	Blows per 6"	Well Construction Diagram	Description	Water Level	Remarks
5	1211-MW4-1	4 5 8		Moist, med. brown, fine-grained silty clay; Medium-high plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.		
10	1211-MW4-2	4 4 6		Saturated, med. brown, fine-grained sandy clay; Low plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.	▼	Groundwater after installation 13'
15						
20	1211-MW4-3	2 3 5		Saturated, med. brown, fine-grained silty clay; Medium-high plasticity; No visual or olfactory evidence of petroleum hydrocarbon contamination observed.		

Legend: Screen: Sand: Gravel: Soil Backfill: Bentonite: Cement Grout:

GEOLOGIC LOG OF EXPLORATION

LOCATION OF SKETCH
(Show dimensions to mapped features)



CLIENT/OWNER: OREGON STATE HOSPITAL BLDG 40
TETRA TECH PROJECT NUMBER: 93-V07 II
EXPLORATION NUMBER: MW5 SHEET 1 OF 2
START DATE: MARCH 25, 1993 HOUR: 10:55 AM
GROUND SURFACE CONDITIONS: GRASS WET SILTY CLAY
TETRA TECH REPRESENTATIVE: JOHN M. REHM JR.
EXPLORATION CONTRACTOR: HOGATE DRILLING ALBANY OR
OPERATOR: CHRIS COX, LARRY BARKER
DRILL TYPE/METHOD: 8" O.D. HOLLOW STEM AUGER
HAMMER WEIGHT & STROKE: 140# 30 INCHES

WATER LEVEL INFORMATION

DATE	03/25	03/25		
TIME	12:45hrs	13:25		
DEPTH OF WATER	17	16		
HOLE DEPTH	18	18		
CASING DEPTH	16	18		

	SAMPLE NUMBER	PENETRATION RESISTANCE/6"	LENGTH DRIVEN	SAMPLE LENGTH RECOVERED	P.I.D.	GRAPHIC RECOVERY	DEPTH SCALE	UNIFIED SYMBOL	
							0		SILTY CLAY BROWN MED STIFF MOIST W/ TRACE FINE SAND PLASTIC
							1		
							2		
							3		
							4	CL	
11:05	1	4/9	18	18	ND		5		6" STRINGER BROWN GRAY COLOR. NO H.C. ODOR/SHEEN
		12					6		
							7		
							8	ML	SILT BROWN MED STIFF DAMP DILATENT FLUFFY TEXTURE W/ TRACE CLAY, NO HC ODOR
							9		
11:20	2	5/5	18	18	ND		10		
		5					11		WITH LITTLE TO SOME CLAY PLASTIC MOIST NO H.C. ODOR/SHEEN
11:34	3	3/3	18	18	ND		2		SANDY SILT BY SOFT WET. SAND IS VERY
		5					3	ML	FINE GRAINED. DILATENT NO HC ODOR
12:06	4	4/4	18	15	ND		4		INCREASING WETNESS AT 14, VERY
		6					5		DILATENT
12:24	5	3/3	18	16	ND		6	SM	SILTY SAND BROWN LOOSE WET. VERY FINE
		5					7		GRAINED DILATENT. NO HC ODOR/SHEEN
13:30	6	2/3	18	16	ND		8	ML	SANDY SILT BROWN SOFT WET DILATANT
		5					9		W/ TRACES OF CLAY IN PLACES NO H.C. ODOR

FINISH DATE: 03/25/93 HOUR: 16:40hrs OR CONTINUED ____

GEOLOGIC LOG OF EXPLORATION

LOCATION OF SKETCH
(Show dimensions to mapped features)

NORTH ARROW

CLIENT/OWNER: OREGON STATE HOSPITAL
TETRA TECH PROJECT NUMBER: 93-V07 II
EXPLORATION NUMBER: MW-5 SHEET 2 OF 2
START DATE: MARCH 25, 1993 HOUR: 10:55 AM
GROUND SURFACE CONDITIONS: GRASS WET SILTY CLAY
TETRA TECH REPRESENTATIVE: JOHN M. REHM JR.
EXPLORATION CONTRACTOR: HOGATE DRLG. ALBANY, OR
OPERATOR: CHRIS COX, LARRY BARKER
DRILL TYPE/METHOD: HOLLOW STEM AUGER
HAMMER WEIGHT & STROKE: 140# 30 INCHES

WATER LEVEL INFORMATION

DATE				
TIME				
DEPTH OF WATER				
HOLE DEPTH				
CASING DEPTH				

TIME	SAMPLE NUMBER	PENETRATION RESISTANCE/6"	LENGTH DRIVEN	SAMPLE LENGTH RECOVERED	P.I.D.	GRAPHIC RECOVERY	DEPTH SCALE	UNIFIED SYMBOL	
							0		
							1	ML	WET ABOVE
1355	NS	4/7	18	16	NR		2		LESS SAND TRACE CLAY DAMP
							3	ML	COLOR CHANGE TO SPECKLED BROWN AND BROWN ORANGE. NO HC. ODOR
							4		
							5		
							6	T.D.	BOTTOM OF WELL AT 25 FEET
							7		0.010 SLOT SCREEN 24 - 10.5 FEET
							8		TOP OF COLORADO 8-12 SAND 9.5 FEET
							9		TOP OF BAROID bentonite "HOLEPLUG" 5.5 FEET
							10		
							11		START CARD NO. 51798
							12		
							13		
							14		
							15		
							16		
							17		
							18		
							19		

FINISH DATE: 03/25/93 HOUR: 16:40 hrs OR CONTINUED ____

APPENDIX V

REPRESENTATIVE WATER WELL LOGS

STATE ENGINEER
Salem, Oregon

State Well No. 7S3W-25C
ty Marion
1 ication No. GR-679

Well Log

Owner: Oregon State Hospital Owner's No. #1

Driller: Date Drilled 1913

CHARACTER OF MATERIAL	(Feet below land surface) From	To	Thickness (feet)
Clay and sand	0	36	36
Cement gravel	36	44	8
Sand and gravel	44	54	10
Hard aand and clay	54	64.5	10.
Water gravel	64.5	70	5.5
Sand and gravel	70	81	11
Sand	81	86	5
Water gravel	86	97	11

STATE ENGINEER
Salem, Oregon

Well Record

STATE WELL NO. 7/3W-25B(
UNTY Marion
PLICATION NO. GR-677

OWNER: Oregon State Hospital

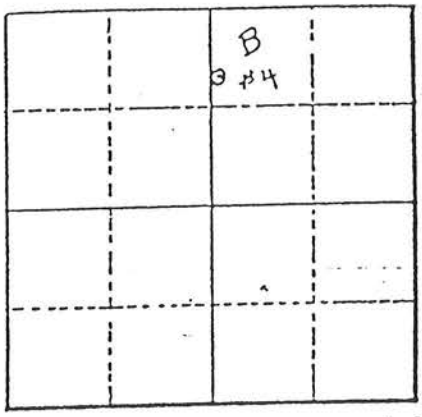
MAILING ADDRESS:

CITY AND STATE: Salem, Oregon

LOCATION OF WELL: Owner's No. # 4

NE ¼ NW ¼ Sec. 25 T. 7 ~~N.~~ S., R. 3 ~~E.~~ W., W.M.

Bearing and distance from section or subdivision corner 867 feet South and 2600 feet West of NE Corner, Section 25, T. 7 S., R. 3 W., W. M.



Section 25

Altitude at well 208.11

TYPE OF WELL: Drilled Date Constructed Fall 1928

Depth drilled 112.5 feet Depth cased 112.5 feet

CASING RECORD:

12-inch

FINISH:

AQUIFERS:

WATER LEVEL:

33.5 feet

PUMPING EQUIPMENT: Type Byrom Jackson Turbine H.P. 20

Capacity 150 G.P.M.

WELL TESTS:

Drawdown ft. after hours G.P.M.

Drawdown ft. after hours G.P.M.

USE OF WATER Domestic Temp. °F., 19

SOURCE OF INFORMATION GR-675

DRILLER or DIGGER

ADDITIONAL DATA:

Log x Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:

Clay and sand	0	35	35
Cement gravel	35	51	16
Loose gravel	51	70	19
Dry clay	70	72	2
Gravel and sand	72	90	18
Hard sand	90	95	5
Water gravel	95	111	16
Dry clay	111	112.5	1.5

State Printer 25216

STATE ENGINEER
Salem, Oregon

Well Record

STATE WELL NO. 7/2W-25A
COUNTY Marion
APPLICATION NO. GR-676

OWNER: Oregon State Hospital

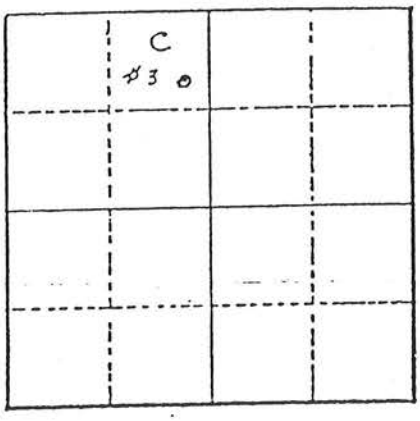
MAILING ADDRESS: 3

CITY AND STATE: Salem, Orego

LOCATION OF WELL: Owner's No. #3

NE ¼ NW ¼ Sec. 25 T. 7 N. S., R. 3 E. W., W.M.

Bearing and distance from section or subdivision corner 946 feet South and 3080 feet West of NE corner, Section 25



Section 25

Altitude at well 206.94 feet

TYPE OF WELL: Drilled Date Constructed 1913

Depth drilled 112.5 feet Depth cased 112.5 feet

CASING RECORD:

12-inch

FINISH:

AQUIFERS:

WATER LEVEL:

42 feet

PUMPING EQUIPMENT: Type Deming-Mueller Turbine H.P. 20

Capacity 250 G.P.M.

WELL TESTS:

Drawdown ..... ft. after ..... hours ..... G.P.

Drawdown ..... ft. after ..... hours ..... G.P.

USE OF WATER Domestic Temp. ..... °F. ....., 19....

SOURCE OF INFORMATION GR-674

DRILLER or DIGGER .....

ADDITIONAL DATA:

Log ✓ Water Level Measurements ..... Chemical Analysis ..... Aquifer Test .....

REMARKS:

Clay and sand	0	35	35	Gravel and sand	72	90	18
Cement gravel	35	51	16	Hard sand	90	95	5
Loose gravel	51	70	19	Water gravel	95	111	16
Dry clay	70	72	2	Dry clay	111	112.5	1.5

State Printing 25316

STATE ENGINEER
Salem, Oregon

Well Record

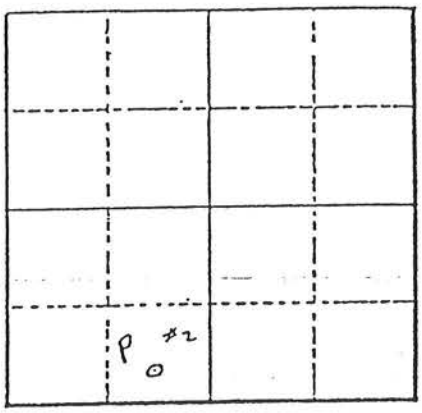
STATE WELL NO. 7/3W-24P1
COUNTY Marion
4 APPLICATION NO. GR-678

OWNER: Oregon State Hospital
MAILING ADDRESS
CITY AND STATE: Salem, Oregon

LOCATION OF WELL: Owner's No. # 2

SE ¼ SW ¼ Sec. 24 T. 7 ~~N.~~ S., R. 3 ~~E.~~ W., W.M.

Bearing and distance from section or subdivision corner 4773 feet South and 3328 feet West of NE corner, Section 24



Section 24

Altitude at well 203.42

TYPE OF WELL: Drilled Date Constructed Aug. 10, 1949

Depth drilled 190 Depth cased 190

CASING RECORD:

10-inch

FINISH:

AQUIFERS:

WATER LEVEL:
22 feet

PUMPING EQUIPMENT: Type F. M. Turbine H.P. 20
Capacity 220 G.P.M.

WELL TESTS:
Drawdown 83 ft. after hours 190 G.P.M.
Drawdown 128 ft. after hours 265 G.P.M.

USE OF WATER Irrigation 42.33 Temp. °F. , 19
SOURCE OF INFORMATION GR-676
DRILLER or DIGGER
ADDITIONAL DATA:
Log ✓ Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:

State Printing 89216

STATE ENGINEER
Salem, Oregon

State Well No. 7/3W-24
unty Marion
4 plication No. GR-678

Well Log

Owner: Oregon State Hospital Owner's No. #1

Driller: Date Drilled Aug. 10, 1949

CHARACTER OF MATERIAL	(Feet below land surface) From	To	Thickness (feet)
Top soil	0	1	1
Yellow clay and silt	1	30	29
Blue clay and silt	30	42	12
Cemented gravel	42	53	11
Gravel with clay binder	53	57	4
Some sand in gravel, a little water	57	62	5
Cemented gravel	62	82	20
Brown clay	82	86	4
Gravel with clay binder	86	164	78
Sand, some water	164	167	3
Cemented gravel	167	177	10
Sand and gravel with water	177	181	4
Gravel with clay binder	181	190	9

STATE ENGINEER
Salem, Oregon

Well Record

STATE WELL NO. 7/3W-25C(3)
NTY Marion
LICATION NO. GR-675

5

OWNER: Oregon State Hospital

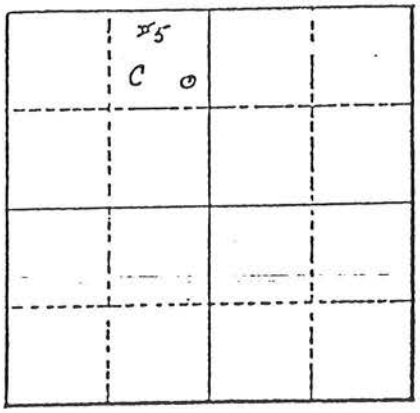
MAILING ADDRESS:

CITY AND STATE: Salem, Oregon

LOCATION OF WELL: Owner's No. 5

NE ¼ NW ¼ Sec. 25 T. 7 ~~N.~~ S., R. 3 ~~E.~~ W., W.M.

Bearing and distance from section or subdivision corner 877 feet South and 2880 feet West from NE corner, Section 25, T. 7 S., R. 3 W., W. M.



Section 25

Altitude at well 207.35 feet

TYPE OF WELL: Drilled Date Constructed July 1935

Depth drilled 361 feet Depth cased 278 feet

CASING RECORD:

12-inch casing set from 0 to 194 feet
10-inch casing set from 194 to 278 feet

FINISH:

AQUIFERS:

WATER LEVEL:
40 feet

PUMPING EQUIPMENT: Type Berkeley H.P. 30
Capacity 300 G.P.M.

WELL TESTS:
Drawdown 104 ft. after hours 323 G.P.M.
Drawdown ft. after hours G.P.M.

USE OF WATER Domestic Temp. °F. , 19
SOURCE OF INFORMATION GR-673
DRILLER or DIGGER
ADDITIONAL DATA:
Log ✓ Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:

State Printing 85316

STATE ENGINEER
Salem, Oregon

State Well No. 7/3W-25C(3)
County Marion
5 Application No. GR-675

Well Log

Owner: Oregon State Hospital Owner's No. 5

Driller: Date Drilled July 1935

CHARACTER OF MATERIAL	(Feet below land surface) From	To	Thickness (feet)
Clay and sand	0	35	35
Cemented gravel	35	51	16
Loose gravel	51	70	19
Dry clay	70	72	2
Gravel and sand	72	90	18
Hard sand	90	95	5
Water gravel	95	100	5
Sand and gravel w/water	100	125	25
Layers of cemented gravel	125	149	24
w/water			
Hard cement gravel	149	155	6
Gravel w/water	155	166	11
Cemented gravel possibley			
some water.	166	183	17
Clay and gravel	183	186	3
Cemented gravel	186	193	7
Broken rock and clay (?)			
Solid rock	193	199	6
Clay w/some decomposed			
rock and grit	199	252	53
Fairly solid rock with crevices	252	278	26
" " " "	278	323	45
Rock with Crevices	323	361	38

M1R1....8025

TICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED
DEC 12 1966
STATE ENGINEER
SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

7

State Well No. 7/3W-24

State Permit No. .....

OWNER:

e Salem Equipment INC.

ddress 3371 D. St. N.E. Salem Ore.

LOCATION OF WELL:

ounty Marion Driller's well number

¼ ¼ Section 24 T. 7S R. 3W W.M.

cing and distance from section or subdivision corner

TYPE OF WORK (check):

Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐

ndonment, describe material and procedure in Item 12.

PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☑ Other ☐

Irrigation ☐ Test Well ☐

(5) TYPE OF WELL:

Rotary ☐ Driven ☐

Cable ☑ Jetted ☐

Dug ☐ Bored ☐

CASING INSTALLED:

Threaded ☐ Welded ☑

6 " Diam. from 0 ft. to 111 ft. Gage .250

" Diam. from ..... ft. to ..... ft. Gage .....

" Diam. from ..... ft. to ..... ft. Gage .....

(7) PERFORATIONS:

Perforated? ☑ Yes ☐ No

pe of perforator used Mills

e of perforations ⅜ in. by 2 in.

..... perforations from ..... ft. to ..... ft.

84 perforations from 74 ft. to 91 ft.

84 perforations from 100 ft. to 107 ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

) SCREENS:

Well screen installed? ☐ Yes ☑ No

Manufacturer's Name .....

..... Model No. .....

..... Slot size ..... Set from ..... ft. to ..... ft.

Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

) CONSTRUCTION:

Well seal—Material used in seal Bentonite ¼"-crushed rock

Depth of seal 40 ft. Was a packer used? No

ameter of well bore to bottom of seal 10 in.

ere any loose strata cemented off? ☐ Yes ☑ No Depth .....

Was a drive shoe used? ☑ Yes ☐ No

s well gravel packed? ☐ Yes ☑ No Size of gravel: .....

avel placed from ..... ft. to ..... ft.

Did any strata contain unusable water? ☐ Yes ☑ No

pe of water? depth of strata

thod of sealing strata off

(10) WATER LEVELS:

tic level 20 ft. below land surface Date 10-13-66

tesian pressure lbs. per square inch Date

(11) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? ☑ Yes ☐ No If yes, by whom? Miller-Robins

Yield: 120 gal./min. with 80 ft. drawdown after 3 hrs.

" " " "

" " " "

Bailer test gal./min. with ft. drawdown after hrs.

Artesian flow g.p.m. Date

Temperature of water Was a chemical analysis made? ☐ Yes ☑ No

(12) WELL LOG:

Diameter of well below casing 6

Depth drilled 111 ft. Depth of completed well 111 ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Brown - Clay	0	22
Blue - "	22	41
Medium Sand & Gravel	41	55
Fine - Sand	55	60
Blue - Clay	60	62
Medium Gravel	65	71
" - Sand	71	72
Cemented Gravel	72	80
Medium - Gravel	80	91
Cemented - "	91	103
Medium - Gravel	103	107
Cemented - "	107	111

Work started 9-30-66 19 Completed 10-12-66 19

Date well drilling machine moved off of well 19

(13) PUMP:

Manufacturer's Name .....

Type: ..... H.P. .....

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Miller-Robins Const. Inc.
(Person, firm or corporation) (Type or print)

Address 5545 Joseph St. S.E.

Drilling Machine Operator's License No. 455

[Signed] Harlan E. Miller
(Water Well Contractor)

Contractor's License No. 37 Date 10-12-66, 19

STATE ENGINEER
Salem, Oregon

8

State Well No. 7/3W-24A(1)
County MARION
Application No. GR-5

Well Log

Owner: BARTEL W. ANDRESEN Owner's No.

Driller: Date Drilled February 1955

CHARACTER OF MATERIAL	(Feet below land surface) From	To	Thickness (feet)
Soil	0	26	26
Silt, yellow	26	29	3
Silt, blue	29	44	15
Sand & gravel, fine (Sulfer Water) H2S	44	48	4
Sand, cemented	48	61	13
Gravel, cemented Blue clay	61	65	4
Gravel, cemented yellow clay	65	77	12
Clay, yellow	77	82	5
Sand, cemented	82	86.6	4.6
Gravel-water bearing (sizes $1\frac{1}{2}$" minus)	86.6	90	3.4
Gravel, cemented with blue clay	90	112	22
Gravel-water bearing, same blue clay	112	125	13
Gravel, cemented with yellow clay	125	147	22
Gravel, cemented with blue clay	147	157	10
Gravel, cemented with yellow clay	157	190	33

File Original and Duplicate with the STATE ENGINEER, SALEM, OREGON

M 371....

STATE OF OREGON

Fill In State Permit No. .....

9

(1) OWNER:

Name OREGON STATE PENITENTIARY

Address STATE STREET SALEM, ORE.

(2) LOCATION OF WELL: #4

County Marion Owner's number, if any— # 4

R. F. D. or Street No. 2605 State Street

Bearing and distance from section or subdivision corner

2059.2 North and 2653.2 ft. West from the ~~SE corner of Section 25 T7S R3W~~ (within ~~NE¼ of SW¼ of Sec. 25~~)

(3) TYPE OF WORK (check):

Well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [X] Industrial [ ] Municipal [ ]

Irrigation [ ] Test Well [ ] Other [X]

(5) EQUIPMENT:

Rotary [ ]

Cable [X]

Dug Well [ ]

CASING INSTALLED:

Threaded [ ] Welded [X]

FROM	ft. to	ft.	Diam.	Gage or Wall
" 0	" 166	" 12	" 5/16	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"

Type and size of shoe or well ring

Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
	"	"
	"	"
	"	"
	"	"
	"	"

Size of gravel:

(7) PERFORATIONS:

Type of perforator used Mills

SIZE of perforations 3 in., length, by 3/8 in.

FROM	ft. to	ft.	perf per foot	No. of rows
23	50	8	27	
50	70	12	20	
70	162	8	90	

SCREENS:

Give Manufacturer's Name, Model No. and Size

CONSTRUCTION:

Was a surface sanitary seal provided? [ ] Yes [X] No To what depth ft.

Were any strata sealed against pollution? [X] Yes [ ] No

If yes, note depth of strata

FROM	ft. to	ft.
7	20	
"	"	"

METHOD OF SEALING Clay

(9) WATER LEVELS:

Depth at which water was first found	20	ft.
Standing level before perforating	30	ft.
Standing level after perforating	23	ft.

Log Accepted by:

[Signed] Oregon State Pen. (Owner) Dated 11-18-55, 19.....

By H. E. Joyce

(10) WELL TESTS:

Was a pump test made? [X] Yes [ ] No If yes, by w

Yield: 475 gal./min. with 210 ft. draw down after 8 hrs.

" " " "

" " " "

Artesian flow ..... g.p.m.

Shut-in pressure ..... lbs. per square inch.

Bailer test ..... g.p.m. with ..... ft. drawdown

Temperature of water 57 Was a chemical analysis made? [ ] Yes [ ] No

Was electric log made of well? [ ] Yes [X] No

(11) WELL LOG:

Diameter of well, 12 inches.

Total depth 275 ft. Depth of completed well 275 ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

ft. to	ft.	
0 " 7	"	soil
7 " 14	"	clay with a little gravel
14 " 20	"	clay
20 " 27	"	loose gravel
27 " 35	"	cemented gravel
35 " 51	"	Cemented gravel - Small
51 " 70	"	Dirty gravel. Lots of wate
70 " 135	"	cement gravel, very tight
135 " 150	"	clay mixed with gravel
150 " 168	"	decomposed rock. Hard
168 " 202	"	Basalt rock. Some broken
202 " 210	"	Basalt 207 - 207½ (Soft lay
210 " 221	"	Basalt
221 " 222	"	Soft layer
222 " 252	"	Basalt (very hard).
252 " 253	"	Soft layer
253 " 264	"	Basalt rock
264 " 275	"	Basalt rock. Several crev
"	"	
"	"	upper perfs above 171
"	"	feet sealed off w/ casing
"	"	7-14-82 Waldrop Drlg.
"	"	SET PUMP 260 Ft.
"	"	
"	"	
"	"	
"	"	

Ground elevation at well site 180 ? feet above mean sea level.

Work started AUG 19 55 Completed SEPT 19 55

Well Driller's Statement:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME STUDEBAKER BROS. (Person, firm, or corporation) (Typed or printed)

Address Rt. 5 Box 497 - SALEM

Driller's well number 1

[Signed] Ed J. Studebaker (Well Driller)

License No. 40 Dated 11-14, 19 55

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

(2) RECEIVED NOV ... WATER RESOURCES DEPARTMENT SALEM, OREGON

15/3W-25L

PLEASE TYPE or PRINT IN INK

10 (for official use only)

(1) OWNER:

Name Oregon State Penitentiary

Address

City State

(2) TYPE OF WORK (check):

New Well ☐ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Air ☐ Driven ☐

Rotary Mud ☐ Dug ☐

Cable ☐ Bored ☐

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐

Irrigation ☐ Thermal: Withdrawal ☐ Reinjection ☐

Other: Piezometric ☐ Grounding ☐ Test ☐

(5) CASING INSTALLED:

Steel ☐ Threaded ☐ Plastic ☐ Welded ☐

..." Diam. from ... ft. to ... ft. Gauge ...

..." Diam. from ... ft. to ... ft. Gauge ...

LINER INSTALLED:

Steel ☐ Threaded ☐ Plastic ☐ Welded ☐

..." Diam. from ... ft. to ... ft. Gauge ...

(6) PERFORATIONS:

Perforated? ☐ Yes ☐ No

Size of perforations ... in. by ... in.

... perforations from ... ft. to ... ft.

... perforations from ... ft. to ... ft.

... perforations from ... ft. to ... ft.

(7) SCREENS:

Well screen installed? ☐ Yes ☐ No

Manufacturer's Name ...

Type ... Model No. ...

Diam. ... Slot Size ... Set from ... ft. to ... ft.

Diam. ... Slot Size ... Set from ... ft. to ... ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

... gal./min. with ... ft. drawdown after ... hrs.

Air test ... gal./min. with drill stem at ... ft. ... hrs.

Bailer test ... gal./min. with ... ft. drawdown after ... hrs.

Artesian flow ... g.p.m.

...perature of water ... Depth artesian flow encountered ... ft.

(9) CONSTRUCTION:

Special standards: Yes ☐ No ☐

Well seal—Material used ...

Well sealed from land surface to ... ft.

Diameter of well bore to bottom of seal ... in.

Diameter of well bore below seal ... in.

Amount of sealing material ... sacks ☐ pounds ☐

How was cement grout placed? ...

Was pump installed? ... Type ... HP ... Depth ... ft.

Was a drive shoe used? ☐ Yes ☐ No Plugs ... Size: location ... ft.

Did any strata contain unusable water? ☐ Yes ☐ No

Type of Water? ... depth of strata

Method of sealing strata off

Was well gravel packed? ☐ Yes ☐ No Size of gravel: ...

Gravel placed from ... ft. to ... ft.

(10) LOCATION OF W ... legal description:

County ... ¼ ... ¼ of Section ... of

Township ... (Township is North or South), Range ... (Range is East or West), WM.

Tax Lot ... Lot ... Block ... Subdivision ...

MAILING ADDRESS OF WELL (or nearest address) WELL #5

(11) WATER LEVEL of COMPLETED WELL:

Depth at which water was first found ... ft.

Static level ... ft. below land surface. Date

Artesian pressure ... lbs. per square inch. Date

(12) WELL LOG:

Diameter of well below casing ...

Depth drilled ... ft. Depth of completed well ... ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
WELL LOG - CONT'D			
Reddish-brown clay w/ small sands + gravels	144'	163'	
Blue-gray clay w/ sand + gravel	163'	197'	
Brown clay w/ gravel	197'	202'	
Brown clay - dense w/ some gravel bits	202'	211'	
Brown sand + gravel w/ brown, weathered clay	211'	215'	
Brown clay w/ sand	215'	234'	
Tan clay - dense, bentonite-like w/ gravel chips	234'	240'	
Blue clay - drills quickly	240'	250'	
The portion of the bore which is uncased was back-filled from with sand + small gravel.	250'	210'	

Date work started ... /completed ...

Date well drilling machine moved off of well ... 19

(unbonded) Water Well Constructor Certification (if applicable):

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.

[Signed] ... Date ..., 19 ...

(bonded) Water Well Constructor Certification:

Bond ... (number) Issued by: ... (Surety Company Name)

On behalf of ... (type or print name of Water Well Constructor)

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief:

(Signed) ... (Water Well Constructor)

(Dated) ...

NOTICE TO WATER WELL CONSTRUCTOR

The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

SP*46866-690

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

RECEIVED NOV 13 1985 WATER RESOURCES DEPT. SALEM, OREGON

WATER PLEASE TYPE or PRINT IN INK

10

7S/3W-25d

(for official use only)

(1) OWNER:

Name Oregon State Penitentiary

Address 2605 State St. NE

City Salem State Oregon

(2) TYPE OF WORK (check):

New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Air ☐ Driven ☐

Rotary Mud ☐ Dug ☐

Cable ☑ Bored ☐

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☑ Municipal ☐

Irrigation ☐ Thermal: Withdrawal ☐ Reinjection ☐

Other: Piezometric ☐ Grounding ☐ Test ☐

(5) CASING INSTALLED:

Steel ☑ Threaded ☐ Plastic ☐ Welded ☑

12" Diam. from +2 ft. to 208 ft. Gauge .250

" Diam. from ft. to ft. Gauge

LINER INSTALLED:

Steel ☐ Threaded ☐ Plastic ☐ Welded ☐

" Diam. from ft. to ft. Gauge

(6) PERFORATIONS:

Perforated? ☑ Yes ☐ No

Size of perforations 3/8 in. by 2½ in.

552 / 1392 perforations from 60 ft. to 82 ft.

perforations from 86 ft. to 143 ft.

perforations from ft. to ft.

(7) SCREENS:

Well screen installed? ☐ Yes ☑ No

Manufacturer's Name

Type Model No.

Diam. Slot Size Set from ft. to ft.

Diam. Slot Size Set from ft. to ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? ☑ Yes ☐ No If yes, by whom? Stettler Supply

Yield: 300 gal./min. with 76 ft. drawdown after 4 hrs.

275 · 91 · 2 ·

Air test gal./min. with drill stem at ft. hrs.

Bailer test gal./min. with ft. drawdown after hrs.

Artesian flow g.p.m.

Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:

Special standards: Yes ☐ No ☑

Well seal—Material used Portland Cement

Well sealed from land surface to 23 ft.

Diameter of well bore to bottom of seal 17 in.

Diameter of well bore below seal 12 in.

Amount of sealing material 27 sacks ☑ pounds ☐

How was cement grout placed? an air grout pump

Was pump installed? NO Type HP Depth ft.

Was a drive shoe used? ☑ Yes ☐ No Plugs Size: location ft.

Did any strata contain unusable water? ☐ Yes ☑ No

Type of Water? depth of strata

Method of sealing strata off

Was well gravel packed? ☐ Yes ☑ No Size of gravel:

Gravel placed from ft. to ft.

(10) LOCATION OF WELL by legal description:

County Marion NW ¼ SE ¼ of Section 25 of

Township 7S (Township is North or South), Range 3W (Range is East or West), WM.

Tax Lot Lot Block Subdivision

MAILING ADDRESS OF WELL (or nearest address) Same as Section #1 Well #5

(11) WATER LEVEL of COMPLETED WELL:

Depth at which water was first found 50 ft.

Static level 36 ft. below land surface. Date 8/20/85

Artesian pressure lbs. per square inch. Date

(12) WELL LOG:

Diameter of well below casing 12"

Depth drilled 250 ft. Depth of completed well 210 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Brown silty clay	0'	13'	
Brown clay	13'	23'	
Small - large gravel + brown sand	23'	37'	
Slightly cemented sandy gravel	37'	43'	
Sand + gravel - looser - water bearing	43'	74'	36'
Brown sand + gravel with some brown clay	74'	82'	
Brown clay	82	86'	
Brown sand + gravel w/clay - tighter formation	86'	102'	43'
Sand + gravel w/clay - smaller gravels - looser	102'	125'	
Small - large gravel - loose mainly w/ some clay + broken gravels	125'	144'	43'
NEXT PAGE			

Date work started AUGUST 1, '85 /completed OCT. 24, '85

Date well drilling machine moved off of well OCT. 24 1985

(unbonded) Water Well Constructor Certification (if applicable):

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.

[Signed] Date , 19

(bonded) Water Well Constructor Certification:

Bond 94-77-460 (number) Issued by: MARYLAND CASUALTY SURETY DEPOSIT (Surety Company Name)

On behalf of MIKE WALDROOP WELL DRILLING (type or print name of Water Well Constructor)

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

(Signed) Michael Waldroop (Water Well Constructor)

(Dated) November 11, 1985

NOTICE TO WATER WELL CONSTRUCTOR

The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

SP*46866-690

STATE ENGINEER
Salem, Oregon

Well Record

STATE WELL NO. 7/3W-25H
COUNTY Marion
APPLICATION NO. GR-4180

OWNER: J. G. Greenlee and Alice E. Greenlee

MAILING ADDRESS: 1440 Ferry Street
495 Hawthorne Ave

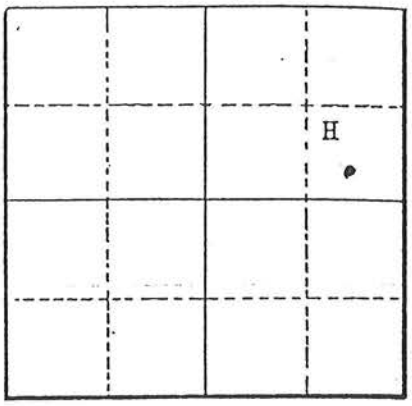
CITY AND STATE: Salem, Oregon

LOCATION OF WELL: Owner's No. .....

SE ¼ NE ¼ Sec. 25 T. 7 S., R. 3 W., W.M.

Bearing and distance from section or subdivision corner 65 chains East and 29 chains South from NW Corner, Savage DLC 79

Altitude at well gradial slope



Section 25

TYPE OF WELL: Drilled Date Constructed 1940

Depth drilled 41 feet Depth cased 41 feet

CASING RECORD:

4-inch steel casing set from 0 to 41 feet

FINISH:

No perforations

AQUIFERS:

WATER LEVEL:
15 feet

PUMPING EQUIPMENT: Type F. M. Cent. H.P. .....
Capacity 15 G.P.M.

WELL TESTS:
Drawdown ..... ft. after ..... hours 200 G.P.M
Drawdown ..... ft. after ..... hours ..... G.P.M

USE OF WATER Watering trees and garden Temp. ..... °F. ....., 19.....
SOURCE OF INFORMATION GR-4077
DRILLER or DIGGER .....
ADDITIONAL DATA:
Log (NA) Water Level Measurements ..... Chemical Analysis ..... Aquifer Test .....

REMARKS:

State Printing 89316

NOTICE TO WATER WELL CONTRACTOR: The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED MAR 22 1965 STATE ENGINEER SALEM, OREGON

MAR.....6629

WATER WELL REPORT

STATE OF OREGON (Please type or print)

12

State Well No. 7/3W-24

State Permit No. .....

(1) OWNER:

Name JOHN W. HALL

Address I592 PARK AVE N.E

SALEM, OREGON

(2) LOCATION OF WELL:

County MARION Driller's well number IOII

¼ ¼ Section 24 T. 7 S R. 3W W.M.

Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐

Irrigation ☐ Test Well ☐ Other ☐

(5) TYPE OF WELL:

Rotary ☐ Driven ☐

Cable ☒ Jetted ☐

Dug ☐ Bored ☐

(6) CASING INSTALLED:

Threaded ☐ Welded ☒

6 " Diam. from TOP ft. to 47 ft. Gage 250

" Diam. from ..... ft. to ..... ft. Gage .....

" Diam. from ..... ft. to ..... ft. Gage .....

(7) PERFORATIONS:

Perforated? ☐ Yes ☒ No

Type of perforator used

Size of perforations in. by in.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

..... perforations from ..... ft. to ..... ft.

(8) SCREENS:

Well screen installed? ☐ Yes ☒ No

Manufacturer's Name .....

Type ..... Model No. .....

Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

Diam. ..... Slot size ..... Set from ..... ft. to ..... ft.

(9) CONSTRUCTION:

Well seal—Material used in seal CEMENT & PUDDLE CLAY

Depth of seal 20 ft. Was a packer used? .....

Diameter of well bore to bottom of seal 8 in.

Were any loose strata cemented off? ☐ Yes ☐ No Depth .....

Was a drive shoe used? ☒ Yes ☐ No

Was well gravel packed? ☐ Yes ☒ No Size of gravel: .....

Gravel placed from ..... ft. to ..... ft.

Did any strata contain unusable water? ☐ Yes ☐ No

Type of water? depth of strata

Method of sealing strata off

(10) WATER LEVELS:

Static level I5 ft. below land surface Date 3/7/65

Artesian pressure lbs. per square inch Date

(11) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. drawdown after hrs.

" " " "

" " " "

Baller test 20 gal./min. with 5 ft. drawdown after I hrs.

Artesian flow g.p.m. Date

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

(12) WELL LOG:

Diameter of well below casing .....

Depth drilled 47 ft. Depth of completed well 47 ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
TOP SOIL	0	5
CLAY	5	20
SAND	20	30
CLAY	30	40
SAND	40	45
GRAVEL	45	47

Work started MAR. 6 I965 . Completed MAR. 7 I965

Date well drilling machine moved off of well MAR. 8 I965 19

(13) PUMP:

Manufacturer's Name .....

Type: ..... H.P. .....

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME WILLAMETTE DRILLING CO (Person, firm or corporation) (Type or print)

Address RT. 2 BOX 276 SALEM, OREGON

Drilling Machine Operator's License No. I79

[Signed] Emil O. Beier (Water Well Contractor)

Contractor's License No. 2 Date MAR. 8 I965 19

(USE ADDITIONAL SHEETS IF NECESSARY)

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM 10, OREGON within 30 days from the date of well completion.

RECEIVED SEP - 4 1962 STATE ENGINEER SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

13

State Well No. 7/3W-24

State Permit No. .....

(1) OWNER:
Name KARL W. BOSCH
Address 3231 D. ST. N.E.
SALEM ORE

(2) LOCATION OF WELL:
County MARION Driller's well number .....
¼ ¼ Section 24 T. 7 R. 3W. W.M.
Bearing and distance from section or subdivision corner
.77 ACRE - 3231 D. ST. SALEM. ORE

(3) TYPE OF WORK (check):
Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☒
6" Diam. from 0 ft. to 73 ft. Gage 17#
..." Diam. from ... ft. to ... ft. Gage ...
..." Diam. from ... ft. to ... ft. Gage ...

(7) PERFORATIONS:
Perforated? ☐ Yes ☒ No
Type of perforator used
Size of perforations ... in. by ... in.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.

(8) SCREENS:
Well screen installed ☐ Yes ☒ No
Manufacturer's Name ...
... Model No. ...
Diam. ... Slot size ... Set from ... ft. to ... ft.
Diam. ... Slot size ... Set from ... ft. to ... ft.

(9) CONSTRUCTION:
Well seal—Material used in seal BENTONITE
Depth of seal 41' ft. Was a packer used? yes
Diameter of well bore to bottom of seal 10" in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth ...
Was a drive shoe used? ☒ Yes ☐ No
Was well gravel packed? ☐ Yes ☒ No Size of gravel: ...
Gravel placed from ... ft. to ... ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? Depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 24 ft. below land surface Date 8.30.62
Artesian pressure ... lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ... ft. drawdown after ... hrs.
" " " "
" " " "
Baller test 20 gal./min. with 25 ft. drawdown after 1 hrs.
Artesian flow ... g.p.m. Date
Temperature of water 55° Was a chemical analysis made? ☐ Yes ☒ No

(12) WELL LOG:
Diameter of well below casing 6"
Depth drilled 73' ft. Depth of completed well 73' ft.
Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
TOPSOIL	0	3
CLAY YELLOW COLOR	3	32
CLAY BLUE COLOR	32	41
CONGLOMERATE 3"-	41	56
CLAY - YELLOW - SANDY	56	65
CONGLOMERATE 3"-	65	72
GRAVEL W.B. COARSE	72	73

Work started 8-29- 1962 Completed 8-30- 1962
Date well drilling machine moved off of well 19

(13) PUMP:
Manufacturer's Name ...
Type: JET H.P. 1

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME J.H. SNEED & SONS (Person, firm or corporation) (Type or print)
Address 3910 SILVERTON RD. NE SALEM, ORE.
Drilling Machine Operator's License No. 187
[Signed] R.A. Sneed. (Water Well Contractor)
Contractor's License No. 6 Date 8.30, 1962

(USE ADDITIONAL SHEETS IF NECESSARY)

RECEIVED
AUG 30 1960
STATE ENGINEER
SALEM, OREGON

File Original and First Copy with the STATE ENGINEER, SALEM, OREGON

WATER WELL REPORT 14
STATE OF OREGON

State Well No. 7/3W-24

State Permit No.

(1) OWNER:
Name Wendell C. Ramba
Address 1640 Evergreen ave. N.E. Salem

(2) LOCATION OF WELL:
County Marion Owner's number, if any—
¼ ¼ Section 24 T. 7 R. 3W W.M.
Bearing and distance from section or subdivision corner
From N.W. corner - to road 3. - go 60 ft. W. to well

(3) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☐
6 " Diam. from 6 ft. to 51'6" ft. Gage #1892
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) PERFORATIONS:
Perforated? ☐ Yes ☒ No
Type of perforator used
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS:
Well screen installed ☐ Yes ☒ No
Manufacturer's Name
Type Model No.
Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.
Was a surface seal provided? ☒ Yes ☐ No To what depth? 6" ft.
Material used in seal— PUMP COVERED
Did any strata contain unusable water? ☒ Yes ☐ No
Type of water? SANDY Depth of strata 49' TO 50'
Method of sealing strata off CASED

(10) WATER LEVELS:
Static level 18 ft. below land surface Date 8-24-60
Artesian pressure lbs. per square inch Date

Log Accepted by:
[Signed] W. C. Ramba (Owner) Date Aug. 26, 1960

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 25 gal./min. with 30 ft. drawdown after 1 hrs.
Artesian flow g.p.m. Date
Temperature of water 55° Was a chemical analysis made? ☐ Yes ☒ No

(12) WELL LOG:
Diameter of well 6" inches.
Depth drilled 51'6" ft. Depth of completed well 51'6" ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
TOPSOIL	0	2
YELLOW CLAY	2	24
BLUE CLAY	24	40
CEMENTED GRAVEL	40	49
SAND FINE GRAIN	49	50
CEMENTED GRAVEL	50	52
WATER GRAVEL 1"	52	53

Work started 8-24 1960 Completed 8-24 1960

(13) PUMP:
Manufacturer's Name
Type: H.P.

Well Driller's Statement:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME J. A. SNEED & SONS (Person, firm, or corporation) (Type or print)
Address 2505 BROOKS ST. SALEM, O.
Driller's well number
[Signed] B. J. Sneed (Well Driller)
License No. 6 Date 8-24-, 1960

(USE ADDITIONAL SHEETS IF NECESSARY)

File Original, and Duplicate with the STATE ENGINEER, SALEM, OREGON

STATE OF OREGON 2078 Fill In State Permit No. ____

(1) OWNER:
Name Oakley M. Cochran

Address 787 Oregon Ave. Salem, Oregon

(2) LOCATION OF WELL:
County Marion Owner's number, if any—

R. F. D. or Street No.

Bearing and distance from section or subdivision corner Well is located 34 ft. West and 14 ft. South of the N.E. corn Lot 6, Blk. 2 Zimmerman Home Tracts, in the N.E.¼ of the N.E.¼ of Sec. 25 Tsp. 7 S. R. 3 W Marion County, Oreg.

(3) TYPE OF WORK (check):
New well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic [X] Industrial [ ] Municipal [ ]

Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:
Rotary [ ]

Cable [X]

Dug Well [ ]

(6) CASING INSTALLED:
Threaded [ ] Welded [X]

FROM	ft. to	ft.	Diam.	Gage or Wall
Top		42	5	.258

Type and size of shoe or well ring

Describe joint SHOE Welded spring Steel 1/4x2

If gravel packed

Diameter of Bore	from ft.	to ft.

Size of gravel:

(7) PERFORATIONS: No Perforations
Type of perforator used

SIZE of perforations in., length, by in.

FROM	ft. to	ft.	perf per foot	No. of rows

SCREENS: No Screens

Give Manufacturer's Name, Model No. and Size

(8) CONSTRUCTION: Puddled Clay
Was a surface sanitary seal provided? [ ] Yes [X] No To what depth 18 ft.

Were any strata sealed against pollution? [ ] Yes [X] No

If yes, note depth of strata

FROM	ft. to	ft.

METHOD OF SEALING

(9) WATER LEVELS:
Depth at which water was first found 33 ft.

Standing level before perforating ft.

Standing level after perforating Water Table 20 ft.

Log Accepted by: [Signed] Oakley M Cochran Owner Dated Aug. 15, 1956

(10) WELL TESTS: 15
Was a pump test made? [ ] Yes [X] No If yes, by wh

Yield: gal./min. with ft. draw down after hrs

Artesian flow g.p.m.

Shut-in pressure lbs. per square inch.

Bailer test 15 g.p.m. with 12 ft. drawdown

Temperature of water Was a chemical analysis made? [ ] Yes [X] No

Was electric log made of well? [ ] Yes [X] No

(11) WELL LOG:
Diameter of well, 5 inches.

Total depth 42 ft. Depth of completed well 42 ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

ft. to	ft.	
Top	3	Top Soil
3	18	Yellow clay
18	23	Sandy yellow clay
23	30	Yellow silty sand
30	33	Blue clay
33	38	Black Sand
38	42	Black sand & Gravel (Wat

Ground elevation at well site 208 feet above mean sea level.

Work started Aug. 14 1956 Completed Aug. 15 1956

Well Driller's Statement:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Irving Sears (Person, firm, or corporation) (Typed or printed)

Address Gervais, Oregon

Driller's well number 294

[Signed] Irving Sears (Well Driller) Aug. 15 56

License No. 8 Dated Aug. 15, 1956

APPENDIX VI

LABORATORY ANALYSES OF TRENCH SOIL SAMPLES AND CHAIN OF CUSTODY FORMS

February 11, 1993

REA Environmental Science and Testing, Inc.

Environmental Science and Testing

Report of Sample Analysis By
DEQ Method TPH-G, Gasoline Quantification
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Million (mg/Kg)

Project: OSH 92V07 II
Location: building 40, east end of trench
Attention: Paul Rauch, Project Manager
Analyzed By: Zach Purdie

Date Samples Received: February 12, 1993
Date of Report: February 18, 1993
Report Number: 02181111.093

Sample Number	Concentration (mg/Kg)
92V07IIA	19

Quality Assurance	Method Blank	92V07IIA (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery
	<5	19	190	79%	77%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

REA Environmental Science and Testing, Inc.

Environmental Science and Testing

Report of Sample Analysis By
EPA Method 8020 for Aromatic Volatile Organics
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Billion (µg/Kg)

Project: OSH 92V07 II
Location: building 40, east end of trench
Attention: Paul Rauch, Project Manager
Analyzed By: Zach Purdie

Date Samples Received: February 12, 1993
Date of Report: February 18, 1993
Report Number: 02181111.093

Sample Number: Analyte	92V07IIA
Benzene	<0.10
Ethylbenzene	<0.15
Toluene	30.72
Total Xylene	<0.15

Surrogate Recoveries: 79%

Quality Assurance Analyte	Method Blank	92V07IIA (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike (Duplicate) % Recovery
Benzene	<0.10	<0.10	10	86%	83%
Ethylbenzene	<0.15	<0.15	10	75%	76%
Toluene	<0.10	30.72	300	77%	79%
Total Xylene	<0.15	<0.15	10	81%	85%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

REA Environmental Science and Testing, Inc.

Environmental Science and Testing

Report of Sample Analysis By
DEQ Method TPH-G, Gasoline Quantification
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Million (mg/Kg)

Project: Oregon State Hospital
Location: Building 40
Attention: Paul Rauch, Project Manager
Analyzed By: Zach Purdie

Date Samples Received: February 12, 1993
Date of Report: February 18, 1993
Report Number: 02181103.093

Sample Number	Concentration (mg/Kg)
92V07IIB	13
92V07IIC	<5

Quality Assurance	Method Blank	92V07IIB (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery
	<5	13	130	78%	75%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

Environmental Science and Testing
REA Environmental Science and Testing, Inc.
200 Hawthorne Avenue, Suite C-320
Salem, Oregon 97301
(503) 370-7230 FAX 370-7151

Chain of Custody / Analysis Request Form

Samplers Signature: Paul Rauch	Shipped Via:	Project Name / Number:
Sampling Method: GRAB	Date Shipped:	Project Manager: PAUL RAUCH
Sampling Location: pile of clean soil EXCAVATED from ~~[illegible]~~ E-W TRENCH	Condition:	Company: REA TECH MANAGEMENT
	Custody Seal:	Address:
Special Instructions: please Hold until notified about Analysis		Phone:
		FAX:

Sample Information							Analysis Requested By Method											
Field Sample ID	Lab ID #	Date	Time	Matrix	# Cntnrs	Location / Remarks	TPH-HCID	HCID Only	TPH-Only G	601/8010	602/8020	7000 Metal	1311 TCLP	8310 PAH	9002 PLM	N7400 PCM		
92V07IIB	1454-1			SOIL		N. End of pile			X									
92V07IIC	1454-2			"		S. End of pile			X									

Relinquished by	Received By	Sample Analysis Turn Around	Invoice Information	Laboratory tracking
Signature: Paul Rauch	Signature:	☐ Same Day	P.O. #	Lab # 1954
Print Name: PAUL RAUCH	Print Name: ZACHARIAH PURDIE	☐ 24 Hours	Bill To:	Report # 02181103.093
Company: REA TECH	Company: REA ENV SCI TEST	☐ Normal (3 to 5 working days)		Filed:
Date Time	Date 2/12/93 Time 1521			

Relinquished by	Received By	Field Notes:	Client Approval
Signature	Signature		
Print Name	Print Name		
Company	Company		
Date Time	Date Time		

REA Environmental Science and Testing, Inc.

Environmental Science and Testing

Report of Sample Analysis By
DEQ Method TPH-G, Gasoline Quantification
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Million (mg/Kg)

Project: OSH 92V07II
Location: Building 40
Attention: Paul Rauch, Project Manager
Analyzed By: Zach Purdie

Date Samples Received: February 12, 1993
Date of Report: February 18, 1993
Report Number: 02181122.093

Sample Number	Concentration (mg/Kg)
92V07II	29

Quality Assurance	Method Blank	92V07II (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery
	<5	29	290	83%	79%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

Environmental Science and Testing
4305 River Road North
Keizer, Oregon 97303
Ofc. (503) 390-4861
FAX (503) 390-6630

Chain of Custody / Analysis Request Form

Samplers Signature: Paul Rauch	Shipped Via: Hand Carried	Project Name / Number: OSH 92V07 II
Sampling Method: GRAB	Date Shipped: 2/12/93	Project Manager: Paul Rauch
Sampling / Project Location: OSH Building 40	Condition:	Company: REA Tech Management.
	Custody Seal:	Address:
Special Instructions:		Phone:
		FAX:

Lab ID	Field Sample ID	Date	Time	Matrix	# Cntnrs	Location / Remarks	Analysis Requested by Method: TPH-HCID	HCID only	TPH-only G	601/8010	602/8020	6010 Metal	1311 TCLP	8310 PAH	8080 PCB's	9002 PLM	7400 PCM		
1451-1	92V07II	2/12/93	11:00AM	Soil		N-S trench 15' depth			X										

Relinquished By	Received By	Sample Analysis Turn Around	Invoice Information	Laboratory Tracking
Signature: Paul Rauch	Signature:	☐ Same Day	P.O. #	Lab # 1451
Print Name: Paul Rauch	Print Name: ZACH PURDIE	☐ 24 Hours	Bill To:	Report # 02181123.093
Company: REA Tech Man.	Company: REA ENV. SCI. & TEST	☒ Normal (3 to 5 working days)		Filled:
Date 2/13/93 Time 1:00pm	Date 2/12/93 Time 1515			
Relinquished By	**Received By**	Field Notes:		Client approval for sample analysis
Signature	Signature			
Print Name	Print Name			
Company	Company			
Date Time	Date Time			

APPENDIX VII

LABORATORY ANALYSES OF HAND AUGER BORING SOIL SAMPLES FROM UNDER BUILDING 40 AND CHAIN OF CUSTODY

March 5, 1993

REA Environmental Science and Testing, Inc.
Environmental Science and Testing

Report of Sample Analysis By
DEQ Method TPH-G, Gasoline Quantification
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Million (mg/Kg)

Project: OSH 92-V07 II
Location: OSH Building 40 basement
Attention: Paul Rauch
Analyzed By: Zach Purdie

Date Samples Received: March 8, 1993
Date of Report: March 12, 1993
Report Number: 03121400.093

Sample Number	Concentration (mg/Kg)
V07 B1	56.23
V07 B2	<5
V07 B3	<5
V07 B4	<5
V07 B5	<5

Quality Assurance	Method Blank	V07 B1 (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery
	<5	56.23	600	85%	83%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

APPENDIX VIII

LABORATORY ANALYSIS OF SOIL SAMPLES FROM MONITORING WELL NO. 5 AND A CHAIN OF CUSTODY FORM

March 25, 1993

REA Environmental Science and Testing, Inc.
Environmental Science and Testing

Report of Sample Analysis By
DEQ Method TPH-G, Gasoline Quantification
Using Gas Chromatography (GC/PID)
Results Reported in Parts Per Million (mg/Kg)

Project: 93-V07II
Location: OSH Building 40, well #5
Attention: John Rehm, Project Manager
Analyzed By: Zach Purdie

Date Samples Received: March 25, 1993
Date of Report: March 30, 1993
Report Number: 03301050.093

Sample Number	Concentration (mg/Kg)
MW5-3	<5
MW5-4	<5
MW5-5	<5

Quality Assurance	Method Blank	MW5-3 (Sample Duplicate)	Amount Spiked	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery
	<5	<5	100	94%	98%

Approved By:
Environmental Science and Testing

Zachariah J. Purdie
Laboratory Manager

Approved By:
Environmental Science and Testing

Kathleen J. Thorpe
Laboratory Director

200 Hawthorne Avenue SE, Suite C-320, Salem, Oregon 97301 (503) 370-7230 FAX 370-7151

LUST - OREGON STATE HOSPITAL
SALEM

MARION
24-89-4017

VOLUME 3

SEE ALSO:24-91-4255 OREGON STATE H
24-99-4016 OREGON STATE HOSPITAL
24-99-4050 OREGON STATE HOSPITAL

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, OR 97301-1039
(503) 378-8240
(503) 378-3684 TTY

July 20, 2000

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017
UST Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Conditional No Further Action Letter – Generic Remedy Closure

Dear Mr. Larimer:

The Department of Environmental Quality (DEQ) has reviewed the file and reports for the leaking underground storage tank (UST) project located at the above referenced facility. Based on the information in the file and reports, DEQ has determined that all applicable response, abatement, site characterization, and investigation requirements in OAR 340-122-0205 through 340-122-0240 have been completed, and that the site meets the criteria specified in OAR 340-122-0252 for closure under the generic remedy for simple risk-based cleanups. Therefore, no further action is required at this time. Important information supporting this determination includes:

1. A gasoline release was discovered and reported to DEQ on March 13, 1989. The release was discovered when Oregon State Hospital personnel became aware of fumes in a basement sump immediately adjacent to the underground storage tank.

2. A 250-gallon gasoline UST, used to supply fuel to a standby generator, was decommissioned by removal on March 14, 1989. No documentation was found on the final disposal of the tank.

3. Two cubic yards of gasoline-contaminated soil were excavated from the tank pit. Oregon State Hospital staff arranged for on-site aeration and disposal. No records were found regarding final soil disposition.

4. From March 14, 1989, through August 19, 1991, a groundwater recovery system pumped contaminated water through an oil-water separator system. Discharge of treated water was permitted to the City of Salem's storm sewer system.

5. Four groundwater monitoring wells were operated through May 1994, with the last results showing non-detect levels of BTEX constituents. In June 1999, three site-assessment push probes were advanced to collect soil and groundwater samples in the vicinity of the former tank pit. The groundwater in the former tank pit had benzene at 21 parts-per-billion (ppb) and dissolved lead at 6.9 ppb. Groundwater in the two downgradient borings had dissolved lead at 7.8 and 29.4 ppb. The constituents of toluene, ethylbenzene, xylenes, EDB, EDC, and MTBE were non-detect in groundwater at all three locations. The groundwater plume extends less than 100 feet in the downgradient, southwest direction. The Oregon State Hospital's property extends some 1000 feet in the southwest direction.

6. All the buildings on the Oregon State Hospital Campus are served by the City of Salem's public water supply system. No use is made of the shallow ground water table on the Oregon State Hospital Campus. Groundwater ingestion is not considered a pathway of concern at this time.

7. Building 40 is currently used as a 24-hour supervised care facility for youth in grades K-12. Up to forty youth may be housed at the facility at any point in time. Buildings 33 and 36 (cross-gradient and downgradient, respectively) are day-use office buildings. At a level of 21 ppb, the benzene concentration in groundwater does not present a risk to human health via vapor intrusion into buildings.

Limitation on Future Use or Development of Shallow Groundwater

Please note that certain types of development or uses of the shallow groundwater within 250 feet of the above-referenced cleanup site may be incompatible with the site conditions and remaining petroleum contamination noted above. DEQ must be notified of any proposed changes in the use of the shallow groundwater table before they occur. DEQ will evaluate the proposed changes to insure they will not result in adverse impacts to human health, safety, or the environment. Continued approval under the generic remedy rules is contingent on the current use and development of the shallow groundwater table remaining unchanged without the prior written approval of DEQ.

If the above condition is violated without consent of DEQ, this generic remedy approval and no further action declaration become void. You will then have to reevaluate the site to determine if the generic remedy approval is still appropriate, or if one of the other remedial options in OAR 340-122-0217 is better suited to the new site conditions.

The generic remedy approval will not apply if new or undisclosed facts show the cleanup does not comply with the referenced rules. This determination also does not apply to any conditions at the site other than the release of the petroleum products specifically addressed in DEQ's leaking underground storage tank file (USTC No. 24-89-4017) relating to a 250-gallon gasoline UST supplying a standby generator.

Based on this information, the Department has determined that the site appears to be cleaned up in accordance with Oregon Administrative Rules (OARs) 340-122-0205 through -0360, and that **no further action** (NFA) is required at this time.

However, we remind you that the responsibility for environmental compliance and cleanup remains with you. DEQ's review of this report in no way transfers any of that responsibility to the State of Oregon.

Please note that pursuant to OAR 340-122-0360 (2), a copy of your reports must be retained until ten (10) years after the first sale of the property.

On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017). If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

Merlyn L. Hough
Western Region Tank Manager
Underground Storage Tanks Program
Western Region – Eugene Office

RPR:gad
x:/rreiter/24-89-4017.genremnfa

cc: Duane Carter, Soil Matrix Supervisor
3 Kings Environmental, Inc.
PO Box 280
Battle Ground WA 98604

* HW *		* WQ *		TANKS *		* AQ *		GW *		* ADMIN *	
GIL H		**BARBARA B**		**MERLYN H**		**GARY M**		**CHUCK D**		JENNIFER C	
JIM BIL		JACK A		GINNY D		GARY A		BOB B		PAULINE H	
JOHN B		BOB D		VIRGINIA E		DOTTIE B		BRUCE D		CHRISTINA P	
ERIC C		TOM F		JIM G		JIM BOYL		CATHIE D		KEN T	
BART C		MARK H		JIM P		STEVE C		TERESA D			
CHERYLL P		TIM M		BRUCE S		CLAUDIA D		CHARLES H		**CLEANUP**	
JOE P		RAGHU N		RICH R		PATTY H		NANCY S		BEN M	
JOHN T		DOTTIE R				BARBARA M		CATHERINE S			
		SAMANTHA				ALI N		MICHAEL Y			
		BRYSON T				TERRY O					
						FELICA S					

FILE NAME Oregon State Hospital

PERMIT/FILE # 24-89-4017

LOCATION Marion

COMMENTS _____

LOCATION	PROGRAM	FILE
02 BENTON	AQ	BIOMONITORING
06 COOS	HW	CONFIDENTIAL
08 CURRY	L/UST	CORRES
10 DOUGLAS	L/UST-WQ	DATA
15 JACKSON	SW	PERMIT
17 JOSEPHINE	UST	PORTABLE - AQ
20 LANE	WQ	PRETREATMENT
21 LINCOLN	WQ-GNDW	SOURCE TEST
22 LINN	WQ-MOBILE	SPECS
24 MARION	WQ-SLDG	TAX CREDITS
27 POLK	WQ-SS	UPSETS-AQ
36 YAMHILL	WQ-STW	

SLMRTSLP

CC: SALEM
ORIGINAL-EUGENE

3 Kings
Environmental, Inc.

Specializing in Commercial/Residential
***U**nderground **S**torage **T**anks*

March 29, 2000

Department of Environmental Quality
Attn: Richard Reiter
750 Front Street NE, Suite 120
Salem, OR 97301-1039

RE: LUST Site #24-89-4017

Dear Richard:

Please find enclosed the Low-Impact Closure Report for the Oregon State Hospital, Building #40 (LUST #24-89-4017). The site appears to meet all the qualifications outlined in the Low-Impact Site Closure Rules (OAR 340-122-0243). We recommend that this site be closed under these guidelines. If you have any questions or comments please feel free to call me at (888) 435-4647.

Sincerely,

Duane B. Carter

Duane Carter, MS

Soil Matrix Supervisor

Proposal for Site Closure Under the Low-Impact Site Rule To UST Cleanup Sites

For LUST Site #24-89-4017
Oregon State Hospital Building #40
Salem, OR 97301

Prepared for:

Oregon State Hospital
2600 Center Street NE
Salem, OR 97301

&

Oregon Department of Environmental Quality
Western Region—Salem Office
750 Front Street NE
Salem, OR 97301-1039

Prepared by:

3 Kings Environmental
1311 SE Grace Avenue
Battle Ground, WA 98604

March 2000

Proposal for Site Closure Under the Low-Impact Site Rule To UST Cleanup Sites

For LUST Site #24-89-4017
Oregon State Hospital Building #40
Salem, OR 97301

Prepared for:

Oregon State Hospital
2600 Center Street NE
Salem, OR 97301

&

Oregon Department of Environmental Quality
Western Region—Salem Office
750 Front Street NE
Salem, OR 97301-1039

Prepared by:

3 Kings Environmental
1311 SE Grace Avenue
Battle Ground, WA 98604

March 2000

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Appendices

Appendix A – Site Maps
Appendix B – Laboratory Reports
Appendix C – Correspondence

Prior Reports Available Upon Request

Site Characterization and Remediation Design for Gasoline Contamination at Oregon State Hospital, Building #40, OMNI Environmental Services, Inc., October ~~1999.~~ 1989

Site Characterization Report, OMNI Environmental Services, Inc., February 1992.

Corrective Action Plan, LUST #24-89-4027 [sic], REA Environmental Science & Testing, Inc., June 1993.

Closure Report, LUST #24-89-4027 [sic], REA Environmental Science & Testing, Inc., September 1994.

1.0 Introduction

1.1 General

3 Kings Environmental was retained by Michael Larimer of the Oregon State Hospital to provide assistance in closing the LUST site located at the Oregon State Hospital. The purpose of this report is to summarize and establish the closure requirements for applying the Low-Impact Site Rules to the Oregon State Hospital Building #40, LUST #24-89-4017, located in Salem, Oregon, Township 7 South, Range 3 West, Section 24, in Marion County. This report was written by Duane Carter, MS, Oregon State Soil Matrix Supervisor, an employee of 3 Kings Environmental.

1.2 Site Description

The LUST Site is located on the grounds of the Oregon State Hospital. The facility is approximately 40 acres in size and is located in the southern portion of Salem, Oregon just west of Interstate 5. The Oregon State Women's Correctional Facility is located approximately one mile to the south of the LUST Site. The facility is located in a primarily residential area, but no residences are located adjacent to the LUST Site.

1.3 Geology

The Site is located in the Willamette Valley, west of the Cascade Mountains and east of the Coast Range. The area of the LUST Site has been filled with sediments from alluvial processes and contains minor amounts of eolian material.

According to the *Soil Survey of Marion County Area, Oregon,* 1972, Soil Conservation Service, the Site is underlain by Woodburn silt loam. These soils were formed in silty alluvium and loess of mixed mineralogy, located on broad valley terraces. Typically, the soil is a silt loam to approximately 17 inches, a silty clay loam to approximately 32 inches, and a silt loam to approximately 68 inches.

1.4 Climate

The Site is located in an area of Mediterranean climate. The average annual precipitation is 40 to 45 inches, the average annual air temperature is 52 to 54 degrees Fahrenheit, and typical frost-free season is 200 to 210 days.

1.5 Hydrologic Characteristics

Surface flow of water is typically to the southwest, but has been modified by the construction of impermeable surfaces and anthropogenic pathways, i.e., roadways, storm drains, and catch basins. Permeability of the soils in the area of the site is moderate to slow.

The groundwater gradient inferred from topography, well logs, and monitoring wells formerly located on site is to the southwest toward the Willamette River. Depth to groundwater averages 20 to 30 feet below ground surface. The site is in the area of a seasonally high perched water table. Potable water for the subject property and the surrounding area is provided by the City of Salem. No domestic water wells are adjacent to the LUST site.

2.0 Site Activities

2.1 Prior Site Activities

The following chronology of site activities is based on review of the following reports:

1. *Site Characterization and Remediation Design for Gasoline Contamination at Oregon State Hospital, Building #40,* October 16, 1989, Omni Environmental Services, Inc.;
2. *Site Characterization Report,* February 14, 1992, Omni Environmental Services, Inc.;
3. *Corrective Action Plan, LUST #24-89-4027 [sic], Oregon State Hospital, Salem, Oregon,* June 17, 1993, REA;
4. *Closure Report, LUST #24-89-4027 [sic], Oregon State Hospital, Salem, Oregon,* September 15, 1994.

On March 13, 1989, free product was observed in the sump of Building #40. Further investigation by OSH staff and OMNI personnel led to the discovery of a leaking underground storage tank. Apparently, between the dates of March 5, 1989 and the discovery date, the tank had been filled by OSH staff twice. Thus, resulting in a loss of free product of approximately 500 gallons.

On March 14, 1989, one approximately 250-gallon underground storage tank (UST) was removed from the site by OMNI Environmental Services, Inc. Removal of the UST was in response to the discovery of gasoline in the sump of Building #40. During excavation approximately two cubic yards of gasoline contaminated soil was removed from the excavation. There is no record of the final disposition of the contaminated soil or how the soil was treated.

On April 5, 1989, two observation wells were installed adjacent to the former location of the UST by OMNI Environmental Services, Inc. Free product was observed in one of the monitoring wells.

On April 19, 1989, OMNI personnel attempted to map the extent of the contamination with a hand augur and visual and olfactory observations.

On May 9, 1989 a sump pump system was installed by OMNI in the basement of Building #40 to remove vapors from the area.

On May 19, 1989, OMNI personnel observed free product in both observation wells.

On May 31, 1989, two air operated pulse pumps were installed in the observation wells. Pump effluent was pumped into an existing oil-water separator and was discharged to the storm sewer via DEQ Special Discharge Permit.

The recovery and treatment systems remained in operation until August 19, 1991, when they were removed from the observation wells. No free product had been detected for approximately eighteen months before the removal of the treatment and recovery systems. The sump pump system was also removed the week of August 19, 1991.

On December 11, 1991, two additional monitoring wells were installed to investigate contamination migration.

Groundwater and soil sampling events occurred between September 3, 1991 and January 13, 1992 by OMNI personnel. Six soil borings and two ground water sampling rounds occurred during this time.

In the REA Corrective Action Plan report three groundwater sampling rounds are mentioned, May 5 and August 5, 1992 and January 28, 1993. REA did not begin work on the subject property until December 1992.

On February 5, 1993, monitoring well number one was decommissioned following damage occurred during the movement of heavy equipment.

On February 11, 1993, two trenches were excavated at the former location of the UST. Apparently pea gravel was encountered during excavation. REA personnel hypothesized that this pea gravel could be a dry well shown on older building plans.

On March 5, 1993, REA conducted soil sampling by hand auguring a hole through the basement floor.

On March 25, 1993, an additional monitoring well was drilled, down gradient of the former UST site.

Four additional groundwater monitoring rounds occurred on May 23 and October 21, 1993 and on February 8 and May 11, 1994.

The above summary presents only that information provided to 3 Kings Environmental at the time of this report. Sampling conducted by OMNI and REA has not been relied upon to make the conclusions in this report.

2.2 Site Investigation

On June 23, 1999, 3 Kings Environmental performed soil sampling to investigate the residual environmental impact of a LUST Site. The Site had previously been reported and was assigned

4017

Site Number 24-89-~~4027~~ by the Department of Environmental Quality. 3 Kings Environmental contracted with GeoTech Explorations, Tualatin, Oregon to conduct soil borings with a Geoprobe®.

3.0 Sampling Methodology and Analytical Results

Soil and groundwater sampling was performed in accordance with OAR 340-122-345. Subsurface soil and groundwater samples were collected with a push-probe mobile machine, in particular, a Geoprobe® hydraulically powered, percussion/probing machine. Direct Push refers to tools and sensors that are "pushed" into the ground without the use of drilling to remove soil or to make a path for the tool. A Geoprobe® relies on a relatively small amount of static (vehicle) weight combined with percussion as the energy for advancement of a tool string.

A dual tube sampler with two sets of probe rods was used to collect discrete soil samples at the bottom of the bore hole. One set of rods was driven as an outer casing. These rods received the driving force from the hammer and provided a sealed hole from which soil samples were recovered thereby reducing the potential of cross-contamination. The second, smaller set of rods was placed inside the outer casing. The smaller rods held a sample liner in place as the outer casing was driven one four (4)-foot sampling interval. The small rods were then retracted to retrieve the filled liner.

Soil samples were collected from the liners with new, latex gloves and placed into new, clean 6-ounce glass sample jars. Groundwater samples were collected from the bore holes by pumping with a hand pump through dedicated polyethylene hose into one-liter amber glass bottles. The sample jars with soil contained no headspace and were capped with polyethylene lids, labeled with sample number, date and time collected, and placed in a closed ice chest containing 'blu-ice' for delivery to Columbia Inspection, Inc., Portland, Oregon. The samples were accompanied by a chain-of-custody and request for analysis. The following table summarizes analytical results the last sampling at the subject property.

Table 1: Final Soil and Water Sampling Analytical Results

Date	Sample ID	Analysis	Analyte	Results (ppm)
06/23/99	40-Water-01	BTEX (EPA 602)	Benzene	0.021
		EDB/EDC (EPA 502.2-M)	*ND	ND
		Lead (EPA 200.7/6010B)	Dissolved Lead	0.0069
		MTBE (EPA 8015)	ND	ND
06/23/99	40-Water-02	BTEX (EPA 602)	ND	ND
		EDB/EDC (EPA 502.2-M)	ND	ND
		Lead (EPA 200.7/6010B)	Dissolved Lead	0.029
		MTBE (EPA 8015)	ND	ND
06/23/99	40-Water-03	BTEX (EPA 602)	ND	ND
		EDB/EDC (EPA 502.2-M)	ND	ND
		Lead (EPA 200.7/6010B)	Dissolved Lead	0.0078
		MTBE (EPA 8015)	ND	ND
06/23/99	40-Auger-01	NWTPH-HCID	Hydrocarbons	ND
06/23/99	40-Auger-02	NWTPH-HCID	Hydrocarbons	ND
06/23/99	40-Auger-03	NWTPH-HCID	Hydrocarbons	ND

*ND—Not Detected

Analysis of the closure samples indicated that no petroleum hydrocarbons were detected in any of the three soil samples collected. All water samples recorded results for dissolved lead. Only sample 40-Water-02 recorded results above the DEQ's Risk Based Concentrations (RBC) of 15.0 ppb for dissolved lead for occupational scenarios. Sample 40-Water-01 also recorded positive results for Benzene above the RBC of 4.3 ppb for Groundwater Ingestion for occupational scenarios. The level of Benzene recorded in Sample 40-Water-01 is however below the RBC volatilization of groundwater into buildings of 1200 ppb.

4.0 Closure Analysis

4.1 Qualification for Low-Impact Site Closure (340-122-0243)

The subject property meets all conditions to be acceptable as a Low-Impact Site, as listed below:

1) The source of the release has been removed (March 14, 1989, OMNI Environmental Services, Inc);
2) The facility will continue to be owned and maintained by the Oregon State Hospital;
3) No free product was found on the groundwater during final sampling (June 24, 1999, 3 Kings Environmental, Inc.);
4) No evidence of gasoline contaminated soil was observed in the final sampling round (June 24, 1999, 3 Kings Environmental, Inc.)(REA sampling indicates that only low levels of gasoline impacted soil were detected on site during REA's sampling rounds in 1993);
5) Impacted soil is greater than three feet below ground surface;
6) Impacted soil is not located within utility corridors;
7) Building #40 is located in an area that low levels of contamination have been identified. Gasoline has been detected under Building #40, given the age of the release and the low levels recorded during REA's last sampling round in 1993 (56.23 ppm gasoline), it is unlikely to pose a threat from volatilization (March 5, 1993, REA Environmental Science & Testing, Inc.);
8) Groundwater contamination has been recorded on site, but the following conditions have been met,
   a) There are no water supply wells located within one-quarter mile of the source;
   b) The groundwater plume is less than 250 feet in length;
   c) Historical groundwater monitoring, as well as current results, indicate the groundwater plume has stabilized;
   d) The groundwater plume, based on historic monitoring well sample results, does not leave the property;
   e) Building #40 is located over the impacted groundwater but contamination concentrations of the contaminate of concern, Benzene, are below the RBCs for volatilization from groundwater into buildings;

5.0 Summary

The Oregon State Hospital, Building # 40, LUST Site Number 24-89-4017, has been an open site since 1989 due to the release of product from a 250-gallon UST. Since the release date extensive characterization, remediation and abatement activities have occurred on the site. Based on the review of activities conducted by OMNI Environmental Services (March 89 to February 92) and REA Environmental Science & Testing (December 92 to September 94) and the final sampling conducted by 3 Kings Environmental (June 23, 1999) it appears that the site is eligible for closure under the Low-Impact Site Rules.

Without further investigation the following statements are put forth to aid in site closure. The contamination which was released in 1989 has not migrated off site. Remediation activities that have occurred to date appear to have been effective, eventhough most were discontinued prior to their maximum effectiveness and DEQ approval. Remediation activities appear to have led to the majority of the contaminant being removed and if any has been left on site it is highly immobile in the fine textured soils. No evidence of gasoline vapors in Building #40 or surrounding buildings has been reported since the remedial activities conducted by OMNI Environmental, Inc., concluded in 1992. Thus, for the low level of impacted soil potentially left on site it is best and most cost-effective to allow natural attenuation of the medium. The groundwater that has been impacted is part of a seasonally high water table that is perched. This groundwater is not used as a potable water supply and is unlikely to be a source of potable water in the future. Furthermore, the site and surrounding area are supplied with potable water by the City of Salem.

6.0 Recommendations

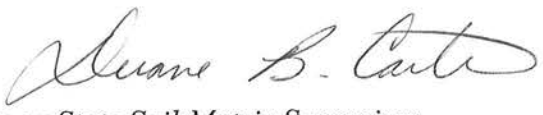
3 Kings Environmental proposes the subject property, Oregon State Hospital Building #40, LUST Site 24-89-4017, Salem, Oregon, be closed under the Low-Impact Site Rule to UST Cleanup Sites, subject to the restrictions and controls placed on the site by the DEQ.

7.0 STATEMENT OF QUALITY ASSURANCE

I have performed this Low-Impact Site Closure Report in accordance with accepted environmental practices and procedures. I have employed the degree of care and skill exercised under similar circumstances by environmental professionals practicing in this area. The conclusions contained within this report are based upon Site conditions I readily observed or were ascertainable and present at the time of this report.

The conclusions and recommendations stated in this report are based upon personal observations made by myself, other employees, or charges of 3 Kings Environmental, Inc., and also upon information provided by others. I have no reason to believe that the information provided is inaccurate.

Signature of Environmental Professional—Duane Carter



Oregon State Soil Matrix Supervisor

8.0 REPORT LIMITATIONS

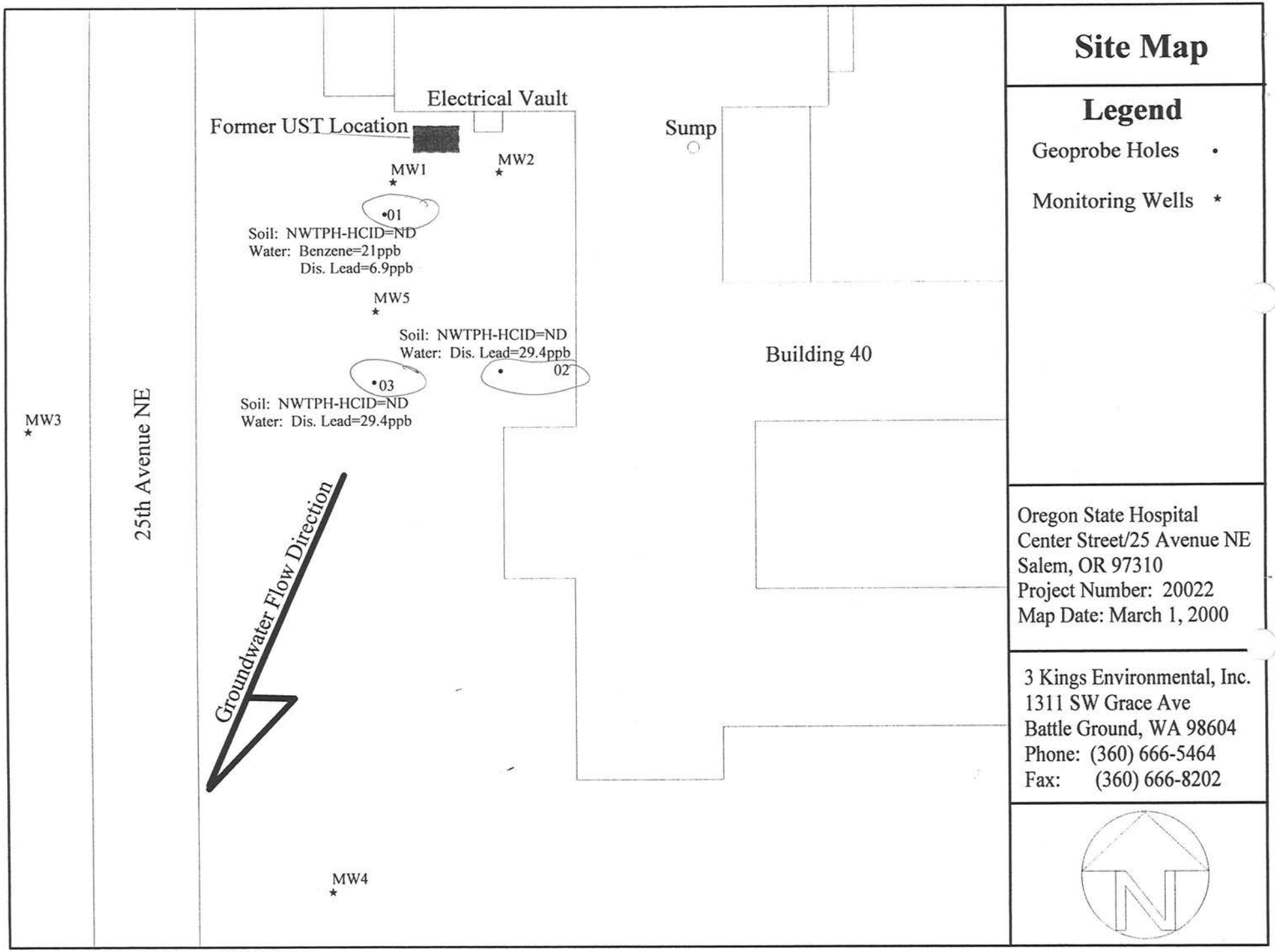
The enclosed Low-Impact Site Closure Report has been performed for the exclusive use of the Oregon State Hospital and the Oregon State Department of Environmental Quality, regarding the property referred to as Oregon State Hospital, Building #40, LUST #24-89-4017, in Salem, Oregon. This report may be distributed to and relied upon by the Oregon State Hospital, successors and assigns to be assigned by the Oregon State Hospital with respect the Site.

This report has been written in accordance with accepted environmental practices and procedures. All services have been performed employing that degree of care and skill exercised under similar circumstances by environmental professionals practicing in this, or similar localities. No other warranty or guarantee, expressed or implied, is made or offered.

The conclusions and recommendations stated in this report are based upon observations made by employees of 3 Kings Environmental, Inc., and also upon information provided by others. We have no reason to believe that the information provided is inaccurate. However, we cannot be held responsible for the accuracy of the information provided to us by others. The scope of this report does not purport to encompass every report, record, or other form of documentation relevant to the Site.

The observations in this report are based upon site conditions readily visible and present at the time of this report. This Low-Impact Site Closure Report does not attempt to forecast future site conditions.

Appendix A
Site Maps



Site Map

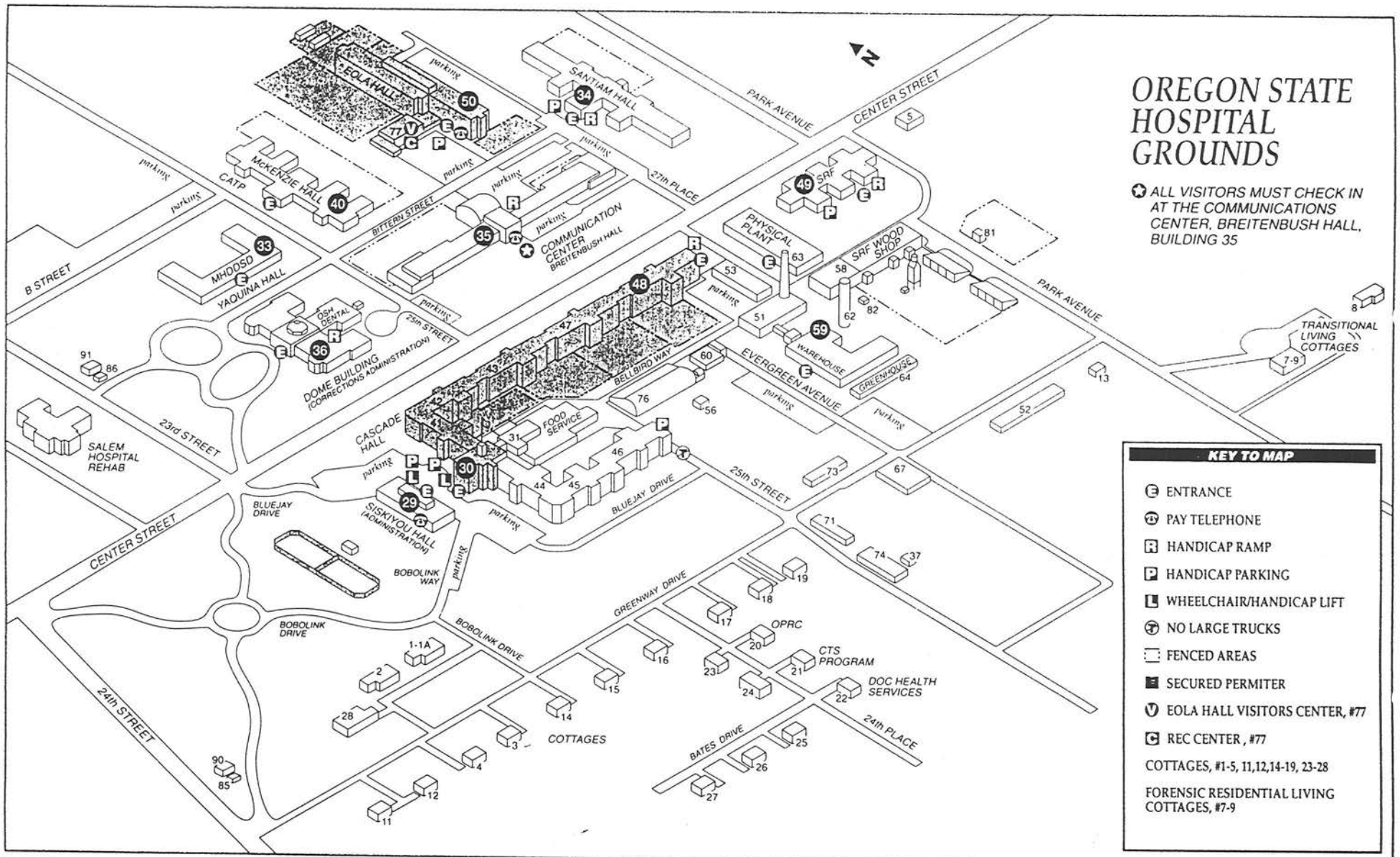
Legend

Geoprobe Holes •

Monitoring Wells ★

Oregon State Hospital
Center Street/25 Avenue NE
Salem, OR 97310
Project Number: 20022
Map Date: March 1, 2000

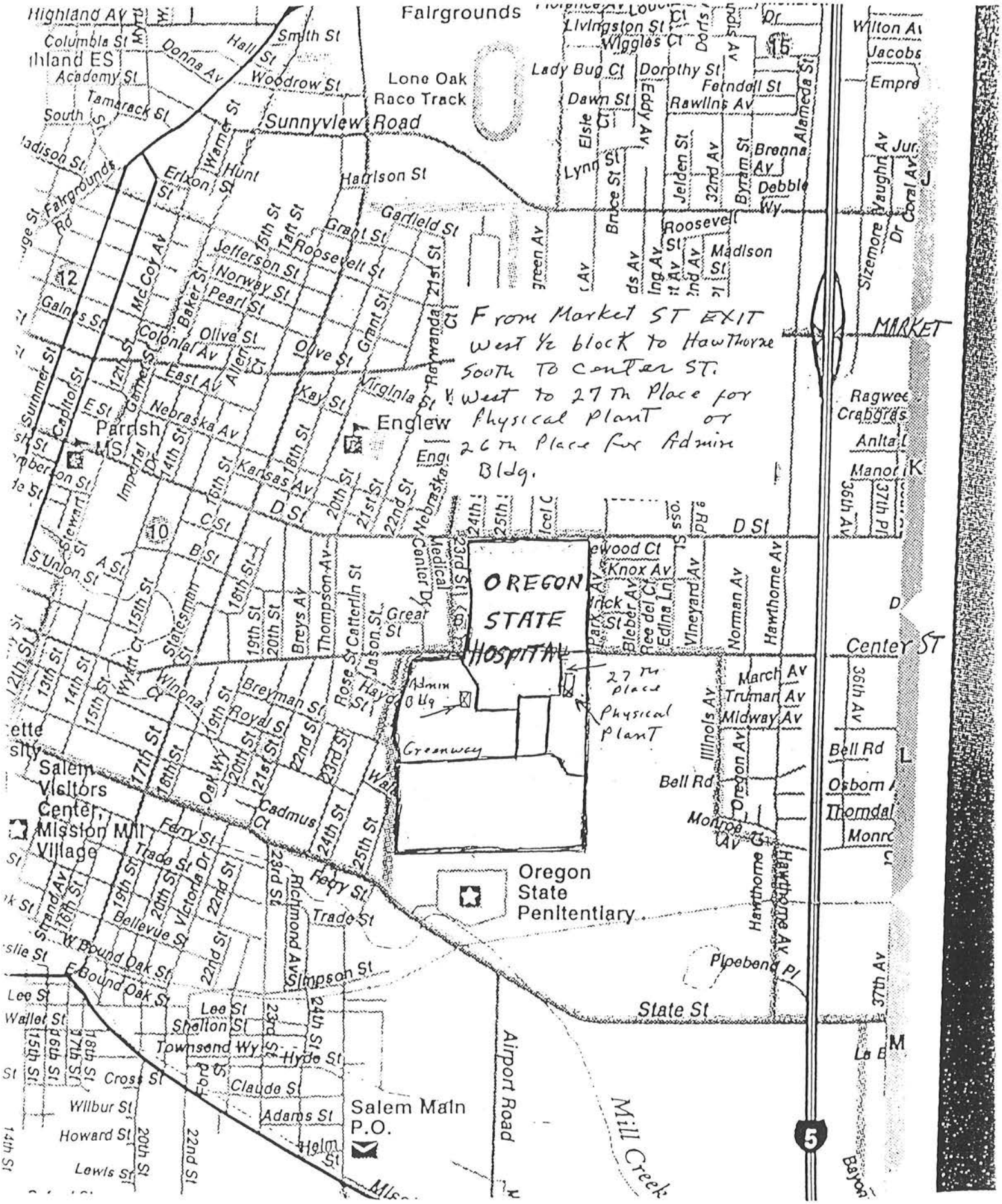
3 Kings Environmental, Inc.
1311 SW Grace Ave
Battle Ground, WA 98604
Phone: (360) 666-5464
Fax: (360) 666-8202



MAIN BUILDINGS

- 29 Oregon State Hospital Administration
- 30 Forensic Residential Treatment Services Administration
- 33 Mental Health & Developmental Disability Services Division
- 34 Geropsychiatric Treatment Services
- 35 Oregon State Hospital Communications Center
- 35 Adult Treatment Services
- 36 Department of Corrections Administration Offices
- 40 Child & Adolescent Treatment Services
- 40 CAGTS Administration
- 48 Forensic Hospital Treatment Services Administration
- 49 Oregon State Hospital/Salem Rehabilitation Facility
- 50 Forensic Hospital/Forensic Residential Treatment Services
- 59 Warehouse/Shipping & Receiving

OSH-STK-14442



From Market ST EXIT
West 1/2 block to Hawthorne
South To Center ST.
West to 27 Th Place for
Physical Plant or
26 Th Place for Admin
Bldg.

MARKET

Center ST

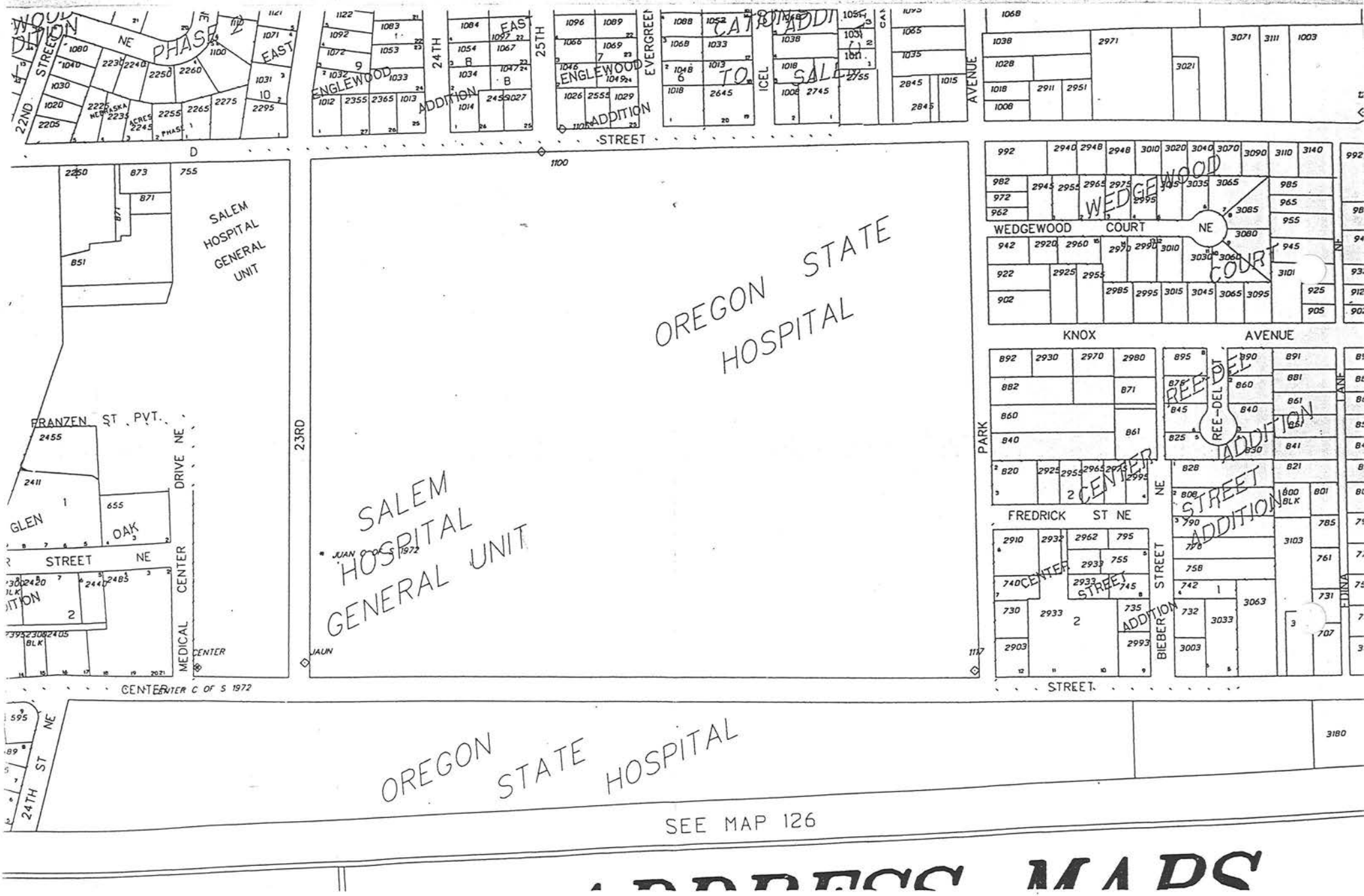
OREGON STATE HOSPITAL

Admin Bldg

27 Th place

Physical Plant

Greenway


22ND STREET NE
PHASE 2
EAST
ENGLEWOOD ADDITION
24TH
25TH
EVERGREEN
ICEL
AVENUE
D STREET
1100
SALEM HOSPITAL GENERAL UNIT
OREGON STATE HOSPITAL
WEDGEWOOD COURT NE
KNOX AVENUE
FRANZEN ST PVT.
DRIVE NE
GLEN OAK STREET NE
MEDICAL CENTER
23RD
PARK
CENTER STREET NE
FREDRICK ST NE
REE-DEL COURT
ADDITION
BIEBER STREET
FLINN LANE
CENTER STREET
24TH ST NE
OREGON STATE HOSPITAL
SEE MAP 126

Appendix B
Laboratory Reports

CERTIFICATE OF ANALYSIS COPY

CLIENT: THREE KINGS ENVIRONMENTAL
21605 B NE 10TH AVE
RIDGEFIELD WA 98642

PHONE: (360) 887-5464
FAX: (360) 887-1492

DATE SUBMITTED: 06/24/99

PROJECT NAME: OREGON STATE HOSPITAL PROJECT NUMBER: 98388

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
991250-001		06/23/99		40-WATER-01
991250-002		06/23/99		40-WATER-02
991250-003		06/23/99		40-WATER-03
991250-004		06/23/99	1045	40-AUGER-01 @ 10' BGS
991250-005		06/23/99	1115	40-AUGER-02 @ 10' BGS
991250-006		06/23/99	1130	40-AUGER-03 @ 15' BGS
991250-007		06/23/99		40-WATER-01
991250-008		06/23/99		40-WATER-02
991250-009		06/23/99		40-WATER-03

REPORT DATE: 07/07/99 REPORT NUMBER: 991250

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-01						
991250-001	BTEX 2 EPA 602	BENZENE	0.021	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	97%	% REC	80%-120%	
40-WATER-02						
991250-002	BTEX 2 EPA 602	BENZENE	ND	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	93%	% REC	80%-120%	

REVIEWED BY: Martin Little - Quality Manager

CERTIFICATE OF ANALYSIS

COPY

REPORT DATE: 07/07/99 REPORT NUMBER: 991250

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-03						
991250-003	BTEX 2 EPA 602	BENZENE	ND	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	88%	% REC	80%-120%	
40-AUGER-01 @ 10' BGS						
991250-004	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	90	%RECOVERY	50-150%	
40-AUGER-02 @ 10' BGS						
991250-005	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	109	%RECOVERY	50-150%	
40-AUGER-03 @ 15' BGS						
991250-006	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	93	%RECOVERY	50-150%	
40-WATER-01						
991250-007	EDB/EDC1 EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	100%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.0069	PPM	0.001	Tony P.
	MTBE EPA 8015	MTBE CONCENTRATION	ND	mg/L	0.05	Jacob F.

CERTIFICATE OF ANALYSIS

COPY

REPORT DATE: 07/07/99 REPORT NUMBER: 991250

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-02						
991250-008	EDB/EDC1 EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	104%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.029	PPM	0.001	Tony P.
	MTBE EPA 8015	MTBE CONCENTRATION	ND	mg/L	0.05	Jacob F.
40-WATER-03						
991250-009	EDB/EDC1 EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	98%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.0078	PPM	0.001	Tony P.
	MTBE EPA 8015	MTBE CONCENTRATION	ND	mg/L	0.05	Jacob F.

ND means none detected at or above the listed detection limit

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD

Laboratory • Inspection • Tank Calibration

Environmental • Petroleum • OR Certified Water Analysis

☐ 7133 N. Lombard, Portland, OR 97203 Ph: (503) 286-9464 Fax: (503) 285-7831

☐ 4901 E. 20th Street, Fife, WA 98424 Ph: (253) 922-8781 Fax: (253) 922-8957

☐ 613 Escobar Street, Martinez, CA 94553 Ph: (510) 229-0360 Fax: (510) 229-2821

☐ 790 Basin Street, Unit #2, San Pedro, CA 90731 Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: 3 Kings

Attention: Dave Franklin

Address:

Phone: ( )

FAX: 360, 887 5464

Sampler: Dave Franklin ☑ Submitted

Project Name: OSH

Project Number: 98388

P.O. Number: 415

Testing Priority: ☑ Standard ☐ Rush

Notification Method(s): ☐ Telephone ☐ FAX ☐ Mail

Due Date:

Sample id#	Sample Description	Sample Matrix	Sample Date	Sample Time	BTEX	NW TPH - HCID	EDB	EDC	MTBE	Dissolved Lead
	40-WATER-01	Water	6/22		X					
	40-WATER-02	water			X					
	40-WATER-03	water			X					
	40-AUGER-01-10'-BGS	Soil		1045		X				
	40-AUGER-02-10'-BGS	Soil		1115		X				
	40-AGER-03-15'-BGS	Soil		1130		X				
	40-[illegible]WATER-01	water				[illegible]	X	X	X	X
	40-WATER-02	water				[illegible]	X	X	X	X
	40-WATER-03	water				[illegible]	X	X	X	X

Relinquished By:	Received By:	Date/Time
Signature: [signature]	Signature: [signature]	6/24/95 12:15
Printed Name: Dave Franklin	Printed Name:	
Relinquished By:	Received By:	Date/Time
Signature:	Signature:	
Printed Name:	Printed Name:	

FOR LABORATORY USE ONLY

Inspection Job Number: _____ ☐ Visa _____

Laboratory Project Number: _____ ☐ Cash/Check # _____

Overtime authorized ☐ Yes ☐ No Amount Paid: $_____

White Copy - Laboratory Yellow Copy - Client Copy

CI Form 100 (COC) Rev B

Appendix C
Correspondence

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, OR 97301-1039
(503) 378-8240
(503) 378-3684 TTY

January 24, 2000

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Request Letter

Dear Mr. Larimer:

I have recently returned for another 6-months temporary assignment with DEQ. I'm reviewing files previously assigned to me to determine their status. I note in a letter of July 21, 1999 (see enclosed) that I suggested the site may be ready to close under DEQ's risk-based concentration rules.

Since that letter, DEQ has updated its rules and guidance. It still appears the site may be eligible for closure under the Low Impact Site rules (OAR 340-122-0243 – most recent guidance issued October 1999), Risk-Based Concentration rules (OAR 340-122-0244) or Generic Remedy rules (OAR 340-122-0252). Guidance for the last two closure options was recently published on September 29, 1999). Please select one of these alternatives and prepare a final closure report consistent with the applicable guidance for the option selected. Copies of the rules and guidance are available for download at :

http://www.deq.state.or.us/wmc/tank/ust-lust.htm

On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:rpr
x:/rreiter/24-89-4017.reqltr

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, OR 97301-1039
(503) 378-8240
(503) 378-3684 TTY

JUL 22 1999

July 21, 1999

Dave Franklin
3 Kings Environmental
21605 B NE 10th Avenue
Ridgefield, WA 98642

Re: USTC No. 24-89-4017
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Response to Your 7/13/1999 Letter

Dear Mr. Franklin:

Thank you for a copy of the preliminary test results from the geoprobe investigation adjacent to Building 40. We have the following observations and requests:

Done 1. These are preliminary results, before they've undergone final laboratory quality assurance review. Please provide a copy of the laboratory's final report. Also these preliminary data sheets don't identify which laboratory ran the tests.

Done 2. The NWTPH-HCID analysis of soil sample "40 Auger-03-15'" detected heavy oil. Was this quantified, and is so, what was the result?

Didn't do 3. Our letter of May 4, 1999 requested water samples and groundwater elevation information. Was groundwater elevation information collected?

Will do ⇒ 4. Our May 4, 1999 letter also requested a scaled drawing showing Building 40's location in relation to the southern and western property boundaries. Will you or the Physical Plant staff be providing that information?

On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:rpr
x:/rreiter/24-89-4017.respltr2

cc: Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, OR 97301-1039
(503) 378-8240
(503) 378-3684 TTY

July 21, 1999

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Request for Three Geoprobes

Dear Mr. Larimer:

We have reviewed the preliminary information submitted by 3 Kings Environmental on July 13, 1999 on the geoprobe investigation results. Two results prevent us from considering this a clean closure:

1. Water sample "40 Water-01" – benzene = 21 parts per billion

2. Water sample "40 Water-02" – dissolved lead = 29.4 parts per billion

Given the property uses and acreage owned, it is likely we can still close the file under the current risk-based concentration rules (copy enclosed). However, in order to proceed in that direction we will need:

1. A conceptual site model prepared pursuant to OAR 340-122-0244.

2. Ownership information for the first tier of pubic and private property adjacent to the Oregon State Hospital. Please also include mailing address information for these properties since DEQ is required to provide public notice on proposed risk-based concentration closures.

With that information in hand, DEQ will proceed toward closure using the current risk-based concentration rules.

On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:rpr
x:/rreiter/24-89-4017.inforeqltr

Enclosure: UST Cleanup Rules

3 Kings
Environmental

Specializing in Commercial/Residential
Underground Storage Tanks

July 13, 1999

Rich Reiter
Department of Environmental Quality
750 Front St.
Salem, Oregon. 97310

RE: USTC No. 24-89-4017

Dear Mr. Reiter:

On June 23, 1999 3 Kings Environmental with the use of a Geo punch bored three holes to a depth of fifteen feet. Soil samples where taken at ten feet below ground surface at boring # 1, ten feet below ground surface at boring # 2 and fifteen feet below ground surface at boring # 3. These soil samples where analyzed for NWTPH-HCID. Ground water was encountered at approximately ten feet below ground surface. Water samples where taken from all three borings and analyzed for B.T.E.X., EDB, EDC,MTBE and dissolved lead. (SEE ANALYTICAL RESULTS). The only constituent of concern is dissolved lead from boring # 2 in groundwater.

Recommendations for this site is to close this site with a no further action letter due to the lack of mobility of dissolved lead and the problems involved with removal.

If there are any question concerning this project please feel free to call me at 360-887-5464.

Sincerely

Dave Franklin

CERTIFICATE OF ANALYSIS

CLIENT: THREE KINGS ENVIRONMENTAL
21605 B NE 10TH AVE
RIDGEFIELD WA 98642

PHONE: (360) 887-5464
FAX: (360) 887-1492

DATE SUBMITTED: 06/24/99

PROJECT NAME: OREGON STATE HOSPITAL PROJECT NUMBER: 98388

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
991250-001		06/23/99		40-WATER-01
991250-002		06/23/99		40-WATER-02
991250-003		06/23/99		40-WATER-03
991250-004		06/23/99	1045	40-AUGER-01 @ 10' BGS
991250-005		06/23/99	1115	40-AUGER-02 @ 10' BGS
991250-006		06/23/99	1130	40-AUGER-03 @ 15' BGS
991250-007		06/23/99		40-WATER-01
991250-008		06/23/99		40-WATER-02
991250-009		06/23/99		40-WATER-03

REPORT DATE: 07/07/99 REPORT NUMBER: 991250 PAGE: 1 OF 3

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-01						
991250-001	BTEX 2 EPA 602	BENZENE	0.021	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	97%	% REC	80%-120%	
40-WATER-02						
991250-002	BTEX 2 EPA 602	BENZENE	ND	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	93%	% REC	80%-120%	

REVIEWED BY: Martin Little - Quality Manager

CERTIFICATE OF ANALYSIS

REPORT DATE: 07/07/99 REPORT NUMBER: 991250

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-03						
991250-003	BTEX 2 EPA 602	BENZENE	ND	mg/L	0.0005	Jacob F.
		ETHYLBENZENE	ND	mg/L	0.0005	
		TOLUENE	ND	mg/L	0.0005	
		M- & P-XYLENE	ND	mg/L	0.0005	
		O-XYLENE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	88%	% REC	80%-120%	
40-AUGER-01 @ 10' BGS						
991250-004	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	--	--	--	
40-AUGER-02 @ 10' BGS						
991250-005	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	109	%RECOVERY	50-150%	
40-AUGER-03 @ 15' BGS						
991250-006	NWTPH-HCID SOIL NWTPH-HCID	GASOLINE	ND	mg/Kg	20	Abigail K.
		DIESEL	ND	mg/Kg	50	
		OIL/GREASE	ND	mg/Kg	100	
		SURROGATE	93	%RECOVERY	50-150%	
40-WATER-01						
991250-007	EDB/EDCI EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	100%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.0069	PPM	0.001	Tony P.

CERTIFICATE OF ANALYSIS

REPORT DATE: 07/07/99 REPORT NUMBER: 991250

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
40-WATER-02						
991250-008	EDB/EDCI EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	104%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.029	PPM	0.001	Tony P.
	MTBE EPA 8015	MTBE CONCENTRATION	ND	mg/L	0.05	Jacob F.
40-WATER-03						
991250-009	EDB/EDCI EPA 502.2-M	1,2-DIBROMOETHANE	ND	mg/L	0.001	Jacob F.
		1,2-DICHLOROETHANE	ND	mg/L	0.0005	
		SURROGATE RECOVERY	98%	% RECOVERY	80-120%	
	LEAD, DISS. - ICP EPA 200.7/6010B	DISSOLVED LEAD	0.0078	PPM	0.001	Tony P.
	MTBE EPA 8015	MTBE CONCENTRATION	ND	mg/L	0.05	Jacob F.

ND means none detected at or above the listed detection limit

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD

Laboratory • Inspection • Tank Calibration

Environmental • Petroleum • OR Certified Water Analysis

☐ 7133 N. Lombard, Portland, OR 97203 Ph: (503) 286-9464 Fax: (503) 285-7831

☐ 4901 E. 20th Street, Fife, WA 98424 Ph: (253) 922-8781 Fax: (253) 922-8957

☐ 613 Escobar Street, Martinez, CA 94553 Ph: (510) 229-0360 Fax: (510) 229-2821

☐ 790 Basin Street, Unit #2, San Pedro, CA 90731 Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: 3 Kings

Attention: Dave Franklin

Address:

Phone: ( )

FAX: (360) 887 5464

Sampler: Dave Franklin ☑ Submitted

Project Name: OSH

Project Number: 98388

P.O. Number: 415

Testing Priority: ☑ Standard ☐ Rush

Notification Method(s): ☐ Telephone ☐ FAX ☐ Mail

Due Date:

Sample id#	Sample Description	Sample Matrix	Sample Date	Sample Time	Analyses To Be Performed: BTEX	NW TPH - HCID	EDB	EDC	MtBE	Dissolved Lead
	40-WATER-01	WATER	6/23		X					
	40-WATER-02	water			X					
	40-WATER-03	water			X					
	40-AUGER-01-10'-BGS	Soil		1045		X				
	40-AUGER-02-10'-BGS	Soil		1115		X				
	40-AGER-03-15'-BGS	Soil		1130		X				
	40-[redacted]WATER-01	water				[redacted]	X	X	X	X
	40-WATER-02	water				[redacted]	X	X	X	X
	40-WATER-03	water				[redacted]	X	X	X	X

Relinquished By:	Received By:	Date/Time
Signature:	Signature:	6/24/95 12:15
Printed Name: Dave Franklin	Printed Name:	
Relinquished By:	Received By:	Date/Time
Signature:	Signature:	
Printed Name:	Printed Name:	

FOR LABORATORY USE ONLY

Inspection Job Number: _____ ☐ Visa _____

Laboratory Project Number: _____ ☐ Cash/Check # _____

Overtime authorized ☐ Yes ☐ No Amount Paid: $_____

White Copy - Laboratory Yellow Copy - Client Copy

CI Form 100 (COC) Rev B

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

Called 4.23.99 not in

Rich Rutz called 4.26.99 and will send what needs to be done in a couple days ML

April 12, 1999

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Second Response to 3/18/99 Letter

Dear Mr. Larimer:

This is in response to your hand-delivered package of April 9, 1999 that included copies of OMNI Environmental's October 16, 1989 and February 14, 1992 site characterization reports. These reports satisfy Items 1 and 2 of our March 11, 1999 information request letter. These reports document the very responsive initial abatement and site characterization activities undertaken by the Hospital.

Assuming you get a similar response from REA Tech Management, the rest of our questions may be effectively answered.

On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

March 31, 1999

Mr. Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Dear Mr. Larimer:

It was a pleasure talking with you yesterday. Given that you only recently started at the State Hospital, it must be a challenge to pick up and close some of these old projects.

Paul Tiegs returned from this business trip yesterday evening and I had an opportunity to talk with him regarding the Building #40 clean-up project and REA Tech Management. His recollection of the progression of events was that OMNI was retained by the State Hospital for the project. We performed the work in phases and provided a cost estimate prior to starting work on each phase. At some point (around December 1991 to January 1992 seemed about right to Paul), the State Hospital got a lower cost estimate for the next phase from another company, terminated its contract relationship with OMNI, and gave the project to the low bidder. We did not know who had submitted a lower cost and took the project, but is appears that it may have been REA Tech Management. OMNI did not work on the project with REA and has no records pertaining to their work.

Regarding the two yards of contaminated soil that were excavated and set aside, I do not have records of final disposal. I am attempting to contact project personnel who are no longer with OMNI to see if they can provide any information on this matter. Given the phased nature of the project, however, I anticipate that disposal of the soil was to be attended to during a later phase of the project, but our contract relationship was terminated by the State Hospital before disposal of the soil was put on the schedule.

As we discussed on the telephone, please find enclosed one photocopy each of the following documents: October 16, 1989, "Site Characterization and Remediation Design for Gasoline Contamination at Oregon State Hospital, Building #40" and February 14, 1992 "Site Characterization Report".

The October 16th report responds to the request for information item # 1 of the March 11, 1999 letter from the Oregon Department of Environmental Quality (DEQ).

OMNI Environmental Services, Inc.
Consulting ✦ Engineering ✦ Testing

Mailing: Post Office Box 743 ✦ Beaverton, Oregon 97075 USA
Street: 5465 SW Western Avenue ✦ Suite G ✦ Beaverton, Oregon 97005 USA

Phone: (503) 643-3788
Fax: (503) 643-3799

The February 14th report contains information on the treatment system design and the remediation conducted up until the date of the report, which responds to DEQ question #2.

As to DEQ question #9, I will contact you if I obtain additional information on the final disposal of the soil.

We have no information regarding the other matters addressed in DEQ's letter.

Thank you.

Sincerely,

David McClure
Vice President

Oregon
John A. Kitzhaber, M.D., Governor

Department of Human Resources
Mental Health and Developmental Disability Services Division
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
(503) 945-2800 (Voice/TTY)
FAX (503) 945-2807

August 3, 1999

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, Oregon 97301-1039

Re: USTC No. 24-89-4017
Facility ID No. 10761
Oregon State Hospital

Richard,

I thank you for your letter dated July 21, 1999, requesting two additional items required closing the above project.

Enclosed you will find maps to answer the two questions on USTC No. 10761 put forth in your letter. Please note the tank leak at the Forty Building is a considerable distance from the first tier housing. The previous record also indicates the drainage runs towards Center Street and not towards D or Park Streets.

In addition, you sent me another letter on July 21, 1999, about USTC No. 24-91-4255. I can not find any additional information about this diesel pipeline leak. I interviewed staff who where here during 1991 and they do not remember the episode. The Oregon State Hospital removed or upgraded all of its underground storage tanks and I am sure if there were a leak the area involved would have been remediated during the tank upgrading or removal. I request and thank you for closure on this job.

I thank you for your help, patience, and cooperation in closing the two projects.

Sincerely,

Michael Larimer

Michael Larimer,
Physical Plant Manager

Cc Marcroft, Olson, File

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

Fax to Chuck Cutler, REA
c/o Mona 3.17.99 #370-7151

Fax 643 3799 Paul Jeeps, OMNI

From Michael Sommer
Oregon State Hospital
503 945 2924
947 1052

March 11, 1999

B. P. Jacobsen, Director
Support Services
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Information Request Letter

Dear Mr. Jacobsen:

I have recently been assigned as the project manager for the above referenced site. The source of the release was a 240-gallon gasoline tank used to fuel a standby emergency generator. It appears some 240 gallons or more was lost in a very short period of time, on or before March 13, 1989. I have reviewed the file and have the following observations and requests for additional information:

1. In a list of background documents in the June 17, 1993, "Corrective Action Plan" by REA Tech Management, there is reference to an OMNI Environmental Services report of October 16, 1989, entitled "Site Characterization and Remediation Design for Gasoline Contamination at Oregon State Hospital, Building # 40. The Department has not received a copy of this report.

2. Apparently, groundwater extraction and treatment occurred between April 1989 and September 1991 out of two recovery wells (wells that eventually became MW-1 and MW-2). There is no report in the file identifying the treatment facility design or any information on the facility operation and effectiveness over this period of more than two years.

3. On February 17, 1994, we received an REA groundwater monitoring report for samples apparently collected February 8, 1994. The report did not contain a Chain-of-

Custody/Request for Analysis form documenting sample collection. The report suggests that samples were collected from monitoring wells 1 to 4. When the data was displayed in Table 1 of the "Closure Report" dated September 15, 1994, the data was assigned to monitoring wells 2 to 5. This discrepancy between reports needs to be explained and clarified.

4. On May 15, 1994, an REA groundwater monitoring report was sent in that again lists monitoring wells 1 to 4. When the data was displayed in Table 1 in the September 15, 1994, "Closure Report" the data was assigned to monitoring wells 2 to 5. This discrepancy between reports needs to be explained and clarified. At this time, DEQ is not inclined to view either sampling event as valid.

5. On October 20, 1994, you forwarded a September 15, 1994, REA report entitled "Closure Report – Oregon State Hospital." Attachment 4 in that report was a June 17, 1993, REA report entitled "Corrective Action Plan – Oregon State Hospital." The following pages or documents were missing from the Corrective Action Plan (CAP):

   a. Page 15 was missing from the report;

   b. There was no Chain-of-Custody/Request for Analysis form for the sample (92VOIIA) collected associated with the east-west trench (see Appendix VI);

   c. There was no Chain-of-Custody/Request for Analysis form for the five samples (VO7B1, VO7B2, VO7B3, VO7B4 & VO7B5) collected associated with the boring drilled through the basement floor (see Appendix VII); and

   d. There was no Chain-of-Custody/Request for Analysis form for the three samples (MW5-3, MW5-4 & MW5-5) collected associated with installation of monitoring well #5 (see Appendix VIII).

6. It does not appear the June 17, 1993, Corrective Action Plan was ever submitted for DEQ review and approval on or after June 17, 1993. Consequently, DEQ never reviewed or commented on the plan before the monitoring wells were decommissioned in August 1994. What is of significant concern to us is that the Corrective Action Plan recommended additional remediation in the form of five soil vapor extraction wells and one groundwater extraction well to lower the groundwater table during remediation. Additional remediation was recommended because of the continuing groundwater contamination in (former) MW-1 and MW-2. It does not appear these recommendations were ever implemented.

7. On October 20, 1994, you submitted REA's September 15, 1994, "Closure Report" and requested DEQ to review and close the file. We are disturbed to learn that the groundwater

monitoring wells were decommissioned on August 8, 1994, a full month before the closure report was completed and two months before the report was forwarded to DEQ. It is highly unusual for monitoring wells to be decommissioned before DEQ determines that a cleanup has been completed to appropriate environmental standards and issues a No Further Action letter. Based on the incomplete record in the file, it does not appear the numeric cleanup standards have been met, most specifically, four quarters of groundwater data demonstrating compliance with the numeric standards.

8. The September 15, 1994, closure report refers to an October 21, 1993, groundwater sampling event. No Chain-of-Custody/Analysis of Samples form or lab sheets were supplied to document this work. Yet, information was included in Table 1.

9. OMNI Environmental's February 14, 1992, "Site Characterization Report" states 2 cubic yards of petroleum contaminated soil were treated on-site. No documentation on its final disposal has been provided. REA Tech Management's April 15, 1993, "Investigation for Soil and Groundwater Cleanup" report describes the excavation of two exploratory trenches up to 15 feet in depth (an east-west trench and a north-south trench). Petroleum contaminated soil was encountered. No documentation was provided as to the final disposition of this contaminated material.

10. REA Tech Management's April 15, 1993, report discusses encountering "pea gravel" in the east-west trench at 11 feet and speculates that it may be backfill for a sanitary sewer line. REA Tech Management's June 17, 1993, Corrective Action Plan speculates that this "pea gravel" may actually be evidence of a dry well installed at the time the hospital was built in 1947. Figure 9 is a copy of the original dry well design drawing. If either of these hypotheses is correct, it may explain the apparent rapid dissipation of some 250 plus gallons of gasoline via a preferential pathway. It seems that additional investigation should have occurred immediately to rule out these potential preferential pathways.

11. It is likely that additional data is needed to document that the hazardous constituent EDB complies with the numeric groundwater standards. The last time it was tested for in MW-2 on January 13, 1992, it slightly exceeded the standard. No additional testing for EDB and EDC has been done since that sampling event.

In order for DEQ to continue and complete its review, please provide information in response to items 1 through 10 by no later than April 5, 1999. After reviewing the additional documentation, DEQ will determine if additional investigation is necessary. At the moment, and without the benefit of the requested information, DEQ currently believes that additional groundwater investigation will be needed. As it stands, the record does not appear to support the conclusion that 240 gallons or more of gasoline contamination has been removed from the environment.

On a related matter, on August 28, 1991, Dwight Linville (378-2361) reported a diesel release from a pipeline leak. The leak was apparently discovered by a contractor by the name of PEMCO who worked on a generator tank the previous day, August 27, 1991. We sent a release acknowledgment letter on August 29, 1991, requesting that an investigation be initiated and to report the investigation and cleanup results to DEQ. The file (USTC No. 24-91-4255) contains no follow-up information from the hospital. **By April 5, 1999, please provide DEQ with any information you have regarding investigation and cleanup of this reported diesel release.**

If there are any questions regarding the above matters, please feel free to contact me in Salem at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region – Salem Office

RPR:gad
x:/rreiter/24-89-4017.inforeq

cc: Charles D. Getter
REA Tech Management
200 Hawthorne Avenue SE Suite C-320
Salem, OR 97301

Michael Greene, Project Manager
OMNI Environmental Services, Inc.
PO Box 743
Beaverton, OR 97075

Oregon Department of Environmental Quality

Oregon State Hospital-Gen

Summary Information

General Site Information

24-91-4255

Basic Incident Information

Site Name:	Oregon State Hospital-Gen	**Received Date:**	08/28/1991
Address:	2600 CENTER ST NE	**Status:**	CLOSED
	SALEM, 97310	**Tank Type**:	Regulated Tank
County:	MARION	**File Status:**	Administrative Closure
		UST Facility Id:	10761
Project Manager	N/A - Project Completed.		

Assessment Information

Cause of Release:	NOT REPORTED	**Source of Release:**	PIPING	**Discovery Method:**	OTHER
Media Effected		**Contaminants Released**			
>Soil		>Diesel			

Management Information

Release Stopped Date:	08/27/1991	**Cleanup Start Date:**	08/27/1991	**Cleanup End Date:**	08/07/2000

Oregon Department of Environmental Quality
Headquarters: 811 Sixth Ave., Portland, OR 97204-1390
phone: 503-229-5696 or toll free in Oregon 800-425-4011
TTY: 503-229-6993 FAX: 503-229-6124

LUST - OREGON STATE HOSPITAL-GEN MAR

Salem 24-91-4255

SEE ALSO:24-89-4017 OREGON STATE
24-99-4016 OREGON STATE HOSPITA
24-99-4050 OREGON STATE HOSPITA

State of Oregon
Department of Environmental Quality — Memorandum

Date: August 7, 2000

To: Sue Specht, DEQ Business Office

From: Ginny Deck, WR-Salem

Subject: **LUST # 24-91-4255**
Oregon State Hospital – Gen
2600 Center St.
Salem, OR 97310

Please ADMINISTRATIVELY CLOSE the above referenced USTC log number.

I have entered a final invoice request date into sequent and charged my final time today. Please go through normal final billing process for closure.

Rich Reiter has recommended this administrative closure, and Merlyn Hough concurred. Although site information is too sketchy to be able to issue an NFA letter, it has been determined that the environmental issues involved with this release have been dealt with through the cleanup of three other releases at this site, all of which have been NFAd.

x:\gdeck\ AdminClose24914255.doc

cc: file: Western Region Salem

Merlyn Hough, WR-Eugene
Dawn Gomez, DEQ Business Office

TO: Merlyn Hough DATE: July 19, 2000

FROM: Richard Reiter

SUBJECT: Oregon State Hospital – Gen
USTC No. 24-91-4255

Over the last two year, I've recommended closure of three other Oregon State Hospital UST Cleanup files, as follows:

1. Oregon State Hospital
USTC No. 24-89-4017
Emergency generator gas tank
Drafted RBC NFA 4/12/00

2. Oregon State Hospital HOT
USTC No. 24-99-4016
4 HOTs
Drafted RBC NFA 4/13/00

3. Oregon State Hospital II
USTC No. 24-99-4050
3 emergency generator and 2 gas tanks
Drafted SM NFA 3/21/00

You will note that the original release report for this file is very vague as to the actual location of the release on the Oregon State Hospital Campus. According to their August 3, 1999 letter they have removed all USTs (Jim Parr concurs with this statement). That would suggest this release has been dealt with in one of the actions represented in the above three files. The problem is neither they or we can tie the pieces together after 11 years.

However, we do know all tanks have been removed and the sites cleaned up, if necessary. Therefore ,there is an excellent chance that this release has been resolved.

I would recommend administrative closure. We not in a good position to issue a site specific NFA but are on firm ground to believe the release has been dealt with in an acceptable fashion. I would further suggest we inform the Hospital of this position at which point they can decide if they can live without an NFA closure on this release. If you concur, Jim Parr and Ginny might be able to process the paperwork in my absence.

I agree.
Jim Parr / Ginny Deck: Can you handle?
Thanks. Merlyn L. Hough 8/3/2000

Oregon
John A. Kitzhaber, M.D., Governor

Department of Human Resources
Mental Health and Developmental Disability Services Division
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
(503) 945-2800 (Voice/TTY)
FAX (503) 945-2807

August 3, 1999

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, Oregon 97301-1039

Re: USTC No. 24-89-4017
Facility ID No. 10761
Oregon State Hospital

Richard,

I thank you for your letter dated July 21, 1999, requesting two additional items required closing the above project.

Enclosed you will find maps to answer the two questions on USTC No. 10761 put forth in your letter. Please note the tank leak at the Forty Building is a considerable distance from the first tier housing. The previous record also indicates the drainage runs towards Center Street and not towards D or Park Streets.

In addition, you sent me another letter on July 21, 1999, about USTC No. 24-91-4255. I can not find any additional information about this diesel pipeline leak. I interviewed staff who where here during 1991 and they do not remember the episode. The Oregon State Hospital removed or upgraded all of its underground storage tanks and I am sure if there were a leak the area involved would have been remediated during the tank upgrading or removal. I request and thank you for closure on this job.

I thank you for your help, patience, and cooperation in closing the two projects.

Sincerely,

Michael Larimer

Michael Larimer,
Physical Plant Manager

Cc Marcroft, Olson, File

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region – Salem Office
750 Front St. NE, Ste. 120
Salem, OR 97301-1039
(503) 378-8240
(503) 378-3684 TTY

July 21, 1999

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Information Request Letter

Dear Mr. Larimer:

On March 24, 1999 (see 1st paragraph on page 4) and May 4, 1999 (see 2nd paragraph on page 2) we ask for any information regarding a diesel pipeline leak that was reported to DEQ on August 28, 1991. To date DEQ has not received any information regarding this release. Please provide any information from historical files or recollections of staff who may have been on site at the time. Please also relate which tank this was and whether or not that tank still exists or has it been subsequently decommissioned. We may be able to close this file based on a subsequent decommissioning.

On future correspondence, please include the site name (Oregon State Hospital - Gen) and log number (USTC No. 24-91-4255) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:rpr
x:/rreiter/24-91-4255.inforeqltr

Enclosure: March 11 and May 4, 1999 Letters

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

May 4, 1999

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Request for Three Geoprobes

Dear Mr. Larimer:

Thank you and your staff for your time this morning. The site visit and discussion helped to put everything into better focus. Although written records haven't been located, your staff recalls that significant product was recovered from the building sump which receives water from the perimeter footing drain that completely surrounds building 40. Considering the depth of the perimeter drain (about 10 feet below grade), and the close proximity of the tank to the perimeter drain, it is reasonable to expect that the drain served as a preferential pathway for at least some of the released gasoline.

Based on our discussions, you agreed to put in three geoprobes and collect water samples and ground water elevation information. See Attachment 1 for a general location for the three geoprobes. The water samples should be tested for BTEX, EDB, EDC, MTBE and dissolved lead. If possible, it would be ideal if the downgradient geoprobe could safely sample in the backfill to the sanitary sewer line to be able to make a judgment if the sewer line served as a preferential pathway. Lastly, please provide a scaled plot plan showing Building 40 in relation

to your southern and western property boundaries (in other words, what distance exists before a contamination plume would actually affect an off-site third party?).

If the samples come back below numeric groundwater cleanup standards, we are prepared to issue a no further action letter for this release location.

On a related matter, please review the first paragraph on page 4 of our March 11, 1999 letter. I made reference to a reported August 28, 1991 diesel release that hopefully you could shed some light on. Our file contains only the release report and no follow-up work.

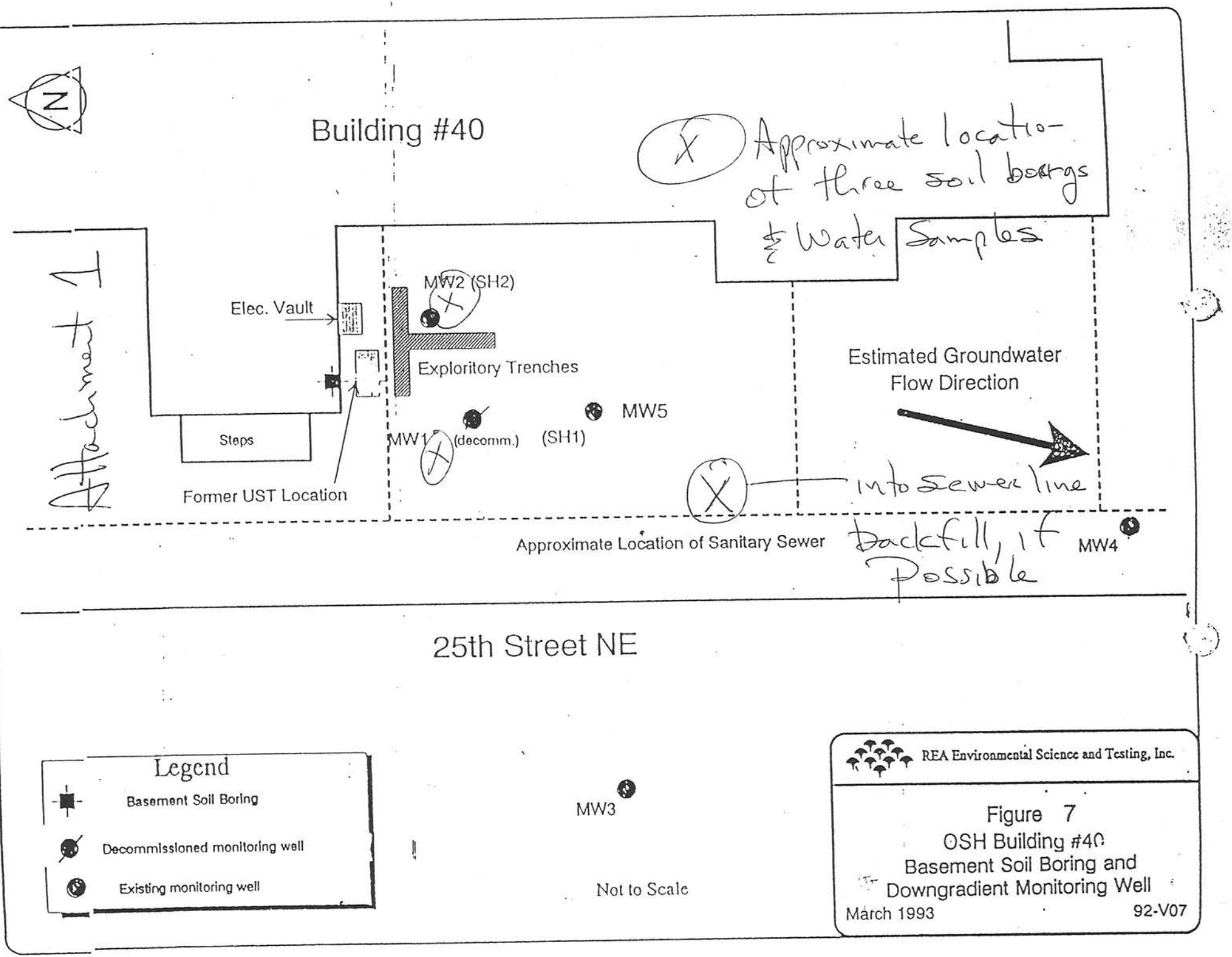
On future correspondence, please include the site name (Oregon State Hospital) and log number (USTC No. 24-89-4017) for the benefit of our support staff who process the mail. If there are any questions regarding the above matters, please feel free to contact me at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:rpr
x:/rreiter/24-89-4017.geoprobereq

Enclosure: Attachment 1


N
Building #40
Approximate location of three soil borings & Water Samples
Attachment 1
Elec. Vault
MW2 (SH2)
Exploritory Trenches
Steps
Former UST Location
MW1
(decomm.)
(SH1)
MW5
Estimated Groundwater Flow Direction
into Sewer line
Backfill, if Possible
Approximate Location of Sanitary Sewer
MW4
25th Street NE
MW3
Legend
Basement Soil Boring
Decommissioned monitoring well
Existing monitoring well
Not to Scale
REA Environmental Science and Testing, Inc.
Figure 7
OSH Building #40
Basement Soil Boring and
Downgradient Monitoring Well
March 1993
92-V07

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

March 24, 1999

Michael Larimer, RPA
Physical Plant Manager
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Response to 3/18/99 Letter

Dear Mr. Larimer:

This is in response to your March 18, 1999, letter wherein you describe actions taken to respond to our letter of March 18, 1999. Because these are old projects, we understand it may take time for your former contractors to research their archives to discover the answers to the requests made. We are prepared to grant time beyond April 5, 1999, in order to develop all the information requested. Please provide an interim progress report by May 1, 1999, on how the research is coming with your contractors.

I don't know if you are aware of this, but another release was reported on February 10, 1999, (copy of release report enclosed). Because this is a heating oil tank release, we will not be able to assign a project manager to this release unless a specific cost recovery agreement is signed (copy enclosed for your review) and submitted along with a deposit of $500 towards the cost of oversight. Heating oil releases are handled differently because we've never had staff and funding to handle these as they occur. As you can see from the gasoline release, however, there can be a benefit to requesting timely DEQ review while the cleanup project is still current.

If there are any questions regarding the above matters, please feel free to contact me in Salem at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region Tank Program
Western Region – Salem Office

RPR:
x:/rreiter/24-89-4017.respltr

encl: Cost Recovery Agreement form and fact sheet
Copy of Release Form for 24-99-4016

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Western Region
Salem Office
750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240
(503) 378-3684 TTY

March 11, 1999

B. P. Jacobsen, Director
Support Services
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310

Re: USTC No. 24-89-4017 and
USTC No. 24-91-4255
Facility ID No. 10761
Oregon State Hospital
2600 Center Street NE
Salem, OR 97310
Marion County
Information Request Letter

Dear Mr. Jacobsen:

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   b. There was no Chain-of-Custody/Request for Analysis form for the sample (92VOIIA) collected associated with the east-west trench (see Appendix VI);

   c. There was no Chain-of-Custody/Request for Analysis form for the five samples (VO7B1, VO7B2, VO7B3, VO7B4 & VO7B5) collected associated with the boring drilled through the basement floor (see Appendix VII); and

   d. There was no Chain-of-Custody/Request for Analysis form for the three samples (MW5-3, MW5-4 & MW5-5) collected associated with installation of monitoring well #5 (see Appendix VIII).

6. It does not appear the June 17, 1993, Corrective Action Plan was ever submitted for DEQ review and approval on or after June 17, 1993. Consequently, DEQ never reviewed or commented on the plan before the monitoring wells were decommissioned in August 1994. What is of significant concern to us is that the Corrective Action Plan recommended additional remediation in the form of five soil vapor extraction wells and one groundwater extraction well to lower the groundwater table during remediation. Additional remediation was recommended because of the continuing groundwater contamination in (former) MW-1 and MW-2. It does not appear these recommendations were ever implemented.

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monitoring wells were decommissioned on August 8, 1994, a full month before the closure report was completed and two months before the report was forwarded to DEQ. It is highly unusual for monitoring wells to be decommissioned before DEQ determines that a cleanup has been completed to appropriate environmental standards and issues a No Further Action letter. Based on the incomplete record in the file, it does not appear the numeric cleanup standards have been met, most specifically, four quarters of groundwater data demonstrating compliance with the numeric standards.

8. The September 15, 1994, closure report refers to an October 21, 1993, groundwater sampling event. No Chain-of-Custody/Analysis of Samples form or lab sheets were supplied to document this work. Yet, information was included in Table 1.

9. OMNI Environmental's February 14, 1992, "Site Characterization Report" states 2 cubic yards of petroleum contaminated soil were treated on-site. No documentation on its final disposal has been provided. REA Tech Management's April 15, 1993, "Investigation for Soil and Groundwater Cleanup" report describes the excavation of two exploratory trenches up to 15 feet in depth (an east-west trench and a north-south trench). Petroleum contaminated soil was encountered. No documentation was provided as to the final disposition of this contaminated material.

10. REA Tech Management's April 15, 1993, report discusses encountering "pea gravel" in the east-west trench at 11 feet and speculates that it may be backfill for a sanitary sewer line. REA Tech Management's June 17, 1993, Corrective Action Plan speculates that this "pea gravel" may actually be evidence of a dry well installed at the time the hospital was built in 1947. Figure 9 is a copy of the original dry well design drawing. If either of these hypotheses is correct, it may explain the apparent rapid dissipation of some 250 plus gallons of gasoline via a preferential pathway. It seems that additional investigation should have occurred immediately to rule out these potential preferential pathways.

11. It is likely that additional data is needed to document that the hazardous constituent EDB complies with the numeric groundwater standards. The last time it was tested for in MW-2 on January 13, 1992, it slightly exceeded the standard. No additional testing for EDB and EDC has been done since that sampling event.

In order for DEQ to continue and complete its review, please provide information in response to items 1 through 10 by no later than April 5, 1999. After reviewing the additional documentation, DEQ will determine if additional investigation is necessary. At the moment, and without the benefit of the requested information, DEQ currently believes that additional groundwater investigation will be needed. As it stands, the record does not appear to support the conclusion that 240 gallons or more of gasoline contamination has been removed from the environment.

On a related matter, on August 28, 1991, Dwight Linville (378-2361) reported a diesel release from a pipeline leak. The leak was apparently discovered by a contractor by the name of PEMCO who worked on a generator tank the previous day, August 27, 1991. We sent a release acknowledgment letter on August 29, 1991, requesting that an investigation be initiated and to report the investigation and cleanup results to DEQ. The file (USTC No. 24-91-4255) contains no follow-up information from the hospital. **By April 5, 1999, please provide DEQ with any information you have regarding investigation and cleanup of this reported diesel release.**

If there are any questions regarding the above matters, please feel free to contact me in Salem at (503) 378-8240 extension 279.

Sincerely,

Richard P. Reiter
Natural Resource Specialist
Western Region – Salem Office

RPR:gad
x:/rreiter/24-89-4017.inforeq

cc: Charles D. Getter
REA Tech Management
200 Hawthorne Avenue SE Suite C-320
Salem, OR 97301

Michael Greene, Project Manager
OMNI Environmental Services, Inc.
PO Box 743
Beaverton, OR 97075

Oregon

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

August 29, 1991

Willamette Valley Region

Dwight Linville
Oregon State Hospital
2600 Center Street
Salem, OR 97310

Re: LUST: 24-91-4255
Oregon State Hospital-Gen
2600 ~~State Street~~ Center St.
Salem, OR 97310
County: Marion

Dear Mr. Linville:

The Willamette Valley Regional Office of the Department of Environmental Quality received a report on August 28th, 1991, of a petroleum product release to the soil at 2600 State Street, Salem, OR 97310.

Investigation of this site must proceed under Oregon Administrative Rules (OAR) Chapter 340-122. A bulletin entitled "Cleanup Rules For Leaking Petroleum UST Systems and Numeric Soil Cleanup Levels for Motor Fuel and Heating Oil" is enclosed for your use and reference. These rules call for several steps of action on your part.

You need to take initial response and initial abatement measures and check the site. This includes preventing future releases, monitoring the site for safety hazards, proper management of contaminated soils (see UST Permit Addendum enclosed), and sampling for the presence of contamination. The complete measures are listed in OAR 340-122-220 and 225 of the cleanup rules. Work must be started immediately to implement these steps. Any delay can allow the problem to become larger and the eventual cost of cleanup to magnify.

By September 20, 1991, you must submit a report to this office summarizing the steps you have taken and all of the information you have acquired under OAR 340-122-225.

BARBARA ROBERTS
Governor

750 Front St. NE
Suite 120
Salem, OR 97310
(503) 378-8240

After the Initial Response and Abatement Measures are completed, sufficent information may be available to determine if cleanup can proceed under the Numerical Soil Matrix Cleanup rules. Should this be the case, you should proceed to implement the soil cleanup under these rules (OAR 340-122-305 through 360). The soil cleanup report as required in OAR 340-122-360 should be submitted to this office not later than October 29, 1991.

If, during the collection of the required information, it is found that any of the following conditions exist, you must immediately notify this office and discuss the site with a Regional UST Cleanup Staffperson before proceeding:

Petroleum products have or may have affected the groundwater;

Strong vapors are present in soils, buildings, or along underground utility or sewer lines;

The contamination has moved, or may be moving, to adjacent properties;

Or, non-petroleum contaminants such as chlorinated solvents are mixed with the petroleum contamination.

Further, you may not be able to use the matrix rules if any of these conditions are found at your site.

Please reference all future correspondence to this office using the LUST number, site name and address given above. If you have any questions regarding this matter, please contact me at (503) 378-8240 in the Salem office.

Sincerely,

Bart D. Collinsworth
Environmental Specialist

LRPTSOIL.LTR
.BDC/jtc

Enc: Petroleum Cleanup Rules and Guidance Documents
UST Permit Addendum

cc: Mike Anderson,ECD/LUST

Oregon Department of Environmental Quality

Heating Oil Tank

Summary Information

General Site Information

24-99-4016

Basic Incident Information

Site Name:	Heating Oil Tank	**Received Date:**	02/10/1999
Address:	2600 CENTER ST NE	**Status:**	CLOSED
	SALEM, 97310	**Tank Type**:	Home Heating Oil Tank
County:	MARION	**File Status:**	No Further Action
Site Type:	Generic Remedy	**UST Facility Id:**	10761
Project Manager	N/A - Project Completed.		

Assessment Information

Cause of Release:	NOT REPORTED	**Source of Release:**	PIPING	**Discovery Method:**	DECOMMISSIONING

Media Effected	**Contaminants Released**
>Soil	>OtherPetro >Heating Oil

Delineate Soil	YES	**Delineate Ground Water**	YES	**Soil Delineated**	YES
Groundwater Delineated	YES				

Management Information

Release Stopped Date:	02/09/1999	**Cleanup Start Date:**	02/17/1999	**Cleanup End Date:**	09/11/2000

Work Reported Information

Work Reported	Reported Date
Soil Matrix Cleanup	7/28/1999
Tank Decommissioning	7/28/1999
20 DAY REPORT	3/18/1999
Initial Response	2/10/1999
Soil Matrix Cleanup	1/21/1999
Tank Decommissioning	1/21/1999

Oregon Department of Environmental Quality
Headquarters: 811 Sixth Ave., Portland, OR 97204-1390
phone: 503-229-5696 or toll free in Oregon 800-425-4011
TTY: 503-229-6993 FAX: 503-229-6124

The Oregon Department of Environmental Quality is a regulatory agency authorized to protect

Oregon's environment by
the State of Oregon and the Environmental Protection Agency.

DEQ Web site privacy notice

Oregon Department of Environmental Quality

Oregon State Hospital II

Summary Information

General Site Information

24-99-4050

Site Name:	Oregon State Hospital II	**Received Date:**	04/14/1999
Address:	2600 CENTER ST NE	**Status:**	CLOSED
	SALEM, 97310	**Tank Type**:	Regulated Tank
County:	MARION	**File Status:**	No Further Action
Site Type:	Soil Matrix Cleanup	**UST Facility Id:**	10761
Project Manager	N/A - Project Completed.		

Basic Incident Information

Assessment Information

Cause of Release:	OVERFILL	**Source of Release:**	NOT REPORTED	**Discovery Method:**	DECOMMISSIONING

Media Effected	**Contaminants Released**
>Soil	>Diesel

Delineate Soil	YES	**Soil Delineated**	YES

Management Information

Release Stopped Date:	04/13/1999	**Cleanup Start Date:**	04/19/1999	**Cleanup End Date:**	06/26/2000

Work Reported Information

Work Reported	Reported Date
Tank Decommissioning	8/9/1999
Initial Response	4/14/1999
Soil Matrix Cleanup	4/13/1999
Tank Decommissioning	4/13/1999

Oregon Department of Environmental Quality
Headquarters: 811 Sixth Ave., Portland, OR 97204-1390
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DEQ Web site privacy notice

APPENDIX D
ENVIRONMENTAL AGENCY
DATABASE SEARCH REPORT

Oregon State Hospital - North Campus
2575-2600 Center St. NE and 2575 Bittern St. NE
Salem, OR 97301

Inquiry Number: 3518356.2s
February 13, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2575-2600 CENTER ST. NE AND 2575 BITTERN ST. NE
SALEM, OR 97301

COORDINATES

Latitude (North):	44.9416000 - 44° 56' 29.76''
Longitude (West):	123.0030000 - 123° 0' 10.80''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	499763.3
UTM Y (Meters):	4976246.0
Elevation:	211 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	44123-H1 SALEM WEST, OR
Most Recent Revision:	1986
East Map:	44122-H8 SALEM EAST, OR
Most Recent Revision:	1986

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2011
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
OREGON STATE HOSPITAL 2600 CENTER ST NE SALEM, OR 97301	RCRA-CESQG FTTS HIST FTTS FINDS LUST Cleanup Complete: 05/19/2000 Cleanup Complete: 03/27/2000 **Additional key fields are available in the Map Findings section* UST MANIFEST	ORD080968696
2600 CENTER #34 2600 CENTER #34 SALEM, OR 97301	OR HAZMAT	N/A

2575 CENTER ST 2575 CENTER ST SALEM, OR 97301	OR HAZMAT	N/A
2600 CENTER ST NE 2600 CENTER ST NE SALEM, OR 97301	UIC AST OR HAZMAT NPDES HSIS ECSI	N/A
DHS 2575 BITTERN ST NE SALEM, OR 97309	HSIS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Facilities List

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Controls Recorded at ESCI Sites
INST CONTROL ---------- Institutional Controls Recorded at ESCI Sites

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Sites
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfields Projects

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
HIST LF ---------- Old Closed SW Disposal Sites

SWRCY Recycling Facility Location Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL Clandestine Drug Labs
AOCONCERN Columbia Slough
CDL Uninhabitable Drug Lab Properties
US HIST CDL National Clandestine Laboratory Register

Local Land Records

LIENS 2 CERCLA Lien Information

Records of Emergency Release Reports

HMIRS Hazardous Materials Information Reporting System
SPILLS Spill Database
OR HAZMAT Hazmat/Incidents

Other Ascertainable Records

RCRA NonGen / NLR RCRA - Non Generators
DOT OPS Incident and Accident Data
DOD Department of Defense Sites
FUDS Formerly Used Defense Sites
CONSENT Superfund (CERCLA) Consent Decrees
ROD Records Of Decision
UMTRA Uranium Mill Tailings Sites
US MINES Mines Master Index File
TRIS Toxic Chemical Release Inventory System
TSCA Toxic Substances Control Act
SSTS Section 7 Tracking Systems
ICIS Integrated Compliance Information System
PADS PCB Activity Database System
MLTS Material Licensing Tracking System
RADINFO Radiation Information Database
RAATS RCRA Administrative Action Tracking System
RMP Risk Management Plans
DRYCLEANERS Drycleaning Facilities
AIRS Oregon Title V Facility Listing
HSIS Hazardous Substance Information Survey
INDIAN RESERV Indian Reservations
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
PRP Potentially Responsible Parties
US AIRS Aerometric Information Retrieval System Facility Subsystem
Financial Assurance Financial Assurance Information Listing
EPA WATCH LIST EPA WATCH LIST
US FIN ASSUR Financial Assurance Information
2020 COR ACTION 2020 Corrective Action Program List
PCB TRANSFORMER PCB Transformer Registration Database
COAL ASH DOE Steam-Electric Plant Operation Data
COAL ASH EPA Coal Combustion Residues Surface Impoundments List
COAL ASH Coal Ash Disposal Sites Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR US Hist Cleaners ------- EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

OR CRL: Sites that are or may be contaminated and may require cleanup.

A review of the OR CRL list, as provided by EDR, and dated 11/19/2012 has revealed that there are 3 OR CRL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	***831 LANCASTER DR NE***	***E 1/2 - 1 (0.825 mi.)***	***AU177***	***168***

Lower Elevation	Address	Direction / Distance	Map ID	Page
OREGON ST PENITENTIARY	***2605 STATE ST***	***SSW 1/2 - 1 (0.592 mi.)***	***171***	***94***
ODOT - EAST SALEM COMPLEX	***2800 STATE ST.***	***SSW 1/2 - 1 (0.638 mi.)***	***172***	***131***

ECSI: The Environmental Cleanup Site Information System records information about sites in Oregon that may be of environmental interest. The data come from the Department of Environmental Quality.

A review of the ECSI list, as provided by EDR, and dated 11/01/2012 has revealed that there are 10 ECSI sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRATTAIN INTERNATIONAL TRUCKS	***1150 HAWTHORNE AVE NE***	***ENE 1/4 - 1/2 (0.436 mi.)***	***AS158***	***80***
SALEM ACADEMY CHRISTIAN HIGH S	***942 LANCASTER DR NE***	***E 1/2 - 1 (0.821 mi.)***	***175***	***151***
SEARS AUTO CENTER NO 2715	***833 LANCASTER DR NE***	***E 1/2 - 1 (0.824 mi.)***	***AU176***	***156***
Not reported	***831 LANCASTER DR NE***	***E 1/2 - 1 (0.825 mi.)***	***AU177***	***168***

Lower Elevation	Address	Direction / Distance	Map ID	Page
OREGON ST PENITENTIARY	***2605 STATE ST***	***SSW 1/2 - 1 (0.592 mi.)***	***171***	***94***
ODOT - EAST SALEM COMPLEX	***2800 STATE ST.***	***SSW 1/2 - 1 (0.638 mi.)***	***172***	***131***
Not reported	***2809 STATE ST***	***S 1/2 - 1 (0.696 mi.)***	***173***	***142***
ODOT - MOBIL SERVICE STATION	***3520 MARKET ST. NE***	***NE 1/2 - 1 (0.696 mi.)***	***174***	***148***
2093 MILL ST. - HOT	***2093 MILL STREET SE***	***SW 1/2 - 1 (0.827 mi.)***	***178***	***180***
HYGENICS OF OREGON	***1335 MADISON ST. NE***	***NW 1/2 - 1 (0.845 mi.)***	***179***	***182***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's LUST Database List.

A review of the LUST list, as provided by EDR, and dated 10/01/2012 has revealed that there are 156 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK	2645 D STREET NE	N 0 - 1/8 (0.002 mi.)	D10	36
HEATING OIL TANK	2745 D ST NE	NNE 0 - 1/8 (0.002 mi.)	E11	36
Cleanup Complete: 06/24/2009				
HEATING OIL TANK	2755 D ST NE	NNE 0 - 1/8 (0.002 mi.)	E12	36
Cleanup Complete: 08/21/2009				
HEATING OIL TANK	740 PARK AVENUE NE	ESE 0 - 1/8 (0.005 mi.)	F14	37
Cleanup Complete: 08/20/1996				
SPARTAN STATION	***2903 CENTER ST NE***	***SE 0 - 1/8 (0.006 mi.)***	***F17***	***38***
HEATING OIL TANK	1008 ICEL COURT NE	NNE 0 - 1/8 (0.008 mi.)	D19	39
HEATING OIL TANK	1013 ICEL COURT NE	NNE 0 - 1/8 (0.010 mi.)	D20	39
Cleanup Complete: 01/15/2004				
HEATING OIL TANK	1018 ICEL COURT NE	NNE 0 - 1/8 (0.013 mi.)	D21	39
Cleanup Complete: 06/06/2007				
HEATING OIL TANK	1029 NE EVERGREEN AVENU	N 0 - 1/8 (0.016 mi.)	D22	40
Cleanup Complete: 12/18/2002				
HEATING OIL TANK	1065 PARK AVENUE NE	NE 0 - 1/8 (0.036 mi.)	24	40
HEATING OIL TANK	1069 EVERGREEN AVE NE	N 0 - 1/8 (0.040 mi.)	D25	40
Cleanup Complete: 03/11/1998				
HEATING OIL TANK	1113 ICEL COURT NE	NNE 0 - 1/8 (0.057 mi.)	G26	41
Cleanup Complete: 07/11/2005				
HEATING OIL TANK	1128 ICEL COURT NE	NNE 0 - 1/8 (0.064 mi.)	G28	41
HEATING OIL TANK	1133 ICEL CT NE	NNE 0 - 1/8 (0.066 mi.)	G29	41
Cleanup Complete: 02/29/2000				
HEATING OIL TANK	1128 EVERGREEN AVENUE N	N 0 - 1/8 (0.071 mi.)	H30	42
Cleanup Complete: 08/05/2005				
HEATING OIL TANK	2985 KNOX AVE NE	E 0 - 1/8 (0.077 mi.)	J33	42
Cleanup Complete: 07/07/2000				
HEATING OIL TANK	860 NE REE DEL COURT	E 0 - 1/8 (0.114 mi.)	J38	44
Cleanup Complete: 12/23/2002				
HEATING OIL TANK	890 REE DEL ST NE	E 0 - 1/8 (0.116 mi.)	J39	44
Cleanup Complete: 07/03/2001				
HEATING OIL TANK	1218 EVERGREEN ST NE	N 0 - 1/8 (0.116 mi.)	H40	44
Cleanup Complete: 08/10/2005				
HEATING OIL TANK	2545 ENGLEWOOD AVE NE	N 1/8 - 1/4 (0.162 mi.)	M48	46
Cleanup Complete: 05/25/2000				
HEATING OIL TANK	1104 SAVAGE RD	ENE 1/8 - 1/4 (0.198 mi.)	58	49
HEATING OIL TANK	1232 REEDY DRIVE NE	NE 1/8 - 1/4 (0.204 mi.)	59	49
HEATING OIL TANK	3182 D STREET NE	ENE 1/8 - 1/4 (0.209 mi.)	61	49
HEATING OIL TANK	3183 CENTER STREET NE	ESE 1/8 - 1/4 (0.221 mi.)	P70	52
Cleanup Complete: 11/23/2011				

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK Cleanup Complete: 04/21/2000	773 VINYARD AVE NE	E 1/8 - 1/4 (0.239 mi.)	T76	53
HEATING OIL TANK Cleanup Complete: 07/09/2008	804 VINYARD AVE. NE	E 1/8 - 1/4 (0.241 mi.)	T79	54
HEATING OIL TANK	794 VINEYARD AVE NE	E 1/8 - 1/4 (0.241 mi.)	T80	54
HEATING OIL TANK Cleanup Complete: 09/21/2004	774 VINYARD AVE NE	E 1/8 - 1/4 (0.241 mi.)	T81	54
HEATING OIL TANK	734 VINYARD AVE NE	ESE 1/8 - 1/4 (0.241 mi.)	T82	55
HEATING OIL TANK Cleanup Complete: 07/13/2004	663 ILLINOIS AVE NE	ESE 1/4 - 1/2 (0.270 mi.)	Y97	58
HEATING OIL TANK Cleanup Complete: 09/29/2000	654 ILLINOIS AVE NE	ESE 1/4 - 1/2 (0.273 mi.)	Y98	59
HEATING OIL TANK Cleanup Complete: 08/21/2001	3254 CENTER ST NE	ESE 1/4 - 1/2 (0.295 mi.)	105	60
HEATING OIL TANK Cleanup Complete: 02/08/2001	786 NORMAN DR NE	E 1/4 - 1/2 (0.318 mi.)	108	61
HEATING OIL TANK Cleanup Complete: 08/21/2001	535 OREGON AVE NE	SE 1/4 - 1/2 (0.411 mi.)	AO145	76
TRANSPORTATION CENTER Cleanup Complete: 10/16/2003	***998 HAWTHORNE AVE NE***	***ENE 1/4 - 1/2 (0.412 mi.)***	***146***	***77***
HEATING OIL TANK Cleanup Complete: 09/13/2002	647 HAWTHORNE AVE NE	ESE 1/4 - 1/2 (0.415 mi.)	147	77
HEATING OIL TANK Cleanup Complete: 01/05/2007	525 OREGON AVE NE	SE 1/4 - 1/2 (0.418 mi.)	AO148	77
BRATTAIN INTERNATIONAL Cleanup Complete: 11/02/1993	***1150 HAWTHORNE AVE NE***	***ENE 1/4 - 1/2 (0.436 mi.)***	***AS157***	***80***
HEATING OIL TANK Cleanup Complete: 10/26/2005	558 HAWTHORNE AVE NE	ESE 1/4 - 1/2 (0.457 mi.)	161	91

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK Cleanup Complete: 04/03/2007	1212 23RD ST NE	0 - 1/8 (0.001 mi.)	B6	31
SALEM REGIONAL REHABILITATION	***2561 CENTER ST NE***	***SW 0 - 1/8 (0.001 mi.)***	***C7***	***31***
Not reported Cleanup Complete: 09/18/2001	***2355 D ST NE***	***NW 0 - 1/8 (0.002 mi.)***	***9***	***33***
HEATING OIL TANK Cleanup Complete: 01/19/2006	1221 23RD ST NE	WNW 0 - 1/8 (0.002 mi.)	B13	36
HEATING OIL TANK Cleanup Complete: 12/14/2009	1027 25TH ST NE	NNW 0 - 1/8 (0.019 mi.)	23	40
HEATING OIL TANK Cleanup Complete: 11/07/2001	1282 23RD ST NE	NW 0 - 1/8 (0.062 mi.)	27	41
HEATING OIL TANK Cleanup Complete: 10/12/2001	2250 D STREET NE	WNW 0 - 1/8 (0.073 mi.)	I31	42
HEATING OIL TANK Cleanup Complete: 07/13/2000	1148 ICEL CT NE	NNE 0 - 1/8 (0.074 mi.)	G32	42
HEATING OIL TANK Cleanup Complete: 03/06/2008	1148 NE EVERGREEN AVE	N 0 - 1/8 (0.081 mi.)	H34	43

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK	1157 25TH STREET NE	NNW 0 - 1/8 (0.084 mi.)	K35	43
HEATING OIL TANK	1168 EVERGREEN, NE	N 0 - 1/8 (0.091 mi.)	H36	43
Cleanup Complete: 10/01/1992				
HEATING OIL TANK	595 24TH STREET NE	WSW 0 - 1/8 (0.124 mi.)	L41	44
Cleanup Complete: 06/24/2003				
HEATING OIL TANK	1246 25TH STREET NE	N 1/8 - 1/4 (0.130 mi.)	K42	45
Cleanup Complete: 05/18/2005				
HEATING OIL TANK	1276 25TH ST NE	N 1/8 - 1/4 (0.145 mi.)	M43	45
Cleanup Complete: 01/04/2000				
HEATING OIL TANK	2220 ENGLEWOOD AVENUE N	NNW 1/8 - 1/4 (0.158 mi.)	45	45
Cleanup Complete: 05/26/2005				
HEATING OIL TANK	2455 ENGLEWOOD AVENUE N	NNW 1/8 - 1/4 (0.161 mi.)	M46	46
HEATING OIL TANK	2720 ENGLEWOOD AVE NE	NNE 1/8 - 1/4 (0.162 mi.)	N47	46
Cleanup Complete: 05/21/2008				
HEATING OIL TANK	2645 ENGLEWOOD AVE NE	N 1/8 - 1/4 (0.163 mi.)	N49	46
Cleanup Complete: 12/13/2011				
HEATING OIL TANK	2695 ENGLEWOOD NE	N 1/8 - 1/4 (0.163 mi.)	N50	47
Cleanup Complete: 02/04/2000				
HEATING OIL TANK	2825 ENGLEWOOD AVE NE	NNE 1/8 - 1/4 (0.164 mi.)	51	47
HEATING OIL TANK	2225 ENLGEWOOD AVE NE	NNW 1/8 - 1/4 (0.170 mi.)	O52	47
Cleanup Complete: 10/15/2001				
HEATING OIL TANK	1085 21 STREET NE	WNW 1/8 - 1/4 (0.193 mi.)	54	48
HEATING OIL TANK	1380 23RD STREET NE	NNW 1/8 - 1/4 (0.198 mi.)	O56	48
HEATING OIL TANK	1380 24TH ST	NNW 1/8 - 1/4 (0.198 mi.)	O57	48
HEATING OIL TANK	560 23RD ST NE	WSW 1/8 - 1/4 (0.206 mi.)	R60	49
Cleanup Complete: 05/23/2012				
HEATING OIL TANK	2250 ELLIS AVE NE	NNW 1/8 - 1/4 (0.209 mi.)	S62	50
Cleanup Complete: 07/11/2001				
HEATING OIL TANK	533 24TH ST NE	SW 1/8 - 1/4 (0.209 mi.)	63	50
Cleanup Complete: 10/04/2001				
HEATING OIL TANK	2690 NE ELLIS AVENUE	N 1/8 - 1/4 (0.209 mi.)	64	50
Cleanup Complete: 12/02/2002				
HEATING OIL TANK	557 23RD ST NE	WSW 1/8 - 1/4 (0.210 mi.)	R65	50
Cleanup Complete: 06/19/2002				
HEATING OIL TANK	2555 ELLIS STREET NE	N 1/8 - 1/4 (0.211 mi.)	Q66	51
Cleanup Complete: 02/29/2000				
HEATING OIL TANK	2230 ELLIS AVE NE	NNW 1/8 - 1/4 (0.212 mi.)	S67	51
Cleanup Complete: 09/10/2001				
HEATING OIL TANK	2665 ELLIS AVE NE	N 1/8 - 1/4 (0.212 mi.)	Q68	51
HEATING OIL TANK	1405 EVERGREEN AVE NE	N 1/8 - 1/4 (0.215 mi.)	Q69	51
Cleanup Complete: 12/10/1999				
HEATING OIL TANK	2275 HAYDEN ST NE	WSW 1/8 - 1/4 (0.222 mi.)	R71	52
HEATING OIL TANK	1420 23RD ST NE	NNW 1/8 - 1/4 (0.223 mi.)	S72	52
Cleanup Complete: 07/25/2011				
HEATING OIL TANK	534 23RD STREET NE	WSW 1/8 - 1/4 (0.227 mi.)	R73	52
HEATING OIL TANK	1420 NE 24TH STREET	NNW 1/8 - 1/4 (0.228 mi.)	74	53
Cleanup Complete: 08/08/2003				
HEATING OIL TANK	578 ROSE ST NE	WSW 1/8 - 1/4 (0.229 mi.)	75	53
Cleanup Complete: 11/21/2006				

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK Cleanup Complete: 07/11/2008	2035 NE KANSAS AVE	WNW 1/8 - 1/4 (0.239 mi.)	U77	53
HEATING OIL TANK Cleanup Complete: 09/13/2005	1430 NE 25TH STREET	N 1/8 - 1/4 (0.239 mi.)	78	54
HEATING OIL TANK Cleanup Complete: 05/21/2008	2220 HAYDEN ST NE	WSW 1/8 - 1/4 (0.242 mi.)	R83	55
HEATING OIL TANK Cleanup Complete: 04/05/2010	1450 23RD ST NE	NNW 1/8 - 1/4 (0.245 mi.)	V84	55
HEATING OIL TANK	509 23RD STREET NE	SW 1/8 - 1/4 (0.245 mi.)	85	55
HEATING OIL TANK	1440 EVERGREEN NE	N 1/8 - 1/4 (0.246 mi.)	W86	56
HEATING OIL TANK Cleanup Complete: 09/19/2011	1460 23RD ST NE	NNW 1/4 - 1/2 (0.252 mi.)	V87	56
HEATING OIL TANK Cleanup Complete: 07/24/2006	1040 20TH STREET NE	WNW 1/4 - 1/2 (0.257 mi.)	U88	56
HEATING OIL TANK Cleanup Complete: 11/07/2006	1065 20TH ST NE	WNW 1/4 - 1/2 (0.258 mi.)	X89	56
HEATING OIL TANK Cleanup Complete: 03/20/2002	2245 LADD AVE NE	NNW 1/4 - 1/2 (0.259 mi.)	V90	57
HEATING OIL TANK Cleanup Complete: 01/09/2007	2735 LADD AVE. NE	N 1/4 - 1/2 (0.259 mi.)	91	57
HEATING OIL TANK	1125 20TH STREET SE	WNW 1/4 - 1/2 (0.259 mi.)	X92	57
HEATING OIL TANK	2225 LADD AVENUE NE	NNW 1/4 - 1/2 (0.261 mi.)	93	57
HEATING OIL TANK	1470 23RD ST NE	NNW 1/4 - 1/2 (0.263 mi.)	V94	58
HEATING OIL TANK Cleanup Complete: 09/27/2002	805 THOMPSON AVE NE	W 1/4 - 1/2 (0.264 mi.)	95	58
HEATING OIL TANK Cleanup Complete: 06/08/2007	1475 23TH STREET NE	NNW 1/4 - 1/2 (0.269 mi.)	V96	58
HEATING OIL TANK Cleanup Complete: 07/18/2001	2190 CENTER ST NE	WSW 1/4 - 1/2 (0.277 mi.)	Z99	59
HEATING OIL TANK Cleanup Complete: 07/20/2009	475 NE 24TH ST	SW 1/4 - 1/2 (0.282 mi.)	AA100	59
HEATING OIL TANK Cleanup Complete: 12/15/2003	1480 NE EVERGREEN AVENU	N 1/4 - 1/2 (0.286 mi.)	W101	59
HEATING OIL TANK Cleanup Complete: 07/09/2008	455 24TH ST NE	SW 1/4 - 1/2 (0.293 mi.)	AA102	60
HEATING OIL TANK Cleanup Complete: 07/29/1997	2155 CENTER ST NE	WSW 1/4 - 1/2 (0.293 mi.)	Z103	60
HEATING OIL TANK Cleanup Complete: 11/23/2010	1490 23RD ST NE	NNW 1/4 - 1/2 (0.294 mi.)	AB104	60
HEATING OIL TANK Cleanup Complete: 10/22/2007	1495 EVERGREEN AVE NE	N 1/4 - 1/2 (0.300 mi.)	AC106	61
HEATING OIL TANK Cleanup Complete: 09/11/2003	2640 WINDSOR AVENUE NE	N 1/4 - 1/2 (0.303 mi.)	AC107	61
HEATING OIL TANK Cleanup Complete: 07/11/2007	1515 EVERGREEN AVE. NE	N 1/4 - 1/2 (0.318 mi.)	AC109	61
HEATING OIL TANK Cleanup Complete: 04/30/2004	3015 WINDSOR AVENUE NE	NNE 1/4 - 1/2 (0.319 mi.)	110	62

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK	3207 LADD AVENUE NE	NE 1/4 - 1/2 (0.325 mi.)	AD111	62
HEATING OIL TANK	1525 EVERGREEN AVE NE	N 1/4 - 1/2 (0.326 mi.)	AC112	62
Cleanup Complete: 04/11/2007				
HEATING OIL TANK	3228 LADD AVE NE	NE 1/4 - 1/2 (0.333 mi.)	AD113	62
Cleanup Complete: 02/16/2011				
SCHULER CORPORATION, PLANT I	***560 21ST ST NE***	***WSW 1/4 - 1/2 (0.333 mi.)***	***114***	***63***
Cleanup Complete: 07/27/2004				
Cleanup Complete: 06/30/2006				
HEATING OIL TANK	3109 WINDSOR AVE NE	NNE 1/4 - 1/2 (0.335 mi.)	115	69
Cleanup Complete: 10/23/2002				
HEATING OIL TANK	1530 23RD NE	NNW 1/4 - 1/2 (0.335 mi.)	AB116	69
Cleanup Complete: 12/03/2003				
HEATING OIL TANK	1530 24TH STREET NE	NNW 1/4 - 1/2 (0.338 mi.)	AE117	69
Cleanup Complete: 08/22/1996				
HEATING OIL TANK	1540 EVERGREEN AVE NE	N 1/4 - 1/2 (0.340 mi.)	AC118	70
Cleanup Complete: 06/26/2002				
HEATING OIL TANK	1505 21 ST NE	NNW 1/4 - 1/2 (0.340 mi.)	AF119	70
HEATING OIL TANK	3258 LADD AVENUE	NE 1/4 - 1/2 (0.346 mi.)	AD120	70
Cleanup Complete: 09/09/1992				
HEATING OIL TANK	1545 23RD STREET NE	NNW 1/4 - 1/2 (0.347 mi.)	AG121	70
Cleanup Complete: 04/12/2004				
HEATING OIL TANK	2710 ALBERTA AVE NE	N 1/4 - 1/2 (0.347 mi.)	AH122	71
Cleanup Complete: 02/05/2002				
HEATING OIL TANK	2665 ALBERTA AVE NE	N 1/4 - 1/2 (0.349 mi.)	AH123	71
Cleanup Complete: 09/11/2001				
HEATING OIL TANK	1585 25TH NE	N 1/4 - 1/2 (0.351 mi.)	124	71
Cleanup Complete: 06/22/2005				
HEATING OIL TANK	1530 21ST STREET NE	NNW 1/4 - 1/2 (0.352 mi.)	AF125	71
Cleanup Complete: 12/16/2005				
HEATING OIL TANK	1550 24TH ST NE	NNW 1/4 - 1/2 (0.356 mi.)	AE126	72
HEATING OIL TANK	3190 WINDSOR AVE NE	NE 1/4 - 1/2 (0.356 mi.)	AI127	72
Cleanup Complete: 06/14/2010				
HEATING OIL TANK	1565 EVERGREEN AVE NE	N 1/4 - 1/2 (0.369 mi.)	AH128	72
Cleanup Complete: 11/12/2010				
HEATING OIL TANK	1570 23RD ST NE	NNW 1/4 - 1/2 (0.369 mi.)	AG129	72
Cleanup Complete: 01/28/2000				
HEATING OIL TANK	381 ROSE ST NE	SW 1/4 - 1/2 (0.376 mi.)	130	73
Cleanup Complete: 04/10/2008				
HEATING OIL TANK	3260 WINDSOR AVENUE NE	NE 1/4 - 1/2 (0.379 mi.)	AI131	73
HEATING OIL TANK	3280 WINDSOR AVE NE	NE 1/4 - 1/2 (0.385 mi.)	AJ132	73
Cleanup Complete: 12/05/2000				
HEATING OIL TANK	3279 WINDSOR AVENUE NE	NE 1/4 - 1/2 (0.386 mi.)	AJ133	73
Cleanup Complete: 11/21/2000				
HEATING OIL TANK	1940 VIRGINIA ST NE	NW 1/4 - 1/2 (0.387 mi.)	134	74
Cleanup Complete: 08/19/1992				
HEATING OIL TANK	1595 23RD ST NE	NNW 1/4 - 1/2 (0.389 mi.)	AG135	74
HEATING OIL TANK	2150 MARKET ST NE	NNW 1/4 - 1/2 (0.389 mi.)	AK136	74
Cleanup Complete: 04/14/2011				

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK Cleanup Complete: 04/09/2012	730 20TH ST NE	W 1/4 - 1/2 (0.389 mi.)	AL137	74
HEATING OIL TANK Cleanup Complete: 03/14/2006	3102 ALBERTA AVE NE	NNE 1/4 - 1/2 (0.391 mi.)	AM138	75
HEATING OIL TANK Cleanup Complete: 10/26/2010	785 20TH ST NE	WNW 1/4 - 1/2 (0.391 mi.)	139	75
HELIOTROPE	2060 MARKET	NNW 1/4 - 1/2 (0.392 mi.)	AK140	75
HEATING OIL TANK	1980 B STREET NE	W 1/4 - 1/2 (0.393 mi.)	AL141	75
HEATING OIL TANK Cleanup Complete: 12/02/2002	2295 NE MARKET STREET	NNW 1/4 - 1/2 (0.394 mi.)	AN142	76
HEATING OIL TANK Cleanup Complete: 05/16/2011	3152 ALBERTA AVE NE	NNE 1/4 - 1/2 (0.396 mi.)	AM143	76
HEATING OIL TANK Cleanup Complete: 04/21/2000	2390 MARKET STREET NE	NNW 1/4 - 1/2 (0.401 mi.)	AN144	76
HEATING OIL TANK	3261 ALBERTA AVE NE	NE 1/4 - 1/2 (0.422 mi.)	149	78
HEATING OIL TANK	1960 CENTER STREET NE	WSW 1/4 - 1/2 (0.424 mi.)	AP150	78
HEATING OIL TANK Cleanup Complete: 02/18/2004	398 21ST NE	WSW 1/4 - 1/2 (0.427 mi.)	AQ151	78
HEATING OIL TANK Cleanup Complete: 01/04/2012	388 21ST ST NE	WSW 1/4 - 1/2 (0.431 mi.)	AQ152	78
HEATING OIL TANK Cleanup Complete: 03/28/2006	1520 NE 19TH ST	NW 1/4 - 1/2 (0.431 mi.)	153	79
HEATING OIL TANK	1730 24TH STREET NE	N 1/4 - 1/2 (0.432 mi.)	154	79
HEATING OIL TANK Cleanup Complete: 12/11/2006	1875 B STREET NE	W 1/4 - 1/2 (0.433 mi.)	155	79
HEATING OIL TANK Cleanup Complete: 04/12/2004	2794 NE MARKET STREET	N 1/4 - 1/2 (0.435 mi.)	AR156	79
JACKSON FOOD STORES #539 Cleanup Complete: 03/07/2001 Cleanup Complete: 09/19/2000 **Additional key fields are available in the Map Findings section*	***2795 MARKET ST NE***	***NNE 1/4 - 1/2 (0.442 mi.)***	***AR159***	***90***
HEATING OIL TANK Cleanup Complete: 06/22/1992 Cleanup Complete: 10/05/2000	2909 MARKET STREET	NNE 1/4 - 1/2 (0.452 mi.)	AT160	91
HEATING OIL TANK Cleanup Complete: 03/14/2006	1730 23RD STREET NE	NNW 1/4 - 1/2 (0.459 mi.)	162	91
HEATING OIL TANK Cleanup Complete: 11/19/1997	1180 17TH STREET NE	WNW 1/4 - 1/2 (0.461 mi.)	163	92
HEATING OIL TANK Cleanup Complete: 06/26/1997	560 19TH STREET NE	WSW 1/4 - 1/2 (0.463 mi.)	AP164	92
ARCO FACILITY NO. 05882 Cleanup Complete: 02/22/1993	***2979 MARKET ST NE***	***NNE 1/4 - 1/2 (0.464 mi.)***	***AT165***	***92***
HEATING OIL TANK Cleanup Complete: 09/11/1998	910 17TH STREET NE	WNW 1/4 - 1/2 (0.467 mi.)	166	93
HEATING OIL TANK Cleanup Complete: 02/22/1993	2999 MARKET ST	NNE 1/4 - 1/2 (0.468 mi.)	167	93
HEATING OIL TANK Cleanup Complete: 05/29/1997	625 18TH ST NE	W 1/4 - 1/2 (0.472 mi.)	168	93

Lower Elevation	Address	Direction / Distance	Map ID	Page
HEATING OIL TANK	1655 NEBRASKA ST NE	WNW 1/4 - 1/2 (0.486 mi.)	169	93
HEATING OIL TANK	190 23RD STREET NE	SW 1/4 - 1/2 (0.494 mi.)	170	94

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's UST List on Disk.

A review of the UST list, as provided by EDR, and dated 10/01/2012 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SPARTAN STATION	***2903 CENTER ST NE***	***SE 0 - 1/8 (0.006 mi.)***	***F17***	***38***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SALEM REGIONAL REHABILITATION	***2561 CENTER ST NE***	***SW 0 - 1/8 (0.001 mi.)***	***C7***	***31***

AST: The Aboveground Storage Tank database contains registered ASTs. The data comes from the list of ASTs reported to the Office of State Fire Marshal.

A review of the AST list, as provided by EDR, and dated 03/01/2012 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SALEM HOSPITAL	***2561 CENTER ST NE***	***SW 0 - 1/8 (0.001 mi.)***	***C8***	***32***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 7 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CENTER STREET AUTO SVC AUTO RP	2903 CENTER ST NE	SE 0 - 1/8 (0.006 mi.)	F15	37

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2903 CENTER ST NE	SE 0 - 1/8 (0.006 mi.)	F16	37
LESS ARCO SERVICE STATION	2903 CENTER ST NE	SE 0 - 1/8 (0.006 mi.)	F18	39
Not reported	3155 CENTER ST NE	ESE 1/8 - 1/4 (0.190 mi.)	P53	47

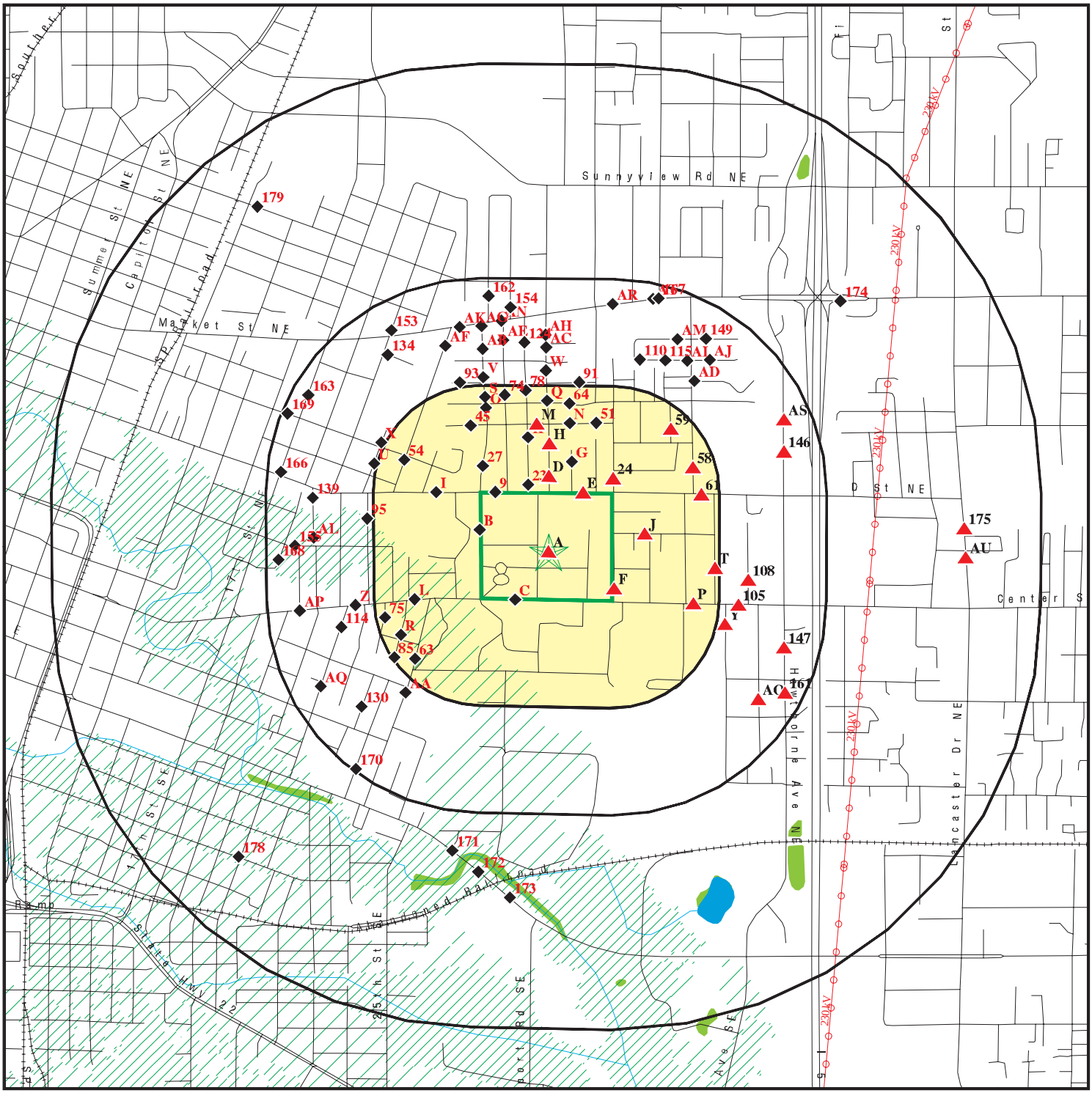
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2225 D ST NE	WNW 0 - 1/8 (0.103 mi.)	I37	43
MIKES CHEVRON GAS STA	2365 CENTER ST NE	WSW 1/8 - 1/4 (0.156 mi.)	L44	45
Not reported	1375 EVERGREEN AVE NE	N 1/8 - 1/4 (0.198 mi.)	Q55	48

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 37 records.

Site Name	Database(s)
SALEM AIRPORT DISPOSAL SITE	FINDS, SWF/LF, Financial Assurance
SALEM AIRPORT CRASH FIRE TRAINING	FINDS, ECSI
MILL CREEK DISTRICT PROPERTY, PARC	ECSI
MILL CREEK DISTRICT PROPERTY, PARC	ECSI
MILL CREEK DISTRICT PROPERTY, PARC	VCP, ECSI
SALEM RIVERFRONT PARK PROJECT	FINDS, OR CRL, ENG CONTROLS, INST CONTROL, VCP, BROWNFIELDS, ECSI
PICTSWEET PROPERTIES (FORMER)	VCP, ECSI
SALEM LANDFILL	ECSI
SUNNYVIEW RD. - TAX LOT 4200	FINDS, ECSI
SALEM FIRE DEPT	AST, HSIS
JLPN INC	AST, HSIS
VERIZON BUSINESS	AST, HSIS
WOODWASTE LANDFILL	SWF/LF
LOOP, RON	LUST
LUMAN, ELIZABETH	LUST
THOMAS, CAROL	LUST
STATE OF OREGON	LUST
REESE, MARVIN HOT	LUST
USWEST - PROSPECT HILL #1 - 010264	UST
SALEM CY OF - REGIONAL PARK & REC	RCRA NonGen / NLR, FINDS
SOIL CONTAMINATION - COTTAGE STREE	FINDS
FIRESTONE #4839 - 015970	FINDS
MARION COUNTY - MUNICIPAL STORMWAT	FINDS
ODOT - STATEWIDE STORMWATER	FINDS
SALEM HOSPITAL	FINDS
STATE PROPERTY HOT	FINDS
MVA - PUDDING RIVER	SPILLS
OP&R - HOLMAN STATE PARK	UIC
STATE FARM INSURANCE	NPDES
WATERS, DAVY L. & SANNA RAHA - MER	NPDES
OREGON DEPARTMENT OF TRANSPORTATIO	NPDES
OREGON DEPARTMENT OF AGICULTURE	NPDES
STEVE NORTH	NPDES
ODOT - STATEWIDE STORMWATER MS4	NPDES
ODOT - REGION 2, CONSTRUCTION STOR	NPDES
USBPA - STATEWIDE CONSTRUCTION STO	NPDES
CITY OF SALEM - PUBLIC WORKS DEPAR	NPDES

OVERVIEW MAP - 3518356.2s

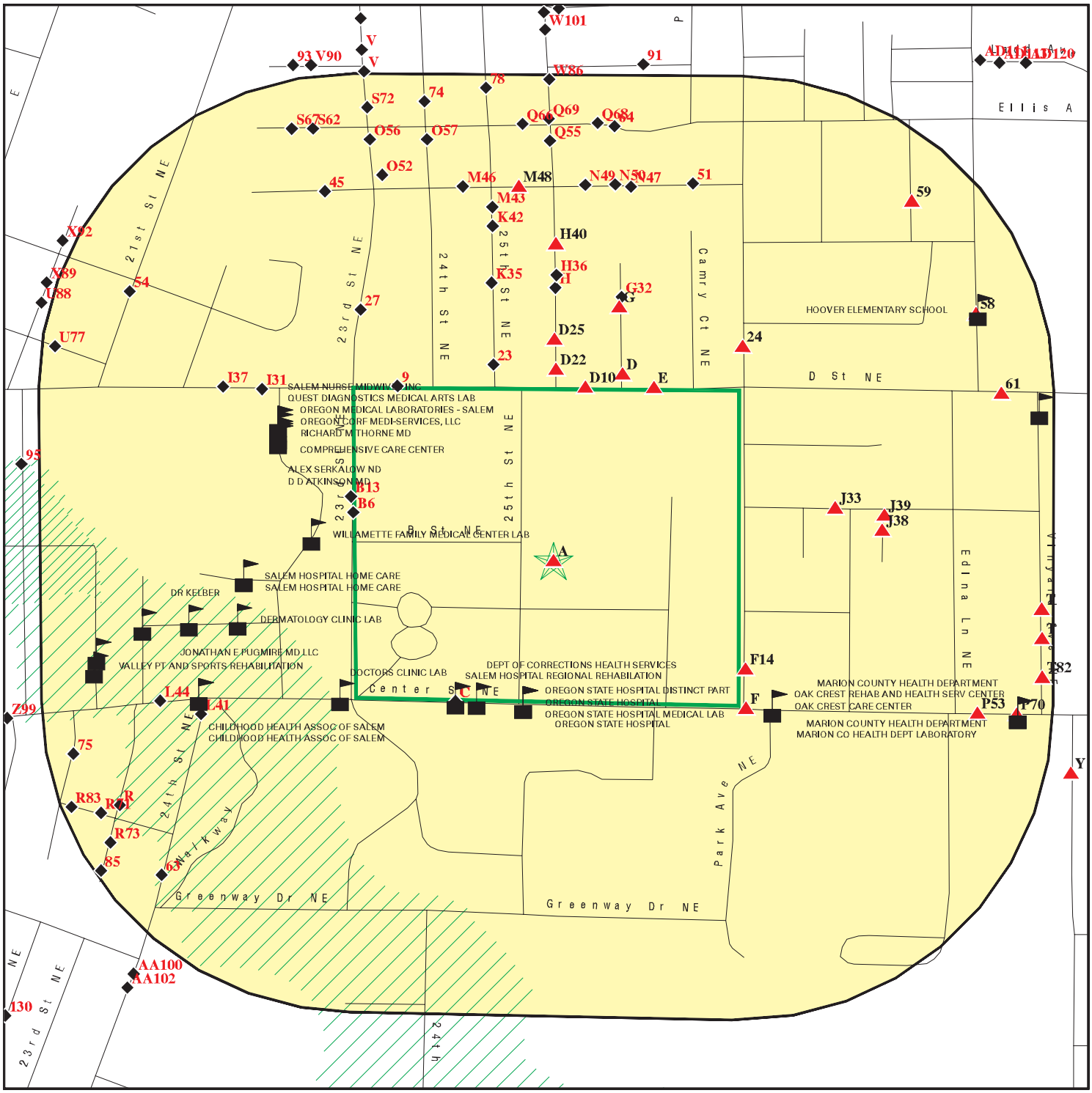


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Oregon State Hospital - North Campus	CLIENT: Stantec
ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem OR 97301	CONTACT: Chris Gdak
LAT/LONG: 44.9416 / 123.003	INQUIRY #: 3518356.2s DATE: February 13, 2013 3:12 pm

DETAIL MAP - 3518356.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Oregon State Hospital - North Campus	CLIENT: Stantec
ADDRESS: 2575-2600 Center St. NE and 2575 Bittern St. NE Salem OR 97301	CONTACT: Chris Gdak INQUIRY #: 3518356.2s
LAT/LONG: 44.9416 / 123.003	DATE: February 13, 2013 3:17 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250	1	0	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
OR CRL	1.000		0	0	0	3	NR	3
ECSI	1.000	1	0	0	1	9	NR	11
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	31	42	83	NR	NR	157
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250	1	2	0	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AST	0.250	1	1	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
OR HAZMAT	TP	3	NR	NR	NR	NR	NR	3
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	1	NR	NR	NR	NR	NR	1
HIST FTTS	TP	1	NR	NR	NR	NR	NR	1
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP	1	NR	NR	NR	NR	NR	1
MANIFEST	0.250	1	0	0	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
AIRS	TP		NR	NR	NR	NR	NR	0
HSIS	TP	2	NR	NR	NR	NR	NR	2
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		4	3	NR	NR	NR	7
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **OREGON STATE HOSPITAL** **RCRA-CESQG** **1004580676**
Target **2600 CENTER ST NE** **FTTS** **ORD080968696**
Property **SALEM, OR 97301** **HIST FTTS**
FINDS
Site 1 of 5 in cluster A **LUST**
UST
Actual: **MANIFEST**
211 ft.

RCRA-CESQG:

Date form received by agency:	12/31/2006
Facility name:	OREGON STATE HOSPITAL
Facility address:	2600 CENTER ST NE SALEM, OR 97301-2682
EPA ID:	ORD080968696
Contact:	JOHN F HAMILTON
Contact address:	2600 CENTER ST NE SALEM, OR 97301-2682
Contact country:	US
Contact telephone:	(503) 945-2924
Contact email:	Not reported
EPA Region:	10
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	OREGON STATE HOSPITAL
Owner/operator address:	2600 CENTER ST NE SALEM, OR 97301
Owner/operator country:	US
Owner/operator telephone:	(503) 945-2870
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	08/26/1991
Owner/Op end date:	Not reported

Owner/operator name:	OREGON STATE HOSPITAL
Owner/operator address:	2600 CENTER ST. N.E SALEM, OR 97310
Owner/operator country:	US
Owner/operator telephone:	(503) 945-2924
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	12/31/2006
Owner/Op end date:	Not reported

OREGON STATE HOSPITAL (Continued) **1004580676**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2005
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/04/2005
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/2004
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/2003
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/17/2003
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/21/2002
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/16/2001
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/13/2000
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/19/1999
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/09/1998
Facility name: OREGON STATE HOSPITAL

OREGON STATE HOSPITAL (Continued) **1004580676**

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/09/1997
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/12/1996
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/06/1995
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 05/05/1994
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/08/1993
Facility name: OREGON STATE HOSPITAL
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 06/26/1992
Facility name: OREGON STATE HOSPITAL
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: OREGON STATE HOSPITAL
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: NA
Waste name: NA

Violation Status: No violations found

FTTS INSP:
Inspection Number: 199408177066 1
Region: 10
Inspection Date: 08/17/94
Inspector: MCDERMOTT
Violation occurred: No
Investigation Type: Section 6 PCB Federal Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: User

HIST FTTS INSP:
Inspection Number: 199408177066 1
Region: 10
Inspection Date: Not reported
Inspector: MCDERMOTT
Violation occurred: No
Investigation Type: Section 6 PCB Federal Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA

OREGON STATE HOSPITAL (Continued) **1004580676**

Facility Function: User

FINDS:

Registry ID: 110001653425

Environmental Interest/Information System

OR-DEQ (Oregon - Department Of Environmental Quality) is a regulatory agency whose job is to protect the quality of Oregon's Environment. DEQ uses a combination of technical assistance, inspections and permitting to help public and private facilities and citizens understand and comply with state and federal environmental regulations.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

Region: Western Region
Facility ID: 24-89-4017
Cleanup Received Date: 03/13/1989
Cleanup Start Date: 03/08/1992
Cleanup Complete Date: 05/19/2000

Region: Western Region
Facility ID: 24-99-4016
Cleanup Received Date: 02/10/1999
Cleanup Start Date: 02/17/1999
Cleanup Complete Date: 05/19/2000

Region: Western Region
Facility ID: 24-99-4050
Cleanup Received Date: 04/14/1999
Cleanup Start Date: 04/19/1999
Cleanup Complete Date: 03/27/2000

Region: Western Region
Facility ID: 24-09-0826
Cleanup Received Date: 08/28/2009
Cleanup Start Date: Not reported
Cleanup Complete Date: 05/11/2011

UST:

Facility ID: 10761

OREGON STATE HOSPITAL (Continued) **1004580676**

Facility Telephone:	(503) 945-2924
Permittee Name:	John Hamilton
Number of Permitted Tanks:	4
Active Tanks:	3
Decommissioned Tanks:	7
Number of Tanks:	10

OR MANIFEST:

Manifest Year:	Manifest Year - 2006
EPA Id:	ORD080968696
Inactive Status:	Not reported
Organization Name:	Not reported
Contact First Name:	John
Contact Last Name:	Hamilton
Contact Telephone Number:	(503) 945-2924
Mailing Address:	2600 Center St NE
Mailing City:	Salem
Mailing State:	OR
Mailing Zip:	97301-2682

A2 **OR HAZMAT** **S105523670**
Target Property **2600 CENTER #34** **N/A**
SALEM, OR 97301

Site 2 of 5 in cluster A

Actual: 211 ft.

HAZMAT:

Responsble Party:	DATA MISSING
RP Company:	Not reported
RP Address:	Not reported
RP City,St,Zip:	Not reported
Facility ID:	950134
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported

(Continued) **S105523670**

Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	0005819881
Osfm Incident Report Number:	950134
Dept. Responding:	SALEM FD
Person Making Report:	LAWRENCE AGUILLAR
Title:	CAPT
Agency:	SALEM FD
Phone:	0005819881
Date Of Incident:	03/18/1995
Call Time:	1:35:00 PM
In Route:	12:00:00 AM
Arrival:	1:40:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	2:04:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	2505
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Structure
Area Type:	Not reported
Responsible Party(Ies):	DATA MISSING
Company:	Not reported
Respcontact:	Not reported
Address:	Not reported
Resp City:	Not reported
Resp State:	Not reported
Resp ZipCode:	Not reported
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Normal Operation
Cause:	Unknown
Vehicle And Cargo:	0
Fixed Property:	0
Total Loss:	$0.00

OR HAZMAT:

Casualties Id:	461
Incident Id:	950134
Casualties Type:	1
Injury Exp:	0
Injury Other:	4
Death Exp:	0
Death Other:	0
Hopitalized:	0

(Continued) **S105523670**

Chemical:
- Chemical Info: 7335
- Chemical Id: 35430
- Incident Id: 950134
- Chemical Name: UNKNOWN CHEMICAL
- UNNA: Not reported
- Amount At Risk: 0
- Amount Released: 0
- Amount Measured: 0
- Biological: False
- Radiological: False

- Chemical Id: 35430
- Chemical Name: UNKNOWN CHEMICAL
- Hazardous Ingredient: UNKNOWN CHEMICAL
- Hazardous Class 1: 9.0
- Hazardous Class 2: Not reported
- Hazardous Rank: 2
- Case Number: Not reported
- UNNA Number: Not reported
- EPA Pest Reg: Not reported
- EHA Chem: Not reported
- PSM Chem: Not reported
- CAA 112R Chem: Not reported

Released:
- Release Behavior Id: 1712
- Incident Id: 950134
- Behavior: 1

Narrative:
- Narrative Id: 5284
- Incident Id: 950134
- Incident Narrative: STAFF MEMBER AT THE STATE HOSPITAL MIXED 2 CLEANING AGENTS IN A BUCKET CREATING TOXIC FUMES. THE MIXTURE WAS FLUSHED DOWN THE SINK.
- Incident Date: 3/18/1995

A3 **OR HAZMAT** **S108390472**
Target Property **2575 CENTER ST** **N/A**
SALEM, OR 97301

Site 3 of 5 in cluster A

Actual: 211 ft.

HAZMAT:
- Responsble Party: Not reported
- RP Company: DEPARTMENT OF CORRECTIONS
- RP Address: Not reported
- RP City,St,Zip: Not reported
- Facility ID: 060055
- OERS Number: 20062607
- Dept Rsp: SALEM FD
- Narrative: Not reported
- Property Loss: Not reported
- Amount Released: Not reported
- Service County: Not reported

(Continued) **S108390472**

Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	12/30/2005
Unit:	Not reported
Agency Phone:	5035886245
Osfm Incident Report Number:	060055
Dept. Responding:	SALEM FD
Person Making Report:	PAUL ORCUTT
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	5035886245
Date Of Incident:	10/17/2006
Call Time:	11:29:00 AM
In Route:	11:36:00 AM
Arrival:	11:48:00 AM
Depart Scene:	12:50:00 PM
Back In Quarters:	1:05:00 PM
In Service:	12:50:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	True
Was Oers Notified?:	True
Oers Number:	20062607
Team Number:	HM13
Agency Report Number:	13875
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Structure
Area Type:	Commercial
Responsible Party(les):	Not reported
Company:	DEPARTMENT OF CORRECTIONS
Respcontact:	MICHAEL GOWER
Address:	Not reported
Resp City:	Not reported
Resp State:	Not reported
Resp ZipCode:	Not reported
Phone:	5039457144
Resp Phone2:	Not reported
Weather:	1
Temperature:	6

(Continued) **S108390472**

Wind Speed: 0
Wind Direction: Not reported
Were Haz Materials Released?: True
Operation Performed: Normal Operation
Cause: Intentional Release
Vehicle And Cargo: 0
Fixed Property: 0
Total Loss: $0.00

Chemical:
Chemical Info: 384
Chemical Id: 6364
Incident Id: 060055
Chemical Name: CHALK
UNNA: Not reported
Amount At Risk: 0
Amount Released: 0
Amount Measured: Not reported
Biological: False
Radiological: False

Chemical Id: 6364
Chemical Name: CHALK
Hazardous Ingredient: CALCIUM CARBONATE
Hazardous Class 1: 9.0
Hazardous Class 2: Not reported
Hazardous Rank: 1
Case Number: 1317653
UNNA Number: Not reported
EPA Pest Reg: Not reported
EHA Chem: Not reported
PSM Chem: Not reported
CAA 112R Chem: Not reported

Method:
Method Used Id: 326
Incident Id: 060055
Identity Method: 6

Released:
Release Behavior Id: 440
Incident Id: 060055
Behavior: 1

Narrative:
Narrative Id: 315
Incident Id: 060055
Incident Narrative: Letter was sent from an inmate at the state pen to the director of corrections. When the letter was opened, a large amount of a white powder was released. The letter was a threatening letter and stated that he would be dead. After testing material, it was positive for chalk. All samples, and evidence was turned over to the FBI, OSP and Department of Homeland Security.
Incident Date: 10/17/2006

A4
Target Property **2600 CENTER ST NE**
SALEM, OR 97301

Site 4 of 5 in cluster A

Actual:
211 ft.

UIC **S105523206**
AST **N/A**
OR HAZMAT
NPDES
HSIS
ECSI

OR UIC:

UIC Well #:	1
Type:	5D2
Type Description:	Storm Water Drainage
Status:	Formal Closure
UIC Number:	14607
Facility Status:	Formal Closure
Lat/Long:	44.938831 / -123.0016

AST:

Facility Id:	005817
Hazardous Substance:	DIESEL FUEL
Reporting Quantities:	10,000-49,999
Quantity Units:	GALLONS
Physical State:	LIQUID
Storage 1:	ABOVEGROUND TANK
Storage 2:	UNDERGROUND TANK

HAZMAT:

Responsble Party:	Not reported
RP Company:	OR STATE HOSPITAL
RP Address:	2600 CENTER STREET NE
RP City,St,Zip:	SALEM, OR 97301
Facility ID:	860198
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported

(Continued) **S105523206**

Agency Phone:	5035886245
Osfm Incident Report Number:	860198
Dept. Responding:	SALEM FD
Person Making Report:	JAMES W RAK
Title:	FIRE MARSH
Agency:	SALEM FD
Phone:	5035886245
Date Of Incident:	12/27/1986
Call Time:	9:14:00 AM
In Route:	12:00:00 AM
Arrival:	9:18:00 AM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	9:47:00 AM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	11190
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Structure
Area Type:	Not reported
Responsible Party(Ies):	Not reported
Company:	OR STATE HOSPITAL
Respcontact:	Not reported
Address:	2600 CENTER STREET NE
Resp City:	SALEM
Resp State:	OR
Resp ZipCode:	97301
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	During Delivery/Shipment
Cause:	Unknown
Vehicle And Cargo:	0
Fixed Property:	250
Total Loss:	$250.00

Chemical:

Chemical Info:	4894
Chemical Id:	35430
Incident Id:	860198
Chemical Name:	UNKNOWN CHEMICAL
UNNA:	Not reported
Amount At Risk:	0
Amount Released:	0
Amount Measured:	0
Biological:	False
Radiological:	False

Chemical Id:	35430

(Continued) **S105523206**

Chemical Name:	UNKNOWN CHEMICAL
Hazardous Ingredient:	UNKNOWN CHEMICAL
Hazardous Class 1:	9.0
Hazardous Class 2:	Not reported
Hazardous Rank:	2
Case Number:	Not reported
UNNA Number:	Not reported
EPA Pest Reg:	Not reported
EHA Chem:	Not reported
PSM Chem:	Not reported
CAA 112R Chem:	Not reported

Method:

Method Used Id:	2848
Incident Id:	860198
Identity Method:	3
Method Used Id:	3924
Incident Id:	860198
Identity Method:	5

Released:

Release Behavior Id:	769
Incident Id:	860198
Behavior:	1

Narrative:

Narrative Id:	1877
Incident Id:	860198
Incident Narrative:	OVER FILLED CL2 MIXER FOR SWIMMING POOL. GAS RELEASE IN BLDG. HAZARD REMOVED TO OUTSIDE.
Incident Date:	12/27/1986

Responsble Party:	DWIGHT LINVILLE
RP Company:	OR STATE HOSPITAL
RP Address:	2600 CENTER ST
RP City,St,Zip:	SALEM 97301
Facility ID:	890139
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported

(Continued) **S105523206**

Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	Not reported
Osfm Incident Report Number:	890139
Dept. Responding:	SALEM FD
Person Making Report:	Not reported
Title:	Not reported
Agency:	SALEM FD
Phone:	Not reported
Date Of Incident:	03/13/1989
Call Time:	12:00:00 AM
In Route:	12:00:00 AM
Arrival:	2:23:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	2:31:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	902448
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Structure
Area Type:	Commercial
Responsible Party(Ies):	DWIGHT LINVILLE
Company:	OR STATE HOSPITAL
Respcontact:	Not reported
Address:	2600 CENTER ST
Resp City:	SALEM
Resp State:	Not reported
Resp ZipCode:	97301
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Not reported
Cause:	Improper Storage
Vehicle And Cargo:	0
Fixed Property:	0
Total Loss:	$0.00

Chemical:

Chemical Info:	5413
Chemical Id:	35430

(Continued) **S105523206**

Incident Id:	890139
Chemical Name:	UNKNOWN CHEMICAL
UNNA:	Not reported
Amount At Risk:	0
Amount Released:	0
Amount Measured:	0
Biological:	False
Radiological:	False

Chemical Id:	35430
Chemical Name:	UNKNOWN CHEMICAL
Hazardous Ingredient:	UNKNOWN CHEMICAL
Hazardous Class 1:	9.0
Hazardous Class 2:	Not reported
Hazardous Rank:	2
Case Number:	Not reported
UNNA Number:	Not reported
EPA Pest Reg:	Not reported
EHA Chem:	Not reported
PSM Chem:	Not reported
CAA 112R Chem:	Not reported

Released:

Release Behavior Id:	5635
Incident Id:	890139
Behavior:	5

Responsble Party:	UNKNOWN-MVA
RP Company:	Not reported
RP Address:	Not reported
RP City,St,Zip:	97000
Facility ID:	900347
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported

(Continued) **S105523206**

Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	5035886245
Osfm Incident Report Number:	900347
Dept. Responding:	SALEM FD
Person Making Report:	AL THOMPKINS
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	5035886245
Date Of Incident:	08/24/1990
Call Time:	12:00:00 AM
In Route:	12:00:00 AM
Arrival:	9:46:00 AM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	10:05:00 AM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	8500
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Road
Area Type:	Commercial
Responsible Party(Ies):	UNKNOWN-MVA
Company:	Not reported
Respcontact:	Not reported
Address:	Not reported
Resp City:	Not reported
Resp State:	Not reported
Resp ZipCode:	97000
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Normal Operation
Cause:	Motor Vehicle Accident
Vehicle And Cargo:	65
Fixed Property:	0
Total Loss:	$65.00

Chemical:

Chemical Info:	3128
Chemical Id:	28101
Incident Id:	900347
Chemical Name:	SULFURIC ACID
UNNA:	Not reported
Amount At Risk:	1
Amount Released:	1
Amount Measured:	2
Biological:	False

(Continued) **S105523206**

Radiological: False

Chemical Id: 28101
Chemical Name: SULFURIC ACID
Hazardous Ingredient: SULFURIC ACID
Hazardous Class 1: 8.0
Hazardous Class 2: 4.4
Hazardous Rank: 2
Case Number: 7664939
UNNA Number: 1830
EPA Pest Reg: Not reported
EHA Chem: Y
PSM Chem: N
CAA 112R Chem: N

Method:
Method Used Id: 1366
Incident Id: 900347
Identity Method: 6

Released:
Release Behavior Id: 1125
Incident Id: 900347
Behavior: 1

Narrative:
Narrative Id: 3023
Incident Id: 900347
Incident Narrative: SPILL RESULTED FROM MOTOR VEHICLE ACCIDENT. NO FIRE. SPILL RESULTED FROM MOTOR VEHICLE ACCIDENT.
Incident Date: 8/24/1990

NPDES:
WQ File Nbr: 118416
Legal Name: OREGON DEPARTMENT OF HUMAN SERVICES
Region: WR
Pri SIC: 1542
Facility Type: NONRESIDENTIAL CONSTRUCT, NEC
Latitude: 44.9398
Longitude: -123.0018
Category: STM
Permit Type: GEN12C
Permit Active: True
Is Active?: Not reported
Permit Description: Stormwater; NPDES construction more than 1 acre disturbed ground
Expiration Date: 11/30/2015
EPA Number: ORR10C189
UIC Facility: False
Admin Agent: Salem Office
Last Action Date: 05/31/2011
Permit Writer: Sewell
Compliance Inspector: Sewell
DMR Reviewer: Not reported
Application Number: 970314

(Continued) **S105523206**

Class: MINOR
Start Date: 09/05/2008

HSIS:

Facility Id:	005817
Chemical Is Extremely Hazardous Substance (EHS):	No
Department Or Division Of Company:	PHYSICAL PLANT
Facility Has Written Emergency Plan:	Yes
Contains 112R:	Yes
NAICS Code 1:	921190
NAICS Desc 1:	OTHER GENERAL GOVERNMENT SUPPORT
NAICS Code 2:	622110
NAICS Desc 2:	GENERAL MEDICAL AND SURGICAL HOSPITALS
Manager Name:	STEPHEN MEDLEY SR
Business Phone:	5039474207
Mailing Address:	2600 CENTER ST NE
Mailing City,St,Zip:	SALEM, OR 97301
No. of Employees:	1400
Day Phone:	5039452800
Placard:	Yes
Fire Dept Code:	0321
Sprinkler System:	Yes
Emergency Contact:	OSH COMMUNICATION CENTER
Emergency Procedure:	COMMUNICATION CENTER BLDG 35
Business Type:	STATE HOSPITAL

Facility:

Facility Id:	005817
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	10
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	N
Description:	PLASTIC BOTTLE, JUG, BUCKET
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	GLYCOL ETHER
United Nations/north America 4 Digit Class Number:	Not reported
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Corrosive Material
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported

(Continued) **S105523206**

Hazard Class 1 Of The Chemical:	8.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	Not reported
Chemical Abstract Service Identifier Number:	111762
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Corrosive Material
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	8.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Contains 112R: Not reported	
Contains EHS: Not reported	
Fertilizer: Not reported	
Pesticide: Not reported	
Contains 313: Not reported	

Facility Id:	005817
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	N
Description:	PLASTIC BOTTLE, JUG, BUCKET
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	DOWANOL DB
United Nations/north America 4 Digit Class Number:	Not reported
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Pesticide
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.5
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

(Continued) **S105523206**

United Nations/north America 4 Digit Class Number:	Not reported
Chemical Abstract Service Identifier Number:	112345
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Pesticide
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.5
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	1839-83-1802
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	Yes
Contains 313:	Yes

Facility Id:	005817
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	N
Description:	PLASTIC BOTTLE, JUG, BUCKET
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	SODIUM HYPOCHLORITE
United Nations/north America 4 Digit Class Number:	1791
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Oxidizers
Second Hazardous Class Code For Chemical:	Corrosive Material
Third Hazardous Class Code For Chemical:	Acute Health Hazard
Hazard Class 1 Of The Chemical:	5.1
Hazard Class 2 Of The Chemical:	8.0
Hazard Class 3 Of The Chemical:	6.3

Chemical:

United Nations/north America 4 Digit Class Number:	1791
Chemical Abstract Service Identifier Number:	7681529
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Oxidizers
Second Hazardous Class Code For Chemical:	Corrosive Material

(Continued) **S105523206**

Third Hazardous Class Code For Chemical:	Acute Health Hazard
Hazard Class 1 Of The Chemical:	5.1
Hazard Class 2 Of The Chemical:	8.0
Hazard Class 3 Of The Chemical:	6.3
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	No
Contains 313:	No

Facility Id:	005817
Physical State Of The Substance:	3
Physical State:	GAS
Average Amount Possessed During The Year Code:	30
Maximum Amount Possessed During The Year Code:	30
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	B
Description:	UNDERGROUND TANK
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	2
Pressure Description:	GREATER THAN NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	10,000-49,999
Description Of The Avg Qnty Code:	10,000-49,999
Most Hazardous Ingridient:	PROPANE
United Nations/north America 4 Digit Class Number:	1075
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.1
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1075
Chemical Abstract Service Identifier Number:	74986
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.1
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No

(Continued) **S105523206**

EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: No
Contains 313: No

Facility Id: 005817
Physical State Of The Substance: 2
Physical State: LIQUID
Average Amount Possessed During The Year Code: 03
Maximum Amount Possessed During The Year Code: 10
Applicable Unit Of Measure Code: 2
Description Of The Unit Of Measure: GALLONS
Type Code: D
Description: STEEL DRUM
Type Code: Not reported
Temperature Description: Not reported
Pressure of Code: 1
Pressure Description: NORMAL PRESSURE
Pressure of Code: Not reported
Pressure Description: Not reported
Temperature Description: NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code: 4
Temperature Description: Not reported
Temperature of The Hazardous Substance Code: Not reported
Days Hazardous Substance On Site During Year: 365
Is The Substance Protected A Trade Secret: False
Description Of The Max Qnty Code: 200-499
Description Of The Avg Qnty Code: 20-49
Most Hazardous Ingridient: PETROLEUM HYDROCARBONS
United Nations/north America 4 Digit Class Number: 0000
Hazard Rank: 2
Chemical Is Extremely Hazardous Substance (EHS): Not reported
First Hazardous Class Code For Chemical: Combustible Material
Second Hazardous Class Code For Chemical: Chronic Health Hazard
Third Hazardous Class Code For Chemical: Not reported
Hazard Class 1 Of The Chemical: 4.5
Hazard Class 2 Of The Chemical: 6.4
Hazard Class 3 Of The Chemical: Not reported

Chemical:
United Nations/north America 4 Digit Class Number: 0000
Chemical Abstract Service Identifier Number: 64742547
Chemical Is Extremely Hazardous Substance (EHS): No
First Hazardous Class Code For Chemical: Combustible Material
Second Hazardous Class Code For Chemical: Chronic Health Hazard
Third Hazardous Class Code For Chemical: Not reported
Hazard Class 1 Of The Chemical: 4.5
Hazard Class 2 Of The Chemical: 6.4
Hazard Class 3 Of The Chemical: Not reported
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: No

(Continued) **S105523206**

Contains 313: Yes

ECSI:

State ID Number:	1894	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	No Further Action
FACA ID:	40431	Further Action:	0
Lat/Long (dms):	44 56 21.50 / -123 0 4.70	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	25	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	03/25/2011

Narrative:

NARR ID:	5736067
NARR Code:	Contamination
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002
NARR Comments:	(6/11/97 CPJ/SAS) Hydraulic fluid release referred from WR Spill Program. No hydraulic fluid found in elevator pit, and three monitoring wells installed by the hospital encountered no hydraulic fluid. No further action required.

NARR ID:	5736068
NARR Code:	Manner of Release
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002
NARR Comments:	Spill of hydraulic fluid, suspected to have originated from an elevator in Building 33 of the hospital.

Administrative Action:

Admin ID:	712322	Action ID:	9443
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	06/11/1997	Complete Date:	06/11/1997
Substance Code:	SAS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NFA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NO FURTHER STATE ACTION REQUIRED		
Further Action:	Not reported		
Comments:	Investigation of Bldg 33 completed. No further action required.		

Admin ID:	712346	Action ID:	9440
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/22/1996	Complete Date:	02/05/1997
Substance Code:	VCS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002

(Continued) **S105523206**

Action Code:	LTAG	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Letter Agreement		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	713008	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/02/1996	Complete Date:	Not reported
Substance Code:	SAS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	711866	Action ID:	9442
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/06/1996	Complete Date:	02/04/1997
Substance Code:	VCS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NEG	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NEGOTIATIONS		
Further Action:	Not reported		
Comments:	Letter agreement signed		

Admin ID:	711985	Action ID:	9459
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/06/1996	Complete Date:	04/09/1997
Substance Code:	VCS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PAE	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	PRELIMINARY ASSESSMENT EQUIVALENT		
Further Action:	Not reported		
Comments:	Site referred from spill prgm. Suspected release from an elevator. Three gw monitoring wells were nondetect for hydrolic oil. Actual elevator pit was als o nondetect for hyrdolic fluid. No further action.		

Admin ID:	711986	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/06/1996	Complete Date:	04/01/1997
Substance Code:	VCS	Rank Value:	0
Employee Id:	440	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	State screening.		

A5 **DHS** **HSIS** **S111248913**
Target **2575 BITTERN ST NE** **N/A**
Property **SALEM, OR 97309**

Site 5 of 5 in cluster A

Actual:
211 ft.

HSIS:

Facility Id:	005812
Chemical Is Extremely Hazardous Substance (EHS):	No
Department Or Division Of Company:	BLDG 33
Facility Has Written Emergency Plan:	Yes
Contains 112R:	No
NAICS Code 1:	923120
NAICS Desc 1:	ADMINISTRATION OF PUBLIC HEALTH PROGRAMS
NAICS Code 2:	622210
NAICS Desc 2:	PSYCHIATRIC AND SUBSTANCE ABUSE HOSPITALS
Manager Name:	STEPHEN A MEDLEY SR
Business Phone:	5039452924
Mailing Address:	2600 CENTER ST NE
Mailing City,St,Zip:	SALEM, OR 973090740
No. of Employees:	195
Day Phone:	5039452924
Placard:	No
Fire Dept Code:	0321
Sprinkler System:	Yes
Emergency Contact:	JOHN HAMILTON
Emergency Procedure:	FACILITIES BLDGS
Business Type:	MENTAL HEALTH ADMIN

Facility:

Facility Id:	005812
Physical State Of The Substance:	1
Physical State:	SOLID
Average Amount Possessed During The Year Code:	11
Maximum Amount Possessed During The Year Code:	11
Applicable Unit Of Measure Code:	1
Description Of The Unit Of Measure:	POUNDS
Type Code:	R
Description:	OTHER
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	500-999
Description Of The Avg Qnty Code:	500-999
Most Hazardous Ingridient:	SULFURIC ACID
United Nations/north America 4 Digit Class Number:	2794
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Yes
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Corrosive Material
Third Hazardous Class Code For Chemical:	Not reported

DHS (Continued) **S111248913**

Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 8.0
Hazard Class 3 Of The Chemical: Not reported

Chemical:
United Nations/north America 4 Digit Class Number: 2794
Chemical Abstract Service Identifier Number: 7664939
Chemical Is Extremely Hazardous Substance (EHS): No
First Hazardous Class Code For Chemical: Acute Health Hazard
Second Hazardous Class Code For Chemical: Corrosive Material
Third Hazardous Class Code For Chemical: Not reported
Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 8.0
Hazard Class 3 Of The Chemical: Not reported
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: Yes
Fertilizer: No
Pesticide: No
Contains 313: Yes

B6 **HEATING OIL TANK** **LUST** **S108572125**
1212 23RD ST NE **N/A**
< 1/8 **SALEM, OR 97301**
0.001 mi.
4 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-07-0249
Cleanup Received Date: 02/27/2007
Cleanup Start Date: Not reported
Cleanup Complete Date: 04/03/2007

C7 **SALEM REGIONAL REHABILITATION CENTER** **LUST** **U004015396**
SW **2561 CENTER ST NE** **UST** **N/A**
< 1/8 **SALEM, OR 97301**
0.001 mi.
6 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4105
Cleanup Received Date: 07/03/1997
Cleanup Start Date: 07/03/1997
Cleanup Complete Date: Not reported

UST:
Facility ID: 11930
Facility Telephone: (503)370-5368
Permittee Name: Not reported
Number of Permitted Tanks: Not reported
Active Tanks: Not reported

SALEM REGIONAL REHABILITATION CENTER (Continued) **U004015396**

Decommissioned Tanks: 1
Number of Tanks: 1

C8 **SALEM HOSPITAL** **AST S111254781**
SW **2561 CENTER ST NE** **HSIS N/A**
< 1/8 **SALEM, OR 97301**
0.001 mi.
6 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
210 ft.

AST:
Facility Id: 066331
Hazardous Substance: DIESEL FUEL
Reporting Quantities: 200-499
Quantity Units: GALLONS
Physical State: LIQUID
Storage 1: ABOVEGROUND TANK

HSIS:
Facility Id: 066331
Chemical Is Extremely Hazardous Substance (EHS): No
Department Or Division Of Company: REGIONAL REHAB CENTER
Facility Has Written Emergency Plan: Yes
Contains 112R: No
NAICS Code 1: 624310
NAICS Desc 1: VOCATIONAL REHABILITATION SERVICES
NAICS Code 2: 000000
NAICS Desc 2: Not reported
Manager Name: NORMAN GRUBER CEO
Business Phone: 5035615200
Mailing Address: 890 OAK ST SE
Mailing City,St,Zip: SALEM, OR 973013905
No. of Employees: 225
Day Phone: 5035611171
Placard: Yes
Fire Dept Code: 0321
Sprinkler System: Yes
Emergency Contact: KERRY CARPENTER
Emergency Procedure: ONLINE POLICY
Business Type: REHABILITATION HEALTH CARE FACILITY

Facility:
Facility Id: 066331
Physical State Of The Substance: 2
Physical State: LIQUID
Average Amount Possessed During The Year Code: 10
Maximum Amount Possessed During The Year Code: 10
Applicable Unit Of Measure Code: 2
Description Of The Unit Of Measure: GALLONS
Type Code: A
Description: ABOVEGROUND TANK
Type Code: Not reported
Temperature Description: Not reported
Pressure of Code: 1
Pressure Description: NORMAL PRESSURE
Pressure of Code: Not reported
Pressure Description: Not reported
Temperature Description: NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code: 4

SALEM HOSPITAL (Continued) **S111254781**

Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	200-499
Most Hazardous Ingridient:	PETROLEUM MID-DISTILLATES
United Nations/north America 4 Digit Class Number:	1993
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1993
Chemical Abstract Service Identifier Number:	68476346
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	No
Contains 313:	No

---

9 **LUST** **S105523346**
NW **2355 D ST NE** **OR HAZMAT** **N/A**
< 1/8 **SALEM, OR 97301**
0.002 mi.
9 ft.

Relative:
Lower

Actual:
205 ft.

LUST:

Region:	Western Region
Facility ID:	24-01-6729
Cleanup Received Date:	08/13/2001
Cleanup Start Date:	08/10/2001
Cleanup Complete Date:	**09/18/2001**

HAZMAT:

Responsble Party:	UNKNOWN
RP Company:	Not reported
RP Address:	Not reported
RP City,St,Zip:	Not reported
Facility ID:	920174
OERS Number:	Not reported
Dept Rsp:	SALEM FD

(Continued) **S105523346**

Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	0005886245
Osfm Incident Report Number:	920174
Dept. Responding:	SALEM FD
Person Making Report:	D JOYNS
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	0005886245
Date Of Incident:	05/11/1992
Call Time:	3:29:00 PM
In Route:	12:00:00 AM
Arrival:	3:31:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	5:09:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	203898
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Road
Area Type:	Residential
Responsible Party(Ies):	UNKNOWN
Company:	Not reported
Respcontact:	Not reported
Address:	Not reported
Resp City:	Not reported
Resp State:	Not reported
Resp ZipCode:	Not reported

(Continued) **S105523346**

Phone: Not reported
Resp Phone2: Not reported
Weather: 0
Temperature: 0
Wind Speed: 0
Wind Direction: Not reported
Were Haz Materials Released?: True
Operation Performed: During Delivery/Shipment
Cause: Unknown
Vehicle And Cargo: 25
Fixed Property: 0
Total Loss: $25.00

Chemical:
Chemical Info: 6283
Chemical Id: 35430
Incident Id: 920174
Chemical Name: UNKNOWN CHEMICAL
UNNA: Not reported
Amount At Risk: 0
Amount Released: 0
Amount Measured: 0
Biological: False
Radiological: False

Chemical Id: 35430
Chemical Name: UNKNOWN CHEMICAL
Hazardous Ingredient: UNKNOWN CHEMICAL
Hazardous Class 1: 9.0
Hazardous Class 2: Not reported
Hazardous Rank: 2
Case Number: Not reported
UNNA Number: Not reported
EPA Pest Reg: Not reported
EHA Chem: Not reported
PSM Chem: Not reported
CAA 112R Chem: Not reported

Method:
Method Used Id: 1633
Incident Id: 920174
Identity Method: 6

Released:
Release Behavior Id: 4006
Incident Id: 920174
Behavior: 4

Narrative:
Narrative Id: 3820
Incident Id: 920174
Incident Narrative: A 50LB BAG OF GYPSUM FALL OUT OF A TRUCK WEST BOUND IN THE 2300 BLOCK OF D ST
Incident Date: 5/11/1992

D10 **HEATING OIL TANK** **LUST** **S102590252**
North **2645 D STREET NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.002 mi.
12 ft. **Site 1 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4076
Cleanup Received Date: 04/29/1996
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

E11 **HEATING OIL TANK** **LUST** **S109843385**
NNE **2745 D ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.002 mi.
12 ft. **Site 1 of 2 in cluster E**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-09-0439
Cleanup Received Date: 05/21/2009
Cleanup Start Date: Not reported
Cleanup Complete Date: 06/24/2009

E12 **HEATING OIL TANK** **LUST** **S109843347**
NNE **2755 D ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.002 mi.
13 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-09-0456
Cleanup Received Date: 05/22/2009
Cleanup Start Date: Not reported
Cleanup Complete Date: 08/21/2009

B13 **HEATING OIL TANK** **LUST** **S107465687**
WNW **1221 23RD ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.002 mi.
13 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-05-2122
Cleanup Received Date: 10/01/2005
Cleanup Start Date: 10/03/2005
Cleanup Complete Date: 01/19/2006

F14 **HEATING OIL TANK** **LUST** **S102417851**
ESE **740 PARK AVENUE NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.005 mi.
29 ft. **Site 1 of 5 in cluster F**

Relative:
Higher

Actual:
221 ft.

LUST:

Region:	Western Region
Facility ID:	24-96-4098
Cleanup Received Date:	06/12/1996
Cleanup Start Date:	06/10/1996
Cleanup Complete Date:	**08/20/1996**

F15 **CENTER STREET AUTO SVC AUTO RPR& SERV** **EDR US Hist Auto Stat** **1014179922**
SE **2903 CENTER ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.006 mi.
33 ft. **Site 2 of 5 in cluster F**

Relative:
Higher

Actual:
221 ft.

EDR Historical Auto Stations:

Name:	GRABERS RICHFIELD SERVICE STATION
Year:	1966
Type:	GASOLINE STATIONS
Name:	LESS ARCO SERVICE STATION
Year:	1976
Type:	GASOLINE STATIONS
Name:	LESS ARCO SERVICE STATION
Year:	1980
Type:	GASOLINE STATIONS
Name:	LESS ARCO SERVICE STATION
Year:	1989
Type:	GASOLINE STATIONS
Name:	CENTER STREET AUTO SVC AUTO RPR& SERV
Year:	2002
Type:	AUTOMOBILE REPAIRING & SERVICE

F16 **EDR US Hist Auto Stat** **1014176270**
SE **2903 CENTER ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.006 mi.
33 ft. **Site 3 of 5 in cluster F**

Relative:
Higher

Actual:
221 ft.

EDR Historical Auto Stations:

Name:	GRABERS RICHFIELD SERV STA
Year:	1961
Type:	GASOLINE STATIONS
Name:	CENTER STREET AUTO SERVICE
Year:	1999
Address:	2903 CENTER ST NE
Name:	CTR STREET AUTO SERVICE
Year:	2001
Address:	2903 CENTER ST NE

(Continued) **1014176270**

Name: CTR STREET AUTO SERVICE
Year: 2002
Address: 2903 CENTER ST NE

Name: CTR STREET AUTO SERVICE
Year: 2003
Address: 2903 CENTER ST NE

Name: CTR STREET AUTO SERVICE
Year: 2004
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICES
Year: 2005
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICES
Year: 2007
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICES
Year: 2008
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICES
Year: 2009
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SVC
Year: 2010
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICE
Year: 2011
Address: 2903 CENTER ST NE

Name: CENTER STREET AUTO SERVICE
Year: 2012
Address: 2903 CENTER ST NE

F17 **SPARTAN STATION** **LUST U000433781**
SE **2903 CENTER ST NE** **UST N/A**
< 1/8 **SALEM, OR 97301**
0.006 mi.
33 ft. **Site 4 of 5 in cluster F**

Relative:
Higher

Actual:
221 ft.

LUST:
Region: Western Region
Facility ID: 24-93-4209
Cleanup Received Date: 11/23/1993
Cleanup Start Date: 07/21/1990
Cleanup Complete Date: Not reported

UST:
Facility ID: 4388
Facility Telephone: (503) 363-8229
Permittee Name: Manh Nguyan

SPARTAN STATION (Continued) **U000433781**

Number of Permitted Tanks: Not reported
Active Tanks: Not reported
Decommissioned Tanks: 5
Number of Tanks: 5

F18 **LESS ARCO SERVICE STATION** **EDR US Hist Auto Stat** **1014172324**
SE **2903 CENTER ST NE** **N/A**
< 1/8 **MARION (County), OR 97301**
0.006 mi.
33 ft. **Site 5 of 5 in cluster F**

Relative:
Higher

Actual:
221 ft.

EDR Historical Auto Stations:
Name: LESS ARCO SERVICE STATION
Year: 1986
Type: GASOLINE STATIONS

D19 **HEATING OIL TANK** **LUST** **S102778702**
NNE **1008 ICEL COURT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.008 mi.
43 ft. **Site 2 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4083
Cleanup Received Date: 06/03/1997
Cleanup Start Date: 06/04/1997
Cleanup Complete Date: Not reported

D20 **HEATING OIL TANK** **LUST** **S105981152**
NNE **1013 ICEL COURT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.010 mi.
53 ft. **Site 3 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-03-1688
Cleanup Received Date: 08/15/2003
Cleanup Start Date: 08/18/2003
Cleanup Complete Date: 01/15/2004

D21 **HEATING OIL TANK** **LUST** **S107134911**
NNE **1018 ICEL COURT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.013 mi.
68 ft. **Site 4 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-05-1027
Cleanup Received Date: 05/19/2005
Cleanup Start Date: 05/20/2005

HEATING OIL TANK (Continued) **S107134911**

Cleanup Complete Date: 06/06/2007

D22 **HEATING OIL TANK** **LUST** **S105710969**
North **1029 NE EVERGREEN AVENUE** **N/A**
< 1/8 **SALEM, OR 97301**
0.016 mi.
87 ft. **Site 5 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-02-1163
Cleanup Received Date: 10/16/2002
Cleanup Start Date: 10/23/2002
Cleanup Complete Date: 12/18/2002

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23 **HEATING OIL TANK** **LUST** **S109843467**
NNW **1027 25TH ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.019 mi.
102 ft.

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-09-0249
Cleanup Received Date: 03/30/2009
Cleanup Start Date: Not reported
Cleanup Complete Date: 12/14/2009

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24 **HEATING OIL TANK** **LUST** **S103839703**
NE **1065 PARK AVENUE NE** **N/A**
< 1/8 **SALEM, OR 97303**
0.036 mi.
188 ft.

Relative:
Higher

Actual:
213 ft.

LUST:
Region: Western Region
Facility ID: 24-92-4180
Cleanup Received Date: 09/25/1992
Cleanup Start Date: 09/25/1992
Cleanup Complete Date: Not reported

D25 **HEATING OIL TANK** **LUST** **S102959646**
North **1069 EVERGREEN AVE NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.040 mi.
213 ft. **Site 6 of 6 in cluster D**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-98-4018
Cleanup Received Date: 02/03/1998
Cleanup Start Date: 01/26/1998
Cleanup Complete Date: 03/11/1998

G26 **HEATING OIL TANK** **LUST** **S106777005**
NNE **1113 ICEL COURT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.057 mi.
300 ft. **Site 1 of 4 in cluster G**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-04-2296
Cleanup Received Date: 11/15/2004
Cleanup Start Date: 11/16/2004
Cleanup Complete Date: 07/11/2005

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27 **HEATING OIL TANK** **LUST** **S105154620**
NW **1282 23RD ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.062 mi.
329 ft.

Relative:
Lower

Actual:
205 ft.

LUST:
Region: Western Region
Facility ID: 24-01-6885
Cleanup Received Date: 09/05/2001
Cleanup Start Date: 09/05/2001
Cleanup Complete Date: 11/07/2001

G28 **HEATING OIL TANK** **LUST** **S103839581**
NNE **1128 ICEL COURT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.064 mi.
340 ft. **Site 2 of 4 in cluster G**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4146
Cleanup Received Date: 09/24/1997
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

G29 **HEATING OIL TANK** **LUST** **S104189467**
NNE **1133 ICEL CT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.066 mi.
350 ft. **Site 3 of 4 in cluster G**

Relative:
Higher

Actual:
211 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4156
Cleanup Received Date: 11/09/1999
Cleanup Start Date: 11/17/1999
Cleanup Complete Date: 02/29/2000

H30 **HEATING OIL TANK** **LUST** **S107134912**
North **1128 EVERGREEN AVENUE NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.071 mi.
373 ft. **Site 1 of 4 in cluster H**

Relative: LUST:
Higher

Region:	Western Region
Facility ID:	24-05-1028
Cleanup Received Date:	05/19/2005
Cleanup Start Date:	05/20/2005
Cleanup Complete Date:	**08/05/2005**

Actual:
211 ft.

I31 **HEATING OIL TANK** **LUST** **S102778695**
WNW **2250 D STREET NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.073 mi.
383 ft. **Site 1 of 2 in cluster I**

Relative: LUST:
Lower

Region:	Western Region
Facility ID:	24-96-4095
Cleanup Received Date:	06/04/1996
Cleanup Start Date:	06/03/1996
Cleanup Complete Date:	**10/12/2001**

Actual:
203 ft.

G32 **HEATING OIL TANK** **LUST** **S104657806**
NNE **1148 ICEL CT NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.074 mi.
390 ft. **Site 4 of 4 in cluster G**

Relative: LUST:
Lower

Region:	Western Region
Facility ID:	24-00-4086
Cleanup Received Date:	05/18/2000
Cleanup Start Date:	05/19/2000
Cleanup Complete Date:	**07/13/2000**

Actual:
210 ft.

J33 **HEATING OIL TANK** **LUST** **S104304631**
East **2985 KNOX AVE NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.077 mi.
404 ft. **Site 1 of 3 in cluster J**

Relative: LUST:
Higher

Region:	Western Region
Facility ID:	24-00-4021
Cleanup Received Date:	02/09/2000
Cleanup Start Date:	01/10/2000
Cleanup Complete Date:	**07/07/2000**

Actual:
218 ft.

H34 **HEATING OIL TANK** **LUST** **S108987239**
North **1148 NE EVERGREEN AVE** **N/A**
< 1/8 **SALEM, OR 97301**
0.081 mi.
426 ft. **Site 2 of 4 in cluster H**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-07-1819
Cleanup Received Date: 12/06/2007
Cleanup Start Date: Not reported
Cleanup Complete Date: 03/06/2008

K35 **HEATING OIL TANK** **LUST** **S103839547**
NNW **1157 25TH STREET NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.084 mi.
446 ft. **Site 1 of 2 in cluster K**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-95-4008
Cleanup Received Date: 01/19/1995
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

H36 **HEATING OIL TANK** **LUST** **S103543332**
North **1168 EVERGREEN, NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.091 mi.
479 ft. **Site 3 of 4 in cluster H**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-92-5065
Cleanup Received Date: 03/13/1992
Cleanup Start Date: 04/08/1992
Cleanup Complete Date: 10/01/1992

I37 **EDR US Hist Auto Stat** **1015337168**
WNW **2225 D ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.103 mi.
546 ft. **Site 2 of 2 in cluster I**

Relative:
Lower

Actual:
202 ft.

EDR Historical Auto Stations:
Name: CHUCKS AUTOMOTIVE CTR
Year: 2002
Address: 2225 D ST NE

Name: CHUCKS AUTOMOTIVE CENTER
Year: 2008
Address: 2225 D ST NE

Name: CHUCKS AUTOMOTIVE CENTER
Year: 2009
Address: 2225 D ST NE

J38 **HEATING OIL TANK** **LUST** **S105710981**
East **860 NE REE DEL COURT** **N/A**
< 1/8 **SALEM, OR 97301**
0.114 mi.
602 ft. **Site 2 of 3 in cluster J**

Relative: LUST:
Higher
Region: Western Region
Facility ID: 24-02-1325
Actual: Cleanup Received Date: 11/08/2002
219 ft. Cleanup Start Date: 11/15/2002
Cleanup Complete Date: 12/23/2002

J39 **HEATING OIL TANK** **LUST** **S103839568**
East **890 REE DEL ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.116 mi.
611 ft. **Site 3 of 3 in cluster J**

Relative: LUST:
Higher
Region: Western Region
Facility ID: 24-99-4054
Actual: Cleanup Received Date: 04/15/1999
219 ft. Cleanup Start Date: 04/13/1999
Cleanup Complete Date: 07/03/2001

H40 **HEATING OIL TANK** **LUST** **S107465661**
North **1218 EVERGREEN ST NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.116 mi.
613 ft. **Site 4 of 4 in cluster H**

Relative: LUST:
Higher
Region: Western Region
Facility ID: 24-05-1584
Actual: Cleanup Received Date: 07/22/2005
211 ft. Cleanup Start Date: 07/22/2005
Cleanup Complete Date: 08/10/2005

L41 **HEATING OIL TANK** **LUST** **S105856287**
WSW **595 24TH STREET NE** **N/A**
< 1/8 **SALEM, OR 97301**
0.124 mi.
654 ft. **Site 1 of 2 in cluster L**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-03-1023
Actual: Cleanup Received Date: 05/23/2003
182 ft. Cleanup Start Date: 05/19/2003
Cleanup Complete Date: 06/24/2003

K42 **HEATING OIL TANK** **LUST** **S107134906**
North **1246 25TH STREET NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.130 mi.
684 ft. **Site 2 of 2 in cluster K**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-05-0813
Cleanup Received Date: 04/22/2005
Cleanup Start Date: 04/26/2005
Cleanup Complete Date: 05/18/2005

M43 **HEATING OIL TANK** **LUST** **S104304617**
North **1276 25TH ST NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.145 mi.
763 ft. **Site 1 of 3 in cluster M**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4165
Cleanup Received Date: 11/24/1999
Cleanup Start Date: 11/30/1999
Cleanup Complete Date: 01/04/2000

L44 **MIKES CHEVRON GAS STA** **EDR US Hist Auto Stat** **1014162938**
WSW **2365 CENTER ST NE** **N/A**
1/8-1/4 **SALEM, OR**
0.156 mi.
822 ft. **Site 2 of 2 in cluster L**

Relative:
Lower

Actual:
180 ft.

EDR Historical Auto Stations:
Name: MIKES CHEVRON GAS STA
Year: 1966
Type: GASOLINE STATIONS

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45 **HEATING OIL TANK** **LUST** **S106475705**
NNW **2220 ENGLEWOOD AVENUE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.158 mi.
834 ft.

Relative:
Lower

Actual:
205 ft.

LUST:
Region: North Western Region
Facility ID: 26-04-0828
Cleanup Received Date: 05/11/2004
Cleanup Start Date: 05/12/2004
Cleanup Complete Date: 05/26/2005

M46 **HEATING OIL TANK** **LUST** **S103543327**
NNW **2455 ENGLEWOOD AVENUE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.161 mi.
849 ft. **Site 2 of 3 in cluster M**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-97-4069
Actual: Cleanup Received Date: 05/07/1997
210 ft. Cleanup Start Date: 05/13/1997
Cleanup Complete Date: Not reported

N47 **HEATING OIL TANK** **LUST** **S109051927**
NNE **2720 ENGLEWOOD AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.162 mi.
853 ft. **Site 1 of 3 in cluster N**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-08-0260
Actual: Cleanup Received Date: 03/12/2008
208 ft. Cleanup Start Date: Not reported
Cleanup Complete Date: 05/21/2008

M48 **HEATING OIL TANK** **LUST** **S103839574**
North **2545 ENGLEWOOD AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.162 mi.
854 ft. **Site 3 of 3 in cluster M**

Relative: LUST:
Higher
Region: Western Region
Facility ID: 24-99-4021
Actual: Cleanup Received Date: 02/23/1999
211 ft. Cleanup Start Date: 12/16/1998
Cleanup Complete Date: 05/25/2000

N49 **HEATING OIL TANK** **LUST** **S111429707**
North **2645 ENGLEWOOD AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.163 mi.
860 ft. **Site 2 of 3 in cluster N**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-11-1237
Actual: Cleanup Received Date: 12/01/2011
209 ft. Cleanup Start Date: Not reported
Cleanup Complete Date: 12/13/2011

N50
North
1/8-1/4
0.163 mi.
861 ft.

HEATING OIL TANK — **LUST** — **S104304615**
2695 ENGLEWOOD NE — **N/A**
SALEM, OR 97301

Site 3 of 3 in cluster N

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4169
Cleanup Received Date: 12/01/1999
Cleanup Start Date: 12/02/1999
Cleanup Complete Date: 02/04/2000

51
NNE
1/8-1/4
0.164 mi.
868 ft.

HEATING OIL TANK — **LUST** — **S103839555**
2825 ENGLEWOOD AVE NE — **N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4026
Cleanup Received Date: 03/02/1999
Cleanup Start Date: 02/22/1999
Cleanup Complete Date: Not reported

O52
NNW
1/8-1/4
0.170 mi.
895 ft.

HEATING OIL TANK — **LUST** — **S105154632**
2225 ENLGEWOOD AVE NE — **N/A**
SALEM, OR 97301

Site 1 of 3 in cluster O

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-01-6884
Cleanup Received Date: 09/05/2001
Cleanup Start Date: 09/04/2001
Cleanup Complete Date: 10/15/2001

P53
ESE
1/8-1/4
0.190 mi.
1004 ft.

EDR US Hist Auto Stat — **1015418304**
3155 CENTER ST NE — **N/A**
SALEM, OR 97301

Site 1 of 2 in cluster P

Relative:
Higher

Actual:
222 ft.

EDR Historical Auto Stations:
Name: SCORPION AUTOMOTIVE WHOLESALE
Year: 2001
Address: 3155 CENTER ST NE

54
WNW
1/8-1/4
0.193 mi.
1021 ft.

HEATING OIL TANK
1085 21 STREET NE
SALEM, OR 97301

LUST **S102778689**
N/A

Relative:
Lower

Actual:
198 ft.

LUST:
Region: Western Region
Facility ID: 24-95-5028
Cleanup Received Date: 01/18/1995
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

Q55
North
1/8-1/4
0.198 mi.
1043 ft.

1375 EVERGREEN AVE NE
SALEM, OR 97301

Site 1 of 4 in cluster Q

EDR US Hist Auto Stat **1015215711**
N/A

Relative:
Lower

Actual:
210 ft.

EDR Historical Auto Stations:
Name: AUTO LOGIC
Year: 2004
Address: 1375 EVERGREEN AVE NE

O56
NNW
1/8-1/4
0.198 mi.
1044 ft.

HEATING OIL TANK
1380 23RD STREET NE
SALEM, OR 97301

Site 2 of 3 in cluster O

LUST **S102778691**
N/A

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4024
Cleanup Received Date: 02/16/1996
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

O57
NNW
1/8-1/4
0.198 mi.
1046 ft.

HEATING OIL TANK
1380 24TH ST
SALEM, OR 97301

Site 3 of 3 in cluster O

LUST **S103839582**
N/A

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4045
Cleanup Received Date: 04/06/1999
Cleanup Start Date: 04/06/1999
Cleanup Complete Date: Not reported

58
ENE
1/8-1/4
0.198 mi.
1046 ft.

HEATING OIL TANK
1104 SAVAGE RD
SALEM, OR 97305

LUST **S105710952**
N/A

Relative:
Higher

Actual:
213 ft.

LUST:
Region: Western Region
Facility ID: 24-02-0935
Cleanup Received Date: 09/16/2002
Cleanup Start Date: 09/12/2002
Cleanup Complete Date: Not reported

59
NE
1/8-1/4
0.204 mi.
1078 ft.

HEATING OIL TANK
1232 REEDY DRIVE NE
SALEM, OR 97301

LUST **S103543315**
N/A

Relative:
Higher

Actual:
212 ft.

LUST:
Region: Western Region
Facility ID: 24-95-4108
Cleanup Received Date: 07/28/1995
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

R60
WSW
1/8-1/4
0.206 mi.
1088 ft.

HEATING OIL TANK
560 23RD ST NE
SALEM, OR 97301

Site 1 of 5 in cluster R

LUST **S104657843**
N/A

Relative:
Lower

Actual:
182 ft.

LUST:
Region: Western Region
Facility ID: 24-00-5409
Cleanup Received Date: 07/24/2000
Cleanup Start Date: 07/24/2000
Cleanup Complete Date: 05/23/2012

61
ENE
1/8-1/4
0.209 mi.
1101 ft.

HEATING OIL TANK
3182 D STREET NE
SALEM, OR 97301

LUST **S103839541**
N/A

Relative:
Higher

Actual:
215 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4014
Cleanup Received Date: 01/24/1997
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

S62
NNW
1/8-1/4
0.209 mi.
1102 ft.

HEATING OIL TANK
2250 ELLIS AVE NE
SALEM, OR 97301

Site 1 of 3 in cluster S

Relative:
Lower

Actual:
206 ft.

LUST:

Region:	Western Region
Facility ID:	24-98-4165
Cleanup Received Date:	10/08/1998
Cleanup Start Date:	10/08/1998
Cleanup Complete Date:	**07/11/2001**

LUST **S103422207**
N/A

63
SW
1/8-1/4
0.209 mi.
1103 ft.

HEATING OIL TANK
533 24TH ST NE
SALEM, OR 97301

Relative:
Lower

Actual:
185 ft.

LUST:

Region:	Western Region
Facility ID:	24-01-6664
Cleanup Received Date:	08/06/2001
Cleanup Start Date:	08/03/2001
Cleanup Complete Date:	**10/04/2001**

LUST **S105154626**
N/A

64
North
1/8-1/4
0.209 mi.
1106 ft.

HEATING OIL TANK
2690 NE ELLIS AVENUE
SALEM, OR 97301

Relative:
Lower

Actual:
208 ft.

LUST:

Region:	Western Region
Facility ID:	24-02-0846
Cleanup Received Date:	09/11/2002
Cleanup Start Date:	09/12/2002
Cleanup Complete Date:	**12/02/2002**

LUST **S105556183**
N/A

R65
WSW
1/8-1/4
0.210 mi.
1110 ft.

HEATING OIL TANK
557 23RD ST NE
SALEM, OR 97301

Site 2 of 5 in cluster R

Relative:
Lower

Actual:
182 ft.

LUST:

Region:	Western Region
Facility ID:	24-02-5895
Cleanup Received Date:	05/14/2002
Cleanup Start Date:	05/14/2002
Cleanup Complete Date:	**06/19/2002**

LUST **S105464139**
N/A

Q66 **HEATING OIL TANK** **LUST** **S103248448**
North **2555 ELLIS STREET NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.211 mi.
1113 ft. **Site 2 of 4 in cluster Q**

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-98-4041
Cleanup Received Date: 03/27/1998
Cleanup Start Date: 03/27/1998
Cleanup Complete Date: 02/29/2000

S67 **HEATING OIL TANK** **LUST** **S104907853**
NNW **2230 ELLIS AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.212 mi.
1118 ft. **Site 2 of 3 in cluster S**

Relative:
Lower

Actual:
205 ft.

LUST:
Region: Western Region
Facility ID: 24-01-5618
Cleanup Received Date: 04/09/2001
Cleanup Start Date: 04/06/2001
Cleanup Complete Date: 09/10/2001

Q68 **HEATING OIL TANK** **LUST** **S102417912**
North **2665 ELLIS AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97303**
0.212 mi.
1119 ft. **Site 3 of 4 in cluster Q**

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4021
Cleanup Received Date: 02/14/1996
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

Q69 **HEATING OIL TANK** **LUST** **S102778708**
North **1405 EVERGREEN AVE NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.215 mi.
1136 ft. **Site 4 of 4 in cluster Q**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4142
Cleanup Received Date: 09/15/1997
Cleanup Start Date: 09/15/1997
Cleanup Complete Date: 12/10/1999

P70
ESE
1/8-1/4
0.221 mi.
1168 ft.

HEATING OIL TANK — **LUST** — **S103839543**
3183 CENTER STREET NE — **N/A**
SALEM, OR 97301

Site 2 of 2 in cluster P

Relative:
Higher

Actual:
221 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4018
Cleanup Received Date: 02/10/1997
Cleanup Start Date: 08/30/2011
Cleanup Complete Date: 11/23/2011

R71
WSW
1/8-1/4
0.222 mi.
1174 ft.

HEATING OIL TANK — **LUST** — **S105464135**
2275 HAYDEN ST NE — **N/A**
SALEM, OR 97301

Site 3 of 5 in cluster R

Relative:
Lower

Actual:
182 ft.

LUST:
Region: Western Region
Facility ID: 24-02-0129
Cleanup Received Date: 05/25/2002
Cleanup Start Date: 05/25/2002
Cleanup Complete Date: Not reported

Region: Western Region
Facility ID: 24-02-5998
Cleanup Received Date: 05/25/2002
Cleanup Start Date: 05/25/2002
Cleanup Complete Date: Not reported

S72
NNW
1/8-1/4
0.223 mi.
1179 ft.

HEATING OIL TANK — **LUST** — **S111210474**
1420 23RD ST NE — **N/A**
SALEM, OR 97301

Site 3 of 3 in cluster S

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-11-0323
Cleanup Received Date: 04/14/2011
Cleanup Start Date: Not reported
Cleanup Complete Date: 07/25/2011

R73
WSW
1/8-1/4
0.227 mi.
1196 ft.

HEATING OIL TANK — **LUST** — **S102590260**
534 23RD STREET NE — **N/A**
SALEM, OR 97301

Site 4 of 5 in cluster R

Relative:
Lower

Actual:
183 ft.

LUST:
Region: Western Region
Facility ID: 24-93-4011
Cleanup Received Date: 01/19/1993
Cleanup Start Date: 01/13/1993
Cleanup Complete Date: Not reported

74
NNW
1/8-1/4
0.228 mi.
1205 ft.

HEATING OIL TANK — **LUST** — **S105856291**
1420 NE 24TH STREET — **N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
210 ft.

LUST:
Region: Western Region
Facility ID: 24-03-1112
Cleanup Received Date: 06/10/2003
Cleanup Start Date: 06/11/2003
Cleanup Complete Date: 08/08/2003

75
WSW
1/8-1/4
0.229 mi.
1209 ft.

HEATING OIL TANK — **LUST** — **S108247067**
578 ROSE ST NE — **N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
179 ft.

LUST:
Region: Western Region
Facility ID: 24-06-1257
Cleanup Received Date: 07/13/2006
Cleanup Start Date: 07/17/2006
Cleanup Complete Date: 11/21/2006

T76
East
1/8-1/4
0.239 mi.
1262 ft.

HEATING OIL TANK — **LUST** — **S104024439**
773 VINYARD AVE NE — **N/A**
SALEM, OR 97301
Site 1 of 5 in cluster T

Relative:
Higher

Actual:
220 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4086
Cleanup Received Date: 07/14/1999
Cleanup Start Date: 06/24/1999
Cleanup Complete Date: 04/21/2000

U77
WNW
1/8-1/4
0.239 mi.
1263 ft.

HEATING OIL TANK — **LUST** — **S109204331**
2035 NE KANSAS AVE — **N/A**
SALEM, OR 97301
Site 1 of 2 in cluster U

Relative:
Lower

Actual:
194 ft.

LUST:
Region: Western Region
Facility ID: 24-08-0410
Cleanup Received Date: 04/15/2008
Cleanup Start Date: Not reported
Cleanup Complete Date: 07/11/2008

78
North
1/8-1/4
0.239 mi.
1264 ft.

HEATING OIL TANK
1430 NE 25TH STREET
SALEM, OR 97301

LUST **S107465669**
N/A

Relative:
Lower

Actual:
209 ft.

LUST:

Region:	Western Region
Facility ID:	24-05-1754
Cleanup Received Date:	08/13/2005
Cleanup Start Date:	08/15/2005
Cleanup Complete Date:	**09/13/2005**

T79
East
1/8-1/4
0.241 mi.
1271 ft.

HEATING OIL TANK
804 VINYARD AVE. NE
SALEM, OR 97301
Site 2 of 5 in cluster T

LUST **S109204361**
N/A

Relative:
Higher

Actual:
220 ft.

LUST:

Region:	Western Region
Facility ID:	24-08-0586
Cleanup Received Date:	05/21/2008
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**07/09/2008**

T80
East
1/8-1/4
0.241 mi.
1272 ft.

HEATING OIL TANK
794 VINEYARD AVE NE
SALEM, OR 97301
Site 3 of 5 in cluster T

LUST **S102590268**
N/A

Relative:
Higher

Actual:
220 ft.

LUST:

Region:	Western Region
Facility ID:	24-96-4020
Cleanup Received Date:	02/14/1996
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**Not reported**

T81
East
1/8-1/4
0.241 mi.
1273 ft.

HEATING OIL TANK
774 VINYARD AVE NE
SALEM, OR 97302
Site 4 of 5 in cluster T

LUST **S106776965**
N/A

Relative:
Higher

Actual:
220 ft.

LUST:

Region:	Western Region
Facility ID:	24-04-1623
Cleanup Received Date:	08/15/2004
Cleanup Start Date:	08/15/2004
Cleanup Complete Date:	**09/21/2004**

T82
ESE
1/8-1/4
0.241 mi.
1275 ft.

HEATING OIL TANK
734 VINYARD AVE NE
SALEM, OR 97301

Site 5 of 5 in cluster T

Relative:
Higher

Actual:
220 ft.

LUST:

Region:	Western Region
Facility ID:	24-99-4113
Cleanup Received Date:	08/17/1999
Cleanup Start Date:	08/11/1999
Cleanup Complete Date:	**Not reported**

Database(s): **LUST**
EDR ID Number: **S104024442**
EPA ID Number: **N/A**

R83
WSW
1/8-1/4
0.242 mi.
1278 ft.

HEATING OIL TANK
2220 HAYDEN ST NE
SALEM, OR 97301

Site 5 of 5 in cluster R

Relative:
Lower

Actual:
180 ft.

LUST:

Region:	Western Region
Facility ID:	24-08-0006
Cleanup Received Date:	01/03/2008
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**05/21/2008**

Database(s): **LUST**
EDR ID Number: **S108987243**
EPA ID Number: **N/A**

V84
NNW
1/8-1/4
0.245 mi.
1291 ft.

HEATING OIL TANK
1450 23RD ST NE
SALEM, OR 97301

Site 1 of 5 in cluster V

Relative:
Lower

Actual:
209 ft.

LUST:

Region:	Western Region
Facility ID:	24-09-0932
Cleanup Received Date:	09/21/2009
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**04/05/2010**

Database(s): **LUST**
EDR ID Number: **S110047924**
EPA ID Number: **N/A**

85
SW
1/8-1/4
0.245 mi.
1292 ft.

HEATING OIL TANK
509 23RD STREET NE
SALEM, OR 97301

Relative:
Lower

Actual:
183 ft.

LUST:

Region:	Western Region
Facility ID:	24-95-4159
Cleanup Received Date:	11/21/1995
Cleanup Start Date:	11/21/1995
Cleanup Complete Date:	**Not reported**

Database(s): **LUST**
EDR ID Number: **S102590271**
EPA ID Number: **N/A**

W86 **HEATING OIL TANK** **LUST** **S112059116**
North **1440 EVERGREEN NE** **N/A**
1/8-1/4 **SALEM, OR 97301**
0.246 mi.
1301 ft. **Site 1 of 2 in cluster W**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-12-0603
Cleanup Received Date: 06/05/2012
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

V87 **HEATING OIL TANK** **LUST** **S110292541**
NNW **1460 23RD ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.252 mi.
1329 ft. **Site 2 of 5 in cluster V**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-10-0220
Cleanup Received Date: 03/19/2010
Cleanup Start Date: 03/16/2010
Cleanup Complete Date: 09/19/2011

U88 **HEATING OIL TANK** **LUST** **S106856520**
WNW **1040 20TH STREET NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.257 mi.
1356 ft. **Site 2 of 2 in cluster U**

Relative:
Lower

Actual:
195 ft.

LUST:
Region: Western Region
Facility ID: 24-05-0246
Cleanup Received Date: 02/11/2005
Cleanup Start Date: 02/17/2005
Cleanup Complete Date: 07/24/2006

X89 **HEATING OIL TANK** **LUST** **S108247133**
WNW **1065 20TH ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.258 mi.
1361 ft. **Site 1 of 2 in cluster X**

Relative:
Lower

Actual:
195 ft.

LUST:
Region: Western Region
Facility ID: 24-06-1478
Cleanup Received Date: 08/14/2006
Cleanup Start Date: 08/15/2006
Cleanup Complete Date: 11/07/2006

V90
NNW
1/4-1/2
0.259 mi.
1367 ft.

HEATING OIL TANK
2245 LADD AVE NE
SALEM, OR 97303

Site 3 of 5 in cluster V

LUST **S104974187**
N/A

Relative:
Lower

Actual:
207 ft.

LUST:
Region: Western Region
Facility ID: 24-01-5879
Cleanup Received Date: 05/10/2001
Cleanup Start Date: 05/07/2001
Cleanup Complete Date: 03/20/2002

91
North
1/4-1/2
0.259 mi.
1367 ft.

HEATING OIL TANK
2735 LADD AVE. NE
SALEM, OR 97301

LUST **S108572090**
N/A

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-06-2112
Cleanup Received Date: 12/06/2006
Cleanup Start Date: Not reported
Cleanup Complete Date: 01/09/2007

X92
WNW
1/4-1/2
0.259 mi.
1367 ft.

HEATING OIL TANK
1125 20TH STREET SE
SALEM, OR 97301

Site 2 of 2 in cluster X

LUST **S101210393**
N/A

Relative:
Lower

Actual:
195 ft.

LUST:
Region: Western Region
Facility ID: 24-94-4125
Cleanup Received Date: 08/24/1994
Cleanup Start Date: 08/17/1994
Cleanup Complete Date: Not reported

93
NNW
1/4-1/2
0.261 mi.
1379 ft.

HEATING OIL TANK
2225 LADD AVENUE NE
SALEM, OR 97301

LUST **S103248445**
N/A

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-98-4026
Cleanup Received Date: 02/26/1998
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

V94 **HEATING OIL TANK** **LUST** **S108060186**
NNW **1470 23RD ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.263 mi.
1391 ft. **Site 4 of 5 in cluster V**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-06-0602
Cleanup Received Date: 04/10/2006
Cleanup Start Date: 04/10/2006
Cleanup Complete Date: Not reported

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95 **HEATING OIL TANK** **LUST** **S105556175**
West **805 THOMPSON AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.264 mi.
1395 ft.

Relative:
Lower

Actual:
176 ft.

LUST:
Region: Western Region
Facility ID: 24-02-0668
Cleanup Received Date: 08/18/2002
Cleanup Start Date: 08/18/2002
Cleanup Complete Date: 09/27/2002

V96 **HEATING OIL TANK** **LUST** **S105710973**
NNW **1475 23TH STREET NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.269 mi.
1419 ft. **Site 5 of 5 in cluster V**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-02-1221
Cleanup Received Date: 10/25/2002
Cleanup Start Date: 11/05/2002
Cleanup Complete Date: 06/08/2007

Y97 **HEATING OIL TANK** **LUST** **S106475181**
ESE **663 ILLINOIS AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.270 mi.
1423 ft. **Site 1 of 2 in cluster Y**

Relative:
Higher

Actual:
220 ft.

LUST:
Region: Western Region
Facility ID: 24-04-1007
Cleanup Received Date: 06/03/2004
Cleanup Start Date: 06/03/2004
Cleanup Complete Date: 07/13/2004

Y98
ESE
1/4-1/2
0.273 mi.
1442 ft.

HEATING OIL TANK
654 ILLINOIS AVE NE
SALEM, OR 97301
Site 2 of 2 in cluster Y

LUST **S104657853**
N/A

Relative:
Higher

Actual:
220 ft.

LUST:
Region: Western Region
Facility ID: 24-00-5507
Cleanup Received Date: 08/04/2000
Cleanup Start Date: 08/03/2000
Cleanup Complete Date: 09/29/2000

Z99
WSW
1/4-1/2
0.277 mi.
1465 ft.

HEATING OIL TANK
2190 CENTER ST NE
SALEM, OR 97301
Site 1 of 2 in cluster Z

LUST **S104974195**
N/A

Relative:
Lower

Actual:
175 ft.

LUST:
Region: Western Region
Facility ID: 24-01-6039
Cleanup Received Date: 05/29/2001
Cleanup Start Date: 05/25/2001
Cleanup Complete Date: 07/18/2001

AA100
SW
1/4-1/2
0.282 mi.
1487 ft.

HEATING OIL TANK
475 NE 24TH ST
SALEM, OR 97301
Site 1 of 2 in cluster AA

LUST **S109577965**
N/A

Relative:
Lower

Actual:
183 ft.

LUST:
Region: Western Region
Facility ID: 24-09-0130
Cleanup Received Date: 02/19/2009
Cleanup Start Date: Not reported
Cleanup Complete Date: 07/20/2009

W101
North
1/4-1/2
0.286 mi.
1510 ft.

HEATING OIL TANK
1480 NE EVERGREEN AVENUE
SALEM, OR 97301
Site 2 of 2 in cluster W

LUST **S105981157**
N/A

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-03-1840
Cleanup Received Date: 09/03/2003
Cleanup Start Date: 09/04/2003
Cleanup Complete Date: 12/15/2003

AA102
SW
1/4-1/2
0.293 mi.
1549 ft.

HEATING OIL TANK
455 24TH ST NE
SALEM, OR 97301

Site 2 of 2 in cluster AA

Relative:
Lower

Actual:
183 ft.

LUST:

Region:	Western Region
Facility ID:	24-08-0529
Cleanup Received Date:	05/12/2008
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**07/09/2008**

Database(s): **LUST**
EDR ID Number: **S109204339**
EPA ID Number: **N/A**

Z103
WSW
1/4-1/2
0.293 mi.
1549 ft.

HEATING OIL TANK
2155 CENTER ST NE
SALEM, OR 97301

Site 2 of 2 in cluster Z

Relative:
Lower

Actual:
175 ft.

LUST:

Region:	Western Region
Facility ID:	24-96-4030
Cleanup Received Date:	02/21/1996
Cleanup Start Date:	02/20/1996
Cleanup Complete Date:	**07/29/1997**

Database(s): **LUST**
EDR ID Number: **S102417835**
EPA ID Number: **N/A**

AB104
NNW
1/4-1/2
0.294 mi.
1552 ft.

HEATING OIL TANK
1490 23RD ST NE
SALEM, OR 97301

Site 1 of 2 in cluster AB

Relative:
Lower

Actual:
208 ft.

LUST:

Region:	Western Region
Facility ID:	24-10-1114
Cleanup Received Date:	11/05/2010
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**11/23/2010**

Database(s): **LUST**
EDR ID Number: **S110737659**
EPA ID Number: **N/A**

105
ESE
1/4-1/2
0.295 mi.
1560 ft.

HEATING OIL TANK
3254 CENTER ST NE
SALEM, OR 97301

Relative:
Higher

Actual:
219 ft.

LUST:

Region:	Western Region
Facility ID:	24-99-4172
Cleanup Received Date:	12/07/1999
Cleanup Start Date:	10/21/1999
Cleanup Complete Date:	**08/21/2001**

Database(s): **LUST**
EDR ID Number: **S104304616**
EPA ID Number: **N/A**

AC106 **HEATING OIL TANK** **LUST** **S108572146**
North **1495 EVERGREEN AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.300 mi.
1582 ft. **Site 1 of 5 in cluster AC**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-07-0923
Actual: Cleanup Received Date: 06/25/2007
208 ft. Cleanup Start Date: Not reported
Cleanup Complete Date: 10/22/2007

AC107 **HEATING OIL TANK** **LUST** **S105981130**
North **2640 WINDSOR AVENUE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.303 mi.
1599 ft. **Site 2 of 5 in cluster AC**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-03-1280
Actual: Cleanup Received Date: 06/26/2003
208 ft. Cleanup Start Date: 07/01/2003
Cleanup Complete Date: 09/11/2003

---

108 **HEATING OIL TANK** **LUST** **S104907823**
East **786 NORMAN DR NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.318 mi.
1679 ft.

Relative: LUST:
Higher
Region: Western Region
Facility ID: 24-01-5110
Actual: Cleanup Received Date: 01/19/2001
217 ft. Cleanup Start Date: 01/17/2001
Cleanup Complete Date: 02/08/2001

AC109 **HEATING OIL TANK** **LUST** **S108572099**
North **1515 EVERGREEN AVE. NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.318 mi.
1680 ft. **Site 3 of 5 in cluster AC**

Relative: LUST:
Lower
Region: Western Region
Facility ID: 24-07-0731
Actual: Cleanup Received Date: 05/24/2007
207 ft. Cleanup Start Date: Not reported
Cleanup Complete Date: 07/11/2007

110
NNE
1/4-1/2
0.319 mi.
1684 ft.

HEATING OIL TANK
3015 WINDSOR AVENUE NE
SALEM, OR 97301

LUST **S105981137**
N/A

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-03-1433
Cleanup Received Date: 07/17/2003
Cleanup Start Date: 07/17/2003
Cleanup Complete Date: 04/30/2004

AD111
NE
1/4-1/2
0.325 mi.
1717 ft.

HEATING OIL TANK
3207 LADD AVENUE NE
SALEM, OR 97301
Site 1 of 3 in cluster AD

LUST **S104657822**
N/A

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-00-5061
Cleanup Received Date: 06/02/2000
Cleanup Start Date: 06/02/2000
Cleanup Complete Date: Not reported

AC112
North
1/4-1/2
0.326 mi.
1723 ft.

HEATING OIL TANK
1525 EVERGREEN AVE NE
SALEM, OR 97301
Site 4 of 5 in cluster AC

LUST **S101746062**
N/A

Relative:
Lower

Actual:
207 ft.

LUST:
Region: Western Region
Facility ID: 24-95-5201
Cleanup Received Date: 11/06/1995
Cleanup Start Date: Not reported
Cleanup Complete Date: 04/11/2007

AD113
NE
1/4-1/2
0.333 mi.
1757 ft.

HEATING OIL TANK
3228 LADD AVE NE
SALEM, OR 97301
Site 2 of 3 in cluster AD

LUST **S111005205**
N/A

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-11-0045
Cleanup Received Date: 01/20/2011
Cleanup Start Date: Not reported
Cleanup Complete Date: 02/16/2011

114
WSW
1/4-1/2
0.333 mi.
1759 ft.

SCHULER CORPORATION, PLANT I
560 21ST ST NE
SALEM, OR 97301

LUST
UST
OR HAZMAT
HSIS

U004015398
N/A

Relative:
Lower

Actual:
177 ft.

LUST:

Region:	Western Region
Facility ID:	24-89-4131
Cleanup Received Date:	10/31/1989
Cleanup Start Date:	10/31/1989
Cleanup Complete Date:	**07/27/2004**

Region:	Western Region
Facility ID:	24-90-4140
Cleanup Received Date:	07/12/1990
Cleanup Start Date:	06/15/1990
Cleanup Complete Date:	**07/27/2004**

Region:	Western Region
Facility ID:	24-06-1076
Cleanup Received Date:	04/10/2006
Cleanup Start Date:	04/08/2006
Cleanup Complete Date:	**06/30/2006**

UST:

Facility ID:	8960
Facility Telephone:	(503)364-8481
Permittee Name:	KENNETH F. PFARR, DIRECTOR OF OPERATIONS
Number of Permitted Tanks:	Not reported
Active Tanks:	Not reported
Decommissioned Tanks:	1
Number of Tanks:	1

HAZMAT:

Responsble Party:	SCHULER CORP
RP Company:	PLANT #1
RP Address:	560 21 SE
RP City,St,Zip:	SALEM, OR 97301
Facility ID:	920258
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	0005886245
Osfm Incident Report Number:	920258
Dept. Responding:	SALEM FD
Person Making Report:	LARRY MILETTN
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	0005886245
Date Of Incident:	07/20/1992
Call Time:	9:20:00 PM
In Route:	12:00:00 AM
Arrival:	9:35:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	10:16:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	03-321
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Private Land
Area Type:	Industrial
Responsible Party(Ies):	SCHULER CORP
Company:	PLANT #1
Respcontact:	Not reported
Address:	560 21 SE
Resp City:	SALEM
Resp State:	OR
Resp ZipCode:	97301
Phone:	0003648481
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Not reported
Cause:	Unknown
Vehicle And Cargo:	0
Fixed Property:	0
Total Loss:	$0.00

Chemical:

Chemical Info:	6326
Chemical Id:	35430
Incident Id:	920258

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

Chemical Name: UNKNOWN CHEMICAL
UNNA: Not reported
Amount At Risk: 0
Amount Released: 0
Amount Measured: 0
Biological: False
Radiological: False

Chemical Id: 35430
Chemical Name: UNKNOWN CHEMICAL
Hazardous Ingredient: UNKNOWN CHEMICAL
Hazardous Class 1: 9.0
Hazardous Class 2: Not reported
Hazardous Rank: 2
Case Number: Not reported
UNNA Number: Not reported
EPA Pest Reg: Not reported
EHA Chem: Not reported
PSM Chem: Not reported
CAA 112R Chem: Not reported

Method:
Method Used Id: 1659
Incident Id: 920258
Identity Method: 6

Released:
Release Behavior Id: 1335
Incident Id: 920258
Behavior: 1

Responsble Party: Not reported
RP Company: SCHULERS CORP
RP Address: 560 21ST SE
RP City,St,Zip: SALEM, OR 97302
Facility ID: 920329
OERS Number: Not reported
Dept Rsp: SALEM FD
Narrative: Not reported
Property Loss: Not reported
Amount Released: Not reported
Service County: Not reported
Service Name: Not reported
Incident Type: Not reported
Civilian Casualty Activity: Not reported
Chemical Name: Not reported
Hazmat Area Affected: Not reported
Hazmat Area Evacuated: Not reported
Hazmat Container Type: Not reported
Hazmat Physical State Released: Not reported
Hazmat Released Into: Not reported
Hazmat Released Volume Units: Not reported
Hazmat Released Weight Units: Not reported
Hazmat Released From: Not reported
Hazmat Area Affected Measurement: Not reported

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	Not reported
Osfm Incident Report Number:	920329
Dept. Responding:	SALEM FD
Person Making Report:	LAWERENCE AGUILAR
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	Not reported
Date Of Incident:	10/24/1992
Call Time:	9:05:00 AM
In Route:	12:00:00 AM
Arrival:	9:09:00 AM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	10:07:00 AM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	92-09278
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Private Land
Area Type:	Industrial
Responsible Party(Ies):	Not reported
Company:	SCHULERS CORP
Respcontact:	Not reported
Address:	560 21ST SE
Resp City:	SALEM
Resp State:	OR
Resp ZipCode:	97302
Phone:	0003648481
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Railcar Connect
Cause:	Unknown
Vehicle And Cargo:	30
Fixed Property:	0
Total Loss:	$30.00

Chemical:

Chemical Info:	6358
Chemical Id:	35430
Incident Id:	920329
Chemical Name:	UNKNOWN CHEMICAL

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

UNNA: Not reported
Amount At Risk: 0
Amount Released: 0
Amount Measured: 0
Biological: False
Radiological: False

Chemical Id: 35430
Chemical Name: UNKNOWN CHEMICAL
Hazardous Ingredient: UNKNOWN CHEMICAL
Hazardous Class 1: 9.0
Hazardous Class 2: Not reported
Hazardous Rank: 2
Case Number: Not reported
UNNA Number: Not reported
EPA Pest Reg: Not reported
EHA Chem: Not reported
PSM Chem: Not reported
CAA 112R Chem: Not reported

Method:
Method Used Id: 1674
Incident Id: 920329
Identity Method: 6

Method Used Id: 3076
Incident Id: 920329
Identity Method: 3

Method Used Id: 4976
Incident Id: 920329
Identity Method: 5

Released:
Release Behavior Id: 1350
Incident Id: 920329
Behavior: 1

Narrative:
Narrative Id: 3947
Incident Id: 920329
Incident Narrative: RELEASE OCCUED DO TO FAILURE TO HOSE AT FILL VALVE
Incident Date: 10/24/1992

HSIS:
Facility Id: 062734
Chemical Is Extremely Hazardous Substance (EHS): No
Department Or Division Of Company: Not reported
Facility Has Written Emergency Plan: No
Contains 112R: No
NAICS Code 1: 423310
NAICS Desc 1: LUMBER, PLYWOOD, MILLWORK, AND WOOD PANEL MERCHANT WHOLESALERS
NAICS Code 2: 321918
NAICS Desc 2: OTHER MILLWORK (INCLUDING FLOORING)

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

Manager Name: JOHN HANEY
Business Phone: 5033630769
Mailing Address: PO BOX 12872
Mailing City,St,Zip: SALEM, OR 97309
No. of Employees: 12
Day Phone: 5033630769
Placard: Yes
Fire Dept Code: 0321
Sprinkler System: Yes
Emergency Contact: JOHN HANEY
Emergency Procedure: Not reported
Business Type: WHSLE LUMBER & PLYWOOD-MILLWORK

Facility:

Facility Id:	062734
Physical State Of The Substance:	3
Physical State:	GAS
Average Amount Possessed During The Year Code:	01
Maximum Amount Possessed During The Year Code:	01
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	C
Description:	TANK INSIDE BUILDING
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	2
Pressure Description:	GREATER THAN NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	5-9
Description Of The Avg Qnty Code:	5-9
Most Hazardous Ingridient:	PROPANE
United Nations/north America 4 Digit Class Number:	1075
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.1
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1075
Chemical Abstract Service Identifier Number:	74986
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.1
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported

SCHULER CORPORATION, PLANT I (Continued) **U004015398**

Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: No
Contains 313: No

115
NNE
1/4-1/2
0.335 mi.
1768 ft.

HEATING OIL TANK **LUST** **S105710958**
3109 WINDSOR AVE NE **N/A**
SALEM, OR 97303

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-02-0973
Cleanup Received Date: 09/23/2002
Cleanup Start Date: 09/17/2002
Cleanup Complete Date: 10/23/2002

AB116
NNW
1/4-1/2
0.335 mi.
1770 ft.

HEATING OIL TANK **LUST** **S106116716**
1530 23RD NE **N/A**
SALEM, OR 97301
Site 2 of 2 in cluster AB

Relative:
Lower

Actual:
204 ft.

LUST:
Region: Western Region
Facility ID: 24-03-2492
Cleanup Received Date: 11/28/2003
Cleanup Start Date: 11/28/2003
Cleanup Complete Date: 12/03/2003

AE117
NNW
1/4-1/2
0.338 mi.
1784 ft.

HEATING OIL TANK **LUST** **S102590367**
1530 24TH STREET NE **N/A**
SALEM, OR 97303
Site 1 of 2 in cluster AE

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-95-4043
Cleanup Received Date: 03/29/1995
Cleanup Start Date: 04/18/1995
Cleanup Complete Date: 08/22/1996

AC118 **HEATING OIL TANK** **LUST** **S105464140**
North **1540 EVERGREEN AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.340 mi.
1793 ft. **Site 5 of 5 in cluster AC**

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-02-5904
Cleanup Received Date: 05/15/2002
Cleanup Start Date: 05/08/2002
Cleanup Complete Date: 06/26/2002

AF119 **HEATING OIL TANK** **LUST** **S106776983**
NNW **1505 21 ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.340 mi.
1796 ft. **Site 1 of 2 in cluster AF**

Relative:
Lower

Actual:
201 ft.

LUST:
Region: Western Region
Facility ID: 24-04-2047
Cleanup Received Date: 10/07/2004
Cleanup Start Date: 10/07/2004
Cleanup Complete Date: Not reported

AD120 **HEATING OIL TANK** **LUST** **S102778678**
NE **3258 LADD AVENUE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.346 mi.
1828 ft. **Site 3 of 3 in cluster AD**

Relative:
Lower

Actual:
209 ft.

LUST:
Region: Western Region
Facility ID: 24-92-5037
Cleanup Received Date: 01/30/1992
Cleanup Start Date: 01/30/1992
Cleanup Complete Date: 09/09/1992

AG121 **HEATING OIL TANK** **LUST** **S106475156**
NNW **1545 23RD STREET NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.347 mi.
1831 ft. **Site 1 of 3 in cluster AG**

Relative:
Lower

Actual:
203 ft.

LUST:
Region: Western Region
Facility ID: 24-04-0447
Cleanup Received Date: 03/23/2004
Cleanup Start Date: 03/23/2004
Cleanup Complete Date: 04/12/2004

AH122 **HEATING OIL TANK** **LUST** **S105247180**
North **2710 ALBERTA AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.347 mi.
1833 ft. **Site 1 of 3 in cluster AH**

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-01-8645
Cleanup Received Date: 12/28/2001
Cleanup Start Date: 12/28/2001
Cleanup Complete Date: 02/05/2002

AH123 **HEATING OIL TANK** **LUST** **S105076283**
North **2665 ALBERTA AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97303**
0.349 mi.
1842 ft. **Site 2 of 3 in cluster AH**

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-01-6386
Cleanup Received Date: 07/05/2001
Cleanup Start Date: 07/05/2001
Cleanup Complete Date: 09/11/2001

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124 **HEATING OIL TANK** **LUST** **S102590341**
North **1585 25TH NE** **N/A**
1/4-1/2 **SALEM, OR 97303**
0.351 mi.
1854 ft.

Relative:
Lower

Actual:
204 ft.

LUST:
Region: Western Region
Facility ID: 24-94-5152
Cleanup Received Date: 09/02/1994
Cleanup Start Date: 08/02/1996
Cleanup Complete Date: 06/22/2005

AF125 **HEATING OIL TANK** **LUST** **S107595997**
NNW **1530 21ST STREET NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.352 mi.
1859 ft. **Site 2 of 2 in cluster AF**

Relative:
Lower

Actual:
201 ft.

LUST:
Region: Western Region
Facility ID: 24-05-2433
Cleanup Received Date: 11/17/2005
Cleanup Start Date: 11/18/2005
Cleanup Complete Date: 12/16/2005

AE126 **HEATING OIL TANK** **LUST** **S103839550**
NNW **1550 24TH ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.356 mi.
1880 ft. **Site 2 of 2 in cluster AE**

Relative:
Lower

Actual:
204 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4012
Cleanup Received Date: 02/01/1999
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

AI127 **HEATING OIL TANK** **LUST** **S110510198**
NE **3190 WINDSOR AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.356 mi.
1881 ft. **Site 1 of 2 in cluster AI**

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-10-0483
Cleanup Received Date: 05/23/2010
Cleanup Start Date: Not reported
Cleanup Complete Date: 06/14/2010

AH128 **HEATING OIL TANK** **LUST** **S110638886**
North **1565 EVERGREEN AVE NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.369 mi.
1948 ft. **Site 3 of 3 in cluster AH**

Relative:
Lower

Actual:
204 ft.

LUST:
Region: Western Region
Facility ID: 24-10-0880
Cleanup Received Date: 08/29/2010
Cleanup Start Date: Not reported
Cleanup Complete Date: 11/12/2010

AG129 **HEATING OIL TANK** **LUST** **S104189463**
NNW **1570 23RD ST NE** **N/A**
1/4-1/2 **SALEM, OR 97301**
0.369 mi.
1948 ft. **Site 2 of 3 in cluster AG**

Relative:
Lower

Actual:
201 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4142
Cleanup Received Date: 09/27/1999
Cleanup Start Date: 09/22/1999
Cleanup Complete Date: 01/28/2000

130
SW
1/4-1/2
0.376 mi.
1986 ft.

HEATING OIL TANK — **LUST** — **S109051928**
381 ROSE ST NE — **N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
181 ft.

LUST:
Region: Western Region
Facility ID: 24-08-0033
Cleanup Received Date: 01/11/2008
Cleanup Start Date: Not reported
Cleanup Complete Date: 04/10/2008

AI131
NE
1/4-1/2
0.379 mi.
2002 ft.

HEATING OIL TANK — **LUST** — **S103839571**
3260 WINDSOR AVENUE NE — **N/A**
SALEM, OR 97301
Site 2 of 2 in cluster AI

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-98-4015
Cleanup Received Date: 01/27/1998
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

AJ132
NE
1/4-1/2
0.385 mi.
2034 ft.

HEATING OIL TANK — **LUST** — **S104657825**
3280 WINDSOR AVE NE — **N/A**
SALEM, OR 97301
Site 1 of 2 in cluster AJ

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-00-5141
Cleanup Received Date: 06/20/2000
Cleanup Start Date: 06/20/2000
Cleanup Complete Date: 12/05/2000

AJ133
NE
1/4-1/2
0.386 mi.
2039 ft.

HEATING OIL TANK — **LUST** — **S104657826**
3279 WINDSOR AVENUE NE — **N/A**
SALEM, OR 97301
Site 2 of 2 in cluster AJ

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-00-5142
Cleanup Received Date: 06/20/2000
Cleanup Start Date: 06/20/2000
Cleanup Complete Date: 11/21/2000

134
NW
1/4-1/2
0.387 mi.
2044 ft.

HEATING OIL TANK
1940 VIRGINIA ST NE
SALEM, OR 97301

LUST **S100498244**
N/A

Relative:
Lower

Actual:
191 ft.

LUST:
Region: Western Region
Facility ID: 24-92-4152
Cleanup Received Date: 08/19/1992
Cleanup Start Date: 08/18/1992
Cleanup Complete Date: 08/19/1992

AG135
NNW
1/4-1/2
0.389 mi.
2053 ft.

HEATING OIL TANK
1595 23RD ST NE
SALEM, OR 97301
Site 3 of 3 in cluster AG

LUST **S104024436**
N/A

Relative:
Lower

Actual:
197 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4128
Cleanup Received Date: 08/31/1999
Cleanup Start Date: 08/31/1999
Cleanup Complete Date: Not reported

AK136
NNW
1/4-1/2
0.389 mi.
2054 ft.

HEATING OIL TANK
2150 MARKET ST NE
SALEM, OR 97301
Site 1 of 2 in cluster AK

LUST **S102417832**
N/A

Relative:
Lower

Actual:
198 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4009
Cleanup Received Date: 01/02/1996
Cleanup Start Date: 01/26/1996
Cleanup Complete Date: 04/14/2011

AL137
West
1/4-1/2
0.389 mi.
2055 ft.

HEATING OIL TANK
730 20TH ST NE
SALEM, OR 97301
Site 1 of 2 in cluster AL

LUST **S111332480**
N/A

Relative:
Lower

Actual:
171 ft.

LUST:
Region: Western Region
Facility ID: 24-11-0945
Cleanup Received Date: 09/12/2011
Cleanup Start Date: Not reported
Cleanup Complete Date: 04/09/2012

AM138
NNE
1/4-1/2
0.391 mi.
2062 ft.

HEATING OIL TANK
3102 ALBERTA AVE NE
SALEM, OR 97301

Site 1 of 2 in cluster AM

LUST **S107844847**
N/A

Relative:
Lower

Actual:
208 ft.

LUST:
Region: Western Region
Facility ID: 24-06-0297
Cleanup Received Date: 02/19/2006
Cleanup Start Date: 02/22/2006
Cleanup Complete Date: 03/14/2006

139
WNW
1/4-1/2
0.391 mi.
2065 ft.

HEATING OIL TANK
785 20TH ST NE
SALEM, OR 97301

LUST **S110510153**
N/A

Relative:
Lower

Actual:
179 ft.

LUST:
Region: Western Region
Facility ID: 24-10-0382
Cleanup Received Date: 04/30/2010
Cleanup Start Date: Not reported
Cleanup Complete Date: 10/26/2010

AK140
NNW
1/4-1/2
0.392 mi.
2071 ft.

HELIOTROPE
2060 MARKET
SALEM, OR 97301

Site 2 of 2 in cluster AK

LUST **S100498220**
N/A

Relative:
Lower

Actual:
197 ft.

LUST:
Region: Western Region
Facility ID: 24-91-4125
Cleanup Received Date: 05/01/1991
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

AL141
West
1/4-1/2
0.393 mi.
2075 ft.

HEATING OIL TANK
1980 B STREET NE
SALEM, OR 97301

Site 2 of 2 in cluster AL

LUST **S103839551**
N/A

Relative:
Lower

Actual:
170 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4040
Cleanup Received Date: 03/05/1996
Cleanup Start Date: 03/04/1996
Cleanup Complete Date: Not reported

AN142
NNW
1/4-1/2
0.394 mi.
2082 ft.

HEATING OIL TANK
2295 NE MARKET STREET
SALEM, OR 97301

Site 1 of 2 in cluster AN

Relative:
Lower

Actual:
196 ft.

LUST:

Region:	Western Region
Facility ID:	24-02-0872
Cleanup Received Date:	09/16/2002
Cleanup Start Date:	09/17/2002
Cleanup Complete Date:	**12/02/2002**

LUST **S105556186**
N/A

AM143
NNE
1/4-1/2
0.396 mi.
2093 ft.

HEATING OIL TANK
3152 ALBERTA AVE NE
SALEM, OR 97301

Site 2 of 2 in cluster AM

Relative:
Lower

Actual:
207 ft.

LUST:

Region:	Western Region
Facility ID:	24-11-0321
Cleanup Received Date:	04/14/2011
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**05/16/2011**

LUST **S111210473**
N/A

AN144
NNW
1/4-1/2
0.401 mi.
2118 ft.

HEATING OIL TANK
2390 MARKET STREET NE
SALEM, OR 97301

Site 2 of 2 in cluster AN

Relative:
Lower

Actual:
197 ft.

LUST:

Region:	Western Region
Facility ID:	24-97-4174
Cleanup Received Date:	12/11/1997
Cleanup Start Date:	12/16/1997
Cleanup Complete Date:	**04/21/2000**

LUST **S103839558**
N/A

AO145
SE
1/4-1/2
0.411 mi.
2169 ft.

HEATING OIL TANK
535 OREGON AVE NE
SALEM, OR 97301

Site 1 of 2 in cluster AO

Relative:
Higher

Actual:
218 ft.

LUST:

Region:	Western Region
Facility ID:	24-01-6183
Cleanup Received Date:	06/13/2001
Cleanup Start Date:	06/12/2001
Cleanup Complete Date:	**08/21/2001**

LUST **S105076259**
N/A

146
ENE
1/4-1/2
0.412 mi.
2177 ft.

TRANSPORTATION CENTER
998 HAWTHORNE AVE NE
SALEM, OR 97301

Database(s): **LUST, UST**
EDR ID Number: **U000433838**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
212 ft.

LUST:

Region:	Western Region
Facility ID:	24-84-4006
Cleanup Received Date:	07/10/1984
Cleanup Start Date:	07/11/1984
Cleanup Complete Date:	**10/16/2003**

Region:	Western Region
Facility ID:	24-92-4222
Cleanup Received Date:	11/12/1992
Cleanup Start Date:	11/11/1992
Cleanup Complete Date:	**10/16/2003**

UST:

Facility ID:	9358
Facility Telephone:	(503) 399-3108
Permittee Name:	HOWARD GIROD, ASST MANAGER
Number of Permitted Tanks:	Not reported
Active Tanks:	Not reported
Decommissioned Tanks:	4
Number of Tanks:	4

147
ESE
1/4-1/2
0.415 mi.
2193 ft.

HEATING OIL TANK
647 HAWTHORNE AVE NE
SALEM, OR 97301

Database(s): **LUST**
EDR ID Number: **S105556164**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
214 ft.

LUST:

Region:	Western Region
Facility ID:	24-02-0501
Cleanup Received Date:	07/26/2002
Cleanup Start Date:	07/17/2002
Cleanup Complete Date:	**09/13/2002**

AO148
SE
1/4-1/2
0.418 mi.
2205 ft.

HEATING OIL TANK
525 OREGON AVE NE
SALEM, OR 97301

Site 2 of 2 in cluster AO

Database(s): **LUST**
EDR ID Number: **S108572117**
EPA ID Number: **N/A**

Relative:
Higher

Actual:
218 ft.

LUST:

Region:	Western Region
Facility ID:	24-06-1997
Cleanup Received Date:	11/08/2006
Cleanup Start Date:	Not reported
Cleanup Complete Date:	**01/05/2007**

149
NE
1/4-1/2
0.422 mi.
2229 ft.

HEATING OIL TANK
3261 ALBERTA AVE NE
SALEM, OR 97301

LUST **S109204332**
N/A

Relative:
Lower

Actual:
207 ft.

LUST:
Region: Western Region
Facility ID: 24-08-0716
Cleanup Received Date: 06/13/2008
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

AP150
WSW
1/4-1/2
0.424 mi.
2238 ft.

HEATING OIL TANK
1960 CENTER STREET NE
SALEM, OR 97301
Site 1 of 2 in cluster AP

LUST **S102778685**
N/A

Relative:
Lower

Actual:
176 ft.

LUST:
Region: Western Region
Facility ID: 24-94-4097
Cleanup Received Date: 07/18/1994
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

AQ151
WSW
1/4-1/2
0.427 mi.
2252 ft.

HEATING OIL TANK
398 21ST NE
SALEM, OR 97303
Site 1 of 2 in cluster AQ

LUST **S106116719**
N/A

Relative:
Lower

Actual:
184 ft.

LUST:
Region: Western Region
Facility ID: 24-03-2557
Cleanup Received Date: 12/12/2003
Cleanup Start Date: 12/15/2003
Cleanup Complete Date: 02/18/2004

AQ152
WSW
1/4-1/2
0.431 mi.
2277 ft.

HEATING OIL TANK
388 21ST ST NE
SALEM, OR 97301
Site 2 of 2 in cluster AQ

LUST **S111210479**
N/A

Relative:
Lower

Actual:
184 ft.

LUST:
Region: Western Region
Facility ID: 24-11-0480
Cleanup Received Date: 05/19/2011
Cleanup Start Date: Not reported
Cleanup Complete Date: 01/04/2012

153
NW
1/4-1/2
0.431 mi.
2278 ft.

HEATING OIL TANK
1520 NE 19TH ST
SALEM, OR 97301

LUST **S107844841**
N/A

Relative:
Lower

Actual:
189 ft.

LUST:
Region: Western Region
Facility ID: 24-06-0361
Cleanup Received Date: 03/02/2006
Cleanup Start Date: 03/02/2006
Cleanup Complete Date: 03/28/2006

154
North
1/4-1/2
0.432 mi.
2283 ft.

HEATING OIL TANK
1730 24TH STREET NE
SALEM, OR 97301

LUST **S102076279**
N/A

Relative:
Lower

Actual:
197 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4003
Cleanup Received Date: 01/11/1996
Cleanup Start Date: Not reported
Cleanup Complete Date: Not reported

155
West
1/4-1/2
0.433 mi.
2287 ft.

HEATING OIL TANK
1875 B STREET NE
SALEM, OR 97301

LUST **S107596009**
N/A

Relative:
Lower

Actual:
170 ft.

LUST:
Region: Western Region
Facility ID: 24-05-2271
Cleanup Received Date: 10/21/2005
Cleanup Start Date: 10/21/2005
Cleanup Complete Date: 12/11/2006

AR156
North
1/4-1/2
0.435 mi.
2297 ft.

HEATING OIL TANK
2794 NE MARKET STREET
SALEM, OR 97301

Site 1 of 2 in cluster AR

LUST **S106475147**
N/A

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-04-0262
Cleanup Received Date: 02/27/2004
Cleanup Start Date: 03/02/2004
Cleanup Complete Date: 04/12/2004

AS157
ENE
1/4-1/2
0.436 mi.
2303 ft.

BRATTAIN INTERNATIONAL
1150 HAWTHORNE AVE NE
SALEM, OR 97301

Site 1 of 2 in cluster AS

Relative:
Higher

Actual:
212 ft.

LUST **1000421612**
UST **N/A**

LUST:

Region:	Western Region
Facility ID:	24-92-4073
Cleanup Received Date:	11/19/1990
Cleanup Start Date:	11/19/1990
Cleanup Complete Date:	**11/02/1993**

UST:

Facility ID:	5611
Facility Telephone:	(503) 581-1446
Permittee Name:	CREED V & NANCY M BRATTAIN
Number of Permitted Tanks:	Not reported
Active Tanks:	Not reported
Decommissioned Tanks:	3
Number of Tanks:	3

AS158
ENE
1/4-1/2
0.436 mi.
2303 ft.

BRATTAIN INTERNATIONAL TRUCKS
1150 HAWTHORNE AVE NE
SALEM, OR 97301

Site 2 of 2 in cluster AS

Relative:
Higher

Actual:
212 ft.

RCRA NonGen / NLR **1004769965**
FINDS **ORD050955624**
AST
MANIFEST
HSIS
ECSI

RCRA NonGen / NLR:

Date form received by agency:	12/31/2007
Facility name:	BRATTAIN INTERNATIONAL TRUCKS
Facility address:	1150 HAWTHORNE AVE NE SALEM, OR 97301
EPA ID:	ORD050955624
Mailing address:	PO BOX 11287 PORTLAND, OR 97211
Contact:	DEBBIE HULL
Contact address:	1150 HAWTHORNE AVE NE SALEM, OR 97301
Contact country:	US
Contact telephone:	503 285-9300 EX
Contact email:	Not reported
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	BRATTAIN INTERNATIONAL TRUCKS
Owner/operator address:	PO BOX 11287 PORTLAND, OR 97211
Owner/operator country:	US
Owner/operator telephone:	503 581 1446 EX
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/01/1970
Owner/Op end date:	Not reported
Owner/operator name:	BRATTAIN INTERNATIONAL TRUCKS

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Owner/operator address: 1150 HAWTHORNE AVE NE
PORTLAND, OR 97211
Owner/operator country: US
Owner/operator telephone: 503 285-9300
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2004
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 02/10/2003
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 12/28/2001
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/29/2001
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/13/2000
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/22/1999
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/21/1998

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/17/1997
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/03/1996
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/03/1996
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/11/1995
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 02/01/1994
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 01/11/1993
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Date form received by agency: 03/02/1992
Facility name: BRATTAIN INTERNATIONAL TRUCKS
Classification: Not a generator, verified

Hazardous Waste Summary:
Waste code: NA
Waste name: NA

Violation Status: No violations found

FINDS:

Registry ID: 110004783565

Environmental Interest/Information System

OR-DEQ (Oregon - Department Of Environmental Quality) is a regulatory agency whose job is to protect the quality of Oregon's Environment. DEQ uses a combination of technical assistance, inspections and permitting to help public and private facilities and citizens understand and comply with state and federal environmental regulations.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

AST:
Facility Id: 019130
Hazardous Substance: WASTE OIL
Reporting Quantities: 500-999
Quantity Units: GALLONS
Physical State: LIQUID
Storage 1: ABOVEGROUND TANK

OR MANIFEST:
Manifest Year: Manifest Year - 2007
EPA Id: ORD050955624
Inactive Status: 2007-12-31 00:00:00
Organization Name: Not reported
Contact First Name: Debbie
Contact Last Name: Hull
Contact Telephone Number: 503 285-9300 ext 130
Mailing Address: PO Box 11287
Mailing City: Portland
Mailing State: OR
Mailing Zip: 97211

HSIS:
Facility Id: 019130
Chemical Is Extremely Hazardous Substance (EHS): No
Department Or Division Of Company: SALEM
Facility Has Written Emergency Plan: Yes
Contains 112R: No
NAICS Code 1: 441229
NAICS Desc 1: ALL OTHER MOTOR VEHICLE DEALERS
NAICS Code 2: 441110
NAICS Desc 2: NEW CAR DEALERS
Manager Name: CREED BRATTAIN
Business Phone: 5035811446
Mailing Address: PO BOX 11287
Mailing City,St,Zip: PORTLAND, OR 97211
No. of Employees: 26
Day Phone: 5035811446
Placard: Yes
Fire Dept Code: 0321
Sprinkler System: No
Emergency Contact: ROB BRATTAIN
Emergency Procedure: INTRANET SITE AND SERVICE OFC
Business Type: TRUCK SALES & SVC

Facility:
Facility Id: 019130
Physical State Of The Substance: 3
Physical State: GAS
Average Amount Possessed During The Year Code: 10
Maximum Amount Possessed During The Year Code: 10
Applicable Unit Of Measure Code: 3
Description Of The Unit Of Measure: CUBIC FEET
Type Code: L

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Description:	CYLINDER
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	2
Pressure Description:	GREATER THAN NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	200-499
Most Hazardous Ingridient:	NITROGEN
United Nations/north America 4 Digit Class Number:	1066
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Non-flammable Gas
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.2
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1066
Chemical Abstract Service Identifier Number:	7727379
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Non-flammable Gas
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.2
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	No
Contains 313:	No

Facility Id:	019130
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	10
Maximum Amount Possessed During The Year Code:	10
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	D
Description:	STEEL DRUM
Type Code:	N
Temperature Description:	PLASTIC BOTTLE, JUG, BUCKET
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	200-499
Most Hazardous Ingridient:	ETHYLENE GLYCOL
United Nations/north America 4 Digit Class Number:	3082
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	3082
Chemical Abstract Service Identifier Number:	107211
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	No
Contains 313:	Yes

Facility Id:	019130
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	10
Maximum Amount Possessed During The Year Code:	20
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	N
Description:	PLASTIC BOTTLE, JUG, BUCKET
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	1,000-4,999
Description Of The Avg Qnty Code:	200-499
Most Hazardous Ingridient:	PETROLEUM HYDROCARBONS
United Nations/north America 4 Digit Class Number:	0000
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Combustible Material
Second Hazardous Class Code For Chemical:	Chronic Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	4.5
Hazard Class 2 Of The Chemical:	6.4
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	0000
Chemical Abstract Service Identifier Number:	64742547
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Combustible Material
Second Hazardous Class Code For Chemical:	Chronic Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	4.5
Hazard Class 2 Of The Chemical:	6.4
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Contains 112R:	Not reported
Contains EHS:	Not reported
Fertilizer:	No
Pesticide:	No
Contains 313:	Not reported

Facility Id:	019130
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	D
Description:	STEEL DRUM
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	50-199

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Most Hazardous Ingridient:	PETROLEUM DISTILLATE HYDROCARBON SOLVENT
United Nations/north America 4 Digit Class Number:	1268
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Chronic Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	6.4
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1268
Chemical Abstract Service Identifier Number:	64742478
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Chronic Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	6.4
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Contains 112R:	Not reported
Contains EHS:	Not reported
Fertilizer:	Not reported
Pesticide:	Not reported
Contains 313:	Not reported

Facility Id:	019130
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	D
Description:	STEEL DRUM
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	ETHYLENE GLYCOL
United Nations/north America 4 Digit Class Number:	0000
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Acute Health Hazard

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Second Hazardous Class Code For Chemical: Combustible Material
Third Hazardous Class Code For Chemical: Chronic Health Hazard
Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 4.5
Hazard Class 3 Of The Chemical: 6.4

Chemical:
United Nations/north America 4 Digit Class Number: 0000
Chemical Abstract Service Identifier Number: 107211
Chemical Is Extremely Hazardous Substance (EHS): No
First Hazardous Class Code For Chemical: Acute Health Hazard
Second Hazardous Class Code For Chemical: Combustible Material
Third Hazardous Class Code For Chemical: Chronic Health Hazard
Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 4.5
Hazard Class 3 Of The Chemical: 6.4
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: No
Contains 313: Yes

ECSI:

State ID Number:	193	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	No Further Action
FACA ID:	819	Further Action:	0
Lat/Long (dms):	44 56 42.00 / -122 59 29.00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	24	Qtr Section:	Not reported
Tax Lots:	300	Size:	2.6 acres
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	12/22/2011

Narrative:
NARR ID: 5729054
NARR Code: Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: (2/5/93 KPD/SAS) File information originally consisted of sampling data of contaminated waste oil. The waste oil contained five volatile organic compounds: methylene chloride (3600 ppm), 1,1,1-trichloroethane (120 ppm), benzene (100 ppm), toluene (560 ppm), and ethylbenzene (130 ppm). The waste oil had been sampled in a tank, but it was unclear what had become of the oil. In response to an information request in January 1993, Brattain provided a Hazardous Waste Manifest showing that the oil had been properly disposed of.

NARR ID: 5729438
NARR Code: Hazardous Substance/Waste Types

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: methylene chloride, 1,1,1-trichloroethane, benzene, toluene, ethylbenzene

NARR ID: 5729475
NARR Code: Site Location
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: SE corner of Center ST and Hawthorne AVE (across I-5 from Lancaster Mall).

NARR ID: 5729476
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: unknown

NARR ID: 5729477
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: (2/5/93 KPD/SAS) Contaminated waste oil was properly disposed of off-site. No release is known to have occurred on-site. No further action is necessary at this site at this time.

Permit:
Permit Agency: DEQ/SW
Permit Number: 193
Permit Type: SW Disposal
Comments: Closed 1977.

Administrative Action:

Admin ID:	723070	Action ID:	9443
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	02/05/1993	Complete Date:	02/05/1993
Substance Code:	SAS	Rank Value:	0
Employee Id:	301	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NFA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NO FURTHER STATE ACTION REQUIRED		
Further Action:	0		
Comments:	Not reported		

Admin ID:	723545	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	02/04/1993	Complete Date:	02/04/1993
Substance Code:	SAS	Rank Value:	0
Employee Id:	301	Cleanup Flag:	False

BRATTAIN INTERNATIONAL TRUCKS (Continued) **1004769965**

Created By: Not reported
Action Code: EV
Action Flag: True
Action: SITE EVALUATION
Further Action: Not reported
Comments: Not reported
Created Date: 12/17/2002
Category: Remedial Action
Action Code Flag: False

Admin ID: 718049
Agency: Dept Of Environmental Quality
Start Date: 05/11/1988
Substance Code: SAS
Employee Id: 26
Created By: Not reported
Action Code: ENTRY
Action Flag: True
Action: Site added to database
Further Action: Not reported
Comments: Not reported
Action ID: 9424
Region: Headquarters
Complete Date: Not reported
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002
Category: Administrative Action
Action Code Flag: False

Operations:
Operation Id: 131611
Operation Status: Active
Common Name: Brattain International
Yrs of Operation: Not reported
Comments: Not reported
Updated Date: 08/31/1995

AR159 **JACKSON FOOD STORES #539** **LUST U000433816**
NNE **2795 MARKET ST NE** **UST N/A**
1/4-1/2 **SALEM, OR 97303**
0.442 mi.
2333 ft. **Site 2 of 2 in cluster AR**

Relative:
Lower

Actual:
205 ft.

LUST:
Region: Western Region
Facility ID: 24-91-4189
Cleanup Received Date: 06/28/1991
Cleanup Start Date: 06/27/1991
Cleanup Complete Date: 03/07/2001

Region: Western Region
Facility ID: 24-95-4082
Cleanup Received Date: 06/07/1995
Cleanup Start Date: 09/22/1995
Cleanup Complete Date: 09/19/2000

Region: Western Region
Facility ID: 24-07-1502
Cleanup Received Date: 09/21/2007
Cleanup Start Date: 08/29/2007
Cleanup Complete Date: 09/18/2008

UST:
Facility ID: 6108
Facility Telephone: (208) 888-6061
Permittee Name: Richard Wright
Number of Permitted Tanks: 2
Active Tanks: 2

JACKSON FOOD STORES #539 (Continued) **U000433816**

Decommissioned Tanks: 9
Number of Tanks: 11

AT160
NNE
1/4-1/2
0.452 mi.
2385 ft.

HEATING OIL TANK **LUST** **S103839679**
2909 MARKET STREET **N/A**
SALEM, OR 97303

Site 1 of 2 in cluster AT

Relative:
Lower

Actual:
205 ft.

LUST:
Region: Western Region
Facility ID: 24-91-4336
Cleanup Received Date: 11/04/1991
Cleanup Start Date: 11/01/1991
Cleanup Complete Date: 06/22/1992

Region: Western Region
Facility ID: 24-97-4058
Cleanup Received Date: 04/03/1997
Cleanup Start Date: 04/03/1997
Cleanup Complete Date: 10/05/2000

161
ESE
1/4-1/2
0.457 mi.
2413 ft.

HEATING OIL TANK **LUST** **S107465660**
558 HAWTHORNE AVE NE **N/A**
SALEM, OR 97301

Relative:
Higher

Actual:
214 ft.

LUST:
Region: Western Region
Facility ID: 24-05-1572
Cleanup Received Date: 07/20/2005
Cleanup Start Date: 07/22/2005
Cleanup Complete Date: 10/26/2005

162
NNW
1/4-1/2
0.459 mi.
2422 ft.

HEATING OIL TANK **LUST** **S107465686**
1730 23RD STREET NE **N/A**
SALEM, OR 97303

Relative:
Lower

Actual:
193 ft.

LUST:
Region: Western Region
Facility ID: 24-05-2099
Cleanup Received Date: 09/29/2005
Cleanup Start Date: 09/30/2005
Cleanup Complete Date: 03/14/2006

163
WNW
1/4-1/2
0.461 mi.
2433 ft.

HEATING OIL TANK — **LUST** — **S102778692**
1180 17TH STREET NE — **N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
179 ft.

LUST:
Region: Western Region
Facility ID: 24-96-4044
Cleanup Received Date: 03/15/1996
Cleanup Start Date: 03/15/1996
Cleanup Complete Date: 11/19/1997

AP164
WSW
1/4-1/2
0.463 mi.
2444 ft.

HEATING OIL TANK — **LUST** — **S102590259**
560 19TH STREET NE — **N/A**
SALEM, OR 97301
Site 2 of 2 in cluster AP

Relative:
Lower

Actual:
179 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4067
Cleanup Received Date: 04/23/1997
Cleanup Start Date: 04/24/1997
Cleanup Complete Date: 06/26/1997

AT165
NNE
1/4-1/2
0.464 mi.
2450 ft.

ARCO FACILITY NO. 05882 — **LUST** — **U001150161**
2979 MARKET ST NE — **UST** — **N/A**
SALEM, OR 97301
Site 2 of 2 in cluster AT

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-92-4254
Cleanup Received Date: 12/22/1992
Cleanup Start Date: 12/13/1992
Cleanup Complete Date: 02/22/1993

UST:
Facility ID: 11095
Facility Telephone: (714) 670-3958
Permittee Name: Bratzo Basagoitia
Number of Permitted Tanks: 4
Active Tanks: 4
Decommissioned Tanks: Not reported
Number of Tanks: 4

166
WNW
1/4-1/2
0.467 mi.
2466 ft.

HEATING OIL TANK
910 17TH STREET NE
SALEM, OR 97301

LUST **S102959652**
N/A

Relative:
Lower

Actual:
177 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4176
Cleanup Received Date: 12/02/1997
Cleanup Start Date: 12/11/1997
Cleanup Complete Date: 09/11/1998

167
NNE
1/4-1/2
0.468 mi.
2472 ft.

HEATING OIL TANK
2999 MARKET ST
SALEM, OR 97305

LUST **S100498446**
N/A

Relative:
Lower

Actual:
206 ft.

LUST:
Region: Western Region
Facility ID: 24-92-4253
Cleanup Received Date: 12/22/1992
Cleanup Start Date: 12/22/1992
Cleanup Complete Date: 02/22/1993

168
West
1/4-1/2
0.472 mi.
2491 ft.

HEATING OIL TANK
625 18TH ST NE
SALEM, OR 97301

LUST **S102076265**
N/A

Relative:
Lower

Actual:
171 ft.

LUST:
Region: Western Region
Facility ID: 24-93-4001
Cleanup Received Date: 01/04/1993
Cleanup Start Date: 01/04/1993
Cleanup Complete Date: 05/29/1997

169
WNW
1/4-1/2
0.486 mi.
2564 ft.

HEATING OIL TANK
1655 NEBRASKA ST NE
SALEM, OR 97301

LUST **S104304613**
N/A

Relative:
Lower

Actual:
178 ft.

LUST:
Region: Western Region
Facility ID: 24-99-4166
Cleanup Received Date: 11/29/1999
Cleanup Start Date: 11/17/1999
Cleanup Complete Date: Not reported

170
SW
1/4-1/2
0.494 mi.
2608 ft.

HEATING OIL TANK
190 23RD STREET NE
SALEM, OR 97301

LUST **S102959653**
N/A

Relative:
Lower

Actual:
183 ft.

LUST:
Region: Western Region
Facility ID: 24-97-4155
Cleanup Received Date: 10/09/1997
Cleanup Start Date: 10/09/1997
Cleanup Complete Date: Not reported

171
SSW
1/2-1
0.592 mi.
3124 ft.

OREGON ST PENITENTIARY
2605 STATE ST
SALEM, OR 97310

RCRA-CESQG **1000474532**
FINDS **ORD081970881**
OR CRL
LUST
UST
AST
VCP
HSIS
US AIRS
ECSI

Relative:
Lower

Actual:
184 ft.

RCRA-CESQG:
Date form received by agency: 12/31/2006
Facility name: OREGON ST PENITENTIARY
Facility address: 2605 STATE ST
SALEM, OR 97310
EPA ID: ORD081970881
Contact: LINDA VILLINES
Contact address: 2605 STATE ST
SALEM, OR 97310
Contact country: US
Contact telephone: (503) 373-1836
Contact email: Not reported
EPA Region: 10
Land type: State
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: OREGON STATE PENITENTIARY
Owner/operator address: 2605 STATE STREET
SALEM, OR 97310
Owner/operator country: US

OREGON ST PENITENTIARY (Continued) **1000474532**

Owner/operator telephone: (503) 378-2453
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 07/07/1986
Owner/Op end date: Not reported

Owner/operator name: OREGON STATE PENITENTIARY
Owner/operator address: 2605 STATE STREET
SALEM, OR 97310
Owner/operator country: US
Owner/operator telephone: (503) 378-2453
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 12/31/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2005
Facility name: OREGON ST PENITENTIARY
Classification: Small Quantity Generator

Date form received by agency: 12/31/2004
Facility name: OREGON ST PENITENTIARY
Classification: Small Quantity Generator

Date form received by agency: 12/31/2003
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/07/2003
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/03/2002
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/10/2001
Facility name: OREGON ST PENITENTIARY

OREGON ST PENITENTIARY (Continued) **1000474532**

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/02/2000
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/26/1999
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/01/1998
Facility name: OREGON ST PENITENTIARY
Classification: Large Quantity Generator

Date form received by agency: 02/12/1998
Facility name: OREGON ST PENITENTIARY
Classification: Large Quantity Generator

Date form received by agency: 03/04/1997
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/01/1996
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 04/18/1995
Facility name: OREGON ST PENITENTIARY
Classification: Small Quantity Generator

Date form received by agency: 02/28/1994
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 09/27/1993
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 04/01/1992
Facility name: OREGON ST PENITENTIARY
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: NA
Waste name: NA

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 03/04/2009
Date achieved compliance: 04/30/2009
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 03/16/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/04/2009
Date achieved compliance: 04/30/2009
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 03/16/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 03/04/2009
Date achieved compliance: 04/30/2009
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 03/16/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Universal Waste - Destination Facilities
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

OREGON ST PENITENTIARY (Continued) **1000474532**

Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135

OREGON ST PENITENTIARY (Continued) **1000474532**

Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0

OREGON ST PENITENTIARY (Continued) **1000474532**

Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

OREGON ST PENITENTIARY (Continued) **1000474532**

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) SFO ORDER
Enforcement action date: 09/22/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 2627
Paid penalty amount: 2627

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Area of violation: Universal Waste - Destination Facilities
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: NOTICE OF NONCOMPLIANCE
Enforcement action date: 08/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Universal Waste - Destination Facilities
Date violation determined: 07/29/2005
Date achieved compliance: 11/14/2005
Violation lead agency: State
Enforcement action: INITIAL 3008(A) CP/CO ORDER
Enforcement action date: 08/28/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 13135
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General

OREGON ST PENITENTIARY (Continued) **1000474532**

Date violation determined: 11/21/1989
Date achieved compliance: 07/09/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/22/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Formal Enforcement Agreement or Order
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Formal Enforcement Agreement or Order
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: INITIAL CIVIL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/13/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 5250

Regulation violated: Not reported
Area of violation: TSD - Corrective Action for SWMUs
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: INITIAL CIVIL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/13/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 5250

Regulation violated: Not reported
Area of violation: TSD - Corrective Action for SWMUs
Date violation determined: 11/21/1989

OREGON ST PENITENTIARY (Continued) **1000474532**

Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/22/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/21/1989
Date achieved compliance: 07/09/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/19/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 8000
Final penalty amount: 8000
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: INITIAL CIVIL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/13/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 5250

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991

OREGON ST PENITENTIARY (Continued) **1000474532**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/22/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: INITIAL CIVIL ACTION FOR IMMINENT AND SUBSTANTIAL ENDANGERMENT
Enforcement action date: 05/13/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 5250

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 11/21/1989
Date achieved compliance: 05/13/1991
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/24/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 5250
Final penalty amount: 5250
Paid penalty amount: 0

Evaluation Action Summary:
Evaluation date: 03/04/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/30/2009
Evaluation lead agency: State

Evaluation date: 03/04/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 04/30/2009
Evaluation lead agency: State

Evaluation date: 03/04/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 04/30/2009
Evaluation lead agency: State

OREGON ST PENITENTIARY (Continued) **1000474532**

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Destination Facilities
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 07/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 11/14/2005
Evaluation lead agency: State

Evaluation date: 11/21/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/13/1991
Evaluation lead agency: State

Evaluation date: 11/21/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/09/1990
Evaluation lead agency: State

Evaluation date: 11/21/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General

OREGON ST PENITENTIARY (Continued) **1000474532**

Date achieved compliance: 05/13/1991
Evaluation lead agency: State

Evaluation date: 11/21/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Formal Enforcement Agreement or Order
Date achieved compliance: 05/13/1991
Evaluation lead agency: State

Evaluation date: 11/21/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Corrective Action for SWMUs
Date achieved compliance: 05/13/1991
Evaluation lead agency: State

FINDS:

Registry ID: 110000816957

Environmental Interest/Information System

OR-DEQ (Oregon - Department Of Environmental Quality) is a regulatory agency whose job is to protect the quality of Oregon's Environment. DEQ uses a combination of technical assistance, inspections and permitting to help public and private facilities and citizens understand and comply with state and federal environmental regulations.

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

OREGON ST PENITENTIARY (Continued) **1000474532**

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

CRL:
Facility ID: 621
Location ID: 11575
Status Code: LIS
Facility Status: OPERATION & MAINTENANCE
Lat/Long: 44.9321 / -123.005

LUST:
Region: Western Region
Facility ID: 24-91-4163
Cleanup Received Date: 06/14/1991
Cleanup Start Date: 06/18/1991
Cleanup Complete Date: 07/15/1999

UST:
Facility ID: 2515
Facility Telephone: (503) 378-1835
Permittee Name: M GORAUM, PHYSICAL PLANT MANAGER
Number of Permitted Tanks: Not reported
Active Tanks: Not reported
Decommissioned Tanks: 6
Number of Tanks: 6

AST:
Facility Id: 005810
Hazardous Substance: GASOLINE
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID
Storage 1: ABOVEGROUND TANK

Facility Id: 005810
Hazardous Substance: PROPANE
Reporting Quantities: 200-499

OREGON ST PENITENTIARY (Continued) **1000474532**

Quantity Units: GALLONS
Physical State: LIQUID
Storage 1: ABOVEGROUND TANK

Facility Id: 005810
Hazardous Substance: CAUSTIC SODA SOLUTION
Reporting Quantities: 1,000-4,999
Quantity Units: GALLONS
Physical State: LIQUID
Storage 1: ABOVEGROUND TANK

VCS:
ECS Site ID: 621
CRL: LIS
Facility Size: 306.3 acre
Action: OPERATION & MAINTENANCE
Start Date: 06/01/2006
End Date: Not reported
Project Manager Name: Greg Aitken
Program: VCS

HSIS:
Facility Id: 005810
Chemical Is Extremely Hazardous Substance (EHS): No
Department Or Division Of Company: ACCOUNTS PAYABLE
Facility Has Written Emergency Plan: Yes
Contains 112R: No
NAICS Code 1: 922140
NAICS Desc 1: CORRECTIONAL INSTITUTIONS
NAICS Code 2: 000000
NAICS Desc 2: Not reported
Manager Name: JEFF PREMO
Business Phone: 5033731835
Mailing Address: 2575 CENTER ST
Mailing City,St,Zip: SALEM, OR 97310
No. of Employees: 568
Day Phone: 5033731835
Placard: Yes
Fire Dept Code: 0321
Sprinkler System: Yes
Emergency Contact: STEVE MITCHELL
Emergency Procedure: MASTER CONTROL
Business Type: STATE PRISON

Facility:
Facility Id: 005810
Physical State Of The Substance: 1
Physical State: SOLID
Average Amount Possessed During The Year Code: 10
Maximum Amount Possessed During The Year Code: 10
Applicable Unit Of Measure Code: 1
Description Of The Unit Of Measure: POUNDS
Type Code: J
Description: BAG
Type Code: Not reported
Temperature Description: Not reported
Pressure of Code: 1

OREGON ST PENITENTIARY (Continued) **1000474532**

Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	200-499
Most Hazardous Ingridient:	AMMONIUM SULFATE
United Nations/north America 4 Digit Class Number:	2072
Hazard Rank:	1
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	2072
Chemical Abstract Service Identifier Number:	7783202
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	No
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	Yes
Pesticide:	No
Contains 313:	No

Facility Id:	005810
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	L
Description:	CYLINDER
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	2
Pressure Description:	GREATER THAN NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4

OREGON ST PENITENTIARY (Continued) **1000474532**

Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	CHLORODIFLUOROMETHANE
United Nations/north America 4 Digit Class Number:	1018
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Non-flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.2
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	1018
Chemical Abstract Service Identifier Number:	75456
Chemical Is Extremely Hazardous Substance (EHS):	No
First Hazardous Class Code For Chemical:	Non-flammable Gas
Second Hazardous Class Code For Chemical:	Acute Health Hazard
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	2.2
Hazard Class 2 Of The Chemical:	6.3
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Yes
EPA Pesticide Registration Number:	Not reported
Contains 112R:	No
Contains EHS:	No
Fertilizer:	No
Pesticide:	No
Contains 313:	No

Facility Id:	005810
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	D
Description:	STEEL DRUM
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199

OREGON ST PENITENTIARY (Continued) **1000474532**

Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	PETROLEUM HYDROCARBON
United Nations/north America 4 Digit Class Number:	Not reported
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Combustible Material
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	4.5
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	Not reported
Chemical Abstract Service Identifier Number:	Not reported
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Combustible Material
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	4.5
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Contains 112R:	Not reported
Contains EHS:	Not reported
Fertilizer:	Not reported
Pesticide:	Not reported
Contains 313:	Not reported

Facility Id:	005810
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	03
Maximum Amount Possessed During The Year Code:	04
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	D
Description:	STEEL DRUM
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	50-199
Description Of The Avg Qnty Code:	20-49
Most Hazardous Ingridient:	PETROLEUM DISTILLATES
United Nations/north America 4 Digit Class Number:	Not reported
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported

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First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported

Chemical:

United Nations/north America 4 Digit Class Number:	Not reported
Chemical Abstract Service Identifier Number:	Not reported
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Flammable and Combustible Liquid
Second Hazardous Class Code For Chemical:	Not reported
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	3.0
Hazard Class 2 Of The Chemical:	Not reported
Hazard Class 3 Of The Chemical:	Not reported
Chemical Is A Toxic 313 Chemical:	Not reported
EPA Pesticide Registration Number:	Not reported
Contains 112R:	Not reported
Contains EHS:	Not reported
Fertilizer:	Not reported
Pesticide:	Not reported
Contains 313:	Not reported

Facility Id:	005810
Physical State Of The Substance:	2
Physical State:	LIQUID
Average Amount Possessed During The Year Code:	01
Maximum Amount Possessed During The Year Code:	01
Applicable Unit Of Measure Code:	2
Description Of The Unit Of Measure:	GALLONS
Type Code:	N
Description:	PLASTIC BOTTLE, JUG, BUCKET
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	1
Pressure Description:	NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	5-9
Description Of The Avg Qnty Code:	5-9
Most Hazardous Ingridient:	ISOPROPYLAMINE SALT OF GLYPHOSATE
United Nations/north America 4 Digit Class Number:	0000
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Pesticide
Third Hazardous Class Code For Chemical:	Chronic Health Hazard
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	6.5

OREGON ST PENITENTIARY (Continued) **1000474532**

Hazard Class 3 Of The Chemical: 6.4

Chemical:
United Nations/north America 4 Digit Class Number: 0000
Chemical Abstract Service Identifier Number: 38641940
Chemical Is Extremely Hazardous Substance (EHS): No
First Hazardous Class Code For Chemical: Acute Health Hazard
Second Hazardous Class Code For Chemical: Pesticide
Third Hazardous Class Code For Chemical: Chronic Health Hazard
Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 6.5
Hazard Class 3 Of The Chemical: 6.4
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: MULTIPLE
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: Yes
Contains 313: No

AIRS (AFS):

Airs Minor Details:
EPA plant ID: 110000816957
Plant name: OREGON STATE PENITENTIARY
Plant address: 2605 STATE ST
SALEM, OR 973101346
County: MARION
Region code: 10
Dunn & Bradst #: 081970881
Air quality cntrl region: 193
Sic code: 4961
Sic code desc: STEAM AND AIR-CONDITIONING SUPPLY
North Am. industrial classf: 337122
NAIC code description: Nonupholstered Wood Household Furniture Manufacturing
Default compliance status: IN COMPLIANCE - INSPECTION
Default classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Govt facility: SOURCE OWNED OR OPERATED BY THE STATE
Current HPV: Not reported

Compliance and Enforcement Major Issues:
Air program: SIP SOURCE
National action type: Not reported
Date achieved: 00000
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: Not reported
Date achieved: 00000
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Date achieved: 00000
Penalty amount: Not reported

Air program: Not reported
National action type: Not reported
Date achieved: Not reported
Penalty amount: Not reported

Air program: Not reported
National action type: Not reported
Date achieved: Not reported
Penalty amount: Not reported

Historical Compliance Minor Sources:

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 0903
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1001
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1002
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1004
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1102
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1103
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 0901
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 0901
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 0902
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 0904
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1002
Air prog code hist file: V

OREGON ST PENITENTIARY (Continued) **1000474532**

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1004
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1101
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1103
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 0904
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1003
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1101
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1104
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - CERTIFICATION
Hist compliance date: 0902
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 0903
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1001
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1003
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1102
Air prog code hist file: V

State compliance status: IN COMPLIANCE - SHUT DOWN
Hist compliance date: 1104
Air prog code hist file: V

Compliance & Violation Data by Minor Sources:
Air program code: SIP SOURCE
Plant air program pollutant: CARBON MONOXIDE
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION

OREGON ST PENITENTIARY (Continued) **1000474532**

Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: PARTICULATE MATTER
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: SULFUR DIOXIDE
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: TITLE V PERMITS
Plant air program pollutant: Not reported
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - SHUT DOWN
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: Not reported
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: TOTAL PARTICULATE MATTER
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

Air program code: SIP SOURCE
Plant air program pollutant: VOLATILE ORGANIC COMPOUNDS
Default pollutant classification: POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR
Def. poll. compliance status: IN COMPLIANCE - INSPECTION
Def. attainment/non attnmnt: ATTAINMENT AREA FOR GIVEN POLLUTANT
Repeat violator date: Not reported
Turnover compliance: Not reported

ECSI:

State ID Number:	621	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	831	Investigation:	Listed on the CRL/Inventory
FACA ID:	11575	Further Action:	0

OREGON ST PENITENTIARY (Continued) **1000474532**

Lat/Long (dms):	44 55 55.00 / -123 0 18.00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	25	Qtr Section:	Not reported
Tax Lots:	55186-000	Size:	306.3 acres
NPL:	False	Orphan:	False
Updated By:	MENGLIS	Update Date:	11/27/2006
Alias Name:	OS Penitentiary Fire		

Hazardous Release:

Substance ID.:	120883
Haz Release ID:	385062
Qty Released:	Unknown
Date Released:	7/28/88
Update Date:	10/24/1988
Update By:	Not reported
Substance Code:	108-88-3
Substance Name:	TOLUENE
Substance Abbrev.:	Not reported
Substance Category ID:	8520
Substance Category:	Volatiles
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Category ID:	8520
Substance Category:	Volatiles
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Alias ID:	316466
Sub Alias Name:	BENZENE,METHYL-
Substance Alias ID:	316467
Sub Alias Name:	METHACIDE
Substance Alias ID:	316468
Sub Alias Name:	METHYLBENZENE
Substance Alias ID:	316469
Sub Alias Name:	METHYLBENZOL
Substance Alias ID:	316470
Sub Alias Name:	PHENYLMETHANE
Substance Alias ID:	316471
Sub Alias Name:	TOLUOL
Comment ID:	304260
Release Code:	Data Sources
Release Comments:	consultants sampling of hazardous waste barrels
Sampling Result ID:	346859
Feature Id:	Not reported
Hazard Release Id:	385062
Medium:	703
Substance Abbrev.:	Not reported
Unit Code:	Not reported
Observation:	False
Owner Operator:	False
Lab Data:	True
Sample Depth:	Not reported
Start Date:	Not reported
End Date:	Not reported
Min Concentration:	Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Max Concentration: Not reported
Sample Comment: Unknown
Last Update By: CONV
Update Date: 09/13/1994

Substance ID.: 121011
Haz Release ID: 385063
Qty Released: Unknown
Date Released: 7/28/88
Update Date: 10/24/1988
Update By: Not reported
Substance Code: 127-18-4
Substance Name: TETRACHLOROETHYLENE
Substance Abbrev.: Not reported
Substance Category ID: 8519
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8551
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8519
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8551
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 316912
Sub Alias Name: ETHENE,TETRACHLORO-
Substance Alias ID: 316913
Sub Alias Name: ETHYLENE TETRACHLORIDE
Substance Alias ID: 316914
Sub Alias Name: PERCHLOROETHYLENE
Substance Alias ID: 316915
Sub Alias Name: PERCLENE
Substance Alias ID: 316916
Sub Alias Name: TETRACHLOROETHENE
Substance Alias ID: 316917
Sub Alias Name: TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID: 316918
Sub Alias Name: TETRACHLOROETHYLENE,1,1,2,2-
Comment ID: 304261
Release Code: Data Sources
Release Comments: consultants sampling of hazardous waste barrels
Sampling Result ID: 345125
Feature Id: Not reported
Hazard Release Id: 385063
Medium: 698
Substance Abbrev.: Not reported
Unit Code: Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 08/01/1993
End Date: Not reported
Min Concentration: Not reported
Max Concentration: Not reported
Sample Comment: 16,000 ppb
Last Update By: CONV
Update Date: 09/13/1994

Substance ID.: 121781
Haz Release ID: 385064
Qty Released: Unknown
Date Released: Unknown
Update Date: 10/24/1988
Update By: Not reported
Substance Code: 79-01-6
Substance Name: TRICHLOROETHYLENE
Substance Abbrev.: Not reported
Substance Category ID: 8523
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8545
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8523
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8545
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 317517
Sub Alias Name: ETHINYL TRICHLORIDE
Substance Alias ID: 317518
Sub Alias Name: ETHYLENE TRICHLORIDE
Substance Alias ID: 317519
Sub Alias Name: TCE
Substance Alias ID: 317520
Sub Alias Name: TRI-CLENE
Substance Alias ID: 317521
Sub Alias Name: TRICHLOROETHENE
Sampling Result ID: 346450
Feature Id: Not reported
Hazard Release Id: 385064
Medium: 698
Substance Abbrev.: Not reported
Unit Code: Not reported

OREGON ST PENITENTIARY (Continued) **1000474532**

Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 08/01/1993
End Date: Not reported
Min Concentration: Not reported
Max Concentration: Not reported
Sample Comment: 68 ppb
Last Update By: CONV
Update Date: 09/13/1994

Substance ID.: 121245
Haz Release ID: 385065
Qty Released: Unknown
Date Released: Unknown
Update Date: 10/24/1988
Update By: Not reported
Substance Code: 25323-30-2
Substance Name: DICHLOROETHYLENEs
Substance Abbrev.: Not reported
Substance Alias ID: 318226
Sub Alias Name: DICHLOROETHENEs
Substance Alias ID: 318227
Sub Alias Name: ETHENE,DICHLORO-
Sampling Result ID: 346451
Feature Id: Not reported
Hazard Release Id: 385065
Medium: 698
Substance Abbrev.: Not reported
Unit Code: Not reported
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 08/01/1993
End Date: Not reported
Min Concentration: Not reported
Max Concentration: Not reported
Sample Comment: 57 ppb
Last Update By: CONV
Update Date: 09/13/1994

Substance ID.: 121690
Haz Release ID: 385066
Qty Released: Unknown
Date Released: Unknown
Update Date: 10/24/1988
Update By: Not reported
Substance Code: 75-01-4
Substance Name: VINYL CHLORIDE
Substance Abbrev.: Not reported
Substance Category ID: 8525
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002

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Substance Category ID: 8550
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8525
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8550
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319325
Sub Alias Name: CHLOROETHENE
Substance Alias ID: 319326
Sub Alias Name: CHLOROETHYLENE
Substance Alias ID: 319327
Sub Alias Name: ETHENE,CHLORO-
Substance Alias ID: 319328
Sub Alias Name: MONOCHLOROETHYLENE
Sampling Result ID: 346452
Feature Id: Not reported
Hazard Release Id: 385066
Medium: 698
Substance Abbrev.: Not reported
Unit Code: Not reported
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: Not reported
Max Concentration: Not reported
Sample Comment: 1 ppb
Last Update By: CONV
Update Date: 09/13/1994

Narrative:
NARR ID: 5726897
NARR Code: Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: (9/1/98 WRM/VCP) Groundwater samples collected in 1989 from two on-site drinking-water wells at the Oregon State Penitentiary (OSP) contained solvents, including trichloroethylene (TCE) and perchloroethylene (PCE). These and other OSP water supply wells were subsequently removed from service. The likely reason for the contamination was improper disposal or leakage of wastewater from the laundry dry-cleaning facility. (The laundry facility was upgraded in 1983 and no longer uses dry-cleaning solvents.) A plume of solvent-contaminated groundwater has expanded into the neighborhood northwest of OSP. PCE concentrations in shallow groundwater (about 10

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feet below the surface) are about 9,000 ppb under the prison, and about 200 ppb at the intersection of Breyman and Rose Streets. TCE concentrations are much lower than PCE.

NARR ID: 5725906
NARR Code: Data Sources
Created By: Not reported
Created Date: 12/17/2002
Updated By: MCAMARA
Updated Date: 12/31/2008
NARR Comments: 1. EMD response to fire and spill follow-up; consultant sampling of hazardous waste drums; sampling results for on-site wells, conducted by Oregon Health
Division.
2. EPA Generator Notification Form. 3. Spill/Release - Fire; Prelim inary Assessment
I/II.
4. Phase I RI report provided to VCS. 5. Draft RI report. Remedial Investigation Report
(6/1998).
6. Baseline Human Health Risk Assessment (5/2000). 7. Feasibility S tudy Report
(12/2003).
8. Supplemental Baseline Human Health Risk Assessment (12/2003). 9 . Quarterly or Semiannual Groundwater Monitoring Reports since
1993 10. Remedial Design/Remedial Action Work Plan, prepared by SECOR , dated May 31,
2005.
11. Annual Groundwater Monitoring Report - September 2005 prepared b y SECOR, dated January 26
2006.
12. Annual Groundwater Monitoring Report - 2007, prepared by SECOR, Dated January 10, 2008.

NARR ID: 5726850
NARR Code: Hazardous Substance/Waste Types
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Trichloroethylene, perchloroethylene, 1,1-dichloroethylene.

NARR ID: 5726851
NARR Code: Site Location
Created By: Not reported
Created Date: 12/17/2002
Updated By: GWISTAR
Updated Date: 12/18/2003
NARR Comments: Correctional Laundry Industries Building.

NARR ID: 5726852
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: It is suspected that the source of groundwater contamination is from

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improper disposal or leakage from facility dry-cleaning operations. Time of release unknown.

NARR ID: 5726853
NARR Code: Project Activity Status
Created By: Not reported
Created Date: 12/17/2002
Updated By: MCAMARA
Updated Date: 12/18/2003
NARR Comments: Project manager changed from Mason to Aitken 10/1/01. Project manager changed from Aitken to Camarata 4/1/03.

NARR ID: 5726854
NARR Code: Pathways Other Hazards
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Groundwater contamination up to 130 feet bgs.

NARR ID: 5726855
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: MCAMARA
Updated Date: 12/31/2008
NARR Comments: (11/30/93 JLS/VCS) Completed Phase II of remedial investigation of extent of groundwater contamination. Phase III groundwater investigation to fully define lateral and vertical extent of groundwater contamination, and to begin developing remedial actions, completed fall 1995. Shallow groundwater plume defined. Three multi-level monitoring wells installed downgradient of facility 6/95. Preliminary sample results indicate extent of deep plume appears to be defined to ppb level. Groundwater model continues to be updated. Reports on implementation and results from deep multilevel sampling wells provided and reviewed by DEQ 9/95. Meeting between DEQ, OSP, and consultants held 10/95 to review status and discuss next steps. Outline for RI submitted DEQ comments provided 10/95. Quarterly sampling conducted with DEQ oversight 10/95. GW modeling reports and plans for door-to-door well survey under development. (11/4/97 WRM/VCP) Draft RI report submitted; DEQ comments provided 2/97. (6/98 WRM/VCP) OSP responded to DEQ comments; RI is complete. A groundwater extraction system is currently being installed as an interim remedial measure to prevent or reduce the amount of contaminated groundwater leaving the site. (11/98 WRM/VCP) Community group formed to address groundwater contamination issues (8/98). Evaluation of health effects associated with groundwater extraction system submitted and approved (10/98). Draft RA report submitted (11/98). The groundwater extraction system began full-time operation on 1/20/00. Draft FS work plan submitted 2/2/01. (12/18/03 M2C/VCP) DEQ reviewed the FS in July 2003. The final FS was submitted to DEQ on 12/10/03. DEQ requested the 2000 Risk Assessment be updated with current toxicity factors and groundwater concentrations since the installation of the groundwater treatment system. The risk assessment dated 12/10/03 indicates there is a slight risk to excavation workers on-site if they come in contact with contaminated water. There is no risk to residents, prison personnel or inmates. DEQ prepared a Staff Report in 12/03

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recommending continued operation of the groundwater treatment system as the final remedial action. The 30-day public comment period on DEQ's recommendation is from December 19, 2003 through January 20, 2004. (2/2/04 M2C/VCP) DEQ received several public comments from residents, OSP staff, inmates and the community group. DEQ addressed all comments. No significant changes were made to the recommended remedial action as described in the December 2003 Remedial Action Recommendation Staff Report as a result of the public comments received. The remedy selected is described in the DEQ's Record of Decison (ROD) dated 2/2/04. The next step is to develop the remedial design/remedial action
plan.
(3/3/05 M2C/VCP) DEQ and DOC signed the RD/RA Agreement on 3/1/05. DOC is preparing the remedial action plan which includes a groundwater monitoring plan, worker projection plan for on-site excavation, operation and maintenance plan, contingency plan if beneficial use changes off-site or new construction is proposed on-site, and yearly project status reports to DEQ. The groundwater extraction system will be operated until groundwater contamination is below DEQ's risk screening values.
(1/13/06 M2C/VCP) Draft RDRA Work Plan submitted to DEQ in June 20 05. DEQ and the community has provided comments to OSP. Once the comments have been addressed, OSP will finalized the RDRA Work Plan.
SECOR submitted the Annual Groundwater Report for 2005. Approximat ely 876 pounds of HVOCs have been removed since March 2000. SECOR conducted a beneficial water use monitoring by reviewing WRD well logs. No new wells were installed in the local of facility (LOF).
(12/29/06 M2C/VCP) SECOR submitted the Annual Groundwater Report f or 2006. Groundwater samples were collected on in January and September 2006. PCE concentrations continue to decrease or stable in the wells sampled. SECOR conducted a beneficial water use monitoring by reviewing WRD well logs. No new wells were installed in the local of facility (LOF).
The treatment system has been turned off since August 11, 2005. Th e system is being upgraded and will likely be turned on early 2007.
SECOR requested approval to abandoned wells MW-3, MW-4, MW-6, MW-1 1, MW-12, MW-4. These wells are not longer needed to assess groundwater contamination.
(1/22/08 M2C/VCP) SECOR abandoned on-site wells MW-D, MW-3, MW-4, and MW-6, and off-site wells MW-11 and MW-12 on July 10 -12, 2007. A new monitoring well 16S was isntalled on July 20, 2007 and is located approximately 20 feet to the north of groundwater monitoring well MW-16M.
Annually groundwater samples were collected in September 2007 at M W-2, MW-5, MW-9, MW-10, MW-16SMW-2I, MW-2D, MW-9D, MW-12M-20, MW-12M-40, MW-12M-80, MW-12M-100, MW-15M-20, MW-15M-80, MW-15M-85, MW-15M-120, MW-16M-20, MW-16M-60, MW-16M-90, MW-16M-120. There was a slight increase in VOCs concentrations in a few wells.
The extraction system was shut down for repairs on August 11, 2005 and restarted on January 29, 2007.
Annual groundwater samples was conducted in Fall 2008. DEQ approve d using low flow sampling method. Annual report will be submitted in early 2009.

NARR ID: 5726856

OREGON ST PENITENTIARY (Continued) **1000474532**

NARR Code: Health Threats
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: The primary concern at the site is the potential exposure of area residents, prison employees, and inmates to chlorinated solvents present in groundwater. Contaminated groundwater on and near the facility is not being used for domestic purposes, indicating that OSP staff, inmates, and nearby community residents are not currently being exposed to solvent contaminants at levels that could cause adverse health effects. The Federal Agency for Toxic Substances and Disease Registry independently determined that OSP staff and inmates are not likely to have had harmful health effects from past exposure to solvent contaminants.

NARR ID: 5748871
NARR Code: Water Use (Current/Reasonably Likely)
Created By: MCAMARA
Created Date: 12/29/2006
Updated By: MCAMARA
Updated Date: 12/29/2006
NARR Comments: The area is supplied with city water. However, there are few wells out side the groundwater contamination area. SECOR reviews annually water resource records to check if any new wells are installed in the groundwater contamination area.

Administrative Action:

Admin ID:	733207	Action ID:	9469
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	02/02/2004	Complete Date:	Not reported
Substance Code:	VCP	Rank Value:	Not reported
Employee Id:	2197	Cleanup Flag:	False
Created By:	MCAMARA	Created Date:	12/29/2006
Action Code:	RA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	REMEDIAL ACTION		
Further Action:	0		
Comments:	OSP will continue to operate the groundwater treatment system as the remedial action.		

Admin ID:	720389	Action ID:	9437
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	09/09/1991	Complete Date:	09/09/1991
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	q	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	q		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	721666	Action ID:	9484
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	11/16/1992	Complete Date:	02/28/1993
Substance Code:	VCS	Rank Value:	0
Employee Id:	711	Cleanup Flag:	False

OREGON ST PENITENTIARY (Continued) **1000474532**

Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	REMEDIAL INVESTIGATION		
Further Action:	Not reported		
Comments:	(RI completed for groundwater study)		

Admin ID:	722476	Action ID:	9465
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	11/03/1992	Complete Date:	11/03/1992
Substance Code:	SAS	Rank Value:	0
Employee Id:	Not reported	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	722477	Action ID:	9467
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	11/03/1992	Complete Date:	11/03/1992
Substance Code:	SAS	Rank Value:	0
Employee Id:	Not reported	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Inventory		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	722517	Action ID:	9519
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	10/17/1991	Complete Date:	03/03/1992
Substance Code:	VCS	Rank Value:	0
Employee Id:	631	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	VWL	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	VCS Waiting List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	722858	Action ID:	9438
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/12/1993	Complete Date:	03/12/1993
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility placed on Confirmed Release List		
Further Action:	0		
Comments:	Not reported		

Admin ID:	722859	Action ID:	9439
Agency:	Dept Of Environmental Quality	Region:	Western Region

OREGON ST PENITENTIARY (Continued) **1000474532**

Start Date:	03/12/1993	Complete Date:	03/12/1993
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility placed on Inventory		
Further Action:	0		
Comments:	Not reported		

Admin ID:	722928	Action ID:	9511
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	03/03/1992	Complete Date:	07/27/1992
Substance Code:	VCS	Rank Value:	0
Employee Id:	711	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	SI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE INVESTIGATION		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	723609	Action ID:	9456
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	01/01/1991	Complete Date:	06/05/1991
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	BASIC PRELIMINARY ASSESSEMENT		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	724554	Action ID:	9498
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	09/10/1991	Complete Date:	09/10/1991
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Proposal for Confirmed Release List recommended		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	724555	Action ID:	9499
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	09/10/1991	Complete Date:	09/10/1991
Substance Code:	SAS	Rank Value:	0
Employee Id:	466	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Proposal for Inventory recommended		
Further Action:	Not reported		
Comments:	Not reported		

OREGON ST PENITENTIARY (Continued) **1000474532**

Admin ID:	724806	Action ID:	9484
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/28/1992	Complete Date:	06/08/1998
Substance Code:	VCS	Rank Value:	0
Employee Id:	510	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	REMEDIAL INVESTIGATION		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	738383	Action ID:	9450
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	06/01/2006	Complete Date:	Not reported
Substance Code:	VCS	Rank Value:	Not reported
Employee Id:	1872	Cleanup Flag:	False
Created By:	GAITKEN	Created Date:	01/12/2011
Action Code:	OM	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	OPERATION and MAINTENANCE		
Further Action:	0		
Comments:	Not reported		

Admin ID:	701322	Action ID:	9429
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/08/2001	Complete Date:	12/10/2003
Substance Code:	VCS	Rank Value:	0
Employee Id:	2197	Cleanup Flag:	True
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	FS	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	FEASIBILITY STUDY		
Further Action:	0		
Comments:	Not reported		

Admin ID:	710043	Action ID:	9491
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/01/1998	Complete Date:	Not reported
Substance Code:	VCS	Rank Value:	0
Employee Id:	510	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RM	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	REMOVAL		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	707055	Action ID:	9486
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/04/1998	Complete Date:	12/10/2003
Substance Code:	VCS	Rank Value:	0
Employee Id:	2197	Cleanup Flag:	True
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RISK	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	RISK ASSESSMENT		

OREGON ST PENITENTIARY (Continued) **1000474532**

Further Action: 0
Comments: Not reported

Admin ID: 727768
Agency: Dept Of Environmental Quality
Start Date: 04/20/1996
Substance Code: VCP
Employee Id: 2197
Created By: MCAMARA
Action Code: BENE
Action Flag: True
Action: Beneficial Water Use Assessment
Further Action: 0
Comments: Not reported

Action ID: 9409
Region: Western Region
Complete Date: 12/10/2003
Rank Value: Not reported
Cleanup Flag: True
Created Date: 12/18/2003
Category: Remedial Action
Action Code Flag: False

Admin ID: 727936
Agency: Dept Of Environmental Quality
Start Date: 02/02/2004
Substance Code: VCP
Employee Id: 1872
Created By: MCAMARA
Action Code: RD
Action Flag: True
Action: REMEDIAL DESIGN
Further Action: 0
Comments: Not reported

Action ID: 9473
Region: Western Region
Complete Date: 04/25/2006
Rank Value: Not reported
Cleanup Flag: False
Created Date: 02/02/2004
Category: Remedial Action
Action Code Flag: False

Admin ID: 727937
Agency: Dept Of Environmental Quality
Start Date: 02/02/2004
Substance Code: VCP
Employee Id: 2197
Created By: MCAMARA
Action Code: ROD
Action Flag: True
Action: RECORD OF DECISION
Further Action: 0
Comments: Not reported

Action ID: 9494
Region: Western Region
Complete Date: 02/02/2004
Rank Value: Not reported
Cleanup Flag: False
Created Date: 02/02/2004
Category: Remedial Action
Action Code Flag: False

Admin ID: 717367
Agency: Dept Of Environmental Quality
Start Date: 10/24/1988
Substance Code: SAS
Employee Id: 26
Created By: Not reported
Action Code: ENTRY
Action Flag: True
Action: Site added to database
Further Action: Not reported
Comments: Not reported

Action ID: 9424
Region: Headquarters
Complete Date: Not reported
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002
Category: Administrative Action
Action Code Flag: False

Admin ID: 718876
Agency: Dept Of Environmental Quality
Start Date: 09/13/1990
Substance Code: SAS
Employee Id: 26
Created By: Not reported

Action ID: 9425
Region: Headquarters
Complete Date: 09/13/1990
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002

OREGON ST PENITENTIARY (Continued) **1000474532**

Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	718877	Action ID:	9496
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	09/14/1990	Complete Date:	09/14/1990
Substance Code:	SAS	Rank Value:	0
Employee Id:	26	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	State Basic Preliminary Assessment recommended (PA)		
Further Action:	Not reported		
Comments:	Not reported		

Operations:

Operation Id:	131930
Operation Status:	Active
Common Name:	Oregon State Penitentiary
Yrs of Operation:	1866 to present
Comments:	1,709-bed penitentiary; manufacturing/warehouse for Correction Industries.
Updated Date:	06/19/1995
Operations SIC Id:	195109
SIC Code:	9223
Created By:	Not reported
Created Date:	12/17/2002

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172 **ODOT - EAST SALEM COMPLEX** **OR CRL** **S104889580**
SSW **2800 STATE ST.** **VCP** **N/A**
1/2-1 **SALEM, OR 97301** **ECSI**
0.638 mi.
3368 ft.

Relative:
Lower

Actual:
183 ft.

CRL:

Facility ID:	2269
Location ID:	37913
Status Code:	LIS
Facility Status:	REMEDIAL INVESTIGATION
Lat/Long:	44.928 / -123.0061

VCS:

ECS Site ID:	2269
CRL:	LIS
Facility Size:	20 acres
Action:	REMEDIAL INVESTIGATION
Start Date:	01/01/2006
End Date:	Not reported
Project Manager Name:	Bob Schwarz
Program:	ICP

ECSI:

State ID Number:	2269	Brown ID:	0
Study Area:	False	Region ID:	3

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Legislatve ID:	0	Investigation:	Listed on the CRL/Inventory
FACA ID:	37913	Further Action:	258
Lat/Long (dms):	44 55 41.00 / -123 0 22.00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	25	Qtr Section:	SW S
Tax Lots:	200, 400, 500	Size:	20 acres
NPL:	False	Orphan:	False
Updated By:	BSCHWAR	Update Date:	10/05/2012

Hazardous Release:

Substance ID.:	121011
Haz Release ID:	381859
Qty Released:	Not reported
Date Released:	Not reported
Update Date:	12/23/1998
Update By:	Not reported
Substance Code:	127-18-4
Substance Name:	TETRACHLOROETHYLENE
Substance Abbrev.:	Not reported
Substance Category ID:	8519
Substance Category:	Volatiles
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Category ID:	8551
Substance Category:	Solvents of interest to Milwaukie Area GW study
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Category ID:	8519
Substance Category:	Volatiles
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Category ID:	8551
Substance Category:	Solvents of interest to Milwaukie Area GW study
Category Level:	Not reported
Created By:	Not reported
Created Date:	12/17/2002
Substance Alias ID:	316912
Sub Alias Name:	ETHENE,TETRACHLORO-
Substance Alias ID:	316913
Sub Alias Name:	ETHYLENE TETRACHLORIDE
Substance Alias ID:	316914
Sub Alias Name:	PERCHLOROETHYLENE
Substance Alias ID:	316915
Sub Alias Name:	PERCLENE
Substance Alias ID:	316916
Sub Alias Name:	TETRACHLOROETHENE
Substance Alias ID:	316917
Sub Alias Name:	TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID:	316918
Sub Alias Name:	TETRACHLOROETHYLENE,1,1,2,2-
Sampling Result ID:	340299
Feature Id:	Not reported
Hazard Release Id:	381859

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .00
Max Concentration: 2.80
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Substance ID.: 121588
Haz Release ID: 381872
Qty Released: Not reported
Date Released: Not reported
Update Date: 01/14/1999
Update By: Not reported
Substance Code: 67-66-3
Substance Name: CHLOROFORM
Substance Abbrev.: Not reported
Substance Category ID: 8510
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8510
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319118
Sub Alias Name: METHANE,TRICHLORO-
Substance Alias ID: 319119
Sub Alias Name: TRICHLOROFORM
Substance Alias ID: 319120
Sub Alias Name: TRICHLOROMETHANE
Sampling Result ID: 340313
Feature Id: Not reported
Hazard Release Id: 381872
Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .00
Max Concentration: 4.40
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Substance ID.: 121690
Haz Release ID: 381873
Qty Released: Not reported
Date Released: Not reported
Update Date: 01/15/1999
Update By: Not reported
Substance Code: 75-01-4
Substance Name: VINYL CHLORIDE
Substance Abbrev.: Not reported
Substance Category ID: 8525
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8550
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8525
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8550
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319325
Sub Alias Name: CHLOROETHENE
Substance Alias ID: 319326
Sub Alias Name: CHLOROETHYLENE
Substance Alias ID: 319327
Sub Alias Name: ETHENE,CHLORO-
Substance Alias ID: 319328
Sub Alias Name: MONOCHLOROETHYLENE
Sampling Result ID: 340314
Feature Id: Not reported
Hazard Release Id: 381873
Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .00
Max Concentration: 12.00
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Substance ID.: 122002
Haz Release ID: 381874

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Qty Released: Not reported
Date Released: Not reported
Update Date: 01/15/1999
Update By: Not reported
Substance Code: ECD243
Substance Name: POLYAROMATIC HYDROCARBONS (PAH)
Substance Abbrev.: Not reported
Substance Alias ID: 318143
Sub Alias Name: PAH
Substance Alias ID: 318148
Sub Alias Name: POLYCYCLIC AROMATIC HYDROCARBONS (PAH)
Substance Alias ID: 318149
Sub Alias Name: POLYNUCLEAR AROMATIC HYDROCARBINS (PNA)
Substance Alias ID: 318150
Sub Alias Name: PNA
Sampling Result ID: 340315
Feature Id: Not reported
Hazard Release Id: 381874
Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .20
Max Concentration: 2.50
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Substance ID.: 121664
Haz Release ID: 381875
Qty Released: Not reported
Date Released: Not reported
Update Date: 01/15/1999
Update By: Not reported
Substance Code: 7440-38-2
Substance Name: ARSENIC
Substance Abbrev.: Not reported
Substance Category ID: 8439
Substance Category: Inorganics
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8439
Substance Category: Inorganics
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319286
Sub Alias Name: AS
Sampling Result ID: 340316
Feature Id: Not reported
Hazard Release Id: 381875

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .00
Max Concentration: 280.00
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Substance ID.: 121639
Haz Release ID: 381876
Qty Released: Not reported
Date Released: Not reported
Update Date: 01/15/1999
Update By: Not reported
Substance Code: 7439-92-1
Substance Name: LEAD
Substance Abbrev.: Not reported
Substance Category ID: 8466
Substance Category: Inorganics
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8466
Substance Category: Inorganics
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319256
Sub Alias Name: PB
Sampling Result ID: 340317
Feature Id: Not reported
Hazard Release Id: 381876
Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: .00
Max Concentration: 50.00
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Substance ID.: 122012
Haz Release ID: 381877
Qty Released: Not reported

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Date Released: Not reported
Update Date: 01/15/1999
Update By: Not reported
Substance Code: ECD275
Substance Name: TOTAL PETROLEUM HYDROCARBONS (TPH)
Substance Abbrev.: Not reported
Substance Category ID: 8540
Substance Category: Petroleum Related Releases for OSPIRG Report
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8540
Substance Category: Petroleum Related Releases for OSPIRG Report
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Sampling Result ID: 340318
Feature Id: Not reported
Hazard Release Id: 381877
Medium: 698
Substance Abbrev.: Not reported
Unit Code: 63
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: Not reported
End Date: Not reported
Min Concentration: 2400.00
Max Concentration: 26400.00
Sample Comment: Not reported
Last Update By: btm
Update Date: 01/15/1999

Narrative:
NARR ID: 5737920
NARR Code: Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: BSCHWAR
Updated Date: 01/10/2007
NARR Comments: Monitoring well data indicates TPH as high as 26,400 ug/l, chloroform 4.4 ug/l, PCE 2.8 ug/l, vinyl chloride 12 ug/l, total lead 50 ug/l, total arsenic 280 ug/l, and PAHs above screening levels.
(January 10, 2007, Bob Schwarz) Vinyl chloride was found in grondwater at concentrations up to 39 ug/l as of June 2005.

NARR ID: 5737921
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Documented petroleum releases throughout the 20-acre site in former tank areas. Chlorinated solvents in groundwater as well as petroleum contaminants and lead shown in data as current as August 1998. The site has been operating for approximately 80 years.

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

NARR ID: 5737922
NARR Code: Media Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Petroleum, PAHs,and metals detected in soils. Petroleum, PAHs, metals, volatiles in groundwater.

NARR ID: 5737923
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: BSCHWAR
Updated Date: 05/10/2011
NARR Comments: Tank removals and groundwater investigations have occurred from 1991 to present. Tanks Program is currently overseeing a groundwater investigation at Building 16 (LUST 24-91-4268). Cleanup Program is providing input regarding non-petroleum contamination.

(Bob Schwarz, Jan. 10, 2007) This site occupies 80 acres. A full i nvestigation of the entire site has not been done. Of particular interest are three areas:

1. Building J (aka, Building 16, the museum building), along the n orth property boundary. Groundwater monitoring indicates some VOC contamination. In particular, vinyl chloride was found at a concentration of up to 39 ug/l. Groundwater will likely not be used for drinking. The primary concern is that the extent of the contamination has not be determined because this will involve placing monitoring wells outside the property boundary. ODOT is negotiating the the neighboring property owner (the Oregon Dept. of Forestry) for permission to install two wells on this property. This is scheduled for the spring of 2007.

2. Building O (the paint building) and the wash rack nearby. High concentrations of petroleum hydrocarbons and PAHs were detected here. ODOT states there is an underground tank that need to be decommissioned at this location. This will be done during the spring of 2007.

3. A storage area for treated wood, about 100 feet west of buildin g O. ODOT states that no wood treatment was done at this site. However, treated wood that was brought to the site was stored in this area. Some elevated arsenic has been detected.

(Bob Schwarz, December 30, 2008) In May 2007, ODOT conducted an in vestigation for an 8,000-gallon underground heating oil tank that was reportedly near or beneath Building O. No tank was found. Groundwater was encountered at a depth of 10-12 feet below ground surface. Site activities included the following:

- geophysical investigation. A utility locating service was able t o locate approximately 9 feet of a vent line at the reported tank location. However, interference from other nearby metal prevented other line tracing.
- invasive testing. ODOT completed three direct-push explorations

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

to a depth of approximately 15 feet below ground surface. Continuous soil samples were collected along the length of each boring. ODOT also completed two test pits at the presumed tank location.
- Soil sample analysis. ODOT submitted nine soil samples for lab a nalysis. Sample depths ranged from 1 to 15 feet. All nine samples were analyzed for diesel and heavy oil-range petroleum hydrocarbons. One sample, from a depth of 3-4 feet, had detectable concentrations of diesel (39 mg/kg) and heavy oil (71 mg/kg). The other samples did not contain detectable concentrations. Three samples were analyzed for RCRA 8 metals (total and leachable). Metals were not found above acceptable risk levels.
- Groundwater sampling. Two groundwater samples were collected. an d analyzed for BTEX, semivolatile organic compounds (SVOCs) and dissolved RCRA 8 metals. BTEX and SVOCs were not detected. Arsenic (2 ug/l) and barium (10 ug/l) were detected.

Based on the field and laboratory results, ODOT concludes that the reported heating oil tank had either been removed previously or was never installed.

(July 1, 2010, Bob Schwarz) ODOT has proposed installation of 3-4 deep monitoring wells near Building J (Building 16) to evaluate the vertical extent of VOC contamination. Well depth will be 50 to 100 feet, based on what is encountered. Some of the wells will be on the adjacent property owned by the Oregon Dept. of Forestry.

NARR ID: 5737924
NARR Code: Health Threats
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Potential for direct contact with contaminated soils exists for workers during excavations. Groundwater impacted, but city water lines serve the area. A potential exists for releases to Shelton Ditch (which borders the south end of the property) and Mill Creek (approximately 200 feet north of the property).

Administrative Action:

Admin ID:	737162	Action ID:	9484
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	01/01/2006	Complete Date:	Not reported
Substance Code:	ICP	Rank Value:	Not reported
Employee Id:	664	Cleanup Flag:	False
Created By:	BSCHWAR	Created Date:	01/13/2010
Action Code:	RI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	REMEDIAL INVESTIGATION		
Further Action:	0		
Comments:	Not reported		

Admin ID:	706855	Action ID:	9451
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/03/1999	Complete Date:	03/03/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Action Code:	OOCL	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Owner/operator comments received on listing notification		
Further Action:	Not reported		
Comments:	Comments received from Luis F. Rivas.		

Admin ID:	706998	Action ID:	9438
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	05/17/1999	Complete Date:	05/17/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility placed on Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	708228	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	10/12/1998	Complete Date:	10/12/1998
Substance Code:	SAS	Rank Value:	0
Employee Id:	620	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	708340	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	09/24/1998	Complete Date:	01/14/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	2043	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	Federal screening.		

Admin ID:	705399	Action ID:	9440
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/28/2000	Complete Date:	08/28/2000
Substance Code:	VCS	Rank Value:	0
Employee Id:	2164	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LTAG	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Letter Agreement		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	708774	Action ID:	9498
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	01/14/1999	Complete Date:	01/14/1999

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Substance Code:	SAS	Rank Value:	0
Employee Id:	2043	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Proposal for Confirmed Release List recommended		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	708775	Action ID:	9510
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	01/14/1999	Complete Date:	01/14/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	2043	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RXPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	State Expanded Preliminary Assessment recommended (XPA)		
Further Action:	Medium		
Comments:	Further site characterization needed to adequately evaluate exposure pathways.		

Admin ID:	708839	Action ID:	9465
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	02/05/1999	Complete Date:	02/05/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	713214	Action ID:	9519
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/31/1999	Complete Date:	07/01/2000
Substance Code:	VCS	Rank Value:	0
Employee Id:	1872	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	VWL	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	VCS Waiting List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	704150	Action ID:	9435
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	09/24/1998	Complete Date:	03/31/1999
Substance Code:	SAS	Rank Value:	0
Employee Id:	2202	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ICP	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Independent Cleanup Program		
Further Action:	0		
Comments:	Not reported		

ODOT - EAST SALEM COMPLEX (Continued) **S104889580**

Admin ID:	730907	Action ID:	9479
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/18/2005	Complete Date:	Not reported
Substance Code:	ICP	Rank Value:	Not reported
Employee Id:	664	Cleanup Flag:	False
Created By:	NGRAMLI	Created Date:	08/18/2005
Action Code:	RFIA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Further Investigation of Area Facilities recommended		
Further Action:	Medium		
Comments:	Not reported		

Operations:

Operation Id:	133480
Operation Status:	Active
Common Name:	ODOT East Salem Complex
Yrs of Operation:	Not reported
Comments:	Not reported
Updated Date:	05/14/2002

173
South
1/2-1
0.696 mi.
3676 ft.

2809 STATE ST
SALEM, OR 97301

OR HAZMAT **S105525783**
VCP **N/A**
ECSI

Relative:
Lower

Actual:
183 ft.

HAZMAT:

Responsble Party:	OWCC-DEPT OF CORRECTIONS
RP Company:	STATE OF OREGON
RP Address:	809 STATE ST
RP City,St,Zip:	SALEM, OR 97301
Facility ID:	970465
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985

(Continued) **S105525783**

Unit:	Not reported
Agency Phone:	5035886245
Osfm Incident Report Number:	970465
Dept. Responding:	SALEM FD
Person Making Report:	WILLIAM HURLY
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	5035886245
Date Of Incident:	11/17/1997
Call Time:	1:14:00 PM
In Route:	12:00:00 AM
Arrival:	1:18:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	1:39:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	12440
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Structure
Area Type:	Not reported
Responsible Party(Ies):	OWCC-DEPT OF CORRECTIONS
Company:	STATE OF OREGON
Respcontact:	Not reported
Address:	809 STATE ST
Resp City:	SALEM
Resp State:	OR
Resp ZipCode:	97301
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	0
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Normal Operation
Cause:	Unknown
Vehicle And Cargo:	0
Fixed Property:	0
Total Loss:	$0.00

OR HAZMAT:

Casualties Id:	585
Incident Id:	970465
Casualties Type:	1
Injury Exp:	0
Injury Other:	3
Death Exp:	0
Death Other:	0
Hopitalized:	0

Chemical:

(Continued) **S105525783**

Chemical Info: 8255
Chemical Id: 35430
Incident Id: 970465
Chemical Name: UNKNOWN CHEMICAL
UNNA: Not reported
Amount At Risk: 0
Amount Released: 0
Amount Measured: 0
Biological: False
Radiological: False

Chemical Id: 35430
Chemical Name: UNKNOWN CHEMICAL
Hazardous Ingredient: UNKNOWN CHEMICAL
Hazardous Class 1: 9.0
Hazardous Class 2: Not reported
Hazardous Rank: 2
Case Number: Not reported
UNNA Number: Not reported
EPA Pest Reg: Not reported
EHA Chem: Not reported
PSM Chem: Not reported
CAA 112R Chem: Not reported

Released:
Release Behavior Id: 4899
Incident Id: 970465
Behavior: 4

Narrative:
Narrative Id: 6808
Incident Id: 970465
Incident Narrative: 3 FEMALE EMPLOYEES OF OWCC BECAME OVERCOME BY FUMES OF UNKNOWN ORIGIN OR MANUFACTURE. THEY WERE WORKING IN MAIN LOBBY AREA OF PRISON AT TIME OF INCIDENT. THEY COMPLAINED OF ONSET OF DIZZINESS FOLLOWED BY NAUSEA. NO SMELLS OR ODORS WERE NOTICED BY US OR DETECTED USING OUR GAS DETECTORS
Incident Date: 11/17/1997

VCS:
ECS Site ID: 1177
CRL: NFA
Facility Size: 5 acres
Action: NO FURTHER STATE ACTION REQUIRED
Start Date: 04/23/1996
End Date: 04/23/1996
Project Manager Name: Keith Andersen
Program: VCS

ECSI:
State ID Number: 1177
Study Area: False
Legislatve ID: 831
FACA ID: 9032
Brown ID: 0
Region ID: 3
Investigation: No Further Action
Further Action: 0

(Continued) **S105525783**

Lat/Long (dms):	44 55 47.00 / -123 0 8.00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	25	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	5 acres
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	02/26/2009

Narrative:

NARR ID: 5731962
NARR Code: Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: The facility is situated on a 5-acre site and consists of six buildings. There are no manufacturing or process operations on-site. PCBs were suspected at an abandoned transformer pad; analysis confirms none present.

NARR ID: 5731963
NARR Code: Project Issues Summary
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: The site has been managed under a multi-site environmental management agreement administered by DEQ through a Stipulated Final Order (SFO) (August 1994). DEQ and the Department of Corrections (DOC) have agreed to review recommendations for further action at each of seven DOC facilities to determine how DOC's limited resources will be spent to address them. The decisions will be based on the relative priority of the environmental threat at each site. DEQ will incorporate the decision that no further action is required at this facilith in an amended SFO.

NARR ID: 5731964
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Visible signs of leakage at pad-mounted transformer, date of release(s) unknown. Wipe samples from stained pad and soils adjacent to pad did not contain detectable PCBs.

NARR ID: 5731965
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: A PA was conducted at the site in 1992, indicating the potential for PCB contamination in the vicinity of an abandoned pad-mounted transformer. An XPA was conducted and samples were analyzed in March 1995. The XPA Summary Report was submitted to DEQ in June 1995. PCBs were not detected. DEQ agrees that no further action is required at

(Continued) **S105525783**

the site.

Administrative Action:

Admin ID:	720974	Action ID:	9510
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	05/13/1994	Complete Date:	05/13/1994
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RXPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	State Expanded Preliminary Assessment recommended (XPA)		
Further Action:	Not reported		
Comments:	Department of Corrections committed to completing XPA by 7/95.		

Admin ID:	723392	Action ID:	9456
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	03/09/1992	Complete Date:	05/08/1993
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	BASIC PRELIMINARY ASSESSEMENT		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	723394	Action ID:	9519
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	10/17/1991	Complete Date:	03/09/1992
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	VWL	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	VCS Waiting List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	723505	Action ID:	9442
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	05/09/1993	Complete Date:	01/10/1995
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NEG	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NEGOTIATIONS		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	711348	Action ID:	9443
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/23/1996	Complete Date:	04/23/1996
Substance Code:	VCS	Rank Value:	0
Employee Id:	179	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NFA	Category:	Remedial Action

(Continued) **S105525783**

Action Flag:	True	Action Code Flag:	False
Action:	NO FURTHER STATE ACTION REQUIRED		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	711349	Action ID:	9413
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/23/1996	Complete Date:	04/23/1996
Substance Code:	VCS	Rank Value:	0
Employee Id:	179	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	CO	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Closeout activities on completed project		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	714974	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	03/08/1992	Complete Date:	03/08/1992
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	714975	Action ID:	9496
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	03/08/1992	Complete Date:	03/08/1992
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	State Basic Preliminary Assessment recommended (PA)		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	716340	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	02/07/1992	Complete Date:	Not reported
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	717316	Action ID:	9520
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	01/10/1995	Complete Date:	06/30/1995
Substance Code:	VCS	Rank Value:	0

(Continued) **S105525783**

Employee Id:	179	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	XPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	EXPANDED PRELIMINARY ASSESSMENT		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	718666	Action ID:	9449
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	05/10/1994	Complete Date:	Not reported
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NSFL	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Insufficient information to list		
Further Action:	Not reported		
Comments:	pending completion of XPA		

Admin ID:	718667	Action ID:	9437
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	05/09/1994	Complete Date:	05/09/1994
Substance Code:	VCS	Rank Value:	0
Employee Id:	304	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	q	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	q		
Further Action:	Not reported		
Comments:	Not reported		

Operations:

Operation Id:	132484
Operation Status:	Active
Common Name:	Oregon Women's Correctional Center
Yrs of Operation:	1965 to present
Comments:	190-bed, medium security correction facility for women.
Updated Date:	06/19/1995
Operations SIC Id:	195940
SIC Code:	9223
Created By:	Not reported
Created Date:	12/17/2002

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174 **ODOT - MOBIL SERVICE STATION** **LUST** **S100500446**
NE **3520 MARKET ST. NE** **ECSI** **N/A**
1/2-1 **SALEM, OR 97301**
0.696 mi.
3677 ft.

Relative:
Lower

Actual:
207 ft.

LUST:

Region:	Western Region
Facility ID:	24-82-4001
Cleanup Received Date:	02/20/1982
Cleanup Start Date:	02/22/1982
Cleanup Complete Date:	**11/23/1998**

ODOT - MOBIL SERVICE STATION (Continued) **S100500446**

ECSI:

State ID Number:	1536	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	No Further Action
FACA ID:	40194	Further Action:	0
Lat/Long (dms):	44 57 .00 / -122 59 27.60	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	24	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	05/23/2007
Alias Name:	Baylor's Mobil Service		

Narrative:

NARR ID:	5734032
NARR Code:	Data Sources
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002
NARR Comments:	LUST file #24-82-4001

Administrative Action:

Admin ID:	707683	Action ID:	9426
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/19/1998	Complete Date:	11/19/1998
Substance Code:	SAS	Rank Value:	0
Employee Id:	2043	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV2	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE PRIORITY EVALUATION FOR FURTHER ACTION		
Further Action:	Not reported		
Comments:	Evaluation documented in memo to file re: Baylor's Mobil Service (LUST #24-82- 4001). NFA recommended for non-petroleum contamination issues. Tanks program recommended NFA for petroleum-related issues.		

Admin ID:	707684	Action ID:	9443
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/19/1998	Complete Date:	11/19/1998
Substance Code:	SAS	Rank Value:	0
Employee Id:	2043	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NFA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NO FURTHER STATE ACTION REQUIRED		
Further Action:	Not reported		
Comments:	Evaluation documented in memo to file re: Baylor's Mobil Service (LUST #24-82- 4001). NFA recommended for non-petroleum contamination issues. Tanks program recommended NFA for petroleum-related issues.		

Admin ID:	720552	Action ID:	9519
Agency:	Dept Of Environmental Quality	Region:	Northwestern Region
Start Date:	03/25/1994	Complete Date:	05/15/1994
Substance Code:	VCS	Rank Value:	0
Employee Id:	631	Cleanup Flag:	False

ODOT - MOBIL SERVICE STATION (Continued) **S100500446**

Created By:	Not reported	Created Date:	12/17/2002
Action Code:	VWL	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	VCS Waiting List		
Further Action:	Not reported		
Comments:	Kerri Nelson - PM		

Admin ID:	714467	Action ID:	9506
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/30/1994	Complete Date:	08/30/1994
Substance Code:	VCS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RSI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Site Investigation recommended (SI)		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	716665	Action ID:	9424
Agency:	Not reported	Region:	Not reported
Start Date:	04/07/1994	Complete Date:	Not reported
Substance Code:	Not reported	Rank Value:	0
Employee Id:	631	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	717328	Action ID:	9437
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/30/1994	Complete Date:	08/30/1994
Substance Code:	VCS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	q	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	q		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	717329	Action ID:	9449
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	08/30/1994	Complete Date:	Not reported
Substance Code:	VCS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NSFL	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Insufficient information to list		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	717330	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region

ODOT - MOBIL SERVICE STATION (Continued) **S100500446**

Start Date: 08/29/1994
Substance Code: VCS
Employee Id: 738
Created By: Not reported
Action Code: EV
Action Flag: True
Action: SITE EVALUATION
Further Action: Not reported
Comments: Not reported
Complete Date: 08/29/1994
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002
Category: Remedial Action
Action Code Flag: False

Operations:
Operation Id: 132866
Operation Status: Inactive
Common Name: Mobil Gasoline Service Station - ODOT
Yrs of Operation: Not reported
Comments: Not reported
Updated Date: 05/01/1995
Operations SIC Id: 195882
SIC Code: 5541
Created By: Not reported
Created Date: 12/17/2002

---

175 East 1/2-1 0.821 mi. 4335 ft.

Relative: Higher

Actual: 215 ft.

SALEM ACADEMY CHRISTIAN HIGH SCHOOL
942 LANCASTER DR NE
SALEM, OR 97301

RCRA NonGen / NLR **1004770157**
FINDS **ORD135943108**
MANIFEST
VCP
NPDES
ECSI

RCRA NonGen / NLR:
Date form received by agency: 12/31/2007
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Facility address: 942 LANCASTER DR NE
SALEM, OR 97301
EPA ID: ORD135943108
Contact: DWIGHT WILSON
Contact address: 942 LANCASTER DR NE
SALEM, OR 97301
Contact country: US
Contact telephone: 503 378-1219
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Owner/operator address: 942 LANCASTER DRIVE NE
SALEM, OR 97301
Owner/operator country: US
Owner/operator telephone: (503) 378-1219
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 04/28/1989
Owner/Op end date: Not reported

Owner/operator name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Owner/operator address: 942 LANCASTER DR NE

SALEM ACADEMY CHRISTIAN HIGH SCHOOL (Continued) **1004770157**

SALEM, OR 97301
Owner/operator country: US
Owner/operator telephone: (503) 378-1219
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/31/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2006
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 01/10/2003
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 03/22/2002
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 03/05/2001
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 02/09/2000
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

SALEM ACADEMY CHRISTIAN HIGH SCHOOL (Continued) **1004770157**

Date form received by agency: 03/17/1999
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 05/04/1998
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 02/20/1997
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 05/02/1996
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 05/11/1995
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 12/31/1993
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 12/30/1992
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Date form received by agency: 04/01/1992
Facility name: SALEM ACADEMY CHRISTIAN HIGH SCHOOL
Site name: SALEM ACADEMY HIGH SCHOOL
Classification: Not a generator, verified

Hazardous Waste Summary:
Waste code: NA
Waste name: NA

Violation Status: No violations found

FINDS:

Registry ID: 110004788891

Environmental Interest/Information System
OR-DEQ (Oregon - Department Of Environmental Quality) is a regulatory agency whose job is to protect the quality of Oregon's Environment. DEQ uses a combination of technical assistance, inspections and permitting to help public and private facilities and citizens understand and comply with state and federal environmental regulations.

SALEM ACADEMY CHRISTIAN HIGH SCHOOL (Continued) **1004770157**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

OR MANIFEST:

Manifest Year:	Manifest Year - 2007
EPA Id:	ORD135943108
Inactive Status:	2007-12-31 00:00:00
Organization Name:	Not reported
Contact First Name:	Dwight
Contact Last Name:	Wilson
Contact Telephone Number:	503 510-0626
Mailing Address:	942 Lancaster Dr NE
Mailing City:	Salem
Mailing State:	OR
Mailing Zip:	97301

VCS:

ECS Site ID:	5362
CRL:	SUS
Facility Size:	Not reported
Action:	SITE INVESTIGATION
Start Date:	06/23/2010
End Date:	Not reported
Project Manager Name:	Timothy Brown
Program:	ICP

NPDES:

WQ File Nbr:	121229
Legal Name:	SALEM ACADEMY CHRISTIAN SCHOOLS
Region:	WR
Pri SIC:	1629
Facility Type:	OTHER HEAVY CONSTRUCTION
Latitude:	44.9433
Longitude:	-122.9767
Category:	STM
Permit Type:	GEN12C
Permit Active:	True
Is Active?:	Not reported
Permit Description:	Stormwater; NPDES construction more than 1 acre disturbed ground
Expiration Date:	11/30/2015
EPA Number:	ORR10D003
UIC Facility:	False
Admin Agent:	Salem Office
Last Action Date:	07/14/2011
Permit Writer:	Everett
Compliance Inspector:	Not reported
DMR Reviewer:	Not reported
Application Number:	966363

SALEM ACADEMY CHRISTIAN HIGH SCHOOL (Continued) **1004770157**

Class: MINOR
Start Date: 07/14/2011

ECSI:

State ID Number:	5362	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	Suspect
FACA ID:	116303	Further Action:	0
Lat/Long (dms):	44 56 33.70 / -122 58 59.90	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	2.00	Range Zone:	W
Section Coord:	19	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	09/02/2010

Narrative:

NARR ID:	5752272
NARR Code:	Contamination
Created By:	GGAMOLO
Created Date:	06/23/2010
Updated By:	GWISTAR
Updated Date:	09/02/2010
NARR Comments:	Contaminants associated with site are petroleum hydrocarbons (TPH-Dx) and their constituents (PAH's, VOCs) due to a heating oil tank release.

Administrative Action:

Admin ID:	737718	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Not reported
Start Date:	06/23/2010	Complete Date:	06/23/2010
Substance Code:	Not reported	Rank Value:	Not reported
Employee Id:	2594	Cleanup Flag:	False
Created By:	GGAMOLO	Created Date:	06/23/2010
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	737719	Action ID:	9511
Agency:	Dept Of Environmental Quality	Region:	Northwestern Region
Start Date:	06/23/2010	Complete Date:	Not reported
Substance Code:	ICP	Rank Value:	Not reported
Employee Id:	242	Cleanup Flag:	False
Created By:	GGAMOLO	Created Date:	06/23/2010
Action Code:	SI	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE INVESTIGATION		
Further Action:	0		
Comments:	Not reported		

AU176
East
1/2-1
0.824 mi.
4353 ft.

SEARS AUTO CENTER NO 2715
833 LANCASTER DR NE
SALEM, OR 97301

Site 1 of 2 in cluster AU

Relative:
Higher

Actual:
215 ft.

Database(s): RCRA-CESQG, FINDS, MANIFEST, VCP, BROWNFIELDS, ECSI

EDR ID Number: 1004769742
EPA ID Number: OR0001014869

RCRA-CESQG:

Date form received by agency:	12/31/2009
Facility name:	SEARS AUTO CENTER NO 2715
Facility address:	833 LANCASTER DR NE SALEM, OR 97301-2929
EPA ID:	OR0001014869
Mailing address:	210 SOUTH CLARK STREET, STE 22 CHICAGO, IL 60603
Contact:	MICHAEL OLSEN
Contact address:	3333 BEVERLY RD, B5-362A HOFFMAN ESTATES, IL 60179
Contact country:	US
Contact telephone:	847 286-7222
Contact email:	Not reported
EPA Region:	10
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	SEARS ROEBUCK & CO
Owner/operator address:	3333 BEVERLY RD, B5-362A HOFFMAN ESTATES, IL 60179
Owner/operator country:	US
Owner/operator telephone:	(847) 286-7222
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	12/31/2009
Owner/Op end date:	Not reported

Owner/operator name:	SEARS ROEBUCK & CO
Owner/operator address:	3333 BEVERLY RD B5-362A HOFFMAN ESTATES, IL 60179
Owner/operator country:	US
Owner/operator telephone:	(847) 286-7222
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/02/2002
Owner/Op end date:	Not reported

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: No

Historical Generators:
Date form received by agency: 12/31/2008
Facility name: SEARS AUTO CENTER NO 2715
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/2007
Facility name: SEARS AUTO CENTER NO 2715
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/2003
Facility name: SEARS AUTO CENTER NO 2715
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/03/2003
Facility name: SEARS AUTO CENTER NO 2715
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 04/02/2002
Facility name: SEARS AUTO CENTER NO 2715
Classification: Small Quantity Generator

Date form received by agency: 01/31/2001
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/27/2000
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 06/30/1999
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/04/1998
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/25/1997
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 06/28/1996
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Small Quantity Generator

Date form received by agency: 01/24/1995
Facility name: SEARS AUTO CENTER NO 2715
Site name: MONTGOMERY WARD AUTO CENTER
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: NA
Waste name: NA

Violation Status: No violations found

FINDS:

Registry ID: 110014164732

Environmental Interest/Information System

OR-DEQ (Oregon - Department Of Environmental Quality) is a regulatory agency whose job is to protect the quality of Oregon's Environment. DEQ uses a combination of technical assistance, inspections and permitting to help public and private facilities and citizens understand and comply with state and federal environmental regulations.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

OR MANIFEST:
Manifest Year: Manifest Year - 2007
EPA Id: OR0001014869
Inactive Status: Not reported
Organization Name: Not reported
Contact First Name: Michael
Contact Last Name: Olsen
Contact Telephone Number: 847 286-7222
Mailing Address: 3333 Beverly Rd, B5-339A

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Mailing City: Hoffman Estates
Mailing State: IL
Mailing Zip: 60179

RCRA Id : OR0001014869
Inactive : Not reported
Year : 2007
Status : Conditionally exempt generator
Manifest : na
Ship Date : 12/17/2007
TSD : ORD981766124
WS Num: 1
Transporter : TXR000050930
Ship Qty : Not reported
Rpt Unit : Not reported
Off Mng : H061
EPA Waste Codes: D001 D018 D039
Waste Description: Parts Washer Solvent Waste
Tot Amt Of Waste Stream Generated in Reporting Yr: 100.27
Tot Amt Of Waste Stream Generated in Reporting Yr: 24.309999999999999

RCRA Id : OR0001014869
Inactive : Not reported
Year : 2007
Status : Conditionally exempt generator
Manifest : na
Ship Date : 03/27/2007
TSD : ORD981766124
WS Num: 1
Transporter : TXR000050930
Ship Qty : Not reported
Rpt Unit : Not reported
Off Mng : H061
EPA Waste Codes: D001 D018 D039
Waste Description: Parts Washer Solvent Waste
Tot Amt Of Waste Stream Generated in Reporting Yr: 100.27
Tot Amt Of Waste Stream Generated in Reporting Yr: 33.420000000000002

RCRA Id : OR0001014869
Inactive : Not reported
Year : 2007
Status : Conditionally exempt generator
Manifest : na
Ship Date : 06/13/2007
TSD : ORD981766124
WS Num: 1
Transporter : TXR000050930
Ship Qty : Not reported
Rpt Unit : Not reported
Off Mng : H061
EPA Waste Codes: D001 D018 D039
Waste Description: Parts Washer Solvent Waste
Tot Amt Of Waste Stream Generated in Reporting Yr: 100.27
Tot Amt Of Waste Stream Generated in Reporting Yr: 24.309999999999999

RCRA Id : OR0001014869
Inactive : Not reported

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Year : 2007
Status : Conditionally exempt generator
Manifest : na
Ship Date : 09/24/2007
TSD : ORD981766124
WS Num: 1
Transporter : TXR000050930
Ship Qty : Not reported
Rpt Unit : Not reported
Off Mng : H061
EPA Waste Codes: D001 D018 D039
Waste Description: Parts Washer Solvent Waste
Tot Amt Of Waste Stream Generated in Reporting Yr: 100.27
Tot Amt Of Waste Stream Generated in Reporting Yr: 18.23

VCS:
ECS Site ID: 1778
CRL: NFA
Facility Size: Not reported
Action: NO FURTHER STATE ACTION REQUIRED
Start Date: 07/02/2002
End Date: 07/02/2002
Project Manager Name: Nancy Sawka
Program: ICP

OR BROWNFIELDS:
Geolocation Id: 40332
Status: NO FURTHER STATE ACTION REQUIRED
Lat/Long: 44.9401 / -122.983

ECSI:

State ID Number:	1778	Brown ID:	Brownfield Site - DEQ Tech Assistance
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	No Further Action
FACA ID:	40332	Further Action:	0
Lat/Long (dms):	44 56 24.70 / -122 59 1.30	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	2.00	Range Zone:	W
Section Coord:	19	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	02/26/2009

Hazardous Release:
Substance ID.: 122012
Haz Release ID: 380228
Qty Released: unknown
Date Released: Not reported
Update Date: 05/12/1995
Update By: Not reported
Substance Code: ECD275
Substance Name: TOTAL PETROLEUM HYDROCARBONS (TPH)
Substance Abbrev.: Not reported
Substance Category ID: 8540

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Substance Category: Petroleum Related Releases for OSPIRG Report
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8540
Substance Category: Petroleum Related Releases for OSPIRG Report
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Comment ID: 303231
Release Code: General Comments
Release Comments: from one soil sample
Sampling Result ID: 343806
Feature Id: Not reported
Hazard Release Id: 380228
Medium: 703
Substance Abbrev.: Not reported
Unit Code: 7
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 11/14/1994
End Date: Not reported
Min Concentration: .00
Max Concentration: 83000.00
Sample Comment: 83,000 ppm
Last Update By: acv
Update Date: 12/05/1995

Substance ID.: 120908
Haz Release ID: 380229
Qty Released: unknown
Date Released: Not reported
Update Date: 05/12/1995
Update By: Not reported
Substance Code: 11096-82-5
Substance Name: PCB 1260
Substance Abbrev.: Not reported
Substance Category ID: 8496
Substance Category: Semi-volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8557
Substance Category: PCB Substances for the OSPIRG Report
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8496
Substance Category: Semi-volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8557
Substance Category: PCB Substances for the OSPIRG Report
Category Level: Not reported

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 316557
Sub Alias Name: AROCHLOR 1260
Substance Alias ID: 316558
Sub Alias Name: AROCLOR 1260
Sampling Result ID: 343807
Feature Id: Not reported
Hazard Release Id: 380229
Medium: 703
Substance Abbrev.: Not reported
Unit Code: 7
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 11/14/1994
End Date: Not reported
Min Concentration: .00
Max Concentration: 140.00
Sample Comment: 140 ppm
Last Update By: acv
Update Date: 12/05/1995

Substance ID.: 121694
Haz Release ID: 380230
Qty Released: unknown
Date Released: Not reported
Update Date: 05/12/1995
Update By: Not reported
Substance Code: 75-09-2
Substance Name: METHYLENE CHLORIDE
Substance Abbrev.: Not reported
Substance Category ID: 8518
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8518
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 319341
Sub Alias Name: DICHLOROMETHANE
Substance Alias ID: 319342
Sub Alias Name: METHANE DICHLORIDE
Substance Alias ID: 319343
Sub Alias Name: METHYLENE BICHLORIDE
Substance Alias ID: 319344
Sub Alias Name: METHYLENE DICHLORIDE
Sampling Result ID: 343808
Feature Id: Not reported
Hazard Release Id: 380230
Medium: 703
Substance Abbrev.: Not reported
Unit Code: 8

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 11/14/1994
End Date: Not reported
Min Concentration: .00
Max Concentration: 44.00
Sample Comment: 44 ppb
Last Update By: acv
Update Date: 12/05/1995

Substance ID.: 121587
Haz Release ID: 380231
Qty Released: unknown
Date Released: Not reported
Update Date: 05/12/1995
Update By: Not reported
Substance Code: 67-64-1
Substance Name: ACETONE
Substance Abbrev.: Not reported
Substance Alias ID: 319114
Sub Alias Name: DIMETHYL KETONE
Substance Alias ID: 319115
Sub Alias Name: KETOPROPANE,beta-
Substance Alias ID: 319116
Sub Alias Name: PROPANONE,2-
Substance Alias ID: 319117
Sub Alias Name: PYROACETIC ETHER
Sampling Result ID: 343809
Feature Id: Not reported
Hazard Release Id: 380231
Medium: 703
Substance Abbrev.: Not reported
Unit Code: 8
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 11/14/1994
End Date: Not reported
Min Concentration: .00
Max Concentration: 340.00
Sample Comment: 340 ppb
Last Update By: acv
Update Date: 12/05/1995

Substance ID.: 121500
Haz Release ID: 380232
Qty Released: unknown
Date Released: Not reported
Update Date: 05/12/1995
Update By: Not reported
Substance Code: 591-78-6
Substance Name: HEXANONE,2-
Substance Abbrev.: Not reported
Substance Alias ID: 318885

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Sub Alias Name: BUTYL METHYL KETONE,n-
Substance Alias ID: 318886
Sub Alias Name: KETONE,BUTYL METHYL-
Substance Alias ID: 318887
Sub Alias Name: MBK
Substance Alias ID: 318888
Sub Alias Name: METHYL-n-BUTYL KETONE
Substance Alias ID: 318889
Sub Alias Name: MNBK
Sampling Result ID: 343810
Feature Id: Not reported
Hazard Release Id: 380232
Medium: 703
Substance Abbrev.: Not reported
Unit Code: 8
Observation: False
Owner Operator: False
Lab Data: True
Sample Depth: Not reported
Start Date: 11/14/1994
End Date: Not reported
Min Concentration: .00
Max Concentration: 500.00
Sample Comment: 500 ppb
Last Update By: acv
Update Date: 12/05/1995

Narrative:
NARR ID: 5735491
NARR Code: Contamination
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: (12/5/95 ACV/SAS) In November 1994, a release from an automotive service center hydraulic hoist system was reported to the LUST Program. An initial soil sample was collected and analyzed for TPH, solvents, PCBs and metals. TPH levels were at 83,000 ppm and several VOCs and PCBs were detected. No other information was provided that indicated any soil cleanup activities or excavation had been conducted.

NARR ID: 5735492
NARR Code: Data Sources
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: DEQ LUST file 24-94-4163; Soil & Groundwater Report 11/2/01; Supplemental Subsurface Site Investigation Report 2/20/02

NARR ID: 5735493
NARR Code: Hazardous Substance/Waste Types
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Hydraulic oils, solvents, and PCBs

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

NARR ID: 5735494
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Leaking hydraulic hoist or piping

NARR ID: 5735495
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: (8/6/02 NAS/ICP) An ICP agreement for the hydraulic lift release was executed 12/16/01. After reviewing the report, DEQ recommended no further action related to the hydraulic fluid release. No comments were received during the public comment period and DEQ issued a NFA for the hydraulic fluid release on 7/2/02.

Administrative Action:

Admin ID:	711289	Action ID:	9496
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	12/06/1995	Complete Date:	12/06/1995
Substance Code:	SAS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	State Basic Preliminary Assessment recommended (PA)		
Further Action:	Low		
Comments:	Not reported		

Admin ID:	701602	Action ID:	9435
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	12/16/2001	Complete Date:	12/16/2001
Substance Code:	ICP	Rank Value:	0
Employee Id:	644	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ICP	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Independent Cleanup Program		
Further Action:	Not reported		
Comments:	ICP agreement executed for the hydraulic lift release		

Admin ID:	701603	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	12/03/2001	Complete Date:	04/17/2002
Substance Code:	ICP	Rank Value:	0
Employee Id:	644	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	Hydraulic fluid release area		

Admin ID:	701644	Action ID:	9443

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/02/2002	Complete Date:	07/02/2002
Substance Code:	ICP	Rank Value:	0
Employee Id:	644	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	NFA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	NO FURTHER STATE ACTION REQUIRED		
Further Action:	Not reported		
Comments:	NFA for hydraulic fluid release		

Admin ID:	701814	Action ID:	9417
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	09/11/2002	Complete Date:	09/11/2002
Substance Code:	ICP	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	DLC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility delisted from Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	714086	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	10/26/1995	Complete Date:	Not reported
Substance Code:	SAS	Rank Value:	0
Employee Id:	Not reported	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	714202	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/11/1995	Complete Date:	12/05/1995
Substance Code:	SAS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		
Further Action:	Not reported		
Comments:	Federal Screening		

Admin ID:	714583	Action ID:	9498
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	12/05/1995	Complete Date:	12/05/1995
Substance Code:	SAS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Proposal for Confirmed Release List recommended		
Further Action:	Not reported		

SEARS AUTO CENTER NO 2715 (Continued) **1004769742**

Comments: Not reported

Admin ID:	714584	Action ID:	9437
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	12/05/1995	Complete Date:	12/05/1995
Substance Code:	SAS	Rank Value:	0
Employee Id:	738	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	q	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	q		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	702335	Action ID:	9438
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	10/04/2001	Complete Date:	10/04/2001
Substance Code:	SAS	Rank Value:	0
Employee Id:	767	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility placed on Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	702337	Action ID:	9465
Agency:	Dept Of Environmental Quality	Region:	Headquarters
Start Date:	08/06/2001	Complete Date:	08/23/2001
Substance Code:	SAS	Rank Value:	0
Employee Id:	767	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Confirmed Release List		
Further Action:	Not reported		
Comments:	E-mails to John Lyons, Skadden Aarps (Chicago), bankruptcy trustee for Montgomery Wards		

Operations:

Operation Id:	133104
Operation Status:	Active
Common Name:	Auto Service Center
Yrs of Operation:	unknown
Comments:	Not reported
Updated Date:	12/05/1995
Operations SIC Id:	196079
SIC Code:	7538
Created By:	Not reported
Created Date:	12/17/2002

AU177
East
1/2-1
0.825 mi.
4355 ft.

831 LANCASTER DR NE
SALEM, OR 97301

Site 2 of 2 in cluster AU

Relative:
Higher

Actual:
215 ft.

OR CRL **S105523497**
SPILLS **N/A**
OR HAZMAT
INST CONTROL
HSIS
ECSI

CRL:
Facility ID: 2085
Location ID: 40571
Status Code: LIS
Facility Status: No Further Action (Conditional)
Lat/Long: 44.9413 / -122.983

OR SPILLS:
Year: Not reported
Facility ID: 97-2296
Spill Date: Not reported
Material: Not reported
Quantity: 2
Unit of Measure: Gallons
How Occurred: Not reported
Release Date: 09/11/1997
Description: White Ford pickup Or license F137905
Location: Not reported
Lat/Long: 44.9413 / -122.983
Source: Motor Vehicle - Private
Material: Not reported
Media: Not reported
Responsible Company: Not reported
Responsible Contact: Not reported
Responsible Address: Not reported
Responsible City,St,Zip: Not reported
Responsible Country: Not reported

HAZMAT:
Responsble Party: ROBIN WILLIAMSON
RP Company: Not reported
RP Address: 2260 CRESTVIEW DR S
RP City,St,Zip: SALEM, OR 97302
Facility ID: 910429
OERS Number: Not reported
Dept Rsp: SALEM FD
Narrative: Not reported
Property Loss: Not reported
Amount Released: Not reported
Service County: Not reported
Service Name: Not reported
Incident Type: Not reported
Civilian Casualty Activity: Not reported
Chemical Name: Not reported
Hazmat Area Affected: Not reported
Hazmat Area Evacuated: Not reported
Hazmat Container Type: Not reported
Hazmat Physical State Released: Not reported
Hazmat Released Into: Not reported
Hazmat Released Volume Units: Not reported
Hazmat Released Weight Units: Not reported

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Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	5035886245
Osfm Incident Report Number:	910429
Dept. Responding:	SALEM FD
Person Making Report:	BRUCE OERTER
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	5035886245
Date Of Incident:	11/18/1991
Call Time:	2:31:00 AM
In Route:	12:00:00 AM
Arrival:	2:36:00 AM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM
In Service:	3:04:00 AM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	107558
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Public Road
Area Type:	Commercial
Responsible Party(Ies):	ROBIN WILLIAMSON
Company:	Not reported
Respcontact:	Not reported
Address:	2260 CRESTVIEW DR S
Resp City:	SALEM
Resp State:	OR
Resp ZipCode:	97302
Phone:	5033629627
Resp Phone2:	Not reported
Weather:	3
Temperature:	4
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	Normal Operation
Cause:	Container Rupture
Vehicle And Cargo:	400
Fixed Property:	0
Total Loss:	$400.00

Chemical:

Chemical Info:	6120
Chemical Id:	13288

(Continued) **S105523497**

Incident Id: 910429
Chemical Name: GASOLINE
UNNA: Not reported
Amount At Risk: 18
Amount Released: 15
Amount Measured: 2
Biological: False
Radiological: False

Chemical Id: 13288
Chemical Name: GASOLINE
Hazardous Ingredient: PETROLEUM DISTILLATES
Hazardous Class 1: 3.1
Hazardous Class 2: 6.3
Hazardous Rank: 2
Case Number: 8006619
UNNA Number: 1203
EPA Pest Reg: Not reported
EHA Chem: N
PSM Chem: N
CAA 112R Chem: N

Method:
Method Used Id: 4793
Incident Id: 910429
Identity Method: 5

Released:
Release Behavior Id: 5839
Incident Id: 910429
Behavior: 5

Release Behavior Id: 9054
Incident Id: 910429
Behavior: 1

Release Behavior Id: 9055
Incident Id: 910429
Behavior: 4

Narrative:
Narrative Id: 3594
Incident Id: 910429
Incident Narrative: RUPTURED FUEL TANK ON LEFT SIDE OF VEHICLEALLOWED GASOLINE TO LEAK ONTO THE STREET FOR 1/4 MILE PRIOR TO OCCUPANT PARKING IN THE LANCASTER MALL PARKING LOT. PARKING LOT IS COLLECTING SEVERAL POOL IN THE
AREA.
Alarm Time 0231. Arrival Time 0236. Back in service 0304. Incid ent occurred in commercial area and involved a car and fuel. Agencies responding were: Fire Dept, Public Works, and Landaster Mall
Security.
As reported by Captain Bruce Oerter: Ruptured fuel tank on left s ide of vehicle allowed gasoline to leak onto the street for 1/4 of a mile prior to occupant parking same in the Lancaster Mall parking

(Continued) **S105523497**

lot. Fuel continued to leak in the parking lot collecting in pools in several areas. Polution control responded and utilized approximately 10 absorbent pads to collect as much fuel as possible. Then Cold Kleen was used to dissipate remainder and flushed street and parking lot with water into sewer system.
As reported by Public Works: Gasoline spill 15 gallons. Car tan k ruptured. Assorb gas in parking lot. Inspect trash north on Lancaster. No significant materials found.

Incident Date: 11/18/1991

Responsble Party:	UNKNOWN
RP Company:	Not reported
RP Address:	Not reported
RP City,St,Zip:	Not reported
Facility ID:	910499
OERS Number:	Not reported
Dept Rsp:	SALEM FD
Narrative:	Not reported
Property Loss:	Not reported
Amount Released:	Not reported
Service County:	Not reported
Service Name:	Not reported
Incident Type:	Not reported
Civilian Casualty Activity:	Not reported
Chemical Name:	Not reported
Hazmat Area Affected:	Not reported
Hazmat Area Evacuated:	Not reported
Hazmat Container Type:	Not reported
Hazmat Physical State Released:	Not reported
Hazmat Released Into:	Not reported
Hazmat Released Volume Units:	Not reported
Hazmat Released Weight Units:	Not reported
Hazmat Released From:	Not reported
Hazmat Area Affected Measurement:	Not reported
Hazmat No. of People Evacuated:	Not reported
Hazmat No of Buildings Evacuated:	Not reported
Incident Content Loss:	Not reported
Civilian Casualty Patient Disposition:	Not reported
Remark:	Not reported
Incident District:	SALEM FD
Date Added:	01/01/1985
Unit:	Not reported
Agency Phone:	0005886245
Osfm Incident Report Number:	910499
Dept. Responding:	SALEM FD
Person Making Report:	BRUCE OERTER
Title:	CAPTAIN
Agency:	SALEM FD
Phone:	0005886245
Date Of Incident:	12/29/1991
Call Time:	4:23:00 PM
In Route:	12:00:00 AM
Arrival:	4:25:00 PM
Depart Scene:	12:00:00 AM
Back In Quarters:	12:00:00 AM

(Continued) **S105523497**

In Service:	6:01:00 PM
Dist Of Incident:	SALEM FD
Were State Resources Used?:	False
Was Oers Notified?:	False
Oers Number:	Not reported
Team Number:	Not reported
Agency Report Number:	111153
Unit:	Not reported
Highway:	Not reported
Mile Post:	Not reported
Scene Type:	Private Land
Area Type:	Commercial
Responsible Party(Ies):	UNKNOWN
Company:	Not reported
Respcontact:	Not reported
Address:	Not reported
Resp City:	Not reported
Resp State:	Not reported
Resp ZipCode:	Not reported
Phone:	Not reported
Resp Phone2:	Not reported
Weather:	3
Temperature:	0
Wind Speed:	0
Wind Direction:	Not reported
Were Haz Materials Released?:	True
Operation Performed:	In Route
Cause:	Unknown
Vehicle And Cargo:	0
Fixed Property:	2000
Total Loss:	$2,000.00

Chemical:

Chemical Info:	1273
Chemical Id:	9332
Incident Id:	910499
Chemical Name:	DIESEL FUEL
UNNA:	Not reported
Amount At Risk:	5
Amount Released:	5
Amount Measured:	2
Biological:	False
Radiological:	False

Chemical Id:	9332
Chemical Name:	DIESEL FUEL
Hazardous Ingredient:	PETROLEUM MID-DISTILLATES
Hazardous Class 1:	3.3
Hazardous Class 2:	Not reported
Hazardous Rank:	2
Case Number:	68476346
UNNA Number:	1993
EPA Pest Reg:	Not reported
EHA Chem:	N
PSM Chem:	N
CAA 112R Chem:	N

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Method:
Method Used Id: 1575
Incident Id: 910499
Identity Method: 6

Released:
Release Behavior Id: 3962
Incident Id: 910499
Behavior: 4

Narrative:
Narrative Id: 3641
Incident Id: 910499
Incident Narrative: Fuel Spill. Three agencies responded: Fire Department, Public Works, and an Ambulance. Response inclueded 2 engines, 1 ladder, 1 medic, 1 Public Works. This will be at the mall entrance on D Street near the Wards Auto Center. Reported by P&M Tow. Advising no traction in the area. A large amount in the mall parking lot also. ossible fuel unk. Advising mall security at this time.
At Public Works, Pollution Control was paged to respond to a diese l spill. Received by Barton Miller. Dispatched at 16:24. Departed job at 18:08. Applied cold clean 500 and had street sweeper work it in. SFD hosed down. Notified Ali Nikuker of DEQ regarding the spill. Estimated 2-3 gallons of diesel spilled.
AS REPORTED BY BRUCE OERTER, SALEM FIRE DEPT: DIESEL SPILLED FROM CONTAINERS FROM UNKNOWN VEHICLE. LEFT A TRAIL APPROXIMATELY 200 FEET LONG IN PARKING LOT. COLD KLEEN AND WATER- 500 GALLONS APPLIED. STREET SWEEPERS SCRUBBED LOT. CONTACT JEANIE OF CITY OF SALEM POLLUTION CONTROL FOR ANY OTHER INFO NEEDED.
Incident Date: 12/29/1991

OR INSTUTIONAL CONTROL:
Site Control Sequence #: 189
Site Id: 2085
Control Sequence #: 4
Begin Date: 04/03/2000
End Date: Not reported
Frequency Of Review: 0
Last Reviewed By: Steve Nichols
Last Review Date: 04/03/2000
Last Updated By: GWISTAR
Last Updated Date: 07/23/2003
Group Sequence #: 2
Control Code: USG
Control Description: Use Restriction Groundwater
FK Type Code: 1
Group Code: PR
Group Description: Proprietary
Type Code: I
Type Description: Institutional
Comments: Deed restriction prohibiting on-site groundwater usage.

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HSIS:

Facility Id:	095999
Chemical Is Extremely Hazardous Substance (EHS):	No
Department Or Division Of Company:	734
Facility Has Written Emergency Plan:	Yes
Contains 112R:	No
NAICS Code 1:	451110
NAICS Desc 1:	SPORTING GOODS STORES
NAICS Code 2:	000000
NAICS Desc 2:	Not reported
Manager Name:	MIKE MAVELLE VP RISK MGMT
Business Phone:	5033780300
Mailing Address:	1050 W HAMPDEN AVE
Mailing City,St,Zip:	ENGLEWOOD, CO 80110
No. of Employees:	28
Day Phone:	5033780300
Placard:	Yes
Fire Dept Code:	0321
Sprinkler System:	Yes
Emergency Contact:	JENNIFER ROBINSON
Emergency Procedure:	MGRS OFFICE
Business Type:	RETAIL SALES - SPORTING GOODS - SKI RENTAL AND REPAIR

Facility:

Facility Id:	095999
Physical State Of The Substance:	3
Physical State:	GAS
Average Amount Possessed During The Year Code:	04
Maximum Amount Possessed During The Year Code:	10
Applicable Unit Of Measure Code:	3
Description Of The Unit Of Measure:	CUBIC FEET
Type Code:	L
Description:	CYLINDER
Type Code:	Not reported
Temperature Description:	Not reported
Pressure of Code:	2
Pressure Description:	GREATER THAN NORMAL PRESSURE
Pressure of Code:	Not reported
Pressure Description:	Not reported
Temperature Description:	NORMAL TEMPERATURE
Temperature of The Hazardous Substance Code:	4
Temperature Description:	Not reported
Temperature of The Hazardous Substance Code:	Not reported
Days Hazardous Substance On Site During Year:	365
Is The Substance Protected A Trade Secret:	False
Description Of The Max Qnty Code:	200-499
Description Of The Avg Qnty Code:	50-199
Most Hazardous Ingridient:	CARBON DIOXIDE
United Nations/north America 4 Digit Class Number:	1013
Hazard Rank:	2
Chemical Is Extremely Hazardous Substance (EHS):	Not reported
First Hazardous Class Code For Chemical:	Acute Health Hazard
Second Hazardous Class Code For Chemical:	Non-flammable Gas
Third Hazardous Class Code For Chemical:	Not reported
Hazard Class 1 Of The Chemical:	6.3
Hazard Class 2 Of The Chemical:	2.2
Hazard Class 3 Of The Chemical:	Not reported

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Chemical:
United Nations/north America 4 Digit Class Number: 1013
Chemical Abstract Service Identifier Number: 124389
Chemical Is Extremely Hazardous Substance (EHS): No
First Hazardous Class Code For Chemical: Acute Health Hazard
Second Hazardous Class Code For Chemical: Non-flammable Gas
Third Hazardous Class Code For Chemical: Not reported
Hazard Class 1 Of The Chemical: 6.3
Hazard Class 2 Of The Chemical: 2.2
Hazard Class 3 Of The Chemical: Not reported
Chemical Is A Toxic 313 Chemical: No
EPA Pesticide Registration Number: Not reported
Contains 112R: No
Contains EHS: No
Fertilizer: No
Pesticide: No
Contains 313: No

ECSI:

State ID Number:	2085	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	Listed on the CRL/Inventory
FACA ID:	40571	Further Action:	0
Lat/Long (dms):	44 56 29.00 / -122 58 59.00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	2.00	Range Zone:	W
Section Coord:	19	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	02/22/2007

Hazardous Release:
Substance ID.: 121781
Haz Release ID: 387762
Qty Released: unk
Date Released: unk
Update Date: 02/24/2011
Update By: GWISTAR
Substance Code: 79-01-6
Substance Name: TRICHLOROETHYLENE
Substance Abbrev.: Not reported
Substance Category ID: 8523
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8545
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8523
Substance Category: Volatiles
Category Level: Not reported

(Continued) **S105523497**

Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8545
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 317517
Sub Alias Name: ETHINYL TRICHLORIDE
Substance Alias ID: 317518
Sub Alias Name: ETHYLENE TRICHLORIDE
Substance Alias ID: 317519
Sub Alias Name: TCE
Substance Alias ID: 317520
Sub Alias Name: TRI-CLENE
Substance Alias ID: 317521
Sub Alias Name: TRICHLOROETHENE

Substance ID.: 121011
Haz Release ID: 387763
Qty Released: unk
Date Released: unk
Update Date: 02/24/2011
Update By: GWISTAR
Substance Code: 127-18-4
Substance Name: TETRACHLOROETHYLENE
Substance Abbrev.: Not reported
Substance Category ID: 8519
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8551
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8519
Substance Category: Volatiles
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Category ID: 8551
Substance Category: Solvents of interest to Milwaukie Area GW study
Category Level: Not reported
Created By: Not reported
Created Date: 12/17/2002
Substance Alias ID: 316912
Sub Alias Name: ETHENE,TETRACHLORO-
Substance Alias ID: 316913
Sub Alias Name: ETHYLENE TETRACHLORIDE
Substance Alias ID: 316914
Sub Alias Name: PERCHLOROETHYLENE
Substance Alias ID: 316915
Sub Alias Name: PERCLENE
Substance Alias ID: 316916
Sub Alias Name: TETRACHLOROETHENE

(Continued) **S105523497**

Substance Alias ID: 316917
Sub Alias Name: TETRACHLOROETHENE,1,1,2,2-
Substance Alias ID: 316918
Sub Alias Name: TETRACHLOROETHYLENE,1,1,2,2-

Narrative:
NARR ID: 5737099
NARR Code: Hazardous Substance/Waste Types
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: PCE, TCE, cis-1,2-DCE.

NARR ID: 5737100
NARR Code: Manner of Release
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Chlorinated solvents in groundwater from former dry-cleaning business. Not reported

NARR ID: 5737101
NARR Code: Remedial Action
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: No further action required. Deed Restriction placed on property prohibiting use of on-site groundwater. Because of this institutional control, the site needs to be included on the Confirmed Release List and Inventory.

NARR ID: 5737102
NARR Code: Health Threats
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Chlorinated solvents in groundwater should present no significant threats to human health or the environment, as long as site owners/operators continue to meet the conditions of the Deed Restriction placed on the property.

Site Control:
Site Control #: 189
Control Number: 4
Begin Date: 04/03/2000
End Date: Not reported
Frequency Of Review: 0
Last Reviewed By: Steve Nichols
Last Reviewed Date: 04/03/2000
Last Update By: GWISTAR
Last Updated Date: 07/23/2003
Site Comment: Deed restriction prohibiting on-site groundwater usage.

Administrative Action:
Admin ID: 704521 Action ID: 9411

(Continued) **S105523497**

Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/03/2000	Complete Date:	04/03/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	CNFA	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	No Further Action (Conditional)		
Further Action:	Not reported		
Comments:	Deed restriction prohibiting on-site groundwater usage.		

Admin ID:	704663	Action ID:	9465
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/27/2000	Complete Date:	07/27/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Confirmed Release List		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	704664	Action ID:	9467
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/27/2000	Complete Date:	07/27/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PRI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False
Action:	Facility proposed for Inventory		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	706466	Action ID:	9434
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/03/2000	Complete Date:	04/03/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ICON	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Institutional Control		
Further Action:	Not reported		
Comments:	No further action required. Deed restriction prohibiting on-site groundwater usage.		

Admin ID:	706600	Action ID:	9425
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/01/2000	Complete Date:	03/29/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	EV	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	SITE EVALUATION		

(Continued) **S105523497**

Further Action: Not reported
Comments: State Screening. Voluntary Cleanup Program. No further action required. Deed restriction prohibiting on-site groundwater usage.

Admin ID:	706711	Action ID:	9498
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/03/2000	Complete Date:	04/03/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False

Action: Proposal for Confirmed Release List recommended
Further Action: Not reported
Comments: Chlorinated solvents in on-site groundwater above MCLs (analytical data). Deed restriction prohibiting on-site groundwater usage.

Admin ID:	706727	Action ID:	9499
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	04/03/2000	Complete Date:	04/03/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	RPLI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False

Action: Proposal for Inventory recommended
Further Action: Not reported
Comments: Chlorinated solvents in on-site groundwater above MCLs (analytical data). Deed restriction prohibiting on-site groundwater usage.

Admin ID:	705206	Action ID:	9438
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/15/2000	Complete Date:	11/15/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSC	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False

Action: Facility placed on Confirmed Release List
Further Action: Not reported
Comments: Not reported

Admin ID:	705207	Action ID:	9439
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	11/15/2000	Complete Date:	11/15/2000
Substance Code:	SAS	Rank Value:	0
Employee Id:	730	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LSI	Category:	Listing Action
Action Flag:	True	Action Code Flag:	False

Action: Facility placed on Inventory
Further Action: Not reported
Comments: Not reported

Admin ID:	706333	Action ID:	9459
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	05/28/1998	Complete Date:	06/18/1998

(Continued) **S105523497**

Substance Code:	SAS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	PAE	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	PRELIMINARY ASSESSMENT EQUIVALENT		
Further Action:	Not reported		
Comments:	VPA.		

Admin ID:	709317	Action ID:	9440
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	01/26/1998	Complete Date:	01/26/1998
Substance Code:	VCS	Rank Value:	0
Employee Id:	566	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	LTAG	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Letter Agreement		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	712393	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	07/23/1997	Complete Date:	Not reported
Substance Code:	SAS	Rank Value:	0
Employee Id:	273	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	712394	Action ID:	9519
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	06/17/1997	Complete Date:	01/26/1998
Substance Code:	VCS	Rank Value:	6
Employee Id:	179	Cleanup Flag:	False
Created By:	Not reported	Created Date:	12/17/2002
Action Code:	VWL	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	VCS Waiting List		
Further Action:	Not reported		
Comments:	Not reported		

178
SW
1/2-1
0.827 mi.
4364 ft.

2093 MILL ST. - HOT **LUST S102076328**
2093 MILL STREET SE **ECSI N/A**
SALEM, OR 97301

Relative:
Lower

Actual:
181 ft.

LUST:

Region:	Western Region
Facility ID:	24-95-4093
Cleanup Received Date:	06/27/1995
Cleanup Start Date:	06/16/1995
Cleanup Complete Date:	**Not reported**

2093 MILL ST. - HOT (Continued) **S102076328**

ECSI:

State ID Number:	4086	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	Suspect
FACA ID:	82520	Further Action:	258
Lat/Long (dms):	44 55 52.30 / -123 1 3.70	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	26	Qtr Section:	NW-S
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	06/21/2004
Alias Name:	OERS 04-0524		

Narrative:

NARR ID:	5744737
NARR Code:	Contamination
Created By:	MENGLIS
Created Date:	03/30/2004
Updated By:	MENGLIS
Updated Date:	03/30/2004
NARR Comments:	An unknown amount of diesel fuel was released from a 275 gallon AST heating oil tank. The exact date of release is not known. The City of Salem reported red diesel in the storm drain system on 3/9/04 in the area of 2000 Mill Street SE in Salem. The release site was confirmed as 2093 Mill Street SE in Salem by the city on 3/15/04. The diesel was released to the soil beneath the building by a gravity tube feeding a basement heater.

Administrative Action:

Admin ID:	728147	Action ID:	9424
Agency:	Dept Of Environmental Quality	Region:	Not reported
Start Date:	03/30/2004	Complete Date:	03/30/2004
Substance Code:	Not reported	Rank Value:	Not reported
Employee Id:	2202	Cleanup Flag:	False
Created By:	MENGLIS	Created Date:	03/30/2004
Action Code:	ENTRY	Category:	Administrative Action
Action Flag:	True	Action Code Flag:	False
Action:	Site added to database		
Further Action:	Not reported		
Comments:	Not reported		

Admin ID:	728148	Action ID:	9508
Agency:	Dept Of Environmental Quality	Region:	Western Region
Start Date:	03/31/2004	Complete Date:	03/31/2004
Substance Code:	SAS	Rank Value:	Not reported
Employee Id:	2314	Cleanup Flag:	False
Created By:	MENGLIS	Created Date:	03/30/2004
Action Code:	RSSC	Category:	Remedial Action
Action Flag:	True	Action Code Flag:	False
Action:	Site Screening recommended (EV)		
Further Action:	Medium		
Comments:	Not reported		

179
NW
1/2-1
0.845 mi.
4463 ft.

HYGENICS OF OREGON
1335 MADISON ST. NE
SALEM, OR 97303

MANIFEST **S105613804**
ECSI **N/A**

Relative:
Lower

Actual:
170 ft.

OR MANIFEST:

Manifest Year:	Manifest Year - 2007
EPA Id:	ORD009614801
Inactive Status:	2007-12-31 00:00:00
Organization Name:	Not reported
Contact First Name:	Dianna
Contact Last Name:	Elliott
Contact Telephone Number:	503 363-6367 ext 612
Mailing Address:	2900 Pringle Rd SE #150
Mailing City:	Salem
Mailing State:	OR
Mailing Zip:	97302

ECSI:

State ID Number:	979	Brown ID:	0
Study Area:	False	Region ID:	3
Legislatve ID:	0	Investigation:	Suspect
FACA ID:	5127	Further Action:	260
Lat/Long (dms):	44 57 12.00 / -123 1 .00	County Code:	24.00
Score Value:	Not reported	Cerclis ID:	Not reported
Township Coord.:	7.00	Township Zone:	S
Range Coord:	3.00	Range Zone:	W
Section Coord:	23	Qtr Section:	Not reported
Tax Lots:	Not reported	Size:	Not reported
NPL:	False	Orphan:	False
Updated By:	GWISTAR	Update Date:	02/26/2009

Narrative:

NARR ID:	5727542
NARR Code:	Contamination
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002
NARR Comments:	MEK habitually dumped out backdoor; constant and chronic vapors in building - according to letter to WVR in August 1988. WVR referred worker aspect of complaint to APD.

NARR ID:	5727543
NARR Code:	Data Sources
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002
NARR Comments:	DEQ Complaint File.

NARR ID:	5727544
NARR Code:	Hazardous Substance/Waste Types
Created By:	Not reported
Created Date:	12/17/2002
Updated By:	Not reported
Updated Date:	12/17/2002

HYGENICS OF OREGON (Continued) **S105613804**

NARR Comments: Methyl ethyl ketone.

NARR ID: 5727545
NARR Code: Pathways Other Hazards
Created By: Not reported
Created Date: 12/17/2002
Updated By: Not reported
Updated Date: 12/17/2002
NARR Comments: Soil.

Administrative Action:

Admin ID: 721977
Agency: Dept Of Environmental Quality
Start Date: 02/11/1994
Substance Code: SAS
Employee Id: 293
Created By: Not reported
Action Code: RSSC
Action Flag: True
Action: Site Screening recommended (EV)
Further Action: Low
Comments: Not reported

Action ID: 9508
Region: Not reported
Complete Date: 02/11/1994
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002
Category: Remedial Action
Action Code Flag: False

Admin ID: 718597
Agency: Dept Of Environmental Quality
Start Date: 06/02/1989
Substance Code: SAS
Employee Id: 304
Created By: Not reported
Action Code: ENTRY
Action Flag: True
Action: Site added to database
Further Action: Not reported
Comments: Not reported

Action ID: 9424
Region: Not reported
Complete Date: Not reported
Rank Value: 0
Cleanup Flag: False
Created Date: 12/17/2002
Category: Administrative Action
Action Code Flag: False

Operations:

Operation Id: 132278
Operation Status: Active
Common Name: Hygenics of Oregon
Yrs of Operation: Not reported
Comments: Not reported
Updated Date: 03/16/1995

Count: 37 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MARION COUNTY	S106918882	WOODWASTE LANDFILL	SEC16,T10S,R06E		SWF/LF
SALEM	S106116709	LOOP, RON	1010 21ST ST	97301	LUST
SALEM	S111242055	OP&R - HOLMAN STATE PARK	OR 221		UIC
SALEM	S105711002	LUMAN, ELIZABETH	559 24TH NE	97301	LUST
SALEM	S111254774	SALEM FIRE DEPT	2740 25TH ST SE	97301	AST, HSIS
SALEM	1006857350	SALEM AIRPORT CRASH FIRE TRAINING	25TH ST	97301	FINDS, ECSI
SALEM	S105464138	THOMAS, CAROL	4265 ALBERTA AVE NE	97301	LUST
SALEM	S111834538	MILL CREEK DISTRICT PROPERTY, PARC	AUMSVILLE HWY	97301	ECSI
SALEM	S111834539	MILL CREEK DISTRICT PROPERTY, PARC	AUMSVILLE HWY	97301	ECSI
SALEM	S112198886	MILL CREEK DISTRICT PROPERTY, PARC	AUMSVILLE HWY	97301	VCP, ECSI
SALEM	S109204330	STATE OF OREGON	CAPITOL BLDG	97301	LUST
SALEM	1006854740	SALEM RIVERFRONT PARK PROJECT	CHEMEKETA AND WATER STS	97301	FINDS, OR CRL, ENG CONTROLS, INST CONTROL, VCP, BROWNFIELD ECSI
SALEM	S111005959	PICTSWEET PROPERTIES (FORMER)	CORDON ROAD AND STATE ST		VCP, ECSI
SALEM	1011958222	SOIL CONTAMINATION - COTTAGE STREE	COTTAGE ST. NE, NORTH OF COURT	97301	FINDS
SALEM	S105613948	SALEM LANDFILL	FARAGATE ST NEAR RIVER RD S	97301	ECSI
SALEM	S108662772	STATE FARM INSURANCE	500 HAWTHORNE		NPDES
SALEM	S104304614	REESE, MARVIN HOT	7980 JENSEN ST NE	97301	LUST
SALEM	1006847502	FIRESTONE #4839 - 015970	844 LANCASTER	97301	FINDS
SALEM	U003580464	USWEST - PROSPECT HILL #1 - 010264	69 MILES SW OF SALEM	97301	UST
SALEM	1000205599	SALEM CY OF - REGIONAL PARK & REC	MINTO BROWN ISLAND PARK	97301	RCRA NonGen / NLR, FINDS
SALEM	S110646000	WATERS, DAVY L. & SANNA RAHA - MER	MOBILE SOURCE WR	97301	NPDES
SALEM	S111762549	OREGON DEPARTMENT OF TRANSPORTATIO	MOBILE SOURCE WR	97301	NPDES
SALEM	S111762601	OREGON DEPARTMENT OF AGICULTURE	MOBILE SOURCE WR	97301	NPDES
SALEM	S111762508	STEVE NORTH	MOBILE SOURCE WR	97301	NPDES
SALEM	1006865577	MARION COUNTY - MUNICIPAL STORMWAT	MULTIPLE OUTFALL LOCATIONS (MA	97301	FINDS
SALEM	1010347972	ODOT - STATEWIDE STORMWATER	MULTIPLE OUTFALL LOCATIONS	97301	FINDS
SALEM	S108661647	ODOT - STATEWIDE STORMWATER MS4	MULTIPLE OUTFALL LOCATIONS	97301	NPDES
SALEM	S108661637	ODOT - REGION 2, CONSTRUCTION STOR	MULTIPLE SOURCES ODOT	97301	NPDES
SALEM	S108663305	USBPA - STATEWIDE CONSTRUCTION STO	MULTIPLE SOURCES BPA	97301	NPDES
SALEM	S108659067	CITY OF SALEM - PUBLIC WORKS DEPAR	MULTIPLE SOURCES SALEM	97301	NPDES
SALEM	1006864589	SALEM AIRPORT DISPOSAL SITE	SEC 1	97301	FINDS, SWF/LF, Financial Assurance
SALEM	S111210373	JLPN INC	5590 STATE ST SE	97301	AST, HSIS
SALEM	S111256752	VERIZON BUSINESS	6140 STATE ST	97301	AST, HSIS
SALEM	1006855017	SUNNYVIEW RD. - TAX LOT 4200	SUNNYVIEW ROAD NE AT LANCASTER	97305	FINDS, ECSI
SALEM	1014826983	SALEM HOSPITAL	UNKNOWN		FINDS
SALEM	1006851209	STATE PROPERTY HOT	770 WINTER ST	97301	FINDS
SILVERTON	S106529652	MVA - PUDDING RIVER	1800 95TH AVE. NE	97301	SPILLS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 70

Source: EPA
Telephone: N/A
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 70

Source: EPA
Telephone: N/A
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 70

Source: EPA
Telephone: N/A
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/02/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/07/2013
Number of Days to Update: 40

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/11/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 11/02/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/07/2013
Number of Days to Update: 40

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/08/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/15/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

CRL: Confirmed Release List and Inventory

All facilities with a confirmed release.

Date of Government Version: 11/19/2012
Date Data Arrived at EDR: 11/21/2012
Date Made Active in Reports: 01/07/2013
Number of Days to Update: 47

Source: Department of Environmental Quality
Telephone: 503-229-6170
Last EDR Contact: 11/21/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

ECSI: Environmental Cleanup Site Information System

Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 11/29/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 40

Source: Department of Environmental Quality
Telephone: 503-229-6629
Last EDR Contact: 01/24/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 503-229-6299
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 11/21/2012
Date Made Active in Reports: 01/04/2013
Number of Days to Update: 44

Source: Department of Environmental Quality
Telephone: 503-229-5790
Last EDR Contact: 11/21/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/12/2012
Date Data Arrived at EDR: 05/09/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 62

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 75
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/30/2012
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/06/2012
Date Data Arrived at EDR: 09/07/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 11/21/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 48
Source: Department of Environmental Quality
Telephone: 503-229-5815
Last EDR Contact: 11/21/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks
Aboveground storage tank locations reported to the Office of State Fire Marshal.

Date of Government Version: 03/01/2012
Date Data Arrived at EDR: 04/23/2012
Date Made Active in Reports: 05/30/2012
Number of Days to Update: 37
Source: Office of State Fire Marshal
Telephone: 503-378-3473
Last EDR Contact: 02/04/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 75

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/06/2012
Date Data Arrived at EDR: 09/07/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 39

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/12/2012
Date Data Arrived at EDR: 05/02/2012
Date Made Active in Reports: 07/16/2012
Number of Days to Update: 75

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/14/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Recorded at ESCI Sites

Engineering controls are physical measures selected or approved by the Director for the purpose of preventing or minimizing exposure to hazardous substances. Engineering controls may include, but are not limited to, fencing, capping, horizontal or vertical barriers, hydraulic controls, and alternative water supplies.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 11/29/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 40

Source: Department of Environmental Quality
Telephone: 503-229-5193
Last EDR Contact: 01/24/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Quarterly

INST CONTROL: Institutional Controls Recorded at ESCI Sites

An institutional control is a legal or administrative tool or action taken to reduce the potential for exposure to hazardous substances. Institutional controls may include, but are not limited to, use restrictions, environmental monitoring requirements, and site access and security measures.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 11/29/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 40

Source: Department of Environmental Quality
Telephone: 503-229-5193
Last EDR Contact: 01/24/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCS: Voluntary Cleanup Program Sites

Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

Date of Government Version: 10/22/2012
Date Data Arrived at EDR: 10/24/2012
Date Made Active in Reports: 11/19/2012
Number of Days to Update: 26

Source: DEQ
Telephone: 503-229-5256
Last EDR Contact: 01/07/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 01/04/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Projects
Brownfields investigations and/or cleanups that have been conducted in Oregon.

Date of Government Version: 11/19/2012
Date Data Arrived at EDR: 11/21/2012
Date Made Active in Reports: 01/07/2013
Number of Days to Update: 47

Source: Department of Environmental Quality
Telephone: 503-229-6801
Last EDR Contact: 11/21/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 04/08/2013
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST LF: Old Closed SW Disposal Sites
A list of solid waste disposal sites that have been closed for a long while.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 07/08/2003
Date Made Active in Reports: 07/18/2003
Number of Days to Update: 10
Source: Department of Environmental Quality
Telephone: 503-229-5409
Last EDR Contact: 07/08/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Facility Location Listing
A listing of recycling facility locations.

Date of Government Version: 12/03/2012
Date Data Arrived at EDR: 12/05/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 34
Source: Department of Environmental Quality
Telephone: 503-229-5353
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Quarterly

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/05/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/11/2012
Date Data Arrived at EDR: 09/12/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 54
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 12/03/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Quarterly

AOC COL: Columbia Slough
Columbia Slough waterway boundaries.

Date of Government Version: 08/10/2005
Date Data Arrived at EDR: 05/17/2006
Date Made Active in Reports: 06/16/2006
Number of Days to Update: 30
Source: City of Portland Environmental Services
Telephone: 503-823-5310
Last EDR Contact: 03/13/2007
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

AOC MU: East Multnomah County Area
Approximate extent of TSA VOC plume February , 2002

Date of Government Version: N/A
Date Data Arrived at EDR: 10/07/2002
Date Made Active in Reports: 10/22/2002
Number of Days to Update: 15

Source: City of Portland Environmental Services
Telephone: 503-823-5310
Last EDR Contact: 03/13/2007
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CDL: Uninhabitable Drug Lab Properties
The properties listed on these county pages have been declared by a law enforcement agency to be unfit for use due to meth lab and/or storage activities. The properties are considered uninhabitable until cleaned up by a state certified decontamination contractor and a certificate of fitness is issued by the Oregon Health Division.

Date of Government Version: 11/09/2012
Date Data Arrived at EDR: 11/15/2012
Date Made Active in Reports: 01/07/2013
Number of Days to Update: 53

Source: Department of Consumer & Business Services
Telephone: 503-378-4133
Last EDR Contact: 02/12/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Varies

CDL 2: Clandestine Drug Lab Site Listing
A listing of clandestine drug lab site locations included in the Incident database.

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 09/11/2012
Number of Days to Update: 39

Source: Oregon State Police
Telephone: 503-373-1540
Last EDR Contact: 01/31/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/16/2012
Date Data Arrived at EDR: 03/26/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/01/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

SPILLS: Spill Data

Oil and hazardous material spills reported to the Environmental Response Program.

Date of Government Version: 09/30/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 11/14/2012
Number of Days to Update: 41

Source: Department of Environmental Quality
Telephone: 503-229-5815
Last EDR Contact: 01/02/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Semi-Annually

HAZMAT: Hazmat/Incidents

Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 08/01/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 09/11/2012
Number of Days to Update: 39

Source: State Fire Marshal's Office
Telephone: 503-373-1540
Last EDR Contact: 01/31/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Semi-Annually

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/11/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 12/04/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/05/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/19/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 62

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/27/2012
Date Data Arrived at EDR: 03/14/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 92

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/28/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/28/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/08/2013
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/16/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 60

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/09/2013
Next Scheduled EDR Contact: 04/22/2013
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 79

Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/28/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/30/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Biennially

UIC: Underground Injection Control Program Database

DEQ's Underground Injection Control Program is authorized by the Environmental Protection Agency (EPA) to regulate all underground injection in Oregon to protect groundwater resources.

Date of Government Version: 10/02/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 11/14/2012
Number of Days to Update: 41

Source: Department of Environmental Quality
Telephone: 503-229-5945
Last EDR Contact: 01/02/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Varies

OR MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 11/30/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 39

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 02/11/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Annually

DRYCLEANERS: Drycleaning Facilities

A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 02/06/2012
Date Data Arrived at EDR: 02/09/2012
Date Made Active in Reports: 03/08/2012
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 503-229-6783
Last EDR Contact: 12/13/2012
Next Scheduled EDR Contact: 02/18/2013
Data Release Frequency: Varies

NPDES: Wastewater Permits Database

A listing of permitted wastewater facilities.

Date of Government Version: 07/05/2012
Date Data Arrived at EDR: 07/11/2012
Date Made Active in Reports: 09/07/2012
Number of Days to Update: 58

Source: Department of Environmental Quality
Telephone: 503-229-5657
Last EDR Contact: 02/11/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Quarterly

AIRS: Oregon Title V Facility Listing

A listing of Title V facility source and emissions information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 05/02/2012
Date Made Active in Reports: 06/06/2012
Number of Days to Update: 35

Source: Department of Environmental Quality
Telephone: 503-229-6459
Last EDR Contact: 12/03/2012
Next Scheduled EDR Contact: 03/18/2013
Data Release Frequency: Varies

HSIS: Hazardous Substance Information Survey

Companies in Oregon submitting the Hazardous Substance Information Survey and either reporting or not reporting hazardous substances.

Date of Government Version: 03/01/2012
Date Data Arrived at EDR: 04/23/2012
Date Made Active in Reports: 05/30/2012
Number of Days to Update: 37

Source: State Fire Marshal's Office
Telephone: 503-373-1540
Last EDR Contact: 02/04/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Semi-Annually

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/21/2013
Next Scheduled EDR Contact: 05/06/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial assurance information for hazardous waste facilities.

Date of Government Version: 08/10/2012
Date Data Arrived at EDR: 08/29/2012
Date Made Active in Reports: 09/11/2012
Number of Days to Update: 13

Source: Department of Environmental Quality
Telephone: 541-633-2011
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/27/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/27/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/28/2012
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/01/2012
Date Data Arrived at EDR: 10/04/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 32

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: 04/15/2013
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/13/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/12/2013
Next Scheduled EDR Contact: 05/27/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 08/20/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/16/2012
Next Scheduled EDR Contact: 03/04/2013
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/01/2013
Next Scheduled EDR Contact: 05/13/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/15/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

Financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 01/08/2013
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 503-229-5521
Last EDR Contact: 12/10/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/11/2012
Next Scheduled EDR Contact: 03/25/2013
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites Listing
A listing of coal ash disposal sites.

Date of Government Version: 06/01/2011
Date Data Arrived at EDR: 06/02/2011
Date Made Active in Reports: 06/30/2011
Number of Days to Update: 28

Source: Department of Environmental Quality
Telephone: 541-298-7255
Last EDR Contact: 11/26/2012
Next Scheduled EDR Contact: 03/11/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/17/2013
Next Scheduled EDR Contact: 04/29/2013
Data Release Frequency: N/A

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 12/11/2012
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/07/2013
Next Scheduled EDR Contact: 05/20/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/13/2012
Next Scheduled EDR Contact: 04/01/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listings
Source: Employment Department
Telephone: 503-947-1420

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Data
Source: Oregon Geospatial Enterprise Office
Telephone: 503-378-2166

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

OREGON STATE HOSPITAL - NORTH CAMPUS
2575-2600 CENTER ST. NE AND 2575 BITTERN ST. NE
SALEM, OR 97301

TARGET PROPERTY COORDINATES

Latitude (North):	44.9416 - 44° 56' 29.76''
Longitude (West):	123.003 - 123° 0' 10.80''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	499763.3
UTM Y (Meters):	4976246.0
Elevation:	211 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	44123-H1 SALEM WEST, OR
Most Recent Revision:	1986
East Map:	44122-H8 SALEM EAST, OR
Most Recent Revision:	1986

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

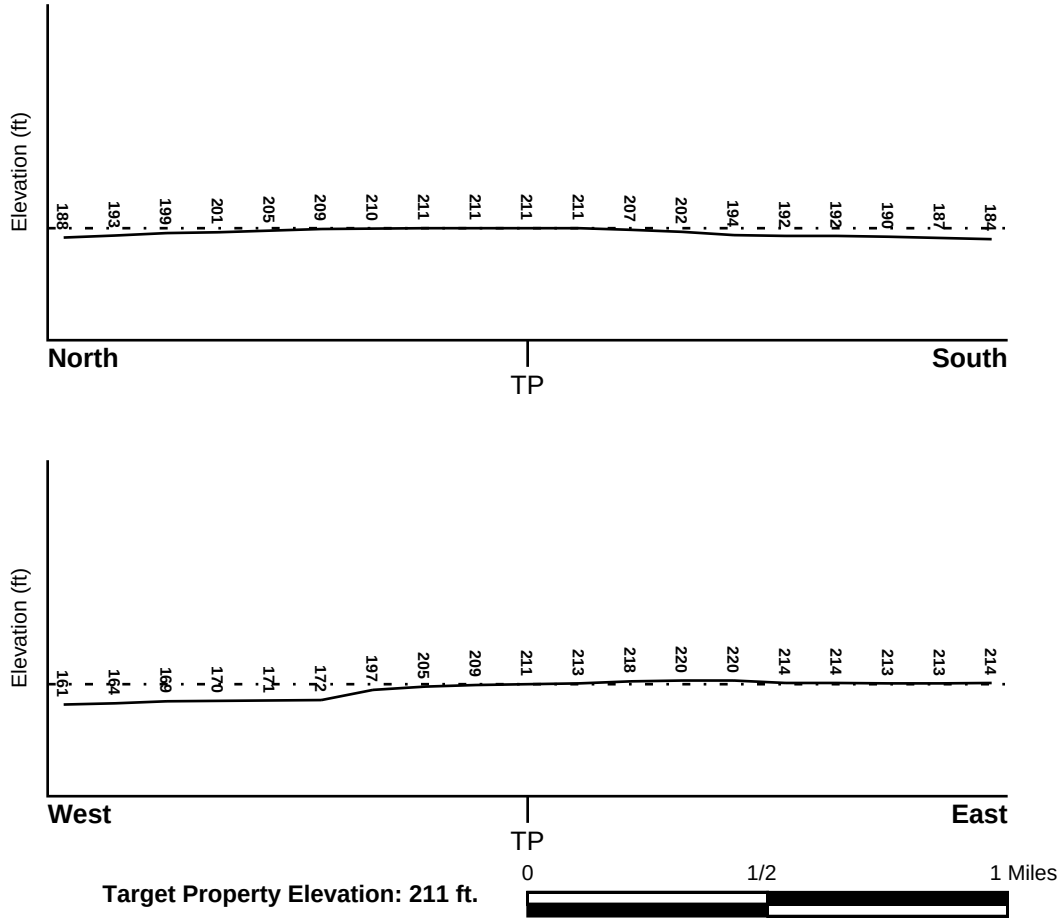
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
MARION, OR	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 41047C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SALEM WEST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

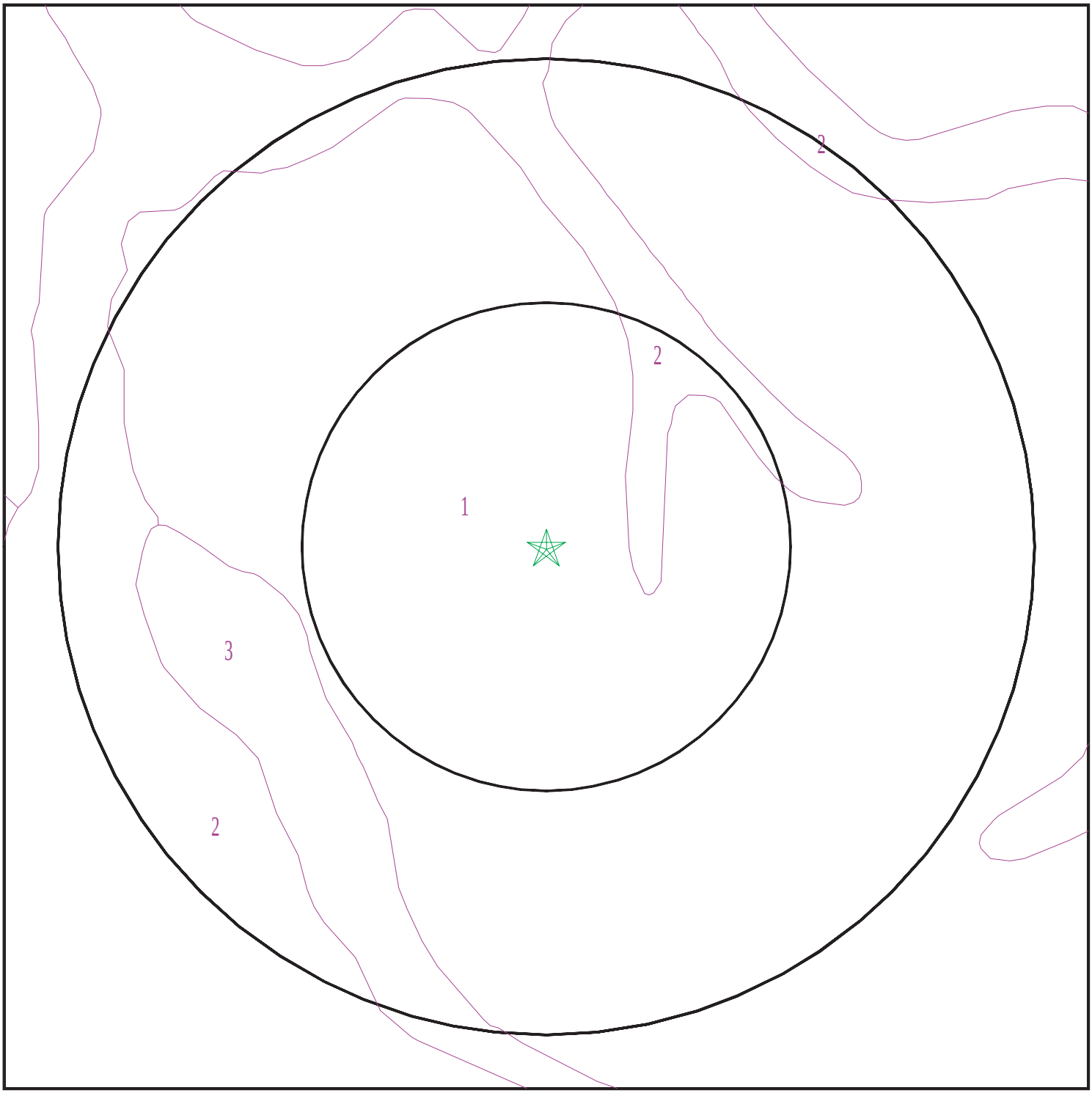
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3518356.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Oregon State Hospital - North Campus	CLIENT:	Stantec
ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE Salem OR 97301	CONTACT:	Chris Gdak
LAT/LONG:	44.9416 / 123.003	INQUIRY #:	3518356.2s
		DATE:	February 13, 2013 3:17 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Woodburn

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 76 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
2	16 inches	31 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
3	31 inches	68 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6

Soil Map ID: 2

Soil Component Name: Amity

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	24 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
2	24 inches	37 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
3	37 inches	59 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

Soil Map ID: 3

Soil Component Name: Woodburn

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 76 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
2	16 inches	31 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
3	31 inches	68 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	USGS3239515	1/8 - 1/4 Mile SSE
H31	USGS3239523	1/2 - 1 Mile ENE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

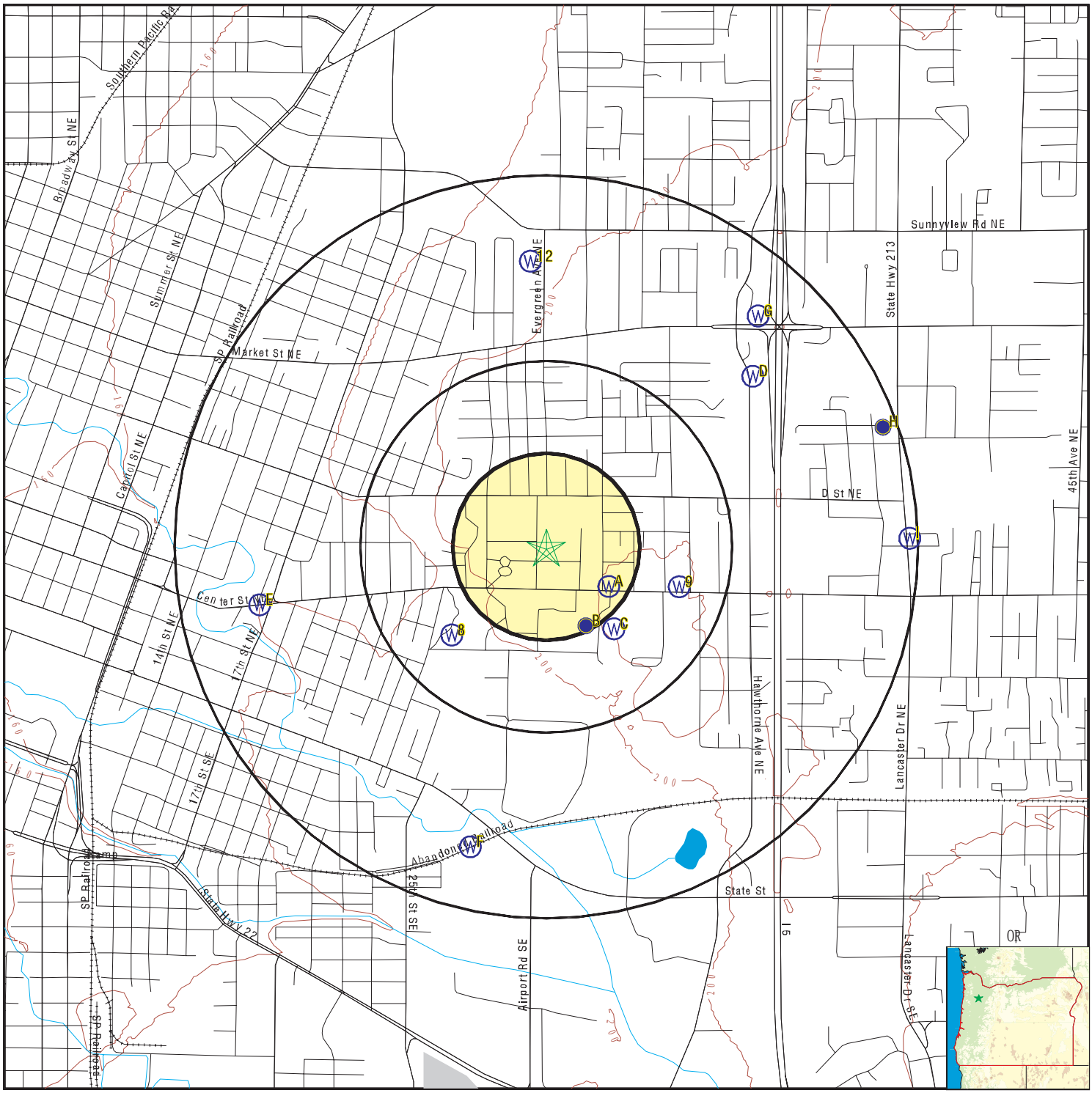
No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	ORI400000008397	1/8 - 1/4 Mile ESE
A2	ORI400000008393	1/8 - 1/4 Mile SE
A3	ORI400000008395	1/8 - 1/4 Mile ESE
B4	ORW400000006030	1/8 - 1/4 Mile SSE
C6	ORI400000008378	1/4 - 1/2 Mile SE
C7	ORI400000008377	1/4 - 1/2 Mile SE
8	ORI400000008376	1/4 - 1/2 Mile SW
9	ORI400000008396	1/4 - 1/2 Mile ESE
D10	ORI400000008541	1/2 - 1 Mile NE
D11	ORI400000008542	1/2 - 1 Mile NE
12	ORW400000006135	1/2 - 1 Mile North
E13	ORI400000008385	1/2 - 1 Mile WSW
E14	ORI400000008381	1/2 - 1 Mile WSW
E15	ORI400000008384	1/2 - 1 Mile WSW
F16	ORI400000008293	1/2 - 1 Mile SSW
E17	ORW400000006037	1/2 - 1 Mile West
G18	ORI400000008556	1/2 - 1 Mile NE
G19	ORI400000008557	1/2 - 1 Mile NE
G20	ORI400000008558	1/2 - 1 Mile NE
F21	ORI400000008288	1/2 - 1 Mile SSW
F22	ORI400000008287	1/2 - 1 Mile SSW
F23	ORI400000008284	1/2 - 1 Mile SSW
F24	ORI400000008285	1/2 - 1 Mile SSW
F25	ORI400000008286	1/2 - 1 Mile SSW
F26	ORI400000008283	1/2 - 1 Mile SSW
F27	ORI400000008282	1/2 - 1 Mile SSW
G28	ORI400000008560	1/2 - 1 Mile NE
G29	ORI400000008563	1/2 - 1 Mile NE
G30	ORI400000008566	1/2 - 1 Mile NE
H32	ORW400000006096	1/2 - 1 Mile ENE
I33	ORI400000008464	1/2 - 1 Mile East
I34	ORI400000008465	1/2 - 1 Mile East
I35	ORI400000008466	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 3518356.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME:	Oregon State Hospital - North Campus	CLIENT:	Stantec
ADDRESS:	2575-2600 Center St. NE and 2575 Bittern St. NE Salem OR 97301	CONTACT:	Chris Gdak
LAT/LONG:	44.9416 / 123.003	INQUIRY #:	3518356.2s
		DATE:	February 13, 2013 3:17 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database: **OR WELLS** | EDR ID Number: **ORI400000008397**

A1
ESE
1/8 - 1/4 Mile
Higher

Well inspe:	48263		
Physical l:	Not Reported	Inspection:	08/28/2009
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	CMP
Special st:	0	Title:	WIN
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	, P09263-3636 Guong Hanh Nguyen		
Street:	2903 CENTER ST NE	City:	SALEM
State:	OR	Zip:	97301
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	-1	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	-1
Consultant:	-1	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	0
Tape missi:	0	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	-1	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	-1
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	TERRENCE, JACQUES
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.94014		
Longitude :	122.99973		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Not Reported	Previous i:	0
Inspected1:	DMP	Wm region:	NW
Well tag a:	quick tie		
Well tag 2:	DRL	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	in asphalt driveway		
Site visit:	0	Type of lo:	M
Casing cap:	JPG	Pictures t:	0
Street of :	2903 CENTER ST NE, SALEM, OR 97301		
Street of1:	2903 Center St NE, Salem, Or 97301		
Last updt :	08/31/2009	Last updt1:	poedm
Rec creati:	08/31/2009	Rec crea 1:	poedm
Newlat:	44.94014		
Newlong:	-122.99973		
Site id:	ORI400000008397		

A2
SE
1/8 - 1/4 Mile Higher

OR WELLS **ORI400000008393**

Well inspe:	48265		
Physical l:	Not Reported	Inspection:	08/28/2009
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	NEW	Witnesses:	Not Reported
Name owner:	, P09263-3636 Guopng Hanh Nguyen		
Street:	2903 CENTER ST NE	City:	SALEM
State:	OR	Zip:	97301
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	-1	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	-1
Consultant:	0	Water in v:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	0
Tape missi:	0	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	-1	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	-1
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	TERRENCE, JACQUES
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.93997		
Longitude :	122.99967		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Not Reported	Previous i:	0
Inspected1:	DMP	Wm region:	NW
Well tag a:	quick tie		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	Not Reported	Pictures t:	0
Street of :	2903 CENTER ST NE, SALEM, OR 97301		
Street of1:	2903 CENTER ST NE, SALEM, OR 97301		

Last updt :	08/31/2009	Last updt1:	poedm
Rec creati:	08/31/2009	Rec crea 1:	poedm
Newlat:	44.93997		
Newlong:	-122.99967		
Site id:	ORI400000008393		

A3
ESE **OR WELLS** **ORI400000008395**
1/8 - 1/4 Mile Higher

Well inspe:	48264		
Physical l:	Not Reported	Inspection:	08/28/2009
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	CMP
Special st:	0	Title:	WIN
Inspecti 2:	NEW	Witnesses:	Not Reported
Name owner:	, P09263-3636 Guong Hanh Nguyen		
Street:	2903 CENTER ST NE	City:	SALEM
State:	OR	Zip:	97301
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	-1	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	tag number does not match number on well log		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	-1
Consultant:	-1	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	0
Tape missi:	0	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	-1	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	-1
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	TERRENCE, JACQUES
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.94004		
Longitude :	122.99929		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Not Reported	Previous i:	0
Inspected1:	DMP	Wm region:	NW
Well tag a:	quick tie		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	asphalt parking lot		
Site visit:	0	Type of lo:	M
Casing cap:	Not Reported	Pictures t:	0
Street of :	2903 CENTER ST NE, SALEM, OR 97301		
Street of1:	2903 Center St Ne, Salem, Or 97301		
Last updt :	08/31/2009	Last updt1:	poedm
Rec creati:	08/31/2009	Rec crea 1:	poedm
Newlat:	44.94004		
Newlong:	-122.99929		
Site id:	ORI400000008395		

B4
SSE
1/8 - 1/4 Mile
Higher

OR WELLS **ORW400000006030**

Logid:	MARI 20670	Lstupdate:	Not Reported
Establby:	KARL WOZNIAK	Xysource:	UNKNOWN
Horizerr:	9999	Sourceorg:	USGS
Sourceowrd:	WILLGW		
Welltag:	0		
Sownum:	0	Obswell:	9
Recwell:	9	Obsflagall:	Not Reported
Lsdelev:	204	Site id:	ORW400000006030

B5
SSE
1/8 - 1/4 Mile
Higher

FED USGS **USGS3239515**

Agency cd:	USGS	Site no:	445619122595901
Site name:	07S/03W-25BA		
Latitude:	445619.25	EDR Site id:	USGS3239515
Longitude:	1225958.61	Dec lat:	44.93852277
Dec lon:	-123.00082036	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	41
State:	41	County:	047
Country:	US	Land net:	NENWS25 T0700SR0300WW
Location map:	SALEM EAST	Map scale:	24000
Altitude:	205		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	3		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Middle Willamette. Oregon. Area = 700 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	193507
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	361	Hole depth:	361
Source of depth data:	driller		
Project number:	4741-16800		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

C6
SE
1/4 - 1/2 Mile
Higher

OR WELLS **ORI400000008378**

Well inspe:	32499		
Physical l:	Not Reported	Inspection:	02/26/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MARION		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	LOCKING CAP SET LOOSELY ON TOP OF CASING		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	Not Reported		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NW	Qtr160:	NE
Latitude d:	44.93845		
Longitude :	122.99926		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	AJK	Wm region:	NW
Well tag a:	ZIPTIE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		

Last updt :	01/01/2000	Last updt1:	kimaj
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93845		
Newlong:	-122.99926		
Site id:	ORI400000008378		

C7
SE **OR WELLS** **ORI400000008377**
1/4 - 1/2 Mile
Higher

Well inspe:	36839		
Physical l:	Not Reported	Inspection:	10/01/2004
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	COUNTY OF MARION		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	MW DAMAGED; VAULT AND ID REMOVED; RECOMMENDED OVERDRILL AND ABANDON		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	-1
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	Not Reported		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NW	Qtr160:	NE
Latitude d:	44.93835		
Longitude :	122.99931		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	-1
Inspected1:	KAW	Wm region:	NW
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	OT	Pictures t:	0
Street of :	PARK PLACE		
Street of1:	OFF CENTER ST		
Last updt :	11/01/2004	Last updt1:	wilckeka
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93835		
Newlong:	-122.99931		
Site id:	ORI400000008377		

8
SW
1/4 - 1/2 Mile
Lower

OR WELLS **ORI400000008376**

Well inspe:	43717		
Physical l:	Not Reported	Inspection:	04/28/2007
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	-1	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	DEPARTMENT OF ADMINISTRATIVE SERVICES		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	4900		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	26		
Qtr40:	NW	Qtr160:	NW
Latitude d:	44.93816		
Longitude :	-123.00818		
Gps horizo:	Not Reported		
Year const:	1981		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	JWJ	Wm region:	NW
Well tag a:	OLDER WELL NO ATTACHED ID, MARI 8091		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	W
Casing cap:	SP	Pictures t:	0
Street of :	100 WAVERLY ST		
Street of1:	100 WAVERLY ST NE		

Last updt :	12/04/2007	Last updt1:	jefferjw
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93816		
Newlong:	-123.00818		
Site id:	ORI400000008376		

9
ESE **OR WELLS** **ORI400000008396**
1/4 - 1/2 Mile
Higher

Well inspe:	48259		
Physical l:	Not Reported	Inspection:	07/23/2009
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	CMP
Special st:	0	Title:	WIN
Inspecti 2:	NEW	Witnesses:	Not Reported
Name owner:	Guong Hanh Nguyn		
Street:	2903 CENTER ST NE	City:	SALEM
State:	OR	Zip:	97301
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	-1
Consultant:	-1	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	0
Tape missi:	0	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	-1	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	-1
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	TERRENCE, JACQUES
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.94004		
Longitude :	122.9957		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	DMP	Wm region:	NW
Well tag a:	zip tie		
Well tag 2:	DRL	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	JPG	Pictures t:	0
Street of :	2903 CENTER ST NE, SALEM, OR 97301		
Street of1:	Not Reported		
Last updt :	08/28/2009	Last updt1:	poedm
Rec creati:	08/28/2009	Rec crea 1:	poedm
Newlat:	44.94004		
Newlong:	-122.9957		
Site id:	ORI400000008396		

D10
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008541**

Well inspe:	32627		
Physical l:	Not Reported	Inspection:	03/15/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	SHELL OPUS,1500 HAWTHORNE AVE NE, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	CUTTINGS ARE IN BARRELS ON SITE DATED 3/12/04		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	SE	Qtr160:	NE
Latitude d:	44.94822		
Longitude :	122.99165		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	AJK	Wm region:	NW
Well tag a:	STRAP		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		

Last updt :	01/01/2000	Last updt1:	kimaj
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.94822		
Newlong:	-122.99165		
Site id:	ORI400000008541		

D11
NE **OR WELLS** **ORI400000008542**
1/2 - 1 Mile
Lower

Well inspe:	43370		
Physical l:	Not Reported	Inspection:	04/11/2007
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	IVIE, WALT		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	3300		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	SE	Qtr160:	NE
Latitude d:	44.94827		
Longitude :	-122.99167		
Gps horizo:	Not Reported		
Year const:	2007		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	JJU	Wm region:	NW
Well tag a:	ZIP TIE IN CONCRETE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	JP	Pictures t:	0
Street of :	Not Reported		
Street of1:	1500 HAWTHORNE AVE NE		
Last updt :	05/07/2007	Last updt1:	ungerjj
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.94827		
Newlong:	-122.99167		
Site id:	ORI400000008542		

12
North
1/2 - 1 Mile
Lower

OR WELLS **ORW400000006135**

Logid:	MARI 8026	Lstupdate:	Not Reported
Establby:	KARL WOZNIAK	Xysource:	UNKNOWN
Horizerr:	9999	Sourceorg:	USGS
Sourceowrd:	WILLGW		
Welltag:	0		
Sownum:	0	Obswell:	9
Recwell:	9	Obsflagall:	Not Reported
Lsdelev:	190	Site id:	ORW400000006135

E13
WSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008385**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well inspe:	35848		
Physical l:	Not Reported	Inspection:	06/11/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	BATTERY X-CHANGE CO		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	MW-2		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	8500		
Township:	7		

Township c:	S		
Range:	3		
Range char:	W		
Sctn:	26		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.93925		
Longitude :	123.01836		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	KAW	Wm region:	NW
Well tag a:	BANDED IN CEMENT		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	SS	Pictures t:	0
Street of :	Not Reported		
Street of1:	1676 CENTER ST NE, SALEM		
Last updt :	06/11/2004	Last updt1:	wilckeka
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93925		
Newlong:	-123.01836		
Site id:	ORI400000008385		

E14
WSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008381**

Well inspe:	35847		
Physical l:	Not Reported	Inspection:	06/11/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	BATTERY X-CHANGE CO		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported

Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	MW-3		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	8500		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	26		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.93906		
Longitude :	123.01839		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	KAW	Wm region:	NW
Well tag a:	BANDED IN CEMENT		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	SS	Pictures t:	0
Street of :	Not Reported		
Street of1:	1676 CENTER ST NE, SALEM		
Last updt :	06/11/2004	Last updt1:	wilckeka
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93906		
Newlong:	-123.01839		
Site id:	ORI400000008381		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E15
WSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008384**

Well inspe:	35849		
Physical l:	Not Reported	Inspection:	06/11/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	BATTERY X-CHANGE CO		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	MW-1		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	8500		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	26		
Qtr40:	NE	Qtr160:	NW
Latitude d:	44.93923		
Longitude :	123.01871		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	KAW	Wm region:	NW
Well tag a:	BANDED IN CEMENT		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	SS	Pictures t:	0
Street of :	Not Reported		
Street of1:	1676 CENTER ST NE, SALEM		
Last updt :	06/11/2004	Last updt1:	wilckeka
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93923		
Newlong:	-123.01871		
Site id:	ORI400000008384		

F16
SSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008293**

Well inspe:	24968		
Physical l:	Not Reported	Inspection:	09/13/2001
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	FORESTERY, DEPARTMENT OF		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	OLD WELL FOUND UNDER PARKING LOT 11.5 FOOT I.D. CASING.		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	OTHER	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	800		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	SE	Qtr160:	SE
Latitude d:	44.93024		
Longitude :	123.00699		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	RDE	Wm region:	NW
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		

Last updt :	01/01/2000	Last updt1:	edwardrd
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.93024		
Newlong:	-123.00699		
Site id:	ORI400000008293		

E17
West
1/2 - 1 Mile
Lower

OR WELLS **ORW400000006037**

Logid:	MARI 8092	Lstupdate:	Not Reported
Establby:	KARL WOZNIAK	Xysource:	UNKNOWN
Horizerr:	9999	Sourceorg:	USGS
Sourceowrd:	WILLGW		
Welltag:	0		
Sownum:	0	Obswell:	9
Recwell:	9	Obsflagall:	Not Reported
Lsdelev:	170	Site id:	ORW400000006037

G18
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008556**

Well inspe:	27905		
Physical l:	Not Reported	Inspection:	07/02/2002
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX; PARK AND RIDE; 3411 MARKET ST NE, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported

Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	SE	Qtr160:	NE
Latitude d:	44.95041		
Longitude :	122.99145		
Gps horizo:	Not Reported		
Year const:	2002		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	BANDED		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95041		
Newlong:	-122.99145		
Site id:	ORI400000008556		

Map ID
Direction
Distance
Elevation

Database: **OR WELLS** | EDR ID Number: **ORI400000008557**

G19
NE
1/2 - 1 Mile
Lower

Well inspe:	27904		
Physical l:	Not Reported	Inspection:	07/02/2002
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX; PARK AND RIDE; 3411 MARKET ST NE, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	SE	Qtr160:	NE
Latitude d:	44.95045		
Longitude :	122.99149		
Gps horizo:	Not Reported		
Year const:	2002		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	BANDED		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95045		
Newlong:	-122.99149		
Site id:	ORI400000008557		

G20
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008558**

Well inspe:	27906		
Physical l:	Not Reported	Inspection:	07/02/2002
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX; PARK AND RIDE; 3411 MARKET ST NE, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	AIR SPARGE WELL; FLUSH VAULT; 3 FT W OF SC 150000		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	SE	Qtr160:	NE
Latitude d:	44.95045		
Longitude :	122.99149		
Gps horizo:	Not Reported		
Year const:	2002		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		

Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95045		
Newlong:	-122.99149		
Site id:	ORI400000008558		

F21
SSW **OR WELLS** **ORI400000008288**
1/2 - 1 Mile
Lower

Well inspe:	25279		
Physical l:	Not Reported	Inspection:	12/06/2001
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	ODOT; 2800 STATE ST, SALEM; BEHIND AND BESIDE BLDG J; SEE MAP		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	2 INCH WELL		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1100		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NW	Qtr160:	NW
Latitude d:	44.9299		
Longitude :	123.00715		
Gps horizo:	Not Reported		
Year const:	2001		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	BANDED		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.9299		
Newlong:	-123.00715		
Site id:	ORI400000008288		

F22
SSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008287**

Well inspe:	25278		
Physical l:	Not Reported	Inspection:	12/06/2001
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	ODOT; 2800 STATE ST, SALEM; BEHIND AND BESIDE BLDG J; SEE MAP		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	2 INCH WELL		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1100		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NW	Qtr160:	NW
Latitude d:	44.92989		
Longitude :	123.0073		
Gps horizo:	Not Reported		
Year const:	2001		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	UNABLE TO OPEN		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		

Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.92989		
Newlong:	-123.0073		
Site id:	ORI400000008287		

F23
SSW **OR WELLS** **ORI400000008284**
1/2 - 1 Mile
Lower

Well inspe:	47523		
Physical l:	Not Reported	Inspection:	09/24/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	OREGON DEPARTMENT OF FORESTRY		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	NO LOCK/E MAIL TO P. LARSEN		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	800		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.92983		
Longitude :	-123.00703		
Gps horizo:	Not Reported		
Year const:	2008		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Y	Previous i:	0
Inspected1:	LLR	Wm region:	NW
Well tag a:	IN CONCRETE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	JP	Pictures t:	0
Street of :	2600 STATE ST		
Street of1:	2600 STATE ST		
Last updt :	12/19/2008	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.92983		
Newlong:	-123.00703		
Site id:	ORI400000008284		

F24
SSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008285**

Well inspe:	47524		
Physical l:	Not Reported	Inspection:	09/24/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	OREGON DEPARTMENT OF FORESTRY		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	NO LOCK/E MAIL TO P. LARSEN		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	800		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.92983		
Longitude :	-123.00703		
Gps horizo:	Not Reported		
Year const:	2008		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Y	Previous i:	0
Inspected1:	LLR	Wm region:	NW
Well tag a:	IN CONCRETE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	JP	Pictures t:	0
Street of :	2600 STATE ST		
Street of1:	2600 STATE ST		

Last updt :	12/19/2008	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.92983		
Newlong:	-123.00703		
Site id:	ORI400000008285		

F25
SSW **OR WELLS** **ORI400000008286**
1/2 - 1 Mile
Lower

Well inspe:	47521		
Physical l:	Not Reported	Inspection:	09/24/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	OREGON DEPARTMENT OF FORESTRY		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	NO LOCK/E-MAIL TO P.LARSEN/RECHECKED 10/17/2008 OK		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	800		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.92986		
Longitude :	-123.00725		
Gps horizo:	Not Reported		
Year const:	2008		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	LLR	Wm region:	NW
Well tag a:	IN CONCRETE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	JP	Pictures t:	0
Street of :	2600 STATE ST		
Street of1:	2600 STATE ST		
Last updt :	12/19/2008	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.92986		
Newlong:	-123.00725		
Site id:	ORI400000008286		

F26
SSW
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008283**

Well inspe:	47522		
Physical l:	Not Reported	Inspection:	09/24/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	OREGON DEPARTMENT OF FORESTRY		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	NO LOCK/OK ON 10/17/2008		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	800		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.92983		
Longitude :	-123.00727		
Gps horizo:	Not Reported		
Year const:	2008		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Y	Previous i:	0
Inspected1:	LLR	Wm region:	NC
Well tag a:	IN CONCRETE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	M
Casing cap:	JP	Pictures t:	0
Street of :	2600 STATE ST		
Street of1:	2600 STATE ST		

Last updt :	12/19/2008	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.92983		
Newlong:	-123.00727		
Site id:	ORI400000008283		

F27
SSW **OR WELLS** **ORI400000008282**
1/2 - 1 Mile
Lower

Well inspe:	25277		
Physical l:	Not Reported	Inspection:	12/06/2001
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	ODOT; 2800 STATE ST, SALEM; BEHIND AND BESIDE BLDG J; SEE MAP		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	2 INCH WELL		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1100		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	25		
Qtr40:	NW	Qtr160:	NW
Latitude d:	44.9298		
Longitude :	123.00727		
Gps horizo:	Not Reported		
Year const:	2001		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	BANDED		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.9298		
Newlong:	-123.00727		
Site id:	ORI400000008282		

G28
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008560**

Well inspe:	44031		
Physical l:	Not Reported	Inspection:	12/05/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	-1	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	NE	Qtr160:	SE
Latitude d:	44.95058		
Longitude :	-122.99137		
Gps horizo:	Not Reported		
Year const:	1992		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	LLR	Wm region:	NC
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	DIP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	-1
Street of :	Not Reported		
Street of1:	1750 FREEWAY CT NESALEM, OR		

Last updt :	01/02/2009	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95058		
Newlong:	-122.99137		
Site id:	ORI400000008560		

G29
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008563**

Well inspe:	44032		
Physical l:	Not Reported	Inspection:	12/29/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	-1	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0

Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	NE	Qtr160:	SE
Latitude d:	44.95068		
Longitude :	-122.99127		
Gps horizo:	Not Reported		
Year const:	1992		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	-1
Inspected1:	LLR	Wm region:	NW
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	JP	Pictures t:	-1
Street of :	Not Reported		
Street of1:	1750 FREEWAY CT NESALEM, OR		
Last updt :	01/02/2009	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95068		
Newlong:	-122.99127		
Site id:	ORI400000008563		

G30
NE
1/2 - 1 Mile
Lower

OR WELLS **ORI400000008566**

Well inspe:	44033		
Physical l:	Not Reported	Inspection:	12/05/2008
Startcard :	Not Reported	Wl county :	MARI
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MERRITT TRUAX		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	Not Reported		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	200		
Township:	7		
Township c:	S		
Range:	3		
Range char:	W		
Sctn:	24		
Qtr40:	NE	Qtr160:	SE
Latitude d:	44.95101		
Longitude :	-122.99114		
Gps horizo:	Not Reported		
Year const:	0		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	U	Previous i:	0
Inspected1:	LLR	Wm region:	NW
Well tag a:	Not Reported		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	DIP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	-1
Street of :	Not Reported		
Street of1:	1750 FREEWAY CT NESALEM, OR 97301		

Last updt :	01/02/2009	Last updt1:	ramseyll
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.95101		
Newlong:	-122.99114		
Site id:	ORI400000008566		

H31
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS3239523**

Agency cd:	USGS	Site no:	445647122590001
Site name:	07S/02W-19CBA2		
Latitude:	445647	EDR Site id:	USGS3239523
Longitude:	1225900	Dec lat:	44.94623115
Dec lon:	-122.98453946	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	41
State:	41	County:	047
Country:	US	Land net:	Not Reported
Location map:	SALEM EAST	Map scale:	24000
Altitude:	210.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5.0		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Middle Willamette. Oregon. Area = 700 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	19600315
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	169.00	Hole depth:	169.00
Source of depth data:	driller		
Project number:	4753-34400		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1960-03-15	Ground water data end date:	1960-03-15
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1960-03-15	15.00	

H32
ENE
1/2 - 1 Mile
Higher

OR WELLS **ORW400000006096**

Logid:	MARI 7324	Lstupdate:	Not Reported
Establby:	KARL WOZNIAK	Xysource:	UNKNOWN
Horizerr:	9999	Sourceorg:	USGS
Sourceowrd:	WILLGW		
Welltag:	0		
Sownum:	0	Obswell:	9
Recwell:	9	Obsflagall:	Not Reported
Lsdelev:	210	Site id:	ORW400000006096

I33
East
1/2 - 1 Mile
Higher

OR WELLS **ORI400000008464**

Well inspe:	32400		
Physical l:	Not Reported	Inspection:	02/06/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	0	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MCKENZIE COMMERCIAL; 890 LANCASTER DR, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	4 INCH WELL IN VAULT; OLD BOBS HAMBURGERS		
Work new:	-1	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	0	Work exist:	0
Work other:	Not Reported	Drill rota:	0

Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1000		
Township:	7		
Township c:	S		
Range:	2		
Range char:	W		
Sctn:	19		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.94193		
Longitude :	122.98305		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	Y	Previous i:	0
Inspected1:	KRB	Wm region:	NW
Well tag a:	NONE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	CMP
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.94193		
Newlong:	-122.98305		
Site id:	ORI400000008464		

I34
East
1/2 - 1 Mile
Higher

OR WELLS **ORI400000008465**

Well inspe:	32410		
Physical l:	Not Reported	Inspection:	02/10/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	-1	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MCKENZIE COMMERCIAL; 890 N LANCASTER DR, SALEM		
Street:	Not Reported	City:	Not Reported

State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	LEAVE CASING IN PLACE AND GROUT UP; CASING BROKE WHEN JACKING OUT		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0
Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1000		
Township:	7		
Township c:	S		
Range:	2		
Range char:	W		
Sctn:	19		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.94193		
Longitude :	122.98305		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported

Deficienci:	N	Previous i:	-1
Inspected1:	KRB	Wm region:	NW
Well tag a:	NONE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.94193		
Newlong:	-122.98305		
Site id:	ORI400000008465		

I35
East
1/2 - 1 Mile
Higher

OR WELLS **ORI400000008466**

Well inspe:	32411		
Physical l:	Not Reported	Inspection:	02/11/2004
Startcard :	Not Reported	Wl county :	Not Reported
Wl nbr:	Not Reported	Startcard1:	Not Reported
Well tag n:	Not Reported	No log:	0
Property o:	Not Reported	Inspecti 1:	Not Reported
Special st:	-1	Title:	Not Reported
Inspecti 2:	Not Reported	Witnesses:	Not Reported
Name owner:	MCKENZIE COMMERCIAL; 890 N LANCASTER DR, SALEM		
Street:	Not Reported	City:	Not Reported
State:	Not Reported	Zip:	Not Reported
Phone home:	Not Reported	Phone comp:	Not Reported
Gps on wel:	0	Distance t:	Not Reported
Bearing to:	Not Reported	Drilling m:	Not Reported
Use of wel:	Not Reported	Drilling 1:	0
Rough log :	0	Inspected :	Not Reported
Well tag r:	Not Reported		
Monitoring:	Not Reported	Monitori 1:	0
Protective:	0	Well locke:	0
Consultant:	0	Water in v:	0
Seal test :	Not Reported	Samples ta:	0
Casing dia:	Not Reported	Csg above :	Not Reported
Csg gauge:	Not Reported	Borehole d:	Not Reported
Dedicated :	0	Access por:	0
Access p 1:	Not Reported	Measuring :	Not Reported
Measuring1:	0	Depth belo:	Not Reported
Depth be 1:	Not Reported	Tape hold:	Not Reported
Tape missi:	Not Reported	Tape cut:	Not Reported
Water leve:	Not Reported	Water le 1:	Not Reported
Cascading :	0	Pump type:	Not Reported
Pump make:	Not Reported	Pump hp:	Not Reported
Flowmeter :	Not Reported	Flowmeter1:	Not Reported
Flowmete 1:	Not Reported	Flowmete 2:	Not Reported
Associated:	Not Reported	Nbr of hou:	Not Reported
Deficiency:	Not Reported		
Inspecti 3:	LEAVE CASING IN PLACE AND GROUT UP; CASING BROKE WHEN JACKING OUT; WORK DONE		
Work new:	0	Work deepe:	0
Work conve:	0	Work alter:	0
Work aband:	-1	Work exist:	0
Work other:	Not Reported	Drill rota:	0

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Drill ro 1:	0	Drill cabl:	0
Drill ca 1:	0	Drill reve:	0
Drill re 1:	0	Drill auge:	0
Drill push:	0	Drill hand:	0
Drill holl:	0	Drill soni:	0
Drill othe:	Not Reported	Use domest:	0
Use irriga:	0	Use commun:	0
Use indust:	0	Use livest:	0
Use dewate:	0	Use monito:	0
Use therma:	0	Use inject:	0
Use piezom:	0	Use observ:	0
Use recove:	0	Use other:	Not Reported
Bentonite :	0	Conductivi:	Not Reported
Conducti 1:	Not Reported		
Measuremen:	Not Reported		
Well tag 1:	Not Reported	Bonded lic:	Not Reported
Unbonded l:	Not Reported	Bonded dri:	Not Reported
Unbonded d:	Not Reported	County cod:	MARI
Tax lot:	1000		
Township:	7		
Township c:	S		
Range:	2		
Range char:	W		
Sctn:	19		
Qtr40:	SE	Qtr160:	SW
Latitude d:	44.94193		
Longitude :	122.98305		
Gps horizo:	Not Reported		
Year const:	2004		
Date const:	Not Reported	Date con 1:	Not Reported
Deficienci:	N	Previous i:	-1
Inspected1:	KRB	Wm region:	NW
Well tag a:	NONE		
Well tag 2:	Not Reported	Depth:	Not Reported
Static wat:	Not Reported	Status of :	Not Reported
Location r:	Not Reported		
Site visit:	0	Type of lo:	Not Reported
Casing cap:	Not Reported	Pictures t:	0
Street of :	Not Reported		
Street of1:	Not Reported		
Last updt :	01/01/2000	Last updt1:	byrdkr
Rec creati:	06/01/2009	Rec crea 1:	OWRD\migrate
Newlat:	44.94193		
Newlong:	-122.98305		
Site id:	ORI400000008466		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: OR Radon

Radon Test Results

Zipcode	Num Tests	Maximum	Minimum	Average	# > 4 pCi/L
97301	26	7.2	0.3	2.1	3

Federal EPA Radon Zone for MARION County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MARION COUNTY, OR

Number of sites tested: 11

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	1.210 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Data
Source: Oregon Geospatial Enterprise Office
Telephone: 503-378-2166

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Data
Source: Department of Water Resources
Telephone: 503-986-0843

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Locations
Source: Department of Geology and Mineral Industries
Telephone: 971-673-1540
A listing of oil and gas well locations in the state.

RADON

State Database: OR Radon
Source: Oregon Health Services
Telephone: 503-731-4272
Radon Levels in Orgeon

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

APPENDIX E
OTHER:

- USER QUESTIONNAIRE
- MISCELLANEOUS DOCUMENTS FROM USER/OWNER

Stantec

Stantec Consulting Services, Inc.
9400 SW Barnes Road, Suite 200
Portland OR 97225-6690
Tel: (503) 297-1631
Fax: (503) 297-5429

ATTACHMENT A
PHASE I ESA USER'S QUESTIONNAIRE

Stantec Consulting Services, Inc.
9400 SW Barnes Road, Suite 200
Portland OR 97225-6690
Tel: (503) 297-1631
Fax: (503) 297-5429

PHASE I ESA USER'S QUESTIONNAIRE

In order to qualify for protection from landowner liability under CERCLA as an *innocent landowner, bona fide prospective purchaser,* or *contiguous property owner*, ASTM standard practice E1527-05 and the Federal AAI rule (40 CFR 312) require that the User of the Phase I ESA report provide certain information (if available) to the Environmental Professional completing the assessment. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Information that is not or cannot be provided to the Environmental Professional may be identified as a "data gap" in the Phase I ESA report.

Please answer the following questions as completely as possible. Attach additional pages as needed. Return the completed questionnaire to Stantec.

1. Property Information.

Property Name: Oregon State Hospital – North Campus

Property Address: 2600 Center St NE (4 buildings); 2575 Center St NE, Dome Building; 2575 Bittern NE, Yaquina Hall

City: Salem State: OR Zip: 97301

Property Owner Name:
Department of Administrative Services (DAS), State of Oregon

Property Owner Phone #: (503) 373-7065

2. Contact for Property Access.

Name: Darrin Brightman

Company/Organization/Title:
Real Estate Services, Department of Administrative Services Facilities Division, State of Oregon; Planner 3.

Phone #: (503) 373-7065 E-Mail Address: darrin.w.brightman@state.or.us

3. Environmental Cleanup Liens.

Are you aware of any environmental cleanup liens against the property that are filed or recorded under Federal, tribal, state or local law?

☐ Yes ☒ No

If yes, describe or attach details of the lien:_____

4. Activity and Land Use Limitations.

Are you aware of any activity and use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded as applicable to the property as a result of environmental contamination, investigation, cleanup, or related matters?

☐ Yes ☒ No

If yes, describe or attach details of the limitations:_____

5. Specialized Knowledge or Experience.

As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property, such that you would have specialized knowledge about chemicals and processes used by this type of business?

☐ Yes ☒ No

If yes, describe or attach details of your specialized knowledge or experience:

_____

6. Relationship of Purchase Price to Fair Market Value of Property.

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, do you have any reason to believe that the reduced purchase price may be related to contamination known or believed to be present at the property?

☐ Yes, I have reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property.

☐ No, I have no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property.

☒ Not applicable. User is not involved in a purchase of the property.

7. Commonly Known or Reasonably Ascertainable Information.

Are you aware of commonly known or reasonably ascertainable information about the property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products? For example:

a. Do you know the past uses of the property?

☒ Yes (describe): Psychiatric hospital

☐ No

b. Do you know of chemicals, hazardous substances or petroleum products that are present or once were present at the property?

☒ Yes (describe): Asbestos and lead paint in buildings, one above-ground diesel tank (in use).

☐ No

c. Do you know of spills or other releases of chemicals, hazardous substances or petroleum products that have taken place at the property?

☐ Yes (describe): _____

☒ No

d. Do you know of any environmental cleanups that have taken place at the property?

☐ Yes (describe): _____

☒ No

8. The Degree of Obviousness of Contamination.

E1527-05 and the Federal AAI rule (40 CFR 312.31) require that the Phase I ESA consider the degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation. Based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

☒ Yes (describe): Age of buildings indicates likely lead paint; visible asbestos wrappings in steam tunnels.

☐ No

9. Availability of Previous Environmental Reports.

Are you aware of previous environmental site assessment reports, other environmental reports, documents, correspondence, etc., concerning the property and its environmental condition?

☒ Yes (please identify and provide copies, if available): Phase I ESA by Hall-Kimbrell, 2006 or 2007. Seeking a copy.

☐ No

Signature: 

Name (printed): Darrin Brightman

Title: Planner

Address: 1225 Ferry Street SE, U-100

Salem, OR 97301

Phone: 503-373-7065

E-Mail: Darrin.w.brightman@state.or.us

Date: 02/05/13

ATTACHMENT H – RFP #107-2810-11 Facility Assessments – DHS-NC Property

Attached you will find pages from the Framework Master Plan Phase I Report, conducted in 2006 for the Oregon State Hospital. Pages pertaining to facilities south of Center Street, or about Oregon's mental health system in general, have been removed.

Building condition assessments are included for Buildings 34, 35, 36, 40, and 50. Building 33 was not assessed. For purposes of your RFP response, please apply the building condition assessment for Building 34 to Building 33, as well. Building 33's current use is office space.

Please bear in mind that the condition assessments were conducted with an eye toward reuse of the buildings for hospital purposes. The requirements for other uses, such as office space, are less stringent.

Some details have changed since this 2006 report was completed, which may impact valuation:

- The entire property is now within an Historic District, listed on the National Register of Historic Places.
- Each building has its own independent HVAC system.
- All connection to the campus south of Center Street has been, or soon will be, severed.
- OSH intends to close the tunnels under Center Street. The tunnels on the DHS-NC property will remain.
- Most buildings will be vacated by June of 2012. Buildings 36 and 33 are presently occupied by DHS and the Department of Corrections, but the tenants of those buildings can be relocated.

Not noted in the condition assessments is the presence of asbestos-wrapped steam pipes within the tunnel system, which amounts to an interconnected basement between all buildings on the campus. The tunnels are wide enough for two small motorized vehicles to pass side-by-side, or conceivably for one standard sized automobile.

Also of note, but not noted within the condition assessments, is the presence of a major State data hub in the basement of Building 36. The State's ability to relocate this hub, and the timing of such a relocation, is being investigated at this time. For purposes of your response, assume that the hub must remain in its current location and that this portion of the basement must remain secured for a period of not less than ten years.

For purposes of your response, assume that the City of Salem is open to rezoning and redevelopment of all or part of the property.

Utilities:

Please note that the DHS-NC property is located in an "island" outside of the City of Salem's Urban Services Area. This means that the City of Salem is not responsible for ensuring adequate water, sewer, and storm sewer capacity for this property. We have investigated with

the City of Salem, and note that the redevelopment of the Oregon State Hospital has brought with it substantial reconstruction of private utilities and potable water infrastructure in Center Street. City of Salem Public Works indicates:

- Potable water is adequate to the site;
- The DHS-NC property is currently on a **shared** private sanitary sewer system with the Oregon State Hospital, a condition not permitted under current code, and which can not persist when the property is redeveloped;
- A 2,600 LF public sanitary sewer main will need to be constructed from the southwest corner of the DHS-NC property to the nearest public sewer interceptor with adequate capacity; and
- Some downstream storm sewer improvements may be necessary, depending upon development.

NPS Form 10-900
(Oct.1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instruction in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classifications, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Oregon State Hospital Historic District

other names/site number Oregon State Insane Asylum

2. Location

street & number Roughly bounded by D Street, Park Avenue, 24th Street, and Bates Drive ☐ not for publication

city or town Salem ☐ vicinity

state OR code OR county Marion code 047 zip code 97301

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ____ does not meet the National Register criteria. I recommend that this property be considered significant ____ nationally X statewide ____locally.

Signature of certifying official/Title - Deputy SHPO — Date: 1.9.08

Oregon State Historic Preservation Office
State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Action

✓ entered in the National Register
___ See continuation sheet.

____ determined eligible for the National Register
___ See continuation sheet.

____determined not eligible for the National Register

____removed from the National Register

____ other (explain):

for Signature of the Keeper — Edson H. Beall — Date of 2.28.08

Oregon State Hospital Historic District
Name of Property

Marion Co., OR
County and State

5. Classification

Ownership of Property
(check as many as apply)

___ private
___ public - local
_X_ public - state
___ public - Federal

Category of Property
(check only one box)

___ building(s)
_X_ district
___ site
___ structure
___ object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
50	3	buildings
2		sites
9	3	structures
		objects
61	6	Total

Name of related multiple property listing
(enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(enter categories from instructions)

HEALTH CARE: hospital
DOMESTIC: institutional housing

Current Functions
(Enter categories from instructions)

HEALTH CARE: hospital
DOMESTIC: institutional housing

7. Description

Architectural Classification
(Enter categories from instructions)

LATE VICTORIAN: Italianate
LATE 19TH & 20TH CENTURY REVIVALS:
Classical Revival
LATE 19TH AND EARLY 20TH CENTRUY
AMERICAN MOVEMENTS:
Commercial Style, Bungalow/Craftsman

Materials
(Enter categories from instructions)

foundation: BRICK; CONCRETE
walls: BRICK
WOOD: Weatherboard
roof: ASPHALT
Other:

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

DESCRIPTION

SUMMARY

The Oregon State Hospital (OSH) in Salem, Marion County, Oregon is the state's primary and oldest institution for the housing and treatment of those with mental disorders.[1] Opening in 1883 as a single three-story building, the institution expanded into a campus over a period of 75 years, reaching its current size and configuration in 1958. The physical character of the property today reflects both its origins in the long-term residential treatment philosophy of Dr. Thomas Story Kirkbride; and the subsequent transition, beginning in the early twentieth century, to a model favoring shorter term commitments and the use of physical and pharmacological interventions. The approximately 130 acre campus, comprised of buildings, structures, and designed landscapes, constitutes a highly intact historic district, virtually without non-historic elements.

LOCATION AND SETTING

Located approximately two miles east of downtown Salem, the Oregon State Hospital Historic District occupies the approximately northerly fifth of a large contiguous acreage of state-owned property housing a diversity of agencies and institutions. The district is bordered on the north by D Street, on the east by Park Avenue and facilities belonging to Marion County, on the south by the State Penitentiary complex, and on the west by 24th Street, and the grounds of the Salem Hospital General Unit. Center Street bisects the campus east to west. The institutional buildings occupy a level bench of ground approximately twenty feet higher than, and northeasterly of, the area where staff housing and the park-like entry grounds are located.

Initially developed in a rural setting well beyond the edge of town, the Oregon State Hospital grounds were laid out orthogonally to the compass, unlike the then existing plats of Salem, which instead conformed to the eastern bank of the Willamette River. These two geometries come together along the western edge of the hospital property, making for misalignment of some streets and inconsistencies in their numbering pattern. The cardinal point orientation of the hospital may simply have been responsive to an existing rural road pattern, but in any event it clearly effected the development of later neighborhoods to the east and north, which are also laid out according to compass.

By the close of the period of significance (1883-1958) the Oregon State Hospital had essentially acquired the setting that it displays today. Residential neighborhoods mostly dating from the first half of the twentieth century adjoin the complex to the north, northeast, northwest, west, and southwest, and public institutional uses abut the remainder of the perimeter. The campus itself, which is open and park-like by design, today exhibits a landscape of sweeping lawns, a wide variety of mature deciduous and evergreen trees and shrubs, and a system of both curving ornamental avenues and practical roadways and paths.

Underlying and linking much of the complex is an extensive system of tunnels which are used for the practical purpose of connecting and distributing infrastructure such as water, power, sewer, heat, and communication systems. It also serves as a distribution network for food (prepared in a central kitchen), laundry, furniture, and

[1] OSH was originally called the Oregon State Insane Asylum.

other supplies; and a secure, weather-protected transportation system for patients and staff. Historically, the tunnel system included a small rail-trolley system for moving people and materials. The tracks for this system emerge from underground, taking advantage of the significant change in grade south of the main treatment complex, in the vicinity of the physical plant buildings. Significantly, the tunnel system twice crosses under Center Street (originally Asylum Avenue), a major public street which is designated as an arterial thoroughfare.

BUILDINGS AND STRUCTURES

For many years the Oregon State Hospital has employed both naming and numbering conventions to identify its buildings, building additions, and structures, with the numbering system being the more complete and consistently applied of the two. In addition to these methodologies, some of the buildings are known widely by common names. In the initial reference to a particular resource the nominators have adopted a hybrid system of: formal name, if any, followed by building number or numbers, and lastly any common name in parentheses, e.g. Cascade Hall - #30, #31, #41, #42, #43, #44, #45, #46, #48 - ("J" Building).

In outward appearance the buildings followed closely the sequence of styles popular at their times of construction. They also tended to exhibit characteristics peculiar to public architecture, such as a conscious downplay of any ornament which might be construed as frivolous and an effort to make buildings appear substantial. In terms of their original functions, the built resources on the campus can be thought of as falling into four broad categories: administrative, patient treatment, utilitarian, and staff residential. These four categories will be used as an organizational framework for further discussion within this section. Note that while administrative and patient ward uses have been somewhat interchangeable over time, the staff housing and the physical plant resources have remained more or less constant in their usage. Today, large parts of the campus are no longer in use.

As one would expect in a complex developed over the span of 75 years, the buildings of the Oregon State Hospital display a wide range of architectural styles. The buildings also employ a wide variety of structural systems. Remarkably, this diversity melds into a cohesive whole, probably owing to factors such as topography, a predominant use of masonry finishes, the wide spacing between structures, and a uniform matrix of lawns dotted with large trees. In a few areas recent additions of chain link security fencing does disrupt this pattern, but not significantly.

The shapes of the buildings, particularly those designed as patient wards, also reflect changing attitudes toward mental disorders and its treatment during the period of significance. For example, the building today known as Cascade Hall is clearly laid out in the then-prevailing pattern associated with Dr. Thomas Story Kirkbride, longtime superintendent of the Pennsylvania Hospital for the Insane, who articulated links between the architectural character of asylums and the efficacy of mental health treatment in his groundbreaking book, *On the Construction, Organization and General Arrangements of Hospitals for the Insane*. This widely read and highly respected book, originally published in 1854, had been revised and reissued in 1880, just before the inception of the Oregon State Hospital.

As the complex expanded over time, later wards tended to be developed for more specialized uses, such as tuberculosis, geriatric, or juvenile treatment. They reflect a philosophy of treatment and release more than a philosophy of long-term residence. While the nineteenth and early twentieth century structures tend to be more attenuated in plan, and have tall ceilings and operable vertical windows for daylighting and ventilation purposes, the footprints of the later buildings, which rely more on mechanical and electrical systems for lighting and air handling, are wider relative to their lengths, with shorter floor heights and inoperable windows. Breitenbush Hall - #35 (Belluschi Building) and Eola Hall - #50, #77 are good examples of this phenomenon.

ADMINISTRATIVE FUNCTIONS

The Kirkbride model, followed closely in the design of the initial building at the Oregon State Hospital complex, placed the administrative core of the institution at the center, with two wings of wards stretching out to either side. As implied in Kirkbride's own words, some of the attending staff was expected to reside in the building, as was the case in Oregon:

> For an institution like that referred to, it is believed that the best, most convenient, and most economical form will be found to be a centre building with wings on each side, so arranged as to give ample accommodations for the resident officers and their families, and for the classification and comfort of the patients, and all employed in their care.[2]

At the Oregon State Hospital, in addition to staff apartments this central block initially also contained general offices, medical facilities, rooms where the public could interface with the institution, visiting parlors, intake facilities, the kitchen, storage, and a chapel or lecture hall.

Kirkbride also envisioned that once an asylum reached the population capacity for which it was designed, optimally no more than 250 patients, a new, separate facility would be built elsewhere to accommodate additional patients. In the case of Oregon, this model of dispersion proved unworkable, and the hospital complex expanded steadily from the outset. In terms of administration this meant that an entirely separate office building, the Dome Building - #36, was constructed in 1912, and that some administrative functions were included within the new single-purpose ward buildings as they were added to the campus. In 1950, although some management functions were retained there, the Dome Building itself was superseded by Siskiyou Hall - #29 (Administration Building). By this point in time the complex was nearing its peak population, housing approximately 3,300 patients.[3]

PATIENT TREATMENT FUNCTIONS

In its first few decades, the Oregon State Hospital mainly adhered to the Kirkbride treatment facility model, except, as noted above, in terms of overall size. Patient wards were initially developed in two attenuated wings off the administration block. They were laid out as double-loaded corridors with small rooms for one or two people opening along the length of the very broad corridors. Each ward floor had a room for an attendant, its

[2] Chapter XXIII – Form of Buildings
[3] OSH reached its peak population of 3, 545 in 1958

own dining room (food was delivered from a central kitchen), and bathing facilities. Wards were segregated both by sex and the relative manageability of patients.

As numbers of patients grew, both of these wings were extended incrementally, in a pattern of stacked wards separated by stairwell "knuckles". Each new ward block was offset from its neighbors, allowing the terminus of its corridor to include a window for better light and ventilation. These additions were similar in character and construction to the original building, but because of the nature of the site, they were not extended out in a straight line as the Kirkbride system preferred. Instead, both wings were turned to the east, with the northern arm eventually reaching four ward blocks in length and the southern arm stopping at two. This asymmetry in plan gives rise to the common nickname of "J Building" for Cascade Hall.[4]

As the Oregon State Hospital grew and its range of treatments expanded, new trends in mental health care tended to influence the physical pattern of patient wards. An emphasis on the provision of wholesome living conditions, such as fresh air, sunlight, quiet, good food, and ample space, as a way to mitigate insanity, which had prevailed through the second half of the nineteenth century, began to recede. Interestingly, it was also around this time that the term "asylum," which implies a place of refuge where one lives, began to be replaced by the term "hospital," which implies a place of healing from which one anticipates departure.

Throughout the twentieth century, increasing research into the nature of mental disorders helped to differentiate among syndromes and their origins, which in turn led to new and sometimes more effective pharmacological and physical treatments. These changes began to move treatments, and the architecture which supported them, into a more medical model in the early decades of the twentieth century. This trend would continue through and beyond the mid-century. The physical manifestations of these changes embodied in the design of buildings are most obvious in the interior floor plans, with the use of larger sleeping wards and dayrooms as opposed to the earlier provision of private and semi-private rooms, and in the aggregation of staff functions within the wards into clusters akin to today's hospital "nursing stations."

UTILITARIAN FUNCTIONS

The buildings and structures which house support operations for the Oregon State Hospital are clustered in two loose groupings to the south and east of the northerly wing of Cascade Hall. As with the rest of the campus, their dates of construction range from the late nineteenth to the mid twentieth century and they reflect simplified versions of architectural tastes and construction methods from the whole period. All but one of these buildings are single-story, although several are raised up on daylight basements. Where these buildings and structures initially supported trade workshops or labor intensive tasks performed by trustee patients such as laundry, sewing, weaving, and cobbling, they display large banks of steel-framed windows for daylighting. Where the function is warehousing, vehicular storage, or steam generation they are much more closed in character. The "physical plant" cluster is closest to Cascade Hall, with a second, looser grouping of small buildings and structures spaced off to the south and downhill. These latter buildings originally supported a farming operation which provided both a work outlet for patients and helped to supply fresh food for the

[4] Unfortunately, the "J" Building has a non-compatible kitchen addition, although it does not compromise the integrity of the overall building.

Hospital and other nearby state institutions. The loss of other agricultural buildings represents perhaps the greatest diminution of historic context in the district, although toward the end of the period of significance the farm operation was already being steadily curtailed.

STAFF RESIDENCES

Twenty-three houses, built over time as housing for staff members, are arranged along the southern edge of the district in four distinct groups. The earliest houses date from 1909 since resident staff lived in apartments within the asylum building itself during the first few decades of the hospital's existence.

The majority of these houses face Greenway Drive, an east-west street running from 24th Street almost all the way across the campus. Other houses face shorter secondary cul-de-sacs, 24th Place, which branches south off Greenway, and Bates Drive, which branches west off 24th Place. The arrangement is not unlike the typical Officer's Row on a military base, with the size of the houses indicating the relative status of the occupants.

The first residential cluster consists of three, large, two-story houses set well back to the north from Greenway Drive and adjoining the large entry park which buffers the original hospital complex from the community to the west. These houses would originally have provided homes for two of the higher ranking administrators of the Oregon State Hospital. The earlier two houses, #1 and #2, exhibit Craftsman stylistic influences but the later one, #28, appears to be a stripped down interpretation of the Colonial Revival style popular in the post-war period and in the other housing on this campus.

The second grouping of houses is a row of ten facing north directly onto Greenway Drive. From west to east, the first two, #11 and #12, are dissimilar story-and-a-half structures slightly larger in footprint than those making up the remainder of this group. They display characteristics of a simplified Colonial Revival style. The remainder of the row is made up of eight similar, story-and-a-half houses also in a Colonial Revival mode, #4, #3, #14, #15, #16, #17, #18, and #19.

The third grouping is comprised of the five houses facing east and west onto 24th Place, #20, #21, and #22, and #23 and #24 respectively; and three, #25, #26, and #27, facing north onto Bates Drive. All but one of these, #27, which is a single story Ranch style house, are of a type similar to, but less detailed than the smaller residences facing Greenway Drive.

Finally, there are two residences lying at the extreme southeastern corner of the complex, far removed from all other buildings and accessible via the extension of Park Avenue onto the campus. One is a story-and-a-half late nineteenth century farmhouse, possibly predating acquisition of the farm property by the hospital, and the other is a very large two-story residence displaying an eclectic range of Period Revival characteristics.

LANDSCAPE

One of the most striking and character-defining aspects of the Oregon State Hospital Historic District is the survival of much of its supporting historic landscape. This is especially true of the park-like setting at the west

of the complex. Even the earliest surviving depictions and photographs of the property show the main building fronted by a designed landscape of approximately twenty acres. After the construction of Dome Building north of Center Street in 1912, another approximately five acres of park-like open grounds were added fronting that structure. These two areas are described in greater detail below under the heading "Parks."

In addition to this dedicated open space, the remainder of the built-up complex is also characterized by broad expanses of lawn between the buildings and plantings of ornamental trees and shrubs throughout. Noteworthy among the plantings are the long rows of large black walnut trees lining 24th Street to the west and Park Avenue to the east. The pattern of roads within the complex, especially in the park and west of Dome Building, is also ornamental in character, with stone entry gates, curving streets and roundabouts, a few surviving street lights, and a partial street identification system featuring bird names beginning with the letter "B" (Bluebird, Bobolink, Bluejay, and Bittern). Also associated with the hospital property, but currently undeveloped, are a grassy field of approximately 15 acres between D Street, and the northerly edge of the built-up area, a farmed field in the extreme southeasterly corner of the property, and a swath of plowed but unplanted ground, approximately 500 feet wide, separating the hospital complex from the Oregon State Penitentiary.

PARKS

Dr. Kirkbride was an advocate for the curative values of exercise and open air. His belief that better treatment of patients and respect for their human dignity could, in some instances, result in improvement of their conditions, is referenced throughout his treatise on the development of institutions for the care of the insane. Specifically, he speaks to the need to provide "pleasure grounds" where patients could take long, supervised walks, spending as much as half their time outdoors, and within closed "patient yards" to which many could have access on demand:

> Although it is not well to have a large number of private yards in immediate connection with a hospital for the insane, it will still be found convenient to have two or more for each sex... with shade trees and such other modes of protection from the sun and weather as may be deemed useful. These yards enable many patients... to have the benefit of the open air, and to take exercise at hours when the attendants cannot conveniently leave the wards; but most of the patients should have a more active and longer continued kind of exercise than these yards can afford. They should look to the walks in the open fields and about the pleasure-grounds, which can be readily made a mile or two long for each sex, for their principle exercise.[5]

As noted earlier, the combined park area is approximately twenty feet lower than the ground where the building complex stands. It is slightly off-square in plan owing to the non-compass alignment of 24th Street at the west, and flat in topography. Two curving drives divide the main south park into quadrants diagonally, Bluebird running between the southwestern and northeastern corners (and continuing beyond Center Street to an elliptical lawn fronting the Dome Building) and Bobolink running between the northwestern and southeastern corners. Where the two drives meet they form a roundabout which for many decades surrounded a

[5] (Chapter XVIII - Patient Yards)

columbarium to house the cremated remains of those who died at the Hospital and were not claimed by family.[6] Early photographs show this area enclosed with an open, lightweight, picket fence.

Over the years, the south park has also included many ornamental and recreational structures, including a fountain, a pond, benches, a swing, gazebos and shelters, ornamental arches, gateways, plantings, etc. The only structure remaining in the park area today is a pair of fenced tennis courts, just downhill from and west of Siskiyou Hall. The areas immediately around Siskiyou Hall to the east, north, and south have been converted to parking lots, as have several areas within the park north of Center Street.

ARCHITECTS ASSOCIATED WITH THE OREGON STATE HOSPITAL

Wilbur F. Boothby, 1840-1946

Wilbur Boothby was prominent in Salem as a merchant, contractor and supervising architect for nearly fifty years. He prepared plans for the 1878 house of newspaper publisher and banker Asahel Bush. Located in Bush's Pasture Park it is now a historic museum and is listed in the National Register of Historic Places.

In 1872, Boothby took the contract to build the Marion County Courthouse (demolished). In 1880, Boothby oversaw the construction of Cascade Hall ("J" Building) and served as the supervising architect and superintendent of construction. He was also involved in the construction of the old Oregon State Capitol and the Oregon State Penitentiary.

Walter David Pugh, 1863-1946

Walter Pugh was an architect in Portland and Salem. As State Architect under Governor Sylvester Pennoyer, Pugh designed buildings on the campuses of the Oregon State Hospital, Penitentiary, Fairview Home and Oregon Agriculture College (now Oregon State University). He also supervised construction of the dome of the old state capitol. Among prominent buildings he designed in Salem were the Bush-Breyman and Bush-Brey Blocks (1889) on Commercial Street, the first Salem High School (1893), old City Hall (1893), and the Thomas Kay Woolen Mill (1896). He also designed buildings at Chemawa Indian School and was the architect of the Shelton-McMurphy House (1888) Eugene; Whitespires Presbyterian Church (1891), Albany: and the Crook County Courthouse (1909, Prineville).

Edgar M. Lazarus, 1868-1939

Edgar Lazarus was a prominent architect in Portland for more than 45 years. He is credited with many important works in his long career. In his early years he designed many houses for prominent people, especially among Portland's Jewish community. His house designs were mostly in the shingle style and they generally had a unique appearance that seemed to be Lazarus' own trademark. Their roofs had an extremely steep pitch and unusual shapes.

[6] The columbarium was removed in the mid 1980s.

Perhaps his most important work was the Vista House at Crown Point on the Columbia River Highway. Completed in1918, it was designed in the German version of the Art Nouveau style and shows great sensitivity to the site. It has become one of Oregon's most important monuments and is listed in the National Register of Historic Places.

Other public works by Lazarus include Apperson Hall at Oregon Agricultural College (1898-99) Corvallis; Morrow County Courthouse (1903), Heppner; Ahvai Shalom Synagogue in Portland (1904); Clatsop County Courthouse in Astoria (1904-07); and the Oregon State Hospital Receiving Ward (Dome Building) (1912). Lazarus also designed early alterations to the Pioneer Courthouse in Portland and was the resident architect for the U.S. Customs House in Portland. He designed the first Multnomah Athletic Club Building at S.W. 10th and Yamhill Streets.

After the completion of the Vista House, Lazarus engaged in a long bitter dispute with the Oregon Board of Control concerning his fees for the Vista House and the Oregon State Hospital's Dome Building. These disputes brought him much unfavorable publicity in the press that must have hurt his practice. He performed little work of importance after this unfortunate conflict.

William Christmas Knighton, 1864-1977

William Knighton was a prominent Portland architect for 35 years. In 1913 he was appointed Oregon's first State Architect, a position he held until 1917. His best-known building is the State Supreme Court Building (1913). In 1919, when licensing of architects commenced in Oregon, Knighton received license No. 2 under the grandfather clause. He was a member of the Oregon State Board of Architect Examiners from 1919 to 1923, serving as its first president.

While associated with C.S. McNally, Knighton was involved in the design of the Capitol Bank Building in Salem (1893), and the Dr. L.A. Port residence (1894) also in Salem. In Portland, Knighton designed a number of homes in the Craftsman style. He also designed the Seward Hotel (1908), which is now part of The Governor Hotel.

As State Architect, Knighton supervised the construction and remodeling of more than 90 buildings throughout the State. Included in that inventory was the Rehabilitation Center - #49 (1937) at the Oregon State Hospital.

Lyle Pascoe Bartholomew, 1896-1978

After graduating from Willamette University and the University of Oregon School of Architecture, Lyle Bartholomew established his practice in Salem, where he worked for nearly 50 years. Among his works was the Capitol Journal Building (1934), Yaquina Hall - #33 (Nurses Dormitory) at the Oregon State Hospital (1947), and Beth Shalom Synagogue in Salem.

Albert Sutton, 1867-1923

Albert Sutton was the senior member of the Sutton & Whitney Firm, which produced some of the most outstanding designs in the Northwest during the 1920s and 1930s. Included in their collection were the Annie Wright School, The College of Puget Sound and the Rust Building, all in Tacoma. Later when Aandahl joined the firm their projects in Portland included the J.K. Gill Building, (1923), The Shrine Hospital (1923) the Masonic Temple (1927), The Good Samaritan Nurses Dormitory (1936) the Parish House Addition to Trinity Church (1939) and McKenzie Hall - #40 on the Oregon State Hospital campus (1948). Many of the above projects were in the Neo-Georgian and Art Deco styles, but several showed Scandinavian Modern influence.

Pietro Belluschi, 1899-1994

Pietro Belluschi was one of Oregon's leading architects from the 1930s until his death in 1994. Breitenbush Hall - #35 was one of several buildings Belluschi designed in Salem. Other buildings located in Salem include the YWCA Building (now vacant), Baxter Hall, Collins Hall, and the old library building (now Smullen Hall) all at Willamette University.

His early Portland houses and churches are elegantly simple and quietly restrained structures with a modest sensibility. They are sensitive to the climate and landscape of the region and led to his becoming the leader in the development of the Northwest Regional style.

In 1925 he became one of the principal designers in the Albert E. Doyle Firm. He was involved in the designs of the Pacific Building, The Corbett Residence, and the lobby of the Public Service Building, all located in Portland. In 1931 Belluschi received his first major commission in the Doyle office, The Portland Art Museum (1931-32, 1937-38). It was his first design to draw national attention receiving praise for its modern simplicity and decidedly non-classical design.

His innovative aluminum-clad Equitable Building (now known as the Commonwealth Building) built in Portland 1945-48 has been hailed nationally as the first curtain-wall office tower to be built in the U.S. after World War II. It was the first building to be sheathed in aluminum, the first to employ double-glazed window panels, and the first to be completely sealed and air-conditioned.

Using simple means within modest budgets, Belluschi became respected and sought after for the design of churches. He designed churches for many denominations and each design paid close attention to the specific spiritual needs required by the clergy, building committees, and congregations for whom he worked. Northwest regional characteristics and slightly Japanese influenced architectural elements began appearing in Belluschi's Oregon churches Including the following in Portland: St Thomas More Catholic Church (1939-40), Zion Lutheran Church, a National Register Property (1947-50), Central Lutheran Church (1948-50), St Philip Neri (1946-52), and First Presbyterian Church in Cottage Grove (1948-51). He also designed Breitenbush Hall (1948) on the campus of the Oregon State Hospital. Other significant designs in Oregon include the Oregonian Building (1945-48), Pacific Telephone and Telegraph Company Building (1947) Portland, and the Federal Reserve Bank(1948-49) and the Marion County Courthouse (1950-54) in Salem.

From 1951 to 1965 he was Dean of Architecture and Urban Planning at Massachusetts Institute of Technology. He retired from MIT in 1965 and returned to Portland permanently in 1973 where he continued to practice independently and in association with local and national architectural firms. Some of the latter included The Julliard School Of Music and Alice Tully Hall (1956), Pan American Building (1963-73), Saint Joseph's Church (1964-68) Roseburg, Oregon; Meyerhof Symphony Hall (1972-1982) Baltimore, Maryland; Kerr McGee Building (1966-69); and the Bank of America Building (1964-69) in San Francisco.

Belluschi retired from MIT in 1965 and returned to Portland where he continued to practice as a design consultant to architects throughout the country. He also served on many advisory committees, design review boards and juries. In 1972 he was awarded the American Institute of Architects highest honor – the Gold Medal for Lifetime Achievement. In 1991 he received the National Medal of Arts by President George H. Bush in a White House ceremony.

During his later years in Portland, Belluschi designed six churches in Oregon in close association with Joachim Grube (Yost Grube Hall Architecture). Other works designed when he was in his 80s include the Papworth House (1978-80) and Packard House (1986-88), both in Portland, and the George Fox Bell Tower (1990) in Newberg, Oregon. Other late projects on which he consulted include the World Bank and Pentagon City, in Arlington, Virginia, and the Parliament Building

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing).

__X__ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

_____ B Property is associated with the lives of persons significant in our past.

__X__ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

_____ D Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance
(Enter categories from instructions)

ARCHITECTURE
HEALTH/MEDICINE
SOCIAL HISTORY

Period of Significance
1883-1958

Significant Dates
1883. opening of hospital
1958, most of present-day configuration reached; patient population peaks

Criteria Considerations
(Mark "x" in all the boxes that apply)

Property is:

_____ A owned by a religious institution or used for religious purposes

_____ B removed from its original location

_____ C a birthplace or grave

_____ D a cemetery

_____ E a reconstructed building, object, or structure

_____ F a commemorative property

_____ G less than 50 years of age or achieved significance Within the past 50 years

Significant Person
(Complete if Criterion B is marked above)

Cultural Affiliation

N/A

Architect/Builder
Wilbur Boothby; Walter Pugh; Edgar Lasarus; William Knighton, Albert Sutton; Lyle Bartholomew; Pietro Belluschi

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets)

9. Major Bibliographical References

Bibliography (Cite books, articles, and other sources used in preparing the form on one or more continuation sheets) See continuation sheets

Previous documentation on file (NPS):
- ___ preliminary determination of individual listing (36CFR67) has been requested
- ___ previously listed in the National Register
- ___ previously determined eligible by the National Register
- ___ designated a National Historic Landmark
- ___ recorded by Historic American Buildings Survey
- ___ recorded by Historic American Engineering Record

Primary location of additional data:
- __x__ State Historic Preservation Office
- __x__ Other State agency
- ___ Federal agency
- ___ Local government
- __x__ University
- ___ Other

Name of repository: _____

STATEMENT OF SIGNIFICANCE

SUMMARY

The campus of the Oregon State Hospital developed between 1883 and 1958 and is comprised of hospital buildings, various support structures, houses, tunnels, and designed landscaping. During the period of significance, the Oregon State Hospital evolved with completely self-sustaining services which echoed the country's perception of how to treat and control those with mental disorders.[1] The period of significance begins in 1883 with the opening of the first segment of the "J" Building and ends in 1958 when both most of the present-day configuration of the hospital was reached and the patient population peaked. The buildings and landscaping contained within the approximately 130 acre site constitute a district that represents one of several self-sufficient institutions established in the capital city of Oregon in the late nineteenth and early twentieth centuries in the wake of social and medical reforms. The Oregon State Hospital Historic District is historically significant and is eligible for listing in the National Register of Historic Places under Criterion A for its association with the evolution of philosophies and policies related to mental health care in Oregon during the period of significance. The district is also architecturally significant and is eligible under Criterion C for its concentration of distinctive architectural styles and excellent examples of institutional buildings designed by various prominent architects in Oregon.

The Oregon State Hospital Historic District retains the seven aspects of integrity that describe its historic and architectural significance. Its location has not changed. The design of the site, spatial relationships between the primary hospital structures and housing units, the landscaping, and the architectural character of the buildings, reflects the historic period of significance. The setting of the hospital was originally outside the city limits to protect both the residents of the hospital from the distractions and influences of the outside world as well as the citizens of Salem. As the hospital has grown with the construction of additional buildings to meet the changes needs of the patients and staff, which reflects the character and growth of the Hospital during the period of significance, so has the area around it, which has been developed with residential housing and commercial enterprises,. The primary materials used in the construction of the buildings, and the workmanship and quality of construction illustrate the aesthetic principles as they changed through 75 years of growth of the hospital complex. The feeling or historic sense of the site also has been retained by the campus setting with mature trees, lawns, and open spaces between buildings. The aspect of association has also been retained as the hospital has been continually used up to the present-day as the primary residence for those with severe mental disorders in Oregon.

The design for the Oregon State Hospital was based on the Kirkbride Hospital System, a plan for mental hospitals put forth in the 1850s by Dr. Thomas Kirkbride, Superintendent of the Pennsylvania Hospital for the Insane in Philadelphia. A second edition of his work appeared in 1880 with a plan variation that the Oregon State Hospital followed in which a U-shaped building was considered appropriate to use if space was at a premium. The Kirkbride plan suggested a center section for administrative and service activities with wings for patient wards on either side. The setting for the Kirkbride hospital was also important. Designed landscapes were considered part of the system of therapy, which called for calm and pleasant surroundings as well as

[1] The Oregon State Hospital was originally called the Oregon State Insane Asylum.

proper diet, regular routine, and productive occupation. The Kirkbride plan was used by as many as twenty-two hospitals in the east and mid-west. In Oregon, the Oregon State Hospital Historic District contains the oldest intact public building in Salem (presently known as "J" Building).

Typically, Kirkbride hospitals were enlarged over the years and the Oregon State Hospital is no exception. Additions to existing buildings and the construction of new buildings occurred throughout the period of significance. Additions made to the most prominent building in the historic district, "J" Building, were of brick bearing walls or brick veneer of the same general style and configuration as the original building. As wings were added to one side of the original "U"-shaped building, the building gradually assumed its "J" shape.

BRIEF HISTORY OF THE DEVELOPMENT OF THE AMERICAN ASYLUM

When the ideas of the European Enlightenment reached the shores of the Americas, "Rational Humanitarianism" or the idea that reason could conquer human suffering and the faith that all human life was of value prompted foresighted Americans to realize that "madness" was a disease and that those with mental disorders were human beings in need of care and kind treatment. From the settlement of the American colonies through the early eighteenth century, both those mental disorders and the destitute were "cared for" by relatives or neighbors. Incarceration, even for serious crimes, was relatively rare. Instead, criminals were shipped, fined, put in stocks for a period, or branded. Beginning in the late 1820s, and especially in the 1830s, however, incarceration became the rule rather than the exception for all categories of social deviants. The rise of a new egalitarian ethic and social aberrance were seen by influential men of the times as a serious and potentially dangerous threat to a social order in which everyone knew their place. The causes of "insanity" were seen to lie in the evolution of modern civilization and its discontents. The solution, therefore, was to remove the insane from the stress and strains of modern life to a place where an orderly and stable environment could be provided, and where a lesson in the proper way of living could be taught. Because of this philosophy, it is no accident that the superintendents of asylums in America at this time were often educators and men of religion.

Both the increasing population and complexity of social life made the presence of those with mental disorders disruptive and disturbing. Having the "insane" out of sight and out of mind was perceived as an increasing necessity, both socially and psychologically. An outgrowth of this influence was the trend toward locating asylums away from centers of populations and in isolated, rural areas. Incarceration of those with mental disorders was for moral re-socialization, to provide a refuge from the world full of temptations, and to protect society.

In was not until the 1880s with the rise of the organized medical community and the discrediting of the philosophy of the early asylum superintendents, that the asylum became known as a "hospital" where those with mental disorders had medical treatments. Doctors, nurses, and therapists were dedicated to curing an imbalance in the psychological state of the patient, not correcting God's work or the moral weakness of the patient. Initially, these treatments were almost entirely physical in nature depending in large measure on either shock (e.g., immersion in water, severe physical confinement) or relaxation. In the early part of the twentieth

century the influence of Freudian psychology and psychoanalysis led to hypnosis and other forms of "talking therapy."

Programs and medications used to treat those with mental disorders continued to evolve. Representative of the philosophies of the early twentieth century is a report by Mary Lawson Neff, M.D., Des Moines, Iowa, who wrote in 1913 about minimizing insanity. She found approximately 15-20 percent of commitments were attributed to alcohol, and 10-12 percent to syphilis. She wrote that these commitments were, in theory, preventable, and that with education institutions could reduce the number of patients. Dr. Neff also discussed the need to evaluate the qualitative nature of the institution as well as the quantitative for determining ways to minimize mental disorders. Rather than keep patients lined up and looking out windows, she encouraged interaction with games and reading, and providing activities for patients to feel productive. Occupational therapy was the wide-spread movement of that time, and the appropriate disposition of goods and services patients provided was being explored. Later, Metrazol and insulin treatment for certain types of mental disorders were introduced about 1938 and a larger number of cures and improvements were recognized with greater numbers of patients being discharged (Oregon Historical Quarterly, December, 1945)

BRIEF HISTORY OF SALEM, OREGON

Between the Cascade and Coast mountain ranges of Oregon, the Kalapuya lived in the mid-Willamette area for over 5,000 years before European-Americans founded the city of Salem. By 1812, fur trappers had traveled to the Salem region where some remained and turned to farming. A few decades later, in 1840, Jason Lee, a Methodist missionary, settled along the Willamette River, building a home and grist mill. On January 13, 1851, the state capitol was moved from Oregon City to Salem, and the city was later incorporated in 1860. As Salem continued to grow the town began to take its current shape with its business district located close to the river.

During the 1880s Salem experienced tremendous growth. A water system was installed, road improvement occurred, and a bridge was constructed across the Willamette River. A school for the blind and deaf had been constructed in 1870 followed by the Oregon Insane Asylum in 1883 and the Native American boarding school (Chemawa) in 1885 (at its current location). In 1908 the State School for the Feeble Minded was built south of town. In 1893 the city promoted the construction of more state institutions in the Salem area. By 1900 Salem's population was more than 4,000 people. The Oregon Electric line between Salem and Portland was completed in 1908 when the Oregon Insane Asylum was renamed the Oregon State Hospital. In 1919, there were 1,724 people in the Oregon State Hospital as compared to only 271 people in the state prison.

After World War I, neighborhoods south of Salem expanded to include mostly larger homes for the wealthy, while the northern part of town expanded with the construction of smaller homes for the working-class. With the increased number of automobiles, neighborhoods expanded surrounding industrial areas and some institutions, including the Oregon State Hospital. This growth continued into the 1930s despite the Great Depression. Agriculture continued to be a strong economic influence along with several state institutions and government in the city. By the 1940s, Salem had a population of over 30,000 people and was experiencing an

expansion outside the city center into new suburban developments. West Salem was annexed into the city in 1949 that continued to grow with businesses and social activities moving away from the center of town.

Because of continued growth within Salem, the Oregon State Hospital, originally on the outskirts of town, would eventually become a central part of the city over the 75 year period in which the associated buildings constructed on the site evolved. The hospital's physical location just outside the city limits when it was constructed later became a central part of the city as primarily residential neighborhoods grew up around it with the expansion of Salem's population that spiraled around the central core.

DEVELOPMENT OF THE OREGON STATE HOSPITAL

Prior to the construction of the Oregon State Hospital, government-supported mental health care in Oregon began with the formation of a provisional government in 1843. The care of "lunatics" was contracted to private individuals who bid to care for them. Any justice of the peace could conduct a sanity hearing and declare someone a "lunatic." Care providers for these people were required to provide a bond certifying that they would use the money paid to them for the care of those with mental disorders in their possession.

As early as 1862, Governor Addison Gibbs recommended to the Oregon Legislature the establishment of an asylum in Salem to provide for the care and medical treatment of "insane and idiotic persons." The Legislative Assembly passed a bill in 1862 that authorized the governor to make a contract with doctors Hawthorn and Loryea of East Portland to take care of persons with mental disorders in the state. Presumably this arrangement for care in Portland was a temporary measure until funds could be appropriated and the hospital could be constructed in Salem. Marion County, along with most of the counties then in existence, contracted with Dr. Hawthorne to care for their citizens "of unsound mind." At county expense, these patients were shipped to the town of East Portland where the Institute was built (Asylum Street was the original name where the asylum was located). Due to residents' complaints, the name was later changed to that of the doctor, Hawthorn. In 1864, Oregon's general laws set up the framework for taking care of those with mental disorders, and the Hawthorn Asylum operated as the state facility between 1864 and 1883.

Not until October 25, 1880 did the state legislature enact and approve an act to appropriate money to furnish the Oregon State Insane Asylum. It was entitled "An act to provide for the construction of a brick Insane Asylum Building for this State, to levy a tax and appropriate money therefore." Funds were allocated in the fall of 1880 for the asylum and the site selected was north of the state prison just east of Salem's city limits. Groundbreaking took place in May 1881 with much of the labor force and brick building material coming from the state penitentiary. In October 1883, 268 male and 102 female patients were moved from the Hawthorne Asylum to the Oregon State Hospital.

The design and development of the first building, the "J" Building, to be part of the Oregon State Hospital are described in a Report to the Board of Insane Asylum Building Commissioners dated September 1, 1882 prepared by architect Wilbur F. Boothby and in *The Daily Oregonian* article printed October 24, 1883. The detailed description explains the significance of each part of the hospital as it related to standard practices for mental health care in the late nineteenth century. From the outward appearance of the building, to the

programming to accommodate both patients and staff and how they interacted, Boothby was very detailed in relaying the purpose and intent behind his design. The newspaper article, which extracted much of its content from Boothby's report, places the architect's description into the broader context of the city's perspective:

> . . . Construction was complete, equipment and furnishings were in place, a superintendent (Dr. Horace C. Carpenter) was appointed, and staff was hired when the public was invited to inspect the new facility in the fall of 1883. The location, far enough from the business part of the city and conveniently located one-half mile north of the penitentiary and directly opposite the "Orphan's home," was considered especially adapted for the building erected on a site purchased by the board of commissioners in 1864. The site contained 107 acres with sufficient land to grow vegetables for the institution.
>
> The style was quoted as being modified Italian, the details being bold and effective . . . The aim of the architect to produce a suitable and commodious structure without useless ornamentation or elaboration. The basement was constructed to provide room for the railways (with a turn-table to allow the car to run either direction) to convey food and other necessities from the kitchen to the dumb-waiters for the various dining rooms on the floors above.
>
> The first floor of the building contained an entrance hall, office of the superintendent, general reception room, library, dispensary, supervisors' and matrons' reception rooms, water closet, bath rooms, kitchen buildings, officers' dining room, the female ward on the right, and the male ward on the left. The upper floors contained the female wards on the south and the male wards on the north side. To the rear of these and outside the main ward buildings were the water closets. The attendants' rooms were at either end with a sitting room. The remainder of the front portion of the upper floors was divided into fourteen single sleeping rooms for patients.
>
> The second floor of the main office building was arranged especially for the superintendent's family and assistants, and contained parlors, sitting room, chambers, bathrooms, water-closets, and all other necessary closets. The rear of the second floor housed the supervisor's and matron's rooms and apothecary's room.
>
> The assistant physician, matron and steward, bathroom, water-closet, lavatory, clothes room, sewing room, etc., were on the third floor of the main building. The fourth floor was divided into seven large rooms in the same arrangement and size of the third floor. Those rooms were to be used as infirmaries, sewing rooms, or apartments for private patients.
>
> The building was heated by the hot air system with the placement of seven furnaces installed in the basement, chosen for economic reasons, low maintenance requirements, and efficient fuel use. The ventilation was designed to meet what was considered one of the most essential health producing features of the institution. An iron register opening directly into the flue was placed in the baseboard in every apartment. The doors and windows of the patients' room throughout were designed to be directly opposite each other to create a direct draught without endangering the health of the inmate whose bed was placed to one side.

The lighting of the building was with gas pipes arranged to distribute the light with the greatest economy. Boothby indicated that gas was superior to any other illuminator in use at that time, in regard to cleanliness, safety and convenience. The water was designed to be pumped from the pipes leading from the penitentiary to the State Fairgrounds.

Growth of the Oregon State Hospital Complex

Attitudes about those with mental disorders, mental health treatment methods, and associated building campaigns are reflected in reports and articles written between 1883 and 1958. These articles illustrate the problems associated with an increasing number of patients, the roles of the various staff members, the attitudes of the public and governing bodies, the types of buildings constructed to meet ever-changing needs, and some of the successes and failures of the institution. These accounts shed light on how these factors have been, and continue to be, tremendous challenges for those who live and work at the Oregon State Hospital.

Historically, the population and overcrowding at the Oregon State Hospital was an ongoing issue, beginning soon after the hospital opened in 1883, when 370 patients moved from the Hawthorne facility in Portland. The "J" Building capacity of 412 patients was soon realized and the expansion of the building in 1896 signaled the beginning of a growing complex. A 1904 report in the *Oregon Statesman Illustrated Annual* was a positive account of the staffing, accommodations and treatment of patients under the care of the Oregon State Hospital. At that time, the main building was on approximately 200 acres "in the eastern suburbs occupying a commanding position upon high ground surrounded by spacious laws and exercise grounds." In addition, the Cottage Farm, consisting of about 1,000 acres, was located approximately three-and-one-half miles away, to the southeast of the main campus (where the current Oregon Correctional Institute is currently located). 300 patients were provided accommodations at the then growing part of the institution with what was considered the most up-to-date "cottage system," with ample room to spread out. Additionally, about 150 acres rented by the institution from the "Mute School," was located near the Cottage Farm. The make-up of hospital staff indicated a self-sufficient system in which they took care of all needs without outside assistance. At that time, a full staff included the superintendent, J.F. Calbreath, physicians, druggist, bookkeeper, stenographer, department overseer, engineer, supervisor, matron, steward, commissary, blacksmith, tinner, shoemaker, tailor, laundryman, laundress, seamstress, basementman, baker, cooks, farmer, dairyman, night watchman and watchwoman, elevator operator, table girls, 40 female attendants, and 78 male attendants.

In 1908, attitudes about mental disorders were changing, and can be seen when separate provisions were made for the "mentally deficient group, as contrasted with the mentally ill." That year, the State Institution for the Feeble-Minded was ordered by the legislature to care for "young people born mentally deficient or retarded due to accidents," and some patients were moved out of the Oregon State Hospital. The hospital was also relieved of part of its burden when the distinction was made that "feeble-mindedness is a condition, not a disease, with little hope of remedy by medical attention."

The challenges of running the Oregon State Hospital were exposed again on January 23, 1911, when the *Portland Evening Telegram* reported that misuse of funds and unprofessional methods were occurring under the management of Dr. Stiner. There was also criticism of the operations at the home for the Feeble-Minded prompting the state legislature to demand that work begun by a special joint committee appointed at the 1909 session should be continued by another special session. Problems at both institutions included overcrowding of patients, insufficient tubercular care, and working patients beyond an eight-hour day. Overcrowding was not alleviated by the time of A *Biennial Report of the State Board of Control* in 1914, although there was good news that no serious accidents had occurred, no pestilential diseases had threatened the patients, that there was order and cleanliness throughout the buildings and at the Cottage Farm, and that the grounds were beautifully attended.

There were also successes at the Oregon State Hospital, however, and the treatment of patients produced positive results. Between 1914 and 1916, 1,248 patients were received and treated, with over 40 percent cured and sent home. Hospital staffing remained at a manageable level with 215 names on the payroll in the amount of about $9,700 monthly. Additional buildings were constructed, including the Receiving Hospital, or "Dome Building" which opened in the fall of 1912. Overcrowding, however, unfortunately continued. At that time, the legislature enacted the cremation of all remains of persons who had died in state custody at the hospital and whose family members never claimed their bodies, including those who had been buried, reflecting a shift in the attitudes about the dead, particularly those without support outside of the hospital.

An increasing population in the state, and an increase in the number of those with mental disorders, brought about the question in 1910 about constructing a second mental health hospital in the state. There was considerable discussion in the press beginning about 1909 as to the need for such an institution in eastern Oregon. In 1910, the Legislature appropriated $165,000 to purchase a site for a new state hospital. In November of that year, Pendleton was chosen over Baker City as the site for the hospital, with Dr. W. D. McNary as the appointed superintendent, and Dr. A.E. Tamiesie as the assistant superintendent. Both men had been members of the Oregon State Hospital for many years. The cornerstone for the Eastern Oregon State Hospital was laid on March 26, 1912 and was completed in early 1913. In January of that year, 326 patients were transferred to the new facility. Few of them were considered curable and the transfer was to lighten the burden on the Oregon State Hospital in Salem. The Eastern Oregon State Hospital was almost to capacity in 1918 with 515 patients.

The Oregon State Board of Control was created in 1913 to manage state institutions, including the Oregon State Hospital and the newly opened Eastern Oregon State Hospital, and consisted of the same officers as the previous Boards of Trustees that oversaw both hospitals. The Board appointed a "well-educated physician" as superintendent to manage the Oregon State Hospital, and was also authorized to transfer patients between two state hospitals as needed, as well as to transfer patients from other state institutions, such as the Oregon State Penitentiary, Fairview Home, training schools, or industrial schools, when patients were determined to have mental disorders. The Board was also authorized to coordinate with federal authorities to deport illegak alien patients and to return non-resident patients to their home states. More broadly, the functions of both the Oregon and Eastern Oregon State Hospitals were defined to diagnose mental illnesses, provide treatment, and release patients who have satisfactorily responded to treatment; to investigate the history of persons admitted

and their families as a means of determining the cause or causes of the person's mental illness; to provide adequate and humane custodial care for those for whom curative treatment is ineffective; to conduct social and recreational programs for patients; to utilize patients, when possible, in the maintenance and upkeep of buildings and grounds; to assist in the protection of patients financial and business interests; to offer accredited courses in psychiatric nursing; and to provide outpatient clinic services.

Overall, treatment at the Oregon State Hospital followed national trends in mental health care. An important part of a patient's treatment was occupational therapy. There were 1,400 acres of farmland from which patients at the Oregon State Hospital produced $133,726.51 in produce between 1914 and 1916. Between 1921 and 1923, production increased and consisted of a dairy, which produced $42,545.39; a farm and garden ($96,570.39); hog house ($17,288.93); an orchard ($22,980.00); and poultry ($34,259.62), for a total of $213,644.33. All of the fruit, vegetables, and other produce for maintaining the hospital were produced at the farm. There was also a cold storage plant that produced 100,000 pounds of ice, and provided space for fresh meat.

Treatment through engaging patients in occupational therapy continued as the superintendent's reports described positive results. In 1921, superintendent Dr. Steiner stated optimistically that 40 percent of all those patients received at that time were discharged as "much improved" or "almost well." He wrote with pride that the "beautiful lawns, flowers, the extensive orchards, vineyards, truck gardens and intensively cultivated fields showed a small part of the men's labors. The women were employed in the laundry, sewing room, and dining rooms, in gathering berries and preparing vegetables and in canning departments. The "duller" ones were stimulated to effort by attractive work such as basketry, needlework, and rug making.

The Superintendent's Report for the Oregon State Hospital dated October 1, 1922, was less optimistic, however. Instead of describing the benefits of occupational therapy, the report focused on the topic of sterilization, defending its effectiveness in protecting the patient and their possible progeny and society in light of its being declared unconstitutional. The report included specific information related to surgeries and medical treatments, and listed various procedures including castration, hysterectomies, cancer treatments, blood transfusions, bone transplants, amputations, preventative testing, dental work, and fitting for glasses. In addition, the issue of overcrowding was again highlighted, as the report discussed the fact that wards that were originally designed to accommodate 40 people were crowded with up to 45. Obviously, crowded sleeping quarters, jammed dining rooms, and a general feeling of being cramped, which compromised both health and comfort, was an ongoing concern. Unfortunately, the current policy at the time was to transfer excess patients to the Eastern Oregon State Hospital in Pendleton. Although the hospital in Salem needed more space to accommodate growing numbers of patients and staff, Dr. Steiner recommended instead adding a new wing to the hospital in Pendleton. Two floors were added in 1921 to the Eastern Oregon State Hospital, a third floor in 1922, another wing in 1925, and an additional wing in 1930.

Reports continued to illustrate the challenges of operating the Oregon State Hospital, describing both successes and failures, reflecting the difficulty of providing adequate funding and treatment for people unable to care for themselves. Dr. Steiner stated in the *Report of Oregon State Board of Control* for 1927 that material expenditure needed to be increased to adequately meet the demands of patient care, but that the institution

was well-equipped for their study, treatment, and care. He indicated that more was being done than ever before, but much more might be done. During this period, voluntary commitment by patients was increasing, and the need for a ward for the criminally insane designed to protect the public was recognized. These growing demands would be met temporarily by some increases in funding, such as a relief in overcrowding for a period of about two years with the construction of a nurses' home at a cost of $13,000.

The attitude of the medical profession caring for those with mental disorders continued to consider sterilization as an appropriate treatment into the 1930s. The 1931 superintendent's report stated that 131 persons had been rendered sterile in the institution. In addition, Dr. Steiner had recommended a national eugenics law "with the end in view of preventing the mating of people who are distinctly psychotic, feeble-minded, or those having strong criminal tendencies, or degenerates of every character for the improvement of the race."

As the Great Depression impacted the general economy in 1933, Dr. Steiner applauded the Oregon law that required a payment of $20 per month by voluntarily committed patients, leaving it up to judges to determine whether or not patients could pay. A 104-bed building for patients with pulmonary tuberculosis and "certain other sick patients who are in need of fresh air" was constructed for $55,000 largely with patient labor. In spite of these improvements, the number of patients continued to rise, and Dr. Steiner stressed the need to increase food production, relieve the overworked doctors and nurses, and update the old buildings susceptible to fires. He added, "the public as a whole is not interested. In fact, it is unusually cold-hearted. The public should rid itself of the wrong idea that mental illness is a disgrace. A sick brain is no more disgraceful than a sick lung, heart or kidney. And the public should be aware that only eight-tenths of one percent of tax money goes for the care of the state's mentally ill." A slight decrease in the patient population occurred in 1938 with the completion of the United States Veterans Facility in Roseburg in southern Oregon, but not for long.

In 1947, when Dr. Dean Brooks arrived at the Oregon State Hospital, there were only seven doctors for more than 3,000 patients. The requirements of that time were that the Governor had to visit the hospital every three months, and that the superintendent live on the hospital grounds (an apartment was located in the "J" Building). "Flatted" was a term used by staff who lived in the wards, and "floaters" were staff that came from other institutions. Staff requirements were not the main topic of discussion, however, with overcrowded conditions continuing to take center stage. The *Oregon Sunday Journal* of February 9, 1947 included photographs of what was described as unsanitary living conditions for 2,700 "mentally sick patients." This graphic evidence of overcrowding was used to encourage public attention to the hospital that would pressure the state legislature to appropriate money for capital improvements.

Building at the Oregon State Hospital continued with the construction of a modern treatment hospital, nurses' dormitory for a new nurses' training program, and a new administration building in the 1950s. Building 34, a two-story brick building divided into four wards was completed in 1952 as a tuberculosis unit for between 275 and 300 patients. The unit was first directed by Rudolph Rosenberg, M.D. During his several year tenure, the use of the newly developed para-amino-salicylic acid (PAS) and streptomycin, the first truly effective medicines against tuberculosis were begun, replacing the earlier treatments which included rest, exercise, warm water bathing, and surgical resection of diseased parts of the lungs, a very deforming surgery in which lengths of a

patient's ribs were shortened (pneumothoracotomy). Building 34 continued to be used for this purpose until about 1970 when it was converted to a unit for elderly patients.

Plans for replacing the entire original Oregon State Hospital "J" Building at a cost of $8,500,000 were approved in 1952. The new structure was to be six-stories high, with initial construction to include an east wing and a central building in the rear to house patient employee wards, an auditorium, library, and areas for occupational therapy and surgeries. These plans were not implemented, however, and construction during the 1955-57 biennium instead called for rebuilding the south wing of the existing hospital to provide six large wards and add one story to the recently constructed administration building. Plans continued to be developed for building new structures and implementing new treatment programs. Dr. Dean Brooks told the local Kiwanis Club "new treatment methods are increasing and speeding the return of patients to community life." He cited the hospital's principle objectives as creating an outpatient department that would reduce admissions, replacing the then 72 year old "J" Building, and securing space and property facilities for new types of treatment, including occupational and recreational therapy.

While considerations for new buildings were still being deliberated, new therapies for mental health care were introduced to the public. The *Oregon Statesman* of August 22, 1954 announced "New Outpatient Clinic at State Hospital Cuts Costs While Expanding Facilities: Mentally Ill Not Always Hospitalized." A series of six articles were written by Rolla J. Crick examining the difficulties encountered in adequately solving Oregon's mental health problem. The titles of her articles summarize the attitudes of the period, including "Good, Bad Points Found at Oregon Mental Hospital," "Mentally Ill Display Many Basic Traits," "Mental Ills Differ: New Patients Reveal Variety of Types," "Wonder Drugs Reduce Restraints; Hospital Uses Shock Treatment," "For Some, Mental Hospital Offers Shield Against "Terror" of World," and "'Brains Before Bricks' Claimed Answer to Lack of Beds for Insane."

An editorial following these reports highlighted the 25 years of improvement in Oregon's mental health care system, including the introduction of the new drugs, therapies and equipment, and the improvement in professional staffing. Newspaper reporting itself had also undergone a revolution in attitude with less of an emphasis on the sensational and condemning authorities, to being more rational in understanding both societal problems of those with mental disorders the professionals who treated them.

The expansion of the Oregon State Hospital continued from the time it opened in 1883 until 1958 with the addition of the second floor of the Administration Building in 1958, although no new patient beds were added after 1955. After being in continuous operation for 75 years, the patient population high of 3, 545 peaked in 1958 with more than 1,000 employees. This population peak in 1958, however, would later quickly decline, due in large part to the introduction of psychiatric drugs and nursing home funding that became tied to Social Security. The founding of Alcoholics Anonymous, which removed many chronic alcoholics from the hospital system, the discovery of the use of Thorazine in 1952, and the later introduction of other anti-psychotic drugs also changed the way mental disorders were treated, as mental disorders were increasingly recognized as chemical imbalances in the brain. A short time later a "deintitutionalization movement" across the country also resulted in significant drops in population.

The trend toward treating fewer people with psychiatric problems continued to grow culminating in the Mental Health Act of 1963 that effectively changed the commitment law, stating that one had to be a danger to themselves or others in order to be admitted. This process of de-institutionalization began with medicated patients placed in community settings instead of in hospitals, and an increasingly difficulty to commit a person to the state hospital. In 1975, it was ruled that a person with mental disorders had to be a danger to him or herself or to others before he or she could be committed. Presently, around 600 patients are hospitalized at the Oregon State Hospital campus. Four-fifths of this population are forensic patients.

Mental Health Division: 1969-present

When the Mental Health Division took over in 1969 the population had dropped to around 1,000 patients; ten years later it was approximately 500. The role of the Oregon State Hospital also changed to a specialty hospital serving the whole state with five clinical programs: forensic psychiatric, geropsychiatric/medical services, child and adolescent treatment, correctional treatment, and adult psychiatric.

Currently, the Forensic Psychiatric Program serves adult mentally ill criminal offenders directed to the Oregon State Hospital by courts for evaluation and treatment. Most have been found "guilty except for insanity" and are under the jurisdiction of the Psychiatric Security Review Board. The Geropsychiatric Treatment/Medical Services Program serves mentally ill adults who have needs that cannot be managed in a regular nursing home. Other patients are mentally ill persons over 65 years old. The Child and Adolescent Treatment Program serves persons aged 6-17 with three, 20-bed units and a 5-bed crisis unit. The children's unit and one adolescent unit are secure and intend to provide protection to persons at risk to themselves or others. The Correctional Treatment Program is supervised by the Oregon State Hospital as a residential facility. It serves inmates of state correctional facilities who voluntarily transfer to the program. Inmates must be approved for transfer and able to complete it before their parole release date. The program is also responsible for mental health services to inmates in state correctional institutions.

Lastly, the Adult Psychiatric Program serves mentally ill adults from Marion, Polk, Benton, and Linn Counties who are admitted as voluntary, emergency, or civil court commitments. It averages 70 commitments per month. In 1995, Dammasch State Hospital in Wilsonville, Oregon, a hospital, asylum, and education center, merged with the Oregon State Hospital. Dammasch State Hospital was part of the Oregon State Mental Health system opening in 1961 and closing in 1995. The campus housed a 460-bed facility located on 490 acres. The patients served at Dammasch mainly came from Multnomah, Washington, and Clackamas Counties. Some of those patients and staff were relocated to the Oregon State Hospital in Salem and the new Portland Park facility in Portland. Portions of the former Dammasch State Hospital are currently being used by a private, non-mental health corporation.

ARCHITECTURAL DESIGN CONCEPTS OF THE OREGON STATE HOSPITAL

Kirkbride hospital buildings reflect a particular philosophy of mental patient care widely accepted throughout most of the nineteenth century. The philosophical basis of mental patient treatment from 1830 onward was that the causes of insanity could be reversed or meliorated by isolating the patient from the damaging

influences of society. Rehabilitation revolved around proper diet, regular routine, productive occupation, calm and pleasant surroundings, and accommodations which separated patients according to sex and degree of disturbance.

Dr. Thomas Kirkbride, Superintendent of the Pennsylvania Hospital for the Insane in Philadelphia, took the lead in developing architectural standards for hospitals for the insane. His propositions were adopted by his professional organization of medial superintendents and were elaborated in a book published in 1854 entitled *On the Construction, Organization, and General Arrangement of Hospitals for the Insane*. Thus, Kirkbride profoundly influenced the design and administration of insane hospitals for the remainder of the century. The Oregon State Hospital Historic District shows this enduring influence of the Kirkbride system. The hospital opened for use in 1883, three years after a second, expanded edition of Kirkbride's handbook was published.

The distinguishing characteristic of hospitals based on the Kirkbride plan is linear arrangement consisting of a center section for administrative and service activities and wings for patient wards extending on either side. In the earlier hospitals, each wing was set back from the preceding wing. In the 1880 edition of Kirkbride's manual, a U-shaped configuration was recommended for building sites having limited space. Oregon's hospital, having its outermost wings at a right angle to the principal facade, is based on this later alternative.

To provide maximum light, ventilation, and separation between wards, the wings were connected with sections that contained tall windows. The buildings were typically three-stories in height on a full basement, and wall construction is as fire resistant as possible (usually of brick masonry). Architectural style was discretionary, though cupolas, domes, and spires appear to have been universally used as terminal features of the central pavilions and connections sections. The historic architectural styles applied throughout the century ranged from Greek Revival and Romanesque, to High Victorian Gothic and Second Empire Baroque. Oregon's hospital is a stately version of the High Victorian Italianate style.

In the first edition of his manual published in 1854, Dr. Kirkbride acknowledged the expert assistance of the Philadelphia architectural firm of Sloan and Stewart. A study of the architecture of Samuel Sloan has identified as many as twenty-two hospitals for the insane in the East and Midwest for which Sloan and Kirkbride appear to have collaborated as consultants. Of this number, thirteen are documented Sloan/Kirkbride hospitals. They are located in Tuscaloosa, Alabama; Hopkinsville, Kentucky; Kalamazoo, Michigan; Trenton and Greystone, New Jersey; Indianapolis, Indiana; Middletown, Connecticut; St. Peter, Minnesota; Morganton and Raleigh, North Carolina; and Columbia, South Carolina.

On the West Coast, it appears that Oregon may rightfully claim the best-surviving example of a Kirkbride designed hospital. Several Kirkbride-influenced mental hospitals were constructed in California including the Stockton State Hospital in1853, the Napa State Hospital in1875, Agnews State Hospital in 1885, and Southern State Hospital in1893, although all have been remodeled or demolished. Western State Hospital in Washington opened in 1871 on the site of the former Fort Steilacoom, but, unfortunately, its Kirkbride-designed main building has been significantly altered, although still used as part of the institution. In addition, the Oregon State Hospital Historic District's Kirkbride-designed "J" Building is the oldest, intact public building in Salem.

The status of the Oregon State Hospital Historic District's oldest building, the "J" Building, in which essentially only the administrative and service core is in use and in which maintenance of empty wings has been deferred to a crisis point, is typical of Kirkbride hospitals elsewhere in the country. Many of the hospitals have been listed in the National Register of Historic Places, and citizen concern has prompted efforts to find new uses for these important, yet empty, landmarks.

Typically, the preferred alternative is to convert empty wings to purposes that support the psychiatric programs of the state hospital. Failing that, the property is next offered for use by other state agencies. In cases where the Kirkbride hospital is a discrete unit of a campus and public access is not disruptive, the older hospital units have been offered for private sector rehabilitation for housing or commercial offices. The State of Pennsylvania claims ten Kirkbride hospital among the twenty mental health hospitals built by the State to date. Five of the State's hospitals have been liquidated in recent years and adaptively used for schools, geriatric care centers, and a county prison.

Many other buildings within the Oregon State Hospital Historic District display their uses through their architectural design. The architectural design of buildings within the historic district reflect the period in which they were constructed, in part due to the architectural trends of a particular period, but also they reflect the changes in the mental health care facility policies and procedures. Many of the buildings are utilitarian in design. For example, the numerous agricultural buildings on site reflect the patient training and working to accommodate a self-sustaining community for patients and staff. The cottages were constructed to allow for the doctors and staff to remain on site but move outside the main building that housed patients. Many of the storage and maintenance buildings are utilitarian design as well and reflect mid-twentieth century institutions' increasing reliance on the automobile.

CONCLUSION

In 1975, the academy award-winning movie *One Flew Over the Cuckoo's Nest* was filmed in the "J" Building of the Oregon State Hospital. Based on the novel by Oregon writer Ken Kesey, the filming involved several well-known actors, hospital staff, and patients. When the film was completed, private "in-house" showings were given for patients and staff of the hospital. While some viewers saw the movie as more of a black mark against the psychiatric profession, many others viewed it as an example of the abuse of power. As it has been throughout the history of the Oregon State Hospital, the debate over how best to meet the needs of the mental health care system and provide adequate services to patients continues.

The contributors to the website "Kirkbride Buildings" perhaps best sum up the historical and lasting importance of the Kirkbride system within the Oregon State Hospital Historic District, and for many other state hospitals in America. The writers describe, "Once state-of-the-art mental healthcare facilities, Kirkbride buildings have long been relics of an obsolete therapeutic method known as Moral Treatment. These massive structures were conceived as ideal sanctuaries for those with mental disorders in the latter half of the nineteenth century. Careful attention was given to every detail of their design to promote a healthy environment and to convey a sense of respectable decorum. Placed in secluded areas within expansive grounds, many seemed almost

palace-like from the outside. But growing populations and insufficient funding led to unfortunate conditions that spoiled their idealistic promise.

Within decades of their first conception, new treatment methods and hospital design concepts emerged and the Kirkbride design was eventually discarded. With advances in drug treatment in the 1950s, and as a result of the movements for community health centers and patients' rights, hospital populations have been declining over the past two decades. Many existing Kirkbride buildings maintained a central place in these institutions which began within their walls, but by the end of the twentieth century many have been abandoned; several, unfortunately, have been destroyed. Although a few Kirkbride-inspired buildings have managed to survive into the twenty-first century intact and still in use, many that survive sit abandoned and decaying—their mysterious grandeur intensified by their derelict condition."[2]

Because of its historic association with the development of differing philosophies and policies related to mental health care in Oregon, and its concentration of architecturally distinctive and significant institutional buildings and landscapes influenced by the Kirkbride system and designed by several prominent Oregon architects, the Oregon State Hospital Historic District is eligible for listing in the National Register of Historic Places under Criteria A and C.

[2] "Kirkbride Buildings," January 2008, http://www.kirkbridebuildings.com/index.html.

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Luchins, Abraham S. *The Study of a Mental Hospital: A Functional Approach to the Training of the Psychologist.* Salem, OR, Oregon State Hospital, 1956.

Neff, Mary Lawson. *The Minimizing of Insanity.* Chicago: American Medical Association, 1913.

Tuke, Daniel Hack. *The Insane in the United States and Canada 1827-1895.* Arno Press, New York. 1973.

Twenty-first Annual Report on the State of the Asylum for The Relief of Persons Deprived of the Use of Their Reason. Philadelphia: William Brown, 1838.

10. Geographical Data

Acreage of Property approx. 130.35 acres

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
1	10	499610	4976478
2	10	500105	4976478
3	10	500229	4975668
4	10	499351	4975790

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Hazel Patton, David Skilton, Virginia Green, Tom Green, Julie Osborne

organization Volunteer Group date August 1, 2007; Rev. Jan. 2008

street & number 3251 Bluff Ave SE telephone (503) 375-7759

city or town Salem state OR zip code 97302

Additional Documentation

Submit the following items with the completed form:

Continuation sheets

Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs: Representative black and white photographs of the property.

Additional items (check with the SHPO or FPO for any additional items)

Property Owner

name State of Oregon, Department of Human Services

street & number 2600 Center Street telephone (503) 945-2800

city or town Salem state OR zip code 97301

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 1

VERBAL BOUNDARY DESCRIPTION

The nominated Oregon State Hospital Historic District is roughly bounded by Park Avenue on the east, "D" Street on the north, 24th Street on the west, and Bates Drive on the south. The boundaries for the historic district contain approximately 130.35 acres of the northerly portion of tax lot 700 located in Sections 24 and 25 in Township 7 South, Range 3 West, Willamette Meridian. The boundary for the nominated areas is shown on both the accompanying boundary and site maps.

BOUNDARY JUSTIFICATION

The boundary comprises that area of the Oregon State Hospital that includes those buildings, structures, and sites that historically have been associated with the Oregon State Hospital, that maintain historic integrity, and that date from the period of significance (1883-1958). The entire Oregon State Hospital Historic District retains its overall historic integrity and is historically associated with the development and implementation of the mental health care system in Salem and in the State of Oregon.

National Register of Historic Places Continuation Sheet

Section number Photographs Page 1

PHOTOGRAPHS

Address: Oregon State Hospital Historic District
2600 Center Street
Salem, Marion Co., OR

Photographer: Tom Green, nomination preparer, 3251 Buff Ave. SE Salem, OR 97302
Date: June 2007
Ink and Paper: Printed on Epsom Premium Glossy Paper with Ultra Chrome Ink
Location of Negatives: Digital, images held by nomination preparer(s)

1 of 52: Exterior View: Building 30, 31, 41-48, "J" Building, front facade, looking northeast from driveway

2 of 52: Exterior View: "J" Building, looking northeast (Building 29 on left) at front facade

3 of 52: Exterior View: "J" Building, looking southwest from Center Street at north facade

4 of 52: Exterior View: "J" Building, looking southeast from Center Street at north facade

5 of 52: Interior View: "J" Building, interior, Ward 63

6 of 52: Interior View: "J" Building, interior, bathroom

7 of 52: Interior View: "J" Building, interior, ward hallway

8 of 52: Exterior View: Tunnel Entrance, looking north

9 of 52: Interior View: Tunnel Interior

10 of 52: Exterior View: Building 36, Dome Building, looking northeast at front facade

11 of 52: Exterior View: Dome Building, south facade, looking north

12 of 52: Exterior View: Building 31, kitchen addition to "J" Building, looking northwest at rear elevation

13 of 52: Exterior View: Building 33, Yaquina Hall, looking northeast at front elevation

14 of 52: Exterior View: Building 34, Santiam Hall, looking northeast at front elevation

15 of 52: Exterior View: Building 35, Breintenbush Hall, looking northwest at front elevation

National Register of Historic Places Continuation Sheet

Section number Photographs Page 2

16 of 52: Exterior View: Building 40, McKenzie Hall, looking northeast at front elevation

17 of 52: Exterior View: Building 49, Salem Rehabilitation Facility, looking northeast at front elevation

18 of 52: Exterior View: Building 50, Eola Hall, looking northeast at south and west elevations

19 of 52: Exterior View: Building 51 & 61, Heat Plant, looking at west facade, facing east

20 of 52: Exterior View: Building 53, Garage and Offices, looking southeast at east facade

21 of 52: Exterior View: Building 58, Hog Fuel Shed, looking southwest at northeast facade

22 of 52: Exterior View: Building 59, Central Storage, looking southeast at northwest facade

23 of 52: Exterior View: Building 60, 75, Old Paint Shop and Crematorium, looking southeast at northwest facade

24 of 52: Exterior View: Water Tower, Building 62, looking south at north facade

25 of 52: Exterior View: Building 73, Physical Plants Storage, looking northwest at southeast facade

26 of 52: Exterior View: Building 76, Quonset Hut, looking southeast at southeast facade

27 of 52: Exterior View: Building 77, 50, Eola Hall and Gym and Office, looking northeast at main facade

28 of 52: Exterior View: South Park Grounds and Tennis Court, looking north

29 of 52: Exterior View: Cottage 1, Superintendent's House, looking northwest at front facade

30 of 52: Exterior View: Cottage 2, looking north at front facade

31 of 52: Exterior View: Cottage 3, looking southeast at front facade

32 of 52: Exterior View: Cottage 4, looking south at front facade

33 of 52: Exterior View: Cottage 7, 9, looking south at front facade

34 of 52: Exterior View: Cottage 11, looking southeast at front facade

35 of 52: Exterior View: Cottage 12, looking south at front facade

36 of 52: Exterior View: Cottage 13, looking southeast at northwest facade

National Register of Historic Places Continuation Sheet

Section number Photographs Page 3

37 of 52: Exterior View: Cottage 14, looking southwest at front facade

38 of 52: Exterior View: Cottage 15, looking south at front facade

39 of 52: Exterior View: Cottage 16, looking southwest at front facade

40 of 52: Exterior View: Cottage 17, looking southwest at northeast facade

41 of 52: Exterior View: Cottage 18, looking southwest at northeast facade

42 of 52: Exterior View: Cottage 19, looking southwest at front facade

43 of 52: Exterior View: Cottage 20, looking east at front facade

44 of 52: Exterior View: Cottage 21, looking east at front facade

45 of 52: Exterior View: Cottage 22, looking east at front facade

46 of 52: Exterior View: Cottage 23, looking west at front facade

47 of 52: Exterior View: Cottage 24, looking west at front facade

48 of 52: Exterior View: Cottage#25, looking south at front facade

49 of 52: Exterior View: Cottage 26, looking south at front facade

50 of 52: Exterior View: Cottage 27, looking south at front facade

51 of 52: Exterior View: Cottage 28, looking southwest at front facade

52 of 52: Exterior View: Cottages along Greenway, looking east

Architectural Survey Data for Oregon State Hospital Historic District

(printout date: 1/9/2008)

Oregon State Historic Preservation Office

Address/ Property Name	Eval./ Ht	Yr.(s) Built	Materials	Arch. Classifs/Styles	Orig. Use/ Plan (Type)	Survey Date	Comments
23rd St NE	EC	1946	CONCRETE: Other/Undefin	Utilitarian	Waterworks	6/1/2007	122 square feet
Building 86	1						
23rd St NE	NP	1992	METAL: Other/Undefined	Utilitarian	Waterworks	6/1/2007	140 square feet
Building 91	1						
24th Pl NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 21	1.5				Cape Code		
24th St NE	EC	1946	CONCRETE: Other/Undefin	Utilitarian	Waterworks	6/1/2007	122 square feet
Building 85	1						
24th St NE	NP	1992	METAL: Other/Undefined	Utilitarian	Waterworks	6/1/2007	140 square feet
Building 90	1						
24th Pl NE	EC	1951	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 20	1.5				Cape Code		
24th Pl NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 22	1.5				Cape Code		
24th Pl NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 23	1.5				Cape Code		
24th Pl NE	EC	1954	Horizontal Board	Ranch Style	DOMESTIC: General	6/1/2007	
Cottage 24	1				Ranch/Rambler		
25th St NE	EC	1938	WOOD:Other/Undefined	Utilitarian	Industrial Storage	6/1/2007	
Building 74							
25th St NE	EC	1957	WOOD:Other/Undefined	Utilitarian	Other	6/1/2007	
Building 37	1						
25th Pl NE	EC	1947	BRICK:Other/Undefined	MODERN PERIOD: Other	HEALTH CARE: General	6/1/2007	
Building 33	2				Other Commercial/Public		
25th Pl NE	EC	1948	BRICK:Other/Undefined	MODERN PERIOD: Other	HEALTH CARE: General	6/1/2007	
Building 40	2	1982			Other Commercial/Public		
27th Pl NE	EC	1955	CONCRETE: Other/Undefin	MODERN PERIOD: Other	HEALTH CARE: General	6/1/2007	Bldg. 50 and 77 are connected; Bldg 50 constructed in 1955; 77 constructed in 1956
Building 50, 77	5	1956	Brick Veneer		Other Commercial/Public		
27th Pl NE	EC	1950	BRICK:Other/Undefined	Minimal Traditional	HEALTH CARE: General	6/1/2007	
Building 34	2	1987			Other Commercial/Public		
Bates Dr NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 25	1.5				Cape Code		

Evaluation Codes: ES=eligible/significant EC=eligible/contributing NC=not eligible/non-contributing NP=not eligible/out of period UN=undetermined/lack of info XD=demolished

Architectural Survey Data for Oregon State Hospital Historic District

(printout date: 1/9/2008)

Oregon State Historic Preservation Office

Address/ Property Name	Eval./ Ht	Yr.(s) Built	Materials	Arch. Classifs/Styles	Orig. Use/ Plan (Type)	Survey Date	Comments
Bates Dr NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 26	1.5				Cape Code		
Bates Dr NE	EC	1952	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 27	1.5				Cape Code		
Bluebird Dr NE	EC	c.1912	STONE:Other/Undefined	Not Applicable	LANDSCAPE: General	6/1/2007	Two gate posts at intersection of 24th and Bluebird
Entry Gate #1			METAL: Other/Undefined				
Bluejay Dr NE	EC	1935	WOOD:Other/Undefined	Utilitarian	Other	6/1/2007	
Building 54	1						
Bluejay Dr NE	EC	1950	BRICK:Other/Undefined	Contemporary	Sanitarium	6/1/2007	
Building 29	2	c.1958			Rectangular Block		
Bobolink Dr NE	EC	c.1912	STONE:Other/Undefined	Not Applicable	LANDSCAPE: General	6/1/2007	Two gate posts at intersection of Bobolink, 24th, and Center
Entry Gate #2			METAL: Other/Undefined				
Center St NE	EC	1929	CONCRETE: Other/Undefin	Utilitarian	Other	6/1/2007	
Building 63	1				Rectangular Block		
Center St NE	EC	1946	WOOD:Other/Undefined	Not Applicable	Waterworks	6/1/2007	122 square feet
Building 82	1						
Center St NE	EC	c.1883	Not Applicable	Not Applicable	LANDSCAPE: General	6/1/2007	Bordered by Center St. on north, 24th on the west, and Greenway on the south
South Park Grounds							
Center St NE	EC	c.1957	WOOD:Other/Undefined	Utilitarian	Other	6/1/2007	150 square feet
Building 56	1		Stucco				
Center St NE	EC	c.1900	Not Applicable	Not Applicable	TRANSPORTATION: General	6/1/2007	Tunnels cross Center St. twice and run underground near Evergreen, 27th Place, and Bittern St.
Tunnel System							
Center St NE	EC	1896	BRICK:Other/Undefined	Greek Revival	Other	6/1/2007	Buildings 60 and 75 are joined
Building 60, 75	1.5	1949	Brick Veneer	MODERN PERIOD: Other	Temple Form		
Center St NE	EC	c.1912	STONE:Other/Undefined	Not Applicable	LANDSCAPE: General	6/1/2007	Two gate posts at intersection of Center and Bluebird (north of Center)
Entry Gate #3			METAL: Other/Undefined				
Center St NE	EC	1947	Metal Sheet	Utilitarian	TRANSPORTATION: General	6/1/2007	
Building 76	1				Quonset Hut		
Center St NE	EC	1912	BRICK:Other/Undefined	Utilitarian	Other	6/1/2007	
Building 51, 61	1	1951			Other/Undefined		
Center St NE	EC	c.1931	WOOD:Other/Undefined	Utilitarian	Other	6/1/2007	
Building 55	1						

Evaluation Codes: ES=eligible/significant EC=eligible/contributing NC=not eligible/non-contributing NP=not eligible/out of period UN=undetermined/lack of info XD=demolished

Architectural Survey Data for Oregon State Hospital Historic District

(printout date: 1/9/2008)

Oregon State Historic Preservation Office

Address/ Property Name	Eval./ Ht	Yr.(s) Built	Materials	Arch. Classifs/Styles	Orig. Use/ Plan (Type)	Survey Date	Comments
Center St NE Building 62	EC	1925	Steel	Not Applicable	Irrigation Facility	6/1/2007	
Center St NE Building 59	EC 1	1909	Stucco	Neo-Classical Revival	Other	6/1/2007	
Center St NE North Park Grounds	EC	c.1912	Not Applicable	Not Applicable	LANDSCAPE: General	6/1/2007	Bordered by Center St. on the south, 23rd on the west, and B St. on the north
Center St NE Building 31	EC	1926	BRICK:Other/Undefined	Italianate	HEALTH CARE: General	6/1/2007	
Center St NE Building 35	EC 2	1948	BRICK:Other/Undefined	MODERN PERIOD: Other	HEALTH CARE: General Other Commercial/Public	6/1/2007	
Center St NE Building 49	EC 2	1937	BRICK:Other/Undefined	Neo-Classical Revival	HEALTH CARE: General Other Commercial/Public	6/1/2007	
Center St NE Building 53	EC 2	1937	BRICK:Other/Undefined	Utilitarian	Other Rectangular Block	6/1/2007	
2600 Center St NE Building 30, 31, 41-48	ES 4	1883	BRICK:Other/Undefined	Italianate	Sanitarium	6/1/2007	
2605 Center St NE Building 36	ES 3	1912 1993	BRICK:Other/Undefined CONCRETE: Other/Undefin	Neo-Classical	Sanitarium Other Commercial/Public	6/1/2007	
Evergreen Ave NE Building 64	EC 1	1927	Glass	Utilitarian	AGRICULTURAL: General	6/1/2007	
Greenway Dr NE Cottage 12	EC 1.5	1940	Horizontal Board	English Cottage	DOMESTIC: General Cape Code	6/1/2007	
Greenway Dr NE Building 73	EC 1	1901	WOOD:Other/Undefined	Utilitarian	Other Rectangular Block	6/1/2007	
Greenway Dr NE Cottage 13	EC 1	1940	Horizontal Board	English Cottage	DOMESTIC: General Period Cottage	6/1/2007	
Greenway Dr NE Building 71	EC 1	1942	Wood Sheet	Utilitarian	Agric. Storage Rectangular Block	6/1/2007	
Greenway Dr NE Building 67	NC 1	1901 1962	Horizontal Board	Utilitarian	Horticultural Facility Barn - Other	6/1/2007	
Greenway Dr NE Cottage 15	EC 1.5	1946	Horizontal Board	Minimal Traditional	DOMESTIC: General Cape Code	6/1/2007	
Greenway Dr NE Building 52	EC 1	1951	Glass	Utilitarian	Horticultural Facility	6/1/2007	

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Architectural Survey Data for Oregon State Hospital Historic District

(printout date: 1/9/2008)

Oregon State Historic Preservation Office

Address/ Property Name	Eval./ Ht	Yr.(s) Built	Materials	Arch. Classifs/Styles	Orig. Use/ Plan (Type)	Survey Date	Comments
Greenway Dr NE	EC	1938	Shingle	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 11	1.5				Period Cottage		
Greenway Dr NE	EC	1945	Horizontal Board	Minimal Traditional	DOMESTIC: General	6/1/2007	
Cottage 14	1.5				Period Cottage		
Greenway Dr NE	EC	1942	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 3	1.5				Cape Code		
Greenway Dr NE	EC	1942	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 4	1.5				Central Passage		
Greenway Dr NE	EC	1951	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 18	1.5				Cape Code		
Greenway Dr NE	EC	1951	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 19	1.5				Cape Code		
Greenway Dr NE	EC	1946	Horizontal Board	Minimal Traditional	DOMESTIC: General	6/1/2007	
Cottage 16	1.5				Cape Code		
Greenway Dr NE	EC	1951	Horizontal Board	English Cottage	DOMESTIC: General	6/1/2007	
Cottage 17	1.5				Cape Code		
Midway Ave NE	EC	1909	Horizontal Board	Prairie School	DOMESTIC: General	6/1/2007	
Cottage 1, 1a	2				Other Residential Type		
Midway Ave NE	EC	1909	Horizontal Board	Prairie School	Single Dwelling	6/1/2007	
Cottage 2	2				Other Residential Type		
Midway Ave NE	EC	1956	Horizontal Board	Vernacular	DOMESTIC: General	6/1/2007	
Cottage 28	2				Other Residential Type		
Park Ave	EC	c.1946	WOOD:Other/Undefined	Not Applicable	Waterworks	6/1/2007	122 square feet
Building 81	1						
Park Ave	NP	c.1990	METAL: Other/Undefined	Utilitarian	Warehouse	6/1/2007	
Building 92	1						
Park Ave	NP	1998	METAL: Other/Undefined	Utilitarian	Other	6/1/2007	
Building 93	1						
Park Ave	NP	1998	METAL: Other/Undefined	Utilitarian	Other	6/1/2007	
Building 89	1						
Park Ave NE	EC	1929	Stucco	Arts & Crafts / Craftsman	DOMESTIC: General	6/1/2007	
Cottage 7, 9	2				Other Residential Type		
Park Ave NE	EC	1928	WOOD:Other/Undefined	LATE 19TH/20TH REVIVAL	DOMESTIC: General	6/1/2007	
Cottage 8	1.5				Crosswing		

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Architectural Survey Data for Oregon State Hospital Historic District

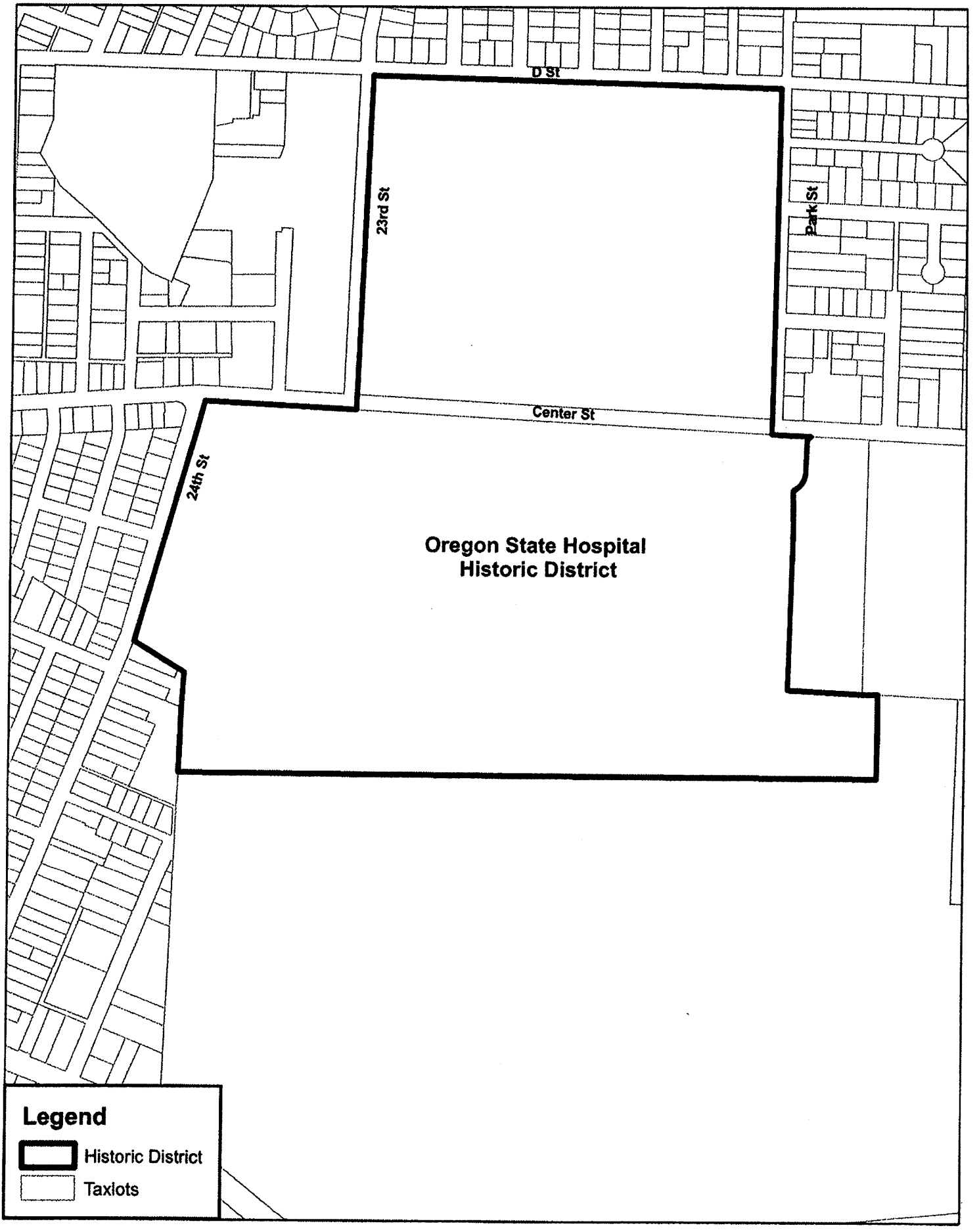
(printout date: 1/9/2008)

Oregon State Historic Preservation Office

Address/ Property Name	Eval./ Ht	Yr.(s) Built	Materials	Arch. Classifs/Styles	Orig. Use/ Plan (Type)	Survey Date	Comments
Park Ave NE	EC	1932	Metal Sheet	Utilitarian	TRANSPORTATION: General	6/1/2007	
Building 58	1				Other/Undefined		

Evaluation Codes: ES=eligible/significant EC=eligible/contributing NC=not eligible/non-contributing NP=not eligible/out of period UN=undetermined/lack of info XD=demolished

OREGON STATE HOSPITAL HISTORIC DISTRICT BOUNDARY MAP



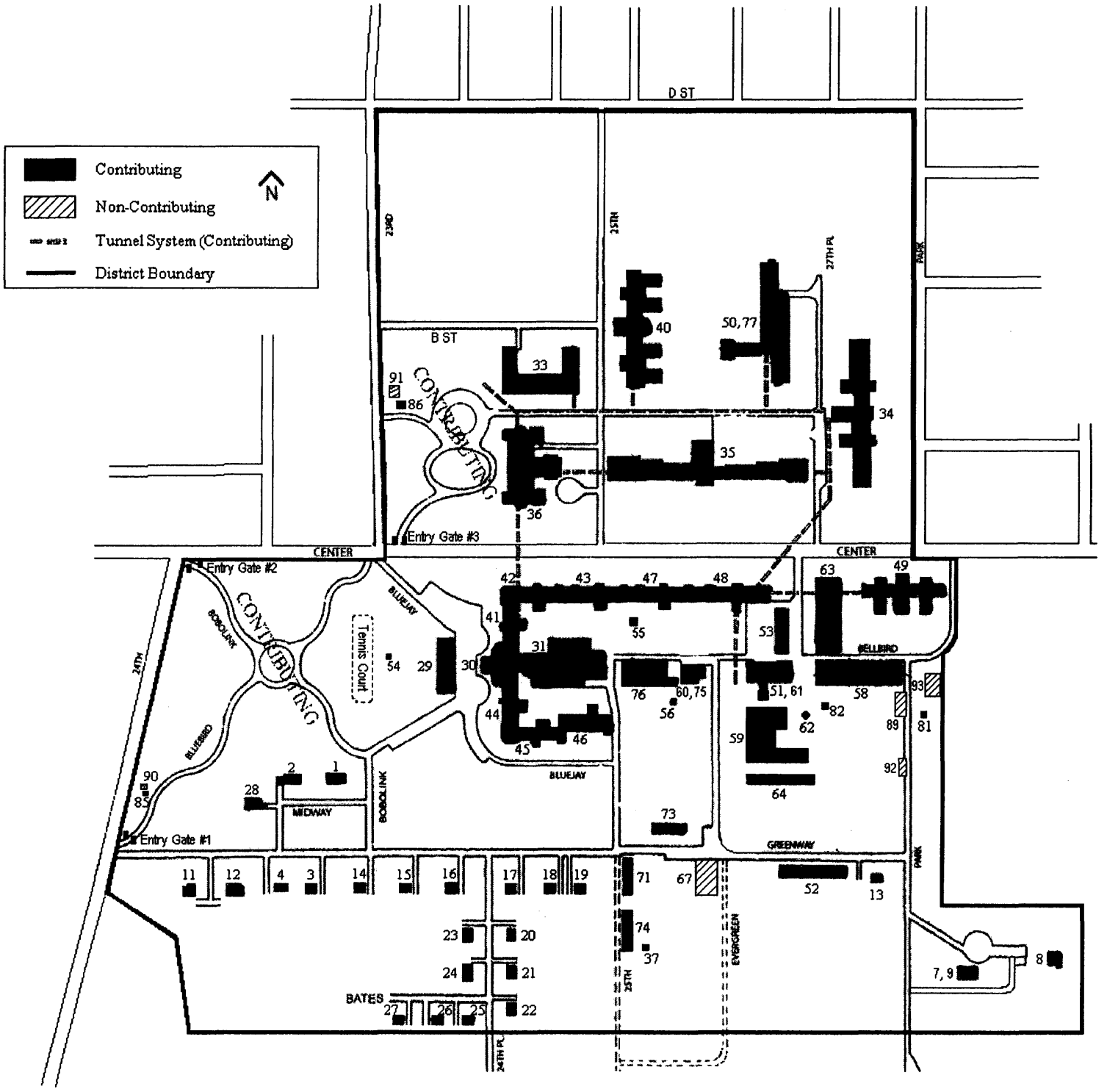
This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Oregon Lambert Projection
Datum NAD 83

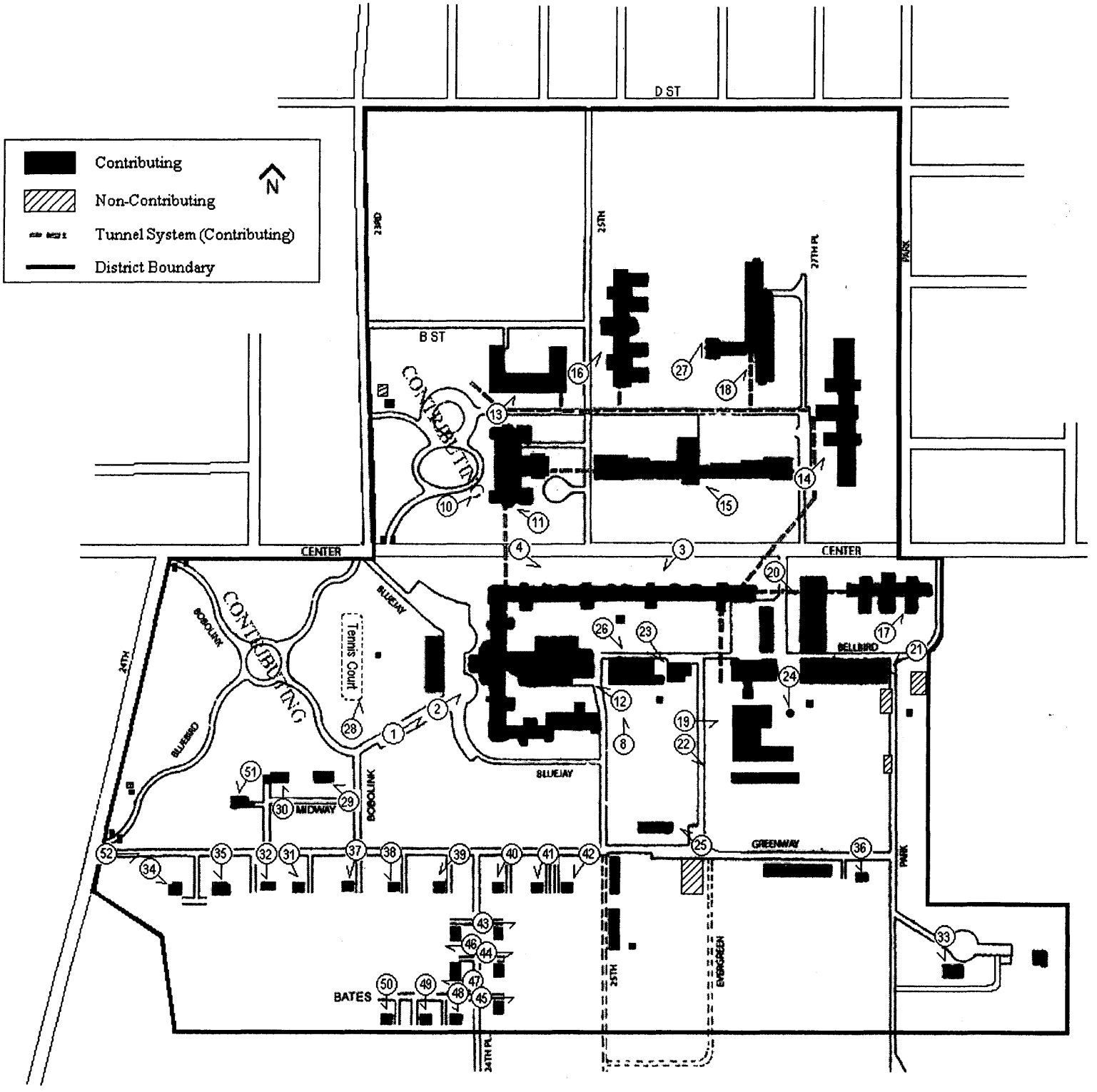
0 287.5 575 Feet

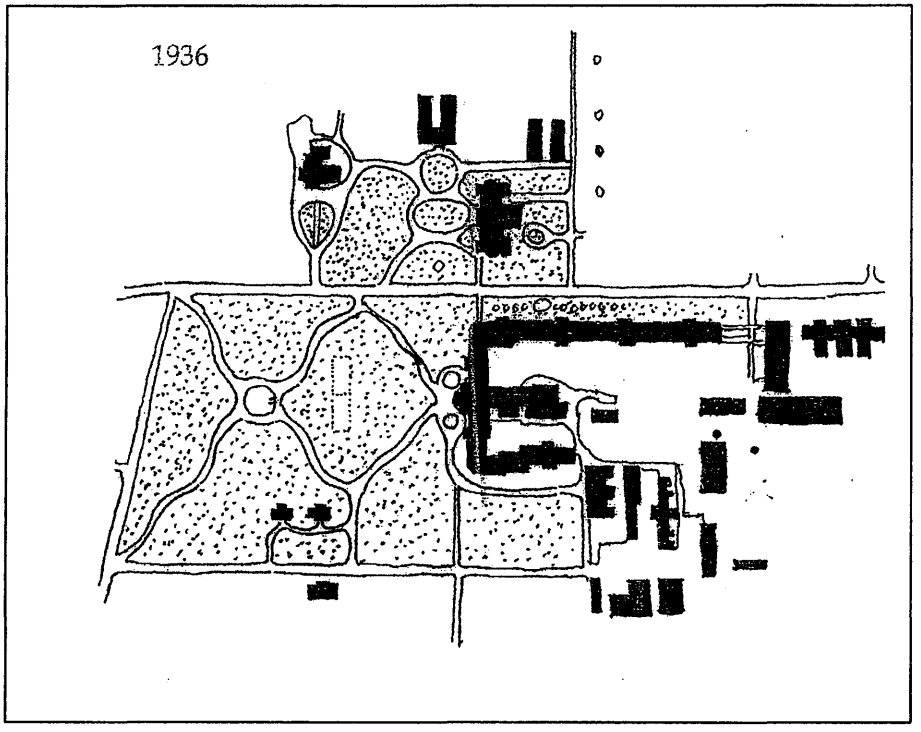
MJD 1/4/2008

OREGON STATE HOSPITAL HISTORIC DISTRICT
SITE MAP
(Note: Map Not to Scale)

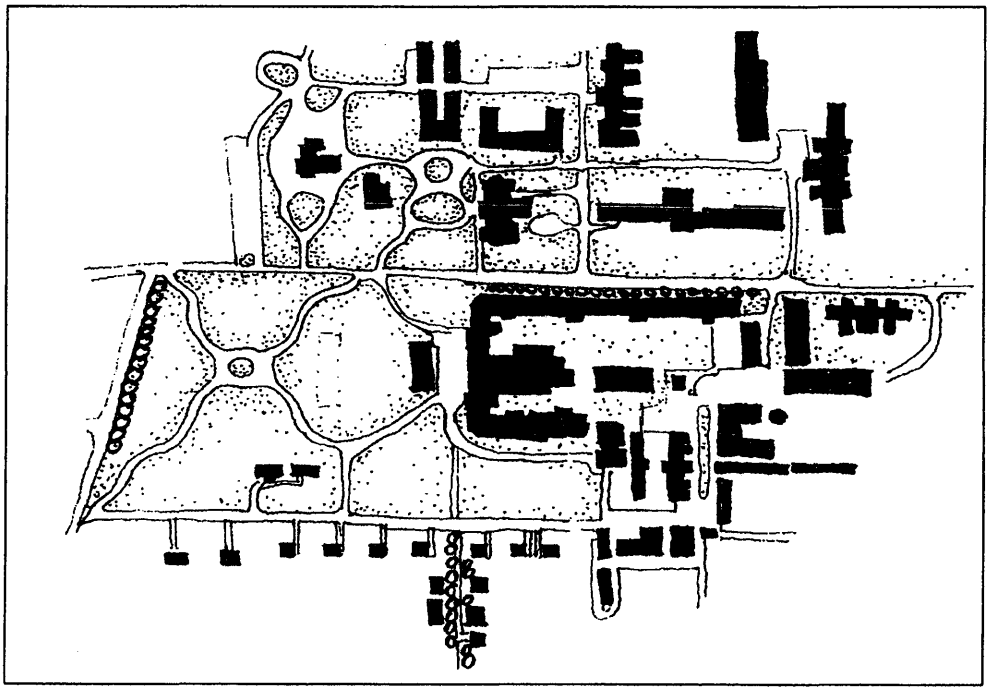


OREGON STATE HOSPITAL
PHOTOGRAPH MAP
(Note: Map Not to Scale)

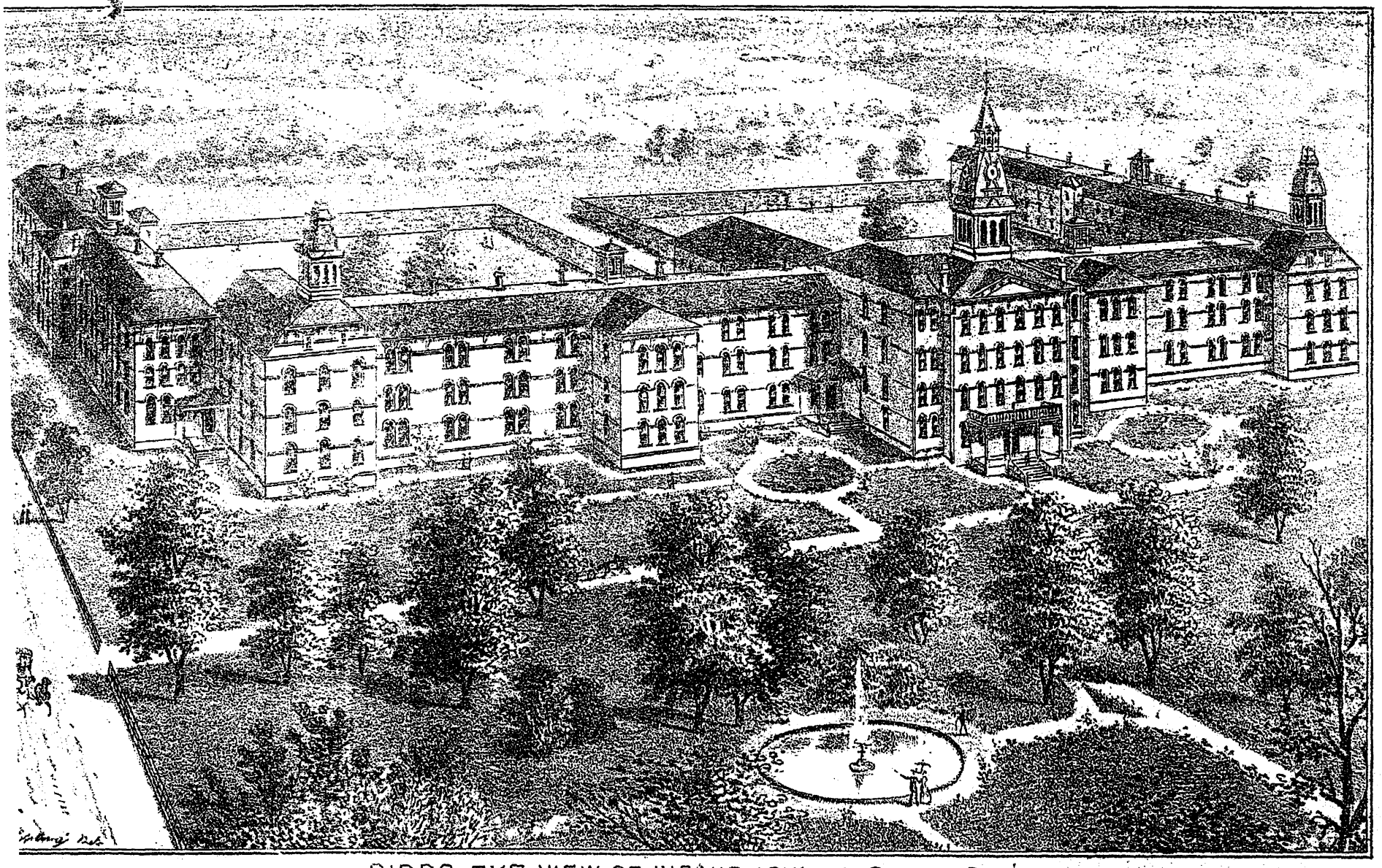




Above: Configuration of the Oregon State Hospital in 1936



Above: Configuration of the Oregon State Hospital in 1955

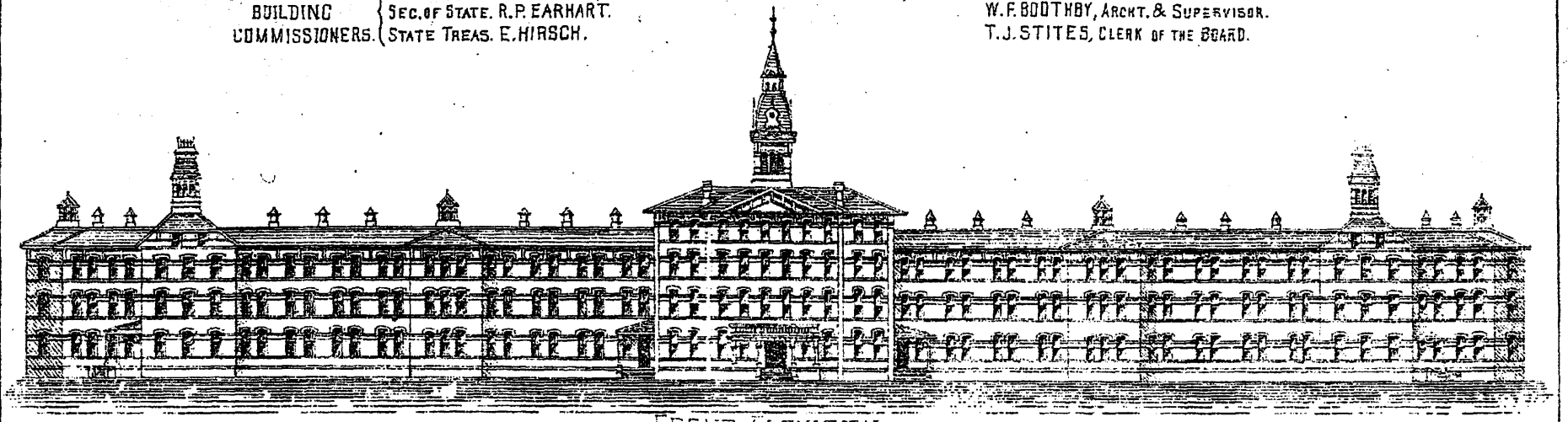


BIRDS EYE VIEW OF INSANE ASYLUM, SALEM. OR.

BOARD OF (Governor W W THAYER

BOARD OF BUILDING COMMISSIONERS. { GOVERNOR. W.W. THAYER. SEC. OF STATE. R.P. EARHART. STATE TREAS. E. HIRSCH.

H. CARPENTER, M.D. MEDICAL SUPT.
W.F. BOOTHBY, ARCHT. & SUPERVISOR.
T.J. STITES, CLERK OF THE BOARD.

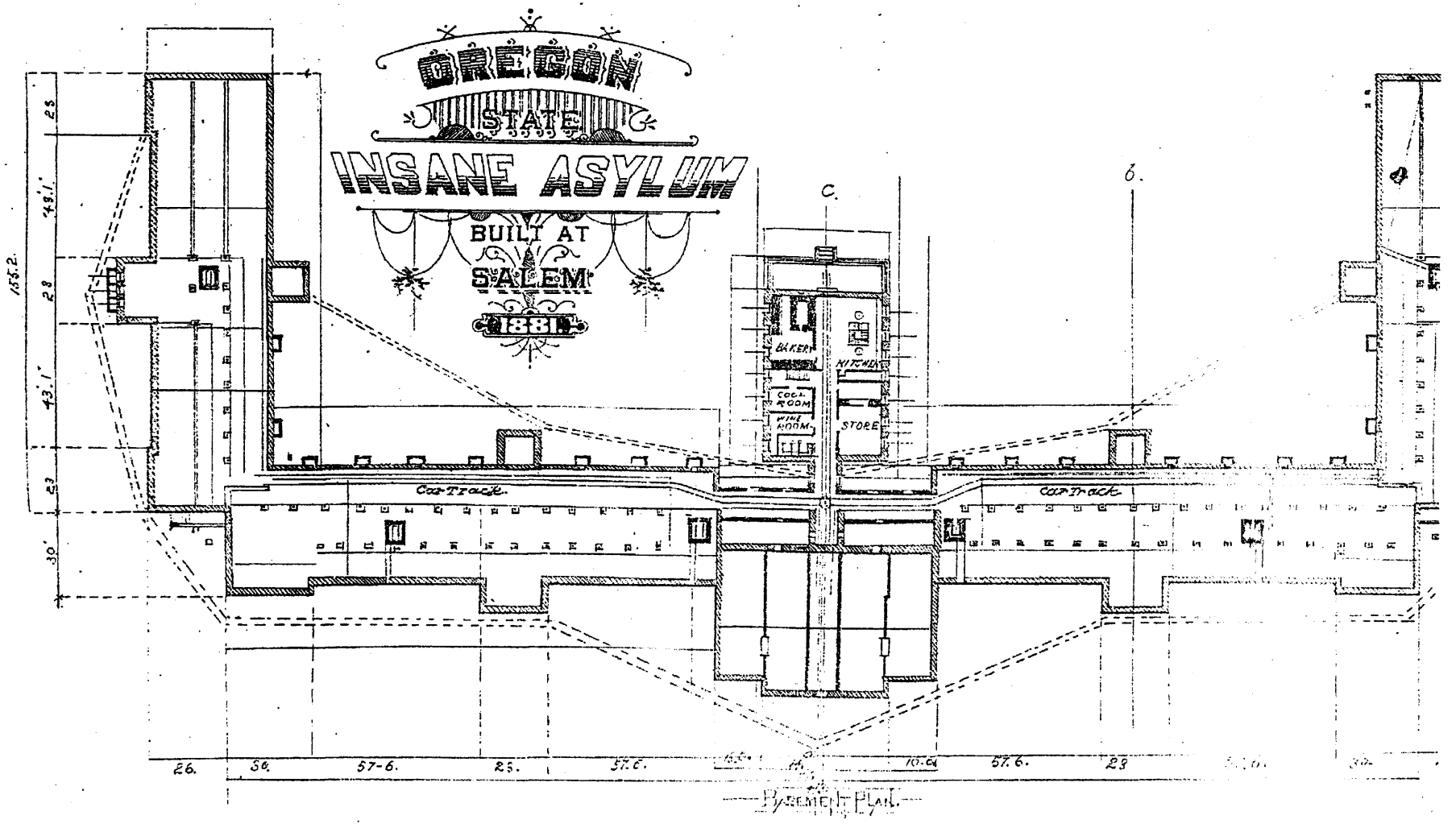


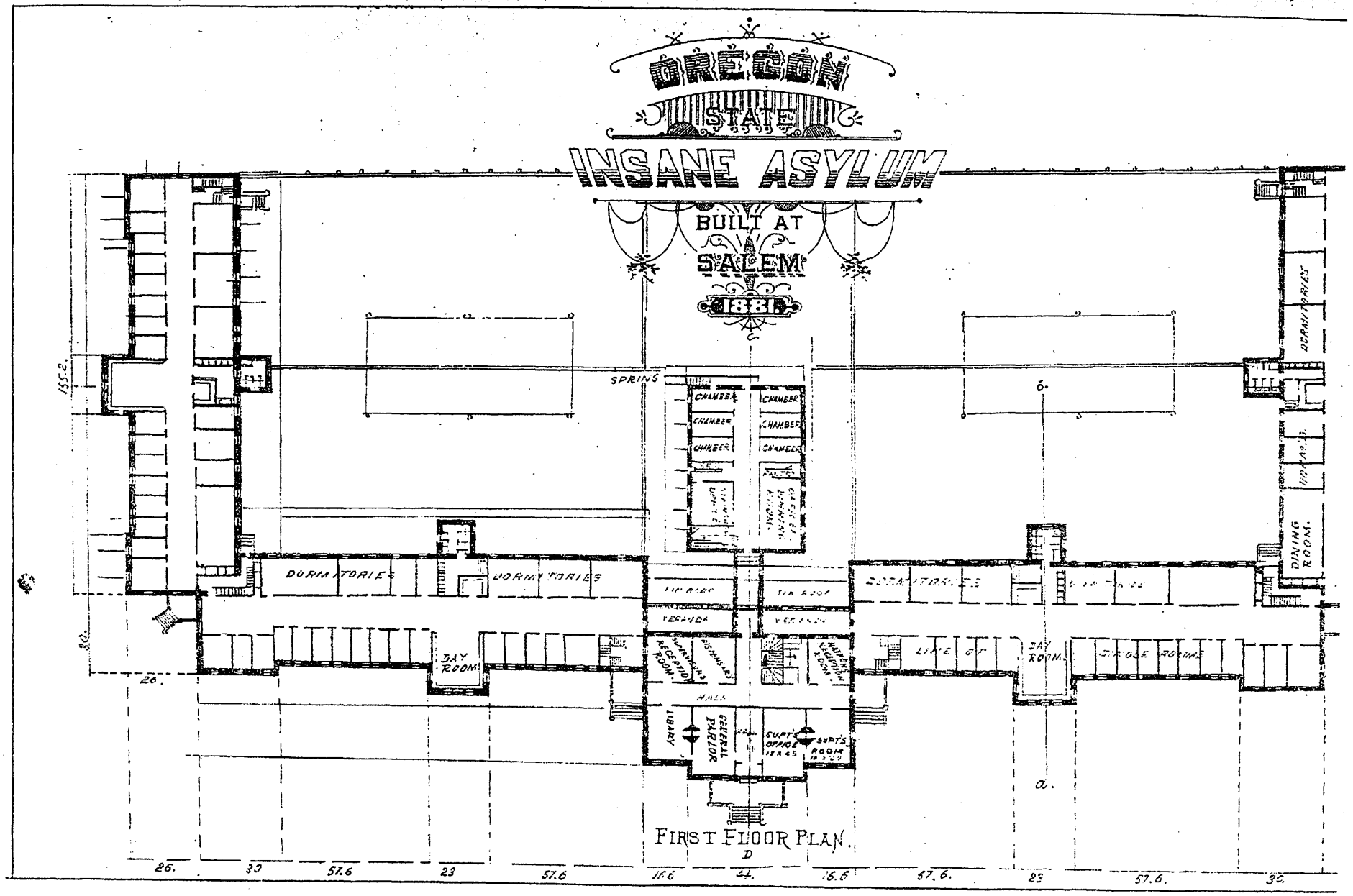
FRONT ELEVATION

OREGON STATE INSANE ASYLUM

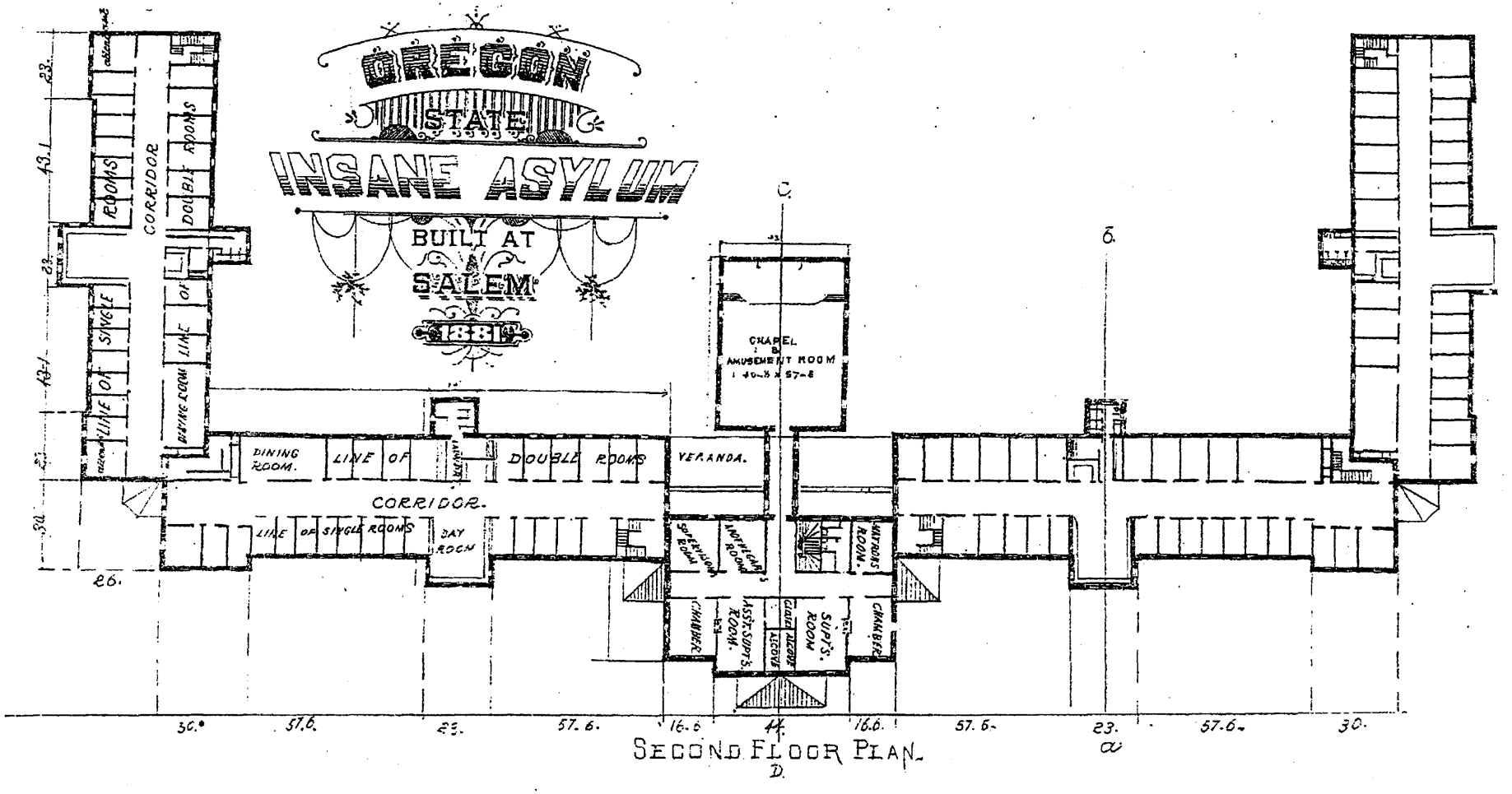
BUILT AT SALEM

1883


OREGON
STATE
INSANE ASYLUM
BUILT AT
SALEM
1883
C.
6.
BAKERY
KITCHEN
COOL ROOM
WINE ROOM
STORE
Car Track.
Car Track.
155.2.
25
49.1'
28
43.1'
23
30'
26.
30.
57-6.
25.
57.6.
10.6
57.6.
23
30.
BASEMENT PLAN.



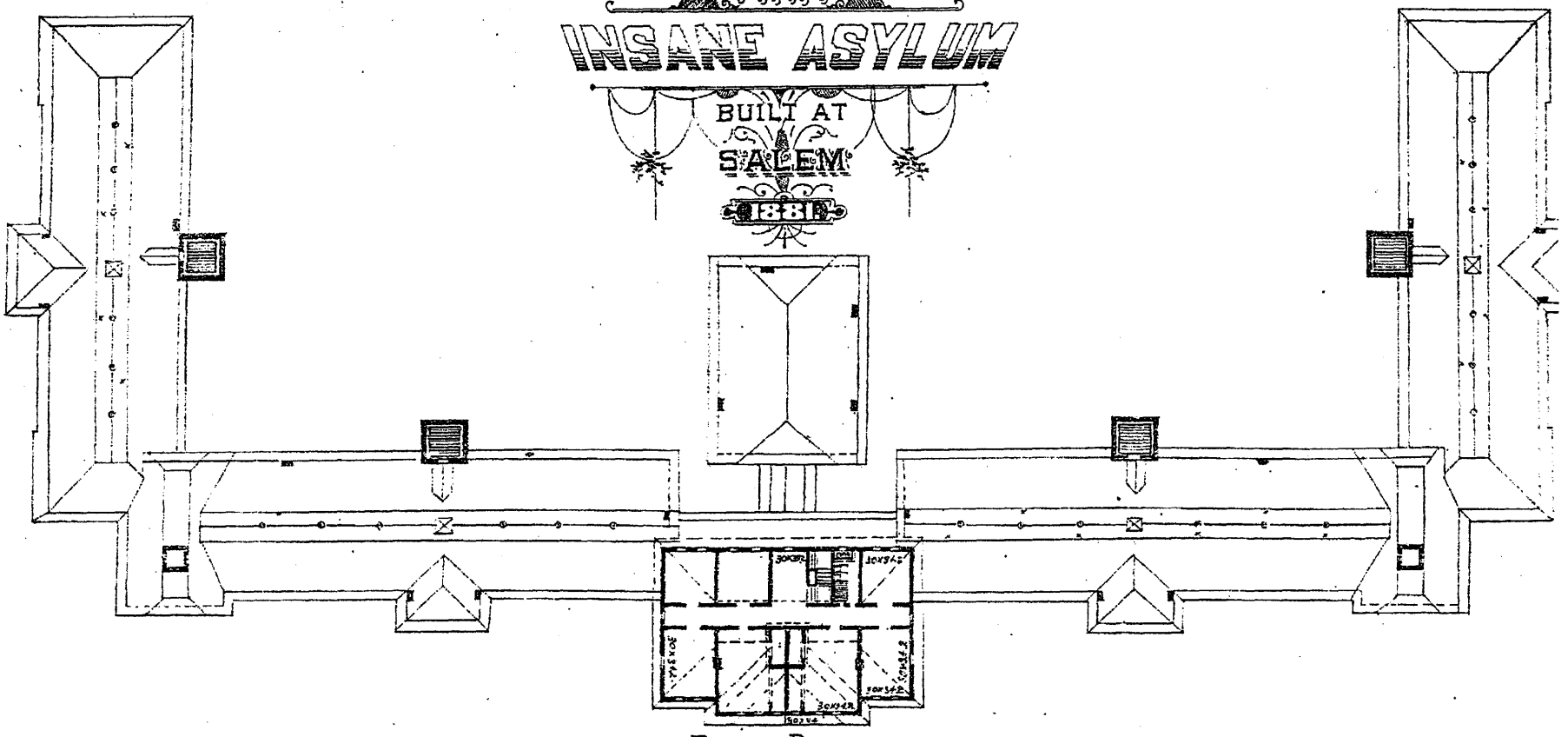
FIRST FLOOR PLAN.
D



SECOND FLOOR PLAN.

OREGON STATE INSANE ASYLUM

BUILT AT SALEM 1883



ROOF PLAN.

"J" Building/OSH Historic Distric

Marion, OR

Photo #1

"J" Building, OSIT Historic District
Marion, OR
Photo #2

"J" Building OSH Historic District

Marion, OR

#3

"J" Building, OSH Historic District
Marion, OR
#4


WARD 53
WARD 54

"J" Building, OSH Historic District

Marion, OR

#5

"J" Building OSH Historic District

Marion, OR

#6

"J" Building, OSH Historic District

Marion, OR

#7

Tunnel Entrance, OSH Historic District
Marion, OR
#8


MIN. CARGO WATCH

Tunnel Interior, OSH Historic District
Marion, OR
#9

Dome Building, OSH Historic District
Marion, OR
#10

Dome Building, OSH Historic District
Marion, OR
#11

Bldg. 31, OSH Historic District
Marion, OR
#12

Bldg. 33, OSH Historic District
Marion, OR
13

Bldg. 34, OSH Historic District
Marion, OR
#14

Bldg. 35, OSH Historic District

Marion, OR

#15

Bldg. 40, OSH Historic District
Marion, OR
#16

Bldg. 49, OSH Historic District
Marion, OR
#17

Bldg. 50, OSH Historic District
Marion, OR
#18

Bldg. 51 & 61, OSH Historic District
Marion, OR
#19

Bldg. 53, OSH Historic District
Marion, OR
#20

Bldg. 58, OSH Historic District
Marion, OR
#21

Bldg. 59, OSH Historic District
Marion, OR
#22


75

Bldg. 60 & 75, OSH Historic District
Marion, OR
#23

Water tower #62, OSH Historic District
Marion, OR
#24

Bldg. 73, OSH Historic District
Marion, OR
25


HONDA

Bldg. 76, OSH Historic District
Marion, OR
#26

Bldg. 77, 50, OSH Historic District
Marion, OR
#27

Tennis Court and South Park Grounds
[redacted], OSH Historic District
Marion, OR
#28

Cottage 1, OSH Historic District
Marion, OR
#29

Cottage 2, OSH Historic District
Marion, OR
#30

Cottage #3, OSH Historic District
Marion, OP
#31

Cottage 4, OSH Historic District
Marion, OR
#32

Cottage 7-9, OSH Historic District
Marion, OR
#33

Cottage 11, OSH Historic District
Marion, OR
#34

Cottage 12, OSH Historic District
Marion, OR
#35

Cottage 13, OSH Historic District
Marion, OR
#36

Cottage 14, OSH Historic District
Marion, OR
#37

Cottage 15, OSH Historic District
Marion, OR
#38

Cottage 16, OSH Historic District
Marion, OR
#39

Cottage 17, OSH Historic District
Marion, OR
#40

Cottage 18, OSH Historic District
Marion, OR
#41

Cottage 19, OSH Historic District
Marion, OR
#42

Cottage 20, OSH Historic District
Marion, OR
#43

Cottage 21, OSH Historic District
Marion, OR
44

Cottage 22, OSH Historic District
Marion, OP
#45

Cottage 23, OSH Historic District
Marion, OR
#46

Cottage 24, OSH Historic District
Marion, OR
47

Cottage 25, OSH Historic District
Marion, OR
48

Cottage 26, OSH Historic District
Marion, OR
#49

Cottage 27, OSH Historic District
Marion, OR

#50

Cottage 28, OSH Historic District
Marion, OR
#51

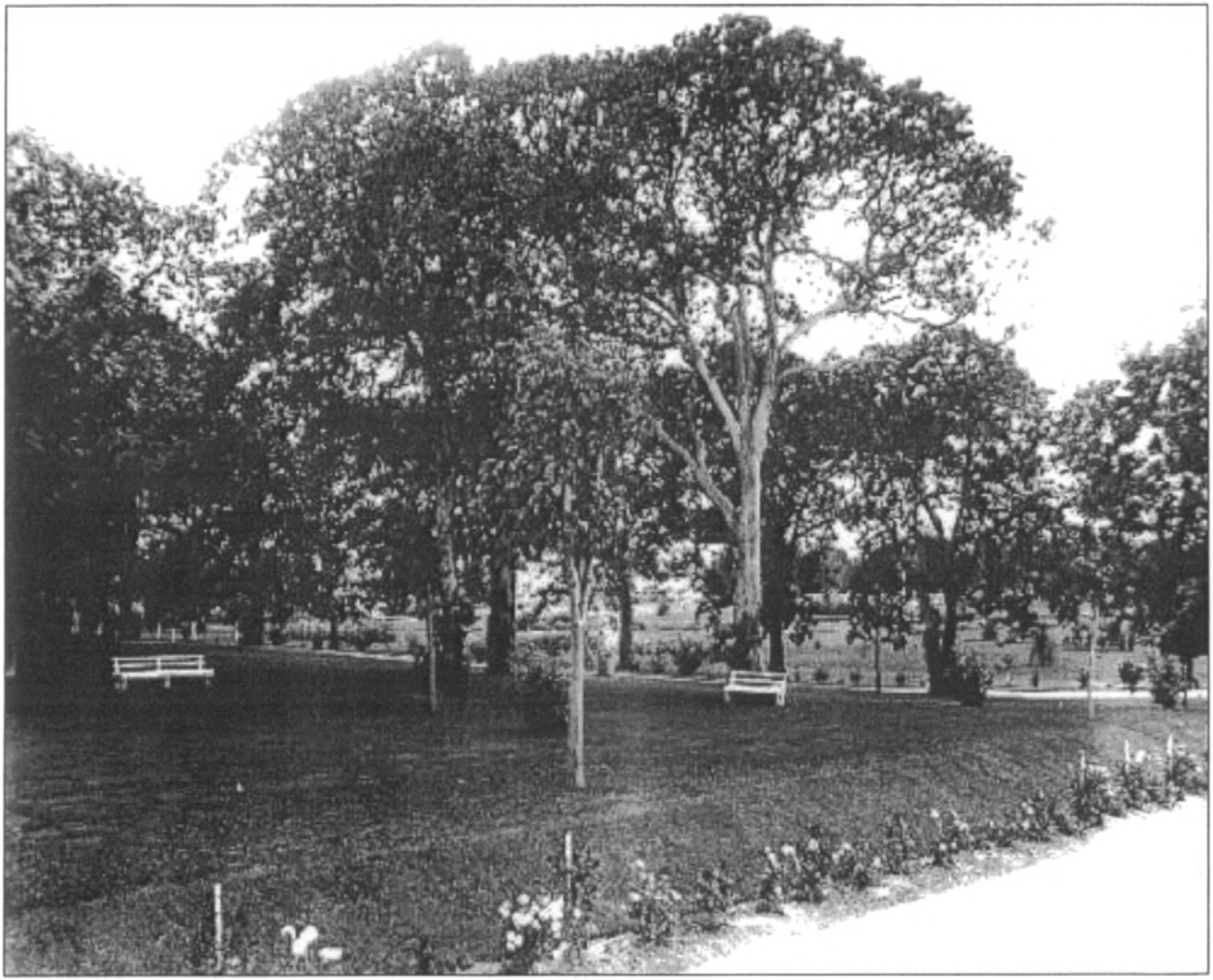
Greenway, OSH Historic District
Marion, OR
#52

Oregon State Hospital "J" Building (Oregon State Insane Asylum) in Salem, Oregon, 1892

(Courtesy of Oregon State Archives, Oregon Board of Architect Examiners, OAE0013)

Oregon State Hospital and "J" Building located in Salem, Oregon, ca. 1905

(Courtesy of Oregon State Archives, Oregon State Hospital, OSH0004)



Grounds of the Oregon State Hospital on in Salem, Oregon, ca. 1905

(Courtesy of Oregon State Archives, Oregon State Hospital, OSH0006)

Power plant at Oregon State Hospital, Salem, Oregon, ca 1905

(Courtesy of Oregon State Archives, Oregon State Hospital, OSH0013)

Superintendent's house at Oregon State Hospital in Salem, Oregon, ca 1916

(Courtesy of Oregon State Archives, Oregon State Hospital, OSH0031)

The Oregon State Hospital Dome Building in Salem, Oregon, ca. 1916

(Courtesy of Oregon State Archives, Oregon State Hospital, OSH0001)

EXHIBIT 5 - DHS/OHA PORTFOLIO
Contract No. 107-2920-12

Facility: OREGON STATE HOSPITAL NORTH CAMPUS (OSH-NC)
Physical Address: 2575 Bittern St. NE, Salem, OR (Yaquina Hall)
2575 Center St. NE, Salem, OR (Dome Building)
2600 Center St. NE, Salem, OR (all other Buildings)

BUILDING NAME	Year Built	Construction Sq.Ft.	Floors/level	Type of Construction	Type of Usage
McKenzie Hall 40	1948	68,706	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Tile	Health, Hospital, Clinic
Bola 50	1955	143,44g	6 Including Basement	Bldg Frame: Concrete Ext. Wall: Cast in Place Concrete Roof: Other	Health, Hospital, Clinic
Breitenbush Hall 35	1948	110,301	4 2 Floors, Basement, Partial 3rd Floor	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Built up Single Ply	Health, Hospital, Clinic
Santiam Hall 34	1951	57,348	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Composition Shingles	Health, Hospital, Clinic
YaquinaHall (MHDDSD) 33	1948	51,720	3 Including Basement	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Other	Office
Dome Building 36 .	1912	70,052	3 Not Including Basement	Bldg Frame: Masonry Ext. Wall: Masonry Roof: Other	Office
Activities Center 77	1956	5,600	1	Bldg Frame: Concrete Ext. Wall: Brick Veneer Roof: Built up_Single Ply	Sports, Recreational

Oregon State Hospital

STATE OF OREGON DHS – OFFICE OF MENTAL HEALTH AND ADDICTION SERVICES

Framework Master Plan
Phase I Report

KMD Architects

May 16, 2005

EXECUTIVE SUMMARY

The purpose of this Phase I Framework Master Plan is to provide an overview of the Oregon State Hospital (OSH) and the effectiveness of Oregon's mental health system. The goal is to provide guidance to the Department of Human Services (DHS), the Governor and the Oregon Legislative Assembly in determining the future design, location and role of OSH in the Oregon State Mental Health System.

Phase II of the Master Plan will be a more detailed analysis of the conclusions and recommendations set forth in the Phase I Framework Master Plan. This work is contingent on the approval of funding in the 2005 Legislative Assembly.

PROCESS

The design team interviewed over 150 stakeholders consisting of key individuals and groups participating in or having specialized knowledge of the Oregon Mental Heath System. Information and data obtained provided the findings and established the framework for the Design Team's conclusions and recommendations. The Steering Committee participated throughout the process by reviewing and commenting on the findings and conclusions.

The assessment of the OSH Salem campus focuses on the physical condition of the buildings and the operational effectiveness for administering mental health treatment programs. Architectural and engineering professionals toured the campus and established findings based on visual observations of the conditions, hospital staff interviews, technical reports and original design documents. Priority was given to those buildings designated for patient treatment.

FINDINGS

The major buildings on the OSH Salem campus were constructed over a period from 1883 to 1955 and none are currently considered historically significant by National or State Registries of Historical Buildings. The buildings and systems are dated and have not been well maintained over the years. The findings regarding buildings used for long-term mental health programs are as follows:

- Buildings do not comply with current building and energy codes or contemporary design standards for secure psychiatric facilities.
- The buildings do not comply with seismic requirements and will experience significant damage or collapse during a seismic event at the level projected for the Salem area.
- Patient wards are inefficient in layout, lack appropriate program space and do not comply with Oregon's Psychiatric Patient Care Rules. The layout impacts the hospital staff's ability to administer quality treatment programs and creates a potentially unsafe environment for the patients and staff.

The role of the Oregon State Hospital in the overall mental health system of care is dependent on the availability of community resources necessary to provide the less intensive step-down mental health services for individuals with severe and persistent mental illness. Currently, the system does not have

the necessary community resources which significantly impacts the ability of these individuals to move efficiently and economically through the system. Under current treatment conditions, many individuals who are eligible and better served to receive treatment in smaller facilities within the community remain in the custody of the State Hospital. This results in a less appropriate or effective treatment program for the patients at significantly higher cost to the State.

The basic findings for the delivery of mental health services in the State of Oregon's publicly funded system are as follows:

- The current system is complex with multiple approaches to patient care.
- System configuration is not representative of patient needs and results in over-reliance on OSH to provide patient services that might be better administered in a less structured environment.
- Limited investment in the mental health system has resulted in insufficient community programs and limits patient movement through the continuum of care.
- Insufficient oversight of community settings managed by private organizations.
- Improvement is needed in integration among the State systems providing mental health services.

CONCLUSIONS

The current buildings designed for patient care are inadequate and their renovation to meet code requirements and standards will be cost prohibitive. It will be impossible to create the environments necessary to achieve modern treatment and recovery standards.

The State of Oregon's publicly funded mental health system is:

- Limited in resources and appropriate funding. This negatively effects patient care and results in greater use of OSH and higher treatment costs.
- Growing at an unsustainable rate. Without additional investment in community settings (beyond the current investments) the State Hospital will need more than 1,100 beds by the year 2020.
- Oregon should proceed concurrently with 1) replacement of the hospital, and 2) continue the reconfiguration of the statewide mental health system, consistent with the Governor's Mental Health Task Force recommendations.

RECOMMENDATIONS

Following are the core recommendations for the Oregon State Hospital and Oregon's mental health system.

- Replace patient treatment buildings on the OSH Campus with a new State Hospital as soon as is practical given the conditions of the existing facilities. The specific requirements will be determined in the Phase II Master Plan.

- Continue the reconfiguration of the public mental health system of care based on the Governor's Mental Health Task Force recommendations.

- Evaluate the roles of Mental Health Service agencies to improve coordination of care.

- Further develop the three system options:

Option 1

Build a new state hospital facility to house civil, geriatric, and forensic patients, supported by a stronger community-based system (e.g. housing, short term facilities, medication management programs, emergency services, case management, etc). Under this option, it is assumed the system redesign efforts will enable more efficient patient movement among treatment settings, lowering length of stay at OSH (and other settings).

Option 2

Build a new state security hospital for the forensic patients, while focusing civil commitments and geropsychiatry at the Portland Campus of Oregon State Hospital, Eastern Oregon Psychiatric Center in Pendleton, or other setting(s).

- Separating the civil and forensic populations could ease the concerns of many regarding safety, and the inmate vs. patient tension that currently exists at OSH.
- The potential exists to locate the mentally ill prison population and forensic population on one campus. Operating efficiencies and an enhanced treatment environment could be created in this approach.

Option 3

Build regional facilities of a smaller scale, some of which may be State operated, to allow for a moderately sized central facility or facilities.

2005 Oregon State Legislative Assembly

The Design Team recommends that the Governor and the Legislative Assembly approve the funding for the functions described in this document for the Phase II Master Plan, and provide a funding mechanism that will allow further steps to take place after Phase II is approved. This will provide the necessary resources to complete Phase II of the Master Plan, along with implementing the recommendations immediately after approval of the Master Plan. These actions will provide a higher level of project definition and costs that will need to be considered during the 2007 Legislative Assembly.

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- *B. Statistical Data*
- *C. Glossary of Terminology*

Oregon State Hospital

State of Oregon Department of Human Services

Framework Master Plan Phase I Report

KMD

May 16, 2005

2. INTRODUCTION

The KMD Project Team was charged by the Oregon Department of Human Services (DHS) to develop the first phase of a Framework Master Plan to guide DHS, the Governor and the Oregon State Legislative Assembly in determining the future design, location and role of the Oregon State Hospital in the Oregon State Mental Health System.

The last two months have been spent in interviews with over 150 persons in groups and private settings. We gathered data, read reports, met with the Steering Committee, and learned as much as we could about Oregon's system of care and the facilities that are part of the treatment for those with mental illness. We have found that for too many years Oregon has continued to under-fund and overlook the conditions, policies and systems in place for the treatment and care of this significant portion of our population.

The Basics

- This report focuses on the systems and facilities associated with the treatment of those individuals who have severe and persistent mental illness, whose major diagnosis is acute, chronic and long-term.

- Many of those with major mental illnesses can and do recover and go on to lead normal, productive lives if given proper treatment and opportunity. Those current and former consumers of mental health services with whom we have met cover the range of professions, including teachers, lobbyists, physicians, artists, etc. Therefore, persons with mental illness should not be defined by their illness any more than those with cancer or a chronic back problem is defined by their illness.

- According to the 2003 report of the U.S. President's New Freedom Commission on Mental Health, major mental illness, including clinical depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder, when compared with all other diseases (such as cancer and heart disease), is the most common cause of disability in the United States.

- According to the National Alliance for the Mentally Ill (NAMI):

  – Twenty-three percent (23%) of North American adults will suffer from a clinically diagnosable mental illness in a given year, but less than half of them will suffer symptoms severe enough to disrupt their daily functioning.
  – Approximately nine to thirteen percent (9-13%) of children under the age of 18 experience a serious emotional disturbance with substantial functional impairment, and five to nine percent (5-9%) have a serious emotional disturbance with extreme functional impairment due to a mental illness. Many of these young people will recover from their illnesses before reaching adulthood and will lead normal lives uncomplicated by mental illness.

Oregon State Hospital (OSH)

As previously noted, this report is to have a focus on the Oregon State Hospital. OSH has two campuses, Salem and Portland, administered from Salem and sharing a superintendent. As of this report, the total patient population at OSH is about 750, including 68 at the Portland campus; but the total budgeted capacity is 681 patients for both campuses.

The Eastern Oregon Psychiatric Center (EOPC) in Pendleton has a patient population of 60, however, for this report it is not part of Oregon State Hospital. Neither the facilities nor the patient population at EOPC are considered within the statistical data of this report, except as noted.

OSH is overcrowded partly because it cannot place patients back into community settings as rapidly as desired. A result of this is that the acute care hospital psychiatric wards are backed up with individuals who need to come to OSH. This is compounded by a legal system that continues to commit patients to hospitals that are already overcrowded.

Oregon's System

The current system for the care of individuals with severe and persistent mental illness is complex and at times operates more as an aggregate of treatment settings than a true system of care.

That system begins with crisis stabilization. This sometimes occurs in the emergency department (ER) of local acute care hospitals. They are usually overcrowded, consequently the wait in the local ER may be from several hours to several days. Further treatment and evaluation may continue in an evaluation unit in one of the few acute care hospitals that still offer this service. The legal system may enter at this point as involuntary commitment laws require a judicial civil commitment order; however, eight out of nine adults who have civil commitment petitions filed are diverted to voluntary treatment by admission to intensified outpatient services in their community. This may also apply to persons who may have developed behavioral problems associated with aging or dementia and who cannot be effectively treated at the community level. The patient and family can experience a series of complex issues, diagnoses, and delay. Easily accessible educational materials are essential at this juncture.

A parallel yet sometimes intersecting system of treatment may begin with the legal system. A significant percentage of those with mental illness enter the system through the commission of a crime. Depending on circumstances, the patient may enter the forensic system and be subjected to the Psychiatric Security Review Board (PSRB) and/or court system; again a complex series of issues, diagnoses and delays.

The county in which a person resides is ultimately responsible for the public treatment and care of a resident with mental illness. While in the past few years the number and abilities of community-based treatment facilities have grown, a small portion of citizens with severe and persistent mental illnesses from all Oregon counties are committed to OSH for a significant part of their treatment.

The following section summarizes our findings of the physical conditions at the Salem Campus of OSH.

3. Site and Facilities
Findings Summary

3. SITE AND FACILITIES FINDINGS SUMMARY

The current facilities and utility infrastructure at the Salem Campus of OSH are inadequate and inappropriate for a modern psychiatric hospital. As further noted in this report, it would be cost-prohibitive to renovate and/or add to these buildings to achieve modern treatment and recovery standards in a cost-effective manner. Finally, in their current state, the site, buildings and utility infrastructure put the State of Oregon at considerable risk for patient and staff safety based on overcrowded conditions, physical layout and seismic issues, especially within portions of the "J" Complex.

SITE AND BUILDING ANALYSIS METHODOLOGY

KMD reviewed drawings, photographs and reports; then toured each building with knowledgable OSH personnel, and while touring consulted with treatment staff and patients. We prioritized our assessments by first reviewing those buildings that house patients, followed by administrative facilities, and finally program and facility support buildings. We conducted an overview of the hospital's freestanding houses. Structural, mechanical and electrical engineers have reviewed the informational materials, toured the facilities and reported their findings.

Each building's structural condition as well as its ability to withstand earthquake and, more importantly, its adaptability to modern mental healthcare design was considered. In addition to certain environmental issues, each of the major buildings was reviewed relative in the context of current mechanical and electrical codes. Specific information about each of these facilities, evaluations and joint conclusions is available in Appendix A of this report.

SUMMARY OF FINDINGS

Site and Utility Infrastructure

The Salem campus has the character of a college campus with tree lined lanes twisting through expansive lawns with charming old brick buildings. The adjoining neighborhoods consider this campus as a park and a buffer to the Oregon State Penitentiary. However, Center Street NE bisects the campus and is heavily trafficked during most of the day, intruding into the quiet campus image. Center Street may experience greater traffic demands, further complicating vehicle and pedestrian crossing between the two portions of the campus.

A system of tunnels, developed to safely transport patients and materials among the buildings, remains in use. The tunnels cross under Center Street at two locations. There are issues of patient and staff safety associated with these tunnels.

- Observed water infiltration will weaken the structure of the tunnels.
- Seismic resistance is inadequate within the unreinforced brick masonry portions of the tunnels.
- Utilities in these tunnels, including the electronic security system, are within reach of anyone gaining access to the tunnel system.

- In the event of a collapse of a portion of the tunnel system the security system to the south campus would fail.

There appears to be adequate land and sufficient utility infrastructure available to serve the current facilities and any expansion of the hospital. The domestic water system pressure, however, requires pumps for fire suppression systems above the second floor.

Portions of the campus utility infrastructure utilize pipes and conduits that are quite old (such as the sanitary and storm sewer systems, fire mains, etc.). Some have been replaced, others are buried and are replaced as they fail; these continue to be part of the ongoing maintenance costs. Utility efficiencies are compromised when pipes are rusty, wiring is brittle or drains are broken. OSH pays about $250,000 for utilities every month. With more energy efficient buildings and systems, such costs would be significantly reduced.

Facilities

All of the buildings are old and have exceeded their useful life as components of a modern psychiatric hospital. Part of this is because the specialized needs of this hospital type have evolved over time, whereas the Salem OSH facilities have largely remained static.

Highlighted building issues include:

- Single corridors resulting in long paths of travel for staff and severely restricted sightlines for patient observation.
- Exposed piping for fire suppression increases the risk of patient injury.
- Patient rooms and program spaces do not comply with modern standards for area, observability, shape, accessibility, finishes, etc.
- Overcrowded patient wards reduce treatment effectiveness and lengthen the patient stay. This may result in increased patient anxiety levels which increase risk of injury to patients and staff.
- Improper and insufficient space for staff support and visualization of patients increases the risk for staff and patient injury.
- Access to exterior recreation is restricted and compromises safety. Movement to outdoor spaces via crowded elevators and narrow stairs increases risk of injury for patients and staff.
- The buildings are expensive to operate because they have single-pane windows, no insulation, and antiquated and inefficient heating, electrical, and lighting systems. Maintenance costs are very high due to continual replacement of worn out equipment.
- Only one building housing patients has a forced air mechanical system with cooling capabilities. Other buildings rely on steam heating and occasional ineffective window-mounted air conditioners. In warmer months, temperatures in all patient wards significantly exceed the maximum of 78°F. permitted by the Oregon Administrative Rule (OAR).

- Current Americans with Disabilities Act (ADA) requirements are not met.

- The presence of lead and asbestos, as reported by the Physical Plant Director, raises significant issues of soil and building contamination.

- Roof leaks are common and occur in buildings occupied by patients.

- The oldest buildings of the "J" Complex are wood framed with exterior walls of unreinforced masonry. Some portions have no proper foundation. Should an earthquake occur of the magnitude for which we now design, these unreinforced masonry buildings are likely to collapse, thereby putting the State at considerable risk for patient and staff safety. One wing (Building 48) in the "J" Complex is of concrete and steel construction; however, it is recommended that, if OSH continues to house patients in this building, a seismic analysis be conducted.

The newest building housing patients (Building 50, Eola Hall) was constructed of reinforced concrete in the 1950's and remodeled in the 1970's. It might be considered the most likely candidate for reuse. However, if it is remodeled again, current regulations will require that the building be brought into compliance with all current structural, safety and psychiatric hospital codes. This includes structural upgrading to withstand code-determined seismic forces. The exterior glazing, interior walls and ceilings, and plumbing would need to be replaced and the heating, cooling and electrical systems would need to be upgraded. The patient wards that now house up to 44 persons in two-, three- and four-bed rooms would need to be converted into private and semi-private rooms with integral toilet and shower facilities as required by the OAR. This increases the area for patient rooms which will decrease the number of rooms. This suggests that the remodeled building would house about one-third fewer patients.

We estimate reconstruction costs for Building 50 would approach $25 million, similar to that for new construction. Even with such extensive renovation, the basic building configuration still limits the quantity and types of spaces and amenities that can be provided. This suggests that the building will never be appropriate for modern methods of treatment and care for those with mental illness.

Historical Impacts

The "J" Complex is the grouping of building and additions dating back to 1883. The original facility was patterned after treatment hospital prototypes of that era developed by Dr. Thomas S. Kirkbride of Pennsylvania in the 1840's. Over the years, additions, remodeling and poor maintenance have changed the appearance and historical viability of the facility. Some note, however, that this is the oldest continually operated psychiatric hospital on the west coast, and it was featured in the 1970's movie, *"One Flew Over the Cuckoo's Nest."*

No buildings on the Salem campus are included in either the National or State Registries of Historic Buildings. The "J" Complex and the "Dome" Building are, however, listed by City of Salem as "Local Landmarks." Approval by the City of Salem Landmarks Commission is required for any exterior repairs or modifications. The State Historic Preservation Office (SHiPO) of the Parks and Recreation Department recommend that a site reconnaissance be conducted prior to any redevelopment. KMD further recommends that a qualified architectural historian review the buildings and available documents to make certain of their appropriate place in history. It should be noted that just because a building is old, that doesn't make it historical or significant.

5. OPTIONS AND RECOMMENDATIONS

OPTIONS

There are multiple options for serving the severe and persistent mentally ill population. While the focus of this study was on the OSH facility, the recommendations address the system of care that effects, and is effected by, OSH.

Oregon's commitment to a recovery model for the mentally ill, with an increasing focus on community-based alternatives to care is evident. Facility options for the state hospital were considered in this context. The options most likely to succeed in the long term involve a commitment to changing the system while preparing for a new state hospital that is used appropriately.

Oregon population growth alone will create a greater demand for OSH beds. Greater focus on, and support for, developing community-based services, will slow the growth in OSH bed need. Preliminary bed need projections suggest that a range of 800 to 1,100 state hospital beds will be needed in 2020 (all three sites included in bed need). Accounting for those populations currently in Portland Campus of Oregon State Hospital (POSH) and Eastern Oregon Psychiatric Center (EOPC), the bed need at a replacement for the Salem facility would be between 750 and 970. A breakdown by patient population shows:

Civil Commitment:	62 to 92 beds
Geropsychiatry:	84 to 136 beds
Forensic:	606 to 740 beds

Please see Appendix B for statistical data.

Facility options include:

- Option 1
  Build a new state hospital facility to house civil, geriatric, and forensic patients, supported by a stronger community-based system (e.g. housing, short term facilities, medication management programs, emergency services, case management, etc). Under this option, it is assumed the system redesign efforts will enable more efficient patient movement among treatment settings, lowering length of stay at OSH (and other settings).

- Option 2
  Build a new state security hospital for the forensic/PSRB patients, while focusing civil commitments and geropsychiatry at POSH, EOPC, or other setting(s).
  - Separating the civil and forensic populations could ease the concerns of many regarding safety, and the inmate vs. patient tension that currently exists at OSH.
  - The potential exists to locate the mentally ill prison population and PSRB population on one campus. Operating efficiencies and an enhanced treatment environment could be created in this approach.

- Option 3
  Build regional facilities of a smaller scale, some of which may be State operated, to allow for a moderately sized central facility or facilities.

The following options were considered but ruled out as they were cost prohibitive or did not address the overall system issues driving OSH over-utilization.

- Renovate existing facility and continue use. While this may be an option for some to consider, it is not a realistic alternative given the age of the current facility and deficiencies noted in the facility evaluation. The potential cost of renovating would be near the cost of a new facility, and the final design would remain less efficient and effective.

- Build a new facility without any corresponding changes in the system of care. Given historical trends, and Oregon's continued population growth, building a new facility without any change in utilization patterns would result in unsustainable growth, and projected bed need of 1,100 or more by 2020. With hospital beds the highest cost care setting in the state, this option would quickly become a greater financial strain on the system.

- Privatize the state hospital function. In privatizing, the state could shift the incentive for running an efficient operation and integrating with the system to a private agency. OMHAS currently has multiple agencies with which it contracts for a variety of services, including the recent contract with Trillium for inpatient adolescent services. The driving force behind privatization is typically financial and does not often result in significant changes to the system of care. While this approach lets the state leave the operation of the state hospital to another entity, there is less flexibility should this relationship not work out. There is also less recourse for cost escalation as volume increases. For these reasons, the interest among states in privatizing state hospital functions has slowed.

- Decentralize mental health funding to turn most/full control to county/local agencies. Some states have shifted the funding responsibility to the county agencies. State hospital beds are then "bought" by these agencies on an as-needed basis. This facilitates more local ownership of the full continuum of services, including state hospital stays, and can foster the development of more extensive community resources. However, states have also found that this approach carries the risk that local authorities will choose to do less for their mentally ill populations than is currently available, effectively shrinking the continuum of care.

RECOMMENDATIONS

- Proceed with the Phase II Master Planning for a new state hospital facility. Replacement is clearly the best option for the state and movement towards a new facility needs to progress quickly. Specific deliverables for Phase II include:

  - Projected state hospital bed need for 2020 that is agreed upon by a multi-agency work group.
    - > Projections will address the role of additional community-based settings and will factor these into the assumptions.
  - Review of EOPC and POSH facilities to determine potential and suitability for expansion.
  - Recommendations on the number of state hospital sites needed.
  - Recommendations on patient mix in a new state hospital facility – forensic, geropsych, civil.
    - > Recommendation on viability of co-locating the mentally ill prison population with the forensic population on a state security hospital campus.

  - Recommended site(s) for state hospital beds.
  - Master facility plan for new state hospital, based on functional and space program.
  - Cost estimates for new state hospital.

- Continue the reconfiguration of the system consistent with the recommendations of the Governor's Mental Health Task Force. A fully decentralized system is not warranted at this time, but greater support for initiatives now underway is needed to promote the development of community-based services.

- Charge OMHAS with developing a plan that articulates the number and type of community-based settings needed across the state to support the state hospital at the bed projection levels determined in Phase II.

- Re-evaluate the roles of the courts, Department of Corrections, PSRB, and OMHAS in the identification, placement and treatment of forensic and mentally ill patients to develop a more rational and consistent system that promotes recovery while supporting public safety.

- Finally, we recommend that a memorial be established to achieve the following:

  - Dignified, perpetual care of the unclaimed cremated patient remains ("Cremains") of those who died at Oregon State Hospital.
  - Collect and archive the historical data, photographs, etc., of this facility to assure that this important component of the State's history is preserved.

SITE AND FACILITIES ANALYSIS

INTRODUCTION

This report is a review of the site and facilities that make up the Salem Campus of the Oregon State Hospital (OSH); and it is an evaluation of their function within the context of the State's psychiatric hospital. The hospital facilities have been constructed over the last 120 years; standards for patient care have evolved and been refined over that period of time. The original 1883 building was modeled on the 1840 designs authored by Dr. Thomas S. Kirkbride of Pennsylvania. While the Dr. Kirkbride standards and designs were a marked improvement over the standards and designs typical of the early 19th Century, current rules and standards for contemporary psychiatric facilities have changed. The State of Oregon's own rules for psychiatric hospitals include the following:

- Patient sleeping rooms are to have a minimum of 120 square feet area with attached and private toilet and bathing facilities. Private rooms are encouraged, but if semi-private rooms are provided, the minimum size is 100 square feet per occupant.
- Each patient housing unit is to have multi-purpose areas available to the patients as follows: two social activity areas with a total minimum area of 40 square feet per patient; one multi-purpose group therapy area with a minimum of 15 square feet per patient; and private consultation rooms of 100 square feet minimum and a maximum ratio of one room per twelve patients.
- Handicapped accessibility as required by the ADA.
- Transparency of design is required to allow the staff to easily monitor patient sleeping rooms, activity areas and outdoor recreation spaces.
- Direct access to outdoor recreation areas is considered essential.

In addition, patient areas are to be designed and finished to minimize the opportunities for patients to cause injury to themselves or others. This includes:

- Hidden alcoves and nooks are prohibited.
- All interior and exterior windows are to be non-operable and glazed with break-resistant glass.
- T-bar ceilings with lay-in acoustical tiles are not allowed.
- Wall, ceiling, lighting and air distribution devices are to be tamper-resistant and secured with tamper-resistant fasteners.
- No exposed piping or electrical conduit is allowed.
- Electrical outlets must be ground fault interrupter type.
- Window curtains and blinds shall break away with a vertical force of greater than 40 pounds.

These design rules and standards and other operational requirements were considered during the review and assessment of the physical condition of the existing facilities. It is important to remember that buildings in use at the time a new code or regulation is initiated are allowed to remain in operation without being upgraded to the new regulations. This process, called "grandfathering," allows for the codes and standards to be updated without burdening owners of existing facilities with expensive repairs or upgrades. However, if a building owner chooses to remodel or refurbish a building that has been grandfathered, it must meet current code, and any portion of the building affected by the remodel must be upgraded to current code. In addition, the structural and life/safety qualities of the existing building cannot be diminished from their original level. A decision to repair, remodel or refurbish any of the existing OSH buildings must consider the impact of upgrading the building to current codes.

METHODOLOGY

The building assessment involved review and evaluation of documentation provided by the Hospital. This documentation included:

- "Building Inventory Reports" dated 16 March 2005
- Current "Building Information Reports" for selected buildings
- Federal Emergency Management Administration's "Hazardous Building Study (FEMA-154/HAZUS) Rapid Visual Screening Form"
- The building floor plans were reviewed to confirm the physical and operational use of the OSH campus buildings

The on-site reviews of the existing buildings and infrastructure systems were conducted by KMD architectural staff, and engineering staff from KPFF Consulting Engineers for structural evaluation, and Balzhiser & Hubbard Engineers for environmental systems evaluation. OSH facilities maintenance and housekeeping staff assisted in the review and supplemented the assessment team's visual observations with personal knowledge of the condition of the buildings and their infrastructure systems. The review also included a preliminary evaluation of potential building code deficiencies. These codes include:

- The State of Oregon Structural Specialty and Life Safety Code 2004 based on the International Building Code (IBC) 2003 edition for fire/life safety concerns, compliance with the Americans with Disabilities Act (ADA) and structural integrity and seismic design issues
- The Oregon Mechanical Specialty Code, 2004 edition for evaluation of HVAC systems
- The Oregon Plumbing Specialty Code, 2005 edition for building domestic water supply and plumbing fixtures
- National Electric Code (NEC), 2005 edition for electrical power and lighting issues
- The standards prescribed in the State of Oregon, Department of Energy, State Energy-Efficient Design (SEED) Program for energy efficiency in state-owner buildings

We also evaluated the buildings' compliance with the rules and standards pertaining to the design and operations of mental health treatment facilities and psychiatric hospitals, including:

- Oregon Administrative Rules 333-535-0061, Psychiatric Patient Care Rules
- Chapter 11 of the "Guidelines for the Design and Construction of Hospital and Health Care Facilities" 2001 edition, American Institute of Architects Academy of Architecture for Health.

The information developed was compiled into an Assessment Evaluation Form for each building. These forms are included at the end of this section and are intended to provide an overview of building size and use and the general condition of the architectural, structural, mechanical and electrical systems.

The staff interviews and evaluations of the buildings and infrastructure confirm the following conclusions:

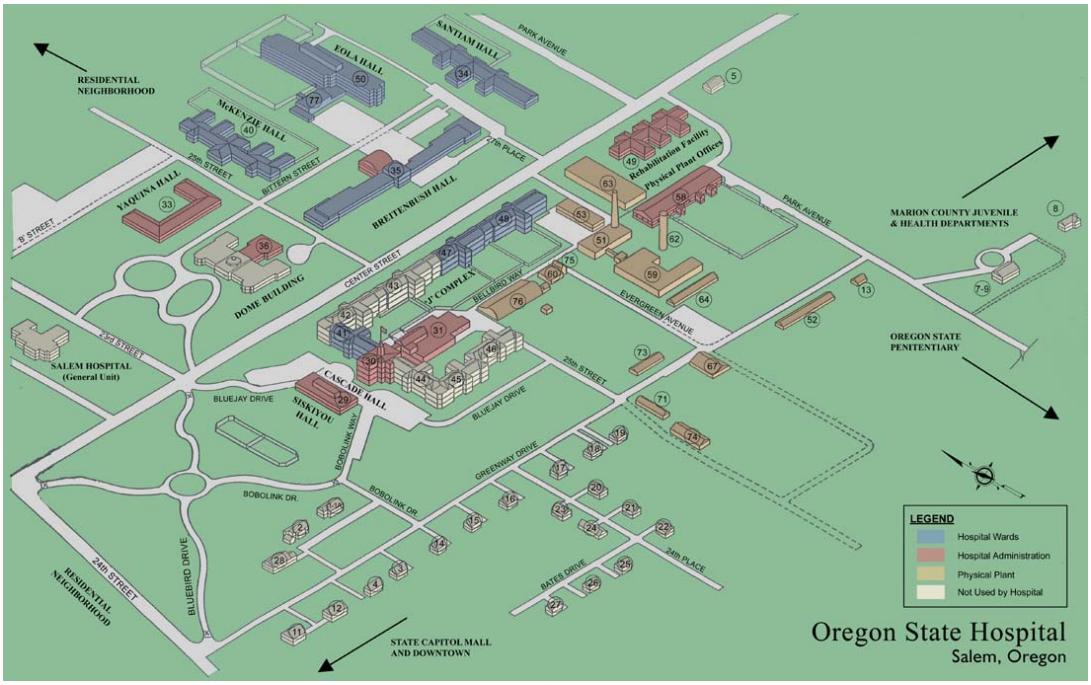
- The existing buildings are not compliant with the regulations and standards established for mental health facilities and psychiatric hospitals.
- The existing buildings, are not in compliance with current State and National building codes.
- Continued use of the existing "J" Complex buildings, poses a danger to the building's patients and staff due to fire/ life safety and seismic structural design deficiencies.

- While the interior finishes of the patient ward facilities are being maintained, the buildings' exterior walls, windows, roofs and infrastructure has been neglected to the detriment of the buildings.
- The existing structures have suffered from a program of deferred maintenance. Repair and upgrade of some of the existing buildings, such as Buildings 33, 34, 35, and 40, could make alternative use of these buildings possible; however, reuse of any of the buildings as psychiatric treatment facilities would not be cost effective.
- By allowing the abandoned "J" Complex buildings (42, 43, 44, 45, 46) and the second floor of Building 49 to deteriorate, environmental hazards associated with lead paint, asbestos, mold and mildew have developed to the point that significant mitigation will be required prior to any restoration or demolition.

ARCHITECTURAL AND STRUCTURAL EVALUATION

The Oregon State Hospital Salem campus is a collection of 58 buildings constructed between 1883 and 1956. The campus design consists of 19 buildings housing patient wards and hospital administration offices, 15 buildings serving physical plant and warehouse needs, and 26 residential cottages.

- Five of the patient ward and administrative buildings (Buildings 42, 43, 44, 45, and 46) have been completely abandoned. A majority of the space in Buildings 33 and 36 has been leased to other state agencies.
- Of the physical plant and warehouse structures, only five are fully utilized with the remainder being used for incidental storage. At this time, the residential cottages are either rented to hospital staff or leased to other state and local service agencies, except for three of the houses, which have been abandoned.
- Of the 19 patient ward buildings and hospital administration buildings, 12 were constructed between 1883 and 1928, while the remaining were constructed between 1948 and 1956. All of the physical plant structures were constructed prior to 1940, excluding the new boiler room built in 1985. The period of construction of the cottages varies, but based on design and construction techniques it appears most were constructed prior to 1950. All of the facilities, except those that have been completely abandoned, have been remodeled or refurbished to some degree.



For the purposes of this analysis, the patient care and hospital administration buildings were divided into two groups: those south of Center Street, and those north of Center Street. Those buildings south of Center Street – Buildings 30, 32, 41, 42, 43, 44, 45, 46, 47, 48, and 49 – are the older group of patient care buildings (known as the "J" Complex buildings) and includes the hospital's main kitchen. Building 29, built in 1950, is used for OSH administration.

Patient Care Buildings South of Center Street

The ten building wings that make up "J" Complex and Building 49, the Salem Rehabilitation Facility, were all built prior to 1930. Of the "J" Complex segments, Buildings 42, 43, 44, 45 and 46 have been completely abandoned and allowed to deteriorate. The second floor of the Salem Rehabilitation Facility is unoccupied and has not been maintained for several years. These buildings are in an advanced state of disrepair and may be considered for condemnation. The deterioration and the environmental hazards of exposed lead paints and friable asbestos, as well as the presence of molds and mildew make refurbishing and reuse of these building questionable. The remaining structures are staff and patient occupied; they have been maintained with some functional upgrades and further observations note that:

- Elevators were added long ago to provide handicapped access to the upper floors; however, the elevators are not ADA compliant.
- Older plaster ceilings have been concealed behind lay-in acoustical panel ceilings, hiding stains, mold or mildew caused by water leaks. It is noted that lay-in ceiling systems are not allowed under OAR regulations for use in patient areas of psychiatric hospital facilities.
- Fire protection sprinkler and electronic detection systems have been installed. The sprinkler piping is exposed in some of the patient areas in violation of the OARs.
- The steam heat system includes antiquated cast iron radiators, some of which have been replaced with now-antiquated finned tube radiators. Cooling is provided by residential style window-mounted air-conditioning units. Ventilation is limited to toilet exhaust fans and operable windows. The current HVAC system does not comply with treatment facility rules, state energy-efficiency regulations or state and national building codes.
- Most of the incandescent lighting has been replaced with more energy efficient fluorescent fixtures, however, these fixtures use the older starters ballasts that do not meet the current State SEED program requirements.
- As noted later in this report, the patient-occupied areas are not adequately ventilated or cooled. The OAR mandates that the maximum temperature not exceed 78°F. It is normal, however, for indoor temperatures to exceed 90°F. This is not an acceptable environment for healing.

All of the buildings are basically as they were constructed with all of the inherent problems of older buildings and construction systems. This condition is brought home by the fact that Buildings 30 and 41 have been recently reroofed replacing the original sheet metal roofing installed when the buildings were constructed.

The structural condition of the buildings south of Center Street could be categorized as "fair." No significant signs of distress or settlement were observed in any of the occupied buildings, however, none meet current seismic codes for new construction. The buildings constructed prior to 1930, primarily the "J" Complex, have wood floors and roofs with exterior walls of unreinforced brick masonry. Because the wood and brick are not intertied, it is expected that these buildings would perform poorly in an

earthquake of the magnitude to which we now design. This suggests that patients and staff may not be able to evacuate before the buildings collapse.

Patient Care Buildings North of Center Street

The patient wards constructed between 1948 and 1956 – Buildings 34, 35, 40 and 50 – are located north of Center Street and reflect the normal construction techniques and quality of the period. All are currently in use as patient wards and care staff offices. All have been upgraded to some degree.

- Fire protection sprinkler and electronic detection systems have been installed. The sprinkler piping is exposed in the patient areas in violation of the OARs. While these systems are tested regularly, the situation in which an alarm from Building 50 was not relayed to the City of Salem Central Fire Station due to faulty equipment does raise the concern about the systems' reliability.
- Attempts have been made to provide for handicap accessibility requirements.
- The building interiors have been maintained and some areas have been extensively remodeled, such as Building 50 fifth floor wards and the not yet occupied Building 34 first floor ward.
- The building exteriors are in good condition except for the absence of energy conservation systems, such as wall insulation and insulating glazing systems.
- Roof conditions vary from "recently replaced" at Building 40 to "needing replacement" for Building 34.
- Building 50 is the only building on campus with an integrated heating and cooling system. The other patient ward buildings are cooled by a combination of residential style window-mounted air-conditioning units or package air conditioning units.

In general the structural condition of the buildings is good; there were no significant signs of distress or settlement observed in any of the occupied buildings. Typically, the exterior brick veneer is in good condition. The buildings built between 1940 and 1955 are concrete buildings with concrete walls and columns supporting concrete floors and wood roof structures. While the physical structural condition of the occupied buildings is good, none of the buildings meet current seismic code requirements. These buildings would perform moderately well in an earthquake, experiencing varying levels of cracking that will affect non-structural finishes such as windows and brick veneer. There would be some structural damage but no partial or major collapse of the buildings. This would allow the building occupants to evacuate safely but patients and staff would probably not be able to occupy the buildings until conditions were investigated and necessary repairs made.

Physical Plant Facilities

With the exception of the abandoned wards, the physical plant facilities located south of Center Street suffer the most from deferred maintenance. All of the buildings have been retrofitted with a fire protection sprinkler and electronic fire/smoke detection systems, but no other modernization has occurred. All show signs of deterioration and stopgap repair attempts.

As noted above in reference to the "J" Complex, the unreinforced brick masonry buildings would perform poorly in an earthquake. It is likely that portions of the buildings would collapse in a code level seismic event which could prevent staff evacuation.

SEISMIC DESIGN EVALUATION

Buildings designed to current seismic code requirements should be able to resist a major earthquake equal to the strongest earthquake either experienced or forecasted for the building site without collapse. It is expected that any damage to the structure would be limited to a repairable level. For existing buildings, another standard was developed by the Federal Emergency Management Agency (FEMA) to ensure a life safety performance level during an earthquake. This standard is now called the American Society of Civil Engineers – Seismic Evaluation of Existing Buildings (ASCE-31). During a major earthquake, existing buildings that have been upgraded to the life safety performance level of ASCE-31 would have significant structural and nonstructural damage; however, partial or total structural collapse is not likely to occur. The structure would not be safe for continued occupancy unless repairs are made. There may be some injuries, but the risk to life threatening injuries is low. At this time the City of Salem does not allow application of ASCE-31 for buildings required by code to be upgraded; they must be upgraded to the levels of the Oregon Structural Specialty Code when remodeled.

The Willamette Valley did experience a significant earthquake with a magnitude 5.6 in the Scott Mills area in 1993. This earthquake seriously damaged the State Capitol Building, requiring the Capitol Rotunda to be closed for an extended period of time while repairs were made. Major ground motion in the Salem area is expected from an earthquake with a magnitude 6.2 to 6.8. This anticipated code level earthquake will have approximately ten times the force of the Scott Mills earthquake.

The construction costs to upgrade the structure of the existing OSH buildings would range from $10 to $35 per square foot depending on the construction type. While it is possible to upgrade the structural quality of the buildings, in some cases it would not be cost effective to upgrade these buildings to the current structural, life safety standards.

ENVIRONMENTAL SYSTEMS EVALUATION

The hospital's mechanical, plumbing and electrical systems were built under earlier, less restrictive codes and regulations. For compliance with the current building codes, these systems would require extensive modifications. Additional modifications beyond current Building Code minimums would be needed to comply with the Oregon State Energy-Efficient Design (SEED) Program regulations for publicly owned buildings. Modernization of the buildings' environmental systems would also require extensive upgrades of the buildings' architectural designs for building insulation, windows and doors, roof assemblies and lighting design throughout the facility.

Mechanical/Plumbing

The following conditions were noted during the on-site evaluation of the facility:

- The existing central heating plant building has modern equipment which is functioning effectively. The size of the central heating equipment is appropriate to serve the current campus and does not need capacity enlargement. However, for SEED energy-efficiency compliance, upgrades would be necessary.
- The central plant does not include a central cooling system, but space is generally available for potential cooling piping through the existing utility tunnels. The buildings are currently cooled by

diverse methods, including numerous residential window-style air-conditioners, rooftop packaged air-conditioning units and, for Building 50, air cooled chillers serving the building's air handling units. However, none of these systems bring the buildings into compliance with the 78°F. maximum temperature allowed by the Oregon Administrative Rules or the other SEED Program for energy efficiency.

- The heating, ventilation, and air-conditioning (HVAC) equipment located in hospital buildings does not have adequate zoning controls for occupant comfort and energy conservation. The HVAC systems have exceeded their anticipated length of service and appear to be still functioning only because of ongoing and creative maintenance. With few exceptions, the existing systems do not provide the ventilation rates now required by code. Providing the code-required outside-air ventilation rates would increase energy consumption further, which emphasizes the need for building energy efficiency upgrades.
- The existing manual HVAC controls should be upgraded to a modern electronic control system.
- Site water piping for domestic consumption is acceptable, but the existing plumbing systems are antiquated. The galvanized piping for domestic hot and cold water is nearing the end of its useful life. The corroded pipes may have rust and mineral deposits that restrict flows and reduce water quality. Replacement of the buildings' piping systems will be required for any remodel or upgrade. The existing plumbing system fixtures do not conserve water as required by current code and SEED regulations, nor do the plumbing fixtures meet the requirements for accessible design mandated by the Americans with Disabilities Act.
- The site infrastructure piping is routed through the utility tunnels. The existing steam and heating water piping are acceptable for continued use, but condensate mains and the expansion joints on steam piping need repair or replacement. Wastewater piping is in acceptable condition for continued use. The tunnels are also used for staff movement between buildings, so tunnel ventilation should be added.
- Some wastewater piping, not located in the tunnel system, has been found to be completely deteriorated. As leaks are discovered, these pipes are replaced.
- Existing fire suppression equipment in buildings is adequate, however, marginally low pressure in the City water supply makes fire pumps necessary for all buildings over two stories in height. Currently, fire pumps exist only in the Central Plant and one other building. These existing fire pumps are old and unreliable with no backup systems. The existing standard fire sprinkler heads are subject to actuation through tampering and should be replaced with institutional-grade sprinkler heads. Patient wards have exposed fire sprinkler piping, accessible by the patients, which is not permitted by the State administrative rule for these institutions.

Electrical

The hospital buildings were built using electrical equipment and designs that were acceptable at the time of construction. Buildings that had partial electrical upgrades between 1977 and 1987 include Buildings 34, 35, 40, 50, and the "J" Building complex. Most of these upgrades were made to the fire alarm system. No major electrical renovations have been made to the main campus power distribution system. It is reported by facility administration that it is necessary for at least one below grade electrical vault to be protected during wet times by a sump pump to keep infiltrating water from damaging the equipment.

Future remodels and any new buildings will require the upgrade of electrical systems for compliance with the National Electrical Code and Oregon Energy Standards. These upgrades would include:

- Uniform power distribution systems throughout the facility
- Energy-efficient step-down transformers
- Adequate grounding of electrical systems and equipment
- Proper overload protection
- Development of emergency and life safety systems with proper backup power sources

The main electrical power distribution to the campus is served by PGE from a primary line through a series of step-down power transformers. All of the transformers are tied to the same PGE power distribution line, therefore, there is no redundancy of public power sources for the facility. This means that the step-down transformers are owned by OSH but are maintained by PGE. It is not known what condition the transformers are in and to what level they have been maintained. Secondary transformers are tapped to feed more than one building from the same transformer. Most of the transformers are located in the tunnel system with a power duct system in the tunnel used to connect the transformers to each building's main distribution board. Water has leaked into the tunnel and part of the power duct shows signs of rust and deterioration.

Most of the buildings built in the 1940s and 1950s have a main distribution board that feeds all the branch panels associated with that particular building. Most of the buildings that were built prior to 1930 are fed not from their own main distribution board, but from the branch panels in the building are fed from various disconnects connected to a common power source. This type of distribution makes it extremely difficult to troubleshoot any problems on the system. Record drawings showing power distribution within a particular building are not available for most of the hospital. Any building remodel would need to redesign the power distribution system for the entire building.

The normal life expectancy for commercial grade equipment is approximately 30 to 35 years, but much of the equipment has operated much longer. No preventive maintenance has been done on any of the electrical distribution equipment. Some of the equipment installed on the renovated buildings, such as building 50 and 35, is still in fair shape but it is recommended for all equipment to be tested by an electrical testing company to determine the condition and service life of the equipment. Also, most of the emergency power equipment seems to have been installed within the last 30 years and it is recommended that this gear be tested as well.

Most of the building interior lighting is fluorescent fixtures. These fixtures use magnetic ballasts that are less efficient than modern electronic ballasts, and older style less efficient lamps are still in use. There are still incandescent lighting fixtures in some areas of the hospital. Building lighting needs to be renovated and new automatic lighting controls added to meet existing Oregon energy regulations.

The buildings' fire alarm systems have been renovated in the last 30 years. All alarms in the buildings are connected to a centralized reporting station which has an auto-dialup to the Salem Fire Department Central Station. However, the recent failure with the auto-dialer device reinforces the need for continual testing and upgrading of systems.

A campus-wide data network system has been installed with each building containing its own IDF rack. The main distribution frame room is located in building 33. Power for this room is backed up by a UPS system. The design of the system is based on current technologies.

HISTORIC ASSESSMENT

The Oregon State Hospital, previously known as the Oregon State Insane Asylum, has occupied this site since 1883. Prior to this the land was used for agricultural purposes. The original site, developed in conjunction with the Oregon State Penitentiary, included over 5,000 acres, extending to the hills north of Turner. Apparently, only the Dome Building (Building 36) and Cascade Hall (Building 30, part of the "J" Complex and the original 1883 hospital) are considered by the City of Salem Historic Commission to be of historic quality. Salem's Planning and Zoning Code, Chapter 120A lists the Dome Building and Cascade Hall as "Local Historic Landmarks."

Dome Building (Building 36)

- The two buildings have been placed on the list of local historic buildings for their architectural, human and environmental significance, per Section 120A.040 of the Salem Revised Code (SRC).
- Any remodel to or change to the buildings' exterior facade must be approved by the Salem Historic Commission and by the Salem Department of Development (Planning Bureau).
- Demolition of the structures is possible only after complying with SRC Section 120A.050. This section requires verification that the building cannot be reasonably repaired or restored, that there is no viable beneficial use of the building, and that there is no serious interest by outside parties in relocating the building.

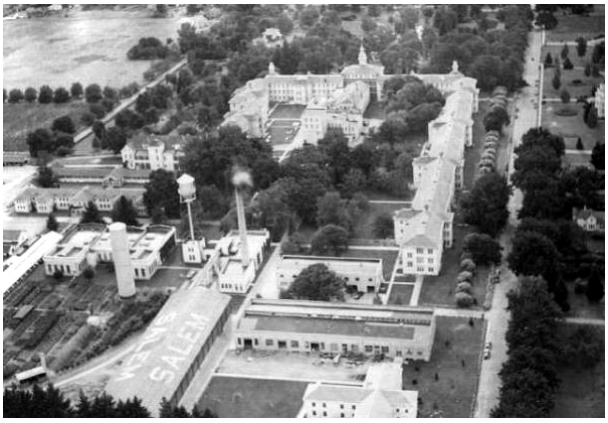
The Oregon State Historic Preservation Programs, Heritage Conservation Division, State Historic Preservation Office (SHiPO) notes that:

- None of the buildings on the site are on the State or National Registry of Historic Buildings. The area is not considered by the State as an Historic District.
- It is recommended that an "historic reconnaissance" of the site be made prior to any site use decisions to determine if any of the buildings qualify for consideration for the historic registries or if the site, or a portion of the site, qualifies to be considered as an historic district.
- Because the facility is owned by the State of Oregon, there is no financial incentive to the Owner to have the buildings or site officially declared as "historic."

Neither SHiPO nor the Salem Historical Commission mentioned that Building 35 (Breitenbush Hall), designed by Pietro Belluschi, should be considered as an historic building. It appears that this is not considered one of his significant works warranting historical status.

Any work done on the site must comply with state and national statutes if archaeological sites, features or historic materials were to be found during any excavation or construction. "Historic material" refers to any manmade materials 75 or more years old or, if Federal funds are use for the project, 50 years or more in age. The State is advised to be extremely aware of construction activities where old cemeteries were located as these have proven in the past to be poorly and inaccurately documented.

An aerial photograph of the south of center buildings taken in August 1940 shows several major structures located directly south of the "J" Complex buildings. These buildings are no longer present but there are existing signs of their previous existence. Any development in this area would require investigation of the site. As an historic reconnaissance of the facility is recommended to determine the historic issues pertaining to the buildings, an archaeological investigation of the site also is recommended prior to any redevelopment in the area.



1940 Photo of Oregon State Hospital
Ben Maxwell Collection
Salem (Oregon) Public Library

TREATMENT FACILITY SITING ISSUES

Community-Based Secure and Non-Secure 16-Bed Residential Treatment Facilities (RTF)

When evaluating a potential site for location of a residential treatment facility, the following should be considered as essential for any site:

- The parcel of land should be large enough to accommodate the physical needs and amenities of a 16-bed facility. This includes enough land for at least a 16,000 to 20,000 square foot single story building, parking and delivery access, patient outdoor recreation space, and a buffer from the adjoining uses in order to maintain a quiet environment. The minimum area required is approximately two acres, depending on location and land configuration. If expansion of the facility is anticipated, a larger site should be selected.
- The site can be located in either a rural, suburban or urban environment. However, the site should be within walking distance of public transportation. This is necessary for patient access to jobs, shopping, recreation and social activities. It is important that the access be safe and easy to negotiate.
- The site is not to be located in an industrial environment.

As well as essential needs, there are criteria which are advantageous and should be considered:

- Some of the patients may be employed by local businesses. Access to public transportation would allow patient travel to and from work, but close proximity to local employment would minimize patient commuting times and make the work experience more meaningful.
- Similarly, it is anticipated that a community-based program will expect the patient to interact with local neighbors. Neighborhood commercial, consisting of personal shops, cafes and other activities that would encourage patient socialization, would be a benefit to the treatment program. Pedestrian-friendly access and facilities should be near the residence and provide a range of positive reinforcement activities during evenings and weekends.

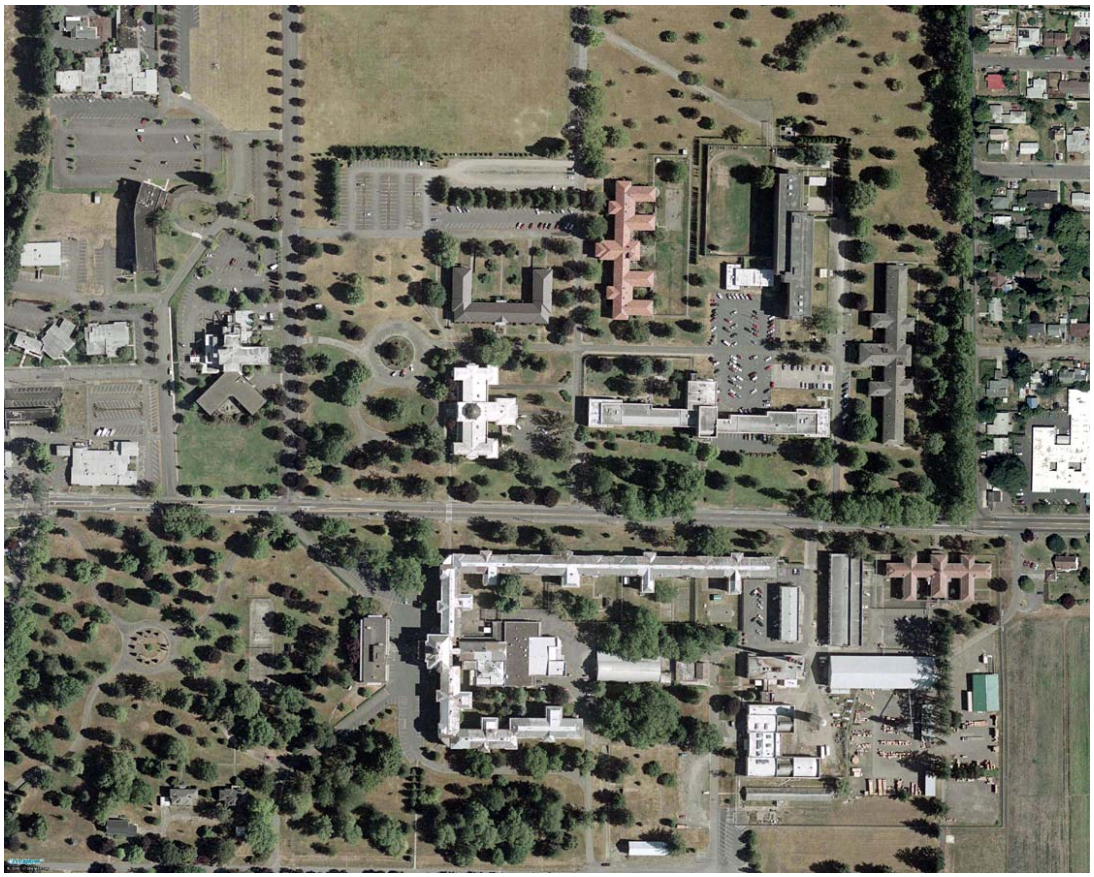
Secure State Facility

When evaluating a potential site to be the location of a regional or statewide secure treatment facility the following should be considered:

- The parcel of land should be large enough to accommodate the physical needs of a large patient population. This includes enough land for a treatment facility that, including treatment and support services, would be sized to approximately 1,000 square feet per patient. Parking and delivery access, patient outdoor recreation space and a buffer from the adjoining uses are also required. It should maintain a quiet environment. The minimum area required for a secured facility is approximately 50 acres, depending on patient population, location, and land configuration. Potential expansion of the facility should be considered. Given the need for a larger parcel of land, the site would be most generally located in a rural area.
- Because the facility will be secured and patients will not have access to areas beyond the facility, access to public transportation is not essential, except for the use of staff and visitors.
- The facility will need a well developed access system of streets and roads to accommodate staff, deliveries and emergency equipment.
- The facility will be of such a scale that utility infrastructure systems such as water, sanitary and storm sewer systems, electrical power and natural gas must be available and sized as appropriate for the facility. Electrical power and natural gas services are relatively easy and inexpensive to provide. If the site has no adjacent sewer utility, it may be necessary to develop an on-site treatment facility. Water supply needs are dependent on patient population and building size. If there is no immediate source of domestic and fire prevention water of adequate capacity, on-site wells and reservoirs would be included in the infrastructure development.
- The site may be located in either agricultural or commercial areas, but should not be located in an industrial or residential environment.
- Location of the site in a commercial or agricultural environment will require that the local planning jurisdiction approve the use of the site for an institutional use. This usually involves a zoning Conditional Use Permit. The Conditional Use Permit process is a long and involved procedure and will surely bring out the local “not in my back yard” (NIMBY) factor.
- As noted above, good access to the facility is required by the staff employed at the facility. The site should be located where qualified staff will want to live and work. It would be best to locate the facility where there is an established pool of trained potential personnel, and where there are cultural and physical amenities.

FACILITIES ASSESSMENT

The following Facilities Assessment Forms were developed for specific occupied buildings on campus.



Oregon State Hospital (U.S. Geological Survey, 2000)

Oregon State Hospital

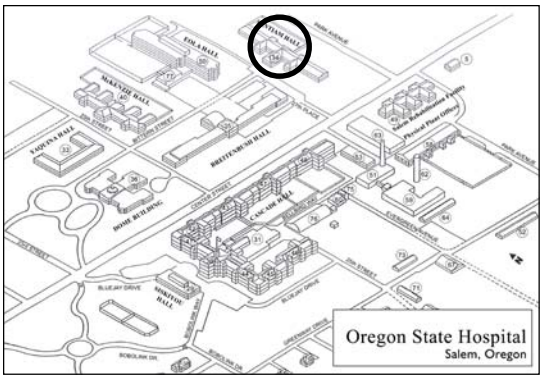
State of Oregon Department of Human Services

Framework Master Plan Phase I Report

KMD

May 16, 2005

APPENDIX A - 12



SANTIAM HALL, BUILDING 34

Current Use: PATIENT WARDS / X-RAY DEPARTMENT
History of Uses: PATIENT WARDS
Historical Significance: ☐ Yes ■ No
Year Built: 1951

GENERAL CONSTRUCTION DATA

Area:
- Footprint: 19,116 square feet
- Total: 38,232 square feet (not including basement)
- Height (# Stories): ☐ 1 ■ 2 ☐ 3 ☐ 4 ☐ 5 ■ Basement

Structural System:
Concrete framed floors, beams and joists supported on concrete columns and walls; wood framed roof.

Exterior:
- Walls: ■ Brick ☐ CMU ☐ Stucco ☐ Other _____
- Windows/Doors: ☐ Wood ■ Steel ☐ Aluminum ☐ Fixed ■ Operable ■ Single Pane ☐ Insulated
- Roof: ☐ Built-Up ☐ Membrane ☐ Composition Shingle ■ Other: Tile

Interior:
- Walls: ☐ CMU ☐ Wood Stud ☐ Metal Stud ☐ Fire/Smoke Rated ■ Plaster Finish ☐ Drywall Finish
- Floors: ☐ Wood ■ Concrete ■ Vinyl Composition Tile ☐ Vinyl Asbestos Tile ■ Carpet ☐ Ceramic Tile ☐ Sheet Vinyl
- Ceilings: ■ Plaster ☐ Drywall ☐ Glue-Up Acoustical Tile ■ Lay-In Acoustical Panels ☐ Exposed Structure

Mechanical Systems:
Building 34 has built-up air handling systems with large centrifugal fans with steam coils. Fans and heating coils appear to be original equipment, Some spaces have air conditioning in the form of through-wall, residential-style air conditioners. Building 34 has DDC controls but zoning is limited. Toilet rooms have exhaust systems. Fire protection is provided by a wet-pipe system. Plumbing fixtures are serviceable but do not meet modern requirements for water conservation and accessibility. The building appears to have little insulation. Windows do not meet the current Energy Code.
- Heating: ■ Supply Air ☐ Convection (Steam & Heating Water)
- Cooling: ☐ Supply Air ☐ Rooftop AC Units ■ Window AC Units ■ Openable Windows ☐ None
- Ventilation: ■ Supply Air ☐ Limited Exhaust ■ Openable Windows ☐ None
- Water Heating: ☐ Local Heating ■ Piped from Central Plant

Electrical Systems:
The building's main distribution is fed from on of the utility's transformers located in the tunnel. Branch panels located throughout the building are then fed from the main distribution board. There is a dedicated generator for this building feeding emergency loads such as egress lighting and fire alarm panel. The building does contain a fire alarm system including detection and verification devices reporting to a central station. Most of the lighting in the building comes from fluorescent lights but there are still areas with

incandescent lighting. No automatic lighting controls for this building. A security system with controlled access and egress and closed circuit TV monitoring has been installed.

Main Distribution	■ Campus System	☐ Fed from Adjacent Bldg.	☐ Separate System
Meter on Main Board	■ Yes	☐ No	
Lighting Control	■ Manual	☐ Automatic	
Emergency System	■ Generator	☐ UPS	☐ None
Fire Alarm	■ Yes	☐ No	

Security Systems:	■ CCTV	☐ Secured Exiting	
	■ Security Doors	☐ Security Windows	■ Security Grilles

GENERAL BUILDING CONDITION

Exterior:

Walls	☐ Poor	☐ Fair	■ Acceptable
Openings	☐ Poor	■ Fair	☐ Acceptable
Roof	■ Poor	☐ Fair	☐ Acceptable

Interior:	☐ Poor	■ Fair	☐ Acceptable

Structural:

Building 34 appears to be in good structural condition. The structural system consists of concrete framed floors with beams and joists supported on interior concrete columns and exterior concrete walls. The roof is wood framed. There were no signs of significant distress or settlement. The exterior brick veneer was in very good condition with no visible cracks. The lateral system for the building consists of concrete shear walls around the entire exterior with some interior stair walls. Because of its age, the building would most likely not meet current seismic code requirements, and would perform fair in a seismic event. The building would likely perform better, however, the wood roof is probably not anchored adequately to the concrete walls and the wood diaphragm probably does not have adequate strength. In order to seismically upgrade the building, additional steel anchors and straps would have to be added to the roof, as would a plywood diaphragm. Additional shear walls may need to be added in the transverse direction of the long north and south wings above the second floor to reduce the span of the roof diaphragm. The estimated structural cost to upgrade the building to current seismic code requirements would be $8 to $15 per square foot.

Mechanical:

Potable Water Systems	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	■ Poor	☐ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	☐ Fair	■ Acceptable
Fire Protection System	☐ Poor	■ Fair	☐ Acceptable
Heating	☐ Poor	■ Fair	☐ Acceptable
Cooling	■ Poor	☐ Fair	☐ Acceptable
Outside Air Ventilation	☐ Poor	■ Fair	☐ Acceptable
HVAC Controls	■ Poor	☐ Fair	☐ Acceptable
HVAC Energy Efficiency	■ Poor	☐ Fair	☐ Acceptable
Smoke Control	■ Poor	☐ Fair	☐ Acceptable

Electrical:

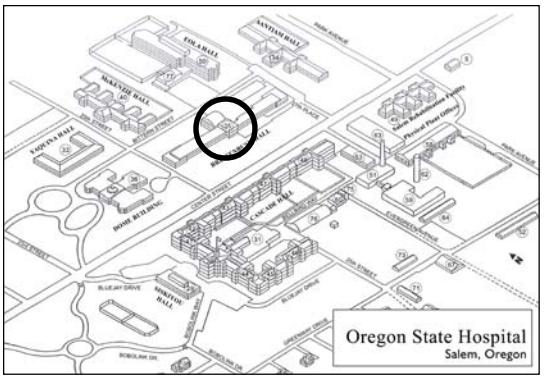
Equipment Age	☐ < 10 yrs.	■ < 25 yrs.	■ > 25 yrs.
Equip. Condition	☐ Poor	☐ Fair	☐ Acceptable

Civil:

Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	☐ Fair	■ Acceptable

Definitions:

Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is



BREITENBUSH HALL, BUILDING 35

Current Use: PATIENT WARDS, PHARMACY, MEDICAL LABORATORY
History of Uses: PATIENT WARDS
Historical Significance: ■ Yes (Architect Pietro Belluschi design) ☐ No
Year Built: 1948

GENERAL CONSTRUCTION DATA

Area:
- Footprint: 36,767 square feet
- Total: 80,750 square feet (not including basement)
- Height (# Stories): ☐ 1 ☐ 2 ■ 3 ☐ 4 ☐ 5 ■ Basement

Structural System:
Concrete framed floors and roof; concrete exterior walls.

Exterior:
- Walls: ■ Brick ☐ CMU ☐ Stucco ☐ Other_____
- Windows/Doors: ☐ Wood ■ Steel ☐ Aluminum ☐ Fixed ■ Operable ■ Single Pane ☐ Insulated
- Roof: ■ Built-Up ☐ Membrane ☐ Composition Shingle ☐ Other _____

Interior:
- Walls: ☐ CMU ☐ Wood Stud ☐ Metal Stud ☐ Fire/Smoke Rated ☐ Plaster Finish ☐ Drywall Finish
- Floors: ☐ Wood ■ Concrete ☐ Vinyl Composition Tile ■ Vinyl Asbestos Tile ■ Carpet ■ Ceramic Tile ☐ Sheet Vinyl
- Ceilings: ■ Plaster ■ Drywall ☐ Glue-Up Acoustical Tile ■ Lay-In Acoustical Panels ☐ Exposed Structure

Mechanical Systems:
Building 35 has rooftop packaged units with gas heat and air conditioning for some spaces. Other spaces have through-wall, residential-style air conditioners. This building also has a smoke control system including fans controlled with electronic variable-speed drives. HVAC controls are generally pneumatic and zoning is limited. Toilet rooms have exhaust systems. Fire protection is provided by a wet-pipe system. Plumbing fixtures are serviceable but do not meet current requirements for water conservation and accessibility. The large therapy pool in Building 35 appears to be well maintained. The building insulation and windows do not meet the current Energy Code.
- Heating: ☐ Supply Air ■ Convection (Steam & Heating Water)
- Cooling: ☐ Supply Air ☐ Rooftop AC Units ■ Window AC Units ■ Openable Windows ☐ None
- Ventilation: ☐ Supply Air ■ Limited Exhaust ☐ None
- Water Heating: ☐ Local Heating ■ Piped from Central Plant

Electrical Systems:
The building's main distribution is fed from on of the utility's transformers located in the tunnel. Branch panels located throughout the building are then fed from the main distribution board. Most of the main switchgear appears to be outside the equipment's life

expectancy. There is a dedicated generator for this building feeding emergency loads such as egress lighting and fire alarm panel. The building does contain a fire alarm system including detection and verification devices reporting to a central station. The lighting in the building comes from fluorescent lights but there are still some areas with incandescent lighting. No automatic lighting controls for this building. A security system with controlled access and egress and closed circuit TV monitoring has been installed. Building 35 houses the main head in gear for this security system.

Main Distribution	■ Campus System	☐ Fed from Adjacent Bldg.	☐ Separate System
Meter on Main Board	☐ Yes	■ No	
Lighting Control	■ Manual	☐ Automatic	
Emergency System	■ Generator	☐ UPS	☐ None
Fire Alarm	■ Yes	☐ No	

Security Systems:	■ CCTV	■ Secured Exiting	
	■ Security Doors	☐ Security Windows	■ Security Grilles

GENERAL BUILDING CONDITION

Exterior:

Walls	☐ Poor	☐ Fair	■ Acceptable
Openings	☐ Poor	☐ Fair	■ Acceptable
Roof	☐ Poor	☐ Fair	■ Acceptable

Interior:	☐ Poor	☐ Fair	■ Acceptable

Structural:

Building 35 appears to be in good structural condition. The structural system consists of concrete framed floors and roof with beams and joists supported on interior concrete columns and exterior concrete walls. Isolation joints are located in the east and west wings. There were no signs of significant distress or settlement and the exterior brick veneer was in good condition. The lateral system for the building consists of concrete shear walls. The building would not meet current seismic code requirements, and would perform fair in a seismic event. In order to seismically upgrade the building, additional concrete shear walls would need to be added in the transverse direction of the long east and west wings. The floors and roof would have to be tied to these walls and some new foundation work would be required. The estimated structural cost to upgrade the building to current seismic code requirements would be $10 to $15 per square foot.

Mechanical:

Potable Water Systems	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	☐ Poor	■ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	■ Fair	☐ Acceptable
Fire Protection System	☐ Poor	■ Fair	☐ Acceptable
Heating	☐ Poor	■ Fair	☐ Acceptable
Cooling	☐ Poor	■ Fair	☐ Acceptable
Outside Air Ventilation	☐ Poor	■ Fair	☐ Acceptable
HVAC Controls	☐ Poor	■ Fair	☐ Acceptable
HVAC Energy Efficiency	☐ Poor	■ Fair	☐ Acceptable
Smoke Control	☐ Poor	☐ Fair	■ Acceptable

Electrical

Equipment Age	☐ < 10 yrs.	■ < 25 yrs.	■ > 25 yrs.
Equip. Condition	■ Poor	☐ Fair	☐ Acceptable

Civil

Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	■ Fair	☐ Acceptable

Definitions:

Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is

Oregon State Hospital

State of Oregon Department of Human Services

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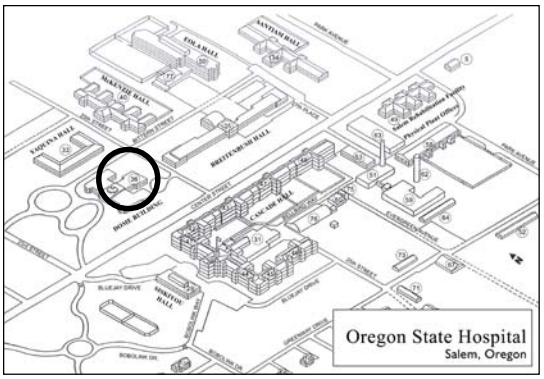
BREITENBUSH HALL Building 35



DOME BUILDING, BUILDING 36

Current Use: DENTAL SERVICES / LEASED TO OREGON DEPARTMENT OF CORRECTIONS
History of Uses: HOSPITAL ADMINISTRATION
Historical Significance: ■ Yes (City of Salem "Local Landmark") ☐ No
Year Built: 1912

GENERAL CONSTRUCTION DATA

Area:
- Footprint: 17,513 square feet
- Total: 37,586 square feet (not including basement)
- Height (# Stories): ☐ 1 ☐ 2 ■ 3 ☐ 4 ☐ 5 ☐ Basement

Structural System:
Unreinforced masonry bearing walls; concrete framed floor and roof.

Exterior:
- Walls: ■ Brick ☐ CMU ☐ Stucco ☐ Other_____
- Windows/Doors: ■ Wood ☐ Steel ☐ Aluminum ☐ Fixed ■ Operable ☐ Single Pane ☐ Insulated
- Roof: ■ Built-Up ☐ Membrane ☐ Composition Shingle ☐ Other _____

Interior:
- Walls: ☐ CMU ■ Wood Stud ☐ Metal Stud ☐ Fire/Smoke Rated ■ Plaster Finish ☐ Drywall Finish
- Floors: ☐ Wood ☐ Concrete ■ Vinyl Composition Tile ■ Vinyl Asbestos Tile ■ Carpet ☐ Ceramic Tile ■ Sheet Vinyl
- Ceilings: ■ Plaster ☐ Drywall ☐ Glue-Up Acoustical Tile ■ Lay-In Acoustical Panels ☐ Exposed Structure

Mechanical Systems:
Building 36 has air conditioning for some spaces, in the form of cooling coils and fans with both roof-mounted and mounted-at-grade condensing units. HVAC controls are pneumatic with only two zones for the entire building. Toilet rooms have exhaust systems. Fire protection is provided by a wet-pipe system. Plumbing fixtures are but do not meet modern requirements for water conservation and accessibility. The building insulation and windows do not meet the current Energy Code.
- Heating: ☐ Supply Air ■ Convection (Steam & Heating Water)
- Cooling: ☐ Supply Air ■ Rooftop AC Units ☐ Window AC Units ■ Openable Windows ☐ None
- Ventilation: ☐ Supply Air ■ Limited Exhaust ☐ None
- Water Heating: ☐ Local Heating ■ Piped from Central Plant

Electrical Systems:
Building 36 is fed from a separate utility feeder than the rest of the campus. The main distribution board is located in the basement and appears to be in good condition. Only part of the building is occupied by OSH and a different tenant occupies the rest of the building. There is a dedicated generator for the building feeding emergency loads as well as standby loads. The building has a fire

alarm system but it is not tied to the main system in campus. There is a security system in the building that is not owned by OSH. Except for the dental area, this building is operated by the Oregon Dept. of Corrections.

Main Distribution	☐ Campus System	☐ Fed from Adjacent Bldg.	■ Separate System
Meter on Main Board	■ Yes	☐ No	
Lighting Control	■ Manual	☐ Automatic	
Emergency System	■ Generator	☐ UPS	☐ None
Fire Alarm	■ Yes	☐ No	

Security Systems:	■ CCTV	☐ Secured Exiting	
	☐ Security Doors	☐ Security Windows	☐ Security Grilles

GENERAL BUILDING CONDITION

Exterior:

Walls	☐ Poor	■ Fair	☐ Acceptable
Openings	☐ Poor	■ Fair	☐ Acceptable
Roof	☐ Poor	■ Fair	☐ Acceptable

Interior:	☐ Poor	☐ Fair	■ Acceptable

Structural:

Building 36 appears to be in fair structural condition. Building 36 is actually a small portion of a larger building. The structural system consists of exterior unreinforced brick masonry walls supporting a concrete floor and roof. The concrete floor framing consists of beams and joists supported on concrete columns and the brick wall clay tiles used for forming the joists are still in place between the concrete joists in the basement. These could be a falling hazard in a seismic event. There were no signs of significant distress or settlement with only minor cracking typical in a building of this age. The lateral system for the building consists of brick shear walls. The building would not meet current seismic code requirements and would perform poorly in a seismic event. In order to seismically upgrade the building, new concrete shear walls would have to be added. These walls would most likely be added against the inside face of the brick walls. The roof and floors would have to be anchored to the exterior walls and some new foundation work would be required. The estimated structural cost to upgrade the building to current code would be $20 to $30 per square foot.

Mechanical:

Potable Water Systems	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	■ Poor	☐ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	☐ Fair	■ Acceptable
Fire Protection System	☐ Poor	■ Fair	☐ Acceptable
Heating	■ Poor	☐ Fair	☐ Acceptable
Cooling	☐ Poor	■ Fair	☐ Acceptable
Outside Air Ventilation	■ Poor	☐ Fair	☐ Acceptable
HVAC Controls	■ Poor	☐ Fair	☐ Acceptable
HVAC Energy Efficiency	■ Poor	☐ Fair	☐ Acceptable
Smoke Control	■ Poor	☐ Fair	☐ Acceptable

Electrical:

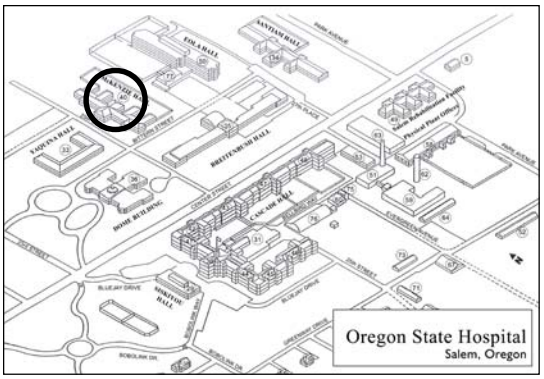
Equipment Age	☐ < 10 yrs.	■ < 25 yrs.	☐ > 25 yrs.
Equip. Condition	☐ Poor	☐ Fair	■ Acceptable

Civil:

Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	☐ Fair	■ Acceptable

Definitions:

Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is



McKENZIE HALL, BUILDING 40

Current Use: PATIENT WARDS/OFFICES
History of Uses: PATIENT WARDS
Historical Significance: ☐ Yes ■ No
Year Built: 1948

GENERAL CONSTRUCTION DATA

Area:
Footprint: 23,975 square feet
Total: 47,950 square feet (not including basement)
Height (# Stories): ☐ 1 ■ 2 ☐ 3 ☐ 4 ☐ 5 ■ Basement

Structural System:
Concrete framed floors with beams and joists with concrete columns and walls; wood roof structure.

Exterior:

Walls	■ Brick	☐ CMU	☐ Stucco	☐ Other _____	
Windows/Doors	☐ Wood	■ Steel	☐ Aluminum	☐ Fixed	■ Operable
	■ Single Pane	☐ Insulated			
Roof	☐ Built-Up	☐ Membrane	■ Composition Shingle	☐ Other _____	

Interior:

Walls	☐ CMU	☐ Wood Stud	■ Metal Stud	☐ Fire/Smoke Rated
	■ Plaster Finish	☐ Drywall Finish		
Floors	☐ Wood	☐ Concrete	■ Vinyl Composition Tile	■ Vinyl Asbestos Tile
	■ Carpet	☐ Ceramic Tile	☐ Sheet Vinyl	
Ceilings	■ Plaster	☐ Drywall	■ Glue-Up Acoustical Tile	
	■ Lay-In Acoustical Panels		☐ Exposed Structure	

Mechanical Systems:
Building 40 has two penthouse dual-deck “multizone” air handling units, which provide central HVAC. Zoning Is limited to three zones per unit. The Building 40 attic spaces contain the HVAC equipment and ductwork. HVAC controls are pneumatic. Toilet rooms have exhaust systems. Fire protection is provided by a wet-pipe system. Plumbing fixtures are serviceable but do not meet requirements for water conservation and accessibility. The building appears to have no insulation. Windows do not meet the current Energy Code.

Heating	■ Supply Air	☐ Convection (Steam & Heating Water)		
Cooling	☐ Supply Air	☐ Rooftop AC Units	■ Window AC Units	■ Openable Windows
	☐ None			
Ventilation	■ Supply Air	☐ Limited Exhaust	☐ None	
Water Heating	☐ Local Heating	■ Piped from Central Plant		

Electrical Systems:
Building 40 is fed from the campus distribution into a common bus. Various disconnects are connected to this common bus to feed branch panels located at each floor. The distribution disconnects should be replaced. There is dedicated generator for this building feeding emergency circuits, egress lighting and fire alarm panel. The building does contain a fire alarm system including detection

and verification devices reporting to a central station. The lighting in the building comes from fluorescent lights but there is still some incandescent lighting. No automatic lighting controls.

Main Distribution	■ Campus System	☐ Fed from Adjacent Bldg.	☐ Separate System
Meter on Main Board	☐ Yes	■ No	
Lighting Control	■ Manual	☐ Automatic	
Emergency System	■ Generator	☐ UPS	☐ None
Fire Alarm	■ Yes	☐ No	

Security Systems:	■ CCTV	☐ Secured Exiting	
	■ Security Doors	☐ Security Windows	☐ Security Grilles

GENERAL BUILDING CONDITION

Exterior:			
Walls	☐ Poor	☐ Fair	■ Acceptable
Openings	☐ Poor	☐ Fair	■ Acceptable
Roof	☐ Poor	☐ Fair	■ Acceptable
Interiors	☐ Poor	☐ Fair	■ Acceptable

Structural:

Building 40 appears to be in good structural condition. The structural system consists of concrete framed floors with beams and joists supported on interior concrete columns and exterior concrete walls. The roof is wood framed. There were no signs of significant distress or settlement. The exterior brick veneer was in very good condition with no visible cracks. The lateral system for the building consists of concrete shear walls around the entire exterior with some interior stair walls. An isolation joint is located through the building in both the north and south wings. The joint continues through the brick veneer. Because of its age, the building would most likely not meet current seismic code requirements, and would perform fair in a seismic event. The building would likely perform better, however, the wood roof is probably not anchored adequately to the concrete walls and the wood diaphragm probably does not have adequate strength. In order to seismically upgrade the building, additional steel anchors and straps would have to be added to the roof, as would a plywood diaphragm. Additional shear walls may need to be added in the transverse direction of the long north and south wings above the second floor to reduce the span of the roof diaphragm. The estimated structural cost to upgrade the building to current seismic code requirements would be $8 to $15 per square foot.

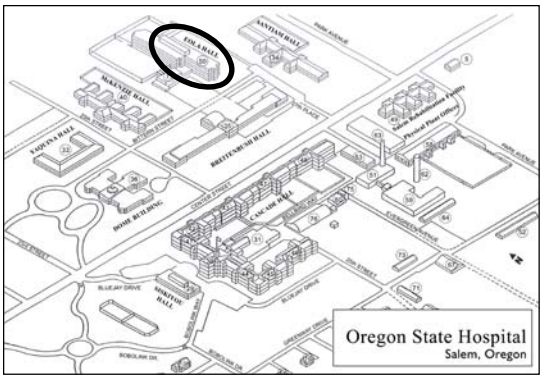
Mechanical:			
Potable Water Systems	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	■ Poor	☐ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	☐ Fair	■ Acceptable
Fire Protection System	☐ Poor	☐ Fair	■ Acceptable
Heating	☐ Poor	■ Fair	☐ Acceptable
Cooling	☐ Poor	■ Fair	☐ Acceptable
Outside Air Ventilation	☐ Poor	■ Fair	☐ Acceptable
HVAC Controls	■ Poor	☐ Fair	☐ Acceptable
HVAC Energy Efficiency	■ Poor	☐ Fair	☐ Acceptable
Smoke Control	■ Poor	☐ Fair	☐ Acceptable

Electrical:			
Equipment Age	☐ < 10 yrs.	☐ < 25 yrs.	■ > 25 yrs.
Equip. Condition	☐ Poor	☐ Fair	■ Acceptable

Civil:			
Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	☐ Fair	■ Acceptable

Definitions:

Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is



EOLA HALL, BUILDING 50

Current Use: PATIENT WARDS
History of Uses: PATIENT WARDS
Historical Significance: ☐ Yes ■ No
Year Built: 1955

GENERAL CONSTRUCTION DATA

Area:
- Footprint: 23,908 square feet
- Total: 119,540 square feet (not including basement)
- Height (# Stories): ☐ 1 ☐ 2 ☐ 3 ☐ 4 ■ 5 ☐ Basement

Structural System:
Concrete flat slab at floors and roof supported by columns and walls.

Exterior:
- Walls: ☐ Brick ☐ CMU ☐ Stucco ■ Other: Curtain wall system
- Windows/Doors: ☐ Wood ☐ Steel ■ Aluminum ■ Fixed ☐ Operable ■ Single Pane ☐ Insulated
- Roof: ☐ Built-Up ■ Membrane ☐ Composition Shingle ☐ Other _____

Interior:
- Walls: ☐ CMU ☐ Wood Stud ■ Metal Stud ☐ Fire/Smoke Rated ☐ Plaster Finish ☐ Drywall Finish
- Floors: ☐ Wood ☐ Concrete ■ Vinyl Composition Tile ☐ Vinyl Asbestos Tile ■ Carpet ☐ Ceramic Tile ☐ Sheet Vinyl
- Ceilings: ■ Plaster ■ Drywall ☐ Glue-Up Acoustical Tile ■ Lay-In Acoustical Panels ☐ Exposed Structure

Mechanical Systems:
Building 50 has central HVAC system. Two air cooled chillers at grade provide chilled water for air conditioning, and the central air handling units have heating and cooling coils with "economizer" dampers for outside air when appropriate for cooling use. Repair is needed on the controls and air balancing systems. Also, some systems provide fixed-temperature "tempered" ventilation and rely on the use of perimeter radiation and windows and for heating and cooling. HVAC systems have some heat recovery systems. Controls zoning is limited, with the air handling units providing fixed-temperature air. Exhaust is provided by a central fan. Fire protection is provided by a wet-pipe system. Plumbing fixtures are lacking current features for water conservation and accessibility. The building HVAC system design is marginally adequate to meet current Energy Code. Insulation and window upgrades are necessary to meet SEED requirements.
- Heating: ■ Supply Air ☐ Convection (Steam & Heating Water)
- Cooling: ■ Supply Air ☐ Rooftop AC Units ☐ Window AC Units ☐ Openable Windows ☐ None
- Ventilation: ■ Supply Air ☐ Limited Exhaust ☐ None
- Water Heating: ☐ Local Heating ■ Piped from Central Plant

Electrical Systems:
The building's main distribution is fed from a PGE transformer located in the tunnel. Branch panels located throughout the building are then fed from the main distribution board. Some of the switchgear seems to have been replaced when the building

was renovated. There is a dedicated generator for this building feeding emergency loads, egress lighting and fire alarm panel as well as some standby loads. The building does contain a fire alarm system including detection and verification devices reporting to a central station. Most of the lighting in the building comes from fluorescent lights with no automatic lighting controls. A security system with controlled access and egress and closed circuit TV monitoring has been installed.

Main Distribution	■ Campus System	☐ Fed from Adjacent Bldg.	☐ Separate System
Meter on Main Board	☐ Yes	■ No	
Lighting Control	■ Manual	☐ Automatic	
Emergency System	■ Generator	☐ UPS	☐ None
Fire Alarm	■ Yes	☐ No	

Security Systems	■ CCTV	■ Secured Exiting	
	■ Security Doors	☐ Security Windows	☐ Security Grilles

GENERAL BUILDING CONDITION

Exterior:

Walls	☐ Poor	☐ Fair	■ Acceptable
Openings	☐ Poor	☐ Fair	■ Acceptable
Roof	☐ Poor	☐ Fair	■ Acceptable

Interior:	☐ Poor	☐ Fair	☐ Acceptable

Structural:

Building 50 appears to be in good structural condition. The structural system consists of concrete flat slabs at the floors and roof supported by interior and exterior concrete columns and walls. The original exterior cladding system has been replaced. There were no signs of significant distress or settlement. Some exterior exposed concrete walls had minor “spider web” type cracking, which is typical of shrinkage type cracks. The lateral system of the building consists of concrete shear walls and possibly frame action between the slabs and columns. Because of its age and height, the building most likely would not meet current seismic code requirements and would perform fair to well depending on the amount of concrete shear walls. In order to seismically upgrade the building, additional concrete shear walls or possibly steel braced frames would need to be added. New foundations would need to be added at these elements. The estimated structural cost to upgrade the building to current seismic code requirements would be $5 to $15 per square foot.

Mechanical:

Potable Water Systems	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	■ Poor	☐ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	☐ Fair	■ Acceptable
Fire Protection System	☐ Poor	■ Fair	☐ Acceptable
Heating	☐ Poor	☐ Fair	■ Acceptable
Cooling	☐ Poor	☐ Fair	■ Acceptable
Outside Air Ventilation	☐ Poor	☐ Fair	■ Acceptable
HVAC Controls	☐ Poor	■ Fair	☐ Acceptable
HVAC Energy Efficiency	☐ Poor	■ Fair	☐ Acceptable
Smoke Control	☐ Poor	☐ Fair	■ Acceptable

Electrical:

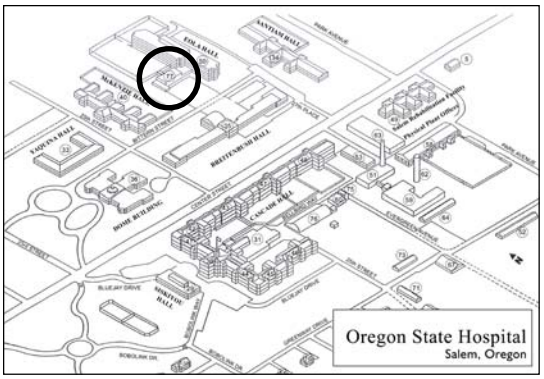
Equipment Age	o < 10 yrs.	■ < 25 yrs.	■ > 25 yrs.
Equip. Condition	■ Poor	☐ Fair	☐ Acceptable

Civil:

Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	☐ Fair	■ Acceptable

Definitions:

Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is



RECREATION CENTER, BUILDING 77

Current Use: RECREATIONAL ACTIVITIES
History of Uses: RECREATIONAL ACTIVITIES
Historical Significance: ☐ Yes ■ No
Year Built: 1956

GENERAL CONSTRUCTION DATA

Area:
- Footprint: 5,600 square feet
- Total: 5,600 square feet
- Height (# Stories): ■ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Basement

Structural System:
Concrete columns and beams supporting precast concrete roof planks.

Exterior:
- Walls: ■ Brick ☐ CMU ☐ Stucco ☐ Other _____
- Windows/Doors: ☐ Wood ■ Steel ☐ Aluminum ☐ Fixed ☐ Operable
- ■ Single Pane ☐ Insulated
- Roof: ■ Built-Up ☐ Membrane ☐ Composition Shingle ☐ Other _____

Interior:
- Walls: ■ CMU ■ Wood Stud ☐ Metal Stud ☐ Fire/Smoke Rated
- ■ Plaster Finish ☐ Drywall Finish
- Floors: ■ Wood ☐ Concrete ☐ Vinyl Composition Tile ☐ Vinyl Asbestos Tile
- ■ Carpet ☐ Ceramic Tile ☐ Sheet Vinyl
- Ceilings: ☐ Plaster ☐ Drywall ☐ Glue-Up Acoustical Tile
- ■ Lay-In Acoustical Panels ■ Exposed Structure

Mechanical Systems:
Building 77 is served by the Building 50 mechanical systems.

- Heating: ■ Supply Air ☐ Convection (Steam & Heating Water)
- Cooling: ■ Supply Air ☐ Rooftop AC Units ☐ Window AC Units ■ Openable Windows
- ☐ None
- Ventilation: ■ Supply Air ☐ Limited Exhaust ☐ None
- Water Heating: ☐ Local Heating ■ Piped from Central Plant

Electrical Systems:
Building 77 is served from same systems as building 50.

- Main Distribution: ☐ Campus System ■ Fed from Adjacent Bldg. ☐ Separate System
- Meter on Main Board: ☐ Yes ■ No
- Lighting Control: ■ Manual ☐ Automatic
- Emergency System: ☐ Generator ☐ UPS ■ None
- Fire Alarm: ■ Yes ☐ No

Security Systems: ■ CCTV ■ Secured Exiting
■ Security Doors ☐ Security Windows ■ Security Grilles

GENERAL BUILDING CONDITION

Exterior:

Walls	☐ Poor	☐ Fair	■ Acceptable
Openings	☐ Poor	☐ Fair	■ Acceptable
Roof	☐ Poor	☐ Fair	■ Acceptable

Interior:	☐ Poor	☐ Fair	■ Acceptable

Structural:
Building 77 appears to be in good structural condition. The structural system consists of concrete beams and columns supporting a precast concrete roof. The precast roof consists of precast beams supporting precast planks. There were no signs of significant distress or settlement. The lateral system consists of CMU shear walls infilled between the concrete beams and columns. The building would most likely not meet current seismic code requirements, however, because of its height and construction type, it probably would perform reasonably well in a seismic event. The buildings performance would also depend on well the precast roof elements are tied together and how well they are anchored to the surrounding structure. The estimated structural cost to upgrade the building to current seismic code requirements would be $10 to $15 per square foot.

Mechanical:

Potable Water Systems	☐ Poor	☐ Fair	☐ Acceptable
Plumbing Fixtures	☐ Poor	■ Fair	☐ Acceptable
Plumbing Fixtures - Water Use	■ Poor	☐ Fair	☐ Acceptable
Waste & Vent Piping	☐ Poor	☐ Fair	■ Acceptable
Fire Protection System	☐ Poor	■ Fair	☐ Acceptable
Heating	☐ Poor	■ Fair	☐ Acceptable
Cooling	☐ Poor	■ Fair	☐ Acceptable
Outside Air Ventilation	☐ Poor	■ Fair	☐ Acceptable
HVAC Controls	☐ Poor	■ Fair	☐ Acceptable
HVAC Energy Efficiency	☐ Poor	■ Fair	☐ Acceptable
Smoke Control	☐ Poor	■ Fair	☐ Acceptable

Electrical:

Equipment Age	☐ < 10 yrs.	☐ < 25 yrs.	■ > 25 yrs.
Equip. Condition	■ Poor	☐ Fair	☐ Acceptable

Civil:

Stormwater Drainage	☐ Poor	☐ Fair	■ Acceptable
Wastewater Drainage	☐ Poor	☐ Fair	■ Acceptable

Definitions:
Poor = Needs Replacement, Fair = Needs Repair, Acceptable = Adequate as is

Oregon State Hospital

State of Oregon Department of Human Services

Framework Master Plan Phase I Report

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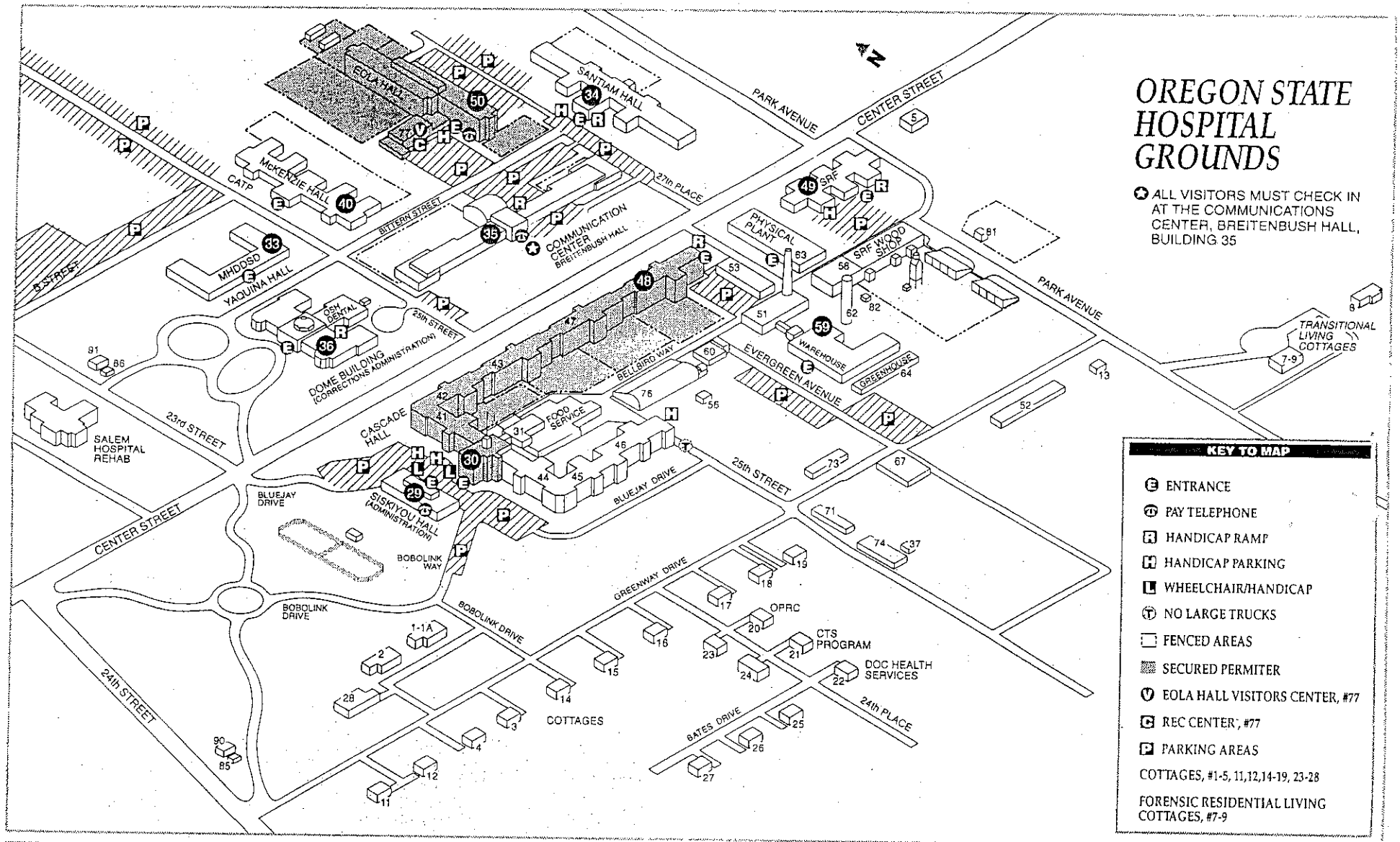
May 16, 2005

RECREATION CENTER Building 77



MAIN BUILDINGS

- 29 Oregon State Hospital Administration
- 30 Forensic Residential Treatment Services Administration
- 33 Mental Health & Developmental Disability Services Division
- 34 Geropsychiatric Treatment Services
- 35 Oregon State Hospital Communications Center
- 35 Adult Treatment Services
- 36 Department of Corrections Administration Offices
- 40 Child & Adolescent Treatment Services
- 48 Forensic Hospital Treatment Services Administration
- 49 Oregon State Hospital/Salem Rehabilitation Facility
- 50 Forensic Hospital/Forensic Residential Treatment Services
- 59 Warehouse/Shipping & Receiving

OSH-STK-14442

Rev. 4-6/98

Summary of
Asbestos and Hard
Plaster Surveys
TO DAS Facilities 01/25/07

OREGON STATE HOSPITAL

BLDG. 000
TUNNELS AND ADJOINING ROOMS

- Findings and Observations
- Spreadsheets
- Petrographic Analysis
- Sample Location Drawings
- Area of Special Concern Report
- Miscellaneous Materials
- Photographs

1000.231.01.25

TUNNELS AND ADJOINING ROOMS - 000 80,000+ SQ. FT.

The Tunnels at Oregon State Hospital contain approximately 8,000 linear feet. These pathways have multiple uses which include providing mechanical and electrical utilities to various buildings, transportation for food service carts and employees to individual buildings, plus a large amount of storage space. Not all areas of the tunnels are openly accessed, locked gates decrease traffic from building 48 to 59 to 46.

The Tunnels and Adjoining Rooms is a combination of the tunnel system and the basements (or adjoining rooms) of those buildings which the tunnels service. For the purposes of this report, the Tunnels and Adjoining Rooms have been divided into three sections based on the relative construction dates. Area 1 consists of the tunnels connecting buildings 48, 63, and 49 plus the basements of building 49 and building 63. Area 2 includes the tunnels from the Heat Plant (51) north to building 34 and westward to buildings 35, 50, 77, 40 and 33. In addition, it includes the basement of buildings 34, 35, 40, 50 and 77. Area 3 consists of the main tunnels below the J building, north to building 36, east from 45 to 59, north from 59 to 48 and the basements of 36, 59 and the J building. (See Tunnel Plan diagram for details).

AREA 1

The tunnels between building 49 and 63 were found to have asbestos-containing pipe insulation and mudded joint packing. This material is in fair condition but activity is quite high and the material is less than eight feet from the ground.

Building 49 Basement - Asbestos-containing pipe insulation and mudded joint packings were observed throughout the basement in fair condition. Minor damage to pipe insulation was noticed in the West Bench Assembly area which should be repaired. Asbestos-containing drop ceiling panels were found in the Box Storage next to the laundry and acoustical tiles which contain asbestos were found on the walls and ceiling of the southwest Bench Assembly area. Both of these areas have high potential for problems thus the material should be put under a strict Operations and Maintenance program or it should be removed.

Building 63 Tunnels - The tunnels below building 63 have asbestos-containing pipe insulation and mudded joint packings in high traffic areas. This material is in fair to poor condition with areas of severe damage. The majority of this material should be removed to prevent further problems. Repairs should be performed if removal does not take place soon.

AREA 2

The tunnels in this area were found to have asbestos-containing pipe insulation, mudded joint packings and tank insulation. The condition of material was fair but included numerous areas of cracked covers, exposed pipe ends and contact damage. Most damage occured at intersections where pipes are low to the ground and

activity is high. These areas of damage should be repaired or removed. If repaired, precautions should be taken to prevent further contact damage.

Building 34 - Asbestos-containing pipe insulation and mudded joint packings were observed throughout the tunnels, crawlspaces, air plenum compartments and other rooms in the basement of building 34. The majority of these areas had material that was in fair to good condition. Areas of damage include the east crawlspace which had damaged insulation, debris and contaminated soil. This crawlspace should be restricted from access until it can be cleaned. The air plenum compartment contained damaged pipe insulation which should be removed since it could cause distribution of material throughout the basement. Two tanks were also found in the basement of building 34.

Building 35 - Pipe insulation, mudded joint packings, tank insulation and duct insulation which contain asbestos were found in the mechanical room. This material was in fair to good condition. Pipe insulation with mudded joint packings were also found throughout the basement rooms, crawlspace areas and tunnels. The areas of most severe damage were in the southeast and northeast crawlspaces. The damage to pipe insulation has resulted in debris and contaminated soil. Access to these areas should be restricted until the material can be removed.

Building 40 - The tunnel under building 40 and the basement rooms have asbestos-containing pipe insulation and mudded joint packings that were in fair to good condition. The tunnel had pipe insulation with minor damage and exposed ends which should be repaired. Storage rooms in the basement had material that was in fair condition but room 39 had a section of pipe insulation on the floor that should be removed.

Building 50 - The tunnel below building 50 is a very high traffic area with asbestos-containing pipe insulation that is damaged. This material should be repaired and wrapped with metal or it should be removed. Damaged pipe insulation and debris was found in a tunnel located behind a gate east of the elevator. The debris should be removed and the pipe insulation repaired or removed. Asbestos-containing pipe insulation and mudded joint packings were found throughout the basement in fair to good condition. The mechanical room has tank insulation that was in good condition.

Building 77 - The tunnel under building 77 had pipe insulation and mudded joint packings that contain asbestos which were in fair to good condition. Some pipes have been damaged by contact and people have used the pipes as steps. This practice should stop and the pipes should be repaired and wrapped with sheet metal.

AREA 3

The tunnels in this area includes a section near building 36, the area behind locked gates from building 48 to 59 to 46 and the tunnels below the J building. Asbestos-containing pipe insulation with mudded joint packings was found in all of these areas with noticeable damage. Areas behind locked gates had severe damage and debris. Stored appliances have been contaminated as well as other materials stored in the area. This area is locked so access is lower than other areas but the gates do not slow the flow of air. This entire run of tunnel should have all debris removed, contaminated materials cleaned and pipe insulation removed and/or repaired. The basement of the J building is a high traffic area with lots of electric carts, bicycles

and foot traffic. Asbestos-containing pipe insulation and mudded joint packing were in poor condition throughout the tunnels of this area and in fair condition in most of the adjoining rooms. The rooms off the tunnel have concrete floors but the crawlspaces off the tunnel have soil floors. Debris and damage was noted throughout the tunnel system below the J building. Since this is such a high traffic area the debris should be removed quickly and the most severe damage also removed. Some material can be repaired but most should be removed. If material is repaired, it should be covered with sheet metal to protect it from incidental contact. For details of location and amounts of debris see Spreadsheets.

Building 36 - The tunnel of building 36 has asbestos-containing pipe insulation and mudded joint packing with damage. This is also a high traffic area that should have pipe insulation removed, repaired and protected from further damage. The housekeeping rooms, emergency generator room and storage rooms of the basement all have damage and deterioration. This basement material needs to be repaired if not removed. General maintenance could keep these areas in good condition.

Building 59 - The basement near the elevator has pipe insulation and mudded joint packings that are in poor condition and should be repaired. This area is open to the tunnels which have severe damage and debris.

OREGON STATE HOSPITAL

BLDG. 00A
PIPE CHASES

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

PIPE CHASES - 00A 15,333 SQ. FT.

The Pipe Chases are buried concrete pathways for the supply of steam and heating water to various outer-lying buildings. It is approximately three to four feet deep and two to three feet wide with access limited to manholes and steel covers along the length of the chase.

Asbestos-containing pipe insulation was observed throughout the Pipe Chase system. This material was in fair condition but numerous areas of water damage were noticed. All areas should be maintained and monitored for further damage.

The pipe insulation from the Mason Shop (#072) to Vault #10 was not consistent with other materials and samples were determined to contain a trace of asbestos. A cover on another type of insulation in this same area was determined nonasbestos.

OREGON STATE HOSPITAL

BLDG. 029
ADMINISTRATION

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

ADMINISTRATION BLDG. - 029 25, 575 SQ. FT.

The Administration Building is a two story brick and concrete structure with a basement and attic. The heating system is forced air from steam coils. Use of the building is office space.

Asbestos-containing pipe insulation with mudded joint packing and mudded joint packing on nonsuspect pipe covering was found throughout the building. This material was in fair to good condition. A paper insulation on the ductwork in the basement was found to contain asbestos. It has minor damaged areas which should be repaired. The basement Conference room and Library had an asbestos-containing drop ceiling tile present which was in good condition. This tile should not be moved or handled without proper precautions and training. A crawlspace located between the first and second floor had asbestos-containing pipe insulation with mudded joint packing, exterior duct insulation and debris from the damaged duct insulation. This entire area has been considered contaminated since the damage and debris is widespread. This crawlspace should be restricted from access until removal and cleaning can be performed.

Nonfriable material that was not sampled but often contains asbestos was floor tile located in the basement, first and second floor.

Material that was sampled but determined nonasbestos included acoustical ceiling tiles on the first floor and drop ceiling panels on the first and second floor.

OREGON STATE HOSPITAL

BLDG. 030
ADMINISTRATION

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

ADMINISTRATION BLDG. - 030J 24,030 SQ. FT.

Building #30J is a three story concrete and lathe/plaster structure with an upper level attic. The first and second floor is utilized as office space and the third floor is unoccupied. The heating system is hot water radiant supplied from the main heat plant.

Asbestos-containing mudded joint packings on nonsuspect pipe insulation were observed in the northwest hallway and office on the first floor. This material was in fair to good condition and should be monitored.

Nonfriable material that was not sampled but often contains asbestos was floor tile found on all levels of the building.

Material that was sampled but determined nonasbestos included drop ceiling panels on the first, second and third floors and acoustical ceiling tile on the first and second floors.

OREGON STATE HOSPITAL

BLDG. 031
KITCHEN

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

KITCHEN/FOOD SERVICE - 031J 44,400 SQ. FT.

The Kitchen/Food Service building is a two story wood and concrete structure. It has a basement level and attic crawlspace. The heating system is hot water radiant and the building is used for the preparation and serving of food.

Asbestos-containing pipe insulation with mudded joint packing and mudded joint packing on nonsuspect pipe covering were found in the first floor bakery and ice room. Minor damage was noticed in the ice room which should be repaired. Asbestos-containing material in the attic included vibration joint cloths on the east HVAC unit, pipe insulation with mudded joint packing and widespread debris from damage to the pipe insulation. This area including the attic mechanical room should be cleaned of all debris and pipe insulation either repaired or removed where necessary.

Nonfriable material that was not sampled but often contains asbestos included floor tile on the first and second floors and transite pipes found in the attic mechanical room.

Material that was sampled but determined nonasbestos was the drop ceiling panels on the first floor.

OREGON STATE HOSPITAL

BLDG. 033
MENTAL HEALTH ADMIN.

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

MENTAL HEALTH ADMINISTRATION - 033 51,700 SQ. FT.

The Mental Health Administration building is two story brick and concrete structure with a full basement. It is currently being used as office space. The heating system is radiant steam which is supplied via the tunnels from the main heat plant.

Asbestos-containing pipe insulation with mudded joint packing was observed throughout the basement. The condition of material was fair with minor repairs and monitoring recommended. Sprayed acoustical ceiling plaster which contains asbestos was found throughout the basement. This material was in good condition but some has been sprayed onto the pipe insulation. The ceiling plaster should be monitored closely for damage.

Nonfriable material that was not sampled but often contains asbestos included floor tile and linoleum on all floors of the building and firedoors on the second floor.

Material that was sampled but determined nonasbestos included drop ceiling panels on the basement, first and second floors and trowelled plaster on the first floor ceilings of rooms 130, 139 and 109.

OREGON STATE HOSPITAL

BLDG. 034
GERIATRIC HOSPITAL

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

GERIATRIC HOSPITAL - 034 72,550 SF.

The Geriatric Hospital is a two story brick structure with an attic and a basement. It is primarily utilized as a geriatric psychiatric ward but the main floor has a laboratory and x-ray department. The heating system is radiant steam and forced air steam.

Asbestos-containing pipe insulation, mudded joint packings, tank insulation and duct insulation were found in the second floor duct room. This material was in fair condition with some damage and deterioration. Repairs and monitoring of this area should be done. The autoclave room on the second floor has insulation on the autoclaves which contains asbestos. Damage to this material has resulted in debris which should be cleaned and the insulation should either be removed or repaired. The attic area and air plenum compartments in the attic contained pipe insulation and mudded joint packings. Damage was noted in both air plenum compartments along with debris on the floor. This material in these areas should be removed and the entire space cleaned.

Nonfriable material that was not sampled but often contains asbestos was floor tiles located on the first, second and third floors.

Material that was sampled but determined nonasbestos was acoustical ceiling tiles on the first and second floors.

OREGON STATE HOSPITAL

BLDG. 035
APP HOSPITAL

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

APP HOSPITAL - 035 110,303 SQ. FT.

The APP Hospital is a three story concrete and plaster/lathe structure with an attic. The heating system is steam forced air hot water. THe building is used as patient treatment and living areas.

Asbestos-containing pipe insulation with mudded joint packings was observed in the restroom pipe chases on all floors of the building. This material was in fair condition with numerous areas of damage. Damage on the third has resulted in debris in the women's restroom pipe chase. The attic is a series of fan units with air plenum compartments. The plenum compartments throughout the attic contain damaged asbestos-containing pipe insulation and mudded joint packing. Damage in some areas has resulted in debris. The damaged insulation and debris in the air plenum should be removed as soon as possible. Other ACM found in the attic included duct insulation that was in fair condition but should be removed or repaired, encapsulated and monitored closely for damage.

Nonfriable materials that were not sampled but often contains asbestos included floor tile on the first floor, floor tile, linoleum and firebrick on the second floor and linoleum and tar paper on the third floor.

Material that was sampled but determined nonasbestos was drop ceiling panels on the first and second floors.

OREGON STATE HOSPITAL

BLDG. 036
CORRECTIONS ADMINISTRATION

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

CORRECTIONS ADMINISTRATION - 036 70,050 SQ. FT.

The Corrections Administration building is a two story structure. It is used by the Department of Corrections for office space. The heating system is steam radiant supplied via the tunnel system from them main heat plant.

Asbestos-containing mudded joint packings were observed on the first floor in rooms 107, 118 and the janitor's closet near room 123. These were in fair to good condition and should be maintained. Acoustical ceiling tiles (1'x1') which contain asbestos were found on the first and second floors. The ceiling tiles are in fair to good condition with localized areas of damage. If left in place the tiles should continue to be painted and monitored. An asbestos-containing sprayed acoustical ceiling plaster was observed in room 297-299 of the second floor. It is in fair condition but does not appear to be adhering well to the substrate. This plaster should be removed but monitored closely until that time.

Nonfriable material that was not sampled but often contains asbestos included floor tile throughout the building and rolls of asbestos paper in the Dentist's office.

Material that was sampled but determined nonasbestos included pipe covering found in Rm. 113 on the first floor, 2'x4' drop ceiling panels on the first and second floor and 1'x1' acoustical tiles on the walls of Rm. 228 and 273 on the second floor.

OREGON STATE HOSPITAL

BLDG. 040
ADOLESCENT TREATMENT CENTER

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

ADOLESCENT TREATMENT CENTER - 040 68,707 SQ. FT.

The Adolescent Treatment Center is a two story structure with an attic. It is used as classrooms etc. and the heating system is steam forced air with the steam supplied via the tunnels from the main heat plant.

Asbestos-containing mudded joint packings were found on the first and second and pipe insulation with mudded joint packing was observed in the the southeast stairwell of the north wing. These materials were in good condition and should be monitored. Asbestos-containing material in the attic included tank insulation, pipe insulation with mudded joint packing, exterior duct insulation and debris resulting from damaged duct insulation. It has numerous areas of damage and general deterioration throughout. The duct insulation should be removed at the same time as the debris removal.

Nonfriable material that was not sampled but often contains asbestos was floor tile found throughout the building.

Material that was sampled but determined nonasbestos included acoustical ceiling tile and drop ceiling tile on the first and second floors.

OREGON STATE HOSPITAL

BLDG. 041
CTP HOSPITAL

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

CTP HOSPITAL - 041 36,676 SQ. FT.

The CTP Hospital is a three story concrete and plaster/lathe structure with an attic. It is utilized as a patient treatment facility. The heating system is hot water radiant which is supplied via tunnels from the main heat plant.

Nonfriable material that was not sampled but often contains included linoleum on all three floors, floor in the recreation room and stairs of all three floors.

Material that was sampled but determined nonasbestos included drop ceiling panels, acoustical ceiling tiles and mudded joint packings, on nonsuspect pipe covering found on each of the three floors.

OREGON STATE HOSPITAL

BLDG. 042
STORAGE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

STORAGE - 042 34,532 SQ. FT.

The storage building is a three story concrete and plaster/lathe structure which includes an attic and is above a tunnel system. The building is currently used for storage. The heating system is hot water radiant which is supplied via the tunnel system from the main heat plant.

Asbestos-containing pipe insulation was observed on the first, second and third floors. The condition was fair with minor damage and exposed ends that should be covered. The third floor has large amounts of water damage to the ceiling resulting in debris scattered throughout the floor. The debris consisted of ceiling plaster and floor tile. Ceiling tiles found in the hallway and day room on the third floor were determined to contain asbestos. These tiles should not be disturbed or moved unless proper precautions are followed.

Nonfriable material that was not sampled but often contains asbestos included floor tile on all three levels and fire doors throughout the buildings.

Material that was sampled but determined nonasbestos was debris found throughout the second floor from the water damaged ceiling and floor.

OREGON STATE HOSPITAL

BLDG. 043
WORK RELEASE CENTER

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

WORK RELEASE CENTER - 043 37,212 SQ. FT.

The Work Release Center is a three story concrete and plaster/lathe structure which has an attic and is above a tunnel system. The building is used as a correctional facility. The heating system is hot water radiant supplied via the tunnel system from the main heat plant.

Asbestos-containing pipe insulation with mudded joint packing was found on the second floor in the west game room. The condition was fair with some exposed ends which should be wrapped. On the third floor west game room and hallway asbestos-containing ceiling panels were found. They were in fair to good condition but should be monitored closely if not removed.

Nonfriable material that was not sampled but often contains asbestos included floor tile on the first, second and third floors and fire doors throughout the building.

Material that was sampled but determined nonasbestos was debris from water damaged ceiling plaster and floor tile in the kitchen on the second floor.

OREGON STATE HOSPITAL

BLDG. 044
STORAGE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

STORAGE - 044 35,800 SQ. FT.

The storage building is a three story concrete and plaster/lathe structure that is being utilized as storage space. It has an attic and is above a tunnel system. The heating system is hot water radiant which is supplied via the tunnels from the main heat plant.

Asbestos-containing pipe insulation with mudded joint packing was observed in the northeast corner bathroom on the first floor. The condition of material was good but it should be monitored for damage.

Nonfriable material that was not sampled but often contains asbestos was floor tile on all level of the building.

Material that was sampled but determined nonasbestos was debris from water damaged ceiling plaster on the third floor.

OREGON STATE HOSPITAL

BLDG. 045
STORAGE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

STORAGE - 045 28,700 SQ. FT.

This storage building is a three story concrete and plaster/lathe structure with an attic and a tunnel system below. The building is utilized as donation storage and staff offices on the first floor. The heating system is hot water radiant supplied via tunnels from the main heat plant.

Asbestos-containing debris from water damaged floor tile was found throughout the southwest solarium of the third floor. This area should be cleaned and all debris removed.

Nonfriable material that was not sampled but often contains asbestos was floor tile found throughout the building.

OREGON STATE HOSPITAL

BLDG. 046
BUILDING 46

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

BUILDING #46 - 046 34,120 SQ. FT.

Building #46 is a three story concrete and plaster/lathe structure that has an attic and is above a tunnel system. The building is used as a free materials storage facility and is accessed frequently by staff and patients. The heating system is hot water radiant which is supplied via tunnels from the main heat plant.

Asbestos-containing pipe insulation with mudded joint packings was found on the first and second floor. This material was in fair condition with some ends exposed. Any damage should be repaired and the ends of the pipe wrapped.

Nonfriable material that was not sampled but often contains asbestos included floor tile and fire doors on all floors of the building.

OREGON STATE HOSPITAL

BLDG. 047
HOSPITAL FPP-CTP

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

HOSPITAL FPP-CTP - 047 36,768 SQ. FT.

The Hospital FPP-CTP is a three story concrete and plaster/lathe structure with an attic and built over a tunnel system. The building is utilized as a patient treatment facility. The heating system is hot water radiant which is supplied via the tunnels from the main heat plant.

Asbestos-containing pipe insulation was found on the first floor Air Court area and asbestos-containing mudded joint packing on nonsuspect pipe covering was observed on the third floor Air Court area. These materials were in fair condition and should be monitored for damage.

Nonfriable material that was not sampled but often contains asbestos included floor tile and fire doors throughout the building.

Material that was sampled but determined nonasbestos was drop ceiling panels on the first second and third floors.

OREGON STATE HOSPITAL

BLDG. 048
HOSPITAL MAX. SEC. FPP

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

HOSPITAL MAXIMUM SECURITY FPP - 048 40,312 SQ. FT.

The Hospital Maximum Security FPP is a three story concrete and plaster/lathe structure with an attic and it is above a tunnel system. The building is used for patient treatment and administration. The heating system is hot water radiant which is supplied via the tunnels from the main heat plant.

Asbestos-containing paper tape was found above the ceiling of the first floor visitor's room. It was in fair condition and should be monitored and encapsulated.

Nonfriable material that was not sampled but often contains asbestos included floor tile and fire doors on all levels of the building.

Material that was sampled but determined nonasbestos was drop ceiling panels found on the first, second and third floors.

OREGON STATE HOSPITAL

BLDG. 049
S.R. FACILITY

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

SALEM REHABILITATION FACILITY - 049 36,150 SQ. FT.

The Salem Rehabilitation Facility is a two story concrete structure with a basement. It is used for offices and dining on the first floor and lining areas on the upper floor. The heating system is hot water radiant plus forced air space heaters.

Asbestos-containing drop ceiling panels were found in the north office area on the first floor. It was in good condition but any disturbance of the material could potentially cause problems. This tile should be monitored for damage and not disturbed or moved unless proper precautions are taken. Asbestos-containing mudded joint packings nonsuspect pipe covering were found in the first floor southwest corner offices and asbestos-containing pipe insulation was found in the east wing men's room. The condition of material was fair with ends exposed that should be wrapped.

Material that was sampled but determined nonasbestos included acoustical ceiling tile and drop ceiling panels on the first floor and drop ceiling panels on the second floor.

OREGON STATE HOSPITAL

BLDG. 050
HOSPITAL 5 FLOORS FPP

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

HOSPITAL 5 FLOORS - FPP - 050 143,448 SQ. FT.

Hospital 5 Floors - FPP is a five story concrete structure with an attic fan room. The first floor is used primarily for office space and craft workshops. The second, third and fourth floors are hospital wards which are utilized to house patients. The fifth floor was vacant at the time of the inspection and under renovation. The heating system is forced air steam with perimeter radiant steam heating which is supplied via tunnels from the main heat plant.

Asbestos-containing pipe insulation with mudded joint packing was observed in the stairwells, on the H wing of the fifth floor, in the attic fan room and it was assumed to be located behind the perimeter walls. In most areas it was in fair to good condition. The pipe insulation in the attic was damaged and has resulted in small amounts of debris. The debris should be removed and any damaged material should either be removed or repaired. Since large amounts of piping was located behind walls care should be taken when demolition or renovation projects are being conducted in any area of this building.

Nonfriable material that was not sampled but often contains asbestos included transite panels on the outside of the building, linoleum on the first floor, floor tile on all floors of the building, firebrick on the first floor and firehoses on all floors of the building.

OREGON STATE HOSPITAL

BLDG. 051
BOILER PLANT

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

HEAT PLANT - 051 8,584 SQ. FT.

The Heat Plant is a two story concrete block structure. It is divided into a main office area, the main boiler room, a pumphouse and a workshop. These boilers generate steam for operation of the majority of buildings at Oregon State Hospital. A tunnel system distributes all piping which leads to various buildings.

Asbestos-containing material included insulation on two large hot water tanks, seven smaller tanks, end caps off the boilers, the boiler exhaust and the piping. The majority of the materials were in poor to fair condition with some type of damage due to general deterioration. The small tanks were in good condition but should be monitored and maintained. Damage was noticed on the large hot water heaters, the pipe insulation and the boiler exhaust. Damage to some material has resulted in debris on the tops of boilers 1 and 3, north of the hog fuel trough, in the hog fuel trough and in the second floor shop area. All debris should be removed as should any ACM whose damage is resulting in debris. Most damaged areas can and should be repaired but to keep the material in good condition will take continuous monitoring for damage and deterioration.

Nonfriable material that was not sampled but often contains asbestos included gaskets throughout the boiler room and floor tile in the office area.

Material that was sampled but determined nonasbestos was the drop ceiling panels in the office area.

OREGON STATE HOSPITAL

BLDG. 053
GARAGE/OFFICE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

GARAGE/OFFICE - 053 16,380 SQ. FT.

The Garage/Office is a two story concrete structure with a wooden attic. The building is used for an auto shop, storage area and fire engine storage. The heating system is steam radiant.

Pipe insulation and mudded joint packings located in the first floor stairwell were determined to contain asbestos. Damage to small sections of this material was noticed which should be repaired or removed.

Nonfriable material that was not sampled but often contains abestos included fire suits in the fire engine room and floor linoleum and counter top linoleum on the second floor.

OREGON STATE HOSPITAL

BLDG. 058
FUEL SHED

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

FUEL SHED - 058 18,864 SQ. FT.

The Fuel Shed is an open air wood and metal structure with a concrete floor in all areas except the vehicle storage area. The only enclosed sections are a southeast corner office and the car wash area in the southwest corner. The main use of this building is the construction of pallets and wood storage.

Asbestos-containing mudded joint packings on fiberglass insulated lines were found in the wash rack area. This material was in poor condition with clear signs of deterioration and wear. This material should be removed or repaired and maintained. Debris which contains asbestos was found on the ground at the west end of the vehicle storage area. Pipes are stored in this area with the insulation still on the pipe. This debris should be removed.

Nonfriable material that was not sampled but often contains asbestos was transite board on the exterior and interior walls of the wash rack area.

OREGON STATE HOSPITAL

BLDG. 059
WAREHOUSE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

WAREHOUSE - 059 24,200 SQ. FT.

The Warehouse is a one story concrete structure that is used primarily for storage with some office space. The heating system is wall mounted steam forced fan units.

Asbestos-containing pipe insulation with mudded joint packing and mudded joint packing on nonsuspect pipe covering was observed throughout the building. The condition of material was poor to fair with numerous exposed ends and damaged areas. Debris was found to contain asbestos and was located on the landing above the office. All debris should be removed and the pipe insulation should be repaired and monitored.

Nonfriable material that was not sampled but often contains asbestos was floor tile found in the office/hallway.

Material that was sampled but determined nonasbestos was drop ceiling panels located in the northeast corner office.

OREGON STATE HOSPITAL

BLDG. 60/75
PAINT SHOP/TAD

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

Photographs

PAINT SHOP/TAD - 60/75 3,264 SQ. FT.

The Paint Shop/TAD building is a one story brick structure that is the combination of these two buildings. The heating system is hot water radiant.

Asbestos-containing pipe insulation and mudded joint packings located throughout the first floor were in fair condition. Minor localized damaged areas should be repaired and maintained.

Nonfriable material that was not sampled but often contains asbestos was floor tile found on the first floor.

OREGON STATE HOSPITAL

BLDG. 063
MAINT. SHOP/CLOT REPAIR

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

MAINTENANCE SHOP/CLOTHING REPAIR - 063 33,592 SQ. FT.

The Maintenance Shop/Clothing Repair building is a one story concrete structure with a basement. The heating system is steam radiant which is supplied from the main heat plant.

Asbestos-containing pipe insulation and mudded joint packings were found throughout the basement in fair condition. Many ends were exposed and mudded joints had been damaged. This material should be repaired if not removed monitored.

Nonfriable material that was not sampled but often contains asbestos included stored floor tile, roofing felt, brake shoes rolled wire, stored linoleum and a blackboard in the basement. Miscellaneous materials on the first floor included linoleum and floor tile.

Material that was sampled but determined nonasbestos included stored ceiling tile in the basement storage room, acoustical ceiling tile in the first floor receptionist's office and drop ceiling panels in the conference room and foreman's office.

OREGON STATE HOSPITAL

BLDG. 064
GREENHOUSE #2

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

GREENHOUSE - 064 6,262 SQ. FT.

This greenhouse is a single story wood, glass and metal structure. The heating system is radiant hot water and most pipes are not insulated. A pipe chase runs east-west under the greenhouse.

Asbestos-containing pipe insulation was found in the pipe chase beneath the south side office. Access to this area should be restricted. The insulation has deteriorated and has exposed ends.

OREGON STATE HOSPITAL

BLDG. 067
BARN

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

BARN - 067 6,257 SQ. FT.

The barn is a one story wood structure used for storage. The only materials within the building that were suspected of containing asbestos were nonfriable.

Underneath the building is a pipe storage area which has pipes with asbestos-containing insulation still on them. This material has been ground into the soil and scattered throughout this area. All debris should be removed as should the piping if it is not going to be used again.

Nonfriable materials that were not sampled but often contains asbestos included shingles, roofing felt and roof sealer stored in the building.

OREGON STATE HOSPITAL

BLDG. 071
GROUNDS MAINTENANCE STORAGE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Photographs

GROUNDS MAINTENANCE STORAGE - 071 2,136 SQ. FT.

The Grounds Maintenance Storage building is a one story concrete and wood structure. It is used as a storage area for miscellaneous maintenance equipment including mowers, tools, pesticides and fertilizers. The heating system is radiant steam supplied from the main heat plant.

Damaged asbestos-containing pipe insulation with mudded joint packing found throughout the first floor and above the ceiling of the tool room. The damage is widespread and has resulted in some areas of debris. The pipe insulation and mudded joint packings should be removed to prevent further problems.

OREGON STATE HOSPITAL

BLDG. 076
VEHICLE STORAGE

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Area of Special Concern Report

Miscellaneous Materials

Photographs

VEHICLE STORAGE HUT - 076 12,000 SQ. FT.

The Vehicle Storage Hut is a one story wood and metal structure with attic built on a concrete slab. It is used as a storage area for maintenance vehicles, equipment and has a break area for maintenance crew. The heating system is steam forced air space heaters with steam supplied from the main heat plant.

Asbestos-containing pipe insulation was observed throughout the main floor and in the attic. The material was in fair condition with minor localized damage that should be repaired. Pipe insulation in the women's restroom was damaged severely and has resulted in debris and contaminated soil in the pipe chase beneath the restroom. This material should be removed an the area cleaned of all debris.

Nonfriable material that was not sampled but often contains asbestos included floor tile, linoleum and a firehose on the main floor.

Material that was sampled but determined nonasbestos included the mudded joint packings on nonsuspect pipe covering in the women's restroom and the blown-in insulation above the men's restroom.

OREGON STATE HOSPITAL

BLDG. 077
RECREATION CENTER

Findings and Observations

Spreadsheets

Petrographic Analysis

Sample Location Drawings

Miscellaneous Materials

RECREATION CENTER - 077 5,308 SQ. FT.

The Recreation Center is a one story concrete structure used as an office area and a gymnasium. The heating system is steam forced air.

Asbestos-containing pipe insulation and mudded joint packings was observed in the attic fan room and above the stage of the gymnasium. The condition of this material is good with very few areas of damage.

Nonfriable material that was not sampled but often contains asbestos was floor tiles in the men's and women's restroom.

Material that was sampled but determined nonasbestos was acoustical ceiling tiles in the main office and hallway.

OREGON STATE HOSPTAL
HARD PLASTER SURVEY

Book I

Executive summary of results

Bldg. #29 - Negative
Bldg. #30 - Negative
Bldg. #31 - Negative
Bldg. #33 - Negative Exception: Acoustical ceiling throughout basement is positive
Bldg. #34 - Negative
Bldg. #35 - Negative
Bldg. #36 - Negative
Bldg. #40 - Negative Exception: North Basement classroom area is positive
Bldg. #41 - Negative
Bldg. #42 - Negative
Bldg. #43 - Negative
Bldg. #44 - Negative

*Note: Buldings not listed do not contain any suspect plaster material and thus were not sampled.

HARD PLASTER SURVEY

Bldg. # 29 - Administration

The Administration building is a two story brick and concrete structure with a basement and attic. This building is used for office space.

The basement and attic areas do not contain any suspect hard plaster material, and thus were not sampled. The first and second floors did contain some suspect hard plaster material, which was all determined to be negative of any asbestos.

This determination is based on a thorough analysis of bulk samples by Professional Services Industries, inc. They used the E.P.A. approved "Interim method of determination asbestos in bulk insulation samples."

Building #30 - Administration 24,030 sq. ft.

Building #30 - J is a three story concrete and lathe/plaster structure, with an upper level attic.

The attic area did not contain any suspect hard plaster material, and thus was not sampled. The basement, first, second and third floor consist entirely of lathe and plaster structures, which has been sampled extensively in accordance to the E.P.A. 3-5-7+1 rule. All samples were determined to be negative of any A.C.M.

This determination is based on thorough analysis of bulk samples by Professional Services Industries, inc., using the E.P.A. approved "Interim Method of Determination of Asbestos in Bulk Insulation Samples."

Building #31 Kitchen Food Service 44,400 sq. ft.

The Kitchen/Food Service building is a two story wood and concrete structure. It also contains a basement area, and an attic crawlspace. It is utilized for the preparation and serving of food.

The attic crawlspace area does contain some hard plaster, but is homogenous to first floor walls that continue above the drop ceiling grid, and thus was not sampled. The first and second floors of this building did contain suspect plaster material and were sampled according to the E.P.A. 3-5-7+1 rule. All samples have been determined to be negative on Asbestos testing.

This determination is based on thorough P.L.M. analysis of bulk samples by Professional Services Industries, Inc., using the E.P.A. approved "Interim Method of determination of asbestos in bulk insulation samples."

Building #33 Mental Health Administration 51,700 sq. ft.

The Mental Health Administration building is a two story brick and concrete structure with a full basement. It is currently being used as office space.

The basement, 1st and 2nd floor are comprised entirely of suspect plaster material, with the exception of the acoustical sprayed ceiling material throughout the basement area, which has already been determined to be positively containing asbestos. All other suspect plaster material was sampled throughout the building. All samples have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis of bulk samples by Professional Service Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #34 Geriatric Hospital 72,500 sq. ft.

The Geriatric Hospital is a two story brick structure with an attic and a basement. It is primarily used as a geriatric psychiatric ward, but the main floor has a laboratory and X-Ray department.

The basement and attic areas did not contain any suspect plaster and thus was not sampled.

The first and second floor walls are comprised entirely of hard plaster and were sampled in accordance with E.P.A. 3-5-7+1 rule. All sample results were determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis by Professional Services Industries, inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Bluilding #35 A.P.P. Hospital 110,303 sq. ft.

The A.P.P. Hospital is a three story concrete and plaster/lathe structure with an attic. The building is used as patient treatment and living areas.

The first, second and third floors are comprised of plaster and lathe, and were sampled in accordance with the E.P.A. 3+5-7+1 rule. All sample results were determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis by Professional Services Industries, Inc., using E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #36 Corrections Administration 70,050 sq. ft.

The Corrections administration building is a two story structure. It is primarily used for office space by the Department of Corrections.

The basement area consists primarily of concrete walls, and was not sampled. The first, second and third floor are comprised of lathe and plaster materials and were sampled in accordance to the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #40 Adolescent Treatment Center 68,707 sq. ft.

The Adolescent Treatment Center is a two story brick structure with a basement and an attic.

The attic area does not contain any suspect plaster material, and thus was not sampled. All walls in the basement, first and second floor are comprised primarily of plaster and lathe, and were sampled in accordance with E.P.A. recommendations. One sample in the North Basement (NB-6) has been determined to contain 1.2% Tremolite Asbestos and this area should be handled as positive material.

This area is marked in red on the following north basement floor plan. All other trace areas throughout the building have been point counted and determined to be negative.

This determination is based on thorough P.L.M. point count analysis performed by Professional Services Industries Inc. using E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #41 C.T.P. Hospital 36,676 sq. ft.

The C.T.P. Hospital is a three story concrete plaster/lathe structure. It is primarily utilized as a patient treatment facility.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings, and have been sampled in accordance with the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #42 Storage 34,532 sq. ft.

The storage building is a three story concrete plaster/lathe structure. It is primarily utilized for storage.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings and have been sampled in accordance with the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #43 Work Release Center 37,212 sq. ft.

The Work Release Center is a three story concrete plaster/lathe structure. It is primarily utilized as a work release center for the Department of Corrections.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings, and have been sampled in accordance to the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #44 Storage 35,800 sq. ft.

The Storage Building is a three story concrete plaster/lathe structure. It is primarily utilized for storage.

The first, second and third floor are constructed primarily of lathe and plaster walls and ceilings and have sampled in accordance with the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

OREGON STATE HOSPITAL

Hard Plaster Survey

Book II

Executive Summary of Results

Building #45 - Negative
Building #46 - Negative
Building #47 - Negative
Building #48 - Negative
Building #49 - Negative
Building #50 - Positive throughout building
Building #53 - Negative
Building #60 - Negative
Building #63 - Negative
Building #70 - Negative
Building #77 - Positive throughout office areas

*Note: Buildings not listed do not contain any suspect plaster material, and thus were not sampled.

Building #45 Storage 28,700 sq. ft.

The Storage building is a three story concrete plaster/lathe structure. It is primarily utilized for storage.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings, and have been sampled in accordance to the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #46 Free Materials 34,120 sq. ft.

The Free Materials building is a three story concrete plaster/lathe structure. It is primarily utilized as a storage area for OSH extra materials that are made available for use.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings, and have been sampled in accordance to the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #47 Hospital F.P.P.-C.T.P. 34,120 sq. ft.

The F.P.P.-C.T.P. hospital is a three story concrete plaster/lathe structure. It is primarily utilized as a patient treatment facility.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings and have been sampled in accordance with the E.P.A. 3-5-7+1 rule. All sample results have been determined to be neggative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Bldg. #48 Maximum Security F.P.P.-C.T.P. Hospital 40,312 sq.ft.

The maximum security F.P.P. hospital is a three story concrete plaster/lathe structure. It is primarily utilized as a patient treatment facility.

The first, second and third floors are constructed primarily of lathe and plaster walls and ceilings, and have been sampled in accordance with the E.P.A. 3-5-7+1 rule. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Service Industries, Inc. using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #49 Salem Rehabilitation Facility 36,150 sq. ft.

The Salem Rehabilitation Facility is a two story concrete structure with a full basement. It is used for office space on the first floor, and living areas on the upper floor.

The basement, first and second floors consist primarily of lathe and plaster construction. These suspect areas have been sampled extensively according to E.P.A. recommendations. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis of bulk samples, performed by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #50 F.P.P. Hospital 143,448 sq. ft.

The F.P.P. hospital is a five story concrete structure with an attic. The attic is constructed entirely of concrete, and thus was not sampled. All five floors were sampled in accordance with E.P.A. recommendations.

According to sample results, it has been determined that all hard plaster throughout this building is to be considered to positively contain asbestos. O & M procedures are in effect for these areas, and material quantification is as follows;

The first floor consists of approximately 27,136 sq. ft. of asbestos containing plaster.

The second, third and fourth floors consist of approximately 38,720 sq. ft. of asbestos containing plaster on each floor.

The fifth floor is currently being remodeled, and the majority of hard plaster has been removed. However, there still remains approximately 1790 sq. ft. of asbestos containing plaster in the following locations:

North wall in Ward I
South wall in Ward J
North and South elevator housings
East and West solariums

Building #53 Garage/Office 16,380 sq. ft.

The Garage/Office is a two story concrete structure with a wooden attic. The building is used for an auto shop, storage area, and fire engine storage.

The first and second floors do contain suspect hard plaster throughout. These areas have been sampled according to E.P.A. recommendations. It has been determined that all sample results are negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #59 Warehouse 29,200 sq. ft.

The warehouse is a one story concrete structure that is used primarily for supply storage, with some office space.

All interior walls in the warehouse are constructed of lathe and plaster and thus were sampled in accordance with E.P.A. recommendations. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #60 Wood Shop 1,600 sq. ft.

The Wood Shop is a one story brick structure with a wooden attic. It is primarily used for patient activities.

The first floor is constructed with plaster/lathe. This material has been sampled in accordance with E.P.A. recommendations. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #63 Maintenance Shop/Clothing Repair 33,592 sq.ft.

The Maintenance shop/Clothing repair building is a one story concrete structure with a concrete basement.

The first floor is primarily constructed of wood walls, with the exception of the Plant Operations office, which are constructed with hard plaster/lathe. The Plant Operations offices have been sampled according to E.P.A. recommendations. All bulk samples from this area have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis performed by Professional Services Industries, Inc. using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #75 Paint Shop 1,664 sq. ft.

The Paint Shop is a one story concrete structure that is currently being used as the Asbestos shop.

It is constructed on the interior with hard plaster/lathe throughout. This material has been sampled according to E.P.A. recommendaions. All sample results have been determined to be negative of any asbestos.

This determination is based on thorough P.L.M. analysis of bulk samples, performed by Professional Services Industries, Inc., using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."

Building #77 Recreation Center 5,308 sq. ft.

The Recreation center is a one story concrete structure used as an office area and a gymnasium.

The gymnasium area is constructed entirely of concrete, and thus was not sampled. The Office area is constructed with hard plaster/lathe and has been sampled in accordance with E.P.A. recommendations.

All hard plaster in this building has been determined to be positive for containing asbestos, and should be treated as such. O & M practices are in effect for this building.

This determination is based on thorough P.L.M. analysis performed by Professional Services Industries, Inc. using the E.P.A. approved "Interim method of determination of asbestos in bulk insulation samples."_