

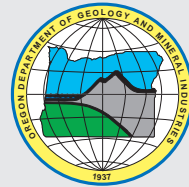
GTILO – Geothermal Information Layer for Oregon

HotSpringURI: <http://www.oregongeology.org/gtilo/ngds/sprg/SH-001.pdf>

Spreadsheet: Oregon_HotSpringFeature_metadata_1_13_11.xls

This URI last updated: 2012-09-29 00:00:00

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IDENTIFIER *See field key on last page for data field definitions.*

HotSpringURI: <http://www.oregongeology.org/gtilo/ngds/sprg/SH-001.pdf>

Name: Warm Spring

Label: Natural spring that emits geothermally heated groundwater in Oregon

OtherName:

OtherIdentifier: SH-001

Source: National Hydrology Data Set: U.S. Geological Survey.
[Http://nhd.usgs.gov/index.html](http://nhd.usgs.gov/index.html)

SourceURI:

FeatureType: thermal

LandLeaseOwner:

OtherLocationName:

REF_ID NHD (see metadata)

SPATIAL

TOPO24K Indian Cove

TOPO100K Condon

County: Sherman

State: Oregon

PLSS_Meridians: Willamette

Township: 003S

Range: 018E

Section: 17.0

SectionPart:

Parcel:

UTM_E:

UTM_N:

UTMDatumZone:

LatDegree: 45.304119

LongDegree: -120.604303

SRS: EPSG:4326

LocationUncertainty-
Statement: The method of digitization of thermal spring locations involved heads-up digitization from U.S. Geological Survey Digital Raster (DRG) Image of 1:24,000-scale quadrangles on the computer screen by using a computer mouse to scribe the feature. The DRG also acted as a marked base to guide and adjust the position of a previously scribed thermal spring feature based on thermal springs depicted on the DRG. The accuracy of this data depends on a number of different types of errors: geodetic, machine, cartographic, and random errors. Not least of which depends on the level of detail of the source material and the interpretation procedures for capturing that source.

CHARACTERISTICS

ObservationURI: <http://www.oregongeology.org/gtilo/ngds/sprg/SH-001.pdf>

Temperature:

TemperatureUnits:

Temp
Measurement
Procedure:

Temp
Measurement
DateTime:

Flow:

FlowUnits:

FlowMeasurement
Procedure:

FlowMeasurement
DateTime:

Measurement-
Source:

FlowContinuity:

Classification: 0

RelatedWater
Chemistry:

HEAT nd

CLASS nd

REFERENCE

DataEntrySource: Clark Niewendorp, 2006 (update, 2010); Industrial Minerals Geologist, Oregon Department of Geology and Mineral Industries;
clark.niewendorp@dogami.state.or.us

RelatedResources: *If available, related resources are listed on separate page.*

Remarks:

LASTUPDT 2012-09-29 00:00:00

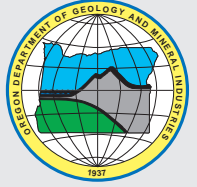
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Related Resources:

If any related resources for this URI exist, they are listed below.

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FIELD KEY: AASG Geothermal Data: Hot Spring Feature content, v. 0.9

This spreadsheet indicates the content requested for basic data characterizing a hot spring feature for the AASG geothermal data project. Typically water temperatures are recorded with other information such as water quality or chemical analysis from a particular spring. The temperature and flow rate reported here are meant to be generalized characterization.

| NewAttrDispName | AttrDesc |
|------------------------------|---|
| HotSpringURI | Unique identifier for the hot spring. Best practice is to define an http URI that will dereference to a normative description of the feature. |
| Name | human-intelligible label for feature |
| Label | label as it would appear on a map, may include feature name and pertinent data such as temperature |
| OtherName | other human-intelligible labels for feature such as secondary spring name or common name, other spellings |
| OtherIdentifier | Other identification associated with springs |
| Source | short text explanation of source of information defining feature; should include some indication of how digital data originated. Recommend including full citation for source of the data in this record. Note a separate source field is available if temperature and flow data have a separate provenance. If all records in table are from same published source, the citation may be put on the dataset metadata sheet and left blank here. |
| SourceURI | Identifier for the cited source. Ideally an http URI that may be dereferenced to produce a representation of the original source document. |
| FeatureType | term from controlled vocabulary classifying kind of geothermal feature; hot, warm, thermal |
| LandLeaseOwner | list ownership if known |
| OtherLocation-Name | Basin name, area name |
| County | county name |
| State | state name |
| PLSS_Meridians | reference meridians used to define township and range grid. |
| Township | list township and direction (15 N) |
| Range | list range and direction (7 E) |
| Section | list section number of 1 through 36 |
| SectionPart | list quarter-quarter-quarter section |
| Parcel | list assessors parcel number or recorded map number and parcel for location |
| UTM_E | UTM easting coordinate. |
| UTM_N | UTM northing coordinate |
| UTMDatumZone | utm datum and zone, e.g. NAD27_12 |
| LatDegree | WGS 84 latitude |
| LongDegree | WGS 84 longitude |
| SRS | Spatial Reference System for latitude and longitude. Use WGS 84 for interoperability |
| LocationUncertaintyStatement | list method used to estimate feature location (middle of qtr section, GPS measurement, located on map for coordinates) and uncertainty of actual position |

| NewAttrDispName | AttrDesc |
|--------------------------|--|
| ObservationURI | Not required if only a single temperature or flow rate is reported. If this table is used to compile multiple temperature or flow-rate measurements associated with a single HotSpring occurrence (same HotSpringURI), then each measurement requires a distinct identifier in this column. If temperature or flow-rate measurement is auxiliary to a water-chemistry analysis, this should be the observationURI that identifies the chemical analysis. In the service architecture, a hot spring feature is characterized by a single temperature measurement that would be the average of multiple measurements reported for the spring. Each observation URI would be published via a 'water temperature observation service'-- cross referenced to the hot spring by a water source identifier. |
| Temperature | Temperature of analyzed water when sampled. |
| TemperatureUnits | °C or °F |
| TempMeasurementProcedure | detail of basis for reported temperature, e.g. 'average of 27 measurements between 1957 and 1967';spot measurement on 12/15/94'. |
| TempMeasurementDateTime | YYYY-MM-DDThr:mm; formatting follows ISO 8601; time assumed to be GMT |
| Flow | Average measured volume of water per unit of time. Has units. |
| FlowUnits | Units of measurement in flow quantity. See data valid terms. |
| FlowMeasurementProcedure | YYYY-MM-DDThr:mm; formatting follows ISO 8601; time assumed to be GMT |
| FlowMeasurementDateTime | Include information on how temperature and flow rate are measured, reference for original data |
| Measurement-Source | Citation for source of measurement. Corrected or extrapolated temperatures should record who made the corrections. |
| Classification | detail of how measurement was acquired (field or laboratory instrument, correction or extrapolation) if known |
| RelatedWaterChemistry | None if no chemical data available; string listing available constituents or analysis types if analyses are available. |
| DataEntrySource | information on person, date of creation of this data record. |
| Remarks | all other information pertaining to geothermal data that does not fit into a feature should be listed in remarks |

Additional DOGAMI data fields:

| | |
|----------|--|
| CLASS | high (>35°C) or low temp. spring classification |
| TOPO24K | USGS 7.5 minute topographic quadrangle name |
| TOPO100K | USGS 30 x 60 minute topographic quadrangle name |
| HEAT | direct-use application area |
| REF_ID | internal DOGAMI source publication cataloging system |
| LASTUPDT | date this URI record was last updated |