## **GTILO – Geothermal Information Layer for Oregon**

HotSpringURI: http://www.oregongeology.org/gtilo/ngds/sprg/LK-007.pdf

Spreadsheet: Oregon\_HotSpringFeature\_metadata\_1\_13\_11.xls

This URI last updated: 2012-06-05 00:00:00

Clark Niewendorp, Industrial Minerals Geologist Oregon Department of Geology and Mineral Industries 800 NE Oregon Street, #28, Suite 965 Portland, OR 97232 tel. (971) 673-1540 <u>clark.niewendorp@dogami.state.or.us</u>



<b>DENTIFIER</b> See field ke	ey on last page for data field definitions.	CHARACTERISTICS	
HotSpringURI:	http://www.oregongeology.org/gtilo/ngds/sprg/LK-007.pdf	ObservationURI:	http://www.oregongeology.org/gtilo/ngds/sprg/LK-007.pdf
Name:	Summer Lake Hot Spring	Temperature: 123.8	
Label:	Natural spring that emits geothermally heated groundwater in Oregon	TemperatureUnits:	Farenheit
OtherName:	Summer Lake Hot Spring	Temp	
OtherIdentifier:	LK-007	Measurement	
	Black, G.L., 1994, Low-temperature geothermal database for Oregon: Oregon Department of Geology and Mineral Industries Open-File Report O-94-08, 178 p., 5 location maps.	Procedure: Temp correctness date is time of publica Measurement by default DateTime:	
SourceURI:		Flow:	75.0
FeatureType:		FlowUnits:	l/min
LandLeaseOwner: OtherLocationName:		FlowMeasurement Procedure:	•
REF_ID	BlacGL1994a	FlowMeasurement DateTime:	correctness date is time of publicati
	Slide Mountain	Measurement- Source:	
TOPO100K	Lake Abert	FlowContinuity:	
County:	Lake	Classification:	5
State:	Oregon		ph, Na, K, Ca, Mg, Fe, Al, SiO2, B, Li, HCO3, S
PLSS_Meridians:		Chemistry:	Cl, F
Township:		HEAT	Summer Lake
Range:	017E	CLASS	sprhi
Section:	12.0		
SectionPart:	ACC	REFERENCE	
Parcel:		DataEntrySource:	Clark Niewendorp, 2006 (update, 2010); Industri Minerals Geologist, Oregon Department of Geol and Mineral Industries; clark.niewendorp@dogami.state.or.us
UTM_E:			
UTM_N:			
UTMDatumZone:			
LatDegree:	42.7251729999999		
LongDegree:	-120.649419	RelatedResources:	If available, related resources of
SRS:	EPSG:4326	Remarks:	listed on separate page.
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.	Remarks.	

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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. Typcially 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	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.	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	
Name	human-intelligible label for feature		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.	
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 sec- ondary 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.	Temperature	Temperature of analyzed water when sampled.	
		TemperatureUnits	°C or °F	
		TempMeasure-	detail of basis for reported temperature, e.g. 'average	
SourceURI	Identifier for the cited source. Ideally an http URI that may be dereferenced to produce a representation of the original source document.	mentProcedure	of 27 measurements between 1957 and 1967','spot measurement on 12/15/94'.	
		TempMeasure- mentDateTime	YYYY-MM-DDThr:mm; formatting follows ISO 8601; time assumed to be GMT	
FeatureType	term from controlled vocabulary classifying kind of geothermal feature; hot, warm, thermal	Flow	Average measured volume of water per unit of time. Has	
LandLeaseOwner	list ownership if known		units.	
OtherLocation- Name	Basin name, area name	FlowUnits	Units of measurement in flow quantity. See data valid terms.	
County	county name	FlowMeasure- mentProcedure	YYYY-MM-DDThr:mm; formatting follows ISO 8601; time assumed to be GMT	
State	state name	FlowMeasure-	Include information on how temperature and flow rate	
PLSS_Meridians	reference meridians used to define township and range grid.	mentDateTime	are measured, reference for original data	
Township	list township and direction (15 N)	Measurement- Source	Citation for source of measurement. Corrected or extrapolated temperatures should record who made the corrections.	
Range	list range and direction (7 E)			
Section	list section number of 1 through 36	Classification	detail of how measurement was aquired (field or labora- tory instrument, correction or extrapolation) if known	
SectionPart	list quarter-quarter section	RelatedWa-	None if no chemical data available; string listing available	
Parcel	list assessors parcel number or recorded map number and parcel for location	terChemistry	constituents or analysis types if analyses are available.	
UTM_E	UTM easting coordinate.	DataEntrySource	information on person, date of creation of this data record.	
UTM_N	UTM northing coordinate	Remarks	all other information pertaining to geothermal data that	
UTMDatumZone	utm datum and zone, e.g. NAD27_12		does not fit into a feature should be listed in remarks	
LatDegree	WGS 84 latitude	Additional DOGAMI data fields:		
LongDegree	WGS 84 longitude	CLASS	high (>35°C) or low temp. spring classification	
SRS	Spatial Reference System for latitude and longitude. Use	ТОРО24К	USGS 7.5 minute topographic quadrangle name	
LocationUncertain- tyStatement	WGS 84 for interoperability list method used to estimate feature location (middle of qtr section, GPS measurement, located on map for coordinates) and uncertainty of actual position	ТОРО100К	USGS 30 x 60 minute topographic quadrangle name	
		HEAT	direct-use application area	
		REF_ID	internal DOGAMI source publication cataloging system	
			data this LIBI record was last undated	

LASTUPDT

date this URI record was last updated