

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OREGON

Basic data for thermal springs and wells
as recorded in GEOTHERM

By

James D. Bliss

Open-File Report 83-435

This report is preliminary and
has not been reviewed for conformity
with U.S. Geological Survey
editorial standards and stratigraphic
nomenclature. Any use of
trade names is for descriptive
purposes only and does not imply
endorsement by the USGS.

Menlo Park, California

May 1983

INTRODUCTION

GEO THERM, a computerized information system now off-line, was used to maintain data on the geology, geochemistry and hydrology of geothermal sites primarily within the United States. The system was proposed at the First Geothermal Implementation Conference in New Zealand in 1974 (Swanson, 1977) and was active until 1983. The primary mission was to provide a broad informational framework for the Geothermal Research Program (Duffield and Guffanti, 1981). GEO THERM was used to support national geothermal assessments--in 1978 (Muffler, 1979) and 1982 (Reed, 1983). It was however a public system and provided data to both public and private sectors. A detailed discussion on databases in GEO THERM and a general scheme of how the information system operated can be found in Bliss and Rapport (1983).

This report on Oregon is one of a series intended to preserve the data collected for GEO THERM and make the data available to the public. States with significant geochemical data for geothermal fluids will be covered in individual reports such as this. A report will also be issued to cover miscellaneous data collected for sites in the central and eastern United States. The data presented in this series is also available as a data file on the internationally-available General Electric Mark III service, a timeshare network. Those interested in accessing that system should contact the Energy Resource Center, University of Oklahoma, Norman, Oklahoma 73070. It is anticipated that a portion of the data will also be available on magnetic tape from the National Technical Information Service, U. S. Department of Commerce, Springfield, VA 22161. It will not be available until after the completion of the open-file series.

GEO THERM INDEXES

Three computer-generated indexes are found in appendices A, B, and C of this report. The indexes give one line summaries of each GEO THERM record describing the chemistry of geothermal springs and wells in the sample file for Oregon. Each index is sorted by different variables to assist the user in locating geothermal records describing specific sites.

Appendix A (p. 218-224) is sorted by the county name and the name of the source. Also given are latitude, longitude (both use decimal minutes), township, range, section, GEO THERM record identifier, and temperature ($^{\circ}\text{C}$). In conducting a search of Appendix A, site names are quite useful for locating springs or wells for which a specific name is commonly used, but sites which do not have specific names are more difficult to locate. It is suggested that site titles which begin with words such as warm, hot, unnamed, pumped, well, or spring be checked. Descriptive text found as part of the site name and the site coordinates should be used to assist in determining location.

Appendix B (p. 225-331) is sorted by township, range, and section. Also given are name of source, GEOTHERM record identifier, and temperature (°C). Records missing items used for sorting will be listed first.

Appendix C (p. 332-339) is first sorted into one-degree blocks by latitude, and longitude, and then by name of source. Adjacent one-degree blocks which are published as a 1:250,000 map are combined under the appropriate map name. Also given are GEOTHERM record identifier, and temperature (°C). Records missing items used for sorting will be listed first. Numbers with a blank in the same position as zero will be given first.

GEOTHERM SAMPLE FILE

GEOTHERM sample file contains 346 records for Oregon (Table 1). Records may be present which are duplicates for the same analyses. A record may contain data on location, sample description, analysis type (water, condensate, or gas), collection condition, flow rates, and the chemical and physical properties of the fluid. Stable and radioactive isotopic data are occasionally available. Some records may contain only location and temperature. When sufficient chemical data was available, the charge balance (percentage of difference in anion- and cation-milliequivalents) was computed and added to the record. Many of the numeric fields in the sample file can be directly qualified. The qualifier code preceeds the number when appropriate. The codes and their meaning are given in Table 1.

Each thermal spring or well usually is represented by several records. This may document temporal changes in the geothermal fluids. Judgement on what constituted acceptable data was extremely complicated and the primary attempt was to insure that each GEOTHERM record faithfully reproduced the published data. On occasion, glaring inconsistencies or data clearly of poor quality were excluded. Regrettably, no database can be constructed or supported without the introduction of errors. The user, therefore, is advised to check with the published literature whenever possible. Users should carefully and critically evaluate the records they use.

This compilation should contain all of the chemical data for geothermal fluids in Oregon available as of December, 1981. However, no claim is made for completeness, and published sources have probably been missed. About 28 % of the records in this list contains information which was unpublished at the time of data entry. A critically evaluated and corrected list of over 2000 records for the United States was extracted from the sample file and issued as a reference document for the national low-temperature geothermal resource assessment (Reed and others, 1983). This, along with a list of geothermal springs by Berry, and others, 1980, may be useful to some users.

GEOTERM BIBLIOGRAPHY

A bibliography is given in Appendix D (p. 340-342). The abbreviated form of the reference (called code) is identified as the record source in the full record list and is used to sort the entries in this appendix. Codes with a leading "*" identify records based on information which was unpublished at the time the record was prepared. Codes with a trailing "*" in the full GEOTERM record are also described in greater detail in Appendix D and are listed ahead of published sources.

ACKNOWLEDGMENTS

Contributions and support to GEOTERM have been made by many in both federal and state agencies. This includes the U.S. Department of Energy (and associated contractors), and U.S. National Oceanic and Atmospheric Administration. Data-entry forms for most sites in Oregon were prepared by the staff of either the Oregon Department of Geology and Mineral Industries (DOGAMI) or the U.S. Geological Survey.

REFERENCES CITED

- Berry, G. W., Grim, P. J., and Ikelman, J. A., 1980, Thermal springs list for the United States: National Oceanic and Atmospheric Administration, Key to Geophysical Records Document No. 12, 59 p.
- Bliss, J. D., and Rapport, Amy, 1983, GEOTERM: the U.S. Geological Survey geothermal information system: Computers & Geosciences, v. 9, no. 1., p. 35-39.
- Duffield, W. A., and Guffanti, Marianne, 1981, The geothermal research program of the U.S. Geological Survey: U.S. Geological Survey Open-File Report 81-564, 108 p.
- Muffler, L. J. P., ed., 1979, Assessment of geothermal resources of the United States--1978: U.S. Geological Survey Circular 790, 163 p.
- Reed, M. J., ed., 1983, Assessment of low-temperature geothermal resources of the United States--1982: U.S. Geological Survey Circular 892.
- Reed, M. J., Mariner, R. H., Brook, C. A., and Sorey, M. L., 1983, Selected data for low-temperature (less than 90°C) geothermal systems in the United States; reference data for U.S. Geological Survey Circular 892: U.S. Geological Survey Open-File Report 83-250, 129 p.
- Swanson, J. R., 1977, GEOTERM data file: Geothermal Resources Council Transactions, v. 1, p. 285.

TABLE 1

State of Oregon: computer-generated listing of records describing geothermal-fluid samples. [A few records may be for cold springs or wells--this was to provide ground-water references for some studies.]

ORGANIZATION: Records are sorted by county and then by the name of the spring or well. Order is the same in Appendix A.

UTM: The UTM Easting label was omitted. However, if the UTM Easting figure is present in the record, it will be found directly below the UTM Northing label.

QUALIFICATION CODES: All numeric attributes may be qualified. The codes and their meaning:

L = less than

G = greater than

E = estimated

T = trace (no numeric value reported)

N = not detected (not followed by number)

Q = qualified (other data in qualification field)

R = midpoint of range (actual range in qualification field)

REFERENCE: An expanded citation of the reference is found in Appendix D. The abbreviated form used in this table is called "CODE" in the appendix. Unpublished sources are preceded with "*". Those which begin and end with a "*" are also found in Appendix D.

RECORD 00001

GEOTHERM FILE 101 0001700

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CITY OF HUNTINGTON WELL
 LOCATION TOWNSHIP=RANGE 14S 04SE 18

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)... 24.

WELL DEPTH (M)... 150.

DISCHARGE... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY... MARINER, R. & BROOK, C.

REFERENCE... PRICE, 1967

COORDINATES

LAT/LONG... 44-21.0 N 117-16.2 W

RECORD 00002

GEOTHERM FILE 101 0015444

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FISHER HOT SPRING

WELL/SPRING NUMBER... 075/38E-108A

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... ROCK CREEK 1424000, CANYON CITY 14250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/06/14 BROOKS, HOWARD

SAMPLE NUMBER... 2125 ORE STATE BOARD OF HEALTH

TEMPERATURE (C)... 37.0

DISCHARGE... 1893. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/07/18 HOSE, ALLAN W.

P... 0 9.8

SPECIFIC CONDUCTANCE... 197.

ALKALINITY... 68.

TOTAL DISSOLVED SOLIDS... 143.

ANALYSIS IN MG/L

AG... CO3...

AL... CR...

AS... L 0.005

R... 2.8

FE... 0.4

FE(TOT)... L 0.03

CA... 1.4

CL... 1.8

CO... N

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 06

REFERENCE... *006AMI

COORDINATES

LAT/LONG... 44-58.48 N 118-02.61 W

UTM ZONE... 11

NORTHING... 4980449.

417718.

ISOTOPES 10/001

LI... 1.0

MG... L 0.1

MN... L 0.03

NA... 40.

NB...

SI02... 39.

S04... 12.

RECORD 00003
GEOTHERM FILE ID: 0015427

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KROPP HOT SPRING

WELL/SPRING NUMBER... 06S/39E-25BD

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 29

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

CAMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER... 12S/043E-02

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

CAMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER... 12S/043E-02

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

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ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

CAMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

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LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

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REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER... 12S/043E-02

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

CAMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER... 12S/043E-02

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

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CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER... 12S/043E-02

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... BAKER

GEOLOGIC PROVINCE... 32

MAP REFERENCE... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... JOHNSON, SID

SAMPLE NUMBER... 2202

TEMPERATURE (C)... 43.0

DISCHARGE... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1972/11/16 ROSE, ALAN W.

P... 0 7.3

SPECIFIC CONDUCTANCE... 445.

ALKALINITY... 43. AS CAC03

TOTAL DISSOLVED SOLIDS... 392.

CHARGE IMBALANCE (% DIFF)... 7.4

ANALYSIS IN MG/L

AG... CO3... L 0.1

AL... 0.04

AS... L 0.005

CA... 1.1

CL... 80.8

CO... K... 1.5

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... ROWEN, RICHARD G.

CAMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

CAMPILER CROSS INDEX... 05

REFERENCE... *UOGAMI

RECORD 00004

GEOTHERM FILE ID: 0001701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... NELSON SPRING

WELL/SPRING NUMBER

RECORD 00005
GEOTHERM FILE 101 0002206

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... RADIUM HOT SPRINGS
MARING NUMBER..... 17A
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... BAKER
GEOLOGIC PROVINCE...
MAP REFERENCE..... HAINES 1:24000
OTHER LOCALITY INFORMATION... 1 MI. NORTH OF HAINES
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1955/05/01
TEMPERATURE (C)..... 57.2
DISCHARGE..... 871. L/MIN
PERTINENT LITHOLOGY..... JURASSIC OR CRETACEOUS QUARTZ DIORITE
WATER ANALYSIS

PH..... 9.7
SPECIFIC CONDUCTANCE..... 290.
TOTAL DISSOLVED SOLIDS... 244.
CHARGE IMBALANCE (% DIFF)... 1.6
ANALYSIS IN PPM
AG..... 47.
AL.....
AS.....
R.....
HF.....
CA..... 1.0
CA+MG.....
CD.....
CL..... 17.
CO.....
K..... 2.0
MG..... N
MN..... N
NA..... 63.
NB.....
NU3..... 0.2
PB.....
PO4..... N
SI02..... 80.
SO4..... 31.
U..... L 0.0001

ISOTOPES 10/001

RECORD 00006
GEOTHERM FILE 101 0000709

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... RADIUM HOT SPRINGS
MARING NUMBER..... 17A
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... BAKER
GEOLOGIC PROVINCE... 32
MAP REFERENCE..... HAINES 1:24000, BAKER 1:25000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
TEMPERATURE (C)..... 58.
DISCHARGE..... 1100. L/MIN
WATER TREATMENT..... PRESSURE - FILTERED THROUGH A .45 MICROMEIRE MEMBRANE, METAL ANALYSES ACIDIFIED, DILUTED.

COORDINATES
LAT/LONG... 44-55.82 N 117-56.36 W
UTM ZONE... 11
NORTHING... 4975423.
425874.

PERTINENT LITHOLOGY..... ALLUVIUM, QUARTZ DIORITE, BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 9.56

SPECIFIC CONDUCTANCE..... 290.

CHARGE IMBALANCE (% DIFF).... 16.3

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... 21.	LI....	0.01	S.....	ISOBES (0/001)
AL.....	CR.....	MG....	0.1	SB....	DEL 0 OF WATER.....
AS..... L 0.01	CS..... L 0.1	MN....	L 0.02	L 0.2	DEL 0(18) OF WATER....
AU..... L 0.1	CU..... L 0.01	NA....	58.	SI02.	78.
BA..... L 0.42	F..... 1.3	NB....		SI04..	34.
BR..... L 0.1	FE(TOT) L 0.02	NH4...		SR....	L 0.05
BT.....	GA.....				
HR..... 0.01	HC03..... 70.	PH....	L 0.06		
CA..... 1.5	HG..... 0.0005	PO4...	0.092		
CA+MG.	H2S.....	RB....	L 0.02		
CD..... L 0.01	I..... 0.007				
CL..... 17.	K..... 1.1				
CO..... L 0.05					

-138.3
-17.85

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 01

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00007

GEOHEM SAMPLE FILE

NAME OF SAMPLE SOURCE... SAMO SPRING

WELL/SPRING NUMBER..... 095/40E-16DA

WARNING NUMBER..... 178

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... BAKER

MAP REFERENCE..... 32

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/02/11 HULL, DONALD A.

SAMPLE NUMBER..... WS-77-022

TEMPERATURE (C)..... 27.0

WATER ANALYSIS

DATE/ANALYST..... 1977/04/27 BANERJEE, KALA C.

PH..... 8.1

SPECIFIC CONDUCTANCE..... 891.

ALKALINITY..... 425.

TOTAL DISSOLVED SOLIDS..... 595.

CHARGE IMBALANCE (% DIFF).... 0.5

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.06		
AL..... 0.43	CR.....	MG....	6.		
AS..... L 0.005	CS.....	MN....	0.05		
BA..... 1.6	F.....	NA....	171.	SI02.	68.
BR.....	FE(TOT) L 0.1	NB....		SI04..	504..
					0.7

GEOHEM FILE ID: 0015420

COORDINATES

LAT/LONG... 44-46.76 N 117-48.65 W

UTM ZONE... 11

NORTHING... 4958540.

EASTING... 435847.

ISOBES (0/001)

HI..... NH4... 0.5
 CA..... 16. H2S..... 0.09
 CD..... 16. K..... 12.
 CO.....
 QUALIFICATION FIELD..... PH MEASURED IN LAB.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... ROMEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 02
 REFERENCE..... #006AMI

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... ACID-SULFATE SPRING ON MT. HOOD
 KARA..... MT. HOOD
 WARNING NUMBER..... 01
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE... CASCADES
 MAP REFERENCE..... MT. HOOD SOUTH 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/06/25 HODGSON, L.
 WATER ANALYSIS

COORDINATES
 LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... +10
 NORTHING... 5024848.
 602059.

TOWNSHIP-RANGE
 02S 009E 29

BARNES GROUP

ISOLOPES 10/001

LI... L 0.01
 MG... 2.8
 NA... 5.4
 NB...
 SI02. 19.
 SO4... 77.

CO..... 0.2
 K.....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1980

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... AUSTIN HOT SPRINGS (CAREY)
 KARA..... CAREY HOT SPRINGS
 WARNING NUMBER..... 04
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE... FISH CREEK MTN. 1:62500, VANCOUVER 1:250000
 MAP REFERENCE.....

COORDINATES
 LAT/LONG... 45-01.30 N 122-00.50 W
 UTM ZONE... +10
 NORTHING... 4985618.
 578131.

TOWNSHIP-RANGE
 06S 007E 30

SW OF NW

RECORD 00008

GEOTHERM FILE ID: 0015469

RECORD 00009

GEOTHERM FILE ID: 0000697

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 86.0 L/MIN
 DISCHARGE..... 950.
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
 WITH NITRIC ACID, DILUTED
 DEPOSITS OR ALTERATION..... TRAVERTINE

PERTINENT LITHOLOGY..... OLIVINE BASALT, BASALTIC ANDESITE, PYROXENE ANDESITE
 WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.63

SPECIFIC CONDUCTANCE..... 1720.

CHARGE IMBALANCE (% DIFF).... 6.5

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	L 1.	LI.....	0.4	S.....		ISOTOPES (0/001)
AL.....		CR.....		MG.....	0.1	SB.....		DEL D OF WATER.....
AS.....	0.59	CS.....	L 0.1	MN.....	L 0.02	SC.....		DEL O(18) OF WATER....
AU.....	L 0.1	CU.....	L 0.01	NA.....	300.	SI02.	81.	DEL O(18) OF S04.....
H.....	2.6	F.....	1.4	NB.....		S04...	140.	
HA.....	L 0.1	FE(TOT).	L 0.02	NH4...		SR...	0.33	
HF.....	L 0.1	GA.....						
HI.....								
HR.....	2.	HCO3.....	56.					
CA.....	35.	HG.....	0.0002	PB...	L 0.06			
CA+MG.		H2S.....	0.03	P04...	0.061			
CD.....	L 0.01	I.....	7.1	NB...	0.03			
CL.....	430.	K.....						
CO.....	L 0.05							

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 03
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... RAGBY HOT SPRINGS
 WELL/SPPING NUMBER..... 075/05E-268H

WELL/SPPING NUMBER..... 05

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE..

MAP REFERENCE..... BATTLE AX 1:62500, SALEM 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1970/03/02 BOWEN, RICHARD

SAMPLE NUMBER..... 1659

TEMPERATURE (C)..... 57.2 L/MIN

DISCHARGE..... 151.

WATER ANALYSIS

DATE/ANALYST..... 1970/04/01 ROSE, A. W.

PH..... 9.7

SPECIFIC CONDUCTANCE..... 290.

ALKALINITY..... 56. AS CAC03

COORDINATES

LAT/LONG... 44-56.15 N 122-10.35 W
 UTM ZONE... 10
 NORTHING... 4975938.
 565294.

TOWNSHIP=RANGE
 07S 00SE 26 NW OF SW NW

RECORD 00010

GEOTHERM FILE ID: 0015422

TOTAL DISSOLVED SOLIDS... 240.
CHARGE IMBALANCE (% DIFF)... 10.6
ANALYSIS IN MG/L

AG.....	0.2	CO3.....	36.	MG....	0.1
AL.....	0.6	CR.....		NA....	54.
HA.....		F.....	0.68		
FE.....		FE+3....	L 0.02		
RE.....		FE(TOT)..		NB....	31.
HI.....		GA.....		NH4... L	0.01
CA.....	3.7			P04...	0.06
CO.....		H2S.....			
CL.....	15.				
CO.....		K.....	0.8		

QUALIFICATION FIELD..... PH MEASURED IN LAB.
REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 04
REFERENCE..... *DUGAMI

RECORD 00011

GEOTERM FILE ID: 0015451

GEOTERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BAGBY HOT SPRINGS
WORKING NUMBER..... 05
LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE... 30
MAP REFERENCE..... BATTLE AX 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1977/09/18 MARINER, R. H. AND EVANS, W. C.
TEMPERATURE (C)..... 58.
WATER TREATMENT..... FILTERED, ACIDIFIED, SILICA DILUTED, AND ALKALINITY DETERMINED IN THE FIELD

COORDINATES
LAT/LONG... 44-56.15 N 122-10.35 W
UTM ZONE... 10
NORTHING... 4975938.
565294.

TOWNSHIP=RANGE
07S 05E 26 NW OF SW NW

DATE/ANALYST..... 1978/01/00 BARNES GROUP
P..... 9.37 AT(C) 58.
ALKALINITY..... 69 AS HCO3
CHARGE IMBALANCE (% DIFF)... 2.3

ANALYSIS IN MG/L			
AG.....	CO3.....	LI....	0.02
AL.....	CR.....	MG....	L 0.05
HA.....	F.....	NA....	53.
FE.....	FE(TOT)..	NB....	
CA.....	HCO3....		
CL.....			
CO.....	K.....		

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 04
REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPES 10/00/L

S102... 74.
S04... 42.

ISOTOPES 10/00/L

RECORD 00012
GEOTHERM FILE 10: 0015446

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... GEOTHERMAL GRADIENT TEST NEAR AUSTIN HOT SPRINGS

WELL/SPRING NUMBER... 065/07E-21CO

LOCATION

COUNTRY... UNITED STATES 06S 007E 21 SE OF SW

STATE... OREGON

COUNTY... CLACKAMAS

GEOLOGIC PROVINCE... 30

MAP REFERENCE... HIGH ROCK 1:62500, THE DALLES 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1976/08/13 BOWEN, RICHARD G.

SAMPLE NUMBER... WS 76-226

POINT OF COLLECTION... OPEN HOLE PUMP TEST ZONES 120-130, 400-450 FT

TEMPERATURE (C)... 35.6

WATER ANALYSIS

DATE/ANALYST... 1976/10/19 JOHNSON, ELLEN M.

P.H... 7.6

SPECIFIC CONDUCTANCE... 282

ALKALINITY... AS CACO3

TOTAL DISSOLVED SOLIDS... 133

CHARGE IMBALANCE (% DIFF)... 7.5

ANALYSIS IN MG/L

AG... CO3... 0.01

AL... L 0.05

AS... 0.07

H... 0.42

FE... 0.71

FE(TOT)... 18.

GA... 0.11

HI... 0.38

CA... 12.

CO... 0.02

CL... 2.

CO... K... 2.8

QUALIFICATION FIELD... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY... BOWEN, RICHARD G.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 05

REFERENCE... *DOGAMI

ISOTOPES 10/001

COORDINATES

LAT/LONG... 45-01.65 N 121-57.80 W

UTM ZONE... 10

NORTHING... 4986311.

581669.

RECORD 00013

GEOTHERM FILE 10: 0015472

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

WELL/SPRING NUMBER... MT. HOOD

LOCATION

COUNTRY... UNITED STATES 02S 009E 29

STATE... OREGON

COUNTY... CLACKAMAS

GEOLOGIC PROVINCE... CASCADES

MAP REFERENCE... MT. HOOD SOUTH 1:24000

OTHER LOCALITY INFORMATION: VENT ON NE BANK OF, AND 10 FT FROM BOTTOM OF, SHALLOW RAVINE ADJACENT TO AND EAST OF

CRATER ROCK

COORDINATES

LAT/LONG... 45-22.3 N 121-41.8 W

UTM ZONE... 10

NORTHING... 5024848.

602059.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 1

TEMPERATURE (C)..... 89.4

OTHER SAMPLE INFORMATION.. SAME LOCATION AS SAMPLE 5 IN AYERS AND CRESWELL AND SAMPLE 2 IN PHILLIPS, 1935

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

ANALYSIS IN VOLUME %

CH4.. 0.0010

C2H6..

CO2.. 2.2

H2... 0.096

OTHER ANALYTICAL DATA,.. 97.5% H2O, 0.007% INERT GASES

REFERENCE AND IDENTIFICATION

COMPTON CROSS INDEX... NEH-964

REFERENCE..... AYERS AND CRESWELL, 1951

ISOLOPES 100ZUL

RECORD 00014

GEUTHERM FILE ID: 0015473

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MT. HOOD FUMARULES

KARRA..... MT. HOOD

WARPING NUMBER..... 01

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... CLACKAMAS

GEOLOGIC PROVINCE.. CASCADES

MAP REFERENCE..... MT. HOOD SOUTH 1:24000

OTHER LOCALITY INFORMATION: VENT ON NE BANK OF, AND 10 FT FROM BOTTOM OF, SHALLOW RAVINE ADJACENT TO AND EAST OF

CRATER ROCK

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 5

OTHER SAMPLE INFORMATION.. SAME LOCATION AS SAMPLE 1 IN AYERS AND CRESWELL AND SAMPLE 2 IN PHILLIPS, 1935

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

ANALYSIS IN VOLUME %

CH4.. 0.0014

C2H6..

CO2.. 2.1

H2... 0.097

OTHER ANALYTICAL DATA,.. 97.6% H2O, 0.006% INERT GASES.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPTON AFFILIATION.. U.S. GEOLOGICAL SURVEY

COMPTON CROSS INDEX... NEH-966

REFERENCE..... AYERS AND CRESWELL, 1951

ISOLOPES 100ZUL

RECORD 00015

GEUTHERM FILE ID: 0015474

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MT. HOOD FUMARULES

KARRA..... MT. HOOD

WARPING NUMBER..... 01

LOCATION

TOWNSHIP=RANGE

COORDINATES

COORDINATES

LAT/LONG... 45-22.3 N 121-41.8 W

UTM ZONE... 10

NORTHING... 5024848.

602059.

COUNTRY..... UNITED STATES 02S 009E 29
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE.. CASCADES
 MAP REFERENCE..... MT. HOOD SOUTH 1124000
 OTHER LOCALITY INFORMATION: SMALL OPENING IN AREA OF HOT ROCKS AT BASE OF CHUTE. AREA IS WEST OF SNOW RIDGE CALLED

MOHACK

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 2

TEMPERATURE (C)..... 91.1

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

ANALYSIS IN VOLUME %

CH4... 0.0011

CO2... 1.8

H2... 0.080

OTHER ANALYTICAL DATA: 98% H2O, 0.049% N2 AND INERT GASES

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPIILER AFFILIATION.. U.S. GEOLOGICAL SURVEY

COMPIILER CROSS INDEX... NEH-967

REFERENCE..... AYERS AND CRESWELL, 1951

ISOLOPES 100/01

LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... 10
 NORTHING... 5024848.
 602059.

RECORD 00016

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

WARRING NUMBER..... MT. HOOD

LOCATION

COUNTRY..... UNITED STATES 02S 009E 29

STATE..... OREGON

COUNTY..... CLACKAMAS

GEOLOGIC PROVINCE.. CASCADES

MAP REFERENCE..... MT. HOOD SOUTH 1124000

OTHER LOCALITY INFORMATION: LARGE FISSURE IN EAST SIDE OF NORTH RIDGE OF CRATER ROCK, ABOUT 15-20 BELOW SUMMIT OF

RIDGE

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 4

TEMPERATURE (C)..... 96.1

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

ANALYSIS IN VOLUME %

CH4... 0.0011

CO2... 1.8

H2... 0.080

OTHER ANALYTICAL DATA: 70% H2O, 0.13% INERT GASES

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPIILER AFFILIATION.. U.S. GEOLOGICAL SURVEY

COMPIILER CROSS INDEX... NEH-968

REFERENCE..... AYERS AND CRESWELL, 1951

ISOLOPES 100/01

COORDINATES
 LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... 10
 NORTHING... 5024848.
 602059.

GEOTHERM FILE ID: 0015937

RECORD 00017
GEOTHERM FILE ID: 0015950

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
KARA..... MT. HOOD
WARRING NUMBER..... 01
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE.. CASCADES
MAP REFERENCE..... MT. HOOD SOUTH 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1915/00/00
SAMPLE NUMBER..... 3
TEMPERATURE (C)..... 71.1
OTHER SAMPLE INFORMATION.. SAME LOCATION AS SAMPLE 4 IN AYERS AND CRESWELL, 1951
GAS ANALYSIS
DATE/ANALYST..... 1935/00/00
ANALYSIS IN VOLUME %
CH4...
C2H6... 0.68
CO2... 0.58
H2...
H2S... N 79.
N2... 20.
O2... 20.

ISOIOPES 100701

OTHER ANALYTICAL DATA... PRACTICALLY ALL THE WATER CONDENSED IN THE COLLECTING TUBE AND DRAINED BACK INTO THE FUMAROLE.
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. H.
COMPIILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPIILER CROSS INDEX... NEH-969
REFERENCE..... PHILLIPS, 1936

RECORD 00018
GEOTHERM FILE ID: 0015951

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
KARA..... MT. HOOD
WARRING NUMBER..... 01
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE.. CASCADES
MAP REFERENCE..... MT. HOOD SOUTH 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1915/00/00
SAMPLE NUMBER..... 2
TEMPERATURE (C)..... 89.4
OTHER SAMPLE INFORMATION.. SAME LOCATION AS SAMPLES 1 & 5 IN AYERS AND CRESWELL, 1951
GAS ANALYSIS
DATE/ANALYST..... 1935/00/00
ANALYSIS IN VOLUME %
CH4...
C2H6... 0.024
CO2... 0.057
H2... 0.0017
H2S...
N2...
O2...
T

ISOIOPES 100701

OTHER ANALYTICAL DATA... 98.6% H2O 0.0007% INERT GASES
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... NEH-970
 REFERENCE..... PHILLIPS, 1936

RECORD 00019

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
 KGRA..... MT. HOOD
 WORKING NUMBER..... 01
 LOCATION

GEOTHERM FILE ID: 0015952

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE... CASCADES
 MAP REFERENCE..... MT. HOOD SOUTH 1:24000
 TOWNSHIP=RANGE
 02S 009E 29

COORDINATES
 LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... 10
 NORTHING... 5024848.
 602059.

OTHER LOCALITY INFORMATION: LARGE VENT 400-500 FT UP-SLOPE FROM REMAINS OF OLD STONE SHELTER AND NE OF IT.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 3

TEMPERATURE (C)..... 89.4

DEPOSITS OR ALTERATION... CRYSTALLINE SULFUR OCCURS AT THE VENT.

OTHER SAMPLE INFORMATION.. SAME AS SAMPLE 6 IN AYERS AND CRESWELL AND SAMPLE 1 IN PHILLIPS, 1935

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

GAS/WATER RATIO.. 0 0.984

ANALYSIS IN VOLUME%

CH4... 0.00063

C2H6...

CO2... 1.4

H2... 0.0045

H2S... 0.176
 N2... 0.032
 O2... 0.0036

ISOTOPES 100/01

OTHER ANALYTICAL DATA... 98.4% H2O 0.0002% INERT GASES 0.0002%

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... NEH-962

REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00020

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
 KGRA..... MT. HOOD
 WORKING NUMBER..... 01
 LOCATION

GEOTHERM FILE ID: 0015471

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE... CASCADES
 MAP REFERENCE..... MT. HOOD SOUTH 1:24000
 TOWNSHIP=RANGE
 02S 009E 29

COORDINATES
 LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... 10
 NORTHING... 5024848.
 602059.

OTHER LOCALITY INFORMATION: LARGE VENT 400-500 FT UP-SLOPE FROM REMAINS OF OLD STONE SHELTER AND NE OF IT

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1951/00/00

SAMPLE NUMBER..... 6
 DEPOSITS OR ALTERATION.... CRYSTALLINE SULFUR OCCURS AT THE VENT
 OTHER SAMPLE INFORMATION... SAME LOCATION AS SAMPLE 3 IN AYERS AND CRESWELL AND SAMPLE 1 IN PHILLIPS, 1935

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00

ANALYSIS IN VOLUME %

CH4... 0.00057
 C2H6... 1.5
 CO2... 0.0042
 H2... 0.0042

OTHER ANALYTICAL DATA... 98.3% H2O, 0.0004% INERT GASES
 REFERENCE AND IDENTIFICATION

COMPILED BY..... MARTINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... NEH-963
 REFERENCE..... AYERS AND CRESWELL, 1951

ISOIOPES 100/01

RECORD 00021

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

KARA..... MT. HOOD

WIRING NUMBER..... 01

LOCATION

COUNTRY..... UNITED STATES 02S 009E 29

STATE..... OREGON

COUNTY..... CLACKAMAS

GEOLOGIC PROVINCE.. CASCADES

MAP REFERENCE..... MT. HOOD SOUTH 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1935/00/00

SAMPLE NUMBER..... 1

TEMPERATURE (C)..... 89.4

OTHER SAMPLE INFORMATION.. LOCATION SAME AS SAMPLES 3 & 6 IN AYERS AND CRESWELL, 1951

GAS ANALYSIS

DATE/ANALYST..... 1935/00/00

ANALYSIS IN VOLUME %

CH4... 0.0011
 CPH6...
 CO2... 1.1
 H2... 0.0033

OTHER ANALYTICAL DATA... 98.7% H2O, 0.0014% INERT GASES
 REFERENCE AND IDENTIFICATION

COMPILED BY..... MARTINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... NEH-965
 REFERENCE..... PHILLIPS, 1936

ISOIOPES 100/01

RECORD 00022

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... SWIM WARM SPRINGS

WELL/SPRING NUMBER..... 03S/8.5E-24CA

WIRING NUMBER..... 02

LOCATION

COUNTRY..... UNITED STATES

TOWNSHIP-RANGE 03S 008.5E24

NE OF SW

COORDINATES

LAT/LONG... 45-17.7 N 121-44.3 W

GEOTHERM FILE ID: 0015421

UTM ZONE... +10
NORTHING... 5016279.
598930.

STATE..... OREGON
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE... 30
M.P. REFERENCE..... MT. HOOD SOUTH 1124000, THE DALLIES 11250000
OTHER LOCALITY INFORMATION: EAST SIDE OLD SWIMMING POOL
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1976/12/02 HOWEN, RICHARD G.
SAMPLE NUMBER..... WS-76-276
TEMPERATURE (C)..... 26.0
DISCHARGE..... 7.8 L/MIN
WATER TREATMENT..... 2 LITER SAMPLES COLLECTED, 1 ACIDIFIED WITH HCL, 1 RAW WATER NON-FILTERED
WATER ANALYSIS

DATE/ANALYST..... 1977/01/20 BANERJEE, KALA C
P.H..... 7.3 AT(C) 26.
SPECIFIC CONDUCTANCE..... 1300.
ALKALINITY..... 179. AS CAC03
TOTAL DISSOLVED SOLIDS..... 988.
CHARGE IMBALANCE (* DIFF) ... 6.1
ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.13	
AL..... L 0.02	CR.....	MG....	48.	SB....
AS..... L 0.005	CS.....	MN....	L 0.05	SC....
H..... 0.32	F.....	NA....	136.	SI02..
HF.....	FE(TOT) L 0.05	NB....		504....
HI.....	GA.....	NH4....	0.05	
CA..... 60.	HC03.....	NO3....	L 0.02	
CD.....	H2S..... T	P04....	0.09	
CL..... 161.				
CO.....	K.....			

ISOTOPES 10/001

DEL O(18) OF WATER... -14.01
DEL O(18) OF S04..... 1.52

72.
205.

OTHER ANALYTICAL DATA... H2S DETECTABLE
REFERENCE AND IDENTIFICATION
COMPILED BY..... ROWEN, RICHARD G.
COMPILED AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILED CROSS INDEX... 02
REFERENCE..... *OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

RECORD 00023

GEOHEM FILE 10: 0001702

GEOHEM SAMPLE FILE
NAME OF SAMPLE SOURCE... CAMP CREEK
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE... 30
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 23.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... RUSSELL, 1905

COORDINATES

LAT/LONG... 44-00.6 N 120-09.0 W

RECORD 00024

GEOHEM FILE 10: 0003017

GEOHEM SAMPLE FILE
NAME OF SAMPLE SOURCE... CRADDUCK WELL

WELL/SPRING NUMBER..... 16S-14E-003-DAA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CROOK
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... POWELL BUTTES, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/12/03 PETROS, JOHN R.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 24.3 L/MIN
 DISCHARGE..... 30.
 WATER ANALYSIS
 DATE/ANALYST..... / / KRONEMAN, RUTH
 P..... 8.05 AT(C) 24.
 SPECIFIC CONDUCTANCE..... 350.
 TOTAL DISSOLVED SOLIDS... 140.
 ANALYSIS IN PPM
 AG..... L 0.050
 AL..... L 0.625
 AS..... L 0.625
 AU..... L 0.1
 R..... L 0.125
 RA..... L 0.625
 RE..... L 0.005
 RI..... L 2.5
 RR.....
 CA..... 14.
 CA+MG.....
 CD..... L 0.063
 CL..... 10.
 CO..... L 0.025
 CR..... L 0.050
 CS.....
 CU..... L 0.063
 F..... 0.6
 FE+3.....
 FE(TOT)..... 0.25
 GA.....
 GE.....
 HC03.....
 HG.....
 H2S.....
 I.....
 K..... L 2.5
 LI..... L 0.050
 MG..... 1.0
 MN..... L 0.250
 MO..... L 1.3
 NA..... 56.
 NA+K.....
 NH4..... N
 NI..... L 0.125
 NO3.....
 PB..... L 0.250
 PO4..... L 2.0
 RA.....
 SN..... 10.
 SN+P..... L 0.125
 SO4..... 20.
 SR..... 0.06
 TI..... L 0.125
 U..... L 6.3
 V..... L 1.3
 W..... L 0.125
 ZN..... L 0.125

ISOTOPES 10/2001

SB... L 0.750
 SI02...
 SN... L 0.125
 SO4... 20.
 SR... 0.06
 TI... L 0.125
 U... L 6.3
 V... L 1.3
 W... L 0.125
 ZN... L 0.125

REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETROS, JOHN R.
 COMPILER AFFILIATION... NOGAMI
 REFERENCE..... #UOGMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79ET-27229.

RECORD 00025

GEOTHERM FILE ID: 0003007

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... DEADMAN SPRINGS
 WELL/SPRING NUMBER..... 16S-15E-016-CC
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CROOK
 GEOLOGIC PROVINCE.. HIGH LAVA PLAINS
 MAP REFERENCE..... POWELL BUTTES, ORE. 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/09/18 BROWN, DAVID E.
 POINT OF COLLECTION.. SPRING ORIFICE
 TEMPERATURE (C)..... 13.
 WATER ANALYSIS
 DATE/ANALYST..... 1980/10/11 BANERJEE, KALA C.
 P..... 6.6 AT(C) 13.
 SPECIFIC CONDUCTANCE..... 145.

COORDINATES

44-10.045N 120-56.020W

TOWNSHIP=RANGE
 16S 015E 16 SW OF SW
 B&M: WILLAMETTE

COORDINATES

44-12.73 N 121-01.02 W

TOWNSHIP=RANGE
 16S 014E 03 NE OF NE SE
 B&M: WILLAMETTE

ALKALITY..... 60. AS CAC03
 TOTAL DISSOLVED SOLIDS... 134.
 CHARGE IMBALANCE (% DIFF)... 28.6
 ANALYSIS IN MG/L
 AG..... CO3..... LI... L 0.01
 AL..... 0.13 CH..... 5.9
 AS..... L 0.005 MN... L 0.05
 R..... 0.18 F..... 0.2
 HE..... FE(TOT)... 0.06 SI02. 52.
 HI..... GA..... NB... 31.
 CA..... 11. HCO3..... 0.07
 CA+MG. HG..... 0.02
 CD..... L 0.001
 CL..... H2S..... 0.8
 CO..... 5.4
 CO..... K..... 1.3
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETROS, JOHN R.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN HOUSE STUDY. DOE CONTRACT DE-FCU7-79EI-27220.

RECORD 00026

GEOHEM FILE ID: 0003021

GEOHEM SAMPLE FILE
 NAME OF SAMPLE SOURCE... E. MEERER WELL
 WELL/SPRING NUMBER..... 16S-14E-010-AAA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... CROOK
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... POWELL BUTTES, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/12/03 PETROS, JOHN R.
 POINT OF COLLECTION.. HOUSE TAP
 TEMPERATURE (C)..... 24.9
 DISCHARGE..... 45. L/MIN
 WATER ANALYSIS

COORDINATES

LAT/LONG... 44-11.42 N 121-01.65 W

TOWNSHIP-RANGE

16S 014E 10 NE OF NE NE
B&M: WILLAMETTE

DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 PH..... 7.3 AT(C) 25.
 SPECIFIC CONDUCTANCE..... 400.
 TOTAL DISSOLVED SOLIDS... 196.

ISOTOPES 10/2001

ANALYSIS IN PPM
 AG..... L 0.050 CO3..... LI... 0.06
 AL..... L 0.625 CR..... 6.0
 AS..... L 0.625 CS..... L 0.250
 AU..... L 0.1 CU..... L 0.063
 R..... L 0.125 F..... 49.
 RA..... 0.8 FE+3.....
 RE..... L 0.005 FE(TOT)... 0.11
 RI..... L 2.5 GA..... N
 RR..... GE..... NI... L 0.125
 CA..... 18. HCO3..... NO3... L 0.250
 CA+MG. HG..... PB... L 2.0
 CD..... L 0.003 H2S..... L 2.0
 CL..... 9.0 I..... RA...
 CO..... L 0.025 K..... L 2.5

M.P. REFERENCE..... POWELL BUTTES, ORE. 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/12/ MCLEAN, GARY
 TEMPERATURE (C)..... 32.5 L/MIN
 DISCHARGE..... 95.
 WATER ANALYSIS

DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 PH..... 8.75 AT(C) 33.
 TOTAL DISSOLVED SOLIDS... 286.

ISOTOPES (0/001)

AG.... L 0.050	CO3.....	LI.... L 0.050	SB.... L 0.750
AL.... 1.6	CR..... L 0.050	MG.... 3.0	
AS.... L 0.625	CS.....	MN.... L 0.250	
AU.... L 0.1	CU..... L 0.063	MO.... L 1.3	
H.... L 0.125	F..... 0.4	NA.... 43.	
HA.... L 0.625	FE+3....	NA+K..	46.
HE.... L 0.005	FE(TQT) 2.1	NB....	SN.... L 0.125
HI.... L 2.5	GA.....	NH4... 2.3	SO4... 40.
HR....	GE.....	NI.... L 0.125	SR.... 0.03
CA.... 7.0	HCO3....	NO3... L 0.3	
CA+MG..	HG.....	PB.... L 6.3	
CO.... L 0.063	H2S....	PO4... L 1.3	
CL.... 10.	I.....	W.... L 0.125	
CO.... L 0.025	K..... 6.0	ZN.... 1.0	

REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETROS, JOHN R.
 COMPUTER AFFILIATION... DUGAMI
 REFERENCE..... *DOGMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79EI-27220.

RECORD 00029

GEOTHERM FILE 101 0003033

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... SAMPALUESI WELL
 WELL/SPRING NUMBER..... 155-15E-029-ABA
 LOCATION
 COUNTRY..... UNITED STATES NE OF NW NE
 STATE..... OREGON
 COUNTY..... CROOK
 GEOLOGIC PROVINCE... 32
 TOWNSHIP-RANGE
 15S 01SE 29 NE OF NW NE
 B&M: WILLAMETTE

COORDINATES
 LAT/LONG... 44-14.80 N 120-57.17 W

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/12/05 PETROS, JOHN R.
 POINT OF COLLECTION.. WEILHEAD
 TEMPERATURE (C)..... 21.6 L/MIN
 DISCHARGE..... 15.
 WATER ANALYSIS

DATE/ANALYST..... 1980/ / KRONEMAN, RUTH.
 PH..... 7.6 AT(C) 22.
 SPECIFIC CONDUCTANCE... 440.
 TOTAL DISSOLVED SOLIDS... 268.

ISOTOPES (0/001)

AG.... L 0.050	CO3.....	LI.... L 0.050	SB.... L 0.75
AL.... L 0.625	CR..... L 0.050	MG.... 6.0	
AS.... L 0.625	CS.....	MN.... L 0.25	
AU.... L 0.1	CU..... L 0.063	MO.... L 1.3	
H.... L 0.125	F..... 1.1	NA.... 49.	
HA.... L 0.625	FE+3....	NA+K..	27.
		SN.... L 0.125	

RE..... L 0.005 FE(TOT) L 0.025 NB..... S04... 25.
 HI..... L 2.5 GA..... NH4... SR... 0.24
 HR..... GE..... NI... L 0.125
 CA..... 24. HCU3... NO3... L 0.125
 CA+MG. HG..... PB... L 0.250
 CO..... L 0.063 H2S... PU4... L 2.0
 CL..... 17. I..... RA...
 CO..... L 0.025 K..... L 2.5

REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETROS, JOHN R.
 COMPILER AFFILIATION... NOGAMI
 REFERENCE..... *NOGAMI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79EI-27220.

GEOTHERM SAMPLE FILE RECORD 00030
 NAME OF SAMPLE SOURCE... T. BEARBY WELL
 WELL/SPRING NUMBER..... 16S-14E-015-ACD
 LOCATION TOWNSHIP=RANGE COORDINATES
 COUNTRY..... UNITED STATES 16S 014E 15 NE OF NW NE LAT/LONG... 44-11.23 N 121-02.05 W
 STATE..... OREGON B&M: WILLAMETTE

COUNTY..... CROOK
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... POWELL BUTTES, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTION..... 1980/12/03 PETROS, JOHN R.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 24.5
 DISCHARGE..... 45. L/MIN

WATER ANALYSIS
 DATE/ANALYST..... 1980/ / KRONENMAN, RUTH
 P1..... 7.1 AT(C) 25.
 SPECIFIC CONDUCTANCE... 260.
 TOTAL DISSOLVED SOLIDS... 142.
 ANALYSIS IN PPM

AG..... L 0.050 CO3... LI... 0.07
 AL..... L 0.625 CR... MG... 5.0
 AS..... L 0.625 CS... MN... L 0.250
 AU..... L 0.1 CU... MO... L 1.3
 R..... L 0.125 F... NA... 37.
 RA..... 1.7 FE+3... NA+K.
 RF..... L 0.005 FE(TOT) 0.43 NB...
 HI..... L 2.5 GA... NH4... N 0.125
 HR..... GE... NI... L 0.125
 CA..... 23. HCU3... NO3... L 0.250
 CA+MG. HG... PB... L 2.0
 CO..... L 0.063 H2S... PU4... L 2.0
 CL..... 9.0 I..... RA...
 CO..... L 0.025 K..... L 2.5

REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETROS, JOHN R.
 COMPILER AFFILIATION... NOGAMI
 REFERENCE..... *NOGAMI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79EI-27220.

ISOLOPES (0.001)

RECORD 00031

GEOTHERM FILE ID: 0001605

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... T. O. MARSHALL WELL

WELL/SPRING NUMBER... 16S-14E-021-ARB

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... CROOK

GEOLOGIC PROVINCE... 32

MAP REFERENCE... POWELL BUTTES, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION... 1980/12/03 PETROS, JOHN R.

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 13.3

WATER ANALYSIS

DATE/ANALYST... 1980/00/00 KRONEMAN, RUTH.

P1... 7.8 AT(C) 33.

SPECIFIC CONDUCTANCE... 250.

TOTAL DISSOLVED SOLIDS... 120.

ANALYSIS IN PPM

AG... L 0.050 CO3... L 0.050

AL... L 0.625 CR... L 0.050

AS... L 0.625 CS... L 0.050

AU... L 0.1 CU... L 0.063

R... L 0.125 F... 0.4

RA... FE+3... 0.03

HF... L 0.005 FE(TQ)... 0.03

HT... L 2.5 GA... 0.03

HR... GE... 0.03

CA... HCO3... 0.03

CA+MG... HG... 0.03

CD... L 0.063 H2S... 0.03

CL... 13. I... 0.03

CO... L 0.025 K... L 2.5

REFERENCE AND IDENTIFICATION

COMPILED BY... PETROS, JOHN R.

COMPILER AFFILIATION... NUGAMI

REFERENCE... *DOGMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79ET-27220.

RECORD 00032

GEOTHERM FILE ID: 0001703

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED SPRING ON S. FORK CROOKED RIVER

WELL/SPRING NUMBER... 17S 022E

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... CROOK

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION... 1980/12/03 PETROS, JOHN R.

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 31. L/MIN

WATER ANALYSIS

DATE/ANALYST... 1980/00/00 KRONEMAN, RUTH.

P1... 7.8 AT(C) 33.

SPECIFIC CONDUCTANCE... 250.

TOTAL DISSOLVED SOLIDS... 120.

ANALYSIS IN PPM

AG... L 0.050 CO3... L 0.050

AL... L 0.625 CR... L 0.050

AS... L 0.625 CS... L 0.050

AU... L 0.1 CU... L 0.063

R... L 0.125 F... 0.4

RA... FE+3... 0.03

HF... L 0.005 FE(TQ)... 0.03

HT... L 2.5 GA... 0.03

HR... GE... 0.03

CA... HCO3... 0.03

CA+MG... HG... 0.03

CD... L 0.063 H2S... 0.03

CL... 13. I... 0.03

CO... L 0.025 K... L 2.5

REFERENCE AND IDENTIFICATION

COMPILED BY... PETROS, JOHN R.

COMPILER AFFILIATION... NUGAMI

REFERENCE... *DOGMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79ET-27220.

RECORD 00033

GEOTHERM FILE ID: 0003015

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... WEIGAND WELL
WELL/SPRING NUMBER..... 155-14E-033-ODA
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... CROOK
GEOLOGIC PROVINCE... 32
MAP REFERENCE..... POWELL BUTTES, ORE. 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1980/12/05 PETROS, JOHN R.
POINT OF COLLECTION.. WELLHEAD
TEMPERATURE (C)..... 24.
WATER ANALYSIS

DATE/ANALYST..... 1980/ / KRONEMAN, RUTH
P1..... 7.75 AT(C) 24.
SPECIFIC CONDUCTANCE..... 280.
TOTAL DISSOLVED SOLIDS... 196.
ANALYSIS IN PPM

ISOTOPES 10/0001

AG..... L 0.050	CO3.....	LI.... L 0.050	SB.... L 0.75
AL..... L 0.025	CR.....	MG.... 9.0	
AS..... L 0.025	CS.....	MN.... L 0.250	
AU..... L 0.1	CU..... L 0.063	MO.... L 1.3	
H..... 0.2	F..... 0.4	NA.... 21.	
HA..... L 0.025	FE+3.....	NA+K..	31.
HE..... L 0.005	FE(TQT) L 0.025	NB....	SN.... L 0.125
HI..... L 2.5	GA.....	NH4.... N	S04... 10.
HR.....	GE.....	NI.... L 0.125	SR.... 0.06
CA..... 12.	HC03.....	NU3....	TI.... L 0.125
CA+MG..	HG.....	PB.... L 0.250	U.... L 6.3
CO..... L 0.063	H2S.....	PO4... L 1.9	V.... L 1.3
CL..... 6.0	I.....	RA....	W.... L 0.125
CO2... L 0.025	K..... L 2.5		ZN.... 0.3

REFERENCE AND IDENTIFICATION
COMPILED BY..... PETROS, JOHN R.
COMPILER AFFILIATION... DOGAMI
REFERENCE..... *DOGMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79ET-27220.

RECORD 00034

GEOTHERM FILE ID: 0003009

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... DECKER WELL NO. 2
WELL/SPRING NUMBER..... 20S-16E-024-CCC
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... DESCHUTES
GEOLOGIC PROVINCE... 32
MAP REFERENCE..... MILLICAN S.E., ORE. 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1980/12/02 BROWN, D.E., PETROS, J.R.
POINT OF COLLECTION.. WELLHEAD
TEMPERATURE (C)..... 25.1

COORDINATES

LAT/LONG... 43-48.026N 120-45.053W

WATER ANALYSIS

DATE/ANALYST..... 1980/ / KRONEMAN, RUTH
 P.A..... 7.35 AT(C) 25.
 SPECIFIC CONDUCTANCE..... 300.
 TOTAL DISSOLVED SOLIDS..... 178.
 ANALYSIS IN PPM

AG..... L 0.050	CO3.....	LI.... L 0.050	SB.... L 0.750
AI..... L 0.025	CR.....	MG.... 12.	
AS..... L 0.025	CS.....	MN.... L 0.25	
AU..... L 0.1	CU.....	MO.... L 1.3	
B..... L 0.125	F.....	NA.... 19.	
HA..... L 0.025	FE+3.....	NA+K..	SI02. 41.
RE..... L 0.005	FE(TQT) L 0.025	NH4....	SN.... L 0.125
RI..... L 2.5	GA.....	NI.... T 0.125	S04... 11.
	GF.....		SR.... 0.11
CA..... 16.	HC03.....		TI.... L 0.125
CA+MG..	HG.....		U.... L 6.3
CO..... L 0.063	H2S.....		V.... L 1.3
CL..... 8.0	I.....		W.... L 0.125
CO..... L 0.025	K..... 5.0		ZN.... 0.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETROS, JOHN R.
 COMPUTER AFFILIATION... NOGAMI
 REFERENCE..... *00GMAI IN HOUSE STUDY. DOE CONTRACT DE-FC07-79ET-27220.

RECORD 00035

GEOTHERM FILE ID: 0000781

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FAST LAKE HOT SPRINGS
 WIRING NUMBER..... 33

LOCATION

COUNTRY..... UNITED STATES 21S 013E 29 SW

STATE..... OREGON

COUNTY..... DESCHUTES

GEOLOGIC PROVINCE..

MAP REFERENCE..... NEWBERRY CHATER 1:125000, CRESCENT 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1973/00/00 BARNES GROUP

TEMPERATURE (C)..... 62.0

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE FILTER, METAL ANALYSES ACIDIFIED,
 DILUTED

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP

P.A..... 6.49

SPECIFIC CONDUCTANCE..... 396.

ALKALINITY..... 184. AS HC03

CHARGE IMBALANCE (% DIFF) ... 10.3

ANALYSIS IN MG/L

AG..... L 0.02	CO3.....	LI.... 0.01	S....
AL.....	CR.....	MG.... 16.	SB.... L 0.2
AS.....	CS.....	MN.... 0.1	
AU..... L 0.1	CU.....		SI02. 36.
B..... 0.93	F.....		S04... 58.
HA..... L 0.1			SN.... 0.14
RE..... L 0.1	FE(TQT) L 0.02		
RI.....	GA.....		

ISOLOPES 10/00/L

DEL D OF WATER..... -76.2
 DEL O(18) OF WATER... -9.42

COORDINATES

LAT/LONG... 43-43.1 N 121-12.2 W
 UTM ZONE... +10
 NORTHING... 4841942.
 644731.

CA.... 38. HC3... 184.
 CA+MG. HG..... 0.0003 PB... L 0.06
 CD.... L 0.01
 CL.... 0.4
 CO.... L 0.05 K..... 3.8 RB... L 0.02

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4... 9. N2... 30.
 C2H6.
 CO2... 56.

OTHER ANALYTICAL DATA... 02,AR=6.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... NEH-974

REFERENCE..... MARINER AND OTHERS, 1975

ISOTOPE 10/001

RECORD 00036

GEOTHERM FILE ID: 0015453

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FAST LAKE HOT SPRINGS

KGRA..... NEWBERRY CALDERA

WARNING NUMBER..... 13

LOCATION

COUNTRY..... UNITED STATES 21S 013E 29 SW

STATE..... OREGON

COUNTY..... DESCHUTES

GEOLOGIC PROVINCE..

MAP REFERENCE..... NEWBERRY CRATER 1125000, CRESCENT 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/08/20 MARINER, R. H. AND EVANS, W. C.

POINT OF COLLECTION.. SPRING NEAR EAST END OF GROUP, BENEATH CLIFF

TEMPERATURE (C)..... 49.

PERTINENT LITHOLOGY..... LAPILLI TUFF

OTHER SAMPLE INFORMATION.. SPRINGS APPEAR TO BE DROWNED GAS VENTS WHICH ISSUE ALONG THE SOUTH SHORE OF EAST LAKE

MAP LISTED ABOVE IS OUT OF PRINT.

WATER ANALYSIS

DATE/ANALYST..... 1975/09/00 BARNES GROUP

PH..... 6.42 AT(C) 49.

SPECIFIC CONDUCTANCE..... 767.

ALKALINITY..... 547. AS HC03

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.04
AL.... 0.008	CH.....	MG....	34.
AS....	CS.....	MN....	0.9
AU....	CU.....	NA....	53.
BA....	F.....	NH....	199.
BF....	FE(TOT).	NH4... R 1.3	28.
BR....	GA.....	NI....	L 0.02
CA....	GF.....	PD....	L 0.1
CA+MG.	HC03....		
CD....	HG.....		
CL.... 1.7	H2S.....		
CO.... L 0.05	K.....		
		RB....	0.03
			ZN.... L 0.01

ISOTOPE 10/001

COORDINATES

LAT/LONG... 43-43.1 N 121-12.2 W

UTM ZONE... 10

NORTHING... 4841942.

644731.

GAS ANALYSIS

ISOLOPES (100/01)

DATE/ANALYST..... 1977/12/00 EVANS, W. C.

ANALYSIS IN VOLUME %

CH4... 2.9

C2H6... 91.

CO2... 5.1

N2... 0.9

OTHER ANALYTICAL DATA... GAS SAMPLES COLLECTED IN "GAS TIGHT" SYRINGES.

QUALIFICATION FIELD..... N#4 RECALCULATED FROM N

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILED AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 01

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00037

GEUTHERM FILE ID: 0015452

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FAST LAKE HOT SPRINGS

KGRA..... NEWBERRY CALDERA

WYRING NUMBER..... 13

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

GEOLOGIC PROVINCE..

MAP REFERENCE..... NEWBERRY CRATER 1:125000, CRESCENT 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION..... 1977/07/28 MARINER, R. H. AND EVANS, W. C.

OTHER SAMPLE INFORMATION.. FIVE VENTS ACROSS THE COMPLEX (EAST TO WEST)

DISCHARGE RATE, NOT RELATIVE POSITION. HIGH DISCHARGE RATE VENTS ARE PREDOMINANTLY CO2 CH4 AND N2 INCREASE AS

DISCHARGE RATES DECREASE.

GAS ANALYSIS

DATE/ANALYST..... 1977/09/00 EVANS, W. C.

ANALYSIS IN VOLUME %

AR... 2.0

CH4... L 0.05

C2H6... 96.

CO2... L 0.01

H2... L 0.02

HE... L 0.02

OTHER ANALYTICAL DATA... O2+AR+N2=2.721 SAMPLES COLLECTED IN EVACUATED TUBES.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILED AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 01

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00038

GEUTHERM FILE ID: 0015947

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... PAULINA HOT SPRINGS

KGRA..... NEWHENRY

WYRING NUMBER..... 32

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

GEOLOGIC PROVINCE..

MAP REFERENCE..... NEWBERRY CRATER 1:125000, CRESCENT 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION..... 1977/07/28 MARINER, R. H. AND EVANS, W. C.

OTHER SAMPLE INFORMATION.. FIVE VENTS ACROSS THE COMPLEX (EAST TO WEST)

DISCHARGE RATE, NOT RELATIVE POSITION. HIGH DISCHARGE RATE VENTS ARE PREDOMINANTLY CO2 CH4 AND N2 INCREASE AS

DISCHARGE RATES DECREASE.

COORDINATES

LAT/LONG... 43-43.75 N 121-15.125W

UTM ZONE... 10

NORTHING... 4842243.

COORDINATES

LAT/LONG... 43-43.75 N 121-15.125W

UTM ZONE... 10

NORTHING... 4842243.

GEOLOGIC PROVINCE... NEWBERRY CRATER 1:125000, CRESCENT 1:250000
 M.P. REFERENCE...
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... MARINER, R. H., AND EVANS, W. C.
 GAS ANALYSIS
 DATE/ANALYST... 1977/12/00 EVANS, W.C.
 ANALYSIS
 AR... 5.4
 CH4... L 0.05
 C2H6... 71.
 CO2... L 0.01
 H2... L 0.02
 HE... L 0.02
 REFERENCE AND IDENTIFICATION
 COMPILED BY... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE... MARINER AND OTHERS, 1980

600677.

ISOLOPES 100/001
 DEL C(13) OF CO2..... -8.70
 SEL C(13) OF CH4..... -52.7

RECORD 00039

GEOHEM FILE ID: 0015454

COORDINATES
 LAT/LONG... 43-43.75 N 121-15.125W
 UTM ZONE... 10
 NORTHING... 4842243.
 600677.

NAME OF SAMPLE SOURCE... PAULINA HOT SPRINGS
 KGRA... NEWBERRY CALDERA
 LOCATION...
 COUNTRY... UNITED STATES 21S 01E 26 NE
 STATE... OREGON
 COUNTY... DESCHUTES
 GEOLOGIC PROVINCE...
 M.P. REFERENCE... NEWBERRY CRATER 1:125000, CRESCENT 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1977/07/28 MARINER, R. H. AND EVANS, W. C.
 OTHER SAMPLE INFORMATION... SPRINGS ISSUE AT EDGE OF PAULINA LAKE AND APPEAR TO BE DROWNED GAS VENTS. CHEMICAL
 COMPOSITIONS ARE USELESS FOR GEOTHERMAL CALCULATIONS BECAUSE OF THE GLASSY MATERIAL THE SPRINGS ISSUE FROM.

WATER ANALYSIS

DATE/ANALYST... 1977/12/00 BARNES GROUP
 ANALYSIS IN MG/L
 AG... CO3... LI... 0.22
 AL... CR... MG... 60.
 AS... CS... L 0.1
 H... F... 0.57
 HE... FE(TOT)...
 CA... 56. HCO3... 856.
 CL... 6.0
 CO... 17. K... 0.04
 RB...

ISOLOPES 100/001

GAS ANALYSIS
 DATE/ANALYST... 1977/12/00 BARNES GROUP
 ANALYSIS IN VOLUME %

AR... 0.09
 CH4... 0.55
 C2H6... L 0.05
 CO2... 93.
 H2... L 0.01
 N2... 4.7
 O2... 0.03

ISOLOPES 100/001

HE... L 0.02
 OTHER ANALYTICAL DATA... SAMPLES FOR GAS ANALYSIS COLLECTED IN "AIR TIGHT" SYRINGES.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00040

GEOTHERM FILE 101 0015455

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... WARM WELL AT LITTLE CRATER CAMPGROUND

LOCATION KERA..... NEWHERRY CALDERA

COUNTRY..... UNITED STATES 21S 012E 36 NW

STATE..... OREGON

COUNTY..... DESCHUTES

GEOLOGIC PROVINCE..

MJP REFERENCE..... NEWBERRY CRATER 11125000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/08/20 MARINER, R. H. AND EVANS, W. C.

TEMPERATURE (C)..... 35.5

WATER ANALYSIS

DATE/ANALYST..... 1975/10/00 BARNES GROUP

PI..... 6.46 AT(C) 36.

SPECIFIC CONDUCTANCE..... 900.

ALKALINITY..... 679. AS HCO3

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.12
AL.....	CR.....	MG....	48.
AS.....	CS.....	MN....	0.25
AU.....	CU.....	NA....	83.
H.....	F.....	NB....	161.
HE.....	FE(TOT).....	NH4... Q	0.53
HI.....	GA.....		
CA.....	HCO3.....		
CA+MG.	HG.....		
CL.....			
CO.....	K.....	HB....	0.02

QUALIFICATION FIELD..... NH4 RECALCULATED FROM N

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 02

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00041

GEOTHERM FILE 101 0015456

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... UMPIQUA HOT SPRINGS

LOCATION WARPING NUMBER..... 24

COUNTRY..... UNITED STATES 26S 004E 20 SW OF NE

STATE..... OREGON

COUNTY..... DOUGLAS

GEOLOGIC PROVINCE.. CASCADES

MJP REFERENCE.....

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR.....

TEMPERATURE (C).....

WATER ANALYSIS

DATE/ANALYST.....

PI.....

SPECIFIC CONDUCTANCE.....

ALKALINITY.....

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.12
AL.....	CR.....	MG....	48.
AS.....	CS.....	MN....	0.25
AU.....	CU.....	NA....	83.
H.....	F.....	NB....	161.
HE.....	FE(TOT).....	NH4... Q	0.53
HI.....	GA.....		
CA.....	HCO3.....		
CA+MG.	HG.....		
CL.....			
CO.....	K.....	HB....	0.02

QUALIFICATION FIELD..... NH4 RECALCULATED FROM N

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 02

REFERENCE..... MARINER AND OTHERS, 1980

COORDINATES

LAT/LONG... 43-17.70 N 122-21.917W

UTM ZONE... +10

NORTHING... 4794657.

632632.

MAP REFERENCE..... TOKETE FALLS 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1977/09/18 MARINER, R. H. AND EVANS, W. C.
 TEMPERATURE (C)..... 46.5
 WATER TREATMENT..... FIELD FILTRATION, ACIDIFICATION, SILICA DILUTION, ALKALINITY DETERMINATION
 DEPOSITS OR ALTERATION..... TRAVERTINE
 WATER ANALYSIS

DATE/ANALYST..... 1978/01/00 BARNES GROUP
 P4..... 6.37 AT(C) 47.

SPECIFIC CONDUCTANCE..... 11300.

ALKALINITY..... 1380. AS HCO3

CHARGE IMBALANCE (% DIFF).... 1.0

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	2.4
AL..... L 0.002	CR.....	MG....	41.
AS.....	CS.....		0.2
AU.....	CU..... L 0.01		
R..... 41.	F.....	NA....	2400.
HF.....	FE(TOT)..... 0.44	NB....	90.
HR.....	GE.....	NI....	190.
CA..... 340.	HCO3..... 1380.		
CA+MG.	HG..... L 0.0001	PB....	L 0.1
CO..... L 0.01	H2S..... L 1.		
CL..... 3500.			
CO..... L 0.02	K..... 63.	RB....	0.16
		ZN....	0.02

ISOTOPES 100/001

GAS ANALYSIS

DATE/ANALYST..... 1978/01/00 BARNES GROUP

ANALYSIS IN VOLUME %

AR..... L 0.02		
CH4..... L 0.005		
C2H6.....	N2....	0.49
CO2..... 99.	O2....	0.04
H2..... L 0.01		
HF..... L 0.02		

ISOTOPES 100/01

OTHER ANALYTICAL DATA..... GAS SAMPLE COLLECTED IN AN EVACUATED TUBE.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1978

RECORD 00042

GEOTHERM FILE ID: 0015949

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UMPQUA HOT SPRINGS

WELL/SPRING NUMBER..... 26S/4E-20AC

WELL/SPRING NUMBER..... 24

LOCATION

COUNTRY..... UNITED STATES 26S 004E 20 SW OF NE
 STATE..... OREGON
 COUNTY..... DOUGLAS

GEOLOGIC PROVINCE...

MAP REFERENCE..... TOKETE FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1978/06/27 HOWEN, RICCIO

SAMPLE NUMBER..... WS 78-116, ORE. DEPT. ENV. QUAL.

COORDINATES

LAT/LONG... 43-17.67 N 122-21.917W
 UTM ZONE... 10
 NORTHING... 4794657.
 632632.

POINT OF COLLECTION.. NORTHERNMOST ORIFICE

TEMPERATURE (C)..... 46.

DISCHARGE..... 38.

DEPOSITS OR ALTERATION..... LARGE TRAVERTINE TERRACE

WATER ANALYSIS

DATE/ANALYST..... 1978/08/01 BANERJEE, K. C.

PH..... 6.2

SPECIFIC CONDUCTANCE..... 10920.

ALKALINITY..... 1120. AS HCO3

TOTAL DISSOLVED SOLIDS..... 7445.

CHARGE IMBALANCE (% DIFF).... 4.1

ANALYSIS IN MG/L

AG..... CO3..... 2.4

AL..... CR..... 42.

AS..... 2.2

R..... 5.8

FE..... 41.

FE(TOT)..... 1.2

GA..... 6.2

HI..... 1120.

CA..... 428.

CD..... 1120.

CL..... 3340.

CO..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

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K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

K..... 62.

ISOTOPES 10/001

OTHER ANALYTICAL DATA... CO2 PRESENT, MINOR H2S
REFERENCE AND IDENTIFICATION
COMPILED BY..... ROWEN, R. G.
COMPILER AFFILIATION... OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 01
REFERENCE..... *DOGAMI

RECORD 00043

GEOTHERM FILE 101 0000719

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BLUE MOUNTAIN HOT SPRINGS

WATER NUMBER..... 16

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... GRANT

GEOLOGIC PROVINCE... 32

MAP REFERENCE..... PRAIRIE CITY 1:62500, CANYON CITY 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 58.0

DISCHARGE..... 250. L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED

DEPOSITS OR ALTERATION... TRAVERTINE

PERTINENT LITHOLOGY..... MIOCENE AND PLEISTOCENE ANDESITE FLOWS

OTHER SAMPLE INFORMATION... MIXED WATERS.

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.96

SPECIFIC CONDUCTANCE..... 610.

CHARGE IMBALANCE (% DIFF).... 4.9

ANALYSIS IN MG/L

AG..... L 0.02

CO3..... 3.

LI..... 0.07

S..... 5.....

ISOTOPES 10/001

DEL D OF WATER..... -126.6

COORDINATES

LAT/LONG... 44-21.30 N 118-34.40 W

UTM ZONE... 11

NORTHING... 4912290.

EASTING... 374610.

WATER ANALYSIS

DATE/ANALYST..... 1978/08/03 BANERJEE, K. C.

P..... 7.1 AT(C) 40.

SPECIFIC CONDUCTANCE..... 2194.

TOTAL DISSOLVED SOLIDS..... 1461.

CHARGE IMBALANCE (% DIFF).... 128.7

ANALYSIS IN MG/L

AG.....	CO3.....	LI.....	0.25
AL.....	CR.....	MG.....	12.
AS.....	CS.....	MN.....	1.8
H.....	F.....	NA.....	500.
HE.....	FE(TOT).....	NB.....	
HI.....	GA.....	NH4.....	2.0
CA.....	HC03.....	NO3.....	0.02
CD.....	H2S.....	PO4.....	0.006
CL.....	121.		

CO..... K..... 11.

OTHER ANALYTICAL DATA... DISTINCT H2S ODOR

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, J. F.

COMPILER AFFILIATION... OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 05

REFERENCE..... *00GAMI

RECORD 00046

GEOHEM SAMPLE FILE

NAME OF SAMPLE SOURCE... LIMESKIN SPRING

LOCATION..... TOWNSHIP-RANGE

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... GRANT

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 21.

DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... WAGNER, 1959

GEOHEM FILE ID: 0001705

COORDINATES

LAT/LONG... 44-22.5 N 118-43.8 W

RECORD 00047

GEOHEM SAMPLE FILE

NAME OF SAMPLE SOURCE... BITTER HOT SPRINGS

LOCATION..... TOWNSHIP-RANGE

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... GRANT

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 41.0

DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... WAGNER, 1959

GEOHEM FILE ID: 0000715

COORDINATES

LAT/LONG... 44-53.60 N 119-08.50 W

UTM ZONE... 11

NORTHING... 4973115.

330886.

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED
DEPOSITS OR ALTERATION... NO DEPOSITS.
PERTINENT LITHOLOGY... MIocene AND PLIOCENE BASALT FLOWS
WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP

PI..... 9.68

SPECIFIC CONDUCTANCE..... 319.

CHARGE IMBALANCE (% DIFF).... 9.9

ANALYSIS IN MG/L

AG.... L 0.02

AL....

AS....

AU.... L 0.1

BA.... 2.6

HA.... L 0.1

HE.... L 0.1

HI....

CA.... 1.4

CA+MG.....

CD.... L 0.01

CL.... 29.

CO.... L 0.05

CR....

CS.... L 0.1

CU.... 0.01

F.... 4.0

FE(TOT) L 0.02

GA....

HC03.... 86.

HG.... 0.0005

PH.... L 0.06

RB.... L 0.02

SR....

SO4.... 9.

SI02.... 70.

NA....

LI.... 0.01

MG.... L 0.05

MN.... L 0.02

SB....

S....

DEL D OF WATER.....

DEL 0(18) OF WATER....

-119.

-14.83

ISOIOPES (02/001)

RECORD 00048

GEOTHERM FILE ID: 0000693

COORDINATES

LAT/LONG... 44-00.1 N 119-38.8 W

UTM ZONE... 11

NORTHING... 48752+8.

287803.

MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PI..... 6.53

SPECIFIC CONDUCTANCE..... 2570.

CHARGE IMBALANCE (% DIFF).... 0.7

ANALYSIS IN MG/L

AG.... L 0.02

AL....

AS.... 0.04

AU.... L 0.1

BA....

HA.... L 0.1

HE....

HI....

CA.... L 0.1

CA+MG.....

CD.... 0.18

CL....

CO.... 1.

CR....

CS.... L 0.1

CU.... 0.06

F....

FE(TOT) L 0.02

GA....

HC03....

HG....

PH.... 0.7

RB.... 7.8

SR....

SO4.... 0.06

SI02....

NA....

LI.... 0.7

MG.... L 0.2

MN....

SB....

S....

DEL D OF WATER.....

DEL 0(18) OF WATER....

-122.1

-15.14

ISOIOPES (02/001)

ANALYSIS IN VOLUME %

CH ₄ ..	2.	N ₂ ...	1.
C ₂ H ₆ ..			
CO ₂ ..	95.		

OTHER ANALYTICAL DATA... O_2 , $AR=1.0$

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED BY J. S. GEORGE, JR.

COMPTON CROSS INDEX... NEH-975

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00049

GEUTHERM FILE ID: 0000681

GEOTERM_SAMPLE_EJLE
NAME OF SAMPLE SOURCE... ALVORU HOT SPRINGS

K-RA.....ALVORD

WARNING NUMBER..... 68

TOWNSHIP=RANGE

NE OF NW SE

COORDINATES

LAT/LONG... 42-32.66 N 118-31.66 W
UTM ZONE... +11
NORTHING... 4711132.
374561.

MAP REFERENCE..... ALVORD HOT SPRINGS 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)	76.0
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TEMPERATURE (°C)	DISCHARGE	L/MIN
70.0	500	
50.0		

DISCHARGE..... 300. L/MIN
WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WATER TREATMENT.....
WITH NITRIC ACID; DILUTED

WITH NITRIC ACID DILUTED
DEPOSITS OR ALTERATION... SINTER. TRAVERTINE

DEPOSITS OR ALTERATION... SINKER, TRAVERTINE
PERTINENT LITHOLOGY... MIOCENE RHYODACITE, ANDESITE, AND BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

DAVE/ANALIS..... 1912700
PH..... 6-73

SPECIFIC CONDUCTANCE..... 4590

SPECIFIC CONDUCTANCE.....	4390.
ALKALINITY.....	1196.

AIKAI INI.....	1130
CHARGE BALANCE (% DIFF)	4.5

CHARGE BALANCE
ANALYSTS IN MG/L

ANALYSTS IN MOLE	CO ₂ IN MOLE
AG-1000 10.42	10.42

AB... L 0.02
AI ... 0.003
CO...
CH...

Model	df	Chi-Square	p-Value
Model 1	1	0.003	0.959
Model 2	1	0.04	0.834

AS	0.05	0.01	0.001
All	0.05	0.01	0.001
AS	0.05	0.01	0.001

[illegible]

DATE	TIME	LOCATION	REMARKS
10	10	10	10

HA.....	L 0.1	
BE.....	L 0.1	FF(TOT) . 0.

HE... 7 007 121110 0.

HI....
 HR.... 2.
 CA.... 13.
 CA+MG.
 CD.... L 0.01
 CL.... 780.
 CO.... L 0.05
 CO+MG.
 CL.... 760.
 CO.... 66.
 K....
 SANFORD, LINDA
 U.S. GEOLOGICAL SURVEY
 23
 MARINER AND OTHERS, 1974; NEHRING AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00050

GEOTHERM FILE ID: 0015429

GEOTHERM_SAMPLE-FILE

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS

KGRA..... ALVORD

WARNING NUMBER..... 48

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..

M.P. REFERENCE..... ALVORD HOT SPRINGS 1:24000

OTHER LOCALITY INFORMATION: EAST SIDE OF ROAD 9 MILES NORTH OF ANDREWS

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/11/09

SAMPLE NUMBER..... 1009

TEMPERATURE (C)..... 42.2

WATER ANALYSIS

DATE/ANALYST..... 1955/11/09 HARRIS, JOHN

P..... 7.3

SPECIFIC CONDUCTANCE..... 4490.

TOTAL DISSOLVED SOLIDS... 2910.

CHARGE IMBALANCE (% DIFF)... 2.0

ANALYSIS IN PPM

AL....	CR....	MG....	1.0
AS....	CS....	MN....	N
H....	F....	NA....	1040.
HE....	FE(TOT)	NB....	7.2
CA....	HC03....	N03....	0.09
CA+MG.	HG....	PB....	1.1
CD....	H2S....	P04....	1250.
CL....			4.5
CO....			0.0001

OTHER ANALYTICAL DATA... CHEMICAL-BETA-GAMMA(UUCURIES/L): KA=140.
 REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 23
 REFERENCE..... *DOGAMI

RECORD 00051

GEOTHERM FILE ID: 0015461

GEOTHERM_SAMPLE-FILE

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 MAPPING NUMBER..... 68
 LOCATION
 COUNTRY..... UNITED STATES 34S 034E 32 NE OF NW SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... ALVORD HOT SPRINGS 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.
 TEMPERATURE (C)..... 78.5
 WATER TREATMENT..... FIELD FILTRATION, ACIDIFICATION, SILICA DILUTION, AND ALKALINITY DETERMINATION.
 WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00 BARNES GROUP
 P.I..... 6.89 AT(C) 79.
 SPECIFIC CONDUCTANCE..... 4070.
 ALKALINITY..... 1230. AS HC03
 CHARGE IMBALANCE (% DIFF).... 0.1
 ANALYSIS IN MG/L
 AG..... CO3..... 1.9
 AL..... CR..... 2.2
 AS..... CS..... 0.1
 R..... F..... 11.
 HF..... FE(TOT).....
 HI..... GA.....
 CA..... 12. HC03..... 1230.
 CD..... H2S..... L 1.
 CL..... 770.
 CO..... K..... 63. RB... 0.24
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPES 10/001

RECORD 00052
 GEOTHERM FILE ID: 0015460

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 MAPPING NUMBER..... 68
 LOCATION
 COUNTRY..... UNITED STATES 34S 034E 32 NE OF NW SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... ALVORD HOT SPRINGS 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.
 TEMPERATURE (C)..... 78.5
 WATER TREATMENT..... FIELD FILTRATION, ACIDIFICATION, SILICA DILUTION, AND ALKALINITY DETERMINATION.
 WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00 BARNES GROUP
 P.I..... 6.90 AT(C) 79.
 SPECIFIC CONDUCTANCE..... 4100.

COORDINATES
 LAT/LONG... 42-32.66 N 118-31.66 W
 UTM ZONE... 411
 NORTHING... 4711132.
 374561.

AI KAI INTY..... 1225. AS HC03
 CHARGE INBALANCE (% DIFF).... 0.7
 ANALYSIS IN MG/L
 AG..... CO3..... LI.... 1.9
 AL..... CR..... MG.... 2.1
 AS..... CS..... 0.1
 H..... F..... 9.6
 RE..... FE(TOT)..... NA.... 990.
 CA..... HC03..... 1225. S102. 129.
 CD..... H2S..... L 1. S04.. 180.
 CL..... 770.
 CO..... K..... 64.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00053
 GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... BAKER SPRING
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 TOWNSHIP-RANGE
 24S 030E 24
 COORDINATES
 LAT/LONG... 43-29.4 N 119-06.0 W
 GEOTHERM FILE ID: 0001680

DISCHARGE..... 190. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00054
 GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... BARNYARD SPRING
 WELL/SPRING NUMBER..... 27S-29E-6-AAA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 TOWNSHIP-RANGE
 27S 029E 06
 NE OF NE NE
 86M: WILLAMETTE
 COORDINATES
 LAT/LONG... 43-15.051N 119-14.020W
 GEOTHERM FILE ID: 0003060

MAP REFERENCE..... BURNS, ORE. 1:250,000
 OTHER LOCALITY INFORMATION: BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
 SAMPLE NUMBER..... WSA0-113
 POINT OF COLLECTION.. MAIN ORIFICE
 TEMPERATURE (C)..... 22.0
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 76. L/MIN
 DEPOSITS OR ALTERATION... SLIGHT SINTER
 PERTINENT LITHOLOGY..... RHYOLITIC ASH FLOW TUFF.
 WATER ANALYSIS

DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.

PH..... 8.1
SPECIFIC CONDUCTANCE..... 285.
ALKALINITY..... 112.
TOTAL DISSOLVED SOLIDS..... 237.
CHARGE IMBALANCE (% DIFF)..... 5.6
ANALYSIS IN MG/L

AS CAC03

AG.....	CO3.....	LI....	L 0.1
AL.....	CR.....	MG....	2.7
AS.....	CS.....	MN....	L 0.05
R.....	F.....	NA....	52.
RE.....	FE(TQT) L 0.05	NB....	62.
RI.....	GA.....	NH4...	11.3
CA.....			0.05
CD.....	H2S.....	P04...	0.034
CL.....	23.5		

CO..... K..... 4.3

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.

COMPILED BY..... DOGAMI

REFERENCE..... BROWN AND OTHERS, 1980A

RECORD 00055

GEOTHERM FILE ID: 0001696

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BASQUE SPRING

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 23.

DISCHARGE..... 6800. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES

LAT/LONG... 43-16.2 N 119-17.1 W

RECORD 00056

GEOTHERM FILE ID: 0003068

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... RATHTUB SPRING

WELL/SPRING NUMBER..... 275-29.5E-028-CAC

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

M3P REFERENCE..... BURNS, ORE. 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/10/10 BROWN, DAVID E.

TEMPERATURE (C)..... 51.1

OTHER SAMPLE INFORMATION... STRONG H2S ODOR.

DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH

PH..... 6.87 AT(C) 51.

COORDINATES

LAT/LONG... 43-11.80 N 119-06.45 W

SPECIFIC CONDUCTANCE..... 3900.
TOTAL DISSOLVED SOLIDS.... 2096.
ANALYSIS IN PPM

ISOLOPES 10/001

AG.....	L 0.054	CO3.....	LI....	0.87	SB....	L 0.816
AL.....	L 0.680	CR.....	MG....	13.		
AS.....	1.0	CS.....	MN....	L 0.272		
AU.....	L 0.109	CU.....	MO....	L 1.4		
H.....	13.	F.....	NA....	682.	SI02.	87.
BA.....	L 0.680	FE+3.....	NA+K.		SN....	L 0.136
FE.....	L 0.005	FE(TOT)...	NB....	0.14	S04....	50.
HI.....	L 2.7	GA.....	NH4....	1.1	SR....	0.25
HR.....		GE.....	NI....	L 0.136	TI....	L 0.136
CA.....	37.	HC03.....	NO3....		U....	L 6.8
CA+MG.		H6.....	PB....	L 0.272	V....	L 1.4
CD.....	L 0.068	H2S.....	PO4....		W....	L 0.136
CL.....	848.	I.....	RA....		ZN....	0.2
CO.....	L 0.027	K.....		32.		

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.
COMPILER AFFILIATION... DOGAMI
REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00057

GEOTHERM FILE ID: 0015441

NAME OF SAMPLE SOURCE... CITY OF HINES WELL
LOCATION

TOWNSHIP=RANGE

NE OF SE SW

COORDINATES

LAT/LONG... 43-33.57 N 119-05.31 W
UTM ZONE... 11
NORTHING... 4824853.
331316.

MAP REFERENCE..... BURNS 1124000, BURNS 112500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION..... 1968/07/24 HANSON, BILL

SAMPLE NUMBER..... PNW 16607

TEMPERATURE (C)..... 17.0

WELL DEPTH (M)..... 105.

DISCHARGE..... 2555.

WATER TREATMENT..... YIELD 675 GPM

WATER ANALYSIS

PH..... 7.6 AT(C) 17.

SPECIFIC CONDUCTANCE..... 289.

TOTAL DISSOLVED SOLIDS... 221.

CHARGE IMBALANCE (% DIFF)... 1.8

ANALYSIS IN MG/L

AG.....	CO3.....	N	MG....	5.7	SI02.	60.
AL.....	CH.....		NA....	35.	S04....	18.
H.....	F.....	0.5	NB....			
HE.....	FE(TOT)...	0.05	NO3....	3.8		
CA.....	HC03.....	128.				
CL.....						

CO..... K..... 6.9

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 46

ISOLOPES 10/001

REFERENCE..... LEONARD, 1970

RECORD 00058

GEOTHERM FILE ID: 0001684

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CITY OF HINES WELL
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 17.
DISCHARGE..... 255. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARTINE, R. & BROOK, C.

COORDINATES
LAT/LONG... 43-32.4 N 119-06.6 W

RECORD 00059

GEOTHERM FILE ID: 0003046

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CRANE HOT SPRING
WELL/SPRING NUMBER..... 24S-33E-034-CAA
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE... HARNEY BASIN
MAP REFERENCE..... CRANE, ORE, 1:62500
OTHER LOCALITY INFORMATION: BURNS A.M.S.
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
SAMPLE NUMBER..... WSR0-117
POINT OF COLLECTION.. POOL OVERLYING SPRING
TEMPERATURE (C)..... 76.0
DISCHARGE..... 95. L/MIN
DEPOSITS OR ALTERATION... MINOR SINTER.
PERTINENT LITHOLOGY..... PALAGONITE TUFF RING AND BASALT.
WATER ANALYSIS
DATE/ANALYST..... 1980/06/26 BANJEREE KALA C.

COORDINATES
LAT/LONG... 43-26.45 N 118-38.30 W

ISOTOPES (u/gul)

AG.....	CO3.....	LI....	0.1
AL.....	CR.....	MG....	0.1
AS.....	CS.....	MN....	L 0.05
BA.....	F.....	NA....	160.
HF.....	FE(TOT). L	NB....	93.
CA.....	3.6		504..
CD.....		P04..	0.050
CL.....	88.		
CO.....	K.....		3.5

REFERENCE AND IDENTIFICATION
COMPILED BY..... BROWN, DAVID E.
COMPILER AFFILIATION... DOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00060

GEOTHERM FILE ID: 0015938

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS

WATER NUMBER..... 53

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE...

MAP REFERENCE..... CRANE 1:62500, BURNS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1911/08/30

TEMPERATURE (C)..... 49.

WATER ANALYSIS

ANALYSIS IN PPM

AG..... CO3..... 22.

HA..... FE+3..... NA+K. 171.

HE..... FE(TOT). S04.. 80.

CA..... 2. HCO3..... 173. 1.4

CL..... 82.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 09

REFERENCE..... PIPER AND OTHERS, 1939

ISOLOPES 10/001

RECORD 00061

GEOTHERM FILE ID: 0015435

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS

WATER NUMBER..... 53

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE...

MAP REFERENCE..... CRANE 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/09/12 HANSON, W. B.

SAMPLE NUMBER..... USGS PNW 16830

TEMPERATURE (C)..... 80.0

WATER ANALYSIS

PH..... 8.3 AT(C) 80.

SPECIFIC CONDUCTANCE..... 814.

TOTAL DISSOLVED SOLIDS... 536.

CHARGE IMBALANCE (% DIFF)... 1.9

ANALYSIS IN MG/L

AG..... Ca3..... 6.

AL..... CR..... MG... 0.2

F..... 6.2 NA... 170.

HE..... FE(TOT). S102. 80.

CA..... 3.8 HCO3..... S04.. 81.

CL..... 78. N

COORDINATES

LAT/LONG... 43-26.45 N 118-38.30 W

UTM ZONE... +11

NORTHING... 4810859.

367416.

ISOLOPES 10/001

CO..... K..... 3.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 09
 REFERENCE..... LEONARD, 1970

RECORD 00062

 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS
 WORKING NUMBER..... 53
 LOCATION
 STATE..... UNITED STATES 24S 033E 34 NE OF NE SW
 COUNTRY..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.....
 M.P. REFERENCE..... CRANE 1192500, BURNS 11250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 78.0
 DISCHARGE..... 550 L/MIN
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
 WITH NITRIC ACID, DILUTED
 PERTINENT LITHOLOGY..... AUGITE ANDESITE

 GEOTHERM FILE ID: 0000727

COORDINATES

LAT/LONG... 43-26.45 N 118-38.30 W
 UTM ZONE... +11
 NORTHING... 4810859.
 367416.

TOWNSHIP-RANGE

24S 033E 34 NE OF NE SW

 M.P. REFERENCE..... CRANE 1192500, BURNS 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 78.0

DISCHARGE..... 550 L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED

PERTINENT LITHOLOGY..... AUGITE ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

P.H..... 8.1

SPECIFIC CONDUCTANCE..... 810.

ALKALINITY..... 202.

CHARGE IMBALANCE (% DIFF)... 0.3

ANALYSIS IN MG/L

AG.....	L 0.02	CO ₃	3.	LI.....	0.09	S.....	
AL.....	0.02E	CR.....		MG.....	0.1	SB.....	L 0.2
AS.....	0.09	CS.....	L 0.1	MN.....	L 0.02		
AU.....	L 0.1	CU.....	0.01	NA.....	170.	SI02.	83.
B.....	7.9	F.....	9.0	NB.....		SO4...	86.
BA.....	L 0.1	FE(TOT)...	L 0.02	NH4...	3.2	SR...	0.06
BF.....	L 0.1	GA.....					
BI.....	0.1						
CA.....	3.7	HCO ₃	202.				
CA+MG.		HG.....	0.0005	PB...	L 0.06		
CD.....	L 0.01	H ₂ S.....		PO4...	0.09		
CL.....	79.	I.....	0.02	RB...	0.03		
CO.....	L 0.05	K.....	3.9				

ISOTOPES 10/001

DEL D OF WATER..... -133.5
 DEL O(18) OF WATER... -16.17

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 09
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00063

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... DEVELOPMENT WELL

 GEOTHERM FILE ID: 0003053

KGRA..... BURNS BUTTE
 WELL/SPRING NUMBER..... 23S-30E-03S-ABD
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... BURNS, ORE. 1:24000 AND 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/10/13 BROWN, DAVID E.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 26.5 AT (M).. 30.
 WATER ANALYSIS
 DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 P4..... 8.33 AT (C) 27.
 SPECIFIC CONDUCTANCE..... 230.
 TOTAL DISSOLVED SOLIDS... 178.
 ANALYSIS IN PPM
 AG..... L 0.054
 AL..... L 0.680
 AS..... L 0.680
 AU..... L 0.109
 H..... 0.5
 HA..... L 0.680
 HE..... L 0.005
 HI..... 2.7
 HR.....
 CA..... 8.0
 CA+MG.....
 CD..... L 0.068
 CL..... 8.0
 CO..... L 0.027
 CR..... L 0.054
 CS.....
 CU..... L 0.068
 F..... 0.5
 FE..... L 0.680
 FE(TOT)..... L 0.027
 GA.....
 GE.....
 HC03.....
 HG.....
 H2S.....
 I.....
 K..... 4.0
 LI..... L 0.054
 MG..... 2.0
 MN..... L 0.272
 MO..... L 1.4
 NA..... 32.
 NA+K.....
 NH4..... T 0.136
 NI..... L 0.136
 NO3..... L 0.272
 P04.....
 RA.....
 SI02..... 45.
 SN..... 0.6
 SO4..... 13.
 SR..... 0.03
 TI..... L 0.136
 U..... L 6.8
 V..... L 1.4
 W..... L 0.136
 ZN..... 0.6

ISOTOPES 10/001

SB... L 0.816
 SI02... 45.
 SN... 0.6
 SO4... 13.
 SR... 0.03
 TI... L 0.136
 U... L 6.8
 V... L 1.4
 W... L 0.136
 ZN... 0.6

COMPLETED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES, DOE CONTRACT DE-FC07-79ET27220.

RECORD 00064

GEOTHERM FILE ID: 0001682

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... DOG MOUNTAIN OIL TEST WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 60.
 DISCHARGE..... L/MIN
 REFERENCE AND IDENTIFICATION
 COMPLETED BY..... MARINER, H. & BROOK, C.
 REFERENCE..... VAN OSTRAND, 1938

COORDINATES
 LAT/LONG... 43-23.4 N 119-04.2 W

RECORD 00065

GEOTHERM FILE ID: 0003043

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... DUNN RANCH ARTESIAN WELL NO. 1

WELL/SPRING NUMBER... 26S-30E-033-DDD

LOCATION

COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... HARNEY
GEOLOGIC PROVINCE... 32

MAP REFERENCE... DOG MTN., ORE. 1162500

OTHER LOCALITY INFORMATION... BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY

SAMPLE NUMBER... WSR0-125

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 26.

DISCHARGE... 756. L/MIN

DEPOSITS OR ALTERATION... CONSIDERABLE SINTER ON WELL CASING.

PARENT LITHOLOGY... VALLEY ALLUVIUM.

OTHER SAMPLE INFORMATION... STRONG MINERAL ODOR.

WATER ANALYSIS

DATE/ANALYST... 1980/06/26 BANJEREE, KALA C.

PH... 9.7

SPECIFIC CONDUCTANCE... 1095.

ALKALINITY... 457. AS CAC03

TOTAL DISSOLVED SOLIDS... 747.

ANALYSIS IN MG/L

AG....	CO3....	LI....	L 0.1
AL....	CR....	MG....	L 0.1
AS....	CS....	MN....	L 0.05
B....	F....	NA....	238.
FE....	FE(T)...	NH....	120.
HI....	GA....	NH4....	26.
CA....	L 0.1	PU4....	0.030
CO....	H2S....		
CL....	69.		

CO... 1.5

REFERENCE AND IDENTIFICATION

COMPILED BY... BROWN, DAVID E.

COMPILER AFFILIATION... DOGAMI

REFERENCE... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00066

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EAGLES NEST SPRING NO. 1

WELL/SPRING NUMBER... 27S-29.5E-025-AAU

LOCATION

COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... HARNEY
GEOLOGIC PROVINCE... 32

MAP REFERENCE... BURNS, ORE. 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1980/10/10 BROWN, DAVID E.

POINT OF COLLECTION... LARGEST SPRING ORIFICE

TEMPERATURE (C)... 41.7

DISCHARGE... 19. L/MIN

GEO THERM FILE ID: 0003070

COORDINATES

LAT/LONG... 43-12.38 N 119-03.45 W

ISOIOPES 10/001

DEPOSITS OR ALTERATION.... GRAYISH SILICA DEPOSIT.
OTHER SAMPLE INFORMATION.. SAMPLED LARGEST OF FIVE SPRINGS.
WATER ANALYSIS

DATE/ANALYST..... 1980/11/00 KRONEMAN, RUTH
PH..... 7.12 AT(C) 42.
SPECIFIC CONDUCTANCE..... 4750.

TOTAL DISSOLVED SOLIDS... 3110.
ANALYSIS IN PPM

AG.....	L 0.054	CO3.....	L 0.054	LI.....	0.69
AL.....	L 0.068	CR.....		MG.....	15.
AS.....	1.0	CS.....		MN.....	L 0.272
AU.....	L 0.109	CU.....	L 0.068	MO.....	L 1.4
B.....	17.	F.....	2.1	NA.....	1207.
HE.....	L 0.005	FE(3).....		NA+K.....	55.
RI.....		FE(TOT).....	L 0.027	NH.....	L 0.136
HR.....		GA.....		NH4.....	5.6
CA.....	30.	GE.....		NI.....	L 0.136
CA+MG.....		HC03.....		NO3.....	
CO.....	L 0.068	HG.....		PH.....	0.272
CL.....	466.	H2S.....		P04.....	
CO.....	L 0.027	I.....		RA.....	
CO.....	L 0.027	K.....	14.		

REFERENCE AND IDENTIFICATION
COMPILED BY..... BROWN, DAVID E.
COMPILED BY..... DOGAMI
COMPILED BY..... DOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00067

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EAGLES NEST SPRING NO. 2
WELL/SPRING NUMBER..... 275-29.5E-024-ADA

LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY

GEOLOGIC PROVINCE... HARNFY BASIN
MAP REFERENCE..... BURNS, ORE.1:250000

OTHER LOCALITY INFORMATION... BURNS A.M.S.
SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/10/10 BROWN, DAVID E.
POINT OF COLLECTION... LARGEST SPRING ORIFICE.

TEMPERATURE (C)..... 28.1
DISCHARGE..... 19. L/MIN

DEPOSITS OR ALTERATION.... GRAY SILICA.

OTHER SAMPLE INFORMATION.. STRONG H2S ODOR, SAMPLE TAKEN FROM SPRING WITH LARGEST FLOW IN GRO UP OF 10 OR MORE SPRINGS.

WATER ANALYSIS

DATE/ANALYST..... 1980/11/00 KRONEMAN, RUTH
PH..... 9.18 AT(C) 28.

SPECIFIC CONDUCTANCE..... 1150.
TOTAL DISSOLVED SOLIDS... 632.

ANALYSIS IN PPM

AG.....	L 0.054	CO3.....		LI.....	0.07
AL.....	L 0.080	CR.....		MG.....	L 0.544
AS.....	L 0.680	CS.....		MN.....	L 0.272

GEOTHERM FILE 101 0003067

COORDINATES

LAT/LONG... 43-12.80 N 119-03.62 W

ISOLOPES 10/0001

AU..... L 0.109 CU..... L 0.068 MU..... L 1.4 SI02. 35.
 H..... 3.1 F..... 7.2 NA..... L 240. SN... L 0.136
 HA..... FE+3..... NA+K. NB... 23.
 HE..... L 0.005 FE(TQ). L 0.027 NH... 125.
 HI..... L 2.7 GA..... NI... L 0.136 SR... 0.02
 HR..... GE..... PB... L 0.272 U..... L 6.8
 CA..... 1.0 HG..... PO4... L 1.4 V..... L 0.136
 CA+MG. L 0.068 H2S..... RA... W..... L 0.136
 CL..... 6H. I..... K..... L 2.7 ZN... L 0.136
 CO..... L 0.027
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... NOGAMI
 REFERENCE..... *DOGAMI(1)

RECORD 00068

GEOTHERM FILE ID: 0003054

NAME OF SAMPLE SOURCE... FISCHER WELL
 KGRA..... BURNS BUTTE
 WELL/SPRING NUMBER..... 24S-30E-002-DAB
 LOCATION
 COUNTRY..... UNITED STATES IOWA-SHIP-BARGE
 STATE..... OREGON 24S 030E 02 NW OF NE SE
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... BURNS, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTION..... 1980/10/13 BROWN, DAVID E.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 25.5 AT (M) 30.
 DISCHARGE..... 76. L/MIN

COORDINATES

LAT/LONG... 43-31.32 N 119-05.00 W

ISOTOPE (0200)

AG..... L 0.054 CO3..... L 0.054 LI... L 0.054 SB... L 0.816
 AL..... L 0.680 CR..... L 0.054 MG... 1.0
 AS..... L 0.680 CS..... MN... L 0.272
 AU..... L 0.109 CU..... L 0.068 MO... L 1.4
 H..... 0.6 F..... 0.6 NA... 30.
 HA..... L 0.680 FE+3..... NA+K. NB... 37.
 HE..... L 0.005 FE(TQ). L 0.027 NH... 15.
 HI..... L 2.7 GA..... NH4... 0.02 SR... 0.02
 HR..... GE..... NI... L 0.136 TI... L 0.136
 CA..... 7.0 HCO3..... NO3... L 6.8
 CA+MG. L 0.068 H2S..... PO4... L 1.4
 CL..... 8.0 I..... HA... L 0.136
 CO..... L 0.027 K..... 3.0 ZN... 1.5
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... NOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DUE CONTRACT DE-FC07-79ET27220.

RECORD 00069

GEOTHERM FILE ID: 0015437

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... GOODMAN SPRING (HOTCHKISS)

WELL/SPRING NUMBER..... 528

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNFY

GEOLOGIC PROVINCE.. 32

MAP REFERENCE..... BURNS 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/09/13 HANSON, W.B.

SAMPLE NUMBER..... PNY 16836 USGS

TEMPERATURE (C)..... 22.0

WATER ANALYSIS

DATE/ANALYST..... 1968/00/00

P..... 7.5

SPECIFIC CONDUCTANCE..... 210.

TOTAL DISSOLVED SOLIDS..... 165.

CHARGE IMBALANCE (% DIFF) ... 2.8

ANALYSIS IN MG/L

AG..... CO3..... N

AL..... CR.....

H..... F..... 0.6

RE..... FE(TOT)..... 0.02

CA..... HC03..... 92.

CL.....

CO..... K..... 3.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 39

REFERENCE..... LEONARD, 1970

ISOTOPES 10/001

COORDINATES

LAT/LONG... 43-31.73 N 119-04.83 W

UTM ZONE... 11

NORTHING... 4821431.

331877.

TOWNSHIP-RANGE

23S 030E 35

SE OF SE SE

RECORD 00070

GEOTHERM FILE ID: 0003065

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... HARNEY LAKE HOT SPRINGS

WELL/SPRING NUMBER..... 27S-29.5E-036-00A

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNFY

GEOLOGIC PROVINCE.. HARNEY BASIN

MAP REFERENCE..... BURNS, ORE. 1:250,000

OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY

SAMPLE NUMBER..... *SRU-116

POINT OF COLLECTION.. HOTTEST ORIFICE

TEMPERATURE (C)..... 67.

DISCHARGE..... 378. L/MIN

DEPOSITS OR ALTERATION.... SINTER

COORDINATES

LAT/LONG... 43-10.6 N 119-03.6 W

TOWNSHIP-RANGE

27S 29.5E 36

NE OF SE SE

B6M: WILLAMETTE

PERTINENT LITHOLOGY..... TUFFACEOUS SEDIMENTS AND OLIVINE BASALT.

OTHER SAMPLE INFORMATION.. STRONG MINERAL ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.

PH..... 7.7

SPECIFIC CONDUCTANCE..... 2700.

ALKALINITY..... 493. AS CAC03

TOTAL DISSOLVED SOLIDS... 1777.

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.4
AL.....	CR.....	MG....	2.1
AS.....	CS.....	MN....	0.06
BA.....	F.....	NA....	? 53.
BE.....	FE(TOT)..	NB....	102.
CA.....	CA.....	S04...	119.
CD.....	H2S.....	P04...	0.294
CL.....	K.....		

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.

COMPILER AFFILIATION... OOGAMI

REFERENCE..... *OOGAMI IN-HOUSE STUDIES. DUE CONTRACT DE-FC07-79ET27220.

RECORD 00071

GEOTHERM FILE ID: 0015436

NAME OF SAMPLE SOURCE... HARNEY VALLEY DEV CO. OIL TEST WELL

LOCATION

COUNTRY..... UNITED STATES 24S 032E 08 NW OF NE SE

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..

MAP REFERENCE..... HARNEY 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/09/12 LEONARD & HANSON

SAMPLE NUMBER..... USGS PNW 16829

TEMPERATURE (C)..... 46.0

FLI DEPTH (M)..... 457.

DISCHARGE..... 132. L/MIN

OTHER SAMPLE INFORMATION.. STRONG SULFUR ODOR

WATER ANALYSIS

PH..... 9.6 AT(C) 46.

SPECIFIC CONDUCTANCE..... 602.

TOTAL DISSOLVED SOLIDS... 396.

CHARGE IMBALANCE (% DIFF)... 1.4

ANALYSIS IN MG/L

AG.....	CO3.....	MG....	0.2
AL.....	CR.....	NA....	135.
AS.....	F.....	NB....	72.
BA.....	FE(TOT)..	S04...	29.
BE.....	CA.....	N03...	0.2
CA.....	CL.....		

CD..... 84.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

ISOIOPES 10/2001

ISOIOPES 10/2001

COORDINATES

LAT/LONG... 43-30.25 N 118-54.30 W
UTM ZONE... 11
NORTHING... 4818351.
345996.

COMPTON CROSS INDEX... 05
REFERENCE..... LEONARD, 1970

RECORD 00072

GEOTHERM FILE ID: 0003045

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HARNEY VALLEY DEV. CO. OIL WELL
WELL/SPRING NUMBER..... 24S-32E-008-DAB

LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON

COUNTY..... HARNEY
TOWNSHIP=RANGE
24S 032E 08 NW OF SE SE
B&M: WILLAMETTE

COORDINATES

LAT/LONG... 43-30.25 N 118-54.30 W

GEOLOGIC PROVINCE... HARNEY BASIN
MAP REFERENCE... HARNEY ORE. 1:62500

OTHER LOCALITY INFORMATION: BURNS A.M.S.
SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN GARY
SAMPLE NUMBER..... WSR0-118

POINT OF COLLECTION... WELLHEAD
TEMPERATURE (C)..... 50.

WELL DEPTH (M)..... 857.
GRADIENT (C/KM)..... N

DISCHARGE..... 95. L/MIN

DEPOSITS OR ALTERATION... SLIGHT SINTER ON WELL CASING.

PERTINENT LITHOLOGY..... VALLEY ALLUVIUM.

OTHER SAMPLE INFORMATION.. OWNER CLAIMS TEMPERATURE REACHES 65 DEGREES C DURING DRY SUMMER MONTHS.

WATER ANALYSIS

DATE/ANALYST..... 1980/06/25 BANJEREE, KALA C.

PH..... 9.9

SPECIFIC CONDUCTANCE..... 540.

ALKALINITY..... 252. AS CAC03

TOTAL DISSOLVED SOLIDS... 416.

CHARGE IMBALANCE (% DIFF)... 9.4

ANALYSIS IN MG/L

AG.....

AL..... 0.16

AS..... 0.015

H..... 4.9

HE.....

RI.....

CA..... 0.1

CD.....

CL..... 21.

CO.....

OTHER ANALYTICAL DATA... OWNERS ANALYSIS PERFORMED BY OREGON STATE UNIVERSITY INDICATES CA MG = 0.05MG/L; NA = 5.55

MG/L; HCO3 = 5.01 MG/L; B = 4.17 PPM.

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.

COMPILED AFFILIATION... DOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00073

GEOTHERM FILE ID: 0015439

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HINES LUMBER CO. WELL

LOCATION

TOWNSHIP=RANGE

COORDINATES

LAT/LONG... 43-32.34 N 119-04.80 W
UTM ZONE... 11
NORTHING... 4822559.
331945.

UNITED STATES 23S 030E 35 SE OF NE NE

COUNTRY.....
STATE.....
COUNTY.....
GEOLOGIC PROVINCE... 32
MAP REFERENCE.....
SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... BURNS 1124000, BURNS 1162500
SAMPLE NUMBER..... 1968/07/24 HANSON, BILL
POINT OF COLLECTION.. SURFACE
TEMPERATURE (C)..... 25.0
WELL DEPTH (M)..... 61.
DISCHARGE..... 6624.

WATER ANALYSIS

PI..... 7.8 AT(C) 25.
SPECIFIC CONDUCTANCE..... 222.
TOTAL DISSOLVED SOLIDS..... 180.
CHARGE IMBALANCE (% DIFF)... 0.7
ANALYSIS IN MG/L

AG..... CO3..... N
AL..... CR..... MG... 2.
B..... F..... 0.5 NA... 33.
C..... FE(TQT)... 0.02 NO3... 55.
CA..... 11. HCO3... 105. S04... 14.
CL..... 7. NO3... 1.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 45
REFERENCE..... LEONARD, 1970

RECORD 00074

GEOTHERM FILE ID: 0003057

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HINES MILL NO. 2
WELL/SPRING NUMBER..... 23S-30E-026-DAD

LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE... HARNEY BASIN

MAP REFERENCE..... BURNS, ORE. 1124000 AND 1162500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1980/10/13 BROWN, DAVID E.

POINT OF COLLECTION.. WELLHEAD
TEMPERATURE (C)..... 27.8 AT (M)... 30.
DEPOSITS OR ALTERATION... WHITE DEPOSITS ON PIPE.
OTHER SAMPLE INFORMATION.. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/ / KRONENMAN, RUTH
PI..... 8.18 AT(C) 28.
SPECIFIC CONDUCTANCE..... 240.
TOTAL DISSOLVED SOLIDS... 172.
ANALYSIS IN PPM
AG..... L 0.054 CO3..... LI... L 0.054

COORDINATES

LAT/LONG... 43-32.82 N 119-04.80 W

ISOLINES 10/001

AL..... L 0.680 CR..... L 0.054 MG.... 2.0 SB.... L 0.816
 AS..... L 0.680 CS..... L 0.272 MN.... L 0.272
 AU..... L 0.109 CU..... L 0.068 MO.... L 1.4
 H..... 0.3 F..... 0.5 NA.... 26.
 HA..... L 0.68 FE+3..... NA+K.
 HE..... L 0.005 FE(TQT). L 0.027 NH....
 HI..... L 2.7 GA..... NI.... L 0.136
 HR..... GE..... NO3... L 0.272
 CA..... 9.0 HC03... PB.... L 6.8
 CAMG. L 0.068 H2S.... PO4...
 CD..... 9.0 I..... RA....
 CL..... K..... 4.0
 CO..... L 0.027

REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00075
 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HINES MILL WELL NO. 1
 WELL/SPRING NUMBER..... 235-30E-35-AAA

COORDINATES
 LAT/LONG... 43-33.43 N 119-04.85 W
 TOWNSHIP-RANGE
 23S 030E 35 NE OF NE NE
 B&M; WILLAMETTE

UNITED STATES
 OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... BURNS, ORE. 1:24000 AND 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/10/09 BROWN, DAVID E.
 POINT OF COLLECTION... WEILHEAD
 TEMPERATURE (C)..... 28.5
 DISCHARGE..... 1890. L/MIN
 DEPOSITS OR ALTERATION... WHITE DEPOSITE ON PIPES.
 OTHER SAMPLE INFORMATION... SLIGHT H2S ODOR.

WATER ANALYSIS
 DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 PH..... 7.9 AT(C) 29.
 SPECIFIC CONDUCTANCE... 280.
 TOTAL DISSOLVED SOLIDS... 180.

ANALYSIS IN PPM
 AG..... L 0.054 CO3..... L 0.054 LI.... L 0.054
 AL..... L 0.680 CH..... L 0.054 MG.... 2.0 SB.... L 0.816
 AS..... L 0.680 CS..... L 0.272 MN.... L 0.272
 AU..... L 0.109 CU..... L 0.068 MO.... L 1.4
 H..... 0.3 F..... 0.6 NA.... 29.
 HA..... L 0.68 FE+3..... NA+K.
 HE..... L 0.005 FE(TQT). L 0.027 NH....
 HI..... L 2.7 GA..... NI.... L 0.136
 HR..... GE..... NO3...
 CA..... 10. HC03... PB.... L 6.8
 CAMG. L 0.068 H2S.... PO4...
 CD..... L 0.068 I..... RA....
 CL..... 8.0

ISOLOPES 10/001

CO..... L 0.027 K..... 4.0
REFERENCE AND IDENTIFICATION
COMPILED BY..... BROWN, DAVID E.
COMPILER AFFILIATION... DOGAMI
REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DUE CONTRACT DE-FC07-79ET27220.

ZN... L 0.136

RECORD 00076

GEOTHERM FILE 101 0001679

NAME OF SAMPLE SOURCE... HOGHOUSE HOT SPRING
LOCATION
COUNTRY..... UNITED STATES 31S 032E 13
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE... 31
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 27.
DISCHARGE..... 6800. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES
LAT/LONG... 42-53.7 N 118-53.7 W

RECORD 00077

GEOTHERM FILE 101 0000782

NAME OF SAMPLE SOURCE... HOT BORAX LAKE
LOCATION
COUNTRY..... UNITED STATES 37S 033E 14
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE...
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
TEMPERATURE (C)..... 36.0
DISCHARGE..... 3500.
WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
WITH NITRIC ACID, DILUTED
DEPOSITS OR ALTERATION.... SINTER
PERTINENT LITHOLOGY..... ALLUVIUM, ANDESITE AND BASALT

COORDINATES
LAT/LONG... 42-19.60 N 118-36.17 W
UTM ZONE... 11
NORTHING... 4687077.
EASTING... 367933.

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.28

SPECIFIC CONDUCTANCE..... 2410.

CHARGE IMBALANCE (% DIFF)... 1.5

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... L 1.	LI.....	0.65	SA.....	0.2	ISOTOPES (0/001)	-115.8
AL.....	CH.....	MG.....	0.3	SB.....		DEL D OF WATER.....	-11.57
AS..... 0.01	CS..... 0.1	MN.....	0.03	SC.....		DEL O(18) OF WATER...	-7.95
AU..... L 0.1	CU..... 0.03	NA.....	500.	SI02.	190.	DEL O(18) OF SO4.....	
HA..... 17.	F..... 9.0						
RA..... L 0.1							
HF..... L 0.1	FE(TOT). L 0.02	NB.....		SO4...	350.		
HI.....	GA.....	SR.....			0.42		

 GEOTHERM_SAMPLE_FILE
 GEOTHERM FILE ID: 0002208
 RECORD 00078

LOCATION	UNITED STATES	TOWNSHIP=RANGE	NW OF SW	COORDINATES
COUNTRY.....	OREGON	37S 03E 14		LAT/LONG....
STATE.....	OREGON			UTM ZONE....
COUNTY.....	HARNEY			NORTHING....
GEOLOGIC PROVINCE..				367933.
				42-19.60 N 118-36.17 W
				+11
				4687077.

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--TEMPERATURE (C) ..... R 29.4
WATER ANALYSIS
DATE/ANALYST..... 1953/09/25 BERMAN, S. AND KRAMER, H.
P1..... 7.7
SPECIFIC CONDUCTANCE..... 2227.
TOTAL DISSOLVED SOLIDS... 1559.
CHARGE IMBALANCE (% DIFF)... 0.4
ANALYSIS IN PPM

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700/01 S3d01051

AG.....	CO ₃	LI....	L 1.5
AL.....	CR.....	MG....	N
A.....	F.....	NA....	488.
AF.....	FE(TQT).....	NB....	
CA.....	HC03.....	N03..	2.5
CL.....			

CO..... K..... 23.
QUALIFICATION FIELD..... TEMP RANGE: 26.7-32.2 C
REFERENCE AND IDENTIFICATION
COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 24
REFERENCE..... MARTINER AND OTHERS, 1980

RECORD 00079

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOT BURAX LAKE

KARA..... ALVORD

GEUTHERM FILE ID: 0002211

WARMING NUMBER..... 70
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1961/06/28 VAN DENBURGH, A. S.
 TEMPERATURE (C)..... 31.1
 OTHER SAMPLE INFORMATION.. LAKE IS 200-300 YD IN DIAMETER AND 1-2 FT DEEP. MAN-MADE DRAIN FLOWS 2 CFS.
 WATER ANALYSIS

PH..... 7.8
 SPECIFIC CONDUCTANCE..... 2410.
 TOTAL DISSOLVED SOLIDS... 1680.
 CHARGE IMBALANCE (% DIFF)... 0.6
 ANALYSIS IN PPM
 AG.....
 AL.....
 H..... 18.
 CA..... 16.
 CO.....
 CL..... 305.
 CO3..... N
 CR.....
 F..... 9.7
 FE(TOT)... 450.
 HC03.....
 H2S.....
 MG... 0.5
 NA... 516.
 NB...
 P04... 2.2
 SI02... 193.
 S04... 367.
 ISOLINES 10/001

CO..... K..... 27.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPUTER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPUTER CROSS INDEX... 24
 REFERENCE..... MARINEK AND OTHERS, 1980

GEOTHERM SAMPLE TITLE
 NAME OF SAMPLE SOURCE... HOTCHKISS WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BURNS 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1968/09/11 LEONARD AND HANSON
 SAMPLE NUMBER..... USGS PNW 16835
 POINT OF COLLECTION.. SURFACE
 TEMPERATURE (C)..... 27.
 WELL DEPTH (M)..... 172.
 DISCHARGE..... 2271.
 WATER ANALYSIS

PH..... 8.1
 SPECIFIC CONDUCTANCE..... 194.
 TOTAL DISSOLVED SOLIDS... 155.
 CHARGE IMBALANCE (% DIFF)... 1.8
 ANALYSIS IN MG/L
 AG.....
 AL.....
 CO3..... N
 CR.....
 MG... 1.4
 AT(C) 27.
 ISOLINES 10/001

RECORD 00080
 GEOTHERM FILE ID: 0015438
 COORDINATES
 LAT/LONG... 43-31.42 N 119-03.83 W
 UTM ZONE... 11
 NORTHING... 4820823.
 333209.

R..... 0.06 F..... 0.5 NA.... 31. SI02. 46.
 HF..... FE(IQT)..... NB.... S04.. 12.
 CA..... 8.8 HCO3.... 93. NO3.. 1.1
 CL..... 5.

CO..... K..... 2.9

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 44
 REFERENCE..... LEONARD, 1970

RECORD 00081

 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HOTCHKISS WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... BURNS 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1931/08/26
 TEMPERATURE (C)..... 27.
 WATER ANALYSIS
 CHARGE IMBALANCE (% DIFF)... 0.6
 ANALYSIS IN PPM
 AG.....
 AL.....
 H.....
 HF.....
 CA..... 9.6
 CL..... 5.2

 GEOTHERM FILE ID: 0015940

COORDINATES
 LAT/LONG... 43-31.42 N 119-03.83 W
 UTM ZONE... 411
 NORTHING... 4820823.
 333209.

TOWNSHIP-RANGE
 24S 030E 01 SE OF NW NE

ISOLOPES 10/001

MG... 1.7
 NA.... 30. SI02. 51.
 NB.... 13. S04.. 13.
 NO3.. 1.2

CO..... K..... 2.4

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 44
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00082

 GEOTHERM FILE ID: 0003050

 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HOTCHKISS WELL
 WELL/SPRING NUMBER..... 24S-30E-001-ACA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... HARNEY BASIN
 MAP REFERENCE..... BURNS, ORE. 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/10/13 BROWN, DAVID E.
 POINT OF COLLECTION.. SEEP AT BASE OF CASING.
 TEMPERATURE (C)..... 13.
 DISCHARGE..... 19. L/MIN

COORDINATES

LAT/LONG... 43-31.42 N 119-03.83 W

TOWNSHIP-RANGE
 24S 030E 01 NE OF SW NE
 86M WILLAMETTE

DEPOSITS OR ALTERATION.... WHITE DEPOSITS.
 ..OTHER SAMPLE INFORMATION.. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 PH..... 8.37 AT (C) 33.
 SPECIFIC CONDUCTANCE..... 220.
 TOTAL DISSOLVED SOLIDS... 166.

ISOTOPES 10/001

ANALYSIS IN PPM			
AG.... L 0.054	CO3.....	LI.... L 0.054	
AL.... L 0.680	CR..... L 0.054	MG.... L 2.0	SB.... L 0.816
AS.... L 0.680	CS.....	MN.... L 0.272	
AU.... L 0.109	CU..... L 0.068	MO.... L 1.4	
H.... 0.3	F..... 0.5	NA.... 30.	SI02. 45.
RA.... L 0.680	FE+3....	NA+K.	SN.... L 0.136
RE.... L 0.005	FE(TOT). L 0.027	NH4... T	SO4... 12.
RI.... L 2.7	GA.....	NH4... L 0.136	SR.... 0.03
RR....	GE.....	NI.... L 0.136	TI.... L 0.136
CA.... 10.	HCO3....	NO3... L 0.272	U.... L 6.8
CA+MG.	HG.....	PO4... L 1.4	V.... L 0.136
CD.... L 0.068	H2S....	RA....	W.... L 0.136
CL.... 7.0	I.....		ZN.... 1.1
CO.... L 0.027	K..... 3.0		

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00083

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOWELL OIL TEST
 LOCATION... UNITED STATES TOWNSHIP-RANGE
 COUNTRY..... OREGON 26S 032E 05
 STATE.....
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 41.
 DISCHARGE..... 114. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

GEOTHERM FILE ID: 0001681

COORDINATES
 LAT/LONG... 43-21.6 N 118-53.4 W

RECORD 00084

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUGHET SPRING
 LOCATION... UNITED STATES TOWNSHIP-RANGE
 COUNTRY..... OREGON 27S 029E 08
 STATE.....
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 20.
 DISCHARGE..... 22300. L/MIN
 REFERENCE AND IDENTIFICATION

GEOTHERM FILE ID: 0001697

COORDINATES
 LAT/LONG... 43-15.0 N 119-15.6 W

RECORD 00087

GEOTHERM FILE ID: 0003042

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... LONG HOLLOW WELL
 WELL/SPRING NUMBER... 265-34E-008-BDD
 LOCATION
 COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... HARNEY
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE... CRANE, ORE. 1:62500
 OTHER LOCALITY INFORMATION... BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1980/05/08 BROWN, DAVID
 SAMPLE NUMBER... WSR0-119
 POINT OF COLLECTION... WELLHEAD
 TEMPERATURE (C)... 25.
 WELL DEPTH (M)... 135.
 PERTINENT LITHOLOGY... TUFFACEOUS SEDIMENTS AND RHYOLITIC ASH FLOW.
 OTHER SAMPLE INFORMATION... SLIGHT MINERAL ODOR.
 WATER ANALYSIS
 DATE/ANALYST... 1980/06/26 BANJEREE, KALA C.
 P... 7.8
 SPECIFIC CONDUCTANCE... 336.
 ALKALINITY... AS CAC03
 TOTAL DISSOLVED SOLIDS... 105.
 CHARGE, IMBALANCE (% DIFF)... 282.
 ANALYSIS IN MG/L
 AG... 9.7
 AL... 0.38
 AS... 0.016
 R... 0.7
 FE... 0.2
 FE(TOT)... 0.2
 GA... 28.6
 CA... 28.6
 CO... 35.5
 CL... 35.5
 CO... 5.6
 K... 5.6
 REFERENCE AND IDENTIFICATION
 COMPILED BY... BROWN, DAVID E.
 COMPUTER AFFILIATION... DODGAMI
 REFERENCE... BROWN AND OTHERS, 1980A

COORDINATES
 LAT/LONG... 43-19.039N 118-33.015W
 TOWNSHIP-RANGE
 26S 034E 08
 SE OF SE NW
 8&M; WILLAMETTE

ISOTOPES (U/DOL)

LI... L 0.1
 MG... 4.5
 MN... L 0.05
 NA... 28.8
 SI02... 76.
 S04... 28.
 NH4... 2.93
 P04... 0.084

RECORD 00088

GEOTHERM FILE ID: 0001699

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... LYNCH SPRING
 LOCATION
 COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1980/05/08 BROWN, DAVID
 SAMPLE NUMBER... WSR0-119
 POINT OF COLLECTION... WELLHEAD
 TEMPERATURE (C)... 25.
 WELL DEPTH (M)... 135.
 PERTINENT LITHOLOGY... TUFFACEOUS SEDIMENTS AND RHYOLITIC ASH FLOW.
 OTHER SAMPLE INFORMATION... SLIGHT MINERAL ODOR.
 WATER ANALYSIS
 DATE/ANALYST... 1980/06/26 BANJEREE, KALA C.
 P... 7.8
 SPECIFIC CONDUCTANCE... 336.
 ALKALINITY... AS CAC03
 TOTAL DISSOLVED SOLIDS... 105.
 CHARGE, IMBALANCE (% DIFF)... 282.
 ANALYSIS IN MG/L
 AG... 9.7
 AL... 0.38
 AS... 0.016
 R... 0.7
 FE... 0.2
 FE(TOT)... 0.2
 GA... 28.6
 CA... 28.6
 CO... 35.5
 CL... 35.5
 CO... 5.6
 K... 5.6
 REFERENCE AND IDENTIFICATION
 COMPILED BY... BROWN, DAVID E.
 COMPUTER AFFILIATION... DODGAMI
 REFERENCE... BROWN AND OTHERS, 1980A

COORDINATES
 LAT/LONG... 43-15.0 N 119-01.5 W
 TOWNSHIP-RANGE
 27S 030E 08

DISCHARGE... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00089

GEOTHERM FILE ID: 000679

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

LOCALITY..... ALVORD

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..

M.S.P. REFERENCE..... ADEL 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 73.0

DISCHARGE..... 100. L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED

DEPOSITS OR ALTERATION..... SINIER

PERTINENT LITHOLOGY..... MIOCENE ANDESITIC TUFF-BRECCIA

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

P..... 8.05

SPECIFIC CONDUCTANCE..... 2490.

CHARGE IMBALANCE (% DIFF).... 1.6

ANALYSIS IN MG/L

AG..... L 0.02

AL..... 0.058

AS..... 0.01

AU..... L 0.1

R..... 11.

BA..... L 0.1

HF..... L 0.1

HI.....

CA..... 1.

CA+MG..... 0.9

CD..... L 0.01

CL..... 240.

CO..... L 0.05

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4..... 1.

C2H6.....

C02..... 23.

OTHER ANALYTICAL DATA... AR.02=18.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... NEH-980

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

COORDINATES

LAT/LONG... 42-40.6 N 118-20.7 W

UTM ZONE... 11

NORTHING... 4725573.

389794.

ISOTOPES (0/00L

DEL O OF WATER..... -124.3

DEL O (18) OF WATER... -13.42

DEL O (18) OF S04..... -7.91

ISOTOPES (00/00L

N2... 60.

RECORD 00090

GEOTHERM FILE ID: 0015459

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

KGRA..... ALVORD

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... ADEL 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

POINT OF COLLECTION.. FROM MORNING GLORY SHAPED POOL JUST BELOW ROAD IN UPPER PART OF COMPLEX

WATER TREATMENT..... FIELD ALKALINITY DETERMINATION, FILTERED (0.1UM), SILICA DILUTED, ACIDIFIED SAMPLE FOR

GROUP II.

DEPOSITS OR ALTERATION... SINTER

OTHER SAMPLE INFORMATION.. TWO OTHER SAMPLES COLLECTED FROM COMPLEX ON SAME DAY

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP

SPECIFIC CONDUCTANCE..... 2290.

ALKALINITY..... R36. AS HCO3

CHARGE IMBALANCE (% DIFF)... 2.9

ANALYSIS IN MG/L

AG.....

AL.....

AS.....

H..... 11.

HE.....

CA..... 0.6

CO..... 245.

CL.....

CO.....

K..... 32.

NA.....

NH.....

HCO3..... 836.

H2S..... L 1.

LI..... 0.85

MG..... L 0.1

SI..... 560.

SO4..... 200.

ZNO..... 220.

ISOTOPE 10/001

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILED AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 22

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00091

GEOTHERM FILE ID: 0015458

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

KGRA..... ALVORD

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... ADEL 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

POINT OF COLLECTION.. FROM GASSY POOL ON EAST END OF COMPLEX AT BASE OF SINTER CAP

TEMPERATURE (C)..... 86.

WATER TREATMENT..... FIELD ALKALINITY DETERMINATION, FILTERED, SILICA DILUTION.

COORDINATES

LAT/LONG... 42-40.6 N 118-20.7 W

UTM ZONE... 11

NORTHING... 4725573.

EASTING... 389794.

DEPOSITS OR ALTERATION..... SINTER
 OTHER SAMPLE INFORMATION.. TWO OTHER SAMPLES COLLECTED FROM COMPLEX ON SAME DAY

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP
 PI..... 8.31 AT(C) 85.
 SPECIFIC CONDUCTANCE..... 2220.
 ALKALINITY..... 814. AS HC03
 CHARGE IMBALANCE (% DIFF).... 2.8
 ANALYSIS IN MG/L

AG..... CO3..... LI... 0.9
 AL..... CR..... MG... 0.1
 AS..... CS..... L 0.1
 H..... F..... NA... 550. SI02. 214.
 HF..... FE(TOT) L 0.02 NH... 220.
 RI..... GA..... NH4.. L 0.5
 CA..... HC03..... 814.
 CI..... H2S..... L 1.
 CL..... 240.
 CO..... K..... RB... 0.14

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 22
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00092

GEOTHERM FILE ID: 0015457

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

LOCATION..... ALVORD

COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 33S 03SE 13

COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... ADL 18250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R.H., AND EVANS, W.C.

TEMPERATURE (C)..... 86.

WATER TREATMENT..... FIELD FILTERED, FIELD ALKALINITY DETERMINATION, SILICA DILUTION, FIELD AMMONIA DETERMINATION

DEPOSITS OR ALTERATION..... SINTER

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP
 PI..... 8.31 AT(C) 86.
 SPECIFIC CONDUCTANCE..... 2200.
 ALKALINITY..... 804. AS HC03
 CHARGE IMBALANCE (% DIFF).... 1.0
 ANALYSIS IN MG/L

AG..... CO3..... LI... 0.9
 AL..... CR..... MG... L 1.
 AS..... CS..... 0.1
 H..... F..... NA... 550. SI02. 214.
 HF..... FE(TOT) 16. NH... 210.
 RI..... GA..... NH4.. L 0.5
 CA..... HC03..... 804.

COORDINATES

LAT/LONG... 42-40.6 N 118-20.7 W
 UTM ZONE... 11
 NORTHING... 4725573.
 389794.

ISOTOPES 10/001

CD..... H2S..... L 1.
 CL..... 240.
 CO..... K..... 31. RB..... 0.18
 COMPILED BY..... MARINER, ROBERT H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 22
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00093

GEOTHERM FILE ID: 0015433

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MICKEY SPRINGS
 LOCATION..... ALVORD
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... ADEL 14250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1970/07/01 BOWEN, R. G.
 SAMPLE NUMBER..... 1711
 TEMPERATURE (C)..... 85.
 WATER ANALYSIS

DATE/ANALYST..... 1970/07/31 AWH-OREGON DEPT OF QUALITY
 PH..... 8.5
 SPECIFIC CONDUCTANCE..... 2200.
 ALKALINITY..... 630.
 TOTAL DISSOLVED SOLIDS... 1748.
 CHARGE IMBALANCE (% DIFF)... 3.1
 ANALYSIS IN MG/L

AG..... CO3..... L 0.2
 AL..... L 0.01 CR..... 1.2
 AS..... 2.5 CS..... 0.02
 H..... 9.2 F..... 20. NA..... 478.
 RE..... FE(TQT) 0.06 NH..... 0.02
 RI..... GA..... NH4..... 0.02
 CA..... 1. HCO3..... NO3..... 0.02
 CD..... H2S..... PO4..... 1.3
 CL..... 230.
 CO..... K..... 20.
 COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 22
 REFERENCE..... *DOGAMI

ISOLOPES 10/001

COORDINATES
 LAT/LONG... 42-40.6 N 118-20.7 W
 UTM ZONE... 11
 NORTHING... 4725573.
 389794.

RECORD 00094

GEOTHERM FILE ID: 0015941

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... WILLPUND SPRING
 LOCATION..... 52
 COUNTRY..... UNITED STATES
 STATE..... OREGON

COORDINATES
 LAT/LONG... 43-32.43 N 119-04.86 W
 UTM ZONE... 11

TOWNSHIP=RANGE
 23S 030E 35 NE OF NE NE

NORTHING... 4822727.
331869.

ISOLOPES 10/001

COUNTY..... HARNFY
GEOLOGIC PROVINCE... 32
MAP REFERENCE..... BURNS 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1931/08/26
TEMPERATURE (C)..... 26.
WATER ANALYSIS
ANALYSIS IN PPM

AG..... CO3..... N
HA..... FE+3.....
RE..... FE(TQT).....
CA..... 14. HC03..... 109. S04... 11.
NA+K. 37.
NR... 1.1
ND3..

CL... 8.
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. H.
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILED CROSS INDEX... 04
REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00095

GEOTHERM FILE ID: 0001690

COORDINATES
LAT/LONG... 43-23.4 N 118-18.9 W

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... NORTH OF VENATOR
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNFY

GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 45.

DISCHARGE..... 135. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00096

GEOTHERM FILE ID: 0015440

COORDINATES
LAT/LONG... 43-37.65 N 118-51.75 W
UTM ZONE... 11
NORTHING... 4831971.
349739.

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... O. J. THOMAS
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNFY

GEOLOGIC PROVINCE... HARNFY 1182500
MAP REFERENCE.....
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1968/09/13 HANSON, W. B.
SAMPLE NUMBER..... USGS PNW 16831
POINT OF COLLECTION.. SURFACE
TEMPERATURE (C)..... 72.0
WELL DEPTH (M)..... 305.
DISCHARGE..... R 95.

OTHER SAMPLE INFORMATION.. WATER USED FOR GREENHOUSE
WATER ANALYSIS
PH..... 9.5 AT(C) 72.
SPECIFIC CONDUCTANCE..... 716.

TOTAL DISSOLVED SOLIDS... 499.

CHARGE IMBALANCE (% DIFF)... 0.0

ANALYSIS IN MG/L

AG..... 92.
AL.....
AS..... 0.06
H..... 4.0
RE.....
CA..... 1.0
CL..... 38.
CO.....
K..... 1.8

QUALIFICATION FIELD: FLOW RANGE: 76-114 LPM

REFERENCE AND IDENTIFICATION

COMPILED BY: PETERSON, NORMAN V.

COMPILER AFFILIATION: OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX: 02

REFERENCE: LEONARD, 1970

RECORD 00097

GEOCHEM SAMPLE

NAME OF SAMPLE SOURCE: O. J. THOMAS WELL

WELL/SPRING NUMBER: 225-32E-035-888

LOCATION

COUNTRY: UNITED STATES

STATE: OREGON

COUNTY: HARNEY

GEOLOGIC PROVINCE: 32

MAP REFERENCE: HARNEY, ORE. 1162500

OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR: 1980/05/08 BROWN, DAVID

SAMPLE NUMBER: WSR0-120

POINT OF COLLECTION: WELL ORIFICE

TEMPERATURE (C): 72.

AMBIENT TEMP (C): 10.

WELL DEPTH (M): R 200.

DISCHARGE: 2268. L/MIN

DEPOSITS OR ALTERATION: SOME STINER ON PIPE OUTLET.

OTHER SAMPLE INFORMATION: WATER PUMPED INTO SETTLING PONDS. WAS USED FOR GREENHOUSES. SLIGHT MINERAL ODOR.

WATER ANALYSIS

DATE/ANALYST: 1980/06/26 BANERJEE, KALA C.

PH: 9.6

SPECIFIC CONDUCTANCE: 622.

ALKALINITY: 193. AS CAC03

TOTAL DISSOLVED SOLIDS: 523.

CHARGE IMBALANCE (% DIFF): 5.7

ANALYSIS IN MG/L

AG.....
AL..... 0.41
AS..... 0.063
H..... 6.7
RE.....
RI.....
CA..... 0.3
CO.....
CO3.....
CR.....
CS.....
F..... 5.1
FE(TOT)..... 0.2
GA.....
H2S.....

LI..... 0.1
MG..... L 0.1
MN..... L 0.05
NA..... 147.
NH4..... 1.
P04..... 0.027

SI02..... 104.
S04..... 76.

ISOLOPES 10/001

COORDINATES

LAT/LONG... 43-37.65 N 118-51.74 W

GEOCHEM FILE ID: 0003048

CI..... 42.
 CO..... K..... 1.3
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DUGAMI
 REFERENCE..... BROWN AND OTHERS, 1980B

 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... 00 STATION SPRING
 WELL/SPRING NUMBER..... 26S-28E-36-RDD
 LOCATION

 GEOTHERM FILE ID: 0003061

COORDINATES
 LAT/LONG... 43-18.00SN 119-19.00JW

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... BURNS, ORE. 1:250,000
 OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY

SAMPLE NUMBER..... WSA0-114
 POINT OF COLLECTION.. MAIN ORIFICE
 TEMPERATURE (C)..... 23.
 AMBIENT TEMP (C)..... 10.

DISCHARGE..... 38. L/MIN
 PERTINENT LITHOLOGY..... RHYOLITIC ASH FLOW TUFF.

WATER ANALYSIS
 DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.

PH..... 8.0
 SPECIFIC CONDUCTANCE..... 228.
 ALKALINITY..... 85. AS CAC03
 TOTAL DISSOLVED SOLIDS... 186.
 CHARGE IMBALANCE (% DIFF)... 1.5

ISOTOPES (0.0001

ANALYSIS IN MG/L
 AG..... CO3..... L 0.1
 AL..... L 0.05 CR..... 3.9
 AS..... 0.019 CS..... MN..... L 0.05
 R..... 0.45 F..... NA..... 31.
 HE..... FE(TOT)... L 0.05 NB.....
 CA..... 11. H2S..... P04... 0.031
 CD.....
 CL..... 18.

CO..... K..... 4.1
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DUGAMI
 REFERENCE..... *DUGAMI IN-HOUSE STUDIES. DUE CONTRACT DE-FC07-79ET27220.

 GEOTHERM FILE ID: 0003039

COORDINATES
 LOCATION
 NAME OF SAMPLE SOURCE... POTTERS SWAMP ART. WELL FIELD
 KGRA..... BURNS HUTTE
 WELL/SPRING NUMBER..... 24S-30E-011-ABA
 LOCATION

RECORD 00099

COORDINATES

COUNTRY..... UNITED STATES 24S 030E 11 NE OF NW NE LAT/LONG... 43-30.040N 119-05.009W
 STATE..... OREGON B&M: WILLAMETTE
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... BURNS, ORE. 1162500
 OTHER LOCALITY INFORMATION: BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
 SAMPLE NUMBER..... WSR0-111
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 27.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... L/MIN
 DEPOSITS OR ALTERATION... SLIGHT SINTER
 PERTINENT LITHOLOGY..... VALLEY ALLUVIUM.
 OTHER SAMPLE INFORMATION.. SAMPLES LARGEST TO FILL L ARGE MAN-MADE LAKE.
 WATER ANALYSIS
 DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.

PH..... 7.9
 SPECIFIC CONDUCTANCE..... 172.
 ALKALINITY..... 62. AS CAC03
 TOTAL DISSOLVED SOLIDS... 149.
 CHARGE IMBALANCE (% DIFF)... 3.2
 ANALYSIS IN MG/L
 AG..... CO3..... L 0.1
 AL..... L 0.1
 AS..... 0.033 CR..... 1.1
 H..... 0.38 F..... 0.5 MG..... L 0.05
 RE..... FE(TOT). L 0.05 NA..... 29. SI02. 54.
 HI..... GA..... NH4.. 0.03 S04.. 14.
 CA..... 7.7 P04.. 0.021
 CD..... H2S.....
 CL..... 6.5
 CO..... K..... 2.3
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPUTER AFFILIATION... NOGAMI
 REFERENCE..... *NOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00100
 GEOTHERM FILE ID: 0003055

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... POWERHOUSE WELL
 KGRA..... RURNS BUTTE
 WELL/SPRING NUMBER..... 23S-30E-026-ADD
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 23S 030E 26 SE OF SE NE
 COUNTY..... HARNEY B&M: WILLAMETTE
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... BURNS, ORE. 1124000 AND 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/10/13 BROWN, DAVID E.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 25. AT (M) 30.
 DEPOSITS OR ALTERATION..... GRAYISH DEPOSITS.

COORDINATES
 LAT/LONG... 43-33.03 N 119-04.77 W

OTHER SAMPLE INFORMATION.. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 P1..... 8.04 AT(C) 25.
 SPECIFIC CONDUCTANCE..... 225.
 TOTAL DISSOLVED SOLIDS... 210.
 ANALYSIS IN PPM

AG.... L 0.054 CO3..... L 0.054 SB.... L 0.816
 AL.... L 0.680 CR..... L 1.0 MG....
 AS.... L 0.680 CS..... L 0.272 MN.... L 1.4
 AU.... L 0.109 CU..... L 0.068 MO.... L 30.
 H.... 0.3 F..... NA+K,
 RA.... L 0.680 FE+3.....
 HF.... L 0.005 FE(TQ) L 0.027 NB....
 HI.... L 2.7 GA..... NH4... 0.3
 CA.... 7.0 HCO3..... NO3... L 0.272
 CA+MG. HG..... P8....
 CD.... L 0.068 H2S..... PO4...
 CL.... 10. I..... RA....
 CO.... L 0.027 K..... 3.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00101

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... REST STOP WARM WELL
 KARA..... BURNS BUTTE

WELL/SPRING NUMBER..... 23S-30E-036-CBB

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32

MAP REFERENCE..... BURNS, ORE. 1124000
 OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
 SAMPLE NUMBER..... WSR0-109
 POINT OF COLLECTION.. PIPE OUTLET

TEMPERATURE (C)..... 26.
 AMBIENT TEMP (C)..... 10.

DEPOSITS OR ALTERATION... SLIGHT SINTER.

PERTINENT LITHOLOGY..... MAFIC VENT COMPLEX.

OTHER SAMPLE INFORMATION.. SLIGHT MINERAL ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/06/25 BANJEREE, KALA C.
 P1..... 8.0
 SPECIFIC CONDUCTANCE..... 177.
 ALKALINITY..... 73. AS CAC03
 TOTAL DISSOLVED SOLIDS... 156.
 CHARGE IMBALANCE (% DIFF)... 2.2

ANALYSIS IN MG/L

AG..... CO3..... LI... L 0.1

GEOTHERM FILE ID: 0003040

COORDINATES

LAT/LONG... 43-31.060N 119-04.040W

ISOTOPES (02/001)

ISOTOPES (02/001)

AL..... L 0.1 CR..... MG... 1.3
 AS..... 0.019 CS..... MN... L 0.05
 R..... 0.31 F..... 0.4 NA... 29. S102. 60.
 RE..... FE(TQ). L 0.05 NH... 0.05 S04... 13.
 HI..... GA.....
 CA..... 8.9 H2S..... P04... 0.044
 CD..... 6.1
 CO..... K..... 2.6

REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00102
 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... ROADLAND SPRING
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP=RANGE
 STATE..... OREGON 24S 030E 11
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 22.
 DISCHARGE..... 1874. L/MIN
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES
 LAT/LONG... 43-29.4 N 119-07.2 W

RECORD 00103
 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... SAGE HEN CREEK ART. WELL
 WELL/SPRING NUMBER..... 24S-30E-24-8CB
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP=RANGE
 STATE..... OREGON 24S 030E 24 NW OF SW NW
 COUNTY..... HARNEY B&M: WILLAMETTE

COORDINATES
 LAT/LONG... 43-28.041N 119-04.024W

COUNTRY..... DOG MTN., ORE. 1162500
 MAP REFERENCE.....
 OTHER LOCALITY INFORMATION: BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
 SAMPLE NUMBER..... WSR0-110
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 23.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 76. L/MIN
 DEPOSITS OR ALTERATION... SINTER AND DARK GREEN ALGAE ON WELL CASING.
 PERTINENT LITHOLOGY..... TUFFACEOUS SEDIMENTS AND BASALT.
 OTHER SAMPLE INFORMATION.. SLIGHT MINERAL ODOR.
 WATER ANALYSIS
 DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.
 PH..... 7.9
 SPECIFIC CONDUCTANCE..... 151.

AL KAI INITY..... 67. AS CAC03

TOTAL DISSOLVED SOLIDS... 125.

CHARGE IMBALANCE (% DIFF)... 12.2

ANALYSIS IN MG/L

AG..... CO3.....
 AL..... L 0.1 CR.....
 AS..... 0.030 CS.....
 R..... L 0.2 F..... 0.5
 HF..... FE(TOT) L 0.05
 HI..... GA.....
 CA..... 6.4
 CD.....
 CL..... 3.6
 CO..... K..... 1.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.

COMPILER AFFILIATION... DOGAMI

REFERENCE..... BROWN AND OTHERS, 1980A

RECORD 00104

GEOTHERM FILE 101 0003037

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... THOMPSON IRR. WELL

WELL/SPRING NUMBER..... 26S-33E-13-ACC

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... CRANF, ORE. 1:62500

TOWNSHIP-RANGE
 26S 03E 13

B&M: WILLAMETTE

COORDINATES

LAT/LONG... 43-18.048N 118-35.019W

OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY

SAMPLE NUMBER..... WSR0-123

POINT OF COLLECTION.. END OF IRR. PIPE

TEMPERATURE (C)..... 24.

WELL DEPTH (M)..... 110.

PERTINENT LITHOLOGY..... VALLEY ALLUVIUM.

OTHER SAMPLE INFORMATION.. SLIGHT MINERAL ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1980/06/26 BANERJEE, KALA C.

P1..... 7.8

SPECIFIC CONDUCTANCE..... 442.

AL KAI INITY..... 122.

TOTAL DISSOLVED SOLIDS... 341.

CHARGE IMBALANCE (% DIFF)... 4.1

ANALYSIS IN MG/L

AG..... CO3.....
 AL..... L 0.1 CR.....
 AS..... 0.024 CS.....
 R..... 1.2 F..... 0.3
 HF..... FE(TOT) L 0.05
 HI..... GA.....
 CA..... 20.
 CD.....
 CL..... 56.
 CO..... H2S.....
 CL..... P04... 0.013

ISOTOPES 10/001

SI02.. 83.
 S04... 45.

ISOTOPES 10/001

SI02.. 41.
 S04... 11.8

CO..... K..... 8.1
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00105

GEOOTHERM FILE ID: 0003058

GEOOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... TRAILER COURT WELL
 KGRA..... BURNS BUTTE
 WELL/SPRING NUMBER..... 23S-31E-036-BBC
 LOCATION
 COUNTRY..... UNITED STATES 36 SW OF NW NW
 STATE..... OREGON 23S 031E 36
 COUNTY..... HARNEY B&M: WILLAMETTE

COORDINATES
 LAT/LONG... 43-32.38 N 119-04.68 W

TOWNSHIP-RANGE
 23S 031E 36
 B&M: WILLAMETTE
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... BURNS, ORE. 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/10/ BROWN, DAVID E.
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 26.5

WATER ANALYSIS
 DATE/ANALYST..... 1980/12/ KRONEMAN, RUTH
 P.L..... 8.24 AT (C) 27.
 SPECIFIC CONDUCTANCE..... 210.
 TOTAL DISSOLVED SOLIDS... 150.

ISOTOPE 10/001

AG.....	L 0.054	CO3.....	LI.....	L 0.054
AL.....	L 0.680	CR.....	MG.....	L 1.0
AS.....	L 0.680	CS.....	MN.....	L 0.272
AU.....	L 0.109	CU.....	MO.....	L 1.4
H.....	0.2	F.....	NA.....	28.
HA.....	L 0.680	FE+3.....	NA+K...	
HF.....	L 0.005	FE(TOT)...	NH4...	T 0.136
HI.....	2.7	GA.....	NI.....	0.136
HR.....		GE.....	NO3...	L 0.272
CA.....	9.0	HCO3.....	PB.....	L 0.272
CA+MG...		HG.....	PO4...	RA...
CD.....	L 0.068	H2S.....		
CL.....	6.0	I.....		
CO.....	L 0.027	K.....		3.0

REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT DE-FC07-79ET27220.

RECORD 00106

GEOOTHERM FILE ID: 0003062

GEOOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNAMED WARM SPRINGS
 WELL/SPRING NUMBER..... 26S-29E-31-CCA
 LOCATION
 COUNTRY..... UNITED STATES 31 SW SW NE
 STATE..... OREGON 26S 029E 31
 COUNTY..... HARNEY B&M: WILLAMETTE

COORDINATES
 LAT/LONG... 43-17.008N 119-17.008W

GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... BURNS, ORE. 1:250000
 OTHER LOCALITY INFORMATION: BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID & MCLEAN, GARY
 SAMPLE NUMBER..... WSR0-115
 POINT OF COLLECTION.. WARMEST ORIFICE
 TEMPERATURE (C)..... 21.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 95. L/MIN
 DEPOSITS OR ALTERATION..... SLIGHT SINTER.
 PERTINENT LITHOLOGY..... RHYOLITIC ASH FLOW TUFF.
 OTHER SAMPLE INFORMATION.. SLIGHT MINERAL ODOH.
 WATER ANALYSIS
 DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.
 PH..... 8.0
 SPECIFIC CONDUCTANCE..... 275.
 ALKALINITY..... 105. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 233.
 CHARGE IMBALANCE (% DIFF).... 5.6
 ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... L 0.1 CR..... L 0.1
 AS..... L 0.023 CS..... L 0.05
 R..... 0.65 F..... 0.3 NA..... 80.
 RE..... FE(TOT). L 0.05 NH4..... 11.8
 HT..... GA..... 0.06
 CA..... 12.2 P04..... 0.032
 CU..... H2S.....
 CL..... 23.5
 CO..... K..... 5.5
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... BROWN AND OTHERS, 1980A

ISOLOPES 10/001

RECORD 00107
 GEOTHERM FILE ID: 0001686
 COORDINATES
 LAT/LONG... 43-31.8 N 119-04.5 W
 TOWNSHIP-RANGE
 23S 03E 36
 GEOOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 25.
 DISCHARGE..... 135. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939
 RECORD 00108
 GEOTHERM FILE ID: 0001691
 NAME OF SAMPLE SOURCE... UNNAMED

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..... 31
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 20. L/MIN
 DISCHARGE..... 38.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES
 LAT/LONG... 42-16.5 N 119-22.5 W

TOWNSHIP-RANGE
 26S 028E 33

RECORD 00109

GEOTHERM FILE ID: 0001689

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... UNNAMED
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 20. L/MIN
 DISCHARGE..... 170.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

COORDINATES
 LAT/LONG... 43-20.4 N 119-26.1 W

TOWNSHIP-RANGE
 26S 027E 12

RECORD 00110

GEOTHERM FILE ID: 0001688

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... UNNAMED
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..... 31
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 32. L/MIN
 DISCHARGE..... 1890.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES
 LAT/LONG... 42-49.2 N 118-54.0 W

TOWNSHIP-RANGE
 32S 032E 12

RECORD 00111

GEOTHERM FILE ID: 0001695

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... UNNAMED
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..... 31
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 32. L/MIN
 DISCHARGE..... 149.

COORDINATES
 LAT/LONG... 42-16.2 N 118-41.4 W

TOWNSHIP-RANGE
 38S 034E 22

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00112

GEUTHERM FILE ID: 0001694

GEOTHERM SAMPLE FILE
LOCATION NAME OF SAMPLE SOURCE... UNNAMED
TOWNSHIP=RANGE
19S 026E 05

COORDINATES
LAT/LONG... 43-57.6 N 119-38.4 W

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 29.

DISCHARGE..... 38. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00113

GEUTHERM FILE ID: 0001693

GEOTHERM SAMPLE FILE
LOCATION NAME OF SAMPLE SOURCE... UNNAMED
TOWNSHIP=RANGE
37S 036E 33

COORDINATES
LAT/LONG... 42-18.0 N 118-17.4 W

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY

GEOLOGIC PROVINCE... 31

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 46.

DISCHARGE..... 38. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

RECORD 00114

GEUTHERM FILE ID: 0001692

GEOTHERM SAMPLE FILE
LOCATION NAME OF SAMPLE SOURCE... UNNAMED
TOWNSHIP=RANGE
38S 037E 24

COORDINATES
LAT/LONG... 42-15.6 N 118-18.6 W

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... HARNEY

GEOLOGIC PROVINCE... 31

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 38.

DISCHARGE..... 114. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

RECORD 00115

GEUTHERM FILE ID: 0001687

GEOTHERM SAMPLE FILE
LOCATION NAME OF SAMPLE SOURCE... UNNAMED

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..... 31
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 28. L/MIN
 DISCHARGE..... 378.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... PIPER AND OTHERS, 1939

COORDINATES LAT/LONG...

42-50.0 N 118-52.2 W

TOWNSHIP-RANGE
 32S 032.5E05

RECORD 00116

GEOHERM FILE 10: 0000729

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HARNEY LAKE
 WADING NUMBER..... 64

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... CRANE 1:62500, BURNS 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 68.0 L/MIN
 DISCHARGE..... 550.
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
 WITH NITRIC ACID, DILUTED
 DEPOSITS OR ALTERATION..... TRAVERTINE
 PERTINENT LITHOLOGY..... BASALTIC TUFF AND OLIVINE BASALT
 WATER ANALYSIS

COORDINATES LAT/LONG...

43-10.6 N 119-03.6 W
 UTM ZONE... 11
 NORTHING... 4782278.
 332568.

ISOTOPE 10/001
 DEL D OF WATER..... -128.5

AG...	L 0.02	CO3...	1.	LI...	0.45	S....	L 0.2
AL...	0.005	CR...		MG...	1.8	SB...	
AS...	0.6	CS...	L 0.1	MN...	0.04		
AU...	L 0.1	CU...	0.02	NA...	630.	SI02.	92.
BA...	11.	F.....	3.3	NB...		S04...	140.
BE...	L 0.1	FE(TQT).	0.05	NH4...	1.8	SR...	0.11
BR...		GA.....					
BR...	29.	HC03...	566.				
CA...	12.	HG...	0.0001	PH...	L 0.06		
CA+MG.		H2S...		PO4...	0.092		
CD...	L 0.01	I.....	0.2	RB...	0.08		
CL...	590.	K.....	13.				
CO...	L 0.05						

ISOTOPE 100701

GAS ANALYSIS
 ANALYSIS IN VOLUME %
 CH4... 1.
 C2H6...
 CO2... 9.

N2... 91.

OTHER ANALYTICAL DATA... 02*AR=1

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... NEH-977
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00117

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HARNEY LAKE

GEOTHERM FILE ID: 0015939

WARNING NUMBER..... 64

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY

GEOLOGIC PROVINCE..

MAP REFERENCE..... BURNS 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/08/21

SAMPLE NUMBER..... 361 IN PIPER AND OTHERS

TEMPERATURE (C)..... 59.

WATER ANALYSIS

CHARGE IMBALANCE (% DIFF).... 1.3

ANALYSIS IN PPM

AG..... CO3..... N
 AL..... CR..... 3.0
 H..... F..... NA..... 622.
 RE..... FE(TOT)..... 0.03
 CA..... 13. HCO3..... 601.
 CL..... 562.

CO..... K..... 12.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 15

REFERENCE..... PIPER AND OTHERS, 1939

ISOTOPES (0/001)

COORDINATES

LAT/LONG... 43-10.6 N 119-03.6 W
 UTM ZONE... 11
 NORTHING... 4782278.
 332568.

TOWNSHIP=RANGE

27S 29.5E 36 NE OF SE

RECORD 00118

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

GEOTHERM FILE ID: 0015467

WARNING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY

GEOLOGIC PROVINCE..

MAP REFERENCE..... BORAX LAKE 1124000

OTHER LOCALITY INFORMATION: SPRING LOCATED APPROXIMATELY 300M NW OF HOT LAKE.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

SAMPLE NUMBER..... GT 213 NM76

TEMPERATURE (C)..... 84.

WATER TREATMENT.....

FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR METALS, FIELD ALKALINITY AND AMMONIA

COORDINATES

LAT/LONG... 42-19.82 N 118-36.16 W
 UTM ZONE... 11
 NORTHING... 4687484.
 367954.

TOWNSHIP=RANGE

37S 033E 14 NW OF NW

DETERMINATION.
 DEPOSITS OR ALTERATION..... SINTER
 OTHER SAMPLE INFORMATION.. SINTER ARCH IN SAMPLED POOL.
 WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00 BARNES GROUP
 PH..... 7.48 AT(C) 84.
 SPECIFIC CONDUCTANCE..... 1890.
 ALKALINITY..... AS HCO3
 CHARGE IMBALANCE (% DIFF).... 386.
 ANALYSIS IN MG/L
 AG.....
 AL.....
 AS.....
 R..... 15.
 RF.....
 HI.....
 CA..... 12.
 CO.....
 CL..... 250.
 CO3.....
 CR.....
 CS..... 0.1
 F..... 7.5
 FE(TOT).....
 GA.....
 HCO3..... 386.
 H2S..... L 1.
 LI..... 0.45
 MG..... 0.2
 NA..... 440.
 NH4..... L 0.5
 SI02..... 164.
 SO4..... 310.
 RB..... 0.18
 K..... 25.
 CO.....
 K.....
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION.... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPES 10/001

RECORD 00119

GEOTHERM FILE ID: 0015466

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KARAS..... ALVORD
 WARPING NUMBER..... 69
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... BORAX LAKE 1124000
 OTHER LOCALITY INFORMATION: SPRING ISSUES APPROXIMATELY 397M NW OF HOT LAKE.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.
 SAMPLE NUMBER..... GT 212 RM76
 TEMPERATURE (C)..... 97.
 DISCHARGE..... N
 WATER TREATMENT..... FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR HEAVY METALS, ALKALINITY AND AMMONIA
 DATA IN THE FIELD.
 OTHER SAMPLE INFORMATION.. POOL DISCHARGES LATERALLY BENEATH SILICA CAP.
 WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00 BARNES GROUP
 PH..... 7.26 AT(C) 97.
 SPECIFIC CONDUCTANCE..... 1840.
 ALKALINITY..... AS HCO3
 CHARGE IMBALANCE (% DIFF).... 372.
 ANALYSIS IN MG/L
 AG.....
 AL.....
 AS.....
 R.....
 RF.....
 HI.....
 CA.....
 CO3.....
 CR.....
 CS.....
 F.....
 FE(TOT).....
 GA.....
 HCO3.....
 H2S.....
 LI..... 0.45
 MG..... 0.2
 NA.....
 NH4.....
 SI02.....
 SO4.....
 RB.....
 K.....
 CO.....
 K.....
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION.... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

COORDINATES

LAT/LONG... 42-20.17 N 118-36.08 W
 UTM ZONE... 11
 NORTHING... 4688129.
 368076.

TOWNSHIP=RANGE

37S 033E 11 SW OF SW

ISOTOPES 10/001

AS..... 14. CS..... 0.1 NA.... 425. SI02. 163.
 R..... F..... 7.4 NB.... 504..
 HF..... FE(TOT). L 0.02 NH4.. L 0.5
 RI..... GA..... 372.
 CA..... HC03..... L 1.
 CO..... H2S..... L 1.
 CL..... 250. K..... 24. RB.... 0.17
 CO.....
 REFERENCE AND IDENTIFICATION
 COMPLETED BY..... MARINER, R. H.
 COMPIER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPIER CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00120

GEOTHERM FILE 10: 0015462

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

KGRA..... ALVORD
 WORKING NUMBER..... 69

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... BORAX LAKE 1:24000
 OTHER LOCALITY INFORMATION: LARGE POOL AT THE NORTHWEST END OF THE MOUND LEADING AWAY FROM HOT LAKE.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.
 SAMPLE NUMBER..... 215 RM76
 TEMPERATURE (C)..... 91.
 WATER TREATMENT..... FIELD ALKALINITY DETERMINATION, FILTERED (0.1UM), DILUTED FOR SILICA, ACIDIFIED FOR METALS.

DEPOSITS OR ALTERATION... SINTER
 OTHER SAMPLE INFORMATION... LARGE POOL OF LOW DISCHARGE, MOST OF POOL AT 50 DEG. C; REPORTED TEMPERATURE (91 C) WAS MEASURED IN A GAS DISCHARGE VENT ON THE NORTHWEST SIDE OF THE POOL.

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP
 PH..... 7.94 AT(C) 46.
 SPECIFIC CONDUCTANCE..... 1990.
 ALKALINITY..... 434. AS HC03
 CHARGE IMBALANCE (% DIFF)... 0.9
 ANALYSIS IN MG/L

AG..... CO3..... LI.... 0.5
 AL..... CR..... MG.... 0.3
 AS..... CS..... 0.2
 R..... F..... 7.5 NA.... 460. SI02. 189.
 HF..... FE(TOT). NB.... 504..
 CA..... HC03..... 434.
 CO..... H2S..... L 1.
 CL..... 270. K..... 29. RB.... 0.23

REFERENCE AND IDENTIFICATION
 COMPLETED BY..... MARINER, R. H.
 COMPIER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPIER CROSS INDEX... 43

ISOBATES 10/001

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00121

GEOTHERM FILE ID: 0015465

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 WARNING NUMBER..... 69

LOCATION
 COUNTRY..... UNITED STATES 37S 033E 14 NW OF NW

STATE..... OREGON
 COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE... BORAX LAKE 1124000

OTHER LOCALITY INFORMATION: FENCED AREA AT THE NORTHWEST BASE OF THE MOUND AROUND HOT LAKE.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

SAMPLE NUMBER..... G1 216 HM76

POINT OF COLLECTION.. SMALL POOL AT SE END OF FENCED AREA

TEMPERATURE (C)..... 86.

WATER TREATMENT..... FIELD ALKALINITY DETERMINATION, FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR METALS.

DEPOSITS OR ALTERATION..... SINTER

WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00

PH..... 8.67 AT(C) 34.

SPECIFIC CONDUCTANCE..... 2040.

ALKALINITY..... 423. AS HCO3

CHARGE IMBALANCE (% DIFF)... 2.0

ANALYSIS IN MG/L

AG..... CO3..... 0.55
 AL..... CR..... 0.3
 AS..... CS..... 0.1
 R..... F..... 7.7
 RE..... FE(TOT)..... 423.
 CA..... HCO3..... 1.
 CD..... H2S..... 0.18
 CL..... K..... 26.
 CO..... MARINER, R. H.
 COMPILED BY..... U. S. GEOLOGICAL SURVEY
 COMPILED AFFILIATION... 43
 COMPILED CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00122

GEOTHERM FILE ID: 0015466

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 WARNING NUMBER..... 69

LOCATION
 COUNTRY..... UNITED STATES 37S 033E 14 NW OF NW

STATE..... OREGON
 COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE... BORAX LAKE 1124000

OTHER LOCALITY INFORMATION: FENCED AREA AT THE NORTHWEST BASE OF THE MOUND AROUND HOT LAKE.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

SAMPLE NUMBER..... G1 216 HM76

POINT OF COLLECTION.. SMALL POOL AT SE END OF FENCED AREA

TEMPERATURE (C)..... 86.

WATER TREATMENT..... FIELD ALKALINITY DETERMINATION, FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR METALS.

DEPOSITS OR ALTERATION..... SINTER

WATER ANALYSIS
 DATE/ANALYST..... 1977/01/00

PH..... 8.67 AT(C) 34.

SPECIFIC CONDUCTANCE..... 2040.

ALKALINITY..... 423. AS HCO3

CHARGE IMBALANCE (% DIFF)... 2.0

ANALYSIS IN MG/L

AG..... CO3..... 0.55
 AL..... CR..... 0.3
 AS..... CS..... 0.1
 R..... F..... 7.7
 RE..... FE(TOT)..... 423.
 CA..... HCO3..... 1.
 CD..... H2S..... 0.18
 CL..... K..... 26.
 CO..... MARINER, R. H.
 COMPILED BY..... U. S. GEOLOGICAL SURVEY
 COMPILED AFFILIATION... 43
 COMPILED CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

COORDINATES

LAT/LONG... 42-19.82 N 118-36.16 W

UTM ZONE... 11

NORTHING... 4687484.

367954.

ISOTOPES 10/001

LI... 0.55

MG... 0.3

NA... 450.

SI02. 157.

S04.. 300.

COORDINATES

LAT/LONG... 42-19.82 N 118-36.16 W

UTM ZONE... 11

NORTHING... 4687484.

367954.

OTHER LOCALITY INFORMATION: SPRING LOCATED APPROXIMATELY 200M NW OF HOT LAKE.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.

SAMPLE NUMBER..... GT 214 RM76

TEMPERATURE (C)..... 90.5

WATER TREATMENT..... FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR METALS, FIELD ALKALINITY DETERMINATION.

DEPOSITS OR ALTERATION.... SINTER

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP

PH..... 7.04 AT(C) 91.

SPECIFIC CONDUCTANCE..... 1910.

ALKALINITY..... 420. AS HCO3

CHARGE IMBALANCE (% DIFF).... 0.6

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.5
AL.....	CR.....	MG....	0.3
AS.....	CS.....	NA....	435.
R.....	F.....	NB....	154.
RE.....	FE(TOT).....		300.
CA.....	HC03.....		
CD.....	H2S.....		
CL.....	L 1.		
CO.....	K.....	RB....	0.18

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPIILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPIILER CROSS INDEX... 43

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00123

GEOHEM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

KGRA..... ALVORU

WATER NUMBER..... 69

LOCATION.....

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE...

MGP REFERENCE..... BORAX LAKE 1:24000

DATE/COLLECTOR..... 1957/05/27 WHITE, DON

SAMPLE NUMBER..... LAR NO. 358

POINT OF COLLECTION.. HOTTEST SPRING 1000 FT NNW OF HOT LAKE FROM LARGE TRAVERTINE CONE.

TEMPERATURE (C)..... 87.0

DISCHARGE..... 19. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1958/02/05 SCHUCH, J. P.

PH..... 7.5

SPECIFIC CONDUCTANCE..... 2190.

TOTAL DISSOLVED SOLIDS... 1520.

CHARGE IMBALANCE (% DIFF).... 8.9

ANALYSIS IN PPM

AG.....	CO3.....	LI....	N
AL.....	CR.....	MG....	N

GEOHEM FILE ID: 0002219

COORDINATES

LAT/LONG... 42-20.08 N 118-36.11 W

UTM ZONE... +11

NORTHING... 4687963.

368032.

ISOLOPES 10/001

AS..... 1.0 CS..... MN..... 0.1
 H..... 15. F..... NA..... 426.
 RE..... FE(TQT) N 6.5 S102. 160.
 RI..... GA..... NH4... 0.69 S04... 328.
 BR..... 1.8 HCO3... N T1... 0.02
 CA..... 9.6 H2S... 1.4
 CD..... 265. I..... 0.2
 CO..... K..... 29.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... *USGS

RECORD 00124

GEOTHERM FILE 101 0000683

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

WATER NUMBER..... ALVORD

LOCATION..... 69

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..... BORAX LAKE 1:24000, ADEL 1:250000

MAP REFERENCE..... 1973/06/00 BARNES GROUP

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1973/06/00 BARNES GROUP

TEMPERATURE (C)..... 96.0

DISCHARGE..... 15 L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE

WITH NITRIC ACID, DILUTED

PERTINENT LITHOLOGY..... ALLUVIUM AND BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.30

SPECIFIC CONDUCTANCE..... 2020.

CHARGE IMBALANCE (% DIFF) ... 7.4

ANALYSIS IN MG/L

AG..... L 0.02 CO3... 4. LI... 0.51 S.... S102. 160. -125.4

AL..... 0.020 CR..... MG... 0.3 S8... L 0.2 DEL D OF WATER..... -14.36

AS..... 0.1 CS..... MN... 0.04 SC... S04... 434. DEL O(18) OF WATER... -8.58

AU..... L 0.1 CU..... 0.01 NA... 450. S102. 160. DEL O(18) OF S04.....

HA..... 15. F..... 7.2 NH4... 0.17 S8... 434. DEL O(18) OF S04.....

HF..... L 0.1 FE(TQT) L 0.02 NB... 0.17 S8... 434. DEL O(18) OF S04.....

RI..... GA..... HCO3... 374. P8... L 0.06 S8... 434. DEL O(18) OF S04.....

CA..... 14. HG..... 0.0008 P04... 1.2 S8... 434. DEL O(18) OF S04.....

CA+MG..... L 0.01 H2S..... RB... 0.18 S8... 434. DEL O(18) OF S04.....

CD..... 250. CO..... K..... 28. RB... 0.18 S8... 434. DEL O(18) OF S04.....

CO..... L 0.05 REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COORDINATES

LAT/LONG... 42-20.17 N 118-36.08 W

UTM ZONE... 11

NORTHING... 4688129.

368076.

ISOTOPES 10/2001

DEL D OF WATER.....

DEL O(18) OF WATER...

DEL O(18) OF S04.....

COMPILED CROSS INDEX... 43
REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00125
GEOHERM FILE ID: 0002210

GEOHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

KGRA..... ALVORD

WORKING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..

MAP REFERENCE..... BORAX LAKE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1953/09/03 HEWETT, D. F.

SAMPLE NUMBER..... LAB NO. 8742

POINT OF COLLECTION.. MOST SOUTHERN OF NUMEROUS SPRINGS EXTENDING 2000 FT.

TEMPERATURE (C)..... 79.4

PERTINENT LITHOLOGY..... WATER-BEARING ZONE IS RECENT TUFA CONE

WATER ANALYSIS

DATE/ANALYST..... 1953/09/18 MARTIN, R. N.

PH..... 8.1

SPECIFIC CONDUCTANCE..... 2160.

TOTAL DISSOLVED SOLIDS..... 1520.

CHARGE IMBALANCE (% DIFF).... 2.3

ANALYSIS IN PPM

AG.....

AL.....

BA..... 14.

BE.....

CA..... 14.

CL..... 270.

CO..... 30.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 43

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00126

GEOHERM FILE ID: 0002209

GEOHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

KGRA..... ALVORD

WORKING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE..

MAP REFERENCE..... BORAX LAKE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1953/09/03 HEWETT, D. F.

SAMPLE NUMBER..... LAB NO. 8743

COORDINATES

LAT/LONG... 42-20.17 N 118-36.08 W

UTM ZONE... 11

NORTHING... 4688129.

368076.

TOWNSHIP=RANGE

37S 033E 11 SW OF SW

POINT OF COLLECTION.. MOST NORTHERN OF NUMEROUS SPRINGS EXTENDING 2000 FT.

TEMPERATURE (C)..... R 73.9

DISCHARGE..... R 29.

PEPINEENT LITHOLOGY..... WATER-BEARING ZONE FROM RECENT TUFA CONE

WATER ANALYSIS

DATE/ANALYST..... 1953/09/18 MARTIN, K. N.

PH..... 7.6

SPECIFIC CONDUCTANCE..... 2050.

TOTAL DISSOLVED SOLIDS..... 1440.

CHARGE IMBALANCE (% DIFF).... 1.6

ANALYSIS IN PPM

AG.....	CO3..... N	LI.... L 1.5
AL.....	CH.....	MG.... N
BA..... 12.	F..... 7.0	NA.... 430.
BR.....	FE(TOT).....	SI02.. 119.
CA..... 15.	HCO3..... 382.	SO4... 319.
CL..... 255.	CL.....	NO3... 1.2
CO.....	K..... 27.	

QUALIFICATION FIELD..... FLOW RANGE: 19-38 LPM, TEMP RANGE: 71.1-76.7C

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 43

REFERENCE..... MARINER AND OTHERS, 1980

ISOIOPES 10/001

RECORD 00127

GEOHEM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE

KARA..... ALVORD

WARNING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... BORAX LAKE 1:24000

OTHER LOCALITY INFORMATION: SPRING ISSUES ON MOUND 400M NW OF HOT LAKE.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, K. H. AND EVANS, W. C.

SAMPLE NUMBER..... GT 211 RM76

TEMPERATURE (C)..... 97.

DISCHARGE..... N

WATER TREATMENT..... FIELD ALKALINITY AND AMMONIA DETERMINATION, FILTERED (0.1UM), ACIDIFIED FOR METALS,

SILICA DILUTION.

DEPOSITS OR ALTERATION..... SINTER

OTHER SAMPLE INFORMATION.. TEMPERATURE VARIES WITH GAS DISCHARGE RATE; SPRING DISCHARGES LATERALLY BENEATH SILICA

CAP.

WATER ANALYSIS

DATE/ANALYST..... 1977/01/00 BARNES GROUP

PH..... 7.36

SPECIFIC CONDUCTANCE..... 1840.

ALKALINITY..... 389. AS HCO3

CHARGE IMBALANCE (% DIFF).... 1.0

ANALYSIS IN MG/L

AG..... CO3.....

LI.... 0.5

ISOIOPES 10/001

COORDINATES

LAT/LONG... 42-20.08 N 118-36.11 W

UTM ZONE... 11

NORTHING... 4687963.

368032.

TOWNSHIP-RANGE

37S 03E 11. 14

GEOHEM FILE ID: 0015463

AL..... 0.028 CR..... MG.... 0.2
 AS..... 0.1 MN.... 0.05
 R..... 14. F..... 7.6 NA.... 435. SI02. 169.
 HF..... FE(TQT). L 0.02 NH.... 300.
 HI..... GA..... L 0.5
 CA..... 13. HCO3..... 389.
 CD..... H2S..... L 1.
 CL..... 250. RB.... 0.17
 CO..... K..... 24.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00128

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF BUTTE HOT SPRING)
 WAVING NUMBER..... 72
 LOCATION

GEOTHERM FILE ID: 0015428

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 42-11.3 N 118-23.0 W
 UTM ZONE... 11
 NORTHING... 4671399.
 385770.

MAP REFERENCE... ADEL 11250000
 SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1970/08/20 BOWEN, R. G.

SAMPLE NUMBER..... 1772

WATER ANALYSIS

DATE/ANALYST..... 1970/11/18 AWH OREGON DEPT. OF ENV. QUALITY

PH..... 8.3
 SPECIFIC CONDUCTANCE..... 1060.
 ALKALINITY..... 360.
 TOTAL DISSOLVED SOLIDS..... 893.
 CHARGE IMBALANCE (% DIFF)... 35.3
 ANALYSIS IN MG/L

ISOTOPES (0/001)

AG..... CO3..... LI.... L 0.5
 AL..... L 0.01 CR..... MG.... 0.9
 AS..... 0.036
 R..... 1.6 F..... 12. NA.... 230. SI02. 79.
 RA..... FE+3..... 0.09
 RF..... FE(TQT). 0.03 NH.... 177.
 CA..... 18. HCO3..... NO3.... 0.05
 CD..... H2S..... PO4.... 0.04
 CL..... 226.

CO..... K..... 25.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 27
 REFERENCE..... *DOGAMI

RECORD 00129

GEOTHERM_SAMPLE_FILE

GEOTHERM FILE ID: 0000731

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF BUTTE HOT SPRING)
 WARNING NUMBER..... 72

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY

COORDINATES

LAT/LONG... 42-11.3 N 118-23.0 W
 UTM ZONE... 11
 NORTHING... 4671399.
 385770.

MAP REFERENCE... ADEL 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 52.0

DISCHARGE..... 200. L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED

PERTINENT LITHOLOGY..... ANDESITE, BASALT AND RHYOLITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 6.77

SPECIFIC CONDUCTANCE..... 1168.

CHARGE IMBALANCE (% DIFF)... 2.0

ANALYSIS IN MG/L

AG..... L 0.02

AL..... 0.002

AS.....

AU..... L 0.1

H..... 0.89

RA..... L 0.1

RE..... L 0.1

RI.....

CA..... 18.

CA+MG.....

CD..... L 0.01

CL..... 24.

CO..... L 0.05

K..... 11.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 27

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00130

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED SPRING
 WARNING NUMBER..... 51A
 LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

MAP REFERENCE... BUCHANAN 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/09/02

SAMPLE NUMBER..... 13 IN PIPER AND OTHERS

TEMPERATURE (C)..... 22.

WATER ANALYSIS

TOWNSHIP-RANGE

22S 32.5E 14 NE OF SW

COORDINATES

LAT/LONG... 43-39.76 N 118-44.30 W
 UTM ZONE... 11
 NORTHING... 4835659.
 359838.

GEOTHERM FILE ID: 0015942

ISOTOPES 10/0007

ANALYSIS IN PPM
 AG.....
 RA.....
 RE.....
 CA..... 16.
 CL..... 1.9
 CO3..... N
 FE+3.....
 FE(TOT).....
 HC03.....
 NA+K..... 12.
 NB.....
 NO3..... 1.0
 S04..... 4.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00131

GEOTHERM FILE ID: 0003063

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED WARM SPRING
 WELL/SPRING NUMBER..... 27S-29E-009-BBC
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE..... BURNS, ORE. 1:250,000
 OTHER LOCALITY INFORMATION: BURNS A.M.S.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY
 SAMPLE NUMBER..... WS112-80
 POINT OF COLLECTION.. WARMEST ORIFICE
 TEMPERATURE (C)..... 21.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 756. L/MIN
 DEPOSITS OR ALTERATION... SLIGHT SINTER
 PERTINENT LITHOLOGY..... RHYOLITIC ASH FLOW TUFF.
 OTHER SAMPLE INFORMATION.. SLIGHT MINERAL ODOR.

COORDINATES
 LAT/LONG... 43-16.026N 119-15.020W

TOWNSHIP-RANGE
 27S 029E 09 SW OF NW NW
 B&M: WILLAMETTE

DATE/ANALYST..... 1980/06/25 BANERJEE, KALA C.

PH..... 7.9
 SPECIFIC CONDUCTANCE..... 297.
 ALKALINITY..... 103.
 TOTAL SUSPENDED SOLIDS... 251.
 CHARGE IMBALANCE (% DIFF)... 6.1

ISOTOPES 10/0007

ANALYSIS IN MU/L
 AG.....
 AL..... L 0.1
 AS.....
 H.....
 HF.....
 HI.....
 CA..... 13.1
 CD.....
 CL..... 25.
 LI..... L 0.1
 MG..... 5.5
 MN..... L 0.05
 NA..... 36.8
 NB.....
 NH4..... 0.04
 P04... 0.032
 SI02... 64.
 S04... 12.9

REFERENCE AND IDENTIFICATION
 COMPILED BY..... BROWN, DAVID E.
 COMPILER AFFILIATION... DUGAMI
 REFERENCE..... BROWN AND OTHERS, 1980A

RECORD 00132

GEOTHERM FILE ID: 0003064

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED WARM SPRING IN HARNEY LAKE

WELL/SPRING NUMBER..... 27S-29.5E-036-CAB

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

MAP REFERENCE..... BURNS, ORE. 1:250,000

OTHER LOCALITY INFORMATION: BURNS A.M.S.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/05/08 BROWN, DAVID AND MCLEAN, GARY

SAMPLE NUMBER..... WSR0-126

POINT OF COLLECTION.. WARMEST ORIFICE

TEMPERATURE (C)..... 22.

DISCHARGE..... 7.6 L/MIN

DEPOSITS OR ALTERATION... SLIGHT SINTER

PERTINENT LITHOLOGY..... EMINATING FROM LAKE SEDIMENTS

WATER ANALYSIS

DATE/ANALYST..... 1980/06/26 BANERJEE, KALA C.

PH..... 8.7

SPECIFIC CONDUCTANCE..... 9280.

ALKALINITY..... 2000. AS CAC03

TOTAL DISSOLVED SOLIDS... 10615.

CHARGE IMBALANCE (% DIFF)... 17.7

ANALYSIS IN MG/L

AG.....

AL..... 125.

AS..... 1.7

H..... 53.

HF.....

RI.....

CA..... 1.5

CO.....

CL..... 2400.

CO.....

K..... 68.

REFERENCE AND IDENTIFICATION

COMPILED BY..... BROWN, DAVID E.

COMPILER AFFILIATION... DUGAMI

REFERENCE..... BROWN AND OTHERS, 1980A

ISOTOPIES (0/00L)

LI... 1.0

MG... 3.3

MN... 1.5

NA... 2220.

NB... 1.55

P04... 1.2

SI02. 90.

S04... 474.

RECORD 00133

GEOTHERM FILE ID: 0015345

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... WARM SPRING NEAR VENATOR

WELL/SPRING NUMBER..... 25S 036E 16

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... HARNEY

GEOLOGIC PROVINCE... 32

MAP REFERENCE..... BURNS 1:250000

OTHER LOCALITY INFORMATION: .3 MILES NORTH OF VENATOR

SAMPLE DESCRIPTION AND CONDITIONS

COORDINATES

LAT/LONG... 43-23.7 N 118-18.4 W

UTM ZONE... 11

NORTHING... 4805294.

Easting... 394177.

DATE/COLLECTOR..... 1977/06/08
 TEMPERATURE (C)..... 41.
 WATER ANALYSIS
 P..... 9.1
 SPECIFIC CONDUCTANCE..... 650.
 TOTAL DISSOLVED SOLIDS... 1360.
 CHARGE IMBALANCE (% DIFF)... 15.8
 ANALYSIS IN MG/L
 AG..... CO3..... 38.
 AL..... CR..... 0.1
 AS..... 0.095 MN..... N 100.
 H..... 2.2 F..... 1.1
 RE..... FE(TOT)... 0.03
 CA..... 2.7 HCO3..... 57.
 CD..... CL..... 7.0 P04... 0.06
 CO..... K..... 1.0
 OTHER ANALYTICAL DATA... NO2+NO3=.24, PHOSPHATE+ORTHO AS P=.06
 QUALIFICATION FIELD... SI02 ANALYSIS MADE ON SAMPLE 10 ML WELL WATER, 50 ML DEMINERALIZED WATER
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 10
 REFERENCE..... GONTHIER AND OTHERS, 1977

RECORD 00134
 GEOTHERM FILE 10: 0001683

COORDINATES
 LAT/LONG... 43-39.0 N 118-15.6 W

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... WARM SPRINGS RESERVOIR
 LOCATION
 TOWNSHIP-RANGE

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 62.
 DISCHARGE..... 340. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... BOWEN AND OTHERS, 1978

RECORD 00135

GEOTHERM FILE 10: 0015971

COORDINATES
 LAT/LONG... 45-29.75 N 121-33.5 W

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... PARKDALE GRADIENT HOLE
 WELL/SPRING NUMBER..... 15-10E-9-8C
 LOCATION
 TOWNSHIP-RANGE

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HOOD RIVER
 GEOLOGIC PROVINCE... 30
 MAP REFERENCE..... DOG RIVER 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1978/11/29 BLACK, GERALD
 SAMPLE NUMBER..... W578-314
 TEMPERATURE (C)..... 74. AT (M)... 50.

<p>AMBIENT TEMP (C)..... 1. DISCHARGE..... 127. L/MIN WATER ANALYSIS DATE/ANALYST..... 1979/12/29 BANERJEE, KALA C. PH..... 8.4 AT(C) 24. SPECIFIC CONDUCTANCE..... 557. ALKALINITY..... 198. AS CAC03 CHARGE IMBALANCE (% DIFF).... 1.2 ANALYSIS IN MG/L</p>		<p>ISOTOPIES (0/001) AG..... 0.05 AL..... 2.9 AS..... 0.02 AU..... R..... 94. SI02. 80. FE..... 10. CA..... 0.03 CO..... 0.099 CL..... K..... 17. REFERENCE AND IDENTIFICATION COMPILED BY..... RICCIO, JOSEPH F. COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES REFERENCE..... *DUGAMI IN-HOUSE STUDIES, DOE GRANT NO. AC06-77-EI-2</p>	
<p>GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... JACKSON HOT SPRING WELLING NUMBER..... 25 LOCATION COUNTRY..... UNITED STATES STATE..... OREGON COUNTY..... JACKSON GEOLOGIC PROVINCE.. 30 MJP REFERENCE..... ASHLAND 1162500 SAMPLE DESCRIPTION AND CONDITIONS DATE/COLLECTOR..... 1952/04/22 TEMPERATURE (C)..... 35.0 WATER ANALYSIS DATE/ANALYST..... 1952/00/00 AT(C) 35. PH..... 9.3 SPECIFIC CONDUCTANCE..... 460. TOTAL DISSOLVED SOLIDS... 318. CHARGE IMBALANCE (% DIFF).... 3.1 ANALYSIS IN PPM</p>		<p>ISOTOPIES (0/001) AG..... 36. AL..... 1.4 R..... 2.9 FE..... 95. SI02. 65. CA..... 2.8 CO..... 11. NO3. 26. CL..... 0.2 K..... 1.2 REFERENCE AND IDENTIFICATION COMPILED BY..... PETERSON, NORMAN V. COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES COMPILER CROSS INDEX... 01</p>	

RECORD 00136
GEOTHERM FILE ID: 0015344

COORDINATES
LAT/LONG... 42-13.30 N 122-44.65 W
UTM ZONE... 10
NORTHING... 4674206.
EASTING... 521114.

REFERENCE..... ROHISON, 1972

RECORD 00137
GEOTHERM FILE ID: 0003005

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... ABE BUEHM
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE... 31
 MAP REFERENCE..... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1975/08/11
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 47.
 WATER ANALYSIS
 ANALYSIS IN MG/L
 AL.....
 AS.....
 RE.....
 CL..... 205.
 CR.....
 CS.....
 FE(TOT).....
 COORDINATES
 LAT/LONG... 42-04.05 N 121-45.40 W
 UTM ZONE... +10
 NORTHING... 4657805.
 602865.
 ISOTOPES (O/00L)
 DEL O (18) OF WATER... -6.78
 DEL O (18) OF SO4..... 15.42
 SB... 308.
 SC...
 SO4...
 TOWNSHIP=RANGE
 40S 009E 28 NE OF SW NE
 B&M: WILLAMETTE
 COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION.. U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... NEHRING AND OTHERS, 1979

RECORD 00138
GEOTHERM FILE ID: 0015309

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... ABE BUEHM
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE... 31
 MAP REFERENCE..... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/30 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 25.0
 WELL DEPTH (M)..... 47.
 PERTINENT LITHOLOGY..... YONNA FM.
 OTHER SAMPLE INFORMATION.. DOMESTIC USE
 WATER ANALYSIS
 DATE/ANALYST..... USGS
 PH..... 7.1
 SPECIFIC CONDUCTANCE..... 2700.
 CHARGE IMBALANCE (% DIFF)... 2.3
 ANALYSIS IN MG/L
 AG.....
 AL.....
 AS.....
 R..... 1.4
 HE.....
 CO3.....
 CH.....
 CS.....
 F.....
 FE(TOT).....
 LI.....
 MG.....
 MN.....
 NA.....
 NB.....
 0.16
 47.
 2.4
 480.
 S.....
 SH... 100.
 SI02... 300.
 SO4...
 TOWNSHIP=RANGE
 40S 009E 28 NE OF SW NE
 COORDINATES
 LAT/LONG... 42-04.05 N 121-45.40 W
 UTM ZONE... +10
 NORTHING... 4657805.
 602865.
 ISOTOPES (O/00L)
 DEL O OF WATER..... -73.2
 DEL O (18) OF WATER... -7.38

CA..... 180. HC03..... 1460.
CL..... 170. K..... 18.
CO.....
REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED BY..... U.S. GEOLOGICAL SURVEY
COMPILED CROSS INDEX... 06
REFERENCE..... SAMMEL, 1976

RECORD 00139

GEOTHERM FILE ID: 0015325

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ALFRED JACOBSEN
LOCATION... NEAR KLAMATH FALLS

TOWNSHIP-RANGE

39S 009E 34 SW OF NE NE

UNITED STATES

COUNTRY..... OREGON

STATE..... KLAMATH

COUNTY..... 31

GEOLOGIC PROVINCE... MERRILL 1162500

MAP REFERENCE.....

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/20 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 30.0

WELL DEPTH (M)..... 47.

OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 7.6

SPECIFIC CONDUCTANCE..... 290.

CHARGE IMBALANCE (% DIFF)... 6.6

ANALYSIS IN MG/L

AG..... CO3..... N

AL..... CR.....

AS..... 0.001 MG... 2.4

R..... 0.05 CS..... 0.050

HE..... FE..... 0.1

CA..... 5.7 FE(TOT)... 0.12

CL..... 7.9 HC03..... 160.

CO..... K..... 12.

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILED BY..... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

ISOIOPES 10/001

COORDINATES

LAT/LONG... 42-07.65 N 121-44.40 W

UTM ZONE... +10

NORTHING... 4664487.

604145.

RECORD 00140

GEOTHERM FILE ID: 0015312

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANNIE SPRING

TOWNSHIP-RANGE

31S 006E 19 SE OF SW NW

UNITED STATES

COUNTRY..... OREGON

STATE..... KLAMATH

COUNTY..... 30

GEOLOGIC PROVINCE... CRATER LAKE NATIONAL PARK AND VICINITY 1162500

MAP REFERENCE.....

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... VOEGTLY AND SAMMEL

COORDINATES

LAT/LONG... 42-52.35 N 122-10.10 W

UTM ZONE... +10

NORTHING... 4746777.

567930.

610375.

GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL J162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/30 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 24.
 WELL DEPTH (M)..... 323.
 OTHER SAMPLE INFORMATION.. DOMESTIC SUPPLY
 WATER ANALYSIS
 DATE/ANALYST..... USGS
 PH..... 8.2
 SPECIFIC CONDUCTANCE..... 220.
 CHARGE IMBALANCE (% DIFF).... 7.9
 ANALYSIS IN MG/L
 AG..... 1.
 AL.....
 AS..... 0.002
 H..... 0.02
 HE.....
 FE(TOT)..... 0.05
 CA..... 9.7
 CO..... 2.8
 CL.....
 K..... 6.2
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

ISOTOPIES (0/001)

SI02. 57.
 S04.. 15.

RECORD 00143

GEUTHERM FILE ID: 0015337

COORDINATES
 LAT/LONG... 42-06.75 N 121-39.65 W
 UTM ZONE... +10
 NORTHING... 4662921.
 610715.

SW OF SE SE

TOWNSHIP=RANGE
 40S 010E 05

NAME OF SAMPLE SOURCE... CLYDE DEHLINGER
 LOCATION
 KRA..... KLAMATH FALLS
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL J162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/06/05 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 24.0
 WELL DEPTH (M)..... E 30.
 OTHER SAMPLE INFORMATION.. STOCK USE
 WATER ANALYSIS
 DATE/ANALYST..... USGS
 PH..... 7.9
 SPECIFIC CONDUCTANCE..... 240.
 CHARGE IMBALANCE (% DIFF).... 3.0
 ANALYSIS IN MG/L
 AG.....
 AL.....
 AS..... 0.04
 H.....
 HE.....
 FE(TOT)..... 0.02
 CA..... 8.1
 CO..... 4.9
 CL.....
 K..... 6.5

ISOTOPIES (0/001)

SI02. 72.
 S04.. 2.3

TEMPERATURE (C)..... 25.0
DISCHARGE..... 7571. L/MIN
PERTINENT LITHOLOGY..... BASALT
WATER ANALYSIS
SPECIFIC CONDUCTANCE..... 53.
ANALYSIS
AL..... CR.....
REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

ISOLOPES 10/001
DEL 0(18) OF WATER... -14.40

SB...

MG...

RECORD 00141

GEOTHERM FILE 101 0015338

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... RILL HILL
KRA..... KLAMATH FALLS
LOCATION
COUNTRY..... UNITED STATES 40S 010E 26 NE OF SW NW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE.. J1
MAP REFERENCE..... MERRILL 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/06/06 VOGELTY AND SAMMEL
TEMPERATURE (C)..... 20.0
WELL DEPTH (M)..... 250.
OTHER SAMPLE INFORMATION.. DOMESTIC AND STOCK USE
WATER ANALYSIS

COORDINATES

LAT/LONG... 42-03.55 N 121-36.60 W
UTM ZONE... +10
NORTHING... 4657067.
615014.

USGS

DATE/ANALYST.....
PH..... 7.7
SPECIFIC CONDUCTANCE..... 245.
CHARGE IMBALANCE (% DIFF)... 1.3
ANALYSIS IN MG/L

AG..... CO3..... N
AL..... CR..... 13.
AS..... N CS..... 0.030
H..... F..... N
HE..... FE(TOT) 0.04
CA..... HC03..... 140.
CL..... 4.2
CO..... K..... 6.4

ISOLOPES 10/001

S102. 26.
S04.. 6.4

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00142

GEOTHERM FILE 101 0015327

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CLAUDE SHUCK
KRA..... KLAMATH FALLS
LOCATION
COUNTRY..... UNITED STATES 39S 010E 08 SE OF NW SE
STATE..... OREGON
COUNTY..... KLAMATH

COORDINATES

LAT/LONG... 42-11.35 N 121-39.80 W
UTM ZONE... +10
NORTHING... 4671430.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00144
 GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... DAN O'CONNOR
 LOCATION..... KRAMA..... KLAMATH FALLS
 TOWNSHIP-RANGE 40S 009E 23

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/07 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 24.0
 WELL DEPTH (M)..... 26
 OTHER SAMPLE INFORMATION.. STOCK USE

WATER ANALYSIS
 PH..... 7.6
 SPECIFIC CONDUCTANCE..... 260
 CHARGE IMBALANCE (% DIFF).... 2.3
 ANALYSIS IN MG/L
 AG.....
 AL.....
 R.....
 HE.....
 CA..... 12
 CL..... 9.1
 CO.....
 CR.....
 F.....
 FE(TOT).....
 HCO3..... 130
 K..... 8.1
 MG..... 6.6
 NA..... 32
 NH.....
 SI02..... 42
 SO4..... 14

ISOTOPES 10/001

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... SAMMEL, 1976

RECORD 00145
 GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... EAGLE POINT SPRING
 LOCATION..... UNITED STATES
 TOWNSHIP-RANGE 36S 007E 23

COUNTRY..... OREGON
 STATE..... KLAMATH
 COUNTY.....
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MODOC POINT 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1972/08/22 GARONER, MURRAY
 TEMPERATURE (C)..... 0 35
 DISCHARGE..... 19 L/MIN
 PERTINENT LITHOLOGY..... HASALT
 WATER ANALYSIS
 DATE/ANALYST..... USGS

COORDINATES
 LAT/LONG... 42-25.85 N 121-57.75 W
 UTM ZONE... 10
 NORTHING... 4697920
 585344

P1..... 8.3
 SPECIFIC CONDUCTANCE..... Q 305.
 ANALYSIS IN MG/L
 AG..... N
 AL.....
 AS..... 0.140
 H..... 0.75
 HE.....
 CA..... 0.6
 CL..... 136.
 CO.....
 K..... 5.7
 QUALIFICATION FIELD..... TEMPERATURE AND CONDUCTANCE MEASURED 1975/04/06; LI=L 0.20; SI02=78
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... SAMMEL, 1976

RECORD 00146

GEOTHERM FILE ID: 0015305

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... FALCON HEIGHTS SCHOOL
 LOCATION..... NEAR KLAMATH FALLS
 COUNTRY..... UNITED STATES 34 SE OF NW SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/07 VOEGLTY AND SAMMEL
 TEMPERATURE (C)..... 37.0
 WELL DEPTH (M)..... 320.
 DISCHARGE..... 322. L/MIN
 PERTINENT LITHOLOGY..... YONNA FM.
 OTHER SAMPLE INFORMATION.. IRRIGATION
 WATER ANALYSIS

COORDINATES
 LAT/LONG... 42-07.80 N 121-45.10 W
 UTM ZONE... 10
 NORTHING... 4664750.
 603177.

P1..... 7.8
 SPECIFIC CONDUCTANCE..... 350.
 CHARGE IMBALANCE (% DIFF)... 3.8
 ANALYSIS IN MG/L
 AG..... N
 AL.....
 AS..... 0.003
 H..... 0.1
 HE..... 0.2
 CA..... 7.7
 CL..... 8.9
 CO..... 7.1
 K.....
 QUALIFICATION FIELD..... TEMPERATURE AND CONDUCTANCE MEASURED 1975/04/06; LI=L 0.20; SI02=78
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

ISOTOPES 10/001
 DEL D OF WATER..... -120.5
 DEL O(18) OF WATER... -15.69

RECORD 00147

GEOTHERM FILE ID: 0015343

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... GEORGE CARTER
 LOCATION... KRAMA,..... KLAMATH FALLS
 COUNTRY..... UNITED STATES 41S 010E 14 NE OF NW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/06/06 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 22.
 "ELI DEPTH (M)..... 20.
 OTHER SAMPLE INFORMATION.. DOMESTIC USE!

WATER ANALYSIS

DATE/ANALYST..... USGS
 P+..... 8.2
 SPECIFIC CONDUCTANCE..... 660.
 CHARGE IMBALANCE (% DIFF).... 3.8
 ANALYSIS IN MG/L
 AG..... CO3..... N 2.3
 AL..... CR..... 0.020
 AS..... N MN..... 99.
 H..... 0.15 F..... N
 RE..... FE(IQT)..... 0.02 41.
 CA..... 29. HCO3..... 100. S04.. 95.
 CL..... 98. CO..... K..... 7.9

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

ISOLOPES 10/001

RECORD 00148

GEOTHERM FILE 101 0015333

NAME OF SAMPLE SOURCE... GEORGE STACY CO.
 LOCATION... KRAMA,..... KLAMATH FALLS
 COUNTRY..... UNITED STATES 39S 010E 32 SE OF NW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/06/05 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 25.0
 "ELI DEPTH (M)..... 279.
 OTHER SAMPLE INFORMATION.. INDUSTRIAL USE

WATER ANALYSIS

DATE/ANALYST..... USGS
 P+..... 8.3
 SPECIFIC CONDUCTANCE..... 170.
 CHARGE IMBALANCE (% DIFF).... 2.2
 ANALYSIS IN MG/L
 AG..... CO3..... N

COORDINATES

LAT/LONG... 42-08.40 N 121-39.80 W
 UTM ZONE... +10
 NORTHING... 4665971.
 610461.

ISOLOPES 10/001

AL..... 0.001 CR..... MG... 2.0
 AS..... 0.01 CS..... MN... 0.010
 R..... F..... N 20.
 RE..... FE(TOT) 0.04 S102. 34.
 CA..... 13. HCO3... 94. S04.. 11.
 CL..... 2.0
 CO..... K..... 4.0

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00149

GEUTHERM FILE ID: 0015320

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOWARD HOLLIDAY
 LOCATION..... NEAR KLAMATH FALLS
 KGRA.....
 COUNTRY..... UNITED STATES 39S 008E 13 NW OF NE SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... KLAMATH FALLS 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/22 VOEGLTY AND SAMMEL
 TEMPERATURE (C)..... 25.0
 DISCHARGE..... 57. L/MIN
 PERTINENT LITHOLOGY..... BASALT
 OTHER SAMPLE INFORMATION.. NEWCOMB AND HART, 1958; TEMP=21.1, EST. FLOW=189 LPM; MEASUREMENTS MADE 1954

COORDINATES

LAT/LONG... 42-10.55 N 121-49.70 W
 UTM ZONE... 10
 NORTHING... 4669750.
 596770.

USGS

ISOTOPES 10/001

AG..... CO3..... L 1. LI... 0.02
 AL..... CR..... MG... 3.1
 AS..... 0.002 CS..... MN... N
 R..... 0.04 F..... 0.1 S102. 27.
 RE..... FE(TOT) 0.08 S04.. 6.4
 CA..... 12. HCO3... 120.
 CL..... 5.1

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 03
 REFERENCE..... SAMMEL, 1976

RECORD 00150

GEUTHERM FILE ID: 0015315

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... J. E. FRIESEN
 LOCATION..... NEAR KLAMATH FALLS
 KGRA.....
 COUNTRY..... UNITED STATES 38S 009E 28 SW OF SE SW
 COORDINATES
 LAT/LONG... 42-13.75 N 121-46.15 W

UTM ZONE... +10
NORTHING... 4675740.
601572.

STATF..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE... 31

MAP REFERENCE..... KLAMATH FALLS 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1955/02/19

TEMPERATURE (C)..... 73.0
WELI DEPTH (M)..... 172.
DISCHARGE..... E 151.

OTHER SAMPLE INFORMATION.. USED FOR HEATING
WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 8.7
SPECIFIC CONDUCTANCE..... 1230.
TOTAL DISSOLVED SOLIDS..... 881.
CHARGE IMBALANCE (% DIFF).... 4.1
ANALYSIS IN PPM

AG..... CO3..... 8.
AL..... CR.....
H..... F..... 1.6
HE..... FE(TOT) N
CA..... HC03..... 32.
CL..... NO3... N
CO..... K..... 4.4

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILED CROSS INDEX... 02
REFERENCE..... NEWCOMB AND HART, 1958

ISOLINES 10/001

SI02. 87.
S04.. 431.

RECORD 00151

GEOTHERM FILE ID: 0015335

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... J. K. O'NEIL

LOCATION... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... KLAMATH

SE OF NW NW

GEOLOGIC PROVINCE... 31
MAP REFERENCE..... MERRILL 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 23.0
WELI DEPTH (M)..... 25.

OTHER SAMPLE INFORMATION.. STOCK USE
WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 7.4
SPECIFIC CONDUCTANCE..... 190.
CHARGE IMBALANCE (% DIFF).... 8.0
ANALYSIS IN MG/L

AG..... CO3..... 1.
AL..... CR.....
H..... F..... 0
HE..... FE(TOT) N

SI02. 5.5
S04.. 26.

ISOLINES 10/001

SI02. 50.
S04.. 13.

COORDINATES

LAT/LONG... 42-08.30 N 121-38.10 W
UTM ZONE... +10
NORTHING... 4665823.
612805.

CA.... 6.1 HCO3.... 110.
CL.... 2.8
CO....
K..... 5.1
QUALIFICATION FIELD..... SAMPLE (1975/08/10): F=0.2+8=0.03, SP COND=205, PH=7.7, TEMP=24
REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 24
REFERENCE..... SAMMEL, 1976

RECORD 00152

GEOTHERM FILE ID: 0015442

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... J. K. O'NEIL
KRA..... KLAMATH FALLS
WELL/SPRING NUMBER..... 39S/10W-34H8D
LOCATION
COUNTRY..... UNITED STATES 39S 010E 34 NW OF NW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL J:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/CONLECTOR..... 1972/03/01 O'NEIL, J. K.
SAMPLE NUMBER..... OREGON STATE BOARD OF HEALTH 2070
WATER ANALYSIS
DATE/ANALYST..... 1972/03/16 AMH

PH..... 7.6
SPECIFIC CONDUCTANCE..... 222.
ALKALINITY..... 83.
TOTAL DISSOLVED SOLIDS... 159.
CHARGE IMBALANCE (% DIFF)... 4.0
ANALYSIS IN MG/L
AL..... L 0.01 CR..... 5.2
AS..... N CS..... 0.02
R..... F..... 0.2
HF..... FE(TQT)... 0.02
CA..... 6.4 HCO3.... 0.03
CD..... H2S..... 0.02
CL..... 2.5

ISOTOPES (0/00)

SI02.. 45.
S04.. 8.5

CO..... K..... 5.4
REFERENCE AND IDENTIFICATION
COMPILED BY..... PETERSON, NORMAN V.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 24
REFERENCE..... #00GAMI

RECORD 00153

GEOTHERM FILE ID: 0015310

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... JACK LISKEY
KRA..... KLAMATH FALLS
WELL/SPRING NUMBER..... 40S 009E 34 NE OF SW NE
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... KLAMATH

COORDINATES
LAT/LONG... 42-02.95 N 121-44.40 W
UTM ZONE... 10
NORTHING... 4655790.

604274.

GEOLOGIC PROVINCE... 31
 MAP REFERENCE... MERRILL 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1974/05/09 VOEGTLY AND SAMMEL
 TEMPERATURE (C)... 93.0
 WELL DEPTH (M)... 86.
 DISCHARGE... 17034. L/MIN
 PERTINENT LITHOLOGY... YONNA FM.
 OTHER SAMPLE INFORMATION... USE: IRRIGATION, STOCK
 WATER ANALYSIS
 DATE/ANALYST... USGS
 PH... 8.9
 SPECIFIC CONDUCTANCE... 1030.
 CHARGE IMBALANCE (% DIFF)... 5.4
 ANALYSIS IN MG/L
 AG... 2.
 AL...
 AS...
 H... 0.65
 BE... 1.5
 FE(TQT)...
 CA... 15.
 CL... 59.
 CO... 4.0
 K...
 REFERENCE AND IDENTIFICATION
 COMPILED BY... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE... SAMMEL, 1976; NEHRING AND OTHERS, 1979

ISOIOPES 10/001
 DEL D OF WATER... -116.6
 DEL O(18) OF WATER... -14.95
 DEL O(18) OF S04... -2.13

LI... 0.08
 MG... L 0.1
 MN...
 NA... 200.
 NB...
 S...
 SB...
 SC...
 SI02... 90.
 S04... 360.

RECORD 00154

GEOTHERM FILE 10: 0015311

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... JACK LISKEY
 LOCATION... KRAMA, KLAMATH FALLS
 COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... KLAMATH
 GEOLOGIC PROVINCE... 31
 MAP REFERENCE... MERRILL 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1974/05/09 VOEGTLY AND SAMMEL
 TEMPERATURE (C)... 22.0
 WELL DEPTH (M)... 29.
 DISCHARGE... 189. L/MIN
 PERTINENT LITHOLOGY... YONNA FM.
 OTHER SAMPLE INFORMATION... DOMESTIC AND STOCK USE
 WATER ANALYSIS
 DATE/ANALYST... USGS
 PH... 7.6
 SPECIFIC CONDUCTANCE... 2400.
 CHARGE IMBALANCE (% DIFF)... 3.5
 ANALYSIS IN MG/L
 AG...
 AL...
 H... U
 CO3... N
 CR...
 F... U
 LI... U
 MG... 16.
 NA... 580.
 S...
 SB...
 SI02... 100.

COORDINATES
 LAT/LONG... 42-02.25 N 121-43.60 W
 UTM ZONE... +10
 NORTHING... 4654511.
 6053396.

ISOIOPES 10/001
 DEL D OF WATER... -87.2
 DEL O(18) OF WATER... -8.83

S04.. 13.

NB...

FE(TOT) 0.09

HE....

HC03..... 1550.

CA.... 35.

CL.... 140.

CO....

K..... 12.

CO....

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 06

REFERENCE..... SAMMEL, 1976

RECORD 00155

GEOTHERM FILE ID: 0003004

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JACK LISKEY

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE.. 31

MJP REFERENCE..... MERRILL, J162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/08/11

TEMPERATURE (C)..... 25.

WELL DEPTH (M)..... 29.

WATER ANALYSIS

ANALYSIS IN MG/L

AL.....

AS.....

HE.....

CL..... 152.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.

COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 06

REFERENCE..... NEHRING AND OTHERS, 1979

RECORD 00156

GEOTHERM FILE ID: 0015339

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JACK O'CONNOR

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE.. 31

MJP REFERENCE..... MERRILL, J162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/09 VUEGTLY AND SAMMEL

TEMPERATURE (C)..... 38.0

WELL DEPTH (M)..... 6 183.

OTHER SAMPLE INFORMATION.. DOMESTIC AND STOCK USE

WATER ANALYSIS

DATE/ANALYST.....

P1..... 8.3

SPECIFIC CONDUCTANCE.... 640.

COORDINATES

LAT/LONG... 42-02.25 N 121-43.60 W

UTM ZONE... +10

NORTHING... 4654511.

EASTING... 6053396.

ISOTOPIES (0/001)

DEL O(18) OF WATER... -8.67

DEL O(18) OF S04..... 8.69

S8...

SC...

S04... 5.

COORDINATES

LAT/LONG... 42-02.00 N 121-42.95 W

UTM ZONE... +10

NORTHING... 4654061.

EASTING... 606300.

ISOLOPES 10/001

CHARGE IMBALANCE (% DIFF)... 0.6

ANALYSIS IN MG/L

AG....	CO3.....	2.	MG....	U.6	SI02.	65.
AL....	CR.....		NA....	130.	S04..	140.
H....	F.....	0	NB....			
HF....	FE(TOT)...					
CA....	7.5	110.				
CL....	50.					
CO....	K.....	3.0				

QUALIFICATION FIELD..... SAMPLE (1975/08/07): F=0.3,B=0.16,SP COND=660,PH=8.2,TEMP=40

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

RECORD 00157

GEUTHERM FILE ID: 0015431

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KLAMATH ICE CO.

KRA..... KLAMATH FALLS

WELL/SPRING NUMBER..... 38S-9E-33HC

LOCATION

COUNTRY..... UNITED STATES 38S 009E 33 SW OF NW

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... KLAMATH FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1936/04/02

TEMPERATURE (C)..... 51.7

WELL DEPTH (M)..... 335.

DISCHARGE..... 57.

WATER ANALYSIS

DATE/ANALYST..... 1936/00/00 CHARLTON LABORATORIES, PORTLAND, ORE.

PH..... 9.0 AT(C) 52.

TOTAL DISSOLVED SOLIDS... 784.

ANALYSIS IN PPM

R.....	F.....	NA....	SI02.	70.
HE....	FE(TOT): N	NB....	S04..	380.

CL..... 53.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 23

REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00158

GEUTHERM FILE ID: 0015331

GEUTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LEN DUBRY

KRA..... KLAMATH FALLS

WELL/SPRING NUMBER..... 39S 01UE 28 NE OF NW SE

LOCATION

COUNTRY..... UNITED STATES 39S 01UE 28 NE OF NW SE

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE.. 31

COORDINATES

LAT/LONG...	42-08.90 N 121-38.65 W
UTM ZONE...	+10
NORTHING...	4666922.
EASTING...	612030.

MAP REFERENCE..... MERRILL 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 21.0
 WELL DEPTH (M)..... 187.
 WATER ANALYSIS

USGS

DATE/ANALYST.....
 PH..... 7.6
 SPECIFIC CONDUCTANCE..... 195.
 CHARGE IMBALANCE (% DIFF).... 7.4
 ANALYSIS IN MG/L

AG.....
 AL.....
 AR.....
 BA.....
 CA..... 5.7
 CL..... 3.4
 CO.....
 CR.....
 FE.....
 HC.....
 K.....
 MG..... 1.1
 NA..... 32.
 NH.....
 SI..... 65.
 SO..... 14.

ISOTOPES 10/001

QUALIFICATION FIELD..... SAMPLE (1975/08/08): F=0.2, B=0.03, SP COND=210, PH=7.7, TEMP=22

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPUTER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00159

GEOTHERM FILE 101 0015332

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... LESTER BROOKSHIRE
 LOCATION..... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL 1162500

COORDINATES

LAT/LONG... 42-08.70 N 121-39.70 W
 UTM ZONE... +10
 NORTHING... 4666529.
 610590.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 25.0
 WELL DEPTH (M)..... 369.

OTHER SAMPLE INFORMATION.. STOCK USE

USGS

DATE/ANALYST.....
 PH..... 8.1
 SPECIFIC CONDUCTANCE..... 175.
 CHARGE IMBALANCE (% DIFF).... 3.7
 ANALYSIS IN MG/L

AG.....
 AL.....
 AR.....
 BA.....
 CA..... 13.
 CL..... 2.8
 CO.....
 CR.....
 FE.....
 HC.....
 K.....
 MG..... 2.0
 NA..... 21.
 NH.....
 SI..... 35.
 SO..... 10.

ISOTOPES 10/001

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR

COMPTLER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00160

GEOTHERM FILE 101 0015319

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... LOIS MERRUYS

KGRA..... KLAMATH FALLS

LOCATION

COUNTRY..... UNITED STATES 33 NW OF NW NW

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1954/12/22

TEMPERATURE (C)..... 71.0

WELL DEPTH (M)..... 161.

OTHER SAMPLE INFORMATION.. USED FOR HEATING

WATER ANALYSIS

P4.....

SPECIFIC CONDUCTANCE..... 8.5

TOTAL DISSOLVED SOLIDS... 1100.

CHARGE IMBALANCE (% DIFF)... 3.0

ANALYSIS IN PPM

AG.....

CO3..... 4.

AL.....

F..... 1.4

FE(TOT)... N

HCO3..... 43.

CA..... 22.

CL..... 50.

CO..... K..... 3.8

MG... N 207.

NA... SI02. 83.

NO3... S04... 393.

NO3... 0.2

ISOTOPE 10/001

COORDINATES

LAT/LONG... 42-13.65 N 121-01.45 W

UTM ZONE... +10

NORTHING... 4676712.

EASTING... 663057.

RECORD 00161

GEOTHERM FILE 101 0015322

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... MAZAMA SCHOOL

KGRA..... KLAMATH FALLS

LOCATION

COUNTRY..... UNITED STATES 11 NE OF NW NW

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... MERRILL 1162500

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 61.0

WELL DEPTH (M)..... 296.

OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

P4.....

DATE/ANALYST..... B.J

OREGON STATE BOARD OF HEALTH

COORDINATES

LAT/LONG... 42-11.85 N 121-43.90 W

UTM ZONE... +10

NORTHING... 4672270.

EASTING... 604719.

SPECIFIC CONDUCTANCE..... 0 895.
 CHARGE IMBALANCE (% DIFF).... 29.4
 ANALYSIS IN MG/L
 AG.....
 AL.....
 R.....
 HE.....
 CA.....
 CL.....
 CO.....
 K.....
 MG.....
 NA.....
 NB.....
 NO3.....
 SI02.....
 S04.....
 TEMP=58

RECORD 00162
 GEOTHERM FILE ID: 0015302

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... MEDO-BELL DAIRY
 LOCATION... KRAMA,..... KLAMATH FALLS
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1955/01/24
 TEMPERATURE (C)..... 81.0
 WELL DEPTH (M)..... 233.
 PERTINENT LITHOLOGY..... YONNA FM.
 OTHER SAMPLE INFORMATION.. INDUSTRIAL USE
 WATER ANALYSIS

ANALYSIS IN PPM
 AG.....
 AL.....
 H.....
 RE.....
 CA.....
 CL.....
 CO.....
 K.....
 MG.....
 NA.....
 NB.....
 NO3.....
 SI02.....
 S04.....
 TEMP=58

RECORD 00163
 GEOTHERM FILE ID: 0003001

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... MEDO-BELL DAIRY
 LOCATION... KRAMA... KLAMATH FALLS
 COUNTRY... UNITED STATES 38S 009E 28 SW OF SW SW
 STATE... OREGON 86M WILLAMETTE
 COUNTY... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR... 1975/07/08 SAMMEL, E.
 TEMPERATURE (C)..... 81.
 WELL DEPTH (M)..... 233.
 PERTINENT LITHOLOGY..... BASALT
 WATER ANALYSIS
 ANALYSIS
 AG..... CO3..... LI.... S.....
 AL..... CR..... MG.... SB....
 AS..... CS..... MN.... SC....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

COORDINATES

LAT/LONG... 42-13.8 N 121-46.4 W
 UTM ZONE... +10
 NORTHING... 4675828.
 601227.

ISOTOPES (0/001)

DEL D OF WATER..... -119.4
 DEL O(18) OF WATER... -14.95
 DEL O(18) OF S04..... -5.45

RECORD 00164

GEOTHERM FILE ID: 0015430

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MELVIN FEIGI

LOCATION... KRAMA... NEAR KLAMATH FALLS

COUNTRY... UNITED STATES 40S 011E 03 NE OF NE
 STATE... OREGON
 COUNTY... KLAMATH

ISOTOPES (0/001)

LAT/LONG... 42-08.20 N 121-30.10 W
 UTM ZONE... +10
 NORTHING... 4665823.
 623827.

MAP REFERENCE... MERRILL 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1970/10/08

SAMPLE NUMBER... GSL-3 (USGS)

TEMPERATURE (C)..... 31.0

WELL DEPTH (M)..... 293.

WATER TREATMENT..... ACIDIFIED WITH 0.5 ML HN03-160Z.

WATER ANALYSIS

PH..... 8.8 AT(C) 31.

SPECIFIC CONDUCTANCE... 273.

TOTAL DISSOLVED SOLIDS... 270.

CHARGE IMBALANCE (% DIFF)... 4.3

ANALYSIS IN MG/L

AG..... CO3..... 21.

AL..... CR.....

R..... F..... 0.4

RE..... FE(TOT)... 0.02

CA..... 1.2 HCO3..... 110.

CL..... 5.

CO..... K..... 1.0

OTHER ANALYTICAL DATA... ISOTOPE FROM SAMMEL, 1976

REFERENCE AND IDENTIFICATION

ISOTOPES (0/001)

DEL O(18) OF WATER... -16.80
 110.
 5.8

SB....
 SI02..
 S04....

MG.... N 66.
 NA....
 NB....
 NO3... 2.9

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 16
 REFERENCE..... LEONARD AND HARRIS, 1974

RECORD 00165

GEOTHERM FILE ID: 0015306

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... MELVIN MCCOLLUM
 LOCATION..... KRAMA,..... KLAMATH FALLS
 COUNTRY..... UNITED STATES 39S 010E 07 NE OF NW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... MERRILL 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/05/28 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 25.0
 WELL DEPTH (M)..... 68.
 DISCHARGE..... 379. L/MIN
 PERTINENT LITHOLOGY..... YONNA FM.
 OTHER SAMPLE INFORMATION.. USE: DOMESTIC AND IRRIGATION
 WATER ANALYSIS

USGS

DATE/ANALYST.....
 P..... 7.5
 SPECIFIC CONDUCTANCE..... 300.
 CHARGE IMBALANCE (% DIFF).... 2.2
 ANALYSIS IN MG/L
 AG.....
 AL.....
 AS..... 0.002
 H..... 0.02
 RE.....
 CA..... 24.
 CL..... 3.1
 CO.....
 CR.....
 CS.....
 F..... 0.2
 FE(TOT)..... 1.4
 HC03..... 120.
 LI.....
 MG..... 13.
 MN.....
 NA.....
 NB.....
 S.....
 SB.....
 SI02..... 52.
 SO4..... 53.
 ISOIOPES 10/001
 DEL D OF WATER..... -113.2
 DEL O(18) OF WATER... -14.71

COORDINATES

LAT/LONG... 42-11.50 N 121-41.05 W
 UTM ZONE... +10
 NORTHING... 4671681.
 608651.

RECORD 00166

GEOTHERM FILE ID: 0015303

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... MILLS SCHOOL
 LOCATION..... KRAMA,..... KLAMATH FALLS
 COUNTRY..... UNITED STATES 38S 009E 33 NE OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. 31
 MAP REFERENCE..... KLAMATH FALLS 1162500
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 89.0
 WELL DEPTH (M)..... 244.

COORDINATES

LAT/LONG... 42-13.45 N 121-45.90 W
 UTM ZONE... +10
 NORTHING... 4675190.
 601924.

DISCHARGE..... 38. L/MIN
PERTINENT LITHOLOGY..... BASALT
OTHER SAMPLE INFORMATION.. USED FOR HEATING
WATER ANALYSIS

OREGON STATE BOARD OF HEALTH

DATE/ANALYST.....
P..... 8.3
SPECIFIC CONDUCTANCE..... 0 1200.
CHARGE IMBALANCE (% DIFF).... 37.7
ANALYSIS IN MG/L

AG.....	CO3.....	LI....	Q	S.....
AL.....	CR.....	MG....	L	SB....
AS.....	CS.....	MN....	0.03	SC....
R.....	F.....	NA....	370.	SI02.
RF.....	FE(TOT).....	NB....		504..
CA.....	HC03.....			
CL.....				
CO.....	K.....			

ISOLOPES 10/2001
DEL D OF WATER..... -121.8
DEL O(18) OF WATER... -14.83
DEL O(18) OF S04..... -4.94

78.
462.

QUALIFICATION FIELD..... CONDUCTANCE MEASURED 1975/08/07: LI=0.13, PH=8.2, TEMP=74

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILED CROSS INDEX... 02
REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

RECORD 00167

GEOOTHERM FILE 10: 0015334

GEOOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MONTE DEHLINGER

LOCATION..... KLAHMAIN FALLS

COUNTRY..... UNITED STATES 39S 010E 32 SE OF SW SW

STATE..... OREGON

COUNTY..... KLAHMAIN

GEOLOGIC PROVINCE.. 31

MAP REFERENCE..... MERRILL 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/06/06 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 26.0

WELL DEPTH (M)..... 45.

OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

DATE/ANALYST..... USGS

P..... 7.6

SPECIFIC CONDUCTANCE..... 260.

CHARGE IMBALANCE (% DIFF).... 0.3

ANALYSIS IN MG/L

AG.....	CO3.....	MG....	11.
AL.....	CR.....	MN....	N
AS.....	CS.....	NA....	22.
R.....	F.....	NB....	
RF.....	FE(TOT).....		0.02
CA.....	HC03.....		160.
CL.....			
CO.....	K.....		6.7

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COORDINATES

LAT/LONG... 42-07.60 N 121-40.40 W
UTM ZONE... +10
NORTHING... 4664478.
609657.

ISOLOPES 10/2001

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE... SAMMEL, 1976

RECORD 00168
GEOTHERM FILE ID: 0015321

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MOYINA WATER CO.

KGRA... KLAMATH FALLS

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... KLAMATH

GEOLOGIC PROVINCE... J1

MGP REFERENCE... MERRILL, 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1966/08/24

TEMPERATURE (C)... 65.0

WELL DEPTH (M)... 476.

OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

PH... 7.4

SPECIFIC CONDUCTANCE... 222.

ANALYSIS IN MG/L

AL... CR...

AS... L 0.005

FE... 0.22

RE... 0.42

CA... 7.9

CL... 1.8

CO... K... 5.0

REFERENCE AND IDENTIFICATION

COMPILED BY... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 02

REFERENCE... SAMMEL, 1976

ISOLOPES 10/001

MG... 2.3
MN... L 0.05
NA... 38.
NB...
SI02... 64.
SI04... 5.6

RECORD 00169

GEOTHERM FILE ID: 0015308

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... O. H. OSBORN

KGRA... KLAMATH FALLS

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... KLAMATH

GEOLOGIC PROVINCE... 31

MGP REFERENCE... MERRILL, 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1974/05/31 VOEGTLY AND SAMMEL

TEMPERATURE (C)... 90.0

WELL DEPTH (M)... 127.

DISCHARGE... 1703. L/MIN

PERTINENT LITHOLOGY... YONNA FM.

OTHER SAMPLE INFORMATION.. USE: STOCK

WATER ANALYSIS

DATE/ANALYST... USGS

COORDINATES

LAT/LONG... 42-03.30 N 121-44.70 W
UTM ZONE... 10
NORTHING... 4656431.
603850.

PH..... 9.5
 SPECIFIC CONDUCTANCE..... 920.
 CHARGE IMBALANCE (% DIFF)... 10.8
 ANALYSIS IN MG/L
 AG..... 9.
 AL.....
 AS..... 0.011
 R..... 0.77
 RF.....
 CA..... 15.
 CL..... 56.
 CO.....
 K..... 4.1

LI.....
 MG.....
 MN.....
 NA.....
 NB.....
 S.....
 SB.....
 SC.....
 SI02.....
 S04.....
 190.
 90.
 270.

ISOIOPES 10/001
 DEL D OF WATER.....
 DEL O(18) OF WATER...
 DEL O(18) OF S04.....
 -117.0
 -14.95
 -1.85

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

RECORD 00170

GEOTHERM FILE 101 0015419

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... O.I.T. NO. 5

LOCATION..... KRAMATH FALLS

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

M.P. REFERENCE..... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1967/00/00 PETERSON & GROH

SAMPLE NUMBER..... 1139 OREGON STATE BOARD OF HEALTH

TEMPERATURE (C)..... 89.0

WATER ANALYSIS

DATE/ANALYST..... ROSE, ALAN W., OREGON STATE BOARD OF HEALTH

PH..... 8.6

SPECIFIC CONDUCTANCE..... 1000.

TOTAL DISSOLVED SOLIDS... 816.

CHARGE IMBALANCE (% DIFF)... 42.4

ANALYSIS IN MG/L

AG..... 16.

AL.....

AS..... 0.03

H..... 0.018

RE.....

HI.....

CA..... 25.

CL..... 48.

CO.....

K..... 3.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 02

REFERENCE..... PETERSON AND GROH, 1967

COORDINATES

LAT/LONG... 42-13.85 N 121-46.40 W

UTM ZONE... +10

NORTHING... 4675920.

601225.

ISOIOPES 10/001

MG... 1.0
 MN... L 0.02
 NA... 331.
 NB...
 NH4... 0.54
 NO3... L 0.01
 SI02... 73.
 S04... 384.

RECORD 00171

GEOTHERM FILE ID: 0015301

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... 0.I.T. NO. 6

LOCATION... KRAMATH FALLS

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/08/24

TEMPERATURE (C)... 88.0

WELL DEPTH (M)... 550.

DISCHARGE... 946. L/MIN

PERTINENT LITHOLOGY... BASALT

OTHER SAMPLE INFORMATION.. USED FOR HEAT

WATER ANALYSIS

PH... 8.2

CHARGE IMBALANCE (% DIFF)... 9.6

ANALYSIS IN MG/L

AG... 03.4... N

AL... CR... 0

H... 1.0

F... 1.5

FE(TOT)... NA...

CA... 24. HC03... 44.

CL... 58.

CO... K... 3.9

REFERENCE AND IDENTIFICATION

COMPILED BY... TESHIN, VICTOR

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 02

REFERENCE... SAMMEL, 1976

ISOTOPES 10/001

COORDINATES

LAT/LONG... 42-14.90 N 121-46.85 W

UTM ZONE... 10

NORTHING... 4677855.

EASTING... 600578.

TOWNSHIP-RANGE

38S 09E 20

NW OF SW NE

RECORD 00172

GEOTHERM FILE ID: 0003006

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... 0.I.T. NO. 6

LOCATION... KRAMATH FALLS

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1975/03/31

TEMPERATURE (C)... 79.

WELL DEPTH (M)... 550.

DISCHARGE... 946. L/MIN

PERTINENT LITHOLOGY... BASALT

OTHER SAMPLE INFORMATION.. USED FOR HEAT

WATER ANALYSIS

PH... 8.2

CHARGE IMBALANCE (% DIFF)... 9.6

ANALYSIS IN MG/L

AG... 03.4... N

AL... CR... 0

H... 1.0

F... 1.5

FE(TOT)... NA...

CA... 24. HC03... 44.

CL... 58.

CO... K... 3.9

COORDINATES

LAT/LONG... 42-14.90 N 121-46.85 W

UTM ZONE... 10

NORTHING... 4677855.

EASTING... 600578.

TOWNSHIP-RANGE

38S 09E 20

NW OF SW NE

R&M: WILLAMETTE

ISOTOPES 10/001

DEL D OF WATER... -118.7

DEL O(18) OF WATER... -14.99

DEL O(18) OF SO4... -5.45

REFERENCE AND IDENTIFICATION
 COMPILED BY..... F.....
 COMPILER AFFILIATION... SWANSON, JAMES R.
 COMPILER CROSS INDEX... U.S. GEOLOGICAL SURVEY
 REFERENCE..... 02
 REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

NA...

S102.

90.

RECORD 00173

GEOTHERM FILE ID: 0015342

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... O'CONNOR LIVESTOCK CO.
 KRA... KLAMATH FALLS

LOCATION

COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... KLAMATH
 GEOLOGIC PROVINCE... 31

COORDINATES

LAT/LONG... 42-01.00 N 121-41.00 W
 UTM ZONE... +10
 NORTHING... 4652252.
 EASTING... 609019.

TOWNSHIP-RANGE

41S 010E 07 NE OF NW SE

MAP REFERENCE... MERRILL 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1974/06/06 VOEGTLY AND SAMMEL

TEMPERATURE (C)... 30.0

WELL DEPTH (M)... 235.

OTHER SAMPLE INFORMATION... USE: IRRIGATION; TEMP 27.9 AT 500' (1974/01/24)

WATER ANALYSIS

DATE/ANALYST... USGS

PH... 7.8

SPECIFIC CONDUCTANCE... 1300.

CHARGE IMBALANCE (% DIFF)... 1.9

ANALYSIS IN MG/L

AG... CO3... N

AL... CR... 6.4

AS... CS... 0.15

BA... F... N

BE... FE(TOT)... 0.04

CA... HCO3... 250.

CL... 160.

CO... K... 7.0

CU... 0.001

DE... 0.69

DI... 58.

DO... 160.

DR... 6.4

DU... 0.15

EE... N

FE(TOT)... 0.04

FI... 250.

FL... 0.04

FM... 250.

FO... 0.04

FR... 250.

FS... 0.04

FT... 250.

FU... 0.04

FV... 250.

FW... 0.04

FX... 250.

FY... 0.04

FZ... 250.

GA... 0.04

GB... 250.

GC... 0.04

GD... 250.

GE... 0.04

GF... 250.

ISOTOPES (0/001)

S102. 80.
 S04. 210.

RECORD 00174

GEOTHERM FILE ID: 0000705

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS
 KRA... KLAMATH FALLS

LOCATION

COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... KLAMATH
 GEOLOGIC PROVINCE... 31

COORDINATES

LAT/LONG... 42-10.45 N 121-36.90 W
 UTM ZONE... +10
 NORTHING... 4669829.
 EASTING... 614393.

TOWNSHIP-RANGE

39S 010E 14 NW OF SW

MAP REFERENCE... MERRILL 1:62500. KLAMATH FALLS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/00/00 HARNES GROUP

TEMPERATURE (C)..... 74.0 L/MIN
 DISCHARGE..... 200.
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
 WITH NITRIC ACID, DILUTED

PERTINENT LITHOLOGY..... BASALT AND ANDESITIC TUFF
 OTHER SAMPLE INFORMATION... TEMP. HAS BEEN MEASURED AS HIGH AS 87

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.68

SPECIFIC CONDUCTANCE..... 1140.

CHARGE IMBALANCE (% DIFF)... 4.0

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... L 1.	LI.....	0.15	S.....		ISOTOPES 10/2001	
AL.....	CR.....	MG.....	0.2	SB.....	L 0.2	DEL D OF WATER.....	-113.3
AS..... 0.09	CS..... L 0.1	MN.....	L 0.02	SC.....		DEL O (18) OF WATER...	-13.00
AU..... L 0.1	CU..... 0.01	NA.....	190.	SI02..	98.	DEL O (18) OF S04.....	0
B..... 1.0	F..... 1.2	NB.....		S04...	400.		
BA..... L 0.1	FE(TOT).. L 0.02	NH4...	0.05	SR...	0.58		
BE..... L 0.1	GA.....	NI...					
BI.....	GE.....	PB...	L 0.06				
BR..... 0.08	HCO3..... 53.	PO4...	0.18				
CA..... 40.	HG.....	RB...	0.02				
CA+MG.	H2S.....						
CD..... L 0.01	I..... 0.01						
CL..... 59.	K..... 7.2						
CO..... L 0.05							

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 07

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00175

GEOTHERM FILE ID: 0003003

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS

WELLING NUMBER..... 28

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLANATH

GEOLOGIC PROVINCE...

MAP REFERENCE..... MERRILL J162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/07/08

TEMPERATURE (C)..... 87.

WATER ANALYSIS

ANALYSIS IN MG/L

AG.....	CO3.....	LI.....	
AL.....	CR.....	MG.....	
AS.....	CS.....	MN.....	
BE.....	FE(TOT)..	NB.....	

CL..... 59.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.

COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COORDINATES

LAT/LONG... 42-10-45 N 121-36.90 W

UTM ZONE... 10

NORTHING... 4669829.

614393.

ISOTOPES 10/2001

DEL D OF WATER.....	-115.3
DEL O (18) OF WATER...	-13.73
DEL O (18) OF S04.....	-4.82

J85.

COMPILER CROSS INDEX... 07
REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

RECORD 00176

GEOTHERM FILE ID: 0015443

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS
K-RA..... KLAMATH FALLS
WATERING NUMBER..... 28

LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE.....

MERRILL 1162500

OTHER LOCALITY INFORMATION: MAIN SPRING ORIFICE

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1967/00/00 PETERSON & GROH
SAMPLE NUMBER..... 1136 OREGON STATE BOARD OF HEALTH
TEMPERATURE (C)..... 73.9
DISCHARGE..... 18. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1967/00/00 ROSE, ALAN W., OREGON STATE BOARD OF HEALTH

pH..... 7.3

SPECIFIC CONDUCTANCE..... 1000.

TOTAL DISSOLVED SOLIDS..... 812.

CHARGE IMBALANCE (% DIFF)..... 42.9

ANALYSIS IN MG/L

AG.....	CO3.....	N	
AL.....	CR.....	MG...	1.1
AS.....	CS.....	MN...	0.06
BA.....	F.....	NA...	294.
BE.....	FE(TOT).....	NH4...	0.55
BI.....	GA.....	NO3...	0.91
CA.....	HC03.....		
CL.....			

CO..... K..... 4.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 07
REFERENCE..... PETERSON AND GROH, 1967

RECORD 00177

GEOTHERM FILE ID: 0015316

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(1)
K-RA..... KLAMATH FALLS
WATERING NUMBER..... 32

LOCATION

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE.. 31
MAP REFERENCE..... KLAMATH FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1930/03/03

COORDINATES

LAT/LONG... 42-10.45 N 121-36.90 W
UTM ZONE... +10
NORTHING... 4669829.
614393.

ISOLOPES (02/001)

COORDINATES

LAT/LONG... 42-13.30 N 121-47.45 W
UTM ZONE... +10
NORTHING... 4674882.
599796.

TEMPERATURE (C)..... 21.
WELL DEPTH (M)..... 259.
OTHER SAMPLE INFORMATION... PUBLIC SUPPLY; TEMP MEASURED IN 1975

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 200.
ANALYSIS IN MG/L

AG.....	CO3..... N	MG.....	4.	SI02.....	46.
AL.....	CR.....	NA.....	29.	S04..... N	
RE.....	FE(TOT)..... L 0.05	NB.....			
CA.....	HC03..... 117.				
CL.....	10.				
	8.				

QUALIFICATION FIELD..... TEMP MEASURED BY SAMMEL (1975/08/08)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 02
REFERENCE..... SAMMEL, 1976

RECORD 00178

GEOTHERM FILE ID: 0015317

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(2)

LOCATION... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... KLAMATH FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1971/09/00

TEMPERATURE (C)..... 21.0

WELL DEPTH (M)..... 133.

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH

PS..... 8.3

ANALYSIS IN MG/L

AL.....	CR.....	MG.....	6.8	SI02.....	24.
AS.....	CS.....	MN.....	L 0.01	S04.....	1.2
RE.....	FE.....	NA.....	26.		
HF.....	FE(TOT).....	NB.....			
CA.....	11.				
CL.....	5.3				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 02
REFERENCE..... SAMMEL, 1976

RECORD 00179

GEOTHERM FILE ID: 0015318

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(3)

LOCATION... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... KLAMATH FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1971/09/00

TEMPERATURE (C)..... 21.0

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH

PS..... 8.3

ANALYSIS IN MG/L

AL.....	CR.....	MG.....	6.8	SI02.....	24.
AS.....	CS.....	MN.....	L 0.01	S04.....	1.2
RE.....	FE.....	NA.....	26.		
HF.....	FE(TOT).....	NB.....			
CA.....	11.				
CL.....	5.3				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 02
REFERENCE..... SAMMEL, 1976

COORDINATES

TOWNSHIP-RANGE

LOCATION

NAME OF SAMPLE SOURCE

GEOTHERM FILE ID

RECORD

LAT/LONG... 42-13.30 N 121-47.45 W
UTM ZONE... +10
NORTHING... 4674882.
599796.

COUNTRY... UNITED STATES 38S 009E 32 SE OF SW NW

STATE... OREGON
COUNTY... KLAMATH
GEOLOGIC PROVINCE...

M.P. REFERENCE... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1971/09/00

TEMPERATURE (C)... 20.0

WELL DEPTH (M)... 191.

OTHER SAMPLE INFORMATION.. SAMPLE(1975/08/08): TEMP=22, SP COND=205

WATER ANALYSIS

DATE/ANALYST... OREGON STATE BOARD OF HEALTH

P1... 8.4

SPECIFIC CONDUCTANCE... 0 205.

ANALYSIS IN MG/L

AL....	CR....	MG...	5.8
AS....	CS....	MN... L	0.01
FE....	F....	NA...	26.
CA....	FE(TOT)...	NB...	5102. 25.
CL....			504.. 0.6

QUALIFICATION FIELD... CONDUCTANCE MEASURED 1975/08/08; TEMP=22.

REFERENCE AND IDENTIFICATION

COMPILED BY... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 02

REFERENCE... SAMMEL, 1976

ISOLOPES 102/001

RECORD 00180

GEOTHERM FILE ID: 0015326

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(4)

LOCATION... KRAMA... KLAMATH FALLS

TOWNSHIP=RANGE

COUNTRY... UNITED STATES 39S 010E 06 NW OF SE SW

STATE... OREGON

COUNTY... KLAMATH

GEOLOGIC PROVINCE...

M.P. REFERENCE... MERRILL 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1970/08/27

TEMPERATURE (C)... 26.

WELL DEPTH (M)... 223.

WATER ANALYSIS

DATE/ANALYST... OREGON STATE BOARD OF HEALTH

P1... 8.6

ANALYSIS IN MG/L

AL....	CR....	MG...	5.8
AS....	CS....	MN... L	0.005
FE....	F....	NA...	36.
CA....	FE(TOT)...	NB...	5102. 63.
CL....			504.. 6.5

QUALIFICATION FIELD... CONDUCTANCE MEASURED 1975/08/08; TEMP=22.

REFERENCE AND IDENTIFICATION

COMPILED BY... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

ISOLOPES 102/001

COORDINATES

LAT/LONG... 42-12.10 N 121-41.40 W
UTM ZONE... +10
NORTHING... 4672784.
608152.

REFERENCE..... SAMMEL, 1976

RECORD 00181

GEUTHERM FILE ID: 0015341

GEOTHERM-SAMPLE-FILE

NAME OF SAMPLE SOURCE... POPE'S MEAT CO.

LOCATION..... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... MERRILL J162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/06/06 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 22.0

WELL DEPTH (M)..... 344.

OTHER SAMPLE INFORMATION.. COMMERCIAL USE

WATER ANALYSIS

DATE/ANALYST..... USGS

P..... 8.5

SPECIFIC CONDUCTANCE..... 190.

CHARGE IMBALANCE (% DIFF)... 1.2

ANALYSIS IN MG/L

AG..... CO3..... 2.

AL..... CR..... 1.4

AS..... MN..... N

H..... F..... 30.

HE..... FE(TOT)... 0.02

CA..... HCO3..... 100.

CL..... 4.4

CO..... K..... 3.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

ISOTOPES 10/001

COORDINATES

LAT/LONG... 42-01.95 N 121-37.50 W

UTM ZONE... +10

NORTHING... 4654086.

613821.

NE OF NE NE

TOWNSHIP-RANGE

41S 01E 03

SE OF SW NW

TOWNSHIP-RANGE

39S 01E 10

COORDINATES

LAT/LONG... 42-11.55 N 121-37.95 W

UTM ZONE... +10

NORTHING... 4671841.

612915.

SE OF SW NW

TOWNSHIP-RANGE

39S 01E 10

SE OF SW NW

TOWNSHIP-RANGE

39S 01E 10

RECORD 00182

GEUTHERM FILE ID: 0015328

GEOTHERM-SAMPLE-FILE

NAME OF SAMPLE SOURCE... RAY BIXLER

LOCATION..... KRAMA..... KLAMATH FALLS

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... MERRILL J162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/29 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 22.0

WELL DEPTH (M)..... 140.

OTHER SAMPLE INFORMATION.. DOMESTIC AND STOCK USE

WATER ANALYSIS

DATE/ANALYST..... USGS

P..... 7.8

ISOTOPES 10/001

SI02. 49.
S04.. 7.9

MG... 8.4
MN... 1.4
NA... 16.
NB...

SPECIFIC CONDUCTANCE..... 190.
CHARGE IMBALANCE (% DIFF) ... 1.9
ANALYSIS IN MG/L

AG.....
AL.....
AS..... 0.002
R..... 0.02
HE.....
CA..... 12.
CL..... 1.9

CO..... K..... 3.3

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00183

GEOTHERM FILE 10: 0015432

ISOTOPES 10/001

SI02. 49.
S04.. 7.9

MG... 8.4
MN... 1.4
NA... 16.
NB...

SPECIFIC CONDUCTANCE..... 190.
CHARGE IMBALANCE (% DIFF) ... 1.9
ANALYSIS IN MG/L

AG.....
AL.....
AS..... 0.002
R..... 0.02
HE.....
CA..... 12.
CL..... 1.9

CO..... K..... 3.3

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00184

GEOTHERM FILE 10: 0015330

ISOTOPES 10/001

SI02. 49.
S04.. 7.9

MG... 8.4
MN... 1.4
NA... 16.
NB...

SPECIFIC CONDUCTANCE..... 190.
CHARGE IMBALANCE (% DIFF) ... 1.9
ANALYSIS IN MG/L

AG.....
AL.....
AS..... 0.002
R..... 0.02
HE.....
CA..... 12.
CL..... 1.9

CO..... K..... 3.3

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00184

GEOTHERM FILE 10: 0015330

ISOTOPES 10/001

SI02. 49.
S04.. 7.9

MG... 8.4
MN... 1.4
NA... 16.
NB...

SPECIFIC CONDUCTANCE..... 190.
CHARGE IMBALANCE (% DIFF) ... 1.9
ANALYSIS IN MG/L

AG.....
AL.....
AS..... 0.002
R..... 0.02
HE.....
CA..... 12.
CL..... 1.9

CO..... K..... 3.3

REFERENCE AND IDENTIFICATION
COMPILED BY..... TESHIN, VICTOR
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

COORDINATES

LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... Klamath
GEOLOGIC PROVINCE... 31
MAP REFERENCE..... MERRILL 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/05/04 VOGELTY AND SAMMEL
TEMPERATURE (C)..... 23.
OTHER SAMPLE INFORMATION.. DOMESTIC USE
WATER ANALYSIS
DATE/ANALYST..... USGS

42-10.75 N 121-37.90 W
+10
4670362.
613008.

39S 010E 15 SW OF SW SE

39S 010E 15 SW OF SW SE

ANALYSIS IN MG/L
AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

USGS

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

RECORD 00185

GEOTHERM FILE 10: 0015329

COORDINATES

LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... Klamath
GEOLOGIC PROVINCE... 31
MAP REFERENCE..... MERRILL 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/10/11 GARDNER, MURRAY
TEMPERATURE (C)..... 0 65.0
PERTINENT LITHOLOGY..... THERMAL-ARTESIAN; YONNA FORMATION
WATER ANALYSIS
DATE/ANALYST..... USGS

42-10.40 N 121-37.05 W
+10
4669733.
614188.

39S 010E 14 NW OF SW SW

39S 010E 14 NW OF SW SW

ANALYSIS IN MG/L
AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

USGS

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

CO3..... 1.
CR..... 6.3
F..... 0
FE(TOT)..... 50.
HC03..... 110.
CL..... 2.6

CO..... 5.5
K..... 5.5

PH..... 7.4

SPECIFIC CONDUCTANCE..... 200.

CHARGE IMBALANCE (% DIFF).... 4.0

ANALYSIS IN MG/L

AG..... 1.
AL..... 6.3
H..... 0
HE..... 0
CA..... 10.
CL..... 2.6

ISOTOPES 10/2001

48.
430.

4.1
217.

MG... 4.1
NA... 217.
NB... 430.

SI02.
S04..

CO..... K..... 5.0
 QUALIFICATION FIELD..... TEMP. AND SP COND MEASURED 1974/03/09
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 08
 REFERENCE..... SAMMEL, 1976

RECORD 00186

GEOTHERM FILE ID: 0015314

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... S. AND C. KILGORE

TOWNSHIP-RANGE

40S 014E 16

NE OF NW NE

UNITED STATES

COUNTRY..... OREGON

STATE..... KLAMATH

COUNTY.....

GEOLOGIC PROVINCE...

MAP REFERENCE..... GERBER RESERVOIR 1162500

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 20.0

WELL DEPTH (M)..... 130.

DISCHARGE..... 6624. L/MIN

PERTINENT LITHOLOGY..... BASALT

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 230.

ANALYSIS

AL..... CR.....

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

ISOTOPES (02/001)
 DEL 0118) OF WATER... -16.00

RECORD 00187

GEOTHERM FILE ID: 0015340

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... TOWN OF MERRILL

TOWNSHIP-RANGE

41S 010E 02

SE OF SE SE

UNITED STATES

COUNTRY..... OREGON

STATE..... KLAMATH

COUNTY.....

GEOLOGIC PROVINCE... 31

MAP REFERENCE..... MERRILL 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/02/18

TEMPERATURE (C)..... 21.0

WELL DEPTH (M)..... 132.

OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY

WATER ANALYSIS

P1..... 8.3

SPECIFIC CONDUCTANCE..... 316.

TOTAL DISSOLVED SOLIDS... 214.

CHARGE IMBALANCE (% DIFF)... 5.3

ANALYSIS IN PPM

AL..... CR.....

AS..... 0.01

MG... 4.3

COORDINATES
 LAT/LONG... 42-01.50 N 121-36.00 W
 UTM ZONE... 10
 NORTHING... 4653286.
 615904.

ISOTOPES (02/001)

R..... 0.01 F..... 0.1 NA.... 44. S102. 38.
 HE..... FE(TOT)..... 0.12 NB.... 21.
 CA..... 11. HCO3..... 114. NO3.. N
 CL..... 27. K..... 3.8

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00188

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... U.S. AIR FORCE(1)
 LOCATION..... NEAR KLAMATH FALLS

GEOTHERM FILE ID: 0015323

COUNTRY..... UNITED STATES 39S 009E 34 SW OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. J1
 MAP REFERENCE..... KLAMATH FALLS 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1972/10/17 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 0 31.0
 WELL DEPTH (M)..... 152.

COORDINATES

LAT/LONG.... 42-08.05 N 121-45.25 W
 UTM ZONE... +10
 NORTHING... 4665210.
 EASTING... 602964.

OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY

WATER ANALYSIS

PH..... 0 7.0
 SPECIFIC CONDUCTANCE..... 0 240.
 CHARGE IMBALANCE (% DIFF).... 4.5
 ANALYSIS IN MG/L

ISOTOPE 10/001

AG..... CO3..... N MG.... 1.2
 AL..... CR..... L 0.01
 AS..... CS..... MN.... 47.
 R..... F..... 0.3 S102. 53.
 RE..... FE(TOT)..... 0.04 S04.. 8.
 CA..... 3.8 HCO3..... 128.
 CL..... 6.0 K..... 9.0

QUALIFICATION FIELD..... TEMP. COND. PH MEASURED 1973/12/12

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00189

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... U.S. AIR FORCE(2)
 LOCATION..... NEAR KLAMATH FALLS

GEOTHERM FILE ID: 0015324

COUNTRY..... UNITED STATES 39S 009E 34 SW OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE.. J1
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES

LAT/LONG.... 42-08.10 N 121-45.35 W
 UTM ZONE... +10
 NORTHING... 4665301.
 EASTING... 602825.

SAMPLE DESCRIPTION AND CONDITIONS DATE/COLLECTOR..... 1972/10/17 VOEGLY AND SAMMEL

TEMPERATURE (C)..... 0 30.
WELL DEPTH (M)..... 120.

OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY WATER ANALYSIS

DATE/ANALYST..... USGS

SPECIFIC CONDUCTANCE..... 0 255.

CHARGE IMBALANCE (% DIFF) ... 0.8

ANALYSIS IN MG/L

AG.....	CO3.....	IN	MG...	2.3
AL.....	CR.....		MN...	L 0.01
AS.....	CS.....		NA...	48.
H.....	F.....	0.2	WB...	
HE.....	FE(TOT)...	0.03		
CA.....	HC03.....	145.		
CL.....				
CO.....	K.....	8.5		

QUALIFICATION FIELD..... TEMP AND SP COND MEASURED 1973/12/12

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

RECORD 00190

GEOTHERM FILE ID: 0015304

GEOTHERM SAMPLE NAME

NAME OF SAMPLE SOURCE... WEYERHAUSER WELL NO. 4

LOCATION..... NEAR KLAMATH FALLS

TOWNSHIP-RANGE 39S 009E 18 NW OF NW SW

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE.. 31

MAP REFERENCE..... KLAMATH FALLS 1162500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/08/22

TEMPERATURE (C)..... 22.

WELL DEPTH (M)..... 166.

DISCHARGE..... 4637. L/MIN

PERTINENT LITHOLOGY..... BASALT

OTHER SAMPLE INFORMATION.. INDUSTRIAL USE

WATER ANALYSIS

DATE/ANALYST..... GARDNER, MURRAY

PH..... 0 8.3

SPECIFIC CONDUCTANCE..... 0 200.

CHARGE IMBALANCE (% DIFF) ... 4.8

ANALYSIS IN MG/L

AG.....	CO3.....	4.5	LI...	S.....
AL.....	CR.....		MG...	1.9
H.....	F.....	0.11	NA...	32.
HE.....	FE(TOT)...		NB...	
CA.....	HC03.....	115.		
CL.....				
CO.....	K.....	3.3		

QUALIFICATION FIELD..... SP COND AND PH MEASURED BY SAMMEL (1973/10/16)

ISOTOPES 10/001

COORDINATES

LAT/LONG... 42-10.70 N 121-48.10 W
UTM ZONE... +10
NORTHING... 4670058.
598969.

ISOTOPES 10/001

DEL D OF WATER..... -109.1
DEL O(18) OF WATER... -14.60

RECORD 00193

GEOTHERM FILE 101 0002216

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANTELOPE HOT SPRINGS

WELL/SPRING NUMBER... 48A

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... 31

MAP REFERENCE... WARNER PEAK 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1948/08/10

TEMPERATURE (C)... 40.0

DISCHARGE... 114. L/MIN

PERTINENT LITHOLOGY... VALLEY ALLUVIUM

WATER ANALYSIS

DATE/ANALYST... USGS

PH... 8.3

SPECIFIC CONDUCTANCE... 876.

TOTAL DISSOLVED SOLIDS... 695.

CHARGE IMBALANCE (% DIFF)... 0.0

ANALYSIS IN PPM

AL... 1.5

CA... 10.

CL... 64.

CO... 13.

CR... 3.6

F... 0.02

FE... 376.

HCO3... 0.2

K... 13.

Mg... 2.5

NA... 191.

NO3... 0.2

SI02... 168.

S04... 57.

SO4... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

S04... 57.

COORDINATES

LAT/LONG... 42-29.97 N 119-41.48 W

UTM ZONE... 11

NORTHING... 4708534.

EASTING... 278848.

ISOTOPES 10/001

RECORD 00194

GEOTHERM FILE 101 0015954

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANTELOPE SPRINGS

WELL/SPRING NUMBER... 185-20E-6-AA

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... BIG RALDY 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1979/07/27 PETERSON, NORMAN V.

SAMPLE NUMBER... W579-225

POINT OF COLLECTION... ORIFICE

TEMPERATURE (C)... 22.5

AIR/ENT. TEMP (C)... 16.

WATER ANALYSIS

DATE/ANALYST... 1979/09/04 BANERJEE, KALA C.

PH... 8.2

AT(C) 23.

COORDINATES

LAT/LONG... 42-18.52 N 120-23.78 W

SPECIFIC CONDUCTANCE..... 16.9
 ALKALINITY..... 86.
 TOTAL DISSOLVED SOLIDS..... 130.
 CHARGE IMBALANCE (% DIFF).... 4.7
 ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... L 0.1 CR..... L 0.05
 AS..... L 0.005 CS..... L 0.05
 H..... F..... L 0.1 NA..... 46.
 RE..... FE(TOT) 0.06 NB..... 2.0
 CA..... 12. H2S.....
 CD..... PO4... 0.0036
 CL.....
 CO..... K..... 4.3
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... PICCIN, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

ISOTOPES 10/001

RECORD 00195

GEO THERM FILE ID: 0015976

NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS
 KARA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S/20E/27/DC
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 27 NW OF SE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/07/13 PETERSON, NORMAN V.
 SAMPLE NUMBER..... W579-200
 POINT OF COLLECTION.. ORIFICE OF NORTHERNMOST SPRING.
 TEMPERATURE (C)..... 92.5
 AMBIENT TEMP (C)..... 17.
 DISCHARGE..... 38.
 OTHER SAMPLE INFORMATION.. H2S 000R.

COORDINATES

LAT/LONG... 42-09.35 N 120-20.67 W

DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.
 PH..... 7.7 AT(C) 93.
 SPECIFIC CONDUCTANCE..... 1382.
 ALKALINITY..... 167.
 TOTAL DISSOLVED SOLIDS... 965.
 CHARGE IMBALANCE (% DIFF).... 3.0
 ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... 0.34 CR..... 0.18
 AS..... 0.101 CS..... 0.08
 H..... F..... 5.6 L 0.05
 HA..... FE+3..... 268.
 HF..... FE(TOT) 0.15
 CA..... 8.8 NB.....
 CD..... H2S.....
 CL..... 158. PO4... 0.031

ISOTOPES 10/001

SI02. 77.
 SO4... 224.

CO..... K..... 9.6
REFERENCE AND IDENTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00196

GEOTHERM FILE ID: 0002217

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS (GUS ALLEN)
KGRA..... LAKEVIEW
WATERING NUMBER..... 47
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE...
MAP REFERENCE... LAKEVIEW NE 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1948/05/22
TEMPERATURE (C)..... 85.0
DISCHARGE..... 189. L/MIN
PARENT LITHOLOGY..... FROM TERTIARY LAVA NEAR FAULT SCARP
WATER ANALYSIS

USGS

DATE/ANALYST.....
P..... 7.3
SPECIFIC CONDUCTANCE..... 1320.
TOTAL DISSOLVED SOLIDS... 905.
CHARGE IMBALANCE (% DIFF)... 0.9

ISOTOPES (0/001)

ANALYSIS IN PPM
AL.....
H..... 9.9
HE.....
CA..... 8.5
CL..... 146.
CR.....
F..... 6.9
FE(TOT)... 0.02
HC03..... 208.
CL..... 1.4
MG..... 268.
NA.....
NB.....
NO3..... 0.3
SI02..... 140.
S04..... 223.

COORDINATES
LAT/LONG... 42-09.35 N 120-20.67 W
UTM ZONE... +10
NORTHING... 4670278.
719399.

TOWNSHIP-RANGE
39S 020E 27 NW OF SE

RECORD 00197

GEOTHERM FILE ID: 0000780

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS (GUS ALLEN)
KGRA..... LAKEVIEW
WATERING NUMBER..... 47
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE...
MAP REFERENCE... LAKEVIEW NE 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

COORDINATES
LAT/LONG... 42-09.35 N 120-20.67 W
UTM ZONE... +10
NORTHING... 4670278.
719399.

TOWNSHIP-RANGE
39S 020E 27 NW OF SE

TEMPERATURE (C)..... 88.0 L/MIN
 DISCHARGE..... 200. L/MIN
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
 WITH NITRIC ACID, DILUTED
 DEPOSITS OR ALTERATION.... SINTER, TRAVERTINE
 PERTINENT LITHOLOGY..... ANDESITE, ANDESITE TUFF-BRECCIA, RHYOLITE
 OTHER SAMPLE INFORMATION... MIXED WATERS

WATER ANALYSIS
 DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.76

SPECIFIC CONDUCTANCE..... 1370.

CHARGE IMBALANCE (% DIFF).... 7.2

ANALYSIS IN MG/L

AG.... L 0.02 CO3..... 2. LI.... 0.15 S.... 500. -119.4
 AL.... 0.014 CR..... MG.... 0.1 SB.... L 0.2 -13.72
 AS.... 0.07 CS..... L 0.1 MN.... L 0.02
 AU.... L 0.1 CU..... L 0.01 NA.... 280. SI02. 130.
 H.... 11. F..... 5.4
 HA.... L 0.1
 HE.... L 0.1 FE(TQT). L 0.02 NB.... 504.. 240.
 HI.... GA..... NH4.. 1.8 SR.... 0.17

ISOLOPES 10/00/01

DEL D OF WATER.....
 DEL 0(10) OF WATER...

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. 42.

C2H6.

CO2.. 2.

OTHER ANALYTICAL DATA... 02-AR=2

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... NEH-978

REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00198

GEOTHERM FILE ID: 0001716

NAME OF SAMPLE SOURCE... BEAN HOT SPRING
 LOCATION... TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 37S 020E 11

COORDINATES
 LAT/LONG... 42-23.4 N 120-19.4 W

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE... J1

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 26. L/MIN

DISCHARGE.....

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... TRAUGER, 1950

RECORD 00199

GEOTHERM FILE 101 0015955

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CHAMBERS RANCH IRRIGATION WELL
WELL/SPRING NUMBER... 375-20E-22-CA

LOCATION
COUNTRY... UNITED STATES 38S 020E 22 NE OF SW
STATE... OREGON

COUNTY... LAKE
GEOLOGIC PROVINCE... BASIN AND RANGE
MAP REFERENCE... CROOKED CREEK VALLEY 1:24000

SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR... 1979/07/27 PETERSON, NORMAN V.

SAMPLE NUMBER... W579-227
POINT OF COLLECTION... 100 FEET FROM WELLHEAD.

TEMPERATURE (C)... 28.5
ANALYST TEMP (C)... 16.

WATER ANALYSIS

DATE/ANALYST... 1979/04/09 BANERJEE, KALA C.
PH... 8.3 AT(C) 29.

SPECIFIC CONDUCTANCE... 663.

ALKALINITY... 338. AS CAC03

TOTAL DISSOLVED SOLIDS... 432.

CHARGE IMBALANCE (% DIFF)... 0.6

ANALYSIS IN MG/L

AG...	CO3...	LI...	L 0.05
AL...	CR...	MG...	1.7
AS...	CS...	MN...	L 0.05
H...	F...	NA...	153.
HE...	FE(TOT)...	NB...	
CA...			
CD...	H2S...	P04...	0.039
CL...			

CO... K... 1.5

REFERENCE AND IDENTIFICATION

COMPILED BY... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

ISOTOPIES (0/001)

SIO2... 54.
S04... 14.

RECORD 00200

GEOTHERM FILE 101 0015963

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... COLVERT SPRING
WELL/SPRING NUMBER... 375-20E-16-CCA

LOCATION
COUNTRY... UNITED STATES 37S 020E 16 SW OF SW NE

STATE... OREGON

COUNTY... LAKE
GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... CROOKED CREEK VALLEY 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1979/08/24 PETERSON, NORMAN V.

SAMPLE NUMBER... W579-274

POINT OF COLLECTION... ORTICE

TEMPERATURE (C)... 16.

COORDINATES
LAT/LONG... 42-21.44 N 120-21.51 W

AMBIENT TEMP (C)..... 12.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/10 BANERJEE, KALA C.
 PH..... 7.4 AT(C) 16.
 SPECIFIC CONDUCTANCE..... 110.
 ALKALINITY..... 44.
 CHARGE IMBALANCE (% DIFF).... 24.5

ANALYSIS IN MG/L

AG..... CO3..... L 0.01
 AL..... 0.47 CR..... 2.6
 AS..... L 0.005 CS..... L 0.02
 R..... F..... L 0.1 NA..... 10.
 RE..... FE(TOT)..... 0.21 NB..... 58.
 CA..... 9.8 H2S..... 1.4
 CD..... CL..... PO4... 0.111

CO..... K..... 2.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIU, JOSEPH F.
 COMPUTER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00201

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRUMP SPRING
 K-PA..... CRUMP GEYSER
 WAXING NUMBER..... 49C

LOCATION

COUNTRY..... UNITED STATES 38S 024E 34 SW OF SW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..

MAP REFERENCE..... ADEL 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/09/16 TRAUGER, F. D.
 TEMPERATURE (C)..... 40.0
 DISCHARGE..... 19.

PERTINENT LITHOLOGY..... LAKE TERRACE SEDIMENTS

WATER ANALYSIS

DATE/ANALYST..... SINGLETON, E. L.

PH..... 8.7

SPECIFIC CONDUCTANCE... 935.

TOTAL DISSOLVED SOLIDS... 662.

CHARGE IMBALANCE (% DIFF).... 0.2

ANALYSIS IN PPM

AG..... CO3..... N
 AL..... CR.....
 R..... 7.3 F..... 1.9 MG... 2.
 RE..... FE(TOT)..... 0.04 NA... 175.
 CA..... 18. HCO3.... 130. NB... 125.
 CL..... 150. NO3... 1.5

CO..... K..... 8.7

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPUTER AFFILIATION... U.S. GEOLOGICAL SURVEY

GEOTHERM FILE ID: 0002223

COORDINATES

LAT/LONG... 42-13.60 N 119-52.87 W
 UTM ZONE... 11
 NORTHING... 4678745.
 262345.

ISOLOPES 10/2001

ISOLOPES 10/2001

COMPILER CROSS INDEX... 33
REFERENCE..... TRAUGER, 1950

RECNO 00202
GEOTHERM FILE ID: 0000691

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRUMP SPRING
KRA..... CRUMP GEYSER
WARNING NUMBER..... 49C

LOCATION..... TOWNSHIP=RANGE
38S 024E 34 SW OF SW

COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... LAKE

GEOLOGIC PROVINCE...
MAP REFERENCE..... ADEL 1:24000

SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
TEMPERATURE (C)..... 78.0

DISCHARGE..... 200.
WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED
WITH NITRIC ACID, DILUTED

DEPOSITS OR ALTERATION..... SINTER; TRAVERTINE
PERTINENT LITHOLOGY..... ALLUVIUM AND OLIVINE BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.26

SPECIFIC CONDUCTANCE..... 1490.

CHARGE IMBALANCE (% DIFF).... 2.5

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	L 1.	LI.....	0.4	S.....	
AL.....	0.017	CR.....		MG.....	0.2	SB.....	L 0.2
AS.....	0.46	CS.....	0.1	MN.....	0.03	SC.....	
AU.....	L 0.1	CU.....	L 0.01	NA.....	280.	SI02.	180.
AV.....	14.	F.....	4.9	NB.....		SR.....	200.
BA.....	L 0.1	FE(TOT).....	L 0.02	NH4.....	0.6		0.12
BE.....	L 0.1	GA.....					
BR.....	0.4	HC03.....	153.				
CA.....	16.	HG.....	0.0004	PB.....	L 0.06		
CA+MG.....		H2S.....		PO4.....	0.58		
CD.....	L 0.01	I.....	0.1	RB.....	0.07		
CL.....	240.	K.....	11.				
CO.....	L 0.05						

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4..... 6.

C2H6.....

CO2..... 14.

OTHER ANALYTICAL DATA... 02+AR=5

REFERENCE AND IDENTIFICATION

COMPILER BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... NEH-979

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHNING AND OTHERS, 1979

COORDINATES

LAT/LONG... 42-13.60 N 119-52.87 W
UTM ZONE... 11
NORTHING... 4678745.
262345.

ISOTOPES 10/001

DEL D OF WATER..... -115.5
DEL O (18) OF WATER... -13.28
DEL O (18) OF SO4..... -4.71

ISOTOPES 100/011

REC'D 00203

GEOTHERM FILE 101 0002221

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CRUMP WELL (1)
KGRA..... CRUMP GEYSER

LOCATION
COUNTRY..... UNITED STATES 38S 024E 34 SW OF SW
STATE..... OREGON
COUNTY..... LAKE

GEOLOGIC PROVINCE...
MAP REFERENCE..... ADEL 1124000
OTHER LOCALITY INFORMATION: 4 MI. NORTH OF ADEL

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1959/07/26 WALKER, G.

POINT OF COLLECTION.. AT SURFACE, IN POLY. DISH PAN

TEMPERATURE (C)..... 99.0

DISCHARGE..... 3785. L/MIN

OTHER SAMPLE INFORMATION.. CLEAR JET IS 150-200 FT. HIGH AS OF SEPT. 15, 1959. 4 FT. OF 18IN. CASING AT TOP. DEPTH
OF WELL: 1684 FT. 15 FT. OF 20 IN. CASING AT SURFACE; SAMPLE TAKEN OF CONTINUOUS GEYSER.

WATER ANALYSIS

DATE/ANALYST..... 1959/11/03 DENBURGH, ROGERS

PH..... 8.7

SPECIFIC CONDUCTANCE..... 1580.

TOTAL DISSOLVED SOLIDS..... 1130.

CHARGE IMBALANCE (% DIFF).... 3.8

ANALYSIS IN PPM

AG.....	CO3.....	36.	LI....	0.39
AL.....	CR.....		MG....	0.5
AS.....	CS.....		MN....	N
R.....	F.....	5.2	NA....	298.
RE.....	FE(TQT).....	0.15	NH....	SI02. 169.
RI.....	GA.....		NH4....	S04.. 209.
HR.....				SR.... 0.31
CA.....	HC03.....	70.	NO3....	1.0
CH.....	H2S.....	0.3	PO4....	1.4
CL.....	I.....	0.1		
CO.....	K.....	12.		

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 33

REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPE 10/001

REC'D 00204

GEOTHERM FILE 101 0002220

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... CRUMP WELL (2)
KGRA..... CRUMP GEYSER

LOCATION
COUNTRY..... UNITED STATES 38S 024E 34 SW OF SW
STATE..... OREGON
COUNTY..... LAKE

GEOLOGIC PROVINCE...
MAP REFERENCE..... ADEL 1124000

OTHER LOCALITY INFORMATION: 120 FT. NORTH OF WELL DRILLED 1958-1959

CORRINATES
LAT/LONG... 42-13.59 N 119-52.87 W
UTM ZONE... +11
NORTHING... 4678731.
262220.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1960/09/23 WHITE, DON AND SIGVALDASON, G.
 TEMPERATURE (C)..... 88.0
 OTHER SAMPLE INFORMATION.. WELL ERUPTS PERIODICALLY AS GEYSER
WATER ANALYSIS
 DATE/ANALYST..... 1961/03/01 WHITEHEAD, H. C.
 P.A..... 8.1
 SPECIFIC CONDUCTANCE..... 1460.
 ANALYSIS IN PPM
 AG..... CO3..... LI... 0.33
 R..... 13. F..... NA... 281.
 CL..... 248.
 CO..... K..... 10.
REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 33
 REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPES 10/001

RECORD 00205

GEOTHERM FILE 10: 0015956

COORDINATES
 LAT/LONG... 42-14.10 N 120-20.18 W

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... DON LINDSEY WELL
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 38S-20E-33-AB
 LOCATION
 COUNTRY..... UNITED STATES 38S 020E 33 NW OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... W579-229
 POINT OF COLLECTION.. AT PUMP
 TEMPERATURE (C)..... 48.
 AMBIENT TEMP (C)..... 16.
WATER ANALYSIS

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.
 PH..... 7.8 AT (C) 48.
 SPECIFIC CONDUCTANCE..... 788.
 ALKALINITY..... 72. AS CAC03
 TOTAL DISSOLVED SOLIDS... 556.
 CHARGE IMBALANCE (% DIFF)... 1.8
 ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.05
 AL..... L 0.1 CR..... MG... 0.62
 AS..... 0.047 CS..... MN... L 0.05
 H..... F..... 2.2 NA... 140.
 RE..... FE(TOT)... 0.62 NB...
 CA..... 22. H2S..... P04... 0.004
 CO..... 50.
 CL.....
 CO..... K..... 2.4

ISOTOPES 10/001

ST02. 60.
 S04.. 215.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00206

GEOTHERM FILE ID: 0015966

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... E. McDONALD HOT WELL

KRA... LAKEVIEW

WELL/SPRING NUMBER... 38S-20E-33-CDD

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION... 1979/09/26 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.

SAMPLE NUMBER... W579-297

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 94.

AMBIENT TEMP (C)... 17.

WATER ANALYSIS

DATE/ANALYST... 1979/11/05 BANERJEE, KALA C.

PI... 8.2 AT(C) 94.

SPECIFIC CONDUCTANCE... 1137.

ALKALINITY... 60. AS CAC03

TOTAL DISSOLVED SOLIDS... 803.

CHARGE IMBALANCE (% DIFF)... 12.5

ANALYSIS IN MG/L

AG....	CO3....	LI....	0.14
AL....	CR....	MG....	0.06
AS....	CS....	MN....	L 0.02
H....	F....	NA....	195.
RE....	FE(TOT) L	NB....	5102. 123.
CA....	13.	NO3..	S04.. 169.
CO....	HCO3....	P04..	L 0.02
CL....	H2S....		0.022

CO... 118.

K... 8.7

REFERENCE AND IDENTIFICATION

COMPILED BY... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00207

GEOTHERM FILE ID: 0015953

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EVERETT McDONALD HOT SPRING

KRA... LAKEVIEW

WELL/SPRING NUMBER... 38S-20E-33-DC

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION... 1979/09/26 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.

SAMPLE NUMBER... W579-297

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 94.

AMBIENT TEMP (C)... 17.

ISOLOPES 10/2001

COORDINATES
LAT/LONG... 42-14.500N 120-21.968W

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.

SAMPLE NUMBER..... W579-219

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 77.5

AMBIENT TEMP (C)..... 18.

DISCHARGE..... L 38. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.

P.H..... 8.6 AT(C) 78.

SPECIFIC CONDUCTANCE..... 1152.

ALKALINITY..... 50. AS CAC03

TOTAL DISSOLVED SOLIDS... 841.

CHARGE IMBALANCE (% DIFF)... 15.2

ANALYSIS IN MG/L

AG..... CO3..... LI.... 0.13

AL..... CR..... MG.... 0.07

AS..... CS..... MN.... L 0.05

R..... F..... NA.... 207.

FE..... FE(TOT)... 0.07 SI02.. 66.

CA..... H2S..... PO4... 0.062

CL..... K..... 9.4

CO.....

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIU, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00208

GEOGRAPHIC SAMPLE FILE

NAME OF SAMPLE SOURCE... FISHER HOT SPRINGS

KGRA..... CRUMP GEYSER

WAPING NUMBER..... 49A

LOCATION

COUNTRY..... UNITED STATES 38S 025E 10 NW OF NW NW

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE...

MAP REFERENCE..... CRUMP LAKE 1:24000, ADEL 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 68.0

DISCHARGE..... 70. L/MIN

WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED

DEPOSITS OR ALTERATION... TRAVERTINE

PERTINENT LITHOLOGY..... QUATERNARY ALLUVIUM AND MIOCENE-PLIOCENE OLIVINE BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

P.H..... 7.93

SPECIFIC CONDUCTANCE..... 513.

CHARGE IMBALANCE (% DIFF)... 0.6

ANALYSIS IN MG/L

AG..... L 0.02 CO3..... 1. LI.... 0.04 S.... 5....

AL..... 0.011 CR..... MG.... 1.0 SB.... L 0.2

ISOTOPES 10/00/1

DEL U OF WATER..... -117.0

GEOTERM FILE 10: 0000717

COORDINATES

LAT/LONG... 42-17.84 N 119-46.55 W

UTM ZONE... 11

NORTHING... 4686308.

271170.

AS..... 0.1 CS..... L 0.1 MN.... L 0.02
 AU..... L 0.1 CU..... L 0.01 NA.... 92. SI02. 77.
 H..... 2.2 F..... 3.5 NB.... S04... 59.
 HE..... L 0.1 FE(TQI). L 0.02 NH4... 0.18 SR.... 0.05
 HI..... GA.....
 HR..... 0.4 HC03..... 105.
 CA..... 8.4 HG..... L 0.0001 PB... L 0.06
 CAMG. H2S..... 0.18
 CO..... L 0.01 I..... 0.03 RB... 0.02
 CL..... 56. K..... 7.9
 CO..... L 0.05

REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 32
 REFERENCE..... MARINER AND OTHERS, 1974A1 MARINER AND OTHERS, 1975

RECORD 00209

GEO THERM FILE ID: 0001718

COORDINATES
LAT/LONG... 43-32.4 N 119-55.8 W

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... GLASS BUTTE MERCURY MINE WELL
 LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 23S 02SE 27
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... 32

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 48.

WELL DEPTH (M)..... 221.

DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00210

GEO THERM FILE ID: 0001719

COORDINATES
LAT/LONG... 42-04.8 N 119-54.6 W

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HALLINAN SPRINGS
 LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 02SE 30
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... 31

OTHER LOCALITY INFORMATION: FOUR CLOSELY SET ORIFICES

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 71.

DISCHARGE..... L/MIN

OTHER SAMPLE INFORMATION: H2S ORDER

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... TRAUGER, 1950

RECORD 00211

GEO THERM FILE ID: 0015993

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HAMMERSLY CANYON NO. 1 GRADIENT HOLE

WELL/SPRING NUMBER..... 19S-20E-3-8DB TOWNSHIP-RANGE COORDINATES
LOCATION 39S 020E 03 NW OF SE NW LAT/LONG... 42-13.12 N 120-20.89 W

COUNTRY..... UNITED STATES OREGON
STATE.....
COUNTY..... LAKE
GEOLOGIC PROVINCE... BASIN AND RANGE

M.P. REFERENCE..... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/11/08 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.

SAMPLE NUMBER..... WS79-340

POINT OF COLLECTION.. WEILHEAD

TEMPERATURE (C)..... 50. AT (M).. 49.

Ambient Temp (C)..... 10.

Well Depth (M)..... 90.

Gradient (C/KM)..... 200.

Discharge..... 38. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/02/28 BANERJEE, KALA C.

pH..... 8.3 AT (C) 50.

SPECIFIC CONDUCTANCE..... 1046.

ALKALINITY..... 69. AS CaCO3

TOTAL DISSOLVED SOLIDS..... 982.

CHARGE IMBALANCE (% DIFF).... 5.4

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.1
AL.....	CR.....	MG....	3.4
AS.....	CS.....	MN....	0.55
Fe.....	F.....	NA....	181.
HF.....	FE(TOT).....	NB....	72.
CA.....	22.	PO4..	504..
CD.....	H2S.....		207.
CL.....	108.		
CO.....	K.....		0.022
			6.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILED AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00212

GEOTHERM SAMPLE FILE NAME OF SAMPLE SOURCE... HAMMERSLY CANYON NO. 1 GRADIENT HOLE

WELL/SPRING NUMBER..... 19S-20E-3-8DB TOWNSHIP-RANGE COORDINATES

LOCATION 39S 020E 03 NW OF SE NW LAT/LONG... 42-13.12 N 120-20.89 W

COUNTRY..... UNITED STATES OREGON

STATE.....

COUNTY..... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

M.P. REFERENCE..... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/11/08 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.

SAMPLE NUMBER..... WS79-341

POINT OF COLLECTION.. WEILHEAD

TEMPERATURE (C)..... 71. AT (M).. 67.

Ambient Temp (C)..... 9.

Well Depth (M)..... 90.

GEOTHERM FILE 101 0015984

GRADIENT (C/KM)..... 200.
 DISCHARGE..... 189. L/MIN
 WATER ANALYSIS

DATE/ANALYST..... 1980/02/28 BANERJEE, KALA C.
 P.H..... 8.8 AT(C) 71.
 SPECIFIC CONDUCTANCE..... 1113.
 ALKALINITY..... 94. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 2400.
 CHARGE IMBALANCE (% DIFF).... 37.0

ISOTOPE ANALYSIS

ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.12
 AL..... 70. CR..... 34.
 AS..... 0.179 CS..... 2.3
 H..... 6.8 F..... 3.7
 HE..... FE(TOT)..... 32. ST02. 94.
 CA..... 41. NB... 200. S04...
 CO..... H2S..... P04... 0.056
 CL..... 114.

CO..... K..... 7.5

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *DOGAMI

RECORD 00213

GEOTHERM FILE 101 0001725

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... HART MTN. HOT SPRING
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... 31

COORDINATES
 LAT/LONG... 42-28.2 N 119-42.0 W

TOWNSHIP-RANGE
 36S 026E 07

REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

RECORD 00214

GEOTHERM FILE 101 0001720

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... HOUSTON WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... 31

COORDINATES
 LAT/LONG... 42-04.8 N 119-51.6 W

TOWNSHIP-RANGE
 40S 024E 27

SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 71. L/MIN
 DISCHARGE..... 75.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

RECORD 00215

GEOTHERM FILE 101 0015985

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... HUNTER HOT SPRING SOUTHWEST
 KARA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-04-RCA
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 04 NE OF SW NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN & RANGE
 MAP REFERENCE..... LAKEVIEW NORTHEAST 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/12/04 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS 79-358
 POINT OF COLLECTION.. SPRING ORIFICE
 TEMPERATURE (C)..... R7.
 AMBIENT TEMP (C)..... 9.
 ...DISCHARGE..... L 38. L/MIN
 WATER ANALYSIS
 DATE/ANALYST..... 1980/04/11 BANERJEE, KALA C.
 P..... 8.2 AT(C) 87.
 SPECIFIC CONDUCTANCE..... 883.
 ALKALINITY..... 71. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 683.
 CHARGE IMBALANCE (% DIFF).... 8.4
 ANALYSIS IN MG/L
 AG..... CO3..... 0.11
 AL..... CR..... 0.08
 AS..... CS..... L 0.02
 H..... F..... 3.3
 HE..... FE(TOT) L 0.06
 CA..... 13. H2S..... 0.027
 CL..... 97. CL..... 5.5
 CO..... K.....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILED AFFILIATION... DEPT. OF GEOLOGY AND MINERAL INDUSTRIES, OREGON
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

ISOTOPES 00/001

COORDINATES
 LAT/LONG... 42-12.9 N 120-22.4 W

RECORD 00216
 GEOTHERM FILE ID: 0015962

NAME OF SAMPLE SOURCE... HUNTER WELL
 WELL/SPRING NUMBER..... 19S-20E-33-DC
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 33 SW OF SE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/08/24 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-272
 POINT OF COLLECTION.. TOP OF CASING.
 TEMPERATURE (C)..... 95.
 AMBIENT TEMP (C)..... 16.
 WATER ANALYSIS

DATE/ANALYST..... 1979/10/10 BANERJEE, KALA C.
 P1..... 8.7 AT(C) 95.
 SPECIFIC CONDUCTANCE..... 1120.
 ALKALINITY..... AS CAC03
 TOTAL DISSOLVED SOLIDS..... 60.
 CHARGE IMBALANCE (% DIFF).... 852.
 ANALYSIS IN MG/L..... 5.2

AG..... 0.34 CO3..... LI.... 0.13
 AL..... CR..... MG.... 0.12
 AS..... 0.116 CS..... MN.... L 0.02
 H..... F..... 4.3 NA.... 192.
 HE..... FE(TOT) 0.09 NB.... 168.
 CA..... 13. H2S..... P04.. 187.
 CD..... 123. PO4.. 0.015
 CL..... K..... 9.1

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

GEOTHERMAL SAMPLE FILE
 NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS
 WELL/SPRING NUMBER..... LAKEVIEW
 LOCATION..... 39S-20E-4-BA
 COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... W579-220
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 95.
 AMBIENT TEMP (C)..... 17.
 OTHER SAMPLE INFORMATION.. SAMPLE TAKEN IN BATHHOUSE. SLIGHT H2S ODOR.
 WATER ANALYSIS

RECORD 00217

GEOTHERM FILE ID: 0015978

COORDINATES
 LAT/LONG... 42-13.28 N 120-22.08 W

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.
 P1..... 7.9 AT(C) 95.
 SPECIFIC CONDUCTANCE..... 1101.
 ALKALINITY..... AS CAC03
 TOTAL DISSOLVED SOLIDS..... 60.
 CHARGE IMBALANCE (% DIFF).... 805.
 ANALYSIS IN MG/L..... 15.0

AG..... 0.11 CO3..... LI.... 0.12
 AL..... 0.162 CR..... MG.... 0.07
 AS..... 0.007 CS..... MN.... L 0.05
 H..... F..... 4.8 NA.... 197.
 HE..... FE(TOT) L 0.05 NB.... 60.
 CA..... 14. HCO3... NO3.. 307.
 CD..... H2S..... P04.. 103.
 CL..... 115. PO4.. 0.044

ISOLOPES 10/001

ISOLOPES 10/001

CO..... K..... 9.8
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *DOGAMI

RECORD 00218
 GEOTHERM FILE ID: 0015969

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-BA
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1124000
 TOWNSHIP=RANGE 42-13.28 N 120-22.08 W
 COORDINATES
 LAT/LONG...

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.

SAMPLE NUMBER..... WS79-221

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 94.

AIR/ENT TEMP (C)..... 17.

OTHER SAMPLE INFORMATION.. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.

PH..... 8.6 AT(C) 94.

SPECIFIC CONDUCTANCE..... 1114.

ALKALINITY..... 51. AS CAC03

TOTAL DISSOLVED SOLIDS..... 807.

CHARGE IMBALANCE (% DIFF) ... 6.9

ANALYSIS IN MG/L

AG..... CO3..... LI..... 0.13

AL..... CR..... MG..... 0.03

AS..... CS..... MN..... L 0.05

B..... F..... 4.9

RE..... FE(TOT) L 0.05

CA..... HCO3..... NH..... 60.

CL..... H2S..... NO3..... 289.

CO..... 115. PO4..... 0.043

CO..... K..... 9.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00219
 GEOTHERM FILE ID: 0015970

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-BA
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1124000
 TOWNSHIP=RANGE 42-13.28 N 120-22.08 W
 COORDINATES
 LAT/LONG...

COUNTY..... LAKE
GEOLOGIC PROVINCE.. BASIN AND RANGE
MAP REFERENCE..... LAKEVIEW NE 1124000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
SAMPLE NUMBER..... W579-223
POINT OF COLLECTION.. ORTICE
TEMPERATURE (C)..... 88.
AMBIENT TEMP (C)..... 17.

WATER ANALYSIS
DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.
PH..... 8.8 AT(C) 88.

SPECIFIC CONDUCTANCE..... 1114.
ALKALINITY..... 52. AS CAC03
TOTAL DISSOLVED SOLIDS... 424.
CHARGE IMBALANCE (% DIFF)... 9.8

ISOLOPES 10/001

ANALYSIS IN MG/L
AG..... CO3..... LI... 0.13
AL..... L 0.1 CR..... MG... 0.05
AS..... 0.161 CS..... MN... L 0.005
R..... 0.0075 F..... 4.3 NA... 201.
FE..... FE(TQT) L 0.005 NB... 54.
CA..... 13. HC03... 106. S04... 291.
CD..... H2S..... PO4... 0.033
CL..... 118.
CO..... K..... 9.5

REFERENCE AND IDENTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILED AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00220

GEOOTHERM FILE ID: 0002226

GEOOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS (LAKEVIEW)
KGRA..... LAKEVIEW
MAPING NUMBER..... 45

LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE..
MAP REFERENCE.....
TOWNSHIP=RANGE 39S 020E 04 NE OF NW
COORDINATES
LAT/LONG... 42-13.32 N 120-22.09 W
UTM ZONE... 10
NORTHING... 4677565.
EASTING... 717216.

OTHER LOCALITY INFORMATION: LAKEVIEW NE 1124000, KLAMATH FALLS 11250000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1957/10/29 FETH, J. AND ROGERS, S. M.
SAMPLE NUMBER..... LAR# 534
TEMPERATURE (C)..... 86.0
DISCHARGE..... L 19. L/MIN

PERTINENT LITHOLOGY..... LAVAS AND LAKE BEDS IN AREA
WATER ANALYSIS
DATE/ANALYST..... 1958/02/17 SCHUCH, J. P.
PH..... 8.4
SPECIFIC CONDUCTANCE..... 1140.
TOTAL DISSOLVED SOLIDS... 821.
CHARGE IMBALANCE (% DIFF)... 3.1

RECORD 00222
 GEOTHERM FILE ID: 0000689

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS (LAKEVIEW)
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 45

LOCATION
 COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.....

MAP REFERENCE..... LAKEVIEW NE 1124000, KLAMATH FALLS 11250000
 SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 96.0
 DISCHARGE..... 2300. L/MIN
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED
 DEPOSITS OR ALTERATION..... TRAVERTINE, SINTER
 PERTINENT LITHOLOGY..... ALLUVIUM, ANDESITE AND ANDESITIC TUFF-BRECCIA

WATER ANALYSIS
 DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.77
 SPECIFIC CONDUCTANCE..... 1120.
 CHARGE IMBALANCE (% DIFF)..... 2.8

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	L 1.	LI.....	0.15	S.....	0.2	ISOPTOPES (0/001)
AL.....	0.034	CR.....		MG.....	L 0.1	SB.....		DEL D OF WATER.....
AS.....	0.06	CS.....	L 0.1	MN.....	L 0.02	SC.....		DEL O(18) OF WATER...
AU.....	L 0.1	CU.....	L 0.01	MO.....		SE.....		DEL O(18) OF SO4.....
H.....	6.9	F.....	4.4	NA.....	210.	SI02.		
HA.....	L 0.1							
HE.....	L 0.1	FE(TQT).....	L 0.02	NB.....		SO4...		
HI.....		GA.....		NH4...	0.31	SR...		
BR.....	0.4							
CA.....	13.	HCO3.....	79.					
CA+MG.		HG.....	0.0004	PB.....	L 0.06			
CD.....	L 0.01	H2S.....		PO4...	0.25			
CL.....	120.	I.....	0.08	RB.....	0.04			
CO.....	L 0.05	K.....	8.5					

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 23
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; WEHRING AND OTHERS, 1979

RECORD 00223
 GEOTHERM FILE ID: 0015965

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HIGLETON WELL
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-AAB

LOCATION
 COUNTRY..... UNITED STATES 39S 020E 04 NW OF NE NE
 STATE..... OREGON

MAP REFERENCE..... LAKEVIEW NE 1124000, KLAMATH FALLS 11250000
 SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 96.0
 DISCHARGE..... 2300. L/MIN
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED

WITH NITRIC ACID, DILUTED
 DEPOSITS OR ALTERATION..... TRAVERTINE, SINTER
 PERTINENT LITHOLOGY..... ALLUVIUM, ANDESITE AND ANDESITIC TUFF-BRECCIA

WATER ANALYSIS
 DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.77
 SPECIFIC CONDUCTANCE..... 1120.
 CHARGE IMBALANCE (% DIFF)..... 2.8

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	L 1.	LI.....	0.15	S.....	0.2	ISOPTOPES (0/001)
AL.....	0.034	CR.....		MG.....	L 0.1	SB.....		DEL D OF WATER.....
AS.....	0.06	CS.....	L 0.1	MN.....	L 0.02	SC.....		DEL O(18) OF WATER...
AU.....	L 0.1	CU.....	L 0.01	MO.....		SE.....		DEL O(18) OF SO4.....
H.....	6.9	F.....	4.4	NA.....	210.	SI02.		
HA.....	L 0.1							
HE.....	L 0.1	FE(TQT).....	L 0.02	NB.....		SO4...		
HI.....		GA.....		NH4...	0.31	SR...		
BR.....	0.4							
CA.....	13.	HCO3.....	79.					
CA+MG.		HG.....	0.0004	PB.....	L 0.06			
CD.....	L 0.01	H2S.....		PO4...	0.25			
CL.....	120.	I.....	0.08	RB.....	0.04			
CO.....	L 0.05	K.....	8.5					

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 23
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; WEHRING AND OTHERS, 1979

COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/09/26 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.
 SAMPLE NUMBER..... WS79-298
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 23.
 AMBIENT TEMP (C)..... 16.
 DISCHARGE..... 76. L/MIN
 WATER ANALYSIS
 DATE/ANALYST..... 1979/11/05 BANERJEE, KALA C.
 P.H..... 7.7 AT(C) 23.
 SPECIFIC CONDUCTANCE..... 345.
 ALKALINITY..... 138. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 403.
 CHARGE IMBALANCE (% DIFF).... 17.9
 ANALYSIS IN MG/L
 AG..... CO3..... 0.03
 AL..... 13. CR..... 8.3
 AS..... 0.013 CS..... 0.18
 H..... 0.36 F..... 0.3
 RE..... FE(TOT) 6.2
 CA..... 40. HCO3..... 0.74
 CI..... H2S..... 0.033
 CL..... 48. K..... 0.9
 CO.....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPUTER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *DOGAMI

ISOLOPES (0.001)

SI02. 34.
 S04.. 12.

RECORD 00224
 GEOTHERM FILE ID: 0015959

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 3
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 395-20E-16-AB
 LOCATION
 COUNTRY..... UNITED STATES 39S 020E 16 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/07/12 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-197
 POINT OF COLLECTION.. AT PUMP
 TEMPERATURE (C)..... 16.5
 AMBIENT TEMP (C)..... 14.
 DEPOSITS OR ALTERATION..... NONE
 WATER ANALYSIS
 DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.
 P.H..... 8.0 AT(C) 17.
 SPECIFIC CONDUCTANCE..... 286.
 ALKALINITY..... 114. AS CAC03

COORDINATES
 LAT/LONG... 42-11.333N 120-21.130W

TOTAL DISSOLVED SOLIDS... 236.

ANALYSIS IN MG/L

AG....	0.1	CO3....	LI....	0.05
AL....	0.005	CR....	MG....	0.83
AS....	1.5	CS....	MN....	0.06
H....		F....	NA....	56.
RE....		FE(TOT)...	NB....	504.. 4.9
CA....		H2S....	PO4...	0.437
CL....	11.			

CO... 2.8 K... 2.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00225

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 4

KARA..... LAKEVIEW

WELL/SPRING NUMBER..... 39S-20E-16-AA

LOCATION..... UNITED STATES 39S 020E 16 NE OF NE

COUNTRY..... TOWNSHIP=RANGE

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... LAKEVIEW NE 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/12 PETERSON, NORMAN V.

SAMPLE NUMBER..... WS79-196

POINT OF COLLECTION.. AT PUMP.

TEMPERATURE (C)..... 19.5

AIR/WT TEMP (C)..... 16.

DEPOSITS OR ALTERATION.... NONE

WATER ANALYSIS

DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.

PH..... 7.8 AT (C) 20.

SPECIFIC CONDUCTANCE.... 358.

ALKALINITY..... 144. AS CAC03

TOTAL DISSOLVED SOLIDS... 273.

CHARGE IMBALANCE (% DIFF).... 1.7

ANALYSIS IN MG/L

AG....	0.1	CO3....	LI....	0.05
AL....	0.005	CR....	MG....	1.9
AS....	1.7	CS....	MN....	0.11
H....		F....	NA....	68.
HF....		FE(TOT)...	NB....	502. 78.
CA....	5.8		PO4...	504.. 3.0
CL....	19.			

CO... 2.5 K... 2.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *NOGAMI

GEO THERM FILE ID: 0015958

ISOLOPES 10/001

ISOLOPES 10/001

RECORD 00226
GEOTHERM FILE ID: 0015957GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 5
WELL/SPRING NUMBER... LAKEVIEW
WELL/SPRING NUMBER... 39S-20E-15-BA
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... LAKE
GEOLOGIC PROVINCE... BASIN AND RANGECOORDINATES
LAT/LONG... 42-11.333N 120-20.266WTOWNSHIP-RANGE
39S 020E 15 NW OF NE

MJP REFERENCE... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1979/07/12 PETERSON, NORMAN V.

SAMPLE NUMBER... WS79-195

POINT OF COLLECTION... WELLHEAD

TEMPERATURE (C)... 37.5

AMBIENT TEMP (C)... 18.

WATER TREATMENT... NONE

DEPOSITS OR ALTERATION... NONE

PERTINENT LITHOLOGY... VOLCANIC

WATER ANALYSIS

DATE/ANALYST... 1979/08/21 BANERJEE, KALA C.

PH... 8.5 AT(C) 38.

SPECIFIC CONDUCTANCE... 448.

ALKALINITY... 80. AS CACO3

TOTAL DISSOLVED SOLIDS... 298.

CHARGE IMBALANCE (% DIFF)... 4.5

ANALYSIS IN MG/L

AG... CO3... 0.05

AL... CR... 0.38

AS... CS... 0.05

H... F... 1.7

HF... FE(TOT)... 0.05

CA... H2S... 0.004

CL... K... 0.6

CO... K... 0.6

REFERENCE AND IDENTIFICATION

COMPILED BY... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00227
GEOTHERM FILE ID: 0015960GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 7

WELL/SPRING NUMBER... LAKEVIEW

WELL/SPRING NUMBER... 39S-20E-16-BB

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... LAKEVIEW NE 1:24000

COORDINATES
LAT/LONG... 42-11.333N 120-21.463WTOWNSHIP-RANGE
39S 020E 16 NW OF NW

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/12 PETERSON, NORMAN V.
 SAMPLE NUMBER..... W579-198
 POINT OF COLLECTION.. AT PUMP
 TEMPERATURE (C)..... 16.
 AMBIENT TEMP (C)..... 12.
 DEPOSITS OR ALTERATION.... NONE

WATER ANALYSIS

DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.
 PH..... 7.9 AT(C) 16.
 SPECIFIC CONDUCTANCE..... 280.
 ALKALINITY..... 92. AS CAC03
 TOTAL DISSOLVED SOLIDS... 216.
 CHARGE IMBALANCE (% DIFF)... 0.8

ISOIDES 10/001

ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.05
 AL..... 0.1 CR..... MG... 0.57
 AS..... 0.006 CS..... MN... 0.07
 R..... F..... 1.2 NA... 54.
 HE..... FE(TOT)... 0.14 NB... 9.8
 CA..... 2.4 H2S..... PO4... 0.6
 CO..... CL..... K..... 2.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIU, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00228

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... IEDFORD WELL
 WELL/SPRING NUMBER..... 41S-21E-18-BBB
 LOCATION

TOWNSHIP-RANGE

41S 021E 18 NW OF NW NW

COORDINATES

LAT/LONG... 42-01.08 N 120-17.67 W

GEUTHERM FILE ID: 0015964

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE... BASIN AND RANGE
 MAP REFERENCE..... CRANE CREEK 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/08/24 PETERSON, NORMAN V.
 SAMPLE NUMBER..... W579-273
 POINT OF COLLECTION.. TOP OF CASING
 TEMPERATURE (C)..... 21.
 AMBIENT TEMP (C)..... 17.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/10 BANERJEE, KALA C.
 PH..... 8.9 AT(C) 21.
 SPECIFIC CONDUCTANCE..... 292.
 ALKALINITY..... 50. AS CAC03
 TOTAL DISSOLVED SOLIDS... 213.
 CHARGE IMBALANCE (% DIFF)... 87.4

ISOIDES 10/001

ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.02
 AL..... 0.06 CR..... MG... 0.26

AS.... 0.005 CS.... 0.1 MN.... L 0.02 S102.. 18.
 H..... F..... NA.... 66. S04.. 6.6
 AF..... FE(TOT).. NB....

CA.... 1.6 H2S..... P04.. 0.003
 CD.... 1.1 K..... 0.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00229

GEOCHEM SAMPLE FILE

GEOCHEM FILE ID: 0015977

NAME OF SAMPLE SOURCE... LEITHHEAD (JOYLAND PLUNGE) HOT SPRING

KIRA..... LAKEVIEW

WELL/SPRING NUMBER..... 39S-20E-27-BA

LOCATION

COUNTRY..... UNITED STATES 39S 020E 27 NW OF NE

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE..... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/13 PETERSON, NORMAN V.

SAMPLE NUMBER..... WS79-201

POINT OF COLLECTION.. OVERFLOW FROM ORIFICE.

TEMPERATURE (C)..... 70.

AIR/WT TEMP (C)..... 17.

DISCHARGE..... 189. L/MIN

OTHER SAMPLE INFORMATION.. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.

PH..... 8.1 AT(C) 70.

SPECIFIC CONDUCTANCE..... 819.

ALKALINITY..... 63. AS CAC03

TOTAL DISSOLVED SOLIDS... 552.

CHARGE IMBALANCE (% DIFF)... 8.1

ANALYSIS IN MG/L

AG.... CO3..... L1... L 0.05

AL.... L 0.1 CR..... MG... 0.1

AS.... L 0.005 CS..... MN... L 0.05

R..... F..... 3.4 NA.... S102.. 74.

RF.... FE(TOT).. L 0.05 NB.... S04.. 157.

CA.... 14. H2S..... P04.. 0.004

CD.... 56. CL....

K..... 2.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

ISOIOPES 10/001

COORDINATES

LAT/LONG... 42-09.708N 120-20.608W

RECORD 00230
GEOTHERM FILE ID: 0002224GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... IETHEAD (JOYLAND PLUNGE) HOT SPRING

KGRA..... LAKEVIEW

WARNING NUMBER..... 46

LOCATION
COUNTRY..... UNITED STATES 39S 02WE 27 NW OF NE

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE..

MAP REFERENCE..... LAKEVIEW NE 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/06/23

TEMPERATURE (C)..... 59.4

DISCHARGE..... 186. L/MIN

PETROGENETIC LITHOLOGY..... FROM TERTIARY VOLCANIC ROCKS NEAR FAULT SCARP. FLOWS FROM TALUS OF SCARP

WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 7.7

SPECIFIC CONDUCTANCE..... 813.

TOTAL DISSOLVED SOLIDS..... 531.

CHARGE IMBALANCE (% DIFF).... 0.6

ANALYSIS IN PPM

AL.....	CR.....	MG....	0.4
BA.....	FE.....	NA....	152.
BE.....	FE(TOT).....	NB....	504..
CA.....	HC03.....	NO3..	0.2
CL.....			
CO.....			

OTHER ANALYTICAL DATA... H2S 000K PRESENT

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 24

REFERENCE..... TRAUGER, 1950

RECORD 00231

GEOTHERM FILE ID: 0001712

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... IOST CABIN

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE... 31

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 20.

DISCHARGE..... 375. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARTINER, R. & BROOK, C.

REFERENCE..... TRAUGER, 1950

TOWNSHIP=RANGE
30S 017E 25COORDINATES
LAT/LONG... 42-55.2 N 120-39.0 WCOORDINATES
LAT/LONG... 42-09.708N 120-20.608W
UTM ZONE... 10
NORTHING... 4670948.
719474.

ISOLINES 10/0001

RECORD 00232

GEOTHERM FILE ID: 0001723

COORDINATES
LAT/LONG...

42-19.2 N 119-52.7 W

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... MOSS 1 WELL
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... LAKE
GEOLOGIC PROVINCE... 31
OTHER LOCALITY INFORMATION: WELL USED FOR IRRIGATION
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 22.
DISCHARGE..... 1890. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... TRAUGER, 1950

RECORD 00233

GEOTHERM FILE ID: 0001722

COORDINATES
LAT/LONG...

42-17.4 N 119-52.8 W

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... MOSS 2 WELL
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... LAKE
GEOLOGIC PROVINCE... 31
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 28.
DISCHARGE..... 15. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... TRAUGER, 1950

RECORD 00234

GEOTHERM FILE ID: 0001715

COORDINATES
LAT/LONG...

42-56.4 N 120-47.4 W

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... PARDON
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... LAKE
GEOLOGIC PROVINCE... 31
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 24.
DISCHARGE..... 150. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... TRAUGER, 1950

RECORD 00235

GEOTHERM FILE ID: 0015967

COORDINATES

TOWNSHIP-RANGE
39S-20E-4-8AA

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... RUBBLE WELL
WELL/SPRING NUMBER..... 39S-20E-4-8AA
LOCATION

LAT/LONG... 42-10.43 N 120-22.47 W

39S 020E 04 NW OF NE NE

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1979/08/09 PETERSON, NORMAN V.

SAMPLE NUMBER... WS79-257

POINT OF COLLECTION... TAP

TEMPERATURE (C)... 80.

AIR/TEMP (C)... 16.

WATER ANALYSIS

DATE/ANALYST... 1979/10/10 BANERJEE, KALA C.

PH... 8.1 AT(C) 80.

SPECIFIC CONDUCTANCE... 932.

ALKALINITY... 66. AS CAC03

TOTAL DISSOLVED SOLIDS... 705.

CHARGE IMBALANCE (% DIFF)... 9.7

ANALYSIS IN MG/L

AG... CO3...

AL... 0.1 CH... 0.1

AS... 0.072 CS... 0.49

H... F... 3.7 NA... 163.

HE... FE(TOT)... L 0.05 NB... 126.

CA... 18. H2S... 0.015

CD... 99. PO4... 0.015

CL... K... 5.9

CO... AND IDENTIFICATION

COMPILED BY... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00236

GEOTHERM FILE ID: 0015961

NAME OF SAMPLE SOURCE... ROCKFORD (OLD DETER) RANCH

WELL/SPRING NUMBER... 40S-20E-1-CC

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... LAKE

GEOLOGIC PROVINCE... BASIN AND RANGE

MAP REFERENCE... CRANE CREEK 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1979/07/13 PETERSON, NORMAN V.

SAMPLE NUMBER... WS79-199

POINT OF COLLECTION... WELHEAD

TEMPERATURE (C)... 77.

AIR/TEMP (C)... 18.

DISCHARGE... 7571. L/MIN

WATER TREATMENT... NONE

DEPOSITS OR ALTERATION... NONE

OTHER SAMPLE INFORMATION... WELL FLOWING FROM 8 INCH DIAMETER PIPE.

WATER ANALYSIS

DATE/ANALYST... 1979/08/21 BANERJEE, KALA C.

COORDINATES

LAT/LONG... 42-06.350N 120-17.327W

P1..... 8.3 AT(C) 77.
 SPECIFIC CONDUCTANCE..... 1152.
 ALKALINITY..... 326.
 TOTAL DISSOLVED SOLIDS..... 813.
 CHARGE IMBALANCE (% DIFF).... 5.2
 ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... L 0.1 CR..... 0.22
 AS..... L 0.005 CS..... 0.15
 H..... F..... 3.7 MN..... L 0.05
 RE..... FE(TOT) L 0.05 NA..... 238. SI02. 74.
 CA..... 4.2 NB..... 504.. 75.
 CD..... H2S..... PO4.. 0.021
 CL..... 112.
 CO..... K..... 9.6
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00237

GEOTHERM FILE ID: 0002229

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... SUMMER LAKE HOT SPRING (WOODWARD)
 KGRA..... SUMMER LAKE HOT SPRING
 WARRING NUMBER..... 42
 LOCATION
 COUNTRY..... UNITED STATES 33S 017E 12 NE OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... SLIDE MTN. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1948/10/08 TRAUGER, F.D.
 TEMPERATURE (C)..... 46.7
 DISCHARGE..... 79. L/MIN
 DEPOSITS OR ALTERATION... SILICEOUS SINTER
 PERTINENT LITHOLOGY..... FROM PLEISTOCENE TERRACE DEPOSITS NEAR MAJOR FAULT SCARP
 OTHER SAMPLE INFORMATION.. WATER USED FOR IRRIGATION. GASSY SPRING.

COORDINATES

LAT/LONG... 42-43.53 N 120-38.75 W
 UTM ZONE... 10
 NORTHING... 4732806.
 692746.

P1..... 8.5 USGS
 SPECIFIC CONDUCTANCE..... 1760.
 TOTAL DISSOLVED SOLIDS..... 1120.
 CHARGE IMBALANCE (% DIFF).... 6.1
 ANALYSIS IN PPM
 AL..... CR.....
 R..... F..... 2.2 MG... 0.4
 RE..... FE(TOT) 0.03 NA... 399. SI02. 96.
 CA..... MC03.... 374. NB... 504.. 111.
 CL..... 285. NO3.. 0.1
 CO..... K..... 6.8
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 14

ISOLOPES 10/001

REFERENCE..... TRAUER, 1950

RECORD 00238

GEOTHERM FILE ID: 0000707

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... SUMMER LAKE HOT SPRING (WOODWARD)

KGRA..... SUMMER LAKE HOT SPRING

WARNING NUMBER..... 42

LOCATION

TOWNSHIP=RANGE

COUNTRY..... UNITED STATES 33S 017E 12 NE OF NE

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE..

MAP REFERENCE..... SLIDE MIN. 1:24000, KLAMATH FALLS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 43.0

DISCHARGE..... 75. L/MIN

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED.

DEPOSITS OR ALTERATION..... TRAVERTINE

PERTINENT LITHOLOGY..... ALLUVIUM, ANDESITE, AND ANDESITIC TUFF-BRECCIA

OTHER SAMPLE INFORMATION.. MIXED WATERS

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

P..... 8.43

SPECIFIC CONDUCTANCE..... 1790.

CHARGE IMBALANCE (% DIFF).... 1.7

ANALYSIS IN MG/L

AG..... L 0.02 CO3..... 10.

AL..... CR.....

AS..... 0.02 CS..... L 0.1

AU..... L 0.1 CU..... 0.02

R..... 6.9 F..... 2.2

HA..... L 0.1

HE..... L 0.1

HI..... FE (TQT) L 0.02

BR..... GA.....

CA..... 1.

CA+MG..... 2.1 HCO3..... 406.

CD..... L 0.01 Hg.....

CL..... 280. H2S.....

CO..... L 0.05 K..... 4.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILED CROSS INDEX... 14

REFERENCE..... MAHNER AND OTHERS, 1974; MAHNER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00239

GEOTHERM FILE ID: 0001713

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... U.S. SOIL CONSERVATION SERVICE WELL

LOCATION

TOWNSHIP=RANGE

COUNTRY..... UNITED STATES 33S 018E 15

STATE..... OREGON

COUNTY..... LAKE

COORDINATES

LAT/LONG... 42-42.6 N 120-34.5 W

COORDINATES

LAT/LONG... 42-43.53 N 120-38.75 W

UTM ZONE... 10

NORTHING... 4732806.

692746.

ISOTOPES 10/2001

DEL D OF WATER..... -115.0

DEL O (18) OF WATER... -13.32

DEL O (18) OF SO4..... -4.00

S....

SB....

SC....

SI02. 94.

SO4... 120.

SR.... 0.07

LI.... 0.15

MG.... 0.1

MN.... L 0.02

NA.... 390.

NB....

NH4...

PB.... L 0.06

PO4... 0.18

RB.... L 0.02

GEOLOGIC PROVINCE... 3)
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 32.
 WELL DEPTH (M)..... R 36.
 DISCHARGE..... L/MIN
 QUALIFICATION FIELD..... RANGE OF DEPTH IS 30. - 41.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00240

GEO THERM FILE ID: 0001714

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LAKE

COORDINATES
 LAT/LONG... 42-36.0 N 120-10.2 W

TOWNSHIP-RANGE
 34S 02E 30

GEOLOGIC PROVINCE... 3)
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 27.
 DISCHARGE..... 115. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

RECORD 00241

GEO THERM FILE ID: 0015986

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UPPER BARRY NO. 1
 WELL/SPRING NUMBER..... 39S-20E-27-08B
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LAKE

COORDINATES
 LAT/LONG... 42-09.4 N 120-20.38 W

TOWNSHIP-RANGE
 39S 02E 27

MAP REFERENCE..... LAKEVIEW NORTHEAST 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/12/20 MCLEAN, G
 SAMPLE NUMBER..... WS 79-373
 TEMPERATURE (C)..... 63. AT (M) 70.
 WELL DEPTH (M)..... 73.

DISCHARGE..... 380. L/MIN
 WATER ANALYSIS
 DATE/ANALYST..... 1980/04/11 BANERJEE, KALA C.

PH..... 8.7 AT (C) 63.
 SPECIFIC CONDUCTANCE..... 847.
 ALKALINITY..... 103. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 647.
 CHARGE IMBALANCE (% DIFF)..... 9.6

ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... 1.2 CR.....
 AS..... 0.115 CS.....
 BA..... 8.2 F..... 3.4
 HE..... FE (TOT) 20.

SI02... 52.
 SO4... 106.

ISOTOPES 10/001

CA.... 11. H2S..... PU4... 0.025
 CD.... 12C.

CO..... K..... 3.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... DEPT. OF GEOLOGY AND MINERAL INDUSTRIES, OREGON

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00242

GEOTERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... UPPER ROCK CREEK

LOCATION... TOWNSHIP=RANGE 35S 026E 16

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE.. 31

OTHER LOCALITY INFORMATION: SEVERAL ORIFICES

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 46.

DISCHARGE..... 190. L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... WARING, 1965

COORDINATES

LAT/LONG... 42-32.4 N 119-39.6 W

GEOTERM FILE ID: 0001724

RECORD 00243

GEOTERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... WHITE ROCK RANCH HOT SPRING

LOCATION... TOWNSHIP=RANGE 36S 020E 26

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE.. 31

OTHER LOCALITY INFORMATION: TWO MAJOR ORIFICES

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 20.

DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... WARING, 1965

COORDINATES

LAT/LONG... 42-20.4 N 120-19.5 W

GEOTERM FILE ID: 0001717

RECORD 00244

GEOTERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... BELKNAP HOT SPRINGS

LOCATION... TOWNSHIP=RANGE 16S 006E 11 NE

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LAKE

GEOLOGIC PROVINCE..

REFERENCE AND IDENTIFICATION

COMPILED BY..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000

REFERENCE.....

COORDINATES

LAT/LONG... 44-11.65 N 122-02.90 W

UTM ZONE... +10

NORTHING... 4893663.

576052.

GEOTERM FILE ID: 0000703

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 71.0 L/MIN
 DISCHARGE..... 300.
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED.
 PERTINENT LITHOLOGY..... PLIOCENE-HOLOCENE BASIC VOLCANIC FLOWS AND PYROCLASTIC ROCKS
 WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.62
 SPECIFIC CONDUCTANCE..... 4300.
 CHARGE IMBALANCE (% DIFF).... 0.2

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... L 1.	LI.....	0.95	S.....		ISOTOPES 10/001
AL.....	CR.....	MG.....	0.2	SB.....		DEL D OF WATER.....
AS..... 0.35	CS..... L 0.1	MN.....	0.02	SC.....		DEL O (18) OF WATER....
AU..... L 0.1	CU..... 0.01					DEL O (18) OF S04.....
H..... 6.4	F..... 1.2	NA.....	690.	S102.	96.	
HE..... L 0.1	FE(TOT)..... 0.02	NB.....		S04....	170.	
BI.....	GA.....	NH4....		SR....	1.4	
HR..... 33.						
CA..... 210.	HC03..... 17.	PB.... L 0.06				
CA+MG.....	HG..... L 0.0001	P04.... 0.21				
CO..... L 0.01	H2S..... 0.2					
CL..... 1300.	I..... 15.	RB.... 0.05				
CO..... L 0.05	K.....					

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPIER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPIER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00245

GEOTHERM FILE ID: 0002230

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BELKNAP HOT SPRINGS
 GRA..... NEAR BELKNAP-FOLEY HOT SPRINGS
 WADING NUMBER..... 18

LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500

COORDINATES
 LAT/LONG... 44-11.65 N 122-02.90 W
 UTM ZONE... +10
 NORTHING... 4893663.
 576052.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1903/00/00
 TEMPERATURE (C)..... 86.7

DISCHARGE..... 284. L/MIN
 PERTINENT LITHOLOGY..... LATE TERTIARY LAVA
 OTHER SAMPLE INFORMATION.. GASSY SPRINGS.

WATER ANALYSIS

TOTAL DISSOLVED SOLIDS... 2506.

ANALYSIS IN PPM

AL.....	CR.....	MO.... Q 13.
AS.....	CS.....	MN.... T
HA.....	F.....	NA.... Q 364.
HE.....	FE(TOT).....	SI02. 81.
CA.... Q 455.		S04... Q 168.

ISOTOPES 10/001

CL..... 0 1343. K..... 0 69.
 CO.....
 OTHER ANALYTICAL DATA... CHEMISTRY RECALCULATED! REPORTED!
 FE203+AL2O3+3*CaCL2=1066.9,CASO4=238.6,MGCL2=49.8,NACL=925,KCL=131.8 PPM
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00246

GEOTHERM FILE ID: 0015423

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... RIGELOW HOT SPRINGS
 WELL/SPRING NUMBER..... 15S/6E-26BA
 LOCATION
 COUNTRY..... UNITED STATES 26 NE OF NW
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE... 30
 MAP REFERENCE..... MCKENZIE BRIDGE 1162500, SALEM 11250000
 OTHER LOCALITY INFORMATION! AT EDGE OF RIVER 50 M BELOW BRIDGE AT CONFLUENCE OF MCKENZIE RIVER AND DEER CREEK
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/03/08 BOWEN, RICHARD G.
 SAMPLE NUMBER..... WS 76-053
 TEMPERATURE (C)..... 61.0
 DISCHARGE..... 7.6 L/MIN
 WATER ANALYSIS

DATE/ANALYST..... 1976/06/25 JOHNSON, ELLEN M.
 P1..... 7.8 AT(C) 61.
 SPECIFIC CONDUCTANCE..... 3800.
 TOTAL DISSOLVED SOLIDS... 2566.

ISOTOPES (0/001)

ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... L 0.05
 AS..... 0.11
 R..... 6.5
 HF.....
 HI.....
 CA..... 188.
 CD.....
 CL..... 1148.
 LI..... 1.1
 MG..... 1.
 MN..... L 0.005
 NA..... 540.
 NH4..... 0.39
 P04... 0.32
 SI02. 69.
 S04... 102.

CO..... K..... 17.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 08
 REFERENCE..... *DOGAMI

RECORD 00247

GEOTHERM FILE ID: 0000787

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... COUGAR RESERVOIR HOT SPRINGS (RIDEH)
 WELL/SPRING NUMBER..... 20
 LOCATION
 COUNTRY..... UNITED STATES 20
 STATE.....
 COUNTY.....
 TOWNSHIP=RANGE
 17S 005E 20

COORDINATES
 LAT/LONG... 44-04.95 N 122-14.00 W

STATF..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. 30
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1973/00/00 BARNES GROUP
 TEMPERATURE (C)..... 44.0
 DISCHARGE..... 200. L/MIN
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED
 PERTINENT LITHOLOGY..... ANDESITE, BASALT, AND BASIC TUFF-BRECCIA
 WATER ANALYSIS
 DATE/ANALYST..... 1973/00/00 BARNES GROUP

P1..... 7.76
 SPECIFIC CONDUCTANCE..... 2890.
 CHARGE IMBALANCE (% DIFF).... 2.0
 ANALYSIS IN MG/L
 AG..... L 0.02
 AL.....
 AS.....
 AU..... L 0.1
 R..... 5.1
 RA..... L 0.1
 HF..... L 0.1
 HI.....
 CA..... 225.
 CA+MG.....
 CO..... L 0.01
 CL..... 788.
 CO..... L 0.05
 K..... 6.3
 RB..... 0.03

REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 03
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

CO3..... L 1.
 CR.....
 CS..... L 0.1
 CU..... L 0.01
 F..... 0.8
 FE(TQT)..... L 0.02
 GA.....
 HC03..... 19.
 HG..... 0.0005
 PB..... L 0.06
 LI..... 0.52
 MG..... 0.1
 MN..... L 0.02
 NA..... 392.
 NB.....
 NH4.....
 NI.....
 PA.....
 SB..... L 0.2
 SI02..... 50.
 SI04..... 260.
 SR..... 2.0

STATF..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. 30
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/03/08 BOWEN, R.
 TEMPERATURE (C)..... 42.0
 DISCHARGE..... 114. L/MIN
 WATER TREATMENT..... SEVERAL WARM SPRINGS IN CREEK
 PERTINENT LITHOLOGY.....
 WATER ANALYSIS
 DATE/ANALYST..... 1976/06/28 JOHNSON, ELLEN M.
 P1..... 0 8.2

GEO THERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... COUGAR RESERVOIR HOT SPRINGS (RIDER)
 WELL/SPRING NUMBER..... 17S/5E-208B
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. 30
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000
 OTHER LOCALITY INFORMATION: UPPER SPRING
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/03/08 BOWEN, R.
 SAMPLE NUMBER..... WS-76 URE DEPT ENVIRONMENTAL QUALITY
 TEMPERATURE (C)..... 42.0
 DISCHARGE..... 114. L/MIN
 WATER TREATMENT..... SEVERAL WARM SPRINGS IN CREEK
 PERTINENT LITHOLOGY.....
 WATER ANALYSIS
 DATE/ANALYST..... 1976/06/28 JOHNSON, ELLEN M.
 P1..... 0 8.2

RECORD 00248

GEOTHERM FILE ID: 0015426

COORDINATES
 LAT/LONG... 44-04.95 N 122-14.00 W
 UTM ZONE... +10
 NORTHING... 4881105.
 561383.

SPECIFIC CONDUCTANCE..... 2660.
 ALKALINITY..... 15.
 TOTAL DISSOLVED SOLIDS... 1763.
 CHARGE IMBALANCE (% DIFF)... 1.0
 ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.64
 AL..... L 0.05 CR... 0.2
 AS..... 0.1 CS... L 0.05
 R..... 6.2 F..... 0.87 S102. 47.
 HE..... FE(TOT). 0.1 NB... S04.. 185.
 HI..... GA..... NH4.. 0.12
 CA..... 196. H2S..... P04.. 0.08
 CD..... 693. K..... 6.8
 CL..... CO.....
 CO.....
 QUALIFICATION FIELD..... PH MEASURED IN LAB.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 03
 REFERENCE..... *DOGAMI

RECORD 00249

GEOTHERM FILE 101 0015424

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... FOLEY SPRINGS
 KARA..... BELKNAP-FOLEY HOT SPRINGS
 WELL/SPRING NUMBER..... 16S/6E-28BB
 WARPING NUMBER..... 19
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE... 30
 MAP REFERENCE..... MCKENZIE BRIDGE 1162500, SALEM 11250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/03/08 BOWEN, RICHARD
 SAMPLE NUMBER..... WS 76-055
 TEMPERATURE (C)..... 80.6
 DISCHARGE..... 227. L/MIN
 DEPOSITS OR ALTERATION..... SILICEOUS SINTER
 WATER ANALYSIS
 DATE/ANALYST..... 1976/06/28 JOHNSON, E.M., ORE DEPT ENV QUALITY
 PH..... 8. AT(C) 80.
 SPECIFIC CONDUCTANCE..... 4800.
 ALKALINITY..... 13. AS CAC03
 TOTAL DISSOLVED SOLIDS... 3333.
 CHARGE IMBALANCE (% DIFF)... 5.8
 ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.96
 AL..... L 0.01 CR..... 0.8
 AS..... 0.21
 R..... 10. F..... 0.81 S102. 60.
 HE..... FE(TOT). L 0.05 NB... S04.. 550.
 HI..... GA..... NH4.. L 0.01
 CA..... 494.

COORDINATES

LAT/LONG... 44-09.20 N 122-05.85 W
 UTM ZONE... +10
 NORTHING... 4889083.
 572173.

TOWNSHIP-RANGE

16S 006E 28 NW OF NW

ISOTOPES 10/001

ANALYSIS IN MG/L
 AG..... CO3..... LI... 0.96
 AL..... L 0.01 CR..... 0.8
 AS..... 0.21
 R..... 10. F..... 0.81 S102. 60.
 HE..... FE(TOT). L 0.05 NB... S04.. 550.
 HI..... GA..... NH4.. L 0.01
 CA..... 494.

CD..... H2S..... P04.. 0.06
CL..... 1304.
CO..... K..... 11.2
REFERENCE AND IDENTIFICATION
COMPILED BY..... BOWEN, RICHARD G.
COMPIILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPIILER CROSS INDEX... 02
REFERENCE..... *DOGAMI

RECORD 00250

GEO THERM FILE ID: 0015973

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FRISSEL ROAD SPRING

KARA..... RELKNAP-FULEY

WELL/SPRING NUMBER..... 16S-6E-2-CD

LOCATION

COUNTRY..... UNITED STATES 16S 006E 02 SE OF SW

TOWNSHIP=RANGE

COORDINATES

LAT/LONG... 44-12.06 N 122-03. W

STATE..... OREGON

COUNTY..... LANE

GEOLOGIC PROVINCE... WESTERN CASCADES

MAP REFERENCE..... MCKENZIE BRIDGE 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTION..... 1979/08/08 BROWN, DAVID

SAMPLE NUMBER..... W579-270

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 18.

AIR/ENT. TEMP (C).... 16.

WATER ANALYSIS

DATE/ANALYST..... 1979/09/28 BANERJEE, KALA C.

PH..... 6.3 AT(C) 18.

SPECIFIC CONDUCTANCE..... 151.

ALKALINITY..... 10. AS CAC03

TOTAL DISSOLVED SOLIDS... 41.

CHARGE IMBALANCE (% DIFF)... 22.1

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	L	0.01
AL.....	CH.....	MG....		0.88
AS.....	CS.....	MN....		0.02
R.....	F.....	NA....	1.7	
RE.....	FE(TQT) L	NB....		
CA.....	HC03 L	NO3...	0.07	
CD.....	H2S.....	P04...	0.004	

ISOTOPIES (002001)

S102. 14.
S04.. 0.5

CO..... K..... 0.3

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPIILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00251

GEO THERM FILE ID: 0015968

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KITSON HOT SPRING

KARA..... MCCREDIE HOT SPRINGS

WELL/SPRING NUMBER..... 22S-4E-6-AD

LOCATION

TOWNSHIP=RANGE

COORDINATES

LAT/LONG... 43-41.35 N 122-22.32 W

22S 004E 06 SE OF NE

UNITED STATES

COUNTRY.....

STATE.....

COUNTY.....

GEOLOGIC PROVINCE..

MAP REFERENCE.....

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR.....

SAMPLE NUMBER.....

POINT OF COLLECTION..

TEMPERATURE (C).....

AMBIENT TEMP (C).....

WATER ANALYSIS

DATE/ANALYST.....

P.....

SPECIFIC CONDUCTANCE.....

ALKALINITY.....

TOTAL DISSOLVED SOLIDS.....

CHARGE IMBALANCE (% DIFF)...

ANALYSIS IN MG/L

AG.....

AL.....

AS.....

R.....

RE.....

CA.....

CO.....

CL.....

CO.....

COMPILED BY.....

COMPILED BY.....

COMPILED BY.....

COMPILED BY.....

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COMPILED BY.....

ISOTOPES (Q/Q001

LI... 2.0
MG... 1.5
MN... 0.12
NA... 1370.
NB... 49.
NU3... 149.
PO4... 0.02
L 0.081

RECORD 00252

GEOTHERM FILE 10: 0015468

NAME OF SAMPLE SOURCE... KITSON SPRINGS

KARA.....

KARA.....

KARA.....

KARA.....

KARA.....

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KARA.....

KARA.....

KARA.....

KARA.....

KARA.....

COORDINATES

LAT/LONG... 43-41.35 N 122-22.50 W
UTM ZONE... 10
NORTHING... 4837324.
550371.

TOWNSHIP-RANGE

22S 004E 06 NE

COUNTRY.....

STATE.....

COUNTY.....

GEOLOGIC PROVINCE..

MAP REFERENCE.....

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR.....

POINT OF COLLECTION..

TEMPERATURE (C).....

AMBIENT TEMP (C).....

WATER ANALYSIS

DATE/ANALYST.....

P.....

SPECIFIC CONDUCTANCE.....

ALKALINITY.....

CHARGE IMBALANCE (% DIFF)...

AND ALKALINITY DETERMINED ON A COOLED SAMPLE.

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	2.0
AL.....	CR.....	MG....	1.6
AS.....	CS.....	MN....	0.15
AU.....	CU.....	NA....	1500.
H.....	F.....	SI02..	45.
HE.....	FE(TQT)..	SO4... 210.	
HR.....	GE.....	NB....	L 0.02
CA.....	HC03.....	PB....	L 0.1
CA+MG..	HG.....	ZN....	L 0.01
CD.....	H2S.....		
CL.....	K.....		
CO.....	RB....		

CO..... L 0.02 26. RB.... 0.1 ZN.... L 0.01

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 06

REFERENCE..... MARINER AND OTHERS, 1980

RECORD 00253

GEOOTHERM FILE ID: 0002232

GEOOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KITSON SPRINGS

KGRA..... NEAR MCCREDIE HOT SPRINGS

WATERING NUMBER..... 23

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LANE

GEOLOGIC PROVINCE..

MAP REFERENCE..... OAKRIDGE 1:62500

TOWNSHIP-RANGE

22S 004E 06

COORDINATES

LAT/LONG... 43-41.35 N 122-22.50 W

UTM ZONE... 10

NORTHING... 4837324.

550371.

OTHER LOCALITY INFORMATION: 7 MI. SOUTHEAST OF OAKRIDGE, ORE.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1958/03/30 FETH, J.

SAMPLE NUMBER..... LAR# 668

TEMPERATURE (C)..... 44.4

DISCHARGE..... 66. L/MIN

PERTINENT LITHOLOGY..... FLOW FROM FISSURE IN BASALT

WATER ANALYSIS

DATE/ANALYST..... 1958/09/30 SCHUCH, J. P.

PH..... 7.4

SPECIFIC CONDUCTANCE..... 10500.

TOTAL DISSOLVED SOLIDS... 6340.

CHARGE IMBALANCE (% DIFF)... 0.5

ANALYSIS IN PPM

AG.....	CO3.....	LI....	1.8
AL.....	CR.....	MG....	5.7
AS.....	CS.....	MN....	N
H.....	F.....	NA....	1450.
HE.....	FE(TQT)..	NB....	SI02..
HI.....	GA.....	NH4... 0.5	SO4... 197.
HR.....			
CA.....	HC03.....	NO3... 2.7	
CD.....	H2S.....	PO4... 0.54	
CL.....	I.....		
CO.....	K.....		

ISOLOPES 10/001

ISOLOPES 10/001

OTHER ANALYTICAL DATA... NO2=.02 PPM
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... MADISON, 1966

RECORD 00254

GEOTHERM FILE ID: 0015975

COORDINATES
 LAT/LONG... 43-42.6 N 122-17.3 W

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MCCREDIE HOT SPRING NO. 2
 KGRA..... MCCREDIE HOT SPRINGS
 WELL/SPRING NUMBER..... 215-4E-36-BC
 LOCATION

TOWNSHIP=RANGE

21S 004E 36 SW OF NW

COORDINATES
 LAT/LONG... 43-42.6 N 122-17.3 W

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE... WESTERN CASCADES
 MAP REFERENCE... OAKRIDGE 1162500
 OTHER LOCALITY INFORMATION: SPRING LOCATED ON SOUTH SIDE OF SALT CREEK.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/08/08 WOLLER, NEIL AND GUST, DON

SAMPLE NUMBER..... W579-276

POINT OF COLLECTION... WIER BOX

TEMPERATURE (C)..... 62.

AMBIENT TEMP (C)..... 18.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/02 BANERJEE, KALA C.
 PI..... 7.2 AT(C) 62.

SPECIFIC CONDUCTANCE..... 6750.

ALKALINITY..... 16. AS CAC03

TOTAL DISSOLVED SOLIDS... 4200.

CHARGE IMBALANCE (% DIFF)... 1.8

ANALYSIS IN MG/L

AG.....	CO3.....	LI.....	1.5
AL.....	CR.....	MG.....	2.4
AS.....	CS.....	MN.....	0.13
H.....	F.....	NA.....	885.
HE.....	FE(TOT)...	NO3.....	0.02
CA.....	HC03.....	PO4.....	0.06
CD.....	H2S.....		
CL.....			

ISOLOPES 10/001

CO..... K..... 22.

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00255

GEOTHERM FILE ID: 0015425

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MCCREDIE SPRINGS
 KGRA..... MCCREDIE HOT SPRINGS
 WELL/SPRING NUMBER..... 215/4E-36HC
 TOWNSHIP=RANGE
 LOCATION

COORDINATES

COUNTRY..... UNITED STATES 21S 004E 36 SW OF NW
STATE..... OREGON
COUNTY..... LANE
GEOLOGIC PROVINCE... OAKRIDGE 1:62500, ROSEBERG 1:250000
M.P. REFERENCE.....
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1976/03/10 BOWEN, R.
SAMPLE NUMBER..... WS 76-062 ORE DEPT ENV QUAL
TEMPERATURE (C)..... 71.0 L/MIN
DISCHARGE..... 76.
WATER ANALYSIS
DATE/ANALYST..... 1976/06/28 JOHNSON, ELLEN M., OREGON DEPT. ENV. QUAL.
P4..... 7.4 AT(C) 71.
SPECIFIC CONDUCTANCE..... 6770.
ALKALINITY..... 16. AS CAC03
TOTAL DISSOLVED SOLIDS... 4420.
ANALYSIS IN MG/L

ISOTOPES 10/001

AG.....	CO3.....	LI....	2.0
AL.....	CR.....	MG....	0.9
AS.....	CS.....	MN....	0.05
H.....	F.....	NA....	910.
HE.....	FE(TOT)...		2.7
HI.....	GA.....	NH4...	0.21
CA.....			
CA+MG...	HG.....	PB....	L 0.05
CD.....	H2S.....	P04...	0.11
CL.....			
CO.....	K.....		28.

REFERENCE AND IDENTIFICATION
COMPILED BY..... BOWEN, RICHARD G.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 05
REFERENCE..... *DOGAMI

RECORD 00256

GEOTHERM FILE ID: 0000783

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... MCCREDIE SPRINGS
KGWA..... MCCREDIE HOT SPRINGS
WATERING NUMBER..... 22

TOWNSHIP-RANGE

COUNTRY..... UNITED STATES 21S 004E 36 SW OF NW
STATE..... OREGON
COUNTY..... LANE
GEOLOGIC PROVINCE... OAKRIDGE 1:62500, ROSEBERG 1:250000
M.P. REFERENCE.....
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/00/00 BARNES GROUP
TEMPERATURE (C)..... 73.
WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUED
WATER ANALYSIS
DATE/ANALYST..... 1974/00/00 BARNES GROUP
P4..... 7.29
SPECIFIC CONDUCTANCE..... 6730.
ALKALINITY..... 21. AS HC03
CHARGE IMBALANCE (% DIFF).... 0.3

COORDINATES

LAT/LONG.... 43-42.35 N 122-17.20 W
UTM ZONE... +10
NORTHING... 4839233.
557474.

ISOTOPES 10/001
DEL D OF WATER..... -94.0

S.... L 0.2
SB....
S102. 79.
S04.. 240.

LI... 1.4
MG... 0.9
MN... 0.1
NA... 1000.
NB... 0.26
NH4...
PB... L 0.06
PO4... 0.01
RB... 0.11
N2... 98.

ISOTOPES 100/01

LI... 0.57
MG... 1.
MN... L 0.05
NA... 315.
S102. 63.

ANALYSIS IN MG/L
AG.... L 0.02
AL.... 0.010
AS....
AU.... L 0.1
H.... 18.
RA.... L 0.1
HF.... L 0.1
CA.... 460.
CA+MG.
CD.... L 0.01
CL.... 2200.
CO.... L 0.05
CH4... L 1.
C2H6.
C02... L 1.
OTHER ANALYTICAL DATA... 02,AR=1
REFERENCE AND IDENTIFICATION
COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... NEH-973
REFERENCE..... MARINER AND OTHERS, 1975

RECORD 00257

GEOTHERM FILE 10: 0015401

COORDINATES

LAT/LONG... 43-48.45 N 122-18.55 W
UTM ZONE... +10
NORTHING... 4850509.
555567.

TOWNSHIP-RANGE

20S 004E 26 SW OF NW

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... LANE

GEOLOGIC PROVINCE... 30

MAP REFERENCE..... SARDINE BUTTE 1:62500, ROSEBERG 1:25000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/03/10 BOWEN, RICHARD G.

SAMPLE NUMBER..... W576-064 ORE. DEPT. ENV. QUAL.

TEMPERATURE (C)..... 41.0 L/MIN

DISCHARGE..... 11.

DATE/ANALYST..... 76/06/28 JOHNSON, ELLEN M., ORE. DEPT. ENV. QUAL.

PH..... 7.2

SPECIFIC CONDUCTANCE..... 2340.

ALKALINITY..... 34.

TOTAL DISSOLVED SOLIDS... 1461.

CHARGE IMBALANCE (% DIFF)... 3.1

ANALYSIS IN MG/L

AG.... CO3... 0.57

AL.... L 0.05

AS.... 0.07

R.... 6.6

HA.... 4.1 0.05

RF.....
 AT.....
 CA.....
 CO.....
 CL.....
 CO.....
 QUALIFICATION FIELD.....
 REFERENCE AND IDENTIFICATION.....
 COMPILED BY.....
 COMPILER AFFILIATION.....
 COMPILER CROSS INDEX.....
 REFERENCE.....

RECORD 00258

GEOTHERM FILE ID: 0015974

COORDINATES
 LAT/LONG... 43-48.5 N 122-18.2 W

TOWNSHIP=RANGE
 20S 04E 26 SW OF NW

UNITED STATES
 20S 04E 26 SW OF NW

OREGON
 20S 04E 26 SW OF NW

WESTERN CASCADES
 20S 04E 26 SW OF NW

SARDINE BUTTE 1:62500
 20S 04E 26 SW OF NW

1979/08/08 WOLLER, NEIL
 20S 04E 26 SW OF NW

WS79-277
 20S 04E 26 SW OF NW

ORIFICE
 20S 04E 26 SW OF NW

40.
 20S 04E 26 SW OF NW

18.
 20S 04E 26 SW OF NW

1979/10/02 BANERJEE, KALA C.
 20S 04E 26 SW OF NW

7.6 AT(C) 40.
 20S 04E 26 SW OF NW

2288. AS CAC03
 20S 04E 26 SW OF NW

35. AS CAC03
 20S 04E 26 SW OF NW

1500.
 20S 04E 26 SW OF NW

10.7
 20S 04E 26 SW OF NW

0.43
 20S 04E 26 SW OF NW

0.53
 20S 04E 26 SW OF NW

0.04
 20S 04E 26 SW OF NW

299.
 20S 04E 26 SW OF NW

73.
 20S 04E 26 SW OF NW

160.
 20S 04E 26 SW OF NW

0.02
 20S 04E 26 SW OF NW

0.022
 20S 04E 26 SW OF NW

8.5
 20S 04E 26 SW OF NW

8.5
 20S 04E 26 SW OF NW

8.5
 20S 04E 26 SW OF NW

8.5
 20S 04E 26 SW OF NW

RECORD 00259

GEOTHERM FILE ID: 0015412

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... ALKALI FLAT GRADIENT WELL

QUALIFICATION FIELD.....
 REFERENCE AND IDENTIFICATION.....
 COMPILED BY.....
 COMPILER AFFILIATION.....
 COMPILER CROSS INDEX.....
 REFERENCE.....

WELL/SPRING NUMBER..... 17S/45E-8AA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE.....
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1975/05/08 HULL, D. A.
 POINT OF COLLECTION.. WELL HEAD
 TEMPERATURE (C)..... 24.0
 WELL DEPTH (M)..... 60.
 WATER ANALYSIS
 DATE/ANALYST..... 1975/08/21 LWS
 PH..... 8.3
 SPECIFIC CONDUCTANCE..... 2400.
 ALKALINITY..... AS CAC03
 TOTAL DISSOLVED SOLIDS..... 115.
 CHARGE IMBALANCE (% DIFF).... 0.0
 ANALYSIS IN MG/L

COORDINATES

LAT/LONG... 44-06.60 N 117-13.60 W
 UTM ZONE... 11
 NORTHING... 4883899.
 481860.

ISOTOPES 10/001

AG.....	CO3.....	LI...	0.4
AL.....	CR.....	MG...	0.5
AS.....	CS.....	MN...	0.05
H.....	F.....	NA...	482.
HE.....	FE(TOT)...	NB...	32.
HI.....	GA.....	NH4...	135.
CA.....	HC03.....	NO3...	0.92
CL.....	CL.....		0.03

QUALIFICATION FIELD..... PH MEASURED IN LAB.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... ROWEN, RICHARD
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 28
 REFERENCE..... *DOGAMI

RECORD 00260

GEOTHERM FILE ID: 0015411

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ARTESIAN WELL
 WELL/SPRING NUMBER..... 21S/46E-33DD
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... 21S 46E 33 SE OF SE
 COUNTY..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE.. 32
 MAP REFERENCE.....
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... ADRIAN 1124000, BOISE 11250000
 POINT OF COLLECTION.. 1977/03/03 BOWEN, R. AND HULL, D.
 TEMPERATURE (C)..... WELL HEAD
 46.0
 WATER ANALYSIS
 DATE/ANALYST..... 1977/04/27 BANERJEE, KALA C.
 PH..... 9.5
 SPECIFIC CONDUCTANCE..... 670.
 ALKALINITY..... 77. AS CAC03

COORDINATES

LAT/LONG... 43-41.8 N 117-05.7 W
 UTM ZONE... 11
 NORTHING... 4837972.
 492345.

TOTAL DISSOLVED SOLIDS... 443.
CHARGE IMBALANCE (% DIFF)... 2.3
ANALYSIS IN MG/L

AG....	0.1	CO3....	0.04
AL....	0.01	CR....	0.1
AS....	0.31	CS....	L 0.05
FE....		FE(TOT)... L	2.7
HI....		GA....	0.1
CA....	1.8	HCO3....	0.8
CD....		NO3....	0.02
CL....	12.	P04....	0.02

SI02. 44.
S04.. 164.

ISOIOPES (0/001

CO.... K..... 0.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
C. IMPIER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 27
REFERENCE..... *DOGAMI

RECORD 00261

GEOTHERM FILE 101 0000723

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... REULAH HOT SPRINGS

WATER NUMBER..... 74

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... MALHEUR

GEOLOGIC PROVINCE... 32

MAP REFERENCE..... BEULAH 1:62500, BURNS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 60.0

DISCHARGE..... 50. L/MIN

WATER TREATMENT..... PRESSURE - FILTERED THROUGH .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

DEPOSITS OR ALTERATION..... SINTER, TRAVERTINE

PERMIT/LITHOLOGY..... MIOCENE AND PLOCENE VITRIC TUFF

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.56

SPECIFIC CONDUCTANCE..... 1090.

CHARGE IMBALANCE (% DIFF)... 3.8

ANALYSIS IN MG/L

AG....	L 0.02	CO3....	1.	LI....	0.24
AL....	0.006	CR....		MG....	0.2
AS....	0.21	CS....	L 0.1	MN....	0.03
AU....	L 0.1	CU....	0.01	NA....	200.
H....	4.7	F....	4.7	NB....	170.
HA....	L 0.1	FE(TOT)... L	0.02	NH4....	290.
HE....	L 0.1	GA....		S04..	0.17
HI....		HCO3....	161.	SR....	
AP....	0.1	HG....	0.0001		
CA....	24.	H2S....	0.03		
CA+MG.		I.....			
CD....	L 0.01				
CL....	55.				

ISOIOPES (0/001

DEL D OF WATER..... -131.7
DEL O(18) OF WATER... -13.22

COORDINATES

LAT/LONG... 43-56.65 N 118-08.15 W

UTM ZONE... 11

NORTHING... 4866082.

408847.

CO..... L 0.05 K..... 6.0 RB... L 0.02
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 04
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00262

GEOTHERM FILE ID: 0001736

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CANTER'S HOT SPRING (JORDAN VALLEY)
 LOCATION
 COUNTY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 33
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 50. L/MIN
 DISCHARGE.....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

COORDINATES

LAT/LONG... 42-54.0 N 117-04.2 W

RECORD 00263

GEOTHERM FILE ID: 0001728

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... DEER BUTTE H.S./MITCHELL BUTTE SYSTEM
 LOCATION
 COUNTY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... L/MIN
 DISCHARGE.....
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

COORDINATES

LAT/LONG... 43-44.7 N 117-10.2 W

RECORD 00264

GEOTHERM FILE ID: 0015405

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... JONESBORO WARM SPRING
 LOCATION
 COUNTY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... WESTFALL BUTTE 1462500, BOISE 11250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... DELLECHAIE, F.
 SAMPLE NUMBER..... AMAX EXPLORATION 89873
 TEMPERATURE (C)..... 44.5
 WATER ANALYSIS

COORDINATES

LAT/LONG... 43-47.5 N 117-57.5 W
 UTM ZONE... 11
 NORTHING... 4848964.
 422896.

PH..... 9.6
 CHARGE IMBALANCE (% DIFF)... 10.7

ISOLOPES 10/001

ANALYSIS IN MG/L
 AG..... CO3..... 48.
 AL..... LI.... L 0.1
 CR..... MG.... L 0.1
 R..... F..... 72.
 RE..... FE(TQT)..... 70.
 CA..... HC03..... 50.
 CL..... 11.
 CO..... K..... 0.7

REFERENCE AND IDENTIFICATION
 COMPILED BY..... ROWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 24
 REFERENCE..... *DOGAMI

RECORD 00265

GEUTHERM FILE 10: 0015407

GEUTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... JUNTURA WARM SPRING #1

WELL/SPRING NUMBER..... 21S/38E-9C
 LOCATION
 COUNTRY..... UNITED STATES 21S 038E 09 SW
 STATE..... OREGON
 COUNTY..... MALHEUR

COORDINATES

LAT/LONG... 43-45.5 N 118-04.0 W
 UTM ZONE... 11
 NORTHING... 4845369.
 414132.

MVP REFERENCE..... BEULAH 1:62500, BURNS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... DELLECHAIE, F.

SAMPLE NUMBER..... AMAX EXPLORATION 90214

TEMPERATURE (C)..... 25.0

WATER ANALYSIS

PH..... 9.4
 CHARGE IMBALANCE (% DIFF)... 27.8

ANALYSIS IN PPM
 AG..... LI.... L 0.1
 AL..... MG.... 21.
 R..... F..... 1.0
 RE..... FE(TQT)..... 55.
 CA..... HC03..... 204.
 CL..... 120.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... ROWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 25
 REFERENCE..... *DOGAMI

RECORD 00266

GEUTHERM FILE 10: 0015409

GEUTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... JUNTURA WARM SPRING #2

WELL/SPRING NUMBER..... 21S/38E-17B
 LOCATION
 COUNTRY..... UNITED STATES 21S 038E 17 NW
 STATE..... OREGON

COORDINATES

LAT/LONG... 43-45.5 N 118-05.5 W
 UTM ZONE... 11
 NORTHING... 4845395.
 412119.

COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32

MAP REFERENCE..... BEULAH 1:62500, BURNS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... DELLECIE, F.

SAMPLE NUMBER..... AMAX EXPLORATION 90215

TEMPERATURE (C)..... 35.0

WATER ANALYSIS

PH..... 9.7

CHARGE IMBALANCE (% DIFF).... 68.8

ANALYSIS IN PPM

AG..... CO3..... 28. LI... L 0.1

AL..... CR..... MG... L 0.1

AR..... F..... 1.3 NA... 78.

AS..... FE(TOT)..... NH... S102. 79.

AT..... CA..... 76. S04... 43.

BA..... CL.....

BB..... K..... 0.8

BC.....

BD.....

BE.....

BF.....

BG.....

BH.....

BI.....

BJ.....

BK.....

BL.....

BM.....

BN.....

BO.....

BP.....

BQ.....

BR.....

BS.....

BT.....

BU.....

BV.....

BW.....

BX.....

BY.....

BZ.....

CA.....

CB.....

CC.....

CD.....

CE.....

CF.....

CG.....

CH.....

CI.....

CJ.....

CK.....

CL.....

CM.....

CN.....

CO.....

CP.....

CQ.....

CR.....

CS.....

CT.....

CU.....

ISOLOPES (10/2001)

RECORD 00267

GEOTHERM FILE ID: 0000725

COORDINATES

LAT/LONG... 43-28.15 N 118-12.08 W

UTM ZONE... 11

NORTHING... 4813402.

402826.

TOWNSHIP-RANGE

24S 037E 20

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LUCE HOT SPRINGS

WATERING NUMBER..... 84

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... MALHEUR

GEOLOGIC PROVINCE...

MAP REFERENCE..... MCWEN BUTTE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 63.0

DISCHARGE..... 200. L/MIN

WATER TREATMENT..... PRESSURE - FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

DEPOSITS OR ALTERATION... TRACES OF CaCO3 DEPOSITED. TRACES OF GAS PRESENT.

PERTINENT LITHOLOGY..... ANDESITE IS ROCK TYPE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.43

SPECIFIC CONDUCTANCE..... 1330.

CHARGE IMBALANCE (% DIFF).... 2.9

ANALYSIS IN MG/L

AG..... L 0.02 CO3..... L 1.

AL..... CR.....

AS..... 0.04 CS..... L 0.1

AU..... L 0.1 CU..... 0.01

AV..... 6.6 F..... 4.8

BA..... L 0.1 NA... 240. S102. 110.

BE..... L 0.1 FE(TOT) L 0.02 NH... 290.

BT..... GA..... NH4... 0.42

BR..... 0.5

CA..... 34. HCO3... 160.

ISOLOPES (10/2001)

DEL D OF WATER..... -134.0

DEL D(18) OF WATER... -15.15

CA+MG. HG.... 0.0001 PB... L 0.06
 CD.... L 0.01 H2S.... 0.21
 CL.... 140. I.... 0.03
 CO.... L 0.05 K.... 9.7 RB... 0.04
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00268
 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MALHEUR BUTTE SPRINGS(MAY NOT EXIST)
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 33
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 75.
 DISCHARGE..... L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

COORDINATES
 LAT/LONG... 42-02.7 N 117-01.2 W

GEOTHERM FILE ID: 0001740
 TOWNSHIP=RANGE
 17S 047E 31

RECORD 00269
 GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MITCHELL BUTTE HOT SPRINGS
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 MAP REFERENCE..... MITCHELL BUTTE 1:24000, BOISE 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 62.0
 DISCHARGE..... L/MIN
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUED
 DEPOSITS OR ALTERATION... TRAVERTINE
 PERTINENT LITHOLOGY..... PLIOCENE CONGLOMERATE, SANDSTONE, SILTSTONE
 WATER ANALYSIS
 DATE/ANALYST..... 1972/00/00 BARNES GROUP
 P.I..... 8.69
 SPECIFIC CONDUCTANCE..... 559.
 CHARGE IMBALANCE (% DIFF)... 4.3
 ANALYSIS IN MG/L
 AG.... L 0.02 CO3.... 3.
 AL.... 0.015 CR....
 AS.... L 0.01 CS.... L 0.1
 AU.... L 0.1 CU.... L 0.01
 H.... 0.49 F..... 10.
 HA.... L 0.1

COORDINATES
 LAT/LONG... 43-45.78 N 117-09.34 W
 UTM ZONE... +11
 NORTHING... 4845346.
 487470.

GEOTHERM FILE ID: 0000784
 TOWNSHIP=RANGE
 21S 045E 12 NE OF NE

ISOTOPES (02/00/01)
 DEL D OF WATER..... -137.3
 DEL O(18) OF WATER... -16.68

S.... L 0.2
 SH... L 0.02
 NA... 110. SI02. 94.

RE.....	L 0.1	FE(TQT) L 0.02	NB...	S04...	130.
RI.....		GA.....	NH4..	SR...	L 0.05
RR.....	0.2			0.386	
CA.....	4.6	HC03.....			
CA+MG.		HG.....	PB...	L 0.06	
CD.....	L 0.01	H2S.....	PU4..	0.12	
CL.....	28.	I.....			
CO.....	L 0.05	K.....	RB...	L 0.02	
REFERENCE AND IDENTIFICATION					
COMPILED BY.....	SANFORD, LINDA				
COMPILER AFFILIATION...	U.S. GEOLOGICAL SURVEY				
COMPILER CROSS INDEX...	08				
REFERENCE.....	MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975				

RECORD 00270

GEUTHERM FILE ID: 0000687

COORDINATES
LAT/LONG... 44-01.45 N 117-27.60 W
UTM ZONE... 4811
NORTHING... 463134. 4874444.

MAY REFERENCE..... JAMIESON 1:62500, BAKER 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP

TEMPERATURE (C).....	87.0
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DISCHARGE..... 90. L/MIN

WATER TREATMENT..... PRESSURE - FILTERED

DEPOSITS OR ALTERATION... SINTER, TRAVERTINE

PERTINENT LITHOLOGY..... MIOCENE? VOLCANIC FLOWS

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.32

SPECIFIC CONDUCTANCE.... 1010.

Country	Year	Charge Imbalance (% Diff)
United States	1960	4.2
United States	1961	4.2
United States	1962	4.2
United States	1963	4.2
United States	1964	4.2
United States	1965	4.2
United States	1966	4.2
United States	1967	4.2
United States	1968	4.2
United States	1969	4.2
United States	1970	4.2
United States	1971	4.2
United States	1972	4.2
United States	1973	4.2
United States	1974	4.2
United States	1975	4.2
United States	1976	4.2
United States	1977	4.2
United States	1978	4.2
United States	1979	4.2
United States	1980	4.2
United States	1981	4.2
United States	1982	4.2
United States	1983	4.2
United States	1984	4.2
United States	1985	4.2
United States	1986	4.2
United States	1987	4.2
United States	1988	4.2
United States	1989	4.2
United States	1990	4.2
United States	1991	4.2
United States	1992	4.2
United States	1993	4.2
United States	1994	4.2
United States	1995	4.2
United States	1996	4.2
United States	1997	4.2
United States	1998	4.2
United States	1999	4.2
United States	2000	4.2
United States	2001	4.2
United States	2002	4.2
United States	2003	4.2
United States	2004	4.2
United States	2005	4.2
United States	2006	4.2
United States	2007	4.2
United States	2008	4.2
United States	2009	4.2
United States	2010	4.2
United States	2011	4.2
United States	2012	4.2
United States	2013	4.2
United States	2014	4.2
United States	2015	4.2
United States	2016	4.2
United States	2017	4.2
United States	2018	4.2
United States	2019	4.2
United States	2020	4.2
United States	2021	4.2
United States	2022	4.2
United States	2023	4.2
United States	2024	4.2
United States	2025	4.2
United States	2026	4.2
United States	2027	4.2
United States	2028	4.2
United States	2029	4.2
United States	2030	4.2
United States	2031	4.2
United States	2032	4.2
United States	2033	4.2
United States	2034	4.2
United States	2035	4.2
United States	2036	4.2
United States	2037	4.2
United States	2038	4.2
United States	2039	4.2
United States	2040	4.2
United States	2041	4.2
United States	2042	4.2
United States	2043	4.2
United States	2044	4.2
United States	2045	4.2
United States	2046	4.2
United States	2047	4.2
United States	2048	4.2
United States	2049	4.2
United States	2050	4.2
United States	2051	4.2
United States	2052	4.2
United States	2053	4.2
United States	2054	4.2
United States	2055	4.2
United States	2056	4.2
United States	2057	4.2
United States	2058	4.2
United States	2059	4.2
United States	2060	4.2
United States	2061	4.2
United States	2062	4.2
United States	2063	4.2
United States	2064	4.2
United States	2065	4.2
United States	2066	4.2
United States	2067	4.2
United States	2068	4.2
United States	2069	4.2
United States	2070	4.2
United States	2071	4.2
United States	2072	4.2
United States	2073	4.2
United States	2074	4.2
United States	2075	4.2
United States	2076	4.2
United States	2077	4.2
United States	2078	4.2

ANALYSIS IN MG/L

AG... L 0.02 CO3... L 1. LI...

AL... 0.008 CR... MG...

	AS....	0.02	CS.....	0.1	MN..
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ΔU...	L	0.1	CU...	0.02

H.....	4.1	F.....	9.4	NA...
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RA... L 0.1

HE... L 0.1
FE(TOT). L 0.02
NB...

HI... GA... NH₄...

HR...	0.5	1	2
HR...	0.5	1	2

CA... 8.8 HC03... 198.

	CA+MG.	HG.....	PB... L
0.0001			

CD...	L 0.01	H2S...	PU4...
0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02
0.03	0.03	0.03	0.03
0.04	0.04	0.04	0.04
0.05	0.05	0.05	0.05
0.06	0.06	0.06	0.06
0.07	0.07	0.07	0.07
0.08	0.08	0.08	0.08
0.09	0.09	0.09	0.09
0.10	0.10	0.10	0.10
0.11	0.11	0.11	0.11
0.12	0.12	0.12	0.12
0.13	0.13	0.13	0.13
0.14	0.14	0.14	0.14
0.15	0.15	0.15	0.15
0.16	0.16	0.16	0.16
0.17	0.17	0.17	0.17
0.18	0.18	0.18	0.18
0.19	0.19	0.19	0.19
0.20	0.20	0.20	0.20
0.21	0.21	0.21	0.21
0.22	0.22	0.22	0.22
0.23	0.23	0.23	0.23
0.24	0.24	0.24	0.24
0.25	0.25	0.25	0.25
0.26	0.26	0.26	0.26
0.27	0.27	0.27	0.27
0.28	0.28	0.28	0.28
0.29	0.29	0.29	0.29
0.30	0.30	0.30	0.30
0.31	0.31	0.31	0.31
0.32	0.32	0.32	0.32
0.33	0.33	0.33	0.33
0.34	0.34	0.34	0.34
0.35	0.35	0.35	0.35
0.36	0.36	0.36	0.36
0.37	0.37	0.37	0.37
0.38	0.38	0.38	0.38
0.39	0.39	0.39	0.39
0.40	0.40	0.40	0.40
0.41	0.41	0.41	0.41
0.42	0.42	0.42	0.42
0.43	0.43	0.43	0.43
0.44	0.44	0.44	0.44
0.45	0.45	0.45	0.45
0.46	0.46	0.46	0.46
0.47	0.47	0.47	0.47
0.48	0.48	0.48	0.48
0.49	0.49	0.49	0.49
0.50	0.50	0.50	0.50
0.51	0.51	0.51	0.51
0.52	0.52	0.52	0.52
0.53	0.53	0.53	0.53
0.54	0.54	0.54	0.54
0.55	0.55	0.55	0.55
0.56	0.56	0.56	0.56
0.57	0.57	0.57	0.57
0.58	0.58	0.58	0.58
0.59	0.59	0.59	0.59
0.60	0.60	0.60	0.60
0.61	0.61	0.61	0.61
0.62	0.62	0.62	0.62
0.63	0.63	0.63	0.63
0.64	0.64	0.64	0.64
0.65	0.65	0.65	0.65
0.66	0.66	0.66	0.66
0.67	0.67	0.67	0.67
0.68	0.68	0.68	0.68
0.69	0.69	0.69	0.69
0.70	0.70	0.70	0.70
0.71	0.71	0.71	0.71
0.72	0.72	0.72	0.72
0.73	0.73	0.73	0.73
0.74	0.74	0.74	0.74
0.75	0.75	0.75	0.75
0.76	0.76	0.76	0.76
0.77	0.77	0.77	0.77
0.78	0.78	0.78	0.78
0.79	0.79	0.79	0.79
0.80	0.80	0.80	0.80
0.81	0.81	0.81	0.81
0.82	0.82	0.82	0.82
0.83	0.83	0.83	0.83
0.84	0.84	0.84	0.84
0.85	0.85	0.85	0.85
0.86	0.86	0.86	0.86

CL...	120.	1...;...	0.06
CL...	120.	1...;...	0.06

...CO...L 0.05 K..... 16. RB...

GAS ANALYSIS

ANALYSIS IN VOLUME 8

CH₄... 6.

C2H6. N2...

OTHER ANALYTICAL DATA... 02,AR=12
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... NEH-976
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00271

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... NELSON WELL
 LOCATION

GEOTHERM FILE ID: 0001733

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR

COORDINATES
 LAT/LONG... 43-57.6 N 117-37.8 W

GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 21.
 WELL DEPTH (M)..... 59.
 DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00272

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... NORTH HARPER BLM WELL
 WELL/SPRING NUMBER..... 19S/45E-9DB
 LOCATION

GEOTHERM FILE ID: 0015413

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR

COORDINATES
 LAT/LONG... 43-55.76 N 117-12.72 W

GEOLOGIC PROVINCE... 32
 MAP REFERENCE... JAMIFSON 1:62500, BAKER 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1976/06/11 BOWEN, R. G.
 POINT OF COLLECTION... WELL HEAD
 TEMPERATURE (C)..... 36.0
 WELL DEPTH (M)..... 212.

WATER ANALYSIS
 DATE/ANALYST..... 1976/07/07 JOHNSON, ELLEN M.

PH..... 8.0
 SPECIFIC CONDUCTANCE..... 714.
 ALKALINITY..... 157.
 TOTAL DISSOLVED SOLIDS... 476.
 CHARGE IMBALANCE (% DIFF)... 4.3

ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... L 0.05 CR.....
 AS..... 0.05 CS.....
 H..... 0.26 F..... 1.6
 RE..... FE(TOT) L 0.05
 HI..... GA.....
 CA..... 3.0 HCO3.....
 CD..... H2S.....

SI02. 40.
 S04.. 121.

ISOTOPES 10/00/001

CL..... 4.3 K..... 2.2
QUALIFICATION FIELD..... PH MEASURED IN LAB.
REFERENCE AND IDENTIFICATION
COMPILED BY..... ROWEN, RICHARD G.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 29
REFERENCE..... *DOGAMI

RECORD 00273
GEOHEM SAMPLE FILE
NAME OF SAMPLE SOURCE... PAGE WELL
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 40.
WELL DEPTH (M)..... 190.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... ROWEN AND OTHERS, 1978
COORDINATES
LAT/LONG... 43-52.5 N 117-13.8 W
GEOHEM FILE ID: 0001731

RECORD 00274
GEOHEM SAMPLE FILE
NAME OF SAMPLE SOURCE... ROUND MTN. BLM WELL
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 40.
WELL DEPTH (M)..... 179.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... ROWEN AND OTHERS, 1978
COORDINATES
LAT/LONG... 42-49.2 N 117-35.4 W
GEOHEM FILE ID: 0001730

RECORD 00275
GEOHEM SAMPLE FILE
NAME OF SAMPLE SOURCE... S. BLACK WILLOW SPRING/SNIVELY
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 25.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COORDINATES
LAT/LONG... 43-42.0 N 117-10.8 W
GEOHEM FILE ID: 0001727

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

RECORD 00276

GEOTHERM FILE ID: 0001739

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... SAND HOLLOW OIL TEST
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 50.
WELL DEPTH (M)..... 384.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... STEWARD AND NEWTON, 1965

COORDINATES
LAT/LONG... 43-56.6 N 117-22.5 W

RECORD 00277

GEOTHERM FILE ID: 0001735

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... SCOTT'S SPRING
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
OTHER LOCALITY INFORMATION: SIX MILES SW ROME
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 20.
DISCHARGE..... 18700. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

COORDINATES
LAT/LONG... 42-46.8 N 117-43.2 W

RECORD 00278

GEOTHERM FILE ID: 0001734

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... TUDORS SPRING
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 31
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 20.
DISCHARGE..... 22700. L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

COORDINATES
LAT/LONG... 42-37.2 N 117-59.8 W

RECORD 00279

GEOTHERM FILE ID: 0015979

GEOTHERM_SAMPLE_FILE

NAME OF SAMPLE SOURCE... UNNAMED (J. SEIDER PROPERTY)

WELL/SPRING NUMBR..... 19S-43E-30-BAC

LOCATION

TOWNSHIP=RANGE

SW OF NE OF NW 43-53.50 N 117-29.00 W

COORDINATES

LAT/LONG...

UNITED STATES

OREGON

MALHEUR

GEOLOGIC PROVINCE.. SNAKE RIVER BASIN

MAP REFERENCE..... VINES HILL 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/11/24 HART, D.

SAMPLE NUMBER..... W579-348

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 92.

AQWIENT TEMP (C)..... 18.

DISCHARGE..... 379. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/01/10 BANERJEE, KALA C.

PH..... 8.6 AT(C) 82.

SPECIFIC CONDUCTANCE..... 720.

ALKALINITY..... 103. AS CAC03

TOTAL DISSOLVED SOLIDS... 510.

CHARGE IMBALANCE (% DIFF)... 5.6

ANALYSIS IN MG/L

AG..... CO3..... 0.1

AL..... CR..... 0.04

AS..... CS..... L 0.02

HA..... FE..... 7.0

HE..... FE(TQT)..... L 0.05

CA..... HC03..... NB.....

CD..... H2S..... N03... L 0.02

CL..... K..... P04... L 0.008

CO..... 3.1

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00280

GEOTHERM FILE ID: 0000786

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING AT THREE FORKS

WELL/SPRING NUMBR..... A5C

TOWNSHIP=RANGE

35S 045E 03

UNITED STATES

OREGON

MALHEUR

GEOLOGIC PROVINCE.. 33

MAP REFERENCE..... JORDAN VALLEY 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1973/00/00 BARNES GROUP

TEMPERATURE (C)..... 34.0

DISCHARGE..... 4000. L/MIN

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED.

PERTINENT LITHOLOGY..... ROCK TYPE: BASALT

WATER ANALYSIS

COORDINATES

LAT/LONG... 42-32.0 N 117-10.9 W

UTM ZONE... 11

NORTHING... 4708796.

485081.

DATE/ANALYST..... 1973/00/00 BARNES GROUP

P..... 8.11

SPECIFIC CONDUCTANCE..... 338.

CHARGE IMBALANCE (% DIFF).... 1.8

ANALYSIS IN MG/L

AG.... L 0.02

AL.....

AS.....

AU.... L 0.1

R..... 0.11

RA.... L 0.1

RE.... L 0.1

HI.....

CA.... 11.

CA+MG.

CD.... L 0.01

CL.... 18.

CO.... L 0.05

K..... 1.2

RB.... L 0.02

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 18

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

ISOTOPIES 10/001
DEL D OF WATER..... -127.4
DEL O(18) OF WATER.... -16.09

S....

SB.... L 0.2

NA.... 61.

SI02. 40.

NB.... 34.

SR.... 0.06

PB.... L 0.06

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

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RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RB.... L 0.02

RECORD 00281

GEOTHERM FILE 10: 0002239

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING AT THREE FORKS

LOCATION

WATER NUMBER..... RSC

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... MALHEUR

GEOLOGIC PROVINCE...

MAP REFERENCE..... JORDAN VALLEY 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1935/07/20 WARING, G. A.

TEMPERATURE (C)..... 35.0

DISCHARGE..... 1136. L/MIN

PERTINENT LITHOLOGY..... FROM RHYOLITE BENEATH BASALT, PROBABLY TERTIARY

OTHER SAMPLE INFORMATION.. ABOUT 15 SPRINGS FOR 1/2 MILE. TOTAL FLOW=3785 LPM. TEMPERATURE RANGE 31-35 C

WATER ANALYSIS

DATE/ANALYST..... 1935/00/00 USGS

TOTAL DISSOLVED SOLIDS... 230.

ANALYSIS IN PPM

AG....

AL....

R.....

RE....

CA.... 12.

CL.... 19.

CO3.... 11.

CR....

F..... 4.9

FE(TOT) 0.02

MG.... 1.6

NA.... 62.

NB.... 2.9

NO3....

SI02. 44.

S04... 31.

COORDINATES

LAT/LONG... 42-32.0 N 117-10.9 W

UTM ZONE... 11

NORTHING... 4708796.

EASTING... 485081.

ISOTOPIES 10/001

RECORD 00282

GEOTHERM FILE ID: 0000733

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR MCDERMITT

WARRING NUMBER... A6

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... MALHEUR

GEOLOGIC PROVINCE... 31

MAP REFERENCE... JORDAN VALLEY 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/00/00 BARNES GROUP

TEMPERATURE (C)... 52.0

DISCHARGE... 750. L/MIN

WATER TREATMENT... PRESSURE-FILTERED THROUGH A .45 MICROMETRE, PORTION ACIDIFIED, DILUTED.

PERTINENT LITHOLOGY... ROCK TYPE: BASALT

WATER ANALYSIS

DATE/ANALYST... 1972/00/00 BARNES GROUP

PH... 8.79

SPECIFIC CONDUCTANCE... 598.

CHARGE IMBALANCE (% DIFF)... 7.1

ANALYSIS IN MG/L

AG... L 0.02

AL... 0.013

AS... 0.05

AU... L 0.1

BA... L 0.1

BR... L 0.1

CA... 0.4

CD... L 0.01

CL... 14.

CO... L 0.05

CR... 0.6

CU... L 0.01

F... 6.6

FE (TQT)... L 0.02

GA... 0.008

HCO₃... 237.

HCL... 0.0001

H₂SO₄... 0.06

K... 1.0

L... L 0.02

M... 0.06

Mg... L 0.06

Mn... 0.06

Na... 130.

NH₄... 0.103NO₃... 52.

P... 0.05

S... 0.06

SB... L 0.2

SI... 72.

SO... 52.

SR... L 0.05

T... 0.06

Zn... 0.06

Zn... 0.06

Zn... 0.06

Zn... 0.06

COORDINATES

LAT/LONG... 42-04.7 N 117-45.6 W

UTM ZONE... 11

NORTHING... 4658539.

437134.

ISOLOPES (10/00)

DEL D OF WATER... -134.6

DEL O (1B) OF WATER... -16.95

RECORD 00283

GEOTHERM FILE ID: 0002238

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR MCDERMITT

WARRING NUMBER... A6

LOCATION

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... MALHEUR

GEOLOGIC PROVINCE... 31

MAP REFERENCE... JORDAN VALLEY 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/00/00 BARNES GROUP

TEMPERATURE (C)... 52.0

DISCHARGE... 750. L/MIN

WATER TREATMENT... PRESSURE-FILTERED THROUGH A .45 MICROMETRE, PORTION ACIDIFIED, DILUTED.

PERTINENT LITHOLOGY... ROCK TYPE: BASALT

COORDINATES

LAT/LONG... 42-04.7 N 117-45.6 W

UTM ZONE... 11

NORTHING... 4658539.

437134.

OTHER LOCALITY INFORMATION: SEVERAL MILES NORTH OF MCDERMITT AND 1 MILE WEST OF HIGHWAY

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1957/05/17 WHITE, DON
 SAMPLE NUMBER..... LAR# 356
 TEMPERATURE (C)..... 53.5
 DISCHARGE..... 1514. L/MIN
 PERTINENT LITHOLOGY..... FROM ALLUVIUM, PROVABLY ON TERTIARY LAKE

WATER ANALYSIS

DATE/ANALYST..... 1958/03/24 WHITEHEAD AND SCHUCH
 PH..... 9.2
 SPECIFIC CONDUCTANCE..... 604.
 TOTAL DISSOLVED SOLIDS..... 426.
 CHARGE IMBALANCE (% DIFF).... 1.5
 ANALYSIS IN PPM

AG.....	CO3.....	43.	LI....	N
AL.....	CR.....		MG....	N
H.....	F.....	7.0	NA....	135.
HE.....	FE(TOT).....		NB....	90.
CA.....	HCO3.....	176.	NO3..	46.
CL.....	CL.....	15.		

CO..... K..... 1.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION.... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 19
 REFERENCE..... MARINER AND OTHERS, 1980

ISOTOPES 10/2001

RECORD 00284

GEOTHERM FILE ID: 0000721

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED HOT SPRINGS NEAR LITTLE VALLEY

WORKING NUMBER..... 76

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... MALHEUR

GEOLOGIC PROVINCE..

M.P. REFERENCE..... HARPER 1:62500, BOISE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1973/00/00 BARNES GROUP

TEMPERATURE (C)..... 70.0

DISCHARGE..... 550. L/MIN

WATER TREATMENT..... PRESSURE - FILTERED THROUGH A .45 MICROMETHE MEMBRANE, PORTION ACIDIFIED, DILUTED

DEPOSITS OR ALTERATION.... TRAVERTINE, SINTER

PERTINENT LITHOLOGY..... BASALT AND ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP

PH..... 8.71

SPECIFIC CONDUCTANCE..... 740.

CHARGE IMBALANCE (% DIFF).... 5.2

ANALYSIS IN MG/L

AG.....	CO3.....	1.	LI....	0.11	S....
AL.....	CR.....		MG....	L 0.05	SB....
AS.....	CS.....	L 0.1	MN....	L 0.02	SC....
AU.....	CU.....	L 0.01	NA....	160.	SI02.
BA.....	F.....	6.8			
BR.....					

COORDINATES

LAT/LONG... 43-53.48 N 117-30.00 W
 UTM ZONE... 11
 NORTHING... 4859709.
 459839.

ISOTOPES 10/2001

DEL D OF WATER..... -139.7
 DEL O(18) OF WATER... -16.52
 DEL O(18) OF S04..... -8.63

HE.... L 0.1 FE(TQT). L 0.02 NB... 110.
 SR... L 0.05

HI.... 3.2 GA.... NH4...
 CA... 127.
 CA+MG. HG... PB... L 0.06

CD... L 0.01
 CL... 74.

CO... L 0.05 K... 3.2 RB... 0.02

REFERENCE AND IDENTIFICATION
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00285

GEOTHERM FILE ID: 0001738

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED SPRING
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP=RANGE
 STATE..... OREGON 27S 043E 18
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 50.
 DISCHARGE..... 19. L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WARING, 1965

COORDINATES
 LAT/LONG... 43-18.0 N 117-22.5 W

RECORD 00286

GEOTHERM FILE ID: 0001737

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED SPRING
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP=RANGE
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 OTHER LOCALITY INFORMATION: FOUR MILES NE SADDLE BUTTE
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 50.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... RUSSELL, 1905

COORDINATES
 LAT/LONG... 43-06.9 N 117-52.8 W

RECORD 00287

GEOTHERM FILE ID: 0015414

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... UNNAMED WARM SPRING NEAR BULLY CREEK
 WELL/SPRING NUMBER..... 18S/43E-4DA
 LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP=RANGE
 STATE..... OREGON 18S 043E 04 NE OF SE
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... JAMIFSON 1162500, BOISE 11250000

COORDINATES
 LAT/LONG... 44-01.95 N 117-26.95 W
 UTM ZONE... 11
 NORTHING... 4875364.
 464007.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/06/24 BOWEN, R.

TEMPERATURE (C)..... 37.0

DISCHARGE..... 76. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1977/11/29 BANERJEE, KALA C.

P4..... 7.8 AT(C) 35.

SPECIFIC CONDUCTANCE..... 115.

ALKALINITY..... 37. AS CAC03

TOTAL DISSOLVED SOLIDS..... 181.

CHARGE IMBALANCE (% DIFF)..... 118.5

ANALYSIS IN MG/L

AG.....	CO3.....	LI.....	0.04
AL.....	CR.....	MG.....	15.
AS.....	CS.....	MN.....	0.05
FE.....	F.....	NA.....	1.4
HF.....	FE(TOT).....	NB.....	0.7
HI.....	GA.....	NH4.....	0.4
CA.....	HC03.....	N03.....	0.28
CL.....			0.06
CO.....	K.....		0.4

OTHER ANALYTICAL DATA..... CO2 PRESENT

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.

COMPIILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPIILER CROSS INDEX... 30

REFERENCE..... *DUGAMI

ISOTOPES (0/00L)

SI02.	99.
S04..	1.0

RECORD 00288

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... VALE HOT SPRINGS

KGRA..... VALE HOT SPRINGS

WIRING NUMBER..... 77

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... MALHEUR

GEOLOGIC PROVINCE..

MAP REFERENCE..... VALE EAST 1124000, BUISE 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/00/00 BARNES GROUP

TEMPERATURE (C)..... 73.0

WATER ANALYSIS

DATE/ANALYST..... 1974/00/00 BARNES GROUP

P4..... 7.47

SPECIFIC CONDUCTANCE..... 1530.

ALKALINITY..... 143. AS HC03

CHARGE IMBALANCE (% DIFF)..... 0.7

ANALYSIS IN MG/L

AG.....	CO3.....	LI.....	0.28
AL.....	CR.....	MG.....	0.8
AS.....	CS.....	MN.....	0.04
AU.....	CU.....	NA.....	310.
R.....	F.....		6.1

ISOTOPES (0/00L)

DEL O OF WATER.....	-135.0
DEL O(18) OF WATER...	-15.18
DEL O(18) OF S04.....	-6.56

GEOTHERM FILE ID: 0000685

COORDINATES

LAT/LONG... 43-58.96 N 117-13.98 W

UTM ZONE... 411

NORTHING... 4869758.

481313.

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

HA..... L 0.1
 BE..... L 0.1
 HI.....
 CA..... 19.
 CA+MG.
 CD..... L 0.01
 CL..... 360.
 CO..... L 0.05
 CO..... K..... 16.
 COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00289

GEOTHERM FILE ID: 0003002

NAME OF SAMPLE SOURCE... VALE HOT SPRINGS
 WELP NUMBER..... 77
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE...
 MAP REFERENCE..... VALE EAST 1424000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/08/07
 TEMPERATURE (C)..... 90.
 WATER ANALYSIS
 ANALYSIS IN MG/L
 AL.....
 AS.....
 HE.....
 CL..... 350.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... NEHRING AND OTHERS, 1979

COORDINATES
 LAT/LONG... 43-58.96 N 117-13.98 W
 UTM ZONE... 11
 NORTHING... 4869762.
 479977.
 ISOLOPES 10/001
 DEL 0(18) OF WATER... -15.00
 DEL 0(18) OF SO4..... -3.91

S8...
 SC...
 SO4... 112.

RECORD 00290

GEOTHERM FILE ID: 0001729

NAME OF SAMPLE SOURCE... VALE WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE... 32
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 40.
 WELL DEPTH (M)..... 212.
 DISCHARGE..... L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... BOWEN AND OTHERS, 1978

COORDINATES
 LAT/LONG... 43-55.2 N 117-13.2 W

TOWNSHIP=RANGE
 19S 04SE 09

RECORD 00291

GEOTHERM FILE ID: 0001726

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... VINES HILL BLM WELL
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 32
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 40.
WELL DEPTH (M)..... 219.
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... BOWEN AND OTHERS, 1978

COORDINATES
LAT/LONG... 43-54.3 N 117-25.8 W

RECORD 00292

GEOTHERM FILE ID: 0001732

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... WHITEHOUSE RANCH WELL
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE... 31
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 32.
WELL DEPTH (M)..... 396.
DISCHARGE..... L/MIN
REFERENCE AND IDENTIFICATION
COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... BOWEN AND OTHERS, 1978

COORDINATES
LAT/LONG... 42-18.0 N 118-12.6 W

RECORD 00293

GEOTHERM FILE ID: 0015972

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS
KARA..... BREITENBUSH HOT SPRINGS
WELL/SPRING NUMBER..... 9S-7E-20-A
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... MAHON
GEOLOGIC PROVINCE.. WESTERN CASCADES
MAP REFERENCE..... BREITENBUSH HOT SPRINGS 1:62500
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1979/08/27 HARTLEY, GEORGE W.
SAMPLE NUMBER..... W579-271
POINT OF COLLECTION.. PIPE LEADING FROM SPRING.
TEMPERATURE (C)..... 98.
WATER TEMP (C)..... 19.
WATER ANALYSIS
DATE/ANALYST..... 1979/10/02 HANERJEE, KALA C.
PH..... 8.0 AT (C) 98.
SPECIFIC CONDUCTANCE..... 4110.

COORDINATES
LAT/LONG... 44-46.87 N 121-58.5 W

AS CAC03

AL KALI INITI..... 116.
TOTAL DISSOLVED SOLIDS... 2463.
CHARGE IMBALANCE (% DIFF)... 10.0
ANALYSIS IN MG/L

AG.....	CO3.....	LI....	1.8
AL.....	CR.....	MG....	1.5
AS.....	L 0.1	MN....	L 0.02
R.....	0.38	NA....	651.
FE.....	3.9	SI02..	175.
FE(TQT)..	0.36	S04....	126.
CA.....	103.	NO3....	0.57
CO.....	HCO3.....	P04....	0.172
CL.....	H2S.....		
CO.....	1160.		

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00294

GEOTHERM FILE ID: 0000701

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS

LOCATION... BREITENBUSH HOT SPRINGS

COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... MARION

GEOLOGIC PROVINCE... BREITENBUSH HOT SPRINGS 1:62500

MAP REFERENCE... BREITENBUSH HOT SPRINGS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1972/00/00 BARNES GROUP

TEMPERATURE (C)..... 92.0

DISCHARGE..... 3400. L/MIN

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICRONETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

DEPOSITS OR ALTERATION... THAVERTINE

PERTINENT LITHOLOGY..... ROCK TYPE: ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 7.31

SPECIFIC CONDUCTANCE..... 4030.

CHARGE IMBALANCE (% DIFF)... 11.7

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	L 1.	LI....	1.8	S.....	
AL.....		CR.....		MG....	1.3	SI02..	L 0.2
AS.....	0.51	CS.....	0.1	MN....	0.22	S04....	
AU.....	L 0.1	CU.....	0.01	NA....	720.	SR....	0.73
B.....	4.1	F.....	3.4	NB....			
HA.....	L 0.1	FE(TQT)..	0.02	NH4....			
HE.....	L 0.1	GA.....					
HI.....	5.						
HR.....							
CA.....	100.	HC03.....	142.				
CA+MG..		HG.....	0.0002	PR....	L 0.06		
CO.....	L 0.01	H2S.....		P04....	0.25		
CL.....	1300.	I.....	0.1				
CO.....	L 0.05	K.....	31.	HR....	0.18		

ISOLOPES 10/00/01

DEL 0 OF WATER..... -97.5
DEL 0(18) OF WATER... -11.66
DEL 0(18) OF SO4..... -2.67

COORDINATES

LAT/LONG... 44-46.86 N 121-58.54 W
UTM ZONE... 10
NORTHING... 4958916.
EASTING... 581043.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00295

GEOCHEM SAMPLE FILE

GEOCHEM FILE ID: 0015445

NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS - WELL
 NAME... BREITENBUSH HOT SPRINGS
 WELL/SPRING NUMBER... 9S/7E-20A
 MAPING NUMBER... 06

LOCATION

COUNTRY... UNITED STATES
 STATE... OREGON
 COUNTY... MARION
 GEOLOGIC PROVINCE...
 TOWNSHIP-RANGE
 09S 007E 20 NE

COORDINATES

LAT/LONG... 44-46.86 N 121-58.54 W
 UTM ZONE... 10
 NORTHING... 4958916.
 581043.

M.P. REFERENCE

BREITENBUSH HOT SPRINGS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1978/02/23 BOWEN, R.
 SAMPLE NUMBER... ORE DEPT. ENV. QUAL WS 78-032
 POINT OF COLLECTION... WELL HEAD
 TEMPERATURE (C)... 110.0

OTHER SAMPLE INFORMATION.. WELL GEYSERING

WATER ANALYSIS

DATE/ANALYST... 1978/03/16 BANERJEE, KALA C.
 P... 8.5
 ALKALINITY... 72.
 TOTAL DISSOLVED SOLIDS... 2439.
 CHARGE IMBALANCE (% DIFF)... 2.5
 ANALYSIS IN MG/L

ISOTOPES 10/2001

LI... 1.9
 MG... 1.3
 MN...
 NA... 690.
 NH...
 SB...
 SC...
 SI02. Q 182.
 S04... 96.
 DEL 0(18) OF WATER... -12.59
 DEL 0(18) OF S04... -3.28

QUALIFICATION FIELD

SI02 ANALYSIS MADE ON 10 ML WELL WATER, 50 ML DEMINERALIZED WATER

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... *DUGAMI

RECORD 00296

GEOCHEM SAMPLE FILE

GEOCHEM FILE ID: 0003072

NAME OF SAMPLE SOURCE... BREITENBUSH WELL NO. 3

NAME... BREITENBUSH

WELL/SPRING NUMBER... 9S-07E-020-AA

LOCATION

COUNTRY... UNITED STATES
 STATE... OREGON
 TOWNSHIP-RANGE
 09S 007E 20 NE OF NE
 H&M: WILLAMETTE

COORDINATES

LAT/LONG... 44-46.93 N 121-58.45 W

COUNTY..... MARION
 GEOLOGIC PROVINCE.. CASCADES
 M.P. REFERENCE..... BREITENBUSH HOT SPRINGS, ORE. 1:62500
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/04/29 BLACK, GERALD
 SAMPLE NUMBER..... WSRU-108
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 74.
 AMBIENT TEMP (C)..... 11.
 WELL DEPTH (M)..... 310.
 GRADIENT (C/KM)..... 123.
 DISCHARGE..... 7.6 L/MIN

WATER ANALYSIS
 DATE/ANALYST..... 1980/06/16 BANERJEE, KALA C.

PH..... 7.6
 SPECIFIC CONDUCTANCE..... 3480.0
 ALKALINITY..... 145. AS CAC03
 TOTAL DISSOLVED SOLIDS... 2487.
 CHARGE IMBALANCE (% DIFF)... 8.7

ISOTOPE 10/2001

ANALYSIS IN MG/L
 AG..... CO3..... 2.0
 AL..... CR..... 0.7
 AS..... CS..... 0.34
 R..... F..... 3.7
 HE..... FE(TOT)... 3.4
 CA..... H2S..... 0.108
 CL..... 1u70.
 CO..... K..... 165.

SI02. 133.
 SO4.. 129.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPUTER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00297

GEOTHERM FILE ID: 0001708

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... WELLS SPRING (WELL)
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MORROW

COORDINATES
 LAT/LONG... 45-37.8 N 119-48.0 W

TOWNSHIP-RANGE
 T2N R25E 28

GEOLOGIC PROVINCE.. 29
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 27.

DISCHARGE..... L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... WAGNER, 1959

RECORD 00298

GEOTHERM FILE ID: 0000296

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CAMP COLLINS WARM SPRINGS (WELL)
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... MORROW

COORDINATES
 LAT/LONG... 45-30.2 N 122-18.3 W

TOWNSHIP-RANGE
 T15 R04E 10 NW

STATE..... OREGON
 COUNTY..... MULTNOMAH
 GEOLOGIC PROVINCE.. 30
 MAP REFERENCE..... WASHOUGAL 1:24000
 OTHER LOCALITY INFORMATION: YMCA WATER SUPPLY WELL
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/08/07 MARINER, R., AND EVANS, W.
 SAMPLE NUMBER..... 6T30RM80
 TEMPERATURE (C)..... 29.

WATER ANALYSIS
 DATE/ANALYST..... 1981/02 BARNES GROUP
 P..... 8.57
 SPECIFIC CONDUCTANCE..... 518.
 ALKALINITY..... 122.
 CHARGE IMBALANCE (% DIFF) ... 2.9

ANALYSIS IN MG/L
 AL..... CR..... 0.21
 H..... L 1. 3.3 NA..... 100.
 FE..... FE(TQT). NB.....
 CA..... 5.4 HCO3..... 122.
 CO..... H2S..... L 1.
 CL..... 91.
 CO..... K..... 9.5

REFERENCE AND IDENTIFICATION
 COMPILED BY..... LIEB, RANDY
 COMPUTER AFFILIATION... USGS
 REFERENCE..... *MARINER, R., USGS, MENLO PARK

ISOTOPES 10/001

SI02. 61.
 S04. L 1.

RECORD 00299

GEOTHERM FILE 10: 0015415

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CORBETT WARM SPRING
 WELL/SPRING NUMBER..... 1N/4E-27DA
 LOCATION
 COUNTRY..... UNITED STATES 01N 004E 27 NE OF SE
 STATE..... OREGON
 COUNTY..... MULTNOMAH

TOWNSHIP-RANGE

COORDINATES

LAT/LONG... 45-32.5 N 122-17.5 W
 UTM ZONE... +10
 NORTHING... 5043152.
 555301.

MAP REFERENCE..... WASHOUGAL 1:24000, VANCOUVER 1:250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... HULL, D.
 SAMPLE NUMBER..... ORE DEU WS-75-103
 TEMPERATURE (C)..... 18.0 L/MIN
 DISCHARGE..... 76.

WATER ANALYSIS
 DATE/ANALYST..... 1975/04/16 L. W. S.
 P..... 0 8.2
 SPECIFIC CONDUCTANCE..... 370.
 ALKALINITY..... 104.
 TOTAL DISSOLVED SOLIDS... 327.
 CHARGE IMBALANCE (% DIFF) ... 13.2

ANALYSIS IN MG/L
 AG..... CO3.....
 AL..... 0.16 CR.....
 AS..... 0.12 CS.....
 H..... 1.2 F..... 2.4

LI... 0.03
 MG... 0.8
 MN... 0.1
 NA... 86.

SI02. 44.

ISOTOPES 10/001

RE..... FE(TQT). 0.2 NB... 5.9
HI..... GA..... NH4... 0.01
CA..... 22. HCO3... 0.01
CD..... H2S..... PO4... 0.05
CL..... 77.
CO..... K..... 8.9

QUALIFICATION FIELD..... PH MEASURED IN LAB
REFERENCE AND IDENTIFICATION
COMPILED BY..... ROWEN, RICHARD G.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 01
REFERENCE..... *DOGAMI

RECORD 00300

GEOTHERM SAMPLE FILE-----GEOTHERM FILE ID: 0015416

NAME OF SAMPLE SOURCE... YMCA CAMP COLLINS
WELL/SPRING NUMBER..... 15/4E-108B

LOCATION-----TOWNSHIP-RANGE

COUNTRY..... UNITED STATES 01S 004E 10 NW OF NW

STATE..... OREGON

COUNTY..... MULTNOMAH

GEOLOGIC PROVINCE...

MAP REFERENCE..... WASHOUGAL 1:24000, VANCOUVER 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1956/09/02

SAMPLE NUMBER..... 434 IN NEWCOMB, 1972

TEMPERATURE (C)..... 23.3

WELL DEPTH (M)..... 94.

OTHER SAMPLE INFORMATION.. WATER BEARING ZONE 309-310'

WATER ANALYSIS

PH..... 8.6

SPECIFIC CONDUCTANCE..... 517.

TOTAL DISSOLVED SOLIDS... 326.

CHARGE IMBALANCE (% DIFF)... 133.8

ANALYSIS IN MG/L

AG..... CO3... 5.0

AL..... CR..... 0.2

H..... 0.38 F..... 10.

HE..... FE(TQT). 0.06 NB... 60.

CA..... 5.2 HCO3... 114. S04... 1.2

CL..... 92. NO3... 0.5

CO..... K..... 9.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... ROWEN, RICHARD G.

COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILER CROSS INDEX... 02

REFERENCE..... NEWCOMB, 1972

RECORD 00301

GEOTHERM SAMPLE FILE-----GEOTHERM FILE ID: 0015347

NAME OF SAMPLE SOURCE... RINGHAM SPRINGS

LOCATION-----TOWNSHIP-RANGE

COUNTRY..... UNITED STATES 03N 037E 18 SE OF NE

STATE..... OREGON

COORDINATES

LAT/LONG... 45-44.47 N 118-13.96 W

UTM ZONE... 11

NORTHING... 5065811.
404105.COUNTY..... UMATILLA
GEOLOGIC PROVINCE.. 29
M.P. REFERENCE..... BINGHAM SPRINGS 1124000, PENDLETON 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1954/04/01

TEMPERATURE (C)..... 34.4 L/MIN
DISCHARGE..... 322. L/MIN

WATER ANALYSIS

PH..... 8.6

SPECIFIC CONDUCTANCE..... 765.

TOTAL DISSOLVED SOLIDS..... 464.

CHARGE IMBALANCE (% DIFF) ... 0.2

ANALYSIS IN PPM

AG..... CO3..... 9.0

AL..... CH..... 3.5

H..... 10. NA..... 133.

HF..... FE(TOT)..... 0.2

CA..... HC03..... 64.

CD..... H2S..... 0.2

CL..... 192.

CO..... K..... 7.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... ROWEN, RICHARD G.

COMPILED AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES

COMPILED CROSS INDEX... 01

REFERENCE..... HOGENSEN, 1964

RECORD 00302

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CITY OF HERMISTON WELL

LOCATION..... TOWNSHIP-RANGE

COUNTRY..... UNITED STATES 04N 028E 10

STATE..... OREGON

COUNTY..... UMATILLA

GEOLOGIC PROVINCE.. 29

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 24.

WELL DEPTH (M)..... 150.

DISCHARGE..... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.

REFERENCE..... WAGNER, 1959

GEOTHERM FILE ID: 0001711

COORDINATES

LAT/LONG... 45-49.8 N 119-18.0 W

RECORD 00303

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HIDAWAY SPRINGS

LOCATION..... TOWNSHIP-RANGE

COUNTRY..... UNITED STATES 05S 033E 21

STATE..... OREGON

COUNTY..... UMATILLA

GEOLOGIC PROVINCE.. 29

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 34.

DISCHARGE..... 565. L/MIN

GEOTHERM FILE ID: 0001709

COORDINATES

LAT/LONG... 45-07.8 N 118-43.8 W

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. & BROOK, C.
REFERENCE..... WARING, 1965

RECORD 00304

GEOTHERM FILE ID: 0000785

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LEHMAN SPRINGS
WATER NUMBER..... 08

LOCATION

COUNTRY..... UNITED STATES 12 NW OF SE NE
STATE..... OREGON
COUNTY..... UMATILLA
GEOLOGIC PROVINCE.. 29
MAP REFERENCE..... LEHMAN SPRINGS 1:24000, PENDLETON 1:250000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
TEMPERATURE (C)..... 61.0

DISCHARGE..... 275. L/MIN
WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED
DEPOSITS OR ALTERATION... TRAVERTINE
PERTINENT LITHOLOGY..... ROCK TYPE: ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 9.18

SPECIFIC CONDUCTANCE..... 252

CHARGE IMBALANCE (% DIFF)... 6.9

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	11.	LI...	0.03	S....	
AL.....		CR.....		MG...	0.1	SB...	L 0.2
AS.....	0.02	CS.....	L 0.1	MN...	L 0.02		
AU.....	L 0.1	CU.....	L 0.01	NA...	53.	SI02.	44.
HA.....	L 0.1	F.....	2.1	NB...		SO4...	23.
HE.....	L 0.1	FE(TQT).	L 0.02	NH4...		SR...	L 0.05
RI.....		GA.....					
HR.....	0.006						
CA.....	0.9	HC03.....	88.				
CA+MG.		HG.....	0.0003	PB...	L 0.06		
CO.....	L 0.01	H2S.....		PO4...	0.12		
CL.....	5.4	I.....	0.001	RB...	L 0.02		
CO2...	L 0.05	K.....	0.7				

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4... L 0.1

C2H6.

CO2... L 0.1

OTHER ANALYTICAL DATA... 02,AR=4

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... NEH-971
REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

COORDINATES

LAT/LONG... 45-09.06 N 118-39.55 W
UTM ZONE... 11
NORTHING... 5000847.
369572.

ISOTOPES (02/00)

DEL D OF WATER..... -121.3
DEL O(18) OF WATER... -16.52

ISOTOPES (00/01)

RECORD 00305

GEOTHERM FILE ID: 0001710

COORDINATES
LAT/LONG... 45-56.4 N 118-27.6 WTOWNSHIP-RANGE
05N 035E 05GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... WELLLOCATION
COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... UMATILLA

GEOLOGIC PROVINCE... 29

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)... 24.

WELL DEPTH (M)... 174.

DISCHARGE... L/MIN

REFERENCE AND IDENTIFICATION

COMPILED BY... MARINER, R. & BROOK, C.

REFERENCE... NEWCOMB, 1972

RECORD 00306

GEOTHERM FILE ID: 0000179

COORDINATES
LAT/LONG... 45-18.0 N 117-49.5 WTOWNSHIP-RANGE
04S 040E 21 NW OF SWGEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... BAKER WARM SPRING (CHUCK BENNETT WARM SPRING)LOCATION
COUNTRY... UNITED STATES

STATE... OREGON

COUNTY... UNION

GEOLOGIC PROVINCE... 29

MAP REFERENCE... UNION, ORE. 1:24000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR... 1974/07/00

SAMPLE NUMBER... 768

TEMPERATURE (C)... 26.0

DISCHARGE... L/MIN

PERTINENT LITHOLOGY... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF

METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND

VOLCANIC ROCKS OF Eocene THROUGH Pleistocene AGE.

MAJOR ANALYSIS

PH... 7.89

TOTAL DISSOLVED SOLIDS... 292.

CHARGE IMBALANCE (% DIFF)... 14.0

ANALYSIS IN MG/L

AG... L 1.0

AL... L 0.1

H... 0.5

FE... 62.

HC... 136.

CL... 27.

CO... 0.3

OTHER ANALYTICAL DATA... I SI02 (QUARTZ) = 138.0% T NA/K = 15.0% T NA-K-CA = 35.0%, ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY... PETERS, SANDRA K.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE... DELLECHATE, 1978

ISOTOPES 10/001

LI... L 0.01
MG... L 0.1
NA... 62.
NB... 54.
SI02... 54.
SO4... 10.

RECORD 00307

GEOTHERM FILE ID: 0000177

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BARSTAD HOT WELL

KARA..... LE GRANDE

WELL/SPRING NUMBER..... 04S-39E-005-0A

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1124000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 714

TEMPERATURE (C)..... 81.5

DISCHARGE..... 178. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF

METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND

VOLCANIC ROCKS OF Eocene THROUGH Pleistocene AGE.

WATER ANALYSIS

PH..... 9.31

TOTAL DISSOLVED SOLIDS..... 528.

CHARGE IMBALANCE (% DIFF).... 7.9

ANALYSIS IN MG/L

AG.....

AL.....

R..... 3.0

HE.....

CA..... 3.0

CL..... 137.

CO.....

K..... 2.5

OTHER ANALYTICAL DATA... T SiO2 (QUARTZ) = 141.0; T NA/K = 46.0; T NA-K-CA = 99.0. ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... DELLECHAIE, 1978

ISOTOPE DATA

LI... 0.03

MG... L 0.1

F... 2.4

FE(TOT)... NA... 136.

HCO3... NB... 107.

CA... 69.

CL... 137.

CO... 137.

K... 2.5

T SiO2 (QUARTZ) = 141.0; T NA/K = 46.0; T NA-K-CA = 99.0. ALL VALUES ARE DEGREES C.

RECORD 00308

GEOTHERM FILE ID: 0000186

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BENNETT WARM SPRING

KARA..... LE GRANDE

WELL/SPRING NUMBER..... 04S-40E-020-AD

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE... 29

MAP REFERENCE..... UNION, ORE. 1124000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/01/01

SAMPLE NUMBER..... 766

TEMPERATURE (C)..... 27.0

COORDINATES

LAT/LONG... 45-12.00 N 117-49.83 W

DISCHARGE..... 38. L/MIN
 PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
 METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
 VOLCANIC ROCKS OF EOCENE THROUGH PLEISTOCENE AGE.

WATER ANALYSIS

P4..... 8.7
 TOTAL DISSOLVED SOLIDS..... 333.
 CHARGE IMBALANCE (% DIFF)..... 61.8
 ANALYSIS IN MG/L
 AG..... CO3..... 42. LI... L 0.01
 AL..... CR..... L 0.1
 BA..... L 1.0 F..... 0.4 SI02. 61.
 HF..... FE(TOT)..... NA... 56.
 CA..... 0.8 HCO3..... 121. SO4.. 15.
 CL..... 36.
 CO..... K..... 0.9

OTHER ANALYTICAL DATA..... T SI02 (QUARTZ) =111.01 T NA/K =38.01 T NA-K-CA =84.0. ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... DELLECHATE, 1978

RECORD 00309

GEOTHERM FILE ID: 0001707

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CLAYTON FOX WELL
 LOCATION IOWNSHIP=RANGE

COORDINATES

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE... 29
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 27.
 WELL DEPTH (M)..... 447.
 DISCHARGE..... L/MIN
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... ROWEN AND OTHERS, 1978

RECORD 00310

GEOTHERM FILE ID: 0003084

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... COURT/WRIGHT WELL
 LOCATION WELL/SPRING NUMBER..... 45-39E-005-0A

COORDINATES

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE... 29
 MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD
 SAMPLE NUMBER..... WSRU-064
 POINT OF COLLECTION.. WELLHEAD OVERFLOW
 TEMPERATURE (C)..... 67.
 AMBIENT TEMP (C)..... 10.

DISCHARGE..... 76. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/09 BANERJEE, KALA C.

P..... 9.4

SPECIFIC CONDUCTANCE..... 725.

ALKALINITY..... 65. AS CAC03

TOTAL DISSOLVED SOLIDS..... 473.

CHARGE IMBALANCE (% DIFF).... 6.8

ANALYSIS IN MG/L

AG..... CO3..... L 0.1
AL..... 0.14 CR..... L 0.1
AS..... 0.009 CS..... L 0.05
H..... 2.9 F..... 1.6
HF..... FE(TOT) L 0.05
CA..... 4.4 H2S..... P04... 0.009
CD..... 1.35

CO..... K..... 2.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... NOGAMI

REFERENCE..... *NOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00311

GEOTERM SAMPLE FILE

NAME OF SAMPLE SOURCE... COVE BATH HOUSE

WELL/SPRING NUMBER..... 35-40E-022-HB

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. BLUE MOUNTAINS

MAP REFERENCE..... COVE, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD

SAMPLE NUMBER..... WSR0-069

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 28.8

GRADIENT TEMP (C)..... 10.

DISCHARGE..... 7.6 L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.

P..... 9.6

SPECIFIC CONDUCTANCE..... 149.

ALKALINITY..... 50. AS CAC03

TOTAL DISSOLVED SOLIDS..... 110.

CHARGE IMBALANCE (% DIFF).... 1.6

ANALYSIS IN MG/L

AG..... CO3..... L 0.1
AL..... 0.24 CR..... L 0.1
AS..... 0.005 CS..... L 0.05
H..... L 0.2 F..... 0.1
HF..... FE(TOT) 0.12
CA..... 1.7 H2S..... P04... 0.014
CD.....

ISOTOPES 10/001

S102. 83.
S04.. 47.5

GEOTERM FILE ID: 0003080

COORDINATES

LAT/LONG... 45-17-037N 117-48-019W

ISOTOPES 10/001

S102. 35.
S04.. 8.1

CI..... 4.3
 CO..... K..... 0.5
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION..... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... COVE WARM SPRING
 KHA..... LA GRANDE
 WELL/SPRING NUMBER..... 03S-40E-022-88
 LOCATION
 COUNTRY..... UNITED STATES 03S 040E 22 NW OF NW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... COVE, ORE. 1:24000
 OTHER LOCALITY INFORMATION ELEVATION = 900 METERS.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/07/00
 SAMPLE NUMBER..... 685
 TEMPERATURE (C)..... 42.0
 DISCHARGE..... 1158. L/MIN
 PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
 METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
 VOLCANIC ROCKS OF Eocene THROUGH PLEISTOCENE AGE.

COORDINATES
 LAT/LONG... 45-17.66 N 117-48.40 W

TOWNSHIP=RANGE
 03S 040E 22

COUNTRY..... UNITED STATES 03S 040E 22 NW OF NW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... COVE, ORE. 1:24000
 OTHER LOCALITY INFORMATION ELEVATION = 900 METERS.
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/07/00
 SAMPLE NUMBER..... 685
 TEMPERATURE (C)..... 42.0
 DISCHARGE..... 1158. L/MIN
 PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
 METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
 VOLCANIC ROCKS OF Eocene THROUGH PLEISTOCENE AGE.

WATER ANALYSIS

PH..... 8.57
 TOTAL DISSOLVED SOLIDS... 196.
 CHARGE IMBALANCE (% DIFF)... 35.2
 ANALYSIS IN MG/L
 AG..... CO3..... L 1.0 LI... L 0.01
 AL..... CR..... MG... 0.1
 H..... L 1.0 F..... 0.3 S102... 36.
 HE..... FE(TOT)... NB... S04... 7.0
 CA..... 2.0 HCO3.... 112.
 CL..... 6.1
 CO..... K..... 0.8

OTHER ANALYTICAL DATA... T S102 (QUARTZ) =87.0 T NA/K =64.0 T NA-K-CA =55.0, ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETERS, SANDRA K.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... DELLECHAIE, 1978

GEOTHERM_SAMPLE_FILE
 NAME OF SAMPLE SOURCE... COVE WARM SPRING
 WELL/SPRING NUMBER..... 3S/40E-228H
 LOCATION
 COUNTRY..... UNITED STATES 03S 040E 22 NW OF NW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 45-17.67 N 117-48.38 W
 UTM ZONE... 11
 NORTHING... 5015765.

TOWNSHIP=RANGE
 03S 040E 22

COUNTRY..... UNITED STATES 03S 040E 22 NW OF NW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..

MAP REFERENCE..... COVE 1124000, GRANGEVILLE 11250000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1957/06/02
 TEMPERATURE (C)..... 29.4 L/MIN
 DISCHARGE..... 855.
 WATER ANALYSIS
 PH..... 9.8
 SPECIFIC CONDUCTANCE..... 150.
 TOTAL DISSOLVED SOLIDS..... 109.
 CHARGE IMBALANCE (% DIFF).... 6.3
 ANALYSIS IN MG/L
 AG..... 32.
 H..... 0.08
 BA..... 0.3
 HE..... 0.03
 CA..... 1.6
 CL..... 5.0
 CO..... 5.0
 K..... 0.5
 Na..... 30.
 SI02..... 29.
 S04..... 8.8
 NO3..... N
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... ROWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00314

GEUTHERM FILE ID: 0015980

GEUTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... CRESTON SHAW WELL
 WELL/SPRING NUMBER..... IS-39E-31-DD
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... IMBLFR 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/12/06 GEST, D.
 SAMPLE NUMBER..... W579-381
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 22.
 AIR/WT TEMP (C)..... 8.
 DISCHARGE..... 1136. L/MIN
 WATER ANALYSIS
 DATE/ANALYST..... 1980/01/23 BANERJEE, KALA C.
 PH..... 8.3 AT(C) 22.
 SPECIFIC CONDUCTANCE..... 140.
 ALKALINITY..... 67.
 TOTAL DISSOLVED SOLIDS... 161.
 CHARGE IMBALANCE (% DIFF).... 2.7
 ANALYSIS IN MG/L
 AG.....
 AL..... L 0.05
 AS..... L 0.005
 H..... L 0.2
 HE.....
 CA..... 8.5

COORDINATES

LAT/LONG... 45-27.12 N 117-58.19 W

SE OF SE

TOWNSHIP-RANGE

01S 039E 31

ISOIOPES 10/001

LI... L 0.01
 MG... 0.55
 MN... L 0.02
 NA... 19.
 ND...
 SI02... 72.
 S04... 3.8

CD..... H2S..... PU4.. 0.018
CL.....
CO..... K..... 5.1
REFERENCE AND IDENTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... *OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

RECORD 00315

GEOTHERM FILE ID: 0003085

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... DUCK POND
WELL/SPRING NUMBER..... 4S-39E-015-DB
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE.. 29
MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD
SAMPLE NUMBER..... WSR0-065
POINT OF COLLECTION.. OUTLET
TEMPERATURE (C)..... 25.
AQUIFER TEMP (C)..... 10.
DISCHARGE..... 57. L/MIN
WATER ANALYSIS

COORDINATES

LAT/LONG... 45-12-049N 117-55.016W

TOWNSHIP-RANGE

04S 039E 15 NW OF SE
B&M: WILLAMETTE

DATE/ANALYST..... 1980/04/01 BANERJEE, KALA C.

PH..... 8.5
SPECIFIC CONDUCTANCE..... 232.
ALKALINITY..... 66. AS CAC03
TOTAL DISSOLVED SOLIDS... 177.
CHARGE IMBALANCE (% DIFF)... 4.3
ANALYSIS IN MG/L

ISOTOPES 10/001

AG..... CO3..... LI... L 0.1
AL..... CR..... MG... L 0.2
AS..... CS..... MN... L 0.05
H..... F..... 0.6 S102. 56.
HE..... FE(TOT). L 0.05 S04.. 14.
CA..... H2S..... PO4.. 0.017
CD.....
CL.....

CO..... K..... 2.8

REFERENCE AND IDENTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... DUGAMI
REFERENCE..... *DUGAMI IN-HOUSE STUDIES, DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00316

GEOTHERM FILE ID: 0003073

GEOTHERM_SAMPLE_FILE
NAME OF SAMPLE SOURCE... GIRDNER WARM SPRING
WELL/SPRING NUMBER..... 3S-40E-027-RC
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
TOWNSHIP-RANGE
03S 040E 27 SW OF NW
B&M: WILLAMETTE

COORDINATES

LAT/LONG... 45-16-032N 117-48.023W

COUNTY..... UNION
 GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... COVE, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD
 SAMPLE NUMBER..... WSR0-070
 POINT OF COLLECTION.. HOUSE TAP
 TEMPERATURE (C)..... 22.2
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 76. L/MIN
 WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.
 PH..... 9.0
 SPECIFIC CONDUCTANCE..... 133.0
 ALKALINITY..... 54. AS CAC03
 TOTAL DISSOLVED SOLIDS... 121.
 CHARGE IMBALANCE (% DIFF)... 4.9
 ANALYSIS IN MG/L

AG.....	CO3.....	LI....	L 0.1
AL.....	CR.....	MG....	L 0.1
AS.....	CS.....	MN....	L 0.005
HA.....	F.....	NA....	27.
HF.....	FE(TQT) L 0.05	NB....	SI02. 59.
HI.....	GA.....	NH4...	SO4... 6.6
CA.....	0.5		0.02
CD.....		PO4...	0.043
CL.....	3.1		

ISLOPES 10/001

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... NOGAMI
 REFERENCE..... RHOEN AND OTHERS, 1980C

RECORD 00317

GEOHEM FILE ID: 0003076

GEOHEM SAMPLE FILE
 NAME OF SAMPLE SOURCE... GRANGE HALL
 WELL/SPRING NUMBER..... 35-40E-009-DD
 LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. BLUE MOUNTAINS
 MAP REFERENCE..... COVE, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD
 SAMPLE NUMBER..... WSR0-073
 POINT OF COLLECTION.. ORTICE
 TEMPERATURE (C)..... 26.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 57. L/MIN
 WATER ANALYSIS

TOWNSHIP-RANGE
 03S 040E 09 SE OF SE
 BSM: WILLAMETTE

COORDINATES

LAT/LONG... 45-18.046N 117-48.027W

DATE/ANALYST..... 1980/05/08 BANERJEE, KALA C.
 PH..... 8.7
 SPECIFIC CONDUCTANCE..... 114.0
 ALKALINITY..... 46. AS CAC03

TOTAL DISSOLVED SOLIDS... 95.

ISOTOPE 10/001

AG..... CO3..... LI... L 0.1
 AL..... L 0.1 CR..... L 0.1
 AS..... L 0.005 CS..... L 0.05
 H..... L 0.2 F..... 0.1
 RE..... FE(TOT) L 0.05
 CA..... 2.2 H2S..... PO4.. 0.014
 CL..... 3.5

CO..... K..... 0.8

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... DUGAMI
 REFERENCE..... *DUGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00318

GEOTHERM FILE 101 0000176

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HAYSTACK WARM SPRING

KGRA..... LE GRANDE

WELL/SPRING NUMBER..... 04S-39E-015-D

LOCATION..... TOWNSHIP=RANGE

COUNTRY..... UNITED STATES 04S 039E 15 SE

COORDINATES
 LAT/LONG... 45-12.8 N 117-55.3 W

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE... 29

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 716

TEMPERATURE (C)..... 25.5

DISCHARGE..... 141. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
 METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
 VOLCANIC ROCKS OF Eocene THROUGH Pleistocene AGE.

WATER ANALYSIS

PH..... 8.9

TOTAL DISSOLVED SOLIDS... 294.

CHARGE IMBALANCE (% DIFF)... 37.1

ANALYSIS IN MG/L

AG..... CO3..... L 1.0 LI... L 0.01
 AL..... CR..... L 0.1
 H..... L 1.0 F..... 1.2 SI02. 70.
 RE..... FE(TOT) NA... 45. S04.. 11.
 CA..... 2.0 HCO3..... 139.
 CL..... 19.

CO..... K..... 3.0

OTHER ANALYTICAL DATA... T SI02 (QUARTZ) = 118.0 T NA/K = 141.0 T NA-K-CA = 157.0, ALL VALUES ARE DEGREES C

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... NELLECHATE, 1978

RECORD 00319

GEUTHERM FILE ID: 0003074

GEUTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... HOOFNAGLE
WELL/SPRING NUMBER... 35-40E-010-DC
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... UNION
GEOLOGIC PROVINCE... 29
MAP REFERENCE... COVE, ORE. 1:24000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR... 1980/04/01 BLACK, GERALD
SAMPLE NUMBER... W580-071
POINT OF COLLECTION... OFFICE
TEMPERATURE (C)... 24.
AIR/TEMP (C)... 10.
DISCHARGE... 19. L/MIN

COORDINATES
LAT/LONG... 45-18.052N 117-47.042W
TOWNSHIP-RANGE
03S 040E 10
B&M: WILLAMETTE

WATER ANALYSIS
DATE/ANALYST... 1980/05/13 BANERJEE, KALA C.
P... 9.1
SPECIFIC CONDUCTANCE... 121.
ALKALINITY... 45. AS CACO3
TOTAL DISSOLVED SOLIDS... 96.
CHARGE IMBALANCE (% DIFF)... 3.1
ANALYSIS IN MG/L

ISOTOPES (0/001)

AG... CO3... L 0.1
AL... L 0.1
AS... 0.005
H... L 0.2
HE... 0.1
CA... 2.5
CD... 3.6
CL... 1.2
CO...
K...
REFERENCE AND IDENTIFICATION
COMPILED BY... RICCIO, JOSEPH F.
COMPILER AFFILIATION... DOGAMI
REFERENCE... *DOGAMI TN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

SI02. 38.
S04.. 5.5

RECORD 00320

GEUTHERM FILE ID: 0000711

GEUTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... HOT LAKE
WELL/SPRING NUMBER... 11
LOCATION
COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... UNION
GEOLOGIC PROVINCE... 29
MAP REFERENCE... CRAIG Mtn. 1:24000, GRANGEVILLE 1:250000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR... 1972/00/00 BARNES GROUP
TEMPERATURE (C)... 80.0
DISCHARGE... 1500. L/MIN

COORDINATES
LAT/LONG... 45-14.63 N 117-57.51 W
UTM ZONE... 11
NORTHING... 5010267.
424774.

TOWNSHIP-RANGE
04S 039E 05
NW OF SE

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED.

DEPOSITS OR ALTERATION..... TRAVERTINE

PERTINENT LITHOLOGY..... BASALT AND MYLONITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP

PH..... 9.21

SPECIFIC CONDUCTANCE..... 688.

CHARGE IMBALANCE (% DIFF).... 9.4

ANALYSIS IN MG/L

AG.....	L 0.02	CO3.....	10.	LI....	0.03	S....		ISOTOPES (00/001)
AL.....		CR.....		MG....	L 0.1	SB....		DEL O OF WATER.....
AS.....	0.01	CS.....	L 0.1	MN....	L 0.02	SC....		DEL O(18) OF WATER...
AU.....	L 0.1	CU.....	0.01	NA....	130.	SI02.	48.	DEL O(18) OF S04.....
B.....	2.9	F.....	1.7					
BA.....	L 0.1							
BF.....	L 0.1	FE(TOT)...	L 0.02	NB....		S04...	56.	
BI.....		GA.....		NH4...		SR....	L 0.05	
BR.....	0.4							
CA.....	4.9	HC03.....	62.					
CA+MG.		HG.....	0.0032	PB....	L 0.06			
CD.....	L 0.01	H2S.....		PO4...	0.09			
CL.....	140.	I.....	0.08					
CO.....	L 0.05	K.....	2.7	RB....	L 0.02			

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4... 9.

C2H6..

C02... L 1.

OTHER ANALYTICAL DATA.... 02-AR=2

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... NEH-972

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

ISOTOPES (00/001)

RECORD 00321

GEOTHERM FILE 101 0003083

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOT LAKE RESORT

WELL/SPRING NUMBER..... 45-39E-005-08

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE... BLUE MOUNTAINS

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD

SAMPLE NUMBER..... WSA0-063

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 81.

AIR TEMP (C)..... 10.

DISCHARGE..... 6426. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/09 BANERJEE, KALA C.

PH..... 9.3

COORDINATES

LAT/LONG... 45-14.037N 117-57.030W

SOFTIC CONDUCTANCE..... 703.
ALKALINITY..... 61.
CHARGE IMBALANCE (% DIFF).... 8.4
ANALYSIS IN MG/L

ISOTOPES 10/0001

AG.....	0.13	CO3.....	LI....	L 0.1
AL.....	0.009	CR.....	MG....	L 0.1
AS.....	2.8	CS.....	MN....	L 0.05
RA.....	1.5	F.....	NA....	119.
HE.....	4.9	FE+3....	SI02..	84.
CA.....	132.	FE(TOT)..	S04... 1.4	
CL.....		H2S.....	P04... 0.009	
CO.....		K.....		

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... DOGAMI
REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00322

GEOTHERM FILE ID: 0000180

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOT LAKE SPRING

KARA..... LE GRANDE

WELL/SPRING NUMBER..... 04S-39E-005-08

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1424000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 713

TEMPERATURE (C)..... 81.

DISCHARGE..... 1514. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND VOLCANIC ROCKS OF EOCENE THROUGH PLISTOCENE AGE.

WATER ANALYSIS

PH..... 9.22

TOTAL DISSOLVED SOLIDS... 526.

CHARGE IMBALANCE (% DIFF).... 11.1

ANALYSIS IN MG/L

AG.....	10.	CO3.....	LI....	0.03
AL.....	3.6	CR.....	MG....	L 0.1
AS.....		F.....	NA....	132.
RA.....	4.0	FE(TOT)..	SI02..	102.
CA.....	131.	HC03....	S04... 60.	
CL.....		K.....		

ISOTOPES 10/0001

OTHER ANALYTICAL DATA... T SI02 (QUARTZ) = 138.01 T NA/K = 54.01 T NA-K-CA = 96.0. ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... DELLECHIAIE, 1978

COORDINATES

LAT/LONG... 45-14.52 N 117-57.06 W

RECORD 00323

GEOTHERM FILE ID: 0000181

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LA GRANDE WARM WELL

KGRA..... LE GRANDE

WELL/SPRING NUMBER..... 035-38E-006-AD

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. 29

MAP REFERENCE..... LE GRANDE S.E., ORE. 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 679

TEMPERATURE (C)..... 28.0

DISCHARGE..... 1420. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
VOLCANIC ROCKS OF Eocene THROUGH Pleistocene AGE.

WATER ANALYSIS

PH..... 8.1

TOTAL DISSOLVED SOLIDS..... 223.

CHARGE IMBALANCE (% DIFF).... 22.7

ANALYSIS IN MG/L

AG..... CO3..... L 1.0

AL..... CR..... L 0.01

R..... F..... 0.4

HF..... FE(TOT)..... 22.

CA..... HCO3..... 109.

CL..... K..... 5.2

CO.....

OTHER ANALYTICAL DATA... T SiO2 (QUARTZ) = 122.01 T NA/K = 312.01 T NA-K-CA = 86.0, ALL VALUES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... DELLECHAIE, 1978

ISDIOPES 10/001

RECORD 00324

GEOTHERM FILE ID: 0003081

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LOVE SWIMMING POOL

WELL/SPRING NUMBER..... 35-40E-022-88

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. 29

MAP REFERENCE..... COVE, ORE. 1124000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD

SAMPLE NUMBER..... WS80-068

POINT OF COLLECTION.. OFFICE

TEMPERATURE (C)..... 30.

AMBIENT TEMP (C)..... 10.

COORDINATES

LAT/LONG... 45-17.036N 117-48.022W

TOWNSHIP=RANGE

03S 040E 22 NW OF NW

B&M: WILLAMETTE

DISCHARGE..... 756. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.

P..... 9.7
 SPECIFIC CONDUCTANCE..... 157.
 ALKALINITY..... 55. AS CAC03
 TOTAL DISSOLVED SOLIDS..... 114.
 CHARGE IMBALANCE (% DIFF).... 2.4

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	L 0.1
AL.....	CR.....	MG....	L 0.1
AS.....	CS.....	MN....	L 0.05
R.....	F.....	NA....	29.
FE.....	FE(TOT).....	NB....	
CA.....	1.9		
CO.....	H2S.....	PU4...	0.008
CL.....	4.5		

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPUTER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00325

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MEDICAL HOT SPRING

KURA..... LE GRANDE

WELL/SPRING NUMBER..... 06S-41E-025-AA

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

MAP REFERENCE..... MEDICAL SPRINGS, ORE. 1124000

OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 786

TEMPERATURE (C)..... 61.5

DISCHARGE..... 756. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF

METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND

VOLCANIC ROCKS OF Eocene THROUGH PLEISTOCENE AGE.

WATER ANALYSIS

P..... 8.36

TOTAL DISSOLVED SOLIDS..... 946.

CHARGE IMBALANCE (% DIFF).... 11.3

ANALYSIS IN MG/L

AG.....	CO3.....	LI....	0.04
AL.....	CR.....	MG....	0.2
R.....	F.....	NA....	200.
FE.....	FE(TOT).....	NB....	
CA.....	56.		
CO.....	80.		

OTHER ANALYTICAL DATA... T SI02 (QUARTZ) = 124.01 T NA/K = 86.01 T NA-K-CA = 72.01 ALL VALUES ARE DEGREES C.

ISOTOPE 10/001

GEOTHERM FILE 101 0000183

COORDINATES

LAT/LONG... 45-01.10 N 117-38.50 W

ISOTOPE 10/001

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... DELLECHIAIE, 1978

RECORD 00326

GEOTHERM FILE ID: 0000713

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MEDICAL HOT SPRINGS
 WARNING NUMBER..... 12

LOCATION
 COUNTRY..... UNITED STATES NE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE... 29

MAP REFERENCE..... FLAGSTAFF BUTTE 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1973/00/00 BARNES GROUP

TEMPERATURE (C)..... 60.0 L/MIN
 DISCHARGE..... 200.

WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUED
 DEPOSITS OR ALTERATION..... TRAVERTINE

PERTINENT LITHOLOGY..... ROCK TYPE: BASALT

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP

PH..... 8.23

SPECIFIC CONDUCTANCE..... 1173.

CHARGE IMBALANCE (% DIFF).... 9.4

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... L 1.	LI....	0.05	S....		ISOTOPES (0/000)	
AL.....	CR.....	MG....	0.2	SB....	L 0.2	DEL O OF WATER.....	-130.2
AS.....	CS.....	MN....	L 0.02			DEL O(18) OF WATER...	-16.99
AU..... L 0.1	CU..... L 0.01	NA....	190.	SI02.	80.		
BA..... 2.2	F..... 1.2	NB....		SO4...	400.		
RA..... L 0.1	FE(TOT) L 0.02	NH4...		SR....	0.8		
RE..... L 0.1	GA.....						
RI.....	HC03.... 26.						
BR..... 0.2	HG..... 0.0004	PB....	L 0.06				
CA..... 72.							
CA+MG.							
CD..... L 0.01							
CL..... 77.							
CO..... L 0.05	K.....	RB....	0.02				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07

REFERENCE..... MARINER AND OTHERS, 1974A; MARINER AND OTHERS, 1975

RECORD 00327

GEOTHERM FILE ID: 0002241

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... MEDICAL HOT SPRINGS
 WARNING NUMBER..... 12

LOCATION
 COUNTRY..... UNITED STATES SE OF NE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE... 29

COORDINATES

LAT/LONG... 45-01.08 N 117-37.48 W

UTM ZONE... +11
NORTHING... 4984923.
450781.

STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE...
MAP REFERENCE..... FLAGSTAFF BUTTE 1:24000, GRANGEVILLE 1:250000
OTHER LOCALITY INFORMATION: 20 MI. NNE OF BAKER
SAMPLE DESCRIPTION AND CONDITIONS
TEMPERATURE (C)..... 60.0 L/MIN
DISCHARGE..... 189.
WATER ANALYSIS
TOTAL DISSOLVED SOLIDS... 896.
ANALYSIS IN PPM
AG.....
AL.....
H.....
HE.....
CA..... 0 62.
CL..... 0 77.
CO.....
K..... 0 3.4

ISOTOPE (0/001)

MG... 0 1.2
NA... 0 191.
NB...
SI02... 97.
S04... 0 432.

QUALIFICATION FIELD.....
CACL2=55.52, MGCL2=4.66, KCL=6.42, NA2CO3=5.24, NA2SO4=506.38, NA2CO3=5.79, FES04=5.58, CASO4=121.75, CAC03=14.17,
ORGANIC=15.53 ALL IN PPM
REFERENCE AND IDENTIFICATION
COMPILED BY..... SANFORD, LINDA
COMPILED AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILED CROSS INDEX... 07
REFERENCE..... LINDGREN, 1901

RECORD 00328

GEOTHERM FILE 10: 0000185

COORDINATES
LAT/LONG... 45-12.02 N 117-54.51 W

TOWNSHIP-RANGE
04S 03E 23 NW OF SW

NAME OF SAMPLE SOURCE... OASIS WARM SPRING
KARA..... LE GRANDE
WELL/SPRING NUMBER..... 04S-39E-023-CB
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE... 29
MAP REFERENCE..... CHAIG MOUNTAIN, ORE. 1:24000
OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/07/00
SAMPLE NUMBER..... 720
TEMPERATURE (C)..... 29.5 L/MIN
DISCHARGE..... 220.
PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
METAFEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
VOLCANIC ROCKS OF EOCENE THROUGH PLISTOCENE AGE.

WATER ANALYSIS

PH..... 8.70
TOTAL DISSOLVED SOLIDS... 407.
CHARGE IMBALANCE (% DIFF)... 25.6
ANALYSIS IN MG/L
AG.....
AL.....
H..... L 1.0
CO3..... L 1.0
CR.....
F..... 2.1
LI... 0.05
MG... 1.0
NA... 80.
SI02... 78.

ISOTOPE (0/001)

HE.... 4.0

CA.... 136.

CL.... 62.

CO.... 2.7

FE(TOT).....

HCO3.....

LI....

MG....

MN....

NA....

NO....

PO4....

SI02....

S04....

SO4....

SO4....

SO4....

SO4....

SO4....

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OTHER ANALYTICAL DATA..... T SI02 (QUARTZ) =124.01 T NA/K =85.01 T NA-K-CA =87.0, ALL VAL UES ARE DEGREES C.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... DELLECHATE, 1978

RECORD 00329

GEOTHERM FILE ID: 0003078

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ROYCE

WELL/SPRING NUMBER..... 15-39E-017-HD

LOCATION

TOWNSHIP=RANGE

015 039E 17 SE OF NW

86M: WILLAMETTE

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE... 29

MAP REFERENCE..... IMPLER, ONE, 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/02 BLACK, GERALD

SAMPLE NUMBER..... WSR0-076

POINT OF COLLECTION.. WELHEAD

TEMPERATURE (C)..... 26.

A'BIENT JEMP (C)..... 10.

WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.

PH..... 8.6

SPECIFIC CONDUCTANCE..... 148.

ALKALINITY..... 60.

TOTAL DISSOLVED SOLIDS... 142.

CHARGE IMBALANCE (% DIFF)... 0.7

ANALYSIS IN MG/L

AG..... CO3.....

AL..... L 0.1

AS..... L 0.005

H..... L 0.2

RE..... 3.3

CA..... H2S.....

CL..... 1.0

CO..... K.....

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... DOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00330

GEOTHERM FILE ID: 0000184

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... SWEET WARM SPRING

KARA..... LA GRANDE

WELL/SPRING NUMBER..... 04S-39E-022-

LOCATION

TOWNSHIP=RANGE

COORDINATES

ISOLOPES 10/001

COUNTRY..... UNITED STATES 045 039E 22 0F
STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE.. 29
MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000
OTHER LOCALITY INFORMATION: T4S, R39E, CENTER OF SEC. 22, ELEV.=900M.
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1974/07/00
SAMPLE NUMBER..... 719
TEMPERATURE (C)..... 38.0
DISCHARGE..... 56. L/MIN
PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
META-SEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
VOLCANIC ROCKS OF EOCENE THROUGH PLISTOCENE AGE.

STYLYNKA. H. J. V. M.

P.....	8.6
TOTAL DISSOLVED SOLIDS.....	421.
C-CHARGE IMBALANCE (% DIFF) ...	22.1
ANALYSIS IN MG/L	
AG.....	CO3..... L 1.0
AL.....	CR.....
B.....	F..... 2.6
BF.....	FE(TQT).....
CA.....	HC03..... 130.
CL.....	64.

OTHER ANALYTICAL DATA... T SIO2 (QUARTZ) =128.0% T NA/K =98.0% T NA-K-CA =97.0% ALL VALUES ARE DEGREES C.
CO.... K..... 3.4

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERS, SANDRA K.
COMPILER AFFILIATION.. U.S. GEOLOGICAL SURVEY
REFERENCE..... DELLECHAIE, 1978

RECORD 00331

GEUTHERM FILE IN: 0015981

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... U.P. HR NO. 1
WELL/SPRING NUMBER..... 1S-38E-5-CB
LOCATION

COORDINATES
LAT/LONG... 45-19.54 N 118-07.20 W

MS 30 MN

TOWNSHIP=RANGE
03S 038E 05

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. BLUE MOUNTAINS
 MAP REFERENCE..... LA GRANDE SE 1124000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/12/206 GEST. D.

SAMPLE NUMBER..... WS79-382

POINT OF COLLECTION.. WEILHEAD

TEMPERATURE (C)..... 25.5

AMBIENT TEMP (C)..... A.

DISCHARGE..... 374. L/MIN

TFR ANALYSIS		
DATE/ANALYST.....	1980/01/28	BANERJEE, KALA C.
P.I.....	8.2	AT(C) 26.

Pt.	AT(C)	26.
1.....	8.2	
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99.....		
100.....		

SPECIFIC CONDUCTANCE....

ALKALINITY.....60.
AS CAC03.....60.

TOTAL DISSOLVED SOLIDS...

CHARGE IMBALANCE (% DIFF)... 2.8
ANALYSIS IN MG/L

AG....	CO3.....	LI....	0.01
AL....	CR.....	MG....	0.39
AS....	CS.....	MN....	L 0.02
R....	F.....	NA....	19.
FE....	FE(TOT) L 0.05	SI02..	84.
CA....		S04....	3.9
CD....	H2S.....	P04....	0.016
CL....			
CO....	K.....		5.7

REFERENCE AND JUSTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... #D0GAMI

RECORD 00332

GEOTHERM FILE 101 0015982

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... U.P. NR NO. 2
WELL/SPRING NUMBER..... 3S-38E-5-CB
LOCATION
COUNTRY..... UNITED STATES
STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE... 29
MAP REFERENCE..... LA GRANDE SE 1124000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR..... 1979/12/28 BLACK & G.
SAMPLE NUMBER..... W579-378
POINT OF COLLECTION.. WELLHEAD
TEMPERATURE (C)..... 26.
EFFLUENT TEMP (C)..... 8.
DISCHARGE..... 284. L/MIN
WATER ANALYSIS

COORDINATES
LAT/LONG... 45-20.00 N 118-07.17 W

TOWNSHIP-RANGE
03S 038E 05 NW OF SW

DATE/ANALYST..... 1980/01/23 BANERJEE, KALA C.
PH..... 8.4 AT(C) 26.
SPECIFIC CONDUCTANCE..... 143.
ALKALINITY..... 67. AS CAC03
TOTAL DISSOLVED SOLIDS... 154.
CHARGE IMBALANCE (% DIFF)... 3.4

ISOTOPES 10/001

AG....	CO3.....	LI....	0.01
AL....	CR.....	MG....	0.62
AS....	CS.....	MN....	L 0.02
R....	F.....	NA....	24.
FE....	FE+3.....	SI02..	80.
CA....	FE(TOT) L 0.05	S04....	2.4
CD....			
CL....	H2S.....	P04....	0.026
CO....			
CO....	K.....		6.1

REFERENCE AND JUSTIFICATION
COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... #OREGUN DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

RECORD 00333

GEOTHERM FILE ID: 0003082

GEOTHERM-SAMPLE-FILE

NAME OF SAMPLE SOURCE... UNION JUNCTION NO. 1

WELL/SPRING NUMBER..... 4S-39E-022-DA

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. 29

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD

SAMPLE NUMBER..... WSRU-067

POINT OF COLLECTION.. ORIFICE

TEMPERATURE (C)..... 37.

AMBIENT TEMP (C)..... 10.

DISCHARGE..... 57. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/03 BANERJEE, KALA C.

P..... 8.1

SPECIFIC CONDUCTANCE..... 465.

ALKALINITY..... 58. AS CAC03

TOTAL DISSOLVED SOLIDS... 311.

CHARGE IMBALANCE (% DIFF)... 1.3

ANALYSIS IN MG/L

AG..... CO3.....

AL..... L 0.1

AS..... CR.....

CA..... 0.063

CL..... 59.

CO..... 3.5

CU..... K.....

FE..... 1.2

H2S..... L 0.05

H2O..... P04... 0.055

MAG..... L 0.1

MANG..... 1.1

MANG..... L 0.05

MANG..... 75.

MANG..... S102. 78.

MANG..... S04... 41.

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ISOTOPES (0/001)

RECORD 00334

GEOTHERM FILE ID: 0003071

GEOTHERM-SAMPLE-FILE

NAME OF SAMPLE SOURCE... UNION JUNCTION NO. 2

WELL/SPRING NUMBER..... 4S-39E-023-CB

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. 29

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD

SAMPLE NUMBER..... WSRU-066

POINT OF COLLECTION.. ORIFICE

COORDINATES

LAT/LONG... 45-12.000N 117-54.023W

TEMPERATURE (C)..... 30.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 95. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.

PH..... 8.4

SPECIFIC CONDUCTANCE..... 464.

ALKALINITY..... 64. AS CAC03

TOTAL DISSOLVED SOLIDS..... 306.

CHARGE IMBALANCE (% DIFF).... 4.5

ANALYSIS IN MG/L

AG..... CO3.....

AL..... 0.13 CR.....

AS..... 0.057 CS.....

HF..... 1.5 F.....

FE(TOT)..... 0.05

CA..... 6.0 H2S.....

CO..... 59. CL.....

CO..... K..... 2.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... DOGAMI

REFERENCE..... *DOGAMI IN-HOUSE STUDIES. DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00335

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... WAGNER

WELL/SPRING NUMBER..... 1S-38E-024-00

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... UNION

GEOLOGIC PROVINCE.. 29

MAP REFERENCE..... CRAIG MOUNTAIN, ORE. 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1980/04/02 BLACK, GERALD

SAMPLE NUMBER..... W580-074

POINT OF COLLECTION.. WELLHEAD

TEMPERATURE (C)..... 31.

AMBIENT TEMP (C)..... 10.

DISCHARGE..... 13230. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.

PH..... 8.5

SPECIFIC CONDUCTANCE..... 145.0

ALKALINITY..... 55. AS CAC03

TOTAL DISSOLVED SOLIDS..... 154.

CHARGE IMBALANCE (% DIFF).... 0.7

ANALYSIS IN MG/L

AG..... CO3.....

AL..... L 0.1 CR.....

AS..... L 0.005 CS.....

HF..... L 0.2 F.....

FE(TOT)..... L 0.05

ISOTOPE 10/001

LI.... 0.1

MG.... 0.8

MN.... L 0.05

NA.... 74.

NB....

PO4... 0.04

SI02. 65.

S04... 40.

COORDINATES

LAT/LONG... 45-27.026N 117-59.050W

GEOTHERM FILE ID: 0003077

ISOTOPE 10/001

LI.... L 0.1

MG.... L 0.1

MN.... L 0.05

NA.... 25.

NB....

SI02. 84.

S04... 6.1

CA.... 2.2 H2S..... P04... 0.017
 CD.... 1.4
 CL.... 5.4

CO..... K.....
 QUALIFICATION FIELD..... FROM BAXTER AND OTHERS, 1978 FLOW RATE, PUMPED IS 5000 GPM
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION..... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES, DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00336

GEOTHERM SAMPLE FILE.....
 NAME OF SAMPLE SOURCE... WAGNER WARM ARTISAN WELL
 KGRA..... LE GRANDE
 WELL/SPRING NUMBER..... 01S-38E-024-00

GEOTHERM FILE ID: 0000178

COORDINATES

LOCATION.....
 COUNTRY..... UNITED STATES 01S 038E 24 SE OF SE
 STATE..... OREGON
 COUNTY..... UNION

MAP REFERENCE..... SUMMERVILLE, ORE. 1:24000
 OTHER LOCALITY INFORMATION: ELEVATION = 900 METERS.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1974/07/00

SAMPLE NUMBER..... 664
 TEMPERATURE (C)..... 32.0
 DISCHARGE..... 378. L/MIN

PERTINENT LITHOLOGY..... REGIONAL STRATIGRAPHY IS CHARACTERIZED BY A PALEOZOIC-MESOZOIC BASALMENT OF
 METASEDIMENTARY, METAVOLCANIC AND INTRUSIVE IGNEOUS ROCKS WHICH ARE OVERLAIN BY CONTINENTAL SEDIMENTARY AND
 VOLCANIC ROCKS OF EOCENE THROUGH PLEISTOCENE AGE.

WATER ANALYSIS

PH..... 8.55
 TOTAL DISSOLVED SOLIDS... 252.
 CHARGE IMBALANCE (% DIFF)... 30.4
 ANALYSIS IN MG/L

ISOTOPE 10/001

AG..... CO3..... L 1.0 LI... 0.01
 AL..... CR..... MG... 0.1
 H..... L 1.0 F..... 1.7 NA... 30. S102. 91.
 RE..... FE(TOT)... NB... S04... 4.0
 CA..... 2.0 HCO3... 116.
 CL..... 1.5

CO..... K..... 5.6
 OTHER ANALYTICAL DATA... T S102 (QUARTZ) =132.01 T NA/K =270.01 T NA-K-CA =205.01 ALL VALUES ARE DEGREES C.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... PETERS, SANDRA K.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... DELLECHATE, 1978

RECORD 00337

GEOTHERM SAMPLE FILE.....
 NAME OF SAMPLE SOURCE... WAGNER WELL
 LOCATION.....
 COUNTRY..... UNITED STATES 01S 038E 24 SE OF SE
 STATE..... OREGON
 COUNTY..... UNION

GEOTHERM FILE ID: 0015946

COORDINATES
 LAT/LONG... 45-27.43 N 117-59.84 W
 UTM ZONE... 11
 NORTHING... 5034004.

422020.

GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... IMBFR 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1950/08/09
 TEMPERATURE (C)..... 29.
 WELL DEPTH (M)..... 351.
 WATER ANALYSIS
 PH..... 8.0
 SPECIFIC CONDUCTANCE..... 148.
 CHARGE IMBALANCE (% DIFF).... 1.3
 ANALYSIS IN PPM
 AG..... 4.9
 AL..... 0.1
 H..... 2.0
 RE.....
 CA..... 3.6
 CL..... 3.1
 CO.....
 K..... 4.0
 MG..... 0.8
 NA..... 28.
 FE(TOT).....
 HCO3..... 62.
 NO3..... 0.2
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION.... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... HAMPTON AND BROWN, 1964

ISOTOPE5 (0/0001

S04... 8.3

RECORD 00338

GEOTHERM FILE 101 0003075

COORDINATES

LAT/LONG... 45-18.059N 117-48.037W

GEOTHERM SAMPLE FILE
 NAME OF SAMPLE SOURCE... WARM CREEK
 WELL/SPRING NUMBER..... 35-40E-009-DA
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. 29
 MAP REFERENCE..... COVE, ORE. 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1980/04/01 BLACK, GERALD.
 SAMPLE NUMBER..... WSR0-072
 POINT OF COLLECTION.. ORTICE
 TEMPERATURE (C)..... 25.
 AMBIENT TEMP (C)..... 10.
 DISCHARGE..... 945. L/MIN
 WATER ANALYSIS
 DATE/ANALYST..... 1980/05/13 BANERJEE, KALA C.
 PH..... 9.3
 SPECIFIC CONDUCTANCE..... 121.
 ALKALINITY..... 45.
 TOTAL DISSOLVED SOLIDS... 95.
 CHARGE IMBALANCE (% DIFF).... 1.2
 ANALYSIS IN MG/L
 AG.....
 AL..... 0.22
 AS..... 0.005
 R..... L 0.2
 HE.....
 CA..... 2.4

IONSHIP=RANGE

U9S 040E 09

86M: WILLAMETTE

ISOTOPE5 (0/0001

LI... L 0.1
 MG... 0.2
 MN... L 0.05
 NA... 22.
 NO3...
 S04... 35.
 S102... 5.5

CD..... H2S..... P04.. 0.012
 CL..... 3.8
 CO..... K..... 0.8
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... DOGAMI
 REFERENCE..... *DOGAMI IN-HOUSE STUDIES, DOE CONTRACT NO. DE-FFC07-79ET27220.

RECORD 00339
 GEOTHERM FILE ID: 0001706

NAME OF SAMPLE SOURCE... WARM MINERAL SPRINGS
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 COUNTY..... UNION
 GEOLOGIC PROVINCE... 29
 SAMPLE DESCRIPTION AND CONDITIONS
 TEMPERATURE (C)..... 28.
 DISCHARGE..... R 143. L/MIN
 OTHER SAMPLE INFORMATION.. SULFUROUS ODER
 QUALIFICATION FIELD..... RANGE FOR DISCHARGE IS 95. - 190.
 REFERENCE AND IDENTIFICATION
 COMPILED BY..... MARINER, R. & BROOK, C.
 REFERENCE..... HAMPTON AND BROWN, 1964

COORDINATES
 LAT/LONG... 45-04.2 N 118-27.3 W

RECORD 00340
 GEOTHERM FILE ID: 0015945

NAME OF SAMPLE SOURCE... WELL
 LOCATION
 COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION
 COUNTY..... UNION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LA GRANDE SE 1:24000
 SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1955/01/21
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 437.
 DISCHARGE..... 1060. L/MIN
 PERTINENT LITHOLOGY..... BASALT AND TUFF IN ALTERNATING LAYERS
 WATER ANALYSIS
 DATE/ANALYST.....
 PH..... 7.9
 ALKALINITY..... 63.
 CHARGE IMBALANCE (% DIFF)... 37.5
 ANALYSIS IN PPM
 AL..... CR..... 1.3
 R..... F..... 0.5
 RE..... FE(TOT)... 30.
 CA..... 4.8
 CL..... 2.1
 CO..... K..... 5.
 REFERENCE AND IDENTIFICATION

COORDINATES
 LAT/LONG... 45-19.89 N 118-05.43 W
 UTM ZONE... +11
 NORTHING... 5020138.
 414546.

ISOTOPES 10/001

MG... 1.3
 NA... 30.
 NB... 72.
 S04... 4.8
 S102... 4.8

OREGON STATE BOARD OF HEALTH
 AS HC03

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00341

GEOTHERM_SAMPLE_FILE-----
 NAME OF SAMPLE SOURCE... WELL
 WELL/SPRING NUMBER..... 03S/38E-06
 LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION

COORDINATES
 LAT/LONG... 45-20.07 N 118-05.83 W
 UTM ZONE... +11
 NORTHING... 5020478.
 414029.

TOWNSHIP-RANGE
 03S 038E 06

SE OF NE

MAP REFERENCE..... LA GRANDE SE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1957/05/10

TEMPERATURE (C)..... 27.

WELL DEPTH (M)..... 1391.

PERTINENT LITHOLOGY..... BASALT

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 146.

ALKALINITY..... 84.

CHARGE IMBALANCE (% DIFF).... 3.7

ANALYSIS IN PPM

AL.....

H.....

HE.....

CA..... 10.

CL..... 1.

CO..... K..... 5.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 01

REFERENCE..... HAMPTON AND BROWN, 1964

ISOTOPES 10/001

0.2
 19.
 MG...
 NA...
 NB...
 SI02... 71.
 S04... 4.5

RECORD 00342

GEOTHERM_SAMPLE_FILE-----
 NAME OF SAMPLE SOURCE... WELL
 WELL/SPRING NUMBER..... 03S/38E-05
 LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... UNION

COORDINATES
 LAT/LONG... 45-19.89 N 118-05.43 W
 UTM ZONE... +11
 NORTHING... 5020138.
 414546.

TOWNSHIP-RANGE
 03S 038E 05

NW OF SW

MAP REFERENCE..... LA GRANDE SE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/01/21

TEMPERATURE (C)..... 27.

WELL DEPTH (M)..... 468.

DISCHARGE..... 1093. L/MIN

PERTINENT LITHOLOGY..... ALTERNATING LAYERS OF TUFF AND BASALT

WATER ANALYSIS

OREGON STATE BOARD OF HEALTH

DATE/ANALYST..... 7.9

ISOTOPE 10/001

ANALYSIS IN PPM
AL.....
R.....
RE.....
CA..... 5.
CL..... 3.2

CR.....
F..... 0.5
FE(TOT).....
MG..... 0.3
NA..... 27.
NB.....

SI02. 84.
S04.. 3.3

CO..... 5.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
C. COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
C. COMPILER CROSS INDEX... 01
REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00343

GEOTHERM FILE ID: 0015410

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... COOK CREEK WARM SPRING
WELL/SPRING NUMBER..... 5N/48E-30 88

TOWNSHIP=RANGE

COUNTRY..... UNITED STATES USN 048E 30 NW OF NW

STATE..... OREGON
COUNTY..... WALLOWA

GEOLOGIC PROVINCE... 29

MSP REFERENCE..... WAPSHILLA CREEK 1124000, GRANGEVILLE 11250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/11/21 HULL, DONALD A.

TEMPERATURE (C)..... 36.0

DISCHARGE..... 38. L/MIN

DEPOSITS OR ALTERATION..... NONE VISIBLE

WATER ANALYSIS

DATE/ANALYST..... 1975/04/16 L.W.S.

PH..... R 7.95

SPECIFIC CONDUCTANCE..... 610.

ALKALINITY..... 36. AS CAC03

TOTAL DISSOLVED SOLIDS... 386.

CHARGE IMBALANCE (% DIFF)... 1.2

ANALYSIS IN MG/L

AG.....
AL..... 0.16
AS..... 0.12
R.....
RE.....
SI.....
CA..... 36.
CO.....
CL..... 20.
CO.....
CR.....
CS.....
F..... 0.09
FE(TOT)..... 0.15
GA.....
HC03.....
H2S.....
LI..... L 0.01
MG..... 1.1
MN..... L 0.05
NA..... 62.
NB.....
NH4... L 0.01
NO3... 0.13
PO4... 0.05

SI02. 46.
S04.. 164.

ISOTOPE 10/001

QUALIFICATION FIELD..... PH RANGE: 7.9-8.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
C. COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
C. COMPILER CROSS INDEX... 01
REFERENCE..... #100GAMI

COORDINATES

LAT/LONG... 45-53.49 N 116-52.41 W
UTM ZONE... 11
NORTHING... 5081782.
509815.

RECORD 00344

GEOTHERM FILE 101 0015417

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... J. SANDOZ WELL
LOCATION

COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... WASCO
GEOLOGIC PROVINCE... 30
MAP REFERENCE... WHITE SALMON 1:62500, THE DALLES 1:250000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR... 1958/07/31
SAMPLE NUMBER... 303 IN NEWCOMB, 1972
TEMPERATURE (C)... 27.8
WELL DEPTH (M)... 166.
OTHER SAMPLE INFORMATION... WATER BEARING ZONE 420-546' .
WATER ANALYSIS

Pi... 7.9
SPECIFIC CONDUCTANCE... 378.
ALKALINITY... AS CAC03
TOTAL DISSOLVED SOLIDS... 314.
CHARGE IMBALANCE (% DIFF)... 0.2
ANALYSIS IN MG/L

AG... CO3... N
AL... CR... 4.6
AS... MN... N
H... CS... 62.
HE... F... 1.6
CA... FE(TOT)... 0.04
CA... HCO3... 234.
CA+MG... MG... N
CD... H2S... N
CL... 7.5
CO... K... 11.

REFERENCE AND IDENTIFICATION
COMPILED BY... ROWEN, RICHARD G.
COMPIILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPIILER CROSS INDEX... 03
REFERENCE... *DOGAMI

ISOTOPES 10/001

SI02. 95.
S04.. 1.5
U.... L 0.0001

RECORD 00345

GEOTHERM FILE 101 0000599

GEOTHERM SAMPLE FILE
NAME OF SAMPLE SOURCE... KAHNEETAH HOT SPRINGS
LOCATION

COUNTRY... UNITED STATES
STATE... OREGON
COUNTY... WASCO
GEOLOGIC PROVINCE...
MAP REFERENCE... EAGLE BUTTE 1:24000, BEND 1:250000
SAMPLE DESCRIPTION AND CONDITIONS
DATE/COLLECTOR... 1973/00/00 BARNES GROUP
TEMPERATURE (C)... 52.0
DISCHARGE... 200. L/MIN
WATER TREATMENT... PRESSURE - FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

COORDINATES
LAT/LONG... 44-51.72 N 121-12.05 W
UTM ZONE... 10
NORTHING... 4968978.
642146.

COORDINATES
LAT/LONG... 44-51.72 N 121-12.05 W
UTM ZONE... 10
NORTHING... 4968978.
642146.

DEPOSITS OR ALTERATION..... TRAVERTINE
PERTINENT LITHOLOGY..... RHYOLITE, ANDESITE, BASALT AND TUFFS

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP

PH..... 8.32

SPECIFIC CONDUCTANCE..... 1370.

CHARGE IMBALANCE (% DIFF).... 0.7

ANALYSIS IN MG/L

AG....	L 0.02	CO3....	9.	LI....	0.52	S....		ISOTOPE5 10/001	
AL....		CR....		MG....	L 0.05	SB....	L 0.2	DEL D OF WATER.....	-118.9
AS....		CS....	L 0.1	MN....	L 0.02			DEL O(18) OF WATER....	-14.75
AU....	L 0.1	CU....	L 0.01	NA....	325.	SI02.	104.		
H....	2.6	F.....	21.						
HA....	L 0.1	FE(TOT)...	L 0.02	NB....		SO4...	34.		
RE....	L 0.1	GA....		NH4...		SR....	L 0.05		
RI....		HCO3....	493.						
CA....	3.2	HG.....	0.0003	PB....	L 0.06				
CA+MG.									
CD....	L 0.01								
CL....	155.								
CO....	L 0.05	K.....	3.4	RB....	0.02				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPIILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPIILER CROSS INDEX... 01

REFERENCE..... MARINER AND OTHERS, 1974A, MARINER AND OTHERS, 1975

RECORD 00346

GEUTHERM FILE ID: 0015403

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MILTON MARTIN WELL

WELL/SPRING NUMBER..... IN/13E-32AC

LOCATION

COUNTRY..... UNITED STATES

STATE..... OREGON

COUNTY..... WASCO

GEOLOGIC PROVINCE... 30

MAP REFERENCE..... THE DALLS 1:62500, THE DALLS 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1958/07/30

SAMPLE NUMBER..... 314 IN NEWCOMB, 1972

TEMPERATURE (C)..... 22.2

WELL DEPTH (M)..... 130.

OTHER SAMPLE INFORMATION.. DEPTH OF PRODUCTION ZONE 330-336'

WATER ANALYSIS

PH..... 8.5

SPECIFIC CONDUCTANCE..... 279.

TOTAL DISSOLVED SOLIDS... 241.

CHARGE IMBALANCE (% DIFF).... 1.6

ANALYSIS IN MG/L

AG....		CO3....	N	MG....	2.9			ISOTOPE5 10/001	
AL....	1.0	CR....		MN....	N				
AS....		CS....		NA....	41.	SI02.	84.		
H....		F.....	0.9	NB....		SO4...	2.4		
HA....		FE(TOT)...	0.03						
CA....	15.	HCO3....	167.	NO3...	N				

COORDINATES

LAT/LONG... 45-31.70 N 121-12.95 W

UTM ZONE... 10

NORTHING... 5042975.

EASTING... 639325.

CA+MG.	MG.....	PB...	U....	L 0.0001
CD....	H2S.....	PO4..	N	
CL....	6.0			
CO....	K.....			7.2
REFERENCE AND IDENTIFICATION				
COMPILED BY..... ROWEN, RICHARD G.				
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES				
COMPILER CROSS INDEX... 02				
REFERENCE..... NEWCOMB, 1972				

APPENDIX A

Index to GEOTHERM'S sample file for the state of Oregon. This computer generated appendix contains some truncated fields. The index is sorted by county and name of the source. TNS - township, RNG - range, Sect. - section, I.D. - GEOTHERM record identifier, Temp. - temperature °C (see Table 1 for explanation of alphabetic qualifiers preceding temperature.)

County	Name of Source	Latitude	Longitude	TNS	RNG	Sect.	I.D.	Temp.
BAKER	CITY OF HUNTINGTON WELL	44-21.0	N 117-16.2	W 14S	045E	18	0001700	24.
BAKER	FISHER HOT SPRING	44-58.48	N 118-02.61	W 07S	038E	10	0015444	37.0
BAKER	KROPP HOT SPRING	45-00.8	N 117-53.1	W 06S	039E	25	0015427	43.0
BAKER	NELSON SPRING	44-33.0	N 117-24.0	W 12S	043E	02	0001701	27.
BAKER	RADIUM HOT SPRINGS	44-55.82	N 117-56.36	W 07S	039E	28	0002206	57.2
BAKER	RADIUM HOT SPRINGS	44-55.82	N 117-56.36	W 07S	039E	28	0000709	58.
BAKER	SAMO SPRING	44-46.76	N 117-48.65	W 09S	040E	16	0015420	27.0
CLACKAMAS	ACID-SULFATE SPRING ON MT. HOOD	45-22.3	N 121-41.8	W 02S	009E	29	0015469	
CLACKAMAS	AUSTIN HOT SPRINGS (CAREY)	45-01.30	N 122-00.50	W 06S	007E	30	0000697	86.0
CLACKAMAS	BAGBY HOT SPRINGS	44-56.15	N 122-10.35	W 07S	005E	26	0015422	57.2
CLACKAMAS	BAGBY HOT SPRINGS	44-56.15	N 122-10.35	W 07S	005E	26	0015451	58.
CLACKAMAS	GEOTHERMAL GRADIENT TEST NEAR AUSTIN HOT SPRING	45-01.65	N 121-57.80	W 06S	007E	21	0015446	35.6
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015472	89.4
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015473	
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015474	91.1
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015937	86.1
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015950	71.1
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015951	89.4
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015952	89.4
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015471	
CLACKAMAS	MT. HOOD FUMARoles	45-22.3	N 121-41.8	W 02S	009E	29	0015470	89.4
CLACKAMAS	SWIM WARM SPRINGS	45-17.7	N 121-44.3	W 03S	008.5	24	0015421	26.0
CROOK	CAMP CREEK	44-00.6	N 120-09.0	W			0001702	23.
CROOK	CRADDOCK WELL	44-12.73	N 121-01.02	W 16S	014E	03	0003017	24.3
CROOK	DEADMAN SPRINGS	44-10.045N	120-56.020W	16S	015E	16	0003007	13.
CROOK	E. MECKER WELL	44-11.42	N 121-01.65	W 16S	014E	10	0003021	24.9
CROOK	JACKSON WELL	44-11.1	N 121-02.9	W 16S	014E	16	0003018	27.
CROOK	PB-1 DOGAMI DRILL HOLE	44-09.022N	121-03.013W	16S	014E	016	0003014	32.5
CROOK	SAMPALUESI WELL	44-14.80	N 120-57.17	W 15S	015E	29	0003033	21.6
CROOK	T. BEARDY WELL	44-11.23	N 121-02.05	W 16S	014E	15	0003016	24.5
CROOK	T. O. MARSHALL WELL	44-10.73	N 121-03.30	W 16S	014E	21	0001605	33.3
CROOK	UNNAMED SPRING ON S. FORK CROOKED RIVER	44-04.2	N 120-02.4	W 17S	022E		0001703	31.
CROOK	WEIGAND WELL	44-15.5	N 121-03.0	W 15S	014E	33	0003015	24.
DESCHUTES	DECKER WELL NO. 2	43-48.026N	120-45.053W	20S	016E	24	0003009	25.1
DESCHUTES	EAST LAKE HOT SPRINGS	43-43.1	N 121-12.2	W 21S	013E	29	0000781	62.0
DESCHUTES	EAST LAKE HOT SPRINGS	43-43.1	N 121-12.2	W 21S	013E	29	0015453	49.
DESCHUTES	EAST LAKE HOT SPRINGS	43-43.1	N 121-12.2	W 21S	013E	29	0015452	
DESCHUTES	PAULINA HOT SPRINGS	43-43.75	N 121-15.125W	21S	012E	26	0015947	
DESCHUTES	PAULINA HOT SPRINGS	43-43.75	N 121-15.125W	21S	012E	26	0015454	
DESCHUTES	WARM WELL AT LITTLE CRATER CAMPGROUND	43-42.9	N 121-14.5	W 21S	012E	36	0015455	35.5
DOUGLAS	UMPQUA HOT SPRINGS	43-17.70	N 122-21.917W	26S	004E	20	0015456	46.5
DOUGLAS	UMPQUA HOT SPRINGS	43-17.67	N 122-21.917W	26S	004E	20	0015949	46.
GRANT	BLUE MOUNTAIN HOT SPRINGS	44-21.30	N 118-34.40	W 14S	034E	13	0000719	58.0
GRANT	BRISBOIS RANCH SPRINGS	44-05.4	N 119-25.2	W 17S	027E	13	0001704	22.
GRANT	JOAQUIN MILLER RESORT	44-16.81	N 118-57.36	W 15S	031E	11	0015948	40.

GRANT	LIMEKILN SPRING	44-22.5	N	118-43.8	W	14S	033E	10	0001705	21.
GRANT	RITTER HOT SPRINGS	44-53.60	N	119-08.50	W	08S	030E	08	0000715	41.0
GRANT	WEBERG HOT SPRING	44-00.1	N	119-38.8	W	18S	026E	18	0000693	46.0
HARNEY	ALVORD HOT SPRINGS	42-32.66	N	118-31.66	W	34S	034E	32	0000681	76.0
HARNEY	ALVORD HOT SPRINGS	42-32.66	N	118-31.66	W	34S	034E	32	0015429	82.2
HARNEY	ALVORD HOT SPRINGS	42-32.66	N	118-31.66	W	34S	034E	32	0015461	78.5
HARNEY	ALVORD HOT SPRINGS	42-32.66	N	118-31.66	W	34S	034E	32	0015460	78.5
HARNEY	BAKER SPRING	43-29.4	N	119-06.0	W	24S	030E	24	0001680	21.
HARNEY	BARNYARD SPRING	43-15.05	N	119-14.020	W	27S	029E	06	0003060	22.0
HARNEY	BASQUE SPRING	43-16.2	N	119-17.1	W	26S	029E	31	0001696	23.
HARNEY	BATHUB SPRING	43-11.80	N	119-06.45	W	27S	29.5E	28	0003068	51.1
HARNEY	CITY OF HINES WELL	43-33.57	N	119-05.31	W	23S	030E	23	0015441	17.0
HARNEY	CITY OF HINES WELL	43-32.4	N	119-06.6	W				0001684	17.
HARNEY	CRANE HOT SPRING	43-26.45	N	118-38.30	W	24S	033E	34	0003046	76.0
HARNEY	CRANE HOT SPRINGS	43-26.45	N	118-38.30	W	24S	033E	34	0015938	49.
HARNEY	CRANE HOT SPRINGS	43-26.45	N	118-38.30	W	24S	033E	34	0015435	80.0
HARNEY	CRANE HOT SPRINGS	43-26.45	N	118-38.30	W	24S	033E	34	0000727	78.0
HARNEY	DEVELOPMENT WELL	43-32.33	N	119-05.02	W	23S	030E	35	0003053	26.5
HARNEY	DOG MOUNTAIN OIL TEST WELL	43-23.4	N	119-04.2	W	25S	030E	24	0001682	60.
HARNEY	DUNN RANCH ARTESIAN WELL NO. 1	43-15.06	N	119-14.019	W	26S	030E	33	0003043	26.
HARNEY	EAGLES NEST SPRING NO. 1	43-12.38	N	119-03.45	W	27S	29.5E	25	0003070	41.7
HARNEY	EAGLES NEST SPRING NO. 2	43-12.80	N	119-03.62	W	27S	29.5E	24	0003067	28.1
HARNEY	FISCHER WELL	43-31.32	N	119-05.00	W	24S	030E	02	0003054	25.5
HARNEY	GOODMAN SPRING (HOTCHKISS)	43-31.73	N	119-04.83	W	23S	030E	35	0015437	22.0
HARNEY	HARNEY LAKE HOT SPRINGS	43-10.6	N	119-03.6	W	27S	29.5E	36	0003065	67.
HARNEY	HARNEY VALLEY DEV. CO. OIL TEST WELL	43-30.25	N	118-54.30	W	24S	032E	08	0015436	46.0
HARNEY	HARNEY VALLEY DEV. CO. OIL TEST WELL	43-30.25	N	118-54.30	W	24S	032E	08	0003045	50.
HARNEY	HINES LUMBER CO. WELL	43-32.34	N	119-04.80	W	23S	030E	35	0015439	25.0
HARNEY	HINES MILL NO. 2	43-32.82	N	119-04.80	W	23S	030E	26	0003057	27.8
HARNEY	HINES MILL WELL NO. 1	43-33.43	N	119-04.85	W	23S	030E	35	0003056	28.5
HARNEY	HOGHOUSE HOT SPRING	42-53.7	N	118-53.7	W	31S	032E	13	0001679	27.
HARNEY	HOT BORAX LAKE	42-19.60	N	118-36.17	W	37S	033E	14	0000782	36.0
HARNEY	HOT BORAX LAKE	42-19.60	N	118-36.17	W	37S	033E	14	0002208	R 29.4
HARNEY	HOT BORAX LAKE	42-19.60	N	118-36.17	W	37S	033E	14	0002211	31.1
HARNEY	HOTCHKISS WELL	43-31.42	N	119-03.83	W	24S	030E	01	0015438	27.
HARNEY	HOTCHKISS WELL	43-31.42	N	119-03.83	W	24S	030E	01	0015940	27.
HARNEY	HOTCHKISS WELL	43-31.42	N	119-03.83	W	24S	030E	01	0003050	33.
HARNEY	HOWELL OIL TEST	43-21.6	N	118-53.4	W	26S	032E	05	0001681	41.
HARNEY	HUGHET SPRING	43-15.0	N	119-15.6	W	27S	029E	08	0001697	20.
HARNEY	ISLAND RANCH WELL	43-25.40	N	118-55.95	W	25S	032E	07	0015434	41.0
HARNEY	JOHNSON SPRING	43-15.6	N	119-16.8	W	27S	029E	05	0001698	22.
HARNEY	LONG HOLLOW WELL	43-19.039	N	118-33.015	W	26S	034E	08	0003042	25.
HARNEY	LYNCH SPRING	43-15.0	N	119-01.5	W	27S	030E	08	0001699	18.
HARNEY	MICKEY SPRINGS	42-40.6	N	118-20.7	W	33S	035E	13	0000679	73.0
HARNEY	MICKEY SPRINGS	42-40.54	N	118-20.67	W	33S	035E	13	0015459	
HARNEY	MICKEY SPRINGS	42-40.6	N	118-20.7	W	33S	035E	13	0015458	86.
HARNEY	MICKEY SPRINGS	42-40.6	N	118-20.7	W	33S	035E	13	0015457	86.
HARNEY	MICKEY SPRINGS	42-40.6	N	118-20.7	W	33S	035E	13	0015433	85.
HARNEY	MILLPOND SPRING	43-32.43	N	119-04.86	W	23S	030E	35	0015941	26.
HARNEY	NORTH OF VENATOR	43-23.4	N	118-18.9	W				0001690	45.
HARNEY	O. J. THOMAS	43-37.65	N	118-51.75	W	22S	032E	34	0015440	72.0
HARNEY	O. J. THOMAS WELL	43-37.65	N	118-51.74	W	22S	032E	35	0003048	72.
HARNEY	OO STATION SPRING	43-18.005	N	119-00.3	W	26S	028E	36	0003061	23.
HARNEY	POTTERS SWAMP ART. WELL FIELD	43-30.040	N	119-05.009	W	24S	030E	11	0003039	27.
HARNEY	POWERHOUSE WELL	43-33.03	N	119-04.77	W	23S	030E	26	0003055	25.

HARNEY	REST STOP WARM WELL	43-31.060N 119-04.040W 23S 030E	36	0003040	26.
HARNEY	ROADLAND SPRING	43-29.4 N 119-07.2 W 24S 030E	11	0001685	22.
HARNEY	SAGE HEN CREEK ART. WELL	43-28.041N 119-04.024W 24S 030E	24	0003038	23.
HARNEY	THOMPSON IRR. WELL	43-18.048N 118-35.019W 26S 033E	13	0003037	24.
HARNEY	TRAILER COURT WELL	43-32.38 N 119-04.68 W 23S 031E	36	0003058	26.5
HARNEY	UNAMED WARM SPRINGS	43-17.008N 119-17.008W 26S 029E	31	0003062	21.
HARNEY	UNAMED	43-31.8 N 119-04.5 W 23S 030E	36	0001686	25.
HARNEY	UNAMED	42-16.5 N 119-22.5 W 26S 028E	33	0001691	20.
HARNEY	UNAMED	43-20.4 N 119-26.1 W 26S 027E	12	0001689	20.
HARNEY	UNAMED	42-49.2 N 118-54.0 W 32S 032E	12	0001688	32.
HARNEY	UNAMED	42-16.2 N 118-41.4 W 38S 034E	22	0001695	32.
HARNEY	UNAMED	43-57.6 N 119-38.4 W 19S 026E	05	0001694	29.
HARNEY	UNAMED	42-18.0 N 118-17.4 W 37S 036E	33	0001693	46.
HARNEY	UNAMED	42-15.6 N 118-18.6 W 38S 037E	24	0001692	38.
HARNEY	UNAMED	42-50.0 N 118-52.2 W 32S 032.5	05	0001687	28.
HARNEY	UNAMED HOT SPRING NEAR HARNEY LAKE	43-10.6 N 119-03.6 W 27S 29.5E	36	0000729	68.0
HARNEY	UNAMED HOT SPRING NEAR HARNEY LAKE	43-10.6 N 119-03.6 W 27S 29.5E	36	0015939	59.
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-19.82 N 118-36.16 W 37S 033E	14	0015467	84.
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.17 N 118-36.08 W 37S 033E	11	0015466	97.
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.17 N 118-36.08 W 37S 033E	11	0015462	91.
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-19.82 N 118-36.16 W 37S 033E	14	0015465	86.
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-19.82 N 118-36.16 W 37S 033E	14	0015464	90.5
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.08 N 118-36.11 W 37S 033E	11,	0002219	87.0
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.17 N 118-36.08 W 37S 033E	11	0000683	96.0
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-19.82 N 118-36.16 W 37S 033E	14	0002210	79.4
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.17 N 118-36.08 W 37S 033E	11	0002209	R 73.9
HARNEY	UNAMED HOT SPRING NEAR HOT BORAX LAKE	42-20.08 N 118-36.11 W 37S 033E	11,	0015463	97.
HARNEY	UNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF	42-11.3 N 118-23.0 W 39S 037E	16	0015428	
HARNEY	UNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF	42-11.3 N 118-23.0 W 39S 037E	16	0000731	52.0
HARNEY	UNAMED WARM SPRING	43-39.76 N 118-44.30 W 22S 32.5E	14	0015942	22.
HARNEY	UNAMED WARM SPRING IN HARNEY LAKE	43-16.026N 119-15.020W 27S 029E	09	0003063	21.
HARNEY	WARM SPRING NEAR VENATOR	43-12.006N 119-04.027W 27S 29.5E	36	0003064	22.
HARNEY	WARM SPRINGS RESERVOIR	43-23.7 N 118-18.4 W 25S 036E	16	0015345	41.
HARNEY	WARM SPRINGS RESERVOIR	43-39.0 N 118-15.6 W		0001683	62.
HOOD RIVER	PARKDALE GRADIENT HOLE	45-29.75 N 121-33.5 W 01S 010E	09	0015971	24.
JACKSON	JACKSON HOT SPRING	42-13.30 N 122-44.65 W 38S 001E	48	0015344	35.0
KLAMATH	ABE BOEHM	42-04.05 N 121-45.40 W 40S 009E	28	0003005	25.
KLAMATH	ABE BOEHM	42-04.05 N 121-45.40 W 40S 009E	28	0015309	25.0
KLAMATH	ALFRED JACOBSEN	42-07.65 N 121-44.40 W 39S 009E	34	0015325	30.0
KLAMATH	ANNIE SPRING	42-52.35 N 122-10.10 W 31S 006E	19	0015312	25.0
KLAMATH	BILL HILL	42-03.55 N 121-36.60 W 40S 010E	26	0015338	20.0
KLAMATH	CLAUDE SHUCK	42-11.35 N 121-39.80 W 39S 010E	08	0015327	24.
KLAMATH	CLYDE DEHLINGER	42-06.75 N 121-39.65 W 40S 010E	05	0015337	24.0
KLAMATH	DAN O'CONNER	42-04.85 N 121-43.85 W 40S 009E	23	0015336	24.0
KLAMATH	EAGLE POINT SPRING	42-25.85 N 121-57.75 W 36S 007E	23	0015300	Q 35.
KLAMATH	FALCON HEIGHTS SCHOOL	42-07.80 N 121-45.10 W 39S 009E	34	0015305	37.0
KLAMATH	GEORGE CARTER	42-00.55 N 121-36.90 W 41S 010E	14	0015343	22.
KLAMATH	GEORGE STACY CO.	42-08.40 N 121-39.80 W 39S 010E	32	0015333	25.0
KLAMATH	HOWARD HOLLIDAY	42-10.55 N 121-49.70 W 39S 008E	13	0015320	25.0
KLAMATH	J. E. FRIESEN	42-13.75 N 121-46.15 W 38S 009E	28	0015315	73.0
KLAMATH	J. K. O'NEIL	42-08.30 N 121-38.10 W 39S 010E	34	0015335	23.0
KLAMATH	J. K. O'NEIL	42-08.30 N 121-38.10 W 39S 010E	34	0015442	
KLAMATH	JACK LISKEY	42-02.95 N 121-44.40 W 40S 009E	34	0015310	93.0
KLAMATH	JACK LISKEY	42-02.25 N 121-43.60 W 41S 009E	02	0015311	22.0
KLAMATH	JACK LISKEY	42-02.25 N 121-43.60 W 41S 009E	02	0003004	25.

KLAMATH	JACK O'CONNER	42-02.00 N 121-42.95 W 41S 009E	01	0015339	38.0
KLAMATH	KLAMATH ICE CO.	42-13.40 N 121-01.40 W 38S 009E	33	0015431	51.7
KLAMATH	LEN DOBRY	42-08.90 N 121-38.65 W 39S 010E	28	0015331	21.0
KLAMATH	LESTER BROOKSHIRE	42-08.70 N 121-39.70 W 39S 010E	29	0015332	25.0
KLAMATH	LOIS MERRUYS	42-13.65 N 121-01.45 W 38S 009E	33	0015319	71.0
KLAMATH	MAZAMA SCHOOL	42-11.85 N 121-43.90 W 39S 009E	11	0015322	61.0
KLAMATH	MEDO-BELL DAIRY	42-13.8 N 121-46.4 W 38S 009E	28	0015302	81.0
KLAMATH	MEDO-BELL DAIRY	42-13.8 N 121-46.4 W 38S 009E	28	0003001	81.
KLAMATH	MELVIN FEIGI	42-08.20 N 121-30.10 W 40S 011E	03	0015430	31.0
KLAMATH	MELVIN MCCOLLUM	42-11.50 N 121-41.05 W 39S 010E	07	0015306	25.0
KLAMATH	MILLS SCHOOL	42-13.45 N 121-45.90 W 38S 009E	33	0015303	89.0
KLAMATH	MONTE DEHLINGER	42-07.60 N 121-40.40 W 39S 010E	32	0015334	26.0
KLAMATH	MOYINA WATER CO.	42-12.60 N 121-42.45 W 39S 009E	01	0015321	6 50.
KLAMATH	O. H. OSBORN	42-03.30 N 121-44.70 W 40S 009E	27	0015308	90.0
KLAMATH	O.I.T. NO. 5	42-13.85 N 121-46.40 W 38S 009E	28	0015419	89.0
KLAMATH	O.I.T. NO. 6	42-14.90 N 121-46.85 W 38S 009E	20	0015301	88.0
KLAMATH	O.I.T. NO. 6	42-14.90 N 121-46.85 W 38S 009E	20	0003006	79.
KLAMATH	O'CONNER LIVESTOCK CO.	42-01.00 N 121-41.00 W 41S 010E	07	0015342	30.0
KLAMATH	OLENE GAP HOT SPRINGS	42-10.45 N 121-36.90 W 39S 010E	14	0000705	74.0
KLAMATH	OLENE GAP HOT SPRINGS	42-10.45 N 121-36.90 W 39S 010E	14	0003003	87.
KLAMATH	OLENE GAP HOT SPRINGS	42-10.45 N 121-36.90 W 39S 010E	14	0015443	73.9
KLAMATH	OREGON WATER CORP.(1)	42-13.30 N 121-47.45 W 38S 009E	32	0015316	Q 21.
KLAMATH	OREGON WATER CORP.(2)	42-13.30 N 121-47.45 W 38S 009E	32	0015317	21.0
KLAMATH	OREGON WATER CORP.(3)	42-13.30 N 121-47.45 W 38S 009E	32	0015318	20.0
KLAMATH	OREGON WATER CORP.(4)	42-12.10 N 121-41.40 W 39S 010E	06	0015326	26.
KLAMATH	POPE'S MEAT CO.	42-01.95 N 121-37.50 W 41S 010E	03	0015341	22.0
KLAMATH	RAY BIXLER	42-11.55 N 121-37.95 W 39S 010E	10	0015328	22.0
KLAMATH	RAY SMITH WELL	42-27.25 N 121-25.40 W 36S 011E	16	0015432	25.
KLAMATH	ROBERT LANGLEY	42-10.75 N 121-37.90 W 39S 010E	15	0015330	23.
KLAMATH	ROENICKE HOT SPRING	42-10.40 N 121-37.05 W 39S 010E	14	0015329	Q 65.0
KLAMATH	S. AND C. KILGORE	42-06.40 N 121-03.80 W 40S 014E	16	0015314	20.0
KLAMATH	TOWN OF MERRILL	42-01.50 N 121-36.00 W 41S 010E	02	0015340	21.0
KLAMATH	U.S. AIR FORCE(1)	42-08.05 N 121-45.25 W 39S 009E	34	0015323	Q 31.0
KLAMATH	U.S. AIR FORCE(2)	42-08.10 N 121-45.35 W 39S 009E	34	0015324	Q 30.
KLAMATH	WEYERHAUSER WELL NO. 4	42-10.70 N 121-48.10 W 39S 009E	18	0015304	22.
LAKE	ADEL WELL	42-10.8 N 119-52.8 W 39S 024E	23	0001721	71.
LAKE	ANA RIVER SPRING	42-59.8 N 120-45.3 W 30S 017E	06	0002215	18.9
LAKE	ANTELOPE HOT SPRINGS	42-29.97 N 119-41.48 W 35S 026E	32	0002216	40.0
LAKE	ANTONE SPRINGS	42-18.52 N 120-23.78 W 38S 020E	06	0015954	22.5
LAKE	BARRY RANCH HOT SPRINGS	42-09.35 N 120-20.67 W 39S 020E	27	0015976	92.5
LAKE	BARRY RANCH HOT SPRINGS (GUS ALLEN)	42-09.35 N 120-20.67 W 39S 020E	27	0002217	85.0
LAKE	BARRY RANCH HOT SPRINGS (GUS ALLEN)	42-09.35 N 120-20.67 W 39S 020E	27	0000780	88.0
LAKE	BEAN HOT SPRING	42-23.4 N 120-19.4 W 37S 020E	11	0001716	20.
LAKE	CHAMBERS RANCH IRRIGATION WELL	42-45. N 120-20.66 W 38S 020E	22	0015955	28.5
LAKE	COLVERT SPRING	42-21.44 N 120-21.51 W 37S 020E	16	0015963	16.
LAKE	CRUMP SPRING	42-13.60 N 119-52.87 W 38S 024E	34	0002223	40.0
LAKE	CRUMP SPRING	42-13.60 N 119-52.87 W 38S 024E	34	0000691	78.0
LAKE	CRUMP WELL (1)	42-13.59 N 119-52.87 W 38S 024E	34	0002221	99.0
LAKE	CRUMP WELL (2)	42-13.59 N 119-52.87 W 38S 024E	34	0002220	88.0
LAKE	DON LINDSEY WELL	42-14.10 N 120-20.18 W 38S 020E	33	0015956	48.
LAKE	E. McDONALD HOT WELL	42-14.500N 120-21.967W 38S 020E	33	0015966	94.
LAKE	EVERETT McDONALD HOT SPRING	42-14.500N 120-21.968W 38S 020E	33	0015953	77.5
LAKE	FISHER HOT SPRINGS	42-17.84 N 119-46.55 W 38S 025E	10	0000717	68.0
LAKE	GLASS BUTTE MERCURY MINE WELL	43-32.4 N 119-55.8 W 23S 023E	27	0001718	48.
LAKE	HALLINAN SPRINGS	42-04.8 N 119-54.6 W 40S 024E	30	0001719	71.

LAKE	HAMMERSLY CANYON NO. 1 GRADIENT HOLE	42-13.12	N	120-20.89	W	39S	020E	03	0015993	50.
LAKE	HAMMERSLY CANYON NO. 1 GRADIENT HOLE	42-13.12	N	120-20.89	W	39S	020E	03	0015984	71.
LAKE	HART MTN. HOT SPRING	42-28.2	N	119-42.0	W	36S	026E	07	0001725	
LAKE	HOUSTON WELL	42-04.8	N	119-51.6	W	40S	024E	27	0001720	71.
LAKE	HUNTER HOT SPRING SOUTHWEST	42-12.9	N	120-22.4	W	39S	020E	04	0015985	87.
LAKE	HUNTER WELL	42-08.10	N	120-21.30	W	39S	020E	33	0015962	95.
LAKE	HUNTERS HOT SPRINGS	42-13.28	N	120-22.08	W	39S	020E	04	0015978	95.
LAKE	HUNTERS HOT SPRINGS	42-13.28	N	120-22.08	W	39S	020E	04	0015969	94.
LAKE	HUNTERS HOT SPRINGS (LAKEVIEW)	42-13.28	N	120-22.08	W	39S	020E	04	0015970	88.
LAKE	HUNTERS HOT SPRINGS (LAKEVIEW)	42-13.32	N	120-22.09	W	39S	020E	04	0002226	86.0
LAKE	HUNTERS HOT SPRINGS (LAKEVIEW)	42-13.32	N	120-22.09	W	39S	020E	04	0002228	98.0
LAKE	HUNTERS HOT SPRINGS (LAKEVIEW)	42-13.32	N	120-22.09	W	39S	020E	04	0000689	96.0
LAKE	INGLETON WELL	42-13.20	N	120-21.57	W	39S	020E	04	0015965	23.
LAKE	LAKEVIEW CITY WELL NO. 3	42-11.333N	120-21.130W	39S	020E	16	0015959	16.5		
LAKE	LAKEVIEW CITY WELL NO. 4	42-11.333N	120-21.139W	39S	020E	16	0015958	19.5		
LAKE	LAKEVIEW CITY WELL NO. 5	42-11.333N	120-20.266W	39S	020E	15	0015957	37.5		
LAKE	LAKEVIEW CITY WELL NO. 7	42-11.333N	120-21.463W	39S	020E	16	0015960	16.		
LAKE	LEDGORD WELL	42-01.08	N	120-17.67	W	41S	021E	18	0015964	21.
LAKE	LEITHHEAD (JOYLAND PLUNGE) HOT SPRING	42-09.708N	120-20.608W	39S	020E	27	0015977	70.		
LAKE	LEITHHEAD (JOYLAND PLUNGE) HOT SPRING	42-09.708N	120-20.608W	39S	020E	27	0002224	69.4		
LAKE	LOST CABIN	42-55.2	N	120-39.0	W	30S	017E	25	0001712	20.
LAKE	MOSS 1 WELL	42-19.2	N	119-52.7	W	38S	024E	03	0001723	22.
LAKE	MOSS 2 WELL	42-17.4	N	119-52.8	W	38S	024E	10	0001722	28.
LAKE	PAROON	42-56.4	N	120-47.4	W	30S	016E	35	0001715	24.
LAKE	ROBBIE WELL	42-10.43	N	120-22.47	W	39S	020E	04	0015967	80.
LAKE	ROCKFORD (OLD DETER) RANCH	42-06.350N	120-17.327W	40S	020E	01	0015961	77.		
LAKE	SUMMER LAKE HOT SPRING (WOODWARD)	42-43.53	N	120-38.75	W	33S	017E	12	0002229	46.7
LAKE	SUMMER LAKE HOT SPRING (WOODWARD)	42-43.53	N	120-38.75	W	33S	017E	12	0000707	43.0
LAKE	U.S. SOIL CONSERVATION SERVICE WELL	42-42.6	N	120-34.5	W	33S	018E	15	0001713	32.
LAKE	UNNAMED	42-36.0	N	120-10.2	W	34S	022E	30	0001714	27.
LAKE	UPPER BARRY NO. 1	42-09.4	N	120-20.38	W	39S	020E	27	0015986	63.
LAKE	UPPER ROCK CREEK	42-32.4	N	119-39.6	W	35S	026E	16	0001724	46.
LAKE	WHITE ROCK RANCH HOT SPRING	42-20.4	N	120-19.5	W	36S	020E	26	0001717	20.
LAKE	BELKNAP HOT SPRINGS	44-11.65	N	122-02.90	W	16S	006E	11	0000703	71.0
LAKE	BELKNAP HOT SPRINGS	44-11.65	N	122-02.90	W	16S	006E	11	0002230	86.7
LAKE	BIGLOW HOT SPRINGS	44-14.35	N	122-03.50	W	15S	006E	26	0015423	61.0
LAKE	COUGAR RESERVOIR HOT SPRINGS (RIDER)	44-04.95	N	122-14.00	W	17S	005E	20	0000787	44.0
LAKE	COUGAR RESERVOIR HOT SPRINGS (RIDER)	44-04.95	N	122-14.00	W	17S	005E	20	0015426	42.0
LAKE	FOLEY SPRINGS	44-09.20	N	122-05.85	W	16S	006E	28	0015424	80.6
LAKE	FRISSEL ROAD SPRING	44-12.06	N	122-03.	W	16S	006E	02	0015973	18.
LAKE	KITSON HOT SPRING	43-41.35	N	122-22.32	W	22S	004E	06	0015968	44.
LAKE	KITSON SPRINGS	43-41.35	N	122-22.50	W	22S	004E	06	0015468	43.
LAKE	KITSON SPRINGS	43-41.35	N	122-22.50	W	22S	004E	06	0002232	44.4
LAKE	MCCREDIE HOT SPRING NO. 2	43-42.6	N	122-17.3	W	21S	004E	36	0015975	62.
LAKE	MCCREDIE SPRINGS	43-42.35	N	122-17.20	W	21S	004E	36	0015425	71.0
LAKE	MCCREDIE SPRINGS	43-42.35	N	122-17.20	W	21S	004E	36	0000783	73.
LAKE	WALL CREEK WARM SPRINGS	43-48.45	N	122-18.55	W	20S	004E	26	0015401	41.0
LAKE	WALL CREEK WARM SPRINGS	43-48.5	N	122-18.2	W	20S	004E	26	0015974	40.
LAKE	WALL CREEK WARM SPRINGS	44-06.60	N	117-13.60	W	17S	045E	08	0015412	24.0
MALHEUR	ARTESIAN WELL	43-41.8	N	117-05.7	W	21S	046E	33	0015411	46.0
MALHEUR	BEULAH HOT SPRINGS	43-56.65	N	118-08.15	W	19S	037E	02	0000723	60.0
MALHEUR	CANTER'S HOT SPRING(JORDAN VALLEY)	42-54.0	N	117-04.2	W	30S	046E	02	0001736	50.
MALHEUR	DEER BUTTE H.S./MITCHELL BUTTE SYSTEM	43-44.7	N	117-10.2	W				0001728	
MALHEUR	JONESBORO WARM SPRING	43-47.5	N	117-57.5	W	20S	039E	29	0015405	44.5
MALHEUR	JUNTURA WARM SPRING #1	43-45.5	N	118-04.0	W	21S	038E	09	0015407	25.0

MALHEUR	JUNTURA WARM SPRING #2	43-45.5	N	118-05.5	W	21S	038E	17	0015409	35.0
MALHEUR	LUCE HOT SPRINGS	43-28.15	N	118-12.08	W	24S	037E	20	0000725	63.0
MALHEUR	MALHEUR BUTTE SPRINGS(MAY NOT EXIST)	42-02.7	N	117-01.2	W	17S	047E	31	0001740	75.0
MALHEUR	MITCHELL BUTTE HOT SPRINGS	43-45.78	N	117-09.34	W	21S	045E	12	0000784	62.0
MALHEUR	NEAL HOT SPRINGS	44-01.45	N	117-27.60	W	18S	043E	09	0000687	87.0
MALHEUR	NELSON WELL	43-57.6	N	117-37.8	W	18S	043E	34	0001733	21.0
MALHEUR	NORTH HARPER BLM WELL	43-55.76	N	117-12.72	W	19S	045E	09	0015413	36.0
MALHEUR	PAGE WELL	43-52.5	N	117-13.8	W	19S	045E	28	0001731	40.0
MALHEUR	ROUND MTN. BLM WELL	42-49.2	N	117-35.4	W	31S	042E	33	0001730	40.0
MALHEUR	S. BLACK WILLOW SPRING/SNIVELY	43-42.0	N	117-10.8	W					25.0
MALHEUR	SAND HOLLOW OIL TEST	43-56.6	N	117-22.5	W	19S	044E	19	0001739	50.0
MALHEUR	SCOTT'S SPRING	42-46.8	N	117-43.2	W				0001735	20.0
MALHEUR	TUDORS SPRING	42-37.2	N	117-59.8	W	33S	039E	14	0001734	20.0
MALHEUR	UNNAMED (J. SEIDER PROPERTY)	43-53.50	N	117-29.00	W	19S	043E	30	0015979	82.0
MALHEUR	UNNAMED HOT SPRING AT THREE FORKS	42-32.0	N	117-10.9	W	35S	045E	03	0000786	34.0
MALHEUR	UNNAMED HOT SPRING AT THREE FORKS	42-32.0	N	117-10.9	W	35S	045E	03	0002239	35.0
MALHEUR	UNNAMED HOT SPRING NEAR MCDERMITT	42-04.7	N	117-45.6	W	40S	042E	25	0000733	52.0
MALHEUR	UNNAMED HOT SPRING NEAR MCDERMITT	42-04.7	N	117-45.6	W	40S	042E	25	0002238	53.5
MALHEUR	UNNAMED HOT SPRINGS NEAR LITTLE VALLEY	43-53.48	N	117-30.00	W	19S	043E	30	0000721	70.0
MALHEUR	UNNAMED SPRING	43-18.0	N	117-22.5	W	27S	043E	18	0001738	50.0
MALHEUR	UNNAMED SPRING	43-06.9	N	117-52.8	W				0001737	50.0
MALHEUR	UNNAMED WARM SPRING NEAR BULLY CREEK	44-01.95	N	117-26.95	W	18S	043E	04	0015414	37.0
MALHEUR	VALE HOT SPRINGS	43-58.96	N	117-13.98	W	18S	045E	20	0000685	73.0
MALHEUR	VALE HOT SPRINGS	43-58.96	N	117-13.98	W	18S	045E	20	0003002	90.0
MALHEUR	VALE WELL	43-55.2	N	117-13.2	W	19S	045E	09	0001729	40.0
MALHEUR	VINES HILL BLM WELL	43-54.3	N	117-25.8	W	19S	043E	22	0001726	40.0
MALHEUR	WHITEHORSE RANCH WELL	42-18.0	N	118-12.6	W	37S	037E	31	0001732	32.0
MARION	BREITENBUSH HOT SPRINGS	44-46.87	N	121-58.5	W	09S	007E	20	0015972	98.0
MARION	BREITENBUSH HOT SPRINGS	44-46.86	N	121-58.54	W	09S	007E	20	0000701	92.0
MARION	BREITENBUSH HOT SPRINGS - WELL	44-46.86	N	121-58.54	W	09S	007E	20	0015445	110.0
MARION	BREITENBUSH WELL NO. 3	44-46.93	N	121-58.35	W	09S	007E	20	0003072	74.0
MORROW	WELLS SPRING (WELL)	45-37.8	N	119-48.0	W	02N	025E	28	0001708	27.0
MULTNOMAH	CAMP COLLINS WARM SPRINGS (WELL)	45-30.2	N	122-18.3	W	01S	004E	10	0000296	29.0
MULTNOMAH	CORBETT WARM SPRING	45-32.5	N	122-17.5	W	01N	004E	27	0015415	18.0
MULTNOMAH	YNCA CAMP COLLINS	45-30.2	N	122-18.3	W	01S	004E	10	0015416	23.3
UMATILLA	BINGHAM SPRINGS	45-44.47	N	118-13.96	W	03N	037E	18	0015347	34.4
UMATILLA	CITY OF HERMISTON WELL	45-49.8	N	119-18.0	W	04N	028E	10	0001711	24.0
UMATILLA	HIDAWAY SPRINGS	45-07.8	N	118-43.8	W	05S	033E	21	0001709	38.0
UMATILLA	LEWMAN SPRINGS	45-09.06	N	118-39.55	W	05S	033E	12	0000785	61.0
UMATILLA	WELL	45-56.4	N	118-27.6	W	05N	035E	05	0001710	24.0
UNION	BAKER WARM SPRING (CHUCK BENNETT WARM SPRING)	45-18.0	N	117-49.5	W	04S	040E	21	0000179	26.0
UNION	BARSTAD HOT WELL	45-13.6	N	117-57.3	W	04S	039E	05	0000177	81.5
UNION	BENNETT WARM SPRING	45-12.00	N	117-49.83	W	04S	040E	20	0000186	27.0
UNION	CLAYTON FOX WELL	45-28.2	N	117-58.2	W	01S	039E	20	0001707	27.0
UNION	COURTWHRIGHT WELL	45-14.037N	N	117-57.004N	W	04S	039E	05	0003084	67.0
UNION	COVE BATH HOUSE	45-17.037N	N	117-48.019N	W	03S	040E	22	0003080	28.8
UNION	COVE WARM SPRING	45-17.66	N	117-48.40	W	03S	040E	22	0000182	42.0
UNION	COVE WARM SPRING	45-17.67	N	117-48.38	W	03S	040E	22	0015418	29.4
UNION	CRESTON SHAW WELL	45-27.12	N	117-58.19	W	01S	039E	31	0015980	22.0
UNION	DUCK POND	45-12.049N	N	117-55.016N	W	04S	039E	15	0003085	25.0
UNION	GIRDNER WARM SPRING	45-16.032N	N	117-48.023N	W	03S	040E	27	0003073	22.2
UNION	GRANGE HALL	45-18.046N	N	117-48.027N	W	03S	040E	09	0003076	26.0
UNION	HAYSTACK WARM SPRING	45-12.8	N	117-55.3	W	04S	039E	15	0000176	25.5
UNION	HOOFNAGLE	45-18.052N	N	117-47.042N	W	03S	040E	10	0003074	24.0
UNION	HOT LAKE	45-14.63	N	117-57.51	W	04S	039E	05	0000711	80.0

UNION	HOT LAKE RESORT	45-14.037N	117-57.030W	04S	039E	05	0003083	81.
UNION	HOT LAKE SPRING	45-14.52 N	117-57.06 W	04S	039E	05	0000180	81.
UNION	LA GRANDE WARM WELL	45-20.66 N	118-05.90 W	03S	038E	06	0000181	28.0
UNION	LOVE SWIMMING POOL	45-17.036N	117-48.022W	03S	040E	22	0003081	30.
UNION	MEDICAL HOT SPRING	45-01.10 N	117-38.50 W	06S	041E	25	0000183	61.5
UNION	MEDICAL HOT SPRINGS	45-01.08 N	117-37.48 W	06S	041E	25	0000713	60.0
UNION	MEDICAL HOT SPRINGS	45-01.08 N	117-37.48 W	06S	041E	25	0002241	60.0
UNION	OASIS WARM SPRING	45-12.02 N	117-54.51 W	04S	039E	23	0000185	29.5
UNION	ROYCE	45-28.054W	117-57.043W	01S	039E	17	0003078	26.
UNION	SWEET WARM SPRING	45-12.13 N	117-55.03 W	04S	039E	22	0000184	38.0
UNION	U.P. RR NO. 1	45-19.54 N	118-07.20 W	03S	038E	05	0015981	25.5
UNION	U.P. RR NO. 2	45-20.00 N	118-07.17 W	03S	038E	05	0015982	26.
UNION	UNION JUNCTION NO. 1	45-12.003N	117-54.046W	04S	039E	22	0003082	37.
UNION	UNION JUNCTION NO. 2	45-12.000N	117-54.023W	04S	039E	23	0003071	30.
UNION	WAGNER	45-27.026N	117-59.050W	01S	038E	24	0003077	31.
UNION	WAGNER WARM ARTISAN WELL			01S	038E	24	0000178	32.0
UNION	WAGNER WELL	45-27.43 N	117-59.84 W	01S	038E	24	0015946	29.
UNION	WARM CREEK	45-18.059N	117-48.037W	09S	040E	09	0003075	25.
UNION	WARM MINERAL SPRINGS	45-04.2 N	118-27.3 W	06S	035E	12	0001706	28.
UNION	WELL	45-19.89 N	118-05.43 W	03S	038E	05	0015945	25.
UNION	WELL	45-20.07 N	118-05.83 W	03S	038E	06	0015943	27.
UNION	WELL	45-19.89 N	118-05.43 W	03S	038E	05	0015944	27.
WALLOWA	COOK CREEK WARM SPRING	45-53.49 N	116-52.41 W	05N	048E	30	0015410	36.0
WASCO	J. SANDOZ WELL	45-33.8 N	121-16.6 W	01N	012E	38	0015417	27.8
WASCO	KAHNETAH HOT SPRINGS	44-51.72 N	121-12.05 W	08S	013E	20	0000699	52.0
WASCO	MILTON MARTIN WELL	45-31.70 N	121-12.95 W	01N	013E	32	0015403	22.2

APPENDIX B

Index to GEOTHERM sample file for the state of Oregon sorted by county, township (TNS), range (RNG), and section (Sect.) Also given are the name of source, GEOTHERM record identifier (I.D.), and temperature (Temp. °C). See Table 1 for explanation of alphabetic qualifiers preceding temperature.

<u>County</u>	<u>TNS</u>	<u>RNG</u>	<u>Sect.</u>	<u>Name of Source</u>	<u>I.D.</u>	<u>Temp.</u>
BAKER	06S	039E	25	KROPP HOT SPRING	0015427	43.0
BAKER	07S	038E	10	FISHER HOT SPRING	0015444	37.0
BAKER	07S	039E	28	RADIUM HOT SPRINGS	0002206	57.2
BAKER	07S	039E	28	RADIUM HOT SPRINGS	0000709	58.
BAKER	09S	040E	16	SAMO SPRING	0015420	27.0
BAKER	12S	043E	02	NELSON SPRING	0001701	27.
BAKER	14S	045E	18	CITY OF HUNTINGTON WELL	0001700	24.
CLACKAMAS	02S	009E	29	ACID-SULFATE SPRING ON MT. HOOD	0015469	
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015473	
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015470	89.4
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015952	89.4
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015471	
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015472	89.4
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015950	71.1
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015937	86.1
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015951	89.4
CLACKAMAS	02S	009E	29	MT. HOOD FUMARoles	0015474	91.1
CLACKAMAS	03S	008.5	24	SWIM WARM SPRINGS	0015421	26.0
CLACKAMAS	06S	007E	21	GEOTHERMAL GRADIENT TEST NEAR AUSTIN HOT	0015446	35.6
CLACKAMAS	06S	007E	30	AUSTIN HOT SPRINGS (CAREY)	0000697	86.0
CLACKAMAS	07S	005E	26	BAGBY HOT SPRINGS	0015422	57.2
CLACKAMAS	07S	005E	26	BAGBY HOT SPRINGS	0015451	58.
CROOK				CAMP CREEK	0001702	23.
CROOK	15S	014E	33	WEIGAND WELL	0003015	24.
CROOK	15S	015E	29	SAMPALUESI WELL	0003033	21.6
CROOK	16S	014E	016	PB-1 DOGAMI DRILL HOLE	0003014	32.5
CROOK	16S	014E	03	CRADDOCK WELL	0003017	24.3
CROOK	16S	014E	10	E. MEEKER WELL	0003021	24.9
CROOK	16S	014E	15	T. BEARDY WELL	0003016	24.5
CROOK	16S	014E	16	JACKSON WELL	0003018	27.
CROOK	16S	014E	21	T. O. MARSHALL WELL	0001605	33.3
CROOK	16S	015E	16	DEADMAN SPRINGS	0003007	13.
CROOK	17S	022E		UNNAMED SPRING ON S. FORK CROOKED RIVER	0001703	31.
DESCHUTES	20S	016E	24	DECKER WELL NO. 2	0003009	25.1
DESCHUTES	21S	012E	26	PAULINA HOT SPRINGS	0015947	
DESCHUTES	21S	012E	26	PAULINA HOT SPRINGS	0015454	
DESCHUTES	21S	012E	36	WARM WELL AT LITTLE CRATER CAMPGROUND	0015455	35.5
DESCHUTES	21S	013E	29	EAST LAKE HOT SPRINGS	0000781	62.0
DESCHUTES	21S	013E	29	EAST LAKE HOT SPRINGS	0015453	49.
DESCHUTES	21S	013E	29	EAST LAKE HOT SPRINGS	0015452	
DOUGLAS	26S	004E	20	UMPQUA HOT SPRINGS	0015949	46.
DOUGLAS	26S	004E	20	UMPQUA HOT SPRINGS	0015456	46.5
GRANT	08S	030E	08	RITTER HOT SPRINGS	0000715	41.0
GRANT	14S	033E	10	LIMEKILN SPRING	0001705	21.
GRANT	14S	034E	13	BLUE MOUNTAIN HOT SPRINGS	0000719	58.0
GRANT	15S	031E	11	JOAQUIN MILLER RESORT	0015948	40.

GRANT	17S	027E	13,	BRISBOIS RANCH SPRINGS	0001704	22.
GRANT	18S	026E	18	WEBERG HOT SPRING	0000693	46.0
HARNEY				CITY OF HINES WELL	0001684	17.
HARNEY				NORTH OF VENATOR	0001690	45.
HARNEY				WARM SPRINGS RESERVOIR	0001683	62.
HARNEY	19S	026E	05	UNNAMED	0001694	29.
HARNEY	22S	032E	34	O. J. THOMAS	0015440	72.0
HARNEY	22S	032E	35	O. J. THOMAS WELL	0003048	72.
HARNEY	22S	32.5E	14	UNNAMED SPRING	0015942	22.
HARNEY	23S	030E	23	CITY OF HINES WELL	0015441	17.0
HARNEY	23S	030E	26	POWERHOUSE WELL	0003055	25.
HARNEY	23S	030E	26	HINES MILL NO. 2	0003057	27.8
HARNEY	23S	030E	35	MILLPOND SPRING	0015941	26.
HARNEY	23S	030E	35	HINES LUMBER CO. WELL	0015439	25.0
HARNEY	23S	030E	35	GOODMAN SPRING (HOTCHKISS)	0015437	22.0
HARNEY	23S	030E	35	DEVELOPMENT WELL	0003053	26.5
HARNEY	23S	030E	35	HINES MILL WELL NO. 1	0003056	28.5
HARNEY	23S	030E	36	UNNAMED	0001686	25.
HARNEY	23S	030E	36	REST STOP WARM WELL	0003040	26.
HARNEY	23S	031E	36	TRAILER COURT WELL	0003058	26.5
HARNEY	24S	030E	01	HOTCHKISS WELL	0015940	27.
HARNEY	24S	030E	01	HOTCHKISS WELL	0015438	27.
HARNEY	24S	030E	01	HOTCHKISS WELL	0003050	33.
HARNEY	24S	030E	02	FISCHER WELL	0003054	25.5
HARNEY	24S	030E	11	ROADLAND SPRING	0001685	22.
HARNEY	24S	030E	11	POTTERS SWAMP ART. WELL FIELD	0003039	27.
HARNEY	24S	030E	24	BAKER SPRING	0001680	21.
HARNEY	24S	030E	24	SAGE HEN CREEK ART. WELL	0003038	23.
HARNEY	24S	032E	08	HARNEY VALLEY DEV CO. OIL TEST WELL	0015436	46.0
HARNEY	24S	032E	08	HARNEY VALLEY DEV. CO. OIL WELL	0003045	50.
HARNEY	24S	033E	34	CRANE HOT SPRINGS	0015938	49.
HARNEY	24S	033E	34	CRANE HOT SPRINGS	0000727	78.0
HARNEY	24S	033E	34	CRANE HOT SPRING	0003046	76.0
HARNEY	24S	033E	34	CRANE HOT SPRINGS	0015435	80.0
HARNEY	25S	030E	24	DOG MOUNTAIN OIL TEST WELL	0001682	60.
HARNEY	25S	032E	07	ISLAND RANCH WELL	0015434	41.0
HARNEY	25S	036E	16	WARM SPRING NEAR VENATOR	0015345	41.
HARNEY	26S	027E	12	UNNAMED	0001689	20.
HARNEY	26S	028E	33	UNNAMED	0001691	20.
HARNEY	26S	028E	36	OO STATION SPRING	0003061	23.
HARNEY	26S	029E	31	UNAMED WARM SPRINGS	0003062	21.
HARNEY	26S	029E	31	BASQUE SPRING	0001696	23.
HARNEY	26S	030E	33	DUNN RANCH ARTESIAN WELL NO. 1	0003043	26.
HARNEY	26S	032E	05	HOWELL OIL TEST	0001681	41.
HARNEY	26S	033E	13	THOMPSON IRR. WELL	0003037	24.
HARNEY	26S	034E	08	LONG HOLLOW WELL	0003042	25.
HARNEY	27S	029E	05	JOHNSON SPRING	0001698	22.
HARNEY	27S	029E	06	BARNYARD SPRING	0003060	22.0
HARNEY	27S	029E	08	HUGHET SPRING	0001697	20.
HARNEY	27S	029E	09	UNNAMED WARM SPRING	0003063	21.
HARNEY	27S	030E	08	LYNCH SPRING	0001699	18.
HARNEY	27S	29.5E	24	EAGLES NEST SPRING NO. 2	0003067	28.1
HARNEY	27S	29.5E	25	EAGLES NEST SPRING NO. 1	0003070	41.7
HARNEY	27S	29.5E	28	BATHTUB SPRING	0003068	51.1
HARNEY	27S	29.5E	36	UNNAMED WARM SPRING IN HARNEY LAKE	0003064	22.

HARNEY	27S	29.5E	36	UNNAMED HOT SPRING NEAR HARNEY LAKE	0000729	68.0
HARNEY	27S	29.5E	36	HARNEY LAKE HOT SPRINGS	0003065	67.
HARNEY	27S	29.5E	36	UNNAMED HOT SPRING NEAR HARNEY LAKE	0015939	59.
HARNEY	31S	032E	13	HOGHOUSE HOT SPRING	0001679	27.
HARNEY	32S	032.5	05	UNNAMED	0001687	28.
HARNEY	32S	032E	12	UNNAMED	0001688	32.
HARNEY	33S	035E	13	MICKEY SPRINGS	0000679	73.0
HARNEY	33S	035E	13	MICKEY SPRINGS	0015459	
HARNEY	33S	035E	13	MICKEY SPRINGS	0015458	86.
HARNEY	33S	035E	13	MICKEY SPRINGS	0015457	86.
HARNEY	33S	035E	13	MICKEY SPRINGS	0015433	85.
HARNEY	34S	034E	32	ALVORD HOT SPRINGS	0015429	82.2
HARNEY	34S	034E	32	ALVORD HOT SPRINGS	0015460	78.5
HARNEY	34S	034E	32	ALVORD HOT SPRINGS	0015461	78.5
HARNEY	34S	034E	32	ALVORD HOT SPRINGS	0000681	76.0
HARNEY	37S	033E	11	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0000683	96.0
HARNEY	37S	033E	11	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0002209	R 73.9
HARNEY	37S	033E	11	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015462	91.
HARNEY	37S	033E	11	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015466	97.
HARNEY	37S	033E	11,	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0002219	87.0
HARNEY	37S	033E	11,	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015463	97.
HARNEY	37S	033E	14	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015467	84.
HARNEY	37S	033E	14	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015465	86.
HARNEY	37S	033E	14	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0015464	90.5
HARNEY	37S	033E	14	HOT BORAX LAKE	0002208	R 29.4
HARNEY	37S	033E	14	HOT BORAX LAKE	0000782	36.0
HARNEY	37S	033E	14	HOT BORAX LAKE	0002211	31.1
HARNEY	37S	033E	14	UNNAMED HOT SPRING NEAR HOT BORAX LAKE	0002210	79.4
HARNEY	37S	036E	33	UNNAMED	0001693	46.
HARNEY	38S	034E	22	UNNAMED	0001695	32.
HARNEY	38S	037E	24	UNNAMED	0001692	38.
HARNEY	39S	037E	16	UNNAMED HOT SPRING NEAR TROUT CREEK	(F0000731	52.0
HARNEY	39S	037E	16	UNNAMED HOT SPRING NEAR TROUT CREEK	(F0015428	
HOOD RIVER	01S	010E	09	PARKDALE GRADIENT HOLE	0015971	24.
JACKSON	38S	001E	48	JACKSON HOT SPRING	0015344	35.0
KLAMATH	31S	006E	19	ANNIE SPRING	0015312	25.0
KLAMATH	36S	007E	23	EAGLE POINT SPRING	0015300	Q 35.
KLAMATH	36S	011E	16	RAY SMITH WELL	0015432	25.
KLAMATH	38S	009E	20	O.I.T. NO. 6	0003006	79.
KLAMATH	38S	009E	20	O.I.T. NO. 6	0015301	88.0
KLAMATH	38S	009E	28	MEDO-BELL DAIRY	0015302	81.0
KLAMATH	38S	009E	28	MEDO-BELL DAIRY	0003001	81.
KLAMATH	38S	009E	28	O.I.T. NO. 5	0015419	89.0
KLAMATH	38S	009E	28	J. E. FRIESEN	0015315	73.0
KLAMATH	38S	009E	32	OREGON WATER CORP.(2)	0015317	21.0
KLAMATH	38S	009E	32	OREGON WATER CORP.(1)	0015316	Q 21.
KLAMATH	38S	009E	32	OREGON WATER CORP.(3)	0015318	20.0
KLAMATH	38S	009E	33	LOIS MERRUYS	0015319	71.0
KLAMATH	38S	009E	33	KLAMATH ICE CO.	0015431	51.7
KLAMATH	38S	009E	33	MILLS SCHOOL	0015303	89.0
KLAMATH	39S	008E	13	HOWARD HOLLIDAY	0015320	25.0
KLAMATH	39S	009E	01	MOYINA WATER CO.	0015321	G 50.
KLAMATH	39S	009E	11	MAZAMA SCHOOL	0015322	61.0
KLAMATH	39S	009E	18	WEYERHAUSER WELL NO. 4	0015304	22.
KLAMATH	39S	009E	34	FALCON HEIGHTS SCHOOL	0015305	37.0

KLAMATH 39S 009E 34	ALFRED JACOBSEN	0015325	30.0
KLAMATH 39S 009E 34	U.S. AIR FORCE(1)	0015323 Q	31.0
KLAMATH 39S 009E 34	U.S. AIR FORCE(2)	0015324 Q	30.
KLAMATH 39S 010E 06	OREGON WATER CORP.(4)	0015326	26.
KLAMATH 39S 010E 07	MELVIN MCCOLLUM	0015306	25.0
KLAMATH 39S 010E 08	CLAUDE SHUCK	0015327	24.
KLAMATH 39S 010E 10	RAY BIXLER	0015328	22.0
KLAMATH 39S 010E 14	ROENICKE HOT SPRING	0015329 Q	65.0
KLAMATH 39S 010E 14	OLENE GAP HOT SPRINGS	0003003	87.
KLAMATH 39S 010E 14	OLENE GAP HOT SPRINGS	0000705	74.0
KLAMATH 39S 010E 14	OLENE GAP HOT SPRINGS	0015443	73.9
KLAMATH 39S 010E 15	ROBERT LANGLEY	0015330	23.
KLAMATH 39S 010E 28	LEN DOBRY	0015331	21.0
KLAMATH 39S 010E 29	LESTER BROOKSHIRE	0015332	25.0
KLAMATH 39S 010E 32	GEORGE STACY CO.	0015333	25.0
KLAMATH 39S 010E 32	MONTE DEHLINGER	0015334	26.0
KLAMATH 39S 010E 34	J. K. O'NEIL	0015442	
KLAMATH 39S 010E 34	J. K. O'NEIL	0015335	23.0
KLAMATH 40S 009E 23	DAN O'CONNER	0015336	24.0
KLAMATH 40S 009E 27	O. H. OSBORN	0015308	90.0
KLAMATH 40S 009E 28	ABE BOEHM	0015309	25.0
KLAMATH 40S 009E 28	ABE BOEHM	0003005	25.
KLAMATH 40S 009E 34	JACK LISKEY	0015310	93.0
KLAMATH 40S 010E 05	CLYDE DEHLINGER	0015337	24.0
KLAMATH 40S 010E 26	BILL HILL	0015338	20.0
KLAMATH 40S 011E 03	MELVIN FEIGI	0015430	31.0
KLAMATH 40S 014E 16	S. AND C. KILGORE	0015314	20.0
KLAMATH 41S 009E 01	JACK O'CONNER	0015339	38.0
KLAMATH 41S 009E 02	JACK LISKEY	0015311	22.0
KLAMATH 41S 009E 02	JACK LISKEY	0003004	25.
KLAMATH 41S 010E 02	TOWN OF MERRILL	0015340	21.0
KLAMATH 41S 010E 03	POPE'S MEAT CO.	0015341	22.0
KLAMATH 41S 010E 07	O'CONNER LIVESTOCK CO.	0015342	30.0
KLAMATH 41S 010E 14	GEORGE CARTER	0015343	22.
LAKE 23S 023E 27	GLASS BUTTE MERCURY MINE WELL	0001718	48.
LAKE 30S 016E 35	PARDON	0001715	24.
LAKE 30S 017E 06	ANA RIVER SPRING	0002215	18.9
LAKE 30S 017E 25	LOST CABIN	0001712	20.
LAKE 33S 017E 12	SUMMER LAKE HOT SPRING (WOODWARD)	0002229	46.7
LAKE 33S 017E 12	SUMMER LAKE HOT SPRING (WOODWARD)	0000707	43.0
LAKE 33S 018E 15	U.S. SOIL CONSERVATION SERVICE WELL	0001713	32.
LAKE 34S 022E 30	UNNAMED	0001714	27.
LAKE 35S 026E 16	UPPER ROCK CREEK	0001724	46.
LAKE 35S 026E 32	ANTELOPE HOT SPRINGS	0002216	40.0
LAKE 36S 020E 26	WHITE ROCK RANCH HOT SPRING	0001717	20.
LAKE 36S 026E 07	HART MTN. HOT SPRING	0001725	
LAKE 37S 020E 11	BEAN HOT SPRING	0001716	20.
LAKE 37S 020E 16	COLVERT SPRING	0015963	16.
LAKE 38S 020E 06	ANTONE SPRINGS	0015954	22.5
LAKE 38S 020E 22	CHAMBERS RANCH IRRIGATION WELL	0015955	28.5
LAKE 38S 020E 33	EVERETT MCDONALD HOT SPRING	0015953	77.5
LAKE 38S 020E 33	DON LINDSEY WELL	0015956	48.
LAKE 38S 020E 33	E. MCDONALD HOT WELL	0015966	94.
LAKE 38S 024E 03	MOSS 1 WELL	0001723	22.
LAKE 38S 024E 10	MOSS 2 WELL	0001722	28.

LAKE	38S 024E	34	CRUMP SPRING	0002223	40.0
LAKE	38S 024E	34	CRUMP SPRING	0000691	78.0
LAKE	38S 024E	34	CRUMP WELL (2)	0002220	88.0
LAKE	38S 024E	34	CRUMP WELL (1)	0002221	99.0
LAKE	38S 025E	10	FISHER HOT SPRINGS	0000717	68.0
LAKE	39S 020E	03	HAMMERSLY CANYON NO. 1 GRADIENT HOLE	0015993	50.
LAKE	39S 020E	03	HAMMERSLY CANYON NO. 1 GRADIENT HOLE	0015984	71.
LAKE	39S 020E	04	HUNTERS HOT SPRINGS	0015978	95.
LAKE	39S 020E	04	HUNTER HOT SPRING SOUTHWEST	0015985	87.
LAKE	39S 020E	04	ROBBIE WELL	0015967	80.
LAKE	39S 020E	04	HUNTERS HOT SPRINGS	0015970	88.
LAKE	39S 020E	04	HUNTERS HOT SPRINGS	0015969	94.
LAKE	39S 020E	04	HUNTERS HOT SPRINGS (LAKEVIEW)	0002226	86.0
LAKE	39S 020E	04	HUNTERS HOT SPRINGS (LAKEVIEW)	0002228	98.0
LAKE	39S 020E	04	HUNTERS HOT SPRINGS (LAKEVIEW)	0000689	96.0
LAKE	39S 020E	04	INGLEDON WELL	0015965	23.
LAKE	39S 020E	15	LAKEVIEW CITY WELL NO. 5	0015957	37.5
LAKE	39S 020E	16	LAKEVIEW CITY WELL NO. 7	0015960	16.
LAKE	39S 020E	16	LAKEVIEW CITY WELL NO. 4	0015958	19.5
LAKE	39S 020E	16	LAKEVIEW CITY WELL NO. 3	0015959	16.5
LAKE	39S 020E	27	BARRY RANCH HOT SPRINGS (GUS ALLEN)	0002217	85.0
LAKE	39S 020E	27	LEITHEAD (JOYLAND PLUNGE) HOT SPRING	0002224	69.4
LAKE	39S 020E	27	UPPER BARRY NO. 1	0015986	63.
LAKE	39S 020E	27	BARRY RANCH HOT SPRINGS	0015976	92.5
LAKE	39S 020E	27	LEITHEAD (JOYLAND PLUNGE) HOT SPRING	0015977	70.
LAKE	39S 020E	27	BARRY RANCH HOT SPRINGS (GUS ALLEN)	0000780	88.0
LAKE	39S 020E	33	HUNTER WELL	0015962	95.
LAKE	39S 024E	23	ADEL WELL	0001721	71.
LAKE	40S 020E	01	ROCKFORD (OLD DETER) RANCH	0015961	77.
LAKE	40S 024E	27	HOUSTON WELL	0001720	71.
LAKE	40S 024E	30	HALLINAN SPRINGS	0001719	71.
LAKE	41S 021E	18	LEDFORD WELL	0015964	21.
LANE	15S 006E	26	BIGELOW HOT SPRINGS	0015423	61.0
LANE	16S 006E	02	FRISSEL ROAD SPRING	0015973	18.
LANE	16S 006E	11	BELKNAP HOT SPRINGS	0002230	86.7
LANE	16S 006E	11	BELKNAP HOT SPRINGS	0000703	71.0
LANE	16S 006E	28	FOLEY SPRINGS	0015424	80.6
LANE	17S 005E	20	COUGAR RESERVOIR HOT SPRINGS (RIDER)	0015426	42.0
LANE	17S 005E	20	COUGAR RESERVOIR HOT SPRINGS (RIDER)	0000787	44.0
LANE	20S 004E	26	WALL CREEK WARM SPRINGS	0015974	40.
LANE	20S 004E	26	WALL CREEK WARM SPRINGS	0015401	41.0
LANE	21S 004E	36	MCCREDIE SPRINGS	0000783	73.
LANE	21S 004E	36	MCCREDIE SPRINGS	0015425	71.0
LANE	21S 004E	36	MCCREDIE HOT SPRING NO. 2	0015975	62.
LANE	22S 004E	06	KITSON SPRINGS	0002232	44.4
LANE	22S 004E	06	KITSON HOT SPRING	0015968	44.
LANE	22S 004E	06	KITSON SPRINGS	0015468	43.
MALHEUR			UNNAMED SPRING	0001737	50.
MALHEUR			SCOTT'S SPRING	0001735	20.
MALHEUR			DEER BUTTE H.S./MITCHELL BUTTE SYSTEM	0001728	
MALHEUR			S. BLACK WILLOW SPRING/SNIVELY	0001727	25.
MALHEUR	17S 045E	08	ALKALI FLAT GRADIENT WELL	0015412	24.0
MALHEUR	17S 047E	31	MALHEUR BUTTE SPRINGS(MAY NOT EXIST)	0001740	75.
MALHEUR	18S 043E	04	UNNAMED WARM SPRING NEAR BULLY CREEK	0015414	37.0
MALHEUR	18S 043E	09	NEAL HOT SPRINGS	0000687	87.0

MALHEUR	18S 043E	34	NELSON WELL	0001733	21.
MALHEUR	18S 045E	20	VALE HOT SPRINGS	0003002	90.
MALHEUR	18S 045E	20	VALE HOT SPRINGS	0000685	73.0
MALHEUR	19S 037E	02	BEULAH HOT SPRINGS	0000723	60.0
MALHEUR	19S 043E	22	VINES HILL BLM WELL	0001726	40.
MALHEUR	19S 043E	30	UNNAMED (J. SEIDER PROPERTY)	0015979	82.
MALHEUR	19S 043E	30	UNNAMED HOT SPRINGS NEAR LITTLE VALLEY	0000721	70.0
MALHEUR	19S 044E	19	SAND HOLLOW OIL TEST	0001739	50.
MALHEUR	19S 045E	09	VALE WELL	0001729	40.
MALHEUR	19S 045E	09	NORTH HARPER BLM WELL	0015413	36.0
MALHEUR	19S 045E	28	PAGE WELL	0001731	40.
MALHEUR	20S 039E	29	JONESBORO WARM SPRING	0015405	44.5
MALHEUR	21S 038E	09	JUNTURA WARM SPRING #1	0015407	25.0
MALHEUR	21S 038E	17	JUNTURA WARM SPRING #2	0015409	35.0
MALHEUR	21S 045E	12	MITCHELL BUTTE HOT SPRINGS	0000784	62.0
MALHEUR	21S 046E	33	ARTESIAN WELL	0015411	46.0
MALHEUR	24S 037E	20	LUCE HOT SPRINGS	0000725	63.0
MALHEUR	27S 043E	18	UNNAMED SPRING	0001738	50.
MALHEUR	30S 046E	02	CANTER'S HOT SPRING(JORDAN VALLEY)	0001736	50.
MALHEUR	31S 042E	33	ROUND MTN. BLM WELL	0001730	40.
MALHEUR	33S 039E	14	TUDORS SPRING	0001734	20.
MALHEUR	35S 045E	03	UNNAMED HOT SPRING AT THREE FORKS	0000786	34.0
MALHEUR	35S 045E	03	UNNAMED HOT SPRING AT THREE FORKS	0002239	35.0
MALHEUR	37S 037E	31	WHITEHORSE RANCH WELL	0001732	32.
MALHEUR	40S 042E	25	UNNAMED HOT SPRING NEAR MCDERMITT	0002238	53.5
MALHEUR	40S 042E	25	UNNAMED HOT SPRING NEAR MCDERMITT	0000733	52.0
MARION	09S 007E	20	BREITENBUSH HOT SPRINGS	0000701	92.0
MARION	09S 007E	20	BREITENBUSH HOT SPRINGS - WELL	0015445	110.
MARION	09S 007E	20	BREITENBUSH WELL NO. 3	0003072	74.
MARION	09S 007E	20	BREITENBUSH HOT SPRINGS	0015972	98.
MORROW	02N 025E	28	WELLS SPRING (WELL)	0001708	27.
MULTNOMAH	01N 004E	27	CORBETT WARM SPRING	0015415	18.0
MULTNOMAH	01S 004E	10	YMCA CAMP COLLINS	0015416	23.3
MULTNOMAH	01S 004E	10	CAMP COLLINS WARM SPRINGS (WELL)	0000296	29.
UMATILLA	03N 037E	18	BINGHAM SPRINGS	0015347	34.4
UMATILLA	04N 028E	10	CITY OF HERMISTON WELL	0001711	24.
UMATILLA	05N 035E	05	WELL	0001710	24.
UMATILLA	05S 033E	12	LEHMAN SPRINGS	0000785	61.0
UMATILLA	05S 033E	21	HIDAWAY SPRINGS	0001709	38.
UNION	01S 038E	24	WAGNER	0003077	31.
UNION	01S 038E	24	WAGNER WARM ARTISAN WELL	0000178	32.0
UNION	01S 038E	24	WAGNER WELL	0015946	29.
UNION	01S 039E	17	ROYCE	0003078	26.
UNION	01S 039E	20	CLAYTON FOX WELL	0001707	27.
UNION	01S 039E	31	CRESTON SHAW WELL	0015980	22.
UNION	03S 038E	05	U.P. RR NO. 2	0015982	26.
UNION	03S 038E	05	U.P. RR NO. 1	0015981	25.5
UNION	03S 038E	05	WELL	0015945	25.
UNION	03S 038E	05	WELL	0015944	27.
UNION	03S 038E	06	WELL	0015943	27.
UNION	03S 038E	06	LA GRANDE WARM WELL	0000181	28.0
UNION	03S 040E	09	GRANGE HALL	0003076	26.
UNION	03S 040E	10	HOOFNAGLE	0003074	24.
UNION	03S 040E	22	LOVE SWIMMING POOL	0003081	30.
UNION	03S 040E	22	COVE WARM SPRING	0000182	42.0

UNION	03S	040E	22	COVE BATH HOUSE	0003080	28.8
UNION	03S	040E	22	COVE WARM SPRING	0015418	29.4
UNION	03S	040E	27	GIRDNER WARM SPRING	0003073	22.2
UNION	04S	039E	05	HOT LAKE RESORT	0003083	81.
UNION	04S	039E	05	COURTWRIGHT WELL	0003084	67.
UNION	04S	039E	05	HOT LAKE SPRING	0000180	81.
UNION	04S	039E	05	HOT LAKE	0000711	80.0
UNION	04S	039E	05	BARSTAD HOT WELL	0000177	81.5
UNION	04S	039E	15	HAYSTACK WARM SPRING	0000176	25.5
UNION	04S	039E	15	DUCK POND	0003085	25.
UNION	04S	039E	22	UNION JUNCTION NO. 1	0003082	37.
UNION	04S	039E	22	SWEET WARM SPRING	0000184	38.0
UNION	04S	039E	23	OASIS WARM SPRING	0000185	29.5
UNION	04S	039E	23	UNION JUNCTION NO. 2	0003071	30.
UNION	04S	040E	20	BENNETT WARM SPRING	0000186	27.0
UNION	04S	040E	21	BAKER WARM SPRING	0000179	26.0
				(CHUCK BENNETT WARM SPRING)		
UNION	06S	035E	12	WARM MINERAL SPRINGS	0001706	28.
UNION	06S	041E	25	MEDICAL HOT SPRING	0000183	61.5
UNION	06S	041E	25	MEDICAL HOT SPRINGS	0000713	60.0
UNION	06S	041E	25	MEDICAL HOT SPRINGS	0002241	60.0
UNION	09S	040E	09	WARM CREEK	0003075	25.
WALLOWA	05N	048E	30	COOK CREEK WARM SPRING	0015410	36.0
WASCO	01N	012E	38	J. SANDOZ WELL	0015417	27.8
WASCO	01N	013E	32	MILTON MARTIN WELL	0015403	22.2
WASCO	08S	013E	20	KAHNEETAH HOT SPRINGS	0000699	52.0

APPENDIX C

Index to GEOTHERM sample file for the state of Oregon sorted into one-degree blocks by latitude and longitude. Records are sorted by name of source within each one-degree block. Adjacent one-degree blocks which are published as a 1:250,000 map are combined under the appropriate map name. See Table 1 for explanation of alphabetic qualifiers preceding temperature. I.D. - GEOTHERM record identifier. Temp. - Temperature °C.

<u>Latitude</u>	<u>Longitude</u>	<u>Name of Source</u>	<u>County</u>	<u>I.D.</u>	<u>Temp.</u>
COORDINATES NOT GIVEN					
JORDAN VALLEY 1:250,000					
		WAGNER WARM ARTISAN WELL	UNION	0000178	32.0
42-54.0	N 117-04.2	W CANTER'S HOT SPRING(JORDAN VALLEY)			
42-02.7	N 117-01.2	W MALHEUR BUTTE SPRINGS(MAY NOT EXIST)	MALHEUR	0001736	50.
42-49.2	N 117-35.4	W ROUND MTN. BLM WELL	MALHEUR	0001740	75.
42-46.8	N 117-43.2	W SCOTT'S SPRING	MALHEUR	0001730	40.
42-37.2	N 117-59.8	W TUDORS SPRING	MALHEUR	0001735	20.
42-32.0	N 117-10.9	W UNNAMED HOT SPRING AT THREE FORKS	MALHEUR	0001734	20.
42-32.0	N 117-10.9	W UNNAMED HOT SPRING AT THREE FORKS	MALHEUR	0002239	35.0
42-04.7	N 117-45.6	W UNNAMED HOT SPRING NEAR MCDEWITT	MALHEUR	0000786	34.0
42-04.7	N 117-45.6	W UNNAMED HOT SPRING NEAR MCDEWITT	MALHEUR	0002238	53.5
42-04.7	N 117-45.6	W UNNAMED HOT SPRING NEAR MCDEWITT	MALHEUR	0000733	52.0
ADEL 1:250,000					
42-32.66	N 118-31.66	W ALVORD HOT SPRINGS	HARNEY	0015429	82.2
42-32.66	N 118-31.66	W ALVORD HOT SPRINGS	HARNEY	0000681	76.0
42-32.66	N 118-31.66	W ALVORD HOT SPRINGS	HARNEY	0015461	78.5
42-32.66	N 118-31.66	W ALVORD HOT SPRINGS	HARNEY	0015460	78.5
42-53.7	N 118-53.7	W HOGHOUSE HOT SPRING	HARNEY	0001679	27.
42-19.60	N 118-36.17	W HOT BORAX LAKE	HARNEY	0002211	31.1
42-19.60	N 118-36.17	W HOT BORAX LAKE	HARNEY	0002208	R 29.4
42-19.60	N 118-36.17	W HOT BORAX LAKE	HARNEY	0000782	36.0
42-40.6	N 118-20.7	W MICKEY SPRINGS	HARNEY	0015433	85.
42-40.54	N 118-20.67	W MICKEY SPRINGS	HARNEY	0015459	
42-40.6	N 118-20.7	W MICKEY SPRINGS	HARNEY	0015458	86.
42-40.6	N 118-20.7	W MICKEY SPRINGS	HARNEY	0015457	86.
42-40.6	N 118-20.7	W MICKEY SPRINGS	HARNEY	0000679	73.0
42-16.2	N 118-41.4	W UNNAMED	HARNEY	0001695	32.
42-18.0	N 118-17.4	W UNNAMED	HARNEY	0001693	46.
42-15.6	N 118-18.6	W UNNAMED	HARNEY	0001692	38.
42-49.2	N 118-54.0	W UNNAMED	HARNEY	0001688	32.
42-50.0	N 118-52.2	W UNNAMED	HARNEY	0001687	28.
42-19.82	N 118-36.16	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0002210	79.4
42-20.17	N 118-36.08	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0002209	R 73.9
42-20.17	N 118-36.08	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0000683	96.0
42-20.17	N 118-36.08	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015462	91.
42-19.82	N 118-36.16	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015464	90.5
42-20.08	N 118-36.11	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015463	97.
42-19.82	N 118-36.16	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015467	84.
42-20.17	N 118-36.08	W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015466	97.

42-19.82 N 118-36.16 W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0015465	86.
42-20.08 N 118-36.11 W UNNAMED HOT SPRING NEAR HOT BORAX LAKE	HARNEY	0002219	87.0
42-11.3 N 118-23.0 W UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF HARNEY)	HARNEY	0000731	52.0
42-11.3 N 118-23.0 W UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF HARNEY)	HARNEY	0015428	
42-18.0 N 118-12.6 W WHITEHORSE RANCH WELL	MALHEUR	0001732	32.
42-10.8 N 119-52.8 W ADEL WELL	LAKE	0001721	71.
42-29.97 N 119-41.48 W ANTELOPE HOT SPRINGS	LAKE	0002216	40.0
42-13.60 N 119-52.87 W CRUMP SPRING	LAKE	0002223	40.0
42-13.60 N 119-52.87 W CRUMP SPRING	LAKE	0000691	78.0
42-13.59 N 119-52.87 W CRUMP WELL (1)	LAKE	0002221	99.0
42-13.59 N 119-52.87 W CRUMP WELL (2)	LAKE	0002220	88.0
42-17.84 N 119-46.55 W FISHER HOT SPRINGS	LAKE	0000717	68.0
42-04.8 N 119-54.6 W HALLINAN SPRINGS	LAKE	0001719	71.
42-28.2 N 119-42.0 W HART MTN. HOT SPRING	LAKE	0001725	
42-04.8 N 119-51.6 W HOUSTON WELL	LAKE	0001720	71.
42-19.2 N 119-52.7 W MOSS 1 WELL	LAKE	0001723	22.
42-17.4 N 119-52.8 W MOSS 2 WELL	LAKE	0001722	28.
42-16.5 N 119-22.5 W UNNAMED	HARNEY	0001691	20.
42-32.4 N 119-39.6 W UPPER ROCK CREEK	LAKE	0001724	46.

KLAMATH FALLS 1:250,000

42-59.8 N 120-45.3 W ANA RIVER SPRING	LAKE	0002215	18.9
42-18.52 N 120-23.78 W ANTONE SPRINGS	LAKE	0015954	22.5
42-09.35 N 120-20.67 W BARRY RANCH HOT SPRINGS	LAKE	0015976	92.5
42-09.35 N 120-20.67 W BARRY RANCH HOT SPRINGS (GUS ALLEN)	LAKE	0002217	85.0
42-09.35 N 120-20.67 W BARRY RANCH HOT SPRINGS (GUS ALLEN)	LAKE	0000780	88.0
42-23.4 N 120-19.4 W BEAN HOT SPRING	LAKE	0001716	20.
42-45. N 120-20.66 W CHAMBERS RANCH IRRIGATION WELL	LAKE	0015955	28.5
42-21.44 N 120-21.51 W COLVERT SPRING	LAKE	0015963	16.
42-14.10 N 120-20.18 W DON LINDSEY WELL	LAKE	0015956	48.
42-14.500N 120-21.967W E. MCDONALD HOT WELL	LAKE	0015966	94.
42-14.500N 120-21.968W EVERETT MCDONALD HOT SPRING	LAKE	0015953	77.5
42-13.12 N 120-20.89 W HAMMERSLY CANYON NO. 1 GRADIENT HOLE	LAKE	0015993	50.
42-13.12 N 120-20.89 W HAMMERSLY CANYON NO. 1 GRADIENT HOLE	LAKE	0015984	71.
42-12.9 N 120-22.4 W HUNTER HOT SPRING SOUTHWEST	LAKE	0015985	87.
42-08.10 N 120-21.30 W HUNTER WELL	LAKE	0015962	95.
42-13.28 N 120-22.08 W HUNTERS HOT SPRINGS	LAKE	0015970	88.
42-13.28 N 120-22.08 W HUNTERS HOT SPRINGS	LAKE	0015969	94.
42-13.32 N 120-22.09 W HUNTERS HOT SPRINGS (LAKEVIEW)	LAKE	0015978	95.
42-13.32 N 120-22.09 W HUNTERS HOT SPRINGS (LAKEVIEW)	LAKE	0002228	98.0
42-13.32 N 120-22.09 W HUNTERS HOT SPRINGS (LAKEVIEW)	LAKE	0002226	86.0
42-13.32 N 120-22.09 W HUNTERS HOT SPRINGS (LAKEVIEW)	LAKE	0000689	96.0
42-13.20 N 120-21.57 W INGLEDON WELL	LAKE	0015965	23.
42-11.333N 120-21.130W LAKEVIEW CITY WELL NO. 3	LAKE	0015959	16.5
42-11.333N 120-21.139W LAKEVIEW CITY WELL NO. 4	LAKE	0015958	19.5
42-11.333N 120-20.266W LAKEVIEW CITY WELL NO. 5	LAKE	0015957	37.5
42-11.333N 120-21.463W LAKEVIEW CITY WELL NO. 7	LAKE	0015960	16.
42-01.08 N 120-17.67 W LEDFORD WELL	LAKE	0015964	21.
42-09.708N 120-20.608W LEITHHEAD (JOYLAND PLUNGE) HOT SPRING	LAKE	0002224	69.4
42-09.708N 120-20.608W LEITHHEAD (JOYLAND PLUNGE) HOT SPRING	LAKE	0015977	70.
42-55.2 N 120-39.0 W LOST CABIN	LAKE	0001712	20.
42-56.4 N 120-47.4 W PARDON	LAKE	0001715	24.
42-10.43 N 120-22.47 W ROBBIE WELL	LAKE	0015967	80.
42-06.350N 120-17.327W ROCKFORD (OLD DETER) RANCH	LAKE	0015961	77.

42-43.53 N 120-38.75 W SUMMER LAKE HOT SPRING (WOODWARD)	LAKE	0000707	43.0
42-43.53 N 120-38.75 W SUMMER LAKE HOT SPRING (WOODWARD)	LAKE	0002229	46.7
42-42.6 N 120-34.5 W U.S. SOIL CONSERVATION SERVICE WELL	LAKE	0001713	32.
42-36.0 N 120-10.2 W UNNAMED	LAKE	0001714	27.
42-09.4 N 120-20.38 W UPPER BARRY NO. 1	LAKE	0015986	63.
42-20.4 N 120-19.5 W WHITE ROCK RANCH HOT SPRING	LAKE	0001717	20.
42-04.05 N 121-45.40 W ABE BOEHM	KLAMATH	0003005	25.
42-04.05 N 121-45.40 W ABE BOEHM	KLAMATH	0015309	25.0
42-07.65 N 121-44.40 W ALFRED JACOBSEN	KLAMATH	0015325	30.0
42-03.55 N 121-36.60 W BILL HILL	KLAMATH	0015338	20.0
42-11.35 N 121-39.80 W CLAUDE SHUCK	KLAMATH	0015327	24.
42-06.75 N 121-39.65 W CLYDE DEHLINGER	KLAMATH	0015337	24.0
42-04.85 N 121-43.85 W DAN O'CONNER	KLAMATH	0015336	24.0
42-25.85 N 121-57.75 W EAGLE POINT SPRING	KLAMATH	0015300	Q 35.
42-07.80 N 121-45.10 W FALCON HEIGHTS SCHOOL	KLAMATH	0015305	37.0
42-00.55 N 121-36.90 W GEORGE CARTER	KLAMATH	0015343	22.
42-08.40 N 121-39.80 W GEORGE STACY CO.	KLAMATH	0015333	25.0
42-10.55 N 121-49.70 W HOWARD HOLLIDAY	KLAMATH	0015320	25.0
42-13.75 N 121-46.15 W J. E. FRIESEN	KLAMATH	0015315	73.0
42-08.30 N 121-38.10 W J. K. O'NEIL	KLAMATH	0015335	23.0
42-08.30 N 121-38.10 W J. K. O'NEIL	KLAMATH	0015442	
42-02.25 N 121-43.60 W JACK LISKEY	KLAMATH	0015311	22.0
42-02.25 N 121-43.60 W JACK LISKEY	KLAMATH	0003004	25.
42-02.95 N 121-44.40 W JACK LISKEY	KLAMATH	0015310	93.0
42-02.00 N 121-42.95 W JACK O'CONNER	KLAMATH	0015339	38.0
42-13.40 N 121-01.40 W KLAMATH ICE CO.	KLAMATH	0015431	51.7
42-08.90 N 121-38.65 W LEN DOBRY	KLAMATH	0015331	21.0
42-08.70 N 121-39.70 W LESTER BROOKSHIRE	KLAMATH	0015332	25.0
42-13.65 N 121-01.45 W LOIS MERRUYS	KLAMATH	0015319	71.0
42-11.85 N 121-43.90 W MAZAMA SCHOOL	KLAMATH	0015322	61.0
42-13.8 N 121-46.4 W MEDO-BELL DAIRY	KLAMATH	0003001	81.
42-13.8 N 121-46.4 W MEDO-BELL DAIRY	KLAMATH	0015302	81.0
42-08.20 N 121-30.10 W MELVIN FEIGI	KLAMATH	0015430	31.0
42-11.50 N 121-41.05 W MELVIN MCCOLLUM	KLAMATH	0015306	25.0
42-13.45 N 121-45.90 W MILLS SCHOOL	KLAMATH	0015303	89.0
42-07.60 N 121-40.40 W MONTE DEHLINGER	KLAMATH	0015334	26.0
42-12.60 N 121-42.45 W MOYINA WATER CO.	KLAMATH	0015321	6 50.
42-03.30 N 121-44.70 W O. H. OSBORN	KLAMATH	0015308	90.0
42-13.85 N 121-46.40 W O.I.T. NO. 5	KLAMATH	0015419	89.0
42-14.90 N 121-46.85 W O.I.T. NO. 6	KLAMATH	0015301	88.0
42-14.90 N 121-46.85 W O.I.T. NO. 6	KLAMATH	0003006	79.
42-01.00 N 121-41.00 W O'CONNER LIVESTOCK CO.	KLAMATH	0015342	30.0
42-10.45 N 121-36.90 W OLENE GAP HOT SPRINGS	KLAMATH	0000705	74.0
42-10.45 N 121-36.90 W OLENE GAP HOT SPRINGS	KLAMATH	0003003	87.
42-10.45 N 121-36.90 W OLENE GAP HOT SPRINGS	KLAMATH	0015443	73.9
42-13.30 N 121-47.45 W OREGON WATER CORP.(1)	KLAMATH	0015316	Q 21.
42-13.30 N 121-47.45 W OREGON WATER CORP.(2)	KLAMATH	0015317	21.0
42-13.30 N 121-47.45 W OREGON WATER CORP.(3)	KLAMATH	0015318	20.0
42-12.10 N 121-41.40 W OREGON WATER CORP.(4)	KLAMATH	0015326	26.
42-01.95 N 121-37.50 W POPE'S MEAT CO.	KLAMATH	0015341	22.0
42-11.55 N 121-37.95 W RAY BIXLER	KLAMATH	0015328	22.0
42-27.25 N 121-25.40 W RAY SMITH WELL	KLAMATH	0015432	25.
42-10.75 N 121-37.90 W ROBERT LANGLEY	KLAMATH	0015330	23.
42-10.40 N 121-37.05 W ROENICKE HOT SPRING	KLAMATH	0015329	Q 65.0
42-06.40 N 121-03.80 W S. AND C. KILGORE	KLAMATH	0015314	20.0

42-01.50 N 121-36.00 W TOWN OF MERRILL	KLAMATH	0015340	21.0
42-08.05 N 121-45.25 W U.S. AIR FORCE(1)	KLAMATH	0015323 Q	31.0
42-08.10 N 121-45.35 W U.S. AIR FORCE(2)	KLAMATH	0015324 Q	30.
42-10.70 N 121-48.10 W MEYERHAUSER WELL NO. 4	KLAMATH	0015304	22.
MEDFORD 1:250,000			
42-52.35 N 122-10.10 W ANNIE SPRING	KLAMATH	0015312	25.0
42-13.30 N 122-44.65 W JACKSON HOT SPRING	JACKSON	0015344	35.0
BOISE 1:250,000			
43-41.8 N 117-05.7 W ARTESIAN WELL	MALHEUR	0015411	46.0
43-44.7 N 117-10.2 W DEER BUTTE H.S./MITCHELL BUTTE SYSTEM	MALHEUR	0001728	
43-47.5 N 117-57.5 W JONESBORO WARM SPRING	MALHEUR	0015405	44.5
43-45.78 N 117-09.34 W MITCHELL BUTTE HOT SPRINGS	MALHEUR	0000784	62.0
43-57.6 N 117-37.8 W NELSON WELL	MALHEUR	0001733	21.
43-55.76 N 117-12.72 W NORTH HARPER BLM WELL	MALHEUR	0015413	36.0
43-52.5 N 117-13.8 W PAGE WELL	MALHEUR	0001731	40.
43-42.0 N 117-10.8 W S. BLACK WILLOW SPRING/SNIVELY	MALHEUR	0001727	25.
43-56.6 N 117-22.5 W SAND HOLLOW OIL TEST	MALHEUR	0001739	50.
43-53.50 N 117-29.00 W UNNAMED (J. SEIDER PROPERTY)	MALHEUR	0015979	82.
43-53.48 N 117-30.00 W UNNAMED HOT SPRINGS NEAR LITTLE VALLEY	MALHEUR	0000721	70.0
43-18.0 N 117-22.5 W UNNAMED SPRING	MALHEUR	0001738	50.
43-06.9 N 117-52.8 W UNNAMED SPRING	MALHEUR	0001737	50.
43-58.96 N 117-13.98 W VALE HOT SPRINGS	MALHEUR	0003002	90.
43-58.96 N 117-13.98 W VALE HOT SPRINGS	MALHEUR	0000685	73.0
43-55.2 N 117-13.2 W VALE WELL	MALHEUR	0001729	40.
43-54.3 N 117-25.8 W VINES HILL BLM WELL	MALHEUR	0001726	40.
BURNS 1:250,000			
43-56.65 N 118-08.15 W BEULAH HOT SPRINGS	MALHEUR	0000723	60.0
43-26.45 N 118-38.30 W CRANE HOT SPRING	HARNEY	0003046	76.0
43-26.45 N 118-38.30 W CRANE HOT SPRINGS	HARNEY	0000727	78.0
43-26.45 N 118-38.30 W CRANE HOT SPRINGS	HARNEY	0015938	49.
43-26.45 N 118-38.30 W CRANE HOT SPRINGS	HARNEY	0015435	80.0
43-30.25 N 118-54.30 W HARNEY VALLEY DEV CO. OIL TEST WELL	HARNEY	0015436	46.0
43-30.25 N 118-54.30 W HARNEY VALLEY DEV. CO. OIL WELL	HARNEY	0003045	50.
43-21.6 N 118-53.4 W HONELL OIL TEST	HARNEY	0001681	41.
43-25.40 N 118-55.95 W ISLAND RANCH WELL	HARNEY	0015434	41.0
43-45.5 N 118-04.0 W JUNTURA WARM SPRING #1	MALHEUR	0015407	25.0
43-45.5 N 118-05.5 W JUNTURA WARM SPRING #2	MALHEUR	0015409	35.0
43-19.039N 118-33.015W LONG HOLLOW WELL	HARNEY	0003042	25.
43-28.15 N 118-12.08 W LUCE HOT SPRINGS	MALHEUR	0000725	63.0
43-23.4 N 118-18.9 W NORTH OF VEHATOR	HARNEY	0001690	45.
43-37.65 N 118-51.75 W O. J. THOMAS	HARNEY	0015440	72.0
43-37.65 N 118-51.74 W O. J. THOMAS WELL	HARNEY	0003048	72.
43-18.048N 118-35.019W THOMPSON IRR. WELL	HARNEY	0003037	24.
43-39.76 N 118-44.30 W UNNAMED SPRING	HARNEY	0015942	22.
43-23.7 N 118-18.4 W WARM SPRING NEAR VENATOR	HARNEY	0015345	41.
43-39.0 N 118-15.6 W WARM SPRINGS RESERVOIR	HARNEY	0001683	62.
43-29.4 N 119-06.0 W BAKER SPRING	HARNEY	0001680	21.
43-15.051N 119-14.020W BARNYARD SPRING	HARNEY	0003060	22.0
43-16.2 N 119-17.1 W BASQUE SPRING	HARNEY	0001696	23.

43-11.80 N 119-06.45 W BATHTUB SPRING	HARNEY	0003068	51.1
43-32.4 N 119-06.6 W CITY OF HINES WELL	HARNEY	0001684	17.
43-33.57 N 119-05.31 W CITY OF HINES WELL	HARNEY	0015441	17.0
43-32.33 N 119-05.02 W DEVELOPMENT WELL	HARNEY	0003053	26.5
43-23.4 N 119-04.2 W DOG MOUNTAIN OIL TEST WELL	HARNEY	0001682	60.
43-15.06 N 119-14.019W DUNN RANCH ARTESIAN WELL NO. 1	HARNEY	0003043	26.
43-12.38 N 119-03.45 W EAGLES NEST SPRING NO. 1	HARNEY	0003070	41.7
43-12.80 N 119-03.62 W EAGLES NEST SPRING NO. 2	HARNEY	0003067	28.1
43-31.32 N 119-05.00 W FISCHER WELL	HARNEY	0003054	25.5
43-32.4 N 119-55.8 W GLASS BUTTE MERCURY MINE WELL	LAKE	0001718	48.
43-31.73 N 119-04.83 W GOODMAN SPRING (HOTCHKISS)	HARNEY	0015437	22.0
43-10.6 N 119-03.6 W HARNEY LAKE HOT SPRINGS	HARNEY	0003065	67.
43-32.34 N 119-04.80 W HINES LUMBER CO. WELL	HARNEY	0015439	25.0
43-32.82 N 119-04.80 W HINES MILL NO. 2	HARNEY	0003057	27.8
43-33.43 N 119-04.85 W HINES MILL WELL NO. 1	HARNEY	0003056	28.5
43-31.42 N 119-03.83 W HOTCHKISS WELL	HARNEY	0015940	27.
43-31.42 N 119-03.83 W HOTCHKISS WELL	HARNEY	0003050	33.
43-15.0 N 119-15.6 W HUGHET SPRING	HARNEY	0015438	27.
43-15.6 N 119-16.8 W JOHNSON SPRING	HARNEY	0001697	20.
43-15.0 N 119-01.5 W LYNCH SPRING	HARNEY	0001698	22.
43-32.43 N 119-04.86 W MILLPOND SPRING	HARNEY	0001699	18.
43-18.005N 119-19.003W OO STATION SPRING	HARNEY	0015941	26.
43-30.040N 119-05.009W POTTERS SWAMP ART. WELL FIELD	HARNEY	0003061	23.
43-33.03 N 119-04.77 W POWERSHOUSE WELL	HARNEY	0003039	27.
43-31.060N 119-04.040W REST STOP WARM WELL	HARNEY	0003055	25.
43-29.4 N 119-07.2 W ROADLAND SPRING	HARNEY	0003040	26.
43-28.041N 119-04.024W SAGE HEN CREEK ART. WELL	HARNEY	0001685	22.
43-32.38 N 119-04.68 W TRAILER COURT WELL	HARNEY	0003038	23.
43-17.008N 119-17.008W UNAMED WARM SPRINGS	HARNEY	0003058	26.5
43-31.8 N 119-04.5 W UNAMED	HARNEY	0003062	21.
43-20.4 N 119-26.1 W UNAMED	HARNEY	0001686	25.
43-57.6 N 119-38.4 W UNAMED	HARNEY	0001689	20.
43-10.6 N 119-03.6 W UNAMED HOT SPRING NEAR HARNEY LAKE	HARNEY	0001694	29.
43-10.6 N 119-03.6 W UNAMED HOT SPRING NEAR HARNEY LAKE	HARNEY	0015939	59.
43-16.026N 119-15.020W UNAMED WARM SPRING	HARNEY	0000729	68.0
43-12.006N 119-04.027W UNAMED WARM SPRING IN HARNEY LAKE	HARNEY	0003063	21.
CRESCENT 1:250,000		0003064	22.
43-48.026N 120-45.053W DECKER WELL NO. 2	DESCHUTES	0003009	25.1
43-43.1 N 121-12.2 W EAST LAKE HOT SPRINGS	DESCHUTES	0000781	62.0
43-43.1 N 121-12.2 W EAST LAKE HOT SPRINGS	DESCHUTES	0015453	49.
43-43.1 N 121-12.2 W EAST LAKE HOT SPRINGS	DESCHUTES	0015452	
43-43.75 N 121-15.125W PAULINA HOT SPRINGS	DESCHUTES	0015947	
43-43.75 N 121-15.125W PAULINA HOT SPRINGS	DESCHUTES	0015454	
43-42.9 N 121-14.5 W WARM WELL AT LITTLE CRATER CAMPGROUND	DESCHUTES	0015455	35.5
ROSEBURG 1:250,000			
43-41.35 N 122-22.32 W KITSON HOT SPRING	LAKE	0015968	44.
43-41.35 N 122-22.50 W KITSON SPRINGS	LAKE	0002232	44.4
43-41.35 N 122-22.50 W KITSON SPRINGS	LAKE	0015468	43.
43-42.6 N 122-17.3 W MCCREDIE HOT SPRING NO. 2	LAKE	0015975	62.
43-42.35 N 122-17.20 W MCCREDIE SPRINGS	LAKE	0000783	73.

43-42.35 N 122-17.20 W MCCREDIE SPRINGS	LANE	0015425	71.0
43-17.67 N 122-21.917W UMPQUA HOT SPRINGS	DOUGLAS	0015949	46.
43-17.70 N 122-21.917W UMPQUA HOT SPRINGS	DOUGLAS	0015456	46.5
43-48.5 N 122-18.2 W WALL CREEK WARM SPRINGS	LANE	0015974	40.
43-48.45 N 122-18.55 W WALL CREEK WARM SPRINGS	LANE	0015401	41.0
BAKER 1:250,000			
44-06.60 N 117-13.60 W ALKALI FLAT GRADIENT WELL	MALHEUR	0015412	24.0
44-21.0 N 117-16.2 W CITY OF HUNTINGTON WELL	BAKER	0001700	24.
44-01.45 N 117-27.60 W NEAL HOT SPRINGS	MALHEUR	0000687	87.0
44-33.0 N 117-24.0 W NELSON SPRING	BAKER	0001701	27.
44-55.82 N 117-56.36 W RADIUM HOT SPRINGS	BAKER	0002206	57.2
44-55.82 N 117-56.36 W RADIUM HOT SPRINGS	BAKER	0000709	58.
44-46.76 N 117-48.65 W SAMO SPRING	BAKER	0015420	27.0
44-01.95 N 117-26.95 W UNNAMED WARM SPRING NEAR BULLY CREEK	MALHEUR	0015414	37.0
CANYON CITY 1:250,000			
44-21.30 N 118-34.40 W BLUE MOUNTAIN HOT SPRINGS	GRANT	0000719	58.0
44-58.48 N 118-02.61 W FISHER HOT SPRING	BAKER	0015444	37.0
44-16.81 N 118-57.36 W JOAQUIN MILLER RESORT	GRANT	0015948	40.
44-22.5 N 118-43.8 W LIMEKILN SPRING	GRANT	0001705	21.
44-05.4 N 119-25.2 W BRISBOIS RANCH SPRINGS	GRANT	0001704	22.
44-53.60 N 119-08.50 W RITTER HOT SPRINGS	GRANT	0000715	41.0
44-00.1 N 119-39.8 W WEBERG HOT SPRING	GRANT	0000693	46.0
BEND 1:250,000			
44-00.6 N 120-09.0 W CAMP CREEK	CROOK	0001702	23.
44-10.045N 120-56.020W DEADMAN SPRINGS	CROOK	0003007	13.
44-14.80 N 120-57.17 W SAMPALUESI WELL	CROOK	0003033	21.6
44-04.2 N 120-02.4 W UNNAMED SPRING ON S. FORK CROOKED RIVER	CROOK	0001703	31.
44-46.86 N 121-58.54 W BREITENBUSH HOT SPRINGS	MARION	0000701	92.0
44-46.87 N 121-58.5 W BREITENBUSH HOT SPRINGS	MARION	0015972	98.
44-46.86 N 121-58.54 W BREITENBUSH HOT SPRINGS - WELL	MARION	0015445	110.
44-46.93 N 121-58.35 W BREITENBUSH WELL NO. 3	MARION	0003072	74.
44-12.73 N 121-01.02 W CRADDOCK WELL	CROOK	0003017	24.3
44-11.42 N 121-01.65 W E. WEEKER WELL	CROOK	0003021	24.9
44-11.1 N 121-02.9 W JACKSON WELL	CROOK	0003018	27.
44-51.72 N 121-12.05 W KAHNEETAH HOT SPRINGS	WASCO	0000699	52.0
44-09.022N 121-03.013W PB-1 DOGAMI DRILL HOLE	CROOK	0003014	32.5
44-11.23 N 121-02.05 W T. BEARDY WELL	CROOK	0003016	24.5
44-10.73 N 121-03.30 W T. O. MARSHALL WELL	CROOK	0001605	33.3
44-15.5 N 121-03.0 W WEIGAND WELL	CROOK	0003015	24.
SALEM 1:250,000			
44-56.15 N 122-10.35 W BAGBY HOT SPRINGS	CLACKAMAS	0015451	58.
44-56.15 N 122-10.35 W BAGBY HOT SPRINGS	CLACKAMAS	0015422	57.2
44-11.65 N 122-02.90 W BELKNAP HOT SPRINGS	LANE	0000703	71.0
44-11.65 N 122-02.90 W BELKNAP HOT SPRINGS	LANE	0002230	86.7
44-14.35 N 122-03.50 W BIGELOW HOT SPRINGS	LANE	0015423	61.0
44-04.95 N 122-14.00 W COUGAR RESERVOIR HOT SPRINGS (RIDER)	LANE	0015426	42.0
44-04.95 N 122-14.00 W COUGAR RESERVOIR HOT SPRINGS (RIDER)	LANE	0000787	44.0
44-09.20 N 122-05.85 W FOLEY SPRINGS	LANE	0015424	80.6

44-12.06 N 122-03. W FRISSEL ROAD SPRING	LANE	0015973	18.
GRANGEVILLE 1:250,000			
45-53.49 N 116-52.41 W COOK CREEK WARM SPRING	MALLOVA	0015410	36.0
45-18.0 N 117-49.5 W BAKER WARM SPRING (CHUCK BENNETT WARM SPRING)	UNION	0000179	26.0
45-13.6 N 117-57.3 W BARSTAD HOT WELL	UNION	0000177	81.5
45-12.00 N 117-49.83 W BENNETT WARM SPRING	UNION	0000186	27.0
45-28.2 N 117-58.2 W CLAYTON FOX WELL	UNION	0001707	27.
45-14.037N 117-57.004W COURTHRIGHT WELL	UNION	0003084	67.
45-17.037N 117-48.019W COVE BATH HOUSE	UNION	0003080	28.8
45-17.67 N 117-48.38 W COVE WARM SPRING	UNION	0015418	29.4
45-17.66 N 117-48.40 W COVE WARM SPRING	UNION	0000182	42.0
45-27.12 N 117-58.19 W CRESTON SHAW WELL	UNION	0015980	22.
45-12.049N 117-55.016W DUCK POND	UNION	0003085	25.
45-16.032N 117-48.023W GIRDNER WARM SPRING	UNION	0003073	22.2
45-18.046N 117-48.027W GRANGE HALL	UNION	0003076	26.
45-12.8 N 117-55.3 W HAYSTACK WARM SPRING	UNION	0000176	25.5
45-18.052N 117-47.042W HOOFNAGLE	UNION	0003074	24.
45-14.63 N 117-57.51 W HOT LAKE	UNION	0000711	80.0
45-14.037N 117-57.030W HOT LAKE RESORT	UNION	0003083	81.
45-14.52 N 117-57.06 W HOT LAKE SPRING	UNION	0000180	81.
45-00.8 N 117-53.1 W KROPP HOT SPRING	BAKER	0015427	43.0
45-17.036N 117-48.022W LOVE SWIMMING POOL	UNION	0003081	30.
45-01.10 N 117-38.50 W MEDICAL HOT SPRING	UNION	0000183	61.5
45-01.08 N 117-37.48 W MEDICAL HOT SPRINGS	UNION	0000713	60.0
45-01.08 N 117-37.48 W MEDICAL HOT SPRINGS	UNION	0002241	60.0
45-12.02 N 117-54.51 W OASIS WARM SPRING	UNION	0000185	29.5
45-28.054W 117-57.043W ROYCE	UNION	0003078	26.
45-12.13 N 117-55.03 W SWEET WARM SPRING	UNION	0000184	38.0
45-12.003N 117-54.046W UNION JUNCTION NO. 1	UNION	0003082	37.
45-12.000N 117-54.023W UNION JUNCTION NO. 2	UNION	0003071	30.
45-27.026N 117-59.050W WAGNER	UNION	0003077	31.
45-27.43 N 117-59.84 W WAGNER WELL	UNION	0015946	29.
45-18.059N 117-48.037W WARM CREEK	UNION	0003075	25.
PENDLETON 1:250,000			
45-44.47 N 118-13.96 W BINGHAM SPRINGS	UMATILLA	0015347	34.4
45-07.8 N 118-43.8 W HIDAWAY SPRINGS	UMATILLA	0001709	38.
45-20.66 N 118-05.90 W LA GRANDE WARM WELL	UNION	0000181	28.0
45-09.06 N 118-39.55 W LEHMAN SPRINGS	UMATILLA	0000785	61.0
45-19.54 N 118-07.20 W U.P. RR NO. 1	UNION	0015981	25.5
45-20.00 N 118-07.17 W U.P. RR NO. 2	UNION	0015982	26.
45-04.2 N 118-27.3 W WARM MINERAL SPRINGS	UNION	0001706	28.
45-56.4 N 118-27.6 W WELL	UNION	0001710	24.
45-19.89 N 118-05.43 W WELL	UNION	0015944	27.
45-19.89 N 118-05.43 W WELL	UNION	0015945	25.
45-20.07 N 118-05.83 W WELL	UNION	0015943	27.
45-49.8 N 119-18.0 W CITY OF HERMISTON WELL	UNION	0001711	24.
45-37.8 N 119-48.0 W WELLS SPRING (WELL)	UMATILLA	0001708	27.
THE DALLES 1:250,000			
45-22.3 N 121-41.8 W ACID-SULFATE SPRING ON MT. HOOD	CLACKAMAS	0015469	

45-01.65	N 121-57.80	W GEOTHERMAL GRADIENT TEST NEAR AUSTIN HOT SPRING	CLACKAWAS	0015446	35.6
45-33.8	N 121-16.6	W J. SANDOZ WELL	MASCO	0015417	27.8
45-31.70	N 121-12.95	W MILTON MARTIN WELL	MASCO	0015403	22.2
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015471	
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015472	89.4
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015474	91.1
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015473	
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015950	71.1
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015470	89.4
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015937	86.1
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015951	89.4
45-22.3	N 121-41.8	W MT. HOOD FUMARoles	CLACKAWAS	0015952	89.4
45-29.75	N 121-33.5	W PARKDALE GRADIENT HOLE	HOOD RIVER	0015971	24.
45-17.7	N 121-44.3	W SWIM WARM SPRINGS	CLACKAWAS	0015421	26.0
VANCOUVER 1:250,000					
45-01.30	N 122-00.50	W AUSTIN HOT SPRINGS (CAREY)	CLACKAWAS	0000697	86.0
45-30.2	N 122-18.3	W CAMP COLLINS WARM SPRINGS (WELL)	MULTNOMAH	0000296	29.
45-32.5	N 122-17.5	W CORBETT WARM SPRING	MULTNOMAH	0015415	18.0
45-30.2	N 122-18.3	W YMCA CAMP COLLINS	MULTNOMAH	0015416	23.3

APPENDIX D

Sources for the records in the GEOTHERM sample file for Oregon. Each reference is preceded by its abbreviated form (called CODE) used in the sample file (Table 1). Entries in this computer-generated appendix are sorted by CODE.

CODE = AYERS AND CRESWELL, 1951

AYRES, F. D., AND CRESWELL, A. E., 1951, THE MOUNT HOOD FUMARoles: MAZAMA, V. 33, NO. 13, P. 33-40.

CODE = BOWEN AND OTHERS, 1978

BOWEN, R. G., PETERSON, N. V., RICCIO, J. F., 1978, LOW- TO INTERMEDIATE-TEMPERATURE THERMAL SPRINGS AND WELLS IN OREGON: OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, GEOLOGICAL MAP SERIES, GMS-10.

CODE = BROWN AND OTHERS, 1980A

BROWN, D. E., MCLEAN, G. D., AND BLACK, G. L., 1980A, PRELIMINARY GEOLOGY AND GEOTHERMAL RESOURCE POTENTIAL OF THE SOUTHERN HARNEY BASIN OREGON: OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES OPEN-FILE REPT. O-80-7, 90 P.

CODE = BROWN AND OTHERS, 1980B

BROWN, D. E., MCLEAN, G. D., AND BLACK, G. L., 1980B, PRELIMINARY GEOLOGY AND GEOTHERMAL RESOURCE POTENTIAL OF THE NORTHERN HARNEY BASIN OREGON: OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES OPEN-FILE REPT. O-80-6, 52 P.

CODE = BROWN AND OTHERS, 1980C

BROWN, D. E., BLACK, G. L., AND MCLEAN, G. D., 1980C, PRELIMINARY GEOLOGY AND GEOTHERMAL RESOURCE POTENTIAL OF THE CRAIG MOUNTAIN-COVE AREA, OREGON: OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES OPEN-FILE REPT. O-80-4, 21 P. INDUSTRIES OPEN-FILE REPT. O-80-9.

CODE = DELLECHAIE, 1978

DELLECHAIE, F. 1978, A GEOLOGICAL AND HYDRO-GEOCHEMICAL STUDY OF THE LA GRANDE AREA, UNION COUNTY, OREGON: GEOTHERMAL RESOURCES COUNCIL, TRANSACTIONS, VOL. 2, JULY, 1978, P. 145-148.

CODE = GONTHIER AND OTHERS, 1977

GONTHIER, J. B., COLLINS, C. A., AND ANDERSON, D. B., 1977, GROUND WATER DATA FOR THE DREWSEY RESOURCE AREA, HARNEY AND MALHEUR COUNTIES, OREGON: U. S. GEOLOGICAL SURVEY OPEN-FILE REPORT 77-741, 28 P.

CODE = HAMPTON AND BROWN, 1964

HAMPTON, E. R., AND BROWN, S. G., 1964, GEOLOGY AND GROUND-WATER RESOURCES OF THE UPPER GRANDE RONDE RIVER BASIN, UNION COUNTY, OREGON: U. S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1597, 99 P.

CODE = HOGENSON, 1964

HOGENSON, G. M., 1964, GEOLOGY AND GROUND WATER OF THE UMATILLA RIVER BASIN, OREGON: U. S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1620, 162 P.

CODE = LEONARD AND HARRIS, 1974

LEONARD, A. R., AND HARRIS, A. B., 1974, GROUND WATER IN SELECTED AREAS IN THE KLAMATH BASIN, OREGON: OREGON STATE GROUND-WATER REPORT NO. 21, 104 P.

CODE = LEONARD, 1970

LEONARD, A. R., 1970, GROUND-WATER RESOURCES IN HARNEY VALLEY, HARNEY COUNTY, OREGON: OREGON STATE GROUND-WATER REPORT NO. 16, 85 P.

CODE = LINDGREN, 1901

LINDGREN, WALDEMAR, 1901, THE GOLD BELT OF THE BLUE MOUNTAINS OF OREGON: U. S. GEOLOGICAL SURVEY 2ND ANN. REPT., PT. 2, P. 551-776.

CODE = MADISON, 1966

MADISON, R. J., 1966, WATER-QUALITY DATA IN THE WILLAMETTE BASIN, OREGON, 1910-64: U. S. GEOLOGICAL SURVEY BASIC-DATA RELEASE, 40 P.

CODE = MARINER AND OTHERS, 1974A

MARINER, R. H., RAPP, J. B., WILLEY, L. M., AND PRESSER, T. S., 1974A, CHEMICAL COMPOSITION AND ESTIMATED MINIMUM THERMAL RESERVOIR TEMPERATURES OF SELECTED HOT SPRINGS IN OREGON: U. S. GEOLOGICAL SURVEY OPEN-FILE REPORT, 32 P.

CODE = MARINER AND OTHERS, 1975

MARINER, R. H., PRESSER, T. S., RAPP, J. B., AND WILLEY, L. M., 1975, THE MINOR AND TRACE ELEMENTS, GAS, AND ISOTOPE COMPOSITIONS OF THE PRINCIPAL HOT SPRINGS OF NEVADA AND OREGON: U. S. GEOLOGICAL SURVEY OPEN-FILE REPORT, 27 P.

CODE = MARINER AND OTHERS, 1980

MARINER, R. H., SWANSON, J. R., ORRIS, G. J., PRESSER, T. S., AND EVANS, W. C., 1980, CHEMICAL AND ISOTOPIC DATA FOR WATER FROM THERMAL SPRINGS AND WELLS OF OREGON: U. S. GEOLOGICAL SURVEY OPEN-FILE REPORT 80-737, 50 P.

CODE = NEHRING AND OTHERS, 1979

NEHRING, N. L., MARINER, R. H., WHITE, L. D., HUEBNER, M. A., ROBERTS, E. D., HARMON, KAREN, BOWEN, P. A., AND TANNER, LANE, 1979, SULFATE GEOTHERMOMETRY OF THERMAL WATERS IN THE WESTERN UNITED STATES: U.S. GEOLOGICAL SURVEY OPEN-FILE REPORT 79-1135, 12 P.

CODE = NEWCOMB AND HART, 1958

NEWCOMB, R. C., AND HART, D. H., 1958, PRELIMINARY REPORT ON THE GROUND-WATER RESOURCES OF THE KLAMATH RIVER BASIN, OREGON: U. S. GEOLOGICAL SURVEY OPEN-FILE REPORT 466, 248 P.

CODE = NEWCOMB, 1972

NEWCOMB, R. C., 1972, QUALITY OF THE GROUND WATER IN BASALT OF THE COLUMBIA RIVER GROUP, WASHINGTON, OREGON, AND IDAHO: U. S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1999N, 71 P.

CODE = PETERSON AND GROH, 1967

PETERSON, N. V., AND GROH, E. A., 1967, GEOTHERMAL POTENTIAL OF THE KLAMATH FALLS AREA, OREGON - A PRELIMINARY STUDY: THE ORE-BIN, V. 29, NO. 11, P. 209-231.

CODE = PHILLIPS, 1936

PHILLIPS, K. N., 1936, A CHEMICAL STUDY OF THE FUMARoles OF MOUNT HOOD: MAZAMA, V. 18, NO. 12, P. 44-46

CODE = PIPER AND OTHERS, 1939

PIPER, A. M., ROBINSON, T. W., AND PARK, C. F., JR., 1939, GEOLOGY AND GROUND-WATER RESOURCES OF THE HARNEY BASIN, OREGON: U. S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 841, 190 P.

CODE = PRICE, 1967

PRICE, DON, 1967, GROUND-WATER RECONNAISSANCE IN THE BURNT RIVER VALLEY AREA, OREGON: U. S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1839-I, 127 P.

CODE = ROBISON, 1972

ROBISON, J. H., 1972, AVAILABILITY AND QUALITY OF GROUND WATER IN THE ASHLAND QUADRANGLE, JACKSON COUNTY, OREGON: U. S. GEOLOGICAL SURVEY HYDROLOGIC INVESTIGATIONS ATLAS HA-421.