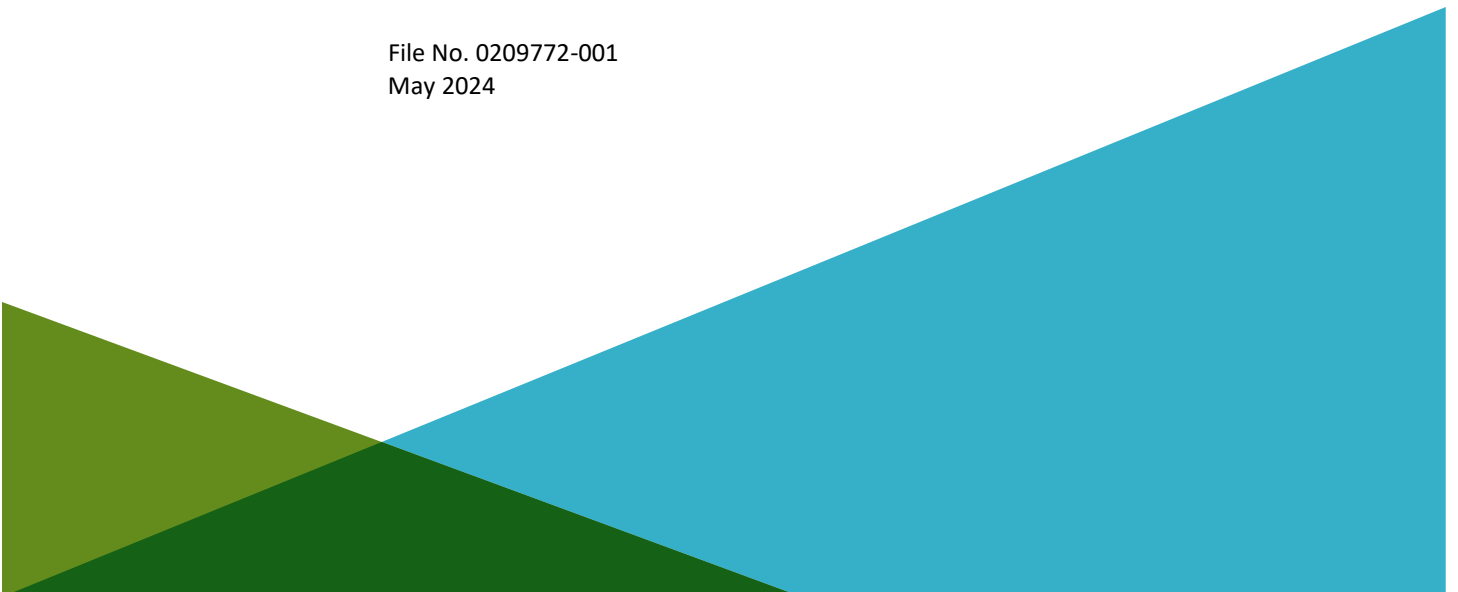


CONTAMINATED MEDIA MANAGEMENT PLAN  
WEST PROPERTY - TASS 2 SITE  
10505 NORTH PORTLAND ROAD  
PORTLAND, OREGON

by  
Haley & Aldrich, Inc.  
Portland, Oregon

for  
City of Portland, Bureau of Environmental Services, TASS Program, and  
Brownfield Program  
Portland, Oregon

File No. 0209772-001  
May 2024





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3 May 2024  
File No. 0209772-001

City of Portland, Bureau of Environmental Services  
1120 SW 5th Avenue  
Portland, Oregon 97204

Attention: Taryn Meyer

Subject: Contaminated Media Management Plan  
West Property - TASS 2 Site  
10505 North Portland Road  
Portland, Oregon

Dear Taryn:

Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to provide this Contaminated Media Management Plan (CMMP) for the West Property - TASS 2 Site (site) located at 10505 North Portland Road in Portland, Oregon. This document has been developed for the construction of an RV and Pod shelter for the Temporary Alternative Shelter Sites (TASS) program within the City of Portland (City) Mayor's office. The City Brownfield Program is providing US Environmental Protection Agency (EPA) grant funding for this project. These services are being provided through the City Bureau of Environmental Services (BES) Coordinated Site Assessment programs environmental on-call contract #31001878 with Haley & Aldrich. During construction of the TASS 2, BES personnel and/or TASS contractors may encounter soil impacted with low concentrations of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals. This CMMP has been prepared for use by BES and/or their contractors during field activities to assist with the proper management of affected media during construction.

Sincerely yours,  
**HALEY & ALDRICH, INC.**

A handwritten signature in blue ink that reads "Kevin Woodhouse".

Kevin Woodhouse  
Project Manager

A handwritten signature in blue ink that reads "Jennifer Ann Casler".

Jennifer Casler  
Client Account Manager

Enclosures



**SIGNATURE PAGE FOR**

**REPORT ON  
CONTAMINATED MEDIA MANAGEMENT PLAN  
WEST PROPERTY - TASS 2 SITE  
10505 NORTH PORTLAND ROAD  
PORTLAND, OREGON**

**PREPARED FOR  
CITY OF PORTLAND, BUREAU OF ENVIRONMENTAL SERVICES  
PORTLAND, OREGON**

PREPARED BY:



---

Kevin Woodhouse  
Project Manager  
Haley & Aldrich, Inc.

REVIEWED AND APPROVED BY:



---

Jennifer Casler  
Client Account Manager  
Haley & Aldrich, Inc.

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## List of Abbreviations

Abbreviation	Definition
°C	degrees Celsius
BES	Bureau of Environmental Services (City of Portland)
bgs	below ground surface
BMP	best management practice
BUD	Beneficial Use Determination
CFR	Code of Federal Regulations
CMMP	Contaminated Media Management Plan
DEQ	Department of Environmental Quality (State of Oregon)
ECSI	Environmental Cleanup Site Information
ESCP	Erosion and Sedimentation Control Plan
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
IDW	investigation-derived waste
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
msl	mean sea level
NELAP	National Environmental Laboratory Accreditation Program
NFA	No Further Action
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollution Discharge Elimination System
OAR	Oregon Administrative Rules
ORELAP	Oregon Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PNG	PNG Environmental, Inc.
RAP	Remedial Action Plan
RBC	Risk-Based Concentration
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
RV	recreational vehicle
site	West Property - TASS 2 Site, 10505 North Portland Road, Portland, Oregon
SL	Screening Level
SVOC	semi-volatile organic compound
TASS	Temporary Alternative Shelter Site
TPH	total petroleum hydrocarbons
UST	underground storage tank
VOC	volatile organic compound

## **1. Introduction**

This Contaminated Media Management Plan (CMMP) presents information and guidance for City of Portland (City) Bureau of Environmental Services (BES) personnel and contractors to identify and appropriately manage potentially contaminated soil during future earthwork-related activities at the West Property - Temporary Alternative Shelter Site (TASS) 2 development in Portland, Oregon (referred to as the “site”; Figure 1). This plan includes information on the proper identification, management, removal, temporary storage, transportation, and disposal of potentially contaminated soil that may be encountered during earthwork activities at the site. This CMMP was funded through the City Brownfield Program with federal grant money provided by the US Environmental Protection Agency (EPA).

## **2. Purpose**

The purpose of this CMMP is to provide protocols for identifying and managing potentially contaminated soil that may be encountered during future earthwork activities at the site. Based on the results of previous environmental assessments conducted at the site, soil may contain concentrations of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), pesticides, and metals, including arsenic, cadmium, chromium, copper, mercury, and lead.

In addition to this CMMP, any redevelopment activities are subject to best management practices (BMPs) prescribed by permits, plans, and specifications, and adherence to regulations and requirements of local, state, and federal agencies.

## **3. Site Description**

The site is located at 10505 North Portland Road in Portland, Oregon (Figure 1) and is located on the east portion of tax lot 1000 of Multnomah County tax map 1N1E05B. Tax lot 1000 was previously referred to as the Former North Larsen Property and is currently called the West Property because it is situated west of the City Columbia Boulevard Wastewater Treatment Plant (WWTP), and the future long-term use for this property is for the expansion of the WWTP. The West Property includes the current planned footprint of a proposed TASS 2 facility, which is an approximately 6-acre portion of the West Property. This CMMP discusses only the activities and results of investigations conducted within the boundary and perimeter of the planned development of the TASS 2 site. The site is currently developed with gravel parking and storage areas. The West Property is bordered by industrial properties to the west (Columbia Steel) and south (Truck Repair Enterprise), North Portland Road to the east, and the Columbia Slough to the north. Access to the site is through an unnamed road along the southern boundary of the site. The approximate limits of the site and surrounding area are shown on the BES site plan included in Appendix A.

## **4. Planned Redevelopment**

The City intends to construct the TASS 2 facility within the West Property. Environmental services in preparation for construction of the TASS 2 site are being funded using EPA Brownfield Grant funding. Preliminary plans indicate that TASS 2 will consist of RV storage areas; car parking areas; mobile manufactured housing pods; tents for common areas including kitchen areas, trash areas, picnic areas, and gathering areas; and sewage and stormwater infrastructure. Except for stormwater swales and a small, forested area along the east boundary of the site, the entirety of the site will be paved following the completion of construction activities. Sewage infrastructure will likely consist of a series of subsurface sewage treatment tanks connected to above-ground holding tanks that will be periodically pumped out and the sewage properly disposed of off site. Surface grading will slope the site slightly downward to the north, so that surface water at the site will flow toward a curb along the northern edge of the pavement near the north boundary of the site. Stormwater will flow through curb openings to lined stormwater swales along the northern boundary of the site. The lined stormwater swales will discharge to an oil/water separator, which will ultimately discharge to the City of Portland storm sewer system. Preliminary development plans are included in Appendix B.

Ground-disturbing activities will generally be limited to surface grading of imported gravel fill, installation of subsurface utility lines, subsurface wastewater and stormwater infrastructure, fencing, and surface improvements (i.e., walkways, parking areas, common areas, etc.). The specific locations of these excavations have not yet been determined. Excavations of up to 9 feet below ground surface (bgs) will be required to install septic treatment tanks near the southeast portion of the site. Excavations deeper than 9 feet bgs are not anticipated. Excavations to install the septic treatment tanks will be conducted during periods of dry weather to minimize surface water runoff entering the excavations. As discussed below in Section 5.2, groundwater beneath the site is generally present at depths of between 18 and 21 feet bgs, except for an area of perched groundwater observed in former monitoring well MW-3, located near the center of the site. Perched groundwater was encountered at a depth of 10.7 feet bgs in former well MW-3, below the maximum planned excavation depth. Therefore, dewatering during construction is not anticipated. Preliminary septic plans are included in Appendix B.

Prior to installation of TASS 2 facilities, the entirety of the TASS 2 site except for the lined stormwater swales and a forested area near the south boundary of the site will be capped with a minimum of 8 inches of imported aggregate base rock fill underlying a minimum of 4 inches of asphalt paving. A demarcation layer consisting of geotextile fabric will be installed prior to the placement of the aggregate base rock and asphalt cap. The geotextile fabric demarcation layer will identify the boundary between contaminated soil and overlying clean capping materials, isolating contamination from human or ecological contact. The planned project will prevent direct contact of underlying soil by future site occupants and eliminate exposure to the generally low concentrations of contaminants in surface soil. In addition to this CMMP, the TASS 2 development will be conducted in accordance with a forthcoming Remedial Action Plan (RAP) for the TASS 2 development.

## **5. Background**

A discussion of the site history, geology and hydrology, and previous environmental investigations is presented in the following sections.

## 5.1 SITE HISTORY

Based on information obtained from the Oregon Department of Environmental Quality (DEQ), the West Property, which includes the TASS 2 site, operated as an industrial site since at least the 1940s, including use as a shingle mill, a boat manufacture and repair facility, for materials storage, welding, diesel engine repair and rebuilding, and as a tank-truck washing facility. The West Property is currently vacant. The Columbia Slough adjoins the northern boundary of the West Property. The West Property was listed on the DEQ Environmental Cleanup Site Information (ECSI) database (ECSI No. 0186) because of the presence or suspected presence of metals, polychlorinated biphenyls (PCBs), and petroleum hydrocarbons and associated constituents in soil and/or groundwater. Contamination present on-site resulted from historical practices that included discharge of wastewaters to on-site ponds, product spillage, leaking underground storage tanks (USTs), contaminated stormwater runoff, as well as contaminants released to an on-site drywell.

Historically, the primary environmental concern for the West Property was groundwater contamination from a solvent plume migrating from the adjacent South Larsen site (ECSI No. 3337). Other potential historical sources on site include historical truck washing, historical diesel truck repair, and a former UST as shown on the BES figure included in Appendix A. BES installed several monitoring wells and conducted several monitoring events to determine if groundwater contamination from the South Larsen site was migrating to the West Property. Groundwater was encountered in the monitoring well located closest to the unnamed road separating the two sites at depths of between 35 to 60 feet bgs.

TASS 2 structures at the site will be mobile or temporary in nature, i.e., they will be driven on site and supported on axels, support struts, or will be skid mounted units deposited at the site. As a result, all TASS 2 structures will be air gapped and not in direct contact with the ground surface (i.e., structures will have airspace of between approximately 5 to 6 inches or 1 to 1.5 feet between the ground surface and the bottom of the structure, depending on the type of structure); therefore, the *Vapor Intrusion into Indoor Air* exposure pathway is considered incomplete. The structures will not have skirting or flashing around their bases that could impede airflow through the airspace below the structure. Groundwater beneath TASS 2 is a data gap. There is minimal data available for the TASS 2 site with the only existing data located along the western boundary from MW-3 and MW-4. The existing data is pertinent to monitoring the VOC plume from the South Larsen property but was collected prior to remediation of the South Larsen VOC plume. There is no on-site data pertaining to the former UST releases in the northeast corner of the site. Additional data in and adjacent to the source area should be collected to further characterize groundwater at the site.

The South Larsen Property owners remediated the groundwater contamination present on the South Larsen site and the small area of impacted groundwater that migrated onto the West Property. ECSI No. 3337, including the small area of impacted groundwater that migrated onto the West Property, was granted a No Further Action (NFA) designation from DEQ after the completion of remedial activities (Appendix C). DEQ determined that the groundwater exposure pathway evaluation was complete and approved the abandonment of the groundwater wells on the West Property that were installed to investigate the plume from the South Larsen site. A detailed comparison of previous soil and groundwater sample analytical results to applicable cleanup levels is presented in Haley & Aldrich's draft Risk Assessment for the TASS 2 site (Haley & Aldrich, 2024).

The solvents in groundwater that migrated onto the southern-most portion of the West Property from the South Larsen site are a listed hazardous waste. Despite the low concentrations of solvents in soil and



groundwater, because the solvents are a listed hazardous waste, soil and groundwater at the subject property must either be managed as a hazardous waste or managed as non-hazardous waste under a No Longer Contained-In Determination (NLCID) from DEQ. DEQ issued an NLCID for investigation-derived waste (IDW) generated during well abandonment and soil generated during subsurface investigations at the West Property in December 2023 (Appendix C), allowing IDW generated during well abandonment and soil generated during subsurface investigations at the West Property to be disposed of as non-hazardous waste.

Foundry waste from the Columbia Steel facility located adjacent to the west of the West Property was previously stored on the western-most portion of the West Property, outside the limits of the site. The foundry waste from Columbia Steel included heavy metals, with elevated concentrations of cobalt and manganese. The majority of this foundry waste has been removed from the West Property. Previous sampling of the foundry waste indicated that the material is not a characteristic hazardous waste.

## **5.2 GEOLOGY AND HYDROGEOLOGY**

The site is approximately 43 feet above mean sea level (msl) and is generally flat, with a slight downwards slope north toward the Columbia Slough located approximately 160 feet north of the site. Stormwater at the site appears to either infiltrate into the ground surface or surface flow to the south, east, or north.

Near-surface soils mapped on the site primarily consist of Sauvie-Rafton-Urban land complex on the eastern portion of the site and Sauvie silt loam on the western portion of the site (NRCS, 2023). Subsurface conditions encountered at the site during previous investigations consisted of clayey to silty fill soils with varying amounts of debris (concrete, wood, plastic, brick, piping, and rebar). Abundant large concrete and asphalt debris (up to 3 feet in diameter) was encountered in a majority of the test pits excavated at the site by Kleinfelder, Inc. in May 2000 (Kleinfelder, 2000). This debris was encountered generally between 6 to 14 feet bgs. The fill soils appeared to extend to a depth of at least 21 feet bgs in some areas of the site.

Static groundwater measurements from former on-site groundwater monitoring wells MW-1, MW-3, and MW-4 generally ranged from approximately 18 feet bgs to 21 feet bgs. Apparent perched groundwater was encountered at a depth of 10.7 feet bgs in monitoring well MW-3, formerly located near the center of the site. The depth to groundwater in monitoring wells MW-2, formerly located off site near the northeast portion of the site and the closest monitoring well to the future locations of the septic tanks, ranged between 20 and 21 feet bgs. Based on the maximum depth of planned excavations of 9 feet bgs and the depth to static groundwater beneath the site, groundwater is not anticipated to be encountered during ground disturbance activities and is therefore not discussed in this CMMP.

Regional groundwater is expected to flow to the north toward the Columbia Slough and follow the direction of flow to the west. Groundwater is not anticipated to be encountered during ground disturbance activities; however, a description of protocols that will be followed if groundwater is encountered, is presented in Section 7.

## **5.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS**

Numerous previous environmental investigations have been conducted on the West Property; however, this CMMP discusses only the activities and results of investigations conducted within the boundary and

perimeter of the planned development of the TASS 2 (the site). Previous environmental investigations conducted at the site consist of a Phase II Environmental Site Assessment (ESA) conducted by PNG Environmental, Inc. (PNG) in November 1999, a Phase II ESA conducted by Kleinfelder, Inc. in May 2000, and soil sampling activities conducted by BES in October and November 2023.

For the purpose of this CMMP, soil sample analytical results were compared to DEQ Clean Fill Screening Levels (Clean Fill SLs; DEQ, 2019) and DEQ Ecological RBCs for Freshwater Sediment (DEQ, 2020). Soil sample analytical results were also compared to the following DEQ RBCs (DEQ, 2023):

- *Soil Ingestion, Dermal Contact, and Inhalation* for residential, occupational, construction worker, and excavation worker receptors; and

Groundwater sample analytical results were compared to the following DEQ RBCs (DEQ, 2023):

- *Groundwater in Excavation* for construction and excavation worker receptors; and

Previous soil sample analytical results, including a comparison to the above-described regulatory criteria, are presented in BES tables 1 through 6, included in Appendix D. The November 1999 PNG report and the July 2000 Kleinfelder, Inc. report, which include previous on-site groundwater analytical data, are included in Appendix E. The results of the previous investigations are summarized in the following sections.

### **5.3.1 Phase II ESA - PNG Environmental, Inc. - November 1999**

PNG conducted a Phase II ESA of the West Property in November 1999. The Phase II ESA included analyzing a soil sample collected from one test pit (TP-3) advanced adjacent to the west boundary of the site, installing three on-site groundwater monitoring wells (MW-1, MW-3, and MW-4), and collecting groundwater samples from the monitoring wells during two sampling events. It appears that soil samples were either not collected from the monitoring well borings or were not analyzed. The locations of the 1999 explorations on the site are shown on the site plan included in Appendix A.

#### **5.3.1.1 Soil Analytical Results**

Test Pit TP-3 encountered fill material to a total depth excavated of 13 feet bgs. The fill material consisted of construction debris, primarily concrete rubble, with a dark brown silt/sand matrix. The fill material emitted a petroleum-like odor and displayed staining indicative of petroleum contamination. Groundwater was not encountered in the excavation. Soil sample TP-3-13 was collected from the base of the excavation at a depth of 13 feet bgs and analyzed for diesel- and oil-range hydrocarbons by Northwest Method NWTPH-Dx, gasoline-range hydrocarbons by Northwest Method NWTPH-Gx, VOCs by United States Environmental Protection Agency (EPA) Method 8240, and semi-volatile organic compounds (SVOCs) by EPA Method 8270B.

Diesel-range hydrocarbons were not detected in soil sample TP-3-13. Gasoline- and oil-range hydrocarbons were detected in soil sample TP-3-13 at concentrations of 4.77 and 1,000 milligrams per kilogram (mg/kg), respectively. The detected concentrations of gasoline- and oil-range hydrocarbons were less than DEQ Clean Fill SLs and applicable DEQ RBCs. DEQ has not established freshwater sediment ecological RBCs for gasoline- or oil-range hydrocarbons. Benzene was detected in soil sample TP-3-13 at a concentration of 956 micrograms per kilogram (µg/kg), greater than the corresponding DEQ Clean Fill SL but less than applicable DEQ RBCs. DEQ has not established freshwater sediment ecological RBCs for benzene. Additional VOCs or SVOCs were not detected in soil sample TP-3-13.

Soil sample TP-3-13 analytical results, including a comparison to the above-described regulatory criteria, are presented in BES tables 1 through 3, included in Appendix D.

#### **5.3.1.2     *Groundwater Analytical Results***

Groundwater samples were collected from former on-site monitoring wells MW-1, MW-3, and MW-4 in May and June 1999 and analyzed for gasoline-range hydrocarbons by Northwest Method NWTPH-Gx, diesel- and oil-range hydrocarbons by Northwest Method NWTPH-Dx, SVOCs by EPA Method 625, and VOCs by EPA Method 624. Contaminants were not detected at concentrations greater than applicable DEQ RBCs in the groundwater samples analyzed.

Groundwater sample analytical results are presented in the November 1999 PNG report, included in Appendix E.

#### **5.3.2     *Phase II ESA - Kleinfelder, Inc. - May 2000***

Kleinfelder, Inc. completed a Phase II ESA at the West Property in July 2000. The July 2000 Phase II ESA included analyzing 11 soil samples collected from two test pits advanced on or adjacent to the site (TP-1 and TP-2) and analyzing groundwater samples collected from on-site monitoring wells MW-1, MW-3, and MW-4. This Phase II ESA used the same nomenclature for test pit labeling as the previous Phase II ESA performed by PNG in 1999; however, the test pits of the same identification were not in the same location for both investigations. The locations of the July 2000 explorations on the site are shown on the site plan included in Appendix A.

##### **5.3.2.1     *Soil Analytical Results***

Subsurface conditions encountered in the test pits generally consisted of clayey to silty fill soils with varying amounts of debris (concrete, wood, plastic, brick, piping, and rebar). Abundant large concrete and asphalt debris (up to 3 feet in diameter) was encountered in a majority of the test pits excavated. This debris was encountered generally from 6 to 14 feet bgs. Fill soils stained black or gray were observed in test pit TP-1. Field screening did not detect the presence of volatile organic vapors in test pits TP-1 or TP-2.

Soil samples were analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270D, and total Resource Conservation and Recovery Act (RCRA) 8 metals by EPA 6000/7000 series methods. Naphthalene and/or 1,2,4-trimethylbenzene were detected in soil sample TP-2-19 at a concentration greater than DEQ Clean Fill SLs. VOCs were not detected at concentrations greater than applicable DEQ RBCs. Except for naphthalene, DEQ has not established freshwater sediment ecological RBCs for VOCs. The detected concentration of naphthalene in soil sample TP-2-19 of 408 µg/kg was greater than the corresponding DEQ freshwater sediment ecological RBC of 176 µg/kg.

PAHs were not detected at concentrations greater than applicable DEQ RBCs or DEQ Clean Fill SLs. Fluoranthene and pyrene were detected in soil sample TP-2-5 at a concentration greater than the corresponding DEQ freshwater sediment ecological RBCs.

RCRA 8 metals were not detected at concentrations greater than applicable DEQ RBCs. Lead and/or mercury were detected at concentrations greater than DEQ Clean Fill SLs and DEQ freshwater sediment ecological RBCs in soil samples TP-1-19 and TP-2-19.

Soil sample analytical results from the July 2000 Phase II ESA, including a comparison to the above-described regulatory criteria, are presented in BES tables 1 through 4, included in Appendix D.

#### **5.3.2.2 Groundwater Analytical Results**

Groundwater samples were collected from former on-site monitoring wells MW-1, MW-3, and MW-4 and analyzed for SVOCs by EPA Method 8270, VOCs by EPA Method 8260B, and total Resource Conservation and Recovery Act (RCRA) 8 metals. Contaminants were not detected at concentrations greater than applicable DEQ RBCs in the groundwater samples analyzed.

Groundwater sample analytical results are presented in the July 2000 Kleinfelder report, included in Appendix E.

### **5.3.3 Test Pit Investigation - City of Portland BES - October 2023**

The BES analyzed 13 composite soil samples collected from 12 test pits advanced on or adjacent to the northern portion of the site in October 2023 (test pits T-Pit-1 through T-Pit-12). The composite soil samples included seven composite soil samples collected between 0 and 1.5 feet bgs and six composite soil samples collected between 0 and 5 feet bgs. The composite soil samples were analyzed for qualitative hydrocarbon identification by Method NWTPH-HCID; gasoline-range hydrocarbons by Northwest Method NWTPH-Gx; diesel- and oil-range hydrocarbons by Northwest Method NWTPH-Dx; PAHs by EPA Method 8270-SIM; total arsenic, cadmium, chromium, copper, lead, mercury, and zinc by EPA Method 6020; PCBs by EPA Method 8082, and/or organochlorine pesticides by EPA Method 8081B.

#### **5.3.3.1 Soil Analytical Results**

Gasoline- and diesel-range hydrocarbons were either not detected or were detected at concentrations less than DEQ Clean Fill SLs and applicable DEQ RBCs in the composite soil samples analyzed. Oil-range hydrocarbons were either not detected or were detected at concentrations less than applicable DEQ RBCs in the composite soil samples analyzed. DEQ has not established Clean Fill SLs for oil-range hydrocarbons and has not established freshwater sediment ecological RBCs for petroleum hydrocarbons.

Benzo(a)pyrene, dibenz(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene were detected at concentrations greater than DEQ Clean Fill SLs in soil samples T-Pit-2 0-5', T-Pit-3 0-18", T-Pit-5 0-18", T-Pit-6 0-18", T-Pit-6 0-5', T-Pit-9 0-5', and T-Pit-11 0-5'. The detected concentrations of benzo(a)pyrene, dibenz(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene in soil samples T-Pit-2 0-5', T-Pit-3 0-18", T-Pit-5 0-18", T-Pit-6 0-18", T-Pit-6 0-5', and/or T-Pit-9 0-5' were greater than the corresponding DEQ RBCs for Soil Ingestion, Dermal Contact, and Inhalation for residential receptors. With these exceptions, PAHs were not detected at concentrations greater than applicable DEQ RBCs. One or more PAHs were detected at concentrations greater than DEQ freshwater sediment ecological RBCs in seven of the 13 composite soil samples analyzed.

Arsenic, cadmium, chromium, copper, lead, mercury, and/or zinc were detected at concentrations greater than DEQ Clean Fill SLs in 11 of the 13 composite soil samples analyzed (i.e., except for soil samples T-Pit-8 0-18" and T-Pit-12 0-18"). Except for arsenic in soil sample T-Pit-3 0-18", metals were not detected at concentrations greater than applicable DEQ RBCs in the 13 composite soil samples analyzed. One or more metals were detected at concentrations greater than DEQ freshwater sediment ecological RBCs in nine of the 13 composite soil samples analyzed (i.e., except for soil samples T-Pit-6 0-18", T-Pit-8 0-18", T-Pit-9 0-5', and T-Pit-12 0-18").

One of the 13 composite soil samples (composite soil sample T-Pit-6 0-5') was analyzed for PCBs. PCBs were not detected. One of the 13 composite soil samples (composite soil sample T-Pit-7 0-5') was analyzed for organochlorine pesticides. Three organochlorine pesticides, including 4-4'-DDD, 4-4'-DDE, and 4-4'-DDT, were detected at concentrations greater than DEQ Clean Fill SLs and DEQ freshwater sediment ecological RBCs. Organochlorine pesticides were not detected at concentrations greater than applicable DEQ RBCs.

### **5.3.4 Direct-Push Boring Investigation - City of Portland BES - November 2023**

The BES analyzed 27 soil samples collected from 12 direct-push borings (WP-1 through WP-7 and WP-9 through WP-13) advanced on or adjacent to the site in October 2023. The soil samples included one discrete soil sample collected between 0 and 1 foot bgs, 12 composite soil samples collected between 0 and 5 feet bgs, 12 composite soil samples collected between 5 and 10 feet bgs, and two composite soil samples collected between 10 and 15 feet bgs. The soil samples were analyzed for qualitative hydrocarbon identification by Method NWTPH-HCID; gasoline-range hydrocarbons by Northwest Method NWTPH-Gx; diesel- and oil-range hydrocarbons by Northwest Method NWTPH-Dx; VOCs by EPA Method 8260, PAHs by EPA Method 8270-SIM; total arsenic, cadmium, chromium, copper, lead, mercury, and zinc by EPA Method 6020; and/or PCBs by EPA Method 8082.

#### **5.3.4.1 Soil Analytical Results**

Gasoline- and diesel-range hydrocarbons were either not detected or were detected at concentrations less than DEQ Clean Fill SLs and applicable DEQ RBCs in the composite soil samples analyzed. Oil-range hydrocarbons were either not detected or were detected at concentrations less than applicable DEQ RBCs in the composite soil samples analyzed. DEQ has not established Clean Fill SLs for oil-range hydrocarbons and has not established freshwater sediment ecological RBCs for petroleum hydrocarbons.

One of the 27 soil samples (WP-11-0-1) was analyzed for VOCs. VOCs were not detected at concentrations greater than DEQ Clean Fill SLs, DEQ RBCs, or DEQ freshwater sediment ecological RBCs.

One or more PAHs were detected in each of the 27 soil samples analyzed. PAHs were detected at concentrations greater than DEQ Clean Fill SLs in 11 of the soil samples analyzed, including five soil samples collected between 0 and 5 feet bgs, five soil samples collected between 5 and 10 feet bgs, and one soil sample collected between 10 and 15 feet bgs. One or more PAHs were detected at concentrations greater than DEQ RBCs for soil ingestion, dermal contact, and inhalation for residential and/or occupational receptors in three soil samples (WP-9 0-5, WP-10 0-5, WP-12 0-5, and WP-13 0-5) collected between 0 and 5 feet bgs. For soil below 3 feet bgs, the soil ingestion, dermal contact, and inhalation exposure pathway is considered an incomplete exposure pathway for residential and

occupational receptors. PAHs were not detected at concentrations greater than applicable DEQ RBCs for construction or excavation workers.

One or more PAHs were detected at concentrations greater than DEQ freshwater sediment criteria in 22 of the 27 soil samples analyzed (all except for WP-3 0-5, WP-6 0-5, WP-10 5-10, WP-11 5-10, and WP-12 5-10).

Arsenic, chromium, copper, and/or lead were detected at concentrations greater than DEQ Clean Fill SLs in 20 of the 27 composite soil samples analyzed. Except for arsenic in soil sample WP-2 0-5, metals were not detected at concentrations greater than applicable DEQ RBCs in the 27 soil samples analyzed. One or more metals were detected at concentrations greater than DEQ freshwater sediment ecological RBCs in 12 of the 27 soil samples analyzed.

Two of the 27 soil samples (WP-3 0-5 and WP-10 5-10) were analyzed for PCBs. Except for Aroclor 1254 in soil sample WP-3 0-5, PCBs were not detected. The detected concentration of Aroclor 1254 and/or concentration of total PCBs in soil sample WP-3 0-5 of 19.3 µg/kg was less than the DEQ Clean Fill SL and applicable DEQ RBC, but greater than the DEQ freshwater sediment ecological RBC.

### 5.3.5 Previous Soil and Groundwater Sample Summary

Based on the previous soil analytical data, all soil excavated during site redevelopment should be considered restricted fill and will require disposal at a Subtitle-D landfill, either because of the presence of fill material or because of the presence of contaminants at concentrations exceeding DEQ Clean Fill SLs. The analytical results from previous soil and groundwater samples collected from the site indicate that:

- Contaminants were not detected in soil samples at concentrations greater than DEQ *Soil Ingestion, Dermal contact, and Inhalation* RBCs for construction worker and excavation worker receptors, and contaminants were not detected in groundwater samples at concentrations greater than DEQ *Groundwater in Excavation* for construction and excavation worker receptors; therefore, the low concentrations of contaminants in soil and groundwater do not appear to present a risk to future construction and excavation workers.
- Except for PAHs and arsenic, contaminants were not detected in soil samples at concentrations greater than DEQ *Soil Ingestion, Dermal contact, and Inhalation* RBCs for residential receptors.
- Based on the measured depths to groundwater beneath the site, groundwater is not expected to be encountered during site redevelopment. In the unlikely event that groundwater is encountered during excavation, work will stop until this CMMP is revised to include appropriate guidance on appropriate permitting and treatment requirements for dewatering and construction water disposal.
- Contaminants were detected in some soil samples at concentrations greater than DEQ ecological RBCs for freshwater sediment. Appropriate efforts will be made to restrict stormwater flow to catch basins and surface water bodies during construction.

A detailed comparison of previous soil and groundwater sample analytical results to applicable cleanup levels is presented in Haley & Aldrich's draft Risk Assessment for the TASS 2 site (Haley & Aldrich, 2024).

## **6. Worker Safety**

Contamination has not been detected at the site at concentrations greater than DEQ direct-contact RBCs for construction or excavation workers. However, higher concentrations of contaminants may be present in areas not explored. Each entity involved in earthwork-related activities is responsible for the safety of their workers. Prior to beginning site activities, each entity shall prepare a site-specific Health and Safety Plan (HASP) in accordance with Oregon Occupational Safety and Health Administration (OSHA) requirements to cover safety issues related to site environmental and physical hazards and to describe any training requirements, monitoring, and certifications. The HASP shall include the potential exposure to contaminated soil.

As part of the HASP preparation, each involved entity shall assess existing data and the location of the planned work to identify potentially contaminated media as it relates to worker safety. Occupational health guidelines for chemical hazards (i.e., OSHA and the National Institute for Occupational Safety and Health [NIOSH]) can be used to evaluate site conditions. The evaluation should consider exposure limits (i.e., time-weighted average, short term exposure limit, and/or permissible exposure limit), exposure symptoms, and personal protective equipment. Haley & Aldrich environmental personnel who may be on site during future earthwork must have received 40-hour Hazardous Waste Operation and Emergency Response (29 Code of Federal Regulations [CFR] 1910.120) training. Additionally, the City of Portland or the Contractor must have a 40-hour Hazardous Waste Operation and Emergency Response (29 CFR 1910.120) trained representative on site during earthwork activities who is able to identify contaminated media to oversee or observe earthwork activities and direct staff in the correct handling of contaminated media during earthwork activities. Each party involved should assess the need for this training for additional staff or for supervisory staff based on the activities to be performed and current information for the site. Specific recommendations should be provided in the forthcoming HASP to protect worker safety.

All entities shall be responsible for notifying and updating their employees of potential site hazards that may be encountered during the project. Changes may need to be made should additional contamination be discovered. DEQ should be notified if additional unanticipated contamination is discovered during site work. Prior to site work, this CMMP and the HASP must also be provided to employees who will be working on the site, and a list of contacts should be prepared and distributed to all entities involved in work at the site for implementation of this CMMP. This will help ensure timely notification of changing site conditions to maintain the appropriate level of worker safety. All site workers will be responsible for compliance with their HASP, including use of appropriate personal protective equipment.

## **7. Contaminated Media Identification and Management**

Previous environmental investigations at the site identified TPH, VOCs, PAHs, pesticides, and arsenic, cadmium, chromium, copper, mercury, and lead in soil at the site. Prior to any earthwork-related activities, site workers and their employers should review this CMMP. This section presents regulatory requirements, methods to identify and manage contaminated soil, as well as an analytical program to identify uncontaminated media.



Groundwater is not anticipated to be encountered and therefore is not discussed in the CMMP. If groundwater is encountered, work still stop and DEQ will be notified. This CMMP will be modified to address potential groundwater contamination prior to excavation work resuming.

## **7.1 REGULATORY REQUIREMENTS, SCREENING LEVELS, AND CRITERIA**

Certain regulatory requirements, screening levels, and criteria are applicable for managing soil from the site. Future users of this document should review regulatory requirements for updates and revisions. The regulatory factors described below are applicable as of February 2024. While these requirements are primarily applicable during excavation or grading, they also will apply for contaminated media exposed or generated during future site maintenance. These items are described below as they pertain to this site. Additional criteria may be used by disposal facilities to determine whether to accept environmental media from the site for treatment and/or disposal. A disposal permit will be obtained by the City Coordinated Site Assessment (CSA) program under the forthcoming amended NLCID.

### **7.1.1 Clean Fill SLs**

The DEQ has developed guidance and Clean Fill SLs for soil (DEQ, 2019). If contaminant concentrations in excavated soil are below Clean Fill SLs and “...the material type is limited to soil, rock, concrete, brick, building block, tile or asphalt paving and does not consist of putrescible wastes, construction and demolition wastes and industrial solid wastes,” the soil can be used as unrestricted clean fill for placement on and off the site, with the exception that soil cannot be placed in a location where surface water would be affected. Clean Fill SLs are based on RBCs for residential use, ecological SLs for terrestrial receptors, and background levels. Based on the nature of the site and the previous soil sample analytical results, soil generated during site redevelopment cannot be managed as clean fill.

### **7.1.2 Solid Waste Regulations**

Any soil not meeting Clean Fill SLs and that is not considered a hazardous waste would fall under DEQ’s solid waste regulations (Oregon Administrative Rules [OAR] 340-093). At the TASS 2 site, soil generated during site earthwork will be disposed of at a Subtitle D landfill.

### **7.1.3 Risk-Based Concentrations**

Based on toxicity data and standard exposure factors, the DEQ has calculated RBCs to estimate contaminant concentrations in environmental media that are considered protective of ecological receptors and humans, including sensitive groups, over a lifetime. RBCs are used to assess if contaminant concentrations might pose an unacceptable health risk.

### **7.1.4 National Pollution Discharge Elimination System (NPDES)**

NPDES permits set regulatory benchmarks for surface water discharge to a storm sewer system, including runoff from the site during earthwork activities. Site earthwork activities will be conducted in accordance with a forthcoming NPDES 1200-CA permit for the TASS 2 development. DEQ’s Cleanup Program will be provided a copy of the approved 1200-CA permit and will be involved in review of the 1200-CA permit application prior to approval.



## 7.2 IDENTIFICATION OF POTENTIALLY CONTAMINATED SOIL

Each party involved in any earthwork-related construction activities at the site shall be solely responsible for identification of contaminated soil. Each contractor shall monitor soil for evidence of contamination. If site personnel observe media exhibiting characteristics of contaminant impacts, the media in question shall be identified as potentially impacted and handled and characterized as described in Sections 7.3 and 7.4. The following field observations can be used to screen potentially impacted media:

- Staining of soil (dark gray or black in color);
- Chemical or petroleum odors;
- Measurements made with a photoionization detector; and/or
- Sheen on moist or saturated soil.

Note that the absence of these characteristics does not necessarily imply that the media does not contain contaminants. Contaminant concentrations at the site are likely only detectable with the use of environmental testing equipment or analytical testing. As such, chemical analysis of excavated soil is recommended. In addition, all media generated during construction should be assumed to be contaminated and handled accordingly.

The contractor should expect to encounter soil with generally low concentrations of TPH, VOCs, PAHs, pesticides, and metals, and debris including concrete, wood, plastic, brick, piping, and rebar. If unexpected hazardous materials are encountered, the contractors shall:

- Stop all work in that area;
- Notify the BES immediately;
- Ensure no contaminated material is hauled from the site;
- Remove the work force from the immediate area of the contamination;
- Involve an environmental consultant; and
- Secure the area from access by the public to prevent unauthorized entry prior to and during construction activities.

## 7.3 HANDLING OF CONTAMINATED MEDIA

Except for the septic treatment tanks, which will include excavations to a maximum depth of 9 feet bgs, only shallow soil will be excavated during site redevelopment. Groundwater is not expected to be encountered during site redevelopment. Soil generated during the planned redevelopment of the site cannot be managed as clean fill. Because of the presence of listed hazardous wastes from an off-site source in deep soil and groundwater at the site, soil generated during the planned redevelopment must be disposed of at an RCRA Subtitle D landfill as non-hazardous waste under a NLCID from DEQ. The previous NLCID for the site only applies to specific drums and IDW. The existing NLCID will be amended to include soil generated during planned site redevelopment. The City of Portland should use the forthcoming amended NLCID to support a disposal permit for soil generated during site redevelopment. The forthcoming NLCID will be added to Appendix C upon issuance. Care should be taken to minimize worker exposure to contaminated soil in accordance with the forthcoming site-specific HASP.

## 7.4 ANALYTICAL PROTOCOLS FOR MEDIA CHARACTERIZATION

Specific media characterization requirements should be negotiated with the receiving facility. The receiving facility may determine that recent analytical data collected by BES may be adequate to support a disposal permit.

If additional soil samples are collected, samples should undergo a minimal amount of disturbance during sample collection. Generally, all sample containers should be filled to the top, leaving no observable head space. Protocol may vary depending on the contaminant of concern, particularly VOCs, if collected. Samples should then be stored in a cooler at 4 degrees Celsius (°C)  $\pm$  2°C from collection to receipt by the analytical laboratory. Chain of custody documentation must be maintained. The laboratory must be certified by Oregon and/or National Environmental Laboratory Accreditation Program (ORELAP and NELAP, respectively). Soil samples should be analyzed for RCRA 8 metals by EPA Method 6010/6020 and/or 7471, gasoline-range hydrocarbons by Northwest Method NWTPH-Gx, diesel-range hydrocarbons by Northwest Method NWTPH-Dx, VOCs by EPA Method 5035/8260B, organochlorine pesticides by EPA Method 8081A, and PAHs by EPA Method 8270-SIM. The receiving facility may require additional analyses.

Method reporting limits for the above tests shall be consistent with industry standards and less than that required for disposal or regulatory screening criteria (e.g., Clean Fill guidelines of DEQ [2019]), as appropriate.

Waste characterization should adequately determine the nature and magnitude of contamination; consult with the waste disposal facility for current sampling and analysis requirements to ensure acceptance of the waste materials by the facility. These may include composite sampling or other methods to help reduce overall analytical costs. If additional soil samples are required by the receiving facility, they may be collected *in situ* prior to earthwork activities or from stockpiles of excavated material.

## 7.5 OFF-SITE TRANSPORT AND DISPOSAL

The City is responsible for obtaining appropriate soil disposal permits from the permitted landfill facility(s) under the forthcoming amended NLCID prior to the contractor hauling the impacted soil or other materials off site. The City will likely need to provide a copy of the chemical analytical laboratory report to the selected disposal facility. Copies of the permit should accompany each load transported to the selected disposal facility.

Disposal facilities often have the following requirements prior to accepting soil at their facility:

- Contaminated soil will not be received without first completing a soil profile sheet, obtaining a permit (to be completed by the City), having an approval of credit application on file, and having pre-approval from the disposal facility.
- Trucks will be permitted to weigh in as negotiated with the facility.
- Material may be sampled during delivery by the disposal facility. Comparisons may be made between the submitted profile and on-site analysis. Any material's profile that does not compare to the delivered material may be rejected.
- Exported soil must not contain any free liquids or foreign material (i.e., rebar, fittings, cans, wood, etc.). Truckloads found with excessive foreign material may be reloaded and returned to

the customer or screened, sorted, and disposed of by the disposal facility for an additional fee. Truckloads with free liquids may be rejected or charged an additional solidification fee.

- BES and DEQ shall be notified and approve of all off-site soil disposal locations.

## **7.6 STOCKPILE MANAGEMENT**

Soil generated during excavation that cannot be immediately transported off site can be temporarily stockpiled on the TASS 2 site or in other areas on the West Property designated by BES. Excavated material that is placed in temporary stockpiles must be well maintained at all times. All stockpiled material must be placed on impermeable plastic sheeting (minimum 6-mil-thick) with a berm around the perimeter of the stockpile. The plastic sheeting and berm must be constructed to prevent the runoff of soil and contaminants to surrounding areas. The berm will be constructed with either hay bales or dimensional lumber. The bottom plastic sheeting should be lapped over the berm materials and the soil stockpile covered with plastic sheeting to prevent erosion or leaching of contaminants to underlying soil and to prevent exposure to precipitation and wind. Plastic sheeting that covers the soil stockpile should be secured using sandbags or equivalent.

Stockpiles must be clearly designated as to the nature of the stockpiled soil (e.g., contaminated soil, pending analysis, or awaiting transport), either with signage or stakes with different colored flagging. The locations and nature of each stockpile should be discussed during daily work meetings. There are currently no plans to stockpile soil outside of the West Property. Off-site stockpiling of soil will not be conducted unless DEQ approves an off-site soil stockpile location and provides a Solid Waste Letter of Authorization. Following removal, the stockpile areas should be restored to a pre-stockpile condition. Residual plastic or debris should not be left unattended at the site and must be properly disposed of following stockpile removal.

## **7.7 LOADING AND HAULING**

Material intended for off-site disposal can be loaded directly into trucks for transport to the receiving facility once the appropriate permitting has been completed and field screening protocols implemented, as appropriate. All truck loading will occur on the West Property. The contractor must exercise care during loading of the impacted material to help minimize spillage of the material onto the ground surface. All trucks leaving the West Property will be free of loose soil on the exterior of the trucks and tires, will have loads sitting below the bed walls, and beds will be covered with tight fitting covers. Impacted soil loaded into trucks will be covered during transport to the disposal facility. The contractor must use care not to track soil onto roads and must implement additional BMPs if soil is observed tracked onto roads. Trucks should not be allowed to leave the West Property if liquids are draining from the load. Transport tracking tickets may be required, which document the haul to the approved disposal facility for each truck leaving the West Property.

## **7.8 WHEEL WASH**

Standard site entry BMPs, including stabilized construction entrances/exits (e.g., rock pad) to the construction site and gravel filter berms, will be implemented at the site in accordance with Section 4.2 of the City of Portland's Erosion and Sediment Control Manual dated October 2022. If sediment is tracked off site during construction, additional BMPs shall be implemented, including washing wheels before vehicles leave the site. Wheel washing will be completed on the rock pad or in an approved wheel wash structure, as specified in Section 4.2 of the City of Portland's Erosion Control Manual dated

March 2008. The wheels will be washed before crossing the construction exit to leave the site. Wheel wash water will be containerized by constructing a wheel wash station consisting of a paved or lined shallow depression to hold wheel wash water, or by installing a specialized system consisting of a large surface pad with direct drainage to a large sump. Water generated during wheel washing will be periodically disposed of to the City of Portland sanitary sewer system under a forthcoming batch discharge authorization.

## **7.9 EROSION AND DUST CONTROL**

Exposed soil will become susceptible to erosion by wind and water; therefore, erosion control measures should be planned carefully and in place before excavation and stockpiling begin. Silt fences, fiber rolls or compost socks, and/or gravel haul roads will be used as required to reduce sediment transport during construction to acceptable levels. Measures to reduce erosion should be implemented in accordance with the State of Oregon 1200-CA Construction Stormwater Discharge General Permit. Erosion and dust control measures will be presented in an Erosion and Sedimentation Control Plan (ESCP) for on- and off-site portions of the site. The anticipated erosion and dust control measures to be outlined in the ESCP include the use of sediment fences, inlet protection, gravel construction entrances, and biofilter bags where necessary.

## **7.10 RIGHT-OF-WAY EXCAVATION**

Right-of-way (ROW) excavation activities shall comply with the City of Portland's Hazardous Substances requirements (PCC 17.24.067). Contaminated soil encountered during excavation work within the ROW will be managed in accordance with this CMMP. The City of Portland's Hazardous Substances code requires that residual contaminated soil left in-place within the ROW after excavation activities be characterized and demarked using orange geotextile fabric or similar material.

## **7.11 IMPORTED FILL MATERIAL**

All fill material imported to the site shall consist of either a manufactured rock product (e.g., 0.75-inch-minus crushed rock from a permitted rock quarry) or must be free of contaminants at concentrations exceeding DEQ's Clean Fill SLs. It is the contractor's responsibility to ensure all imported fill material meets these criteria and provide BES with the imported origin information and accompanying documentation demonstrating the material meets DEQ Clean Fill SLs, if not using a manufactured rock product. If a non-manufactured rock material is used, test results demonstrating that the material meets DEQ Clean Fill SLs must be reviewed and approved by DEQ prior to being brought onsite. In addition, if evidence of contamination is observed in imported fill material, the contractor should reject the imported backfill and identify an alternate source. Also, any material imported as structural backfill should be evaluated and approved by the geotechnical engineer before placement on the site.

## **7.12 CONTRACTOR REPORTING REQUIREMENTS**

The contractor is responsible for keeping a detailed daily record of all soil excavation, stockpiling, export, and disposal activities. This includes the purpose, origin, destination, and volume of soil that is: (1) loaded and hauled to the approved off-site disposal sites; (2) reused on the site; or (3) transported to temporary soil stockpile locations on the West Property. The contractor is responsible for preparing a daily field report for distribution to BES representatives that identifies the number of truckloads and tonnage of soil transported off site and daily tonnage for each disposal location. All soil excavation, handling, and disposal activities should be documented in daily field reports by the contractor, and soil

sampling and chemical analytical data shall be summarized in a final report upon the completion of construction that will be submitted to DEQ.

### **7.13 PERMITS AND APPROVALS**

All involved parties are responsible for obtaining the appropriate permits for construction activities at the site. These may include but are not limited to general construction/erosion control permits and disposal permits. For disposal of soil and water, the landfill or treatment facility should be contacted regarding their acceptance and chemical analysis requirements prior to beginning work. The landfill or treatment facility may accept the data listed herein for disposal characterization; however, it is likely that more recent data will be required for profiling. Copies of all approved permits obtained to complete the work will be included in the Construction Completion report.

## **8. Communications**

The key personnel and roles and responsibilities for communication during construction are summarized below:

### **City of Portland Project Contact**

Ms. Taryn Meyer, Hydrogeologist  
Bureau of Environmental Services  
1120 SW 5th Avenue, Suite 613  
Portland, Oregon 97204  
503.823.8155  
[taryn.meyer@portlandoregon.gov](mailto:taryn.meyer@portlandoregon.gov)

Ms. Meyer will have the role of primary City contact during implementation of the RA. Ms. Meyer has overall responsibility for project performance and meeting regulatory requirements.

### **General Contractor Project Manager**

Mr. Luis Lopez  
Fulcrum Construction  
971.201.6843  
[luis.l@fulcrumpdx.com](mailto:luis.l@fulcrumpdx.com)

Mr. Lopez will have the role of construction manager during completion of the TASS 2 project.

### **Haley & Aldrich Project Manager**

Mr. Colby Hunt  
6420 S. Macadam, Suite 100  
Portland, Oregon 97239  
971.327.9103  
[chunt@haleyaldrich.com](mailto:chunt@haleyaldrich.com)

Mr. Hunt will have the role of Environmental Consultant during implementation of the RA. The Environmental Consultant in collaboration with the contractor has responsibility for implementation of the CMMP. The Environmental Consultant is responsible for oversight during installation of the

protective cap, response if notified of suspected contamination beyond that described in Section 5.0 is encountered, sampling and analysis (if conducted) evaluation of disposal requirements and options for contaminated soil management, and response to other environmental issues that may develop.

**Oregon Department of Environmental Quality (DEQ) Project Manager**

Ms. Sarah Greenfield

Oregon Department of Environmental Quality

700 Multnomah Street, Suite 600

Portland, Oregon

503.229.5245

[sarah.greenfield@deq.oregon.gov](mailto:sarah.greenfield@deq.oregon.gov)

Ms. Greenfield is responsible for environmental regulatory oversight during implementation of this CMMP.

## **9. Reporting**

Following completion of earthwork activities, a Construction Completion Report will be prepared and submitted to DEQ for review and approval. The Construction Completion Report will include a description of methods and procedures used during cap construction, a summary of observations during earthwork activities, final copies of all approved permits, and a summary of media management and disposal.

## **10. Schedule**

It is anticipated that ground disturbing activities will begin immediately upon receiving DEQ approval of this draft CMMP. Construction of the protective cap and any other remedial elements of the TASS 2 development will begin following DEQ review and approval of the draft Risk Assessment and the draft RAP. The Construction is anticipated to be completed within 60 days after the initiation of construction activities. DEQ will be notified at least 10 days before construction activities commence. The Construction Completion Report will be submitted to DEQ within 60 days of completion of construction.

## **11. Limitations**

This CMMP is intended to provide procedures for identifying and managing potentially contaminated soil encountered during earthwork and ground-disturbing activities only on the portion of the West Property comprising the site. Haley & Aldrich prepared this CMMP in accordance with generally accepted professional practices related to the nature of the work specified in the CMMP, in the same or similar localities, at the time this plan was prepared. Future users of this plan shall consider changes that may have occurred in environmental practices, regulations, and guidance, including risk-based and Clean Fill criteria since plan preparation. No other warranty, express or implied, is made.

## References

1. DEQ, 2019. Clean Fill Determinations. February 21.
2. DEQ, 2020. Conducting Ecological Risk Assessments. September 14.
3. DEQ, 2023. Risk-Based Concentrations for Individual Chemicals. Revised August.
4. Kleinfelder, 2000. Limited Site Investigation and Groundwater Monitoring, Backfilled Retention Ponds, 10505 North Portland Road, Portland Oregon. July 6.
5. NRCS, 2023. Web Soil Survey, accessed November 2023 at:  
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
6. PNG, 1999. Phase II Environmental Investigation, Larsen Property, 10505 North Portland Road, Portland, Oregon. November 12.
7. Haley & Aldrich, 2024. Draft Risk Assessment, Former North Larsen Property, 10505 North Portland Road, Portland, Oregon, dated 29 January.

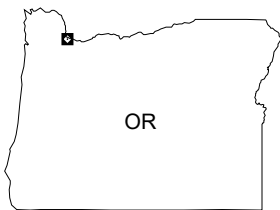
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FIGURE





GIS: \\haleyaldrich.com\share\CF\Projects\0209772\GIS\209772\_COP\_WEST\_PARCEL.aprx - ayabu - 11/19/2023 11:32 AM



OR



MAP SOURCE: ESRI  
SITE COORDINATES: 45°35'59"N, 122°43'22"W

**HALEY  
ALDRICH**

CONTAMINATED MEDIA MANAGEMENT PLAN  
WEST PROPERTY - TASS 2 SITE  
10505 N PORTLAND ROAD  
PORTLAND, OREGON 97203

## VICINITY MAP

APPROXIMATE SCALE: 1 IN = 2000 FT  
MAY 2024

**FIGURE 1**


## APPENDIX A

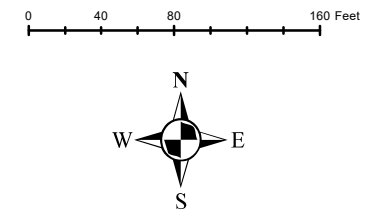
### City of Portland Bureau of Environmental Services Figures





Former North  
Larsen Property  
10505 N Portland Rd  
  
1996

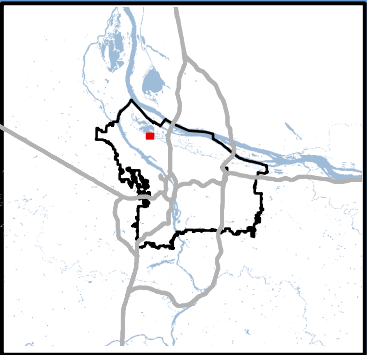
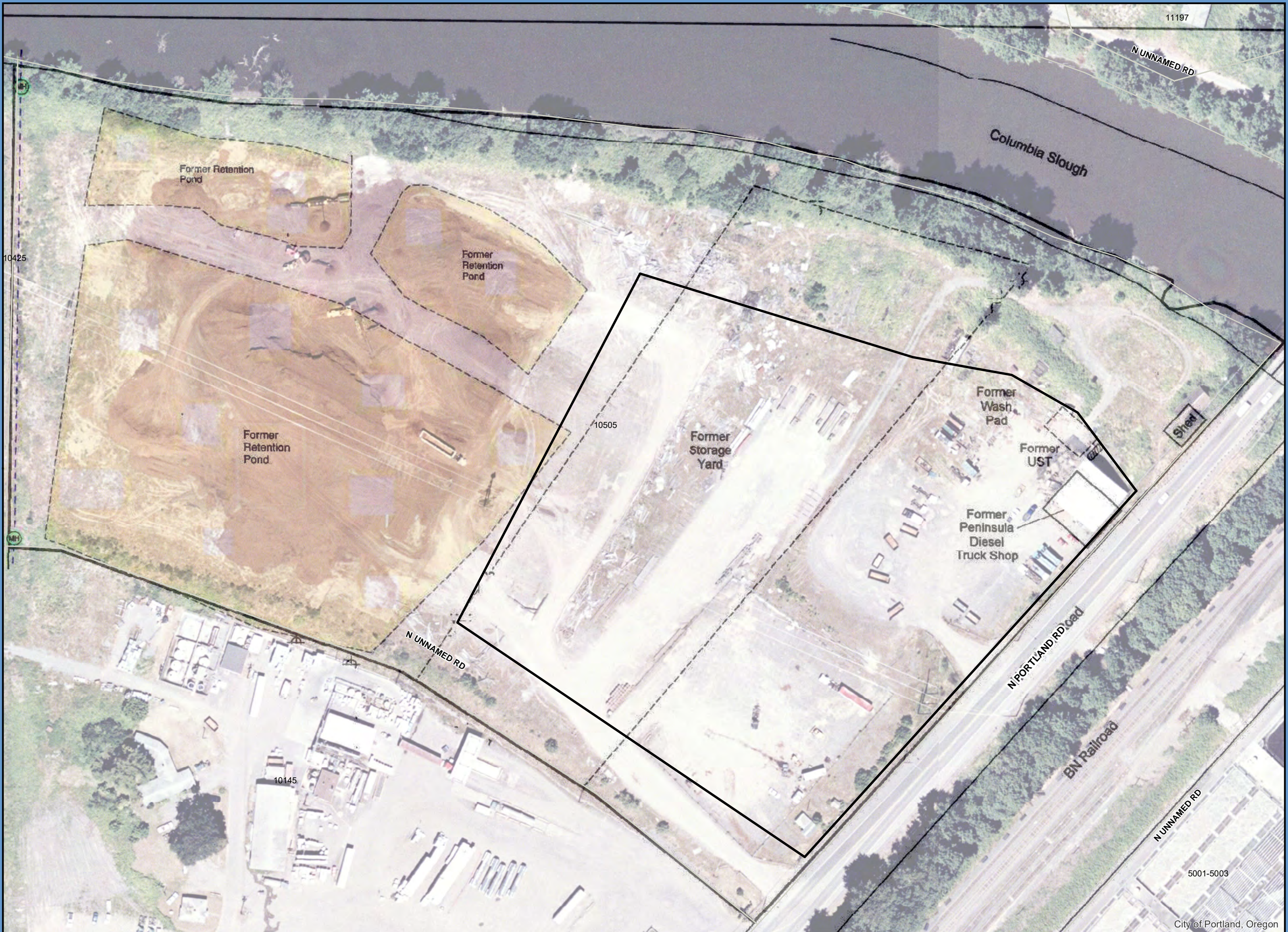
**Map Symbols**  
 RV Shelter  
Boundary



Map Created by: cmcelhaney February 23, 2024

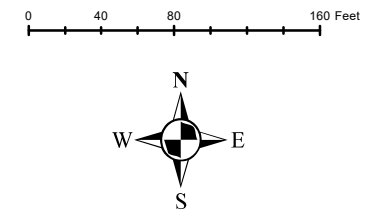






Former North  
Larsen Property  
10505 N Portland Rd  
2000

**Map Symbols**  
RV Shelter  
Boundary



Map Created by: cmcelhaney February 23, 2024

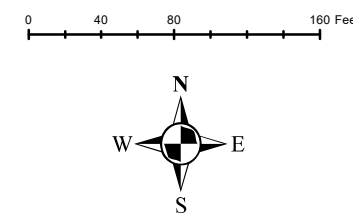






Former North  
Larsen Property  
10505 N Portland Rd  
  
2005

**Map Symbols**  
RV Shelter  
Boundary



Map Created by: cmcelhaney February 23, 2024



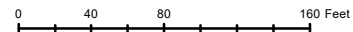




Former North  
Larsen Property  
10505 N Portland Rd  
  
2010

### Map Symbols

 RV Shelter  
Boundary



Map Created by: cmcelhaney

February 23, 2024






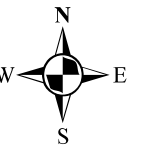


Former North  
Larsen Property  
10505 N Portland Rd  
  
2015

### Map Symbols

 RV Shelter  
Boundary

0 40 80 160 Feet



Map Created by: cmcelhaney

February 23, 2024



City of Portland, Oregon






Former North  
Larsen Property  
10505 N Portland Rd

2021

### Map Symbols

 RV Shelter  
Boundary

0 40 80 160 Feet



Map Created by: cmcelhaney

February 23, 2024



City of Portland, Oregon





Map Produced in ArcMap



## West Property RV Shelter Soil Sampling Locations

### Legend

- BES Sample Points
- PNG Sample Points
- Kleinfelder Sample Points
- BES Test Pit Sites
- Vegetated Area
- Project Area

0 65 130 260 Feet



Map Created by: cmcelhaney February 22, 2024



City of Portland, Oregon



## APPENDIX B

### Preliminary Development Plans and Septic System Plans

# TEMPORARY ALTERNATIVE SHELTER SITE 2 - DEVELOPMENT REVIEW

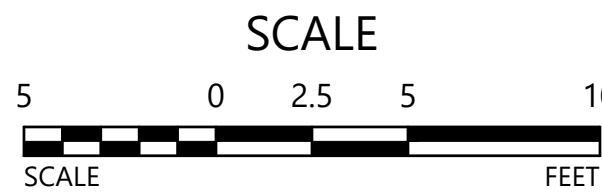
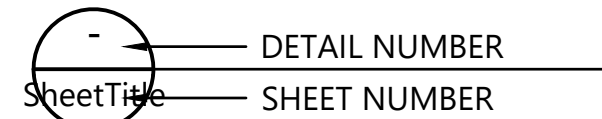
## PROJECT TEAM

OWNER	GENERAL CONTRACTOR	ARCHITECT
CITY OF PORTLAND OFFICE OF MANAGEMENT AND FINANCE 1120 SW 5TH AVENUE PORTLAND, OR 97204 CONTACT: MICHELLE LADD PH: 503.823.8344 EMAIL: MICHELLE.LADD@PORTLANDOREGON.GOV	FULCRUM CONSTRUCTION 12125 SW 2ND STREET BEAVERTON, OR 97005 CONTACT: LUIS LOPEZ PH: 971.201.6842 EMAIL: LUIS.L@FULCRUMPD.COM	SOSYAL ARCHITECTURE AND COMMUNITY DEVELOPMENT, LLC P.O. BOX 19833 PORTLAND, OR 97280 CONTACT: SERMIN YESILADA PH: 503.922.9099 EMAIL: SYESILADA@SOSYALARCHITECTURE.COM

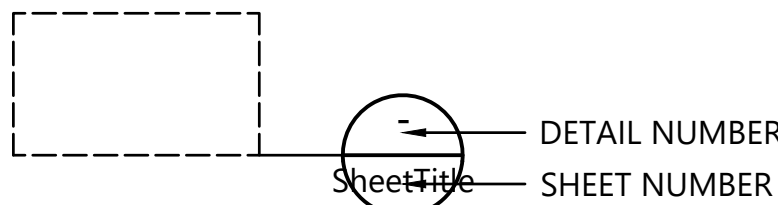
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A09	TREE PROTECTION PLAN

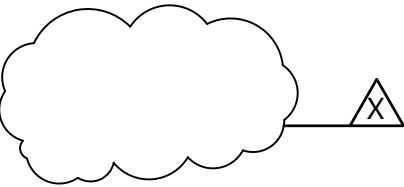
## SYMBOLS



DRAWING TITLE



DETAIL CALLOUT



REVISION MARK AND CLOUD



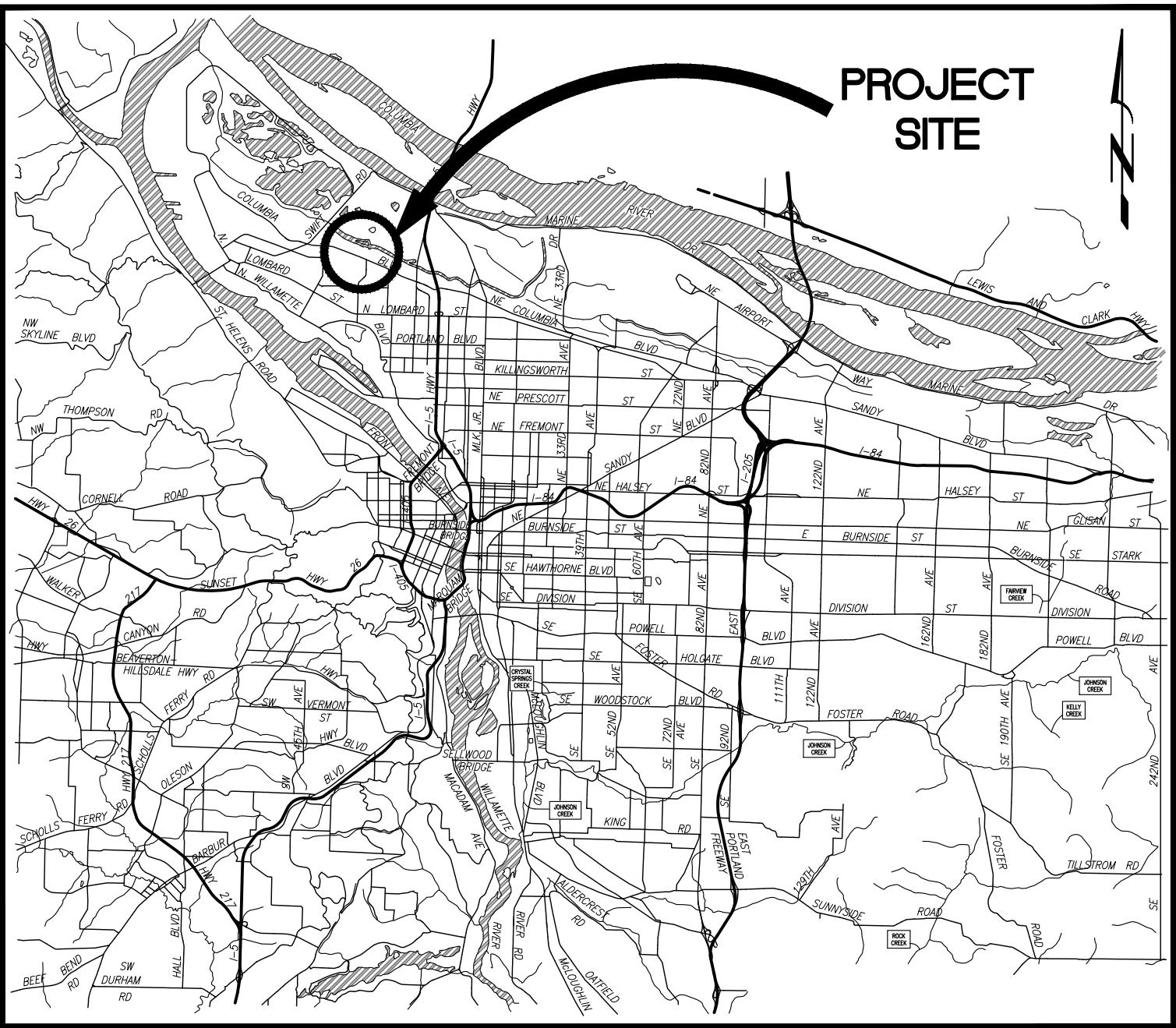
NORTH ARROW



ELEVATION HEIGHT, DATUM POINT



KEYNOTE



PORTLAND, OREGON  
VICINITY MAP  
NOT TO SCALE

## ABBREVIATIONS

AC.	ACRE	GA.	GAUGE	P	POWER OR SIGNAL POLE	U	UNKNOWN
AL	ALIGNMENT	GALV	GALVANIZED	PC	POINT OF CURVATURE	UG	UNDERGROUND
AGGR	AGGREGATE	GEN	GENERAL	PE	PROFESSIONAL ENGINEER		
ANG	ANGLE POINT	GR	GUARDRAIL	PED	PEDESTRIAN	VAR	VARIES OR VARIABLE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE			PERF	PERFORATED	VERT	VERTICAL
APPROX	APPROXIMATE	H	HEIGHT	PERM	PERMANENT		
ASPH	ASPHALT	HORIZ	HORIZONTAL	PGE	PORTLAND GENERAL ELECTRIC	W	WEST, WIDTH, OR WATER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS			PL, P/L	PROPERTY LINE	WF	WATER FAUCET OR HOSE BIB
AVE	AVENUE	ID	INSIDE DIAMETER	PP	POWER POLE	WM	WATER METER
		IN.	INCHES	PROF	PROFILE	WS	WATER STANDPIPE
BES	BUREAU OF ENVIRONMENTAL SERVICES	INCL	INCLUDE	PS	PUMPING STATION	W/	WITH
BOTT	BOTTOM	INST	INSTALL OR INSTRUMENT	PSI	POUNDS PER SQUARE INCH	W/O	WITHOUT
BDRY	BOUNDARY			PVMT	PAVEMENT	YD	YARD
BR	BRIDGE	J	JUNCTION BOX				
BKFL	BACKFILL	JCT	JUNCTION	QC	QUARTER SECTION CORNER		
BKWY	BIKEWAY						
BLK	BLOCK	KM	KILOMETER	R	RADIUS		
BLVD	BOULEVARD			RD	ROAD		
BLDG	BUILDING	LIN	LINEAL, LINEAR	RDWY	ROADWAY		
BM	BENCH MARK	LOC	LOCATION	REQ'D	REQUIRED		
BWW	BUREAU OF WATER WORKS	LP	LIGHT POLE	REV	REVISE		
		LT	LEFT	RR	RAILROAD		
CL	CENTERLINE	LV	LEVEL	RT	RIGHT		
CLR	CLEARANCE			R/W.	ROW/R.O.W.		
CONC	CONCRETE	M	METER	S	SOUTH OR SLOPE		
CONN	CONNECTION	MATL	MATERIAL	SALV	SALVAGE		
CONST	CONSTRUCT	MAX	MAXIMUM	SAN			
CP	CONTROL POINT	MH	MAINTENANCE HOLE	SC	SECTION CORNER		
CU.	CUBIC	MIN	MINIMUM	SE	SOUTHEAST		
CY	CUBIC YARD	MOD	MODIFIED	SEC	SECTION		
		MULTI	MULTIPLE	SEG	SEGMENT		
D	DEGREE OF CURVE OR DELTA			SF, SQ FT	SQUARE FEET		
DIA	DIAMETER	N	NORTH	ST	STREET		
DR	DRIVE	NE	NORTHEAST	STD	STANDARD		
DWG	DRAWING	NO.	NUMBER	STL	STEEL		
DWY	DRIVEWAY	NOM	NOMINAL	STM	STORM, STORM SEWER		
		NORM	NORMAL	SU	SUMP		
E	EAST	NTS	NOT TO SCALE	SURF	SURFACE		
EL, ELEV	ELEVATION	NW	NORTHWEST	SW	SOUTHWEST		
ELEC	ELECTRICAL			S/W	SIDWALK		
EMB	EMBANKMENT	OC	ON CENTER				
ESMT	EASEMENT	OD	OUTSIDE DIAMETER	TBM	TEMPORARY BENCHMARK		
EW	EACH WAY	ODOT	OREGON DEPARTMENT OF TRANSPORTATION	TC	TOP OF CURB OR TRAFFIC CONTROL		
EXC.	EXCAVATION	OH	OVERHEAD LINES	TEMP	TEMPORARY		
EXIST, EXTG, EX.	EXISTING	OSHD	OREGON STATE HIGHWAY DIVISION	THKN	THICKNESS		
				TOPO	TOPOGRAPHY		
				TP	TOP OF PAVEMENT		
				TYP	TYPICAL		
FDTN	FOUNDATION						
FFE	FINISHED FLOOR ELEVATION						
FF	FINISHED FLOOR						
FH	FIRE HYDRANT						
FIN	FINISHED						
FT	FOOT OR FEET						

CITY OF PORTLAND VERTICAL DATUM AND OCRS83.PORTLANDIF

CITY OF PORTLAND  
TEMPORARY ALTERNATIVE SHELTER SITE 2

COVER SHEET  
10505 NORTH PORTLAND ROAD  
PORTLAND, OR 97209

1/4 SECTION  
1924, 1925  
JOB NO.  
23003.01  
SHEET NO.  
A0.0  
1 OF 10

CITY OF PORTLAND  
ENVIRONMENTAL SERVICES

MINGUS MAPPS  
COMMISSIONER

APPROVAL

PAUL SUTO, P.E.  
CHIEF ENGINEER

ENVIRONMENTAL SERVICES CHIEF ENGINEER  
REG. PROF. ENGR. NO. 82245



PERMIT SET 2.14.2024

NO.	DATE	DESCRIPTION	APPD.
		REVISION	

XREF(S) USED:	:2023-11-15 MFD8000304 10505 N Portland Rd TOPO,COP SITE 2 -S
ROTATION ANGLE:	0x0'0"
CONSTRUCTED BY:	
PROJECT COMPLETED	
MAP CORRECTED BY:	CHECKED BY
	FINAL MAP DATA
DRAWING NAME:	COP TASS 2 - DEVELOPMENT REVIEW SET 1.31.24.dwg

DESIGNED BY	DATE APPROVED
1.31.24	
DRAWN BY	ENGR. SUPV.
CHECKED BY	ENGR. DIV. MGR.
BES DESIGN LEAD	CONST. DIV. MGR.

C:\USERS\15039\DOCUMENTS\PROJECTS\23003.00 COP URBAN CAMPGROUNDS\BES SITE\DWGS\3- CADD\COP TASS 2 - DEVELOPMENT REVIEW SET 1.31.24.DWG

SITE PLAN NOTES

1. SITE PLAN BASED ON SURVEY PROVIDED BY BUREAU OF ENVIRONMENTAL SERVICES.
2. CONTRACTOR TO VERIFY ALL EXISTING UTILITY LOCATIONS.

PROJECT DESCRIPTION

THE PROJECT IS A TEMPORARY OUTDOOR SHELTER FOR UP TO 250 GUESTS WITH 90 SLEEPING UNITS, 70 RV SAFE PARKING SPACES, VEHICLE PARKING, AND COMMON RESTROOM, SHOWER, LAUNDRY, KITCHENETTE, STORAGE, CENTRAL WASTE COLLECTION, AND COVERED OUTDOOR COMMUNITY SPACES. THE OUTDOOR SHELTER FACILITY HAS 24 HR/7 DAYS A WEEK ONSITE MANAGEMENT. MEALS WILL BE DELIVERED TO THE SITE, REHEATED ONSITE, AND DELIVERED 1X DAILY. THERE ARE MICROWAVES IN THE KITCHENETTE CONEX.

SITE INFORMATION

SITE DESCRIPTION:  
PROPERTY ID:  
STATE ID:  
SITE LOCATION:  
  
SITE SIZE:  
APPROXIMATE ELEVATION:  
AREA OF WORK:

SECTION 05 1N 1E, TL 1000  
R314548  
1N1E05B 1000  
10505 NORTH PORTLAND ROAD  
PORTLAND, OR 97205  
22.50 ACRES  
35' ABOVE SEA LEVEL  
285, 336 SF, 6.5 ACRES  
INCLUDING SWALES, HOLDING  
TANK AREA, AND (E) S.O.G.  
265, 111 SF, 6 ACRES EXCLUDING  
SWALES, HOLDING TANK AREA,  
AND (E) S.O.G.

ZONING SUMMARY:

CLASSIFICATION: IG2 - GENERAL INDUSTRIAL 2  
c;k - ENVIRONMENTAL CONSERVATION  
PRIME INDUSTRIAL  
k - PRIME INDUSTRIAL  
NO PLAN DISTRICT  
5' MINIMUM FRONT, SIDE, REAR

PROJECT DATA:

PROJECT TYPE: TEMPORARY OUTDOOR SHELTER  
BUILDING/ACCESSIBILITY CODES: CITY OF PORTLAND TEMPORARY OUTDOOR SHELTER  
CODE GUIDE 2022  
OREGON ADMINISTRATIVE RULES 918 SECTION 650  
RECREATIONAL PARKS AND ORGANIZATIONAL  
CAMPS  
OREGON STRUCTURAL SPECIALTY CODE 2022  
ICC/ANSI 117.1-2017  
PORTLAND FIRE CODE 2021 BASED ON THE 2018  
INTERNATIONAL FIRE CODE AND 2019 OREGON FIRE  
CODE

TEMPORARY OUTDOOR CODE GUIDE:

PROPOSED NUMBER OF UNITS: 90 SLEEPING PODS, INCLUDING 4 ADA  
2 DE-ESCALATION PODS  
  
PROPOSED NUMBER OF SAFE  
PARKING SPACES: 70  
  
PROPOSED NUMBER OF VEHICLE  
PARKING SPACES: 143  
113 GUEST, 30 STAFF AND VISITORS  
10 ADA (6 FOR GUESTS, 4 FOR STAFF AND VISITORS)

MINIMUM SEPARATION DISTANCE:

TEMPORARY OUTDOOR SHELTER  
CODE GUIDE SECTION IV.A.b  
6' BETWEEN STRUCTURE EQUIPPED WITH ELECTRICAL  
CONNECTIONS SERVICING A RADIANT PANEL HEAT  
SOURCE, SMOKE DETECTOR, LIGHT, LIGHT SWITCH,  
AND ELECTRICAL OUTLET (PLUG.)  
APPEAL NO: 31525, APPEAL IN PROGRESS  
  
10' BETWEEN SAFE PARKING SPACES

BUILDING SUMMARY:

STRUCTURE TYPE 1: PREFABRICATED SLEEPING POD. 64 SF. EACH  
PREFABRICATED OFFICE POD. 64 SF. EACH  
STRUCTURE TYPE 2: PREFABRICATED DE-ESCALATION POD. 64 SF. EACH  
PREFABRICATED RESTROOM, LAUNDRY, KITCHENETTE  
STRUCTURES. 320 SF EACH.  
STRUCTURE TYPE 3: PREFABRICATED COVERED OUTDOOR CARPORT FOR  
COMMUNITY GATHERING. PRE-APPROVED. 18'X30'  
STRUCTURE TYPE 4: PREFABRICATED TRASH ENCLOSURE BUILDING UNDER  
SEPARATE PERMIT.  
STRUCTURE TYPE 5: PREFABRICATED STORAGE CONTAINER. 416 SF.

BUILDING FIRE DETECTION/SUPPRESSION:

FIRE SPRINKLER SYSTEM: NOT REQUIRED FOR PREFABRICATED UNITS  
FIRE ALARM SYSTEM: NOT REQUIRED FOR PREFABRICATED UNITS  
SMOKE ALARMS: REQUIRED (907.2.11.2) IN EACH SLEEPING UNIT  
PROVIDED IN HYGIENE, KITCHENETTE, AND OFFICE  
UNITS  
  
CARBON MONOXIDE ALARMS: REQUIRED (908.7.2) IN EACH SLEEPING UNIT

ACCESSIBILITY SUMMARY:

MOBILITY ACCESSIBLE UNITS: 4 UNITS IDENTIFIED ON PLAN WITH  
(TYPE A UNIT PER ICC A117.1-2017) ACCESSIBILITY SYMBOL

RESTROOM/SHOWER/LAUNDRY/COOKING FACILITIES: 245 GUESTS

	REQUIRED	PROVIDED
TOILETS:	1:25 (4 FOR 1ST 100) 10 TOTAL	10 TOILETS + 6 PORTABLE (1 ADA)
LAVATORIES	1:30 (5 FOR 150) 9 TOTAL	10 LAVS + 3 HANDWASH STATIONS (1 ADA)
SHOWERS:	0	10 (1 ADA)
WASHERS AND DRYERS:	0	11 (1 ADA)
COOKING (FOOD STORAGE, MICROWAVES, CONVECTION REHEATING)	1	1

SECTION 05 1N 1E, TL 1000  
R314548  
1N1E05B 1000  
10505 NORTH PORTLAND ROAD  
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22.50 ACRES  
35' ABOVE SEA LEVEL  
285, 336 SF, 6.5 ACRES  
INCLUDING SWALES, HOLDING  
TANK AREA, AND (E) S.O.G.  
265, 111 SF, 6 ACRES EXCLUDING  
SWALES, HOLDING TANK AREA,  
AND (E) S.O.G.

BUILDING INFORMATION:

CONSTRUCTION TYPE: VB  
  
OCCUPANCY: R-2, B, S-1, A-3  
  
MEANS OF EGRESS SIZING: 2" PER 245 OCCUPANTS  
49" MIN. REQUIRED

LEGEND

- SITE ENTRY
- PATH OF TRAVEL
- PROPERTY LINE
- SETBACKS
- CHAIN LINK FENCE
- SLEEPING POD
- TREE TO BE REMOVED
- TREE TO REMAIN
- UNDERGROUND HOLDING  
TANK
- WATER LINE
- OVERHEAD POWER  
TRANSMISSION LINES
- ADA ACCESSIBLE UNIT OR  
PARKING SPACE
- LANDSCAPED AREA
- ENVIRONMENTAL  
CONSERVATION ZONE
- 100 YR FLOOD ZONE
- 1996 FLOOD ZONE
- STORMWATER SWALE  
SEE CIVIL DRAWINGS

SCALE

0' 20' 50' 100' 175'

OCCUPANT LOAD FOR STRUCTURES\*:

STRUCTURE	AREA	TYPE	LOAD FACTOR	FACTOR TYPE	OCCUPANCY LOAD
SLEEPING POD	64 SF	R-2	1:200	GROSS	1 EA. X 90 = 90
DE-ESCALATION POD	64 SF	B	1:150	GROSS	1 EA. X 2 = 2
OFFICE POD	64 SF	B	1:150	GROSS	1 EA. X 12 = 12
KITCHEN	320 SF	A-3 ACCESSORY	1:200	GROSS	2
HYGIENE STATION	320 SF	B	1:150	GROSS	2 EA. X 3 = 6
STORAGE CONEX	416 SF	S-1	1:300	GROSS	2
TRASH ENCLOSURE	784 SF	S-1	1:300	GROSS	3
COVERED OUTDOOR COMMUNITY AREA	540 SF	A-3	1:15	NET	36

TOTAL

153

\*NOT INCLUDING RECREATIONAL VEHICLES

1 SITE PLAN OVERALL

SCALE: 1:75

XREF(S) USED:	2023-11-15 MFD0000304 10505 N Portland Rd TOPO\COP SITE 2 - SITE PLAN 1.31.24
ROTATION ANGLE:	0d0'0"
CONSTRUCTED BY	
PROJECT COMPLETED	
MAP CORRECTED BY	CHECKED BY
APPD.	FINAL MAP DATA
DRAWING NAME:	COP TASS 2 - DEVELOPMENT REVIEW SET 1.31.24.dwg

DESIGNED BY	SV. LB	DATE APPROVED	
DRAWN BY	SV	ENGR. SUPV.	
CHECKED BY	SV	ENGR. DIV. MGR.	
BES DESIGN LEAD	LB. SV	CONST. DIV. MGR	

CITY OF PORTLAND  
ENVIRONMENTAL SERVICES



PERMIT SET 2.02.2024

CITY OF PORTLAND  
TEMPORARY ALTERNATIVE SHELTER SITE 2

OVERALL SITE PLAN AND CODE SHEET  
10505 N PORTLAND ROAD  
PORTLAND, OR 97209

1/4 SECTION
1924, 1925
JOB NO.
23003.01
SHEET NO.
A01
2 OF 10

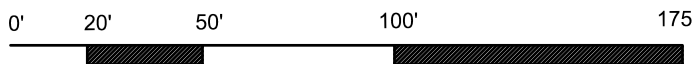


SITE PLAN NOTES

- EXISTING GRADES AND ELEVATIONS SHOWN IN PROFILE WERE PROVIDED BY THE CITY OF PORTLAND AND TAKEN ALONG THE CENTERLINE STATIONED ALIGNMENT OF SEWER MAIN. VERIFY ALL ELEVATIONS AND GRADES.
- UTILITIES AND SERVICE LATERALS AS SHOWN IN THE CONTRACT DOCUMENTS ARE AT APPROXIMATE LOCATIONS. VERIFY ALL LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
- NOT ALL WATER OR GAS SERVICE LATERALS ARE SHOWN.
- REINSTATE ALL ACTIVE SERVICE LATERAL CONNECTIONS UNLESS OTHERWISE SHOWN OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
- SUPPORT UTILITIES, AS REQUIRED, TO PROTECT IN PLACE.
- CONSTRUCT PER CURRENT CITY OF PORTLAND STANDARD DETAILS AND DRAWINGS, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
- NOT ALL KEYNOTES USED ON EVERY SHEET.

50.00' WIDE P.P.T.  
RIGHT OF WAY  
EASEMENT

SCALE



LEGEND

- SITE ENTRY
- PATH OF TRAVEL
- PROPERTY LINE
- SETBACKS
- CHAIN LINK FENCE
- SLEEPING POD
- TREE TO BE REMOVED
- TREE TO REMAIN
- UNDERGROUND HOLDING TANK
- WATER LINE
- OVERHEAD POWER TRANSMISSION LINES
- ADA ACCESSIBLE UNIT OR PARKING SPACE
- LANDSCAPED AREA
- ENVIRONMENTAL CONSERVATION ZONE
- 100 YR FLOOD ZONE
- 1996 FLOOD ZONE
- STORMWATER SWALE  
SEE CIVIL DRAWINGS
- COMPACTED GRAVEL

1

SITE PLAN OVERALL - AREA OF WORK

SCALE: 1:50

CONSTRUCTION KEYNOTES

- KILL EXISTING HYDRANT (BY PORTLAND WATER BUREAU)
- EXISTING SLAB ON GRADE
- WASTE WATER HOLDING TANKS
- UNDERGROUND WASTE WATER HOLDING TANKS
- NEW 7' H CHAIN LINK PERIMETER FENCE WITH PRIVACY SLATS
- EXISTING UTILITY POLES FOR TRANSMISSION LINES
- NEW 7'H CHAIN LINK FENCE WITH 24' WIDE VEHICLE AND 4' WIDE MAN GATE, W/ PRIVACY SLATS.
- NEW CHAIN LINK FENCE WITH PRIVACY SLATS AND NEW 24' WIDE VEHICLE GATE
- NEW 18' X 30' COVERED CARPORT STRUCTURE PREVIOUSLY APPROVED AND PERMITTED. USE IS FOR VILLAGE GATHERING, SOCIAL SERVICES, AND CONSUMING MEALS UNDER STRUCTURES. NO VEHICLE STORAGE OR MAINTENANCE UNDER STRUCTURES. STRUCTURE TYPE 3
- NEW 28' X 28' BUILDING W/ CONCRETE PAD FOR TRASH ENCLOSURE UNDER SEPARATE BUILDING PERMIT. PROVIDE 6" CONCRETE CURB AROUND PERIMETER OF STRUCTURE. STRUCTURE TYPE 4
- NEW 8' X 40' CONEX STRUCTURES FOR HYGIENE (LAUNDRY, SHOWER, RESTROOMS,) FOOD PREPARATION KITCHEN (NO COOKING OR OPEN FLAMES,) OFFICES, MEETING ROOMS, AND FIRST AID STATION. CONEX UNITS BY OTHERS UNDER SEPARATE BUILDING PERMIT. STRUCTURE TYPE 2
- NEW 8'X52' CONEX CONTAINER FOR STORAGE. STRUCTURE TYPE 5
- FENCED OUTDOOR AREA. PROVIDE 6' H CHAIN LINK INTERIOR FENCE AND 4' W MAN GATES, NO PRIVACY SLATS. SEE ENLARGED PLANS FOR DETAILS
- TREES AND SHRUBS TO BE REMOVED. SEE TREE PLAN.
- NEW 8'W X 8'D X 8'H PRE APPROVED SLEEPING PODS BY OTHERS. STRUCTURE TYPE 1
- NEW WATER SPIGOT WITH DOUBLE MANIFOLD. MOUNTED ON 3' H PRESSURE TREATED WOOD POST
- NEW PORTABLE TOILETS AND PORTABLE HAND WASH STATION
- NEW 20' WIDE VEHICLE GATE.
- KILL EXISTING TWO WATER SERVICES (BY PORTLAND WATER BUREAU)
- NEW FIRE HYDRANT 18' SOUTH OF EXISTING HYDRANT BY PORTLAND WATER BUREAU
- INSTALL 6" X 2" TAPPED CAP AND 2" BLOW-OFF ASSEMBLY W/ 3 SQ. FT. THRUST BLOCK. BY PORTLAND WATER BUREAU
- INSTALL NEW 1.5" METER (2" SERVICE) 2" SOUTH OF NEW HYDRANT BY PORTLAND WATER BUREAU. CONTRACTOR TO CONNECT TO THE SHORT STUB AT THE BACK OF THE METER
- RPBA TO BE INSTALLED IMMEDIATELY AFTER THE WATER METER. RPBA TO BE INSTALLED 12" ABOVE OUTDOOR ENCLOSURE. EXPOSED PIPING MUST BE INSULATED WITH CLOSED CELL FOAM PIPE INSULATION
- NEW 8'W X 8'D X 8'H PRE APPROVED PODS/OFFICES BY OTHERS. STRUCTURE TYPE 1
- NEW 20' WIDE VEHICLE GATE WITH LOCK
- NEW 7' CHAIN LINK FENCE, NO PRIVACY SLATS
- NEW 4' WIDE MAN GATE WITH LOCK
- NEW PREFABRICATED DECK AND RAMP BY OTHERS. MAX HEIGHT 10"
- PARKING AND LANE STRIPING. USE PAINT PRE-APPROVED BY PBOT
- NEW PLANTER BOXES BY OTHERS
- STORMWATER SWALE. SEE CIVIL DRAWINGS.
- TREE TO REMAIN. SEE TREE PLAN.
- PBOT STANDARD GREEN PEDESTRIAN WALKWAY PAINT AND PEDESTRIAN SYMBOL
- NEW 48" WIDE MAN GATE WITH LOCK FROM OUTSIDE. PROVIDE FREE EGRESS AND PANIC BAR ON INSIDE FOR EMERGENCY EXIT.
- ASPHALT PAVING. SEE CIVIL ENGINEERING PLANS.

CITY OF PORTLAND  
TEMPORARY ALTERNATIVE SHELTER SITE 2

SITE PLAN AREA OF WORK  
10505 N PORTLAND ROAD  
PORTLAND, OR 97209

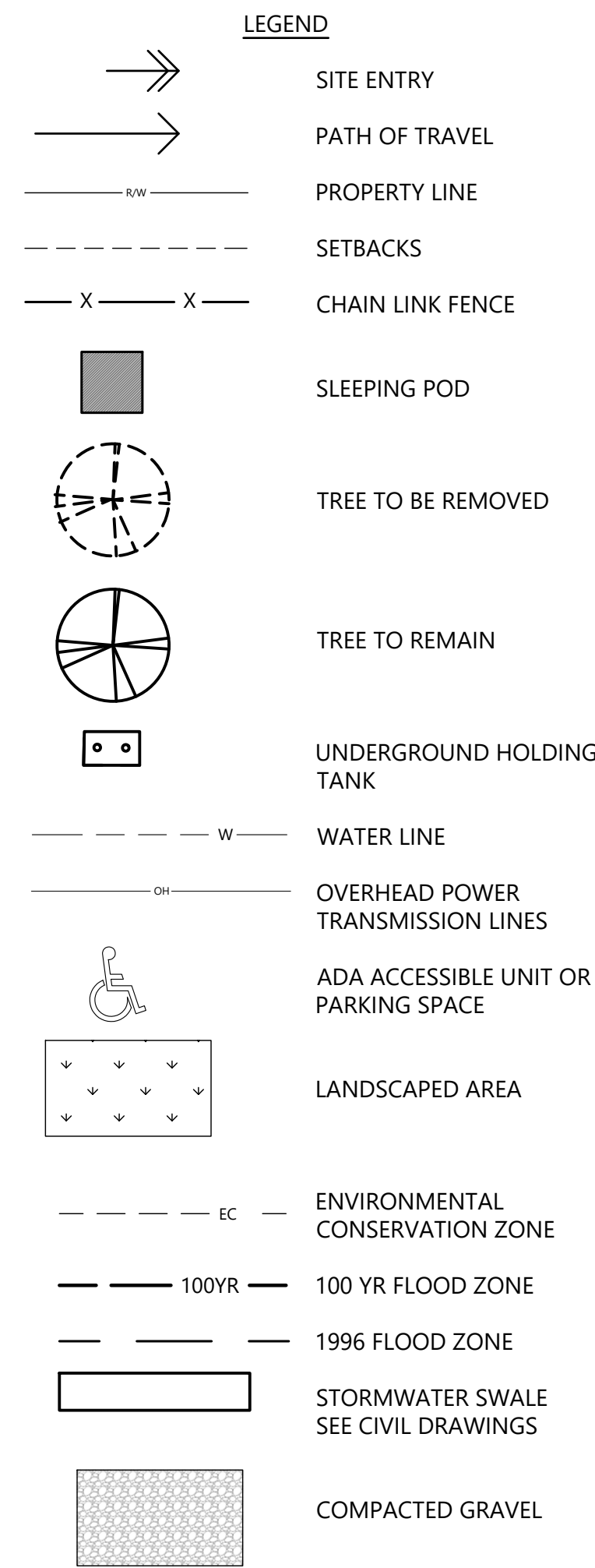
1/4 SECTION  
1924, 1925  
JOB NO.  
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A02  
3 OF 10

CITY OF PORTLAND  
ENVIRONMENTAL SERVICES



PERMIT SET 2.02.2024

XREF(S) USED:	2023-11-15 MFD000304 10505 N Portland Rd TOPO/COP SITE 2 - S	DESIGNED BY	DATE APPROVED
ROTATION ANGLE:	0.000°	DRAWN BY	ENGR. SUPV.
CONSTRUCTED BY		CHECKED BY	ENGR. DIV. MGR.
PROJECT COMPLETED		BES DESIGN LEAD	CONST. DIV. MGR.
MAP CORRECTED BY	CHECKED BY		
FINAL MAP DATA			
DRAWING NAME:	COP TASS 2 - DEVELOPMENT REVIEW SET 1.31.24.dwg		

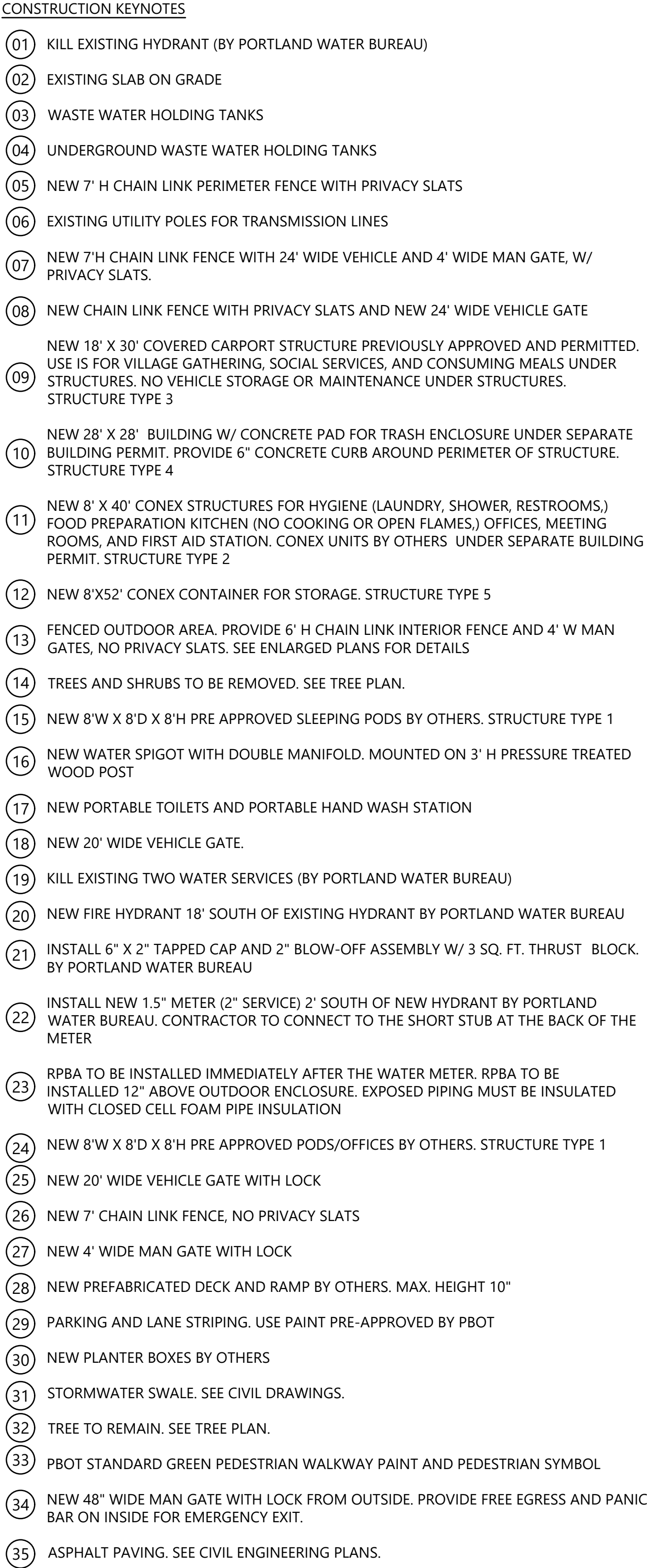


- CONSTRUCTION KEYNOTES

  - 01 KILL EXISTING HYDRANT (BY PORTLAND WATER BUREAU)
  - 02 EXISTING SLAB ON GRADE
  - 03 WASTE WATER HOLDING TANKS
  - 04 UNDERGROUND WASTE WATER HOLDING TANKS
  - 05 NEW 7' H CHAIN LINK PERIMETER FENCE WITH PRIVACY SLATS
  - 06 EXISTING UTILITY POLES FOR TRANSMISSION LINES
  - 07 NEW 7'H CHAIN LINK FENCE WITH 24' WIDE VEHICLE AND 4' WIDE MAN GATE, W/ PRIVACY SLATS.
  - 08 NEW CHAIN LINK FENCE WITH PRIVACY SLATS AND NEW 24' WIDE VEHICLE GATE  
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  - 14 TREES AND SHRUBS TO BE REMOVED. SEE TREE PLAN.
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  - 26 NEW 7' CHAIN LINK FENCE, NO PRIVACY SLATS
  - 27 NEW 4' WIDE MAN GATE WITH LOCK
  - 28 NEW PREFABRICATED DECK AND RAMP BY OTHERS. MAX. HEIGHT 10"
  - 29 PARKING AND LANE STRIPING. USE PAINT PRE-APPROVED BY PBOT
  - 30 NEW PLANTER BOXES BY OTHERS
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  - 35 ASPHALT PAVING. SEE CIVIL ENGINEERING PLANS.

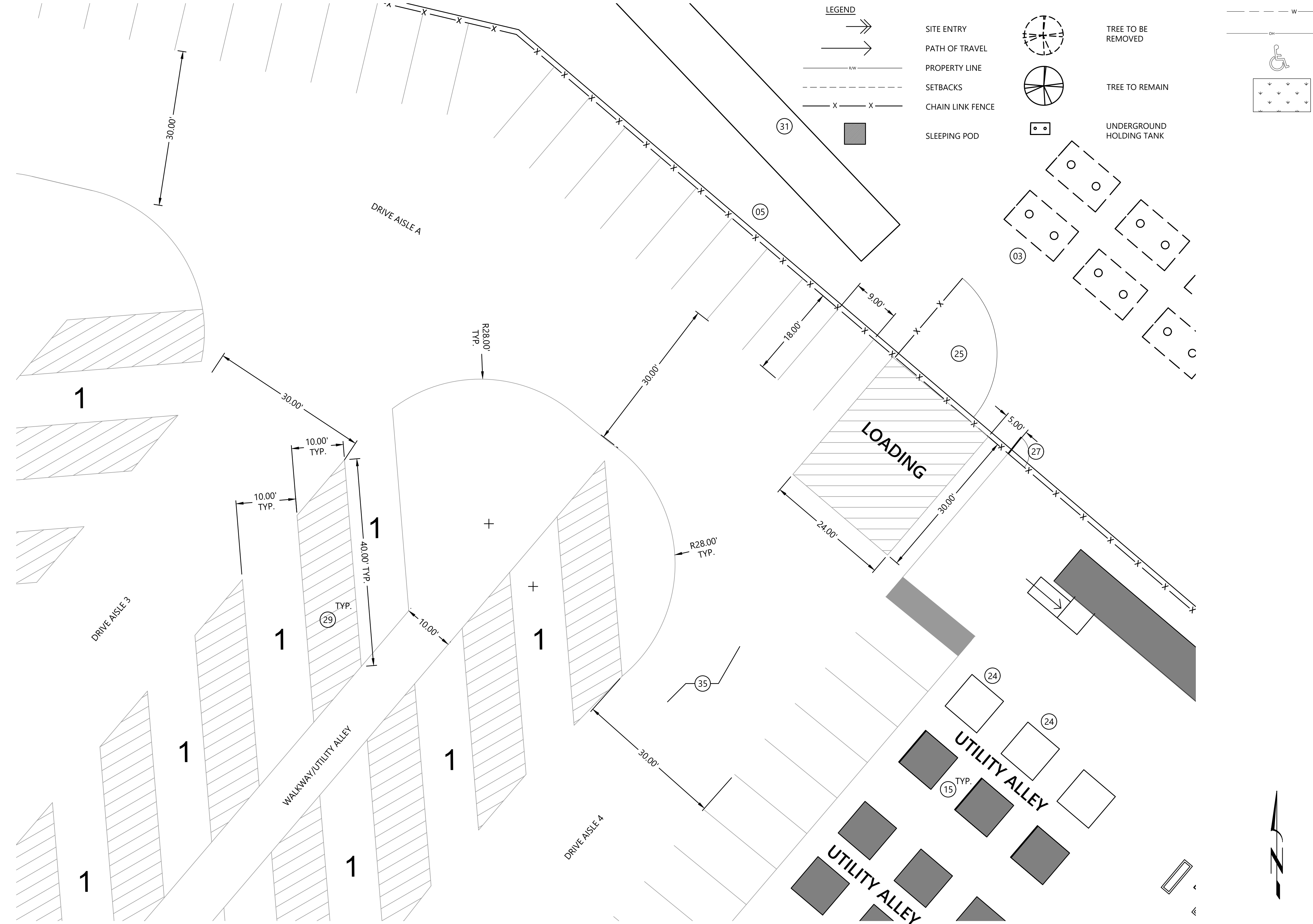
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SCALE: 1:10

1/4 SECTION  
1924, 1925  
JOB NO.  
23003.01  
SHEET NO.  
A04  
5 OF 10



- WATER LINE

OVERHEAD POWER TRANSMISSION LINES

ADA ACCESSIBLE UNIT OR PARKING SPACE

LANDSCAPED AREA

ENVIRONMENTAL CONSERVATION ZONE

100YR 100 YR FLOOD ZONE

1996 FLOOD ZONE

STORMWATER SWALE SEE CIVIL DRAWINGS

COMPACTED GRAVEL
- CONSTRUCTION KEYNOTES
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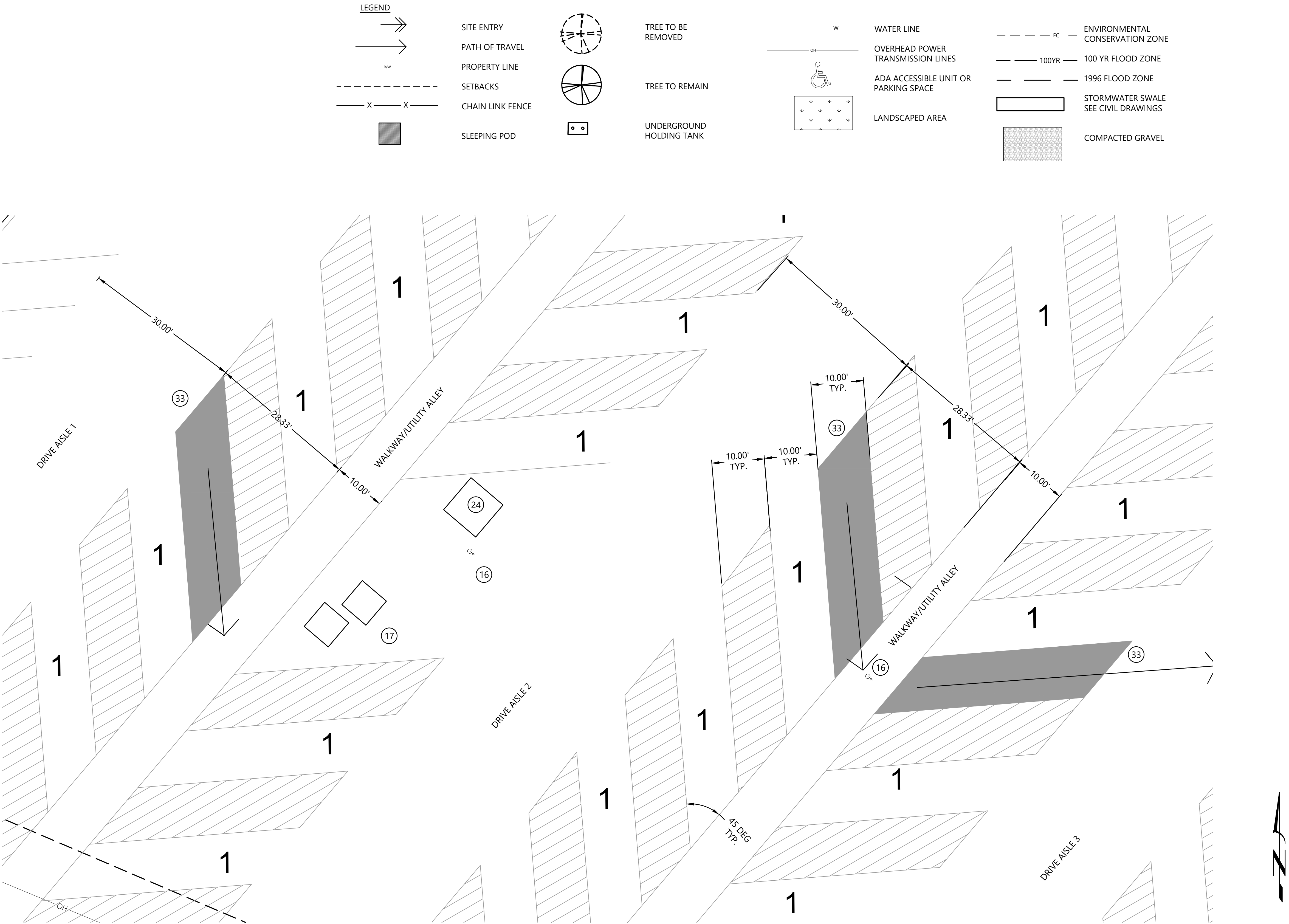
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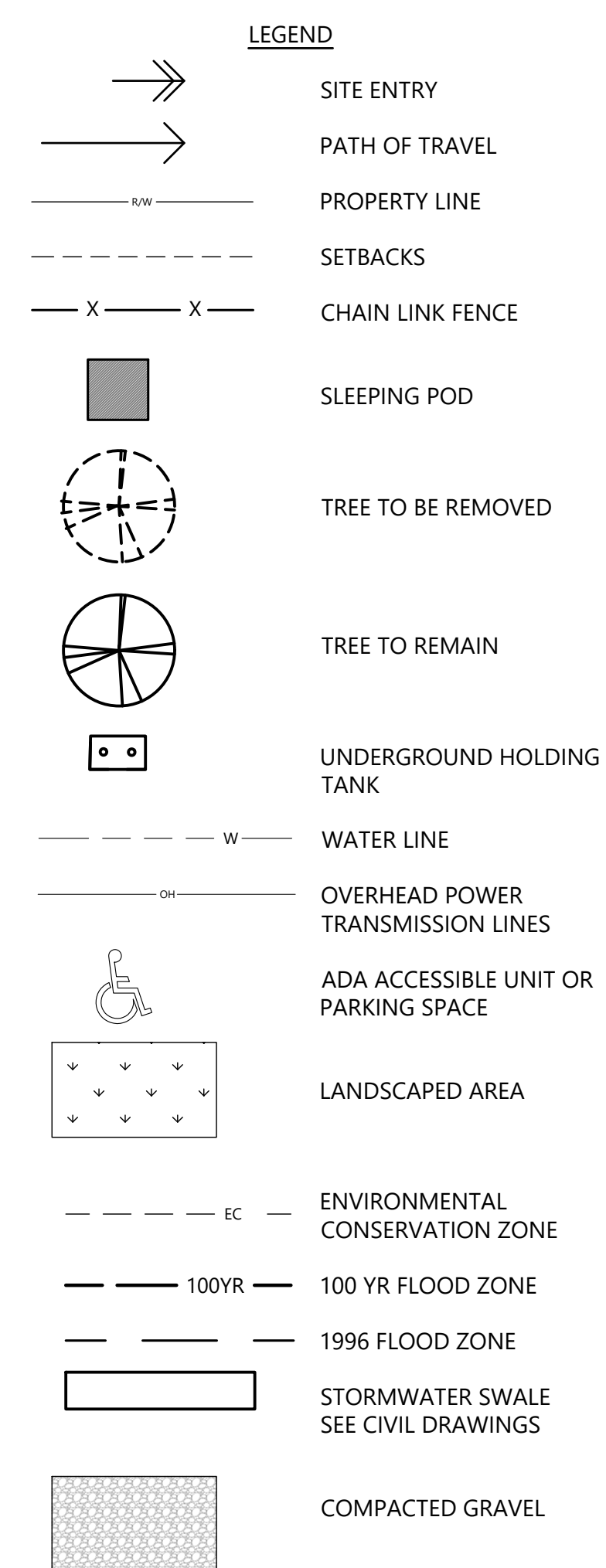




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SCALE: 1:10

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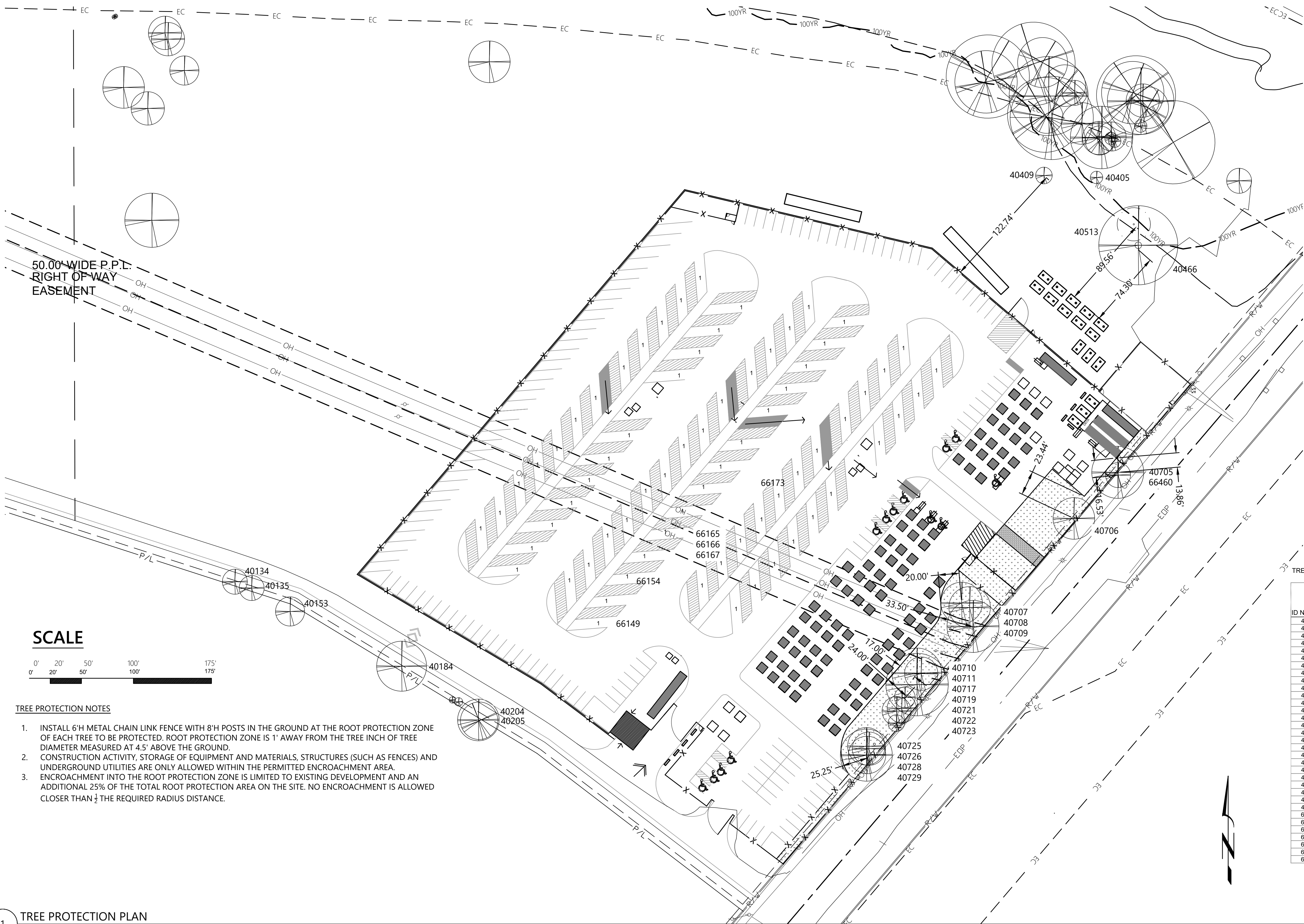
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SCALE: 1:10

14/1/2024 - SEWMIN					XREF(S) USED: :2023-11-15 MFD8000304 10505 N Portland Rd TOPO;COP SITE 2-5	DESIGNED BY	DATE APPROVED
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NO.	DATE	DESCRIPTION	APPD.				
REVISION							





LEGEND

SITE ENTRY

PATH OF TRAVEL

PROPERTY LINE

SETBACKS

CHAIN LINK FENCE

SLEEPING POD

TREE TO BE REMOVED

TREE TO REMAIN

UNDERGROUND HOLDING TANK

WATER LINE

OVERHEAD POWER TRANSMISSION LINES

ADA ACCESSIBLE UNIT OR PARKING SPACE

LANDSCAPED AREA

ENVIRONMENTAL CONSERVATION ZONE

100 YR FLOOD ZONE

1996 FLOOD ZONE

STORMWATER SWALE  
SEE CIVIL DRAWINGS

TREE SCHEDULE									
ID NO	DECIDUOUS (D) EVERGREEN (E)	DBH (DIA. @ BREAST HEIGHT)	RPZ (ROOT PROTECTION ZONE) RADIUS IN FEET	MIN. LINEAR DISTANCE RADIUS IN FEET	IN ROW	EXEMPT YES/NO	WORK PROPOSED		
40134 D	12"		12	6 NO	N	N	NONE		
40135 D	12"		12	6 NO	N	N	NONE		
40153 D	14"		14	7 NO	N	N	NONE		
40184 D	24"		24	12 NO	N	N	NONE		
40204 D	20"		20	10 NO	N	N	NONE		
40205 D	18"		18	9 NO	N	N	NONE		
40405 D	6"		6	3 NO	Y		DEAD		
40409 D	8"		8	4 NO	N	N	NONE		
40466 D	38"		38	19 NO	N	N	NONE		
40513 E	8"		8	4 NO	N	N	NONE		
40705 D	25"		25	12.5 YES	N		PROTECT		
40706 D	20"		20	10 NO	N	N	PROTECT		
40707 D	20"		20	10 NO	N	N	PROTECT		
40708 D	25"		25	12.5 NO	N	N	PROTECT		
40709 D	20"		20	10 NO	N	N	PROTECT		
40710 D	24"		24	12 NO	N	N	PROTECT		
40711 D	16"		16	8 NO	N	N	PROTECT		
40717 D	30"		30	15 NO	N	N	PROTECT		
40719 D	10"		10	5 NO	N	N	PROTECT		
40721 D	14"		14	7.5 NO	N	N	PROTECT		
40722 D	14"		14	7.5 NO	N	N	PROTECT		
40723 D	8"		8	4 NO	N	N	PROTECT		
40725 D	18"		18	9 NO	N	N	PROTECT		
40728 D	16"		16	8 NO	N	N	PROTECT		
40728 D	18"		18	9 NO	N	N	PROTECT		
40729 D	25"		25	12.5 NO	N	N	PROTECT		
66149 D	16"		16	8 NO	N	N	REMOVE		
66154 D	14"		14	7 NO	N	N	REMOVE		
66165 D	8"		8	4 NO	N	N	REMOVE		
66167 D	8"		8	4 NO	N	N	REMOVE		
66168 D	8"		8	4 NO	N	N	REMOVE		
66173 D	15"		15	7.5 NO	N	N	REMOVE		
66460 D	12"		12	6 YES	N	N	PROTECT		

- TREE PROTECTION NOTES
1.

INSTALL 6'H METAL CHAIN LINK FENCE WITH 8'H POSTS IN THE GROUND AT THE ROOT PROTECTION ZONE OF EACH TREE TO BE PROTECTED. ROOT PROTECTION ZONE IS 1' AWAY FROM THE TREE INCH OF TREE DIAMETER MEASURED AT 4.5' ABOVE THE GROUND.
2.

CONSTRUCTION ACTIVITY, STORAGE OF EQUIPMENT AND MATERIALS, STRUCTURES (SUCH AS FENCES) AND UNDERGROUND UTILITIES ARE ONLY ALLOWED WITHIN THE PERMITTED ENCROACHMENT AREA.
3.

ENCROACHMENT INTO THE ROOT PROTECTION ZONE IS LIMITED TO EXISTING DEVELOPMENT AND AN ADDITIONAL 25% OF THE TOTAL ROOT PROTECTION AREA ON THE SITE. NO ENCROACHMENT IS ALLOWED CLOSER THAN  $\frac{1}{2}$  THE REQUIRED RADIUS DISTANCE.

1

TREE PROTECTION PLAN

SCALE: 1:50

11/17/2024	SERWIN				XREF(S) USED: 2023-11-15 MFD R000304 10505 N Portland Rd TOPO; COP SITE 2 - S	DESIGNED BY	LIB	DATE APPROVED
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CITY OF PORTLAND

ENVIRONMENTAL SERVICES



PERMIT SET 12.22.2023

CITY OF PORTLAND

TEMPORARY ALTERNATIVE SHELTER SITE 2

SITE PLAN AREA OF WORK

10505 N PORTLAND ROAD

PORTLAND, OR 97209

1/4 SECTION

1924, 1925

JOB NO.

23003.01

SHEET NO.

A09

10 OF 10



THIS PROJECT PERMITTED UNDER THE AUTHORITY OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)  
Western Region Salem Office  
4026 Fairview Industrial Dr. SE  
Salem, OR 97302  
503-378-8240

**TASS 2**  
T:1N, R:1E, SEC:05, TL:1000  
**10505 N Portland Rd, Portland, OR 97203, USA**



**Table of Contents**

Page 1	Cover Sheet	Page 7	Holding Tanks (A1-5 & B1-5)
Page 2	Construction Specifications	Page 8	Equalization Tank (E1)
Page 3	System Schematic	Page 9	Recirculation Tanks (R1 & R2)
Page 4	Site Plan Overall	Page 10	Trash Tank Section
Page 5	Site Plan Tank Area	Page 11	Holding Tank Section
Page 6	Trash Tanks (T1-T3)	Page 12	Section C-C and Pump Out Basin

**Project Description**

A Temporary Housing and Shelter Site is proposed for 71 RV spaces, 90 living pods, and 143 cars serving an estimated 418 guests and 30 staff. The estimated peak daily flow is 15,000 gallons per day.

All wastewater will be generated by guests and staff using the First Aid office and the 2 community restroom/showers and laundry facilities. There is a kitchen to serve food prepared off-site. There are no RV hookups. There are also 6 portable toilets with hand washing stations.

Residential strength sewage will flow from each of the restrooms (designated H1-2) and the First Aid Office (O-5) into 1500 gallon tanks (designated T1-3). Effluent from these tanks will flow by gravity and comeingle in a 3000 gallon dosing tank (Tank E1). This effluent will be dosed to a splitter basin equally dividing the flow into two parallel series of 1500 gallon tanks (A1-5 and B1-5). Effluent from each row of tanks will flow separately into one of two 3000 gallon tanks (R1 and R2) for storage. Tank R1 is fitted with an audible and visual alarm activated at 75% capacity, to indicate the need for pumping out the holding tank system.

Pump out will be via a remote pipe connection, with effluent pumped from tanks E1, R1 and R2 through a 3" pipe fitted with a quick disconnect for direct connection to the pumper truck's vacuum hose. Pumps in each tank will be manually operated until the tank is emptied. These controls will be located in a shed near the pump out basin.

This temporary holding tank system is designed to accommodate the future phase of onsite treatment and disposal, or as pretreatment before being released to a municipal sewer system.

**ATTENTION:** Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is (503) 232-1987).

**PERMITS TO NOTIFY EXCAVATOR OF REQUIREMENTS OF LAW**

952-001-0030 Any entity authorized to issue permits for construction which requires excavation shall include on such permits the language set out in OAR 952-001-0020.

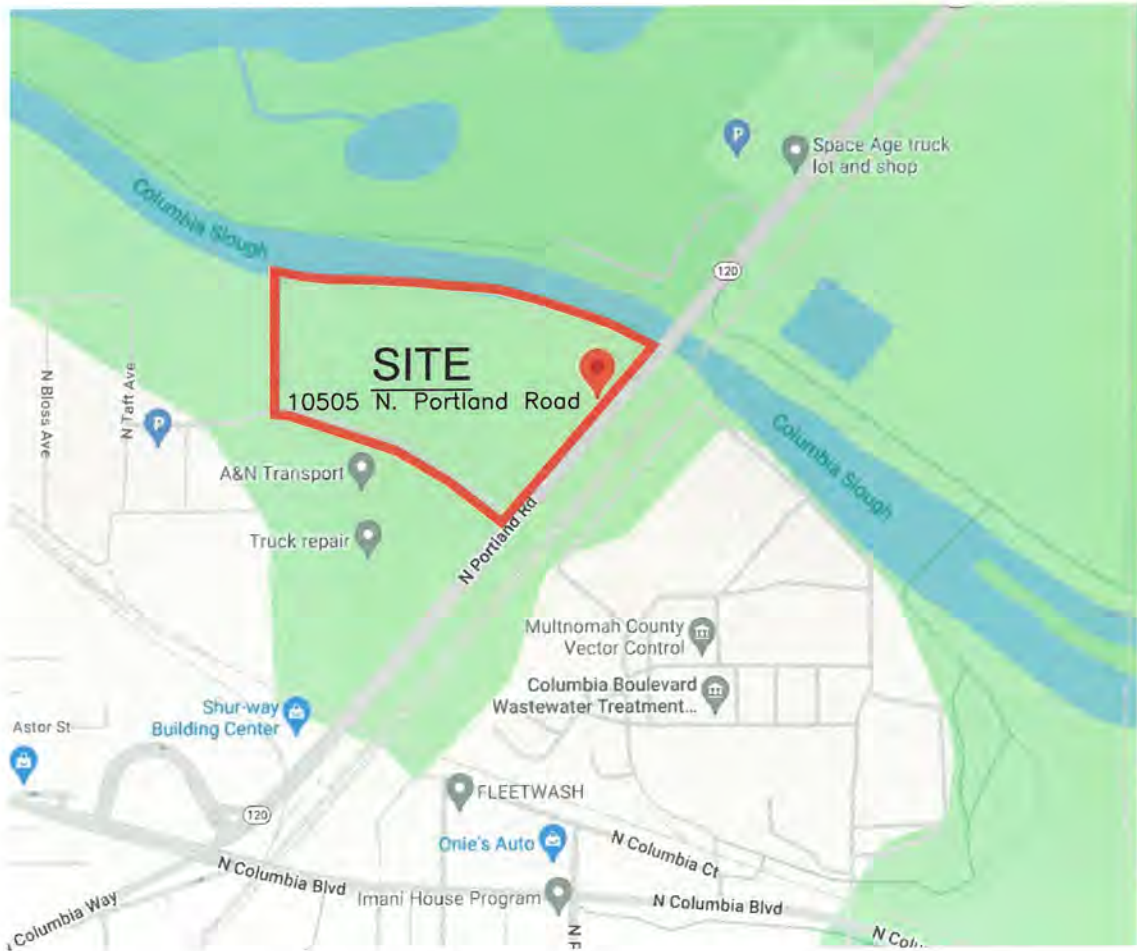
**Site and Soils**

- Domestic water supply by: Portland Water Bureau

INSTALLER: Superior Underground, LLC

LICENSE #: 39230

**VICINITY MAP**





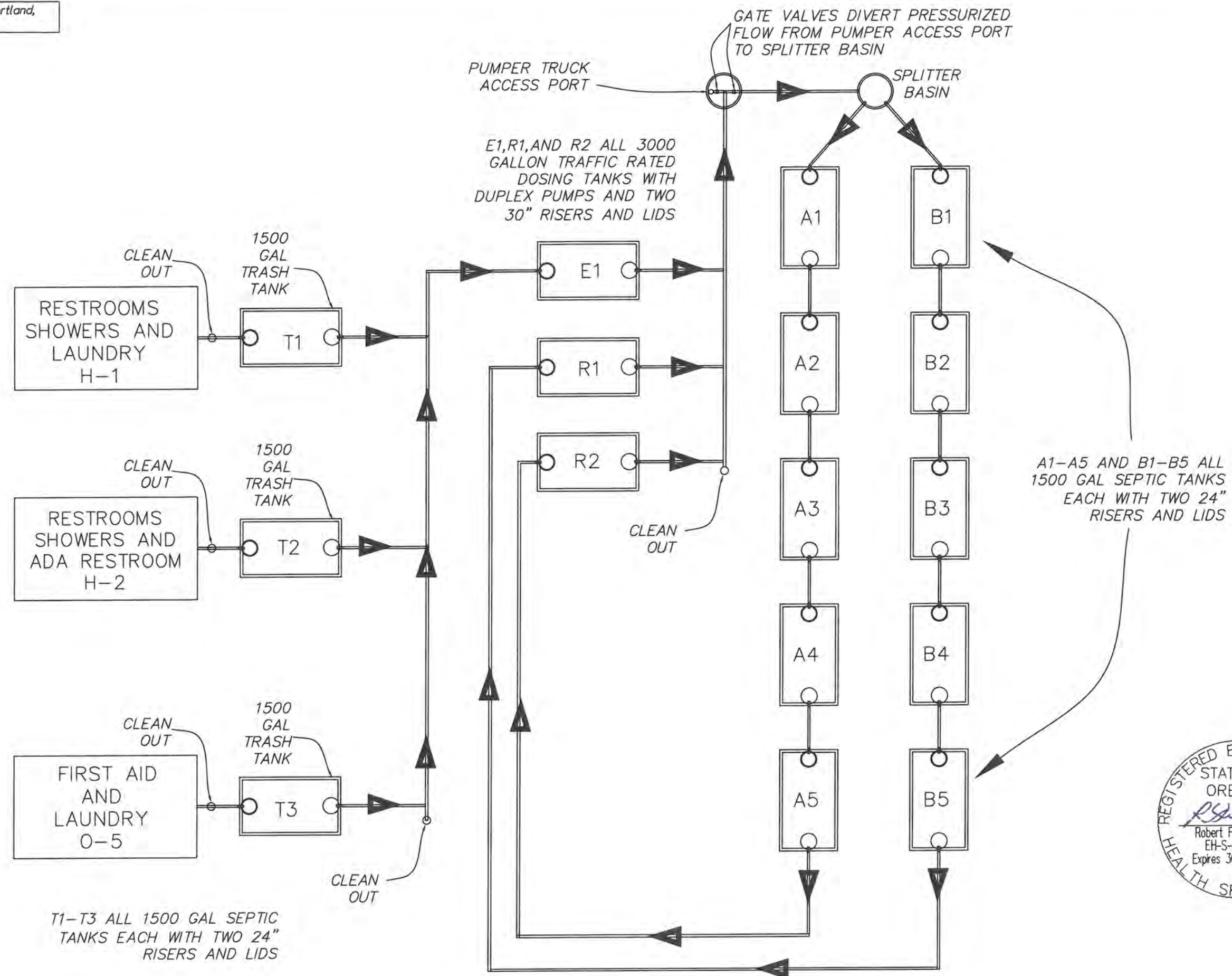
10505 N Portland Rd, Portland,  
OR 97203, USA



CHECK OFF	
	<b>GENERAL STANDARDS</b>
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	All work and material shall conform with OAR 340 Div. 71 & 73 approved design permit, and appropriate laws. Permits relating (but not limited) to plumbing, electrical, and grading must be coordinated with the on-site system installer and designer.
	Minor modifications to accommodate stumps, boulders or other unforeseen obstacles may be needed. Major modification cannot be performed without re-design and regulatory approval.
	If the installation contractor (installer) notes any conflicts with applicable State and/or local laws, rules or requirements, he shall request a clarification before ordering or installing affected materials or work. This may include and is not limited t
	Installer is to obtain copies of all necessary permits, authorizations, licenses etc. prior to initiating construction, including that specialty design work designated to a subcontractor which is directly or indirectly related to the system construction,d
	Installer shall request and obtain utility locates by a qualified service for all potential underground utilities before excavation work commences.
	Installer shall maintain any and all survey monuments, which are affected by work and activities, related to the projects. Monuments, if damaged by the installer, shall be reset by a licensed surveyor at the installer's expense.
	All materials and equipment shall be of the type, model and brand listed for the manufacturers specified, unless otherwise authorized by the system designer. Substitution of materials and equipment shall receive pre-authorization and the contractor/insta
	Installer shall prepare, maintain and provide, at completion of the project, drawings detailing the construction "as-built" and shall provide the owner & designer with the manufacturer's current specification and operating data on all equipment installed
	<b>TANK (S)</b>
	Seal all joints and seams with manufacturer-approved sealants. Provide material submittal, and all means and methods for tank and accessory testing.
	Odor proof: Seal riser lid to contact with closed cell plastic foam sheet, or single-side adhesive neoprene foam tape.
	Riser: Tank must be equipped with a watertight riser, with minimum 18" inside diameter, with tank access brought to or above finish grade. Riser must be fiberglass bonded to tank adapter w / adhesive.
	Knockouts: Perforations and unused knockouts must be grouted or otherwise sealed.
	Watertight: After installation, Tank must be subject to 24 hour test for watertightness. Fill to a maximum 2" into riser. Mark water level, time and date. There may be no more than 1 gallon leakage over 24 hour period.
	THE ABOVE SPECIFICATIONS ARE IN ADDITION TO AND DO NOT REPLACE THE MANUFACTURERS WRITTEN INSTALLATION AND TESTING PROCEDURE REQUIREMENTS.

	<b>ELECTRICAL COMPONENTS</b>
	Wiring of pumps and controls shall be performed by a licensed electrician under the auspices of an electrical permit secured from the local jurisdiction. For details of electrical system, pump controls, floats, and the level of the float settings see the
	Splicing of wires at the splice box inside the tank risers shall be done using the heat shrink connectors provided by the manufacturer or with an approved watertight electrical connector nut.
	Wiring from the splice box to the source or the control panel shall be protected in UL approved PVC conduit, constructed watertight. Pump line voltage shall have water proof insulation such as THW, THWN, or HHW. Wire for all connections shall be 14 gaug
	"Seal offs" shall be installed between the splice box and the power source or control panel, either in the horizontal just outside the riser or in the vertical just below the control panel or per connection. "Seal offs" shall be installed per manufacture
	Wiring shall be color coded or numbered and the schedule written inside the control panel or on the wiring diagram.
	Upon completion, the apparatus shall be tested for operation and correctness. Available voltage, pump run voltage and pump run amperage shall be measured and recorded inside the control panel.
	The wiring diagram shall be retained on site (preferably in control panel enclosure) and any as-built notes or comments entered, initialed, and dated.
	<b>CONTROL PANEL (S)</b>
	The electrician shall label the control panel or electrical panel with his business name and the permit number and date of installation.
	Control panel shall be installed per manufacturers written instructions; alarm shall be audible from the living/working space. Pump and alarm must be on separate circuits.
	Panel shall be in accordance with NEMA 4X rating. Panel enclosure shall meet NEMA 4X requirements.
	Panel shall be installed within 50' of tank and preferably within sight of the tank.
	<b>OTHER</b>
	Setbacks: Maintain required setbacks
	<b>COLLECTION SYSTEM</b>
	Contractor to obtain plumbing permit.
	Do not use the plumbing system for disposal of non-biodegradable and/or toxic materials such as paints, thinners, gasoline, motor oil, drain cleaners, or other harsh chemicals.
	Do not use the plumbing system for disposal of cooking grease, diapers, sanitary napkins, rags, cigarette butts, rubber or plastic products
	Water softener backwash, storm or ground water sources, floor drains not to be connected to the septic system.
	<b>DISTRIBUTION AND TRANSPORT LINES</b>
	Road crossing: Sleeve transport pipe in Sch. 40 PVC, installed a minimum of 18" below grade, and bedded in ¾ minus to the surface.
	Road/Driveway crossing: Use Sch. 40 or Sch. 80 PVC, installed a minimum of 24" below grade, and bedded in ¾ minus to the surface.
	Trace wire: Provide an electrically continuous 18 gauge, green-jacketed copper wire in trench, above the pipe, for the full length of all pressure or gravity transport lines, accessible at the source end.
	<b>DESIGNER INSPECTIONS</b>
	During system construction, the designer, Environmental Management Systems (EMS) shall inspect all components of the installation. These inspections are to be coordinated with the installer and the Oregon Department of Environmental Quality.







10505 N Portland Rd, Portland,  
OR 97203, USA

50.00' WIDE P.P.L.  
RIGHT OF WAY  
EASEMENT

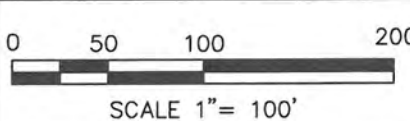
2.9 ACRES  
REMOVED  
FROM SCOPE

HOLDING TANK SYSTEM  
SEE PAGE 4

PUMPER  
TRUCK  
LOADING ZONE

FACILITY LEGEND:

- H-1 5 TOILET/SHOWER RMS, 3 W/D
- H-2 5 TOILET/SHOWER RMS, (1 ADA RR)
- O-1A-B PANTRY & MEETING ROOM
- O-2A-D 4 PRIVATE OFFICES
- O-3A-B 2 OPEN OFFICE
- O-4A-B OFFICES & CHECK-IN
- O-5 FIRST AID, & 8-9 W/D & LAUNDRY SINK
- K-1 FULL KITCHEN



IF THIS BAR DOES NOT MEASURE 2"  
THEN DRAWING IS NOT TO SCALE

THIS DOCUMENT IS NOT A SURVEY.  
LOCATIONS OF SITE FEATURES ARE  
APPROXIMATE.



10505 N Portland Rd, Portland,  
OR 97203, USA

PUMP OUT BASIN  
(SEE PUMP OUT  
BASIN DETAIL)

SPLITTER

"A" & "B" TANKS  
1500 GAL SEPTIC  
TANK WITH VENTED  
LIDS (TYP)



8'x8'  
CONTROL  
PANEL  
SHED

3" SCH.40  
PVC FORCE  
MAIN

3000 GAL  
EQUALIZATION  
TANK

EL. 97.67'  
TANK TOP

EL. 96.50'  
INLET I.E.

4" PVC GRAVITY  
EFFLUENT SEWER

EL. 97.67'  
TANK TOP

3000 GAL  
RECIRCULATION  
TANKS R1 & R2

6" PVC SEWER  
1% SLOPE TO E1

CLEAN-OUT

EL. 99.00'  
OUTLET I.E.

EL. 100.0'  
TANK TOP

CLEAN-OUT  
(TYP)

COMPACT

O-1A-B

A

18 CAR  
SPACES

FACILITY LEGEND:

- H-1 5 TOILET/SHOWER RMS, 3 W/D
- H-2 5 TOILET/SHOWER RMS, (1 ADA RR)
- O-1A-B PANTRY & MEETING ROOM
- O-2A-D 4 PRIVATE OFFICES
- O-3A-B 2 OPEN OFFICE
- O-4A-B OFFICES & CHECK-IN
- O-5 FIRST AID, & 8-9 W/D & LAUNDRY SINK
- K-1 FULL KITCHEN

WATER  
LINE

O-2A-D

A

B

C

D

PLUMBING ALLEY

DECK

PLUMBING ALLEY

H-1

H-2

O-5

0 10 20 40

SCALE 1"= 20'

IF THIS BAR DOES NOT MEASURE 2"  
THEN DRAWING IS NOT TO SCALE

THIS DOCUMENT IS NOT A SURVEY.  
LOCATIONS OF SITE FEATURES ARE  
APPROXIMATE.

City of Portland-TASS 2

T:1N, R:1E, SEC:05, TL:1000

TANK PLAN

Page 05

2/6/2024

SCALE: 1"= 20'

CHECKED BY: [Signature]  
DRAWN BY: [Signature]



ENVIRONMENTAL  
MANAGEMENT  
SYSTEMS, INC

© ALL RIGHTS RESERVED

OR 503-353-9691  
FAX 503-353-9695  
www.envmgtsys.com

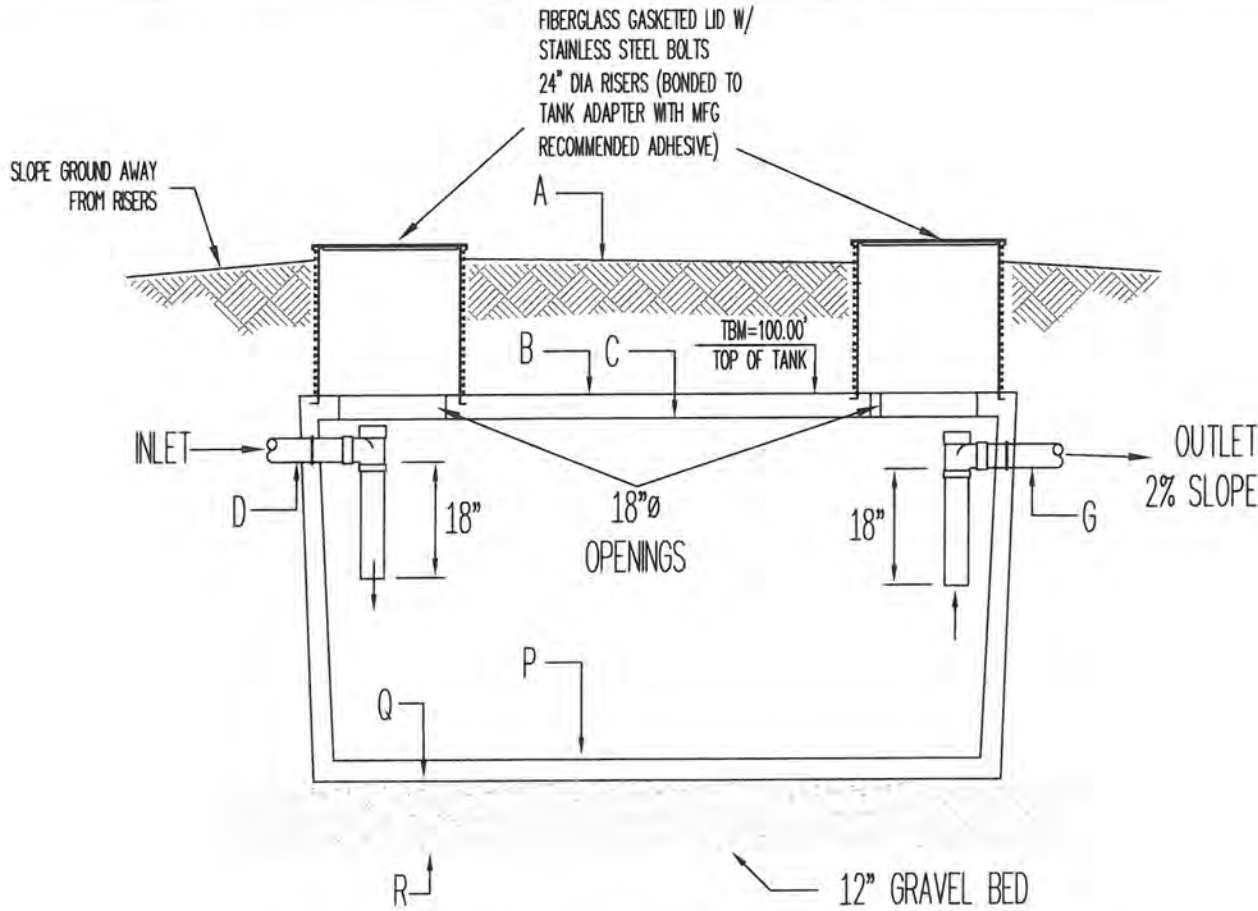
4080 SE International Way  
Suite B112  
Milwaukie, OR 97222





Trash Tanks (T1-T3)				
Letter	Component	Elevation from Tank Floor (Inches)	Elevation from Tank Top (Inches)	Estimated Elevation from TBM (feet)
A	Ground Surface	84.00	22.00	101.83
B	Top of Tank	62.00	0.00	100.00
C	Ceiling of Tank	57.00	-5.00	99.58
D	Inlet Invert	50.00	-12.00	99.00
E	RSV Manifold	na	na	na
F	RSV Stinger Seat	na	na	na
G	Outlet Invert	48.00	-14.00	98.83
H	Outlet Opening	na	na	na
I	Alarm (HWA)	na	na	na
J	Pump On	na	na	na
K	Pump Off	na	na	na
L	na	na	na	na
M	Redundant Off	na	na	na
N	Vault Inlet Holes	na	na	na
O	Pump Intake	na	na	na
P	Floor of Tank	0.00	-62.00	94.83
Q	Bottom of Tank	-4.00	-66.00	94.50
R	Excavation	-16.00	-78.00	93.50

TBM= 100.00' USING TOP OF TRASH TANKS

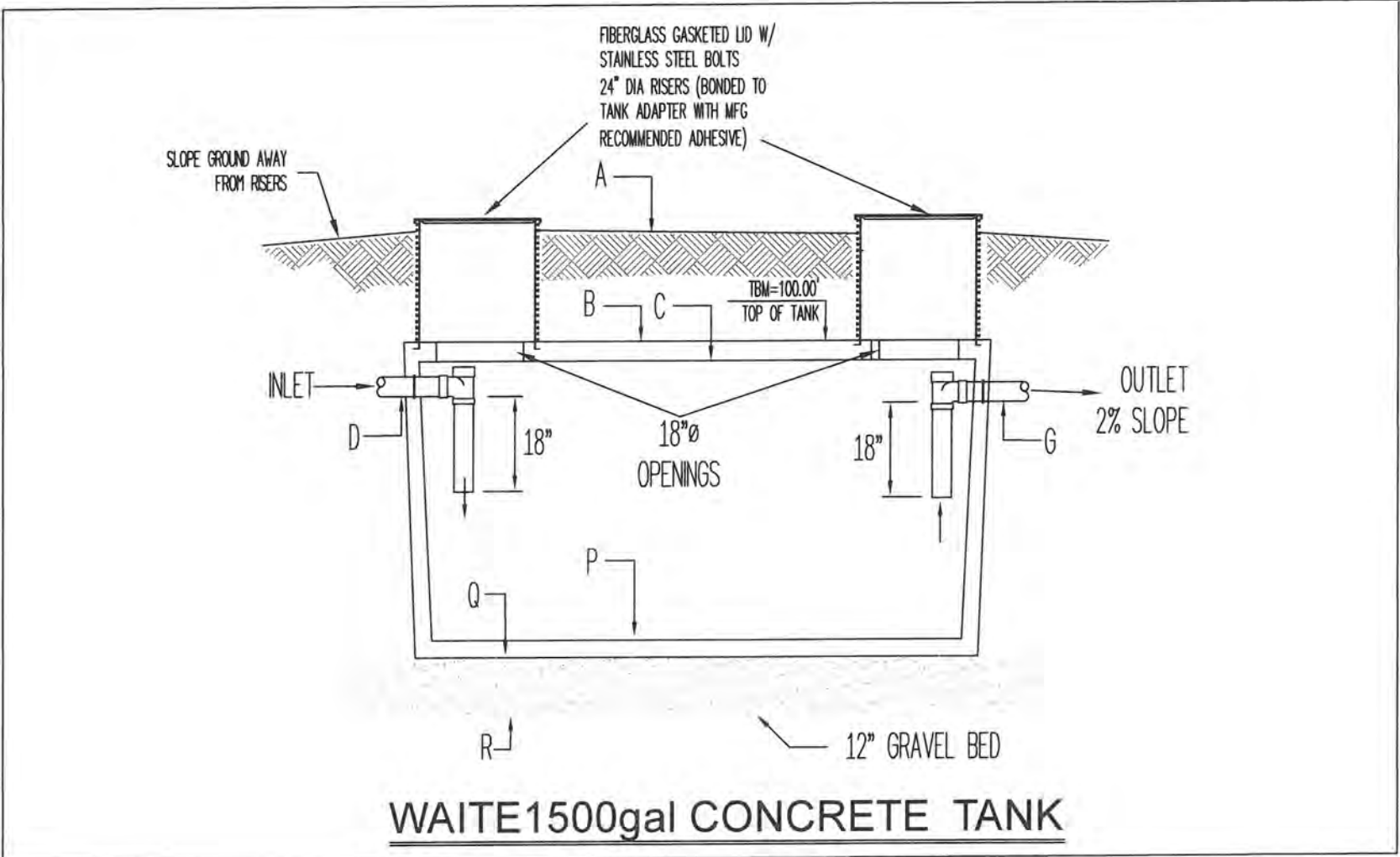


WAITE1500gal CONCRETE TANK



Holding Tanks A1 and B1				
Letter	Component	Elevation from Tank Floor (Inches)	Elevation from Tank Top (Inches)	Estimated Elevation from TBM (feet)
A	Ground Surface	83.00	22.00	101.83
B	Top of Tank	61.00	0.00	100.00
C	Ceiling of Tank	56.00	-5.00	99.58
D	Inlet Invert	51.00	-10.00	99.16
E	RSV Manifold	na	na	na
F	RSV Stinger Seat	na	na	na
G	Outlet Invert	na	na	na
H	Outlet Opening	na	na	na
I	Alarm (HWA)	na	na	na
J	Pump On	na	na	na
K	Pump Off	na	na	na
L	na	na	na	na
M	Redundant Off	na	na	na
N	Vault Inlet Holes	na	na	na
O	Pump Intake	na	na	na
P	Floor of Tank	0.00	-61.00	94.91
Q	Bottom of Tank	-3.50	-64.50	94.62
R	Excavation	-15.50	-76.50	93.62

EACH SUBSEQUENT TANK (NUMBERS 2-5) IS SET 2" DEEPER THAN THE ONE PRECEDING IT. SEE PAGE 10.

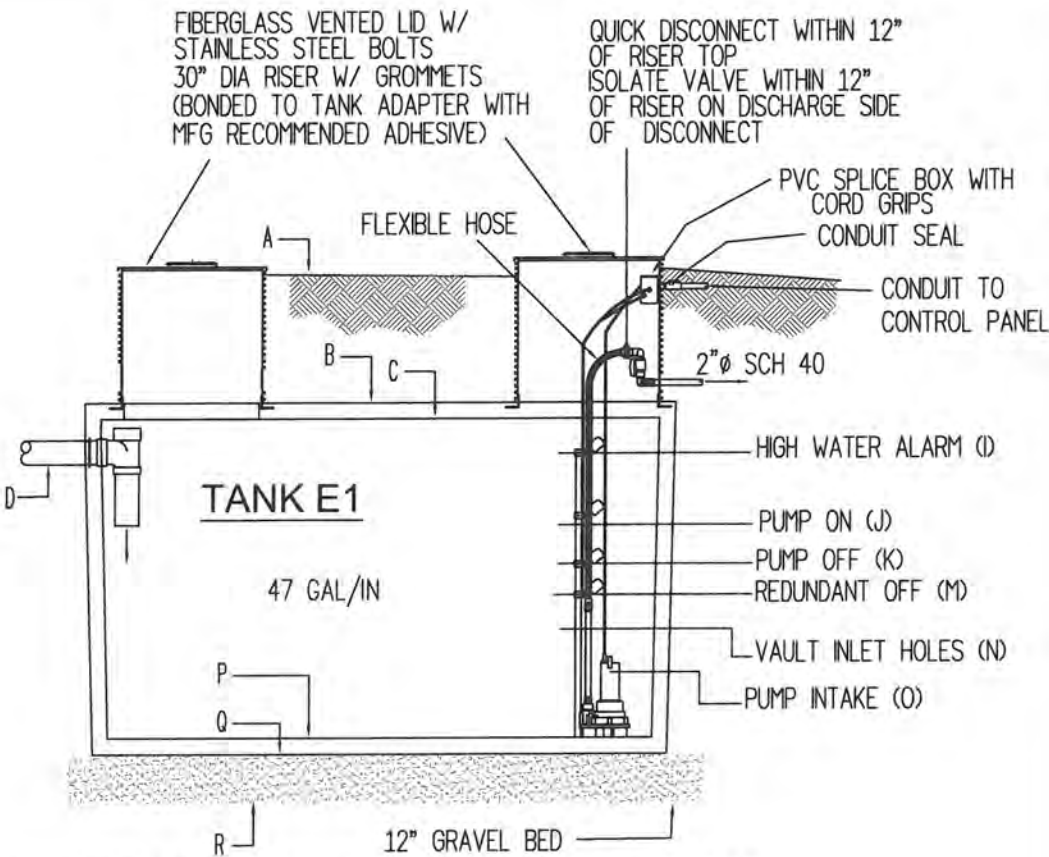




Equalization Tank (E1)

Letter	Component	Elevation from Tank Floor (Inches)	Elevation from Tank Top (Inches)	Estimated Elevation from TBM (feet)
A	Ground Surface	136.18	50.68	101.83
B	Top of Tank	85.50	0.00	97.61
C	Ceiling of Tank	77.50	-8.00	96.94
D	Inlet Invert	71.50	-14.00	96.44
E	RSV Manifold	na	na	na
F	RSV Stinger Seat	na	na	na
G	Outlet Invert	na	na	na
H	Outlet Opening	na	na	na
I	Alarm (HWA)	na	na	na
J	Pump On / 75% Alarm	55.00	-30.50	95.07
K	Pump Off	na	na	na
L	na	na	na	na
M	Redundant Off	na	na	na
N	Vault Inlet Holes	na	na	na
O	Pump Intake	na	na	na
P	Floor of Tank	0.00	-85.50	90.48
Q	Bottom of Tank	-4.50	-90.00	90.11
R	Excavation	-16.50	-102.00	89.11

TBM=100.00' AT TOP OF TRASH TANKS

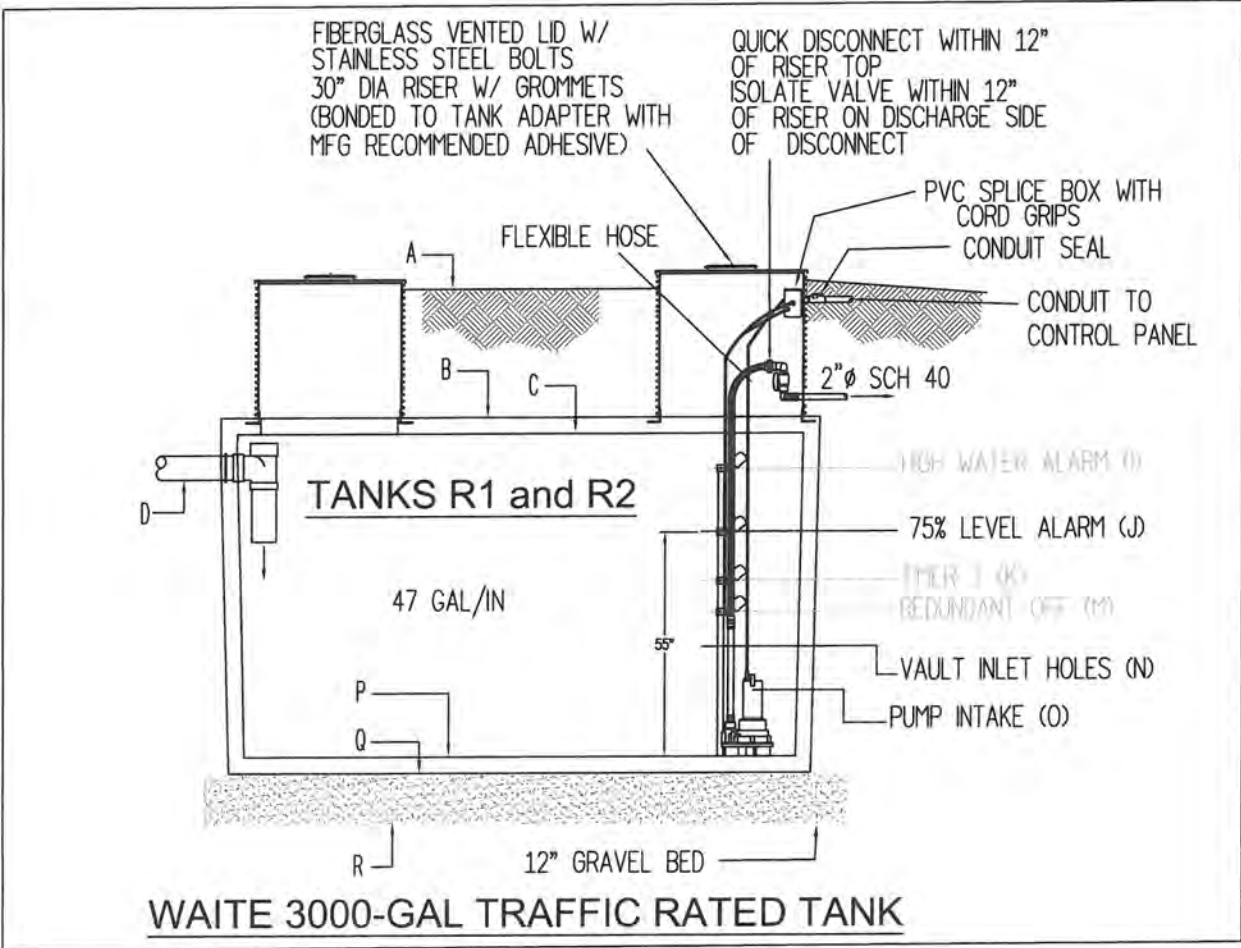






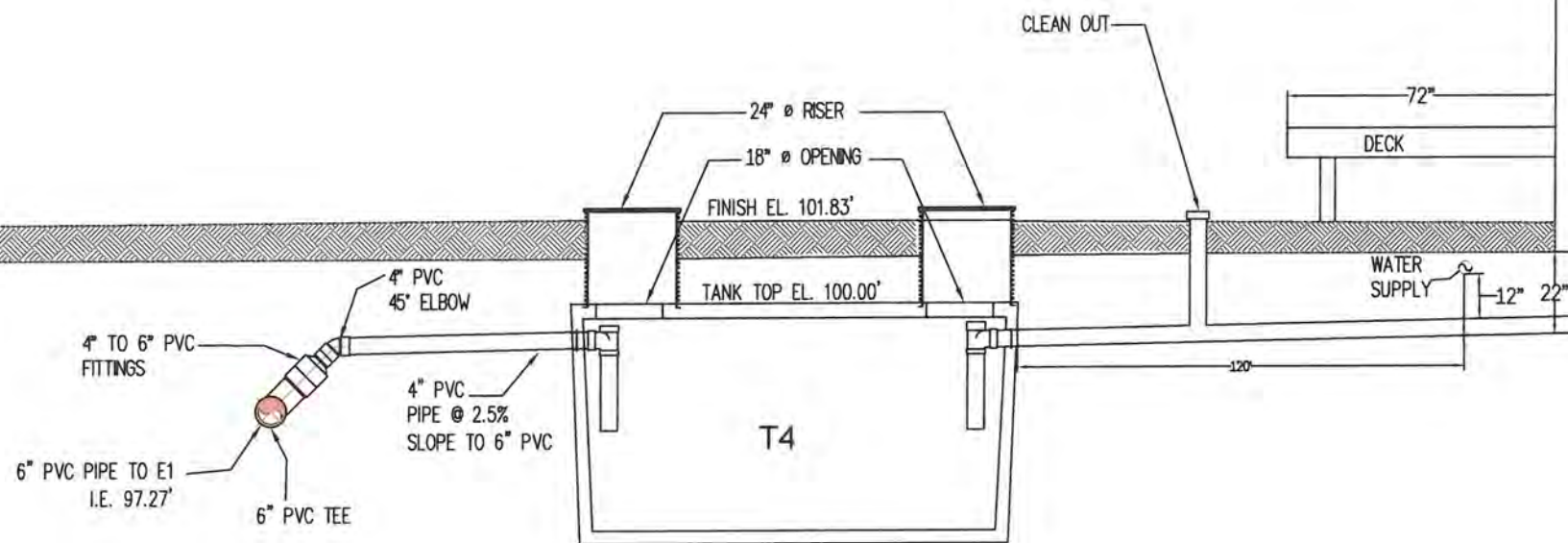
Recirculation Tanks (R1 and R2)

Letter	Component	Elevation from Tank Floor (Inches)	Elevation from Tank Top (Inches)	Estimated Elevation from TBM (feet)
A	Ground Surface	136.18	50.68	101.83
B	Top of Tank	85.50	0.00	97.61
C	Ceiling of Tank	77.50	-8.00	96.94
D	Inlet Invert	71.50	-14.00	96.44
E	RSV Manifold	na	na	na
F	RSV Stinger Seat	na	na	na
G	Outlet Invert	na	na	na
H	Outlet Opening	na	na	na
I	Alarm (HWA)	43.22	-42.28	94.08
J	Pump On	na	na	na
K	Pump Off	na	na	na
L	na	na	na	na
M	Redundant Off	na	na	na
N	Vault Inlet Holes	na	na	na
O	Pump Intake	na	na	na
P	Floor of Tank	0.00	-85.50	90.48
Q	Bottom of Tank	-4.50	-90.00	90.11
R	Excavation	-16.50	-102.00	89.11



RESIDENT KITCHEN,  
PANTRY & STOR.

TOILET/  
SHOWER RMS and  
LAUNDRY



WAITE1500gal TRASH TANKS

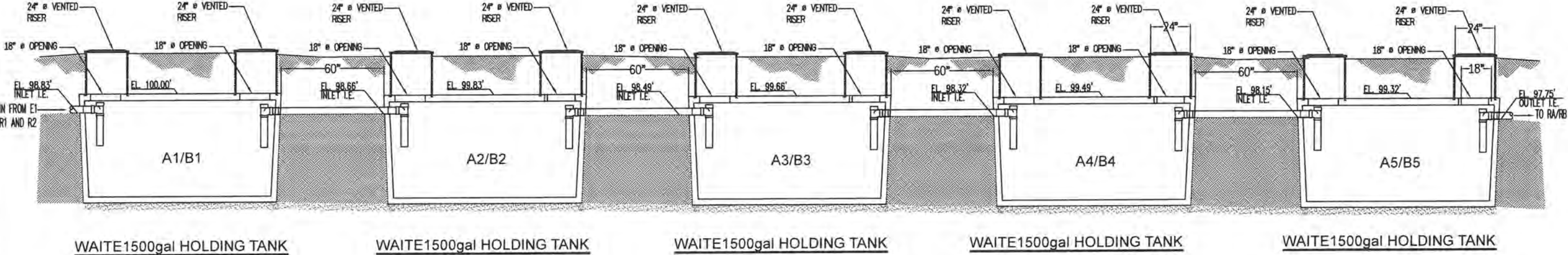
SECTION A-A'





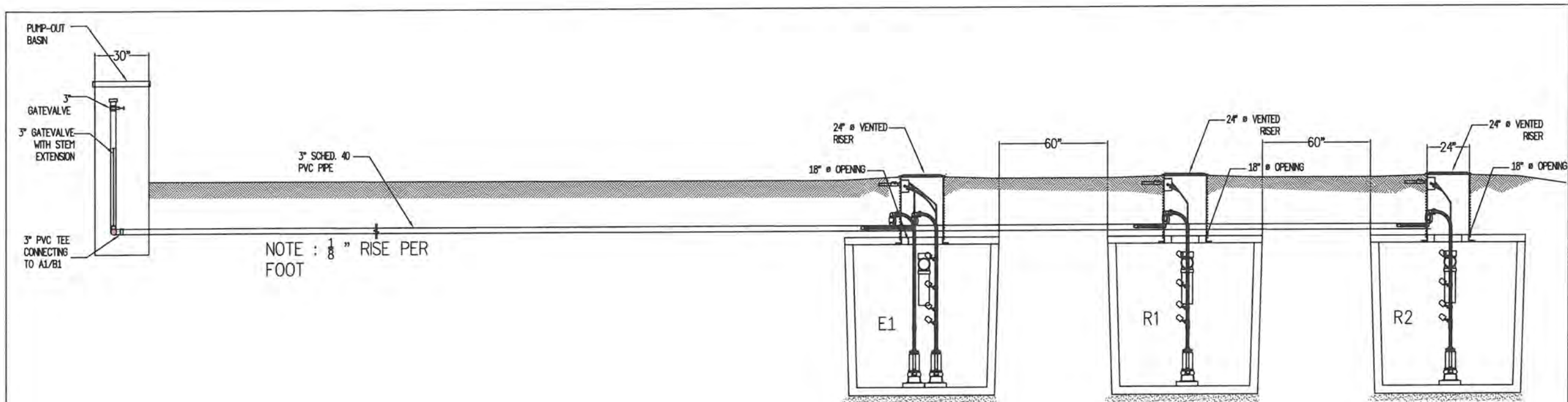
NOTES

- USE WAITE CONCRETE 1500 GALLON TANKS
- TANK MINIMUM BURIAL DEPTH 24"
- TANKS TO SET ON 12" BED OF 3/4 MINUS GRAVEL
- TANKS TO BE BACKFILLED WITH 3/4 MINUS GRAVEL TO FINISH GRADE
- EACH TANK IN THE SERIES IS SET 2" LOWER THAN THE PRECEDING UPSTREAM TANK

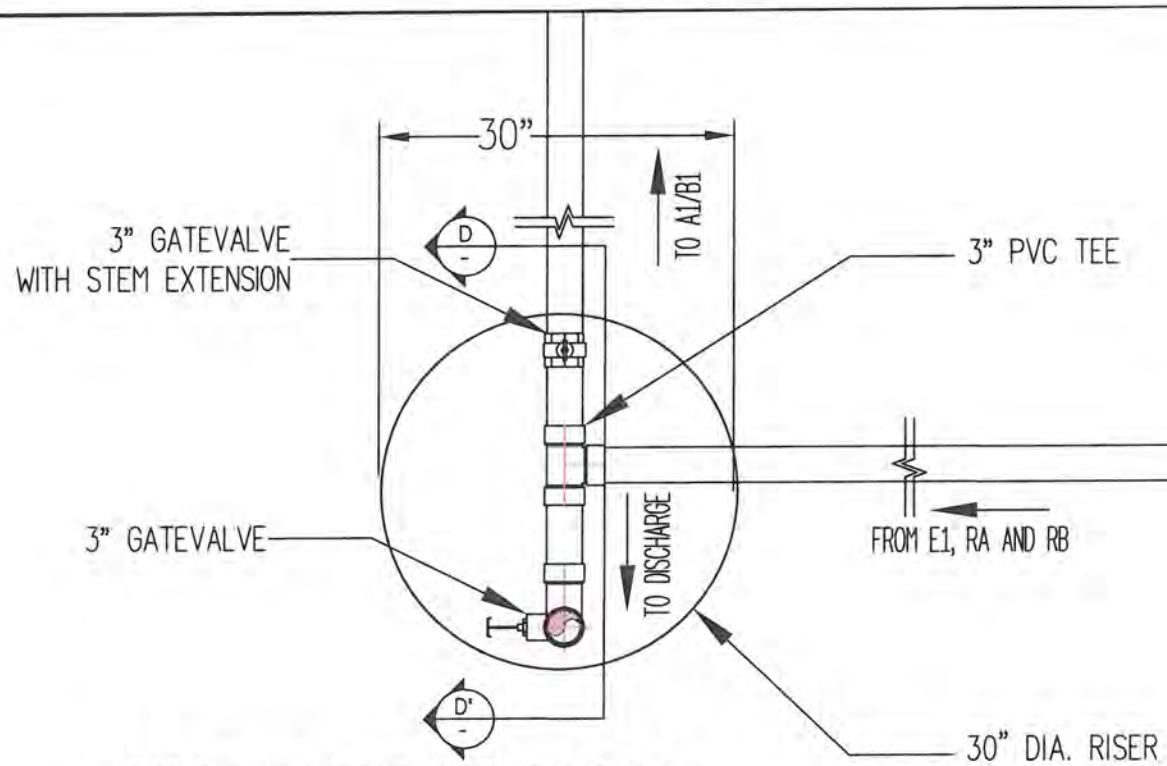


SECTION B-B'

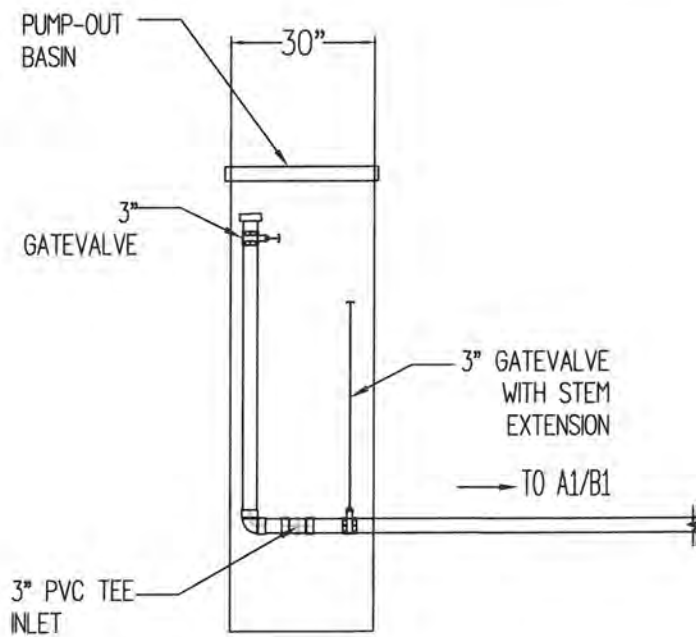




SECTION C-C'



PUMP-OUT BASIN PLAN



SECTION D-D'



APPENDIX C  
Oregon Department of Environmental Quality  
No Longer Contained-In Determination and  
ECSI No. 3337 Certificate of Completion



# Oregon

John A. Kitzhaber, MD, Governor

## Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4<sup>th</sup> Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

August 16, 2011

Gerald Breunig  
North Portland Road LLC  
609 NE Repass Road  
Vancouver, Washington 98655

Re: Certification of Completion  
North Portland Road, LLC (former South Larsen)  
ECSI No. 3337

Dear Mr. Breunig:

Enclosed is an original copy of the DEQ Certification of Completion documenting the satisfactory completion of the scope of work at the North Portland Road, LLC (NPR) site located at 10145 North Portland Road in Portland, Oregon (specified in the Consent Judgment between DEQ and NPR, Multnomah County Case Number 0512-13315). As noted in the Certification, DEQ has concluded based on the information presented to date, that the NPR site is protective of public health and the environment and requires no further action provided the land and water use restrictions outlined in the Certificate of Completion are observed.

The NPR site was placed on DEQ's Inventory of sites that have a confirmed release and need additional investigation on December 17, 2002 as required by ORS 465.225. The facility will remain on the list because of potential future risk related to development in the vicinity of the residual chlorinated solvent plume and related to potential future use of the on-site groundwater supply well. DEQ will update the Environmental Cleanup Site Information System (ECSI) database to reflect the Certificate of Completion and the future use restrictions.

The Site Management Plan was submitted to DEQ on May 4, 2011 and was revised in August. A revised report was received August 15, 2011. The final Site Management Plan will be received after completion of the Soil Placement Cell and will include the As-Built drawings. The final Closeout Memorandum was received May 13, 2011.

Please note that NPR is still required to reimburse DEQ for its response costs associated with issuance of the Certification of Completion and project close out administrative tasks including: the ECSI database updates, the project filing, and receipt of the final Site Management Plan containing the As-Built diagrams. DEQ will invoice NPR for its response costs incurred through completion of these tasks.



In closing, DEQ would like to thank NPR for their cooperation with DEQ in the performance of investigation and cleanup actions at the site under the Consent Judgment. Should you have any questions or comments concerning administrative close out activities or your final invoice, please contact me at (503) 229-5213.

Sincerely;



Anna Coates, R.G.  
Hydrogeologist/Project Manager  
Cleanup and Emergency Response Section

Enclosure: Certification of Completion

cc: Bruce Gilles, DEQ  
Dawn Ismero, DEQ  
Charlie Landman, DEQ  
Lynne M. Parechan, Attorney at Law  
John Foxwell, Ash Creek  
Project File

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

In the Matter of:                    ) Consent Judgment, Multnomah County  
  ) Oregon, Case Number 0512-13315  
North Portland Road, LLC         )  
  ) CERTIFICATION OF COMPLETION  
  )  
  )  
  )

**I.     Findings**

A.   On December 23, 2005, the Oregon Department of Environmental Quality (DEQ) entered into a *Prospective Purchaser Agreement (PPA)* in the form of a *Stipulation and Consent Judgment (Consent Judgment)* with North Portland Road, LLC (NPR), concerning the property at 10145 North Portland Road in Portland, Oregon (the Site). The Site is also known as the “South Larsen Site” and is separated from the Columbia Slough by the parcel known as “North Larsen,” currently owned by the City of Portland. Under the terms of the Consent Judgment, NPR agreed to: 1) Pay \$60,000 to *Oregon Department of Environmental Quality, Hazardous Substances Remedial Action Fund* for investigation, removal, and remedial actions in the Columbia Slough; 2) Perform all actions described in the *Consent Judgment Scope of Work (SOW)*; and 3) abide by DEQ’s determination of whether institutional or engineering controls are required at the property to protect human health and the environment, and agree to an Easement and Equitable Servitude if necessary.

B.   The *Consent Judgment SOW* designated the following work items:

1. Remove or cap surface soils to a depth of two feet that exceed the risk-based concentrations (RBC) for occupational worker direct contact exposure pathways



as defined in the current *DEQ Risk-Based Decision Making for Remediation of Petroleum Contaminated Sites* (RBDM guidance).

2. Decommission stormwater catch basins along the western property boundary by removal or by filling with concrete if located during property development.
3. Install a stormwater drainage swale or berm along northern property boundary to minimize discharge of suspended sediments in storm water from northern property line ditch to the Columbia Slough.
4. Sample the on-Site water supply well, reassess future use of the well for irrigation in accordance with applicable DEQ requirements, and decommission the well in accordance with Oregon Water Resources requirements if continued use is not protective of human health and the environment.
5. Complete a focused beneficial water use determination to identify (current and potential future) groundwater uses both on-Site (if water supply well used for irrigation) and down gradient of the Site within the locality of the facility.
6. Treat the chlorinated solvent plume source area (groundwater) on the South Larsen Site, and perform groundwater monitoring within and downgradient of the source zone on the South Larsen Site to assess remediation effectiveness and residual risks to human health and the environment. Successful remediation would be determined based on the results of the beneficial water use determination, and a groundwater to surface water pathway evaluation that documents that groundwater dissolved phase solvent concentrations would not exceed applicable ambient water quality criteria adjacent to the Columbia Slough. Compliance concentrations are 3.3 ug/L for tetrachloroethene (PCE); 30 ug/L

trichloroethene (TCE); and 2.4 ug/L vinyl chloride (VC) in groundwater. Maximum detected groundwater concentrations in the source zone are 1,110 ug/L PCE; 17,200 ug/L TCE; and 3,870 ug/L VC. Groundwater fate and transport modeling using off-the-shelf programs (e.g. Biochlor) may be utilized to verify that residual solvent concentrations in groundwater are not predicted to exceed remediation goals adjacent to the Slough.

7. Evaluate risk to occupational workers from volatilization of chlorinated solvents to outdoor air in the event TCE concentrations in groundwater following remediation continue to exceed the DEQ generic occupational RBCs for volatilization to outdoor air exposure pathway specified in the DEQ RBDM guidance.
8. Evaluate solvent vapor intrusion into buildings if facility development includes placement of buildings within 20 feet of the source zone and concentrations of TCE and vinyl chloride in groundwater following remediation continue to exceed DEQ occupational vapor intrusion RBC as specified in the DEQ RBDM guidance. In lieu of evaluation, the applicant will install engineering controls, such as a liner or horizontal venting, for Site buildings in the vicinity of the solvent plume.

C. Work completed by NPR to fulfill the Consent Judgment work items is documented in the plans and reports in the Administrative Record included as Attachment A to this Certification of Completion and summarized below:

1. NPR's contractor, Ash Creek Associates, prepared a work plan to characterize concentrations of hazardous substances in surface soil, which was subsequently



approved by DEQ. The surface soil sampling was completed in 2010 as described in the DEQ approved work plan. Concentrations of polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs) and some metals (primarily lead) were detected in surface soils. The data were evaluated consistent with Oregon risk assessment guidance, and human health risks were found to be acceptable. Consequently, no excavation or capping was required.

2. Ash Creek prepared a work plan describing the stormwater system upgrades to remove the stormwater pathway to the Columbia Slough, which was subsequently approved by DEQ. The stormwater system upgrades were completed in 2009 and 2010. This included changing the City's grated top manhole covers to solid top, removing the west side catch-basins to prevent flow into the City storm sewer system, constructing an infiltration swale on the north side, and removing the four north side catch-basins and plugging the north stormwater line to prevent flow to the City storm sewer system. Approximately 2,400 cubic yards of soil were excavated to construct the infiltration swale. The soil contained petroleum hydrocarbons and lead at concentrations below applicable human health risk concentrations. Ash Creek's Site Management Plan provides that the soil will be placed in an on-Site cell and covered with 12 inches of gravel pursuant to the cell design prepared by reviewed and approved by DEQ. The location and grade of the soil placement cell will be surveyed after construction.
3. Ash Creek completed a beneficial water use determination for the facility and did not identify any current beneficial groundwater water uses within the locality of

facility. As part of the beneficial use determination, the on-Site supply well was sampled and tested for volatile organic compounds, metals, pesticides, herbicides and PAHs. No VOCs were detected above Method Detection Limits. Groundwater use, through operation of the on-Site water well for industrial or agricultural water supply, is a potential future beneficial use. The evaluation of groundwater-surface water interactions did not identify a connection between the chlorinated solvent source and the Columbia Slough.

4. Ash Creek completed a pilot test for the enhanced reductive dechlorination treatment of the solvent source zone, and prepared a report documenting the results of the pilot test. In addition, the report described a full scale design for injecting an emulsified oil substrate for treatment of the source area. Using EPA's Biochlor Model, the pilot test included baseline modeling of source area migration to develop conservative treatment goals that were protective of the Columbia Slough. Following full scale implementation, Ash Creek prepared a report describing the implementation of the enhanced bioremediation treatment injections, remedial effectiveness modeling, and performance evaluation. In all, a total of 73,000 gallons of emulsified oil and water mixture were injected at 29 injection locations within the source area. Two on-Site down gradient compliance monitoring wells were installed by NPR. The City of Portland also installed five wells on the adjacent off-Site North Larsen Site, three of which were between the South Larsen Site and the Columbia Slough. The enhanced bioremediation program resulted in a significant decrease in the concentrations of the chlorinated solvent source. The new wells provided water level data to determine the



hydraulic gradient, and chemical data to better estimate biotransformation factors. The baseline Biochlor model was subsequently updated using this information. The results of the updated model indicated that contamination from the Site would migrate no more than 300 feet from the source area, and would not intersect the Columbia Slough. Based on the treatment results and the findings that chlorinated solvents from the Site would not migrate to the Columbia Slough, DEQ has determined that treatment goals for the source zone have been satisfied.

5. Ash Creek completed an evaluation of the potential risk to occupational workers with respect to occupational vapor intrusion and volatilization to outdoor air. Concentrations of residual TCE and vinyl chloride do not pose a significant outdoor air exposure risk. TCE and vinyl chloride concentrations in one shallow well in the source area, MW-6s, remain above occupational vapor intrusion RBCs indicating a potential risk to workers through vapor intrusion and inhalation of indoor air. Since there are currently no buildings constructed over the source area this is a potential future human health risk. This potential exposure pathway is addressed in the Site Management Plan as outlined below.
6. Ash Creek prepared a closeout memorandum to summarize the activities completed under the Consent Judgment, which was approved by DEQ.
7. Ash Creek prepared a Site Management Plan to document the procedures by which the Property's owners will continue to exercise due care with respect to the Property. The Site Management Plan describes procedures for visual inspection of the swale and soil placement cell, considerations for construction in the vicinity of the chlorinated solvent source area, and provisions for evaluating future use of

the on-Site supply well to avoid impact to the residual VOC plume. Performance of Site controls is a condition of this *Certification of Completion* and will be recorded on the DEQ ECSI database.

D. On June 1, 2011, DEQ provided public notice and opportunity to comment on a proposed “No Further Action” determination for the NPR facility and, in accordance with ORS 465.320 and 465.325(10)(b), a proposed Certification of Completion. Copies of work plans and reports completed for the project, and a public review draft of the DEQ *Certification of Completion*, dated May 13, 2011, were available to review at DEQ’s Northwest Region offices. The public notice was published on June 1, 2011, in the *Oregon Secretary of State's Bulletin*, and in *The Oregonian* newspaper. The comment period was June 1, 2011 through June 30, 2011. Written comments were received from the City of Portland Bureau of Environmental Services on July 25, 2011. DEQ’s responses were dated August 4, 2011.

E. Based on the reports and other information submitted by NPR and based on DEQ's inspection and oversight of activities, DEQ finds that NPR has satisfactorily completed the Consent Judgment scope of work.

## **2. Conclusions**

A. NPR has satisfactorily completed the investigation and cleanup of soil and groundwater at the NPR facility located at 10145 North Portland Road, Portland, Oregon, required under the Consent Judgment, Multnomah County Oregon Case No. 0512-13315.

B. No further remedial actions are required at the Site to protect public health, safety, and welfare or the environment, except as provided under Subsection 3.B. of this Certification.



### **3. Conditions**

A. This Certification of Completion applies only to the satisfactory completion of the work conducted by NPR pursuant to the Consent Judgment.

B. Conditions include: 1) A prohibition on development within the vicinity of the source area (see Figure 4 of the Site Management Plan) where residual TCE and vinyl chloride concentrations exceed DEQ occupational RBCs for vapor intrusion, unless (a) DEQ-approved engineering controls are integrated into the construction, or (b) reevaluation of VOCs within the Building Exclusion Zone demonstrates to DEQ's satisfaction that concentrations of VOCs are below DEQ occupational RBCs for vapor intrusion ; 2) A prohibition on use of the on-Site water supply well unless a capture zone analysis demonstrates to DEQ's satisfaction that future well use would not mobilize residual contamination; and 3) Maintenance of the soil cell constructed to hold soil excavated for the stormwater swale.

C. DEQ's determination that no further action is required at the Site may be withdrawn upon discovery that Site controls have not been maintained, or discovery of new information showing that public health, safety, and welfare or the environment are not being protected.

D. DEQ does not, by this Certification, assume liability for any claim arising from acts or omissions of NPR or its officers, employees, agents, successors, subsidiaries, or assigns relating to actions pursuant to the Consent Judgment.

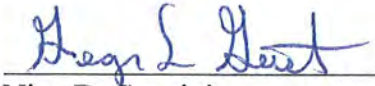
### **4. Notice**

This order constitutes Certification of Completion under ORS 465.325(10), and may be appealed by any aggrieved person in accordance with ORS 465.325(10)(c).

**Issued By:**

State of Oregon

Department of Environmental Quality

By:   
for Nina DeConcini  
Administrator, Northwest Region

8/15/11  
Date

**CERTIFICATE OF SERVICE**

I certify that I served a true copy of the above Certification of Completion by  
depositing it in the United States mail, postage prepaid, and addressed to the following  
persons:

Gerald Breunig  
North Portland Road LLC  
609 NE Repass Road  
Vancouver, Washington 98655

Lynne Paretchan, Attorney at Law  
PO Box 309, Lake Oswego, Oregon 97034  
Tel: 503.957.3341  
Email: Lynne@Paretchan.com

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)



## **Appendix A – Administrative Record Index**

1. *Proposed Surface Soil Sampling*, Ash Creek Associates, 2009
2. *Results of Surface Soil Sampling*, Ash Creek Associates, 2010.
3. *Work Plan for Stormwater System Upgrades*, Ash Creek Associates, 2009.
4. *Stormwater System Upgrades*, Ash Creek Associates, 2010
5. *Beneficial Use Determination*, Ash Creek, 2008; *Revised Beneficial Water Use Determination*, Ash Creek, 2011.
6. *Pilot Testing and Design Report*, Ash Creek, 2008.
7. *Enhanced Bioremediation Report and Updated Hydrogeologic Model*, Ash Creek, 2011.
8. *Occupational Air Evaluation Report*, Ash Creek Associates, 2011.
9. *Closeout Memorandum*, Ash Creek Associates 2011
10. *Site Management Plan*, Ash Creek Associates, 2011.

***Site Management Plan  
North Portland Road, LLC  
10145 North Portland Road  
Portland, Oregon***

**Prepared for:  
North Portland Road, LLC**

**May 4, 2011  
1392-00**



**Ash Creek Associates, Inc.**  
Environmental and Geotechnical Consultants





Ash Creek Associates, Inc.  
Environmental and Geotechnical Consultants

**Site Management Plan  
North Portland Road, LLC  
10145 North Portland Road  
Portland, Oregon**

**Prepared for:  
North Portland Road, LLC**

**May 4, 2011  
1392-00**



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**John Foxwell, R.G.**  
*Senior Associate Hydrogeologist, Ash Creek Associates*

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B	As-built Figure Showing Soil Placement Cell





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## **1.0 Introduction**

This Site Management Plan (SMP) has been prepared for the North Portland Road, LLC for its property located at 10145 North Portland Road, in Portland, Oregon (the Property). From 2005 to 2011, North Portland Road, LLC conducted a range of environmental remediation and management activities as part of a Consent Judgment and Prospective Purchaser Agreement (PPA) with the Oregon Department of Environmental Quality (DEQ). The work items required by the Consent Judgment were completed in early 2011. The owner of the Property will be responsible for the implementation the SMP.

### **1.1 Limitations**

The SMP is not intended to provide health and safety recommendations for the protection of site workers or construction personnel. Persons involved in construction activities or site operations that could result in exposure to site soil should be familiar with the content of this SMP and have a Health and Safety Plan (HASP) prepared specific to their work.

## **2.0 Property Description**

The Property is an approximately 15-acre parcel located approximately 600 feet south of the Columbia Slough (Figures 1 and 2). It is also known as the "South Larsen" property and is separated from the Columbia Slough by the parcel known as "North Larsen," currently owned by the City of Portland. The topography of the Property is relatively flat, with an elevation of approximately 20 feet above mean sea level (MSL). The ground surface of the Property is mainly unpaved, with interspersed paved areas.

## **3.0 Management Plan**

The SMP addresses the following areas:

- Monitoring of constructed infiltration swale;
- Performance monitoring of soil placement cell;
- Construction limitations near chlorinated solvent source area; and
- Production well capture zone analysis.

Two environmental management items that are not specific requirements of the Consent Judgment Scope of Work, but are applicable to the Property, are discussed in Section 4. These items are soil management and protection of monitoring wells.

---

### 3.1 Stormwater Infiltration Swale

One stormwater infiltration swale was constructed in the northeast portion of the Property in 2010 (Figure 2). A second swale was pre-existing in the southwest corner of the Property. These swales do not have a discharge connection to the City system, nor do they discharge or overflow to a surface water body. The design report for the constructed swale includes an operations and maintenance plan (O&M plan) that describes the frequency and scope of the reporting requirements, which is included in Appendix A.

#### Actions Required:

1. Inspect the constructed swale according to the O&M plan and as follows:
  - Quarterly through 2012;
  - Twice a year thereafter; and
  - Within 48 hours of major rainfall events (1 inch of rain over a 24-hour period).
2. Maintain the O&M plan logbook on site and make it available in the event of future inspections by City of Portland.
3. Provide swale maintenance according to the O&M plan.

### 3.2 Soil Placement Cell Management and Inspection

Approximately 2,400 cubic yards of mildly contaminated soil were generated during construction of the infiltration swale (Ash Creek, 2010b). These soils will be placed in a new soil placement cell constructed by summer 2011 (Figure 2). Thereafter, the surface of the placement cell area will be used for truck and equipment parking and staging. Figure 3 shows a schematic of the soil placement cell construction and a grading plan. As-constructed figures will be included in Appendix B after construction.

#### Actions Required:

1. The property owner shall maintain a soil placement cell inspection logbook that documents quarterly inspections and any maintenance or repairs completed on the soil placement cell, and includes pictures documenting the current condition of the soil placement cell. The soil cell inspection log will be maintained on site and made available to DEQ as requested.
2. Quarterly inspections of the soil placement cell shall document in the logbook whether:
  - The gravel cover is in place and washouts or other erosion is not apparent;
  - The demarcation layer is not exposed;
  - Surface water does not collect over an area larger than 25 square feet; and
  - Any repairs are made to soil placement cell, including its surface.



- 
3. Additional clean gravel will be added and graded as needed to repair surface of soil cell.

### **3.3 Limits on Construction Near Chlorinated Solvent Source Area**

A chlorinated solvent source area is present as a result of prior operations at the Property (Figure 4). In 2009, an enhanced bioremediation project was completed to treat the source area. The project resulted in a significant decrease of the chlorinated solvent source (Ash Creek, 2011a). The current soil and groundwater data set indicate that the remaining concentrations of VOCs do not result in unacceptable occupational risks from volatilization to outdoor air (Ash Creek 2011b). Risks to site workers from volatilization to outdoor air are acceptable, so no additional actions are required due to any volatilization to outdoor air pathway.

With respect to the indoor air pathway, concentrations of residual trichloroethene (TCE) and vinyl chloride currently remain above occupational vapor intrusion risk-based concentrations (RBCs) at one location in the source area (at shallow well MW-6s). Figure 4 shows the former chlorinated solvent source area, highlighting both the extent of VOCs in groundwater, as well as the estimated extent of VOCs that exceed DEQ's vapor intrusion RBC (DEQ, 2007a). The vapor intrusion management area will be defined by the limits of the contour on Figure 4.

#### **Actions Required:**

1. The property owner shall ensure that no buildings or other inhabitable structures (temporary or permanent) are built within the vapor intrusion management area, unless engineering controls (vapor barriers and/or a venting system) are incorporated into construction;
2. If construction is planned, the property owner shall provide the building plans, including the design for engineering controls, to DEQ prior to permitting and construction. Design for engineering controls will include a startup and performance monitoring plan; or
3. If a reevaluation of TCE and vinyl chloride concentrations determines that the concentrations of volatile organic compounds (VOCs) in shallow groundwater no longer result in vapor intrusion risks, then the property owner shall submit documentation to DEQ prior to permitting and construction. No engineering controls (vapor barriers and/or a venting system) would then be required for construction of structures in the current vapor intrusion management area.

### **3.4 Production Well Capture Zone Analysis**

An on-site production well is present at the location shown on Figure 2 and its well construction log is included in Appendix C. The well was sampled in 2008 for a comprehensive list of hazardous substances and the results were either "non-detect" or below DEQ risk-based concentrations for drinking water (Ash Creek, 2011c). There are no current plans for use and the well is reserved for future use. Prior to bringing the well back into use, the property owner shall determine the capture zone (radius of influence of the well

---

during pumping). Capture zones are dependant on pumping rates and site geology. The following procedures will be used to evaluate whether future well use would mobilize residual contamination in the former chlorinated solvent source area.

**Action Required:**

1. If property owner proposes to use existing well, a capture zone analysis will be completed by either an Oregon Registered Geologist or Professional Engineer and provided to DEQ for review prior to initiating use of the well. The capture zone analysis shall be completed using a 2-dimensional analytical model, or a similar hydrogeologic evaluation tool. An aquifer test will not be required

## **4.0 Additional Management Items**

This section describes additional environmental management considerations for current and future operations at the property. These items are not a specific requirement of the Consent Judgment; however, since the condition of the property may implicate regulatory requirements that current and future property managers and operators will be required to follow, including soil management procedures and protection of monitoring wells, those particular items are discussed here.

### **4.1 Soil Management**

No surface soil sources were identified that require excavation or capping (Ash Creek, 2010a). The only area on the site where soil concentrations are known to exceed DEQ occupational RBCs is the area within the soil placement cell and soils located at depth at the former chlorinated solvent source area (Figure 2). Soil management procedures will be put in place to ensure that waste soils that are generated during future construction or maintenance activities are characterized in accordance with state and federal regulations.

**Actions Required:**

1. If excavated soils are re-used on-site: Unless there are field indications of contamination (e.g., odors or staining), soils that are excavated for utility or other construction that will be replaced in their original excavation or used elsewhere on the site can be completed without characterization by North Portland Road, LLC.
2. If excavated soils are removed from the site: Soils excavated and stockpiled for off-site transport will be characterized prior to off-site transport to document that the concentrations of any hazardous substances do not exceed DEQ's unrestricted soil re-use criteria (commonly referred to as clean fill criteria; DEQ, 2007b).
  - If soil concentrations are less than unrestricted use criteria, then this plan places no restrictions on the use of the soil.





- 
- If soil concentrations exceed the unrestricted use criteria, then the soil may be re-used at the Property or disposed of at a licensed disposal facility.
  - If at least one concentration exceeds occupational screening levels, then the soil shall be properly designated and disposed of at a licensed disposal facility.

## **4.2 Maintenance of Monitoring Wells**

The site contains a network of monitoring wells (Figure 2). These wells will be left in place to support any future monitoring activities. The property owner will take steps to protect the monitoring wells in order to prevent surface water from entering the wells.

### **Actions Required:**

1. Repairs of site monitoring wells will be completed by an Oregon-licensed well driller.
2. Operations, maintenance, and construction activities conducted on the Property shall be done so as not to damage the monitoring wells.
3. If wells are inadvertently damaged, they shall be repaired as soon as practicable, but in no case shall the repair require more than two months to complete. Damaged wells will be appropriately secured so that surface water cannot enter the subsurface through the well casing or annulus while the well is awaiting repair. If the damage is too extensive to repair, the well will be decommissioned in accordance with applicable state regulations.

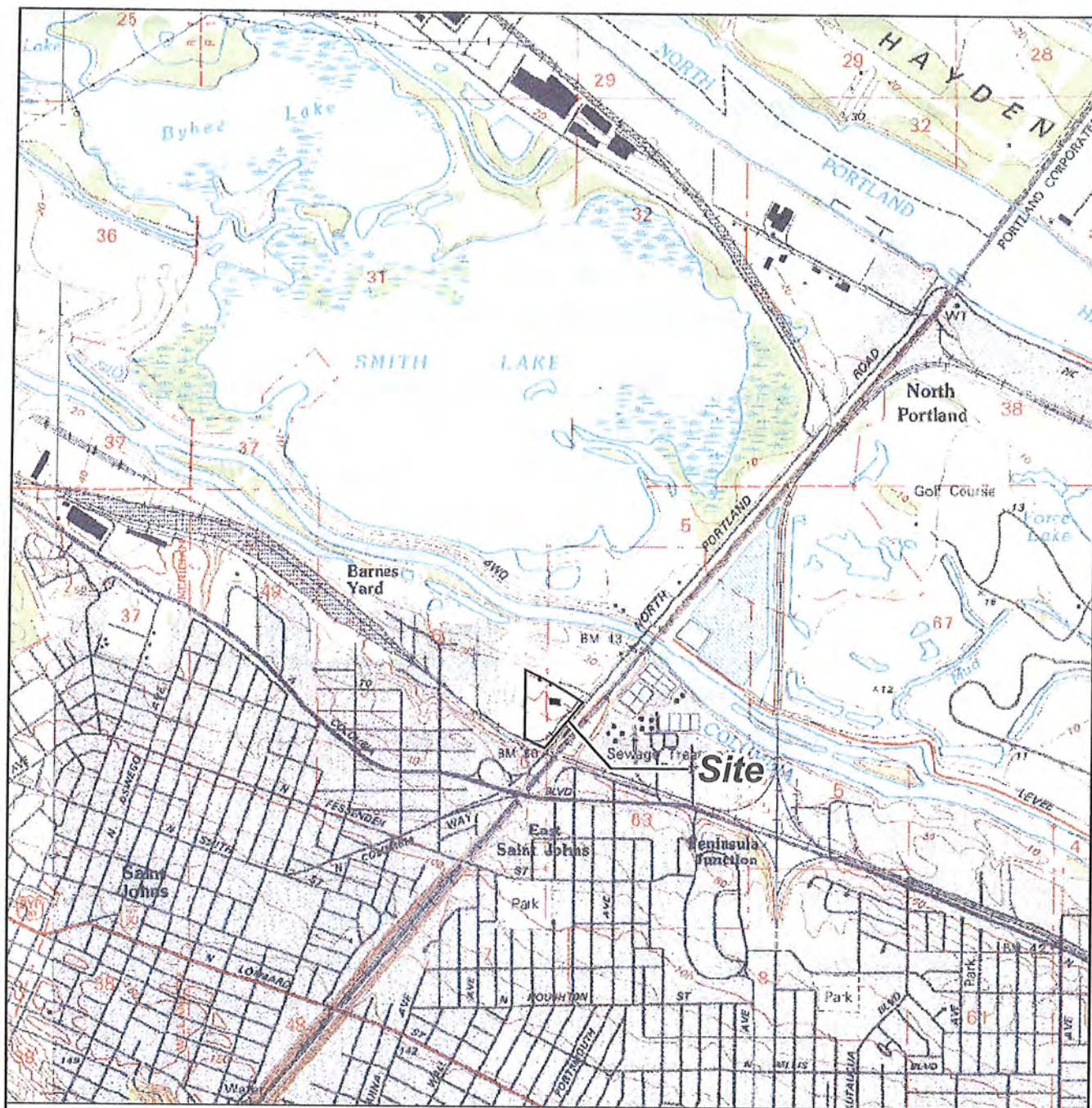


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## **5.0 References**

- Ash Creek Associates, Inc. (Ash Creek), 2009. Work Plan for Stormwater System Upgrades, North Portland Road, LLC, 10145 North Portland Road. October 5, 2009.
- Ash Creek, 2010a. Results of Surface Soil Sampling, Ash Creek Associates, North Portland Road, LLC, 10145 North Portland Road. December 16, 2010.
- Ash Creek, 2010b. Stormwater System Upgrades, North Portland Road, LLC, 10145 North Portland Road. December 27, 2010.
- Ash Creek, 2011a. Enhanced Bioremediation Report and Updated Hydrogeologic Model; North Portland Road, LLC, 10145 North Portland Road. January 13, 2011.
- Ash Creek, 2011b. Occupational Air Quality Evaluation, North Portland Road, LLC, 10145 North Portland Road. April 1, 2011.
- Ash Creek, 2011c. Revised Beneficial Water Use Determination, North Portland Road, LLC, 10145 North Portland Road. April 8, 2011.
- DEQ, 2007a. Risk-based Decision Making for the Remediation of Petroleum-Contaminated Sites. Oregon Department of Environmental Quality, Land Quality Division, Environmental Cleanup and Tanks Program. Updated March 2007.
- DEQ, 2007b. Guidelines for Soil Management Determinations (DRAFT). July 3, 2007.





Base map prepared from USGS 7.5-minute quadrangle of Portland, OR-WA, dated 1990 as provided by Topozone.

0 2000 4000  
Scale in Feet



## Site Location Map

10145 North Portland Road  
North Portland Road, LLC  
Portland, Oregon



Ash Creek Associates, Inc.  
Environmental and Geotechnical Consultants

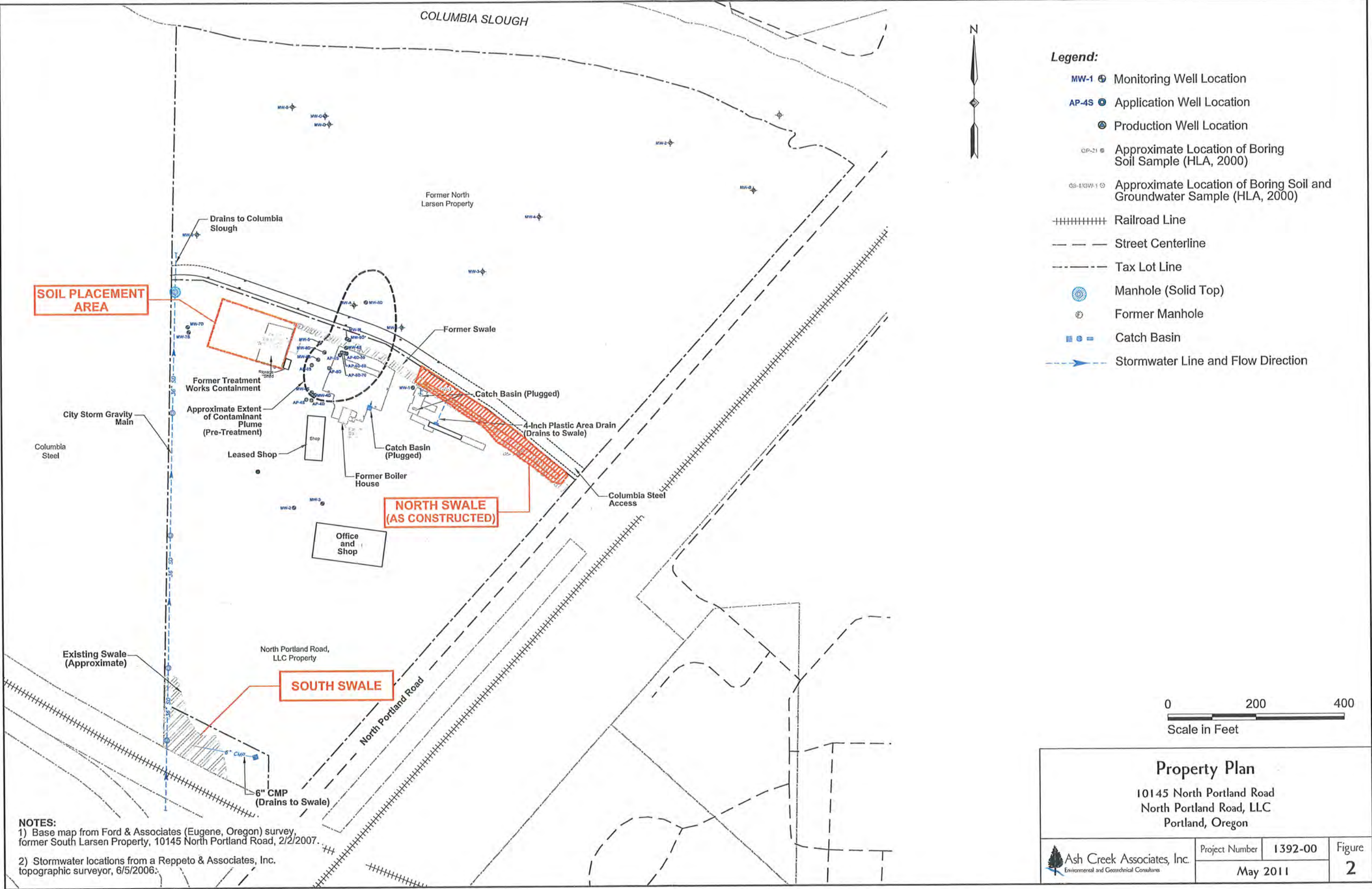
Project Number 1392-00

May 2011

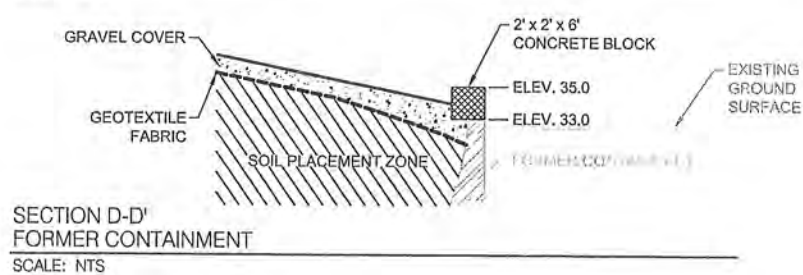
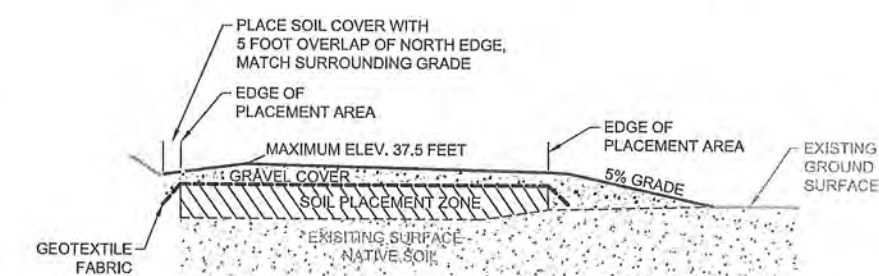
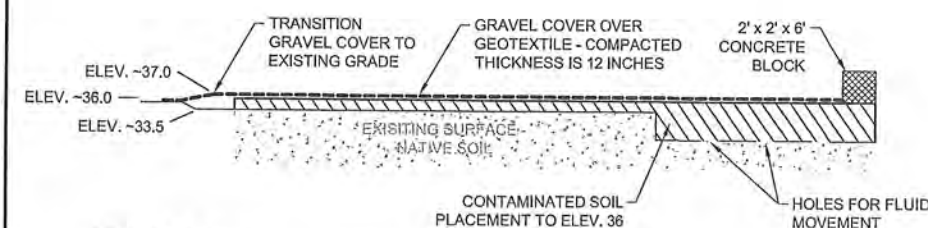
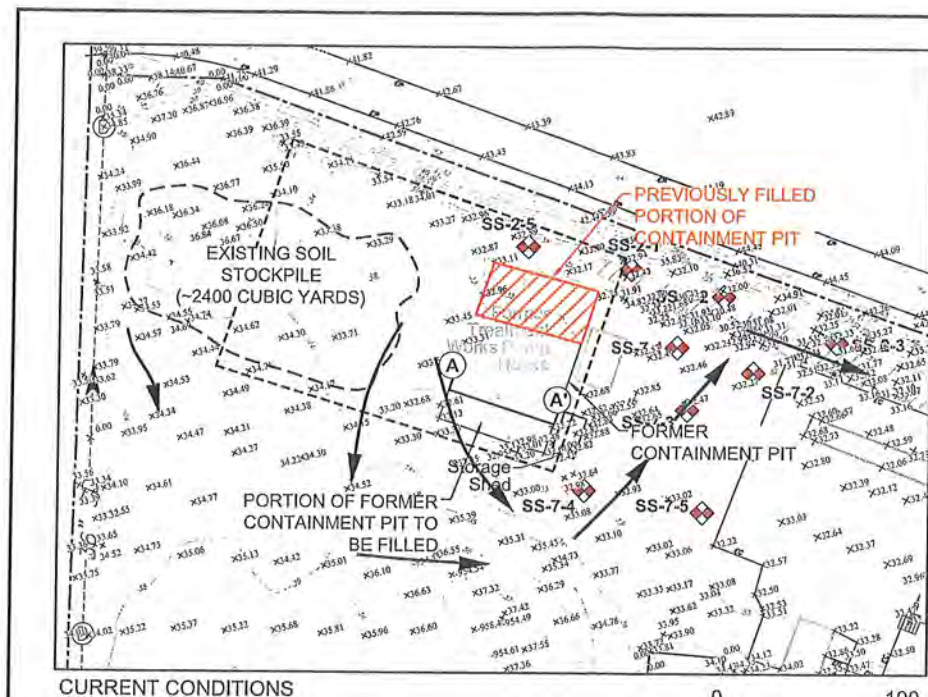
Figure

1





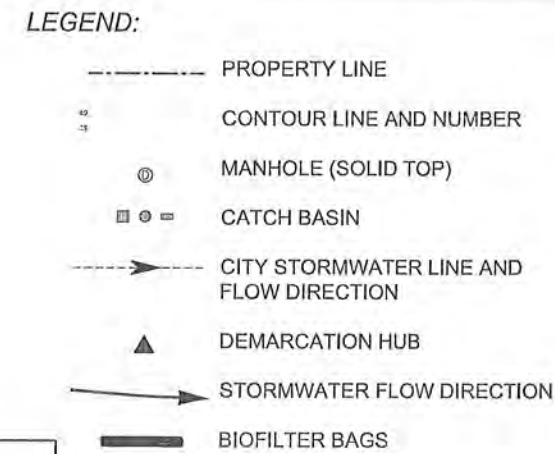
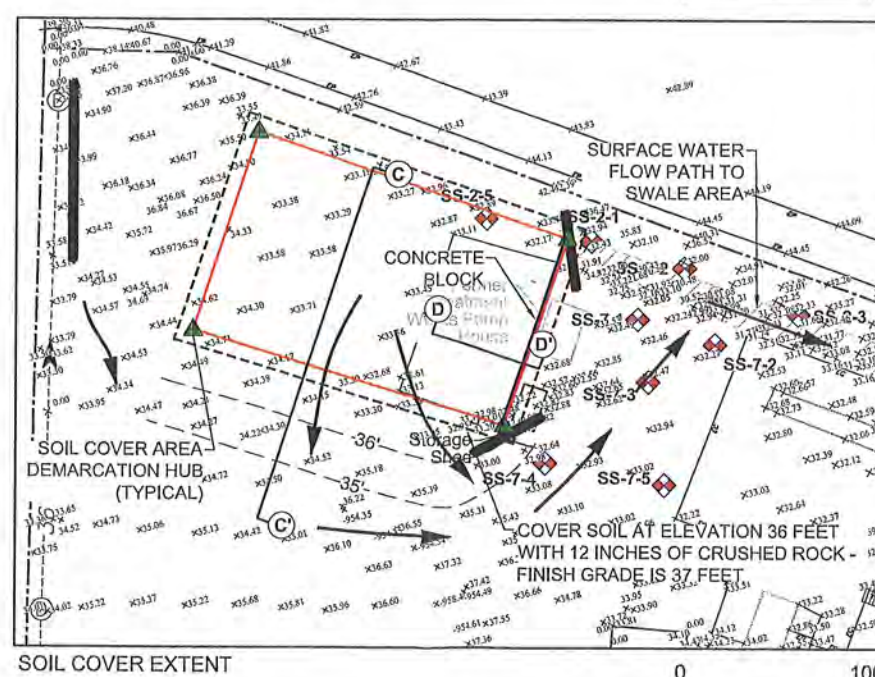
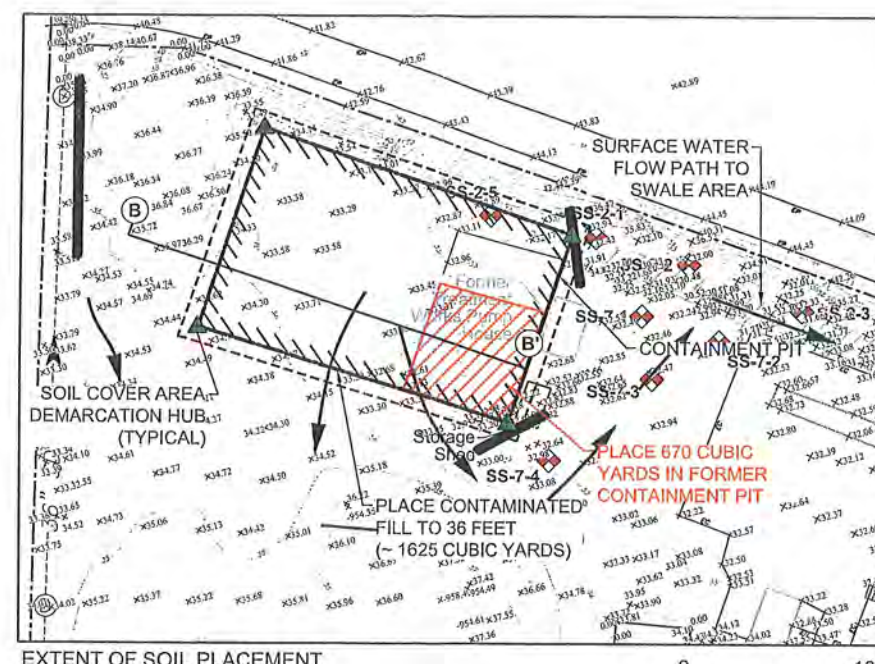
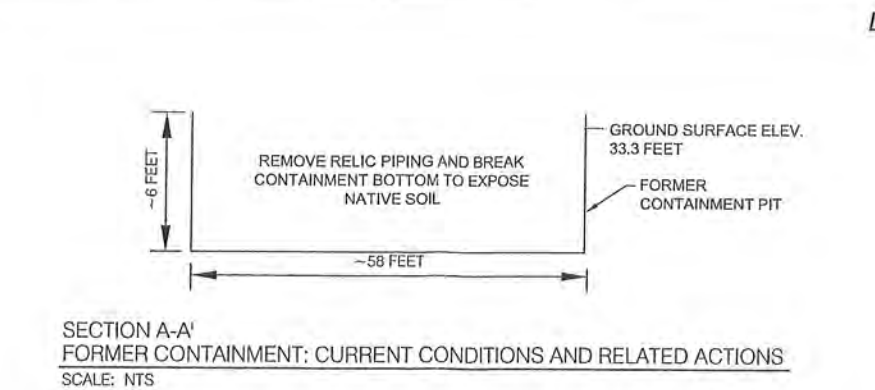




**NOTES:**

1) Base map from Ford & Associates (Eugene, Oregon) survey, former South Larsen Property, 10145 North Portland Road, 2/2/2007.

2) Stormwater locations from a Reppetto & Associates, Inc. topographic survey, 6/5/2006.



- EXCAVATION AND BACKFILL NOTES:**
1. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES.
  2. STOCKPILED SOIL IS CONTAMINATED SOIL.
  3. REMOVE ALL PLASTIC LINERS UNDER STOCKPILE BEFORE PLACING SOIL.
  4. PRIOR TO FILLING, PERFORATE PIT FLOOR TO ALLOW FOR DRAINAGE. PERFORATION SHOULD BE COMPLETED USING A HYDRO-HAMMER OR THROUGH CORING.
  5. PLACE CONTAMINATED SOIL IN 12-INCH LIFTS. COMPACT AND/OR TRACK SOIL UNTIL A DENSE, NON-YIELDING CONDITION IS ACHIEVED.
  6. PLACE GEOTEXTILE FABRIC ACROSS SOIL COVER AREA FOR DEMARCATION OF CONTAMINATED ZONE FROM GRAVEL CAP.
  7. PLACE IRON RODS OR OTHER SURVEY HUB AT CORNERS OF SOIL PLACEMENT AREA.
  8. SURVEY ELEVATIONS OF COMPACTED SOIL PLACEMENT AREA.
  9. PLACE 12 INCHES (MINIMUM) OF CRUSHED ROCK OVER SOIL COVER AREA. COMPACT AND ADD ADDITIONAL CRUSHED ROCK AS NEEDED TO MAINTAIN FINISHED, COMPACTED THICKNESS OF 12 INCHES.
  10. SLOPE AS SHOWN FOR SURFACE DRAINAGE AND SMOOTH TRANSITION TO EXISTING SURFACES.
  11. SURVEY FINISH GRADE.

- EROSION AND TURBIDITY CONTROL NOTES:**
- NOTE: THERE ARE NO CONNECTIONS TO OFFSITE DRAINAGES OR WATER BODIES. NO OFFSITE STORMWATER TRANSPORT IS POSSIBLE. EROSION AND TURBIDITY CONTROLS WILL BE ESTABLISHED TO PROTECT STORMWATER SWALE.**

1. IMPLEMENTATION, CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF ALL EROSION CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED. EROSION CONTROL MEASURES TO BE REMOVED BY CONTRACTOR AT END OF CONTRACT
2. THE EROSION CONTROL FACILITIES ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL GRADING ACTIVITIES TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT LEAVE WORK AREA OR ENTER THE SITE INFILTRATION SWALE.
3. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL UPGRADE AND MAINTAIN ALL EROSION CONTROL FACILITIES AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER SWALE.
4. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR.
5. DURING INACTIVE PERIODS ON THE SITE, THE CONTRACTOR MUST INSPECT AND MAINTAIN EROSION CONTROL FACILITIES ONCE EVERY 14 DAYS OR WITHIN 24 HOURS FOLLOWING A STORM EVENT (GREATER THAN 0.5 INCH).
6. MEASURES MUST BE TAKEN BY THE CONTRACTOR WHEN NECESSARY TO ENSURE THAT ALL EXISTING PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
7. THE MEANS AND METHODS OF THE CONTRACTOR MAY DICTATE THAT ADDITIONAL EROSION CONTROL MEASURES ARE NECESSARY. THESE ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE.
8. A SPILL KIT IS REQUIRED TO BE MAINTAINED ON SITE TO PREVENT SPILLS OF HAZARDOUS OR HARMFUL SUBSTANCES FROM ENTERING THE STORMWATER MANAGEMENT SYSTEM. CREWS MUST BE TRAINED ON THE LOCATION AND USE OF THE KIT.

## Grading and Erosion Control Details

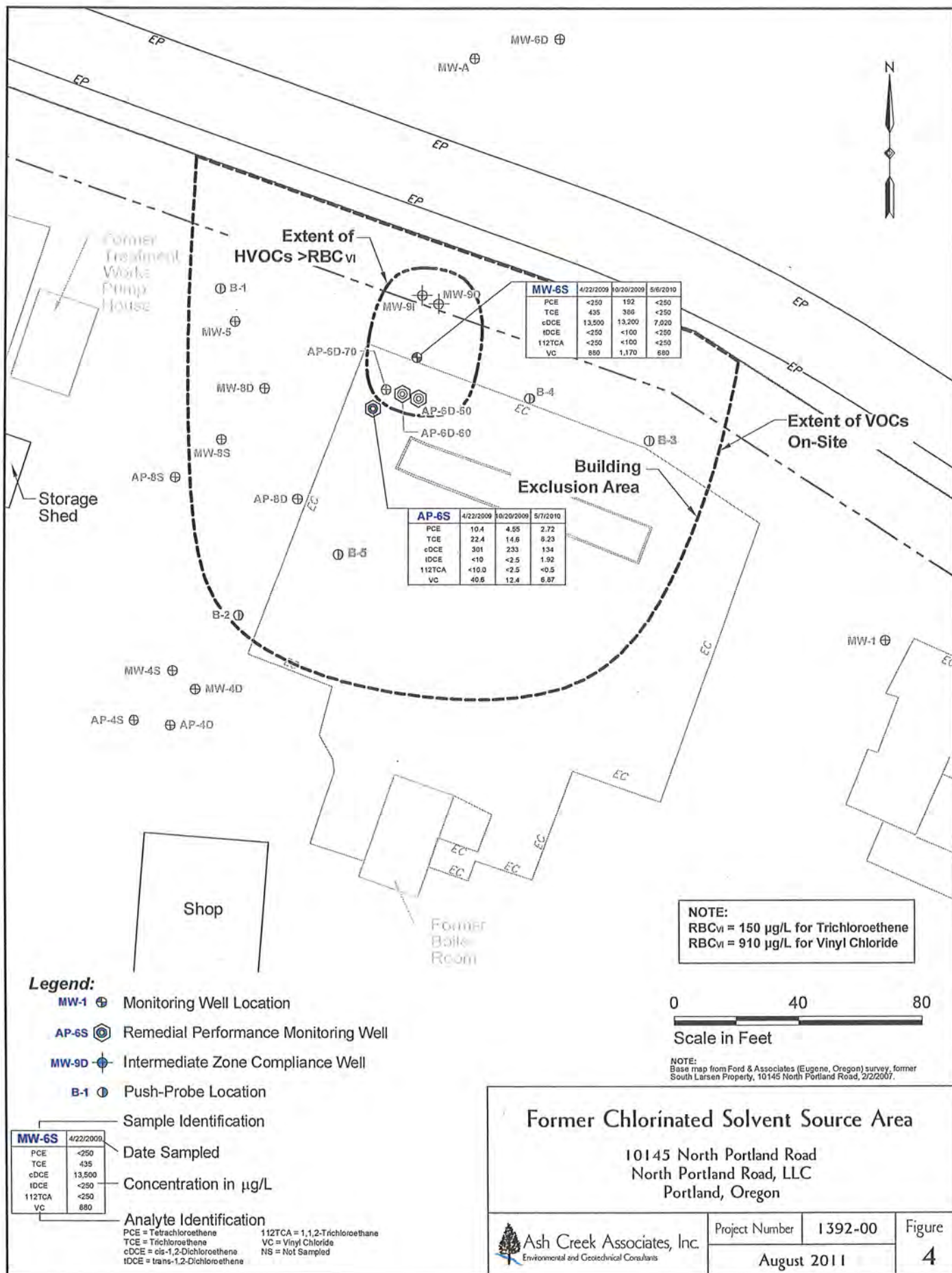
10145 North Portland Road  
North Portland Road, LLC  
Portland, Oregon

Ash Creek Associates, Inc.  
Environmental and Geotechnical Consultants

Project Number 1392-00  
May 2011

Figure 3







## ***Appendix A***

---

### **Vegetated Infiltration Swale O&M Plan**

**STORMWATER MANAGEMENT FACILITIES  
OPERATIONS & MAINTENANCE PLAN**

**FOR**

**WCT YARD DEVELOPMENT  
STORMWATER QUALITY INFILTRATION SWALE**

**10145 N. Portland Road  
Portland, Oregon  
Multnomah County**

**September 15, 2009**

**I DESCRIPTION**

This Stormwater Management Plan describes the operations and maintenance procedures necessary for the stormwater facilities to function properly. Vegetated Infiltration facilities are planted with low maintenance, native vegetation. However, as an infiltration facility, it needs some maintenance in order to continually infiltrate runoff into the ground.

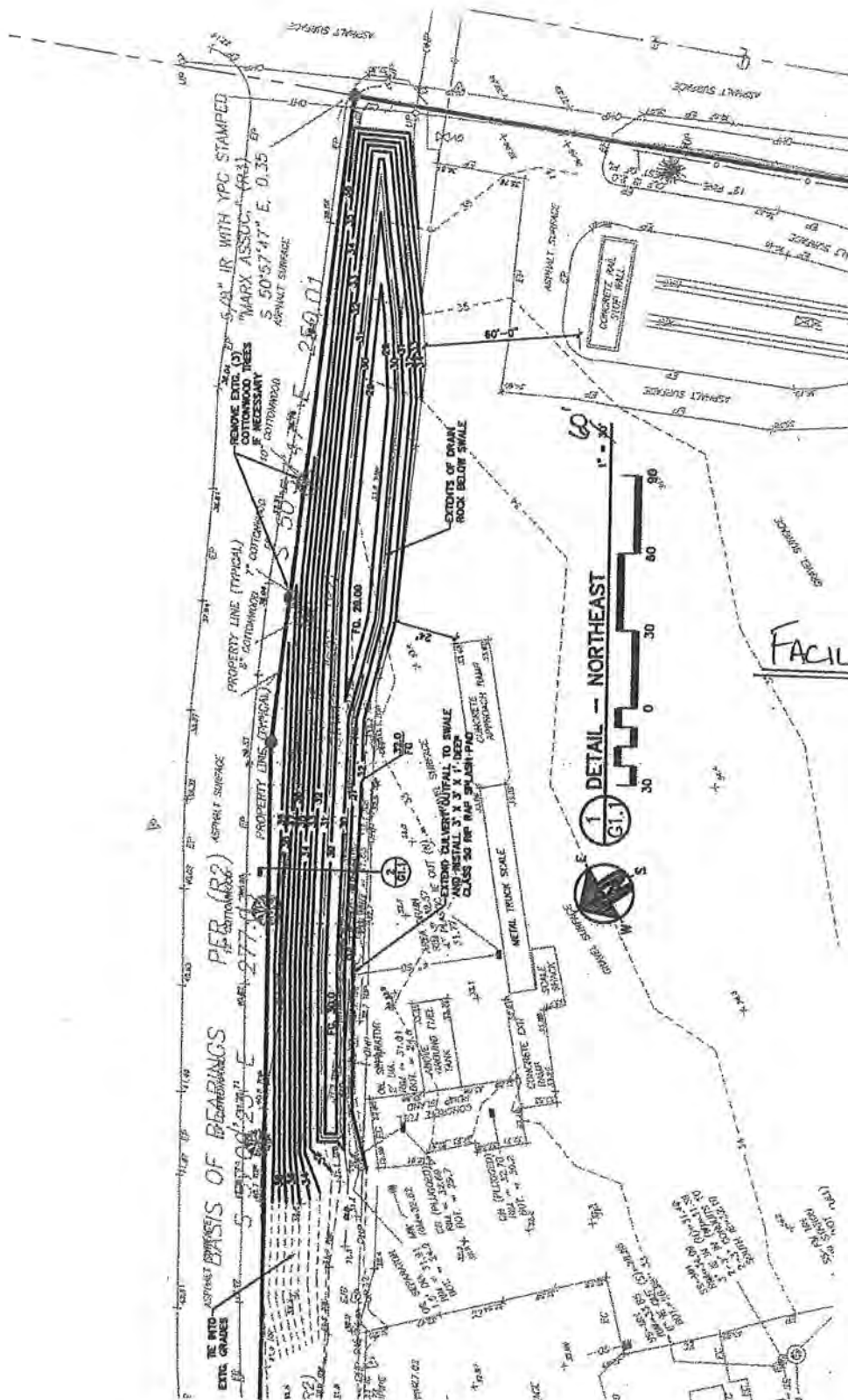
The vegetated infiltration swale receives stormwater runoff that carries sediment and other pollutants from the site. The topsoil in the facility traps sediments and pollutants, filtering the stormwater before it infiltrates to the native soil beneath the site. As the topsoil traps sediments, the void spaces near the surface fill up and become clogged, slowing down and eventually preventing runoff from infiltrating underground. Vigorous and healthy grassy vegetation helps to break up sediment layers and promote infiltration. If not properly maintained as outlined in this plan, clogged soils will lead to significant ponding in the facility.

This facility is designed to infiltrate all runoff up to a 10-year storm event (3.4" over 24-hours) with 12" freeboard. A 25-year storm event will infiltrate all runoff (3.9" over 24-hours) with 2" freeboard.

One facility will be built, at the northeast property line, near N. Portland Road. See map, next page. The facility will be maintained by the property owner.



## FACILITY MAP



## II SCHEDULE

Facility must be inspected at least:

- Quarterly for the first 2 years
- Twice a year thereafter
- Within 48 hours of major rainfall events (more than 1 inch of rain over a 24-hour period)

For at least the first 2 years, inspections should be conducted with the facility drawings and the O&M Plan in hand to help the inspector understand how the facility is supposed to function. The O&M Plan will help the inspector recognize signs that indicate diminished performance (for example, sediment accumulation, vegetation die-off, or ponding water for more than 24 hours after a storm).

## III PROCEDURES

The vegetated infiltration swale will require periodic maintenance during the first two years (establishment period) to ensure proper functioning and plant survival. The swale shall be inspected and maintained as stated:

**Source Control** measures prevent pollutants from mixing with stormwater. Typical non-structural control measures include raking and removing leaves, removing grass clippings, street sweeping, vacuum sweeping, and limited and controlled application of pesticides, herbicides, and fertilizers.

Impervious (paved) surface areas are significant sources of stormwater pollution. Parking lots, because of their large impervious surfaces, are one such source. During dry weather, parking lots accumulate pollutants associated with exhaust emissions, brake pad wear, fluid leaks from vehicles, atmospheric dryfall, and lack of maintenance. During wet weather, these and other pollutants (e.g., pesticides and fertilizers from landscaped areas) may be mobilized and transported into the storm drain system via rainwater. Thus, runoff from parking lots can contain metals, hydrocarbons, organic pollutants, and many other constituents. Pollution prevention (source control) is one of the most cost-effective long-term solutions to stormwater management.

### **Vegetated Infiltration Swale**

- Vegetation or roots from large shrubs and trees that limit access or interfere with swale operations shall be prevented.
- Water shall be provided to ensure plant establishment and survival during the establishment period. Beyond the establishment period, established native vegetation should survive on precipitation (except during extreme conditions).
- Nuisance and prohibited vegetation of all species shall be removed biannually. Invasive vegetation shall be removed and replaced with native vegetation per the plans.
- Vegetation that dies shall be replaced within 3 months or immediately if the season is appropriate, in order to maintain cover density and control erosion where soils are exposed.
- Any trash, plant debris, or sediment that collects in the planter may inhibit swale function, and shall be removed.
- Vegetated infiltration swales remove heavy sediment by letting it settle out of the stormwater. Many pollutants attach to sediment and are removed from stormwater in this way.
- The infiltration swale is designed to infiltrate within 48 hours of a storm event. If water continues to pond after that time, it is likely that sediment has settled over most of the swale. Remove collected sediment. Till and amend with compost the top 3"± of topsoil; if this is not sufficient, remove and replace the top 3"± with new freely draining growing medium. Replant vegetation & water to ensure establishment.
- Sediment can fill a swale over time. Healthy vegetation may keep stormwater infiltrating as normal. If the swale depth decreases by 1' or more, sediment and vegetation needs to be removed. Grades and vegetation shall be replaced per the original construction documents.
- Vacuum sweeping of paved vehicle traffic areas will reduce the amount of sediment that enters the swale.



- Repair any areas of erosion damage more than 2" deep.

**Spill Prevention** measures shall be exercised when handling substances that can contaminate stormwater. Virtually all sites, including residential and commercial, present dangers from spills. It is important to exercise caution when handling substances that can contaminate stormwater and migrate into the groundwater. Activities that pose the chance of hazardous material spills shall not take place near stormwater collection facilities.

- The proper authority and the property owner shall be contacted immediately if a spill is observed.
- A spill kit shall be kept near spill-prone operations and refreshed annually.
- Employees shall be trained on spill control measures.
- Releases of pollutants shall be corrected within 12 hours.

**Insects and Rodents** shall not be harbored in any part of the stormwater system.

- Pest control measures shall be taken when insects/rodents are found to be present. Food sources shall be prevented.
- Holes in the ground located in and around the storm system shall be filled.

#### **IV WHO SHARES FINANCIAL RESPONSIBILITY**

The facilities will be maintained by the property owner.

#### **V INSPECTION AND MAINTENANCE LOGS**

Keep inspection and maintenance records to track the development of the systems over time. The inspection records shall include:

- General condition of the systems, inflow pipes and vegetation.
- Sediment condition and depth. Installing a sediment gauge is recommended.
- Water elevation and observations (sheen, smell, etc.).
- Unscheduled maintenance needs.
- General observations and aesthetic conditions.

See next page for an example maintenance log.

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

Work performed by: \_\_\_\_\_

Work performed: \_\_\_\_\_

Details: \_\_\_\_\_

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

Work performed by: \_\_\_\_\_

Work performed: \_\_\_\_\_

Details: \_\_\_\_\_

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

Work performed by: \_\_\_\_\_

Work performed: \_\_\_\_\_

Details: \_\_\_\_\_

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

Work performed by: \_\_\_\_\_

Work performed: \_\_\_\_\_

Details: \_\_\_\_\_

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

Work performed by: \_\_\_\_\_

Work performed: \_\_\_\_\_

Details: \_\_\_\_\_



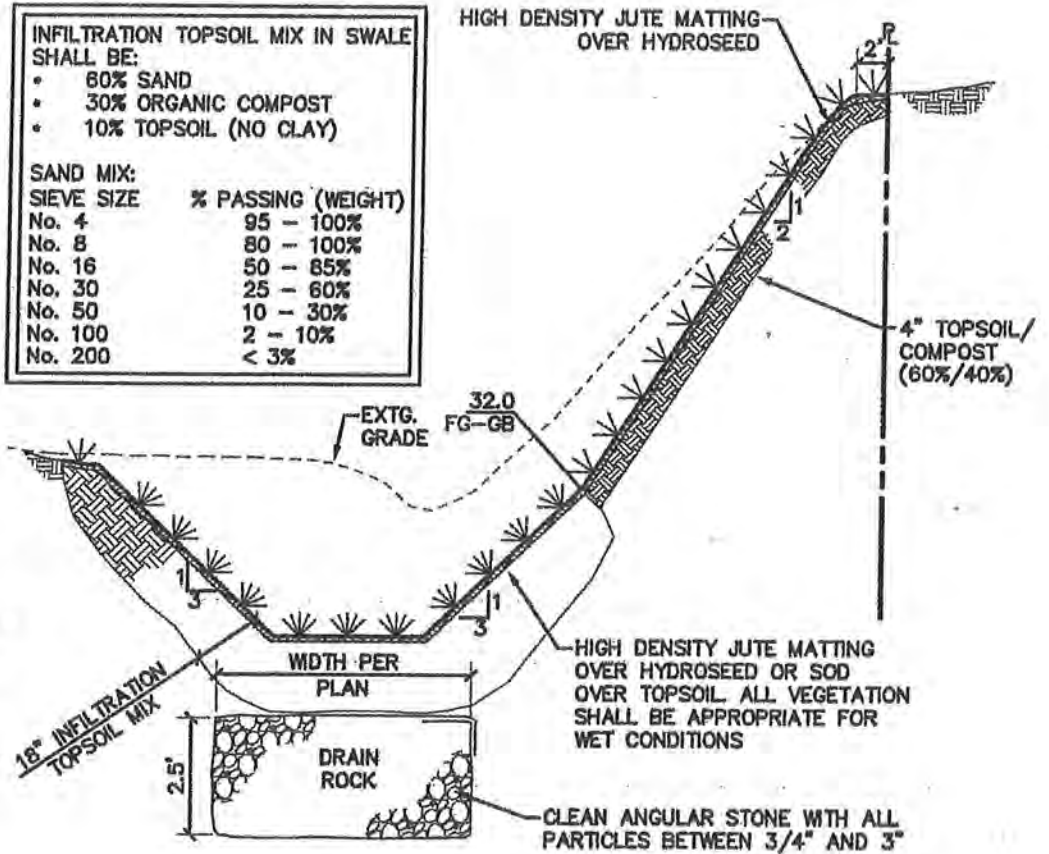
WCT YARD  
207467

SEED MIX ABOVE SWALE ON THE NORTH SLOPE SHALL BE APPROXIMATELY 60% PERENNIAL RYEGRASS, 15% EUREKA HARD FESCUE, AND 20% HERBACEOUS PLANTS AND CLOVER (HOBBS AND HOPKINS PRO-TIME 705 PDX). SOW AT 2 LBS. PER 1,000 SQ. FT.

SEED MIX WITHIN SWALE SHALL BE APPROXIMATELY 40% DWARF TALL FESCUE, 30% DWARF PERENNIAL RYE "BARCLAY", 25% FESCUE AND 5% COLONIAL BENTGRASS. SOW AT 5 LBS. PER 1,000 SQ. FT.

ALL SWALE SIDE SLOPES SHALL BE 3H:1V (MAXIMUM) BELOW ELEVATION 32.0.

ALL SIDE SLOPES ABOVE ELEVATION 32.0 SHALL BE 2H:1V.



2  
G1.1

## SWALE SECTION

G11-2.dwg

N.T.S.

## ***Appendix B***

---

**As-Built Figure Showing Soil Placement Cell**



**To be included at later date**

## ***Appendix C***

---

### **Well Log for On-Site Water Well**



STATE ENGINEER  
Salem, Oregon

MULT  
938

## Well Record

STATE WELL NO. 1N/1-6J(1)  
COUNTY Multnomah  
APPLICATION NO. G-2988

OWNER: Louis F. Larsen

MAILING ADDRESS: 8233 N. Willamette Blvd.

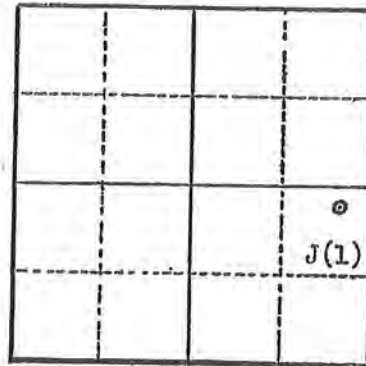
LOCATION OF WELL: Owner's No. \_\_\_\_\_

CITY AND STATE: Portland, Oregon

NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Sec. 6 T. 1 N. 3 R. 1 E. W. W.M.

Bearing and distance from section or subdivision

corner 180' S. & 389' W. of E $\frac{1}{4}$  cor. of sec. 6



Section 6

Altitude at well \_\_\_\_\_

TYPE OF WELL: Drilled Date Constructed 1946

Depth drilled 65' Depth cased 65'

CASING RECORD:  
8 inch

FINISH:

AQUIFERS:

Gravel

WATER LEVEL:  
26 feet

PUMPING EQUIPMENT: Type Turbine H.P. 10  
Capacity \_\_\_\_\_ G.P.M.

WELL TESTS:

Drawdown \_\_\_\_\_ ft. after \_\_\_\_\_ hours \_\_\_\_\_ G.P.M.

Drawdown \_\_\_\_\_ ft. after \_\_\_\_\_ hours \_\_\_\_\_ G.P.M.

USE OF WATER Irrigation & Commercial Temp. \_\_\_\_\_ °F. \_\_\_\_\_, 19\_\_\_\_

SOURCE OF INFORMATION G- 2779

DRILLER or DIGGER \_\_\_\_\_

ADDITIONAL DATA:

Log X Water Level Measurements \_\_\_\_\_ Chemical Analysis \_\_\_\_\_ Aquifer Test \_\_\_\_\_

REMARKS:

Sandy loam	0 to 42
Sand	42 to 55
Sand & gravel	55 to 61
Gravel, WB	61 to 65

# CLARENDON

AREA OF GROUND: 100,148 sq. ft. (2.3A)

**RECEIVED**  
FEB 28 1972

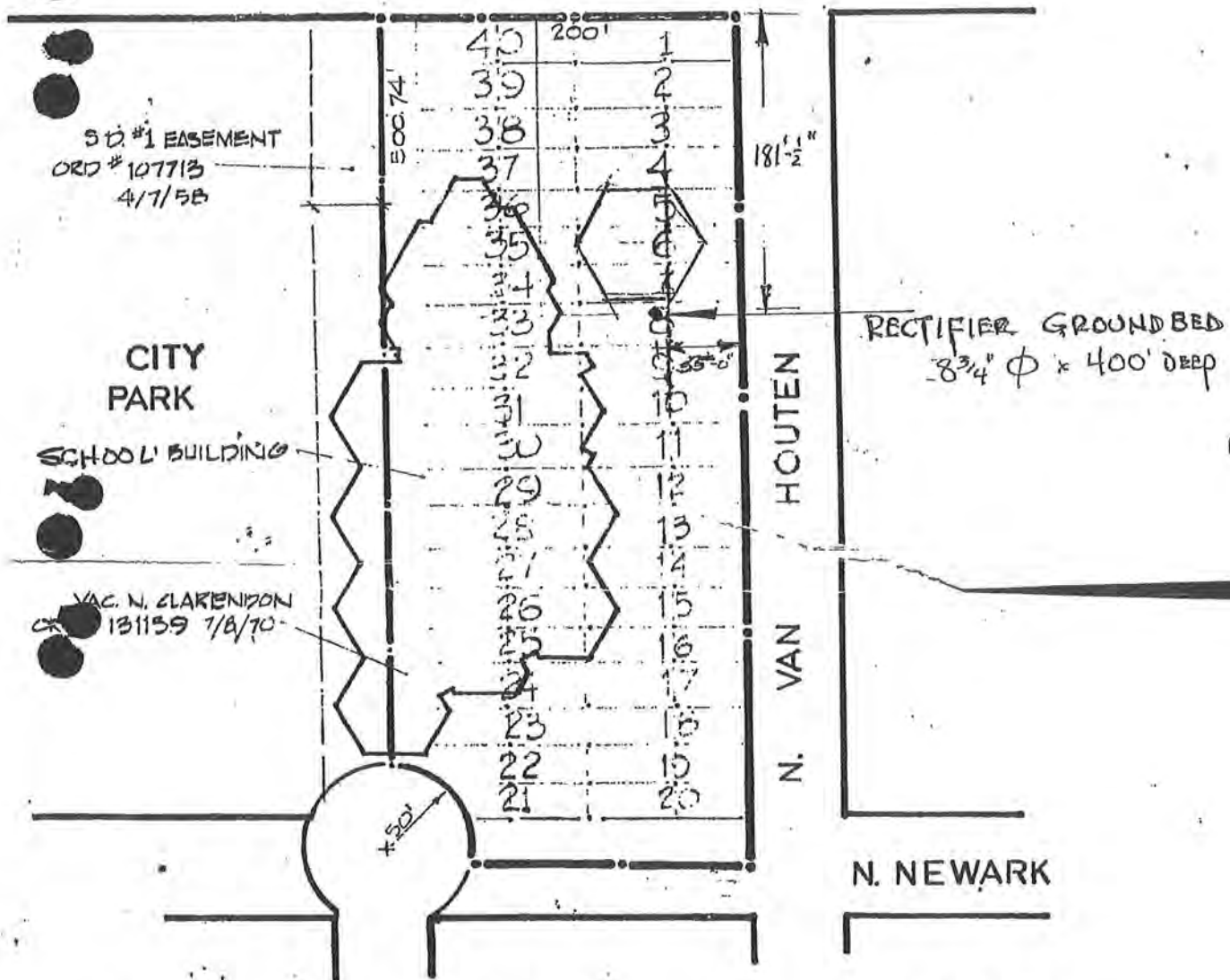
STATE ENGINEER  
SALEM, OREGON

**RECEIVED**  
JAN 31 1972

STATE ENGINEER  
SALEM, OREGON



N. FESSENDEN ST.



MULTNOMAH COUNTY  
SECT. 7 TIM - RIE W.M.

MAR 22 1971

1/4 SECT. N<sup>o</sup> 2125  
2124



# Oregon DEQ Contained-In Determination Approval Signoff Sheet

**Site Name:** Larsen North – City of Portland (ECSI No. 186)

**Location:** 10505 North Portland Road, Portland, Oregon 97203

**Media:** Soil

**Approved Disposal Location:** Hillsboro Landfill

**DEQ Project Manager:** \_\_\_\_\_  
(Sarah Greenfield)

Date: 12/7/2023

**DEQ HW Staff:** \_\_\_\_\_  
(Zeb Bates)

Date: 12/7/2023

**DEQ HSW Program Manager:** \_\_\_\_\_  
(Audrey O'Brien)

Date: 12/07/2023

**DEQ Cleanup Program Manager:** \_\_\_\_\_  
(Kevin Parrett)

Date: 12/07/2023

# Memo

**Date:** December 6, 2023

**To:** Project File, Larsen North – City of Portland, ECSI 186

**From:** Sarah Greenfield, Project Manager, NWR Cleanup Program

**Through:** Zeb Bates, Hazardous Waste Inspector

**And:** Audrey O'Brien, DEQ HW/SW Program Manager  
Kevin Parrett, NWR Cleanup Program Manager

**Subject:** No Longer Contained-In Determination  
Larsen North – City of Portland (ECSI 186)  
10505 North Portland Road  
Portland, Oregon 97203



**Northwest Region  
Cleanup Program,**  
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Phone: 503-229-5245

Fax: 503-229-5696  
Contact: Sarah Greenfield  
Email:  
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on.gov  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

The DEQ's Northwest Region Environmental Cleanup and Hazardous Waste programs have prepared this *No Longer Contained-In Determination* for soil and investigation derived waste (IDW) generated during well abandonment and subsurface investigations at the North Larsen voluntary cleanup site at 10505 North Portland Road, Portland Oregon (the Site). This determination was prepared in response to a request entitled *Request for No Longer Contained-In Determination for North Larsen Property* dated October 2, 2023, prepared by Parametrix on behalf of the City of Portland, Bureau of Environmental Services (BES). The request is included in this determination as Attachment 1.

The Site has been an industrial property since at least the 1940s. The Site has been used as a shingle mill, used for boat manufacture and repair, materials storage, diesel engine repair and rebuilding, and tank-truck washing companies. More recently it has been vacant, acquired by the City of Portland for potential expansion of the nearby Columbia Boulevard Wastewater Treatment Plant. Columbia Slough is located along the Site's northern property line.

The contaminants of concern (COCs) in environmental media at the Site include volatile organic compounds (VOCs), specifically 1,1-Dichloroethylene (1,1-DCE), tetrachloroethylene (PCE), Trichloroethylene (TCE), and Vinyl Chloride (VC), petroleum hydrocarbons, and metals associated with historical use. DEQ considers PCE and TCE contamination in environmental media from this Site to potentially contain listed hazardous waste with waste code of F002.

Foundry waste from the adjacent Columbia Steel property to the west was previously stored in the westernmost portion of the Site, with City of Portland approval. This waste was subsequently removed. The foundry waste stored on Site and later removed has been the subject of numerous sampling efforts, reviewed by both Cleanup and Materials Management Program personnel at DEQ. Sampling has not identified the stored foundry material to exceed characteristic waste standards.

Drums containing cuttings from the over-drilling and decommissioning of a single Site monitoring well (MW-A, located near MW-6D) were previously found to contain concentrations of PCE which designated it as a hazardous waste (> 5 ppm). These drums were disposed of in 2020 at a Subtitle C landfill and no material from this well decommissioning remains on site.

# Memo

This No Longer Contained-In Determination is for the following types of waste stored on Site:

- Thirty-one 55-gallon steel drums of investigative-derived waste (IDW) soil were generated in 2016 by overdrilling and decommissioning several monitoring wells that remain on Site. The IDW drums are currently stored on Site in sealed drums labeled as non-hazardous waste.
- A pile of soil (assumed to be less than 90 tons) that was generated in 2020 by over-excavating the foundry waste that was previously stored on Site. Over-excavation of the foundry waste resulted in a soil pile and excavation pit that remain on Site. The soil pile is covered with plastic sheeting secured with sandbags.

All of the soil and IDW drums have been stored in the area of contamination (AOC) on the Site.

On behalf of the City of Portland, Parametrix collected the following samples representative of the materials subject to this determination:

- Six soil samples were collected on March 15, 2016, from drums containing cuttings from over-drilling and decommissioning monitoring wells MW-1, MW-2, MW-C, MW-6, MW-6D, MW3, MW-4, and MW-B, MW-D, and MW-5 (CUTTINGS\_MWBD5, CUTTINGS\_MW34, CUTTINGS\_MW6D, CUTTINGS\_MW2C, CUTTINGS\_MW1, CUTTINGS\_MW6). The six IDW drum samples were collected as composite samples generated by collecting and compositing subsamples from 3 to 4 drums representative of one or more of the abandoned wells. Soil samples collected from the IDW drums were analyzed for VOCs by U.S. Environmental Protection Agency (EPA) Method 8260D. Select IDW drum samples were also tested for a variety of metals via EPA Method 6020 as follows:
  - CUTTINGS\_MWBD5 – Total Lead;
  - CUTTINGS\_MW34 – Total Chromium and Total Lead; and
  - CUTTINGS\_MW2C – Total RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver).
- One soil sample was collected on May 28, 2020, using an excavator to scrape the bottom and sides of the pit (CS-15-Pit) created by over-excavating the foundry waste. The pit sample was tested for the following analyses:
  - VOCs – EPA Method 8260D;
  - Total metals – EPA Method 6020;
  - Toxic Characteristic Leaching Procedure (TCLP) lead – EPA Method 6020;
  - Total petroleum hydrocarbons, gasoline range – NWTPH-Gx;
  - Total petroleum hydrocarbons, diesel range – NWTPH-Dx;
  - Polycyclic aromatic hydrocarbons (PAHs) – EPA Method 8270-SIM; and
  - Polychlorinated biphenyls (PCBs) as Aroclors – EPA Method 8082.
- One composite soil sample was collected on June 23, 2020, from the resultant soil pile (CS-17 Pile). The soil pile sample was analyzed for the following metals via EPA Method 6020:



State of Oregon  
Department of  
Environmental  
Quality

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- Total Priority Pollutant 13 metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) – EPA Method 6020; and
- Total manganese – EPA Method 6020.

All samples were collected in laboratory-provided containers and submitted to the City of Portland Water Pollution Control Laboratory in Portland Oregon under proper chain-of-custody procedures. DEQ reviewed the laboratory results for the hazardous constituents from listed waste per DEQ guidance *Conducting Contained-In Determinations for Environmental Media* dated January 9, 2020. Low levels of PCE and TCE were detected in select IDW drums. The results of the chemical analysis for PCE and TCE are tabulated below. The complete soil analytical results are presented in Tables 1 and 2 of Attachment 1.



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**Table 1. Media Pollutant and Applicable Risk-Based Concentrations**

Sample ID	PCE Concentration (ug/Kg)	TCE Concentration (ug/Kg)
CUTTINGS_MW6D	975	111
CUTTINGS_MW2C	124	ND
CUTTINGS_MW1	57.2	ND
CS-17-Pile	NA	NA
CS-15-PIT	ND	ND
<b>Soil Direct Contact Occupational RBC</b>	<b>1,000, 000</b>	<b>51,000</b>
<b>20 x TCLP Limit for Soil</b>	<b>14,000</b>	<b>10,000</b>

A No Longer Contained-In Determination is needed to show that the soils planned for disposal are not characteristic hazardous waste; and that concentrations of PCE and TCE are below protective levels, and if applicable, Land Disposal Requirements (LDRs).

To demonstrate that the soil no longer "contains" hazardous waste, the following conditions need to be met:

1. The soil (a solid) must not exhibit a characteristic of hazardous waste (must not be reactive or toxic). The potential for soil containing a waste to exhibit the toxicity characteristic is evaluated through comparison of constituent concentrations in leachate, extracted from the waste, using the Toxicity Characteristic Leaching Procedure (TCLP), with the limits specified at Title 40, Part 261.24 of the Code of Federal Regulations (40 CFR 261.24). Only the pit soil sample (CS-15-PIT) was submitted for TCLP analysis for lead. The TCLP lead concentration was 0.029 mg/L which is well below the TCLP limit for lead (5 mg/L). TCLP Representative (total) chemical concentrations for the soil samples were compared to a value of 20 times the TCLP limit (to account for the 20 to 1

# Memo

dilution inherent in the TCLP analysis method) to determine if the limits could potentially be exceeded. If the 20 times TCLP limit for any chemical is exceeded, then the waste may be a characteristic waste. The 20 times TCLP limit for PCE is 14 part per million (ppm) or 14,000 part per billion (ppb). The 20 times TCLP limit for TCE is 10 ppm or 10,000 ppb. The soil would not exceed the toxicity characteristic for PCE or TCE applying this assessment method. The soil is therefore not a characteristic hazardous waste.

2. Concentrations of hazardous constituents from listed waste must be below health-based levels. Currently, it is DEQ policy that if soil is to be taken to a lined Subtitle D facility then concentrations of hazardous constituents should be below DEQ's "Occupational" Risk-Based Concentration (RBC) for direct contact. Currently, the occupational RBCs for PCE and TCE are 1,000 ppm and 51 ppm, respectively. The concentrations of PCE and TCE detected in the pit soil and the IDW soil are well below the occupational direct contact RBC indicating the soil is a good candidate for disposal at a Subtitle C or a Subtitle D equivalent landfill.
3. RCRA Land Disposal Restrictions do not apply because the waste was not removed from the Area of Contamination before this determination.

The table above illustrates the sample results compared to the applicable DEQ RBCs and TCLP.

Underlying constituents of PCE and TCE might be present in the soil at concentrations below the minimum reporting levels (MRLs) shown in the laboratory data. Using the MRL concentrations and our knowledge of process, we can assume the following about the soil:

- It would not be ignitable, corrosive nor reactive;
- Concentrations of underlying constituents would be below Toxicity Characteristic levels;
- Concentrations of underlying constituents would be below DEQ protective levels (Occupational RBCs).

Based on the review of the data and the above findings, DEQ has determined that the pit soil and the IDW soil generated during drilling and sampling activities at the Site do not exhibit characteristics of hazardous waste. The concentrations of detected solvents in the soil samples are below the DEQ's occupational risk-based levels. The soil does not pose an unacceptable risk to industrial worker exposure under the waste management scenario proposed. Thus, the pit soil and IDW soil meet the criteria for no longer containing listed waste. The pit soil and IDW soil may be disposed of at a permitted Subtitle C or Subtitle D landfill. Parametrix or BES should contact the applicable landfill facility(ies) to verify that they are willing to accept the soil and IDW waste. If the soil or IDW waste is not managed and disposed of following these conditions of approval, this NLCI Determination does not apply, the waste remains hazardous waste and must be managed and disposed of in compliance with applicable hazardous waste laws.



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APPENDIX D  
City of Portland Bureau of Environmental Services  
Soil Sample Data Tables 1 through 6



**Table 1 - Summary of Soil Analytical Results- Total Petroleum Hydrocarbons (TPH)**

Sample ID	Sample Date	Sampled By	Sample Depth	Laboratory Analytical Testing Results (mg/kg)					
				NWTPH- HCID	NWTPH-Gx	NWTPH-Dx		EPA 8260	EPA 8270
					Gasoline	Diesel	Lube Oil	VOCs	SVOCs/PAHs
Kleinfelder & PNG Test Pits (ft. bgs)									
TP3-13	5/18/99	PNG	13	--	4.77	ND	1,000	Table 2 <sup>4</sup>	ND
TP-1-7	5/17/00	Kleinfelder	7	--	--	--	--	ND <sup>4</sup>	ND
TP-1-19	5/17/00	Kleinfelder	19	--	--	--	--	ND <sup>4</sup>	ND
TP-2-5	5/17/00	Kleinfelder	5	--	--	--	--	ND <sup>4</sup>	Table 3
TP-2-19	5/17/00	Kleinfelder	19	--	--	--	--	Table 2 <sup>4</sup>	ND
BES Test Pits (ft. bgs)									
T-Pit-1 0-18"	10/5/23	BES	0-1.5	Oil	--	28	520	--	Table 3
T-Pit-2 0-5'	10/5/23	BES	0-5	Oil	--	30	480	--	Table 3
T-Pit-3 0-18"	10/5/23	BES	0-1.5	Oil	--	ND	280	--	Table 3
T-Pit-4 0-5'	10/5/23	BES	0-5	Diesel, Gasoline, Oil	ND	190	2,100	--	Table 3
T-Pit-5 0-18"	10/5/23	BES	0-1.5	Diesel, Oil	--	64	1,700	--	Table 3
T-Pit-6 0-18"	10/5/23	BES	0-1.5	Oil	--	ND	390	--	Table 3
T-Pit-6 0-5'	10/5/23	BES	0-5	Oil	--	43	600	--	Table 3
T-Pit-7 0-5'	10/5/23	BES	0-5	Oil	--	ND	390	--	Table 3
T-Pit-8 0-18"	10/5/23	BES	0-1.5	Oil	--	ND	1,400	--	Table 3
T-Pit-9 0-5'	10/5/23	BES	0-5	Oil	--	27	550	--	Table 3
T-Pit-10 0-18"	10/5/23	BES	0-1.5	Oil	--	ND	450	--	Table 3
T-Pit-11 0-5'	10/5/23	BES	0-5	Oil	--	ND	200	--	Table 3
T-Pit-12 0-18"	10/5/23	BES	0-1.5	Oil	--	ND	410	--	Table 3
BES Geoprobe Samples (ft. bgs)									
WP-1 0-5	11/21/23	BES	0-5	--	--	--	--	--	Table 3
WP-1 5-10	11/21/23	BES	5-10	Oil	--	ND	190	--	Table 3
WP-2 0-5	11/21/23	BES	0-5	Oil	-	ND	340	--	Table 3
WP-2 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-3 0-5	11/21/23	BES	0-5	--	--	--	--	--	Table 3
WP-3 5-10	11/21/23	BES	5-10	Oil	--	ND	260	--	Table 3
WP-4 0-5	11/21/23	BES	0-5	Diesel, Oil	--	93	740	--	Table 3
WP-4 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-5 0-5	11/21/23	BES	0-5	--	--	--	--	--	Table 3
WP-5 5-10	11/21/23	BES	5-10	ND	--	--	--	--	--
WP-6 0-5	11/21/23	BES	0-5	Oil	--	ND	96	--	Table 3
WP-6 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-7 0-5	11/21/23	BES	0-5	Oil	--	26	490	--	Table 3
WP-7 5-10	11/21/23	BES	5-10	Oil	--	ND	220	--	Table 3
WP-9 0-5	11/21/23	BES	0-5	Oil	--	100	910	--	Table 3
WP-9 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-10 0-5	11/21/23	BES	0-5	Oil	--	ND	180	--	Table 3
WP-10 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-11 0-1	11/21/23	BES	0-1	--	ND	--	--	Table 2	--
WP11 0-5	11/21/23	BES	0-5	ND	--	--	--	--	--
WP-11 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-11 10-15	11/21/23	BES	10-15	ND	--	--	--	--	--
WP-12 0-5	11/21/23	BES	0-5	Oil	--	ND	1,000	--	Table 3
WP-12 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-13 0-5	11/21/23	BES	0-5	Diesel, Oil	--	150	1,000	--	Table 3
WP-13 5-10	11/21/23	BES	5-10	--	--	--	--	--	Table 3
WP-13 10-15	11/21/23	BES	10-15	Oil	--	ND	180	--	Table 3
ODEQ Cleanfill									
Clean Fill Screening Value				--	--	--	--	--	--
ODEQ Risk Based Concentrations									
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				--	9,700	4,600	--	--	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				--	>Max	>Max	--	--	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational				--	20,000	14,000	--	--	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential				--	1,200	1,100	--	--	--
ODEQ Ecological Risk Based Concentrations									
Freshwater Sediment				--	--	--	--	--	--

**Notes**

DEQ - Department of Environmental Quality

EPA - Environmental Protection Agency

RBCs - Risk-Based Concentrations

NWTPH-HCID - Total petroleum hydrocarbon identification

NWTPH-Dx - Diesel-range hydrocarbon quantification

NWTPH-Gx - Gasoline-range hydrocarbon quantification

VOCs- Volatile organic compounds

PAHs - Polycyclic aromatic hydrocarbons

PCBs- Polychlorinated biphenyls

bgs - Below ground surface

mg/kg - Milligrams per kilogram

ND - Analyte not detected in the sample

-- - Analyte not analyzed, or no screening value for this analyte in this scenario

&gt;Max - Substance is deemed not to pose risks in this scenario

Bolded - Analyte detected in the sample

-- - Analyte detected at a concentration at or above ODEQ Clean Fill Screening Lev

-- - Analyte detected at a concentration at or above ODEQ Risk-Based Concentratic

4 - 2-Butanone detection attributed to laboratory contamination

Table 2 - Summary of Soil Analytical Results: Volatile Organic Compounds (VOCs)

Sample ID	Sample Date	Sampled By	Sample Depth	Analytical Testing Results (ug/kg)																
				Volatile Organic Compounds by EPA 8260																
				1,1,2-Trichloroethane	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Acetone	Benzene	Chlorobenzene	iso-Propylbenzene	p-Isopropyltoluene	m,p-Xylene	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Total Xylenes	
Kleinfelder & PNG Test Pits			(ft. bgs)																	
TP3-13	5/18/99	PNG	13	--	ND	ND	ND	ND	956	ND	ND	--	--	--	--	--	--	--	--	
TP-2-5	5/17/00	Kleinfelder	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TP-2-19	5/17/00	Kleinfelder	19	ND	ND	ND	ND	ND	ND	ND	ND	126	ND	408	ND	ND	ND	ND	ND	
BES Geoprobe Samples			(ft. bgs)																	
WP-11 0-1	11/21/23	BES	0-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	44	ND	ND	ND	ND	ND	
ODEQ Cleanfill																				
Clean Fill Screening Value				4	200	920	57	1,200	23	2,400	--	--	11,000	77	190,000	72,000	1,000	350,000	1,400	
ODEQ Risk Based Concnetrations																				
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				54,000	2,900,000	20,000	1,300,000	--	380,000	4,700,000	27,000,000	--	20,000,000	580,000	--	--	20,000,000	--	20,000,000	
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				1,500,000	81,000,000	560,000,000	36,000,000	--	11,000,000	130,000,000	750,000,000	--	560,000,000	16,000,000	--	--	560,000,000	--	560,000,000	
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational				26,000	6,900,000	36,000,000	64,000	--	37,000	8,700,000	57,000,000	--	25,000,000	23,000	--	--	25,000,000	--	25,000,000	
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential				3,200	430,000	2,200,000	14,000	--	8,200	530,000	3,500,000	--	--	5,300	--	--	--	--	1,400,000	
Freshwater Sediment																				
Oregon DEQ Ecological Sediment SLVs				--	--	--	--	--	--	--	--	--	--	176	--	--	--	--	--	

Notes  
DEQ - Departement of Enviornmental Quality  
EPA - Environmental Protection Agency  
RBCs - Risk-Based Concentrations  
bgs - Below ground surface  
ug/kg - Micrograms per kilogram  
ND - Analyte not detected in the sample  
>Csat - Substance RBC exceeds the limit of the three-phase equilibrium partitioning  
-- - Analyte not analyzed, or no screening value for this analyte in this scenario  
Bolded - Analyte detected in the sample  
- Analyte detected at a concentration at or above ODEQ Clean Fill Screening Levels  
- Analyte detected at a concentration at or above ODEQ RBCs

Table 3 - Summary of Soil Analytical Results: Polycyclic Aromatic Hydrocarbons (PAHs)

Sample ID	Sample Date	Sampled By	Sample Depth	Laboratory Analytical Testing Results (ug/kg)																
				Polycyclic Aromatic Hydrocarbons (PAHs) by EPA 8270-SIM																
				Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Butyl benzyl phthalate	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Kleinfelder & PNG Test Pits (ft. bgs)				--	4.77	ND	1,000	Table 2 <sup>4</sup>	ND						3,830		ND	ND	ND	3,980
TP-3-13	5/18/99	PNG	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-2-5	5/17/00	Kleinfelder	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-2-19	5/17/00	Kleinfelder	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BES Test Pits (ft. bgs)				ND	ND	ND	35	72	93	100	23	--	52	ND	69	ND	79	ND	ND	91
T-Pit-1 0-18"	10/5/23	BES	0-1.5	ND	ND	ND	35	72	93	100	23	--	52	ND	69	ND	79	ND	ND	91
T-Pit-2 0-5"	10/5/23	BES	0-5	50	430	250	490	1,400	1,100	1,400	390	--	700	160	580	ND	1,300	ND	130	960
T-Pit-3 0-18"	10/5/23	BES	0-1.5	ND	80	83	95	220	260	300	100	--	160	49	140	ND	270	ND	ND	180
T-Pit-4 0-5"	10/5/23	BES	0-5	ND	ND	ND	43	66	77	69	29	--	77	ND	57	ND	58	ND	85	88
T-Pit-5 0-18"	10/5/23	BES	0-1.5	ND	ND	ND	ND	120	170	210	ND	--	65	ND	78	ND	150	ND	ND	150
T-Pit-6 0-18"	10/5/23	BES	0-1.5	ND	48	65	180	190	210	170	79	--	190	42	290	ND	160	ND	150	400
T-Pit-6 0-5"	10/5/23	BES	0-5	ND	88	110	150	220	230	320	68	--	170	48	250	ND	240	ND	100	370
T-Pit-7 0-5"	10/5/23	BES	0-5	ND	ND	ND	66	91	110	140	36	--	89	22	160	ND	120	ND	110	180
T-Pit-8 0-18"	10/5/23	BES	0-1.5	ND	ND	ND	ND	52	80	130	ND	--	ND	ND	52	ND	60	ND	ND	80
T-Pit-9 0-5"	10/5/23	BES	0-5	ND	100	110	110	260	300	370	100	--	200	69	230	ND	360	ND	110	290
T-Pit-10 0-18"	10/5/23	BES	0-1.5	ND	ND	ND	ND	40	58	95	ND	--	19	ND	42	ND	52	ND	ND	62
T-Pit-11 0-5"	10/5/23	BES	0-5	ND	49	52	31	110	100	160	27	--	36	35	63	ND	150	ND	ND	92
T-Pit-12 0-18"	10/5/23	BES	0-1.5	ND	ND	ND	ND	46	48	76	ND	--	22	ND	28	ND	50	ND	ND	43
BES Geoprobe Samples (ft. bgs)				ND	ND	ND	ND	26	28	35	ND	--	ND	ND	42	ND	28	ND	ND	61
WP-1 0-5	11/21/23	BES	0-5	ND	ND	ND	ND	26	28	35	ND	--	ND	ND	42	ND	28	ND	ND	61
WP-1 5-10	11/21/23	BES	5-10	ND	ND	ND	66	100	120	80	40	--	89	ND	120	ND	78	ND	68	140
WP-2 0-5	11/21/23	BES	0-5	ND	ND	ND	ND	35	39	53	ND	--	24	ND	51	ND	33	ND	ND	71
WP-2 5-10	11/21/23	BES	5-10	50	190	140	180	430	350	390	100	--	240	31	490	80	360	ND	390	660
WP-3 0-5	11/21/23	BES	0-5	ND	ND	ND	ND	29	29	42	ND	--	ND	ND	ND	ND	ND	ND	ND	38
WP-3 5-10	11/21/23	BES	5-10	ND	ND	ND	130	170	180	130	66	--	150	26	240	ND	130	ND	120	260
WP-4 0-5	11/21/23	BES	0-5	ND	ND	ND	24	ND	34	29	ND	--	28	ND	85	ND	23	ND	ND	100
WP-4 5-10	11/21/23	BES	5-10	570	42	450	730	950	1,000	660	310	--	800	110	1,700	480	730	270	1,400	1,600
WP-5 0-5	11/21/23	BES	0-5	ND	ND	53	39*	57	80	73	28	--	110	ND	56	ND	62	ND	ND	75
WP-6 0-5	11/21/23	BES	0-5	ND	ND	ND	ND	13	17	ND	ND	--	14	ND	25	ND	ND	ND	ND	27
WP-6 5-10	11/21/23	BES	5-10	ND	ND	ND	61	69	79	58	25	--	78	ND	110	ND	48	ND	79	140
WP-7 0-5	11/21/23	BES	0-5	ND	ND	ND	54	110	110	120	28	--	57	24	100	ND	96	ND	54	150
WP-7 5-10	11/21/23	BES	5-10	54	1,200	620	2,700	2,800	2,500	1,600	830	--	2,700	340	5,000	180	1,800	190	2,300	6,500
WP-9 0-5	11/21/23	BES	0-5	370	4,300	1,900	5,000	8,400	6,500	6,400	2,100	--	5,800	780	18,000	290	5,900	ND	10,000	24,000
WP-9 5-10	11/21/23	BES	5-10	1,900	110	1,100	530	480	550	300	180	--	630	74	2,100	1,400	330	3,800	3,800	2,100
WP-10 0-5	11/21/23	BES	0-5	ND	ND	ND	360	680	880	540	270	--	600	150	350	ND	600	ND	83	470
WP-10 5-10	11/21/23	BES	5-10	ND	ND	ND	ND	14	14	15	ND	--	11	ND	16	ND	13	ND	ND	22
WP-11 5-10	11/21/23	BES	5-10	ND	ND	ND	ND	16	16	18	ND	--	13	ND	20	ND	17	ND	ND	26
WP-12 0-5	11/21/23	BES	0-5	ND	47	23	94	230	240	850	89	--	210	100	130	ND	730	ND	57	210
WP-12 5-10	11/21/23	BES	5-10	ND	ND	ND	16	34	33	66	11	--	24	ND	30	ND	56	ND	ND	45
WP-13 0-5	11/21/23	BES	0-5	3,408	2,600	1,200	3,100	5,300	4,800	5,300	1,500	--	4,400	670	8,800	820	4,900	1,100	7,300	12,000
WP-13 5-10	11/21/23	BES	5-10	ND	ND	ND	80	78	110	72	ND	--	150	ND	170	ND	ND	ND	320	280
WP-13 10-15	11/21/23	BES	10-15	120	700	560	1,200	1,700	1,400	1,300	450	--	1,500	190	3,900	420	1,300	400	4,300	4,500
ODEQ Cleanfill																				
Clean Fill Screening Value				250	120,000	6,800	730	110	1,100	25,000	11,000	14,000	3,100	110	10,000	3,700	1,100	77	5,500	10,000
ODEQ Risk Based Concentrations																				
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				21,000,000	--	110,000,000	170,000	17,000	4,900,000	--	49,000,000	--	490,000,000	490,000	280,000,000	390,000,000	4,900,000	16,000,000	--	210,000,000
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				590,000,000	--	>Max	4,900,000	490,000	170,000	--	1,700,000	--	17,000,000	17,000	10,000,000	14,000,000	170,000	580,000	--	7,500,000
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational				70,000,000	--	350,000,000	21,000	2,100	21,000	--	210,000	--	2,100,000	2,100	30,000,000	47,000,000	21,000	23,000	--	23,000,000
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential				4,700,000	--	23,000,000	1,100	110	1,100	--	11,000	--	110,000	110	2,400,000	3,100,000	1,100	5,300	--	1,800,000
ODEQ Ecological Risk Based Concentrations																				
Freshwater Sediment				290	160	57	32	32	--	300	27	--	57	33	111	77	17	176	42	53

## Notes

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RBCs - Risk-Based Concentrations

bgs - Below ground surface

ug/kg - Micrograms per kilogram

ND - Analyte not detected in the sample

-- - Analyte not analyzed, or no screening value was found for this analyte in this scenario

&gt;Max - Substance is deemed not to pose risks in this scenario

&gt;Csat - Substance RBC exceeds the limit of the three-phase equilibrium partitioning

NV - Substance is not volatile

Bolded - Analyte detected in the sample

-- - Analyte detected at a concentration at or above ODEQ Clean Fill Screening Levels

-- - Analyte detected at a concentrations at or above ODEQ RBCs



Table 4 - Summary of Soil Analytical Results: Total Metals

Sample ID	Sample Date	Sampled By	Sample Depth	Laboratory Analytical Testing Results (mg/kg)									
				Total Metals EPA 6020									
				Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Silver	Zinc
Kleinfelder & PNG Test Pits (ft. bgs)													
TP-1-7	5/17/00	Kleinfelder	7	2.62	120	0.078	24	--	7.8	0.0075	ND	ND	--
TP-1-19	5/17/00	Kleinfelder	19	7.19	220	0.26	24	--	74	0.030	ND	ND	--
TP-2-5	5/17/00	Kleinfelder	5	6.93	110	0.40	22	--	24	0.030	ND	ND	--
TP-2-19	5/17/00	Kleinfelder	19	6.45	120	0.19	14	--	76	4.88	ND	ND	--
BES Test Pits (ft. bgs)													
T-Pit-1 0-18"	10/5/23	BES	0-1.5	4.44	--	0.449	113	34.4	84.1	0.0670	--	--	142
T-Pit-2 0-5'	10/5/23	BES	0-5	5.00	--	0.352	51.8	30.6	59.2	0.1610	--	--	127
T-Pit-3 0-18"	10/5/23	BES	0-1.5	9.27	--	0.893	169	82.4	123	0.0719	--	--	232
T-Pit-4 0-5'	10/5/23	BES	0-5	3.63	--	0.252	21.3	21.6	69.9	0.0484	--	--	112
T-Pit-5 0-18"	10/5/23	BES	0-1.5	2.62	--	0.166	20.4	24.5	27.7	0.0226	--	--	84.1
T-Pit-6 0-18"	10/5/23	BES	0-1.5	5.15	--	0.193	29.0	25.4	30.9	0.0391	--	--	90.4
T-Pit-6 0-5'	10/5/23	BES	0-5	6.44	--	0.270	27.5	34.0	74.7	0.101	--	--	138
T-Pit-7 0-5'	10/5/23	BES	0-5	5.09	--	0.291	23.3	28.2	51.8	0.0639	--	--	145
T-Pit-8 0-18"	10/5/23	BES	0-1.5	2.72	--	0.165	18.9	30.9	16.0	0.0213	--	--	81.2
T-Pit-9 0-5'	10/5/23	BES	0-5	3.70	--	0.168	24.3	26.2	29.0	0.0252	--	--	93.9
T-Pit-10 0-18"	10/5/23	BES	0-1.5	2.22	--	0.138	447	28.7	25.1	0.0180	--	--	70.8
T-Pit-11 0-5'	10/5/23	BES	0-5	4.27	--	0.171	330	29.8	32.6	0.0246	--	--	104
T-Pit-12 0-18"	10/5/23	BES	0-1.5	3.12	--	0.153	19.7	19.9	16.1	0.0273	--	--	78.1
BES Geoprobe Samples (ft. bgs)													
WP-1 0-5	11/21/23	BES	0-5	6.57	--	0.174	26.8	24.9	89.6	0.0246	--	--	79.2
WP-1 5-10	11/21/23	BES	5-10	6.46	--	0.261	27.1	26.6	62.3	0.0579	--	--	114
WP-2 0-5	11/21/23	BES	0-5	11.0	--	0.165	32.2	25.0	28.8	0.0249	--	--	84.9
WP-2 5-10	11/21/23	BES	5-10	11.8	--	0.167	27.4	18.0	19.6	0.0224	--	--	75.5
WP-3 0-5	11/21/23	BES	0-5	4.69	--	0.102	27.4	22.7	15.8	0.0212	--	--	62.1
WP-3 5-10	11/21/23	BES	5-10	9.59	--	0.239	34.0	46.4	46.2	0.0431	--	--	98.3
WP-4 0-5	11/21/23	BES	0-5	2.91	--	0.141	24.9	16.8	14.5	0.0251	--	--	55.3
WP-4 5-10	11/21/23	BES	5-10	14.3	--	0.267	33.4	115	84.0	0.0683	--	--	121
WP-5 0-5	11/21/23	BES	0-5	8.22	--	0.167	118	26.6	18.2	0.0410	--	--	72.1
WP-5 5-10	11/21/23	BES	5-10	3.65	--	0.125	25.3	20.2	21.7	0.0323	--	--	69.4
WP-6 0-5	11/21/23	BES	0-5	7.59	--	0.149	27.7	19.7	20.1	0.0347	--	--	81.2
WP-6 5-10	11/21/23	BES	5-10	5.93	--	0.155	30.5	31.6	28.1	0.0780	--	--	84.0
WP-7 0-5	11/21/23	BES	0-5	8.32	--	0.170	26.5	24.4	23.8	0.0305	--	--	76.1
WP-7 5-10	11/21/23	BES	5-10	6.17	--	0.157	25.5	35.9	39.4	0.0884	--	--	82.3
WP-9 0-5	11/21/23	BES	0-5	4.56	--	0.110	25.4	19.6	18.5	0.0243	--	--	63.6
WP-9 5-10	11/21/23	BES	5-10	4.75	--	0.204	24.9	28.5	27.1	0.0420	--	--	88.9
WP-10 0-5	11/21/23	BES	0-5	4.51	--	0.249	28.1	28.7	30.7	0.0340	--	--	95.3
WP-10 5-10	11/21/23	BES	5-10	5.48	--	0.241	26.6	22.4	51.5	0.0574	--	--	117
WP11 0-5	11/21/23	BES	0-5	6.74	--	0.268	27.0	29.8	34.1	0.0289	--	--	120
WP-11 5-10	11/21/23	BES	5-10	10.4	--	0.230	27.5	19.2	32.7	0.2790	--	--	111
WP-11 10-15	11/21/23	BES	10-15	7.29	--	0.333	31.8	40.6	137	0.0296	--	--	170
WP-12 0-5	11/21/23	BES	0-5	5.19	--	0.255	23.7	27.0	101	0.0389	--	--	127
WP-12 5-10	11/21/23	BES	5-10	3.18	--	0.182	18.1	27.3	31.6	0.0272	--	--	91.2
WP-13 0-5	11/21/23	BES	0-5	3.19	--	0.307	23.3	38.5	71.0	0.0295	--	--	118
WP-13 5-10	11/21/23	BES	5-10	4.18	--	0.284	23.3	19.7	45.0	0.112	--	--	137
WP-13 10-15	11/21/23	BES	10-15	5.94	--	0.310	26.8	21.4	141	0.0379	--	--	173
ODEQ Cleanfill													
Clean Fill Screening Value				8.8	790	0.63	76	34	28	0.23	0.71	0.82	180
ODEQ Risk Based Concentraions													
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				15	69,000	350	530,000	14,000	800	110	--	1,800	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				420	>Max	9,700	>Max	390,000	800	2,900	--	49,000	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational				1.9*	220,000	1,100	>Max	47,000	800	350	--	5,800	--
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential				0.43*	15,000	78	120,000	3,100	400	23	--	390	--
ODEQ Ecological Risk Based Concentrations													
Freshwater Sediment				6*	--	0.6	37	36	35	0.2	--	4.5	123

## Notes

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RBCs - Risk-Based Concentrations

bgs - Below ground surface

mg/kg - Milligrams per kilogram

ND - Analyte not detected in the sample

-- - Analyte not analyzed, or no screening value was found for this analyte in this scenario

&gt;Max - Substance is deemed not to pose risks in this scenario

NV - Substance is not volatile

Bolded - Analyte detected in the sample

- Analyte detected at a concentration at or above ODEQ Clean Fill Screening Levels

- Analyte detected at a concentrations at or above ODEQ RBCs

\* - Arsenic screening level values are below the naturally occurring background level of 8.8 mg/kg for this region

**Table 5 - Summary of Soil Analytical Results: Polychlorinated Biphenyls (PCBs)**

Sample ID	Sample Date	Sampled By	Sample Depth	Laboratory Analytical Testing Results (ug/kg)						
				Polychlorinated Bipheynyls (PCBs) by EPA 8082						
				Aroclor 1016/1242	Aroclor 1221	Aroclor 1232	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
BES Test Pits			(ft. bgs)							
T-Pit-6 0-5'	10/5/23	BES	0-5	ND	ND	ND	ND	ND	ND	ND
BES Geoprobe Samples			(ft. bgs)							
WP-3 0-5	11/21/23	BES	0-5	ND	ND	ND	ND	19.3	ND	19
WP-10 5-10	11/21/23	BES	5-10	ND	ND	ND	ND	ND	ND	ND
ODEQ Cleanfill										
Clean Fill Screening Value				41	4.8	4.8	7.3	41	240	230
ODEQ Risk Based Concnetrations										
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				--	--	--	--	--	--	4,900
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				--	--	--	--	--	--	140,000
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational				--	--	--	--	--	--	590
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential				--	--	--	--	--	--	230
ODEQ Ecological Risk Based Concentrations										
Freshwater Sediment				--	--	--	21	7	--	34

**Notes**

DEQ - Department of Environmental Quality

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RBCs - Risk-Based Concentrations

bgs - Below ground surface

ug/kg - Micrograms per kilogram

ND - Analyte not detected in the sample

-- - Analyte not analyzed, or no screening value was found for this analyte in this scenario

>Max - Substance is deemed not to pose risks in this scenario

>Csat - Substance RBC exceeds the limit of the three-phase equilibrium partitioning

NV - Substance is not volatile

**Bolded** - Analyte detected in the sample

- Analyte detected at a concentration at or above ODEQ Clean Fill Screening Levels

- Analyte detected at a concentrations at or above ODEQ RBCs

Table 6 - Summary of Soil Analytical Results: Pesticides

Sample ID	Sample Date	Sampled By	Sample Depth	Laboratory Analytical Results (ug/kg)																					
				Pesticides 8081B																					
				Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Chlordane	cis-Chlordane	trans-Chlordane	4-4'-DDD	4-4'-DDE	4-4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
BES Test Pits			(ft. bgs)																						
T-Pit-7 0-5'	10/5/23	BES	0-5	ND	ND	ND	0.35	ND	ND	3.90	4.80	120	91	150	ND	1.40	ND	ND	ND	ND	ND	ND	ND	ND	
ODEQ Clean Fill																									
Clean Fill Screening Value				23	63	9	--	95	910	270	2,200	63	10	10	45	640	640	--	14	--	--	17	42	5,100	360
ODEQ Risk Based Concentrations																									
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker				1,100	3,000	--	--	17,000	61,000	--	--	9,700	66,000	66,000	1,200	1,600,000	1,600,000	--	80,000	--	--	4,000	2,000	--	17,000
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker				30,000	83,000	--	--	470,000	1,700,000	--	--	270,000	1,800,000	1,800,000	33,000	45,000,000	45,000,000	--	2,200,000	--	--	110,000	56,000	--	470,000
Soil Ingestion, Contact, and Inhalation RBC - Occupational				130	360	--	--	2,100	7,400	--	--	12,000	8,200	8,500	140	4,900,000	4,900,000	--	250,000	--	--	450	240	--	2,100
Soil Ingestion, Contact, and Inhalation RBC - Residential				31	86	--	--	490	1,700	--	--	2,200	1,800	1,900	34	380,000		--	19,000	--	--	110	55	--	490
ODEQ Ecological Risk Based Concentrations																									
Freshwater Sediment				40	--	--	--	--	5	--	--	4	2	4	3	--	--	--	3	--	--	10	1	--	--

Notes  
DEQ - Department of Environmental Quality  
EPA - Environmental Protection Agency  
RBCs - Risk-Based Concentrations  
bgs - Below ground surface  
ug/kg - Micrograms per kilogram  
ND - Analyte not detected in the sample  
-- - Analyte not analyzed, or no screening value was found for this analyte in this scenario  
>Max - Substance is deemed not to pose risks in this scenario  
>Csat - Substance RBC exceeds the limit of the three-phase equilibrium partitioning  
NV - Substance is not volatile  
Bolded - Analyte detected in the sample  
- Analyte detected at a concentration at or above ODEQ Clean Fill Screening Levels  
- Analyte detected at a concentrations at or above ODEQ RBCs



APPENDIX E  
Kleinfelder, Inc. and PNG Environmental, Inc. - Phase II  
Environmental Site Assessments

 ORIGINAL

**PHASE II ENVIRONMENTAL INVESTIGATION**

Larsen Property  
10505 North Portland Road  
Portland, Oregon

DEQ File 26-97-0558  
DEQ ECSIS 186

Prepared for:

**CITY OF PORTLAND**  
Bureau of Environmental Services  
1120 Southwest Fifth Avenue, Room 400  
Portland, Oregon 97204-1972

Prepared by:

***PNG ENVIRONMENTAL, INC.***

850-02  
November 12, 1999

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## 1 INTRODUCTION

This report presents the results of the Phase II Environmental Investigation performed by PNG Environmental, Inc. (PNG) at the Larsen Property at 10505 North Portland Road in Portland, Oregon. This Phase II Environmental Investigation was conducted for the City of Portland Bureau of Environmental Services (BES) under a standard Work Order for CSA Services. The City of Portland is in the process of negotiating the purchase of the subject site. The proposed use of the subject site is for the expansion of the adjacent Columbia Boulevard Wastewater Treatment Plant.

The purpose of this investigation is to assess soil and groundwater quality at selected areas at the subject site to assess if the site is in compliance with applicable Oregon Department of Environmental Quality (DEQ) and US Environmental Protection Agency (EPA) regulations. The subject site is currently listed as File 26-97-0558 on the DEQ Underground Storage Tank (UST) Cleanup List and as Site 186 on the DEQ Confirmed Release List. The investigation included the excavation of five test pits, the installation of six monitoring wells, and the collection and analysis of groundwater samples from the monitoring wells during two separate sampling events.

The purpose of the Phase II Environmental Investigation is to assess only environmental concerns. The investigation does not present any engineering opinions concerning the site and presents no engineering opinions concerning the suitability of the site for development.

## **2 SCOPE OF WORK**

The investigation consisted of the following tasks:

### **Task 1 - Review Existing Environmental Data**

- Review the environmental reports available for the site.
- Meet with the current property owner's consultant to review underground storage tank (UST) decommissioning documents for the site.

### **Task 2 - Subsurface Investigation**

- Prepare a Site Safety Plan.
- Excavate five test pits in identified areas of concern.
- Collect subsurface soil samples from test pits.
- Install six monitoring wells.
- Collect two rounds of water samples from the monitoring wells.
- Submit the soil and water samples to an analytical laboratory for selected chemical analyses.

### **Task 3 - Report Preparation**

- Prepare a report summarizing field activities and findings.



### 3 SITE DESCRIPTION

The Larsen Property is located at 10505 North Portland Road in Portland, Oregon (Figure 1). The subject site consists of 24.02 acres in Tax Lots TL22 (13.36 acres) and TL107 (10.66 acres) in sections 5 and 6, Township 1 North, Range 1 East, Multnomah County, Oregon. The subject site is the northern portion of a 39.77-acre parcel owned by Louis and Karen Larsen of Portland, Oregon.

The subject site is bounded on the north by the Columbia Slough, on the east by North Portland Road, the Burlington Northern Railroad and the BES Columbia Boulevard Waste Water Treatment Plant, on the west by Columbia Steel Casting Company, and on the south by the Matlack Inc./Bright-Sol facility (Figure 2).

The Matlack Inc./Bright-Sol facility is located on the southern portion of the parcel owned by the Larsens. The Matlack facility is the site of the former Arrow Trucking facility and former Widing Transportation facility. The former Widing Transportation facility disposed of tanker rinse water into ponds located on the subject site. The ponds were drained, and closed with DEQ approval in 1984. Widing Transportation, Arrow Trucking, and Matlack Inc. continued to use the tanker washing facility, but with discharge to the City of Portland sewer system.

## 4 BACKGROUND

PNG conducted a Limited Phase II Environmental Site Assessment (ESA) at the subject site in December 1998. The results of the Limited Phase II ESA identified the following areas of concern.

### 4.1 UST AT FORMER PENINSULA DIESEL FACILITY

Peninsula Diesel operated a diesel engine repair and rebuilding shop at 10505 North Portland Road on the northeast portion of the subject site from 1985 to 1998. In 1997, a prospective purchaser conducted a Phase I ESA for the subject site. A gasoline UST was identified at the site during the Phase I ESA. At that time, Enviro-Comp Services, Oregon City, Oregon, decommissioned the UST and conducted remedial activities. The release was reported to DEQ (UST File 26-97-0558). At the time of the PNG Limited Phase II ESA, very little information was in the DEQ files concerning this release. As part of the PNG Limited Phase II ESA, PNG installed a soil probe (B-1) in the area of the decommissioned UST. Water samples (B1-W) from the soil probe detected gasoline constituents, with a concentration of benzene exceeding the DEQ numeric cleanup standard.

The concern from the UST area is the status of the remedial activities and the concentration of gasoline constituents remaining in the soil and groundwater. During the present investigation, the Phase I ESA, which contained the UST decommissioning information, was reviewed. In addition, one test pit was excavated in the area downgradient of the remedial activities.

### 4.2 MATERIALS STORAGE AREA

The surface area west of the former Peninsula Diesel shop is used for storage of various used building materials. The subsurface in this area appears to have been filled with construction debris. During the PNG Limited Phase II ESA, an open excavation was noted in this area. The excavation contained concrete rubble and metal debris. A waste drum had been placed near the excavation for excavated materials. The contents of the drum are not known. During the PNG Limited Phase II ESA, two soil borings (B-2 and B-3) were completed in this area. Soil cuttings from Boring B-3 appeared to contain foundry sand. Elevated concentrations of leachable metals (TCLP) were not detected in soil or groundwater samples from the borings during the PNG Limited Phase II ESA. However, elevated hydrocarbon constituents and solvents were detected in groundwater samples from the borings.

The concerns for this area are the source and nature of the fill material and the extent of the petroleum product and solvent contamination in groundwater. During this investigation, two test pits (TP-1 and TP-2) and four monitoring wells (MW-1, MW-2, MW-3, and MW-4) were installed to assess this area.

### 4.3 FORMER POND AREA

The Former Pond Area (Figure 2) has been filled since at least 1984. The pond area was used for the disposal of rinsate from the truck cleaning operation from the previous operators of the adjacent Matlack facility. The Former Pond Area portion of the subject site and the adjacent former Arrow Trucking facility were assessed by EPA in 1984. After the ponds were closed, EPA determined that "No Further Action" was required

under the Federal Superfund Program. However, DEQ conducted a Preliminary Assessment in 1993 and placed the Arrow Trucking site (Site 186) on the DEQ Confirmed Release List in 1997. DEQ recommended further assessment of the pond area.

During the PNG Limited Phase II ESA, three soil probes (B-4, B-5, and B-6) were installed in the Former Pond Area. All three probes encountered refusal and could not penetrate the fill material.

The concerns in the Former Pond Area are the type of material used as fill, the effect of the residual sludge material on groundwater quality, and the effect of the adjacent tanker washing operation on groundwater quality. Additional concerns for the Former Pond Area were the effects of the operations of the adjacent Columbia Steel facility on the soil and groundwater at the subject site. Columbia Steel stores used foundry sand on the area directly west of the Former Pond Area.

During this investigation three test pits (TP-2, TP-3, and TP-4) and three monitoring wells (MW-1, MW-5, and MW-6) were installed in the Former Pond Area.



## **5 FIELD INVESTIGATION**

The field investigation task included a test pit exploration, the installation of monitoring wells, and two groundwater sampling events. The test pit exploration was conducted on May 18, 1999. Monitoring wells were installed on May 18, 1999 and May 24, 1999. Groundwater samples were collected on May 26, 1999 and July 28, 1999. The test pit and monitoring well locations installed during this investigation and the boring locations from the PNG Limited Phase II ESA are shown on Figure 3.

### **5.1 FIELD METHODS**

The field methods used during the Phase II Environmental Investigation are described in the following sections.

### **5.2 TEST PIT EXPLORATION**

Five test pits were installed with a track hoe on May 18, 1999 by Terra Hydr, Inc, Portland, Oregon. The purpose of the test pits was to expose a larger area of the subsurface fill materials to evaluate potential drilling conditions. The test pit excavations were observed by a PNG geologist. Soil samples were collected from the excavated material. Following sampling, the pits were filled with the excavated material.

### **5.3 SOIL SAMPLING**

Soil samples were collected from four of the five test pits on May 18, 1999. All soils were field-screened for staining, odor, and the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID). The samples were collected directly out of the track-hoe bucket, placed in laboratory-prepared glass jars, and sealed with Teflon-lined lids. Each sample was placed in an iced cooler and transported to the City of Portland Bureau of Environmental Services Water Pollution Control Laboratory under chain-of-custody protocol. A copy of the chain-of-custody is presented in the laboratory analytical report (Appendix A).

### **5.4 MONITORING WELL INSTALLATION**

Track-mounted drilling equipment was initially scoped for the Phase II Environmental Investigation. The project was scheduled for early spring 1999. At that time, the Former Pond Area could not support rubber-tired drilling equipment. Monitoring Wells MW-1, MW-2, and MW-3 were completed with track-mounted, hollow-stem auger drilling equipment by GeoTech Explorations, Tualatin, Oregon on May 18, 1999. Because the monitoring wells were located near test pits or former soil-probe borings, soil samples were not collected. The cuttings were logged for lithologic contacts and field-screened for contamination. Cuttings are stored in drums on-site, pending disposal. Boring logs were prepared for each soil boring and are presented as Appendix B.

Due to the concrete debris in the subsurface, the completion of borings with hollow-stem auger drilling equipment was difficult. Well MW-3 encountered refusal at a depth of 18 feet. The results of the test pit exploration indicated abundant concrete rubble in the Former Pond Area. On May 24, 1999, Wells MW-4, MW-5, and MW-6 were installed with air-rotary drilling equipment using a 6-inch diameter, tri-cone bit with a casing hammer. The drill cuttings, collected in a cyclone, were logged for lithologic contacts

and field-screened for contaminants by a PNG geologist. No soil samples were collected from the borings. Cuttings are stored in drums on-site, pending disposal. Boring logs were prepared for each soil boring and are included in Appendix B.

The monitoring wells were constructed to Oregon standards with sand pack, seal, and above-ground monuments. The wells were constructed with 2-inch PVC schedule 40 casing and 0.010-inch machine-slot screen. Bullards were placed around the above-ground monuments to protect the wells. Details of well construction are provided in the boring logs presented in Appendix B and summarized in Table 1.

## **5.5 GROUNDWATER SAMPLING**

The monitoring wells were developed by surging and pumping following drilling. On March 24 and 25, 1999, the wells were purged with a peristaltic pump. Purge water was placed in drums on-site pending disposal. On May 26, 1999 and July 28, 1999, PNG collected groundwater samples from the monitoring wells.

Prior to sampling, each well was measured with an oil-water interface probe to check for separate-phase hydrocarbons (SPH). No SPH were observed in any of the wells.

The volume of water in the wells was calculated and a minimum of three well volumes of water was purged with a peristaltic pump at a pumping rate of approximately one gallon per minute (gpm). Groundwater was purged from the top of the water column and the purge line was lowered in response to decreasing water levels. A new length of low-density polyethylene tubing was used in each well.

Groundwater samples from the wells were collected with new, disposable polyethylene bailers. Samples were carefully transferred into sample containers through a disposable VOA filler valve. Samples were placed in an iced cooler and delivered to the City of Portland Water Pollution Control Laboratory under chain-of-custody protocol. Groundwater collection forms documenting field activities are presented as Appendix C.

Groundwater samples were analyzed for selected chemical analysis, including:

- Total Petroleum Hydrocarbon as gasoline using the DEQ Method NWTPH-Gx.
- Total Petroleum Hydrocarbons as diesel and oil using the DEQ Method NWTPH-Dx.
- Volatile Organic Compounds using EPA Method 624.
- Semi-volatile Organic Compounds using EPA Method 625.



## 6 SUBSURFACE CONDITIONS

### 6.1 SOIL CONDITIONS

The soil encountered in the five test pits consisted of various fill materials including sand, silt, gravel, foundry sand, wood debris, concrete, and asphalt.

#### 6.1.1 Test Pit TP-1

Test Pit TP-1 is located in the material storage area west of the former Peninsula Diesel building. The test pit encountered fill material to the total depth excavated of 17 feet. Groundwater entered the pit and stabilized at a depth of approximately eight feet below ground surface. The soil in the excavation was visibly stained and emitted a creosote-type odor. A petroleum product sheen was noted on the water in the pit. Fill material in the excavation consisted waste materials, including, tires, bottles, wood, concrete, and metal.

Soil sample TP-1-12 was collected from the excavation at a depth of 12 feet. The sample displayed a petroleum product sheen. The sample was analyzed for petroleum products by DEQ Methods NWTPH-Dx and NWTPH-Gx, semi-volatile organic compounds (SVOC) by EPA Method 8270B, and VOCs by EPA Method 8240.

#### 6.1.2 Test Pit TP-2

Test Pit TP-2 is located in the former pond area in the northwest portion of the site. Test Pit TP-2 encountered fill material to the total depth excavated of 17 feet. The fill material consisted of construction debris, primarily concrete rubble, with a brown silt/sand matrix. The fill material emitted a slight petroleum-like odor and displayed slight petroleum-product staining. Groundwater was not encountered in the excavation.

Soil sample TP-2-17 was collected from the base of the excavation at a depth of 17 feet. The sample was analyzed for petroleum products by DEQ Methods NWTPH-Dx and NWTPH-Gx, SVOCs by EPA Method 8270B, and VOCs by EPA Method 8240.

#### 6.1.3 Test Pit TP-3

Test Pit TP-3 is located in the Former Pond Area north of the adjacent Matlack facility. Test Pit TP-3 encountered fill material to the total depth excavated of 13 feet. The fill material consisted of construction debris, primarily concrete rubble, with a dark brown silt/sand matrix. The fill material emitted a petroleum-like odor and displayed a petroleum-product staining. Groundwater was not encountered in the excavation.

Soil sample TP-3-13 was collected from the base of the excavation at a depth of 13 feet. The sample was analyzed for petroleum products by DEQ Methods NWTPH-Dx and NWTPH-Gx, SVOCs by EPA Method 8270B, and VOCs by EPA Method 8240.

#### 6.1.4 Test Pit TP-4

Test Pit TP-4 is located in the Former Pond Area in the southwest portion of the site. Test Pit TP-4 encountered fill material to the total depth excavated of 12 feet. The fill material consisted of construction debris, primarily concrete rubble, with a brown



silt/sand matrix. The fill material did not emit a petroleum-like odor and displayed no petroleum-product staining. Groundwater was not encountered in the excavation.

No soil sample from Test Pit TP-4 was submitted for analyses.

#### **6.1.5 Test Pit TP-5**

Test Pit TP-5 is located north of the UST remediation area in the northeast portion of the site. Test Pit TP-5 encountered sand fill material to the total depth excavated of eight feet. The fill material consisted of well-graded coarse to medium-grained sand with minor silt. The fill material did not emit a petroleum-like odor and did not display petroleum-product staining. Groundwater was not encountered in the excavation.

Soil sample TP-5-8 was collected from the base of the excavation at a depth of eight feet. The sample was analyzed for petroleum products by DEQ Methods NWTPH-Dx and NWTPH-Gx, SVOCs by EPA Method 8270B, and VOCs by EPA Method 8240.

### **6.2 GROUNDWATER FLOW CONDITIONS**

PNG surveyed the elevation of the monitoring wells casings on May 25, 1999. The survey was referenced to an arbitrary datum of 100 feet. Groundwater levels were measured in the six monitoring wells on May 26, 1999, and July 28, 1999 (Table 2).

#### **6.2.1 May 26, 1999**

Groundwater levels at the site as measured on May 26, 1999 ranged from 9.26 to 17.78 feet below ground surface (bgs). The flow is to the north, toward the Columbia River, at a gradient of 0.018 foot per foot (ft/ft) (Figure 4).

The shallow water level in Well MW-3 appears to indicate that a perched water zone is present in the area of the well. Data from Well MW-3 were not used in the calculation of a groundwater flow gradient. A comparison of the groundwater levels in Test Pit TP-1 and the adjacent Well MW-2 indicates that the water observed in the test pit excavation was also a perched water zone.

#### **6.2.2 July 28, 1999**

Groundwater levels at the site as measured on July 28, 1999, ranged from 10.25 to 22.92 feet bgs. Groundwater flow is to the north at a gradient of 0.017 ft/ft (Figure 5).

The water levels in Well MW-3 appeared to indicate a perched water zone.

## 7 ANALYTICAL RESULTS

A summary of the soil and groundwater analytical results is provided in Tables 3 through 8. Laboratory analytical reports are presented as Appendix A.

### 7.1 DATA REVIEW

A review of the analytical reports resulted in the following modifications to the reports.

1. Sample ID LAP990109 – The Sample Point Code is TP-1-12, not TP-1-17.
2. Sample ID LAB990111 – The Sample Point Code is TP-3-13, not TP-2-13 as reported.
3. Sample ID LAB 990113 – The result for Method NWTPH-Gx is 244 ug/L, not 244 mg/L as reported. This correction has been confirmed by the laboratory.
4. Sample ID LAB 990114 – The result for Method NWTPH-Gx is 109 ug/L, not 109 mg/L as reported. This correction has been confirmed by the laboratory.
5. Sample ID LAB 990115 – The result for Method NWTPH-Gx is 90.9 ug/L, not 90.9 mg/L as reported. This correction has been confirmed by the laboratory.
6. Sample ID LAB 990116 – The result for Method NWTPH-Gx is <80 ug/L, not <80 mg/L as reported. This correction has been confirmed by the laboratory.
7. Sample ID LAB 990117 – The result for Method NWTPH-Gx is 310 ug/L, not 310 mg/L as reported. This correction has been confirmed by the laboratory.
8. Sample ID LAB 990118 – The result for Method NWTPH-Gx is <80 ug/L, not <80 mg/L as reported. This correction has been confirmed by the laboratory.

Sample W7 from the July 28, 1999 sampling event is a duplicate sample collected from Well MW-5.

### 7.2 SOIL ANALYTICAL RESULTS

Petroleum hydrocarbons were detected in all four test pit soil samples submitted (Table 3). Total petroleum hydrocarbons as gasoline (TPH-G) were detected in three soil samples (TP-1-12, TP-2-17, and TP-3-13). Concentrations of TPH-G ranged from 3.63 mg/Kg to 1,470 mg/Kg. The highest concentration of TPH-G was from the soil sample from Test Pit TP-1 located in the material storage area.

Total petroleum hydrocarbons in the heavy oil range were detected in all four test pit soil samples submitted at concentrations ranging from 116 mg/Kg to 1,440 mg/Kg. The highest concentrations of TPH in the heavy oil range were from Test Pit TP-3 (1,000 mg/Kg) and Test Pit TP-5 (1,440 mg/Kg).

Concentrations of TPH as diesel were not detected at laboratory detection limits in any of the four soil samples submitted.

Semi-volatile organic hydrocarbons were not detected at the laboratory detection limits in any of the four soil samples submitted (Table 4).

Benzene in sample TP-3-13 was the only VOC detected at concentrations exceeding the laboratory detection limits in the four soil samples submitted (Table 5).



### 7.3 GROUNDWATER ANALYTICAL RESULTS

The results of the May 26, 1999 and July 28, 1999 groundwater sampling events are described in the following sections.

#### 7.3.1 May 26, 1999 Sampling Event

Petroleum hydrocarbons were detected in water samples from Wells MW-1, MW-2, MW-3, and MW-5 during the May 26, 1999 sampling event (Table 6). Total petroleum hydrocarbon as gasoline was detected in samples collected from Wells MW-1, MW-2, MW-3, and MW-5 at concentrations ranging from 0.091 mg/L to 0.310 mg/L.

Total petroleum hydrocarbon as diesel was not detected at laboratory detection limits in any of the six water soil samples submitted.

Total petroleum hydrocarbon in the heavy oil range was detected in the water sample from MW-2 at a concentration of 2.13 mg/L. SATURATION

Semi-volatile organic compounds were detected in water samples from Wells MW-1, MW-2, and MW-3. Only 2,4 dimethylphenol (50 ug/L in MW-1 and 110 ug/L in MW-3) and Bis(2-ethylhexyl) Phthalate (50 ug/L in MW-3) were detected at concentrations that exceeded five times the laboratory detection limits (Table 7).

Volatile organic compounds were detected in water samples from Wells MW-1, and MW-3 (Table 8). Benzene (1 ug/L), chlorobenzene (19 ug/L), chloroethane (9 ug/L) and ethylbenzene (5 ug/L) were detected in the sample from Well MW-1. Chlorobenzene, (3 ug/L) and 1,2 dichlorobenzene (12 ug/L) were detected in the sample from Well MW-3.

#### 7.3.2 July 28, 1999 Sampling Event

Petroleum hydrocarbons were detected in water samples from Wells MW-1, MW-2, MW-3, MW-4, and MW-5 during the July 28, 1999 sampling event (Table 6). Total petroleum hydrocarbons as gasoline were detected in samples from Wells MW-1, MW-2, and MW-3 at concentrations ranging from 0.123 mg/L to 0.234 mg/L.

Total petroleum hydrocarbons as diesel were detected in samples from Wells MW-1, MW-2, MW-3, MW-4, and MW-5 at concentrations ranging from 0.580 mg/L to 1.84 mg/L.

Total petroleum hydrocarbons in the heavy oil range were detected in the water sample from Wells MW-1, MW-3, MW-4, and MW-5 at a concentration ranging from 0.528 mg/L to 1.02 ug/L.

Semi-volatile organic compounds were detected in water samples from Wells MW-1, MW-2, and MW-3. None of the compounds were detected at concentrations that exceeded five times the laboratory detection limits (Table 7).

Volatile organic compounds were detected in water samples from Wells MW-1 and MW-3 (Table 8). Chlorobenzene (9 ug/L) and chloroethane (12 ug/L) were detected in the sample from Well MW-1. Only 1,2 dichlorobenzene (3 ug/L) was detected in the sample from Well MW-3.



## 8 SUMMARY OF FINDINGS

PNG conducted a Phase II Investigation at the subject site. The investigation included the excavation of five test pits, the installation of six monitoring wells, collection and analysis of selected soil samples, and collection and analysis of groundwater samples from two sampling events.

### 8.1 UST AT FORMER PENINSULA DIESEL FACILITY

The areas of concern with the UST were the effect of the release from the UST and the former activities of the facility on the soil and groundwater. Assessment of the UST at the former Peninsula Diesel facility included the review of the following:

- Available documents concerning the UST decommissioning in 1997.
- The results of soil and groundwater sampling during the installation of Boring B-1 during the PNG Phase II ESA in December 1998.
- The results of the soil sampling during the installation of Test Pit TP-5.

A gasoline UST was identified at the former Peninsula Diesel facility in July 1997 during a Phase I ESA by a prospective purchaser of the site. A wash pad with a dry well and various containers of hazardous materials were also identified. The location of the UST and the wash pad are shown on Figure 2.

A Phase I ESA Report by Northwest Consultants of Oregon dated September 11, 1997, provides some information concerning the UST decommissioning and other remedial activities at the former Peninsula Diesel facility. In August and September 1997, Enviro-Comp Services, Inc. (Enviro-Comp) decommissioned the UST by excavation and removal. Enviro-Comp also excavated the dry well and a large volume of petroleum contaminated soil (PCS).

Soil samples collected by Enviro-Comp indicate that residual PCS were left in place. An undefined groundwater remediation system was also installed prior to filling the former UST cavity.

The UST release was reported to DEQ and the site was assigned file 26-97-0558.

A document in the DEQ file indicated that a groundwater sample detected benzene at a concentration of 9 ug/L. During the PNG Limited Phase II ESA, Boring B-1 was installed in the area of the decommissioned UST. A water sample from the boring (B1-W) detected gasoline constituents with the concentration of benzene at 28 mg/L. *ug/l*

During the present Phase II Investigation, Test Pit TP-5 was excavated approximately 40 feet downgradient of the UST excavation. The soil consisted of sand, with no field evidence (visual or olfactory) of impact by petroleum products. Petroleum hydrocarbons in the heavy oil range were detected in the soil sample (TP-5-8) at a concentration of 1,440 mg/Kg.

The following assessment of the UST and activities at the former Peninsula Diesel facility are based on the review of the above information.

- The information concerning the UST presented in the Northwest Consultants of Oregon Phase I ESA report is not sufficient to completely characterize the effects of the release from the UST or the operation of the dry well on soil or groundwater quality.



- The UST, dry well, and a large volume of PCS have been removed. The analytical data presented in the Phase I ESA, the PNG Limited Phase II ESA and the PNG Phase II Investigation indicate that the residual impacted soil and groundwater could potentially extend from the UST excavation to the area of Test Pit TP-5.
- The Phase I ESA indicated that containers of hazardous material had been removed from the site. No disposal documentation was presented in the report. A reconnaissance of the area noted that most of the hazardous materials had been removed from the site. Several barrels of waste are stored north of the former Peninsula Diesel building. Based on a conversation with a worker at the current facility operating in the building, these barrels were from a previous tenant. These barrels should be disposed by the present property owner.

In addition, soil cuttings and purge water from the PNG Limited Phase II ESA and Phase II Environmental Investigation remain at the site pending disposal.

## 8.2 MATERIAL STORAGE AREA

The area of concern in the Material Storage Area was the elevated concentration of chlorinated solvents in water samples from Boring B-3 collected during the PNG Limited Phase II ESA. The assessment of the Material Storage Area included the review of the following:

- The Northwest Consultants of Oregon Phase I ESA.
- The results of soil and groundwater samples collected during the installation of Borings B-2 and B-3 during the PNG Limited Phase II ESA in December 1998.
- The results of the soil samples collected during the installation of Test Pit TP-1 and groundwater samples collected from Wells MW-1, MW-2, MW-3, and MW-4.

During the PNG Limited Phase II ESA, a water sample from Boring B-2 detected petroleum constituents. A water sample from Boring B-3 detected chlorinated solvents, including vinyl chloride at a concentration of 35 ug/L. Elevated concentrations of chlorinated solvents were also detected in water samples from borings installed by others on the adjacent former Arrow Trucking property.

During this investigation, Test Pit TP-1 encountered waste materials including metal, tires, wood, and glass. Water entered the test pit to a depth of approximately eight feet, apparently as perched groundwater. The water displayed a petroleum product sheen. Soil sample TP-1-12, from the test pit, only detected the presence of petroleum hydrocarbons in the gasoline and heavy oil ranges; VOCs were not detected.

Groundwater samples from Wells MW-1, MW-2, MW-3, and MW-4 detected very low levels of petroleum hydrocarbons and petroleum constituents. No chlorinated solvents were detected. The negative results from the groundwater samples, indicate that the previous positive chlorinated solvent detection might have been due to turbid water samples collected from the borings or from contamination introduced during sampling.

VINYL CHLORIDE Not  
A Common Cross Contaminant



### 8.3 FORMER POND AREA

The concerns in the Former Pond Area were the potential effect of the residual sludge layer at the base of the Former Pond and the effect of the operations of the adjacent Columbia Steel facility. The assessment of the Former Pond Area included the review of the following:

- Results of soil and groundwater sampling during the installation of Borings B-4, B-5, and B-6 during the PNG Limited Phase II ESA in December 1998.
- Results of the soil sampling during the installation of Test Pits TP-2, TP-3 and TP-4 and groundwater samples collected from Wells MW-1, MW-5, and MW-6.

The Former Pond Area was used for the discharge of waste water from washing tanker trucks at the adjacent Matlack facility. Both EPA and DEQ approved the closure of the pond area in 1980, with the dried, residual sludge layer left in place. The pond area has been filled with construction debris.

In addition, treated PCS from UST decommissioning at the adjacent Matlack facility was disposed with DEQ approval in the Former Pond Area. The exact area of the soil disposal has not been identified.

Test Pits TP-2, TP-3, and TP-4 were excavated to assess the fill material and the residual sludge layer.

The fill material encountered in Test Pit TP-2 was primarily concrete construction debris in a silt/sand matrix. The sludge layer was not encountered. Minor staining was noted. The results of the soil sample (TP-2-17) indicated low levels of petroleum products but no petroleum constituents.

The fill material encountered in Test Pit TP-4 included large pieces of concrete construction debris in a silt/sand matrix. The sludge layer was not encountered. No evidence of staining was noted.

The fill material encountered in Test Pit TP-3 included concrete construction debris and wood in a silt/sand matrix. The sludge layer was not encountered. Petroleum product staining and odor was noted. Soil sample TP-3-13 detected the presence of petroleum hydrocarbons and low concentrations of benzene (0.956 mg/Kg).

Evidence of the residual sludge layer was not identified in the excavation of the test pits or in the cuttings from the installations of monitoring wells. The thickness and lateral extent of the residual sludge layer is not known. The residual sludge layer may be located at a depth below the extent of the test pit excavations or may have been removed or re-graded prior to placement of fill material. The impact of the residual sludge layer on subsurface soils and groundwater quality has not been quantified.

A groundwater sample from Well MW-1 detected a low concentration of petroleum constituent and phenolic compounds during both sampling events. Groundwater samples from Wells MW-5 and MW-6 did not detect VOCs or SVOCs at concentrations above the laboratory detection limits.



## 9 RECOMMENDATIONS

This section presents recommendations to bring the subject site into compliance with DEQ regulations. The proposed actions are based on the following assumptions:

1. The site will be developed as an extension of the Columbia Boulevard Waste Water Treatment Plant.
2. The depth of excavations will be approximately 25 feet.

### 9.1 FORMER PENINSULA DIESEL FACILITY

#### 9.1.1 Former UST and Dry Well

The subject site is currently listed as an active site on the DEQ UST Cleanup list. The investigations and remedial activity to date do not appear to be sufficient to acquire DEQ "No Further Action" status.

The gasoline UST, the dry well, and a large volume of soil have been removed. Residual PCS remains in the vicinity of the excavation and petroleum constituents have been detected in groundwater. The characterization of the UST release by Enviro-Comp did not include the following information:

- A map of the excavation area.
- Volume of soil removed.
- Documentation of soil disposal.
- Location of confirmation samples.
- No petroleum constituent analyses were conducted.
- No groundwater data was presented.

Data from the dry well area is also very limited. If petroleum products and constituents are the only contaminants, the dry well area might be included by DEQ with the UST site closure procedure. During the PNG Limited Phase II ESA, Boring B-1 was located in the wash pad area. The results of the water sample (B1-W) did not detect chlorinated solvents.

Based on the limited data available and the proposed use for the area of the site, the UST file could be closed by developing Risk-Based Concentrations as a remedial alternative or the file could be closed as a low impact site. The risk-based or the low impact method would require the collection of additional soil and groundwater data and the analysis of potential receptors.

The work tasks to close the site would include:

- A Geoprobe investigation to properly characterize the area.
- The installation of three monitoring wells and one year of monitoring.
- Preparation of a Corrective Action Plan or Low Impact Site Report.

### **9.1.2 Hazardous Material**

The Phase I ESA and PNG's site reconnaissance identified waste materials that require special disposal. The Phase I ESA indicated that a drum of hazardous material located by the site building. The PNG Phase II Environmental Investigation also identified several waste drums. If the contents of these drums can not be determined, a characterization of the contents would have to be conducted.

## **9.2 MATERIALS STORAGE AREA**

The Materials Storage Area is not specifically included in the DEQ UST File 26-97-0558 or the DEQ Cleanup Site 186.

The primary concern in the Materials Storage Area is the potential hazardous material and special waste that is stored in this area and the solid waste and contaminated debris that potentially could be excavated during construction activities as described below.

### **9.2.1 Stored Materials**

The materials stored in this area include paint, roofing shingles, an old boiler, an air-conditioning unit, and treated lumber. These materials should be removed by the present owner prior to purchase.

### **9.2.2 Fill Materials**

Test Pit TP-1 contained fill material with numerous tires and PCS. If excavated this material would have to be treated as a special waste. The extent of this impacted fill does not appear to be continuous across the entire Materials Storage Area, but hot spots would probably be encountered during excavation activities.

### **9.2.3 Groundwater**

The results of the groundwater sampling from the monitoring wells in the Materials Storage Area did not confirm the elevated vinyl chloride concentrations detected in groundwater samples from the PNG Limited Phase II ESA. Vinyl chloride was not detected above laboratory detection limits in any of the in any of the six monitoring wells in either sampling event during the Phase II Investigation. The previous elevated vinyl chloride concentrations may have been due to the analysis of sediment in the turbid samples collected from the borings or from contamination introduced during the sampling procedure.

Low level concentrations of petroleum product constituents and phenolic substances were present in Wells MW-1 and MW-3. These concentrations do not exceed the EPA Drinking Water Maximum Concentration Limits (MCL). The results of the groundwater sampling during the Phase II Investigation did not identify evidence of a extensive groundwater contaminant plume on the subject site.

## **9.3 FORMER POND AREA**

The Former Pond Area is part of the DEQ Cleanup Site 186. The Former Ponds had been used for the disposal of rinse water generated at the adjacent tanker washing



facility. The ponds were drained in 1984 and the residual sludge left in place. Both EPA and DEQ approved the pond closure. The ponds have been filled with construction debris. In 1993, DEQ conducted a Preliminary Assessment of the site and recommended further assessment of the pond area. DEQ placed the Arrow Trucking site on the Confirmed Release List in 1997.

### 9.3.1 Soil and Fill

The soil and fill material in the Former Pond Area was assessed with the installation of Test Pits TP-2, TP-3, and TP-4 and inspection of drill cuttings from Wells MW-1, MW-5, and MW-6. The residual sludge layer was not encountered at the depths excavated in the test pits and was not identified in the drill cuttings.

Soil samples from Test Pits TP-2 and TP-3 detected petroleum products. The concentrations detected are consistent with low level PCS. Compounds related to residual sludge layer, i.e. phenols and pentachlorophenol, were not detected in soil samples.

Based on the limited explorations, the fill material appears to be consistent with construction debris and would not require environmental remediation. The sludge layer was not identified in the explorations. If the sludge layer is encountered during construction activities, the material would have to be sampled to determine the status as a hazardous waste and disposed of properly.

### 9.3.2 Groundwater

The groundwater in the Former Pond Area was assessed with the water samples from Wells MW-1, MW-5, and MW-6. Well MW-1 is located adjacent to the water treatment process area on the adjacent Matlack facility. Wells MW-5 and MW-6 are located in the are of the former ponds.

The low level petroleum product constituents and phenolic compounds (2,4 dimethylphenol and phenol) might indicate low level impact from the adjacent water treatment process area or might be affected by the fill material in the vicinity of the well. The data from the groundwater sampling events do not indicate extensive groundwater impact.

The results from the groundwater sampling events for Wells MW-5 and MW-6 did not detect groundwater impact, other than very low concentrations of petroleum products.

## 9.4 SUMMARY

The following tasks are required to bring the subject site into compliance with US EPA and DEQ regulations.

Further characterization of the extent of impact from the UST release to complete the closure process.

The disposal of excavated materials as special waste would be based on the volume of special waste generated.

The existing materials stored at the site should be removed by the owner, prior to purchase.

Additional assessment of the Former Pond Area should be completed by the owner or other responsible party.

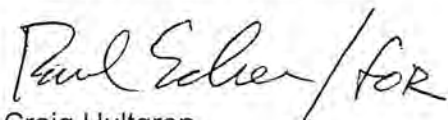


## 10 LIMITATIONS

PNG Environmental, Inc. has prepared this report for use by the City of Portland Bureau of Environmental Services. This report may be made available to future property owners and to regulatory agencies, but this report is not intended for use by others and the information contained herein is not applicable to other sites. Our interpretation of subsurface soil conditions is based on limited, widely-spaced field observations and chemical analytical data. Areas with contamination may exist in portions of the site that were not explored or analyzed.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices and laws, rules, and regulations at the time that the report was prepared. No other conditions, express or implied, should be understood.

*PNG ENVIRONMENTAL, INC.*

Handwritten signature of Paul Echer, with the word "for" written below it.

Craig Hultgren  
Project Geologist

Handwritten signature of Gerard Koschal.

Gerard Koschal, R.G.  
Senior Geologist

**Table 1**  
**Well Construction Details**  
 Larsen Property  
 Portland, Oregon

Well Number	Installation Date	Installer	Borehole Depth (ft)	Drill Type	Well Dia. (in)	Well Materials	Screen Slot (in)	Well Information		
								Well Casing Elevation <sup>1</sup>	Well Casing Length (ft)	Screen Length (ft)
MW-1	05/18/99	Geotech	25	10 in HSA	2	PVC	0.020	96.62	16.1	10
MW-2	05/18/99	Geotech	22	10 in HSA	2	PVC	0.020	88.08	18.4	10
MW-3	05/18/99	Geotech	18	10 in HSA	2	PVC	0.020	94.47	8.7	10
MW-4	05/24/99	Geotech	22	6-in Air Rotary	2	PVC	0.020	94.01	8.5	10
MW-5	05/24/99	Geotech	30	6-in Air Rotary	2	PVC	0.020	94.18	17.2	15
MW-6	05/24/99	Geotech	25	6-in Air Rotary	2	PVC	0.020	98.38	17.5	10

**Notes:**

ft = Feet

in = Inches

**Table 2**  
**Groundwater Elevation Data**  
 Larson Property  
 Portland, Oregon

Well Identification (toc)	Date Gauged	Depth to Water (ft)	Groundwater Elevation (ft)
MW-1	05/26/99	18.03	78.59
(96.62)	07/28/99	17.98	78.64
MW-2	05/26/99	20.15	67.93
(88.08)	07/28/99	20.81	67.27
MW-3	05/26/99	10.43	84.04
(94.47)	07/28/99	11.42	83.05
MW-4	05/26/99	19.65	74.36
(94.01)	07/28/99	20.83	73.18
MW-5	05/26/99	20.23	73.95
(94.18)	07/28/99	22.92	71.26
MW-6	05/26/99	17.54	80.84
(98.38)	07/28/99	17.05	81.33

**Notes:**

toc = Top of casing

ft = Feet

Elevations referenced to an arbitrary datum assumed to be 100 ft.



**Table 3**  
**Soil Analytical Results**  
**Total Petroleum Hydrocarbons**  
 Larsen Property  
 Portland, Oregon

Sample Identification	Depth (Feet)	Date Sampled	NWTPH-Gx (mg/Kg)	NWTPH-DX	
				Diesel (mg/Kg)	Heavy Oil (mg/Kg)
TP-1-12	12	05/18/99	1,470	0.25 U	116
TP-3-13	13	05/18/99	4.77	250 U	1,000
TP-2-17	17	05/18/99	3.63	125 U	423
TP-5-8	8	05/18/99	2.50 U	125 U	1,440

**Notes:**

- = Not analyzed for this parameter

mg/Kg = Milligrams per kilograms

U = Not detected at method reporting limit

NWTPH-Gx by Sub NWTPH-Gx

Heavy Oil by Sub NWTPH-Gx

NWTPH-Dx by Sub NWTPH-Dx

**Table 4**  
**Soil Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA	Phase II Investigation			
	B2-12	TP-1-12	TP-2-17	TP-5-8	TP-3-13
	(12 ft)	(12 ft)	(17 ft)	(8 ft)	(13 ft)
	12/17/99 (mg/Kg) EPA 3550A/8270C	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B
1,2-Dichlorobenzene	0.3 U	2 U	10 U	10 U	20 U
1,2,4-Trichlorobenzene	0.3 U	1 U	5 U	5 U	10 U
1,3-Dichlorobenzene	0.3 U	2 U	10 U	10 U	20 U
1,4-Dichlorobenzene	0.3 U	2 U	10 U	10 U	20 U
2,4,5-Trichlorophenol	0.3 U	2 U	10 U	10 U	20 U
2,4,6-Trichlorophenol	0.3 U	1 U	5 U	5 U	10 U
2,4-Dichlorophenol	0.3 U	1 U	5 U	5 U	10 U
2,4-Dimethylphenol	0.3 U	1 U	5 U	5 U	10 U
2,4-Dinitrophenol	2 U	2 U	10 U	10 U	20 U
2,4-Dinitrotoluene	0.3 U	4 U	20 U	20 U	40 U
2,6-Dinitrotoluene	0.3 U	1 U	5 U	5 U	10 U
2-Chloronaphthalene	0.3 U	1 U	5 U	5 U	10 U
2-Chlorophenol	0.3 U	1 U	5 U	5 U	10 U
2-Methyl-4,6-dinitrophenol	2 U	1 U	5 U	5 U	10 U
2-Methylnaphthalene	0.3 U	1 U	5 U	5 U	10 U
2-Methylphenol	0.3 U	1 U	5 U	5 U	10 U
2-Nitroaniline	2 U	-	-	-	-
2-Nitrophenol	0.3 U	1 U	5 U	5 U	10 U
3- and 4-Methylphenol Coelution	0.3 U	2 U	-	-	-
3,3'-Dichlorobenzidine	2 U	2 U	10 U	10 U	20 U
3-Nitroaniline	2 U	-	-	-	-
4,6-Dinitro-2-methylphenol	-	2 U	10 U	10 U	20 U
4-Bromophenyl Phenyl Ether	0.3 U	1 U	5 U	5 U	10 U
4-Chloro-3-methylphenol	0.3 U	1 U	5 U	5 U	10 U
4-Chloroaniline	0.3 U	4 U	20 U	20 U	40 U
4-Chlorophenyl Phenyl Ether	0.3 U	1 U	5 U	5 U	10 U
4-Nitroaniline	2 U	2 U	10 U	10 U	20 U
4-Nitrophenol	2 U	2 U	10 U	10 U	20 U
Acenaphthene	0.3 U	1 U	5 U	5 U	10 U
Acenaphthylene	0.3 U	1 U	5 U	5 U	10 U
Aniline	1 U	-	-	-	-
Anthracene	0.3 U	10 U	50 U	50 U	100 U
Benzidine	-	2 U	10 U	10 U	20 U
Benz(a)anthracene	0.3 U	1 U	5 U	5 U	10 U
Benzo(a)pyrene	0.3 U	1 U	5 U	5 U	10 U
Benzo(b)fluoranthene	0.3 U	1 U	5 U	5 U	10 U
Benzo(g,h,i)perylene	0.3 U	1 U	5 U	5 U	10 U
Benzo(k)fluoranthene	0.3 U	1 U	5 U	5 U	10 U
Butyl Benzyl Phthalate	0.3 U	1 U	5 U	5 U	10 U
Benzoic Acid	2 U	1 U	5 U	5 U	10 U
Benzyl Alcohol	0.3 U	1 U	5 U	5 U	10 U
Bis(2-chloroethoxy)methane	0.3 U	1 U	5 U	5 U	10 U

**Table 4**  
**Soil Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA	Phase II Investigation			
	B2-12	TP-1-12	TP-2-17	TP-5-8	TP-3-13
	(12 ft)	(12 ft)	(17 ft)	(8 ft)	(13 ft)
	12/17/99 (mg/Kg) EPA 3550A/8270C	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B	05/18/99 (mg/Kg) EPA 8270B
Bis(2-chloroethyl) Ether	0.3 U	1 U	5 U	5 U	10 U
Bis(2-chloroisopropyl) Ether	0.3 U	1 U	5 U	5 U	10 U
Bis(2-ethylhexyl) Phthalate	0.3 U	1 U	5 U	5 U	10 U
Chrysene	0.3 U	1 U	5 U	5 U	10 U
Di-n-butyl Phthalate	0.3 U	2 U	10 U	10 U	20 U
Di-n-octyl Phthalate	0.3 U	1 U	5 U	5 U	10 U
Dibenz(a,h)anthracene	0.3 U	1 U	5 U	5 U	10 U
Dibenzofuran	0.3 U	1 U	5 U	5 U	10 U
Diethyl Phthalate	0.3 U	1 U	5 U	5 U	10 U
Dimethyl Phthalate	0.3 U	1 U	5 U	5 U	10 U
Fluoranthene	0.6	1 U	5 U	5 U	10 U
Fluorene	0.3 U	1 U	5 U	5 U	10 U
Hexachlorobenzene	0.3 U	1 U	5 U	5 U	10 U
Hexachlorobutadiene	0.3 U	2 U	10 U	10 U	20 U
Hexachlorocyclopentadiene	0.3 U	2 U	10 U	10 U	20 U
Hexachloroethane	0.3 U	2 U	10 U	10 U	20 U
Indeno(1,2,3-cd)pyrene	0.3 U	1 U	5 U	5 U	10 U
Isophorone	0.3 U	1 U	5 U	5 U	10 U
N-Nitrosodimethylamine	2 U	1 U	5 U	5 U	10 U
N-Nitrosodi-n-propylamine	0.3 U	1 U	5 U	5 U	10 U
N-Nitrosodiphenylamine	0.3 U	1 U	5 U	5 U	10 U
Naphthalene	0.3 U	1 U	5 U	5 U	10 U
Nitrobenzene	0.3 U	1 U	5 U	5 U	10 U
Pentachlorophenol (PCP)	2 U	2 U	10 U	10 U	20 U
Phenanthrene	0.3 U	1 U	5 U	5 U	10 U
Phenol	0.3 U	1 U	5 U	5 U	10 U
Pyrene	0.4	1 U	5 U	5 U	10 U

**Notes:**

- = Not analyzed for this parameter

U = not detected at method reporting limit shown

mg/Kg = Micrograms per liter



**Table 5**  
**Soil Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA		Phase II Investigation			
	B1-17	B-2-12	TP-1-12	TP-2-17	TP-5-8	TP-2-13
	(17 ft)	(12 ft)	(12 ft)	(17 ft)	(8 ft)	(13 ft)
	12/17/98	12/17/98	05/18/99	05/18/99	05/18/99	05/18/99
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
	EPA 8260	EPA 8260	EPA 8240	EPA 8240	EPA 8240	EPA 8240
1,1,1-Trichloroethane (TCA)	5 U	5 U	200 U	200 U	200 U	200 U
1,1,2,2-Tetrachloroethane	5 U	5 U	200 U	200 U	200 U	200 U
1,1,2-Trichloroethane	5 U	5 U	200 U	200 U	200 U	200 U
1,1-Dichloroethane	5 U	5 U	200 U	200 U	200 U	200 U
1,1-Dichloroethene	5 U	5 U	200 U	200 U	200 U	200 U
1,1-Dichloropropene	5 U	5 U	200 U	200 U	200 U	200 U
1,2,3-Trichlorobenzene	20 U	20 U	200 U	200 U	200 U	200 U
1,2,3-Trichloropropane	5 U	5 U	200 U	200 U	200 U	200 U
1,2,4-Trichlorobenzene	20 U	20 U	200 U	200 U	200 U	200 U
1,2,4-Trimethylbenzene	20 U	20 U	200 U	200 U	200 U	200 U
1,2-Dibromo-3-chloropropane (DBCP)	20 U	20 U	200 U	200 U	200 U	200 U
1,2-Dibromoethane (EDB)	20 U	20 U	200 U	200 U	200 U	200 U
1,2-Dichlorobenzene	5 U	5 U	200 U	200 U	200 U	200 U
1,2-Dichloroethane	5 U	5 U	200 U	200 U	200 U	200 U
1,2-Dichloropropane	5 U	5 U	200 U	200 U	200 U	200 U
1,3,5-Trimethylbenzene	20 U	20 U	200 U	200 U	200 U	200 U
1,3-Dichlorobenzene	5 U	5 U	200 U	200 U	200 U	200 U
1,3-Dichloropropene total	-	-	200 U	200 U	200 U	200 U
1,3-Dichloropropane	5 U	5 U	200 U	200 U	200 U	200 U
1,4-Dichlorobenzene	5 U	5 U	200 U	200 U	200 U	200 U
2,2-Dichloropropane	5 U	5 U	200 U	200 U	200 U	200 U
2-Butanone (MEK)	20 U	20 U	200 U	200 U	200 U	200 U
2-Chlorotoluene	20 U	20 U	200 U	200 U	200 U	200 U
2-Hexanone	20 U	20 U	200 U	200 U	200 U	200 U
4-Chlorotoluene	20 U	20 U	200 U	200 U	200 U	200 U
4-Isopropyltoluene	20 U	20 U	200 U	200 U	200 U	200 U
4-Methyl-2-pentanone (MIBK)	20 U	20 U	200 U	200 U	200 U	200 U
Acetone	160	50U	200 U	200 U	200 U	200 U
Acrolein	-	-	200 U	200 U	200 U	200 U
Acrylonitrile	-	-	200 U	200 U	200 U	200 U
Benzene	5 U	5 U	5000 U	5000 U	5000 U	956
Bromobenzene	5 U	5 U	200 U	200 U	200 U	200 U
Bromochloromethane	5 U	5 U	200 U	200 U	200 U	200 U
Bromodichloromethane	5 U	5 U	200 U	200 U	200 U	200 U
Bromoform	5 U	5 U	5000 U	5000 U	5000 U	5000 U
Bromomethane	5 U	5 U	500 U	500 U	500 U	500 U
Carbon Disulfide	5 U	5 U	-	-	-	-
Carbon Tetrachloride	5 U	5 U	200 U	200 U	200 U	200 U
Chlorobenzene	5 U	5 U	200 U	200 U	200 U	200 U
Chloroethane	5 U	5 U	1000 U	1000 U	1000 U	1000 U

**Table 5**  
**Soil Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA		Phase II Investigation			
	B1-17	B-2-12	TP-1-12	TP-2-17	TP-5-8	TP-2-13
	(17 ft)	(12 ft)	(12 ft)	(17 ft)	(8 ft)	(13 ft)
	12/17/98	12/17/98	05/18/99	05/18/99	05/18/99	05/18/99
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
	EPA 8260	EPA 8260	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Chloroform	5 U	5 U	200 U	200 U	200 U	200 U
Chloromethane	5 U	5 U	200 U	200 U	200 U	200 U
cis-1,2-Dichloroethene	5 U	5 U	-	-	-	-
cis-1,3-Dichloropropene	5 U	5 U	-	-	-	-
Dibromochloromethane	5 U	5 U	400 U	400 U	400 U	400 U
Dichlorobromomethane	-	-	200 U	200 U	200 U	200 U
Dibromomethane	5 U	5 U	500 U	500 U	500 U	500 U
Dichlorodifluoromethane	5 U	5 U	200 U	200 U	200 U	200 U
Ethylbenzene	5 U	5 U	200 U	200 U	200 U	200 U
Hexachlorobutadiene	20 U	20 U	-	-	-	-
Isopropylbenzene	20 U	20 U	-	-	-	-
m,p-Xylenes	5 U	5 U	-	-	-	-
Methylene Chloride	10 U	10 U	-	-	-	-
Naphthalene	20 U	68	-	-	-	-
n-Butylbenzene	20 U	20 U	-	-	-	-
n-Propylbenzene	20 U	20 U	-	-	-	-
o-Xylene	5 U	5 U	-	-	-	-
sec-Butylbenzene	20 U	20 U	-	-	-	-
Styrene	5 U	5 U	-	-	-	-
tert-Butylbenzene	20 U	20 U	-	-	-	-
Tetrachloroethene (PCE)	5 U	5 U	500 U	500 U	500 U	500 U
Toluene	5 U	5 U	200 U	200 U	200 U	200 U
trans-1,2-Dichloroethene	5 U	5 U	200 U	200 U	200 U	200 U
trans-1,3-Dichloropropene	5 U	5 U	-	-	-	-
Trichloroethene (TCE)	5 U	5 U	200 U	200 U	200 U	200 U
Trichlorofluoromethane	5 U	5 U	200 U	200 U	200 U	200 U
Vinyl Chloride	5 U	5 U	200 U	200 U	200 U	200 U

Notes:

- = Not analyzed for this parameter

U = not detected at method reporting limit shown



**Table 6**  
**Groundwater Analytical Results**  
**Total Petroleum Hydrocarbons**  
 Larsen Property  
 Portland, Oregon

Sample Identification	Date Sampled	NWTPH-Gx (mg/L)	NWTPH-DX	
			Diesel (mg/L)	Heavy Oil (mg/L)
MW-1	05/26/99	<b>0.244</b>	0.600 U	1.20 U
	07/28/99	<b>0.125</b>	<b>1.84</b>	<b>1.02</b>
MW-2	05/26/99	<b>0.109</b>	0.600 U	<b>2.13</b>
	07/28/99	<b>0.123</b>	<b>0.599</b>	0.500 U
MW-3	05/26/99	<b>0.091</b>	0.600 U	1.20 U
	07/28/99	<b>0.234</b>	<b>0.656</b>	<b>0.538</b>
MW-4	05/26/99	0.080 U	0.600 U	1.20 U
	07/28/99	0.080 U	<b>0.693</b>	<b>0.651</b>
MW-5	05/26/99	<b>0.310</b>	0.650 U	1.30 U
	07/28/99	0.080 U	<b>0.764</b>	<b>0.656</b>
W-7 (MW-5 Dup)	07/28/99	0.080 U	<b>0.580</b>	<b>0.528</b>
MW-6	05/26/99	0.080 U	0.700 U	1.40 U

**Notes:**

- = Not analyzed for this parameter  
 mg/L = Milligrams per liter  
 U = Not detected at method reporting limit  
 NWTPH-Gx by Sub NWTPH-Gx  
 Heavy Oil by Sub NWTPH-Gx  
 NWTPH-Dx by Sub NWTPH-Dx



**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA		
	B1-W	B2-W	B3-W
	12/17/1998	12/17/1998	12/17/1998
	EPA 8520B/8270C (ug/L)	EPA 8520B/8270C (ug/L)	EPA 8520B/8270C (ug/L)
1,2,4-Trichlorobenzene	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U
2,4,5-Trichlorophenol	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	25 U	25 U
2,4-Dinitrotoluene	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	25 U	25 U	25 U
2-Methylnaphthalene	10 U	24	10 U
2-Methylphenol	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U
2-Nitrophenol	10 U	10 U	10 U
3- and 4-Methylphenol Coelution	10 U	10 U	10 U
3,3'-Dichlorobenzidine	25 U	25 U	25 U
3-Nitroaniline	25 U	25 U	25 U
4-Bromophenyl Phenyl Ether	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U
Acenaphthene	10 U	37	10 U
Acenaphthylene	10 U	10 U	10 U
Aniline	25 U	25 U	25 U
Anthracene	10 U	21	10 U
Azobenzene	-	-	-
Benzidine	-	-	-
Benz(a)anthracene	10 U	23	10 U
Benzo(a)pyrene	10 U	26	10 U
Benzo(b)fluoranthene	10 U	21	10 U
Benzo(g,h,i)perylene	10 U	15	10 U
Benzo(k)fluoranthene	10 U	19	10 U
Butyl Benzyl Phthalate	10 U	10 U	10 U
Benzoic Acid	25 U	25 U	25 U
Benzyl Alcohol	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U
Bis(2-chloroethyl) Ether	10 U	10 U	10 U
Bis(2-chloroisopropyl) Ether	10 U	10 U	10 U

**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA		
	B1-W	B2-W	B3-W
	12/17/1998 EPA 8520B/8270C (ug/L)	12/17/1998 EPA 8520B/8270C (ug/L)	12/17/1998 EPA 8520B/8270C (ug/L)
Bis(2-ethylhexyl) Phthalate	10 U	10 U	10 U
Chrysene	10 U	26	10 U
Di-n-butyl Phthalate	10 U	10 U	10 U
Di-n-octyl Phthalate	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U
Dibenzofuran	10 U	18	25 U
Diethyl Phthalate	10 U	10 U	10 U
Dimethyl Phthalate	10 U	10 U	10 U
Fluoranthene	10 U	59	10 U
Fluorene	10 U	30	10 U
Hexachlorobenzene	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	16	10 U
Isophorone	10 U	10 U	10 U
N-Nitrosodimethylamine	25 U	25 U	25 U
N-Nitrosodi-n-propylamine	10 U	10 U	10 U
N-Nitrosodiphenylamine	10 U	10 U	10 U
Naphthalene	10 U	85	10 U
Nitrobenzene	10 U	10 U	10 U
Pentachlorophenol (PCP)	25 U	25 U	25 U
Phenanthrene	10 U	64	10 U
Phenol	10 U	10 U	10 U
Pyrene	10 U	41	10 U

**Notes:**

U = Not detected at method reporting limit shown

- = Not analyzed for this parameter

ug/L = Micrograms per liter



Table 7  
Groundwater Analytical Results  
Semi-Volatile Organic Compounds  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation					
	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	EPA 625 (ug/L)	EPA 625 (ug/L)	EPA 625 (ug/L)	EPA 625 (ug/L)	EPA 625 (ug/L)	EPA 625 (ug/L)
1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U	5 U SLV-w 5 U	5 U
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	20 74 5 U	5 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	-	-	-	-	-	-
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	50 42	20	10 U	10 U	110	10 U
2,4-Dinitrophenol	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
3- and 4-Methylphenol Coelution	-	-	-	-	-	-
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	-	-	-	-	-	-
4-Bromophenyl Phenyl Ether	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	-	-	-	-	-	-
4-Chlorophenyl Phenyl Ether	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	-	-	-	-	-	-
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	5 U	5 U	10	10	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U	5 U
Aniline	-	-	-	-	-	-
Anthracene	5 U	5 U	5 U	5 U	10	5 U
Azobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Benzidine	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Butyl Benzyl Phthalate	20 U	20 U	20 U	20 U	20 U	20 U
Benzoic Acid	-	-	-	-	-	-
Benzyl Alcohol	-	-	-	-	-	-
Bis(2-chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-chloroethyl) Ether	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-chloroisopropyl) Ether	5 U	5 U	5 U	5 U	5 U	5 U



**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation					
	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Bis(2-ethylhexyl) Phthalate	10 U	10 U	10 U	10 U	50	10 U
Chrysene	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-butyl Phthalate	20 U	20 U	20 U	20 U	10	20 U
Di-n-octyl Phthalate	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	5 U	5 U	5 U	5 U	5 U	5 U
Dibenzofuran	-	-	-	-	-	-
Diethyl Phthalate	5 U	5 U	5 U	5 U	5 U	5 U
Dimethyl Phthalate	-	-	-	-	-	-
Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	10	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobutadiene	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodimethylamine	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodi-n-propylamine	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodiphenylamine	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol (PCP)	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	5 U	5 U	5 U	5 U	10	5 U
Phenol	30	10 U	10 U	10 U	10 U	10 U
Pyrene	5 U	5 U	5 U	5 U	5 U	5 U

**Notes:**

U = Not detected at method report

- = Not analyzed for this parameter

ug/L = Micrograms per liter

**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation					
	MW-4	MW-4	MW-5	MW-5	MW-6	MW-6
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
1,2,4-Trichlorobenzene	10 U	5 U	18 U	5 U	10 U	10 U
1,2-Dichlorobenzene	10 U	5 U	18 U	5 U	10 U	10 U
1,3-Dichlorobenzene	10 U	5 U	18 U	5 U	10 U	10 U
1,4-Dichlorobenzene	10 U	5 U	18 U	5 U	10 U	10 U
2,4,5-Trichlorophenol	-	-	-	-	-	-
2,4,6-Trichlorophenol	20 U	10 U	36 U	10 U	20 U	20 U
2,4-Dichlorophenol	20 U	10 U	36 U	10 U	20 U	20 U
2,4-Dimethylphenol	20 U	10 U	36 U	10 U	20 U	20 U
2,4-Dinitrophenol	40 U	20 U	73 U	20 U	40 U	40 U
2,4-Dinitrotoluene	10 U	5 U	18 U	5 U	10 U	10 U
2,6-Dinitrotoluene	10 U	5 U	18 U	5 U	10 U	10 U
2-Chloronaphthalene	10 U	5 U	18 U	5 U	10 U	10 U
2-Chlorophenol	20 U	10 U	36 U	10 U	20 U	20 U
2-Methyl-4,6-dinitrophenol	20 U	10 U	36 U	10 U	20 U	20 U
2-Methylnaphthalene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
2-Nitrophenol	20 U	10 U	36 U	10 U	20 U	20 U
3- and 4-Methylphenol Coelution	-	-	-	-	-	-
3,3'-Dichlorobenzidine	10 U	5 U	18 U	5 U	10 U	10 U
3-Nitroaniline	-	-	-	-	-	-
4-Bromophenyl Phenyl Ether	10 U	5 U	18 U	5 U	10 U	10 U
4-Chloro-3-methylphenol	20 U	10 U	36 U	10 U	20 U	20 U
4-Chloroaniline	-	-	-	-	-	-
4-Chlorophenyl Phenyl Ether	10 U	5 U	18 U	5 U	10 U	10 U
4-Nitroaniline	-	-	-	-	-	-
4-Nitrophenol	40 U	20 U	73 U	20 U	40 U	40 U
Acenaphthene	10 U	5 U	18 U	5 U	10 U	10 U
Acenaphthylene	10 U	5 U	18 U	5 U	10 U	10 U
Aniline	10 U	-	-	-	10 U	10 U
Anthracene	10 U	5 U	18 U	5 U	10 U	10 U
Azobenzene	10 U	5 U	18 U	5 U	10 U	10 U
Benzidine	20 U	10 U	36 U	10 U	20 U	20 U
Benz(a)anthracene	10 U	5 U	18 U	5 U	10 U	10 U
Benzo(a)pyrene	10 U	5 U	18 U	5 U	10 U	10 U
Benzo(b)fluoranthene	10 U	5 U	18 U	5 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	5 U	18 U	5 U	10 U	10 U
Benzo(k)fluoranthene	10 U	5 U	18 U	5 U	10 U	10 U
Butyl Benzyl Phthalate	40 U	20 U	73 U	20 U	40 U	40 U
Benzoic Acid	-	-	-	-	-	-
Benzyl Alcohol	-	-	-	-	-	-
Bis(2-chloroethoxy)methane	10 U	5 U	18 U	5 U	10 U	10 U
Bis(2-chloroethyl) Ether	10 U	5 U	18 U	5 U	10 U	10 U
Bis(2-chloroisopropyl) Ether	10 U	5 U	18 U	5 U	10 U	10 U

**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
 Larsen Property  
 Portland, Oregon

Parameters	Phase II Investigation					
	MW-4	MW-4	MW-5	MW-5	MW-6	MW-6
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625	EPA 625
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Bis(2-ethylhexyl) Phthalate	20 U	10 U	36 U	10 U	20 U	20 U
Chrysene	10 U	5 U	18 U	5 U	10 U	10 U
Di-n-butyl Phthalate	40 U	20 U	73 U	20 U	40 U	40 U
Di-n-octyl Phthalate	20 U	10 U	36 U	10 U	20 U	20 U
Dibenz(a,h)anthracene	10 U	5 U	18 U	5 U	10 U	10 U
Dibenzofuran	-	-	-	-	-	-
Diethyl Phthalate	10 U	5 U	18 U	5 U	10 U	10 U
Dimethyl Phthalate	-	-	-	-	-	-
Fluoranthene	10 U	5 U	18 U	5 U	10 U	10 U
Fluorene	10 U	5 U	18 U	5 U	10 U	10 U
Hexachlorobenzene	10 U	5 U	18 U	5 U	10 U	10 U
Hexachlorobutadiene	10 U	5 U	18 U	5 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	5 U	18 U	5 U	10 U	10 U
Hexachloroethane	10 U	5 U	18 U	5 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	5 U	18 U	5 U	10 U	10 U
Isophorone	10 U	5 U	18 U	5 U	10 U	10 U
N-Nitrosodimethylamine	10 U	5 U	18 U	5 U	10 U	10 U
N-Nitrosodi-n-propylamine	10 U	5 U	18 U	5 U	10 U	10 U
N-Nitrosodiphenylamine	10 U	5 U	18 U	5 U	10 U	10 U
Naphthalene	10 U	5 U	18 U	5 U	10 U	10 U
Nitrobenzene	10 U	5 U	18 U	5 U	10 U	10 U
Pentachlorophenol (PCP)	20 U	10 U	36 U	10 U	20 U	20 U
Phenanthrene	10 U	5 U	18 U	5 U	10 U	10 U
Phenol	20 U	10 U	36 U	10 U	20 U	20 U
Pyrene	10 U	5 U	18 U	5 U	10 U	10 U

**Notes:**

U = Not detected at method report

- = Not analyzed for this paramete

ug/L = Micrograms per liter

*Handwritten:*  
 MRLs  
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**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation	
	W-7 (MW-5 Dup)	Trip Blank
	07/28/99	07/28/99
	EPA 625 (ug/L)	EPA 625 (ug/L)
1,2,4-Trichlorobenzene	10 U	5 U
1,2-Dichlorobenzene	10 U	5 U
1,3-Dichlorobenzene	10 U	5 U
1,4-Dichlorobenzene	10 U	5 U
2,4,5-Trichlorophenol	-	-
2,4,6-Trichlorophenol	20 U	10 U
2,4-Dichlorophenol	20 U	10 U
2,4-Dimethylphenol	20 U	10 U
2,4-Dinitrophenol	40 U	20 U
2,4-Dinitrotoluene	10 U	5 U
2,6-Dinitrotoluene	10 U	5 U
2-Chloronaphthalene	10 U	5 U
2-Chlorophenol	20 U	10 U
2-Methyl-4,6-dinitrophenol	20 U	10 U
2-Methylnaphthalene	-	-
2-Methylphenol	-	-
2-Nitroaniline	-	-
2-Nitrophenol	20 U	10 U
3- and 4-Methylphenol Coelution	-	-
3,3'-Dichlorobenzidine	10 U	5 U
3-Nitroaniline	-	-
4-Bromophenyl Phenyl Ether	10 U	5 U
4-Chloro-3-methylphenol	20 U	10 U
4-Chloroaniline	-	-
4-Chlorophenyl Phenyl Ether	10 U	5 U
4-Nitroaniline	-	-
4-Nitrophenol	40 U	20 U
Acenaphthene	10 U	5 U
Acenaphthylene	10 U	5 U
Aniline	10 U	-
Anthracene	10 U	5 U
Azobenzene	10 U	5 U
Benzidine	20 U	10 U
Benz(a)anthracene	10 U	5 U
Benzo(a)pyrene	10 U	5 U
Benzo(b)fluoranthene	10 U	5 U
Benzo(g,h,i)perylene	10 U	5 U
Benzo(k)fluoranthene	10 U	5 U
Butyl Benzyl Phthalate	40 U	20 U
Benzoic Acid	-	-
Benzyl Alcohol	-	-
Bis(2-chloroethoxy)methane	10 U	5 U
Bis(2-chloroethyl) Ether	10 U	5 U
Bis(2-chloroisopropyl) Ether	10 U	5 U

**Table 7**  
**Groundwater Analytical Results**  
**Semi-Volatile Organic Compounds**  
 Larsen Property  
 Portland, Oregon

Parameters	Phase II Investigation	
	W-7 (MW-5 Dup)	Trip Blank
	07/28/99	07/28/99
	EPA 625 (ug/L)	EPA 625 (ug/L)
Bis(2-ethylhexyl) Phthalate	20 U	10 U
Chrysene	10 U	5 U
Di-n-butyl Phthalate	40 U	20 U
Di-n-octyl Phthalate	20 U	10 U
Dibenz(a,h)anthracene	10 U	5 U
Dibenzofuran	-	-
Diethyl Phthalate	10 U	5 U
Dimethyl Phthalate	-	-
Fluoranthene	10 U	5 U
Fluorene	10 U	5 U
Hexachlorobenzene	10 U	5 U
Hexachlorobutadiene	10 U	5 U
Hexachlorocyclopentadiene	10 U	5 U
Hexachloroethane	10 U	5 U
Indeno(1,2,3-cd)pyrene	10 U	5 U
Isophorone	10 U	5 U
N-Nitrosodimethylamine	10 U	5 U
N-Nitrosodi-n-propylamine	10 U	5 U
N-Nitrosodiphenylamine	10 U	5 U
Naphthalene	10 U	5 U
Nitrobenzene	10 U	5 U
Pentachlorophenol (PCP)	20 U	10 U
Phenanthrene	10 U	5 U
Phenol	20 U	10 U
Pyrene	10 U	5 U

**Notes:**

U = Not detected at method report

- = Not analyzed for this parameter

ug/L = Micrograms per liter

**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA			Phase II Investigation	
	B1-W	B2-W	B3-W	MW-1	MW-1
	12/17/1998 (ug/L) EPA 8230B	12/17/1998 (ug/L) EPA 8230B	12/17/1998 (ug/L) EPA 8230B	05/26/99 (ug/L) EPA 624	07/28/99 (ug/L) EPA 624
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	5 U	5 U
1,1,1-Trichloroethane (TCA)	0.5 U	0.5 U	0.5 U	3 U	3 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	3 U	3 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	3 U	3 U
1,1-Dichloroethane	0.5 U	0.9	0.5 U	2 U	2 U
1,1-Dichloroethene	0.5 U	0.5 U	0.9	3 U	3 U
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	2 U	2 U	2 U	-	-
1,2-Dibromoethane (EDB)	2 U	2 U	2 U	-	-
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	5 U	5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	3 U	3 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	3 U	3 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	2 U	2 U
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	2 U	2 U
1,2,3-Trichlorobenzene	2 U	2 U	2 U	-	-
1,2,3-Trichloropropane	0.5 U	0.5 U	0.5 U	-	-
1,2,4-Trichlorobenzene	2 U	2 U	2 U	-	-
1,2,4-Trimethylbenzene	2 U	2 U	2 U	-	-
1,3,5-Trimethylbenzene	2 U	2 U	2 U	-	-
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	2 U	2 U
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	-	-
2-Butanone (MEK)	20 U	20 U	20 U	-	-
2-Chlorotoluene	2 U	2 U	2 U	-	-
2-Hexanone	20 U	20 U	20 U	-	-
4-Chlorotoluene	2 U	2 U	2 U	-	-
4-Isopropyltoluene	2 U	2 U	2 U	-	-
4-Methyl-2-pentanone (MIBK)	20 U	20 U	20 U	-	-
Acetone	20 U	20 U	20 U	-	-
2-Chloroethylvinyl ether	-	-	-	50 U	50 U
Acrolein	-	-	-	100 U	100 U
Acrylonitrile	-	-	-	50 U	50 U
Benzene	28	0.5 U	0.9	1	1 U
Bromobenzene	0.5 U	0.5 U	0.5 U	-	-
Bromochloromethane	0.5 U	0.5 U	0.5 U	-	-
Bromodichloromethane	0.5 U	0.5 U	0.5 U	3 U	3 U
Bromoform	0.5 U	0.5 U	0.5 U	3 U	3 U
Bromomethane	0.5 U	0.5 U	0.5 U	10 U	10 U
Carbon Disulfide	1.7	0.8	0.5 U	-	-
Carbon Tetrachloride	0.5 U	0.5 U	0.5 U	3 U	3 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	19	9
Chloroethane	0.5 U	0.5 U	0.5 U	9	12
Chloroform	0.5 U	0.5 U	0.5 U	1 U	1 U
Chloromethane	0.5 U	0.5 U	0.5 U	10 U	10 U



**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II ESA			Phase II Investigation	
	B1-W	B2-W	B3-W	MW-1	MW-1
	12/17/1998 (ug/L) EPA 8230B	12/17/1998 (ug/L) EPA 8230B	12/17/1998 (ug/L) EPA 8230B	05/26/99 (ug/L) EPA 624	07/28/99 (ug/L) EPA 624
<i>cis</i> -1,2-Dichloroethene	0.5 U	1.0	58	-	-
<i>cis</i> -1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	4 U	4 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	5 U	5 U
Dibromomethane	0.5 U	0.5 U	0.5 U	-	-
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	-	-
Ethylbenzene	6.7	0.5 U	0.5 U	5	3 U
Methylene Chloride	1 U	1 U	1 U	4 U	4 U
Tetrachloroethene (PCE)	0.5 U	0.5 U	0.5 U	2 U	2 U
Toluene	2.4	0.5 U	0.5 U	1 U	1 U
<i>trans</i> -1,2-Dichloroethene	0.5 U	0.5 U	1.8	2 U	2 U
<i>trans</i> -1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	3 U	3 U
Trichloroethene (TCE)	0.5 U	0.5 U	5.5	4 U	4 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	4 U	4 U
Vinyl Chloride	0.5 U	0.5 U	35	50 U	50 U
Hexachlorobutadiene	2 U	2 U	2 U	-	-
Isopropylbenzene	2 U	2 U	2 U	-	-
m,p-Xylenes	1.0	0.5	0.5 U	-	-
Naphthalene	2 U	100	2 U	-	-
<i>n</i> -Butylbenzene	2 U	2 U	2 U	-	-
<i>n</i> -Propylbenzene	2 U	2 U	2 U	-	-
o-Xylene	0.9	0.5 U	0.5 U	-	-
<i>sec</i> -Butylbenzene	2 U	2 U	2 U	-	-
Styrene	0.5 U	0.5 U	0.5 U	-	-
<i>tert</i> -Butylbenzene	2 U	2 U	2 U	-	-

**Notes:**

- = Not analyzed for this parameter

U = Not detected at method reporting limit shown

ug/L = Micrograms per liter

**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation					
	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624
1,1,1,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane (TCA)	3 U	3 U	3 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	3 U	3 U	3 U	3 U	3 U	3 U
1,1,2-Trichloroethane	3 U	3 U	3 U	3 U	3 U	3 U
1,1-Dichloroethane	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	3 U	3 U	3 U	3 U	3 U	3 U
1,1-Dichloropropene	3 U	3 U	3 U	3 U	3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	-	-	-
1,2-Dibromoethane (EDB)	-	-	-	-	-	-
1,2-Dichlorobenzene	5 U	5 U	12	3	5 U	5 U
1,2-Dichloroethane	3 U	3 U	3 U	3 U	3 U	3 U
1,2-Dichloropropane	3 U	3 U	3 U	3 U	3 U	3 U
1,3-Dichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U
1,3-Dichloropropane	2 U	2 U	2 U	2 U	2 U	2 U
1,2,3-Trichlorobenzene	-	-	-	-	-	-
1,2,3-Trichloropropane	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	2 U	2 U	2 U	2 U	2 U	2 U
2,2-Dichloropropane	-	-	-	-	-	-
2-Butanone (MEK)	-	-	-	-	-	-
2-Chlorotoluene	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-
4-Chlorotoluene	-	-	-	-	-	-
4-Isopropyltoluene	-	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-	-	-
Acetone	-	-	-	-	-	-
2-Chloroethylvinyl ether	50 U	50 U	50 U	50 U	50 U	50 U
Acrolein	100 U	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	-	-	-	-	-	-
Bromochloromethane	-	-	-	-	-	-
Bromodichloromethane	3 U	3 U	3 U	3 U	3 U	3 U
Bromoform	3 U	3 U	3 U	3 U	3 U	3 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	-	-	-	-	-	-
Carbon Tetrachloride	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobenzene	1 U	1 U	3	1 U	1 U	1 U
Chloroethane	50 U	50 U	50 U	50 U	50 U	50 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U

**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
Larsen Property  
Portland, Oregon

Parameters	Phase II Investigation					
	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4
	05/26/99	07/28/99	05/26/99	07/28/99	05/26/99	07/28/99
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624
<i>cis</i> -1,2-Dichloroethene	-	-	-	-	-	-
<i>cis</i> -1,3-Dichloropropene	4 U	4 U	4 U	4 U	4 U	4 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U
Dibromomethane	-	-	-	-	-	-
Dichlorodifluoromethane	-	-	-	-	-	-
Ethylbenzene	3 U	3 U	3 U	3 U	3 U	3 U
Methylene Chloride	4 U	4 U	4 U	4 U	4 U	4 U
Tetrachloroethene (PCE)	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
<i>trans</i> -1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U
<i>trans</i> -1,3-Dichloropropene	3 U	3 U	3 U	3 U	3 U	3 U
Trichloroethene (TCE)	4 U	4 U	4 U	4 U	4 U	4 U
Trichlorofluoromethane	4 U	4 U	4 U	4 U	4 U	4 U
Vinyl Chloride	50 U	50 U	50 U	50 U	50 U	50 U
Hexachlorobutadiene	-	-	-	-	-	-
Isopropylbenzene	-	-	-	-	-	-
m,p-Xylenes	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-
<i>n</i> -Butylbenzene	-	-	-	-	-	-
<i>n</i> -Propylbenzene	-	-	-	-	-	-
o-Xylene	-	-	-	-	-	-
sec-Butylbenzene	-	-	-	-	-	-
Styrene	-	-	-	-	-	-
tert-Butylbenzene	-	-	-	-	-	-

**Notes:**

- = Not analyzed for this parameter

U = Not detected at method reporting li

ug/L = Micrograms per liter



**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
 Larsen Property  
 Portland, Oregon

*Not appropriate method*

Parameters	Phase II Investigation				
	MW-5	MW-5	MW-6	MW-6	W-7 (MW5 Dup)
	05/26/99	07/28/99	05/26/99	07/28/99	07/28/99
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624
1,1,1,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane (TCA)	3 U	3 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	3 U	3 U	3 U	3 U	3 U
1,1,2-Trichloroethane	3 U	3 U	3 U	3 U	3 U
1,1-Dichloroethane	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	3 U	3 U	3 U	3 U	3 U
1,1-Dichloropropene	3 U	3 U	3 U	3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	-	-
1,2-Dibromoethane (EDB)	-	-	-	-	-
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	3 U	3 U	3 U	3 U	3 U
1,2-Dichloropropane	3 U	3 U	3 U	3 U	3 U
1,3-Dichlorobenzene	2 U	2 U	2 U	2 U	2 U
1,3-Dichloropropane	2 U	2 U	2 U	2 U	2 U
1,2,3-Trichlorobenzene	-	-	-	-	-
1,2,3-Trichloropropane	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-
1,2,4-Trimethylbenzene	-	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	-	-
1,4-Dichlorobenzene	2 U	2 U	2 U	2 U	2 U
2,2-Dichloropropane	-	-	-	-	-
2-Butanone (MEK)	-	-	-	-	-
2-Chlorotoluene	-	-	-	-	-
2-Hexanone	-	-	-	-	-
4-Chlorotoluene	-	-	-	-	-
4-Isopropyltoluene	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-	-
Acetone	-	-	-	-	-
2-Chloroethylvinyl ether	50 U	50 U	50 U	50 U	50 U
Acrolein	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	50 U	50 U	50 U	50 U	50 U
Benzene	1 U	1 U	1 U	1 U	1 U
Bromobenzene	-	-	-	-	-
Bromochloromethane	-	-	-	-	-
Bromodichloromethane	3 U	3 U	3 U	3 U	3 U
Bromoform	3 U	3 U	3 U	3 U	3 U
Bromomethane	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	-	-	-	-	-
Carbon Tetrachloride	3 U	3 U	3 U	3 U	3 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U
Chloroethane	50 U	50 U	50 U	50 U	50 U
Chloroform	1 U	1 U	1 U	1 U	1 U
Chloromethane	10 U	10 U	10 U	10 U	10 U

*Surface H<sub>2</sub>O  
 Lev. # Eco  
 130 ug/L*

*Taf  
 H<sub>2</sub>O  
 8.6  
 0.35  
 ug/L*

**Table 8**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
 Larsen Property  
 Portland, Oregon

*use table 2*

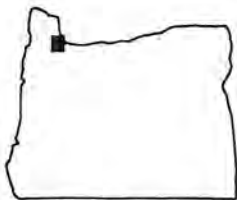
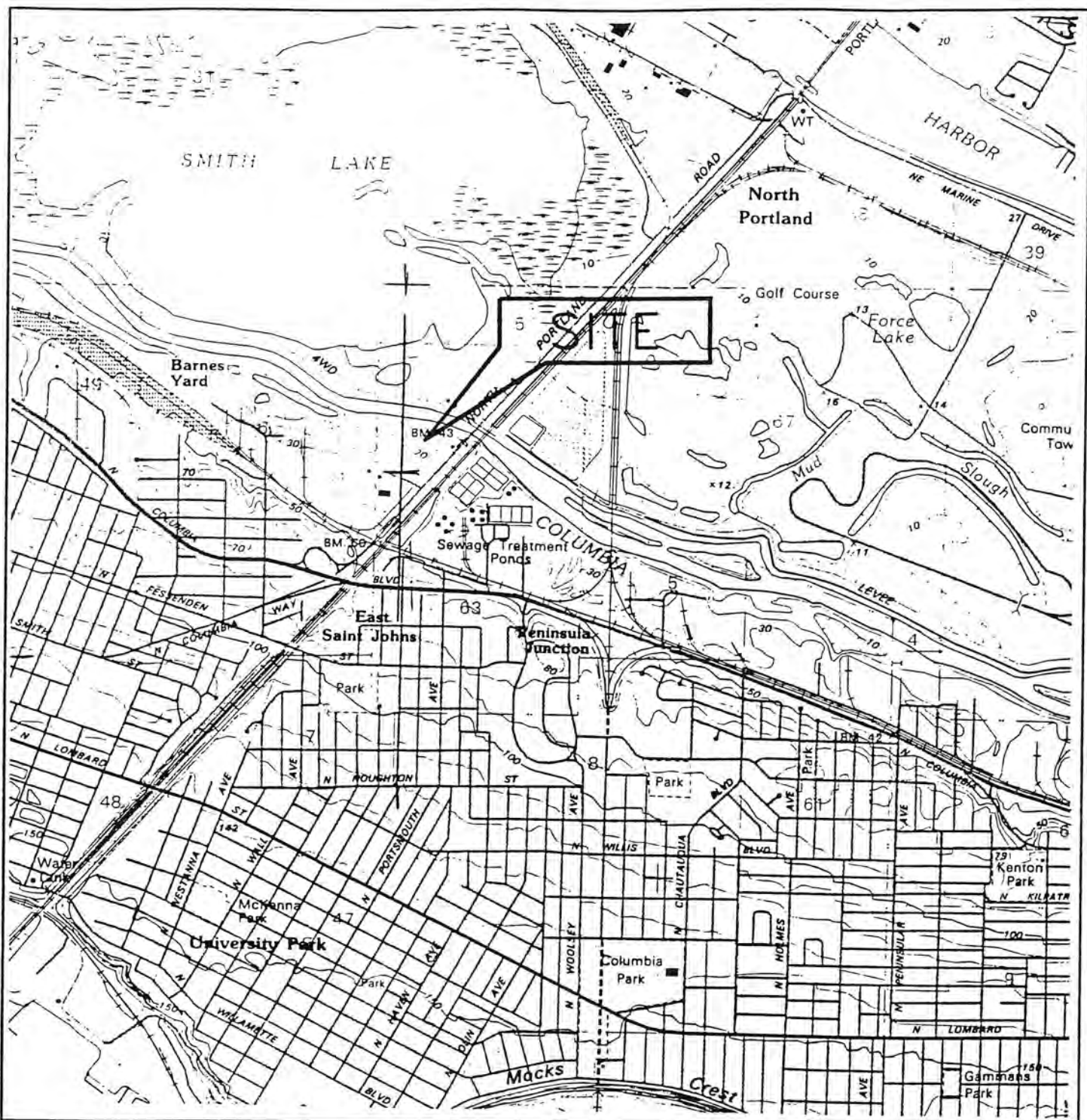
Parameters	Phase II Investigation				
	MW-5	MW-5	MW-6	MW-6	W-7 (MW5 Dup)
	05/26/99	07/28/99	05/26/99	07/28/99	07/28/99
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
	EPA 624	EPA 624	EPA 624	EPA 624	EPA 624
<i>cis</i> -1,2-Dichloroethene	-	-	-	-	-
<i>cis</i> -1,3-Dichloropropene	4 U	4 U	4 U	4 U	4 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U
Dibromomethane	-	-	-	-	-
Dichlorodifluoromethane	-	-	-	-	-
Ethylbenzene	3 U	3 U	3 U	3 U	3 U
Methylene Chloride	4 U	4 U	4 U	4 U	4 U
Tetrachloroethene (PCE)	2 U	2 U	2 U	2 U	2 U
Toluene	1 U	1 U	1 U	1 U	1 U
<i>trans</i> -1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U
<i>trans</i> -1,3-Dichloropropene	3 U	3 U	3 U	3 U	3 U
Trichloroethene (TCE)	4 U	4 U	4 U	4 U	4 U
Trichlorofluoromethane	4 U	4 U	4 U	4 U	4 U
Vinyl Chloride	50 U	50 U	50 U	50 U	50 U
Hexachlorobutadiene	-	-	-	-	-
Isopropylbenzene	-	-	-	-	-
m,p-Xylenes	-	-	-	-	-
Naphthalene	-	-	-	-	-
n-Butylbenzene	-	-	-	-	-
n-Propylbenzene	-	-	-	-	-
o-Xylene	-	-	-	-	-
sec-Butylbenzene	-	-	-	-	-
Styrene	-	-	-	-	-
tert-Butylbenzene	-	-	-	-	-

*Discrepancy  
MCL = 2.0*

**Notes:**

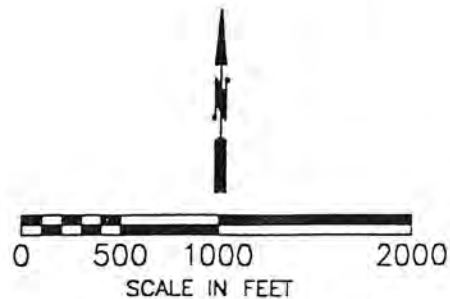
- = Not analyzed for this parameter
- U = Not detected at method reporting li
- ug/L = Micrograms per liter

*MRLs  
too  
high*



QUADRANGLE LOCATION

REFERENCE: USGS 7.5 MINUTE QUADRANGLE;  
QUADRANGLE LOCATION: PORTLAND OREGON



PAC Environmental, Inc.  
7130 SW Elmwood Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

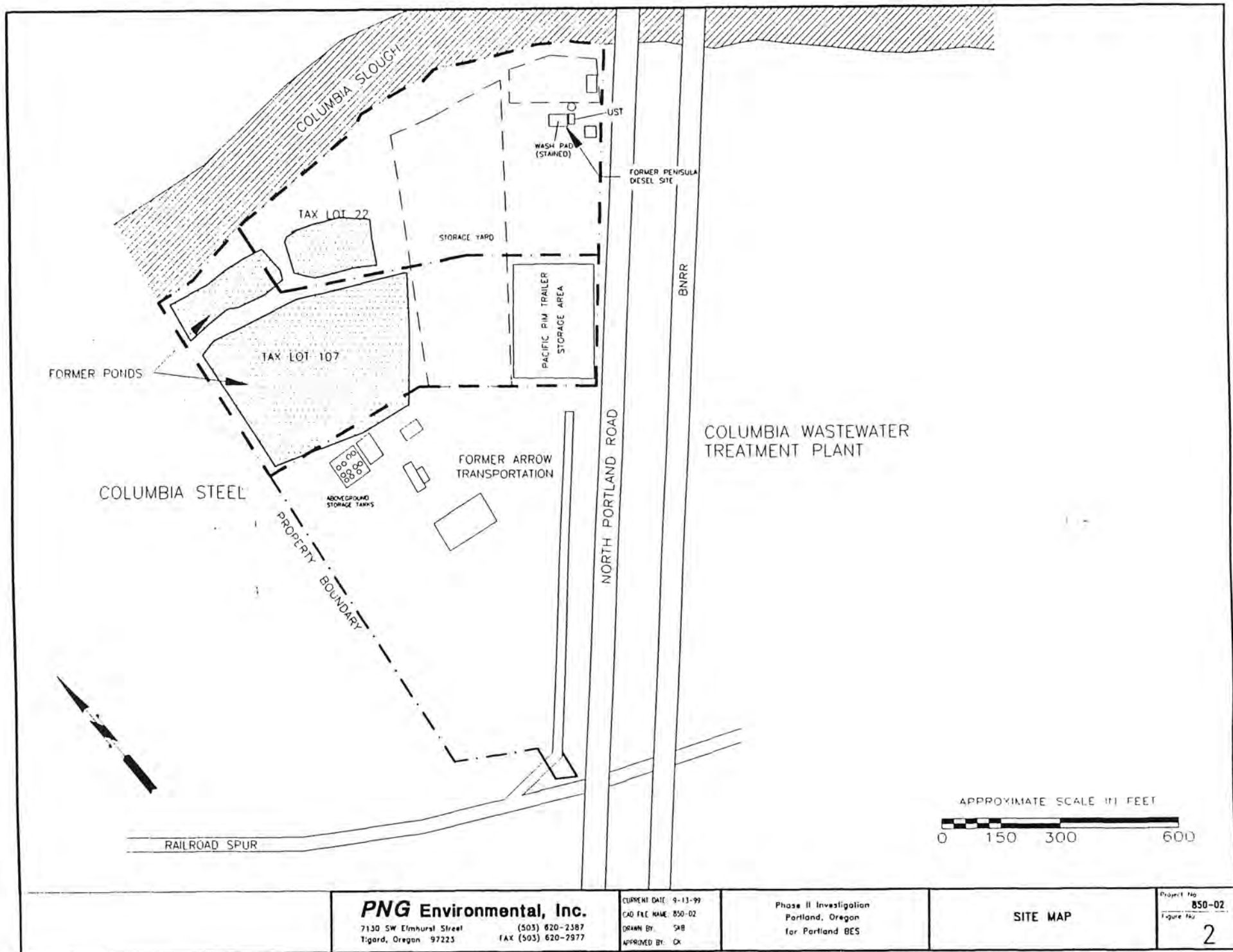
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APPROVED BY:

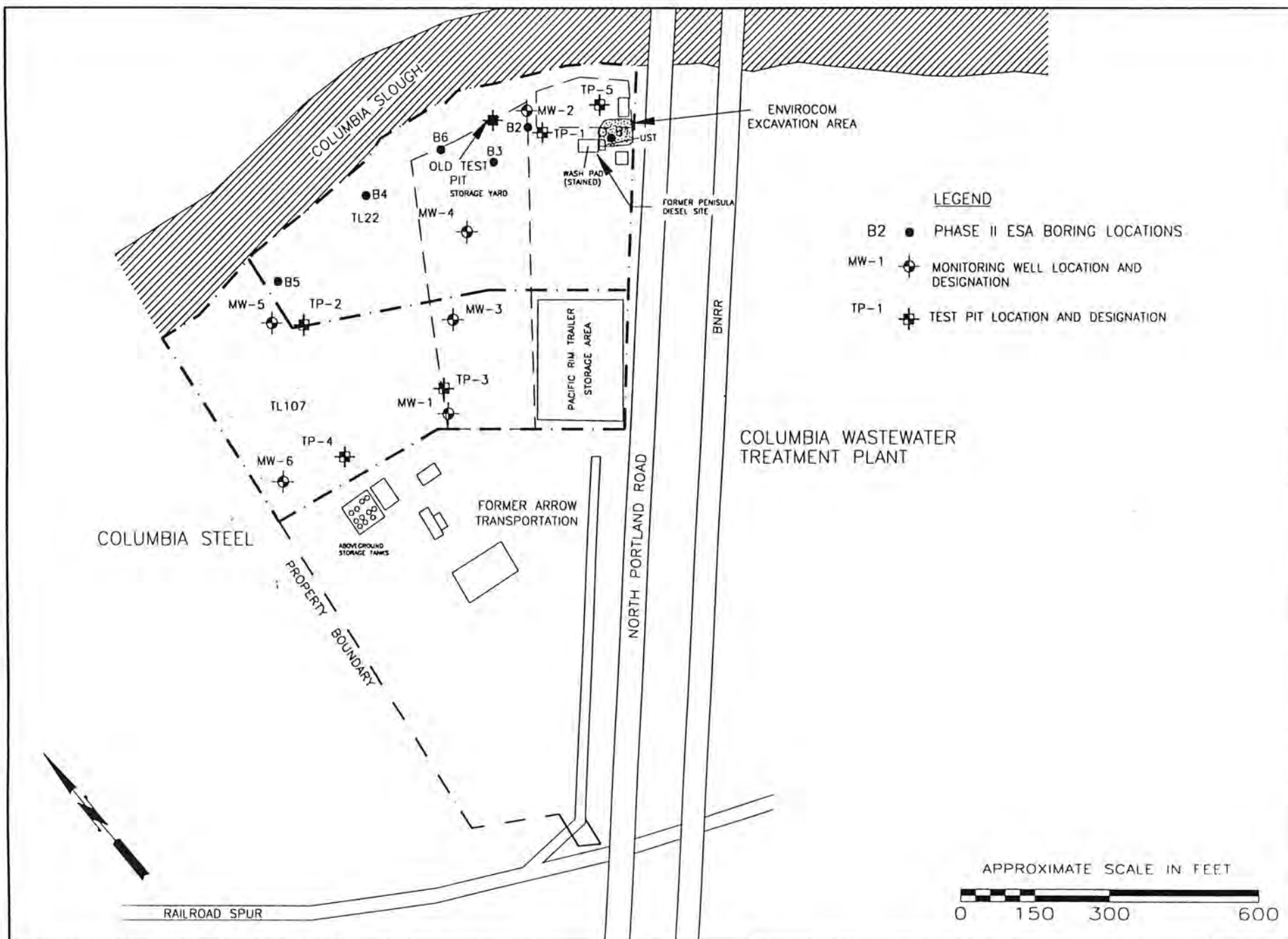
LARSEN PROPERTY  
10505 N. PORTLAND ROAD  
PORTLAND, OR

SITE LOCATION MAP

Project No.  
850-02  
Figure No.







**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223

(503) 620-2387  
FAX (503) 620-2977

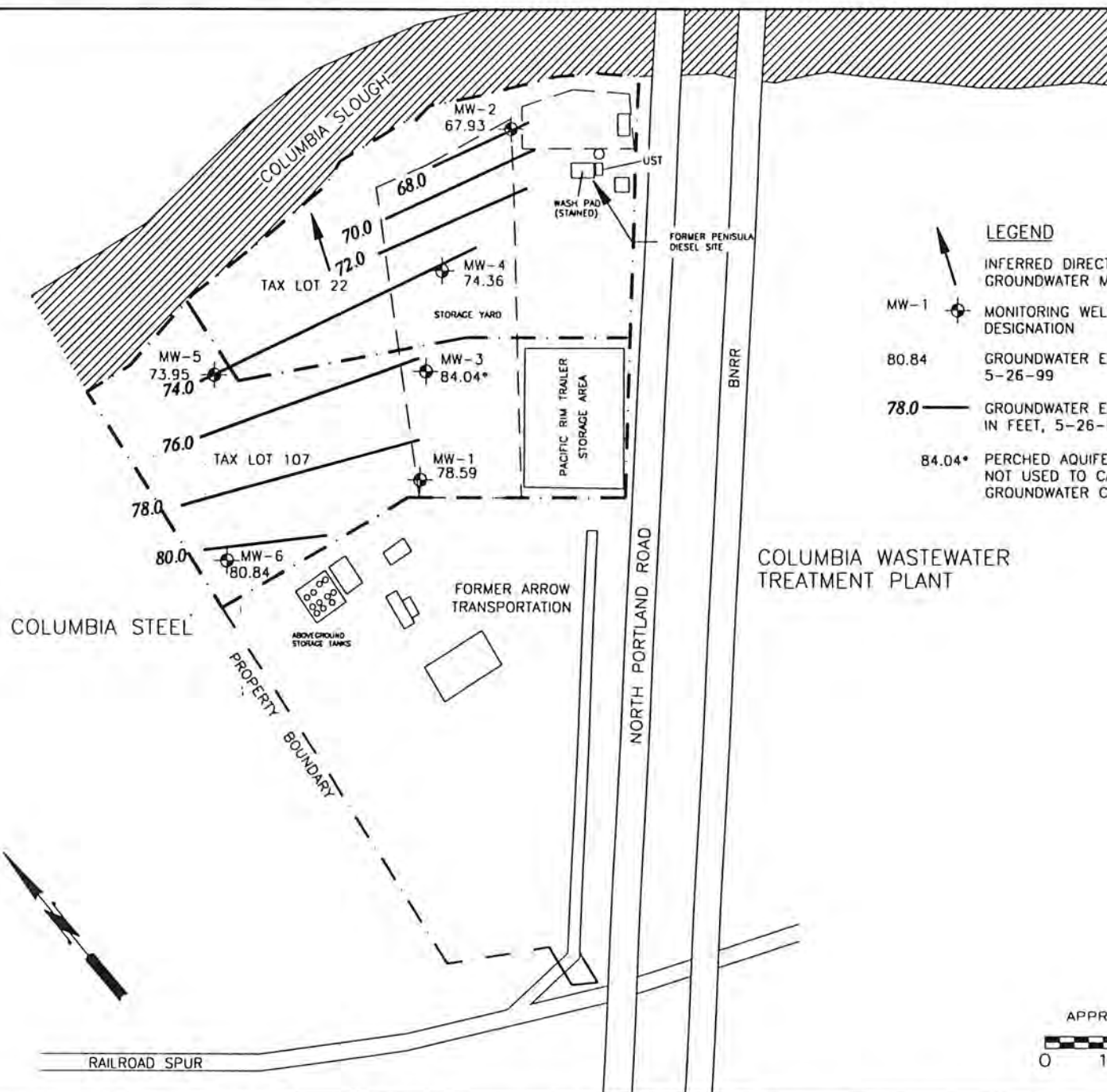
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CAD FILE NAME: 850-02  
DRAWN BY: SKB  
APPROVED BY: CX

Phase II Investigation  
Portland, Oregon  
for Portland BEC

Monitoring Well and  
Test Pit Location Map

Project No  
850-02  
Figure No

3



# LEGEND

- INFERRED DIRECTION OF GROUNDWATER MIGRATION
- MW-1 MONITORING WELL LOCATION AND DESIGNATION
- 80.84 GROUNDWATER ELEVATION IN FEET, 5-26-99
- 78.0 GROUNDWATER ELEVATION CONTOUR IN FEET, 5-26-99
- 84.04\* PERCHED AQUIFER ZONE NOT USED TO CALCULATE GROUNDWATER CONTOURS

APPROXIMATE SCALE IN FEET



**PNG Environmental, Inc.**

7130 SW Elmhurst Street (503) 820-2387  
Tigard, Oregon 97223 FAX (503) 820-2977

CURRENT DATE: 8-13-98  
CAD FILE NAME: 850-02  
DRAWN BY: SKB  
APPROVED BY: DK

Phase II Investigation  
Portland, Oregon  
for Portland BES

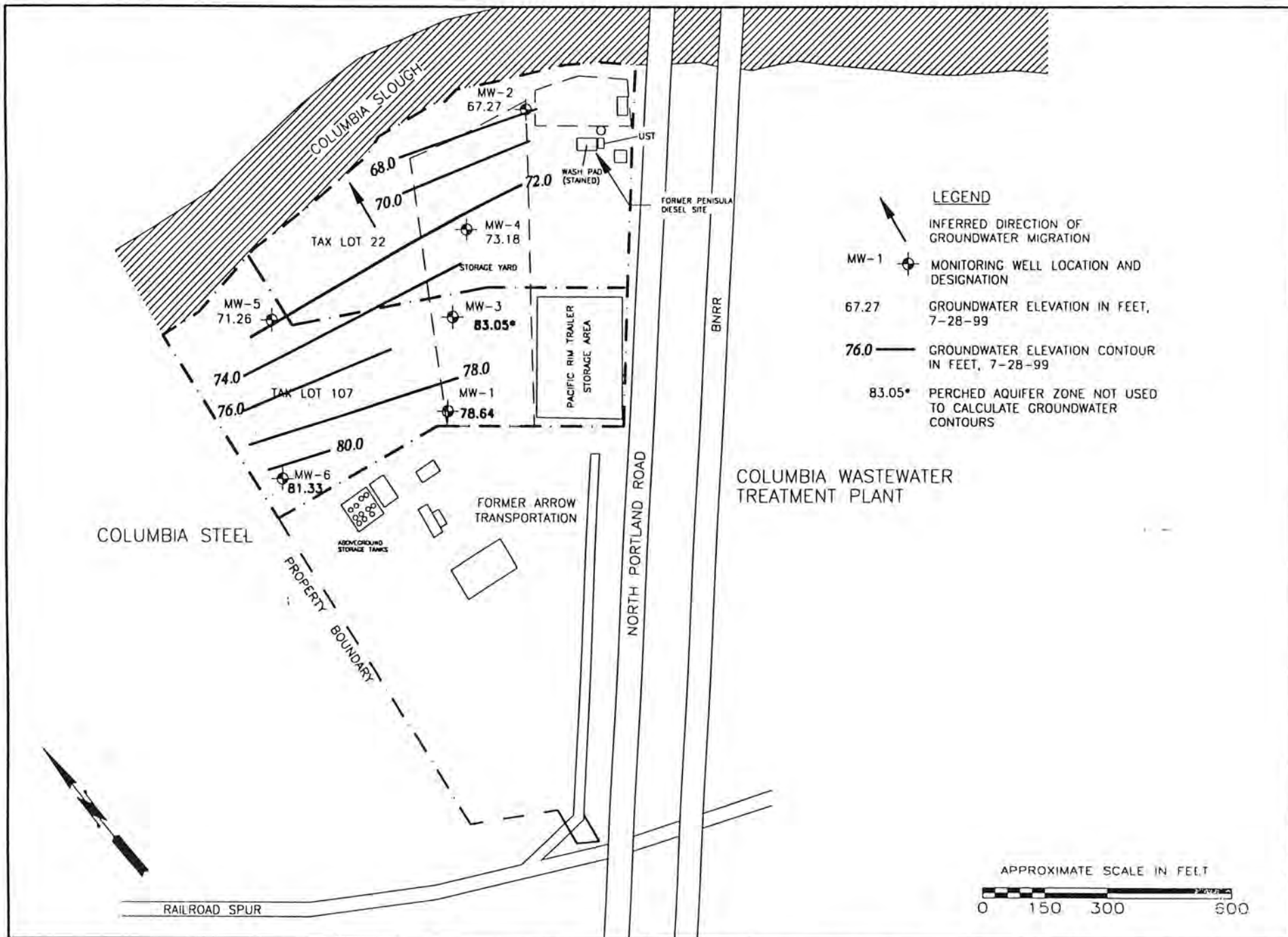
**GROUNDWATER ELEVATION  
CONTOUR MAP**  
MAY 26, 1999

Project No. 850-02

Figure No.

4





**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223

(503) 620-2387  
FAX (503) 620-2977

CURRENT DATE: 9-13-99  
CAD FILE NAME: 850-02  
DRAWN BY: SKB  
APPROVED BY: DE

Phase II Investigation  
Portland, Oregon  
for Portland BES

**GROUNDWATER ELEVATION  
CONTOUR MAP**  
JULY 28, 1999

Project No  
**850-02**

Figure No.

**5**

**APPENDIX A**  
**LABORATORY ANALYTICAL REPORTS**



**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report**



Sample Date/Time 5/18/99 9:10

System ID AD04025

Sample ID LAB990109

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP

Address/Location: LARSEN/TEST PIT 1

Date Received: 5/21/99

Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE

Sample Point Code: TP-1-17

IMS File/Invoice #: 3030.000

Sample Type: GRAB

Sample Matrix: SOIL

Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	<25.0	mg/Kg	25.0	NWTPH-Dx
HEAVY OIL RANGE HYDROCARBONS	116	mg/Kg	50.0	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	1470	mg/Kg	125	NWTPH-Gx
SEMI-VOLATILE ORGANICS				
1,2-Diphenylhydrazine	<2.00	mg/Kg	2.00	EPA 8270B
1,2,4-Trichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4,6-Trichlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dichlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
2-Methylnaphthalene	<1.00	mg/Kg	1.00	EPA 8270B
2-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<1.00	mg/Kg	1.00	EPA 8270B
4-Chloro-3-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<1.00	mg/Kg	1.00	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthylene	<1.00	mg/Kg	1.00	EPA 8270B

4/29/99





**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 9:10 System ID AD04025

Sample ID LAB990109

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN/TEST PIT 1

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-1-17  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/G/K/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Anthracene	<10.0	mg/Kg	10.0	EPA 8270B
Benzidine	<2.00	mg/Kg	2.00	EPA 8270B
Benzo(a)anthracene	<1.00	mg/Kg	1.00	EPA 8270B
Benzo(a)pyrene	<1.00	mg/Kg	1.00	EPA 8270B
Benzo(b)fluoranthene	<1.00	mg/Kg	1.00	EPA 8270B
Benzo(g,h,i)perylene	<1.00	mg/Kg	1.00	EPA 8270B
Benzo(k)fluoranthene	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Bis(2-chloroethoxy) methane	<1.00	mg/Kg	1.00	EPA 8270B
Bis(2-chloroethyl) ether	<1.00	mg/Kg	1.00	EPA 8270B
Bis(2-chloroisopropyl) ether	<1.00	mg/Kg	1.00	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Dibenzo(a,h)anthracene	<1.00	mg/Kg	1.00	EPA 8270B
Dibenzofuran	<1.00	mg/Kg	1.00	EPA 8270B
Diethyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Dimethyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Fluoranthene	<1.00	mg/Kg	1.00	EPA 8270B
Fluorene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<1.00	mg/Kg	1.00	EPA 8270B
Isophorone	<1.00	mg/Kg	1.00	EPA 8270B
N-Nitrosodi-n-propylamine	<1.00	mg/Kg	1.00	EPA 8270B
N-Nitrosodimethylamine	<1.00	mg/Kg	1.00	EPA 8270B
N-Nitrosodiphenylamine	<1.00	mg/Kg	1.00	EPA 8270B
Naphthalene	<1.00	mg/Kg	1.00	EPA 8270B
Nitrobenzene	<1.00	mg/Kg	1.00	EPA 8270B



**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 9:10 System ID AD04025

Sample ID LAB990109

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN/TEST PIT 1

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-1-17  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<1.00	mg/Kg	1.00	EPA 8270B
Phenol	<1.00	mg/Kg	1.00	EPA 8270B
Pyrene	<1.00	mg/Kg	1.00	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1,2,2-Tetrachloroethane	<200	µg/Kg	200	EPA 8240
1,1,2-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethene	<200	µg/Kg	200	EPA 8240
1,2-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,2-Dichloropropane	<200	µg/Kg	200	EPA 8240
1,3-Dichloropropane, total	<200	µg/Kg	200	EPA 8240
2-Chloroethylvinyl ether	<5000	µg/Kg	5000	EPA 8240
Acrolein	<5000	µg/Kg	5000	EPA 8240
Acrylonitrile	<500	µg/Kg	500	EPA 8240
Benzene	<200	µg/Kg	200	EPA 8240
Bromoform	<200	µg/Kg	200	EPA 8240
Bromomethane	<1000	µg/Kg	1000	EPA 8240
Carbon tetrachloride	<200	µg/Kg	200	EPA 8240
Chlorobenzene	<200	µg/Kg	200	EPA 8240
Chloroethane	<400	µg/Kg	400	EPA 8240
Chloroform	<200	µg/Kg	200	EPA 8240
Chloromethane	<500	µg/Kg	500	EPA 8240
Dibromochloromethane	<200	µg/Kg	200	EPA 8240
Dichlorobromomethane	<200	µg/Kg	200	EPA 8240
Ethylbenzene	<200	µg/Kg	200	EPA 8240
Methylene chloride	<500	µg/Kg	500	EPA 8240
Tetrachloroethene	<200	µg/Kg	200	EPA 8240
Toluene	<200	µg/Kg	200	EPA 8240
trans-1,2-Dichloroethene	<200	µg/Kg	200	EPA 8240
Trichloroethene	<200	µg/Kg	200	EPA 8240

*Handwritten signature/initials*  
 6/27/99



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/99 9:10 System ID AD04025

Sample ID LAB990109

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN/TEST PIT 1

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-1-17  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Vinyl chloride	<200	µg/Kg	200	EPA 8240

End of Report for Sample ID: LAB990109

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**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 10:30 System ID AD04026

Sample ID LAB990110

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN TEST PIT 2

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-2-17  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
<b>NWTPH-Dx</b>				
DIESEL RANGE HYDROCARBONS	<125	mg/Kg	125	NWTPH-Dx
HEAVY OIL RANGE HYDROCARBONS	423	mg/Kg	250	NWTPH-Dx
<b>NWTPH-Gx</b>				
GASOLINE RANGE HYDROCARBONS	3.63	mg/Kg	2.50	NWTPH-Gx
<b>SEMI-VOLATILE ORGANICS</b>				
1,2-Diphenylhydrazine	<10.0	mg/Kg	10.0	EPA 8270B
1,2,4-Trichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4,6-Trichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2-Methylnaphthalene	<5.00	mg/Kg	5.00	EPA 8270B
2-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
3,3-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<5.00	mg/Kg	5.00	EPA 8270B
4-Chloro-3-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<5.00	mg/Kg	5.00	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthylene	<5.00	mg/Kg	5.00	EPA 8270B

*Handwritten signature/initials*



**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 10:30 System ID AD04026

Sample ID LAB990110

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN TEST PIT 2

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-2-17  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Anthracene	<50.0	mg/Kg	50.0	EPA 8270B
Benzidine	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(a)anthracene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(a)pyrene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(b)fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(g,h,i)perylene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(k)fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroethoxy) methane	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroethyl) ether	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroisopropyl) ether	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Dibenzo(a,h)anthracene	<5.00	mg/Kg	5.00	EPA 8270B
Dibenzofuran	<5.00	mg/Kg	5.00	EPA 8270B
Diethyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Dimethyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Fluorene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<5.00	mg/Kg	5.00	EPA 8270B
Isophorone	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodi-n-propylamine	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodimethylamine	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodiphenylamine	<5.00	mg/Kg	5.00	EPA 8270B
Naphthalene	<5.00	mg/Kg	5.00	EPA 8270B
Nitrobenzene	<5.00	mg/Kg	5.00	EPA 8270B

*6/29/99*



**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report**



Sample Date/Time 5/18/99 10:30 System ID AD04026

Sample ID LAB990110

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN TEST PIT 2

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-2-17  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<5.00	mg/Kg	5.00	EPA 8270B
Phenol	<5.00	mg/Kg	5.00	EPA 8270B
Pyrene	<5.00	mg/Kg	5.00	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1,2,2-Tetrachloroethane	<200	µg/Kg	200	EPA 8240
1,1,2-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethene	<200	µg/Kg	200	EPA 8240
1,2-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,2-Dichloropropane	<200	µg/Kg	200	EPA 8240
1,3-Dichloropropene, total	<200	µg/Kg	200	EPA 8240
2-Chloroethylvinyl ether	<5000	µg/Kg	5000	EPA 8240
Acrolein	<5000	µg/Kg	5000	EPA 8240
Acrylonitrile	<500	µg/Kg	500	EPA 8240
Benzene	<200	µg/Kg	200	EPA 8240
Bromoform	<200	µg/Kg	200	EPA 8240
Bromomethane	<1000	µg/Kg	1000	EPA 8240
Carbon tetrachloride	<200	µg/Kg	200	EPA 8240
Chlorobenzene	<200	µg/Kg	200	EPA 8240
Chloroethane	<400	µg/Kg	400	EPA 8240
Chloroform	<200	µg/Kg	200	EPA 8240
Chloromethane	<500	µg/Kg	500	EPA 8240
Dibromochloromethane	<200	µg/Kg	200	EPA 8240
Dichlorobromomethane	<200	µg/Kg	200	EPA 8240
Ethylbenzene	<200	µg/Kg	200	EPA 8240
Methylene chloride	<500	µg/Kg	500	EPA 8240
Tetrachloroethene	<200	µg/Kg	200	EPA 8240
Toluene	<200	µg/Kg	200	EPA 8240
trans-1,2-Dichloroethene	<200	µg/Kg	200	EPA 8240
Trichloroethene	<200	µg/Kg	200	EPA 8240

*Handwritten signature/initials*  
6/28/99





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/99 10:30 System ID AD04026

Sample ID LAB990110

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN TEST PIT 2

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-2-17  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Vinyl chloride	<200	µg/Kg	200	EPA 8240

End of Report for Sample ID: LAB990110

(503) 823-5656



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/99 12:00 System ID AD04028

Sample ID LAB990112

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN/TEST PIT 5

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-5-8  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	<125	mg/Kg	125	NWTPH-Dx
HEAVY OIL RANGE HYDROCARBONS	1440	mg/Kg	250	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<2.50	mg/Kg	2.50	NWTPH-Gx
SEMI-VOLATILE ORGANICS				
1,2-Diphenylhydrazine	<10.0	mg/Kg	10.0	EPA 8270B
1,2,4-Trichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4,6-Trichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dichlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
2-Methylnaphthalene	<5.00	mg/Kg	5.00	EPA 8270B
2-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<5.00	mg/Kg	5.00	EPA 8270B
4-Chloro-3-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<5.00	mg/Kg	5.00	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthylene	<5.00	mg/Kg	5.00	EPA 8270B

6/29/99



**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 12:00 System ID AD04028

Sample ID LAB990112

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN/TEST PIT 5

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-5-8  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Anthracene	<50.0	mg/Kg	50.0	EPA 8270B
Benidine	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(a)anthracene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(a)pyrene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(b)fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(g,h,i)perylene	<5.00	mg/Kg	5.00	EPA 8270B
Benzo(k)fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroethoxy) methane	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroethyl) ether	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-chloroisopropyl) ether	<5.00	mg/Kg	5.00	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Dibenzo(a,h)anthracene	<5.00	mg/Kg	5.00	EPA 8270B
Dibenzofuran	<5.00	mg/Kg	5.00	EPA 8270B
Diethyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Dimethyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Fluoranthene	<5.00	mg/Kg	5.00	EPA 8270B
Fluorene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<5.00	mg/Kg	5.00	EPA 8270B
Isophorone	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodi-n-propylamine	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodimethylamine	<5.00	mg/Kg	5.00	EPA 8270B
N-Nitrosodiphenylamine	<5.00	mg/Kg	5.00	EPA 8270B
Naphthalene	<5.00	mg/Kg	5.00	EPA 8270B
Nitrobenzene	<5.00	mg/Kg	5.00	EPA 8270B





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/99 12:00 System ID AD04028

Sample ID LAB990112

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN/TEST PIT 5

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-5-8  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<5.00	mg/Kg	5.00	EPA 8270B
Phenol	<5.00	mg/Kg	5.00	EPA 8270B
Pyrene	<5.00	mg/Kg	5.00	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1,2,2-Tetrachloroethane	<200	µg/Kg	200	EPA 8240
1,1,2-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethene	<200	µg/Kg	200	EPA 8240
1,2-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,2-Dichloropropane	<200	µg/Kg	200	EPA 8240
1,3-Dichloropropene, total	<200	µg/Kg	200	EPA 8240
2-Chloroethylvinyl ether	<5000	µg/Kg	5000	EPA 8240
Acrolein	<5000	µg/Kg	5000	EPA 8240
Acrylonitrile	<500	µg/Kg	500	EPA 8240
Benzene	<200	µg/Kg	200	EPA 8240
Bromoform	<200	µg/Kg	200	EPA 8240
Bromomethane	<1000	µg/Kg	1000	EPA 8240
Carbon tetrachloride	<200	µg/Kg	200	EPA 8240
Chlorobenzene	<200	µg/Kg	200	EPA 8240
Chloroethane	<400	µg/Kg	400	EPA 8240
Chloroform	<200	µg/Kg	200	EPA 8240
Chloromethane	<500	µg/Kg	500	EPA 8240
Dibromochloromethane	<200	µg/Kg	200	EPA 8240
Dichlorobromomethane	<200	µg/Kg	200	EPA 8240
Ethylbenzene	<200	µg/Kg	200	EPA 8240
Methylene chloride	<500	µg/Kg	500	EPA 8240
Tetrachloroethene	<200	µg/Kg	200	EPA 8240
Toluene	<200	µg/Kg	200	EPA 8240
trans-1,2-Dichloroethene	<200	µg/Kg	200	EPA 8240
Trichloroethene	<200	µg/Kg	200	EPA 8240

100/24/99



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/99 12:00 System ID AD04028

Sample ID LAB990112

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN/TEST PIT 5

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-5-8  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Vinyl chloride	<200	µg/Kg	200	EPA 8240

End of Report for Sample ID: LAB990112

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**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/18/99 10:50 System ID AD04027

Sample ID LAB990111

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN TEST PIT 3

Date Received: 5/21/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: TP-2-13  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: SOIL  
 Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
<b>NWTPH-Dx</b>				
DIESEL RANGE HYDROCARBONS	<250	mg/Kg	250	NWTPH-Dx
HEAVY OIL RANGE HYDROCARBONS	1000	mg/Kg	500	NWTPH-Dx
<b>NWTPH-Gx</b>				
GASOLINE RANGE HYDROCARBONS	4.77	mg/Kg	2.50	NWTPH-Gx
<b>SEMI-VOLATILE ORGANICS</b>				
1,2-Diphenylhydrazine	<20.0	mg/Kg	20.0	EPA 8270B
1,2,4-Trichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,2-Dichlorobenzene	<20.0	mg/Kg	20.0	EPA 8270B
1,3-Dichlorobenzene	<20.0	mg/Kg	20.0	EPA 8270B
1,4-Dichlorobenzene	<20.0	mg/Kg	20.0	EPA 8270B
2,4,5-Trichlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4,6-Trichlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dichlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dimethylphenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrophenol	<40.0	mg/Kg	40.0	EPA 8270B
2,4-Dinitrotoluene	<10.0	mg/Kg	10.0	EPA 8270B
2,6-Dinitrotoluene	<10.0	mg/Kg	10.0	EPA 8270B
2-Chloronaphthalene	<10.0	mg/Kg	10.0	EPA 8270B
2-Chlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
2-Methylnaphthalene	<10.0	mg/Kg	10.0	EPA 8270B
2-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
3,3'-Dichlorobenzidine	<20.0	mg/Kg	20.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<20.0	mg/Kg	20.0	EPA 8270B
4-Bromophenylphenyl ether	<10.0	mg/Kg	10.0	EPA 8270B
4-Chloro-3-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Chloroaniline	<40.0	mg/Kg	40.0	EPA 8270B
4-Chlorophenylphenyl ether	<10.0	mg/Kg	10.0	EPA 8270B
4-Nitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
Acenaphthene	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthylene	<10.0	mg/Kg	10.0	EPA 8270B

*Handwritten signature/initials*





**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report.**



Sample Date/Time 5/18/99 10:50 System ID AD04027

Sample ID LAB990111

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN TEST PIT 3

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-2-13  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Anthracene	<100	mg/Kg	100	EPA 8270B
Benzo(a)anthracene	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(a)pyrene	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(b)fluoranthene	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(g,h,i)perylene	<10.0	mg/Kg	10.0	EPA 8270B
Benzo(k)fluoranthene	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Bis(2-chloroethoxy) methane	<10.0	mg/Kg	10.0	EPA 8270B
Bis(2-chloroethyl) ether	<10.0	mg/Kg	10.0	EPA 8270B
Bis(2-chloroisopropyl) ether	<10.0	mg/Kg	10.0	EPA 8270B
Bis(2-ethylhexyl) phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Chrysene	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-butyl phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Di-n-octyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Dibenzo(a,h)anthracene	<10.0	mg/Kg	10.0	EPA 8270B
Dibenzofuran	<10.0	mg/Kg	10.0	EPA 8270B
Diethyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Dimethyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Fluoranthene	<10.0	mg/Kg	10.0	EPA 8270B
Fluorene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachlorobutadiene	<20.0	mg/Kg	20.0	EPA 8270B
Hexachlorocyclopentadiene	<20.0	mg/Kg	20.0	EPA 8270B
Hexachloroethane	<20.0	mg/Kg	20.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<10.0	mg/Kg	10.0	EPA 8270B
Isophorone	<10.0	mg/Kg	10.0	EPA 8270B
N-Nitrosodi-n-propylamine	<10.0	mg/Kg	10.0	EPA 8270B
N-Nitrosodimethylamine	<10.0	mg/Kg	10.0	EPA 8270B
N-Nitrosodiphenylamine	<10.0	mg/Kg	10.0	EPA 8270B
Naphthalene	<10.0	mg/Kg	10.0	EPA 8270B
Nitrobenzene	<10.0	mg/Kg	10.0	EPA 8270B



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/99 10:50 System ID AD04027

Sample ID LAB990111

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN TEST PIT 3

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-2-13  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/KK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Pentachlorophenol	<20.0	mg/Kg	20.0	EPA 8270B
Phenanthrene	<10.0	mg/Kg	10.0	EPA 8270B
Phenol	<10.0	mg/Kg	10.0	EPA 8270B
Pyrene	<10.0	mg/Kg	10.0	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1,2,2-Tetrachloroethane	<200	µg/Kg	200	EPA 8240
1,1,2-Trichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,1-Dichloroethene	<200	µg/Kg	200	EPA 8240
1,2-Dichloroethane	<200	µg/Kg	200	EPA 8240
1,2-Dichloropropane	<200	µg/Kg	200	EPA 8240
1,3-Dichloropropene, total	<200	µg/Kg	200	EPA 8240
2-Chloroethylvinyl ether	<5000	µg/Kg	5000	EPA 8240
Acrolein	<5000	µg/Kg	5000	EPA 8240
Acrylonitrile	<500	µg/Kg	500	EPA 8240
Benzene	956	µg/Kg	200	EPA 8240
Bromoform	<200	µg/Kg	200	EPA 8240
Bromomethane	<1000	µg/Kg	1000	EPA 8240
Carbon tetrachloride	<200	µg/Kg	200	EPA 8240
Chlorobenzene	<200	µg/Kg	200	EPA 8240
Chloroethane	<400	µg/Kg	400	EPA 8240
Chloroform	<200	µg/Kg	200	EPA 8240
Chloromethane	<500	µg/Kg	500	EPA 8240
Dibromochloromethane	<200	µg/Kg	200	EPA 8240
Dichlorobromomethane	<200	µg/Kg	200	EPA 8240
Ethylbenzene	<200	µg/Kg	200	EPA 8240
Methylene chloride	<500	µg/Kg	500	EPA 8240
Tetrachloroethene	<200	µg/Kg	200	EPA 8240
Toluene	<200	µg/Kg	200	EPA 8240
trans-1,2-Dichloroethene	<200	µg/Kg	200	EPA 8240
Trichloroethene	<200	µg/Kg	200	EPA 8240

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City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/99 10:50 System ID AD04027

Sample ID LAB990111

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN TEST PIT 3

Date Received: 5/21/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: TP-2-13  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: CH/GK/PNG

Comments:

Test Parameter	Result	Units	MRL	Method
Vinyl chloride	<200	µg/Kg	200	EPA 8240

End of Report for Sample ID: LAB990111





# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/26/99 8:30 System ID AD04150

Sample ID LAB990113

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-1

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-1  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/ING

Comments: LAB: THE RESULT FOR 2,4-DIMETHYLPHENOL (SEMI-VOLATILE ORGANICS) MAY BE A LOW ESTIMATE DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	0.05	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	<0.005	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625

6/29/99



# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/26/99 8:30 System ID AD04150

Sample ID LAB990113

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN PROPERTY  
 W-1

Date Received: 5/26/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: W-1  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: CH/PNG

Comments: LAB: THE RESULT FOR 2,4-DIMETHYLPHENOL (SEMI-VOLATILE ORGANICS) MAY BE A LOW ESTIMATE DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	0.03	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624

(COW) 6/29/99



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 8:30 System ID AD04150

Sample ID LAB990113

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-1

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-1  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PPNG

Comments: LAB: THE RESULT FOR 2,4-DIMETHYLPHENOL (SEMI-VOLATILE ORGANICS) MAY BE A LOW ESTIMATE DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	0.019	mg/L	0.001	EPA 624
Chloroethane	0.009	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	0.005	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				NWTPH-Dx
DIESEL RANGE HYDROCARBONS	<0.600	mg/L	0.600	NWTPH-Dx

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City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 8:30 System ID AD04150

Sample ID LAB990113

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-1

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-1  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/ING

Comments: LAB: THE RESULT FOR 2,4-DIMETHYLPHENOL (SEMI-VOLATILE ORGANICS) MAY BE A LOW ESTIMATE DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	<1.20	mg/L	1.20	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	244	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990113

6/29/99



# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/26/99 10:15 System ID AD04151

Sample ID LAB990114

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-2

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-2  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: IN ADDITION TO THE REPORTED SEMI-VOLATILE ORGANICS, THIS SAMPLE CONTAINED FLUORENE, ANTHRACENE, FLUORANTHENE AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.01	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625

06/29/99



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 10:15 System ID AD04151

Sample ID LAB990114

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-2

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-2  
IMS File/Invoice #: 3030.000

Sample Type: GRA13  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: IN ADDITION TO THE REPORTED SEMI-VOLATILE ORGANICS, THIS SAMPLE CONTAINED FLUORENE, ANTHRACENE, FLUORANTHENE AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	0.02	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624

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# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/26/99 10:15 System ID AD04151

Sample ID LAB990114

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN PROPERTY  
 W-2

Date Received: 5/26/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: W-2  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: CH/PNG

Comments: LAB: IN ADDITION TO THE REPORTED SEMI-VOLATILE ORGANICS, THIS SAMPLE CONTAINED FLUORENE, ANTHRACENE, FLUORANTHENE AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	<0.600	mg/L	0.600	NWTPH-Dx

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City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 10:15 System ID AD04151

Sample ID LAB990114

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-2

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-2  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: IN ADDITION TO THE REPORTED SEMI-VOLATILE ORGANICS, THIS SAMPLE CONTAINED FLUORENE, ANTHRACENE, FLUORANTHENE AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	2.13	mg/L	1.20	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	109	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990114

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**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/26/99 9:15 System ID AD04152

Sample ID LAB990115

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN PROPERTY  
 W-3

Date Received: 5/26/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: W-3  
 IMS File/Invoice #: 3030.000

Sample Type: GRA3  
 Sample Matrix: GRNDWTR  
 Collected By: CH/PNG

**Comments:** LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS. THE RESULTS FOR THE REPORTED SEMI-VOLATILE ORGANICS SHOULD BE CONSIDERED ESTIMATES DUE TO MATRIX INTERFERENCE. ACENAPHTHENE, FLUORENE, HEXACHLOROBENZENE, AND FLUORANTHENE WERE ALSO DETECTED, BUT AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	0.02	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dimethylphenol	0.11	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.04	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.01	mg/L	0.005	EPA 625
2-Chlorophenol	<0.02	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.02	mg/L	0.010	EPA 625
2-Nitrophenol	<0.02	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.01	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.02	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Nitrophenol	<0.04	mg/L	0.020	EPA 625
Acenaphthene	<0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.01	mg/L	0.005	EPA 625
Anthracene	0.01	mg/L	0.005	EPA 625
Azobenzene	<0.01	mg/L	0.005	EPA 625
Benzidine	<0.02	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.01	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.01	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.01	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.04	mg/L	0.020	EPA 625

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# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/26/99 9:15 System ID AD04152

Sample ID LAB990115

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-3

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-3  
IMS File/Invoice #: 3030.000

Sample Type: GRAI3  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS. THE RESULTS FOR THE REPORTED SEMI-VOLATILE ORGANICS SHOULD BE CONSIDERED ESTIMATES DUE TO MATRIX INTERFERENCE. ACENAPHTHENE, FLUORENE, HEXACHLOROBENZENE, AND FLUORANTHENE WERE ALSO DETECTED, BUT AT LEVELS BELOW THE MRL

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	0.05	mg/L	0.010	EPA 625
Chrysene	<0.01	mg/L	0.005	EPA 625
Di-n-butyl phthalate	0.10	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.02	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.01	mg/L	0.005	EPA 625
Diethyl phthalate	<0.01	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.01	mg/L	0.005	EPA 625
Fluoranthene	<0.01	mg/L	0.005	EPA 625
Fluorene	<0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.01	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.01	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.01	mg/L	0.005	EPA 625
Hexachloroethane	<0.01	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.01	mg/L	0.005	EPA 625
Isophorone	<0.01	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.01	mg/L	0.005	EPA 625
Naphthalene	<0.01	mg/L	0.005	EPA 625
Nitrobenzene	<0.01	mg/L	0.005	EPA 625
Pentachlorophenol	<0.02	mg/L	0.010	EPA 625
Phenanthrene	0.01	mg/L	0.005	EPA 625
Phenol	<0.02	mg/L	0.010	EPA 625
Pyrene	<0.01	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624

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# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 9:15

System ID AD04152

Sample ID LAB990115

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-3

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-3  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDRTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS. THE RESULTS FOR THE REPORTED SEMI-VOLATILE ORGANICS SHOULD BE CONSIDERED ESTIMATES DUE TO MATRIX INTERFERENCE. ACENAPHTHENE, FLUORENE, HEXACHLOROBENZENE, AND FLUORANTHENE WERE ALSO DETECTED, BUT AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	0.012	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	0.003	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	<0.600	mg/L	0.600	NWTPH-Dx

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City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 9:15 System ID AD04152

Sample ID LAB990115

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-3

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-3  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS. THE RESULTS FOR THE REPORTED SEMI-VOLATILE ORGANICS SHOULD BE CONSIDERED ESTIMATES DUE TO MATRIX INTERFERENCE. ACENAPHTHENE, FLUORENE, HEXACHLOROBENZENE, AND FLUORANTHENE WERE ALSO DETECTED, BUT AT LEVELS BELOW THE MRL.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	<1.20	mg/L	1.20	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	90.9	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990115





**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/26/99 9:45 System ID AD04153

Sample ID LAB990116

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN PROPERTY  
 W-4

Date Received: 5/26/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: W-4  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.02	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.04	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.01	mg/L	0.005	EPA 625
2-Chlorophenol	<0.02	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.02	mg/L	0.010	EPA 625
2-Nitrophenol	<0.02	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.01	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.02	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Nitrophenol	<0.04	mg/L	0.020	EPA 625
Acenaphthene	<0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.01	mg/L	0.005	EPA 625
Anthracene	<0.01	mg/L	0.005	EPA 625
Azobenzene	<0.01	mg/L	0.005	EPA 625
Benzidine	<0.02	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.01	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.01	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.01	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.04	mg/L	0.020	EPA 625

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**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report**



Sample Date/Time 5/26/99 9:45 System ID AD04153

Sample ID LAB990116

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-4

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-4  
IMS File/Invoice #: 3030.000

Sample Type: GRA3  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.02	mg/L	0.010	EPA 625
Chrysene	<0.01	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.04	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.02	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.01	mg/L	0.005	EPA 625
Diethyl phthalate	<0.01	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.01	mg/L	0.005	EPA 625
Fluoranthene	<0.01	mg/L	0.005	EPA 625
Fluorene	<0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.01	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.01	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.01	mg/L	0.005	EPA 625
Hexachloroethane	<0.01	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.01	mg/L	0.005	EPA 625
Isophorone	<0.01	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.01	mg/L	0.005	EPA 625
Naphthalene	<0.01	mg/L	0.005	EPA 625
Nitrobenzene	<0.01	mg/L	0.005	EPA 625
Pentachlorophenol	<0.02	mg/L	0.010	EPA 625
Phenanthrene	<0.01	mg/L	0.005	EPA 625
Phenol	<0.02	mg/L	0.010	EPA 625
Pyrene	<0.01	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624

100 6/23/99



**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 5/26/99 9:45 System ID AD04153

Sample ID LAB990116

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: LARSEN PROPERTY  
 W-4

Date Received: 5/26/99  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: W-4  
 IMS File/Invoice #: 3030.000

Sample Type: GRA13  
 Sample Matrix: GRNDWTR  
 Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				NWTPH-Dx
DIESEL RANGE HYDROCARBONS	<0.600	mg/L	0.600	NWTPH-Dx

1/10 6/30/99





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 9:45 System ID AD04153

Sample ID LAB990116

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-4

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-4  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/P'NG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS NWTPH-Gx	<1.20	mg/L	1.20	NWTPH-Dx
GASOLINE RANGE HYDROCARBONS	<80.0	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990116

*25016/29/99*



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 12:30 System ID AD04154

Sample ID LAB990117

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-5

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-5  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/F'NG

Comments: LAB: THE SAMPLE SUBMITTED FOR VOLATILE ORGANICS ANALYSIS WAS NOT PRESERVED. THIS SAMPLE WAS DILUTED BY A FACTOR OF 3.64 FOR SEMI-VOLATILE ORGANICS ANALYSIS. TO REDUCE MATRIX INTERFERENCE, THE SEDIMENT IN THE SAMPLE WAS EXCLUDED FROM THE ALIQUOT EXTRACTED FOR SEMI-VOLATILE ORGANICS.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.018	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.018	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.018	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.018	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.036	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.036	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.036	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.073	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.018	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.018	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.018	mg/L	0.005	EPA 625
2-Chlorophenol	<0.036	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.036	mg/L	0.010	EPA 625
2-Nitrophenol	<0.036	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.018	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.018	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.036	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.018	mg/L	0.005	EPA 625
4-Nitrophenol	<0.073	mg/L	0.020	EPA 625
Acenaphthene	<0.018	mg/L	0.005	EPA 625
Acenaphthylene	<0.018	mg/L	0.005	EPA 625
Anthracene	<0.018	mg/L	0.005	EPA 625
Azobenzene	<0.018	mg/L	0.005	EPA 625
Benzidine	<0.036	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.018	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.018	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.018	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.018	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.018	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.073	mg/L	0.020	EPA 625



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 12:30 System ID AD04154

Sample ID LAB990117

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-5

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-5  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/F'NG

Comments: LAB: THE SAMPLE SUBMITTED FOR VOLATILE ORGANICS ANALYSIS WAS NOT PRESERVED. THIS SAMPLE WAS DILUTED BY A FACTOR OF 3.64 FOR SEMI-VOLATILE ORGANICS ANALYSIS. TO REDUCE MATRIX INTERFERENCE, THE SEDIMENT IN THE SAMPLE WAS EXCLUDED FROM THE ALIQUOT EXTRACTED FOR SEMI-VOLATILE ORGANICS.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.018	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.018	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.018	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.036	mg/L	0.010	EPA 625
Chrysene	<0.018	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.073	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.036	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.018	mg/L	0.005	EPA 625
Diethyl phthalate	<0.018	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.018	mg/L	0.005	EPA 625
Fluoranthene	<0.018	mg/L	0.005	EPA 625
Fluorene	<0.018	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.018	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.018	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.018	mg/L	0.005	EPA 625
Hexachloroethane	<0.018	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.018	mg/L	0.005	EPA 625
Isophorone	<0.018	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.018	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.018	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.018	mg/L	0.005	EPA 625
Naphthalene	<0.018	mg/L	0.005	EPA 625
Nitrobenzene	<0.018	mg/L	0.005	EPA 625
Pentachlorophenol	<0.036	mg/L	0.010	EPA 625
Phenanthrene	<0.018	mg/L	0.005	EPA 625
Phenol	<0.036	mg/L	0.010	EPA 625
Pyrene	<0.018	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624

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# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 12:30 System ID AD04154

Sample ID LAB990117

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-5

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-5  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/ING

**Comments:** LAB: THE SAMPLE SUBMITTED FOR VOLATILE ORGANICS ANALYSIS WAS NOT PRESERVED. THIS SAMPLE WAS DILUTED BY A FACTOR OF 3.64 FOR SEMI-VOLATILE ORGANICS ANALYSIS. TO REDUCE MATRIX INTERFERENCE, THE SEDIMENT IN THE SAMPLE WAS EXCLUDED FROM THE ALIQUOT EXTRACTED FOR SEMI-VOLATILE ORGANICS.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				NWTPH-Dx
DIESEL RANGE HYDROCARBONS	<0.650	mg/L	0.650	NWTPH-Dx

*(Handwritten signature)*



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 12:30 System ID AD04154

Sample ID LAB990117

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-5

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-5  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THE SAMPLE SUBMITTED FOR VOLATILE ORGANICS ANALYSIS WAS NOT PRESERVED. THIS SAMPLE WAS DILUTED BY A FACTOR OF 3.64 FOR SEMI-VOLATILE ORGANICS ANALYSIS. TO REDUCE MATRIX INTERFERENCE, THE SEDIMENT IN THE SAMPLE WAS EXCLUDED FROM THE ALIQUOT EXTRACTED FOR SEMI-VOLATILE ORGANICS.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	<1.30	mg/L	1.30	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	310	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990117

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**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report**



Sample Date/Time 5/26/99 11:05 System ID AD04155

Sample ID LAB990118

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-6

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-6  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/ING

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.02	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.04	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.01	mg/L	0.005	EPA 625
2-Chlorophenol	<0.02	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.02	mg/L	0.010	EPA 625
2-Nitrophenol	<0.02	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.01	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.02	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Nitrophenol	<0.04	mg/L	0.020	EPA 625
Acenaphthene	<0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.01	mg/L	0.005	EPA 625
Anthracene	<0.01	mg/L	0.005	EPA 625
Azobenzene	<0.01	mg/L	0.005	EPA 625
Benzidine	<0.02	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.01	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.01	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.01	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.04	mg/L	0.020	EPA 625





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 11:05 System ID AD04155

Sample ID LAB990118

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-6

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-6  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/F'NG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.02	mg/L	0.010	EPA 625
Chrysene	<0.01	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.04	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.02	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.01	mg/L	0.005	EPA 625
Diethyl phthalate	<0.01	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.01	mg/L	0.005	EPA 625
Fluoranthene	<0.01	mg/L	0.005	EPA 625
Fluorene	<0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.01	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.01	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.01	mg/L	0.005	EPA 625
Hexachloroethane	<0.01	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.01	mg/L	0.005	EPA 625
Isophorone	<0.01	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.01	mg/L	0.005	EPA 625
Naphthalene	<0.01	mg/L	0.005	EPA 625
Nitrobenzene	<0.01	mg/L	0.005	EPA 625
Pentachlorophenol	<0.02	mg/L	0.010	EPA 625
Phenanthrene	<0.01	mg/L	0.005	EPA 625
Phenol	<0.02	mg/L	0.010	EPA 625
Pyrene	<0.01	mg/L	0.005	EPA 625
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/26/99 11:05 System ID AD04155

Sample ID LAB990118

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-6

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-6  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
NWTPH-Dx				NWTPH-Dx
DIESEL RANGE HYDROCARBONS	<0.700	mg/L	0.700	NWTPH-Dx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/26/99 11:05 System ID AD04155

Sample ID LAB990118

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: LARSEN PROPERTY  
W-6

Date Received: 5/26/99  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: W-6  
IMS File/Invoice #: 3030.000

Sample Type: GRAI3  
Sample Matrix: GRNDWTR  
Collected By: CH/PNG

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	<1.40	mg/L	1.40	NWTPH-Dx
NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<80.0	mg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990118





City of Portland  
Bureau of Environmental Services  
Chain of Custody

CENTER CODE: 14522110 PROJECT 6064

Project Name: SPECIAL WASTE MISC SAMP

Date: 5/18/99

Project Subcat: SPECIAL WASTE

Page: 1 of 1

File Number: 3030.000

Collected by: CH/GK  
PNG

Matrix: GRNDWTR

05/17/99 10:25

503 823 5228

SEWERAGE SYSTEM

002

Sample ID No

Location (Rep Address 1)

Sample Type

Point Code

Date

Time

Tests Requested

8260

LAB 990109

LARSEN / TEST PIT 1

S

TP-1-17

5/18/99

9:10

PCBs by 8082

☒ VOCs by 624 8260

☒ NWHCID<sup>1</sup>

Other: QUANTIFY

RCRA Metals<sup>1</sup>

☒ SVOCs by 625

☒ Other:

Pesticides/PCBs by 8081

LAB 990110

LARSEN / TEST PIT 2

S

TP-2-17

5/18/99

10:30

PCBs by 8082

☒ VOCs by 624 8260

☒ NWHCID<sup>1</sup>

Other: QUANTIFY

RCRA Metals<sup>1</sup>

☒ SVOCs by 625

☒ Other:

Pesticides/PCBs by 8081

LAB 990111

LARSEN / TEST PIT 3

S

TP-2-13

5/18/99

10:50

PCBs by 8082

☒ VOCs by 624 8260

☒ NWHCID<sup>1</sup>

Other: QUANTIFY

RCRA Metals<sup>1</sup>

☒ SVOCs by 625

☒ Other:

Pesticides/PCBs by 8081

LAB 990112

LARSEN / TEST PIT 5

S

TP-5-8

5/18/99

12:00

PCBs by 8082

☒ VOCs by 624 8260

☒ NWHCID<sup>1</sup>

Other: QUANTIFY

RCRA Metals<sup>1</sup>

☒ SVOCs by 625

☒ Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

PCBs by 8082

VOCs by 624

NWHCID<sup>1</sup>

Other:

RCRA Metals<sup>1</sup>

SVOCs by 625

Other:

Pesticides/PCBs by 8081

<sup>1</sup> As, Ba, Cd, Cr, Pb, Hg, Se, Ag

<sup>2</sup> run NWTPHDX and NWTPHGX if detects on NWHCID

Relinquished By 1:

Signature: [Signature] Time: 11:45

Printed Name: COENRO KOSCHAL Date: 5/21/99

Received By 1:

Signature: [Signature] Time: 11:45

Printed Name: JOHN W. MATSON Date: 5/21/99

Relinquished By 2:

Signature: [Signature] Time: [Time]

Printed Name: [Name] Date: [Date]

Received By 2:

Signature: [Signature] Time: [Time]

Printed Name: [Name] Date: [Date]





City of Portland  
Bureau of Environmental Services  
**Chain of Custody**

LARSEN PROPERTY

CENTER CODE: 14522110 PROJECT 6004

Project Name: SPECIAL WASTE MISC SAMP

Date: 5/26/99

Project Subcat: SPECIAL WASTE

Page: 1 of 1

File Number: 3030.000

Collected by: CRAIG HOLTGREEN

Matrix: GRNDWTR

PNG

Sample ID No.	Location (Rep Address 1)	Sample Type	Point Code	Date	Time	Tests Requested			
LAB 990113	<del>MAY</del> W-1 - LARSEN	W	W-1	5/26/99	8:30	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	Other:	Pesticides/PCBs by 8081
LAB 990114	W-2 - LARSEN	W	W-2	5/26/99	10:15	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	Other:	Pesticides/PCBs by 8081
LAB 990115	W-3 - LARSEN	W	W-3	5/26/99	9:15	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	<input checked="" type="checkbox"/> Other:	Pesticides/PCBs by 8081
LAB 990116	W-4 - LARSEN	W	W-4	5/26/99	9:45	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	Other:	Pesticides/PCBs by 8081
LAB 990117	W-5 - LARSEN	W	W-5	5/26/99	12:00	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	Other:	Pesticides/PCBs by 8081
LAB 990118	W-6 - LARSEN	W	W-6	5/26/99	11:05	PCBs by 8082	<input checked="" type="checkbox"/> VOCs by 624	<input checked="" type="checkbox"/> NWHCID <sup>1</sup>	<input checked="" type="checkbox"/> Other: QUANTITY
						RCRA Metals <sup>1</sup>	<input checked="" type="checkbox"/> SVOCs by 625	Other:	Pesticides/PCBs by 8081
						PCBs by 8082	VOCs by 624	NWHCID <sup>1</sup>	Other:
						RCRA Metals <sup>1</sup>	SVOCs by 625	Other:	Pesticides/PCBs by 8081
						PCBs by 8082	VOCs by 624	NWHCID <sup>1</sup>	Other:
						RCRA Metals <sup>1</sup>	SVOCs by 625	Other:	Pesticides/PCBs by 8081
						PCBs by 8082	VOCs by 624	NWHCID <sup>1</sup>	Other:
						RCRA Metals <sup>1</sup>	SVOCs by 625	Other:	Pesticides/PCBs by 8081
						PCBs by 8082	VOCs by 624	NWHCID <sup>1</sup>	Other:
						RCRA Metals <sup>1</sup>	SVOCs by 625	Other:	Pesticides/PCBs by 8081

<sup>1</sup> As, Ba, Cd, Cr, Pb, Hg, Se, Ag

<sup>2</sup> run NWTPHDX and NWTPHGX if detects on NWHCID

Relinquished By 1:	Received By 1:	Relinquished By 2:	Received By 2:
Signature: <i>[Signature]</i> Time: 12:30	Signature: <i>[Signature]</i> Time: 12:30	Signature: _____ Time: _____	Signature: _____ Time: _____
Printed Name: GERARD FOSCHAL Date: 5/26/99	Printed Name: JOHN W. MADSON Date: 5/26/99	Printed Name: _____ Date: _____	Printed Name: _____ Date: _____

PNG.



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 9:25 System ID: AD06104

Sample ID: LAB990184

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W1

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	0.02	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	<0.005	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 9:25 System ID: AD06104

Sample ID: LAB990184

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W1

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 9:25 System ID: AD06104

Sample ID: LAB990184

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W1

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	0.009	mg/L	0.001	EPA 624
Chloroethane	0.012	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	1.84	mg/L	0.250	NWTPH-Dx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 9:25 System ID: AD06104

Sample ID: LAB990184

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W1

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	1.02	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	125	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990184





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 11:25 System ID: AD06105

Sample ID: LAB990185

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W2

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.01	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 11:25 System ID: AD06105

Sample ID: LAB990185

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W2

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 11:25 System ID: AD06105

Sample ID: LAB990185

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W2

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	0.599	mg/L	0.250	NWTPH-Dx





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 11:25 System ID: AD06105

Sample ID: LAB990185

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W2

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	<0.500	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	123	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990185



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:00 System ID: AD06106

Sample ID: LAB990186

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W3

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.01	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	<0.005	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:00 System ID: AD06106

Sample ID: LAB990186

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W3

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:00 System ID: AD06106

Sample ID: LAB990186

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W3

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	0.656	mg/L	0.250	NWTPH-Dx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:00 System ID: AD06106

Sample ID: LAB990186

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W3

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	0.538	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	234	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990186



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:50 System ID: AD06107

Sample ID: LAB990187

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W4

Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.01	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	<0.005	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:50 System ID: AD06107

Sample ID: LAB990187

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W4

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:50 System ID: AD06107

Sample ID: LAB990187

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W4

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	0.693	mg/L	0.250	NWTPH-Dx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 10:50 System ID: AD06107

Sample ID: LAB990187

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W4

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	0.651	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<80.0	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990187





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 12:30 System ID: AD06108

Sample ID: LAB990188

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W5

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE ORGANIC TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.005	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.01	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.01	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.02	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.005	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.005	mg/L	0.005	EPA 625
2-Chlorophenol	<0.01	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.01	mg/L	0.010	EPA 625
2-Nitrophenol	<0.01	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.005	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.01	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.005	mg/L	0.005	EPA 625
4-Nitrophenol	<0.02	mg/L	0.020	EPA 625
Acenaphthene	<0.005	mg/L	0.005	EPA 625
Acenaphthylene	<0.005	mg/L	0.005	EPA 625
Anthracene	<0.005	mg/L	0.005	EPA 625
Azobenzene	<0.005	mg/L	0.005	EPA 625
Benzidine	<0.01	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.005	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.005	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.005	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.005	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.02	mg/L	0.020	EPA 625



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 12:30 System ID: AD06108

Sample ID: LAB990188

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W5

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE ORGANIC TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.005	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.01	mg/L	0.010	EPA 625
Chrysene	<0.005	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.02	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.01	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.005	mg/L	0.005	EPA 625
Diethyl phthalate	<0.005	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.005	mg/L	0.005	EPA 625
Fluoranthene	<0.005	mg/L	0.005	EPA 625
Fluorene	<0.005	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.005	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.005	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.005	mg/L	0.005	EPA 625
Hexachloroethane	<0.005	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.005	mg/L	0.005	EPA 625
Isophorone	<0.005	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.005	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.005	mg/L	0.005	EPA 625
Naphthalene	<0.005	mg/L	0.005	EPA 625
Nitrobenzene	<0.005	mg/L	0.005	EPA 625
Pentachlorophenol	<0.01	mg/L	0.010	EPA 625
Phenanthrene	<0.005	mg/L	0.005	EPA 625
Phenol	<0.01	mg/L	0.010	EPA 625
Pyrene	<0.005	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 12:30 System ID: AD06108

Sample ID: LAB990188

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W5

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE ORGANIC TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	0.764	mg/L	0.250	NWTPH-Dx





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 12:30 System ID: AD06108

Sample ID: LAB990188

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W5

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE ORGANIC TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	0.656	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<80.0	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990188



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 13:40 System ID: AD06109

Sample ID: LAB990189

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W6

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
<b>ORG SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.02	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.04	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.01	mg/L	0.005	EPA 625
2-Chlorophenol	<0.02	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.02	mg/L	0.010	EPA 625
2-Nitrophenol	<0.02	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.01	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.02	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Nitrophenol	<0.04	mg/L	0.020	EPA 625
Acenaphthene	<0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.01	mg/L	0.005	EPA 625
Anthracene	<0.01	mg/L	0.005	EPA 625
Azobenzene	<0.01	mg/L	0.005	EPA 625
Benzidine	<0.02	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.01	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.01	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.01	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.04	mg/L	0.020	EPA 625



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 13:40 System ID: AD06109

Sample ID: LAB990189

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W6

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.02	mg/L	0.010	EPA 625
Chrysene	<0.01	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.04	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.02	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.01	mg/L	0.005	EPA 625
Diethyl phthalate	<0.01	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.01	mg/L	0.005	EPA 625
Fluoranthene	<0.01	mg/L	0.005	EPA 625
Fluorene	<0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.01	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.01	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.01	mg/L	0.005	EPA 625
Hexachloroethane	<0.01	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.01	mg/L	0.005	EPA 625
Isophorone	<0.01	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.01	mg/L	0.005	EPA 625
Naphthalene	<0.01	mg/L	0.005	EPA 625
Nitrobenzene	<0.01	mg/L	0.005	EPA 625
Pentachlorophenol	<0.02	mg/L	0.010	EPA 625
Phenanthrene	<0.01	mg/L	0.005	EPA 625
Phenol	<0.02	mg/L	0.010	EPA 625
Pyrene	<0.01	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 13:40 System ID: AD06109

Sample ID: LAB990189

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W6

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Dx				
DIESEL RANGE HYDROCARBONS	0.580	mg/L	0.250	NWTPH-Dx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 13:40 System ID: AD06109

Sample ID: LAB990189

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W6

Page: 4  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: LAB: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE. NCA: DETECTED DIESEL AND HEAVY OIL RANGE HYDROCARBONS DO NOT HAVE PATTERN AND RANGE CONSISTENT WITH TYPICAL PETROLEUM PRODUCTS AND MAY BE DUE TO BIOGENIC INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
HEAVY OIL RANGE HYDROCARBONS	0.528	mg/L	0.500	NWTPH-Dx
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<80.0	µg/L	80.0	NWTPH-Gx

End of Report for Sample ID: LAB990189



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 14:05 System ID: AD06110

Sample ID: LAB990190

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W7

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
ORG SEMI-VOLATILE ORGANICS				
1,2,4-Trichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,2-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,3-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
1,4-Dichlorobenzene	<0.01	mg/L	0.005	EPA 625
2,4,6-Trichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dichlorophenol	<0.02	mg/L	0.010	EPA 625
2,4-Dimethylphenol	<0.02	mg/L	0.010	EPA 625
2,4-Dinitrophenol	<0.04	mg/L	0.020	EPA 625
2,4-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2,6-Dinitrotoluene	<0.01	mg/L	0.005	EPA 625
2-Chloronaphthalene	<0.01	mg/L	0.005	EPA 625
2-Chlorophenol	<0.02	mg/L	0.010	EPA 625
2-Methyl-4,6-dinitrophenol	<0.02	mg/L	0.010	EPA 625
2-Nitrophenol	<0.02	mg/L	0.010	EPA 625
3,3'-Dichlorobenzidine	<0.01	mg/L	0.005	EPA 625
4-Bromophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Chloro-3-methylphenol	<0.02	mg/L	0.010	EPA 625
4-Chlorophenylphenyl ether	<0.01	mg/L	0.005	EPA 625
4-Nitrophenol	<0.04	mg/L	0.020	EPA 625
Acenaphthene	<0.01	mg/L	0.005	EPA 625
Acenaphthylene	<0.01	mg/L	0.005	EPA 625
Anthracene	<0.01	mg/L	0.005	EPA 625
Azobenzene	<0.01	mg/L	0.005	EPA 625
Benzidine	<0.02	mg/L	0.010	EPA 625
Benzo(a)anthracene	<0.01	mg/L	0.005	EPA 625
Benzo(a)pyrene	<0.01	mg/L	0.005	EPA 625
Benzo(b)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzo(g,h,i)perylene	<0.01	mg/L	0.005	EPA 625
Benzo(k)fluoranthene	<0.01	mg/L	0.005	EPA 625
Benzyl butyl phthalate	<0.04	mg/L	0.020	EPA 625





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 14:05 System ID: AD06110

Sample ID: LAB990190

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W7

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
Bis(2-chloroethoxy) methane	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroethyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-chloroisopropyl) ether	<0.01	mg/L	0.005	EPA 625
Bis(2-ethylhexyl) phthalate	<0.02	mg/L	0.010	EPA 625
Chrysene	<0.01	mg/L	0.005	EPA 625
Di-n-butyl phthalate	<0.04	mg/L	0.020	EPA 625
Di-n-octyl phthalate	<0.02	mg/L	0.010	EPA 625
Dibenzo(a,h)anthracene	<0.01	mg/L	0.005	EPA 625
Diethyl phthalate	<0.01	mg/L	0.005	EPA 625
Dimethyl phthalate	<0.01	mg/L	0.005	EPA 625
Fluoranthene	<0.01	mg/L	0.005	EPA 625
Fluorene	<0.01	mg/L	0.005	EPA 625
Hexachlorobenzene	<0.01	mg/L	0.005	EPA 625
Hexachlorobutadiene	<0.01	mg/L	0.005	EPA 625
Hexachlorocyclopentadiene	<0.01	mg/L	0.005	EPA 625
Hexachloroethane	<0.01	mg/L	0.005	EPA 625
Indeno(1,2,3-cd)pyrene	<0.01	mg/L	0.005	EPA 625
Isophorone	<0.01	mg/L	0.005	EPA 625
N-Nitrosodi-n-propylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodimethylamine	<0.01	mg/L	0.005	EPA 625
N-Nitrosodiphenylamine	<0.01	mg/L	0.005	EPA 625
Naphthalene	<0.01	mg/L	0.005	EPA 625
Nitrobenzene	<0.01	mg/L	0.005	EPA 625
Pentachlorophenol	<0.02	mg/L	0.010	EPA 625
Phenanthrene	<0.01	mg/L	0.005	EPA 625
Phenol	<0.02	mg/L	0.010	EPA 625
Pyrene	<0.01	mg/L	0.005	EPA 625
ORG VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 14:05 System ID: AD06110

Sample ID: LAB990190

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W7

Page: 3  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624
SUB NWTPH-Gx				
GASOLINE RANGE HYDROCARBONS	<80.0	µg/L	80.0	NWTPH-Gx



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 14:05 System ID: AD06110

Sample ID: LAB990190

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: W7

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: CH

Comments: THIS SAMPLE WAS DILUTED BY A FACTOR OF TWO FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS. BASED ON LOW SURROGATE RECOVERIES, LOW LEVELS OF SEMI-VOLATILE TARGET ANALYTES MAY NOT HAVE BEEN DETECTED DUE TO MATRIX INTERFERENCE.

Test Parameter	Result	Units	MRL	Method
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End of Report for Sample ID: LAB990190





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 0:00 System ID: AD06111

Sample ID: LAB990191

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: TRIP BLANK

Page: 1  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: OTHER  
Collected By: CH

Comments:

Test Parameter	Result	Units	MRL	Method
<b>ORG VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<0.005	mg/L	0.005	EPA 624
1,1,1-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2,2-Tetrachloroethane	<0.003	mg/L	0.003	EPA 624
1,1,2-Trichloroethane	<0.003	mg/L	0.003	EPA 624
1,1-Dichloroethane	<0.002	mg/L	0.002	EPA 624
1,1-Dichloroethene	<0.003	mg/L	0.003	EPA 624
1,2-Dichlorobenzene	<0.003	mg/L	0.003	EPA 624
1,2-Dichloroethane	<0.005	mg/L	0.005	EPA 624
1,2-Dichloropropane	<0.003	mg/L	0.003	EPA 624
1,3-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
1,4-Dichlorobenzene	<0.002	mg/L	0.002	EPA 624
2-Chloroethylvinyl ether	<0.05	mg/L	0.050	EPA 624
Acrolein	<0.1	mg/L	0.100	EPA 624
Acrylonitrile	<0.05	mg/L	0.050	EPA 624
Benzene	<0.001	mg/L	0.001	EPA 624
Bromodichloromethane	<0.003	mg/L	0.003	EPA 624
Bromoform	<0.003	mg/L	0.003	EPA 624
Bromomethane	<0.01	mg/L	0.010	EPA 624
Carbon tetrachloride	<0.003	mg/L	0.003	EPA 624
Chlorobenzene	<0.001	mg/L	0.001	EPA 624
Chloroethane	<0.01	mg/L	0.010	EPA 624
Chloroform	<0.001	mg/L	0.001	EPA 624
Chloromethane	<0.01	mg/L	0.010	EPA 624
cis-1,3-Dichloropropene	<0.004	mg/L	0.004	EPA 624
Dibromochloromethane	<0.005	mg/L	0.005	EPA 624
Ethylbenzene	<0.003	mg/L	0.003	EPA 624
Methylene chloride	<0.004	mg/L	0.004	EPA 624
Tetrachloroethene	<0.002	mg/L	0.002	EPA 624
Toluene	<0.001	mg/L	0.001	EPA 624
trans-1,2-Dichloroethene	<0.002	mg/L	0.002	EPA 624



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time: 7/28/99 0:00 System ID: AD06111

Sample ID: LAB990191

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: TRIP BLANK

Page: 2  
Date Received: 7/28/99  
Sample Status: INACTIVE

Proj. Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: OTHER  
Collected By: CH

Comments:

Test Parameter	Result	Units	MRL	Method
trans-1,3-Dichloropropene	<0.003	mg/L	0.003	EPA 624
Trichloroethene	<0.004	mg/L	0.004	EPA 624
Trichlorofluoromethane	<0.004	mg/L	0.004	EPA 624
Vinyl chloride	<0.05	mg/L	0.050	EPA 624

End of Report for Sample ID: LAB990191



City of Portland  
Bureau of Environmental Services  
Chain of Custody

Project Name: SPECIAL WASTE MISC SAMP

Date: 7/28/99

Project Subcat: SPECIAL WASTE

Page: 1 of 1

File Number: 3030.000

Collected by: C. ...

Matrix: WATER

Hunter




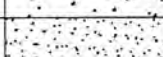






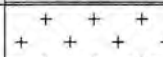

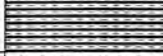


Sample ID No.	Location (Rep Address 1)	Sample Type	Point Code	Date	Time	Tests Requested
LAB 990184	W1	W		7/28/99	9:25	SEMI VOLATILES BY 8270 VOC BY 8260
LAB 990185	W2	W			11:25	# NWTPHG & NWTPHDX
LAB 990186	W3	W			1000	
LAB 990187	W4	W			1050	
LAB 990188	W5	W			1230	
LAB 990189	W6	W			1340	
LAB 990190	W7	W			1405	VOC'S & 825
LAB 990191	TRIP BLANK	W				

Relinquished By 1: Signature: [Signature] Time: 7/28/99	Received By 1: Signature: [Signature] Time: 1045	Relinquished By 2: Signature: Time:	Received By 2: Signature: Time:
Printed Name: GERARD KOSCHAL Date: 1045	Printed Name: Date: JUL 28 1999	Printed Name: Date:	Printed Name: Date:

PUB ENVIRONMENTAL



**APPENDIX B**  
**BORING LOGS**

MAJOR DIVISIONS		SYMBOLS		TYPICAL NAMES
COARSE GRAINED SOILS  (more than 1/2 of soil >No. 200 sieve size)	GRAVELS  more than 50% coarse fraction > no.4 sieve	GW		Well-graded gravels or gravel-sand mixtures, little to no fines.
		GP		Poorly-graded gravels or gravel-sand mixtures, little to no fines.
		GM		Silty gravels, gravel-sand-silt mixtures.
		GC		Clayey gravels or gravel-sand-clay mixtures
	SANDS  less than 50% coarse fraction > no.4 sieve	SW		Well-graded sands or gravelly sands, little to no fines.
		SP		Poorly-graded sands or gravelly sands, little to no fines.
		SM		Silty sands, sand-silt mixtures.
		SC		Clayey sands, sand-clay mixtures.
FINED GRAINED SOILS  (more than 1/2 of soil < No. 200 sieve size)	SILTS & CLAYS Liquid Limit* less than 50%	ML		Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity.
		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy or silty clays, lean clays.
		OL		Organic silts and organic silty clays of low plasticity.
	SILTS & CLAYS Liquid Limit* greater than 50%	MH		Inorganic silts, micaceous or diatomaceous fine sand or silty soils, elastic silts.
		CH		Inorganic clays of high plasticity, fat clays.
		OH		Organic clays of medium to high plasticity, organic silty clay, organic silts.
HIGHLY ORGANIC SOILS		Pt		Peat or other highly organic soils.

\*Liquid Limit represents the moisture content (in percent) of a soil at which point the soil no longer behaves like a plastic and starts to behave like a liquid.

### BORING LOG SYMBOLS



SAMPLE INTERVAL

GROUNDWATER, FIRST OBSERVED

GROUNDWATER, STATIC

#### SAMPLE TYPES:

- SS - Split Spoon
- G - Grab
- ST - Shelby Tube
- GS - Geoprobe Sampler

#### SHEEN TYPES:

- NS - No Sheen observed
- SS - Slight Sheen observed (Spotty coverage of sheen pan, no iridescence)
- MS - Moderate Sheen (full coverage of sheen pan, no iridescence)
- HS - Heavy Sheen (full coverage of sheen pan, iridescent)

#### SAMPLE MOISTURE:

- DRY - No moisture, dry to touch
- MOIST - Damp but no visible moisture
- WET - Visible free water

#### SAMPLE PLASTICITY (FINE-GRAINED SOILS):

- NONPLASTIC - Cannot be rolled at any moisture content
- LOW - Barely rolled, lump cannot be formed when drier than plastic limit
- MEDIUM - Easily rolled, lump crumbles when drier than plastic limit
- HIGH - Easily rolled yet takes considerable time to reach the plastic limit, lump can be formed without crumbling when drier than the plastic limit

#### PARTICLE SIZE RANGE (COARSE-GRAINED SOILS):

- GRAVEL - FINE, COARSE
- SAND - FINE, MEDIUM, COARSE

Based on Unified Soil Classification System and ASTM Standard D2487 and D2488

**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223

(503) 620-2387  
FAX (503) 620-2977

STATE OF OREGON  
MONITORING WELL REPORT

MULT 58187

Received Date 06/17/1999  
Well ID Tag# L 22156  
Start Card # 117512

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

**(1) OWNER/PROJECT**

Well No. 22156  
Co Job No. 3717

Name LOUIS LARSEN  
LARSEN, KAREN  
Street 15227 NW GILLIHAN RD  
City PORTLAND State OR Zip 97231

**(2) TYPE OF WORK**

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

**(3) DRILLING METHOD**

☐ Rotary Air ☐ Rotary Mud ☐ Cable  
☒ Hollow Stem Auger Other -----

**(4) BORE HOLE CONSTRUCTION**

Special Standards ☐ Depth of completed well 25 ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
10.00	0.00	25	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	13.00	5.00	S

Vault  
ft. TO Casing Diameter Liner ☐  
ft. TO Monument Casing or Liner Diameter Begin End Depth Depth Gauge Material Weld Construction Location  
3 ft. C 2.00 Plastic  
TO  
-2 ft.

Seal

ft. TO	ft.	From	To	Material	Amount	Seal Grout Weight	Units
		0.00	1.00	Concrete	2.00		S
		1.00	13.00	Bentonite	5.00		S

Filter Pack Screen ☐  
13 ft. TO  
25 ft.

Diameter	From	To	Gauge	Material	Type	Slot Size
	15	25		PL		.010

Filter Pack  
Material SA  
Size 20.00 in.

**(5) WELL TEST**

Permeability Yield  
Conductivity PH  
Temperature of water 52 °F/C Depth artesian flow found ft.  
Was water analysis done? ☒  
By Whom? PNG ENVIRONMENTAL  
Depth of strata to be analyzed. From ft. to ft.  
Remarks  
Name of supervising Geologist/Engineer

**(6) LOCATION OF WELL By legal description**

County  
Township 1.00 N Range 1.00 E Section 6  
1. SE 1/4 of SE 1/4 of above section.  
Legal Desc:

2. Either Street address of well location

10505 N PORTLAND RD  
or Tax lot number of well location 107

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

**(7) STATIC WATER LEVEL**

18.0 Ft. below land surface. Date 05/18/1999  
Artesian Pressure lb/sq. in. Date

**(8) WATER BEARING ZONES**

Depth at which water was first found 18 ft.

From	To	Est. Flow Rate	SWL
18	25		18

**(9) WELL LOG**

Ground elevation ft.

Material	From	To	SWL
FILL, GRAVELS	0	20	
GREY SILT	20	25	18

Date started 05/18/1999 Completed 05/18/1999

**(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.

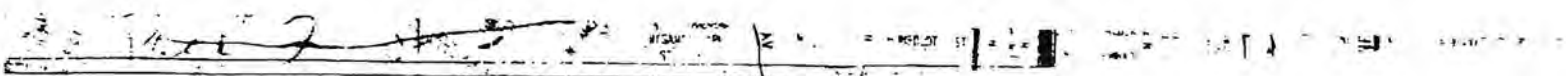
Signed By MARLEN A CROSS MWC Number 10462  
Date

**(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.

Signed By GREG MCINNIS MWC Number 10011  
Date





STATE OF OREGON  
MONITORING WELL REPORT

B-2 MULT 58188

Received Date 06/17/1999  
Well ID Tag# L 22157  
Start Card # 117513

(as required by ORS 537.765 & OAR 890-240-095)

Instructions for completing this report are on the last page of this form.

**(1) OWNER/PROJECT**

Well No. 22157  
Co Job No. 3717

Name LOUIS LARSEN  
LARSEN, KAREN  
Street 15227 NW GILLIHAN RD  
City PORTLAND State OR Zip 97231

**(2) TYPE OF WORK**

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

**(3) DRILLING METHOD**

☐ Rotary Air ☐ Rotary Mud ☐ Cable  
☒ Hollow Stem Auger Other \*\*\*\*\*

**(4) BORE HOLE CONSTRUCTION**

Special Standards ☐ Depth of completed well 21 ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
10.00	0.00	21	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	9.00	4.00	S

Vault

0 ft. Casing Diameter Liner ☐

1 TO

Monument	Casing or Liner	Diameter	Begin Depth	End Depth	Gauge	Material	Construction Weld	Location Threaded Of Shoe
ft.	C	2.00				Plastic		
ft.								
TO								
ft.								

Seal

ft.

TO

From	To	Material	Amount	Seal Grout Weight	Units
0.00	1.00	Concrete	2.00		S
1.00	9.00	Bentonite	4.00		S

Filter Pack

Screen ☐

9 ft.

TO

21 ft.

Diameter	From	To	Gauge	Material	Type	Slot Size
	11	21		PL		.010

Filter Pack

Material SA

Size 20.00 in.

**(5) WELL TEST**

Permeability Yield  
Conductivity PH  
Temperature of water 52 °F/C Depth artesian flow found ft.

Was water analysis done? ☒

By Whom? PNG ENVIRONMENTAL

Depth of strata to be analyzed. From ft. to ft.

Remarks

Name of supervising Geologist/Engineer

**(6) LOCATION OF WELL By legal description**

County  
Township 1.00 N Range 1.00 E Section 5

1. SW 1/4 of SW 1/4 of above section.

Legal Desc:

2. Either Street address of well location

10505 N PORTLAND RD

or Tax lot number of well location 22

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

**(7) STATIC WATER LEVEL**

19.0 Ft. below land surface. Date 05/18/1999  
Artesian Pressure lb/sq. in. Date

**(8) WATER BEARING ZONES**

Depth at which water was first found 19 ft.

From	To	Est. Flow Rate	SWL
19	21		19

**(9) WELL LOG**

Ground elevation ft.

Material	From	To	SWL
GRAVEL FILL	0	12	
GREY SILT	12	21	19

Date started 05/18/1999 Completed 05/19/1999

**(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 10462

Signed By MARLEN A CROSS

Date

**(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.

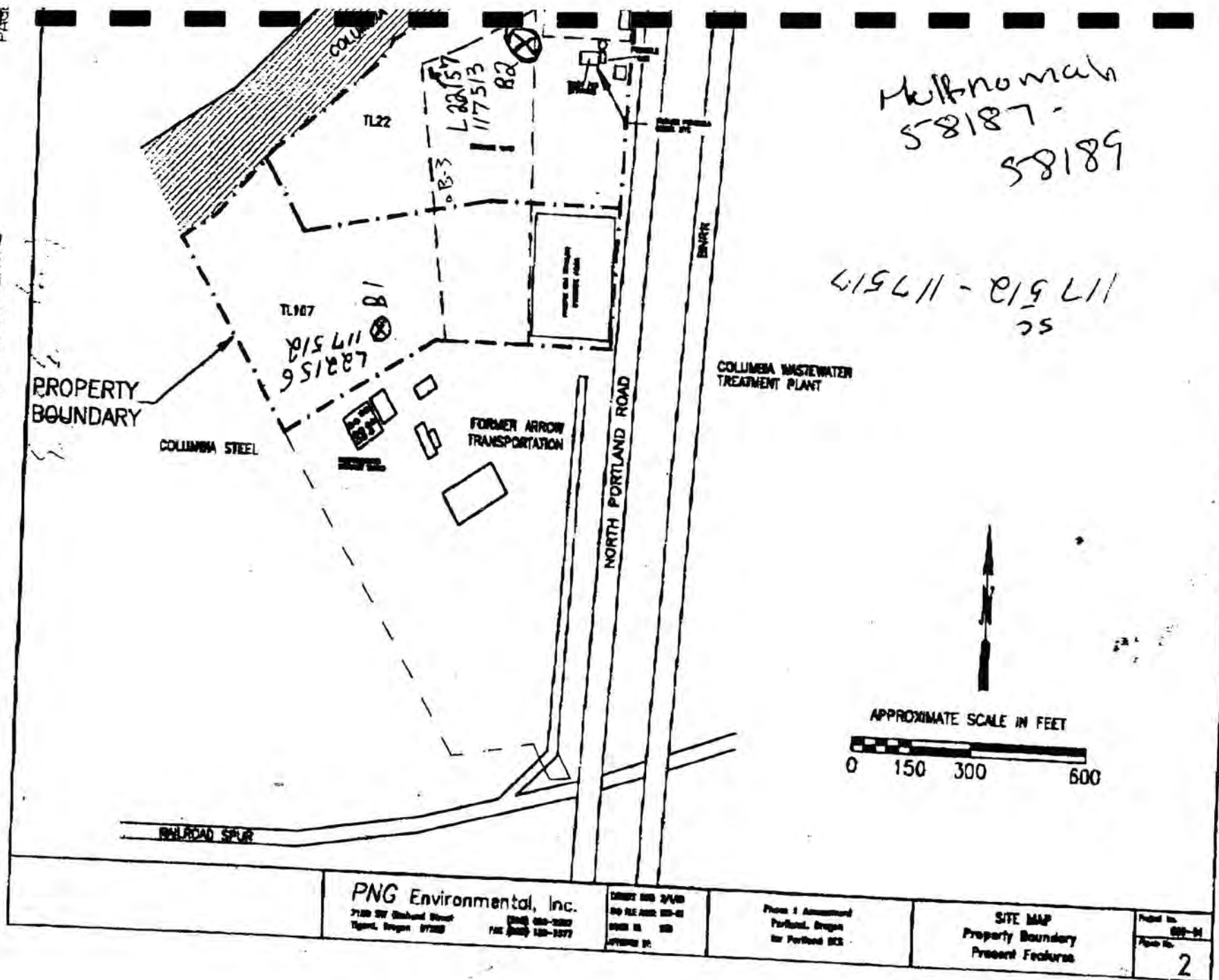
MWC Number 10011

Signed By GREG MCINNIS

Date

Melbomah  
58187 -  
58189

117511 - 219 L11  
SC



**PNG Environmental, Inc.**  
7100 SW Oakland Street  
Tigard, Oregon 97260  
PHONE 503-688-3333  
FAX 503-688-3377

PROJECT NO. 24/98  
JOB NO. 688-3333  
DATE 06/17/99  
BY: [Signature]

Phase 1 Assessment  
Portland, Oregon  
for Portland SEZ

**SITE MAP**  
Property Boundary  
Present Features

Sheet No. 001-01  
Page No. 2

PAGE 1  
PNG ENVIRONMENTAL  
11/27/2009  
10:46  
C:\P\117511



STATE OF OREGON  
MONITORING WELL REPORT

MULT 58189

Received Date 06/17/1999

Well ID Tag# L 22158

Start Card # 117514

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

**(1) OWNER/PROJECT**

Well No. 22158  
Co Job No. 3717

Name LOUIS LARSEN  
LARSEN, KAREN  
Street 15227 NW GILLIHAN RD  
City PORTLAND State OR Zip 97231

**(2) TYPE OF WORK**

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

**(3) DRILLING METHOD**

☐ Rotary Air ☐ Rotary Mud ☐ Cable  
☒ Hollow Stem Auger Other \*\*\*\*\*

**(4) BORE HOLE CONSTRUCTION**

Special Standards ☒ Depth of completed well 18 ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
8.00	0.00	18	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	6.00	3.00	S

Vault  
ft. TO Casing Diameter Liner  
ft. Casing or Liner Diameter Begin End Depth Depth Gauge Material Construction Location Of Shoe  
Monument 3 ft. C 2.00 Plastic  
TO -2 ft.

Seal

ft. TO	From	To	Material	Amount	Seal Grout Weight	Units
ft.	0.00	1.00	Concrete	2.00		S
	1.00	6.00	Bentonite	3.00		S

Filter Pack Screen ☐

ft. TO	Diameter	From	To	Gauge	Material	Type	Slot Size
6 ft.		8	18		PL		.010
18 ft.							

Filter Pack  
Material SA  
Size 20.00 in.

**(5) WELL TEST**

Permeability Yield  
Conductivity PH  
Temperature of water 57 °F/C Depth artesian flow found ft.  
Was water analysis done? ☒  
By Whom? PNG ENVIRONMENTAL  
Depth of strata to be analyzed. From ft. to ft.  
Remarks  
Name of supervising Geologist/Engineer

**(6) LOCATION OF WELL By legal description**

County  
Township 1.00 N Range 1.00 E Section 6  
1. SE 1/4 of SE 1/4 of above section.  
Legal Desc:

2. Either Street address of well location  
10505 N PORTLAND RD  
or Tax lot number of well location 107

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

**(7) STATIC WATER LEVEL**

15.0 Ft. below land surface. Date 05/19/1999  
Artesian Pressure lb/sq. in. Date

**(8) WATER BEARING ZONES**

Depth at which water was first found 15 ft.

From	To	Est. Flow Rate	SWL
15	18		15

**(9) WELL LOG**

Ground elevation ft.

Material	From	To	SWL
FILL	0	18	15

Date started 05/19/1999 Completed 05/19/1999

**(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 10462

Signed By MARLEN A CROSS

Date

**(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 10011

Signed By GREG MCINNIS

Date

Melbomah  
58187-  
58189

117512 - 117517  
SC

COLUMBIA WASTEWATER  
TREATMENT PLANT

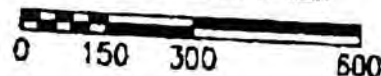
NORTH PORTLAND ROAD

FORMER ARROW  
TRANSPORTATION

COLUMBIA STEEL

PROPERTY  
BOUNDARY

APPROXIMATE SCALE IN FEET



**PNG Environmental, Inc.**

7120 SW Oakland Street  
Portland, Oregon 97205

Phone 503-255-2222  
Fax 503-255-2272

CREATED BY: JAC  
DATE: 06-17-99  
DRAWN BY: JAC  
CHECKED BY: JAC

Phase 1 Assessment  
Portland, Oregon  
for Portland DEQ

**SITE MAP**  
Property Boundary  
Present Features

Project No. 692-04

Page No. 2

STATE OF OREGON  
MONITORING WELL REPORT

MULT 58190

Received Date 06/17/1999  
Well ID Tag# L 22159  
Start Card # 117515

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

**(1) OWNER/PROJECT**

Name **LOUIS LARSEN**  
**LARSEN, KAREN**  
Street **15227 NW GILLIHAN RD**  
City **PORTLAND** State **OR** Zip **97231**

Well No. **22159**  
Co Job No. **3717**

**(2) TYPE OF WORK**

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

**(3) DRILLING METHOD**

☒ Rotary Air ☐ Rotary Mud ☐ Cable  
☐ Hollow Stem Auger ☐ Other \*\*\*\*\*

**(4) BORE HOLE CONSTRUCTION**

Special Standards ☐ Depth of completed well **22** ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
6.00	0.00	22	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	10.00	4.00	S

Vault ☐  
ft. TO Casing Diameter Liner ☐  
ft. TO Casing or Liner Diameter Begin End Depth Depth Gauge Material Construction Location  
Monument **3** ft. **C** **2.00** ☐ ☐ ☐ **Plastic** ☒ ☒ ☐  
TO **-2** ft.

Seal

ft. TO	From	To	Material	Amount	Seal Grout Weight	Units
ft.	0.00	1.00	Concrete	2.00		S
	1.00	10.00	Bentonite	4.00		S

Filter Pack ☐ Screen ☐  
10 ft. TO 22 ft.  
Diameter From To Gauge Material Type Slot Size  
**12** **22** **PL** **.010**  
Filter Pack Material **SA** Size **20.00** in.

**(5) WELL TEST**

Permeability Yield  
Conductivity PH  
Temperature of water **57** °F/C Depth artesian flow found ft.  
Was water analysis done? ☒  
By Whom? **PNG**  
Depth of strata to be analyzed. From ft. to ft.  
Remarks  
Name of supervising Geologist/Engineer

**(6) LOCATION OF WELL By legal description**

County  
Township **1.00 N** Range **1.00 E** Section **5**  
1. **SW** 1/4 of **SW** 1/4 of above section.  
Legal Desc:

2. Either Street address of well location  
**10505 N PORTLAND RD**  
or Tax lot number of well location **22**

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

**(7) STATIC WATER LEVEL**

**20.0** Ft. below land surface. Date **05/24/1999**  
Artesian Pressure lb/sq. in. Date

**(8) WATER BEARING ZONES**

Depth at which water was first found **20** ft.

From	To	Est. Flow Rate	SWL
<b>20</b>	<b>22</b>		<b>20</b>

**(9) WELL LOG**

Ground elevation ft.

Material	From	To	SWL
CONCRET	0	14	
ASPHALT DEBRIS, SILT	14	22	20

Date started **05/24/1999** Completed **05/24/1999**

**(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.

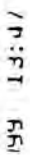
Signed By **GORDON E BURTON** MWC Number **10453** Date

**(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.

Signed By **GREG MCINNIS** MWC Number **10011** Date





STATE OF OREGON  
MONITORING WELL REPORT

MULT 58191

Received Date 06/17/1999  
Well ID Tag# L 22160  
Start Card # 117516

(as required by ORS 537.765 & OAR 690-240-095)

Instructions for completing this report are on the last page of this form.

**(1) OWNER/PROJECT**

Well No. 22160  
Co Job No. 3717

Name LOUIS LARSEN  
LARSEN, KAREN  
Street 15227 NW GILLIHAN RD  
City PORTLAND State OR Zip 97231

**(2) TYPE OF WORK**

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

**(3) DRILLING METHOD**

☒ Rotary Air ☐ Rotary Mud ☐ Cable  
☐ Hollow Stem Auger Other \*\*\*\*\*

**(4) BORE HOLE CONSTRUCTION**

Special Standards ☐ Depth of completed well 30 ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
6.00	0.00	30	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	13.00	5.00	S

Vault  
ft. TO Casing Diameter Liner ☐  
ft. Casing or Liner Diameter Begin End Depth Depth Gauge Material Weld Threaded Location  
Monument 3 ft. C 2.00 Plastic  
TO -2 ft.

Seal

From	To	Material	Amount	Seal Grout Weight	Units
0.00	1.00	Concrete	2.00		S
1.00	13.00	Bentonite	5.00		S

Filter Pack Screen ☐  
13 ft.  
TO 30 ft.

Diameter	From	To	Gauge	Material	Type	Slot Size
	15	30		PL		.010

Filter Pack  
Material SA  
Size 20.00 in.

**(5) WELL TEST**

Permeability Yield  
Conductivity PH  
Temperature of water 57 °F/C Depth artesian flow found ft.  
Was water analysis done? ☒  
By Whom? PNG  
Depth of strata to be analyzed. From ft. to ft.  
Remarks  
Name of supervising Geologist/Engineer

**(6) LOCATION OF WELL By legal description**

County  
Township 1.00 N Range 1.00 E Section 5  
1. SW 1/4 of SW 1/4 of above section.  
Legal Desc:

2. Either Street address of well location

10505 N PORTLAND RD  
or Tax lot number of well location 22

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

**(7) STATIC WATER LEVEL**

29.0 Ft. below land surface. Date 05/24/1999  
Artesian Pressure lb/sq. in. Date

**(8) WATER BEARING ZONES**

Depth at which water was first found 29 ft.

From	To	Est. Flow Rate	SWL
29	30		29

**(9) WELL LOG**

Ground elevation ft.

Material	From	To	SWL
GREY SILT AND GRAVELS	0	20	
SILT	20	30	29

Date started 05/24/1999 Completed 05/24/1999

**(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.

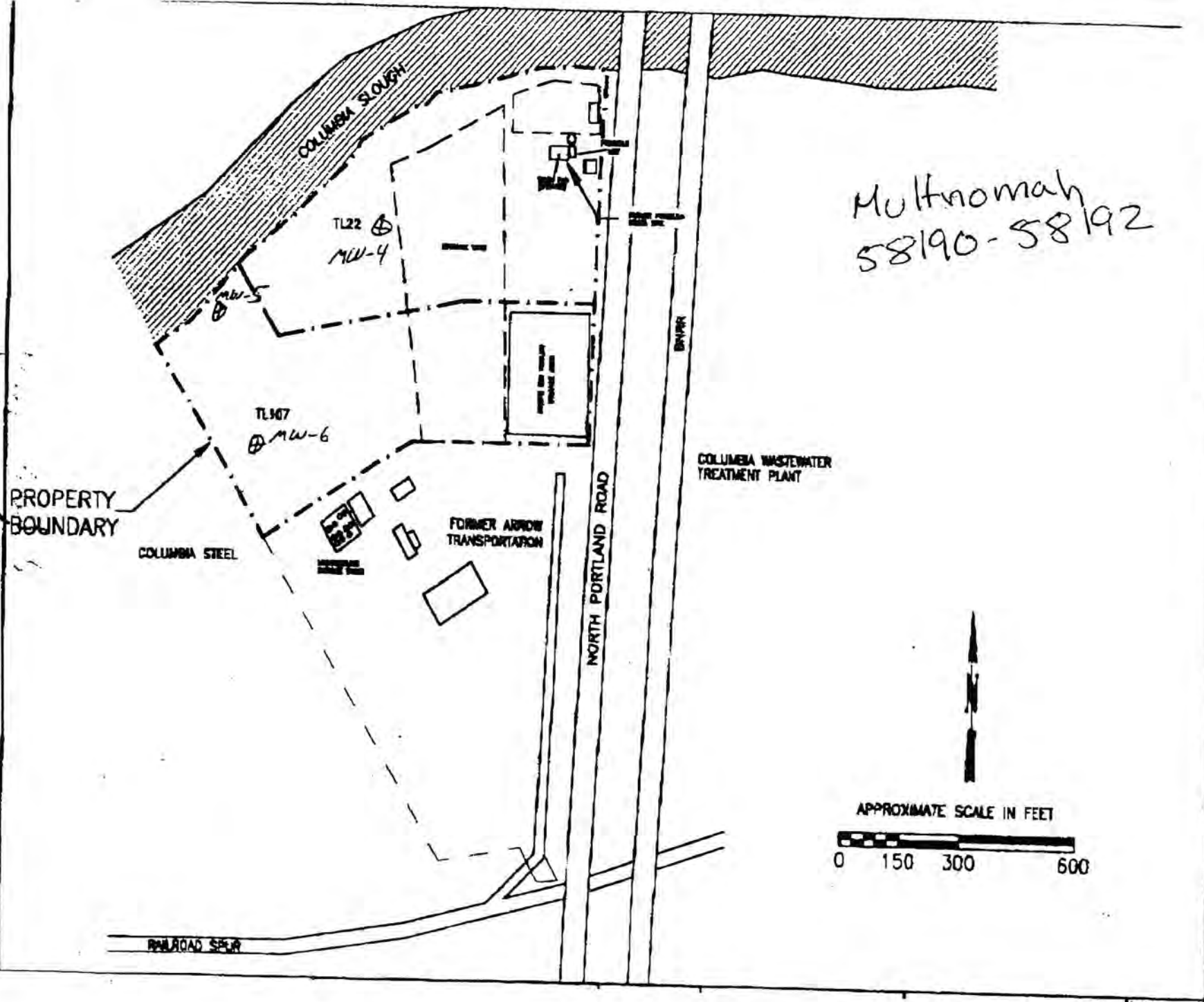
Signed By GORDON E BURTON MWC Number 10453  
Date

**(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.

Signed By GREG MCINNIS MWC Number 10011  
Date

Multnomah  
58190-58192



Site Map  
11/15/2004  
10:11 AM  
10:11 AM



STATE OF OREGON  
MONITORING WELL REPORT

MULT 58192

Received Date 06/18/1999  
Well ID Tag# L 22161  
Start Card # 117517

(as required by ORS 537.765 & OAR 890-240-095)

Instructions for completing this report are on the last page of this form.

(1) OWNER/PROJECT

Well No. 22161  
Co Job No. 3717

Name LOUIS LARSEN  
LARSEN, KAREN  
Street 15227 NW GILLIHAN RD  
City PORTLAND State OR Zip 97231

(2) TYPE OF WORK

☒ New Construction ☐ Alter (Recondition) ☐ Alter (Repair)  
☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable  
☐ Hollow Stem Auger Other \*\*\*\*\*

(4) BORE HOLE CONSTRUCTION

Special Standards ☐ Depth of completed well 25 ft.

Diameter	From	To	Material	Begin Depth	End Depth	Material Amount	Units
6.00	0.00	25	Concrete	0.00	1.00	2.00	S
			Bentonite	1.00	13.00	5.00	S

Vault  
ft. TO Casing Diameter Liner ☐  
ft. Casing or Liner Diameter Begin End Depth Depth Gauge Material Construction Location  
Monument 3 ft. C 2.00 Plastic  
TO -2 ft.

Seal

From	To	Material	Amount	Seal Grout Weight	Units
0.00	1.00	Concrete	2.00		S
1.00	13.00	Bentonite	5.00		S

Filter Pack Screen ☐  
13 ft. TO 25 ft.  
Diameter From To Gauge Material Type Slot Size  
15 25 PL .010  
Filter Pack Material SA Size 20.00 in.

(5) WELL TEST

Permeability Yield  
Conductivity PH  
Temperature of water 57 °F/C Depth artesian flow found ft.  
Was water analysis done? ☒  
By Whom? PNG  
Depth of strata to be analyzed. From ft. to ft.  
Remarks  
Name of supervising Geologist/Engineer

(6) LOCATION OF WELL By legal description

County  
Township 1.00 N Range 1.00 E Section 6  
1. SE 1/4 of SE 1/4 of above section.  
Legal Desc:

2. Either Street address of well location

10505 N PORTLAND RD  
or Tax lot number of well location 107

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL

24.0 Ft. below land surface. Date 05/24/1999  
Artesian Pressure lb/sq. in. Date

(8) WATER BEARING ZONES

Depth at which water was first found 24 ft.

From	To	Est. Flow Rate	SWL
24	25		24

(9) WELL LOG

Ground elevation ft.

Material	From	To	SWL
BROWN SILT	0	15	
SANDY SILT	15	25	

Date started 05/24/1999 Completed 05/24/1999

(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.

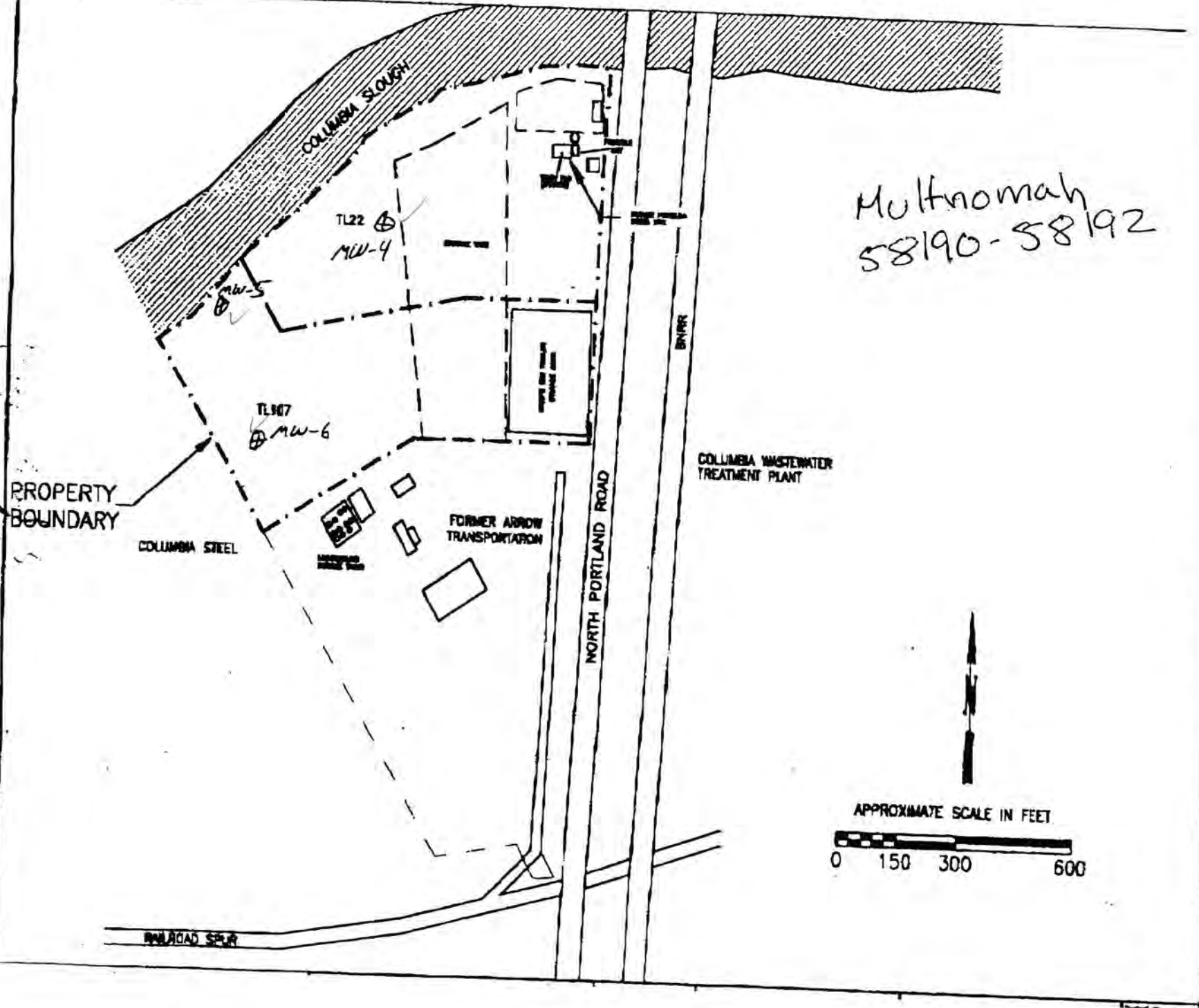
Signed By GORDON E BURTON MWC Number 10453  
Date

(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.

Signed By GREG MCINNIS MWC Number 10011  
Date

Multnomah  
58190-58192



Site 1990  
11/6/2024/9/04  
10:11 PM  
GSI

**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-1**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 18, 1999

SAMPLE INFORMATION						STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	P.D. SHEEN	DEPTH FT., bsg				
	GRAB			0			Sandy Gravel Fill (GP), brown, fine to medium sand, fine to coarse gravels, abundant concrete, asphalt, debris fill, moist, no product odor.		Well monument above-ground with concrete apron. 2-inch locking compression well cap.  Concrete 0 to 1 foot.  Bentonite 1 to 4 feet. Two 50 pound bags.  2-inch diameter, sch 40 solid PVC casing from above-ground to 14.5 feet.
	GRAB			0	5				
	GRAB			0	10				
				0	15				10 x 20 sand; 4 to 25 feet, eleven 50 pound bags.  2-inch diameter, sch 40 0.010-slotted PVC well screen from 14.5 feet to 24.5 feet.
	GRAB				20		@18' stiff. Silty Gravel Fill (GM) dark brown to black brick and other fill debris, faint creosote-like odor, visible sheen		
	GRAB			0	25		TD 25'		2-inch diameter, 6-inch deep threaded PVC end cap from 24.5 to 25 feet.
					30				

DRILLING CONTRACTOR: GEOTECH EXPLORATIONS DRILLING METHOD: HOLLOW-STEM TRACK RIG SAMPLING METHOD: GRAB DRILLING START TIME: 5-18-99 DRILLING END TIME: 5-18-99	COORDINATES: NA SURFACE ELEVATION: 95.04 CASING ELEVATION: 96.62 DATUM: ARBITRARY
--	--



**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-2**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 18, 1999

SAMPLE INFORMATION						STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	PID	SHEET DEPTH FT., bsg				
	GRAB			0			Sandy Gravel Fill (GP), brown, fine clayey sand, fine to coarse gravels, abundant fill debris, moist, <b>creosote-like odor.</b>		Well monument above-ground with concrete apron. 2-inch locking compression well cap. Concrete 0 to 1 foot.
	GRAB			0	5				Bentonite 1 to 4 feet. Two 50 pound bags.
	GRAB			0	10				2-inch diameter, sch 40 solid PVC casing from above-ground to 11.5 feet.
	GRAB			0	15		Silt Fill (ML) brown; low plasticity; fine to coarse gravel; construction debris; moist to very moist; <b>creosote-like odor.</b>		10 x 20 sand; 4 to 22 feet, eleven 50 pound bags.
	GRAB			0	20				2-inch diameter, sch 40 0.010-slotted PVC well screen from 11.5 feet to 21.5 feet.
							TD 22'		2-inch diameter, 6-inch deep threaded PVC end cap from 21.5 to 22 feet.
					25				
					30				
DRILLING CONTRACTOR: GEOTECH EXPLORATIONS DRILLING METHOD: HOLLOW-STEM TRACK RIG SAMPLING METHOD: GRAB DRILLING START TIME: 5-18-99 DRILLING END TIME: 5-18-99								COORDINATES: NA SURFACE ELEVATION: 85.71 CASING ELEVATION: 88.08 DATUM: ARBITRARY	

**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-3**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 18, 1999

SAMPLE INFORMATION						DEPTH FT., bsg	STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	R.D.	SPEC.					
	GRAB			0				Sandy Gravel Fill (GP), brown, low plastic fines; fine clayey sand; fine gravel; fill; moist.		Well monument above-ground with concrete apron. 2-inch locking compression well cap. Concrete 0 to 1 foot.
	GRAB			0		5				Bentonite 1 to 4 feet. Two 50 pound bags.
	GRAB			0		10				2-inch diameter, sch 40 solid PVC casing from above-ground to 7.5 feet.
								Silt Fill (ML) brown; low plasticity; wet; hydrocarbon odor.		
				0		15				10 x 20 sand; 4 to 18 feet, eleven 50 pound bags.
	GRAB							TD 18'		2-inch diameter, sch 40 0.010-slotted PVC well screen from 7.5 feet to 17.5 feet.
						20				2-inch diameter, 6-inch deep threaded PVC end cap from 17.5 to 18 feet.
	GRAB			0		25				
						30				
DRILLING CONTRACTOR: GEOTECH EXPLORATIONS DRILLING METHOD: HOLLOW-STEM TRACK RIG SAMPLING METHOD: GRAB DRILLING START TIME: 5-18-99 DRILLING END TIME: 5-18-99									COORDINATES: NA SURFACE ELEVATION: 93.03 CASING ELEVATION: 94.47 DATUM: ARBITRARY	

# **PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-4**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 24, 1999

SAMPLE INFORMATION							STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	PID	SHEEN	DEPTH FT.bsg				
	GRAB			0				Sandy Gravel Fill (GP), brown, fine to coarse sand, fine to coarse gravel, abundant fill debris, moist, slight creosote-like odor.		Well monument above-ground with concrete apron, 2-inch locking compression well cap. Concrete 0 to 1 foot.
	GRAB			0		5				Bentonite 1 to 9.5 feet. Two 50 pound bags. 2-inch diameter, sch 40 solid PVC casing from 3 feet above-ground to 11.5 feet. 10 x 20 sand; 9.5 to 22 feet, eleven 50 pound bags.
	GRAB			52		10				2-inch diameter, sch 40 0.010-slotted PVC well screen from 11.5 feet to 21.5 feet.
	GRAB			12		15		Silt Fill (ML) with gravel; grayish black; low plasticity; fine to coarse gravel; gravel debris. @16': wet.		
	GRAB			10		20		TD 22'		2-inch diameter, 6-inch deep threaded PVC end cap from 21.5 to 22 feet.
						25				
						30				
DRILLING CONTRACTOR: GEOTECH EXPLORATIONS DRILLING METHOD: AIR ROTARY RIG SAMPLING METHOD: GRAB DRILLING START TIME: 5-24-99 DRILLING END TIME: 5-24-99									COORDINATES: NA SURFACE ELEVATION: 90.99 CASING ELEVATION: 94.01 DATUM: ARBITRARY	



**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-5**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 24, 1999

SAMPLE INFORMATION							STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	R/D	SHEEN	DEPTH FT.bsg				
	GRAB			0				Sandy Gravel Fill (GP), brown, fine to coarse sand, fine to coarse gravel, abundant concrete, asphalt, brick and wood debris, moist.		Well monument above-ground with concrete apron. 2-inch locking compression well cap.  Concrete 0 to 1 foot.  Bentonite 1 to 13 feet. Three 50 pound bags.  2-inch diameter, sch 40 solid PVC casing from 3 feet above-ground to 14.5 feet.  10 x 20 sand; 13 to 30.5 feet, eleven 50 pound bags.
	GRAB			0		5				
	GRAB			0		10				
	GRAB			0		15				
	GRAB			0		20		Silt (ML) with gravel; dark gray to grayish black; low plasticity; clayey; micaceous; very moist to wet.		2-inch diameter, sch 40 0.010-slotted PVC well screen from 14.5 feet to 29.5 feet.
	GRAB			0		25				
	GRAB			0		30				
						TO 30'				2-inch diameter, 6-inch deep threaded PVC end cap from 29.5 to 30 feet.
DRILLING CONTRACTOR: GEOTECH EXPLORATIONS DRILLING METHOD: AIR ROTARY RIG SAMPLING METHOD: GRAB DRILLING START TIME: 5-24-99 DRILLING END TIME: 5-24-99									COORDINATES: NA SURFACE ELEVATION: 91.48 CASING ELEVATION: 94.18 DATUM: ARBITRARY	

**PNG Environmental, Inc.**

7130 SW Elmhurst Street  
Tigard, Oregon 97223  
(503) 620-2387  
FAX (503) 620-2977

BORING NUMBER **MW-6**

PROJECT NAME: Larsen Property  
PROJECT NUMBER: 850-02  
LOCATION: 10505 North Portland Road  
LOGGED BY: C. Hultgren  
REVIEWED BY: GJK  
DATE: MAY 24, 1999

**SAMPLE INFORMATION**

LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	% REC.	Q D	S CREEN	DEPTH FT, bsg	STRATA	DESCRIPTION	WELL DETAIL	BOREHOLE/WELL CONSTRUCTION DETAIL
	GRAB			0				Sandy Gravel Fill (GP), brown, fine to coarse sand, fine to coarse gravel, abundant concrete, asphalt, brick and wood debris, moist.		Well monument above-ground with concrete apron. 2-inch locking compression well cap. Concrete 0 to 1 foot.  Bentonite 1 to 13 feet. Two 50 pound bags.  2-inch diameter, sch 40 solid PVC casing from 3 feet above-ground to 14.5 feet.  10 x 20 sand; 13 to 25 feet, eleven 50 pound bags.
	GRAB			0		5				
	GRAB			0		10				
	GRAB			0		15				2-inch diameter, sch 40 0.010-slotted PVC well screen from 14.5 feet to 24.5 feet.
	GRAB			0		20		Silt (ML); dark gray to grayish black; low plasticity; trace gravel and fill; clay.  @20': very moist.		
	GRAB			0		25		TD 25'		2-inch diameter, 6-inch deep threaded PVC end cap from 24.5 to 25 feet.
						30				

DRILLING CONTRACTOR: GEOTECH EXPLORATIONS  
DRILLING METHOD: AIR ROTARY RIG  
SAMPLING METHOD: GRAB  
DRILLING START TIME: 5-24-99  
DRILLING END TIME: 5-24-99

COORDINATES: NA  
SURFACE ELEVATION: 95.34  
CASING ELEVATION: 98.38  
DATUM: ARBITRARY

**APPENDIX C**  
**GROUNDWATER COLLECTION FORMS**



# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. MW-1  
 Sample no. W-1  
 Date 5-26-99

Project name Larsen Property  
 Project no. 850-02  
 Collector C. Hultgren

## Well Information

Monument condition ☒ Good ☐ Needs repair  
 Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
 Headspace reading ☒ Not measured \_\_\_\_\_ ppm  
 Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
 Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_  
☐ Odor \_\_\_\_\_ ☐ Comments \_\_\_\_\_

## Purge Data

Total well depth 27.12' ft ☒ Clean bottom ☐ Muddy bottom ☐ Not measured  
 Depth to product \_\_\_\_\_ ft  
 Depth to water 18.03 ft  
 Casing volume 9.09 ft (H<sub>2</sub>O) X 0.16 gpf = 1.45 X 3 = 4.4  
 Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

## Purge Method

Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
 Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
 Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
 Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

## Field Parameters

Meter used ☒ HYDAC ☐ pH2Tester ☐ Hach ☐ Other \_\_\_\_\_  
 Gallons \_\_\_\_\_ pH \_\_\_\_\_ Temperature \_\_\_\_\_ Conductivity \_\_\_\_\_ Comments \_\_\_\_\_

	Gallons	pH	Temperature	Conductivity	Comments
CU-1	7.02	60	1170	water is relatively clear,	
CU-2	7.33	57	1139	slight odor, no sheen	
CU-3	7.45	56	1120		

Dissolved Oxygen \_\_\_\_\_

Carbon Dioxide \_\_\_\_\_

## Sampling Device

Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
 Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
 Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

## Bottles Filled

Time 0830

Number	Type	Preservative	Filtration
5	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

Samplers Signature C. Hultgren Date 5-26-99

# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>    </u> <u>MW-2</u> Sample no. <u>    </u> <u>W2</u> Date <u>5-26-99</u>	Project name: <u>    </u> <u>Larsen</u> Project no. <u>    </u> <u>850-02</u> Collector <u>C. HULTGREN</u>
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**Well Information**  
 Monument condition ☒ Good ☐ Needs repair  
 Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
 Headspace reading ☒ Not measured \_\_\_\_\_ ppm ☐ Odor \_\_\_\_\_  
 Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
 Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_

**Purge Data**  
 Total well depth 27.55 ~~28.55~~ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured  
 Depth to product \_\_\_\_\_ ft  
 Depth to water 20.15 ft  
 Casing volume 3.40 ft (H<sub>2</sub>O) X 0.16 gpf = 0.544 X 3 = 1.63  
 Casing volumes 3 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

**Purge Method**  
 Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
 Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
 Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
 Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

**Field Parameters**  
 Meter used ☐ YSI ☒ HYDAC ☐ Other \_\_\_\_\_  

Gallons	pH	Temp	Cond	Comments
<u>CV-1</u>	<u>8.04</u>	<u>60</u>	<u>672</u>	<u>water is clear, hydrocarbon(?) odor, no sheen</u>
<u>CV-2</u>	<u>7.92</u>	<u>60</u>	<u>689</u>	
<u>CV-3</u>	<u>7.88</u>	<u>60</u>	<u>682</u>	
CO2=			DO=	

**Sampling Device**  
 Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
 Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
 Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

**Bottles Filled** Time 1015  

Number	Type	Preservative	Filtration	Filtration	Filtration	Filtration	Filtration
<u>3</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	<u>HCL</u> <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	<u>HCL</u> <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	<u>HCL</u> <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	<u>HCL</u> <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input type="checkbox"/> No				

  
 Samplers Signature Craig Hultgren Date 5-26-99



# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>MW-3</u> Sample no. <u>W3</u> Date <u>5-26-99</u>	Project name: <u>Larkin Properties</u> Project no. <u>850-02</u> Collector <u>C. Hultgren</u>
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**Well Information**  
 Monument condition ☒ Good ☐ Needs repair  
 Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
 Headspace reading ☒ Not measured \_\_\_\_\_ ppm ☐ Odor \_\_\_\_\_  
 Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
 Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_

**Purge Data**  
 Total well depth 19.30 ft ☒ Clean bottom ☐ Muddy bottom ☐ Not measured  
 Depth to product \_\_\_\_\_ ft  
 Depth to water 10.43 ft  
 Casing volume 8.87 ft (H<sub>2</sub>O) X 0.16 gpf = 1.42 X 3 = 4.25  
 Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

**Purge Method**  
 Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
 Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
 Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
 Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

**Field Parameters**  

Meter used <input type="checkbox"/> YSI <input checked="" type="checkbox"/> HYDAC <input type="checkbox"/> Other _____																									
<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;">Gallons</th> <th style="width: 10%;">pH</th> <th style="width: 10%;">Temp</th> <th style="width: 10%;">Cond</th> <th style="width: 50%;">Comments</th> </tr> <tr> <td><u>CV-1</u></td> <td><u>7.42</u></td> <td><u>56</u></td> <td><u>1046</u></td> <td><u>water is relatively clear, no</u></td> </tr> <tr> <td><u>CV-2</u></td> <td><u>7.56</u></td> <td><u>57</u></td> <td><u>1182</u></td> <td><u>odor, no skew</u></td> </tr> <tr> <td><u>CV-3</u></td> <td><u>7.54</u></td> <td><u>56</u></td> <td><u>1177</u></td> <td></td> </tr> <tr> <td colspan="2">CO2= _____</td> <td colspan="3">DO= _____</td> </tr> </table>	Gallons	pH	Temp	Cond	Comments	<u>CV-1</u>	<u>7.42</u>	<u>56</u>	<u>1046</u>	<u>water is relatively clear, no</u>	<u>CV-2</u>	<u>7.56</u>	<u>57</u>	<u>1182</u>	<u>odor, no skew</u>	<u>CV-3</u>	<u>7.54</u>	<u>56</u>	<u>1177</u>		CO2= _____		DO= _____		
Gallons	pH	Temp	Cond	Comments																					
<u>CV-1</u>	<u>7.42</u>	<u>56</u>	<u>1046</u>	<u>water is relatively clear, no</u>																					
<u>CV-2</u>	<u>7.56</u>	<u>57</u>	<u>1182</u>	<u>odor, no skew</u>																					
<u>CV-3</u>	<u>7.54</u>	<u>56</u>	<u>1177</u>																						
CO2= _____		DO= _____																							

**Sampling Device**  
 Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
 Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
 Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

**Bottles Filled** Time 0915  

Number	Type	Preservative	Filtration
<u>3</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

  
 Samplers Signature C. Hultgren Date 5-26-99



# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. MW-4  
Sample no. W4  
Date 5-26-99

Project name Larsen Property  
Project no. 850-02  
Collector C. Hultgren

## Well Information

Monument condition ☒ Good ☐ Needs repair  
Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
Headspace reading ☒ Not measured \_\_\_\_\_ ppm  
Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_  
☐ Odor ☐ Comments \_\_\_\_\_

## Purge Data

Total well depth 25.37 ft ☒ Clean bottom ☐ Muddy bottom ☐ Not measured  
Depth to product \_\_\_\_\_ ft  
Depth to water 19.65 ft  
Casing volume 5.72 ft (H<sub>2</sub>O) X 0.16 gpf = 0.92 X 3 = 2.75  
Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

## Purge Method

Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

## Field Parameters

Meter used ☒ HYDAC ☐ pH2Tester ☐ Hach ☐ Other \_\_\_\_\_  
Gallons \_\_\_\_\_ pH \_\_\_\_\_ Temperature \_\_\_\_\_ Conductivity \_\_\_\_\_ Comments \_\_\_\_\_

	CU-1	CU-2	CU-3	
8.02	61	2160	Water is relatively clear	
7.80	58	2080	no odor, no steel	
7.68	58	2030		

Dissolved Oxygen \_\_\_\_\_

Carbon Dioxide \_\_\_\_\_

## Sampling Device

Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

## Bottles Filled

Time 0945

Number	Type	Preservative	Filtration
3	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input type="checkbox"/> No

Samplers Signature C. Hultgren Date 5-26-99

# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>12W-5</u> Sample no. <u>W-5</u> Date <u>5-26-99</u>	Project name: <u>Larson</u> Project no. <u>850-02</u> Collector <u>C. HULTGREN</u>
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**Well Information**  
 Monument condition ☒ Good ☐ Needs repair  
 Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
 Headspace reading ☒ Not measured \_\_\_\_\_ ppm ☐ Odor \_\_\_\_\_  
 Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
 Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_

**Purge Data**  
 Total well depth 37.26 ft ☒ Clean bottom ☐ Muddy bottom ☐ Not measured  
 Depth to product \_\_\_\_\_ ft  
 Depth to water 20.23 ft  
 Casing volume 13.03 ft (H<sub>2</sub>O) X 0.16 gpf = 2.08 X 3 = 6.25  
 Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

**Purge Method**  
 Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
 Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
 Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
 Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

**Field Parameters**  
 Meter used ☐ YSI ☒ HYDAC ☐ Other \_\_\_\_\_  

Gallons	pH	Temp	Cond	Comments
<u>CV-1</u>	<u>6.98</u>	<u>62</u>	<u>1,620</u>	<u>water is slightly brown, NO odor, NO STEEN</u>
<u>CV-2</u>	<u>7.24</u>	<u>62</u>	<u>1,570</u>	
<u>CV-3</u>	<u>7.40</u>	<u>62</u>	<u>1,590</u>	
CO2=		DO=		

**Sampling Device**  
 Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
 Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
 Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

**Bottles Filled** Time 12:00  

Number	Type	Preservative	Filtration
<u>3</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>2</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

  
 Samplers Signature C. Hultgren Date 5-26-99



# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. mw-6  
Sample no. WG  
Date 5-26-99

Project name: Larsen  
Project no. 850-02  
Collector C. Hultgren

## Well Information

Monument condition ☒ Good ☐ Needs repair  
Well cap condition ☒ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
Headspace reading ☒ Not measured \_\_\_\_\_ ppm ☐ Odor \_\_\_\_\_  
Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_

## Purge Data

Total well depth 27.90 ft ☒ Clean bottom ☐ Muddy bottom ☐ Not measured  
Depth to product \_\_\_\_\_ ft  
Depth to water 17.54 ft  
Casing volume 10.36 ft (H<sub>2</sub>O) X 0.16 gpf = 1.65 X 3 = 5  
Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

## Purge Method

Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
Purge start time \_\_\_\_\_ Purge stop time \_\_\_\_\_ Purge rate \_\_\_\_\_

## Field Parameters

Meter used ☐ YSI ☒ HYDAC ☐ Other \_\_\_\_\_  
Gallons \_\_\_\_\_ pH \_\_\_\_\_ Temp \_\_\_\_\_ Cond \_\_\_\_\_ Comments \_\_\_\_\_  

CV-1	7.20	62	890	water is slightly off-colored (Brown), no odor, no sludge
CV-2	6.98	62	965	
CV-3	6.96	61	934	

  
CO<sub>2</sub>= \_\_\_\_\_ DO= \_\_\_\_\_

## Sampling Device

Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

## Bottles Filled

Time 1105  
Number Type Preservative Filtration  

3	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
(	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input checked="" type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input type="checkbox"/> No

Samplers Signature C. Hultgren Date 5-26-99



# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>MWH</u> Sample no. <u>W</u> Date <u>7-28-99</u>	Project name <u>LARSEN</u> Project no. _____ Collector <u>C. Hultgren</u>																				
<b>Well Information</b> Monument condition <input checked="" type="checkbox"/> Good <input type="checkbox"/> Needs repair _____ Well cap condition <input type="checkbox"/> Good <input checked="" type="checkbox"/> Locked <input type="checkbox"/> Replaced <input type="checkbox"/> Needs replacement Headspace reading <input checked="" type="checkbox"/> Not measured _____ ppm Elevation mark <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Added <input type="checkbox"/> Other _____ Well diameter <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch <input type="checkbox"/> 6-inch <input type="checkbox"/> Other _____ <input type="checkbox"/> Odor _____ <input type="checkbox"/> Comments _____																					
<b>Purge Data</b> Total well depth <u>27.12</u> ft <input type="checkbox"/> Clean bottom <input type="checkbox"/> Muddy bottom <input checked="" type="checkbox"/> Not measured Depth to product _____ ft Depth to water <u>17.98</u> ft Casing volume <u>9.14</u> ft (H <sub>2</sub> O) X <u>0.16</u> gpf = <u>1.46</u> X 3 = <u>4.4</u> Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf																					
<b>Purge Method</b> Pump type <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Centrifugal <input type="checkbox"/> Submersible <input type="checkbox"/> Other _____ Purge tubing <input type="checkbox"/> New LDPE <input checked="" type="checkbox"/> New HDPE <input type="checkbox"/> New Teflon <input type="checkbox"/> New Tygon <input type="checkbox"/> Other _____ Bailer type <input type="checkbox"/> Disposable <input type="checkbox"/> Teflon <input type="checkbox"/> Stainless <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ Purge start time <u>0900</u> Purge stop time <u>0920</u> Purge rate <u>0.25</u> Gpm																					
<b>Field Parameters</b> <table border="0" style="width: 100%;"> <tr> <td>Meter used <input checked="" type="checkbox"/> HYDAC <input type="checkbox"/> pH2Tester <input type="checkbox"/> Hach <input type="checkbox"/> Other _____</td> <td></td> </tr> <tr> <td>Gallons <u>pH</u> <u>Temperature</u> <u>Conductivity</u> <u>Comments</u></td> <td></td> </tr> <tr> <td><u>CU-1</u> <u>7.32</u> <u>64</u> <u>1612</u> <u>water is clear, no odor,</u></td> <td></td> </tr> <tr> <td><u>CU-2</u> <u>7.59</u> <u>64</u> <u>1529</u> <u>no sheen</u></td> <td></td> </tr> <tr> <td><u>CU-3</u> <u>7.62</u> <u>64</u> <u>1576</u> _____</td> <td></td> </tr> <tr> <td><b>Dissolved Oxygen</b> _____</td> <td><b>Carbon Dioxide</b> _____</td> </tr> </table>		Meter used <input checked="" type="checkbox"/> HYDAC <input type="checkbox"/> pH2Tester <input type="checkbox"/> Hach <input type="checkbox"/> Other _____		Gallons <u>pH</u> <u>Temperature</u> <u>Conductivity</u> <u>Comments</u>		<u>CU-1</u> <u>7.32</u> <u>64</u> <u>1612</u> <u>water is clear, no odor,</u>		<u>CU-2</u> <u>7.59</u> <u>64</u> <u>1529</u> <u>no sheen</u>		<u>CU-3</u> <u>7.62</u> <u>64</u> <u>1576</u> _____		<b>Dissolved Oxygen</b> _____	<b>Carbon Dioxide</b> _____								
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<b>Bottles Filled</b> Time <u>0925</u> <table border="0" style="width: 100%;"> <tr> <th>Number</th> <th>Type</th> <th>Preservative</th> <th>Filtration</th> </tr> <tr> <td><u>4</u></td> <td><input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td><u>1</u></td> <td><input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td><u>1</u></td> <td><input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td>_____</td> <td><input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> </table> Samplers Signature <u>Cia Hultgren</u> Date <u>7-28-99</u>		Number	Type	Preservative	Filtration	<u>4</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number	Type	Preservative	Filtration																		
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<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
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_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No																		

# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>mw-2</u> Sample no. <u>w2</u> Date <u>7-23-99</u>	Project name <u>Larsen</u> Project no. _____ Collector <u>C.H.</u>																				
<b>Well Information</b> Monument condition <input checked="" type="checkbox"/> Good <input type="checkbox"/> Needs repair _____ Well cap condition <input type="checkbox"/> Good <input checked="" type="checkbox"/> Locked <input type="checkbox"/> Replaced <input type="checkbox"/> Needs replacement Headspace reading <input checked="" type="checkbox"/> Not measured _____ ppm Elevation mark <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Added <input type="checkbox"/> Other _____ Well diameter <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch <input type="checkbox"/> 6-inch <input type="checkbox"/> Other _____ <input type="checkbox"/> Odor _____ <input type="checkbox"/> Comments _____																					
<b>Purge Data</b> Total well depth <u>23.55</u> ft <input type="checkbox"/> Clean bottom <input type="checkbox"/> Muddy bottom <input checked="" type="checkbox"/> Not measured Depth to product _____ ft Depth to water <u>20.81</u> ft Casing volume <u>2.74</u> ft (H <sub>2</sub> O) X <u>0.16</u> gpf = <u>0.44</u> X 3 = <u>1.32</u> Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf																					
<b>Purge Method</b> Pump type <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Centrifugal <input type="checkbox"/> Submersible <input type="checkbox"/> Other _____ Purge tubing <input type="checkbox"/> New LDPE <input checked="" type="checkbox"/> New HDPE <input type="checkbox"/> New Teflon <input type="checkbox"/> New Tygon <input type="checkbox"/> Other _____ Bailer type <input type="checkbox"/> Disposable <input type="checkbox"/> Teflon <input type="checkbox"/> Stainless <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ Purge start time <u>1105</u> Purge stop time <u>1115</u> Purge rate <u>&lt; 0.1 Gpm</u>																					
<b>Field Parameters</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Meter used</th> <th style="text-align: left;">pH</th> <th style="text-align: left;">Temperature</th> <th style="text-align: left;">Conductivity</th> <th style="text-align: left;">Comments</th> </tr> </thead> <tbody> <tr> <td><u>CU-1</u> <input checked="" type="checkbox"/> HYDAC <input type="checkbox"/> pH2Tester <input type="checkbox"/> Hach <input type="checkbox"/> Other _____</td> <td><u>7.09</u></td> <td><u>69</u></td> <td><u>1001</u></td> <td><u>water is clear, slight odor</u></td> </tr> <tr> <td><u>CU-2</u></td> <td><u>6.80</u></td> <td><u>68</u></td> <td><u>922</u></td> <td><u>No steel</u></td> </tr> <tr> <td><u>CU-3</u></td> <td><u>6.77</u></td> <td><u>68</u></td> <td><u>911</u></td> <td></td> </tr> </tbody> </table> <div style="display: flex; justify-content: space-between;"> <span>Dissolved Oxygen _____</span> <span>Carbon Dioxide _____</span> </div>		Meter used	pH	Temperature	Conductivity	Comments	<u>CU-1</u> <input checked="" type="checkbox"/> HYDAC <input type="checkbox"/> pH2Tester <input type="checkbox"/> Hach <input type="checkbox"/> Other _____	<u>7.09</u>	<u>69</u>	<u>1001</u>	<u>water is clear, slight odor</u>	<u>CU-2</u>	<u>6.80</u>	<u>68</u>	<u>922</u>	<u>No steel</u>	<u>CU-3</u>	<u>6.77</u>	<u>68</u>	<u>911</u>	
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<b>Sampling Device</b> Bailer <input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Stainless <input type="checkbox"/> Teflon <input type="checkbox"/> Other _____ Filter Type _____ Size _____ (micron) <input type="checkbox"/> Other _____ Bailer cord used <input checked="" type="checkbox"/> Monofilament <input type="checkbox"/> Other _____																					
<b>Bottles Filled</b> Time <u>1125</u> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Number</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preservative</th> <th style="text-align: left;">Filtration</th> </tr> </thead> <tbody> <tr> <td><u>4</u></td> <td><input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td><u>1</u></td> <td><input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td><u>1</u></td> <td><input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td> </tr> <tr> <td>_____</td> <td><input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly</td> <td>HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> </tbody> </table> Samplers Signature <u>Craig Hays</u> Date <u>7-23-99</u>		Number	Type	Preservative	Filtration	<u>4</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
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# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>mw-3</u> Sample no. <u>w3</u> Date <u>7-28-99</u>	Project name <u>Larsen</u> Project no. _____ Collector <u>CH</u>																														
<b>Well Information</b> Monument condition <input checked="" type="checkbox"/> Good <input type="checkbox"/> Needs repair _____ Well cap condition <input type="checkbox"/> Good <input checked="" type="checkbox"/> Locked <input type="checkbox"/> Replaced <input type="checkbox"/> Needs replacement Headspace reading <input checked="" type="checkbox"/> Not measured _____ ppm Elevation mark <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Added <input type="checkbox"/> Other _____ Well diameter <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch <input type="checkbox"/> 6-inch <input type="checkbox"/> Other _____ <input type="checkbox"/> Odor _____ <input type="checkbox"/> Comments _____																															
<b>Purge Data</b> Total well depth <u>19.30</u> ft <input type="checkbox"/> Clean bottom <input type="checkbox"/> Muddy bottom <input checked="" type="checkbox"/> Not measured Depth to product _____ ft Depth to water <u>11.42</u> ft Casing volume <u>7.88</u> ft (H <sub>2</sub> O) X <u>0.16</u> gpf = <u>1.26</u> X 3 = <u>3.8</u> Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf																															
<b>Purge Method</b> Pump type <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Centrifugal <input type="checkbox"/> Submersible <input type="checkbox"/> Other _____ Purge tubing <input type="checkbox"/> New LDPE <input checked="" type="checkbox"/> New HDPE <input type="checkbox"/> New Teflon <input type="checkbox"/> New Tygon <input type="checkbox"/> Other _____ Bailer type <input type="checkbox"/> Disposable <input type="checkbox"/> Teflon <input type="checkbox"/> Stainless <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ Purge start time <u>0940</u> Purge stop time <u>0955</u> Purge rate <u>0.25</u> Gpm																															
<b>Field Parameters</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Meter used</td> <td style="width: 20%;"><input checked="" type="checkbox"/> HYDAC</td> <td style="width: 20%;"><input type="checkbox"/> pH2Tester</td> <td style="width: 20%;"><input type="checkbox"/> Hach</td> <td style="width: 20%;"><input type="checkbox"/> Other _____</td> </tr> <tr> <td>Gallons</td> <td>pH</td> <td>Temperature</td> <td>Conductivity</td> <td>Comments</td> </tr> <tr> <td><u>CV-1</u></td> <td><u>7.21</u></td> <td><u>65</u></td> <td><u>1630</u></td> <td><u>water is clear, no</u></td> </tr> <tr> <td><u>CV-2</u></td> <td><u>7.30</u></td> <td><u>65</u></td> <td><u>1641</u></td> <td><u>no sheen</u></td> </tr> <tr> <td><u>CV-3</u></td> <td><u>7.37</u></td> <td><u>65</u></td> <td><u>1635</u></td> <td></td> </tr> <tr> <td colspan="2">Dissolved Oxygen _____</td> <td colspan="3">Carbon Dioxide _____</td> </tr> </table>		Meter used	<input checked="" type="checkbox"/> HYDAC	<input type="checkbox"/> pH2Tester	<input type="checkbox"/> Hach	<input type="checkbox"/> Other _____	Gallons	pH	Temperature	Conductivity	Comments	<u>CV-1</u>	<u>7.21</u>	<u>65</u>	<u>1630</u>	<u>water is clear, no</u>	<u>CV-2</u>	<u>7.30</u>	<u>65</u>	<u>1641</u>	<u>no sheen</u>	<u>CV-3</u>	<u>7.37</u>	<u>65</u>	<u>1635</u>		Dissolved Oxygen _____		Carbon Dioxide _____		
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# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. mw-4  
Sample no. w4  
Date 7-23-99

Project name Larsen  
Project no. \_\_\_\_\_  
Collector CH

## Well Information

Monument condition ☒ Good ☐ Needs repair \_\_\_\_\_  
Well cap condition ☐ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
Headspace reading ☒ Not measured \_\_\_\_\_ ppm  
Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_  
☐ Odor \_\_\_\_\_ ☐ Comments \_\_\_\_\_

## Purge Data

Total well depth 25.37 ft ☐ Clean bottom ☐ Muddy bottom ☒ Not measured  
Depth to product \_\_\_\_\_ ft  
Depth to water 20.83 ft  
Casing volume 4.54 ft (H<sub>2</sub>O) X 0.16 gpf = 0.72 X 3 = 2.2  
Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

## Purge Method

Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
Purge start time 1025 Purge stop time 1040 Purge rate < 0.25 gpm

## Field Parameters

Meter used ☒ HYDAC ☐ pH2Tester ☐ Hach ☐ Other \_\_\_\_\_  
Gallons \_\_\_\_\_ pH \_\_\_\_\_ Temperature \_\_\_\_\_ Conductivity \_\_\_\_\_ Comments \_\_\_\_\_  
CV-1 7.48 66 22000 water is clear, no  
CV-2 7.52 66 1957 odor, no shear  
CV-3 7.57 66 1927 \_\_\_\_\_  
Dissolved Oxygen \_\_\_\_\_ Carbon Dioxide \_\_\_\_\_

## Sampling Device

Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

## Bottles Filled

Time 1050

Number	Type	Preservative	Filtration
<u>4</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

Samplers Signature [Signature] Date 7-23-99

# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. MW-5  
 Sample no. W5 / W7 = duplicate  
 Date 7-23-99

Project name Larsen  
 Project no. \_\_\_\_\_  
 Collector CH

## Well Information

Monument condition ☒ Good ☐ Needs repair \_\_\_\_\_  
 Well cap condition ☐ Good ☒ Locked ☐ Replaced ☐ Needs replacement  
 Headspace reading ☒ Not measured \_\_\_\_\_ ppm  
 Elevation mark ☒ Yes ☐ Added ☐ Other \_\_\_\_\_  
 Well diameter ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other \_\_\_\_\_  
☐ Odor \_\_\_\_\_ ☐ Comments \_\_\_\_\_

## Purge Data

Total well depth 33.26 ft ☐ Clean bottom ☐ Muddy bottom ☒ Not measured  
 Depth to product \_\_\_\_\_ ft  
 Depth to water 22.92 ft  
 Casing volume 10.34 ft (H<sub>2</sub>O) X 0.16 gpf = 1.65 X 3 = 5.0  
 Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf

## Purge Method

Pump type ☒ Peristaltic ☐ Centrifugal ☐ Submersible ☐ Other \_\_\_\_\_  
 Purge tubing ☐ New LDPE ☒ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other \_\_\_\_\_  
 Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other \_\_\_\_\_  
 Purge start time 1155 Purge stop time 1220 Purge rate 0.25 GPM

## Field Parameters

Meter used ☒ HYDAC ☐ pH2Tester ☐ Hach ☐ Other \_\_\_\_\_  

Gallons	pH	Temperature	Conductivity	Comments
CV-1	6.78	68	1978	Water has slight brown tint,
CV-2	6.88	68	1959	No odor, no smell
CV-3	6.91	68	1957	

Dissolved Oxygen \_\_\_\_\_ Carbon Dioxide \_\_\_\_\_

## Sampling Device

Bailer ☒ Disposable ☐ Stainless ☐ Teflon ☐ Other \_\_\_\_\_  
 Filter Type \_\_\_\_\_ Size \_\_\_\_\_ (micron) ☐ Other \_\_\_\_\_  
 Bailer cord used ☒ Monofilament ☐ Other \_\_\_\_\_

## Bottles Filled

Time 1230 (W5) 1405 (W7) duplicate sample  

Number	Type	Preservative	Filtration
<u>8</u>	<input checked="" type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>2</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input checked="" type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>1</u>	<input type="checkbox"/> VOA <input checked="" type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input checked="" type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
_____	<input type="checkbox"/> VOA <input type="checkbox"/> Amber <input type="checkbox"/> Poly	HCL <input type="checkbox"/> Nitric <input type="checkbox"/> Sulfuric <input type="checkbox"/> None <input type="checkbox"/> Other _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

Samplers Signature Craig Haly Date 7-28-99

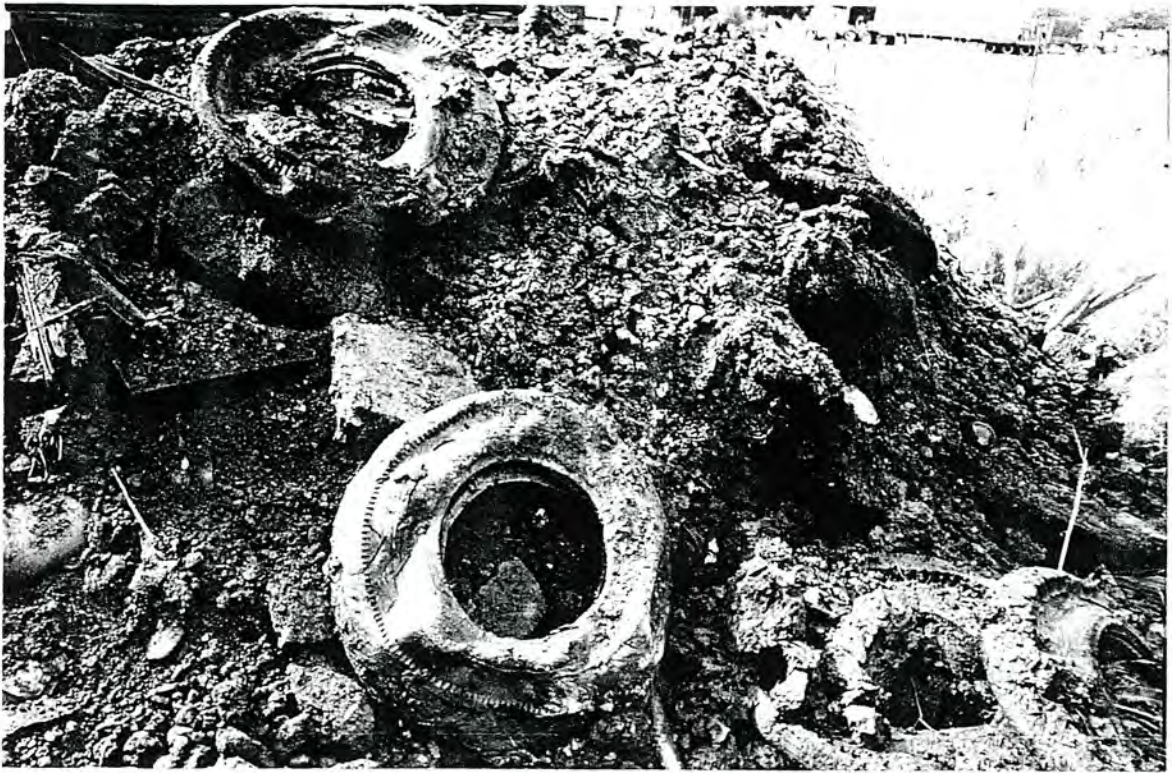


# GROUNDWATER SAMPLE COLLECTION FORM

Well ID no. <u>mw-6</u> Sample no. <u>w6</u> Date <u>7-28-99</u>	Project name <u>LARSEN</u> Project no. _____ Collector <u>CH</u>																								
<b>Well Information</b> Monument condition <input checked="" type="checkbox"/> Good <input type="checkbox"/> Needs repair _____ Well cap condition <input type="checkbox"/> Good <input checked="" type="checkbox"/> Locked <input type="checkbox"/> Replaced <input type="checkbox"/> Needs replacement Headspace reading <input checked="" type="checkbox"/> Not measured _____ ppm Elevation mark <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Added <input type="checkbox"/> Other _____ Well diameter <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch <input type="checkbox"/> 6-inch <input type="checkbox"/> Other _____ <input type="checkbox"/> Odor _____ <input type="checkbox"/> Comments _____																									
<b>Purge Data</b> Total well depth <u>27.99</u> ft <input type="checkbox"/> Clean bottom <input type="checkbox"/> Muddy bottom <input checked="" type="checkbox"/> Not measured Depth to product _____ ft Depth to water <u>17.05</u> ft Casing volume <u>10.94</u> ft (H <sub>2</sub> O) X <u>0.16</u> gpf = <u>1.75</u> X 3 = <u>5.25</u> Casing volumes 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf																									
<b>Purge Method</b> Pump type <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Centrifugal <input type="checkbox"/> Submersible <input type="checkbox"/> Other _____ Purge tubing <input type="checkbox"/> New LDPE <input checked="" type="checkbox"/> New HDPE <input type="checkbox"/> New Teflon <input type="checkbox"/> New Tygon <input type="checkbox"/> Other _____ Bailer type <input type="checkbox"/> Disposable <input type="checkbox"/> Teflon <input type="checkbox"/> Stainless <input type="checkbox"/> PVC <input type="checkbox"/> Other _____ Purge start time <u>1305</u> Purge stop time <u>1330</u> Purge rate <u>&lt; 0.25 Gpm</u>																									
<b>Field Parameters</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Meter used <input checked="" type="checkbox"/> HYDAC</td> <td style="width: 25%;"><input type="checkbox"/> pH2Tester</td> <td style="width: 25%;"><input type="checkbox"/> Hach</td> <td style="width: 25%;"><input type="checkbox"/> Other _____</td> </tr> <tr> <td>Gallons</td> <td>pH</td> <td>Temperature</td> <td>Conductivity</td> </tr> <tr> <td><u>CV-1</u></td> <td><u>6.71</u></td> <td><u>70</u></td> <td><u>1450</u></td> </tr> <tr> <td><u>CV-2</u></td> <td></td> <td><u>70</u></td> <td></td> </tr> <tr> <td><u>CV-3</u></td> <td></td> <td><u>69</u></td> <td></td> </tr> <tr> <td colspan="2">Dissolved Oxygen _____</td> <td colspan="2">Carbon Dioxide _____</td> </tr> </table>		Meter used <input checked="" type="checkbox"/> HYDAC	<input type="checkbox"/> pH2Tester	<input type="checkbox"/> Hach	<input type="checkbox"/> Other _____	Gallons	pH	Temperature	Conductivity	<u>CV-1</u>	<u>6.71</u>	<u>70</u>	<u>1450</u>	<u>CV-2</u>		<u>70</u>		<u>CV-3</u>		<u>69</u>		Dissolved Oxygen _____		Carbon Dioxide _____	
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Samplers Signature <u>[Signature]</u> Date <u>7-28-99</u>																									



**APPENDIX D**  
**SITE PHOTOGRAPHS**



Material from Test Pit TP-1



Perched Water in Test Pit TP-1





Test Pit TP-1



Test Pit TP-2





Material from Test Pit TP-3



Test Pit TP-3



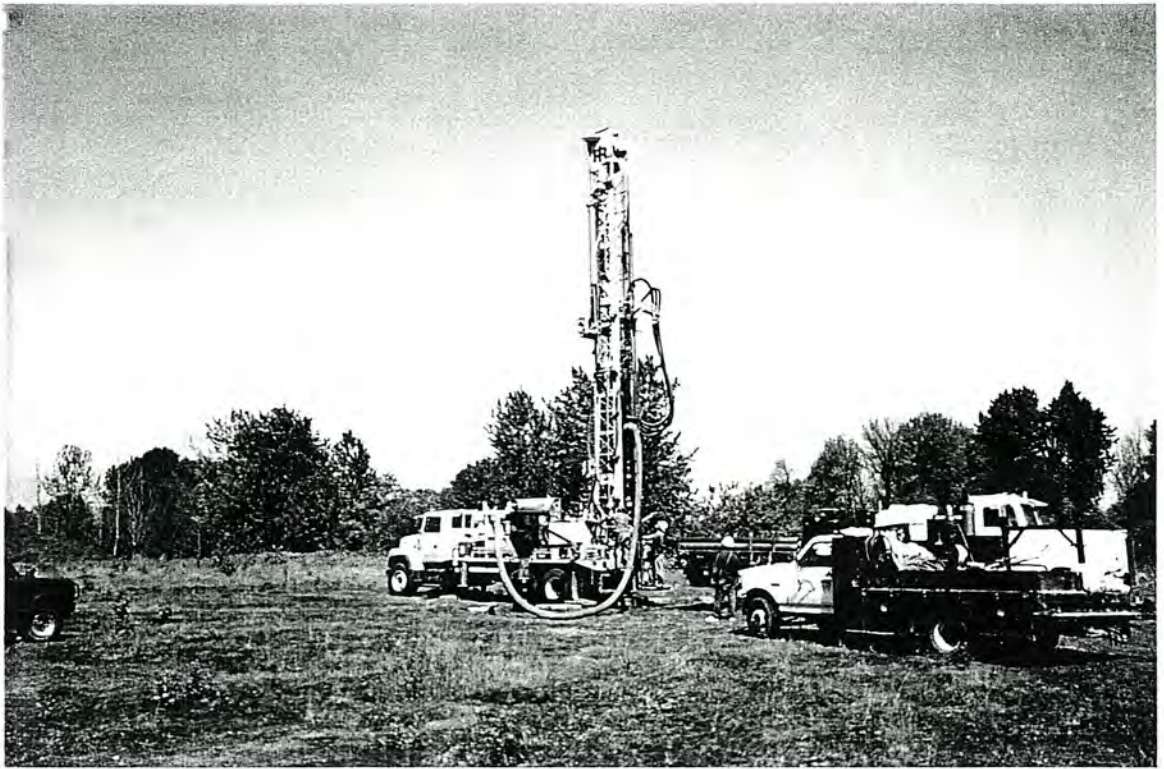
Drilling Monitoring Well MW-4



Drilling Monitoring Well MW-3







Drilling Monitoring Well MW-5



Drilling Monitoring Well MW-6



**ORIGINAL**

**LIMITED SITE INVESTIGATION AND  
GROUNDWATER MONITORING  
BACKFILLED RETENTION PONDS  
10505 NORTH PORTLAND ROAD  
PORTLAND, OREGON  
KLEINFELDER PROJECT NO. 60-5395-01**

**July 6, 2000**

*TP-6  
in the former lagoon - low  
high 0005*

*No ANALYSES  
FOR  
POSTCLOSURE  
PCBs  
CN-*

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July 6, 2000  
Kleinfelder Project Number 60-5395-01

Mr. John O'Donovan  
City of Portland  
Bureau of Environmental Services  
1120 SW 5<sup>th</sup> Avenue, Room 1000  
Portland, OR 97204

**Subject:      Limited Site Investigation  
                 And Groundwater Monitoring  
                 Backfilled Retention Ponds  
                 10505 North Portland Road  
                 Portland, Oregon**

Dear Mr. O'Donovan:

Kleinfelder, Inc., is pleased to present this report describing limited site investigation and groundwater monitoring for the above-referenced property in Portland, Oregon. The investigation was conducted in accordance with Kleinfelder, Inc.'s, proposal No. 60-YP5521 dated April 27, 2000. We trust this information will meet your needs at this time.

We appreciate the opportunity to be of service on this project. Should you require additional information or if questions arise regarding this report, please contact this office at your convenience.

Very truly yours,

**KLEINFELDER, INC.**

John M. Day, R.G.  
Senior Project Manager

Peter L. Stroud, C.E.G.  
Environmental Group Leader

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2. Site Plan and Test Pit Locations
3. Groundwater Elevation Contour Map



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- B. Soil Sample Analytical Data Reports and Chain-of-Custody Forms
- C. Groundwater and Monitoring Well Sample Analytical Data Report and Chain-of-Custody Form

## 1.0 INTRODUCTION

This report describes the field activities and results of limited site investigation and groundwater monitoring at a property located at 10505 North Portland Road in Portland, Oregon (Figure 1). The property is informally referred to as the Larsen property. We understand that the City of Portland is considering purchasing the subject property.

Environmental impacts to soil and groundwater were previously detected by others in the area of the backfilled retention ponds located in the western portion of the property. The purpose of the investigation was to provide a preliminary evaluation of the potential presence of contaminants that may be currently present in soil and groundwater beneath the site from historic operations at and in the vicinity of the subject property. The field activities consisted of excavating 16 test pits in and around the former retention ponds for collection and analysis of grab soil samples, and collection and analysis of groundwater samples from six existing, onsite monitoring wells.

## 2.0 SITE DESCRIPTION

The subject property address is 10505 North Portland Road in Portland, Oregon (Figure 1). The site is situated in the northwest quarter of Section 5, Township 1 North, Range 1 East, Willamette Meridian (U.S. Geological Survey, 1990). The site encompasses approximately 13.3 acres.

The area of concern is located in the northern portion of the property where the former retention ponds are located. The ponds are located in the western portion of the area of concern. A bark dust processing company currently operates in the area of the former ponds. Several large bark dust stockpiles were located over portions of the southern and northeast ponds. The northwest pond is located adjacent to the Columbia Slough. The eastern portion of the area of concern contains a fenced storage area in the southeast corner, a building with a former truck washing pad in the northeast corner, and the remainder of this area is used for materials storage (Figure 2).

The area of concern is essentially level over a majority of the site and slopes moderately to steeply along the northern property boundary adjacent to the Columbia Slough. The property is bounded to the north by the Columbia Slough, to the south by the former Arrow Transportation facility, to the east by North Portland Road and a railroad right-of-way, and to the west by Columbia Steel.

### 3.0 BACKGROUND

St. John's Motor Express Bulk Liquid/Heavy Haul transportation company began operations at the site in 1964. Tank truck rinsate was discharged to natural ponds onsite. The company was purchased by Glenn Widing in 1967 and renamed Widing Transportation Company, Inc. (Widing). Widing continued the tank truck rinsing practices until 1975 when the ponds were replaced by a six-cell aeration treatment system and 30-acre artificial lagoons (retention ponds). Overflow from the treatment system was discharged to the lagoons. Pretreatment sludges were hauled to Chem-Nuclear in Arlington.

In 1980, Widing was directed by the U.S. Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (DEQ) to fill in the lagoons due to the discovery of hazardous materials in the pond sludge layer (several inches thick). Results of sludge and water samples indicated phenols, phthalate, and heavy metals were present, but the concentrations detected did not qualify the sludge as a RCRA hazardous waste. The regulators agreed that the sludge could be left in place as long as a high clay content backfill was used. The lagoons have not been used since filling was accomplished. Truck rinsing continued after 1980, but the rinsate was discharged to the sanitary sewer system.

An estimate of waste generated at the facility in 1980 included 400 gallons per year (gal/yr) of oily waste; 35,000 gal/yr of phenolic resin waste; and 3,000 gal/yr of defoamer waste. Results of a 1978 study showed the following cargos had been carried by trucks being cleaned at the onsite facility: acids, caustics, defoamer, formaldehyde, latex, lignin liquor, organic solvent, phenol, polyvinyl acetate, resins, sodium silicate, sulphur lime, tall oil, wax, and wood preservative (Ecology and Environment, 1981).

1973: 35 TRUCKS PER DAY; 1000-1500 GAL TREATMENT/TRUCK

1979  
TELONE II  
INSECTICIDES  
PCP  
PHENOLS  
THINNAIR  
ETC

Arrow Transportation (Arrow) took over the site operations in 1986 (south of the subject area) and continued to discharge treated rinsate to the sanitary sewer system. Arrow reported a 75 to 100 gallon diesel fuel spill in December 1987. The spill was contained in a man-made collection system and cleaned up. In 1995, several underground storage tanks (USTs) were decommissioned at the subject property. The USTs included a fuel oil, a motor oil, a waste oil, a gasoline fuel, and two diesel fuel USTs. Limited soil contamination was encountered, removed, treated onsite, and used as onsite backfill. A pocket of petroleum hydrocarbon contamination was left in-place beneath an onsite building (approximately 100 to 200 cubic yards of soil). No groundwater was encountered during the decommissioning activities. DEQ issued a No Further Action letter in March 1995 (DEQ, 1995).

SEVERAL  
OTHER  
SPILLS:  
DIESEL 6/91  
HCL 10/93  
H<sub>2</sub>PO<sub>4</sub> (6/90)  
(9/96) FORMALIN CHLORINE  
KOH (4/00)  
MOTOR OIL (5/97)  
55,000 AM  
TPH  
(SAPPHIRE)  
SOIL/FUEL  
PROJECT

6/93 COMPLAINT  
SPILLS COVERED  
UP WITH GRAVEL

11/92 COMPLAINT  
LUST REMOVED  
CLEANUP

JULY 6, 2000



A Phase II Environmental Investigation conducted in 1998 for the subject property (PNG Environmental, Inc., 1999) indicates a residual sludge layer was not encountered in three test pits excavated within the former retention ponds, and that compounds related to residual sludge deposits (phenols) were not detected in soil samples. Low levels of petroleum constituents and phenolic compounds were detected in the onsite monitoring wells. The detected constituents were attributed to either the adjacent water treatment process area or to the former retention pond fill soils. Groundwater was calculated to flow towards the northwest toward the Columbia Slough.

#### 4.0 RETENTION POND TEST PITS

On May 17 and 18, 2000, 16 test pits (TP-1 through TP-16) were excavated in the former retention ponds using a Kobelco trackhoe operated by Raven and Associates, Inc., (Raven) based in Gresham, Oregon. The test pits were advanced to observe subsurface soil conditions and to collect soil and select grab groundwater samples for potential laboratory analyses. The test pits were advanced to total depths of approximately 12 to 21 feet below the ground surface (bgs). The test pits were advanced to the maximum reach of the trackhoe (19 to 21 feet bgs), or the test pit was terminated due to abundant seepage that caused excessive soil stockpile runoff (test pit TP-6 was terminated at 15 feet bgs and test pit TP-16 was terminated at 12 feet bgs). The test pit locations are shown on Figure 2.

Soil and grab groundwater samples were collected during trenching as described in the following sections. A Kleinfelder geologist was onsite to observe the subsurface soil conditions and maintain a log of the test pits. Test pit logs are provided in Appendix A. Following completion of the test pitting, the test pits were backfilled with the excavated soil and the surface was trackrolled.

##### 4.1 *Soil Sampling and Field Screening*

Two or three grab soil samples were collected from each test pit for potential laboratory analysis. The soil samples were collected at various depths based on conditions encountered during test pitting. A summary of the test pit sample numbers and depths is provided in Table 1. The soil samples were collected with the aid of the trackhoe bucket. Care was taken to collect soil that had not contacted the sides of the bucket. New, disposable, nitrile gloves were worn and replaced for each sample collected.

The soil samples were divided into a field screen sample and an archive sample. The field screen samples were screened in the field using a portable photoionization detector (PID) to evaluate the relative concentration of volatile organic vapors. The field screen samples were placed into ziplock plastic bags and allowed to volatilize before measuring the total volatile organic vapor concentration with the PID. The archive samples were placed in laboratory prepared containers, labeled, and immediately stored in a chilled cooler for potential laboratory analysis. The soil samples were transported under chain-of-custody documentation to the analytical laboratory.

#### **4.2 *Grab Groundwater Sampling***

One grab groundwater sample was collected from test pit TP-6 because hydrocarbon odors and a sheen were noted on the groundwater surface. The sample was collected by lowering a new, disposable, polyethylene bailer into the test pit. The sample was transferred into laboratory prepared containers, labeled, and immediately stored in a chilled cooler for potential laboratory analysis. The water sample was transported under chain-of-custody documentation to the analytical laboratory.

#### **4.3 *Analytical Test Methods***

If two soil samples were collected from a test pit, both samples were selected for laboratory analyses. If three samples were collected from a test pit, two of the three soil samples were selected for analysis based on the field screening results and site observations. The soil samples were submitted using chain-of-custody documentation to City of Portland, Bureau of Environmental Services, Water Pollution Control Laboratory in Portland, Oregon. All selected soil samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (semi-VOCs) by EPA Method 8270, and total RCRA 8 metals by EPA Method 6000/7000 series.

The grab groundwater sample collected from Test Pit TP-6 was analyzed for VOCs and semi-VOCs by the methods described above, and for dissolved RCRA 8 metals by EPA Method 200 series.

Copies of the soil analytical data reports and chain-of-custody forms are provided in Appendix B. A copy of the grab groundwater data report and chain-of custody form is provided in Appendix C. A summary of the soil analytical results is provided in Table 1. A summary of the grab groundwater analytical results is provided in Table 2.

## 5.0 GROUNDWATER MONITORING METHODS

On May 18, 2000, groundwater levels were measured in all site monitoring wells (MW-01 through MW-06) using an electronic oil-water interface probe. The monitoring well locations are shown on Figure 3.

Kleinfelder personnel sampled groundwater monitoring wells in accordance with the following protocols:

- The height of the water column within the well was calculated by subtracting the depth to water from the total depth of the well. The volume of the water column was calculated using the relationship  $V = 3.142r^2h$ , where V is the volume of water in cubic feet, r is the radius of the well in feet, and h is the height of the water column in feet.
- Prior to collecting groundwater samples, the monitoring wells were purged using one or a combination of the following equipment: 1) a nondedicated, disposable, polyethylene bailer for each well, or 2) a PVC, submersible electric pump fitted with new, disposable, PVC tubing replaced at each well location. A minimum of three casing volumes of groundwater were removed from the wells, or the wells were purged dry and allowed to recharge, prior to sampling. Temperature, pH, and specific conductivity were monitored during the well purge. Standards of known pH were used to calibrate the field meter prior to use.
- The contract laboratory prepared sample containers to conform with EPA-recommended preservation techniques for the analytes of concern.
- Groundwater samples were collected with new, clean, disposable, polyethylene bailers at each well location (same bailer used to purge the well, if applicable). Sample containers were open only as long as necessary to collect the samples.
- Sample containers were labeled with a sample number, date, and time, and stored in an ice chest containing frozen "blue ice." Chain-of-custody procedures documented sample handling.
- To reduce the potential for cross-contamination, non-disposable developing and sampling equipment were washed in a trisodium phosphate solution and rinsed with distilled water. New, disposable, nitrile gloves were worn and replaced at each well location.



The groundwater samples were submitted for laboratory analyses using chain-of-custody documentation to the City of Portland, Bureau of Environmental Services, Water Pollution Control Laboratory in Portland, Oregon. Similar to the soil samples, the monitoring well groundwater samples were analyzed for VOCs by EPA Method 8260, semi-VOCs by EPA Method 8270, and total RCRA 8 metals by EPA Method 6000/7000 series.

A copy of the analytical laboratory report and chain-of-custody form are provided in Appendix C. A summary of the monitoring well groundwater analytical results is provided in Table 3.

Purge water was transferred into 55-gallon drums, labelled, and left onsite.

## 6.0 RESULTS

### 6.1 *Former Retention Pond Test Pits*

#### 6.1.1 Subsurface Conditions

Subsurface conditions encountered in the test pits generally consisted of clayey to silty fill soils with varying amounts of debris (concrete, wood, plastic, brick, piping and rebar). Abundant large concrete and asphalt debris (up to 3 feet diameter) was encountered in a majority of the test pits from generally 6 to 14 feet bgs, although the thickness at each test pit location varied. The fill soils appeared to extend to a depth of at least 21 feet bgs in the large southern retention pond and the northwest retention pond. It should be noted that test pit TP-2 was excavated east of the pond limits delineated on the map provided by the City of Portland. A sludge layer indicative of bottom retention pond sediments was not observed in any of the test pits.

Potential native soils consisting of gray silt and sandy silt were encountered in the northeast retention pond. These soils were encountered in test pits TP-8 and TP-3 at depths of approximately 20.5 and 18 feet bgs, respectively.

Test pits TP-12, TP-13, and TP-14 were excavated outside of the edge of the ponds as delineated on the map provided by the City of Portland. Similar fill soils as described above were encountered in test pits TP-12, TP-13, and TP-14 to depths of approximately 21, 18, and 11 feet, respectively. Underlying the fill soils were apparent native soils generally consisting of gray or mottled brown and light brown, silt and clay.

Seepage was not encountered in all of the test pits. Where encountered, the observed seepage appeared to occur at depths ranging from approximately 7 to 20 feet bgs. The irregular seepage

depths are likely the result of the inhomogeneous nature of the fill soils. Groundwater was encountered in test pit TP-6 at approximately 13 feet bgs. The groundwater in test pit TP-6 is likely perched and limited in extent based on the absence of significant water bearing zones in the other test pits at this depth.

Fill soils stained black or gray were observed in test pits TP-1, TP-2, and TP-8 located in the northeast corner of the former retention pond area, and in TP-6 where a sheen and hydrocarbon odor were noted in the groundwater seepage. The field screening results indicated volatile organic vapors were not detected except in test pits TP-6 at the seepage depth (13 feet bgs), TP-10 at 16 feet bgs, and TP-12 at 21 feet bgs. No unusual odor or staining were noted in TP-10 or TP-12, and the volatile organic vapor results may be due to biogenic-related sources.

### 6.1.2 Soil Analytical Results

One VOC analyte, 2-butanone, was detected in all of the soil samples analyzed. It is our opinion that laboratory contamination is the cause of the reported 2-butanone concentrations, and the laboratory results for this analyte do not represent environmental conditions at the site.

Soil samples were collected and analyzed at various depths in the fill soils to assess potential environmental impacts throughout these materials. The analytical results of the fill soil samples indicated that in general, few VOC constituents (except in test pit TP-6) and semi-VOC constituents were detected. Other than in test pit TP-6 at 13 feet bgs, the other test pit VOC constituents detected (excluding 2-butanone) included: naphthalene (408 micrograms per kilogram ( $\mu\text{g/kg}$ )) and p-isopropylbenzene (126  $\mu\text{g/kg}$ ) in TP-2 at 19 feet bgs and 1,2,4-trimethylbenzene (299  $\mu\text{g/kg}$ ) and naphthalene (148  $\mu\text{g/kg}$ ) in TP-11 at 11 feet bgs. VOC constituents detected in test pit TP-6 at 13 feet bgs included: 1,1,2-trichloroethane (249  $\mu\text{g/kg}$ ); 1,2,4-trimethylbenzene (2,470  $\mu\text{g/kg}$ ); 1,2-dichlorobenzene (1,100  $\mu\text{g/kg}$ ); 1,4-dichlorobenzene (1,460  $\mu\text{g/kg}$ ); chlorobenzene (8,650  $\mu\text{g/kg}$ ); isopropylbenzene (402  $\mu\text{g/kg}$ ); total xylenes (3,390  $\mu\text{g/kg}$ ); n-butylbenzene (571  $\mu\text{g/kg}$ ); n-propylbenzene (646  $\mu\text{g/kg}$ ); naphthalene (3,020  $\mu\text{g/kg}$ ); p-isopropyltoluene (642  $\mu\text{g/kg}$ ); and sec-butylbenzene (232  $\mu\text{g/kg}$ ).



Semi-VOCs detected in the fill soil samples included: fluoranthene (38.83 milligrams per kilogram (mg/kg)) and pyrene (3.98 mg/kg) in TP-2 at 5 feet bgs; fluoranthene (1.11 mg/kg), phenanthrene (0.67 mg/kg), and pyrene (1.34 mg/kg) in TP-3 at 10 feet bgs; phenanthrene (28.9 mg/kg) in TP-6 at 13 feet bgs; fluoranthene (0.95 mg/kg) and pyrene (0.872 mg/kg) in TP-7 at 17 feet bgs; and benzyl butyl phthalate (0.46 mg/kg) in TP-15 at 21 feet bgs.

The following ranges in total RCRA 8 metals concentrations were detected in the fill soil samples: 2.0 to 21.7 mg/kg (arsenic); 80 to 220 mg/kg (barium); 0.70 to 3.36 mg/kg (cadmium); 14 to 35 mg/kg (chromium); 7.3 to 130 mg/kg (lead); 0.0075 to 4.88 mg/kg (mercury); less than detection limit of 0.25 to 0.32 mg/kg in TP-10 only (selenium); and silver was not detected at or above the laboratory method report limit of 0.30 mg/kg.

Samples of apparent native soils were collected in test pits TP-3 at 21 feet bgs, TP-8 at 19 feet bgs, TP-12 at 21 feet bgs, TP-13 at 19 and 21 feet bgs, and TP-14 at 12 and 20 feet bgs. The analytical results indicated VOCs and semi-VOCs were not detected at or above the laboratory method reporting limits in these samples. The maximum concentrations detected for the RCRA 8 metals were 9.11 mg/kg (arsenic), 220 mg/kg (barium), 0.19 mg/kg (cadmium), 31 mg/kg (chromium) 20 mg/kg (lead), 0.042 mg/kg (mercury), 0.27 mg/kg (selenium), and silver was not detected at the laboratory method reporting limit of 0.30 mg/kg.

### 6.1.3 Test Pit TP-6 Grab Groundwater Sample

The VOC constituents detected in the groundwater sample included: 1,2,4-trimethylbenzene (6.71 micrograms per liter (µg/L)); 1,2-dichlorobenzene (6.71 µg/L); 1,3,5-trimethylbenzene (1.92 µg/L); 1,4-dichlorobenzene (5.88 µg/L); acetone (43.0 µg/L); benzene (8.59 µg/L); chlorobenzene (129 µg/L); cis-1,2-dichloroethene (2.43 µg/L); ethylbenzene (58.9 µg/L); isopropylbenzene (1.93 µg/L); total xylenes (86.0 µg/L); n-butylbenzene (1.04 µg/L); n-propylbenzene (2.08 µg/L); naphthalene (17.1 µg/L); p-isopropyltoluene (19.2 µg/L); and vinyl chloride (1.71 µg/L).

The semi-VOC constituents detected in the grab groundwater sample included: 2-methylnaphthalene (14.7 µg/L); 3,4-methylphenol (10.1 µg/L); acenaphthene (10.5 µg/L); anthracene (11.3 µg/L); bis(2-ethylhexyl)phthalate (63.7 µg/L); fluoranthene (16.6 µg/L); naphthalene (23.3 µg/L); phenanthrene (34.0 µg/L); phenol (67.1 µg/L); and pyrene (15.3 µg/L).

The dissolved RCRA 8 metals analytical results indicated arsenic (0.058 milligrams per liter (mg/L)) and barium (0.019 mg/L) were detected. Cadmium, chromium, lead, mercury, selenium, and silver were not detected at or above the laboratory method reporting limits listed in Table 2.



## 6.2 Groundwater Monitoring Results

Free product was not detected in any of the onsite monitoring wells (wells MW-1 through MW-6). Static groundwater levels measured in the monitoring wells ranged from 10.73 to 20.83 feet below the top of the well casings, and the corresponding groundwater elevations ranged from 67.27 to 83.74 feet above mean sea level. The groundwater elevation data indicated the apparent, near-surface groundwater flow direction was towards the north to northwest (towards the Columbia Slough) with an average hydraulic gradient of approximately 0.002 ft/ft (Figure 3). PNG Environmental, Inc., attributed the water level in well MW-3 to a perched water zone. A similar anomalous water level was measured on May 18, 2000, by Kleinfelder, Inc. As a result, the water level in this well was not used in the evaluation of the groundwater flow direction and gradient.

Similar to the soil analytical results, the monitoring well groundwater analytical results indicate that, in general, few VOC constituents were detected and semi-VOCs were not detected at or above the laboratory method reporting limits. The VOC results are described below.

**MW-01:** VOC constituents detected were: benzene (1.13 micrograms per liter ( $\mu\text{g/L}$ )); chlorobenzene (4.21  $\mu\text{g/L}$ ); chloroethane (7.46  $\mu\text{g/L}$ ); hexachlorobutadiene (2.64  $\mu\text{g/L}$ ); and n-butylbenzene (1.01  $\mu\text{g/L}$ ).

**MW-02:** VOC constituents detected included only hexachlorobutadiene (3.01  $\mu\text{g/L}$ ).

**MW-03:** VOC constituents detected included acetone (18.5  $\mu\text{g/L}$ ) and hexachlorobutadiene (2.01  $\mu\text{g/L}$ ).

**MW-04:** VOC constituents detected included only 1,1-dichloroethane (1.71  $\mu\text{g/L}$ ).

**MW-05 and MW-06:** VOC constituents were not detected at or above the laboratory method reporting limits.

The following ranges in total RCRA 8 metals concentrations were detected in the monitoring well samples: 0.062 to 0.3 milligrams per liter (mg/L) (arsenic); 0.2 to 4.6 mg/L (barium); 0.049 mg/L (cadmium) detected in well MW-04 only; 0.2 to 1.1 mg/L (chromium); 0.44 to 5.7 mg/L (lead); 0.0005 to 0.0026 mg/L (mercury); selenium was not detected above the method reporting limit in any well; and silver was detected (0.015 mg/L) in well MW-04 only.

0.0014 ACUTE TOX

0.0034  
ACUTE  
TOX

0.0043 =  
ACUTE  
TOX

0.016 =  
0.57  
ACUTE  
EX

0.065  
ACUTE  
TOX

## 7.0 REGULATORY SCREENING LEVELS

State numeric soil cleanup standards for simple sites where groundwater has not been impacted are present in the Oregon Soil Cleanup Table (Oregon Administrative Rule (OAR) 340-122-045, Table 1 and Appendix 1) (DEQ, 1994). These cleanup standards can be used as screening levels where groundwater has been impacted. The state cleanup rules specify the total risk level for contaminants at a site cannot exceed one-in-a-million (risk level of  $1 \times 10^{-6}$ ). Federal Environmental Protection Agency (EPA), Region 9, Preliminary Remediation Goals (PRGs) (EPA, 1996) are also used for preliminary risk screening for soil at contaminated sites. The state and federal soil screening levels are provided in Table 4.

State groundwater numeric groundwater quality screening levels are also specified in the Oregon Soil Cleanup Table (Oregon Administrative Rule (OAR) 340-122-045, Appendix 1) (DEQ, 1994). The federal EPA, Region 9, PRGs (EPA, 1996) are also used for preliminary risk screening for groundwater. The state and federal groundwater screening levels are provided in Table 4. It should be noted that the groundwater PRGs are based on tap water ingestion. These values are used for preliminary evaluation of potential risks that may be posed by site contaminants.

## 8.0 FINDINGS AND CONCLUSIONS

The following findings and conclusions are based on Kleinfelder's knowledge of the subject property from information provided by the City of Portland, site observations, information gathered during this site characterization, and information collected by others during previous investigations. The conclusions are subject to the limitations presented in this report, and may change if additional information becomes available.

The former retention ponds contain fill soils (most notably evidenced by construction fill debris such as concrete, asphalt, wood, etc.) to depths greater than reported by previous investigations and information provided by the City of Portland. The fill soils extend to depths ranging from approximately 18 to 20.5 feet bgs in the northeast retention pond and greater than 21 feet bgs in the south and northeast retention ponds. A sludge layer was not observed in any of the test pits. Additionally, the fill soils extend beyond the former retention pond limits delineated by a map provided by the City of Portland. The extent of the fill soils was not completely delineated during this investigation and is unknown at this time.

Perched groundwater was observed at variable depths in the fill soils. The variable depths are likely due to the inhomogeneous nature of the fill soils. Seepage was encountered at various depths (7 to 20 feet bgs) in the test pits. Groundwater encountered in test pit TP-6 (13 feet bgs) is apparently perched based on the absence of significant water-bearing zones in the other test pits at the same depth. PNG Environmental, Inc., also noted that the water level in well MW-3 is likely related to a perched water zone. The apparent groundwater flow direction across the site is toward the Columbia Slough (towards the north to northwest). The static groundwater levels in the wells ranged from approximately 10.7 to 20.8 feet bgs.

Generally low total RCRA 8 metals concentrations were detected in all soil samples analyzed (fill soil and apparent native soil samples), and few VOC and semi-VOC constituents were detected except in test pit TP-6 at 13 feet bgs. An apparent, perched groundwater zone was encountered at 13 feet bgs in test pit TP-6. Except for arsenic, the detected constituents did not exceed the regulatory screening levels (DEQ industrial maximum allowable soil concentrations and EPA PRGs).

Arsenic was detected above the screening level (3.0 mg/kg) in 23 of the 33 soil samples analyzed. Arsenic was detected at the site ranging from 2.0 to 21.7 mg/kg with an average concentration of 5.43 mg/kg. It is our opinion that the arsenic concentrations in soil at the site are not significantly elevated compared to background based on the following:

- Background arsenic concentrations in surficial soils in Oregon (Boerngen and Shacklette, 1981) are reported to range from 1.1 to 12.0 mg/kg.
- Arsenic concentrations in test pit TP-6 were 20.9 and 21.7 mg/kg at 5 and 13 feet bgs, respectively, but all other concentrations did not exceed 9.1 mg/kg which is within the range of the reported background concentrations.
- Arsenic concentrations detected in the apparent native soil (3.33 to 9.11 mg/kg) are comparable to the concentrations detected in the fill soils.

Low levels of VOCs were detected in wells MW-01 through MW-04 which are located east of the former retention ponds. VOCs and Semi-VOCs were not detected in wells MW-5 and MW-6 located within the south and northwest ponds, respectively. The data suggest that the environmental impacts detected in wells MW-01 through MW-04 may be related to sources other than the former backfill soils in the former retention ponds. This interpretation is further supported considering that the highest level of VOCs detected were in well MW-01 which is upgradient of the former pond areas. Other potential sources of groundwater impacts are the



former Arrow Transportation facility located south (upgradient) of the pond area, and the former wash pad area east (crossgradient) of the pond area. Constituents that exceeded the regulatory screening levels in the monitoring well samples included: arsenic, barium, cadmium, chromium, lead, mercury, benzene, and hexachlorobutadiene. Considering that the shallow aquifer beneath the site is not currently a drinking water source, and is not likely to be used as a drinking water source in the foreseeable future, the metal contaminants listed above are not considered to be an immediate threat to human health or the environment.

Perched groundwater in the vicinity of test pit TP-6 contained generally low levels of numerous VOC and semi-VOC compounds (Table 2). Constituents that exceeded the screening levels in the grab groundwater sample collected from the test pit included: benzene; 1,4-dichlorobenzene; naphthalene; vinyl chloride; and bis (2-ethylhexyl)phthalate. Dissolved metals screening levels have not been established for comparison. The generally elevated soil and groundwater concentrations detected in test pit TP-6 suggest that the source for the contaminants is likely localized in the area of test pit TP-6.

## 9.0 RECOMMENDATIONS

The following recommendations are based on the results of this investigation and our knowledge of the site:

- The screening levels presented in this report are for preliminary purposes only and are based on conservative assumptions of potential exposure to the impacted media (i.e., groundwater ingestion). A site-specific risk assessment based on present and future exposure pathways could be conducted to develop site-specific cleanup levels.
- If further assessment of the groundwater conditions is desired, additional investigation could be performed to: 1) evaluate background groundwater concentrations of the constituents of concern, 2) evaluate the potential upgradient source(s) of the contaminants, and 3) further evaluate groundwater conditions within the former retention ponds.
- Additional assessment of the former retention pond backfill soils does not appear to be warranted at this time.

## 10.0 REFERENCES

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## 11.0 LIMITATIONS

Kleinfelder has performed the work described in this report in accordance with the generally accepted standard of care existing in the State of Oregon at the time of the assessment. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface and historical conditions applicable to the study area. More extensive studies including historical review, additional site exploration, soil and groundwater sampling, and chemical analyses may be used to supplement the information presented by this assessment. Kleinfelder should be notified for additional consultation if the City of Portland wishes to reduce uncertainties beyond the level associated with this assessment. Our assessment of the property may also change as new data becomes available during additional site exploration, remediation, or development.

Since activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of the report.

This report may be used only by the client and DEQ, and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both on and off-site) or other factors may change, and additional work may be required with the passage of time. Any party other than the client and DEQ who wishes to use this report shall notify Kleinfelder of such intended use and obtain permission. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the clients or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party.

No warranty, express or implied, is made.

## 12.0 PROFESSIONAL AUTHENTICATION

This report was prepared and reviewed by the undersigned. This report is void if original seal and signature are not present.



John M. Day, R.G.  
Senior Project Manager



Peter L. Stroud, C.E.G.  
Environmental Group Leader



TABLE 1 (page 1 of 5)  
SUMMARY OF SOIL ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	Sample Depth (ft bgs)	VOCs EPA Method 8260B (ug/kg) [1]	Semi-VOCs EPA Method 8270 (mg/kg) [1]	Total RCRA 8 Metals EPA Method 6000/7000 Series (mg/kg)
TP-1	5/17/2000	TP-1-7	7	2-butanone 6,440	not detected ND	Arsenic 2.62 Barium 120 Cadmium 0.078 Chromium 24 Lead 7.8 Mercury 0.0075 Selenium <0.25 Silver <0.3
		Faint HC0002 6-101				
TP-1	5/17/2000	TP-1-19	19	2-butanone 1,140	not detected ND	Arsenic 7.19 Barium 220 Cadmium 0.26 Chromium 24 Lead 74 Mercury 0.03 Selenium <0.25 Silver <0.3
TP-2	5/17/2000	TP-2-5	5	2-butanone 1,170	fluoranthene 3.83 pyrene 3.98	Arsenic 6.93 Barium 110 Cadmium 0.4 Chromium 22 Lead 24 Mercury 0.03 Selenium <0.25 Silver <0.3
TP-2	5/17/2000	TP-2-19	19	2-butanone 1,850 naphthalene 408 p-isopropyltoluene 126	not detected ND	Arsenic 6.45 Barium 120 Cadmium 0.19 Chromium 14 Lead 76 Mercury 4.88 Selenium <0.25 Silver <0.3
		Boraw SWL				
TP-3	5/17/2000	TP-3-10	10	2-butanone 1,100	fluoranthene 1.11 phenanthrene 0.67 pyrene 1.34	Arsenic 7.7 Barium 180 Cadmium 0.2 Chromium 26 Lead 31 Mercury 0.077 Selenium <0.25 Silver <0.3
TP-3	5/17/2000	TP-3-21	21	2-butanone 1,370	not detected ND	Arsenic 5.33 Barium 220 Cadmium 0.19 Chromium 31 Lead 20 Mercury 0.027 Selenium <0.25 Silver <0.3
		Boraw SWL				
TP-4	5/17/2000	TP-4-11	11	2-butanone 1,250	not detected ND	Arsenic 4.91 Barium 170 Cadmium 0.17 Chromium 25 Lead 22 Mercury 0.032 Selenium <0.25 Silver <0.3
TP-4	5/17/2000	TP-4-21	21	2-butanone 1,070	not detected ND	Arsenic 4.97 Barium 190 Cadmium 0.25 Chromium 26 Lead 130 Mercury 0.053 Selenium <0.25 Silver <0.3
		Boraw SWL				

TABLE 1 (page 2 of 5)  
SUMMARY OF SOIL ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	Sample Depth (ft bgs)	VOCs EPA Method 8260B (ug/kg) [1]	Semi-VOCs EPA Method 8270 (mg/kg) [1]	Total RCRA 8 Metals EPA Method 6000/7000 Series (mg/kg)
TP-5	5/17/2000	TP-5-11	11	2-butanone 1,010	not detected ND	Arsenic 2.76 Barium 150 Cadmium 0.08 Chromium 27 Lead 7.4 Mercury 0.021 Selenium <0.25 Silver <0.3
TP-5	5/17/2000	TP-5-21	21	2-butanone 1,060	not detected ND	Arsenic 6.94 Barium 150 Cadmium 0.27 Chromium 23 Lead 13 Mercury 0.025 Selenium <0.25 Silver <0.3
TP-6	5/17/2000	TP-6-5	5	2-butanone 1,210	not detected ND	Arsenic 20.9 Barium 210 Cadmium 0.13 Chromium 30 Lead 17 Mercury 0.037 Selenium <0.25 Silver <0.3
TP-6	5/17/2000	TP-6-13	13	1,1,2-trichloroethane 249 1,2,4-trimethylbenzene 2,470 1,2-dichlorobenzene 1,100 1,4-dichlorobenzene 1,460 chlorobenzene 8,650 isopropylbenzene 402 m,p-xylene 2,040 o-xylene 1,350 n-butylbenzene 571 n-propylbenzene 646 naphthalene 3,020 p-isopropyltoluene 642 sec-butylbenzene 232	phenanthrene 28.9 = 8.5 mg/kg = 8.7 mg/kg RRG = 1.0 mg/kg	Arsenic 21.7 Barium 140 Cadmium 3.36 Chromium 45 Lead 81 Mercury 0.13 Selenium <0.3 Silver <0.32
TP-7	5/17/2000	TP-7-5	5	2-butanone 1,220	not detected ND	Arsenic 2.69 Barium 130 Cadmium 0.13 Chromium 18 Lead 27 Mercury 0.04 Selenium <0.25 Silver <0.3
TP-7	5/17/2000	TP-7-17	17	2-butanone 1,220	fluoranthene 0.95 pyrene 0.872	Arsenic 2.56 Barium 80 Cadmium 0.11 Chromium 21 Lead 17 Mercury 0.024 Selenium <0.25 Silver <0.3
TP-8	5/17/2000	TP-8-5	5	2-butanone 1,320	not detected ND	Arsenic 6.38 Barium 130 Cadmium 0.17 Chromium 20 Lead 9.9 Mercury 0.018 Selenium <0.25 Silver <0.3

TABLE 1 (page 3 of 5)  
SUMMARY OF SOIL ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	Sample Depth (ft bgs)	VOCs EPA Method 8260B (ug/kg) [1]	Semi-VOCs EPA Method 8270 (mg/kg) [1]	Total RCRA 8 Metals EPA Method 6000/7000 Series (mg/kg)
TP-8	5/17/2000	TP-8-19	19	2-butanone 1,300	not detected ND	Arsenic 3.56 Barium 110 Cadmium 0.12 Chromium 17 Lead 7.3 Mercury 0.011 Selenium <0.25 Silver <0.3
TP-9	5/17/2000	TP-9-5	5	2-butanone 1,160	not detected ND	Arsenic 3.0 Barium 110 Cadmium 0.13 Chromium 18 Lead 18 Mercury 0.021 Selenium <0.25 Silver <0.3
TP-9	5/17/2000	TP-9-11	11	2-butanone 1,230	not detected ND	Arsenic 6.04 Barium 200 Cadmium 0.11 Chromium 25 Lead 17 Mercury 0.017 Selenium <0.25 Silver <0.3
TP-10	5/17/2000	TP-10-10	10	2-butanone 1,130	not detected ND	Arsenic 5.25 Barium 150 Cadmium 0.14 Chromium 27 Lead 56 Mercury 0.025 Selenium <0.25 Silver <0.3
TP-10	5/17/2000	TP-10-16	16	2-butanone 1,020	not detected ND	Arsenic 4.45 Barium 200 Cadmium 0.47 Chromium 25 Lead 74 Mercury 0.064 Selenium 0.32 Silver <0.3
TP-11	5/17/2000	TP-11-5	5	2-butanone 1,100	not detected ND	Arsenic 3.8 Barium 150 Cadmium 0.13 Chromium 22 Lead 17 Mercury 0.02 Selenium <0.25 Silver <0.3
TP-11	5/17/2000	TP-11-11	11	1,2,4-trimethylbenzene 299 2-butanone 1,300 naphthalene 148	not detected ND	Arsenic 4.51 Barium 110 Cadmium 0.3 Chromium 17 Lead 45 Mercury 0.028 Selenium <0.25 Silver <0.3
TP-11	5/17/2000	TP-11-21	21	2-butanone 1,180	not detected ND	Arsenic 2.0 Barium 100 Cadmium 0.083 Chromium 21 Lead 11 Mercury 0.0087 Selenium <0.25 Silver <0.3



TABLE 1 (page 4 of 5)  
SUMMARY OF SOIL ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	Sample Depth (ft bgs)	VOCs EPA Method 8260B (ug/kg) [1]	Semi-VOCs EPA Method 8270 (mg/kg) [1]	Total RCRA 8 Metals EPA Method 6000/7000 Series (mg/kg)
TP-12	5/18/2000	TP-12-5	5	2-butanone 1,580	not detected ND	Arsenic 2.4 Barium 140 Cadmium 0.07 Chromium 35 Lead 8.4 Mercury 0.036 Selenium <0.25 Silver <0.3
TP-12	5/18/2000	TP-12-21 PID 33	21	2-butanone 1,390	not detected ND	Arsenic 7.62 Barium 180 Cadmium 0.11 Chromium 25 Lead 15 Mercury 0.024 Selenium <0.25 Silver <0.3
TP-13	5/18/2000	TP-13-19	19	2-butanone 1,190	not detected ND	Arsenic 3.33 Barium 140 Cadmium 0.15 Chromium 22 Lead 4.8 Mercury 0.021 Selenium 0.27 Silver <0.3
TP-13	5/18/2000	TP-13-21	21	2-butanone 1,250	not detected ND	Arsenic 2.97 Barium 140 Cadmium 0.1 Chromium 25 Lead 4.7 Mercury 0.02 Selenium <0.25 Silver <0.3
TP-14	5/18/2000	TP-14-12	12	2-butanone 1,080	not detected ND	Arsenic 9.11 Barium 180 Cadmium 0.19 Chromium 26 Lead 19 Mercury 0.042 Selenium <0.25 Silver <0.3
TP-14	5/18/2000	TP-14-20	20	2-butanone 1,360	not detected ND	Arsenic 3.6 Barium 160 Cadmium 0.14 Chromium 19 Lead 6.7 Mercury 0.024 Selenium <0.25 Silver <0.3
TP-15	5/18/2000	TP-15-12	12	2-butanone 1,290	not detected ND	Arsenic 4.78 Barium 200 Cadmium 0.21 Chromium 22 Lead 22 Mercury 0.031 Selenium <0.25 Silver <0.3
TP-15	5/18/2000	TP-15-21	21	2-butanone 1,200	benzyl butyl phthalate 0.46	Arsenic 16.3 Barium 140 Cadmium 0.14 Chromium 28 Lead 8.9 Mercury 0.018 Selenium <0.25 Silver <0.3

TABLE 1 (page 5 of 5)  
SUMMARY OF SOIL ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	Sample Depth (ft bgs)	VOCs EPA Method 8260B (ug/kg) [1]	Semi-VOCs EPA Method 8270 (mg/kg) [1]	Total RCRA 8 Metals EPA Method 6000/7000 Series (mg/kg)
TP-16	5/18/2000	TP-16-5	5	2-butanone 1,270	not detected ND	Arsenic 2.98 Barium 150 Cadmium 0.13 Chromium 19 Lead 11 Mercury 0.014 Selenium <0.25 Silver <0.3
TP-16	5/18/2000	TP-16-9	9	2-butanone 1,210	not detected ND	Arsenic 2.35 Barium 100 Cadmium 0.11 Chromium 17 Lead 12 Mercury 0.026 Selenium <0.25 Silver <0.3

1. Only analytes detected at or above the laboratory method reporting limits are listed. The reporting limits are provided in the analytical data reports included in Appendix B.

VOCs Volatile Organic Compounds

RCRA Resource Conservation and Recovery Act

ug/kg Micrograms per kilogram, parts per billion.

mg/kg Milligrams per kilogram, parts per million.

<0.25 Not detected at or above the laboratory method reporting limit listed.

ND Analytes not detected at or above the laboratory method reporting limits. The reporting limits are provided in the analytical data reports included in Appendix B.

TABLE 2  
SUMMARY OF GRAB GROUNDWATER (TP-6) ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Test Pit No.	Sample Date	Sample Identification Number	VOCs EPA Method 8260B (ug/L) [1]	Semi-VOCs EPA Method 8270 (ug/L) [1]	Dissolved RCRA 8 Metals EPA Method 200 Series (mg/L)
TP-6	5/17/2000	TP-6	1,2,4-trimethylbenzene 10.4 1,2-dichlorobenzene 6.71 1,3,5-trimethylbenzene 19.2 1,4-dichlorobenzene 5.88 acetone 43 benzene 8.59 chlorobenzene 129 cis-1,2-dichloroethene 2.53 ethylbenzene 58.9 total xylenes 86 isopropylbenzene 1.93 n-butylbenzene 1.04 n-propylbenzene 2.08 naphthalene 17.1 p-isopropyltoluene 28.3 vinyl chloride 1.71	2-methylnaphthalene 14.7 3-,4-methylphenol 10.1 acenaphthene 10.5 anthracene 11.3 bis(2-ethylhexyl)phthalate 63.7 fluoranthene 16.6 naphthalene 23.3 phenanthrene 34 phenol 67.1 pyrene 15.3	Arsenic 0.058 Barium 0.019 Cadmium <0.03 Chromium <0.03 Lead <0.10 Mercury <0.0002 Selenium <0.01 Silver <0.01

1. Only analytes detected at or above the laboratory method reporting limits are listed. The reporting limits are provided in the analytical data reports included in Appendix C.

VOCs Volatile Organic Compounds

RCRA Resource Conservation and Recovery Act

ug/L Micrograms per liter, parts per billion.

mg/L Milligrams per kilogram, parts per million.

<0.03 Not detected at or above the laboratory method reporting limit listed.



TABLE 3  
SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Well No. Elevation [1] Diameter [2] Well Depth [3]	Sample Date	Sample Identification Number	Depth to Ground- water [3]	Ground- water Elevation [4]	Product Thickness [5]	VOCs EPA Methods 8260B (ug/L) [6]	Semi-VOCs EPA Method 8270 (ug/L) [6]	Total RCRA 8 Metals EPA Method 200 Series (mg/L)
MW-01 96.62 2 25	5/18/2000	MW1-05180	17.67	78.95	0.0	benzene 1.13 chlorobenzene 4.21 chloroethane 7.46 hexachlorobutadiene 2.64 n-butylbenzene 1.01	not detected ND	Arsenic <0.01 Barium 0.24 Cadmium <0.03 Chromium <0.03 Lead <0.1 Mercury 0.0007 Selenium <0.01 Silver <0.01
MW-02 88.08 2 23	5/18/2000	MW2-05180	20.81	67.27	0.0	hexachlorobutadiene 3.01	not detected ND	Arsenic 0.02 Barium 0.2 Cadmium <0.03 Chromium <0.03 Lead <0.1 Mercury <0.0002 Selenium <0.01 Silver <0.01
MW-03 94.47 2 20	5/18/2000	MW3-05180	10.73	83.74	0.0	acetone 18.5 hexachlorobutadiene 2.01	not detected ND	Arsenic 0.06 Barium 2.7 Cadmium <0.03 Chromium 0.5 Lead 1.5 Mercury 0.0026 Selenium <0.01 Silver <0.01
MW-04 94.01 2 22	5/18/2000	MW4-05180	19.76	74.25	0.0	1,1-dichloroethane 1.71	not detected ND	Arsenic 0.3 Barium 4.6 Cadmium 0.049 Chromium 1.1 Lead 5.7 Mercury 0.0024 Selenium <0.01 Silver 0.015
MW-05 94.18 2 33	5/18/2000	MW5-05180	20.83	73.35	0.0	not detected ND	not detected ND	Arsenic 0.062 Barium 1.7 Cadmium <0.03 Chromium 0.2 Lead 0.44 Mercury 0.0005 Selenium <0.01 Silver <0.01
MW-06 98.38 2 28	5/18/2000	MW6-05180	16.56	81.82	0.0	not detected ND	not detected ND	Arsenic 0.021 Barium 0.59 Cadmium <0.03 Chromium 0.032 Lead <0.10 Mercury <0.0002 Selenium <0.01 Silver <0.01

1. Mean Sea Level elevation in feet, surveyed to top of PVC well casing.
2. Well casing diameter in inches.
3. Depth in feet, measured from top of PVC well casing.
4. Mean Sea Level elevation in feet corrected for floating product, if applicable.
5. Non-aqueous phase floating product thickness in feet.
6. Only analytes detected at or above the laboratory method reporting limits are listed. The reporting limits are provided in the analytical data reports included in Appendix C.

<0.01 Concentration less than detection limit listed.  
VOCs Volatile Organic Compounds  
RCRA Resource Conservation and Recovery Act  
ug/L Micrograms per liter, parts per billion.  
mg/L Milligrams per liter, parts per million.  
ND Analytes not detected at or above the laboratory method reporting limits. The reporting limits are provided in the analytical data reports included in Appendix C.

TABLE 4 (page 1 of 3)  
SOIL AND GROUNDWATER SCREENING LEVELS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Analyte	Maximum Concentration of Detected Analytes	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Industrial Maximum Allowable Soil Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Industrial Sites	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Groundwater Reference Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Tap Water
<b>Analytes Detected in Soil</b>					
<b>TOTAL RCRA 8 METALS (mg/kg)</b>					
Arsenic	20.9	3	3	NA	NA
barium	220	140,000	100,000	NA	NA
cadmium	3.36	1,000	930	NA	NA
chromium	35	1,500	450	NA	NA
lead	130	2,000	1,000	NA	NA
mercury	4.88	600	560	NA	NA
selenium	0.32	NA	9,400	NA	NA
silver	<0.3	10,000	9,400	NA	NA
<b>VOCs (mg/kg)</b>					
2-butanone	6.44	NA	NA	NA	NA
naphthalene	3.02	8,000	190	NA	NA
p-isopropyltoluene	0.642	NA	NA	NA	NA
isopropylbenzene	0.402	NA	NA	NA	NA
1,1,2-trichloroethane	0.249	9,000	1.9	NA	NA
1,2,4-trimethylbenzene	2.46	NA	170	NA	NA
1,2-dichlorobenzene	1.10	NA	370	NA	NA
1,4-dichlorobenzene	1.46	NA	7.3	NA	NA
chlorobenzene	8.65	40,000	180	NA	NA
m,p-xylene and o-xylene	3.39	2,500	860	NA	NA
n-butylbenzene	0.571	NA	550	NA	NA
n-propylbenzene	0.646	NA	550	NA	NA
sec-butylbenzene	0.323	NA	410	NA	NA
<b>SEMI-VOCs (mg/kg)</b>					
fluoranthene	3.83	80,000	37,000	NA	NA
phenanthrene	0.67	NA	NA	NA	NA
pyrene	3.98	60,000	26,000	NA	NA
benzyl butyl phthalate	0.46	NA	930	NA	NA

TABLE 4 (page 2 of 3)  
SOIL AND GROUNDWATER SCREENING LEVELS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Analyte	Maximum Concentration of Detected Analytes	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Industrial Maximum Allowable Soil Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Industrial Sites	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Groundwater Reference Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Tap Water
<b>Analytes Detected in Groundwater</b>					
<b>TOTAL RCRA 8 METALS (mg/L)</b>					
Arsenic	0.3	NA	NA	0.00004	0.000045
barium	4.6	NA	NA	1	2.6
cadmium	0.049	NA	NA	0.005	0.018
chromium	1.1	NA	NA	0.1	NA
lead	5.7	NA	NA	0.015	0.004
mercury	0.0026	NA	NA	0.002	0.011
selenium	<0.01	NA	NA	0.01	0.18
silver	0.015	NA	NA	0.05	0.18
<b>VOCs (ug/L)</b>					
acetone	43	NA	NA	NA	610
benzene	8.59	NA	NA	0.005	0.39
ethylbenzene	58.9	NA	NA	700	1,300
total xylenes	86	NA	NA	7,000	2,800
1,1-dichloroethane	1.71	NA	NA	NA	810
n-butylbenzene	1.04	NA	NA	NA	61
n-propylbenzene	2.08	NA	NA	700	61
chlorobenzene	129	NA	NA	NA	390
chloroethane	7.46	NA	NA	NA	NA
hexachlorobutadiene	2.64	NA	NA	NA	0.86
1,2,4-trimethylbenzene	10.4	NA	NA	NA	12
1,3,5-trimethylbenzene	19.2	NA	NA	NA	12
1,2-dichlorobenzene	6.71	NA	NA	NA	370
1,4-dichlorobenzene	5.88	NA	NA	NA	0.47
cis-1,2-dichloroethene	2.53	NA	NA	70	61
isopropylbenzene	1.93	NA	NA	NA	NA
naphthalene	17.1	NA	NA	100	6.2
p-isopropyltoluene	28.3	NA	NA	NA	NA
vinyl chloride	1.71	NA	NA	0.04	0.02



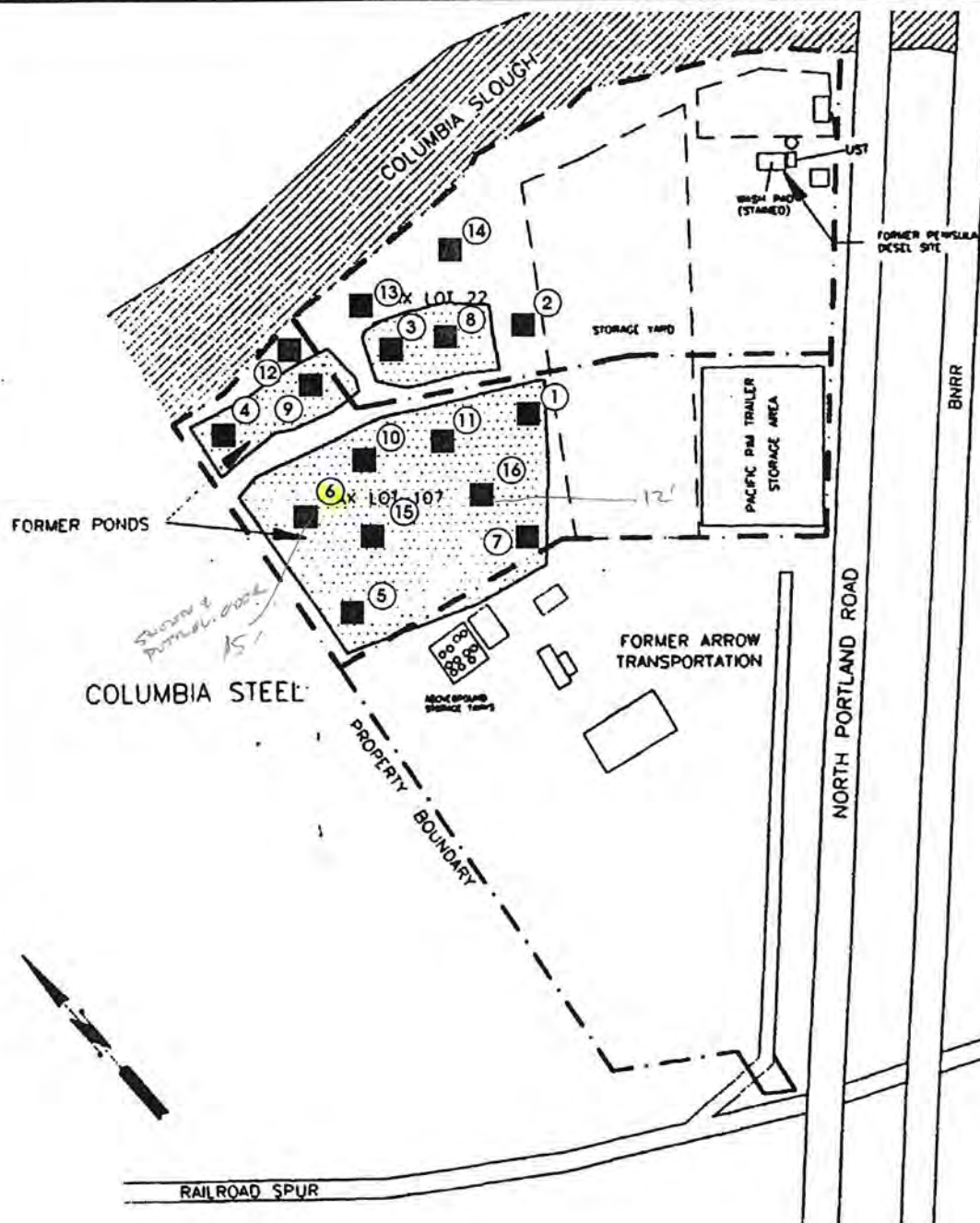
TABLE 4 (page 3 of 3)  
SOIL AND GROUNDWATER SCREENING LEVELS  
CITY OF PORTLAND  
10505 NORTH PORTLAND ROAD  
BACKFILLED RETENTION PONDS  
PORTLAND, OREGON

Analyte	Maximum Concentration of Detected Analytes	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Industrial Maximum Allowable Soil Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Industrial Sites	OAR 340-122-045 DEQ Oregon Soil Cleanup Table Appendix 1 Groundwater Reference Concentration [1]	EPA Region 9 Preliminary Remediation Goals (PRGs) Tap Water
<b>Analytes Detected in Groundwater</b>					
SEMI-VOCs (ug/L)					
Test Pit TP-6 Only					
2-methylnaphthalene	14.7	NA	NA	NA	NA
3-,4-methylphenol	10.1	NA	NA	NA	1,800
acenaphthene	10.5	NA	NA	2,000	370
anthracene	11.3	NA	NA	10,000	1,800
bis(2-ethylhexyl)phthalate	<b>63.7</b>	NA	NA	4	<b>4.8</b>
fluoranthene	16.6	NA	NA	1,000	1,500
naphthalene	<b>23.3</b>	NA	NA	100	<b>6.2</b>
phenanthrene	34.0	NA	NA	NA	NA
phenol	67.1	NA	NA	NA	22,000
pyrene	15.3	NA	NA	1,000	180

1. DEQ Environmental Cleanup Manual, June 1994.  
mg/kg Milligrams per kilogram, parts per million.  
ug/L Micrograms per liter, parts per billion  
mg/L Milligrams per liter, parts per million.  
<0.3 Not detected at or above the maximum laboratory method report limit listed.  
NA Cleanup level not established or not applicable.  
**bold** Exceeds one or more of the screening levels.







① Approximate test pit location and designation

Scale Approximate at 1" = 280'

Reference: Site map provided by City of Portland, From Phase II Environmental Investigation, Larsen Property, 10505 North Portland Road, Portland Oregon, Project #850-02, PNG Environmental Inc. Nov. 12, 1999



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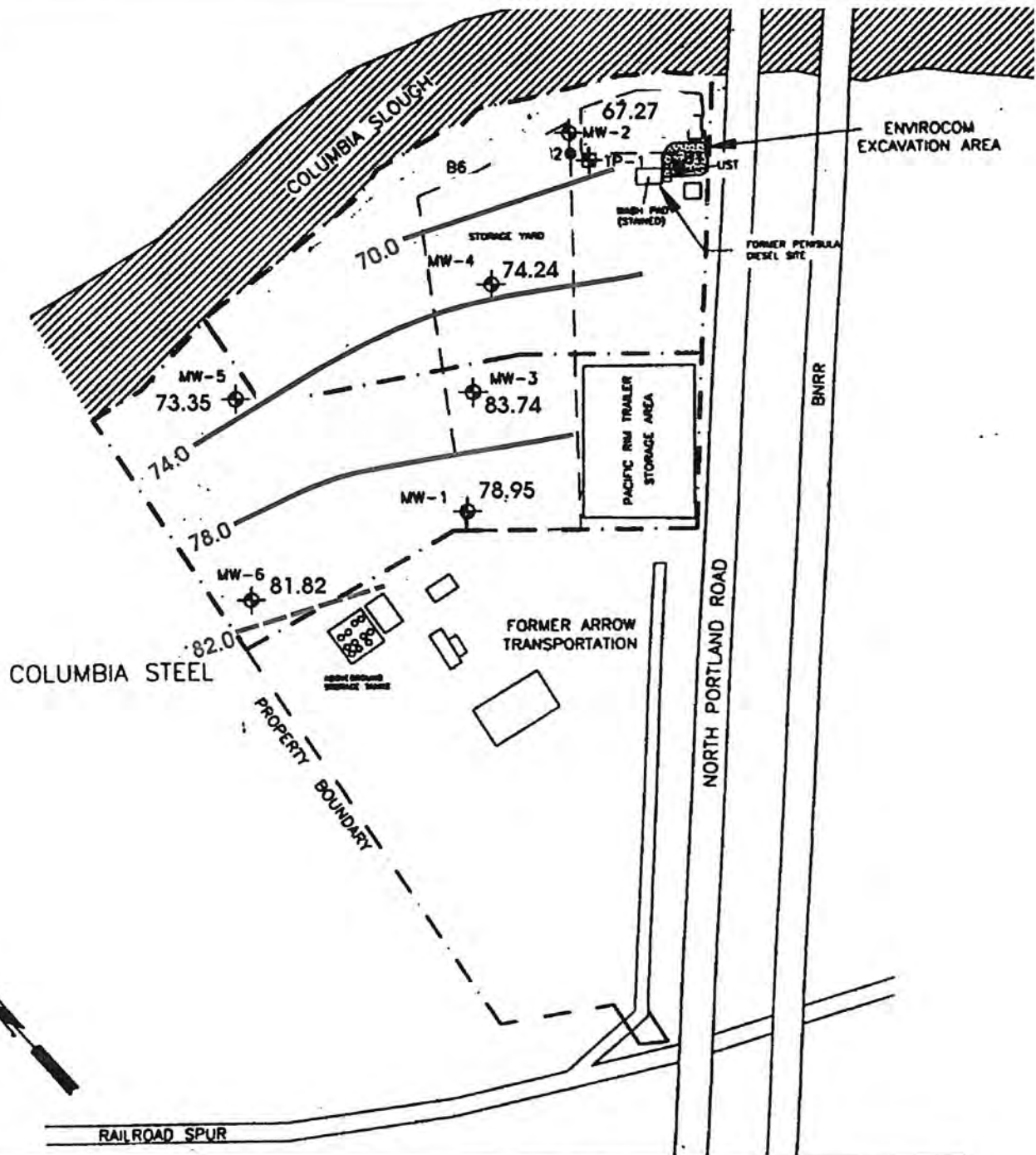
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SITE PLAN AND TEST PIT LOCATION MAP  
10505 NORTH PORTLAND ROAD  
CITY OF PORTLAND BES  
PORTLAND, OREGON

Project # 60-5395-01

**FIGURE 2**





MW-6 Monitoring Well Location and Designation (Installed by PNG Environmental Inc.)

81.82 Groundwater Elevation in Feet above mean sea level (msl)

82.0 Groundwater contour (feet above msl) dashed were uncertain

→ Inferred Groundwater flow direction.

Scale Approximate at 1" = 300'



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GROUNDWATER ELEVATION CONTOUR MAP  
10505 NORTH PORTLAND ROAD  
CITY OF PORTLAND BES  
PORTLAND, OREGON

Project # 60-5395-01

**FIGURE 3**

# SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS  MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS  MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS  (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS  MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS  (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS  MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS  LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS  LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
		HIGHLY ORGANIC SOILS			PT

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS



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## SOIL CLASSIFICATION LEGEND

Project # 60-5395-01

FIGURE A-1



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION NOTES:	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			Silt/Clay (ML/CL), moist, some concrete and asphalt chunks, no odor.				
5			- grades to predominately gray and black				
6-10			Abundant concrete/asphalt from 6-10', predominately black and gray, faint hydrocarbon odor, concrete up to 3' diameter.		TP-1-7'		PID = 0 ppmv
10			- less concrete				
15							
19			Test pit completed at 19' bgs.		TP-1-19'		PID = 0 ppmv
20							
25							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-1

FIGURE  
A-2



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY CHANGE AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION NOTES:	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			Silt/Clay (ML/CL), brown and gray, moist, with concrete, asphalt, piping, plastic, no odor.				
5			Abundant concrete/asphalt from 6-10'		TP-2-5'		PID = 0 ppmv
10			Becomes granular, gray, abundant brick, concrete, wood, no odor. Moisture increases with depth.				
15			- seepage at 17'				
20			Test pit completed at 19' bgs.		TP-2-19'		PID = 0 ppmv
25							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-2

FIGURE  
A-3

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay (ML/CL), mottled gray and brown with scattered concrete, no odor.				
5			Abundant concrete and brick 6-10'.				PID = 0 ppmv
10			Silty SAND, (SM), gray and black, moist, minor brick, wood and trash debris, no odor. Moisture increases with depth.		TP-3-10'		PID = 0 ppmv
15			- slight seepage				
20			- Sandy SILT, moist to wet, olive-gray, no odor. Possible native soil. Test pit completed at 21' bgs.		TP-3-21'		PID = 0 ppmv
25							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits





GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-3

FIGURE  
A-4

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silty/Clay, (ML/CL), moist, mottled light brown with slight gray, scattered debris (plastic, small concrete chunks), no odor.				
5							PID = 0 ppmv
10			Silty/Clay, (ML/CL), gray, moist to wet, some large concrete chunks, scattered wood, brick, no odor.		TP-4-11'		PID = 0 ppmv
15							
20			- seepage at 20'		TP-4-21'		PID = 0 ppmv
Test pit completed at 21' bgs.							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

**\*TESTS:** *M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits*



**GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING**

PROJECT NO. 60-5395-01

**City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-4**

**FIGURE**  
**A-5**



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silty/Clay, (ML/CL), brown, moist, small concrete chunks, no odor.				
5			- becomes gray				PID = 0 ppmv
10			Abundant large concrete debris to 3' diameter from 9-12', some seepage				
15			Clay/Silt, (CL/ML), with some sand, mottled brown and gray, predominately gray, moist to wet, scattered brick, concrete, wood debris, no odor.		TP-5-11'		PID = 0 ppmv
20							PID = 0 ppmv
25			Test pit completed at 21' bgs.				

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



**KLEINFELDER**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

**City of Portland**  
**10505 N. Portland Road**  
**Portland, Oregon**  
**TEST PIT LOG TP-5**

**FIGURE**  
**A-6**

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV: BY:

DEPTH (feet)	SOIL DESCRIPTION		SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
	NAME	SYMBOL				
0						
5						
				TP-6-5'		PID = 0 ppmv
10						
				TP-6-13'		PID = 30.5 ppmv
15						
20						
25						

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☒ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01



City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-6

FIGURE  
A-7

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION		SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
			NOTES:					
0			SILT, (ML), brown, moist, abundant cobbles/boulders to 1.5' diameter, no odor.					
5			Silty with some sand, (SM), predominately gray with brown mottling, abundant large concrete and asphalt debris, no odor.			TP-7-5'		PID = 0 ppmv
			- slight seepage at 7'					
10			Large concrete debris, less abundant than above.					
15								
						TP-7-17'		PID = 0 ppmv
20			Refusal at 19' bgs due to concrete.					
25								

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-7

FIGURE  
A-8



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Clay/Silt, (CL/ML), gray with brown mottling, moist, some sand and gravel, some small concrete chunks, no odor.				
5			Black to gray, slight increase in sand, abundant large concrete and asphalt debris, with brick and wood, no odor.		TP-8-5'		PID = 0 ppmv
10			- less large debris				PID = 0 ppmv
15							
20			Silty Sand/Sandy Silt, (SM/ML), gray, wet, no debris (possible native soil), no odor.		TP-8-19'		PID = 0 ppmv
Test pit completed at 21' bgs.							
25							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits



**KLEINFELDER**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

**City of Portland**  
**10505 N. Portland Road**  
**Portland, Oregon**  
**TEST PIT LOG TP-8**

**FIGURE**  
**A-9**

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

BY: \_\_\_\_\_ APPROV: \_\_\_\_\_

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION NOTES:	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			Silt/Clay, (ML/CL), moist with some sand, plastic and small concrete debris, no odor.				
5					TP-9-5'		PID = 0 ppmv
10			Abundant concrete and asphalt, some brick. Seepage at 8'.		TP-9-11'		PID = 0 ppmv
15			Silt/Clay, (ML/CL), with some sand, gray, wet, minor fill debris (wood, brick, rebar), no odor. Moisture increases with depth.				
20			- saturated at 20'				PID = 0 ppmv
25			Test pit completed at 21' bgs.				

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



**KLEINFELDER**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

**City of Portland**  
**10505 N. Portland Road**  
**Portland, Oregon**  
**TEST PIT LOG TP-9**

**FIGURE**  
**A-10**

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), brown with gray mottling, moist, minor pipe and small concrete debris, no odor.				
5							PID = 0 ppmv
10			Abundant large concrete, debris, gray, wet. Seepage at 8'.		TP-10-10'		PID = 0 ppmv
15			Silt/Clay, (ML/CL), with some sand, gray, moist, minor fill debris (wood, brick), no odor.		TP-10-16'		PID = 11.8 ppmv
20							PID = 0 ppmv
25			Test pit completed at 21' bgs.				

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☒ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-10

FIGURE  
A-11



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION NOTES:	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			Silt/Clay, (ML/CL), brown with gray mottling, moist, no odor.				
5					TP-11-5'		PID = 0 ppmv
10			Sandy clay/Clayey sand, (SC/CL), gray, wet, large concrete and asphalt, rebar, no odor. Seepage at 10'.		TP-11-11'		PID = 0 ppmv
15			Sandy clay, gray, saturated, moderate amount of concrete, wood, no odor.				
20					TP-11-21'		PID = 0 ppmv
Test pit completed at 21' bgs.							

DATE EXCAVATED: 5/17/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01





City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-11

FIGURE  
A-12

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), brown with slight gray and olive mottling, moist, moderate small concrete debris, no odor.				
5					TP-12-5'		PID = 0 ppmv
10							
15			Silt/Clay, (ML/CL), gray, moist to wet, large concrete up to 3' diameter, pipe, brick, no odor.		TP-12-15'		PID = 0 ppmv
20			Clay, (CL), mottled brown, orange brown and olive, moist to wet, no debris, no odor. Possible native soil.		TP-12-21'		PID = 33 ppmv (possible biorganic)
Test pit completed at 21' bgs.							
25	DATE EXCAVATED: 5/18/2000 REVIEWED BY: John Day						

+ SAMPLE TYPE:  Bulk  Grab  Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-12

FIGURE  
A-13

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), mottled brown and olive-gray, moist, some small concrete debris, no odor.				
5					TP-13-5'		PID = 0 ppmv
10			Clay/Silt, (CL/ML), gray with brown mottling, moist to wet, abundant large concrete chunks, plastic, large wood, brick, no odor.				
15					TP-13-15'		PID = 0 ppmv
20			Silt, (ML), gray, moist to wet, jumbled appearance, no fill debris, slight septic odor.		TP-13-19'		PID = 0 ppmv
					TP-13-20'		PID = 0 ppmv
Test pit completed at 21' bgs.							

DATE EXCAVATED: 5/18/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☒ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-13

FIGURE  
A-14



THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), brown, moist, abundant large concrete wood, brick, no odor.				
5					TP-14-5'		PID = 0 ppm
10							
12			Clay, (CL), gray, moist to wet, roots and rootlets, organic odor. Possible native soil.		TP-14-12'		PID = 0 ppm
15							
18			Mottled tan and light brown, moist to wet, no odor.				
20					TP-14-20'		PID = 0 ppmv
20			Test pit completed at 20' bgs.				
25							

DATE EXCAVATED: 5/18/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☒ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-14

FIGURE  
A-15

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

APPROV:

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), mottled brown and gray, moist, abundant asphalt and concrete, brick.				
5					TP-15-5'		PID = 0 ppmv
10			Sandy clay, (CL), abundant rounded cobbles, mottled brown and gray. Fast seepage at 9'.				
15			Clay, (CL), dark gray, moist to wet, some concrete.		TP-15-12'		PID = 0 ppmv
20			Silt/Clay, (ML/CL), mottled gray and brown, moist to wet, few scattered large asphalt and concrete chunks.				
25			Test pit completed at 21' bgs.		TP-15-21'		PID = 0 ppmv

DATE EXCAVATED: 5/18/2000  
REVIEWED BY: John Day

LOGGED BY: D. Lamadrid  
EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☒ Grab ☐ Shelby Tube

\*TESTS: M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane, Pp=Pocket Penetrometer, G=Grain Size, G2=% Passing No. 200 Sieve, A=Atterberg Limits



**KLEINFELDER**  
GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING

PROJECT NO. 60-5395-01

**City of Portland**  
**10505 N. Portland Road**  
**Portland, Oregon**  
**TEST PIT LOG TP-15**

**FIGURE**  
**A-16**

BY:

DEPTH (feet)	NAME	SYMBOL	SOIL DESCRIPTION	SAMPLE	SAMPLE NUMBER	MOISTURE CONTENT %	OTHER TESTS*
0			NOTES: Silt/Clay, (ML/CL), with some sand, brown with some gray mottling, moist, no odor. Moderate amount of concrete chunks.				
5					TP-16-5'		PID = 0 ppmv
			Silt/Clay, (ML/CL), gray, wet, abundant large concrete chunks, no odor.				
10			- abundant rounded cobbles, abundant seepage		TP-16-9'		PID = 0 ppmv
12	Test pit terminated at 12' due to excessive soil stockpile runoff.						
15							
20							
25							

DATE EXCAVATED: 5/18/2000

REVIEWED BY: John Day

LOGGED BY: D. Lamadrid

EQUIPMENT: Kobelco Trackhoe

+ SAMPLE TYPE: ☒ Bulk ☐ Grab ☐ Shelby Tube

**\*TESTS:** *M=Moisture Content(%), D=Dry Density(pcf), Tv=Torvane,  
Pp=Pocket Penetrometer, G=Grain Size,  
G2=% Passing No. 200 Sieve, A=Atterberg Limits*



**GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS  
SOILS AND MATERIALS TESTING**

PROJECT NO. 60-5395-01

**City of Portland  
10505 N. Portland Road  
Portland, Oregon  
TEST PIT LOG TP-16**

FIGURE

A-17







טט/טז/כ

sheet 2 of 2

PROJECT NO. 60-5395-01		PROJECT NAME 10505 N Portland Road		NO. OF CON- TAINERS	TYPE OF CON- TAINERS	ANALYSIS												RECEIVING LAB: City of Portland	
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number) David Zamadri David Zamadri				VOCs (8260) Semi-VOCs (8270) Total PCRA 8 (8260) Dissolved PCRA 8 (8270)												INSTRUCTIONS/REMARKS	
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX																
1	5/17/00	1530	TP-11-5'	Soil	4													LAB 000717	
2		1535	TP-11-11'	Soil	4	X	X	X										LAB 000718	
3		1556	TP-11-21'	Soil	4	X	X	X										LAB 000719	
4																			
5	↓	1220	TP-6	WATER	5	X	X							X				LAB 000720	
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
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15																			
16																			
17																			
18																			
19																			
20																			

Relinquished by: (Signature) David Zamadri	Date/Time 5/17/00 0750	Received by: (Signature) J. Corbett	Instructions/Remarks:	Send Results To:  KLEINFELDER 15050 S.W. KOLL PARKWAY SUITE L BEAVERTON, OR 97006 (503) 644-9447  Attn: John Day
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		

**M-60**

White - Sampler

Canary - Return Copy To Shipper

Pink - Lab Copy

№ 0833

## CHAIN OF CUSTODY





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 8:45 System ID AE04608 Sample ID LAB000697

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-7 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.62	mg/Kg	0.025	EPA 6020
BARIUM	120	mg/Kg	1.0	EPA 6010
CADMIUM	0.078	mg/Kg	0.025	EPA 6020
CHROMIUM	24	mg/Kg	1.0	EPA 6010
LEAD	7.8	mg/Kg	3.0	EPA 6010
MERCURY	0.0075	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 8:45 System ID AE04608 Sample ID LAB000697

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-7 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 8:45 System ID AE04608 Sample ID LAB000697

Page: 3  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-7 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 8:45 System ID AE04608 Sample ID LAB000697

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-7 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	6440	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 8:45 System ID AE04608 Sample ID LAB000697

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-7 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000697



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:00 System ID AE04609 Sample ID LAB000698

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	7.19	mg/Kg	0.025	EPA 6020
BARIUM	220	mg/Kg	1.0	EPA 6010
CADMIUM	0.26	mg/Kg	0.025	EPA 6020
CHROMIUM	24	mg/Kg	1.0	EPA 6010
LEAD	74	mg/Kg	3.0	EPA 6010
MERCURY	0.030	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:00 System ID AE04609 Sample ID LAB000698

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:00 System ID AE04609 Sample ID LAB000698

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:00 System ID AE04609 Sample ID LAB000698

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1140	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:00 System ID AE04609 Sample ID LAB000698

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-1-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000698





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:25 System ID AE04610 Sample ID LAB000699

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	6.93	mg/Kg	0.025	EPA 6020
BARIUM	110	mg/Kg	1.0	EPA 6010
CADMIUM	0.40	mg/Kg	0.025	EPA 6020
CHROMIUM	22	mg/Kg	1.0	EPA 6010
LEAD	24	mg/Kg	3.0	EPA 6010
MERCURY	0.030	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4,6-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Chlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylnaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitrophenol	<3.30	mg/Kg	3.30	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
3-Nitroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:25 System ID AE04610 Sample ID LAB000699

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B
4-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<3.30	mg/Kg	3.30	EPA 8270B
Acenaphthylene	<3.30	mg/Kg	3.30	EPA 8270B
Anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(b)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(g,h,i)perylene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(k)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzoic acid	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl alcohol	<3.30	mg/Kg	3.30	EPA 8270B
Benzyl butyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethoxy) methane	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroisopropyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<3.30	mg/Kg	3.30	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzo(a,h)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzofuran	<3.30	mg/Kg	3.30	EPA 8270B
Diethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dimethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Fluoranthene	3.83	mg/Kg	3.30	EPA 8270B
Fluorene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:25 System ID AE04610 Sample ID LAB000699

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Isophorone	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodi-n-propylamine	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodiphenylamine	<3.30	mg/Kg	3.30	EPA 8270B
Naphthalene	<3.30	mg/Kg	3.30	EPA 8270B
Nitrobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<3.30	mg/Kg	3.30	EPA 8270B
Phenol	<3.30	mg/Kg	3.30	EPA 8270B
Pyrene	3.98	mg/Kg	3.30	EPA 8270B
VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:25 System ID AE04610 Sample ID LAB000699

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1170	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:25 System ID AE04610 Sample ID LAB000699

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000699





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:40 System ID AE04611 Sample ID LAB000700

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	6.45	mg/Kg	0.025	EPA 6020
BARIUM	120	mg/Kg	1.0	EPA 6010
CADMIUM	0.19	mg/Kg	0.025	EPA 6020
CHROMIUM	14	mg/Kg	1.0	EPA 6010
LEAD	76	mg/Kg	3.0	EPA 6010
MERCURY	4.88	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4,6-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Chlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylnaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitrophenol	<3.30	mg/Kg	3.30	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
3-Nitroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:40 System ID AE04611 Sample ID LAB000700

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B
4-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<3.30	mg/Kg	3.30	EPA 8270B
Acenaphthylene	<3.30	mg/Kg	3.30	EPA 8270B
Anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(b)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(g,h,i)perylene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(k)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzoic acid	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl alcohol	<3.30	mg/Kg	3.30	EPA 8270B
Benzyl butyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethoxy) methane	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroisopropyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<3.30	mg/Kg	3.30	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzo(a,h)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzofuran	<3.30	mg/Kg	3.30	EPA 8270B
Diethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dimethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Fluorene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B

*(Signature)*





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:40 System ID AE04611 Sample ID LAB000700

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Isophorone	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodi-n-propylamine	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodiphenylamine	<3.30	mg/Kg	3.30	EPA 8270B
Naphthalene	<3.30	mg/Kg	3.30	EPA 8270B
Nitrobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<3.30	mg/Kg	3.30	EPA 8270B
Phenol	<3.30	mg/Kg	3.30	EPA 8270B
Pyrene	<3.30	mg/Kg	3.30	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:40 System ID AE04611 Sample ID LAB000700

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1850	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 9:40 System ID AE04611 Sample ID LAB000700

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-2-19 PROJECT 6064

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	408	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	126	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000700



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:10 System ID AE04612 Sample ID LAB000701

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	7.70	mg/Kg	0.025	EPA 6020
BARIUM	180	mg/Kg	1.0	EPA 6010
CADMIUM	0.20	mg/Kg	0.025	EPA 6020
CHROMIUM	26	mg/Kg	1.0	EPA 6010
LEAD	31	mg/Kg	3.0	EPA 6010
MERCURY	0.077	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:10 System ID AE04612 Sample ID LAB000701

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	1.11	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:10 System ID AE04612 Sample ID LAB000701

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	0.670	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	1.34	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:10 System ID AE04612 Sample ID LAB000701

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1100	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:10 System ID AE04612 Sample ID LAB000701

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000701





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:25 System ID AE04613 Sample ID LAB000702

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	5.33	mg/Kg	0.025	EPA 6020
BARIUM	220	mg/Kg	1.0	EPA 6010
CADMIUM	0.19	mg/Kg	0.025	EPA 6020
CHROMIUM	31	mg/Kg	1.0	EPA 6010
LEAD	20	mg/Kg	3.0	EPA 6010
MERCURY	0.027	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:25 System ID AE04613 Sample ID LAB000702

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:25 System ID AE04613 Sample ID LAB000702

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/17/00

10:25 System ID AE04613

Sample ID LAB000702

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1370	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:25 System ID AE04613 Sample ID LAB000702

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-3-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000702





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:45 System ID AE04614 Sample ID LAB000703

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	4.91	mg/Kg	0.025	EPA 6020
BARIUM	170	mg/Kg	1.0	EPA 6010
CADMIUM	0.17	mg/Kg	0.025	EPA 6020
CHROMIUM	25	mg/Kg	1.0	EPA 6010
LEAD	22	mg/Kg	3.0	EPA 6010
MERCURY	0.032	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:45 System ID AE04614 Sample ID LAB000703

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:45 System ID AE04614 Sample ID LAB000703

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:45 System ID AE04614

Sample ID LAB000703

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1250	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 10:45 System ID AE04614 Sample ID LAB000703

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000703



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report  
**PRELIMINARY**



Sample Date/Time 5/17/00 10:50 System ID AE04615 Sample ID LAB000704

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: INCOMPLETE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

< TCLP-Pb pending >

Test Parameter	Result	Units	MRL	Method
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**METALS**

ARSENIC	4.97	mg/Kg	0.025	EPA 6020
BARIUM	190	mg/Kg	1.0	EPA 6010
CADMIUM	0.25	mg/Kg	0.025	EPA 6020
CHROMIUM	26	mg/Kg	1.0	EPA 6010
LEAD	130	mg/Kg	3.0	EPA 6010
MERCURY	0.053	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010

**SEMI-VOLATILE ORGANICS**

1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report  
**PRELIMINARY**



Sample Date/Time 5/17/00 10:50 System ID AE04615 Sample ID LAB000704

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: INCOMPLETE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report

**PRELIMINARY**



Sample Date/Time 5/17/00 10:50 System ID AE04615 Sample ID LAB000704

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: INCOMPLETE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report  
**PRELIMINARY**



Sample Date/Time 5/17/00 10:50 System ID AE04615 Sample ID LAB000704

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: INCOMPLETE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1070	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report  
**PRELIMINARY**



Sample Date/Time 5/17/00 10:50 System ID AE04615 Sample ID LAB000704

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-4-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: INCOMPLETE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000704





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:15 System ID AE04616

Sample ID LAB000705

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.76	mg/Kg	0.025	EPA 6020
BARIUM	150	mg/Kg	1.0	EPA 6010
CADMIUM	0.080	mg/Kg	0.025	EPA 6020
CHROMIUM	27	mg/Kg	1.0	EPA 6010
LEAD	7.4	mg/Kg	3.0	EPA 6010
MERCURY	0.021	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:15 System ID AE04616 Sample ID LAB000705

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:15 System ID AE04616

Sample ID LAB000705

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:15 System ID AE04616 Sample ID LAB000705

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1010	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:15 System ID AE04616 Sample ID LAB000705

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000705





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:45 System ID AE04617 Sample ID LAB000706

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	6.94	mg/Kg	0.025	EPA 6020
BARIUM	150	mg/Kg	1.0	EPA 6010
CADMIUM	0.27	mg/Kg	0.025	EPA 6020
CHROMIUM	23	mg/Kg	1.0	EPA 6010
LEAD	13	mg/Kg	3.0	EPA 6010
MERCURY	0.025	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:45 System ID AE04617

Sample ID LAB000706

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:45 System ID AE04617 Sample ID LAB000706

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:45 System ID AE04617

Sample ID LAB000706

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1060	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 11:45 System ID AE04617 Sample ID LAB000706

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-5-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000706



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:00 System ID AE04618 Sample ID LAB000707

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	20.9	mg/Kg	0.025	EPA 6020
BARIUM	210	mg/Kg	1.0	EPA 6010
CADMIUM	0.13	mg/Kg	0.025	EPA 6020
CHROMIUM	30	mg/Kg	1.0	EPA 6010
LEAD	17	mg/Kg	3.0	EPA 6010
MERCURY	0.037	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.30	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:00 System ID AE04618 Sample ID LAB000707

Page: 2  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-5 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:00 System ID AE04618 Sample ID LAB000707

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:00 System ID AE04618 Sample ID LAB000707

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1210	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:00 System ID AE04618 Sample ID LAB000707

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000707





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:15 System ID AE04619 Sample ID LAB000708

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-13 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	21.7	mg/Kg	0.025	EPA 6020
BARIUM	140	mg/Kg	1.0	EPA 6010
CADMIUM	3.36	mg/Kg	0.025	EPA 6020
CHROMIUM	45	mg/Kg	1.0	EPA 6010
LEAD	81	mg/Kg	3.0	EPA 6010
MERCURY	0.13	mg/Kg	0.003	EPA 7471
SELENIUM	<0.30	mg/Kg	0.30	EPA 6020
SILVER	<0.32	mg/Kg	0.32	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<26.9	mg/Kg	26.9	EPA 8270B
1,2-Dichlorobenzene	<81.5	mg/Kg	81.5	EPA 8270B
1,3-Dichlorobenzene	<81.5	mg/Kg	81.5	EPA 8270B
1,4-Dichlorobenzene	<81.5	mg/Kg	81.5	EPA 8270B
2,4,5-Trichlorophenol	<26.9	mg/Kg	26.9	EPA 8270B
2,4,6-Trichlorophenol	<26.9	mg/Kg	26.9	EPA 8270B
2,4-Dichlorophenol	<26.9	mg/Kg	26.9	EPA 8270B
2,4-Dimethylphenol	<81.5	mg/Kg	81.5	EPA 8270B
2,4-Dinitrophenol	<163	mg/Kg	163	EPA 8270B
2,4-Dinitrotoluene	<40.8	mg/Kg	40.8	EPA 8270B
2,6-Dinitrotoluene	<40.8	mg/Kg	40.8	EPA 8270B
2-Chloronaphthalene	<26.9	mg/Kg	26.9	EPA 8270B
2-Chlorophenol	<26.9	mg/Kg	26.9	EPA 8270B
2-Methylnaphthalene	<26.9	mg/Kg	26.9	EPA 8270B
2-Methylphenol	<26.9	mg/Kg	26.9	EPA 8270B
2-Nitroaniline	<26.9	mg/Kg	26.9	EPA 8270B
2-Nitrophenol	<26.9	mg/Kg	26.9	EPA 8270B
3,3'-Dichlorobenzidine	<81.5	mg/Kg	81.5	EPA 8270B
3-Nitroaniline	<81.5	mg/Kg	81.5	EPA 8270B
4,6-Dinitro-2-methylphenol	<81.5	mg/Kg	81.5	EPA 8270B
4-Bromophenylphenyl ether	<26.9	mg/Kg	26.9	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:15 System ID AE04619

Sample ID LAB000708

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-13 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<26.9	mg/Kg	26.9	EPA 8270B
4-Chloroaniline	<163	mg/Kg	163	EPA 8270B
4-Chlorophenylphenyl ether	<26.9	mg/Kg	26.9	EPA 8270B
4-Methylphenol	<26.9	mg/Kg	26.9	EPA 8270B
4-Nitroaniline	<26.9	mg/Kg	26.9	EPA 8270B
4-Nitrophenol	<81.5	mg/Kg	81.5	EPA 8270B
Acenaphthene	<26.9	mg/Kg	26.9	EPA 8270B
Acenaphthylene	<26.9	mg/Kg	26.9	EPA 8270B
Anthracene	<26.9	mg/Kg	26.9	EPA 8270B
Benzo(a)anthracene	<26.9	mg/Kg	26.9	EPA 8270B
Benzo(a)pyrene	<26.9	mg/Kg	26.9	EPA 8270B
Benzo(b)fluoranthene	<26.9	mg/Kg	26.9	EPA 8270B
Benzo(g,h,i)perylene	<26.9	mg/Kg	26.9	EPA 8270B
Benzo(k)fluoranthene	<26.9	mg/Kg	26.9	EPA 8270B
Benzoic acid	<81.5	mg/Kg	81.5	EPA 8270B
Benzyl alcohol	<26.9	mg/Kg	26.9	EPA 8270B
Benzyl butyl phthalate	<26.9	mg/Kg	26.9	EPA 8270B
Bis(2-chloroethoxy) methane	<26.9	mg/Kg	26.9	EPA 8270B
Bis(2-chloroethyl) ether	<26.9	mg/Kg	26.9	EPA 8270B
Bis(2-chloroisopropyl) ether	<26.9	mg/Kg	26.9	EPA 8270B
Bis(2-ethylhexyl) phthalate	<163	mg/Kg	163	EPA 8270B
Chrysene	<26.9	mg/Kg	26.9	EPA 8270B
Di-n-butyl phthalate	<81.5	mg/Kg	81.5	EPA 8270B
Di-n-octyl phthalate	<26.9	mg/Kg	26.9	EPA 8270B
Dibenzo(a,h)anthracene	<26.9	mg/Kg	26.9	EPA 8270B
Dibenzofuran	<26.9	mg/Kg	26.9	EPA 8270B
Diethyl phthalate	<26.9	mg/Kg	26.9	EPA 8270B
Dimethyl phthalate	<26.9	mg/Kg	26.9	EPA 8270B
Fluoranthene	<26.9	mg/Kg	26.9	EPA 8270B
Fluorene	<26.9	mg/Kg	26.9	EPA 8270B
Hexachlorobenzene	<26.9	mg/Kg	26.9	EPA 8270B
Hexachlorobutadiene	<81.5	mg/Kg	81.5	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:15 System ID AE04619 Sample ID LAB000708

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-13 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<81.5	mg/Kg	81.5	EPA 8270B
Hexachloroethane	<81.5	mg/Kg	81.5	EPA 8270B
Indeno(1,2,3-cd)pyrene	<26.9	mg/Kg	26.9	EPA 8270B
Isophorone	<26.9	mg/Kg	26.9	EPA 8270B
N-Nitrosodi-n-propylamine	<26.9	mg/Kg	26.9	EPA 8270B
N-Nitrosodiphenylamine	<26.9	mg/Kg	26.9	EPA 8270B
Naphthalene	<26.9	mg/Kg	26.9	EPA 8270B
Nitrobenzene	<26.9	mg/Kg	26.9	EPA 8270B
Pentachlorophenol	<81.5	mg/Kg	81.5	EPA 8270B
Phenanthrene	28.9	mg/Kg	26.9	EPA 8270B
Phenol	<26.9	mg/Kg	26.9	EPA 8270B
Pyrene	<26.9	mg/Kg	26.9	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<204	µg/Kg	204	EPA 8260B
1,1,1-Trichloroethane	<204	µg/Kg	204	EPA 8260B
1,1,2,2-Tetrachloroethane	<204	µg/Kg	204	EPA 8260B
1,1,2-Trichloroethane	249	µg/Kg	204	EPA 8260B
1,1-Dichloroethane	<204	µg/Kg	204	EPA 8260B
1,1-Dichloroethene	<204	µg/Kg	204	EPA 8260B
1,1-Dichloropropene	<204	µg/Kg	204	EPA 8260B
1,2,3-Trichlorobenzene	<204	µg/Kg	204	EPA 8260B
1,2,3-Trichloropropane	<204	µg/Kg	204	EPA 8260B
1,2,4-Trichlorobenzene	<204	µg/Kg	204	EPA 8260B
1,2,4-Trimethylbenzene	2470	µg/Kg	204	EPA 8260B
1,2-Dibromo-3-chloropropane	<1020	µg/Kg	1020	EPA 8260B
1,2-Dibromoethane	<204	µg/Kg	204	EPA 8260B
1,2-Dichlorobenzene	1100	µg/Kg	204	EPA 8260B
1,2-Dichloroethane	<204	µg/Kg	204	EPA 8260B
1,2-Dichloropropane	<204	µg/Kg	204	EPA 8260B
1,3,5-Trimethylbenzene	<204	µg/Kg	204	EPA 8260B
1,3-Dichlorobenzene	<204	µg/Kg	204	EPA 8260B
1,3-Dichloropropane	<204	µg/Kg	204	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:15 System ID AE04619 Sample ID LAB000708

Page: 4  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-13 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments:

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	1460	µg/Kg	204	EPA 8260B
2,2-Dichloropropane	<204	µg/Kg	204	EPA 8260B
2-Butanone	<2040	µg/Kg	2040	EPA 8260B
2-Chlorotoluene	<204	µg/Kg	204	EPA 8260B
2-Hexanone	<2040	µg/Kg	2040	EPA 8260B
4-Chlorotoluene	<204	µg/Kg	204	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<1020	µg/Kg	1020	EPA 8260B
Acetone	<2040	µg/Kg	2040	EPA 8260B
Benzene	<204	µg/Kg	204	EPA 8260B
Bromobenzene	<204	µg/Kg	204	EPA 8260B
Bromochloromethane	<204	µg/Kg	204	EPA 8260B
Bromodichloromethane	<204	µg/Kg	204	EPA 8260B
Bromoform	<204	µg/Kg	204	EPA 8260B
Bromomethane	<1020	µg/Kg	1020	EPA 8260B
Carbon disulfide	<2040	µg/Kg	2040	EPA 8260B
Carbon tetrachloride	<204	µg/Kg	204	EPA 8260B
Chlorobenzene	8650	µg/Kg	204	EPA 8260B
Chloroethane	<204	µg/Kg	204	EPA 8260B
Chloroform	<204	µg/Kg	204	EPA 8260B
Chloromethane	<1020	µg/Kg	1020	EPA 8260B
cis-1,2-Dichloroethene	<204	µg/Kg	204	EPA 8260B
cis-1,3-Dichloropropene	<204	µg/Kg	204	EPA 8260B
Dibromochloromethane	<204	µg/Kg	204	EPA 8260B
Dibromomethane	<204	µg/Kg	204	EPA 8260B
Dichlorodifluoromethane	<1020	µg/Kg	1020	EPA 8260B
Ethylbenzene	<204	µg/Kg	204	EPA 8260B
Hexachlorobutadiene	<408	µg/Kg	408	EPA 8260B
Isopropylbenzene	402	µg/Kg	204	EPA 8260B
m,p-Xylene	2040	µg/Kg	408	EPA 8260B
Methylene chloride	<1020	µg/Kg	1020	EPA 8260B
n-Butylbenzene	571	µg/Kg	204	EPA 8260B
n-Propylbenzene	646	µg/Kg	204	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:15 System ID AE04619 Sample ID LAB000708

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6-13 PROJECT 6064  
Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments:

Test Parameter	Result	Units	MRL	Method
Naphthalene	3020	µg/Kg	204	EPA 8260B
o-Xylene	1350	µg/Kg	204	EPA 8260B
p-Isopropyltoluene	642	µg/Kg	204	EPA 8260B
sec-Butylbenzene	232	µg/Kg	204	EPA 8260B
Styrene	<204	µg/Kg	204	EPA 8260B
tert-Butylbenzene	<204	µg/Kg	204	EPA 8260B
Tetrachloroethene	<204	µg/Kg	204	EPA 8260B
Toluene	<204	µg/Kg	204	EPA 8260B
trans-1,2-Dichloroethene	<204	µg/Kg	204	EPA 8260B
trans-1,3-Dichloropropene	<204	µg/Kg	204	EPA 8260B
Trichloroethene	<204	µg/Kg	204	EPA 8260B
Trichlorofluoromethane	<204	µg/Kg	204	EPA 8260B
Vinyl chloride	<204	µg/Kg	204	EPA 8260B

End of Report for Sample ID: LAB000708





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:50 System ID AE04620

Sample ID LAB000709

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.69	mg/Kg	0.025	EPA 6020
BARIUM	130	mg/Kg	1.0	EPA 6010
CADMIUM	0.13	mg/Kg	0.025	EPA 6020
CHROMIUM	18	mg/Kg	1.0	EPA 6010
LEAD	27	mg/Kg	3.0	EPA 6010
MERCURY	0.040	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:50 System ID AE04620 Sample ID LAB000709

Page: 2  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-5 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:50 System ID AE04620

Sample ID LAB000709

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:50 System ID AE04620 Sample ID LAB000709

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1220	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 12:50 System ID AE04620

Sample ID LAB000709

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000709



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:00 System ID AE04621 Sample ID LAB000710

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-17 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.56	mg/Kg	0.025	EPA 6020
BARIUM	80	mg/Kg	1.0	EPA 6010
CADMIUM	0.11	mg/Kg	0.025	EPA 6020
CHROMIUM	21	mg/Kg	1.0	EPA 6010
LEAD	17	mg/Kg	3.0	EPA 6010
MERCURY	0.024	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:00 System ID AE04621

Sample ID LAB000710

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-17 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	0.950	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:00 System ID AE04621 Sample ID LAB000710

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-17 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	0.872	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:00 System ID AE04621

Sample ID LAB000710

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-17 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1220	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:00 System ID AE04621 Sample ID LAB000710

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-7-17 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000710





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00

13:55

System ID AE04622

Sample ID LAB000711

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	6.38	mg/Kg	0.025	EPA 6020
BARIUM	130	mg/Kg	1.0	EPA 6010
CADMIUM	0.17	mg/Kg	0.025	EPA 6020
CHROMIUM	20	mg/Kg	1.0	EPA 6010
LEAD	9.9	mg/Kg	3.0	EPA 6010
MERCURY	0.018	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:55 System ID AE04622 Sample ID LAB000711

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:55 System ID AE04622

Sample ID LAB000711

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:55 System ID AE04622 Sample ID LAB000711

Page: 4  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-5 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1320	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 13:55 System ID AE04622

Sample ID LAB000711

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000711





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:05 System ID AE04623

Sample ID LAB000712

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	3.56	mg/Kg	0.025	EPA 6020
BARIUM	110	mg/Kg	1.0	EPA 6010
CADMIUM	0.12	mg/Kg	0.025	EPA 6020
CHROMIUM	17	mg/Kg	1.0	EPA 6010
LEAD	7.3	mg/Kg	3.0	EPA 6010
MERCURY	0.011	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





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Laboratory Analysis Report



Sample Date/Time 5/17/00 14:05 System ID AE04623

Sample ID LAB000712

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





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Laboratory Analysis Report



Sample Date/Time 5/17/00 14:05 System ID AE04623

Sample ID LAB000712

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





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Sample Date/Time 5/17/00 14:05 System ID AE04623

Sample ID LAB000712

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1300	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:05 System ID AE04623 Sample ID LAB000712

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Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-8-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000712





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:30 System ID AE04624

Sample ID LAB000713

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	3.00	mg/Kg	0.025	EPA 6020
BARIUM	110	mg/Kg	1.0	EPA 6010
CADMIUM	0.13	mg/Kg	0.025	EPA 6020
CHROMIUM	18	mg/Kg	1.0	EPA 6010
LEAD	18	mg/Kg	3.0	EPA 6010
MERCURY	0.021	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4,6-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Chlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylnaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitrophenol	<3.30	mg/Kg	3.30	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
3-Nitroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B





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Sample Date/Time 5/17/00 14:30 System ID AE04624 Sample ID LAB000713

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B
4-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<3.30	mg/Kg	3.30	EPA 8270B
Acenaphthylene	<3.30	mg/Kg	3.30	EPA 8270B
Anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(b)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(g,h,i)perylene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(k)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzoic acid	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl alcohol	<3.30	mg/Kg	3.30	EPA 8270B
Benzyl butyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethoxy) methane	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroisopropyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<3.30	mg/Kg	3.30	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzo(a,h)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzofuran	<3.30	mg/Kg	3.30	EPA 8270B
Diethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dimethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Fluorene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B





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Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:30 System ID AE04624

Sample ID LAB000713

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Isophorone	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodi-n-propylamine	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodiphenylamine	<3.30	mg/Kg	3.30	EPA 8270B
Naphthalene	<3.30	mg/Kg	3.30	EPA 8270B
Nitrobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<3.30	mg/Kg	3.30	EPA 8270B
Phenol	<3.30	mg/Kg	3.30	EPA 8270B
Pyrene	<3.30	mg/Kg	3.30	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:30 System ID AE04624 Sample ID LAB000713

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1160	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:30 System ID AE04624

Sample ID LAB000713

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000713





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:35 System ID AE04625 Sample ID LAB000714

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	6.04	mg/Kg	0.025	EPA 6020
BARIUM	200	mg/Kg	1.0	EPA 6010
CADMIUM	0.11	mg/Kg	0.025	EPA 6020
CHROMIUM	25	mg/Kg	1.0	EPA 6010
LEAD	17	mg/Kg	3.0	EPA 6010
MERCURY	0.017	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
1,2-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,3-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,4-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
2,4,5-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4,6-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dimethylphenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dinitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2,6-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2-Chloronaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Chlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylnaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitrophenol	<1.65	mg/Kg	1.65	EPA 8270B
3,3'-Dichlorobenzidine	<5.00	mg/Kg	5.00	EPA 8270B
3-Nitroaniline	<5.00	mg/Kg	5.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Bromophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:35 System ID AE04625

Sample ID LAB000714

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Chloroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4-Chlorophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B
4-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthene	<1.65	mg/Kg	1.65	EPA 8270B
Acenaphthylene	<1.65	mg/Kg	1.65	EPA 8270B
Anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(b)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(g,h,i)perylene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(k)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzoic acid	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl alcohol	<1.65	mg/Kg	1.65	EPA 8270B
Benzyl butyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethoxy) methane	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroisopropyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-ethylhexyl) phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Chrysene	<1.65	mg/Kg	1.65	EPA 8270B
Di-n-butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-octyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzo(a,h)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzofuran	<1.65	mg/Kg	1.65	EPA 8270B
Diethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dimethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Fluorene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobutadiene	<5.00	mg/Kg	5.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:35 System ID AE04625 Sample ID LAB000714

Page: 3  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-11 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachloroethane	<5.00	mg/Kg	5.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Isophorone	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodi-n-propylamine	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodiphenylamine	<1.65	mg/Kg	1.65	EPA 8270B
Naphthalene	<1.65	mg/Kg	1.65	EPA 8270B
Nitrobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Pentachlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
Phenanthrene	<1.65	mg/Kg	1.65	EPA 8270B
Phenol	<1.65	mg/Kg	1.65	EPA 8270B
Pyrene	<1.65	mg/Kg	1.65	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:35 System ID AE04625

Sample ID LAB000714

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1230	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 14:35 System ID AE04625 Sample ID LAB000714

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-9-11 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000714





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:00 System ID AE04626

Sample ID LAB000715

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	5.25	mg/Kg	0.025	EPA 6020
BARIUM	150	mg/Kg	1.0	EPA 6010
CADMIUM	0.14	mg/Kg	0.025	EPA 6020
CHROMIUM	27	mg/Kg	1.0	EPA 6010
LEAD	56	mg/Kg	3.0	EPA 6010
MERCURY	0.025	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
1,2-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,3-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,4-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
2,4,5-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4,6-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dimethylphenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dinitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2,6-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2-Chloronaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Chlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylnaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitrophenol	<1.65	mg/Kg	1.65	EPA 8270B
3,3'-Dichlorobenzidine	<5.00	mg/Kg	5.00	EPA 8270B
3-Nitroaniline	<5.00	mg/Kg	5.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Bromophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:00 System ID AE04626 Sample ID LAB000715

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Chloroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4-Chlorophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B
4-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthene	<1.65	mg/Kg	1.65	EPA 8270B
Acenaphthylene	<1.65	mg/Kg	1.65	EPA 8270B
Anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(b)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(g,h,i)perylene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(k)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzoic acid	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl alcohol	<1.65	mg/Kg	1.65	EPA 8270B
Benzyl butyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethoxy) methane	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroisopropyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-ethylhexyl) phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Chrysene	<1.65	mg/Kg	1.65	EPA 8270B
Di-n-butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-octyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzo(a,h)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzofuran	<1.65	mg/Kg	1.65	EPA 8270B
Diethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dimethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Fluorene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobutadiene	<5.00	mg/Kg	5.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:00 System ID AE04626

Sample ID LAB000715

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachloroethane	<5.00	mg/Kg	5.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Isophorone	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodi-n-propylamine	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodiphenylamine	<1.65	mg/Kg	1.65	EPA 8270B
Naphthalene	<1.65	mg/Kg	1.65	EPA 8270B
Nitrobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Pentachlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
Phenanthrene	<1.65	mg/Kg	1.65	EPA 8270B
Phenol	<1.65	mg/Kg	1.65	EPA 8270B
Pyrene	<1.65	mg/Kg	1.65	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:00 System ID AE04626 Sample ID LAB000715

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1130	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:00 System ID AE04626

Sample ID LAB000715

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-10 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000715



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:05 System ID AE04627

Sample ID LAB000716

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-16 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	4.45	mg/Kg	0.025	EPA 6020
BARIUM	200	mg/Kg	1.0	EPA 6010
CADMIUM	0.47	mg/Kg	0.025	EPA 6020
CHROMIUM	25	mg/Kg	1.0	EPA 6010
LEAD	74	mg/Kg	3.0	EPA 6010
MERCURY	0.064	mg/Kg	0.003	EPA 7471
SELENIUM	0.32	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:05 System ID AE04627

Sample ID LAB000716

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-16 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:05 System ID AE04627

Sample ID LAB000716

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-16 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:05 System ID AE04627

Sample ID LAB000716

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-16 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1020	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:05 System ID AE04627

Sample ID LAB000716

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-10-16 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000716





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:30 System ID AE04628

Sample ID LAB000717

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	3.80	mg/Kg	0.025	EPA 6020
BARIUM	150	mg/Kg	1.0	EPA 6010
CADMIUM	0.13	mg/Kg	0.025	EPA 6020
CHROMIUM	22	mg/Kg	1.0	EPA 6010
LEAD	17	mg/Kg	3.0	EPA 6010
MERCURY	0.020	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:30 System ID AE04628

Sample ID LAB000717

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:30 System ID AE04628

Sample ID LAB000717

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:30 System ID AE04628 Sample ID LAB000717

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1100	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:30 System ID AE04628

Sample ID LAB000717

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000717





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:35 System ID AE04629

Sample ID LAB000718

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	4.51	mg/Kg	0.025	EPA 6020
BARIUM	110	mg/Kg	1.0	EPA 6010
CADMIUM	0.30	mg/Kg	0.025	EPA 6020
CHROMIUM	17	mg/Kg	1.0	EPA 6010
LEAD	45	mg/Kg	3.0	EPA 6010
MERCURY	0.028	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4,6-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Chlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylnaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitrophenol	<3.30	mg/Kg	3.30	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
3-Nitroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:35 System ID AE04629

Sample ID LAB000718

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B
4-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<3.30	mg/Kg	3.30	EPA 8270B
Acenaphthylene	<3.30	mg/Kg	3.30	EPA 8270B
Anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(b)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(g,h,i)perylene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(k)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzoic acid	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl alcohol	<3.30	mg/Kg	3.30	EPA 8270B
Benzyl butyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethoxy) methane	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroisopropyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<3.30	mg/Kg	3.30	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzo(a,h)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzofuran	<3.30	mg/Kg	3.30	EPA 8270B
Diethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dimethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Fluorene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00

15:35

System ID AE04629

Sample ID LAB000718

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Isophorone	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodi-n-propylamine	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodiphenylamine	<3.30	mg/Kg	3.30	EPA 8270B
Naphthalene	<3.30	mg/Kg	3.30	EPA 8270B
Nitrobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<3.30	mg/Kg	3.30	EPA 8270B
Phenol	<3.30	mg/Kg	3.30	EPA 8270B
Pyrene	<3.30	mg/Kg	3.30	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	299	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:35 System ID AE04629

Sample ID LAB000718

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-11 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1300	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:35 System ID AE04629 Sample ID LAB000718

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-11 PROJECT 6064

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Naphthalene	148	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000718



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:50 System ID AE04630

Sample ID LAB000719

Page: 1

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.00	mg/Kg	0.025	EPA 6020
BARIUM	100	mg/Kg	1.0	EPA 6010
CADMIUM	0.083	mg/Kg	0.025	EPA 6020
CHROMIUM	21	mg/Kg	1.0	EPA 6010
LEAD	11	mg/Kg	3.0	EPA 6010
MERCURY	0.0087	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
1,2-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,3-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
1,4-Dichlorobenzene	<10.0	mg/Kg	10.0	EPA 8270B
2,4,5-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4,6-Trichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dichlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2,4-Dimethylphenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrophenol	<20.0	mg/Kg	20.0	EPA 8270B
2,4-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2,6-Dinitrotoluene	<5.00	mg/Kg	5.00	EPA 8270B
2-Chloronaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Chlorophenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylnaphthalene	<3.30	mg/Kg	3.30	EPA 8270B
2-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
2-Nitrophenol	<3.30	mg/Kg	3.30	EPA 8270B
3,3'-Dichlorobenzidine	<10.0	mg/Kg	10.0	EPA 8270B
3-Nitroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4,6-Dinitro-2-methylphenol	<10.0	mg/Kg	10.0	EPA 8270B
4-Bromophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00

15:50

System ID AE04630

Sample ID LAB000719

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Chloroaniline	<20.0	mg/Kg	20.0	EPA 8270B
4-Chlorophenylphenyl ether	<3.30	mg/Kg	3.30	EPA 8270B
4-Methylphenol	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitroaniline	<3.30	mg/Kg	3.30	EPA 8270B
4-Nitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
Acenaphthene	<3.30	mg/Kg	3.30	EPA 8270B
Acenaphthylene	<3.30	mg/Kg	3.30	EPA 8270B
Anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(a)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(b)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(g,h,i)perylene	<3.30	mg/Kg	3.30	EPA 8270B
Benzo(k)fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Benzoic acid	<10.0	mg/Kg	10.0	EPA 8270B
Benzyl alcohol	<3.30	mg/Kg	3.30	EPA 8270B
Benzyl butyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethoxy) methane	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroethyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-chloroisopropyl) ether	<3.30	mg/Kg	3.30	EPA 8270B
Bis(2-ethylhexyl) phthalate	<20.0	mg/Kg	20.0	EPA 8270B
Chrysene	<3.30	mg/Kg	3.30	EPA 8270B
Di-n-butyl phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Di-n-octyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzo(a,h)anthracene	<3.30	mg/Kg	3.30	EPA 8270B
Dibenzofuran	<3.30	mg/Kg	3.30	EPA 8270B
Diethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Dimethyl phthalate	<3.30	mg/Kg	3.30	EPA 8270B
Fluoranthene	<3.30	mg/Kg	3.30	EPA 8270B
Fluorene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Hexachlorobutadiene	<10.0	mg/Kg	10.0	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:50 System ID AE04630

Sample ID LAB000719

Page: 3

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10.0	mg/Kg	10.0	EPA 8270B
Hexachloroethane	<10.0	mg/Kg	10.0	EPA 8270B
Indeno(1,2,3-cd)pyrene	<3.30	mg/Kg	3.30	EPA 8270B
Isophorone	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodi-n-propylamine	<3.30	mg/Kg	3.30	EPA 8270B
N-Nitrosodiphenylamine	<3.30	mg/Kg	3.30	EPA 8270B
Naphthalene	<3.30	mg/Kg	3.30	EPA 8270B
Nitrobenzene	<3.30	mg/Kg	3.30	EPA 8270B
Pentachlorophenol	<10.0	mg/Kg	10.0	EPA 8270B
Phenanthrene	<3.30	mg/Kg	3.30	EPA 8270B
Phenol	<3.30	mg/Kg	3.30	EPA 8270B
Pyrene	<3.30	mg/Kg	3.30	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:50 System ID AE04630

Sample ID LAB000719

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1180	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/17/00 15:50 System ID AE04630

Sample ID LAB000719

Page: 5

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-11-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: DL

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION. THIS SAMPLE WAS ANALYZED FOR VOLATILE ORGANIC COMPOUNDS ONE DAY PAST THE 14-DAY HOLDING TIME.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000719



M-60 White - Sampler

Pink - Lab Copy

№ 0831



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:11 System ID AE04669 Sample ID LAB000731

Page: 1  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-5 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.40	mg/Kg	0.025	EPA 6020
BARIUM	140	mg/Kg	1.0	EPA 6010
CADMIUM	0.070	mg/Kg	0.025	EPA 6020
CHROMIUM	35	mg/Kg	1.0	EPA 6010
LEAD	8.4	mg/Kg	3.0	EPA 6010
MERCURY	0.036	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
1,2-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,3-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,4-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
2,4,5-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4,6-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dimethylphenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dinitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2,6-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2-Chloronaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Chlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylnaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitrophenol	<1.65	mg/Kg	1.65	EPA 8270B
3,3'-Dichlorobenzidine	<5.00	mg/Kg	5.00	EPA 8270B
3-Nitroaniline	<5.00	mg/Kg	5.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Bromophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:11 System ID AE04669 Sample ID LAB000731

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Chloroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4-Chlorophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B
4-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthene	<1.65	mg/Kg	1.65	EPA 8270B
Acenaphthylene	<1.65	mg/Kg	1.65	EPA 8270B
Anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(b)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(g,h,i)perylene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(k)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzoic acid	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl alcohol	<1.65	mg/Kg	1.65	EPA 8270B
Benzyl butyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethoxy) methane	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroisopropyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-ethylhexyl) phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Chrysene	<1.65	mg/Kg	1.65	EPA 8270B
Di-n-butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-octyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzo(a,h)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzofuran	<1.65	mg/Kg	1.65	EPA 8270B
Diethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dimethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Fluorene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobutadiene	<5.00	mg/Kg	5.00	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:11 System ID AE04669 Sample ID LAB000731

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachloroethane	<5.00	mg/Kg	5.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Isophorone	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodi-n-propylamine	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodiphenylamine	<1.65	mg/Kg	1.65	EPA 8270B
Naphthalene	<1.65	mg/Kg	1.65	EPA 8270B
Nitrobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Pentachlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
Phenanthrene	<1.65	mg/Kg	1.65	EPA 8270B
Phenol	<1.65	mg/Kg	1.65	EPA 8270B
Pyrene	<1.65	mg/Kg	1.65	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:11 System ID AE04669 Sample ID LAB000731

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1580	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:11 System ID AE04669 Sample ID LAB000731

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000731





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:25 System ID AE04670 Sample ID LAB000732

Page: 1  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-21 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	7.62	mg/Kg	0.025	EPA 6020
BARIUM	180	mg/Kg	1.0	EPA 6010
CADMIUM	0.11	mg/Kg	0.025	EPA 6020
CHROMIUM	25	mg/Kg	1.0	EPA 6010
LEAD	15	mg/Kg	3.0	EPA 6010
MERCURY	0.024	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:25 System ID AE04670 Sample ID LAB000732

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:25 System ID AE04670 Sample ID LAB000732

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:25 System ID AE04670 Sample ID LAB000732

Page: 4  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-21 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1390	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 8:25 System ID AE04670 Sample ID LAB000732

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-12-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000732



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:15 System ID AE04671 Sample ID LAB000733

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	3.33	mg/Kg	0.025	EPA 6020
BARIUM	140	mg/Kg	1.0	EPA 6010
CADMIUM	0.15	mg/Kg	0.025	EPA 6020
CHROMIUM	22	mg/Kg	1.0	EPA 6010
LEAD	4.8	mg/Kg	3.0	EPA 6010
MERCURY	0.021	mg/Kg	0.003	EPA 7471
SELENIUM	0.27	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
1,2-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,3-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
1,4-Dichlorobenzene	<5.00	mg/Kg	5.00	EPA 8270B
2,4,5-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4,6-Trichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dichlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2,4-Dimethylphenol	<5.00	mg/Kg	5.00	EPA 8270B
2,4-Dinitrophenol	<10.0	mg/Kg	10.0	EPA 8270B
2,4-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2,6-Dinitrotoluene	<2.50	mg/Kg	2.50	EPA 8270B
2-Chloronaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Chlorophenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylnaphthalene	<1.65	mg/Kg	1.65	EPA 8270B
2-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
2-Nitrophenol	<1.65	mg/Kg	1.65	EPA 8270B
3,3'-Dichlorobenzidine	<5.00	mg/Kg	5.00	EPA 8270B
3-Nitroaniline	<5.00	mg/Kg	5.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<5.00	mg/Kg	5.00	EPA 8270B
4-Bromophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:15 System ID AE04671 Sample ID LAB000733

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Chloroaniline	<10.0	mg/Kg	10.0	EPA 8270B
4-Chlorophenylphenyl ether	<1.65	mg/Kg	1.65	EPA 8270B
4-Methylphenol	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitroaniline	<1.65	mg/Kg	1.65	EPA 8270B
4-Nitrophenol	<5.00	mg/Kg	5.00	EPA 8270B
Acenaphthene	<1.65	mg/Kg	1.65	EPA 8270B
Acenaphthylene	<1.65	mg/Kg	1.65	EPA 8270B
Anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(a)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(b)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(g,h,i)perylene	<1.65	mg/Kg	1.65	EPA 8270B
Benzo(k)fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Benzoic acid	<5.00	mg/Kg	5.00	EPA 8270B
Benzyl alcohol	<1.65	mg/Kg	1.65	EPA 8270B
Benzyl butyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethoxy) methane	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroethyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-chloroisopropyl) ether	<1.65	mg/Kg	1.65	EPA 8270B
Bis(2-ethylhexyl) phthalate	<10.0	mg/Kg	10.0	EPA 8270B
Chrysene	<1.65	mg/Kg	1.65	EPA 8270B
Di-n-butyl phthalate	<5.00	mg/Kg	5.00	EPA 8270B
Di-n-octyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzo(a,h)anthracene	<1.65	mg/Kg	1.65	EPA 8270B
Dibenzofuran	<1.65	mg/Kg	1.65	EPA 8270B
Diethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Dimethyl phthalate	<1.65	mg/Kg	1.65	EPA 8270B
Fluoranthene	<1.65	mg/Kg	1.65	EPA 8270B
Fluorene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Hexachlorobutadiene	<5.00	mg/Kg	5.00	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:15 System ID AE04671 Sample ID LAB000733

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<5.00	mg/Kg	5.00	EPA 8270B
Hexachloroethane	<5.00	mg/Kg	5.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<1.65	mg/Kg	1.65	EPA 8270B
Isophorone	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodi-n-propylamine	<1.65	mg/Kg	1.65	EPA 8270B
N-Nitrosodiphenylamine	<1.65	mg/Kg	1.65	EPA 8270B
Naphthalene	<1.65	mg/Kg	1.65	EPA 8270B
Nitrobenzene	<1.65	mg/Kg	1.65	EPA 8270B
Pentachlorophenol	<5.00	mg/Kg	5.00	EPA 8270B
Phenanthrene	<1.65	mg/Kg	1.65	EPA 8270B
Phenol	<1.65	mg/Kg	1.65	EPA 8270B
Pyrene	<1.65	mg/Kg	1.65	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:15 System ID AE04671 Sample ID LAB000733

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-19 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1190	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:15 System ID AE04671 Sample ID LAB000733

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-19 PROJECT 6064

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000733





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:20 System ID AE04672 Sample ID LAB000734

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.97	mg/Kg	0.025	EPA 6020
BARIUM	140	mg/Kg	1.0	EPA 6010
CADMIUM	0.10	mg/Kg	0.025	EPA 6020
CHROMIUM	25	mg/Kg	1.0	EPA 6010
LEAD	4.7	mg/Kg	3.0	EPA 6010
MERCURY	0.020	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:20 System ID AE04672 Sample ID LAB000734

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:20 System ID AE04672 Sample ID LAB000734

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:20 System ID AE04672 Sample ID LAB000734

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1250	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:20 System ID AE04672 Sample ID LAB000734

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-13-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000734



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:50 System ID AE04673 Sample ID LAB000735

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-12 PROJECT 6064

Page: 1  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	9.11	mg/Kg	0.025	EPA 6020
BARIUM	180	mg/Kg	1.0	EPA 6010
CADMIUM	0.19	mg/Kg	0.025	EPA 6020
CHROMIUM	26	mg/Kg	1.0	EPA 6010
LEAD	19	mg/Kg	3.0	EPA 6010
MERCURY	0.042	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:50 System ID AE04673 Sample ID LAB000735

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:50 System ID AE04673 Sample ID LAB000735

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:50 System ID AE04673 Sample ID LAB000735

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-12 PROJECT 6064

Page: 4  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1080	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 9:50 System ID AE04673 Sample ID LAB000735

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000735





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 10:00 System ID AE04674 Sample ID LAB000736

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-20 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	3.60	mg/Kg	0.025	EPA 6020
BARIUM	160	mg/Kg	1.0	EPA 6010
CADMIUM	0.14	mg/Kg	0.025	EPA 6020
CHROMIUM	19	mg/Kg	1.0	EPA 6010
LEAD	6.7	mg/Kg	3.0	EPA 6010
MERCURY	0.024	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 10:00 System ID AE04674 Sample ID LAB000736

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-20 PROJECT 6064

Page: 2  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 10:00 System ID AE04674 Sample ID LAB000736

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Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-20 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 10:00 System ID AE04674

Sample ID LAB000736

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-20 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1360	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 10:00 System ID AE04674 Sample ID LAB000736

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-14-20 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000736



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:10 System ID AE04675

Sample ID LAB000737

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	4.78	mg/Kg	0.025	EPA 6020
BARIUM	200	mg/Kg	1.0	EPA 6010
CADMIUM	0.21	mg/Kg	0.025	EPA 6020
CHROMIUM	22	mg/Kg	1.0	EPA 6010
LEAD	22	mg/Kg	3.0	EPA 6010
MERCURY	0.031	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:10 System ID AE04675 Sample ID LAB000737

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:10 System ID AE04675 Sample ID LAB000737

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-12 PROJECT 6064

Page: 3  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:10 System ID AE04675

Sample ID LAB000737

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1290	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:10 System ID AE04675 Sample ID LAB000737

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-12 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000737





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:20 System ID AE04676 Sample ID LAB000738

Page: 1  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-21 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	16.3	mg/Kg	0.025	EPA 6020
BARIUM	140	mg/Kg	1.0	EPA 6010
CADMIUM	0.14	mg/Kg	0.025	EPA 6020
CHROMIUM	28	mg/Kg	1.0	EPA 6010
LEAD	8.9	mg/Kg	3.0	EPA 6010
MERCURY	0.018	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
1,2-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,3-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
1,4-Dichlorobenzene	<1.00	mg/Kg	1.00	EPA 8270B
2,4,5-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4,6-Trichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dichlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2,4-Dimethylphenol	<1.00	mg/Kg	1.00	EPA 8270B
2,4-Dinitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2,6-Dinitrotoluene	<0.500	mg/Kg	0.500	EPA 8270B
2-Chloronaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Chlorophenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylnaphthalene	<0.330	mg/Kg	0.330	EPA 8270B
2-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
2-Nitrophenol	<0.330	mg/Kg	0.330	EPA 8270B
3,3'-Dichlorobenzidine	<1.00	mg/Kg	1.00	EPA 8270B
3-Nitroaniline	<1.00	mg/Kg	1.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<1.00	mg/Kg	1.00	EPA 8270B
4-Bromophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:20 System ID AE04676

Sample ID LAB000738

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Chloroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.330	mg/Kg	0.330	EPA 8270B
4-Methylphenol	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitroaniline	<0.330	mg/Kg	0.330	EPA 8270B
4-Nitrophenol	<1.00	mg/Kg	1.00	EPA 8270B
Acenaphthene	<0.330	mg/Kg	0.330	EPA 8270B
Acenaphthylene	<0.330	mg/Kg	0.330	EPA 8270B
Anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(a)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(b)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(g,h,i)perylene	<0.330	mg/Kg	0.330	EPA 8270B
Benzo(k)fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Benzoic acid	<1.00	mg/Kg	1.00	EPA 8270B
Benzyl alcohol	<0.330	mg/Kg	0.330	EPA 8270B
Benzyl butyl phthalate	0.460	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethoxy) methane	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroethyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.330	mg/Kg	0.330	EPA 8270B
Bis(2-ethylhexyl) phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Chrysene	<0.330	mg/Kg	0.330	EPA 8270B
Di-n-butyl phthalate	<1.00	mg/Kg	1.00	EPA 8270B
Di-n-octyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzo(a,h)anthracene	<0.330	mg/Kg	0.330	EPA 8270B
Dibenzofuran	<0.330	mg/Kg	0.330	EPA 8270B
Diethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Dimethyl phthalate	<0.330	mg/Kg	0.330	EPA 8270B
Fluoranthene	<0.330	mg/Kg	0.330	EPA 8270B
Fluorene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Hexachlorobutadiene	<1.00	mg/Kg	1.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:20 System ID AE04676 Sample ID LAB000738

Page: 3  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-21 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<1.00	mg/Kg	1.00	EPA 8270B
Hexachloroethane	<1.00	mg/Kg	1.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.330	mg/Kg	0.330	EPA 8270B
Isophorone	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodi-n-propylamine	<0.330	mg/Kg	0.330	EPA 8270B
N-Nitrosodiphenylamine	<0.330	mg/Kg	0.330	EPA 8270B
Naphthalene	<0.330	mg/Kg	0.330	EPA 8270B
Nitrobenzene	<0.330	mg/Kg	0.330	EPA 8270B
Pentachlorophenol	<1.00	mg/Kg	1.00	EPA 8270B
Phenanthrene	<0.330	mg/Kg	0.330	EPA 8270B
Phenol	<0.330	mg/Kg	0.330	EPA 8270B
Pyrene	<0.330	mg/Kg	0.330	EPA 8270B
VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:20 System ID AE04676 Sample ID LAB000738

Page: 4  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-21 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1200	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:20 System ID AE04676 Sample ID LAB000738

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-15-21 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000738



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:50 System ID AE04677

Sample ID LAB000739

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.98	mg/Kg	0.025	EPA 6020
BARIUM	150	mg/Kg	1.0	EPA 6010
CADMIUM	0.13	mg/Kg	0.025	EPA 6020
CHROMIUM	19	mg/Kg	1.0	EPA 6010
LEAD	11	mg/Kg	3.0	EPA 6010
MERCURY	0.014	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:50 System ID AE04677 Sample ID LAB000739

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:50 System ID AE04677 Sample ID LAB000739

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:50 System ID AE04677 Sample ID LAB000739

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1270	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 11:50 System ID AE04677

Sample ID LAB000739

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-5 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000739





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 12:00 System ID AE04678 Sample ID LAB000740

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-9 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	2.35	mg/Kg	0.025	EPA 6020
BARIUM	100	mg/Kg	1.0	EPA 6010
CADMIUM	0.11	mg/Kg	0.025	EPA 6020
CHROMIUM	17	mg/Kg	1.0	EPA 6010
LEAD	12	mg/Kg	3.0	EPA 6010
MERCURY	0.026	mg/Kg	0.003	EPA 7471
SELENIUM	<0.25	mg/Kg	0.25	EPA 6020
SILVER	<0.3	mg/Kg	0.3	EPA 6010
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
1,2-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,3-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
1,4-Dichlorobenzene	<2.00	mg/Kg	2.00	EPA 8270B
2,4,5-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4,6-Trichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dichlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2,4-Dimethylphenol	<2.00	mg/Kg	2.00	EPA 8270B
2,4-Dinitrophenol	<4.00	mg/Kg	4.00	EPA 8270B
2,4-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2,6-Dinitrotoluene	<1.00	mg/Kg	1.00	EPA 8270B
2-Chloronaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Chlorophenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylnaphthalene	<0.660	mg/Kg	0.660	EPA 8270B
2-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
2-Nitrophenol	<0.660	mg/Kg	0.660	EPA 8270B
3,3'-Dichlorobenzidine	<2.00	mg/Kg	2.00	EPA 8270B
3-Nitroaniline	<2.00	mg/Kg	2.00	EPA 8270B
4,6-Dinitro-2-methylphenol	<2.00	mg/Kg	2.00	EPA 8270B
4-Bromophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 12:00 System ID AE04678 Sample ID LAB000740

Page: 2  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-9 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
4-Chloro-3-methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Chloroaniline	<4.00	mg/Kg	4.00	EPA 8270B
4-Chlorophenylphenyl ether	<0.660	mg/Kg	0.660	EPA 8270B
4-Methylphenol	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitroaniline	<0.660	mg/Kg	0.660	EPA 8270B
4-Nitrophenol	<2.00	mg/Kg	2.00	EPA 8270B
Acenaphthene	<0.660	mg/Kg	0.660	EPA 8270B
Acenaphthylene	<0.660	mg/Kg	0.660	EPA 8270B
Anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(a)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(b)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(g,h,i)perylene	<0.660	mg/Kg	0.660	EPA 8270B
Benzo(k)fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Benzoic acid	<2.00	mg/Kg	2.00	EPA 8270B
Benzyl alcohol	<0.660	mg/Kg	0.660	EPA 8270B
Benzyl butyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethoxy) methane	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroethyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-chloroisopropyl) ether	<0.660	mg/Kg	0.660	EPA 8270B
Bis(2-ethylhexyl) phthalate	<4.00	mg/Kg	4.00	EPA 8270B
Chrysene	<0.660	mg/Kg	0.660	EPA 8270B
Di-n-butyl phthalate	<2.00	mg/Kg	2.00	EPA 8270B
Di-n-octyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzo(a,h)anthracene	<0.660	mg/Kg	0.660	EPA 8270B
Dibenzofuran	<0.660	mg/Kg	0.660	EPA 8270B
Diethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Dimethyl phthalate	<0.660	mg/Kg	0.660	EPA 8270B
Fluoranthene	<0.660	mg/Kg	0.660	EPA 8270B
Fluorene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Hexachlorobutadiene	<2.00	mg/Kg	2.00	EPA 8270B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 12:00 System ID AE04678 Sample ID LAB000740

Page: 3  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-9 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<2.00	mg/Kg	2.00	EPA 8270B
Hexachloroethane	<2.00	mg/Kg	2.00	EPA 8270B
Indeno(1,2,3-cd)pyrene	<0.660	mg/Kg	0.660	EPA 8270B
Isophorone	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodi-n-propylamine	<0.660	mg/Kg	0.660	EPA 8270B
N-Nitrosodiphenylamine	<0.660	mg/Kg	0.660	EPA 8270B
Naphthalene	<0.660	mg/Kg	0.660	EPA 8270B
Nitrobenzene	<0.660	mg/Kg	0.660	EPA 8270B
Pentachlorophenol	<2.00	mg/Kg	2.00	EPA 8270B
Phenanthrene	<0.660	mg/Kg	0.660	EPA 8270B
Phenol	<0.660	mg/Kg	0.660	EPA 8270B
Pyrene	<0.660	mg/Kg	0.660	EPA 8270B
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,1-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2,2-Tetrachloroethane	<100	µg/Kg	100	EPA 8260B
1,1,2-Trichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,1-Dichloroethene	<100	µg/Kg	100	EPA 8260B
1,1-Dichloropropene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,3-Trichloropropane	<100	µg/Kg	100	EPA 8260B
1,2,4-Trichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2,4-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dibromo-3-chloropropane	<500	µg/Kg	500	EPA 8260B
1,2-Dibromoethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,2-Dichloroethane	<100	µg/Kg	100	EPA 8260B
1,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
1,3,5-Trimethylbenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
1,3-Dichloropropane	<100	µg/Kg	100	EPA 8260B



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 12:00 System ID AE04678 Sample ID LAB000740

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-9 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<100	µg/Kg	100	EPA 8260B
2,2-Dichloropropane	<100	µg/Kg	100	EPA 8260B
2-Butanone	1210	µg/Kg	1000	EPA 8260B
2-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
2-Hexanone	<1000	µg/Kg	1000	EPA 8260B
4-Chlorotoluene	<100	µg/Kg	100	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<500	µg/Kg	500	EPA 8260B
Acetone	<1000	µg/Kg	1000	EPA 8260B
Benzene	<100	µg/Kg	100	EPA 8260B
Bromobenzene	<100	µg/Kg	100	EPA 8260B
Bromochloromethane	<100	µg/Kg	100	EPA 8260B
Bromodichloromethane	<100	µg/Kg	100	EPA 8260B
Bromoform	<100	µg/Kg	100	EPA 8260B
Bromomethane	<500	µg/Kg	500	EPA 8260B
Carbon disulfide	<1000	µg/Kg	1000	EPA 8260B
Carbon tetrachloride	<100	µg/Kg	100	EPA 8260B
Chlorobenzene	<100	µg/Kg	100	EPA 8260B
Chloroethane	<100	µg/Kg	100	EPA 8260B
Chloroform	<100	µg/Kg	100	EPA 8260B
Chloromethane	<500	µg/Kg	500	EPA 8260B
cis-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
cis-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Dibromochloromethane	<100	µg/Kg	100	EPA 8260B
Dibromomethane	<100	µg/Kg	100	EPA 8260B
Dichlorodifluoromethane	<500	µg/Kg	500	EPA 8260B
Ethylbenzene	<100	µg/Kg	100	EPA 8260B
Hexachlorobutadiene	<200	µg/Kg	200	EPA 8260B
Isopropylbenzene	<100	µg/Kg	100	EPA 8260B
m,p-Xylene	<200	µg/Kg	200	EPA 8260B
Methylene chloride	<500	µg/Kg	500	EPA 8260B
n-Butylbenzene	<100	µg/Kg	100	EPA 8260B
n-Propylbenzene	<100	µg/Kg	100	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00 12:00 System ID AE04678 Sample ID LAB000740

Page: 5  
Date Received: 5/19/00  
Sample Status: REPORT QUEUE  
Sample Type: GRAB  
Sample Matrix: SOIL  
Collected By: KLEINFELDER

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-16-9 PROJECT 6064

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Comments: LAB: THE VOLATILE ORGANIC COMPOUND 2-BUTANONE WAS DETECTED IN THE METHOD BLANK; ITS PRESENCE IN THE SAMPLE MAY BE ATTRIBUTABLE TO LABORATORY CONTAMINATION.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<100	µg/Kg	100	EPA 8260B
o-Xylene	<100	µg/Kg	100	EPA 8260B
p-Isopropyltoluene	<100	µg/Kg	100	EPA 8260B
sec-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Styrene	<100	µg/Kg	100	EPA 8260B
tert-Butylbenzene	<100	µg/Kg	100	EPA 8260B
Tetrachloroethene	<100	µg/Kg	100	EPA 8260B
Toluene	<100	µg/Kg	100	EPA 8260B
trans-1,2-Dichloroethene	<100	µg/Kg	100	EPA 8260B
trans-1,3-Dichloropropene	<100	µg/Kg	100	EPA 8260B
Trichloroethene	<100	µg/Kg	100	EPA 8260B
Trichlorofluoromethane	<100	µg/Kg	100	EPA 8260B
Vinyl chloride	<100	µg/Kg	100	EPA 8260B

End of Report for Sample ID: LAB000740



# KLEINFELDER

██████████ PF ██████████ ER

SOULIN WASTE 5/19/00

PROJECT NO.		PROJECT NAME		NO.	TYPE	ANALYSIS	RECEIVING LAB:
L.P. NO.	P.O. NO.	SAMPLERS: (Signature/Number)					
DATE	SAMPLE I.D.	SAMPLE I.D.	MATRIX	CON-	CON-		
MM/DD/YY	TIME			TAINERS	TAINERS		
	HH-MM-SS						
1	5/19/00	330	MW1-05180	W	8	X X X	LAB 000741
2		515	MW2-05180			X X X	LAB 000742
3		440	MW3-05180			X X X	LAB 000743
4		1005	MW4-05180			X X X	LAB 000744
5		105	MW5-05180			X X X	LAB 000745
6		215	MW6-05180			X X X	LAB 000746
7							
8							
9							
10							
11							
12							
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14							
15							
16							
17							
18							
19							
20							

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Instructions/Remarks
<i>[Signature]</i>	5/19/00 1605	<i>[Signature]</i>	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	

Send Results To:
KLEINFELDER 15050 S.W. KOLL PARKWAY SUITE L BEAVERTON, OR 97006 (503) 644-9447
Attn: <i>John Day</i>

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## CHAIN OF CUSTODY





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

15:30

System ID AE04679

Sample ID LAB000741

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW1-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THIS SAMPLE REQUIRED DILUTION BY A FACTOR OF 5 FOR SEMI-VOLATILE ORGANICS ANALYSIS DUE TO THE MATRIX.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	<0.01	mg/L	0.01	EPA 200.8
BARIUM	0.24	mg/L	0.01	EPA 200.7
CADMIUM	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM	<0.030	mg/L	0.03	EPA 200.7
LEAD	<0.100	mg/L	0.1	EPA 200.7
MERCURY	0.0007	mg/L	0.0002	EPA 245.1
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	<0.010	mg/L	0.01	EPA 200.7
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<25	µg/L	25	EPA 8270
1,2-Dichlorobenzene	<25	µg/L	25	EPA 8270
1,3-Dichlorobenzene	<25	µg/L	25	EPA 8270
1,4-Dichlorobenzene	<25	µg/L	25	EPA 8270
2,4,5-Trichlorophenol	<25	µg/L	25	EPA 8270
2,4,6-Trichlorophenol	<25	µg/L	25	EPA 8270
2,4-Dichlorophenol	<25	µg/L	25	EPA 8270
2,4-Dimethylphenol	<50	µg/L	50	EPA 8270
2,4-Dinitrophenol	<125	µg/L	125	EPA 8270
2,4-Dinitrotoluene	<25	µg/L	25	EPA 8270
2,6-Dinitrotoluene	<25	µg/L	25	EPA 8270
2-Chloronaphthalene	<25	µg/L	25	EPA 8270
2-Chlorophenol	<25	µg/L	25	EPA 8270
2-Methylnaphthalene	<25	µg/L	25	EPA 8270
2-Methylphenol	<25	µg/L	25	EPA 8270
2-Nitroaniline	<25	µg/L	25	EPA 8270
2-Nitrophenol	<25	µg/L	25	EPA 8270
3,3'-Dichlorobenzidine	<25	µg/L	25	EPA 8270
3,4-Methylphenol	<25	µg/L	25	EPA 8270
3-Nitroaniline	<50	µg/L	50	EPA 8270
4,6-Dinitro-2-methylphenol	<50	µg/L	50	EPA 8270





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

15:30

System ID AE04679

Sample ID LAB000741

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW1-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THIS SAMPLE REQUIRED DILUTION BY A FACTOR OF 5 FOR SEMI-VOLATILE ORGANICS ANALYSIS DUE TO THE MATRIX.

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<25	µg/L	25	EPA 8270
4-Chloro-3-methylphenol	<25	µg/L	25	EPA 8270
4-Chloroaniline	<100	µg/L	100	EPA 8270
4-chlorophenylphenyl ether	<25	µg/L	25	EPA 8270
4-Nitroaniline	<25	µg/L	25	EPA 8270
4-Nitrophenol	<125	µg/L	125	EPA 8270
Acenaphthene	<25	µg/L	25	EPA 8270
Acenaphthylene	<25	µg/L	25	EPA 8270
Anthracene	<25	µg/L	25	EPA 8270
Benzo(a)anthracene	<25	µg/L	25	EPA 8270
Benzo(a)pyrene	<25	µg/L	25	EPA 8270
Benzo(b)fluoranthene	<25	µg/L	25	EPA 8270
Benzo(g,h,i)perylene	<25	µg/L	25	EPA 8270
Benzo(k)fluoranthene	<25	µg/L	25	EPA 8270
Benzoic acid	<250	µg/L	250	EPA 8270
Benzyl alcohol	<50	µg/L	50	EPA 8270
Benzyl butyl phthalate	<25	µg/L	25	EPA 8270
Bis(2-chloroethoxy) methane	<50	µg/L	50	EPA 8270
Bis(2-chloroethyl) ether	<25	µg/L	25	EPA 8270
Bis(2-chloroisopropyl) ether	<50	µg/L	50	EPA 8270
Bis(2-ethylhexyl) phthalate	<50	µg/L	50	EPA 8270
Carbazole	<25	µg/L	25	EPA 8270
Chrysene	<25	µg/L	25	EPA 8270
Di-n-butyl phthalate	<25	µg/L	25	EPA 8270
Di-n-octyl phthalate	<25	µg/L	25	EPA 8270
Dibenzo(a,h)anthracene	<25	µg/L	25	EPA 8270
Dibenzofuran	<25	µg/L	25	EPA 8270
Diethyl phthalate	<25	µg/L	25	EPA 8270
Dimethyl phthalate	<25	µg/L	25	EPA 8270
Fluoranthene	<25	µg/L	25	EPA 8270
Fluorene	<25	µg/L	25	EPA 8270
Hexachlorobenzene	<25	µg/L	25	EPA 8270





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

15:30

System ID AE04679

Sample ID LAB000741

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW1-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THIS SAMPLE REQUIRED DILUTION BY A FACTOR OF 5 FOR SEMI-VOLATILE ORGANICS ANALYSIS DUE TO THE MATRIX.

Test Parameter	Result	Units	MRL	Method
Hexachlorobutadiene	<50	µg/L	50	EPA 8270
Hexachlorocyclopentadiene	<50	µg/L	50	EPA 8270
Hexachloroethane	<50	µg/L	50	EPA 8270
Indeno(1,2,3-cd)pyrene	<25	µg/L	25	EPA 8270
Isophorone	<25	µg/L	25	EPA 8270
N-Nitroso-di-n-propylamine	<50	µg/L	50	EPA 8270
N-Nitrosodiphenylamine	<25	µg/L	25	EPA 8270
Naphthalene	<25	µg/L	25	EPA 8270
Nitrobenzene	<25	µg/L	25	EPA 8270
Pentachlorophenol	<50	µg/L	50	EPA 8270
Phenanthrene	<25	µg/L	25	EPA 8270
Phenol	<25	µg/L	25	EPA 8270
Pyrene	<25	µg/L	25	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

15:30

System ID AE04679

Sample ID LAB000741

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW1-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THIS SAMPLE REQUIRED DILUTION BY A FACTOR OF 5 FOR SEMI-VOLATILE ORGANICS ANALYSIS DUE TO THE MATRIX.

Test Parameter	Result	Units	MRL	Method
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	<10.0	µg/L	10.0	EPA 8260B
Benzene	1.13	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	4.21	µg/L	1.00	EPA 8260B
Chloroethane	7.46	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	1.44	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	2.64	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	1.01	µg/L	1.00	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00

15:30

System ID AE04679

Sample ID LAB000741

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW1-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THIS SAMPLE REQUIRED DILUTION BY A FACTOR OF 5 FOR SEMI-VOLATILE ORGANICS ANALYSIS DUE TO THE MATRIX.

Test Parameter	Result	Units	MRL	Method
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000741



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

17:15

System ID AE04680

Sample ID LAB000742

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW2-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
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**METALS**

ARSENIC	0.020	mg/L	0.01	EPA 200.8
BARIUM	0.20	mg/L	0.01	EPA 200.7
CADMIUM	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM	<0.030	mg/L	0.03	EPA 200.7
LEAD	<0.100	mg/L	0.1	EPA 200.7
MERCURY	<0.0002	mg/L	0.0002	EPA 245.1
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	<0.010	mg/L	0.01	EPA 200.7

**SEMI-VOLATILE ORGANICS**

1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,3-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,4-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dimethylphenol	<10	µg/L	10	EPA 8270
2,4-Dinitrophenol	<25	µg/L	25	EPA 8270
2,4-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2,6-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2-Chloronaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Chlorophenol	<5.0	µg/L	5.0	EPA 8270
2-Methylnaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Methylphenol	<10	µg/L	10	EPA 8270
2-Nitroaniline	<5.0	µg/L	5.0	EPA 8270
2-Nitrophenol	<5.0	µg/L	5.0	EPA 8270
3,3'-Dichlorobenzidine	<5.0	µg/L	5.0	EPA 8270
3,4-Methylphenol	<5.0	µg/L	5.0	EPA 8270
3-Nitroaniline	<10	µg/L	10	EPA 8270
4,6-Dinitro-2-methylphenol	<10	µg/L	10	EPA 8270







# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

17:15 System ID AE04680

Sample ID LAB000742

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW2-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Chloro-3-methylphenol	<5.0	µg/L	5.0	EPA 8270
4-Chloroaniline	<20	µg/L	20	EPA 8270
4-chlorophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Nitroaniline	<10	µg/L	10	EPA 8270
4-Nitrophenol	<25	µg/L	25	EPA 8270
Acenaphthene	<5.0	µg/L	5.0	EPA 8270
Acenaphthylene	<5.0	µg/L	5.0	EPA 8270
Anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)pyrene	<5.0	µg/L	5.0	EPA 8270
Benzo(b)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzo(g,h,i)perylene	<5.0	µg/L	5.0	EPA 8270
Benzo(k)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzoic acid	<50	µg/L	50	EPA 8270
Benzyl alcohol	<10	µg/L	10	EPA 8270
Benzyl butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroethoxy) methane	<10	µg/L	10	EPA 8270
Bis(2-chloroethyl) ether	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroisopropyl) ether	<10	µg/L	10	EPA 8270
Bis(2-ethylhexyl) phthalate	<10	µg/L	10	EPA 8270
Chrysene	<5.0	µg/L	5.0	EPA 8270
Di-n-butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Di-n-octyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dibenzo(a,h)anthracene	<5.0	µg/L	5.0	EPA 8270
Dibenzofuran	<5.0	µg/L	5.0	EPA 8270
Diethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dimethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Fluoranthene	<5.0	µg/L	5.0	EPA 8270
Fluorene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobenzene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobutadiene	<10	µg/L	10	EPA 8270



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

17:15 System ID AE04680

Sample ID LAB000742

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW2-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10	µg/L	10	EPA 8270
Hexachloroethane	<10	µg/L	10	EPA 8270
Indeno(1,2,3-cd) pyrene	<5.0	µg/L	5.0	EPA 8270
Isophorone	<5.0	µg/L	5.0	EPA 8270
N-Nitroso-di-n-propylamine	<10	µg/L	10	EPA 8270
N-Nitrosodiphenylamine	<5.0	µg/L	5.0	EPA 8270
Naphthalene	<5.0	µg/L	5.0	EPA 8270
Nitrobenzene	<5.0	µg/L	5.0	EPA 8270
Pentachlorophenol	<10	µg/L	10	EPA 8270
Phenanthrene	<5.0	µg/L	5.0	EPA 8270
Phenol	<5.0	µg/L	5.0	EPA 8270
Pyrene	<5.0	µg/L	5.0	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B





# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/18/00

17:15

System ID AE04680

Sample ID LAB000742

Page: 4

Proj./Company Name: LARSON PROPERTY  
 Address/Location: 10505 N NORTH PORTLAND RD  
 MW2-05180 PROJECT 6064

Date Received: 5/19/00  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: 0  
 IMS File/Invoice #: 3030.007

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	<10.0	µg/L	10.0	EPA 8260B
Benzene	<1.00	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	<1.00	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	<1.00	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	3.01	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

17:15 System ID AE04680

Sample ID LAB000742

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW2-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000742





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

16:40

System ID AE04681

Sample ID LAB000743

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW3-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	0.060	mg/L	0.01	EPA 200.8
BARIUM	2.7	mg/L	0.01	EPA 200.7
CADMIUM	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM	0.50	mg/L	0.03	EPA 200.7
LEAD	1.5	mg/L	0.1	EPA 200.7
MERCURY	0.0026	mg/L	0.0002	EPA 245.1
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	<0.010	mg/L	0.01	EPA 200.7
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,3-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,4-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
2,4,5-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dimethylphenol	<10	µg/L	10	EPA 8270
2,4-Dinitrophenol	<25	µg/L	25	EPA 8270
2,4-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2,6-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2-Chloronaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Chlorophenol	<5.0	µg/L	5.0	EPA 8270
2-Methylnaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Methylphenol	<10	µg/L	10	EPA 8270
2-Nitroaniline	<5.0	µg/L	5.0	EPA 8270
2-Nitrophenol	<5.0	µg/L	5.0	EPA 8270
3,3'-Dichlorobenzidine	<5.0	µg/L	5.0	EPA 8270
3,4-Methylphenol	<5.0	µg/L	5.0	EPA 8270
3-Nitroaniline	<10	µg/L	10	EPA 8270
4,6-Dinitro-2-methylphenol	<10	µg/L	10	EPA 8270



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

16:40 System ID AE04681

Sample ID LAB000743

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW3-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Chloro-3-methylphenol	<5.0	µg/L	5.0	EPA 8270
4-Chloroaniline	<20	µg/L	20	EPA 8270
4-chlorophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Nitroaniline	<10	µg/L	10	EPA 8270
4-Nitrophenol	<25	µg/L	25	EPA 8270
Acenaphthene	<5.0	µg/L	5.0	EPA 8270
Acenaphthylene	<5.0	µg/L	5.0	EPA 8270
Anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)pyrene	<5.0	µg/L	5.0	EPA 8270
Benzo(b)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzo(g,h,i)perylene	<5.0	µg/L	5.0	EPA 8270
Benzo(k)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzoic acid	<50	µg/L	50	EPA 8270
Benzyl alcohol	<10	µg/L	10	EPA 8270
Benzyl butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroethoxy) methane	<10	µg/L	10	EPA 8270
Bis(2-chloroethyl) ether	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroisopropyl) ether	<10	µg/L	10	EPA 8270
Bis(2-ethylhexyl) phthalate	<10	µg/L	10	EPA 8270
Chrysene	<5.0	µg/L	5.0	EPA 8270
Di-n-butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Di-n-octyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dibenzo(a,h)anthracene	<5.0	µg/L	5.0	EPA 8270
Dibenzofuran	<5.0	µg/L	5.0	EPA 8270
Diethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dimethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Fluoranthene	<5.0	µg/L	5.0	EPA 8270
Fluorene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobenzene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobutadiene	<10	µg/L	10	EPA 8270





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

16:40 System ID AE04681

Sample ID LAB000743

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW3-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10	µg/L	10	EPA 8270
Hexachloroethane	<10	µg/L	10	EPA 8270
Indeno(1,2,3-cd)pyrene	<5.0	µg/L	5.0	EPA 8270
Isophorone	<5.0	µg/L	5.0	EPA 8270
N-Nitroso-di-n-propylamine	<10	µg/L	10	EPA 8270
N-Nitrosodiphenylamine	<5.0	µg/L	5.0	EPA 8270
Naphthalene	<5.0	µg/L	5.0	EPA 8270
Nitrobenzene	<5.0	µg/L	5.0	EPA 8270
Pentachlorophenol	<10	µg/L	10	EPA 8270
Phenanthrene	<5.0	µg/L	5.0	EPA 8270
Phenol	<5.0	µg/L	5.0	EPA 8270
Pyrene	<5.0	µg/L	5.0	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

16:40 System ID AE04681

Sample ID LAB000743

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW3-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	18.5	µg/L	10.0	EPA 8260B
Benzene	<1.00	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	<1.00	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	<1.00	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	2.01	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B





# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/18/00

16:40

System ID AE04681

Sample ID LAB000743

Page: 5

Proj./Company Name: LARSON PROPERTY  
 Address/Location: 10505 N NORTH PORTLAND RD  
 MW3-05180 PROJECT 6064

Date Received: 5/19/00  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: 0  
 IMS File/Invoice #: 3030.007

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: KLEINFELDER

Comments:

Test Parameter	Result	Units	MRL	Method
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000743



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

12:05

System ID AE04682

Sample ID LAB000744

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW4-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	0.30	mg/L	0.01	EPA 200.8
BARIUM	4.8	mg/L	0.01	EPA 200.7
CADMIUM	0.049	mg/L	0.03	EPA 200.7
CHROMIUM	1.1	mg/L	0.03	EPA 200.7
LEAD	5.7	mg/L	0.1	EPA 200.7
MERCURY	0.0024	mg/L	0.0002	EPA 245.1
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	0.015	mg/L	0.01	EPA 200.7
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,3-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,4-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
2,4,5-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dimethylphenol	<10	µg/L	10	EPA 8270
2,4-Dinitrophenol	<25	µg/L	25	EPA 8270
2,4-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2,6-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2-Chloronaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Chlorophenol	<5.0	µg/L	5.0	EPA 8270
2-Methylnaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Methylphenol	<10	µg/L	10	EPA 8270
2-Nitroaniline	<5.0	µg/L	5.0	EPA 8270
2-Nitrophenol	<5.0	µg/L	5.0	EPA 8270
3,3'-Dichlorobenzidine	<5.0	µg/L	5.0	EPA 8270
3,4-Methylphenol	<5.0	µg/L	5.0	EPA 8270
3-Nitroaniline	<10	µg/L	10	EPA 8270
4,6-Dinitro-2-methylphenol	<10	µg/L	10	EPA 8270





# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/18/00

12:05

System ID AE04682

Sample ID LAB000744

Page: 2

Proj./Company Name: LARSON PROPERTY  
 Address/Location: 10505 N NORTH PORTLAND RD  
 MW4-05180 PROJECT 6064

Date Received: 5/19/00  
 Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: 0  
 IMS File/Invoice #: 3030.007

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Chloro-3-methylphenol	<5.0	µg/L	5.0	EPA 8270
4-Chloroaniline	<20	µg/L	20	EPA 8270
4-chlorophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Nitroaniline	<10	µg/L	10	EPA 8270
4-Nitrophenol	<25	µg/L	25	EPA 8270
Acenaphthene	<5.0	µg/L	5.0	EPA 8270
Acenaphthylene	<5.0	µg/L	5.0	EPA 8270
Anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)pyrene	<5.0	µg/L	5.0	EPA 8270
Benzo(b)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzo(g,h,i)perylene	<5.0	µg/L	5.0	EPA 8270
Benzo(k)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzoic acid	<50	µg/L	50	EPA 8270
Benzyl alcohol	<10	µg/L	10	EPA 8270
Benzyl butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroethoxy) methane	<10	µg/L	10	EPA 8270
Bis(2-chloroethyl) ether	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroisopropyl) ether	<10	µg/L	10	EPA 8270
Bis(2-ethylhexyl) phthalate	<10	µg/L	10	EPA 8270
Chrysene	<5.0	µg/L	5.0	EPA 8270
Di-n-butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Di-n-octyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dibenzo(a,h)anthracene	<5.0	µg/L	5.0	EPA 8270
Dibenzofuran	<5.0	µg/L	5.0	EPA 8270
Diethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dimethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Fluoranthene	<5.0	µg/L	5.0	EPA 8270
Fluorene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobenzene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobutadiene	<10	µg/L	10	EPA 8270





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

12:05 System ID AE04682

Sample ID LAB000744

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW4-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10	µg/L	10	EPA 8270
Hexachloroethane	<10	µg/L	10	EPA 8270
Indeno(1,2,3-cd) pyrene	<5.0	µg/L	5.0	EPA 8270
sophorone	<5.0	µg/L	5.0	EPA 8270
N-Nitroso-di-n-propylamine	<10	µg/L	10	EPA 8270
N-Nitrosodiphenylamine	<5.0	µg/L	5.0	EPA 8270
Naphthalene	<5.0	µg/L	5.0	EPA 8270
Nitrobenzene	<5.0	µg/L	5.0	EPA 8270
Pentachlorophenol	<10	µg/L	10	EPA 8270
Phenanthrene	<5.0	µg/L	5.0	EPA 8270
Phenol	<5.0	µg/L	5.0	EPA 8270
Pyrene	<5.0	µg/L	5.0	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	1.71	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

12:05

System ID AE04682

Sample ID LAB000744

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW4-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	<10.0	µg/L	10.0	EPA 8260B
Benzene	<1.00	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	<1.00	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	4.82	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	<1.00	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	<2.00	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

12:05

System ID AE04682

Sample ID LAB000744

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW4-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000744





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

13:05

System ID AE04683

Sample ID LAB000745

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW5-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
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**METALS**

ARSENIC	0.062	mg/L	0.01	EPA 200.8
BARIUM	1.7	mg/L	0.01	EPA 200.7
CADMIUM	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM	0.20	mg/L	0.03	EPA 200.7
LEAD	0.44	mg/L	0.1	EPA 200.7
MERCURY	0.0005	mg/L	0.0002	EPA 245
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	<0.010	mg/L	0.01	EPA 200.7

**SEMI-VOLATILE ORGANICS**

1,2,4-Trichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,3-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,4-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
2,4,5-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dimethylphenol	<10	µg/L	10	EPA 8270
2,4-Dinitrophenol	<25	µg/L	25	EPA 8270
2,4-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2,6-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2-Chloronaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Chlorophenol	<5.0	µg/L	5.0	EPA 8270
2-Methylnaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Methylphenol	<10	µg/L	10	EPA 8270
2-Nitroaniline	<5.0	µg/L	5.0	EPA 8270
2-Nitrophenol	<5.0	µg/L	5.0	EPA 8270
3,3'-Dichlorobenzidine	<5.0	µg/L	5.0	EPA 8270
3-4-Methylphenol	<5.0	µg/L	5.0	EPA 8270
3-Nitroaniline	<10	µg/L	10	EPA 8270
4,6-Dinitro-2-methylphenol	<10	µg/L	10	EPA 8270



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

13:05

System ID AE04683

Sample ID LAB000745

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW5-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Chloro-3-methylphenol	<5.0	µg/L	5.0	EPA 8270
4-Chloroaniline	<20	µg/L	20	EPA 8270
4-chlorophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Nitroaniline	<10	µg/L	10	EPA 8270
4-Nitrophenol	<25	µg/L	25	EPA 8270
Acenaphthene	<5.0	µg/L	5.0	EPA 8270
Acenaphthylene	<5.0	µg/L	5.0	EPA 8270
Anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)pyrene	<5.0	µg/L	5.0	EPA 8270
Benzo(b)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzo(g,h,i)perylene	<5.0	µg/L	5.0	EPA 8270
Benzo(k)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzoic acid	<50	µg/L	50	EPA 8270
Benzyl alcohol	<10	µg/L	10	EPA 8270
Benzyl butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroethoxy) methane	<10	µg/L	10	EPA 8270
Bis(2-chloroethyl) ether	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroisopropyl) ether	<10	µg/L	10	EPA 8270
Bis(2-ethylhexyl) phthalate	<10	µg/L	10	EPA 8270
Chrysene	<5.0	µg/L	5.0	EPA 8270
Di-n-butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Di-n-octyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dibenzo(a,h)anthracene	<5.0	µg/L	5.0	EPA 8270
Dibenzofuran	<5.0	µg/L	5.0	EPA 8270
Diethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dimethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Fluoranthene	<5.0	µg/L	5.0	EPA 8270
Fluorene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobenzene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobutadiene	<10	µg/L	10	EPA 8270





# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 5/18/00

13:05

System ID AE04683

Sample ID LAB000745

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW5-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10	µg/L	10	EPA 8270
Hexachloroethane	<10	µg/L	10	EPA 8270
Indeno(1,2,3-cd) pyrene	<5.0	µg/L	5.0	EPA 8270
Isophorone	<5.0	µg/L	5.0	EPA 8270
N-Nitroso-di-n-propylamine	<10	µg/L	10	EPA 8270
N-Nitrosodiphenylamine	<5.0	µg/L	5.0	EPA 8270
Naphthalene	<5.0	µg/L	5.0	EPA 8270
Nitrobenzene	<5.0	µg/L	5.0	EPA 8270
Pentachlorophenol	<10	µg/L	10	EPA 8270
Phenanthrene	<5.0	µg/L	5.0	EPA 8270
Phenol	<5.0	µg/L	5.0	EPA 8270
Pyrene	<5.0	µg/L	5.0	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

13:05

System ID AE04683

Sample ID LAB000745

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW5-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	<10.0	µg/L	10.0	EPA 8260B
Benzene	<1.00	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	<1.00	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	<1.00	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	<2.00	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00

13:05

System ID AE04683

Sample ID LAB000745

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW5-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000745



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

14:15 System ID AE04684

Sample ID LAB000746

Page: 1

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW6-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC	0.021	mg/L	0.01	EPA 200.8
BARIUM	0.59	mg/L	0.01	EPA 200.7
CADMIUM	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM	0.032	mg/L	0.03	EPA 200.7
LEAD	<0.100	mg/L	0.1	EPA 200.7
MERCURY	<0.0002	mg/L	0.0002	EPA 245.1
SELENIUM	<0.01	mg/L	0.01	EPA 200.8
SILVER	<0.010	mg/L	0.01	EPA 200.7
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,2-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,3-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
1,4-Dichlorobenzene	<5.0	µg/L	5.0	EPA 8270
2,4,5-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4,6-Trichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dichlorophenol	<5.0	µg/L	5.0	EPA 8270
2,4-Dimethylphenol	<10	µg/L	10	EPA 8270
2,4-Dinitrophenol	<25	µg/L	25	EPA 8270
2,4-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2,6-Dinitrotoluene	<5.0	µg/L	5.0	EPA 8270
2-Chloronaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Chlorophenol	<5.0	µg/L	5.0	EPA 8270
2-Methylnaphthalene	<5.0	µg/L	5.0	EPA 8270
2-Methylphenol	<10	µg/L	10	EPA 8270
2-Nitroaniline	<5.0	µg/L	5.0	EPA 8270
2-Nitrophenol	<5.0	µg/L	5.0	EPA 8270
3,3'-Dichlorobenzidine	<5.0	µg/L	5.0	EPA 8270
3,4-Methylphenol	<5.0	µg/L	5.0	EPA 8270
3-Nitroaniline	<10	µg/L	10	EPA 8270
4,6-Dinitro-2-methylphenol	<10	µg/L	10	EPA 8270





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

14:15

System ID AE04684

Sample ID LAB000746

Page: 2

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW6-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Chloro-3-methylphenol	<5.0	µg/L	5.0	EPA 8270
4-Chloroaniline	<20	µg/L	20	EPA 8270
4-chlorophenylphenyl ether	<5.0	µg/L	5.0	EPA 8270
4-Nitroaniline	<10	µg/L	10	EPA 8270
4-Nitrophenol	<25	µg/L	25	EPA 8270
Acenaphthene	<5.0	µg/L	5.0	EPA 8270
Acenaphthylene	<5.0	µg/L	5.0	EPA 8270
Anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)anthracene	<5.0	µg/L	5.0	EPA 8270
Benzo(a)pyrene	<5.0	µg/L	5.0	EPA 8270
Benzo(b)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzo(g,h,i)perylene	<5.0	µg/L	5.0	EPA 8270
Benzo(k)fluoranthene	<5.0	µg/L	5.0	EPA 8270
Benzoic acid	<50	µg/L	50	EPA 8270
Benzyl alcohol	<10	µg/L	10	EPA 8270
Benzyl butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroethoxy) methane	<10	µg/L	10	EPA 8270
Bis(2-chloroethyl) ether	<5.0	µg/L	5.0	EPA 8270
Bis(2-chloroisopropyl) ether	<10	µg/L	10	EPA 8270
Bis(2-ethylhexyl) phthalate	<10	µg/L	10	EPA 8270
Chrysene	<5.0	µg/L	5.0	EPA 8270
Di-n-butyl phthalate	<5.0	µg/L	5.0	EPA 8270
Di-n-octyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dibenzo(a,h)anthracene	<5.0	µg/L	5.0	EPA 8270
Dibenzofuran	<5.0	µg/L	5.0	EPA 8270
Diethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Dimethyl phthalate	<5.0	µg/L	5.0	EPA 8270
Fluoranthene	<5.0	µg/L	5.0	EPA 8270
Fluorene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobenzene	<5.0	µg/L	5.0	EPA 8270
Hexachlorobutadiene	<10	µg/L	10	EPA 8270



# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

14:15

System ID AE04684

Sample ID LAB000746

Page: 3

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW6-05180 PROJECT 8064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<10	µg/L	10	EPA 8270
Hexachloroethane	<10	µg/L	10	EPA 8270
Indeno(1,2,3-cd) pyrene	<5.0	µg/L	5.0	EPA 8270
Isophorone	<5.0	µg/L	5.0	EPA 8270
N-Nitroso-di-n-propylamine	<10	µg/L	10	EPA 8270
N-Nitrosodiphenylamine	<5.0	µg/L	5.0	EPA 8270
Naphthalene	<5.0	µg/L	5.0	EPA 8270
Nitrobenzene	<5.0	µg/L	5.0	EPA 8270
Pentachlorophenol	<10	µg/L	10	EPA 8270
Phenanthrene	<5.0	µg/L	5.0	EPA 8270
Phenol	<5.0	µg/L	5.0	EPA 8270
Pyrene	<5.0	µg/L	5.0	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B





City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 5/18/00

14:15 System ID AE04684

Sample ID LAB000746

Page: 4

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW6-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	<10.0	µg/L	10.0	EPA 8260B
Benzene	<1.00	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromiform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	<1.00	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	<1.00	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	<2.00	µg/L	2.00	EPA 8260B
Isopropylbenzene	<1.00	µg/L	1.00	EPA 8260B
m,p-Xylene	<2.00	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
n-Propylbenzene	<1.00	µg/L	1.00	EPA 8260B





# City of Portland Water Pollution Control Laboratory Laboratory Analysis Report



Sample Date/Time 5/18/00

14:15 System ID AE04684

Sample ID LAB000746

Page: 5

Proj./Company Name: LARSON PROPERTY  
Address/Location: 10505 N NORTH PORTLAND RD  
MW6-05180 PROJECT 6064

Date Received: 5/19/00  
Sample Status: REPORT QUEUE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.007

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: KLEINFELDER

Comments: LAB: THE METHOD-SPECIFIED HOLDING TIME WAS EXCEEDED BY ONE DAY FOR VOLATILE ORGANICS ANALYSIS.

Test Parameter	Result	Units	MRL	Method
Naphthalene	<1.00	µg/L	1.00	EPA 8260B
o-Xylene	<1.00	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	<1.00	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	<1.00	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000746



PROJECT NO. 60-535-01		PROJECT NAME 10505 N Portland Road		NO. OF CON- TAINERS	TYPE OF CON- TAINERS	ANALYSIS								RECEIVING LAB:
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number) David Lamadrid Paul [Signature]	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS			SAMPLE I.D.	MATRIX	VOCs (8260)	Semi-VOCs (8270)	Total PCRA 8 Metals	Discolored PCRA 8 Metals	INSTRUCTIONS/REMARKS		
1	5/17/00	0845	TP-1-7'	Soil	4	X	X	X			LAB 000697			
2		0900	TP-1-19'		4	X	X	X			LAB 000698			
3		0925	TP-2-5'		4	X	X	X			LAB 000699			
4		0940	TP-2-19'		4	X	X	X			LAB 000700			
5		1010	TP-3-10'		4	X	X	X			LAB 000701			
6		1025	TP-3-21'		4	X	X	X			LAB 000702			
7		1045	TP-4-11'		4	X	X	X			LAB 000703			
8		1050	TP-4-21'		4	X	X	X			LAB 000704			
9		1115	TP-5-11'		4	X	X	X			LAB 000705			
10		1145	TP-5-21'		4	X	X	X			LAB 000706			
11		1200	TP-6-5'		4	X	X	X			LAB 000707			
12		1215	TP-6-13'		4	X	X	X			LAB 000708			
13		1250	TP-7-5'		4	X	X	X			LAB 000709			
14		1300	TP-7-17'		4	X	X	X			LAB 000710			
15		1355	TP-8-5'		4	X	X	X			LAB 000711			
16		1405	TP-8-19'		4	X	X	X			LAB 000712			
17		1430	TP-9-5'		4	X	X	X			LAB 000713			
18		1435	TP-9-11'		4	X	X	X			LAB 000714			
19		1500	TP-10-10'		4	X	X	X			LAB 000715			
20	V	1505	TP-10-16'	↓	4	X	X	X			LAB 000716			

Relinquished by: (Signature) [Signature]	Date/Time 5/17/00 0750	Received by: (Signature) [Signature]	Instructions/Remarks:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	

CITY OF PORTLAND, OR

KLEINFELDER  
15050 S.W. KOLL PARKWAY  
SUITE L  
BEAVERTON, OR 97006  
(503) 644-9447

Attn: John Day

PROJECT NO. 60-5395-01		PROJECT NAME 10505 N Portland Road		NO. OF CON- TAINERS	TYPE OF CON- TAINERS	ANALYSIS										RECEIVING LAB: City of Portland
L.P. NO. (P.O. NO.)		SAMPLERS: (Signature/Number) David Zamadri's				VOCs (8260)	Semi-VOCs (8270)	Total PCRA 8 metals	Dissolved PCRA 8 metals					INSTRUCTIONS/REMARKS		
DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX													
1	5/17/00	1530	TP-11-5'	Soil	4									LAB 000717		
2		1535	TP-11-11'	Soil	4	X	X	X						LAB 000718		
3		1550	TP-11-21'	Soil	4	X	X	X						LAB 000719		
4																
5	↓	1220	TP-6	WATER	5	X	X		X					LAB 000720		
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

Relinquished by: (Signature) <i>David Zamadri</i>	Date/Time 5/19/00 0750	Received by: (Signature) <i>J. Corbett</i>	Instructions/Remarks:	Send Results To:  KLEINFELDER 15050 S.W. KOLL PARKWAY SUITE L BEAVERTON, OR 97006 (503) 644-9447
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		





**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**


**Sample Date/Time** 05/17/2000 12:20 **System ID** AE04631

**Sample ID** LAB000720

**Page:** 1

**Proj./Company Name:** SPECIAL WASTE MISC SAMP  
**Address/Location:** 10505 N NORTH PORTLAND RD  
 TP-6 PROJECT 6064

**Date Received:** 05/19/2000  
**Sample Status:** INACTIVE

**Proj Subcategory:** SPECIAL WASTE  
**Sample Point Code:** 0  
**IMS File/Invoice #:** 3030.000

**Sample Type:** GRAB  
**Sample Matrix:** GRNDWTR  
**Collected By:** DL

**Comments:**

Test Parameter	Result	Units	MRL	Method
<b>METALS</b>				
ARSENIC, DISSOLVED	0.058	mg/L	0.01	EPA 200.8
BARIUM, DISSOLVED	0.019	mg/L	0.01	EPA 200.7
CADMIUM, DISSOLVED	<0.030	mg/L	0.03	EPA 200.7
CHROMIUM, DISSOLVED	<0.030	mg/L	0.03	EPA 200.7
LEAD, DISSOLVED	<0.100	mg/L	0.01	EPA 200.7
MERCURY, DISSOLVED	<0.0002	mg/L	0.0002	EPA 245.1
SELENIUM, DISSOLVED	<0.01	mg/L	0.01	EPA 200.8
SILVER, DISSOLVED	<0.010	mg/L	0.01	EPA 200.7
<b>SEMI-VOLATILE ORGANICS</b>				
1,2,4-Trichlorobenzene	<10	µg/L	10	EPA 8270
1,2-Dichlorobenzene	<10	µg/L	10	EPA 8270
1,3-Dichlorobenzene	<10	µg/L	10	EPA 8270
1,4-Dichlorobenzene	<10	µg/L	10	EPA 8270
2,4,5-Trichlorophenol	<10	µg/L	10	EPA 8270
2,4,6-Trichlorophenol	<10	µg/L	10	EPA 8270
2,4-Dichlorophenol	<10	µg/L	10	EPA 8270
2,4-Dimethylphenol	<10	µg/L	20	EPA 8270
2,4-Dinitrophenol	<50	µg/L	50	EPA 8270
2,4-Dinitrotoluene	<10	µg/L	10	EPA 8270
2,6-Dinitrotoluene	<10	µg/L	10	EPA 8270
2-Chloronaphthalene	<10	µg/L	10	EPA 8270
2-Chlorophenol	<10	µg/L	10	EPA 8270
2-Methylnaphthalene	14.7	µg/L	10	EPA 8270
2-Methylphenol	<20	µg/L	20	EPA 8270
2-Nitroaniline	<10	µg/L	10	EPA 8270
2-Nitrophenol	<10	µg/L	10	EPA 8270
3,3'-Dichlorobenzidine	<10	µg/L	10	EPA 8270
3,4-Methylphenol	10.1	µg/L	10	EPA 8270
3-Nitroaniline	<20	µg/L	20	EPA 8270
4,6-Dinitro-2-methylphenol	<20	µg/L	20	EPA 8270



City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report



Sample Date/Time 05/17/2000 12:20 System ID AE04631

Sample ID LAB000720

Page: 2

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6 PROJECT 6064

Date Received: 05/19/2000  
Sample Status: INACTIVE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
4-Bromophenylphenyl ether	<10	µg/L	10	EPA 8270
4-Chloro-3-methylphenol	<10	µg/L	10	EPA 8270
4-Chloroaniline	<40	µg/L	40	EPA 8270
4-chlorophenylphenyl ether	<10	µg/L	10	EPA 8270
4-Nitroaniline	<20	µg/L	20	EPA 8270
4-Nitrophenol	<50	µg/L	50	EPA 8270
Acenaphthene	10.5	µg/L	10	EPA 8270
Acenaphthylene	<10	µg/L	10	EPA 8270
Anthracene	11.3	µg/L	10	EPA 8270
Benzo(a)anthracene	<10	µg/L	10	EPA 8270
Benzo(a)pyrene	<10	µg/L	10	EPA 8270
Benzo(b)fluoranthene	<10	µg/L	10	EPA 8270
Benzo(g,h,i)perylene	<10	µg/L	10	EPA 8270
Benzo(k)fluoranthene	<10	µg/L	10	EPA 8270
Benzoic acid	<10	µg/L	10	EPA 8270
Benzyl alcohol	<20	µg/L	20	EPA 8270
Benzyl butyl phthalate	<10	µg/L	10	EPA 8270
Bis(2-chloroethoxy) methane	<20	µg/L	20	EPA 8270
Bis(2-chloroethyl) ether	<10	µg/L	10	EPA 8270
Bis(2-chloroisopropyl) ether	<20	µg/L	20	EPA 8270
Bis(2-ethylhexyl) phthalate	63.7	µg/L	40	EPA 8270
Chrysene	<10	µg/L	10	EPA 8270
Di-n-butyl phthalate	<10	µg/L	10	EPA 8270
Di-n-octyl phthalate	<10	µg/L	10	EPA 8270
Dibenzo(a,h)anthracene	<10	µg/L	10	EPA 8270
Dibenzofuran	<10	µg/L	10	EPA 8270
Diethyl phthalate	<10	µg/L	10	EPA 8270
Dimethyl phthalate	<10	µg/L	10	EPA 8270
Fluoranthene	16.6	µg/L	10	EPA 8270
Fluorene	<10	µg/L	10	EPA 8270
Hexachlorobenzene	<10	µg/L	10	EPA 8270
Hexachlorobutadiene	<20	µg/L	20	EPA 8270





**City of Portland  
Water Pollution Control Laboratory  
Laboratory Analysis Report**



Sample Date/Time 05/17/2000 12:20 System ID AE04631

Sample ID LAB000720

Page: 3

Proj/Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6 PROJECT 6064

Date Received: 05/19/2000  
Sample Status: INACTIVE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
Hexachlorocyclopentadiene	<20	µg/L	20	EPA 8270
Hexachloroethane	<20	µg/L	20	EPA 8270
Indeno(1,2,3-cd) pyrene	<10	µg/L	10	EPA 8270
Isophorone	<10	µg/L	10	EPA 8270
N-Nitroso-di-n-propylamine	<20	µg/L	20	EPA 8270
N-Nitrosodiphenylamine	<10	µg/L	10	EPA 8270
Naphthalene	23.3	µg/L	10	EPA 8270
Nitrobenzene	<10	µg/L	10	EPA 8270
Pentachlorophenol	<20	µg/L	20	EPA 8270
Phenanthrene	34.0	µg/L	10	EPA 8270
Phenol	67.1	µg/L	10	EPA 8270
Pyrene	15.3	µg/L	10	EPA 8270
<b>VOLATILE ORGANIC COMPOUNDS</b>				
1,1,1,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,1-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2,2-Tetrachloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1,2-Trichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
1,1-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,3-Trichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,2,4-Trimethylbenzene	10.4	µg/L	1.00	EPA 8260B
1,2-Dibromo-3-chloropropane	<2.00	µg/L	2.00	EPA 8260B
1,2-Dibromoethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichlorobenzene	6.71	µg/L	1.00	EPA 8260B
1,2-Dichloroethane	<1.00	µg/L	1.00	EPA 8260B
1,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
1,3,5-Trimethylbenzene	1.92	µg/L	1.00	EPA 8260B
1,3-Dichlorobenzene	<1.00	µg/L	1.00	EPA 8260B
1,3-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B



# City of Portland

## Water Pollution Control Laboratory

### Laboratory Analysis Report



Sample Date/Time 05/17/2000 12:20 System ID AE04631

Sample ID LAB000720

Page: 4

Proj./Company Name: SPECIAL WASTE MISC SAMP  
 Address/Location: 10505 N NORTH PORTLAND RD  
 TP-6 PROJECT 6064

Date Received: 05/19/2000  
 Sample Status: INACTIVE

Proj Subcategory: SPECIAL WASTE  
 Sample Point Code: 0  
 IMS File/Invoice #: 3030.000

Sample Type: GRAB  
 Sample Matrix: GRNDWTR  
 Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
1,4-Dichlorobenzene	5.88	µg/L	1.00	EPA 8260B
2,2-Dichloropropane	<1.00	µg/L	1.00	EPA 8260B
2-Butanone	<10.0	µg/L	10.0	EPA 8260B
2-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
2-Hexanone	<10.0	µg/L	10.0	EPA 8260B
4-Chlorotoluene	<1.00	µg/L	1.00	EPA 8260B
4-Methyl-2-pentanone (MIBK)	<5.00	µg/L	5.00	EPA 8260B
Acetone	43.0	µg/L	10.0	EPA 8260B
Benzene	8.59	µg/L	1.00	EPA 8260B
Bromobenzene	<1.00	µg/L	1.00	EPA 8260B
Bromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromodichloromethane	<1.00	µg/L	1.00	EPA 8260B
Bromoform	<1.00	µg/L	1.00	EPA 8260B
Bromomethane	<5.00	µg/L	5.00	EPA 8260B
Carbon disulfide	<10.0	µg/L	10.0	EPA 8260B
Carbon tetrachloride	<1.00	µg/L	1.00	EPA 8260B
Chlorobenzene	129	µg/L	1.00	EPA 8260B
Chloroethane	<1.00	µg/L	1.00	EPA 8260B
Chloroform	<1.00	µg/L	1.00	EPA 8260B
Chloromethane	<5.00	µg/L	5.00	EPA 8260B
cis-1,2-Dichloroethene	2.43	µg/L	1.00	EPA 8260B
cis-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Dibromochloromethane	<1.00	µg/L	1.00	EPA 8260B
Dibromomethane	<1.00	µg/L	1.00	EPA 8260B
Dichlorodifluoromethane	<5.00	µg/L	5.00	EPA 8260B
Ethylbenzene	58.9	µg/L	1.00	EPA 8260B
Hexachlorobutadiene	<2.00	µg/L	2.00	EPA 8260B
Isopropylbenzene	1.93	µg/L	1.00	EPA 8260B
m,p-Xylene	57.7	µg/L	2.00	EPA 8260B
Methylene chloride	<5.00	µg/L	5.00	EPA 8260B
n-Butylbenzene	1.04	µg/L	1.00	EPA 8260B
n-Propylbenzene	2.08	µg/L	1.00	EPA 8260B





PORT. WATER POLLUTION LAB

011

**City of Portland**  
**Water Pollution Control Laboratory**  
**Laboratory Analysis Report**



Sample Date/Time 05/17/2000 12:20 System ID AE04631

Sample ID LAB000720

Proj./Company Name: SPECIAL WASTE MISC SAMP  
Address/Location: 10505 N NORTH PORTLAND RD  
TP-6 PROJECT 6064

Page: 5

Date Received: 05/19/2000  
Sample Status: INACTIVE

Proj Subcategory: SPECIAL WASTE  
Sample Point Code: 0  
IMS File/Invoice #: 3030.000

Sample Type: GRAB  
Sample Matrix: GRNDWTR  
Collected By: DL

Comments:

Test Parameter	Result	Units	MRL	Method
Naphthalene	17.1	µg/L	1.00	EPA 8260B
o-Xylene	28.3	µg/L	1.00	EPA 8260B
p-Isopropyltoluene	1.92	µg/L	1.00	EPA 8260B
sec-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Styrene	<1.00	µg/L	1.00	EPA 8260B
tert-Butylbenzene	<1.00	µg/L	1.00	EPA 8260B
Tetrachloroethene	<1.00	µg/L	1.00	EPA 8260B
Toluene	<1.00	µg/L	1.00	EPA 8260B
trans-1,2-Dichloroethene	<1.00	µg/L	1.00	EPA 8260B
trans-1,3-Dichloropropene	<1.00	µg/L	1.00	EPA 8260B
Trichloroethene	<1.00	µg/L	1.00	EPA 8260B
Trichlorofluoromethane	<1.00	µg/L	1.00	EPA 8260B
Vinyl chloride	1.71	µg/L	1.00	EPA 8260B

End of Report for Sample ID: LAB000720