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FILE_CAB 9 DRAWER _

GEOTHERM:

OREGON

RECORD 00001

GEO THERM FILE ID: 0015444

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FISHER HOT SPRING
WELL/SPRING NUMBER..... 07S/38E-10BA

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 07S 038E 10 NE OF NW
STATE..... OREGON
COUNTY..... BAKER
GEOLOGIC PROVINCE..
MAP REFERENCE..... ROCK CREEK 1:24000, CANYON CITY 1:250000

COORDINATES
LAT/LONG... 44-58.48 N 118-02.61 W
UTM ZONE... +11
NORTHING... 4980449.
EASTING.... 417718.

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.
PH..... Q 9.8
SPECIFIC CONDUCTANCE..... 197.
ALKALINITY..... 68. AS CAC03
TOTAL DISSOLVED SOLIDS... 143.

ANALYSIS IN MG/L

AG....	CO3.....	LI... 1.0		
AL.... 0.07	CR.....	MG... L 0.1		
AS.... L 0.005	CS.....	MN... L 0.03		
AU....	CU.....	MO... 39.	SI02.	
B.... 2.8	F..... 0.4	NA... 40.	S04..	12.
BA....	FE+3.....	NA+K.		
BE....	FE(TOT). L 0.03			
CA.... 1.4				
CL.... 1.8				
CO....	K..... N			

ISOTOPES (0/00)

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... 06
REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00002

GEO THERM FILE ID: 0015427

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KROPP HOT SPRING
WELL/SPRING NUMBER..... 06S/39E-25BD

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 06S 039E 25 SE OF NW
STATE..... OREGON
COUNTY..... BAKER
GEOLOGIC PROVINCE..
MAP REFERENCE..... NORTH POWDER 1:24000, GRANGEVILLE 1:250000

COORDINATES
LAT/LONG... 45-00.8 N 117-53.1 W
UTM ZONE... +11
NORTHING... 4984595.
EASTING.... 430263.

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 HOSE, ALAN W.
 PH..... Q 7.3
 SPECIFIC CONDUCTANCE..... 445.
 ALKALINITY..... 43. AS CAC03
 TOTAL DISSOLVED SOLIDS... 392.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI... L 0.1	
AL....	0.04	CR.....		MG... 0.1	
AS....	L 0.005	CS.....		MN... L 0.03	
AU....		CU.....		MO... 58.	SI02..
B....	3.3	F.....	1.2	NA... 93.	S04.. 32.
BA....		FE+3....		NA+K.	
BE....		FE(TOT). L 0.03		NH4.. 0.15	
BI....		GA.....			
CA....	1.1				
CL....	81.				
CO....		K.....	1.5		

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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00003

 GEOTHERM FILE ID: 0000709

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... RADIUM HOT SPRINGS
 WARING NUMBER..... 17A

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 07S 039E 28 NE
 STATE..... OREGON
 COUNTY..... BAKER
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... HAINES 1:24000, BAKER 1:250000

COORDINATES

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

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 MICROMETRE MEMBRANE, METAL ANALYSES ACIDIFIED, DILUTED.
 PERTINENT LITHOLOGY..... ALLUVIUM, QUARTZ DIORITE, BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 9.56
 SPECIFIC CONDUCTANCE..... 290.

ISOTOPES (0/00)

AG....	L 0.02	CO3.....	27.	LI... 0.01	SB... L 0.2	DEL D OF WATER.....	-138.3
AL....		CR.....		MG... 0.1	SC... 78.	DEL O(18) OF WATER...	-17.85
AS....	L 0.01	CS.....	L 0.1	MN... L 0.02			
AU....	L 0.1	CU.....	L 0.01	MO... 58.			
B....	0.42	F.....	1.3	NA... 34.	S04..		
BA....	L 0.1	FE+3....		NA+K.	SR... L 0.05		
BE....	L 0.1	FE(TOT). L 0.02		NB...			
BR....	0.01						

CA..... 1.5 HCO3..... 86.
 CA+MG. HG..... 0.0005 PB... L 0.06
 CD..... L 0.01 H2S..... P04.. 0.092
 CL..... 17. I..... 0.007 RB... L 0.02
 CO..... L 0.05 K..... 1.1

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00004

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0002206

NAME OF SAMPLE SOURCE... RADIUM HOT SPRINGS
 WARING NUMBER..... 17A

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 07S 039E 28 NE
 STATE..... OREGON
 COUNTY..... BAKER
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... HAINES 1:24000
 OTHER LOCALITY INFORMATION: 1 MI. NORTH OF HAINES

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

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.

ANALYSIS IN PPM

AG.....	CO3..... 47.				
AL.... N	CR.....	MG... N			
AS.....	CS.....	MN... N			
AU.....	CU.....	MO... N		SI02. 80.	
B.....	F..... 1.0	NA... 63.		S04.. 31.	
BA.....	FE+3.....	NA+K.			
BE.....	FE(TOT). N				
CA..... 1.6	HCO3..... 5.	NO3.. 0.2		U..... L 0.0001	
CD.....	H2S.....	P04.. N			
CL..... 17.					
CO.....	K..... 2.0				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... SCOTT AND BARKER, 1962

RECORD 00005

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015420

NAME OF SAMPLE SOURCE... SAM=0 SPRING
 WELL/SPRING NUMBER..... 09S/40E-16DA
 WARING NUMBER..... 17B

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 09S 0 0E 16 NE OF SE
 COUNTY..... BAKER
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BAKER 1:24000, BAKER 1:250000

COORDINATES
 LAT/LONG... 44-46.76 N 117-48.65 W
 UTM ZONE... +11
 NORTHING... 4958540.
 EASTING.... 435847.

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..... Q 8.1
 SPECIFIC CONDUCTANCE..... 891.
 ALKALINITY..... 425. AS CAC03
 TOTAL DISSOLVED SOLIDS... 595.

ANALYSIS IN MG/L

AG....		CO3.....		LI... 0.06			
AL.... 0.43		CR.....		MG... 6.			
AS.... L 0.005		CS.....		MN... 0.05			
AU....		CU.....		MO... 68.	SI02.		
B.... 1.6		F..... 1.2		NA... 171.	S04..	0.7	
BA....		FE+3.....		NA+K.			
BE....		FE(TOT). L 0.1		NH4.. 0.5			
BI....		GA.....		P04.. 0.09			
CA.... 16.		H2S.....					
CD....		K..... 12.					
CL.... 16.							
CO....							

ISOTOPES (0/00)

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... 02
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00006

 GEOTHERM FILE ID: 0015469

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ACID-SULFATE SPRING ON MT. HOOD
 KGRA..... MT. HOOD
 WARING NUMBER..... 01

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

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/06/25 HODGSON, L.

WATER ANALYSIS

DATE/ANALYST..... BARNES GROUP
 PH..... 3.8
 SPECIFIC CONDUCTANCE..... 227.

ANALYSIS IN MG/L

AG....		CO3.....		LI... L 0.01
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ISOTOPES (0/00)

AL.... CR..... MG... 2.8
 AU.... CU..... MO... SI02. 19.
 B..... F..... NA... 5.4
 BA.... FE+3..... NA+K. S04.. 77.
 CA.... 13.
 CL.... L 1.
 CO.... K..... 0.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00007

 GEOTHERM FILE ID: 0000697

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... AUSTIN HOT SPRINGS (CAREY)
 KGRA..... CAREY HOT SPRINGS
 WARING NUMBER..... 04

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 06S 007E 30 SW OF NW
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... FISH CREEK MTN. 1:62500, VANCOUVER 1:250000

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 86.0
 DISCHARGE..... 950. 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..... OLIVINE BASALT, BASALTIC ANDESITE, PYROXENE ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 7.63
 SPECIFIC CONDUCTANCE..... 1720.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... L 1.	LI... 0.4	SB... L 0.2
AL....	CR.....	MG... 0.1	SC... L 0.02
AS.... 0.59	CS..... L 0.1	MN... L 0.02	SE... 81.
AU.... L 0.1	CU..... L 0.01	MO... 300.	SI02. 81.
B..... 2.6	F..... 1.4	NA... 140.	S04.. 140.
BA.... L 0.1	FE+3.....	NA+K. 0.33	SR... 0.33
BE.... L 0.1	FE(TOT). L 0.02	NB... 0.06	
BR.... 2.			
CA.... 35.	HCO3..... 56.		
CA+MG.	HG..... 0.0002	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.061	
CL.... 430.	I..... 0.03	RB... 0.03	
CO.... L 0.05	K..... 7.1		

ISOTOPES (0/00)

DEL D OF WATER..... -94.5
 DEL O(18) OF WATER... -12.22
 DEL O(18) OF S04..... -2.41

REFERENCE AND IDENTIFICATION

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

ALKALINITY..... 56. AS CAC03
 TOTAL DISSOLVED SOLIDS... 240.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....	36.				
AL....	0.2	CR.....		MG...	0.1		
AU....		CU.....		MO...		SI02..	82.
B.....	0.6	F.....	0.68	NA...	54.		
BA....		FE+3....	L 0.02	NA+K..		S04..	31.
BI....		GA.....		NH4..	L 0.01		
CA....	3.7						
CD....		H2S.....		P04..	0.06		
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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00010

 GEOTHERM FILE ID: 0015446

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... GEOTHERMAL GRADIENT TEST NEAR AUSTIN HOT SPRINGS
 WELL/SPRING NUMBER..... 06S/07E-21CD

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	06S 007E 21 SE OF SW	LAT/LONG...	45-01.65 N 121-57.80 W
STATE.....	OREGON		UTM ZONE...	+10
COUNTY.....	CLACKAMAS		NORTHING...	4986311.
GEOLOGIC PROVINCE..			EASTING....	581669.
MAP REFERENCE.....	HIGH ROCK 1:62500, THE VALLES 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.
 PH..... Q 7.6
 SPECIFIC CONDUCTANCE..... 282.
 ALKALINITY..... 133. AS CAC03
 TOTAL DISSOLVED SOLIDS... 795.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI...	0.01		
AL....	L 0.05	CR.....		MG...	2.6		
AS....	0.07						
AU....		CU.....		MO...		SI02..	36.
B.....	0.42	F.....	0.71	NA...	48.		
BA....		FE+3....		NA+K..		S04..	0.6
BE....		FE(TOT)..	18.				
BI....		GA.....		NH4..	0.11		
CA....	12.	HCO3....		N03..	0.38		
CD....		H2S.....		P04..	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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00011

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015470

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
 KGRA..... MT. HOOD
 WARING NUMBER..... 01

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

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

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	H2S..	0.038
C2H6.		N2...	0.116
CO2..	1.1	O2...	0.011
H2...	0.0033		

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... 98.7% H2O, 0.0014% INERT GASES

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... PHILLIPS, 1936

RECORD 00012

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015471

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
 KGRA..... MT. HOOD
 WARING NUMBER..... 01

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

COORDINATES
 LAT/LONG... 45-22.3 N 121-41.8 W
 UTM ZONE... +10
 NORTHING... 5024848.
 EASTING.... 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	H2S..	0.181
C2H6.		N2...	0.035
CO2..	1.5	O2...	0.0043
H2...	0.0042		

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... 98.3% H2O, 0.0004% INERT GASES

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00013

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015472

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

KGRA..... MT. HOOD

WARNING NUMBER..... 01

LOCATIONTOWNSHIP-RANGECOORDINATES

COUNTRY.....	UNITED STATES	02S 009E 29	LAT/LONG...	45-22.3 N 121-41.8 W
STATE.....	OREGON		UTM ZONE...	+10
COUNTY.....	CLACKAMAS		NORTHING...	5024848.
GEOLOGIC PROVINCE..	CASCADES		EASTING....	602059.
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..... 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	H2S..	0.102
C2H6.		N2...	0.041
CO2..	2.2	O2...	0.0040
H2...	0.096		

ISOTOPES (00/0)

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

REFERENCE AND IDENTIFICATION

COMPILER CROSS INDEX... 01

REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00014

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015473

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

KGRA..... MT. HOOD

WARNING NUMBER..... 01

LOCATIONTOWNSHIP-RANGECOORDINATES

COUNTRY.....	UNITED STATES	02S 009E 29	LAT/LONG...	45-22.3 N 121-41.8 W
STATE.....	OREGON		UTM ZONE...	+10
COUNTY.....	CLACKAMAS		NORTHING...	5024848.
GEOLOGIC PROVINCE..	CASCADES		EASTING....	602059.
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 %

ISOTOPES (00/0)

CH4.. 0.0014

H2S.. 0.102

C2H6..

N2... 0.044

CO2.. 2.1

O2... 0.0038

H2... 0.097

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

REFERENCE AND IDENTIFICATION

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

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 01

REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00015

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015474

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

KGRA..... MT. HOOD

WARNING NUMBER..... 01

LOCATIONTOWNSHIP-RANGECOORDINATES

COUNTRY..... UNITED STATES

02S 009E 29

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

STATE..... OREGON

UTM ZONE... +10

COUNTY..... CLACKAMAS

NORTHING... 5024848.

GEOLOGIC PROVINCE.. CASCADES

EASTING.... 602059.

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

OTHER LOCALITY INFORMATION: SMALL OPENING IN AREA OF HOT ROCKS AT BASE OF CHUTE. AREA IS WEST OF SNOW RIDGE CALLED
HOGBACKSAMPLE 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 %

ISOTOPES (00/0)

CH4.. 0.0011

H2S.. 0.045

CO2.. 1.8

O2... 0.0067

H2... 0.080

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

REFERENCE AND IDENTIFICATION

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

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

COMPILER CROSS INDEX... 01

REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00016

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015937

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles

KGRA..... MT. HOOD

WARING NUMBER..... 01

LOCATION
COUNTRY..... UNITED STATES TOWNSHIP-RANGE
STATE..... OREGON 02S 009E 29
COUNTY..... CLACKAMAS
GEOLOGIC PROVINCE.. CASCADES

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

MAP REFERENCE..... MT. HOOD SOUTH 1:24000
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)..... 86.1
OTHER SAMPLE INFORMATION.. SAME AS SAMPLE 3 IN PHILLIPS, 1935

GAS ANALYSIS

DATE/ANALYST..... 1951/00/00
GAS/WATER RATIO.. Q .70
ANALYSIS IN VOLUME %

ISOTOPES (00/0)

CH4.. H2S.. N
C2H6.. N2... 9.8
CO2.. 17. O2... 2.5

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

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 01
REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00017

GEO THERM FILE ID: 0015950

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MT. HOOD FUMARoles
KGRA..... MT. HOOD
WARING NUMBER..... 01

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

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

SAMPLE DESCRIPTION AND CONDITIONS

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

ISOTOPES (00/0)

CH4.. H2S.. N
C2H6.. N2... 79.
CO2.. 0.68 O2... 20.
H2... 0.58

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.
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

ISOTOPES (00/0)

ANALYSIS IN VOLUME%

CH4..	0.00063	H2S..	0.176
C2H6..		N2...	0.032
CO2..	1.4	O2...	0.0036
H2...	0.0045		

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

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... AYERS AND CRESWELL, 1951

RECORD 00020

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015421

NAME OF SAMPLE SOURCE... SWIM WARM SPRINGS
 WELL/SPRING NUMBER..... 03S/8.5E-24CA
 WARING NUMBER..... 02

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 03S 8.5E 24 NE OF SW
 STATE..... OREGON
 COUNTY..... CLACKAMAS
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MT. HOOD SOUTH 1:24000, THE DALLES 1:250000
 OTHER LOCALITY INFORMATION: EAST SIDE OLD SWIMMING POOL

LAT/LONG... 45-17.7 N 121-44.3 W
 UTM ZONE... +10
 NORTHING... 5016279.
 EASTING.... 598930.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/12/02 BOWEN, RICHARD G.
 SAMPLE NUMBER..... WS-76-276
 TEMPERATURE (C)..... 26.0
 DISCHARGE..... 3.8 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
 PH..... 7.3 AT(C) 26.
 SPECIFIC CONDUCTANCE..... 1300.
 ALKALINITY..... 179. AS CaCO3
 TOTAL DISSOLVED SOLIDS... 988.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....	LI... 0.13
AL.... L 0.02		CR.....	MG... 48.
AS.... L 0.005		CS.....	MN... L 0.05
AU....		CU.....	MO... 72.
B.... 0.32		F..... 0.23	NA... 136.
BA....		FE+3....	NA+K. S04.. 205.
BE....		FE(TOT), L 0.05	
BI....		GA.....	NH4.. 0.05
CA.... 60.		HCO3....	NO3.. L 0.02
CD....		H2S..... T	PO4... 0.09
CL.... 161.			
CO....		K..... 12.	

DEL 0(18) OF WATER... -14.01
 DEL 0(18) OF S04..... 1.52

OTHER ANALYTICAL DATA... H2S DETECTABLE

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 02
 REFERENCE..... OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY, UNPUBLISHED DATA

RECORD 00021

GEO THERM FILE ID: 0000781

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EAST LAKE HOT SPRINGS
 WARING NUMBER..... 33

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 21S 013E 29 SW
 COUNTY..... DESCHUTES
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... NEWBERRY CRATER 1:125000, CRESCENT 1:250000

COORDINATES

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

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
 PH..... 6.49
 SPECIFIC CONDUCTANCE..... 396.
 ALKALINITY..... 184. AS HCO3

ANALYSIS IN MG/L

AG.... L 0.02	CO3.....	LI... 0.01	SB... L 0.2
AL....	CR.....	MG... 16.	SC... L 0.2
AS....	CS..... L 0.1	MN... 0.1	
AU.... L 0.1	CU..... 0.01	MO... 36.	SI02. 36.
B.... 0.93	F..... 0.2	NA... 32.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 58.
BE.... L 0.1	FE(TOT). L 0.02	NB... 0.14	SR... 0.14
CA.... 38.			
CA+MG.	HG..... 0.0003	PB... L 0.06	
CD.... L 0.01			
CL.... 0.4	I.....	RB... L 0.02	
CO.... L 0.05	K..... 3.8		

ISOTOPES (0/00)

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

GAS ANALYSISANALYSIS IN VOLUME %

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

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... O2+AR=6.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1975

RECORD 00022

GEO THERM FILE ID: 0015452

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EAST LAKE HOT SPRINGS
 KGRA..... NEWBERRY CALDERA
 WARING NUMBER..... 33

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 21S 013E 29 SW

COORDINATES

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

COUNTY..... DESCHUTES
GEOLOGIC PROVINCE..
MAP REFERENCE..... NEWBERRY CRATER 1:125000, CRESCENT 1:250000

NORTHING... 4841942.
EASTING.... 644731.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/07/28 MARINER, R. H. AND EVANS, W. C.
OTHER SAMPLE INFORMATION.. FIVE VENTS ACROSS THE COMPLEX (EAST TO WEST) WERE SAMPLED. THE COMPOSITIONS VARY WITH 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 %

ISOTOPES (00/0)
DEL C(13) OF CO2..... -6.35

AR... HG...
CH4.. 2.0
C2H6. L 0.05
CO2.. 96.
H2... L 0.01
HE... L 0.02

OTHER ANALYTICAL DATA... O2+AR+N2=2.72; SAMPLES COLLECTED IN EVACUATED TUBES.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 01
REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00023

GEO THERM FILE ID: 0015453

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... EAST LAKE HOT SPRINGS
KGRA..... NEWBERRY CALDERA
WARNING NUMBER..... 33

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 21S 013E 29 SW
STATE..... OREGON
COUNTY..... DESCHUTES
GEOLOGIC PROVINCE..
MAP REFERENCE..... NEWBERRY CRATER 1:125000, CRESCENT 1:250000

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

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

ISOTOPES (0/00)

ANALYSIS IN MG/L
AG.... CO3..... LI... 0.04
AL.... 0.008 CR..... MG... 34.
AS.... CS..... L 0.1 MN... 0.9
AU.... CU..... L 0.01 MO... S102. 199.
B.... F..... 0.16 NA... 53.
BA.... FE+3.... NA+K. S04.. 28.
BE.... FE(TOT). 0.66

BI....	GA.....	NH4..	Q 1.3
BR....	GE.....	NI...	L 0.02
CA....	70.		
CA+MG.	HG.....	PB...	L 0.1
CD....	H2S.....	L 0.5	
CL....	I.....	RB...	0.03
CO....	L 0.05	ZN...	L 0.01

GAS ANALYSIS

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

ANALYSIS IN VOLUME %

CH4..	2.9		
C2H6.		N2...	5.1
CO2..	91.	O2...	0.9

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... GAS SAMPLES COLLECTED IN "GAS TIGHT" SYRINGES.
QUALIFICATION FIELD..... NH4 RECALCULATED FROM N

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00024

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015454

NAME OF SAMPLE SOURCE... PAULINA HOT SPRINGS
 KGRA..... NEWBERRY CALDERA
 WARING NUMBER..... 32

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	21S 012E	26 NE	LAT/LONG...	43-43.7	N 121-45.0	W
STATE.....	OREGON			UTM ZONE...	+10		
COUNTY.....	DESCHUTES			NORTHING...	4842243.		
GEOLOGIC PROVINCE..				EASTING....	600677.		
MAP 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
 PH..... 6.82 AT(C) 30.
 ALKALINITY..... 856. AS HCO3

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG....	CO3.....	LI...	0.22		
AL....	CR.....	MG...	60.		
AS....	CS.....	L 0.1			
AU....	CU.....	MO...		SI02.	205.
B....	0.87	F.....	0.57	NA...	140.
BA....		FE+3....		NA+K.	S04.. L 1.
CA....	56.				
CL....	6.0	I.....		RB...	0.04
CO....		K.....	17.		

GAS ANALYSIS

DATE/ANALYST..... 1977/12/00 BARNES GROUP

ANALYSIS IN VOLUME %

AR...	0.09
CH4..	0.55

ISOTOPES (00/0)

C2H6. L 0.05 N2... 4.7
 CO2.. 93. 02... 0.03
 H2... L 0.01
 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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00025

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015947

NAME OF SAMPLE SOURCE... PAULINA HOT SPRINGS
 KGRA..... NEWBERRY
 WARING NUMBER..... 32

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 21S 012E 26 NE
 STATE..... OREGON
 COUNTY..... DESCHUTES
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... NEWBERRY CRATER 1:125000; CRESCENT 1:250000

COORDINATES
 LAT/LONG... 43-43.7 N 121-45.0 W
 UTM ZONE... +10
 NORTHING... 4842243.
 EASTING... 600677.

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... HG...
 CH4.. 5.4 H2S..
 C2H6. L 0.05
 CO2.. 71.
 H2... L 0.01
 HE... L 0.02

ISOTOPES (00/0)

DEL C(13) OF CO2..... -8.70
 SEL C(13) OF CH4..... -52.7

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00026

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015455

NAME OF SAMPLE SOURCE... WARM WELL AT LITTLE CRATER CAMPGROUND
 KGRA..... NEWBERRY CALDERA

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 21S 012E 36 NW
 STATE..... OREGON
 COUNTY..... DESCHUTES
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... NEWBERRY CRATER 1:125000

COORDINATES
 LAT/LONG... 43-42.9 N 121-14.5 W
 UTM ZONE... +10
 NORTHING... 4841506.
 EASTING... 641651.

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

PH..... 6.46 AT(C) 36.
 SPECIFIC CONDUCTANCE..... 900.
 ALKALINITY..... 679. AS HCO3

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI....	0.12		
AL....	0.002	CR.....		MG....	48.		
AS....		CS.....	L 0.1	MN....	0.25		
AU....		CU.....	L 0.01	MO....		SI02..	161.
B.....	2.5	F.....	0.6	NA....	83.		
BA....		FE+3....		NA+K..		S04..	L 1.
BE....		FE(TOT)..	4.				
BI....		GA.....		NH4..	Q 0.53		
CA....	54.						
CA+MG.		HG.....	L 0.0001				
CL....	5.1	I.....		RB....	0.02		
CO....	L 0.05	K.....	10.				

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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00027

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015949

NAME OF SAMPLE SOURCE... UMPQUA HOT SPRINGS
 WELL/SPRING NUMBER..... 26S/4E-20AC
 WARING NUMBER..... 24

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 26S 004E 20 SW OF NE
 STATE..... OREGON
 COUNTY..... DOUGLAS
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... TOKETEE FALLS 1:62500

LAT/LONG... 43-17.70 N 121-21.90 W
 UTM ZONE... +10
 NORTHING... 4794657.
 EASTING.... 632632.

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... 1978/06/27 BOWEN, RICCIO
 SAMPLE NUMBER..... WS 78-116, ORE. DEPT. ENV. QUAL.
 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI....	2.4		
AL....	2.2	CR.....		MG....	42.		
AS....	5.8						
AU....		CU.....		MO....		SI02..	96.
B.....	41.	F.....	1.2	NA....	2150.		
BA....		FE+3....		NA+K..		S04..	139.
BE....		FE(TOT)..	6.2				

BI..... GA..... NH4.. 0.78
 CA..... 428. H2S..... P04.. 0.005
 CD.....
 CL..... 3340.
 CO..... K..... 62.

OTHER ANALYTICAL DATA... CO2 PRESENT, MINOR H2S

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, R. G.
 COMPILER AFFILIATION... OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00028

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015456

NAME OF SAMPLE SOURCE... UMPQUA HOT SPRINGS
 WARING NUMBER..... 24

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 26S 004E 20 SW OF NE
 STATE..... OREGON
 COUNTY..... DOUGLAS
 GEOLOGIC PROVINCE.. CASCADES
 MAP REFERENCE..... TOKETEE FALLS 1:62500
 LAT/LONG... 43-17.70 N 121-21.90 W
 UTM ZONE... +10
 NORTHING... 4794657.
 EASTING.... 632632.

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... 1977/09/18 MARINER, R. H. AND EVANS, W. C.
 TEMPERATURE (C)..... 46.5
 WATER TREATMENT..... FIELD FILTERATION, ACIDIFICATION, SILICA DILUTION, ALKALINITY DETERMINATION
 DEPOSITS OR ALTERATION.... TRAVERTINE

WATER ANALYSIS

DATE/ANALYST..... 1978/01/00 BARNES GROUP
 PH..... 6.37 AT(C) 47.
 SPECIFIC CONDUCTANCE..... 11300.
 ALKALINITY..... 1380. AS HC03

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	MO... 2400.	SI02.. 90.	
B.... 41.		F..... 1.5	NA... 2400.	S04.. 190.	
BA....		FE+3....	NA+K.		
BE....		FE(TOT).. 0.44			
BR....		GE.....	NI... L 0.02		
CA.... 340.					
CA+MG.		HG..... L 0.0001	PB... L 0.1		
CD.... L 0.01		H2S..... L 1.			
CL.... 3500.		I.....	RB... 0.16	ZN... 0.02	
CO.... L 0.02		K..... 63.			

ISOTOPES (0/00)

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			
HE... L 0.02			

ISOTOPES (00/0)

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 00029

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0000719

NAME OF SAMPLE SOURCE... BLUE MOUNTAIN HOT SPRINGS
 WARING NUMBER..... 16

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 14S 034E 13 S/2
 STATE..... OREGON
 COUNTY..... GRANT
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... PRAIRIE CITY 1:62500, CANYON CITY 1:250000

COORDINATES
 LAT/LONG... 44-21.30 N 118-34.40 W
 UTM ZONE... +11
 NORTHING... 4912290.
 EASTING... 374610.

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 PLIOCENE ANDESITE FLOWS
 OTHER SAMPLE INFORMATION.. MIXED WATERS.

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 7.96
 SPECIFIC CONDUCTANCE..... 610.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 3.	LI... 0.07	SB... L 0.2
AL....	CR.....	MG... 0.2	SC... L 0.02
AS.... L 0.01	CS..... L 0.1	MN... L 0.02	SI02. 47.
AU.... L 0.1	CU..... L 0.01	MO... 140.	S04.. 11.
B..... 1.6	F..... 11.	NA... 140.	SR... L 0.05
BA.... L 0.1	FE+3....	NA+K.	
BE.... L 0.1	FE(TOT). L 0.02	NB... L 0.05	
BR.... 0.04			
CA.... 2.2	HCO3.... 323.		
CA+MG.	HG..... 0.0004	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.12	
CL.... 15.	I..... 0.01	RB... L 0.02	
CO.... L 0.05	K..... 3.3		

ISOTOPES (0/00)

DEL D OF WATER..... -126.6
 DEL O(18) OF WATER... -16.13

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 04
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00030

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015948

NAME OF SAMPLE SOURCE... JOAQUIN MILLER RESORT
 WELL/SPRING NUMBER..... 15S/31E-11DC

DEPOSITS OR ALTERATION..... NO DEPOSITS.
 PERTINENT LITHOLOGY..... MIOCENE AND PLIOCENE BASALT FLOWS

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP
 PH..... 9.68
 SPECIFIC CONDUCTANCE..... 319.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 28.	LI.... 0.01	SB... L 0.2
AL....	CR.....	MG... L 0.05	SC...
AS....	CS..... L 0.1	MN... L 0.02	
AU.... L 0.1	CU..... 0.01	MO...	SI02. 70.
B..... 2.6	F..... 4.0	NA... 72.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 9.
BE.... L 0.1	FE(TOT). L 0.02	NB...	SR... L 0.05
CA.... 1.4	HCO3..... 86.		
CA+MG.	HG..... 0.0005	PB... L 0.06	
CD.... L 0.01			
CL.... 29.	I.....	RB... L 0.02	
CO.... L 0.05	K..... 0.82		

ISOTOPES (0/00)

DEL D OF WATER..... -119.
 DEL O(18) OF WATER... -14.83

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00032

GEO THERM FILE ID: 0000693

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... WEBERG HOT SPRING

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 18S 026E 18
 STATE..... OREGON
 COUNTY..... GRANT
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... CANYON CITY 1:250000

COORDINATES

LAT/LONG... 44-00.1 N 119-38.8 W
 UTM ZONE... +11
 NORTHING... 4875248.
 EASTING... 287803.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 46.0
 DISCHARGE..... 40. 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..... ARKOSIC SANDSTONE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 6.53
 SPECIFIC CONDUCTANCE..... 2570.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI.... 0.7	SB... L 0.2
AL....	CR.....	MG... 7.8	SC...
AS.... 0.04	CS..... L 0.1	MN... 0.06	
AU.... L 0.1	CU..... 0.18	MO...	SI02. 82.
B..... 15.	F..... 3.9	NA... 610.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 13.
BE.... L 0.1	FE(TOT). 0.24	NB...	SR... 2.1
BR.... 0.1			

ISOTOPES (0/00)

DEL D OF WATER..... -122.1
 DEL O(18) OF WATER... -15.14

CA..... 38. HCO3..... 1710.
 CA+MG. HG..... 0.0003 PB... L 0.06
 CD.... L 0.01 H2S..... P04.. 0.12
 CL..... 50. I..... 0.1 RB... 0.09
 CO.... L 0.05 K..... 36.

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. 2. N2... 1.
 C2H6. CO2.. 95.

OTHER ANALYTICAL DATA... O2+AR=1.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

ISOTOPES (00/0)

RECORD 00033

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015460

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 WARNING NUMBER..... 68

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 34S 034E 32 NE OF NW SE LAT/LONG... 42-32.66 N 118-31.66 W
 STATE..... OREGON UTM ZONE... +11
 COUNTY..... HARNEY NORTHING... 4711132.
 GEOLOGIC PROVINCE.. BASIN AND RANGE EASTING.... 374561.
 MAP REFERENCE..... ALVORD HOT SPRINGS 1:24000

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
 PH..... 6.90 AT(C) 79.
 SPECIFIC CONDUCTANCE..... 4100.
 ALKALINITY..... 1225. AS HCO3

ANALYSIS IN MG/L

AG.... CO3..... LI... 1.9
 AL.... CR..... MG... 2.1
 AS.... CS..... 0.1
 AU.... CU..... MO... SI02. 129.
 B..... 35. F..... 9.6 NA... 990.
 BA.... FE+3.... NA+K. S04.. 180.
 CA.... 12.
 CD.... H2S..... L 1.
 CL.... 770.
 CO.... K..... 64.

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00034

GEO THERM FILE ID: 0015461

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 WARING NUMBER..... 68

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 34S 034E 32 NE OF NW SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... ALVORD HOT SPRINGS 1:24000

COORDINATES

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

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
 PH..... 6.89 AT(C) 79.
 SPECIFIC CONDUCTANCE..... 4070.
 ALKALINITY..... 1230. AS HCO3

ANALYSIS IN MG/L

AG....	CO3.....	LI... 1.9		
AL....	CR.....	MG... 2.2		
AS....	CS..... 0.1			
AU....	CU.....	MO... 128.	SI02.	128.
B.... 36.	F..... 11.	NA... 1000.	S04..	180.
BA....	FE+3....			
BI....	GA.....	NH4.. L 0.5		
CA.... 12.				
CD....	H2S..... L 1.			
CL.... 770.	I.....	RB... 0.24		
CO....	K..... 63.			

ISOTOPES (0/00)REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00035

GEO THERM FILE ID: 0000681

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 WARING NUMBER..... 68

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 34S 034E 32 NE OF NW SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... ALVORD HOT SPRINGS 1:24000

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 76.0
 DISCHARGE..... 500. 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..... MIOCENE RHYODACITE, ANDESITE, AND BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 6.73
 SPECIFIC CONDUCTANCE..... 4590.
 ALKALINITY..... 1196.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI.... 2.1	SB.... L 0.2
AL.... 0.003	CR.....	MG.... 2.2	SC....
AS.... 0.04	CS..... 0.2	MN.... 0.02	SE....
AU.... L 0.1	CU..... 0.05	MO....	SI02.. 120.
B..... 30.	F..... 10.	NA.... 960.	
BA.... L 0.1	FE+3....	NA+K..	S04.. 220.
BE.... L 0.1	FE(TOT).. 0.12	NB....	SR.... 0.92
BI....	GA.....	NH4.. 0.9	
BR.... 2.			
CA.... 13.	HCO3.... 1196.		
CA+MG.	HG..... 0.0001	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.43	
CL.... 780.	I..... 0.09	RB.... 0.33	
CO.... L 0.05	K..... 69.		

ISOTOPES (0/00)

DEL D OF WATER..... -123.6
 DEL O(18) OF WATER... -13.23
 DEL O(18) OF S04..... -6.05

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; NEHRING AND OTHERS, 1979

RECORD 00036

 GEOTHERM FILE ID: 0015429

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ALVORD HOT SPRINGS
 KGRA..... ALVORD
 WARNING NUMBER..... 68

LOCATION

COUNTRY..... UNITED STATES	<u>TOWNSHIP-RANGE</u>	34S 034E 32 NE OF NW SE
STATE..... OREGON		
COUNTY..... HARNEY		
GEOLOGIC PROVINCE..		
MAP REFERENCE..... ALVORD HOT SPRINGS 1:24000		
OTHER LOCALITY INFORMATION: EAST SIDE OF ROAD 9 MILES NORTH OF ANDREWS		

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/11/09
 SAMPLE NUMBER..... 1009
 TEMPERATURE (C)..... 82.2

WATER ANALYSIS

DATE/ANALYST..... 1955/11/09 HARRIS, JOHN
 PH..... 7.3
 SPECIFIC CONDUCTANCE..... 4490.
 TOTAL DISSOLVED SOLIDS... 2910.

ANALYSIS IN PPM

AL....	CR.....	MG.... 1.0	
AS....	CS.....	MN.... N	
AU....	CU.....	MO....	SI02.. 135.

ISOTOPES (0/00)

B..... 28. F..... 7.2 NA... 1040.
 BA..... FE+3..... NA+K. S04.. 211.
 BE..... FE(TOT). 0.09
 CA..... 13. HCO3..... 1250. NO3.. 1.1 U.... 0.0001
 CD..... H2S..... P04.. 4.5
 CL..... 760.
 CO..... K..... 66.

OTHER ANALYTICAL DATA... CHEMICAL-BETA-GAMMA(UUCURIES/L): RA=140.

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 23
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00037

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015441

NAME OF SAMPLE SOURCE... CITY OF HINES WELL

LOCATION

COORDINATES

COUNTRY.....	UNITED STATES	TOWNSHIP-RANGE	23S 0 0E 23 NE OF SE SW	LAT/LONG...	43-33.57 N 119-05.31 W
STATE.....	OREGON			UTM ZONE...	+11
COUNTY.....	HARNEY			NORTHING...	4824853.
GEOLOGIC PROVINCE..				EASTING....	331316.
MAP REFERENCE.....	BURNS 1:24000, BURNS 1: 2500				

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 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..... 7.8 AT(C) 17.
 SPECIFIC CONDUCTANCE..... 289.
 TOTAL DISSOLVED SOLIDS... 221.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.....	CO3..... N				
AL.....	CR.....	MG...	5.7		
AU.....	CU.....	MO...		S102.	60.
B..... 0.53	F..... 0.5	NA...	35.		
BA.....	FE+3.....	NA+K.		S04..	18.
BE.....	FE(TOT). 0.05				
CA..... 15.	HCO3..... 128.	NO3..	3.8		
CL..... 13.					
CO.....	K..... 6.9				

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 46
 REFERENCE..... LEONARD, 1970

RECORD 00038

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015938

NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS

WARNING NUMBER..... 53

<u>LOCATION</u>	<u>TOWNSHIP-RANGE</u>	<u>COORDINATES</u>
COUNTRY..... UNITED STATES	24S 033E 34 NE OF NE SW	LAT/LONG... 43-26.45 N 118-38.30 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... HARNEY		NORTHING... 4810859.
GEOLOGIC PROVINCE..		EASTING.... 367416.
MAP REFERENCE..... CRANE 1:62500, BURNS 1:250000		

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/08/30
 TEMPERATURE (C)..... 49.

WATER ANALYSIS

ANALYSIS IN PPM

AG.....	CO3.....	22.			
BA.....	FE+3.....		NA+K.	171.	S04.. 80.
CA..... 2.	HCO3.....	173.	NO3..	1.4	
CL..... 82.					

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 09
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00039

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS
 WARING NUMBER..... 53

GEO THERM FILE ID: 0000727

<u>LOCATION</u>	<u>TOWNSHIP-RANGE</u>	<u>COORDINATES</u>
COUNTRY..... UNITED STATES	24S 033E 34 NE OF NE SW	LAT/LONG... 43-26.45 N 118-38.30 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... HARNEY		NORTHING... 4810859.
GEOLOGIC PROVINCE..		EASTING.... 367416.
MAP REFERENCE..... CRANE 1:62500, BURNS 1:250000		

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
 PH..... 8.1
 SPECIFIC CONDUCTANCE..... 810.
 ALKALINITY..... 202.

ANALYSIS IN MG/L

AG..... L 0.02	CO3.....	3.	LI...	0.09	SB...	L 0.2
AL..... 0.022	CR.....		MG...	0.1	SC...	
AS..... 0.09	CS..... L 0.1		MN...	L 0.02		
AU..... L 0.1	CU.....	0.01	MO...		SI02.	83.
B..... 7.9	F.....	9.0	NA...	170.		
BA..... L 0.1	FE+3.....		NA+K.		S04..	86.
BE..... L 0.1	FE(TOT). L 0.02		NB...		SR...	0.06
BI.....	GA.....		NH4..	3.2		
BR..... 0.1						
CA..... 3.7	HCO3.....	202.				
CA+MG.	HG.....	0.0005	PB...	L 0.06		

ISOTOPES (0/00)

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

CD.... L 0.01 H2S..... P04.. 0.09
 CL.... 79. I..... 0.02 RB... 0.03
 CO.... L 0.05 K..... 3.9

REFERENCE AND IDENTIFICATION

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

RECORD 00040

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015435

NAME OF SAMPLE SOURCE... CRANE HOT SPRINGS
 WARING NUMBER..... 55

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 24S 033E 34 NE OF NE SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..

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

MAP REFERENCE..... CRANE 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/09/12 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.

ANALYSIS IN MG/L

AG....	CO3.....	6.			
AL....	CR.....		MG... 0.2		
AU....	CU.....		MO... 170.	SI02. 80.	
B.... 6.2	F.....	9.3	NA... 170.	S04.. 81.	
BA....	FE+3....		NA+K.		
BE....	FE(TOT)..	0.02			
CA.... 3.8	HCO3....	199.	N03.. N		
CL.... 78.					
CO....	K.....	3.6			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

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

RECORD 00041

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015437

NAME OF SAMPLE SOURCE... GOODMAN SPRING (HOTCHKISS)
 WARING NUMBER..... 52B

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 23S 030E 35 SE OF SE SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 43-31.73 N 119-04.83 W
 UTM ZONE... +11
 NORTHING... 4821431.
 EASTING.... 331877.

MAP REFERENCE..... BURNS 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/09/13 HANSON, W.B.
 SAMPLE NUMBER..... PNW 16836 USGS
 TEMPERATURE (C)..... 22.0

WATER ANALYSIS

DATE/ANALYST..... 1968/00/00
 PH..... 7.5
 SPECIFIC CONDUCTANCE..... 210.
 TOTAL DISSOLVED SOLIDS... 165.

ANALYSIS IN MG/L

AG....		CO3..... N				
AL....		CR.....	MG...	1.4		
AU....		CU.....	MO...		SI02.	46.
B.....	0.23	F.....	NA...	35.		
BA....		FE+3....	NA+K.		S04..	16.
BE....		FE(TOT)..		0.02		
CA....	8.2	HCO3....	NO3..	2.1		
CL....	7.					
CO....		K.....		3.2		

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 39
 REFERENCE..... LEONARD, 1970

RECORD 00042

 GEOTHERM FILE ID: 0015436

GEOTHERM SAMPLE FILE

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

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 24S 032E 08 NW OF NE SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... HARNEY 1:62500

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/09/12 LEONARD & HANSON
 SAMPLE NUMBER..... USGS PNW 16829
 TEMPERATURE (C)..... 46.0
 WELL DEPTH (M)..... 857.
 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.

ANALYSIS IN MG/L

AG....		CO3.....	84.			
AL....		CR.....	MG...	0.2		
AU....		CU.....	MO...		SI02.	72.
B.....	4.1	F.....	NA...	135.		
BA....		FE+3....	NA+K.		S04..	29.
BE....		FE(TOT)..		0.2		
CA....	0.8	HCO3....	NO3..	0.2		
CL....	11.					
CO....		K.....		1.6		

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 05
 REFERENCE..... LEONARD, 1970

RECORD 00043

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015439

NAME OF SAMPLE SOURCE... HINES LUMBER CO. WELL
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 23S 0 0E 35 SE OF NE NE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BURNS 1:24000, BURNS 1:62500

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1968/07/24 HANSON, BILL
 SAMPLE NUMBER..... USGS PNW 16606
 POINT OF COLLECTION.. SURFACE
 TEMPERATURE (C)..... 25.0
 WELL DEPTH (M)..... 61.
 DISCHARGE..... 6624.

WATER ANALYSIS

PH..... 7.8 AT(C) 25.
 SPECIFIC CONDUCTANCE..... 222.
 TOTAL DISSOLVED SOLIDS... 180.

ANALYSIS IN MG/L

AG....		CO3..... N			
AL....		CR.....	MG...	2.	
AU....		CU.....	MO...		SI02. 55.
B....	0.38	F.....	NA...	33.	
BA....		FE+3....	NA+K.		S04.. 14.
BE....		FE(TOT)..		0.02	
CA....	11.	HCO3....	N03..	1.5	
CL....	7.				
CO....		K.....		4.	

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

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

RECORD 00044

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000782

NAME OF SAMPLE SOURCE... HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 70
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 37S 033E 14 NW OF SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1:24000

COORDINATES

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

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

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
PH..... 7.28
SPECIFIC CONDUCTANCE..... 2410.

ANALYSIS IN MG/L

AG.... L 0.02 CO3..... L 1. LI... 0.65 SB... L 0.2
AL.... CR..... MG... 0.3 SC...
AS.... 0.01 CS..... 0.1 MN... 0.03 SE...
AU.... L 0.1 CU..... 0.03 MO... SI02. 190.
B..... 17. F..... 9.0 NA... 500.
BA.... L 0.1 FE+3..... NA+K. S04.. 350.
BE.... L 0.1 FE(TOT). L 0.02 NB... SR... 0.42
BR.... 2.
CA.... 16. HCO3..... 420.
CA+MG. HG..... 0.0004 PB... L 0.06
CD.... L 0.01 H2S..... P04.. 0.89
CL.... 300. I..... 0.2 RB... 0.23
CO.... L 0.05 K..... 31.

ISOTOPES (0/00)

DEL D OF WATER..... -115.8
DEL O(18) OF WATER... -11.57
DEL O(18) OF S04..... -7.95

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 24
REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00045

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002208

NAME OF SAMPLE SOURCE... HOT BORAX LAKE
KGRA..... ALVORD
WARNING NUMBER..... 70

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 37S 033E 14 NW OF SW
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE..

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

MAP REFERENCE..... BORAX LAKE 1:24000
OTHER LOCALITY INFORMATION: 5 MI. NORTHEAST OF FIELDS

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1953/09/03 HEWETT, D. F.
SAMPLE NUMBER..... LAB NO. ICC-46
POINT OF COLLECTION.. WEST SIDE OF SPRINGS
TEMPERATURE (C)..... R 29.4

WATER ANALYSIS

DATE/ANALYST..... 1953/09/25 BERMAN, S. AND KRAMER, H.
PH..... 7.7
SPECIFIC CONDUCTANCE..... 2227.
TOTAL DISSOLVED SOLIDS... 1559.

ANALYSIS IN PPM

ISOTOPES (0/00)

AG.... CO3..... N LI... L 1.5
AL.... CR..... MG... N

AU.....	CU.....	MO....	SI02.	184.
B..... 18.	F..... 8.	NA.... 488.	S04..	343.
BA.....	FE+3....	NA+K.		
CA..... 17.	HCO3.... 424.	NO3.. 2.5		
CL..... 286.				
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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00046

 GEOTHERM FILE ID: 0002211

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 70

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 37S 033E 14 NW OF SW
 STATE..... OREGON
 COUNTY..... HARNEY

COORDINATES

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

GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1:24000

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.

ANALYSIS IN PPM

AG.....	CO3..... N			
AL.....	CR.....	MG... 0.5		
AU.....	CU.....	MO... 516.	SI02.	193.
B..... 18.	F..... 9.7	NA.... 367.	S04..	
BA.....	FE+3....			
CA..... 16.	HCO3.... 450.			
CD.....	H2S.....	P04.. 2.2		
CL..... 305.				
CO.....	K..... 27.			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 24
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00047

 GEOTHERM FILE ID: 0015940

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HOTCHKISS WELL

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 24S 030E 01 SE OF NW NE
 STATE..... OREGON

COORDINATES

LAT/LONG... 43-31.42 N 119-03.83 W
 UTM ZONE... +11

COMPILER CROSS INDEX... 44
 REFERENCE..... LEONARD, 1970

RECORD 00049

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015434

NAME OF SAMPLE SOURCE... ISLAND RANCH WELL
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 25S 032E 07 NW OF NE NW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LAWEN 1:62500

COORDINATES
 LAT/LONG... 43-25.40 N 118-55.95 W
 UTM ZONE... +11
 NORTHING... 4809425.
 EASTING.... 343565.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1969/08/12 LEONARD, A.
 SAMPLE NUMBER..... PNW 17450
 POINT OF COLLECTION.. SURFACE
 TEMPERATURE (C)..... 41.0
 WELL DEPTH (M)..... 410.
 DISCHARGE..... 11.

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 9.3
 SPECIFIC CONDUCTANCE..... 1450.
 TOTAL DISSOLVED SOLIDS... 957.

ANALYSIS IN MG/L

AG....	CO3.....	144.			
AL....	CR.....		MG...	0.2	
AS.... N					
AU....	CU.....		MO...	54.	SI02.
R....	F.....	19.	NA...	386.	S04..
BA....	FE+3....		NA+K.		8.
CA.... 0.5	HCO3....	674.	NO3..	0.1	
CL.... 9.					
CO....	K.....	4.4			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 08
 REFERENCE..... LEONARD, 1970

RECORD 00050

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015457

NAME OF SAMPLE SOURCE... MICKEY SPRINGS
 KGRA..... ALVORD
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 33S 035E 13
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... ADEL 1:250000

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

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
PH..... 8.31 AT(C) 86.
SPECIFIC CONDUCTANCE..... 2200.
ALKALINITY..... 804. AS HC03

ANALYSIS IN MG/L

AG....		CO3.....		LI... 0.9			
AL....		CR.....		MG... L 1.			
AS....		CS..... 0.1					
AU....		CU.....		MO... 550.	SI02..	214.	
B.....	11.	F..... 16.		NA... 550.	S04..	210.	
BA....		FE+3.....		NH4.. L 0.5			
BI....		GA.....					
CA....	1.0						
CD....		H2S..... L 1.					
CL....	240.	I.....		RB... 0.18			
CO....		K..... 31.					

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, ROBERT H.
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 22
REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00051

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015458

NAME OF SAMPLE SOURCE... MICKEY SPRINGS
KGRA..... ALVORD

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	33S 03E 13	LAT/LONG... 42-40.6 N 118-20.7 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... HARNEY		NORTHING... 4725573.
GEOLOGIC PROVINCE.. BASIN AND RANGE		EASTING.... 389794.
MAP REFERENCE..... ADEL 1:250000		

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.
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
PH..... 8.31 AT(C) 85.
SPECIFIC CONDUCTANCE..... 2220.
ALKALINITY..... 814. AS HC03

ANALYSIS IN MG/L

AG....		CO3.....		LI... 0.9			
AL....	0.068	CR.....		MG... 0.1			
AS....		CS..... L 0.1					
AU....		CU.....		MO... 550.	SI02..	214.	
B.....	11.	F..... 17.		NA... 550.	S04..	220.	
BA....		FE+3.....		NA+K.			
BE....		FE(TOT). L 0.02					

ISOTOPES (0/00)

BI.... GA..... NH4.. L 0.5
 CA.... 1.0
 CD.... H2S..... L 1.
 CL.... 240. I..... RB... 0.14
 CO.... K..... 30.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 22
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00052

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015459

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

KGRA..... ALVORD

LOCATION TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES

33S 03E 13

LAT/LONG... 42-40.54 N 118-20.67 W

STATE..... OREGON

UTM ZONE... +11

COUNTY..... HARNEY

NORTHING... 4725461.

GEOLOGIC PROVINCE.. BASIN AND RANGE

EASTING.... 389833.

MAP REFERENCE..... ADEL 1:250000

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..... 836. AS HC03

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.... CO3..... LI... 0.85

AL.... CR..... MG... L 0.1

AS.... CS..... L 0.1

AU.... CU..... MO... S102. 200.

B.... 11. F..... 17. NA... 560.

BA.... FE+3.... NA+K. S04.. 220.

CA.... 0.6

CD.... H2S..... L 1.

CL.... 245. I..... RB... 0.15

CO.... K..... 32.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 22
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00053

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0000679

NAME OF SAMPLE SOURCE... MICKEY SPRINGS

KGRA..... ALVORD

LOCATION TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 33S 035E 13
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE..

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

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

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
PH..... 8.05
SPECIFIC CONDUCTANCE..... 2490.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 11.	LI.... 1.1	SB... L 0.2
AL.... 0.058	CR.....	MG.... 0.1	SC... L 0.02
AS.... 0.01	CS..... 0.1	MN.... L 0.02	SE... 200.
AU.... L 0.1	CU..... 0.05	MO.... 550.	SI02.. 230.
B..... 11.	F..... 16.	NA.... 550.	SR... 0.15
BA.... L 0.1	FE+3.....	NA+K..	
BE.... L 0.1	FE(TOT). L 0.02	NB....	
BI....	GA.....	NH4... 0.39	
BR.... 1.			
CA.... 0.9	HCO3..... 774.	PB... L 0.06	
CA+MG.	HG..... 0.0001	PO4.. 0.74	
CD.... L 0.01	H2S.....	RB... 0.2	
CL.... 240.	I..... 0.09		
CO.... L 0.05	K..... 35.		

ISOTOPES (0/00)

DEL D OF WATER..... -124.3
DEL O(18) OF WATER... -13.42
DEL O(18) OF SO4..... -7.91

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. 1.
C2H6. N2... 60.
CO2.. 23.

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... AR+O2=18.

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 22
REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00054

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MICKEY SPRINGS
KGRA..... ALVORD

GEO THERM FILE ID: 0015433

LOCATION

COUNTRY..... UNITED STATES 33S 035E 13
STATE..... OREGON
COUNTY..... HARNEY
GEOLOGIC PROVINCE..
MAP REFERENCE..... ADEL 1:250000

COORDINATES

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

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.

ANALYSIS IN MG/L

AG.....	CO3.....	LI... L	0.2		
AL.... L	CR.....	MG... L	1.2		
AS....	CS.....	MN... L	0.02		
AU....	CU.....	MO... L		SI02..	167.
B.....	F.....	NA... L	478.		
BA....	FE+3....	NA+K..		S04..	205.
BE....	FE(TOT)..				
RI....	GA.....	NH4... L	0.02		
CA....	HCO3....	N03... L	0.02		
CD....	H2S.....	P04... L	1.3		
CL....					
CO....	K.....				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 22
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00055

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015941

NAME OF SAMPLE SOURCE... MILLPOND SPRING
 WARING NUMBER..... 52

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	23S 0 0E	35 NE OF NE NE	LAT/LONG...	43-32.43 N 119-04.86 W
STATE.....	OREGON			UTM ZONE...	+11
COUNTY.....	HARNEY			NORTHING...	4822727.
GEOLOGIC PROVINCE..				EASTING....	331869.
MAP REFERENCE.....	BURNS 1:24000				

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/08/26
 TEMPERATURE (C)..... 26.

WATER ANALYSIS

ANALYSIS IN PPM

ISOTOPES (0/00)

AG....	CO3..... N				
BA....	FE+3....	NA+K..	37.	S04..	11.
CA....	HCO3....	N03... L	1.1		
CL....					

REFERENCE AND IDENTIFICATION

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

RECORD 00056

GEO THERM FILE ID: 0015440

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... O. J. THOMAS

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 22S 032E 34 NE OF NE NE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... HARNEY 1:62500

COORDINATES

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

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.

ANALYSIS IN MG/L

AG.....		CO3.....	92.				
AL.....		CR.....		MG...	0.2		
AS.....	0.06						
AU.....		CU.....		MO...		SI02.	89.
B.....	4.0	F.....	2.8	NA...	157.		
BA.....		FE+3.....		NA+K.		S04..	89.
BE.....		FE(TOT)..	0.03				
CA.....	1.0	HCO3.....	49.	NO3..	N		
CL.....	38.						
CO.....		K.....	1.8				

ISOTOPES (0/00)

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 00057

GEO THERM FILE ID: 0015462

GEO THERM SAMPLE FILE

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

KGRA..... ALVORD

WARNING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 37S 033E 11 SW OF SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... BORAX LAKE 1:24000

COORDINATES

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

OTHER LOCALITY INFORMATION: LARGE POOL AT T E 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..... GT 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 HCO3

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....	CO3.....	LI...	0.5		
AL....	CR.....	MG...	0.3		
AS....	CS..... 0.2				
AU....	CU.....	MO...		SI02.	189.
B.... 15.	F..... 7.5	NA...	460.		
BA....	FE+3....	NA+K.		S04..	320.
CA.... 15.					
CD....	H2S..... L 1.				
CL.... 270.	I.....	RB...	0.23		
CO....	K..... 29.				

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00058

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015463

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	37S 033E 11, 14	LAT/LONG...	42-20.08 N 118-36.11
STATE.....	OREGON		UTM ZONE...	+11
COUNTY.....	HARNEY		NORTHING...	4687963.
GEOLOGIC PROVINCE..	BASIN AND RANGE		EASTING....	368032.
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, R. 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 HC03			
<u>ANALYSIS IN MG/L</u>			<u>ISOTOPES (0/00)</u>		
AG.....		CO3.....	LI...	0.5	
AL.....	0.028	CR.....	MG...	0.2	
AS.....		CS.....	MN...	0.05	
AU.....		CU.....	MO...		SI02. 169.
B.....	14.	F.....	NA...	435.	
RA.....		FE+3.....	NA+K.		S04.. 300.
RE.....		FE(TOT) L		0.02	
BI.....		GA.....	NH4..	L 0.5	
CA.....	13.				
CD.....		H2S.....		L 1.	
CL.....	250.	I.....	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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00059

GEOIHERM SAMPLE FILE

GEOIHERM FILE ID: 0015464

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	37S 033E	14 NW OF NW	LAT/LONG...	42-19.82 N 118-36.16 W
STATE.....	OREGON			UTM ZONE...	+11
COUNTY.....	HARNEY			NORTHING...	4687484.
GEOLOGIC PROVINCE..	BASIN AND RANGE			EASTING....	367954.
MAP REFERENCE.....	BORAX LAKE 1:24000				
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 HC03

<u>ANALYSIS IN MG/L</u>			<u>ISOTOPES (0/00)</u>		
AG.....		CO3.....	LI...	0.5	
AL.....		CR.....	MG...	0.3	
AS.....		CS.....		0.2	
AU.....		CU.....	MO...		SI02. 154.
B.....	15.	F.....	NA...	435.	
BA.....		FE+3.....	NA+K.		S04.. 300.
CA.....	15.				
CD.....		H2S.....		L 1.	
CL.....	250.	I.....	RB...	0.18	
CO.....		K.....		26.	

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00060

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015465

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 37S 033E 14 NW OF NW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... BORAX LAKE 1:24000
 OTHER LOCALITY INFORMATION: FENCED AREA AT THE NORTHWEST BASE OF THE MOUND AROUND HOT LAKE.

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/09/09 MARINER, R. H. AND EVANS, W. C.
 SAMPLE NUMBER..... GT 216 RM76
 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

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....	CO3.....	LI... 0.55		
AL.....	CR.....	MG... 0.3		
AS.....	CS..... 0.1			
AU.....	CU.....	MO... 157.	SI02..	157.
B..... 14.	F..... 7.7	NA... 450.	S04..	300.
BA.....	FE+3.....	NA+K.		
CA..... 14.				
CD.....	H2S..... L 1.			
CL..... 250.	I.....	RB... 0.18		
CO.....	K..... 26.			

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00061

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015466

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 37S 033E 11 SW OF SW
 STATE..... OREGON

LAT/LONG... 42-20.17 N 118-36.08 W
 UTM ZONE... +11

COUNTY..... HARNEY
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... BORAX LAKE 1:24000
 OTHER LOCALITY INFORMATION: SPRING ISSUES APPROXIMATELY 397M NW OF HOT LAKE.

NORTHING... 4688129.
 EASTING.... 368076.

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..... 372. AS HCO3

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI... 0.45			
AL....		CR.....		MG... 0.2			
AS....		CS..... 0.1					
AU....		CU.....		MO... 163.	SI02..		
B.... 14.		F..... 7.4		NA... 425.	S04..		300.
BA....		FE+3.....		NA+K.			
BE....		FE(TOT). L 0.02		NH4.. L 0.5			
BI....		GA.....					
CA.... 12.		H2S..... L 1.					
CD....		I.....		RB... 0.17			
CL.... 250.		K..... 24.					
CO....							

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00062

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015467

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	37S 033E 14 NW OF NW	LAT/LONG... 42-19.82 N 118-36.16 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... HARNEY		NORTHING... 4687484.
GEOLOGIC PROVINCE.. BASIN AND RANGE		EASTING.... 367954.
MAP REFERENCE..... BORAX LAKE 1:24000		
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 RM76
 TEMPERATURE (C)..... 84.
 WATER TREATMENT..... FILTERED (0.1UM), SILICA DILUTION, ACIDIFIED FOR METALS, FIELD ALKALINITY AND AMMONIA
 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..... 386. AS HCO3

ANALYSIS IN MG/L

AG....	CO3.....	LI...	0.45		
AL....	CR.....	MG...	0.2		
AS....	CS..... 0.1				
AU....	CU.....	MO...		SI02.	164.
B..... 15.	F..... 7.5	NA...	440.		
BA....	FE+3.....	NA+K.		S04..	310.
BI....	GA.....	NH4.. L	0.5		
CA.... 12.					
CD....	H2S..... L 1.				
CL.... 250.	I.....	RB...	0.18		
CO....	K..... 25.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00063

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015939

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HARNEY LAKE
 WARING NUMBER..... 64

LOCATION

COUNTRY..... UNITED STATES 27S 29.5E 36 NE OF SE
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BURNS 1:250000

TOWNSHIP-RANGE

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/08/21
 SAMPLE NUMBER..... 361 IN PIPER AND OTHERS
 TEMPERATURE (C)..... 59.

WATER ANALYSIS

ANALYSIS IN PPM

AG....	CO3..... N				
AL....	CR.....	MG...	3.0		
AU....	CU.....	MO...		SI02.	92.
B.....	F.....	NA...	622.		
BA....	FE+3.....	NA+K.		S04..	140.
BE....	FE(TOT). 0.03				
CA.... 13.	HCO3..... 601.	N03..	0.5		
CL.... 562.					
CO....	K..... 12.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 15
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00064

GEO THERM FILE ID: 0000683

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 37S 033E 11 SW OF SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1:24000, ADEL 1:250000

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

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... 1973/06/00 BARNES GROUP
 TEMPERATURE (C)..... 96.0
 DISCHARGE..... 15. L/MIN
 WATER TREATMENT..... PRESSURE FILTERED THROUGH A .45 MICROMETRE - MEMBRANE FILTER, METAL ANALYSES ACIDIFIED WITH NITRIC ACID, DILUTED
 PERTINENT LITHOLOGY..... ALLUVIUM AND BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 7.30
 SPECIFIC CONDUCTANCE..... 2020.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 4.	LI... 0.51	SB... L 0.2
AL.... 0.020	CR.....	MG... 0.3	SC...
AS....	CS..... 0.1	MN... 0.04	SE...
AU.... L 0.1	CU..... 0.01	MO...	SI02. 160.
B.... 15.	F..... 7.2	NA... 450.	S04.. 434.
BA.... L 0.1	FE+3....	NA+K.	SR... 0.6
BE.... L 0.1	FE(TOT). L 0.02	NB...	
BI....	GA.....	NH4.. 0.17	
CA.... 14.	HCO3.... 374.		
CA+MG.	HG..... 0.0008	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 1.2	
CL.... 250.	I.....	RB... 0.18	
CO.... L 0.05	K..... 28.		

ISOTOPES (0/00)

DEL D OF WATER..... -125.4
 DEL O(18) OF WATER... -14.36
 DEL O(18) OF S04..... -8.58

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00065

GEO THERM FILE ID: 0000729

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HARNEY LAKE
 WARING NUMBER..... 64

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 27S 29.5E 36
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... CRANE 1:62500, BURNS 1:250000

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

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 68.0
 DISCHARGE..... 550. 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..... BASALTIC TUFF AND OLIVINE BASALT

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 7.26
 SPECIFIC CONDUCTANCE..... 2970.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI.... 0.45	SB... L 0.2
AL.... 0.005	CR.....	MG.... 1.8	
AS.... 0.6	CS..... L 0.1	MN.... 0.04	
AU.... L 0.1	CU..... 0.02	MO....	SI02. 92.
B..... 11.	F..... 3.3	NA.... 630.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 140.
RE.... L 0.1	FE(TOT).. 0.05	NB....	SR... 0.11
BI....	GA.....	NH4... 1.8	
BR.... 29.			
CA.... 12.	HCO3..... 566.		
CA+MG.	HG..... 0.0001	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.092	
CL.... 590.	I..... 0.2	RB... 0.08	
CO.... L 0.05	K..... 13.		

ISOTOPES (0/00)

DEL D OF WATER..... -128.5

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. 1.	
C2H6.	N2... 91.
CO2.. 9.	

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... 02+AR=1

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 15
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00066

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0000731

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF BUTTE HOT SPRING)
 WARNING NUMBER..... 72

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	39S 037E 16	LAT/LONG... 42-11.3 N 118-23.0 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... HARNEY		NORTHING... 4671399.
GEOLOGIC PROVINCE..		EASTING... 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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI... 0.68	SB... L 0.2
AL.... 0.002	CR.....	MG... 0.8	SC...
AS....	CS..... 0.1	MN... L 0.02	SE...
AU.... L 0.1	CU..... 0.03	MO...	SI02.. 105.
B..... 0.89	F..... 13.	NA... 270.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 204.
BE.... L 0.1	FE(TOT).. 0.08	NB...	SR... 0.3
BI....	GA.....	NH4.. 0.026	
CA.... 18.	HCO3.... 439.		
CA+MG.	HG..... 0.0003	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.06	
CL.... 24.	I.....	RB... 0.1	
CO.... L 0.05	K..... 11.		

ISOTOPES (0/00)

DEL D OF WATER..... -127.4
 DEL O(18) OF WATER... -16.17
 DEL O(18) OF S04..... -9.22

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 27
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00067

 GEOTHERM FILE ID: 0002209

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARNING NUMBER..... 69

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 37S 033E 11 SW OF SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1:24000

COORDINATES

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

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1953/09/03 HEWETT, D. F.
 SAMPLE NUMBER..... LAB NO. 8743
 POINT OF COLLECTION.. MOST NORTHERN OF NUMEROUS SPRINGS EXTENDING 2000 FT.
 TEMPERATURE (C)..... R 73.9
 DISCHARGE..... R 29.
 PERTINENT LITHOLOGY..... WATER-BEARING ZONE FROM RECENT TUFA CONE

WATER ANALYSIS

DATE/ANALYST..... 1953/09/18 MARTIN, R. N.
 PH..... 7.6
 SPECIFIC CONDUCTANCE..... 2050.
 TOTAL DISSOLVED SOLIDS... 1440.

ANALYSIS IN PPM

AG....	CO3..... N	LI... L 1.5	
AL....	CR.....	MG... N	
AU....	CU.....	MO...	SI02.. 119.
B..... 12.	F..... 7.0	NA... 430.	
BA....	FE+3....	NA+K.	S04.. 319.
CA.... 15.	HCO3.... 382.	NO3.. 1.2	
CL.... 255.			

ISOTOPES (0/00)

CO..... K..... 27.
 QUALIFICATION FIELD..... FLOW RANGE: 19-38 LPM, TEMP RANGE: 71.1-76.7C

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00068

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002210

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 37S 033E 14 SW OF NW LAT/LONG... 42-19.82 N 118-36.16 W
 STATE..... OREGON UTM ZONE... +11
 COUNTY..... HARNEY NORTHING... 4687484.
 GEOLOGIC PROVINCE.. EASTING.... 367954.
 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.

ANALYSIS IN PPM

ISOTOPES (0/00)

AG.....	CO3..... N	LI... L 1.5		
AL.....	CR.....	MG... 0.3		
AU.....	CU.....	MO... 456.	SI02.	173.
B..... 14.	F..... 7.0	NA... 456.	S04..	339.
BA.....	FE+3.....	NO3.. 1.3		
CA..... 14.	HCO3..... 414.			
CL..... 270.				
CO.....	K..... 30.			

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 43
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00069

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002219

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR HOT BORAX LAKE
 KGRA..... ALVORD
 WARING NUMBER..... 69

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 37S 033E 11, 14 LAT/LONG... 42-20.08 N 118-36.11
 STATE..... OREGON UTM ZONE... +11
 COUNTY..... HARNEY NORTHING... 4687963.

EASTING.... 368032.

GEOLOGIC PROVINCE..
 MAP REFERENCE..... BORAX LAKE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1957/05/27 WHITE, DON
 SAMPLE NUMBER..... LAB 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.

ISOTOPES (0/00)

ANALYSIS IN PPM

AG....	CO3..... N	LI... N		
AL.... N	CR.....	MG... N		
AS.... 1.0	CS.....	MN... 0.1		
AU....	CU.....	MO... 0.1	SI02..	160.
B.... 15.	F..... 6.5	NA... 426.	S04..	328.
BA....	FE+3....	NA+K.	SR... N	
BE....	FE(TOT). N	NB... 0.69	TI... 0.02	
BI....	GA.....	NH4..		
BR.... 1.8	GE.....	NI... N		
CA.... 9.6	HCO3.... 425.	N03.. N		
CD....	H2S.....	P04.. 1.4		
CL.... 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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00070

 GEOTHERM FILE ID: 0015428

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR TROUT CREEK (FLAGSTAFF BUTTE HOT SPRING)
 WARING NUMBER..... 72

LOCATION

COUNTRY..... UNITED STATES
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... ADEL 1:250000

TOWNSHIP-RANGE

39S 037E 16

COORDINATES

LAT/LONG... 42-11.3 N 118-23.0 W
 UTM ZONE... +11
 NORTHING... 4671399.
 EASTING.... 385770.

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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....	CO3.....	LI... L 0.5
AL.... L 0.01	CR.....	MG... 0.9

AS....	0.036					
AU....		CU.....		MO...	SI02..	79.
B.....	1.6	F.....	12.	NA...	230.	
BA....		FE+3....	0.09	NA+K.	S04..	177.
BE....		FE(TOT)..	0.03			
CA....	18.	HCO3....		N03..	0.05	
CD....		H2S.....		P04..	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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00071

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015942

NAME OF SAMPLE SOURCE... UNNAMED SPRING
 WARING NUMBER..... 51A

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 22S 32.5E 14 NE OF SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BUCHANAN 1:24000

COORDINATES
 LAT/LONG... 43-39.76 N 118-44.30 W
 UTM ZONE... +11
 NORTHING... 4835659.
 EASTING.... 359838.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1931/09/02
 SAMPLE NUMBER..... 13 IN PIPER AND OTHERS
 TEMPERATURE (C)..... 22.

WATER ANALYSIS

ANALYSIS IN PPM

AG....		CO3.....	N			
BA....		FE+3....		NA+K.	12.	S04.. 4.
CA....	16.	HCO3....	86.	N03..	1.0	
CL....	1.9					

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... PIPER AND OTHERS, 1939

RECORD 00072

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015345

NAME OF SAMPLE SOURCE... WARM SPRING NEAR VENATOR
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 25S 036E 16 NW OF SW SW
 STATE..... OREGON
 COUNTY..... HARNEY
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BURNS 1:250000
 OTHER LOCALITY INFORMATION: 3 MILES NORTH OF VENATOR

COORDINATES
 LAT/LONG... 43-23.7 N 118-18.4 W
 UTM ZONE... +11
 NORTHING... 4805294.
 EASTING.... 394177.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/06/08
 TEMPERATURE (C)..... 4.1

WATER ANALYSIS

PH..... 9.1
 SPECIFIC CONDUCTANCE..... 650.
 TOTAL DISSOLVED SOLIDS... 1360.

ANALYSIS IN MG/L

AG.....		CO3.....	38.				
AL.....		CR.....		MG...	0.1		
AS.....	0.095	CS.....		MN...	N		
AU.....		CU.....		MO...		SI02.	Q 370.
B.....	2.2	F.....	1.1	NA...	100.		
BA.....		FE+3.....		NA+K.		S04..	51.
BE.....		FE(TOT).	0.03				
CA.....	2.7	HCO3.....	57.				
CD.....		H2S.....		P04..	0.06		
CL.....	70.						
CO.....		K.....	1.0				

ISOTOPES (0/00)

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 00073

 GEOTHERM FILE ID: 0015971

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... PARKDALE GRADIENT H-LE
 WELL/SPRING NUMBER..... 1S-10E-9-BC

LOCATION

COUNTRY.....	UNITED STATES	<u>TOWNSHIP-RANGE</u>	01S 010E 09 SW OF NW
STATE.....	OREGON		
COUNTY.....	HOOD RIVER		
GEOLOGIC PROVINCE..	HIGH CASCADES		
MAP REFERENCE.....	DOG RIVER 1:24000		

COORDINATES

LAT/LONG... 45-29.75 N 121-33.5 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1978/11/29 BLACK, GERALD
 SAMPLE NUMBER..... WS78-314
 TEMPERATURE (C)..... 24. AT (M).. 50.
 AMBIENT TEMP (C)..... 1.
 DISCHARGE..... 327. 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

ANALYSIS IN MG/L

AG.....		CO3.....		LI...	0.05		
AL.....	1.1	CR.....		MG...	2.9		
AS.....	0.0053	CS.....		MN...	0.02		
AU.....		CU.....	L 0.05	MO...		SI02.	80.
B.....	3.0	F.....	0.8	NA...	94.		
BA.....		FE+3.....		NA+K.		S04..	10.
BE.....		FE(TOT).	7.9				
CA.....	11.	HCO3.....		NO3..	0.03		
CD.....		H2S.....		P04..	0.099		

ISOTOPES (0/00)

CL..... 37.
 CO..... K..... 17.
REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. AC06-77-ET-28369

RECORD 00074

GEOIHERM SAMPLE FILE

GEOIHERM FILE ID: 0015344

NAME OF SAMPLE SOURCE... JACKSON HOT SPRING
 WARING NUMBER..... 25

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 38S 001E 48 SW
 STATE..... OREGON
 COUNTY..... JACKSON
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... ASHLAND 1:62500

COORDINATES
 LAT/LONG... 42-13.30 N 122-44.65 W
 UTM ZONE... +10
 NORTHING... 4674206.
 EASTING... 521114.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1952/04/22
 TEMPERATURE (C)..... 35.0

WATER ANALYSIS

DATE/ANALYST..... 1952/00/00
 PH..... 9.3 AT(C) 35.
 SPECIFIC CONDUCTANCE..... 460.
 TOTAL DISSOLVED SOLIDS... 318.

ANALYSIS IN PPM

AG.....	CO3.....	36.			
AL.....	CR.....		MG... 1.4		
AU.....	CU.....		MO... 65.	SI02..	
B..... 2.9	F..... 2.0		NA... 95.	S04..	26.
BA.....	FE+3.....		NA+K..		
BE.....	FE(TOT).. 0.07				
CA..... 2.8	HC03..... 11.		N03.. 0.2		
CL..... 80.					
CO.....	K..... 1.2				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... ROBISON, 1972

RECORD 00075

GEOIHERM SAMPLE FILE

GEOIHERM FILE ID: 0003005

NAME OF SAMPLE SOURCE... ABE BOEHM
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 40S 009E 28 NE OF SW NE
 STATE..... OREGON B&M: WILLAMETTE
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-04.05 N 121-45.40 W
 UTM ZONE... +10
 NORTHING... 4657805.
 EASTING... 602865.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/08/11
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 47.

WATER ANALYSIS

ANALYSIS IN MG/L

AL....	CR.....	MG...	SC...	
AS....	CS.....	MN...	SE...	
BA....	FE+3....	NA+K.	S04..	308.
CL....	205.			

ISOTOPES (0/00)

DEL 0(18) OF WATER...	-6.78
DEL 0(18) OF S04.....	15.42

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... NEHRING AND OTHERS, 1979

RECORD 00076

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015309

NAME OF SAMPLE SOURCE... ABE ROEHM
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 40S 009E 28 NE OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-04.05 N 121-45.40 W
 UTM ZONE... +10
 NORTHING... 4657805.
 EASTING.... 602865.

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.

ANALYSIS IN MG/L

AG....	CO3.....	1.	LI...	0.16	SB...	
AL....	CR.....		MG...	47.	SC...	
AS....	CS.....		MN...	2.4		
AU....	CU.....		MO...		SI02.	100.
B.....	F.....	0.2	NA...	480.	S04..	300.
BA....	FE+3....		NA+K.			
BE....	FE(TOT).	0.1				
CA....	HCO3....	1460.				
CL....		170.				
CO....	K.....	18.				

ISOTOPES (0/00)

DEL D OF WATER.....	-73.2
DEL 0(18) OF WATER...	-7.38

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... SAMMEL, 1976

RECORD 00077

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015325

NAME OF SAMPLE SOURCE... ALFRED JACOBSEN
 KGRA..... NEAR KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 009E 34 SW OF NE NE
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-07.65 N 121-44.40 W
UTM ZONE... +10
NORTHING... 4664487.
EASTING.... 604145.

SAMPLE DESCRIPTION AND CONDIIONS

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.

ANALYSIS IN MG/L

AG....	CO3..... N				
AL....	CR.....	MG...	2.4		
AS.... 0.001	CS.....	MN...	0.050		
AU....	CU.....	MO...		SI02.	65.
B..... 0.05	F..... 0.1	NA...	49.		
BA....	FE+3....	NA+K.		S04..	13.
BE....	FE(TOT).. 0.12				
CA.... 5.7	HC03.... 160.				
CL.... 7.9					
CO....	K..... 12.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00078

GEOTHERM FILE ID: 0015312

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANNIE SPRING

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 31S 006E 19 SE OF SW NW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... CRATER LAKE NATIONAL PARK AND VICINITY 1:62500

LAT/LONG... 42-52.35 N 122-10.10 W
UTM ZONE... +10
NORTHING... 4746777.
EASTING.... 567930.

SAMPLE DESCRIPTION AND CONDIIONS

DATE/COLLECTOR..... VOEGTLY AND SAMMEL
TEMPERATURE (C)..... 25.0
DISCHARGE..... 7571. L/MIN
PERTINENT LITHOLOGY..... BASALT

WATER ANALYSIS

SPECIFIC CONDUCTANCE..... 53.

ANALYSIS

AL.... CR..... MG... SC...

ISOTOPES (0/00)

DEL O(18) OF WATER... -14.40

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00079

GEOTHERM FILE ID: 0015338

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BILL HILL
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 010E 26 NE OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-03.55 N 121-36.60 W
 UTM ZONE... +10
 NORTHING... 4657067.
 EASTING.... 615014.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/06/06 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 20.0
 WELL DEPTH (M)..... 250.
 OTHER SAMPLE INFORMATION.. DOMESTIC AND STOCK USE

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 7.7
 SPECIFIC CONDUCTANCE..... 245.

ANALYSIS IN MG/L

AG....	CO3..... N				
AL....	CR.....	MG...	13.		
AS.... N	CS.....	MN...	0.030		
AU....	CU.....	MO...		SI02..	26.
B..... 0.02	F..... N	NA...	19.		
BA....	FE+3.....	NA+K..		S04..	6.4
BE....	FE(TOT).. 0.04				
CA.... 9.1	HCO3..... 140.				
CL.... 4.2					
CO....	K..... 6.4				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00080

GEOTHERM FILE ID: 0015327

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CLAUDE SHUCK
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 010E 08 SE OF NW SE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-11.35 N 121-39.80 W
 UTM ZONE... +10
 NORTHING... 4671430.
 EASTING.... 610375.

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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....	1.				
AL.....		CR.....		MG...	4.1		
AS.....	0.002	CS.....		MN...	0.010		
AU.....		CU.....		MO...		SI02.	57.
B.....	0.02	F.....	0.2	NA...	25.	S04..	15.
BA.....		FE+3.....		NA+K.			
BE.....		FE(TOT).	0.05				
CA.....	9.7	HCO3.....	110.				
CL.....	2.8						
CO.....		K.....	6.2				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00081

GEO THERM FILE ID: 0015337

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CLYDE DEHILINGER
 KGRA..... KLAMATH FALLS

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 40S 010E 05 SW OF SE SE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..

COORDINATES

LAT/LONG... 42-06.75 N 121-39.65 W
 UTM ZONE... +10
 NORTHING... 4662921.
 EASTING... 610715.

MAP REFERENCE..... MERRILL 1:62500

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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....	N				
AL.....		CR.....		MG...	3.1		
AS.....		CS.....		MN... N			
AU.....		CU.....		MO...		SI02.	72.
B.....	0.04	F.....	N	NA...	40.	S04..	2.3
BA.....		FE+3.....		NA+K.			
BE.....		FE(TOT).	0.02				
CA.....	8.1	HCO3.....	150.				
CL.....	4.9						
CO.....		K.....	6.5				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00082

GEO THERM FILE ID: 0015336

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... DAN O'CONNOR
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 009E 23 NW OF NE NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-04.85 N 121-43.85 W
 UTM ZONE... +10
 NORTHING... 4659317.
 EASTING.... 604980.

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.

ANALYSIS IN MG/L

AG....		CO3..... N			
AL....		CR.....	MG...	6.6	
AU....		CU.....	MO...		S102. 42.
B....		F.....	NA...	32.	
BA....		FE+3....	NA+K.		S04.. 14.
CA....	12.	HC03....		130.	
CL....	9.1				
CO....		K.....		8.1	

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... SAMMEL, 1976

RECORD 00083

GEOIHERM SAMPLE FILE

GEOIHERM FILE ID: 0015300

NAME OF SAMPLE SOURCE... EAGLE POINT SPRING
LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 36S 007E 23 NE OF SW SE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MODOC POINT 1:62500

COORDINATES
 LAT/LONG... 42-25.85 N 121-57.75 W
 UTM ZONE... +10
 NORTHING... 4697920.
 EASTING.... 585344.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/08/22 GARDNER, MURRAY
 TEMPERATURE (C)..... Q 35.
 DISCHARGE..... 19. L/MIN
 PERTINENT LITHOLOGY..... BASALT

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 8.3
 SPECIFIC CONDUCTANCE..... Q 305.

ANALYSIS IN MG/L

AG....		CO3..... N	LI... Q	SB...	
AL....		CR.....	MG... L 0.1	SC...	
AU....		CU.....	MO...	S102. Q 38.	
B....	0.140	F.....	NA... 62.		
BA....		FE+3....	NA+K.	S04.. L 2.	

ISOTOPES (0/00)

DEL D OF WATER..... -109.7
 DEL O(18) OF WATER... -15.22

CA.... 0.6 HC03.... 136.
 CL.... 16.
 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 00084

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015305

NAME OF SAMPLE SOURCE... FALCON HEIGHTS SCHO L
 KGRA..... NEAR KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 009E 34 SE OF NW SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-07.80 N 121-45.10 W
 UTM ZONE... +10
 NORTHING... 4664750.
 EASTING.... 603177.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/07 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 37.0
 WELL DEPTH (M)..... 320.
 DISCHARGE..... 322. L/MIN
 PERTINENT LITHOLOGY..... YONNA FM.
 OTHER SAMPLE INFORMATION.. IRRIGATION

WATER ANALYSIS

PH..... 7.8
 SPECIFIC CONDUCTANCE..... 350.

ANALYSIS IN MG/L

AG....		CO3..... N	LI...	SB...		
AL....		CR.....	MG... 4.5	SC...		
AS.... 0.003		CS.....	MN... 0.030		SI02. 80.	
AU....		CU.....	MO...			
B.... 0.1		F..... 0.2	NA... 57.	S04.. 24.		
BA....		FE+3....	NA+K.			
BE....		FE(TOT). 0.19				
CA.... 7.7		HC03.... 170.				
CL.... 8.9						
CO....		K..... 7.1				

ISOTOPES (0/00)

DEL D OF WATER..... -120.5
 DEL O(18) OF WATER... -15.69

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00085

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015343

NAME OF SAMPLE SOURCE... GEORGE CARTER
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 41S 010E 14 NE OF NW NW
 STATE..... OREGON
 COUNTY..... KLAMATH

LAT/LONG... 42-00.55 N 121-36.90 W
 UTM ZONE... +10
 NORTHING... 4651508.

EASTING.... 614690.

GEOLOGIC PROVINCE..

MAP REFERENCE..... MERRILL 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/06/06 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 22.

WELL DEPTH (M)..... 20.

OTHER SAMPLE INFORMATION.. DOMESTIC USE;

WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 8.2

SPECIFIC CONDUCTANCE..... 660.

ANALYSIS IN MG/L

AG....		CO3..... N				
AL....		CR.....	MG...	2.3		
AS.... N		CS.....	MN...	0.020		
AU....		CU.....	MO...		SI02.	41.
B.... 0.15		F..... N	NA...	99.		
BA....		FE+3....	NA+K.		S04..	95.
BE....		FE(TOT).. 0.02				
CA.... 29.		HCO3.... 100.				
CL.... 98.						
CO....		K..... 7.9				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY

REFERENCE..... SAMMEL, 1976

RECORD 00086

GEO THERM FILE ID: 0015333

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... GEORGE STACY CO.

KGRA..... KLAMATH FALLS

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 010E 32 SE OF NW NE

STATE..... OREGON

COUNTY..... KLAMATH

GEOLOGIC PROVINCE..

MAP REFERENCE..... MERRILL 1:62500

COORDINATES

LAT/LONG... 42-08.40 N 121-39.80 W

UTM ZONE... +10

NORTHING... 4665971.

EASTING.... 610461.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/06/05 VOEGTLY AND SAMMEL

TEMPERATURE (C)..... 25.0

WELL DEPTH (M)..... 279.

OTHER SAMPLE INFORMATION.. INDUSTRIAL USE

WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 8.3

SPECIFIC CONDUCTANCE..... 170.

ANALYSIS IN MG/L

AG....		CO3..... N				
AL....		CR.....	MG...	2.0		
AS.... 0.001		CS.....	MN...	0.010		
AU....		CU.....	MO...		SI02.	34.
B.... 0.01		F..... N	NA...	20.		
BA....		FE+3....	NA+K.		S04..	11.
BE....		FE(TOT).. 0.04				

ISOTOPES (0/00)

CA.... 13. HC03.... 94.
 CL.... 2.0
 CO.... K..... 4.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00087

GEOHERM SAMPLE FILE

 GEOTHERM FILE ID: 0015320

NAME OF SAMPLE SOURCE... HOWARD HOLLIDAY
 KGRA..... NEAR KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 008E 13 NW OF NE SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-10.55 N 121-49.70 W
 UTM ZONE... +10
 NORTHING... 4669750.
 EASTING.... 596770.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/22 VOEGTLY 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

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 7.9
 SPECIFIC CONDUCTANCE..... 220.

ANALYSIS IN MG/L

AG....		CO3..... L 1.	LI... 0.02		
AL....		CR.....	MG... 3.1		
AS.... 0.002		CS.....	MN... N		
AU....		CU.....	MO... SI02. 27.		
B.... 0.04		F..... 0.1	NA... 27.		
BA....		FE+3.....	NA+K. S04.. 6.4		
BE....		FE(TOT). 0.08			
CA.... 12.		HC03.... 120.			
CL.... 5.1					
CO....		K..... 2.9			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 03
 REFERENCE..... SAMMEL, 1976

RECORD 00088

GEOHERM SAMPLE FILE

 GEOTHERM FILE ID: 0015315

NAME OF SAMPLE SOURCE... J. E. FRIESEN
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 28 SW OF SE SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..

LAT/LONG... 42-13.75 N 121-46.15 W
 UTM ZONE... +10
 NORTHING... 4675740.
 EASTING.... 601572.

MAP REFERENCE..... KLAMATH FALLS 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/02/19
 TEMPERATURE (C)..... 73.0
 WELL 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.

ANALYSIS IN PPM

AG....		CO3.....	8.				
AL....		CR.....		MG...	N		
AU....		CU.....		MO...		SI02.	87.
B....	0.91	F.....	1.6	NA...	221.	S04..	431.
BA....		FE+3....		NA+K.			
BE....		FE(TOT). N					
CA....	25.	HC03....	32.	NO3..	N		
CL....	56.						
CO....		K.....	4.4				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00089

GEOTHERM FILE ID: 0015335

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... J. K. O'NEIL
 KGRA..... KLAMATH FALLS

LOCATION

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

TOWNSHIP-RANGE

39S 010E 34 SE OF NW NW

COORDINATES

LAT/LONG... 42-08.30 N 121-38.10 W
 UTM ZONE... +10
 NORTHING... 4665823.
 EASTING... 612805.

MAP REFERENCE..... MERRILL 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 23.0
 WELL DEPTH (M)..... 25.
 OTHER SAMPLE INFORMATION.. STOCK USE

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 7.4
 SPECIFIC CONDUCTANCE..... 190.

ANALYSIS IN MG/L

AG....		CO3.....	1.				
AL....		CR.....		MG...	5.5		
AU....		CU.....		MO...		SI02.	50.
B....	0	F.....	0	NA...	26.	S04..	13.
BA....		FE+3....		NA+K.			
CA....	6.1	HC03....	110.				
CL....	2.8						

ISOTOPES (0/00)

CO..... K..... 5.1
 QUALIFICATION FIELD..... SAMPLE (1975/08/10): F=0.2,B=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 00090

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015442

NAME OF SAMPLE SOURCE... J. K. O'NEIL
 KGRA..... KLAMATH FALLS
 WELL/SPRING NUMBER..... 39S/10W-348BD

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 34 NW OF NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-08.30 N 121-38.10 W
 UTM ZONE... +10
 NORTHING... 4665823.
 EASTING... 612805.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/03/01 O'NEIL, J. K.
 SAMPLE NUMBER..... OREGON STATE BOARD OF HEALTH 2070

WATER ANALYSIS

DATE/ANALYST..... 1972/03/16 AWH
 PH..... 7.6
 SPECIFIC CONDUCTANCE... 222.
 ALKALINITY..... 83. AS CAC03
 TOTAL DISSOLVED SOLIDS... 159.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AL..... L 0.01	CR.....	MG...	5.2		
AS..... N	CS.....	MN...	0.02		
AU.....	CU.....	MO...		SI02.	45.
B.....	F..... 0.2	NA...	22.	S04..	8.5
BA.....	FE+3....	NA+K.			
BE.....	FE(TOT). 0.02				
CA..... 6.4	HC03....	N03..	0.03		
CD.....	H2S.....	P04..	0.02		
CL..... 2.5					
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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00091

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0003004

NAME OF SAMPLE SOURCE... JACK LISKEY

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 41S 009E 02 NE OF NE NW
 STATE..... OREGON B&M: WILLAMETTE
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-02.25 N 121-43.60 W
 UTM ZONE... +10
 NORTHING... 4654511.
 EASTING... 605396.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/08/11
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 29.

WATER ANALYSIS

ANALYSIS IN MG/L

AL.....	CR.....	MG...	SC...
AS.....	CS.....	MN...	SE...
BA.....	FE+3....	NA+K.	S04.. 5.
CL..... 152.			

ISOTOPES (0/00)

DEL 0(18) OF WATER... -8.67
 DEL 0(18) OF S04..... 8.69

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... NEHRING AND OTHERS, 1979

RECORD 00092

 GEOTHERM FILE ID: 0015310

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JACK LISKEY
 KGRA..... KLAMATH FALLS

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 40S 009E 34 NE OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES

LAT/LONG... 42-02.95 N 121-44.40 W
 UTM ZONE... +10
 NORTHING... 4655790.
 EASTING... 604274.

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.

ANALYSIS IN MG/L

AG.....	CO3..... 2.	LI... 0.08	SB...
AL.....	CR.....	MG... L 0.1	SC...
AS.....	CS.....	MN...	SE...
AU.....	CU.....	MO...	SI02. 90.
B..... 0.65	F..... 1.5	NA... 200.	S04.. 360.
BA.....	FE+3....	NA+K.	
CA..... 15.	HCO3.... 48.		
CL..... 59.			
CO.....	K..... 4.0		

ISOTOPES (0/00)

DEL D OF WATER..... -116.6
 DEL 0(18) OF WATER... -14.95
 DEL 0(18) OF S04..... -2.13

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 00093

GEO THERM FILE ID: 0015311

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JACK LISKEY
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 41S 009E 02 NE OF NE NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-02.25 N 121-43.60 W
 UTM ZONE... +10
 NORTHING... 4654511.
 EASTING... 605396.

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.

ANALYSIS IN MG/L

AG.....	C03..... N	LI... Q	SB...
AL.....	CR.....	MG... 16.	SC...
AU.....	CU.....	MO... 580.	SI02. 100.
B..... Q	F..... Q	NA... 580.	S04.. 13.
BA.....	FE+3.....	NA+K.	
BE.....	FE(TOT). 0.09		
CA..... 35.	HC03..... 1550.		
CL..... 140.			
CO.....	K..... 12.		

ISOTOPES (0/00)

DEL D OF WATER..... -87.2
 DEL O(18) OF WATER... -8.83

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... SAMMEL, 1976

RECORD 00094

GEO THERM FILE ID: 0015339

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JACK O'CONNOR
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 41S 009E 01 SW OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-02.00 N 121-42.95 W
 UTM ZONE... +10
 NORTHING... 4654061.
 EASTING... 606300.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/09 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 38.0
 WELL DEPTH (M)..... G 183.
 OTHER SAMPLE INFORMATION.. DOMESTIC AND STOCK USE

WATER ANALYSIS

DATE/ANALYST..... USGS
PH..... 8.3
SPECIFIC CONDUCTANCE..... 640.

ANALYSIS IN MG/L
AG..... CO3..... 2.
AL..... CR..... MG... 0.6
AU..... CU..... MO... SI02. 65.
B..... Q F..... Q NA... 130.
BA..... FE+3..... NA+K. S04.. 140.
CA..... 7.5 HCO3..... 110.
CL..... 50.
CO..... K..... 3.0

ISOTOPES (0/00)

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 00095

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015431

NAME OF SAMPLE SOURCE... KLAMATH ICE CO.
KGRA..... KLAMATH FALLS
WELL/SPRING NUMBER..... 38S-9E-33BC

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 33 SW OF NW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-13.40 N 121-01.40 W
UTM ZONE... +10
NORTHING... 4676251.
EASTING... 663137.

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

ISOTOPES (0/00)

AU..... CU..... MO... SI02. 70.
BA..... FE+3..... NA+K. S04.. 380.
BE..... FE(TOT). N
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 00096

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015331

NAME OF SAMPLE SOURCE... LEN DOBRY
KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 28 NE OF NW SE
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-08.90 N 121-38.65 W
UTM_ZONE... +10
NORTHING... 4666922.
EASTING.... 612030.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL
TEMPERATURE (C)..... 21.0
WELL DEPTH (M)..... 187.

WATER ANALYSIS

DATE/ANALYST..... USGS
PH..... 7.6
SPECIFIC CONDUCTANCE..... 195.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG..... CO3..... N
AL..... CR..... MG... 1.1
AU..... CU..... MO... SI02. 65.
R..... Q F..... Q NA... 32.
BA..... FE+3..... NA+K. S04.. 14.
CA..... 5.7 HCO3..... 100.
CL..... 3.4
CO..... K..... 4.5

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
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00097

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015332

NAME OF SAMPLE SOURCE... LESTER BROOKSHIRE
KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 29
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-08.70 N 121-39.70 W
UTM_ZONE... +10
NORTHING... 4666529.
EASTING.... 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

WATER ANALYSIS

DATE/ANALYST..... USGS
PH..... 8.1
SPECIFIC CONDUCTANCE..... 175.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG..... CO3..... 1.
AL..... CR..... MG... 2.0
AS..... 0.002 CS..... MN... 0.02
AU..... CU..... MO... SI02. 35.
B..... 0.006 F..... 0.1 NA... 21.
BA..... FE+3..... NA+K. S04.. 10.
BE..... FE(TOT). 0.02

CA..... 13. HC03..... 95.
 CL..... 2.8
 CO..... K..... 3.4

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00098

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015319

NAME OF SAMPLE SOURCE... LOIS MERRUYS
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 33 NW OF NW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-13.65 N 121-01.45 W
 UTM ZONE... +10
 NORTHING... 4676712.
 EASTING... 663057.

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

PH..... 8.5
 SPECIFIC CONDUCTANCE..... 1100.
 TOTAL DISSOLVED SOLIDS... 812.

ISOTOPES (0/00)

ANALYSIS IN PPM

AG.....		CO3.....	4.				
AL.....		CR.....		MG... N			
AU.....		CU.....		MO... N		SI02.	83.
B.....	0.74	F.....	1.4	NA... N	207.	S04..	393.
BA.....		FE+3.....		NA+K.			
BE.....		FE(TOT), N					
CA.....	22.	HC03.....	43.	NO3.. N	0.2		
CL.....	50.						
CO.....		K.....	3.8				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00099

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015322

NAME OF SAMPLE SOURCE... MAZAMA SCHOOL
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 009E 11 NE OF NW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-11.85 N 121-43.90 W
 UTM ZONE... +10
 NORTHING... 4672270.
 EASTING... 604719.

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 61.0
WELL DEPTH (M)..... 296.
OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH

PH..... 8.3
SPECIFIC CONDUCTANCE..... Q 895.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.... CO3..... N
AL.... CR..... MG... 1.0
AU.... CU..... MO...
B.... F..... 1.0 NA... 246.
BA.... FE+3..... NA+K. S04.. 256.
BE.... FE(TOT). 0.09
CA.... 5.4 HCO3.... 120.
CL.... 35.
CO.... K..... 6.0

QUALIFICATION FIELD..... SPECIFIC CONDUCTANCE MEASURED 1975/08/08: SI02=18,PH=8.9,TEMP=58

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 04
REFERENCE..... SAMMEL, 1976

RECORD 00100

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0003001

NAME OF SAMPLE SOURCE... MEDO-BELL DAIRY
KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 28 SW OF SW SW
STATE..... OREGON B&M: WILLAMETTE
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-13.8 N 121-46.4 W
UTM ZONE... +10
NORTHING... 4675828.
EASTING... 601227.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/07/08 SAMMEL, E.
TEMPERATURE (C)..... 81.
WELL DEPTH (M)..... 233.
PERTINENT LITHOLOGY..... BASALT

WATER ANALYSIS

ISOTOPES (0/00)

ANALYSIS

AG.... CO3..... LI... SB...
AL.... CR..... MG... SC...
AS.... CS..... MN... SE...

DEL D OF WATER..... -119.4
DEL O(18) OF WATER... -14.95
DEL O(18) OF S04..... -5.45

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

RECORD 00101

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015302

NAME OF SAMPLE SOURCE... MEDO-BELL DAIRY
KGRA..... KLAMATH FALLS

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 38S 009E 28 SW OF SW SW
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-13.8 N 121-46.4 W
 UTM ZONE... +10
 NORTHING... 4675828.
 EASTING... 601227.

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
 PH..... 8.8
 SPECIFIC CONDUCTANCE..... 1160.
 TOTAL DISSOLVED SOLIDS... 833.

ISOTOPES (0/00)

ANALYSIS IN PPM
 AG..... CO3..... 8.
 AL..... CR.....
 AU..... CU.....
 B..... 0.96 F..... 1.2 MG... N
 BA..... FE+3..... MO...
 BE..... FE(TOT)... 0.04 NA... 213.
 CA..... 23. HC03..... 32. NA+K. S102. 81.
 CL..... 54. NO3.. N S04.. 403.
 CO..... K..... 4.2

REFERENCE AND IDENTIFICATION
 COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... NEWCOMB AND HART, 1-58

RECORD 00102

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015430

NAME OF SAMPLE SOURCE... MELVIN FEIGI
 KGRA..... NEAR KLAMATH FALLS
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 40S 011E 03 NE OF NE
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-08.20 N 121-30.10 W
 UTM ZONE... +10
 NORTHING... 4665823.
 EASTING... 623827.

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 HNO3-160Z.

WATER ANALYSIS
 PH..... 8.8 AT(C) 31.
 SPECIFIC CONDUCTANCE..... 273.
 TOTAL DISSOLVED SOLIDS... 270.

ISOTOPES (0/00)

ANALYSIS IN MG/L
 AG..... CO3..... 21. MG... N SC...
 AL..... CR.....
 DEL 0(18) OF WATER... -16.80

AU.....	CU.....	MO...	SI02..	110.
B..... N	F.....	NA...	66.	
BA.....	FE+3....	NA+K..	S04..	5.8
BE.....	FE(TOT)..			
CA..... 1.2	HC03....	N03..	2.9	
CL..... 5.				
CO.....	K.....			1.0

OTHER ANALYTICAL DATA... ISOTOPE FROM SAMMEL, 1976

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 16
 REFERENCE..... LEONARD AND HARRIS, 1974

RECORD 00103

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015306

NAME OF SAMPLE SOURCE... MELVIN MCCOLLUM
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 07 NE OF NW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..

LAT/LONG... 42-11.50 N 121-41.05 W
 UTM ZONE... +10
 NORTHING... 4671681.
 EASTING.... 608651.

MAP REFERENCE..... MERRILL 1:62500

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

DATE/ANALYST..... USGS
 PH..... 7.5
 SPECIFIC CONDUCTANCE..... 300.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.....	CO3..... N	LI...	SB...
AL.....	CR.....	MG... 13.	SC... 52.
AS..... 0.002	CS.....	MN... 0.07	
AU.....	CU.....	MO...	SI02.. 52.
B..... 0.02	F..... 0.2	NA... 20.	S04.. 53.
BA.....	FE+3....	NA+K..	
BE.....	FE(TOT).. 1.4		
CA..... 24.	HC03.... 120.		
CL..... 3.1			
CO.....	K..... 4.0		

DEL D OF WATER..... -113.2
 DEL O(18) OF WATER... -14.71

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00104

GEOOTHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015303

NAME OF SAMPLE SOURCE... MILLS SCHOOL

KGRA..... KLAMATH FALLS
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 38S 009E 33 NE OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-13.45 N 121-45.90 W
 UTM ZONE... +10
 NORTHING... 4675190.
 EASTING... 601924.

SAMPLE DESCRIPTION AND CONDIIIONS

TEMPERATURE (C)..... 89.0
 WELL DEPTH (M)..... 244.
 DISCHARGE..... 38. L/MIN
 PERTINENT LITHOLOGY..... BASALT
 OTHER SAMPLE INFORMATION.. USED FOR HEATING

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH
 PH..... 8.3
 SPECIFIC CONDUCTANCE..... Q 1200.

ANALYSIS IN MG/L

AG....		CO3.....		LI... Q		SB...	
AL....		CR.....		MG... L 0.2		SC...	
AS....		CS.....		MN... 0.03		SE...	
AU....		CU.....		MO...		SI02. 78.	
B.....	0.96	F.....	1.2	NA... 370.		S04.. 462.	
BA....		FE+3....		NA+K.			
BE....		FE(TOT)..	0.03				
CA....	27.	HCO3....	46.				
CL....	54.						
CO....		K.....	3.0				

ISOTOPES (0/00)

DEL D OF WATER..... -121.8
 DEL O(18) OF WATER... -14.83
 DEL O(18) OF S04..... -4.94

QUALIFICATION FIELD..... CONDUCTANCE MEASURED 1975/08/07: LI=0.13,PH=8.2,TEMP=74

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

RECORD 00105

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015334

NAME OF SAMPLE SOURCE... MONTE DEHILINGER
 KGRA..... KLAMATH FALLS
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 010E 32 SE OF SW SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-07.60 N 121-40.40 W
 UTM ZONE... +10
 NORTHING... 4664478.
 EASTING... 609657.

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
 PH..... 7.6
 SPECIFIC CONDUCTANCE..... 260.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG....		CO3..... N				
AL....		CR.....		MG... 11.		
AS....	0.004	CS.....		MN... N		
AU....		CU.....		MO... SI02. 54.		
B....	0.02	F..... N		NA... 22.		
BA....		FE+3....		NA+K. S04.. 7.1		
BE....		FE(TOT). 0.02				
CA....	17.	HCO3.... 160.				
CL....	3.6					
CO....		K..... 6.7				

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00106

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015321

NAME OF SAMPLE SOURCE... MOYINA WATER CO.
 KGRA..... KLAMATH FALLS

LOCATION

COUNTRY.....	UNITED STATES	TOWNSHIP-RANGE	39S 009E 01 NE OF SE NW
STATE.....	OREGON		
COUNTY.....	KLAMATH		
GEOLOGIC PROVINCE..			
MAP REFERENCE.....	MERRILL 1:62500		

COORDINATES

LAT/LONG... 42-12.60 N 121-42.45 W
 UTM ZONE... +10
 NORTHING... 4673687.
 EASTING... 606693.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1966/08/24
 TEMPERATURE (C)..... G 50.
 WELL DEPTH (M)..... 476.
 OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

PH..... 7.4
 SPECIFIC CONDUCTANCE..... 222.

ANALYSIS IN MG/L

AL....		CR.....		MG... 2.3		
AS....	L 0.005	CS.....		MN... L 0.05		
AU....		CU.....		MO... SI02. 64.		
B....		F..... 0.22		NA... 38.		
BA....		FE+3....		NA+K. S04.. 5.6		
BE....		FE(TOT). 0.42				
CA....	7.9					
CL....	1.8					
CO....		K..... 5.0				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... SAMMEL, 1976

RECORD 00107

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015308

NAME OF SAMPLE SOURCE... O. H. OSBORN
 KGRA..... KLAMATH FALLS

LOCATION

		TOWNSHIP-RANGE	
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COORDINATES

COUNTRY..... UNITED STATES 40S 009E 27 NE OF SE SW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-03.30 N 121-44.70 W
UTM ZONE... +10
NORTHING... 4656431.
EASTING.... 603850.

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
PH..... 9.5
SPECIFIC CONDUCTANCE..... 920.

ANALYSIS IN MG/L

AG..... CO3..... 9. LI... SB...
AL..... CR..... MG... N SC...
AS..... 0.011 CS..... MN... N SE...
AU..... CU..... MO... SI02. 90.
B..... 0.77 F..... 1.5 NA... 190.
BA..... FE+3..... NA+K. S04.. 270.
BE..... FE(TOT). 0.26
CA..... 15. HCO3..... 37.
CL..... 56.
CO..... K..... 4.1

ISOTOPES (0/00)

DEL D OF WATER..... -117.0
DEL O(18) OF WATER... -14.95
DEL O(18) OF S04..... -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 00108

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015419

NAME OF SAMPLE SOURCE... O.I.T. NO. 5
KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 28 SW OF SW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-13.85 N 121-46.40 W
UTM ZONE... +10
NORTHING... 4675920.
EASTING.... 601225.

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.

ANALYSIS IN MG/L

AG..... CO3..... 16.
AL..... 0.03 CR..... MG... 1.0

ISOTOPES (0/00)

AS.....	0.018	CS.....		MN... L	0.02		
AU.....		CU.....		MO...		SI02.	73.
B.....		F.....	1.1	NA...	331.		
BA.....		FE+3....		NA+K.		S04..	384.
BE.....		FE(TOT)..	0.03				
BI.....		GA.....		NH4..	0.54		
CA.....	25.	HC03....	22.	N03.. L	0.01		
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

RECORD 00109

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0003006

NAME OF SAMPLE SOURCE... O.I.T. NO. 6
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 20 NW OF SW NE
 STATE..... OREGON B&M: WILLAMETTE
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-14.90 N 121-46.85 W
 UTM ZONE... +10
 NORTHING... 4677855.
 EASTING.... 600578.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/03/31
 TEMPERATURE (C)..... 79.
 WELL DEPTH (M)..... 550.

WATER ANALYSIS

ANALYSIS IN MG/L

AG.....	CO3.....	LI... 0.12	SB...	
AL.....	CR.....	MG...	SC...	
AS.....	CS.....	MN...	SE...	
AU.....	CU.....	MO...	SI02.	90.

ISOTOPES (0/00)

DEL D OF WATER..... -118.7
 DEL O(18) OF WATER... -14.99
 DEL O(18) OF S04..... -5.45

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

RECORD 00110

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015301

NAME OF SAMPLE SOURCE... O.I.T. NO. 6
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 20 NW OF SW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-14.90 N 121-46.85 W
 UTM ZONE... +10
 NORTHING... 4677855.
 EASTING.... 600578.

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

ANALYSIS IN MG/L

AG....		CO3..... N	LI... Q		
AL....		CR.....	MG... L 0.1		
AU....		CU.....	MO... S102.	31.	
B.....	1.0	F..... 1.5	NA... 195.	S04..	400.
BA....		FE+3....	NA+K.		
CA....	24.	HCO3.... 44.			
CL....	58.				
CO....		K..... 3.9			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... SAMMEL, 1976

RECORD 00111

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015342

NAME OF SAMPLE SOURCE... O'CONNOR LIVESTOCK CO.
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	41S 010E 07 NE OF NW SE	LAT/LONG...	42-01.00 N 121-41.00 W
STATE.....	OREGON		UTM ZONE...	+10
COUNTY.....	KLAMATH		NORTHING...	4652252.
GEOLOGIC PROVINCE..			EASTING....	609019.
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.

ANALYSIS IN MG/L

AG....		CO3..... N			
AL....		CR.....	MG... 6.4		
AS....	0.001	CS.....	MN... 0.15		
AU....		CU.....	MO... S102.	80.	
B.....	0.69	F..... N	NA... 210.	S04..	210.
BA....		FE+3....	NA+K.		
RE....		FE(TOT). 0.04			
CA....	58.	HCO3.... 250.			
CL....	160.				
CO....		K..... 7.0			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00112

GEOTHERM FILE ID: 0000705

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS
 KGRA..... KLAMATH FALLS
 WARING NUMBER..... 28

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 010E 14 NW OF SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500, KLAMATH FALLS 1:250000

COORDINATES
 LAT/LONG... 42-10.45 N 121-36.90 W
 UTM ZONE... +10
 NORTHING... 4669829.
 EASTING.... 614393.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 74.0
 DISCHARGE..... 200. L/MIN
 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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... L 1.	LI.... 0.15	SB.... L 0.2
AL....	CR.....	MG.... 0.2	SC....
AS.... 0.09	CS..... L 0.1	MN.... L 0.02	SE....
AU.... L 0.1	CU..... 0.01	MO....	SI02.. 98.
B.... 1.0	F..... 1.2	NA.... 190.	
BA.... L 0.1	FE+3....	NA+K..	S04.. 400.
BE.... L 0.1	FE(TOT).. L 0.02	NB....	SR.... 0.58
BR.... 0.08	GE.....	NI.... 0.05	
CA.... 40.	HCO3.... 53.		
CA+MG.	HG.....	PB.... L 0.06	
CD.... L 0.01	H2S....	PO4.. 0.18	
CL.... 59.	I..... 0.01	RB.... 0.02	
CO.... L 0.05	K..... 7.2		

ISOTOPES (0/00)

DEL D OF WATER..... -113.3
 DEL O(18) OF WATER... -13.00
 DEL O(18) OF S04..... Q

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00113

GEOTHERM FILE ID: 0003003

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS
 WARING NUMBER..... 28

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 010E 14 NW OF SW
 STATE..... OREGON B&M: WILLAMETTE
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-10.45 N 121-36.90 W
 UTM ZONE... +10
 NORTHING... 4669829.
 EASTING.... 614393.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/07/08
 TEMPERATURE (C)..... 87.

WATER ANALYSIS

ANALYSIS IN MG/L

AG.....	C03.....	LI...	SB...
AL.....	CR.....	MG...	SC...
AS.....	CS.....	MN...	SE...
BA.....	FE+3.....	NA+K.	S04.. 385.
CL..... 59.			

ISOTOPES (0/00)

DEL D OF WATER.....	-115.3
DEL O(18) OF WATER...	-13.73
DEL O(18) OF S04.....	-4.82

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07
 REFERENCE..... SAMMEL, 1976; NEHRING AND OTHERS, 1979

RECORD 00114

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015443

NAME OF SAMPLE SOURCE... OLENE GAP HOT SPRINGS
 KGRA..... KLAMATH FALLS
 WARING NUMBER..... 28

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	39S 010E 14 NW OF SW	LAT/LONG... 42-10.45 N 121-36.90 W
STATE..... OREGON		UTM ZONE... +10
COUNTY..... KLAMATH		NORTHING... 4669829.
GEOLOGIC PROVINCE..		EASTING.... 614393.
MAP REFERENCE..... MERRILL 1:62500		
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..... 38. 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.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.....	C03..... N		
AL..... 0.03	CR.....	MG... 1.1	
AS..... 0.027	CS.....	MN... 0.06	
AU.....	CU.....	MO... 79.	SI02. 79.
B.....	F..... 1.1	NA... 294.	S04.. 346.
BA.....	FE+3.....	NA+K.	
BE.....	FE(TOT). 0.03		
BI.....	GA.....	NH4.. 0.55	
CA..... 35.	HCO3..... 40.	N03.. 0.91	
CL..... 58.			
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 00115

GEO THERM FILE ID: 0015316

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(1)
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 38S 009E 32 SE OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-13.30 N 121-47.45 W
 UTM ZONE... +10
 NORTHING... 4674882.
 EASTING.... 599796.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1930/03/03
 TEMPERATURE (C)..... Q 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				
AL....	CR.....	MG...	4.		
AU....	CU.....	MO...		SI02.	46.
B....	F.....	NA...	29.		
BA....	FE+3.....	NA+K.		S04..	N
BE....	FE(TOT). L		0.05		
CA.... 10.	HC03.....		117.		
CL.... 8.					

ISOTOPES (0/00)

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 00116

GEO THERM FILE ID: 0015317

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(2)
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 38S 009E 32 SE OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-13.30 N 121-47.45 W
 UTM ZONE... +10
 NORTHING... 4674882.
 EASTING.... 599796.

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

PH..... 8.3

ANALYSIS IN MG/L

AL....	CR.....	MG...	6.8		
AS....	CS.....	MN...	L 0.01		

ISOTOPES (0/00)

AU.....	CU.....	MO...	SI02.	24.
B.....	F..... 0.01	NA... 26.	S04..	1.2
BA.....	FE+3....	NA+K.		
BE.....	FE(TOT). 0.08			
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 00117

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015318

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(3)
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 009E 32 SE OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-13.30 N 121-47.45 W
 UTM ZONE... +10
 NORTHING... 4674882.
 EASTING.... 599796.

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
 PH..... 8.4
 SPECIFIC CONDUCTANCE..... Q 205.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AL.....	CR.....	MG... 5.8		
AS.....	CS.....	MN... L 0.01		
AU.....	CU.....	MO... 26.	SI02.	25.
B.....	F..... 0.02	NA... 26.	S04..	0.6
BA.....	FE+3....	NA+K.		
BE.....	FE(TOT). 0.05			
CA..... 11.				
CL..... 5.3				

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

RECORD 00118

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015326

NAME OF SAMPLE SOURCE... OREGON WATER CORP.(4)
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 06 NW OF SE SW
 STATE..... OREGON

LAT/LONG... 42-12.10 N 121-41.40 W
 UTM ZONE... +10

COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

NORTHING... 4672784.
EASTING.... 608152.

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
PH..... 8.6

ANALYSIS IN MG/L

AL.....	CR.....	MG...	5.8		
AS.....	CS.....	MN... L	0.005		
AU.....	CU.....	MO...		SI02.	63.
B.....	F.....	NA...	36.		
BA.....	FE+3....	NA+K.		S04..	6.5
BE.....	FE(TOT)..		0.33		
CA.....			8.5		
CL.....			3.0		

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
REFERENCE..... SAMMEL, 1976

RECORD 00119

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015341

NAME OF SAMPLE SOURCE... POPE'S MEAT CO.
KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 41S 010E 03 NE OF NE NE
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... MERRILL 1:62500

LAT/LONG... 42-01.95 N 121-37.50 W
UTM ZONE... +10
NORTHING... 4654086.
EASTING.... 613821.

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
PH..... 8.5
SPECIFIC CONDUCTANCE..... 190.

ANALYSIS IN MG/L

AG.....	CO3.....	2.			
AL.....	CR.....		MG...	1.4	
AS..... N	CS.....		MN... N		
AU.....	CU.....		MO...	SI02.	25.
B.....	F.....	N	NA...		
BA.....	FE+3....		NA+K.	S04..	6.0
BE.....	FE(TOT)..	0.02			
CA.....	HCO3....	100.			
CL.....		4.4			
CO.....	K.....	3.2			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00120

 GEOTHERM FILE ID: 0015328

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... RAY BIXLER
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 010E 10 SE OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-11.55 N 121-37.95 W
 UTM ZONE... +10
 NORTHING... 4671841.
 EASTING.... 612915.

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
 PH..... 7.8
 SPECIFIC CONDUCTANCE..... 190.

ANALYSIS IN MG/L

AG.....	CO3..... N				
AL.....	CR.....	MG...	8.4		
AS..... 0.002	CS.....	MN...	1.4		
AU.....	CU.....	MO...		SI02.	49.
B..... 0.02	F..... 0.2	NA...	16.		
BA.....	FE+3.....	NA+K.		S04..	7.9
BE.....	FE(TOT).. 0.16				
CA..... 12.	HCO3..... 110.				
CL..... 1.9					
CO.....	K..... 3.3				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00121

 GEOTHERM FILE ID: 0015432

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... RAY SMITH WELL
 WELL/SPRING NUMBER..... 36S/11E-16BCB

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 36S 011E 16 NW OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BEATTY 1:62500

COORDINATES
 LAT/LONG... 42-27.25 N 121-25.40 W
 UTM ZONE... +10
 NORTHING... 4701194.
 EASTING.... 629648.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1970/10/08 USGS
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 116.

WATER ANALYSIS

DATE/ANALYST..... 1970/00/00 USGS
 PH..... 8.4 AT(C) 25.
 SPECIFIC CONDUCTANCE..... 148.
 TOTAL DISSOLVED SOLIDS... 140.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG....		CO3.....	11.				
AL....		CR.....		MG...	0.1		
AU....		CU.....		MO...		SI02.	50.
B.....		F.....	0.2	NA...	30.		
BA....		FE+3....		NA+K.		S04..	3.2
BE....		FE(TOT)..	0.03				
CA....	3.8	HCO3.....	64.	N03..	0.3		
CL....	2.5						
CO....		K.....	1.9				

REFERENCE AND IDENTIFICATION

COMPILED BY..... PETERSON, NORMAN V.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 22
 REFERENCE..... LEONARD AND HARRIS, 1974

RECORD 00122

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015330

NAME OF SAMPLE SOURCE... ROBERT LANGLEY
 KGRA..... KLAMATH FALLS

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 010E 15 SW OF SW SE
 STATE..... OREGON
 COUNTY..... KLAMATH

LAT/LONG... 42-10.75 N 121-37.90 W
 UTM ZONE... +10
 NORTHING... 4670362.
 EASTING... 613008.

GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/05/04 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... 23.
 OTHER SAMPLE INFORMATION.. DOMESTIC USE

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 7.4
 SPECIFIC CONDUCTANCE..... 200.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....	1.				
AL....		CR.....		MG...	6.3		
AU....		CU.....		MO...		SI02.	50.
B..... Q		F..... Q		NA...	22.		
BA....		FE+3....		NA+K.		S04..	14.
CA....	10.	HCO3.....	110.				
CL....	2.6						
CO....		K.....	5.5				

QUALIFICATION FIELD..... SAMPLE(1975/08/10): F=0.1,B=0.020,SP COND=205,PH=7.8TEMP=24

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00123

GEO THERM FILE ID: 0015329

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ROENICKE HOT SPRING
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 010E 14 NW OF SW SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500
 OTHER LOCALITY INFORMATION: SPRING OWNED BY L. JONES

COORDINATES
 LAT/LONG... 42-10.40 N 121-37.05 W
 UTM ZONE... +10
 NORTHING... 4669733.
 EASTING.... 614188.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/10/11 GARDNER, MURRAY
 TEMPERATURE (C)..... Q 65.0
 PERTINENT LITHOLOGY..... THERMAL-ARTESIAN; YONNA FORMATION

WATER ANALYSIS

PH..... 8.2
 SPECIFIC CONDUCTANCE..... Q 1300.

ANALYSIS IN MG/L

AG....		CO3..... N			
AL....		CR.....	MG...	0.1	
AU....		CU.....	MO...		SI02. 48.
B.....	1.9	F.....	NA...	217.	
BA....		FE+3....	NA+K.		S04.. 430.
CA....	35.	HCO3....			
CL....	65.				
CO....		K.....		5.0	

ISOTOPES (0/00)

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 00124

GEO THERM FILE ID: 0015314

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... S. AND C. KILGORE

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 014E 16 NE OF NW NE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... GERBER RESERVOIR 1:62500

COORDINATES
 LAT/LONG... 42-06.40 N 121-03.80 W
 UTM ZONE... +10
 NORTHING... 4663221.
 EASTING.... 660130.

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.....	MG...		
			SC...		

ISOTOPES (0/00)

DEL 0(18) OF WATER... -16.00

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00125

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015340

NAME OF SAMPLE SOURCE... TOWN OF MERRILL
 KGRA..... KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 41S 010E 02 SE OF SE SE
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MERRILL 1:62500

COORDINATES
 LAT/LONG... 42-01.50 N 121-36.00 W
 UTM ZONE... +10
 NORTHING... 4653286.
 EASTING.... 615904.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/02/18
 TEMPERATURE (C)..... 21.0
 WELL DEPTH (M)..... 332.
 OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY

WATER ANALYSIS

PH..... 8.3
 SPECIFIC CONDUCTANCE..... 316.
 TOTAL DISSOLVED SOLIDS... 214.

ANALYSIS IN PPM

AL.....	CR.....	MG...	4.3		
AS..... 0.01					
AU.....	CU.....	MO...		SI02.	38.
B..... 0.01	F..... 0.1	NA...	44.	S04..	21.
BA.....	FE+3.....	NA+K.			
BE.....	FE(TOT).. 0.12				
CA..... 11.	HCO3..... 114.	N03.. N			
CL..... 27.					
CO.....	K..... 3.8				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... NEWCOMB AND HART, 1958

RECORD 00126

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015323

NAME OF SAMPLE SOURCE... U.S. AIR FORCE(1)
 KGRA..... NEAR KLAMATH FALLS

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 009E 34 SW OF SW NW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

COORDINATES
 LAT/LONG... 42-08.05 N 121-45.25 W
 UTM ZONE... +10
 NORTHING... 4665210.
 EASTING.... 602964.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/10/17 VOEGTLY AND SAMMEL
 TEMPERATURE (C)..... Q 31.0
 WELL DEPTH (M)..... 152.
 OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY

WATER ANALYSIS

PH..... Q 7.0
SPECIFIC CONDUCTANCE..... Q 240.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.....	CO3.....	N			
AL.....	CR.....		MG...	1.2	
AS.....	CS.....		MN... L	0.01	
AU.....	CU.....		MO...		SI02. 53.
B.....	F.....	0.3	NA...	47.	
BA.....	FE+3.....		NA+K.		S04.. 8.
BE.....	FE(TOT).	0.04			
CA.....	HC03.....	128.			
CL.....					
CO.....	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 00127

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015324

NAME OF SAMPLE SOURCE... U.S. AIR FORCE(2)
KGRA..... NEAR KLAMATH FALLS

LOCATION

TOWNSHIP=RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 009E 34 SW OF SW NW
STATE..... OREGON
COUNTY..... KLAMATH
GEOLOGIC PROVINCE..
MAP REFERENCE..... KLAMATH FALLS 1:62500

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 VOEGTLY AND SAMMEL
TEMPERATURE (C)..... Q 30.
WELL DEPTH (M)..... 120.
OTHER SAMPLE INFORMATION.. PUBLIC SUPPLY

WATER ANALYSIS

DATE/ANALYST..... USGS
SPECIFIC CONDUCTANCE..... Q 255.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....	CO3.....	N			
AL.....	CR.....		MG...	2.3	
AS.....	CS.....		MN... L	0.01	
AU.....	CU.....		MO...		SI02. 51.
B.....	F.....	0.2	NA...	48.	
BA.....	FE+3.....		NA+K.		S04.. 9.
BE.....	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 00128

GEO THERM FILE ID: 0015304

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... WEYERHAUSER WELL NO. 4
 KGRA..... NEAR KLAMATH FALLS

LOCATIONTOWNSHIP-RANGECOORDINATES

COUNTRY..... UNITED STATES 39S 009E 18 NW OF NW SW
 STATE..... OREGON
 COUNTY..... KLAMATH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:62500

LAT/LONG... 42-10.70 N 121-48.10 W
 UTM ZONE... +10
 NORTHING... 4670058.
 EASTING.... 598969.

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..... Q 8.3
 SPECIFIC CONDUCTANCE..... Q 200.

ANALYSIS IN MG/L

AG....		CO3.....	4.5	LI...		SB...	
AL....		CR.....		MG....	1.9	SC...	
AU....		CU.....		MO....		SI02..	16.
B.....	0.09	F.....	0.11	NA....	32.	S04..	4.
BA....		FE+3....		NA+K.			
CA....	10.	HC03....	115.				
CL....	4.						
CO....		K.....	3.3				

ISOTOPES (0/00)

DEL D OF WATER..... -109.1
 DEL O(18) OF WATER... -14.60

QUALIFICATION FIELD..... SP COND AND PH MEASURED BY SAMMEL (1973/10/16)

REFERENCE AND IDENTIFICATION

COMPILED BY..... TESHIN, VICTOR
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 REFERENCE..... SAMMEL, 1976

RECORD 00129

GEO THERM FILE ID: 0002215

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANA RIVER SPRING
 WARING NUMBER..... 37

LOCATIONTOWNSHIP-RANGECOORDINATES

COUNTRY..... UNITED STATES 30S 017E 06
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... KLAMATH FALLS 1:250000

LAT/LONG... 42-59.8 N 120-45.3 W
 UTM ZONE... +10
 NORTHING... 4762675.
 EASTING.... 683005.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/12/00
 TEMPERATURE (C)..... 18.9
 DISCHARGE..... 170339.L/MIN
 PERTINENT LITHOLOGY..... FROM FAULTED(?) QUATERNARY LAKE DEPOSITS

WATER ANALYSIS

DATE/ANALYST..... USGS

PH..... 8.4
 TOTAL DISSOLVED SOLIDS... 161.

ANALYSIS IN PPM

ISOTOPES (0/00)

AL....	CR.....	MG...	3.1		
AU....	CU.....	MO...		SI02.	37.
B..... 0.5	F..... 0.2	NA...	39.		
BA....	FE+3....	NA+K.		S04..	6.7
BE....	FE(TOT). 0.16				
CA.... 5.2	HCO3.... 108.	N03..	0.1		
CL.... 13.					
CO....	K..... 3.2				

OTHER ANALYTICAL DATA... FE (TOTAL) RECORDED AS .34 WHEN COLLECTED

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... TRAUGER, 1950

RECORD 00130

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002216

NAME OF SAMPLE SOURCE... ANTELOPE HOT SPRINGS
 WARING NUMBER..... 48A

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 35S 026E 32 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... WARNER PEAK 1:24000

LAT/LONG... 42-29.97 N 119-41.48 W
 UTM ZONE... +11
 NORTHING... 4708534.
 EASTING.... 278848.

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.

ISOTOPES (0/00)

AL....	CR.....	MG...	2.5		
AU....	CU.....	MO...		SI02.	168.
B..... 1.5	F..... 3.6	NA...	191.		
BA....	FE+3....	NA+K.		S04..	57.
BE....	FE(TOT). 0.02				
CA.... 10.	HCO3.... 376.	N03..	0.2		
CL.... 64.					
CO....	K..... 13.				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 28
 REFERENCE..... TRAUGER, 1950

RECORD 00131

 GEOTHERM FILE ID: 0015954

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ANTONE SPRINGS
 WELL/SPRING NUMBER..... 38S-20E-6-AA

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 38S 020E 06 NE OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... BIG BALDY 1:24000

COORDINATES
 LAT/LONG... 42-18.30 N 120-23.530W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-225
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 22.5
 AMBIENT TEMP (C)..... 16.

WATER ANALYSIS

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.
 PH..... 8.2 AT(C) 23.
 SPECIFIC CONDUCTANCE..... 16.9
 ALKALINITY..... 86. AS CAC03
 TOTAL DISSOLVED SOLIDS... 130.

ANALYSIS IN MG/L

AG.....	C03.....	LI... L 0.05		
AL.... L 0.1	CR.....	MG... 7.7		
AS.... L 0.005	CS.....	MN... L 0.05		
AU.....	CU.....	MO... 46.	SI02..	
B.....	F..... L 0.1	NA... 12.		
BA.....	FE+3.....	NA+K.. 2.0	S04..	
BE.....	FE(TOT).. 0.06			
CA.... 12.				
CD.....	H2S.....	P04.. 0.0036		
CL.... 0.6				
CO.....	K..... 4.3			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00132

 GEOTHERM FILE ID: 0015976

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S/20E/27/DC

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 020E 27 NW OF SE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-09.4 N 120-20.4 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/13 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-200

POINT OF COLLECTION.. ORIFICE OF NORTHERNMOST SPRING.
 TEMPERATURE (C)..... 92.5
 AMBIENT TEMP (C)..... 17.
 DISCHARGE..... 38.
 OTHER SAMPLE INFORMATION.. H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1979/08/21 BANERJEE, KALA C.
 PH..... 7.7 AT(C) 93.
 SPECIFIC CONDUCTANCE..... 1382.
 ALKALINITY..... 167. AS CAC03
 TOTAL DISSOLVED SOLIDS... 965

ANALYSIS IN MG/L

AG....		C03.....		LI...	0.18		
AL....	0.34	CR.....		MG...	0.08		
AS....	0.101	CS.....		MN... L	0.05		
AU....		CU.....		MO...		SI02.	77.
B.....		F.....	5.6	NA...	268.		
BA....		FE+3....	0.15	NA+K.		S04..	224.
CA....	8.8						
CD....		H2S.....		P04..	0.031		
CL....	158.						
CO....		K.....	9.6				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE GRANT NO. DE-FC07-79ET27220

RECORD 00133

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000780

NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS (GUS ALLEN)
 KGRA..... LAKEVIEW
 WARING NUMBER..... 47

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	39S 020E 27 NW OF SE	LAT/LONG...	42-09.35 N 120-20.67 W
STATE.....	OREGON		UTM ZONE...	+10
COUNTY.....	LAKE		NORTHING...	4670278.
GEOLOGIC PROVINCE..			EASTING....	719399.
MAP REFERENCE.....	LAKEVIEW NE 1:24000			

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 88.0
 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.

ANALYSIS IN MG/L

AG....	L 0.02	C03.....	2.	LI...	0.15	SB... L	0.2
AL....	0.014	CR.....		MG...	0.1	SC...	
AS....	0.07	CS.....	L 0.1	MN... L	0.02		

ISOTOPES (0/00)

DEL D OF WATER..... -119.4
 DEL O(18) OF WATER... -13.72

AU..... L 0.1	CU..... L 0.01	MO...	SI02.	130.
B..... 11.	F..... 5.4	NA... 280.		
BA.... L 0.1	FE+3....	NA+K.	S04..	240.
BE.... L 0.1	FE(TOT). L 0.02	NB...	SR...	0.17
BI.....	GA.....	NH4.. 1.8		
BR.... 1.				
CA.... 8.8	HCO3.... 232.			
CA+MG.	HG..... 0.0017	PB... L 0.06		
CD.... L 0.01	H2S.....	P04.. 0.18		
CL.... 170.	I..... 0.1	RB... 0.04		
CO.... L 0.05	K..... 9.0			

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. 42.
 C2H6.
 CO2.. 2.

ISOTOPES (00/0)

N2... 54.

OTHER ANALYTICAL DATA... O2+AR=2

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 25
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00134

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002217

NAME OF SAMPLE SOURCE... BARRY RANCH HOT SPRINGS (GUS ALLEN)
 KGRA..... LAKEVIEW
 WARNING NUMBER..... 47

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 27 NW OF SE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-09.35 N 120-20.67 W
 UTM ZONE... +10
 NORTHING... 4670278.
 EASTING... 719399.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/05/22
 TEMPERATURE (C)..... 85.0
 DISCHARGE..... 189. L/MIN
 PERTINENT LITHOLOGY..... FROM TERTIARY LAVA NEAR FAULT SCARP

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 7.3
 SPECIFIC CONDUCTANCE..... 1320.
 TOTAL DISSOLVED SOLIDS... 905.

ANALYSIS IN PPM

ISOTOPES (0/00)

AL.....	CR.....	MG... 1.4		
AU....	CU.....	MO... 140.	SI02.	140.
B..... 9.9	F..... 6.9	NA... 268.		
BA....	FE+3....	NA+K.	S04..	223.
BE....	FE(TOT). 0.02			
CA.... 8.5	HCO3.... 208.	N03.. 0.3		
CL.... 146.				
CO....	K..... 8.8			

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 25
 REFERENCE..... TRAUGER, 1950

RECORD 00135

GEOTHERM FILE ID: 0015955

GEOHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CHAMBERS RANCH IRRIGATION WELL
 WELL/SPRING NUMBER..... 38S-20E-22-CA

LOCATION TOWNSHIP-RANGE
 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

COORDINATES
 LAT/LONG... 42-45. N 120-20.66 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-227
 POINT OF COLLECTION.. 100 FEET FROM WELLHEAD.
 TEMPERATURE (C)..... 28.5
 AMBIENT 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.

ANALYSIS IN MG/L

AG.....	CO3.....	LI... L 0.05		
AL... L 0.1	CR.....	MG... 1.7		
AS... 0.026	CS.....	MN... L 0.05		
AU.....	CU.....	MO... 153.	SI02..	54.
B... 0.007	F..... 0.5	NA... 153.	S04..	14.
BA.....	FE+3.....	NA+K.		
BE.....	FE(TOT). L 0.05			
CA... 7.2	H2S.....	P04.. 0.039		
CD.....				
CL... 2.6				
CO.....	K..... 1.5			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00136

GEOTHERM FILE ID: 0015963

GEOHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... COLVERT SPRING
 WELL/SPRING NUMBER..... 37S-20E-16-CCA

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 37S 020E 16 NE OF SW SW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... CROOKED CREEK VALLEY 1:24000

COORDINATES
 LAT/LONG... 42-21.44 N 120-21.51 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/08/24 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-274
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 16.
 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. AS CAC03

ANALYSIS IN MG/L

AG.....	CO3.....	LI... L 0.01		
AL..... 0.47	CR.....	MG... 2.6		
AS... L 0.005	CS.....	MN... L 0.02		
AU.....	CU.....	MO... 58.	SI02..	58.
B.....	F..... L 0.1	NA... 10.		
BA.....	FE+3.....	NA+K..	S04..	1.4
BE.....	FE(TOT).. 0.21			
CA..... 9.8	H2S.....	P04..	0.111	
CD.....				
CL..... 1.3				
CO.....	K..... 2.8			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE GRANT NO. DE-FC07-79ET27220

RECORD 00137

 GEOTHERM FILE ID: 0000691

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CRUMP SPRING
 KGRA..... CRUMP GEYSER
 WARING NUMBER..... 49C

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 38S 024E 34 SW OF SW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... ADEL 1:24000

COORDINATES

LAT/LONG... 42-13.60 N 119-52.78 W
 UTM ZONE... +11
 NORTHING... 4678745.
 EASTING... 262345.

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.

ANALYSIS IN MG/L

AG... L 0.02	CO3... L 1.	LI... 0.4	SB... L 0.2
AL... 0.017	CR.....	MG... 0.2	SC...
AS... 0.46	CS... 0.1	MN... 0.03	SE...
AU... L 0.1	CU... L 0.01	MO... 180.	SI02..

ISOTOPES (0/00)

DEL D OF WATER..... -115.5
 DEL O(18) OF WATER... -13.28
 DEL O(18) OF S04..... -4.71

B.....	14.	F.....	4.9	NA...	280.		
BA....	L 0.1	FE+3....		NA+K.		S04..	200.
BE....	L 0.1	FE(TOT) L	0.02	NB...		SR...	0.12
BI....		GA.....		NH4..	0.6		
BR....	0.4						
CA....	16.	HCO3....	153.				
CA+MG.		HG.....	0.0004	PB... L	0.06		
CD....	L 0.01	H2S.....		PO4..	0.58		
CL....	240.	I.....	0.1	RB...	0.07		
CO....	L 0.05	K.....	11.				

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4..	6.		
C2H6.		N2...	75.
CO2..	14.		

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... O2+AR=5

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 33
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00138

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002223

NAME OF SAMPLE SOURCE... CRUMP SPRING
 KGRA..... CRUMP GEYSER
 WARNING NUMBER..... 49C

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	38S 024E	34 SW OF SW	LAT/LONG...	42-13.60 N 119-52.78 W
STATE.....	OREGON			UTM ZONE...	+11
COUNTY.....	LAKE			NORTHING...	4678745.
GEOLOGIC PROVINCE..				EASTING....	262345.
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.

ANALYSIS IN PPM

ISOTOPES (0/00)

AG....		CO3..... N			
AL....		CR.....	MG...	2.	
AU....		CU.....	MO...		S102. 125.
B.....	7.3	F.....	NA...	175.	
BA....		FE+3....	NA+K.		S04.. 116.
BE....		FE(TOT) L			
CA....	18.	HCO3....	N03..	1.5	
CL....	150.				
CO....		K.....			

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA

COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 33
 REFERENCE..... TRAUGER, 1950

RECORD 00139

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0002221

NAME OF SAMPLE SOURCE... CRUMP WELL (1)
 KGRA..... CRUMP GEYSER

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 38S 024E 34 SW OF SW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... ADEL 1:24000
 OTHER LOCALITY INFORMATION: 4 MI. NORTH OF ADEL

COORDINATES
 LAT/LONG... 42-13.59 N 119-52.87 W
 UTM ZONE... +11
 NORTHING... 4678731.
 EASTING.... 262220.

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.

ANALYSIS IN PPM

AG....		CO3.....	36.	LI...	0.39		
AL....	0.65	CR.....		MG...	0.5		
AS....		CS.....		MN...	N		
AU....		CU.....		MO...		SI02.	169.
B....	18.	F.....	5.2	NA...	298.		
BA....		FE+3....		NA+K.		S04..	209.
BE....		FE(TOT)..	0.15	NB...		SR...	0.31
BI....		GA.....		NH4..	N		
BR....	0.9						
CA....	10.	HCO3....	70.	N03..	1.0		
CD....		H2S.....	0.3	P04..	1.4		
CL....	263.	I.....	0.1				
CO....		K.....	12.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 33
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00140

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0002220

NAME OF SAMPLE SOURCE... CRUMP WELL (2)
 KGRA..... CRUMP GEYSER

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 38S 024E 34 SW OF SW
 STATE..... OREGON

COORDINATES
 LAT/LONG... 42-13.59 N 119-52.87 W
 UTM ZONE... +11

NORTHING... 4678731.
EASTING... 262220.

COUNTY..... LAKE
GEOLOGIC PROVINCE..
MAP REFERENCE..... ADEL 1:24000
OTHER LOCALITY INFORMATION: 120 FT. NORTH OF WELL DRILLED 1958-1959

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.
PH..... 8.1
SPECIFIC CONDUCTANCE..... 1460.

ANALYSIS IN PPM

AG..... CO3..... LI... 0.33
B..... 13. F..... NA... 281.
CL..... 248.
CO..... K..... 10.

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 33
REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00141

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015956

NAME OF SAMPLE SOURCE... DON LINDSEY WELL
KGRA..... LAKEVIEW
WELL/SPRING NUMBER..... 38S-20E-33-AB

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 020E 33 NW OF NE
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE.. BASIN AND RANGE
MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-14.10 N 120-20.18 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
SAMPLE NUMBER..... WS79-229
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.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG..... CO3..... LI... 0.05
AL... L 0.1 CR..... MG... 0.62
AS... 0.047 CS..... MN... L 0.05
AU..... CU..... MO... S102. 60.
B..... F..... 2.2 NA... 140.
BA..... FE+3..... NA+K. S04.. 215.
BE..... FE(TOT). 0.62
CA... 22.

CD.... H2S..... P04.. 0.004
 CL.... 50.
 CO.... K..... 2.4

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE GRANT NO. DE-FC07-79FT27220

RECORD 00142

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015966

NAME OF SAMPLE SOURCE... E. MCDONALD HOT WELL
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 38S-20E-33-CDD

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 38S 020E 33 SE OF SE SW LAT/LONG... 42-14.500N 120-21.967W
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/09/26 PETERSON, NORMAN V. AND RICCIO, JOSEPH F.
 SAMPLE NUMBER..... WS79-297
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 94.
 AMBIENT TEMP (C)..... 17.

WATER ANALYSIS

DATE/ANALYST..... 1979/11/05 BANERJEE, KALA C.
 PH..... 8.2 AT(C) 94.
 SPECIFIC CONDUCTANCE..... 1137.
 ALKALINITY..... 60. AS CAC03
 TOTAL DISSOLVED SOLIDS... 803.

ANALYSIS IN MG/L

AG....		CO3.....	LI...	0.14		
AL....	0.07	CR.....	MG...	0.06		
AS....	0.19	CS.....	MN... L	0.02		
AU....		CU.....	MO...		S102.	123.
B....	7.1	F.....	4.3	NA...	195.	
BA....		FE+3...		NA+K.	S04..	169.
BE....		FE(TOT). L	0.05			
CA....	13.	HCO3.....		N03.. L	0.02	
CD....		H2S.....		P04..	0.022	
CL....	118.					
CO....		K.....	8.7			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

COUNTRY..... UNITED STATES 38S 020E 33 SE OF SW LAT/LONG... 42-14.500N 120-21.968W
 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..... WS79-219
 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.
 PH..... 8.6 AT(C) 78.
 SPECIFIC CONDUCTANCE..... 1152.
 ALKALINITY..... 50. AS CaCO3
 TOTAL DISSOLVED SOLIDS... 841.

ANALYSIS IN MG/L

AG.....	CO3.....	LI... 0.13		
AL..... 0.29	CR.....	MG... 0.07		
AS..... 0.133	CS.....	MN... L 0.05		
AU.....	CU.....	MO... 66.	SI02.	
B..... 8.0	F..... 4.7	NA... 207.		
BA.....	FE+3.....	NA+K. 338.	S04..	
BE.....	FE(TOT). 0.07			
CA..... 14.				
CD.....	H2S.....	P04.. 0.062		
CL..... 118.				
CO.....	K..... 9.4			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00144

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... FISHER HOT SPRINGS
 KGRA..... CRUMP GEYSER
 WARING NUMBER..... 49A

GEO THERM FILE ID: 0000717

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 38S 025E 10 NW OF NW NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... CRUMP LAKE 1:24000, ADEL 1:250000

COORDINATES

LAT/LONG... 42-17.84 N 119-46.55 W
 UTM ZONE... +11
 NORTHING... 4686308.
 EASTING... 271170.

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
 PH..... 7.93
 SPECIFIC CONDUCTANCE..... 513.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI.... 0.04	SB... L 0.2
AL.... 0.011	CR.....	MG.... 1.0	
AS.... 0.1	CS..... L 0.1	MN.... L 0.02	
AU.... L 0.1	CU..... L 0.01	MO....	SI02.. 77.
B..... 2.2	F..... 3.5	NA.... 92.	
BA....	FE+3....	NA+K..	S04.. 59.
BE.... L 0.1	FE(TOT). L 0.02	NB....	SR... 0.05
BI....	GA.....	NH4.. 0.18	
BR.... 0.4			
CA.... 8.4	HCO3..... 105.		
CA+MG.	HG..... L 0.0001	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.18	
CL.... 56.	I..... 0.03	RB.... 0.02	
CO.... L 0.05	K..... 7.9		

ISOTOPES (0/00)

DEL D OF WATER..... -117.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 32
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00145

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015962

NAME OF SAMPLE SOURCE... HUNTER WELL
 WELL/SPRING NUMBER..... 39S-20E-33-DC

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 33 SW OF SE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-08.10 N 120-21.30 W

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.
 PH..... 8.7 AT(C) 95.
 SPECIFIC CONDUCTANCE..... 1120.
 ALKALINITY..... 60. AS CAC03
 TOTAL DISSOLVED SOLIDS... 852.

ANALYSIS IN MG/L

AG.... 0.34	CO3.....	LI.... 0.13	
AL....	CR.....	MG.... 0.12	
AS.... 0.116	CS.....	MN.... L 0.02	
AU....	CU.....	MO....	SI02.. 168.
B.....	F..... 4.3	NA.... 192.	
BA....	FE+3....	NA+K..	S04.. 187.
BE....	FE(TOT). 0.09		
CA.... 13.			

ISOTOPES (0/00)

CD..... H2S..... P04.. 0.015
 CL..... 123.
 CO..... K..... 9.1

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE GRANT NO. DE-FC07-79ET27220

RECORD 00146

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015969

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRING
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-BA

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-12.0 N 120-21.6 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-221
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 94.
 AMBIENT 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.

ANALYSIS IN MG/L

AG.....		CO3.....		LI... 0.13		
AL..... 0.1		CR.....		MG... 0.03		
AS..... 0.151		CS.....		MN... L 0.05		
AU.....		CU.....		MO... 60.	SI02..	
B..... 0.0075		F..... 4.9		NA... 206.		
BA.....		FE+3.....		NA+K..	S04..	289.
BE.....		FE(TOT) L 0.05				
CA..... 12.		HCO3.....		N03.. 96.		
CD.....		H2S.....		P04.. 0.043		
CL..... 115.						
CO.....		K..... 9.8				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE GRANT NO. DE-FC07-79ET27220

RECORD 00147

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015970

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRING
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-BA

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-12.0 N 120-21.6 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-223
 POINT OF COLLECTION.. ORIFICE
 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 CaCO3
 TOTAL DISSOLVED SOLIDS... 424.

ISOTOPES (0/00)

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			
AU....		CU.....		MO... SI02. 54.			
B.... 0.0075		F..... 4.3		NA... 201.			
BA....		FE+3....		NA+K. S04.. 291.			
BE....		FE(TOT). L 0.005					
CA.... 13.		HCO3....		NO3.. 106.			
CD....		H2S.....		P04.. 0.033			
CL.... 118.							
CO....		K..... 9.5					

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00148

GEOHERM FILE ID: 0002228

GEOHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS (LAKEVIEW)
 KGRA..... LAKEVIEW
 WARING NUMBER..... 45

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LAKEVIEW NE 1:24000, KLAMATH FALLS 1:250000
 OTHER LOCALITY INFORMATION: 2 MI. NORTH OF LAKEVIEW, ORE.

COORDINATES
 LAT/LONG... 42-13.32 N 120-22.09 W
 UTM ZONE... +10
 NORTHING... 4677565.
 EASTING... 717216.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1956/10/18 BAILEY, E. H.
 SAMPLE NUMBER..... LAB# 145
 TEMPERATURE (C)..... 98.0
 DISCHARGE..... G 19. L/MIN

WATER ANALYSIS

DATE/ANALYST..... ROBERSON, C. E.
 PH..... 8.3

SPECIFIC CONDUCTANCE..... 1110.

ANALYSIS IN PPM

AG.....		CO3.....	6.	LI...	0.2		
AL.....		CR.....		MG... N			
AU.....		CU.....		MO...		SI02.	146.
B.....	7.2	F.....		NA...	209.		
BA.....		FE+3.....		NA+K.		S04..	265.
BE.....		FE(TOT).		NB...		SR...	0.5
CA.....	12.	HCO3.....	62.	NO3..	7.2		
CL.....	116.						
CO.....		K.....	9.5				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 23
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00149

 GEOTHERM FILE ID: 0015978

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-4-BA

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-12.0 N 120-21.6 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/27 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-220
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 95.
 AMBIENT TEMP (C)..... 17.
 OTHER SAMPLE INFORMATION.. SAMPLE TAKEN IN BATHHOUSE. SLIGHT H2S ODOR.

WATER ANALYSIS

DATE/ANALYST..... 1979/09/04 BANERJEE, KALA C.
 PH..... 7.9 AT(C) 95.
 SPECIFIC CONDUCTANCE..... 1101.
 ALKALINITY..... 60. AS CAC03
 TOTAL DISSOLVED SOLIDS... 805.

ANALYSIS IN MG/L

AG.....		CO3.....		LI...	0.12		
AL.....	0.11	CR.....		MG... L	0.07		
AS.....	0.162	CS.....		MN... L	0.05		
AU.....		CU.....		MO...		SI02.	66.
B.....	0.007	F.....	4.8	NA...	197.		
BA.....		FE+3.....		NA+K.		S04..	307.
BE.....		FE(TOT).	L 0.05				
CA.....	14.	HCO3.....		NO3..	103.		
CD.....		H2S.....		P04..	0.044		
CL.....	115.						
CO.....		K.....	9.8				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.

COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET-27220

RECORD 00150

GEO THERM FILE ID: 0000689

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS (LAKEVIEW)
 KGRA..... LAKEVIEW
 WARING NUMBER..... 45

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 020E 04 NE OF NW
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LAKEVIEW NE 1:24000, KLAMATH FALLS 1:250000

COORDINATES
 LAT/LONG... 42-13.32 N 120-22.09 W
 UTM ZONE... +10
 NORTHING... 4677565.
 EASTING... 717216.

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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... L 1.	LI.... 0.15	SB... L 0.2
AL.... 0.034	CR.....	MG... L 0.1	SC... L 0.008
AS.... 0.06	CS..... L 0.1	MN... L 0.02	SI02. 140.
AU.... L 0.1	CU..... L 0.01	MO... 210.	SO4.. 260.
B.... 6.9	F..... 4.4	NA... 0.31	SR... 0.32
BA.... L 0.1	FE+3....	NA+K.	
BE.... L 0.1	FE(TOT). L 0.02	NB... 0.31	
BI....	GA.....	NH4.. 0.31	
BR.... 0.4			
CA.... 13.	HCO3..... 79.		
CA+MG.	HG..... 0.0004	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.25	
CL.... 120.	I..... 0.08	RB... 0.04	
CO.... L 0.05	K..... 8.5		

ISOTOPES (0/00)

DEL D OF WATER..... -119.0
 DEL O(18) OF WATER... -14.32
 DEL O(18) OF SO4..... -3.69

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; NEHRING AND OTHERS, 1979

RECORD 00151

GEO THERM FILE ID: 0002226

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... HUNTERS HOT SPRINGS (LAKEVIEW)
 KGRA..... LAKEVIEW
 WARING NUMBER..... 45

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 39S 020E 04 NE OF NW

COORDINATES
 LAT/LONG... 42-13.32 N 120-22.09 W

STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE..
MAP REFERENCE..... LAKEVIEW NE 1:24000, KLAMATH FALLS 1:250000
OTHER LOCALITY INFORMATION: 2 MI. NORTH OF LAKEVIEW, ORE. 30 OR MORE FT. NORTHWEST OF BATHHOUSE

UTM ZONE... +10
NORTHING... 4677565.
EASTING.... 717216.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1957/10/29 FETH, J. AND ROGERS, S. M.
SAMPLE NUMBER..... LAB# 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.

ISOTOPES (0/00)

ANALYSIS IN PPM

AG....		CO3.....	5.				
AL....	N	CR.....		MG....	2.4		
AS....		CS.....		MN....	N		
AU....		CU.....	N	MO....		SI02..	140.
B.....	7.1	F.....	4.5	NA....	208.		
BA....		FE+3....		NA+K..		S04..	258.
BE....		FE(TOT)..	0.01				
CA....	8.0	HCO3....	64.	NO3..	0.3		
CA+MG.		HG.....		PB....	N		
CL....	120.	I.....		RB....		ZN... N	
CO....		K.....	10.				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 23
REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00152

GEO THERM FILE ID: 0015965

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... INGLEDON WELL
KGRA..... LAKEVIEW
WELL/SPRING NUMBER..... 39S-20E-4-AAB

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 04 NW OF NE NE
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE.. BASIN AND RANGE
MAP REFERENCE..... LAKEVIEW NE 1:24000
LAT/LONG... 42-13.20 N 120-21.57 W

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.
PH..... 7.7 AT(C) 23.

SPECIFIC CONDUCTANCE..... 345.
 ALKALINITY..... 138. AS CAC03
 TOTAL DISSOLVED SOLIDS... 403.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI...	0.01		
AL....	13.	CR.....		MG...	8.3		
AS....	0.013	CS.....		MN...	0.18		
AU....		CU.....		MO...		SI02.	34.
B.....	0.36	F.....	0.3	NA...	22.	S04..	12.
BA....		FE+3....		NA+K.			
BE....		FE(TOT)..	6.2				
CA....	40.	HCO3....		N03..	0.74		
CD....		H2S.....		P04..	0.033		
CL....	48.						
CO....		K.....	0.9				

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00153

 GEOTHERM FILE ID: 0015957

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 5
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-15-BA

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 15 NW OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-11.333N 120-20.266W

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 CAC03
 TOTAL DISSOLVED SOLIDS... 298.

ISOTOPES (0/00)

AG....		CO3.....		LI...	0.05		
AL....	0.1	CR.....		MG...	0.38		
AS....	0.012	CS.....		MN...	0.05		
AU....		CU.....		MO...		SI02.	32.
B.....	4.1	F.....	1.7	NA...	80.	S04..	77.
BA....		FE+3....		NA+K.			
BE....		FE(TOT)..	0.05				
CA....	8.5						

CD..... H2S..... P04.. 0.004
CL..... 30.
CO..... K..... 0.6

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE CONTRACT DE-FC07-79ET27220

RECORD 00154

GEO THERM FILE ID: 0015958

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 4
KGRA..... LAKEVIEW
WELL/SPRING NUMBER..... 39S-20E-16-AA

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 16 NE OF NE
STATE..... OREGON
COUNTY..... LAKE
GEOLOGIC PROVINCE.. BASIN AND RANGE
MAP REFERENCE..... LAKEVIEW NE 1:24000

LAT/LONG... 42-11.333N 120-21.139W

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
AMBIENT 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG..... CO3..... LI... 0.05
AL..... 0.1 CR..... MG... 1.9
AS..... 0.005 CS..... MN... 0.11
AU..... CU..... MO...
B..... 1.7 F..... 1.1 NA... 68. SI02. 78.
BA..... FE+3..... NA+K. S04.. 3.0
BE..... FE(TOT). 0.13
CA..... 5.8
CD..... H2S..... P04.. 0.46
CL..... 19.
CO..... K..... 2.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00155

GEO THERM FILE ID: 0015959

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 3
KGRA..... LAKEVIEW
WELL/SPRING NUMBER..... 39S-20E-16-AB

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 39S 020E 16 NE OF NW
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-11.333N 120-21.130W

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.
 PH..... 8.0 AT(C) 17.
 SPECIFIC CONDUCTANCE..... 286.
 ALKALINITY..... 114. AS CAC03
 TOTAL DISSOLVED SOLIDS... 236.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		C03.....		LI...	0.05		
AL....	0.1	CR.....		MG...	0.83		
AS....	0.005	CS.....		MN...	0.06		
B.....	1.5	F.....	1.4	NA...	56.		
BA....		FE+3....		NA+K.		S04..	4.9
BE....		FE(TOT)..	0.11				
CD....		H2S.....		P04..	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..... DOGAMI IN-HOUSE STUDIES; DOE GRANT DE-FC07-79ET27220

RECORD 00156

 GEOTHERM FILE ID: 0015960

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LAKEVIEW CITY WELL NO. 7
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-16-BB

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 39S 020E 16 NW OF NW
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-11.333N 120-21.463W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/07/12 PETERSON, NORMAN V.
 SAMPLE NUMBER..... WS79-198
 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		C03.....		LI...	0.05		
AL....	0.1	CR.....		MG...	0.57		
AS....	0.006	CS.....		MN...	0.07		
AU....		CU.....		MO...		SI02..	69.
B.....		F.....	1.2	NA...	54.	S04..	9.8
BA....		FE+3....		NA+K.			
BE....		FE(TOT)..	0.14				
CA....	2.4						
CD....		H2S.....		P04..	0.6		
CL....	16.						
CO....		K.....	2.2				

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE CONTRACT NO. DE-FC07-79ET27220

RECORD 00157

 GEOTHERM FILE ID: 0015964

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... LEDFORD WELL
 WELL/SPRING NUMBER..... 41S-21E-18-BBB

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	41S 021E	18 NW OF NW NW	LAT/LONG...	42-01.08 N 120-17.67 W
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..... WS79-273
 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		C03.....		LI...	0.02		
AL....	0.06	CR.....		MG...	0.26		
AS....	0.005	CS.....		MN... L	0.02		
AU....		CU.....		MO...		SI02..	18.
B.....		F.....	0.1	NA...	66.	S04..	6.6
BA....		FE+3....		NA+K.			
BE....		FE(TOT)..	0.12				
CA....	1.6						
CD....		H2S.....		P04..	0.003		
CL....	1.1						
CO....		K.....	0.8				

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00158

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002224

NAME OF SAMPLE SOURCE... LEITHEAD HOT SPRINGS (JOYLAND PLUNGE, LEO HANK)
 KGRA..... LAKEVIEW
 WARING NUMBER..... 46

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 020E 27 NW OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-09.71 N 120-20.60 W
 UTM ZONE... +10
 NORTHING... 4670948.
 EASTING... 719474.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1948/06/23
 TEMPERATURE (C)..... 69.4
 DISCHARGE..... 186. L/MIN
 PERTINENT 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.

ANALYSIS IN PPM

AL....	CR.....	MG... 0.4			
AU....	CU.....	MO... 66.	SI02.		
B..... 7.0	F..... 3.1	NA... 152.	S04..	152.	
BA....	FE+3....	NA+K.			
BE....	FE(TOT). 0.06				
CA.... 15.	HCO3.... 84.	N03.. 0.2			
CL.... 99.					
CO....	K..... 2.2				

ISOTOPES (0/00)

OTHER ANALYTICAL DATA... H2S ODOR PRESENT

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 24
 REFERENCE..... TRAUGER, 1950

RECORD 00159

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015977

NAME OF SAMPLE SOURCE... LIETHEAD (JOYLAND PLUNGE) HOT SPRINGS
 KGRA..... LAKEVIEW
 WELL/SPRING NUMBER..... 39S-20E-27-BA

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 39S 020E 27 NW OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE.. BASIN AND RANGE
 MAP REFERENCE..... LAKEVIEW NE 1:24000

COORDINATES
 LAT/LONG... 42-09.5 N 120-20.3 W

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.
AMBIENT 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG..... CO3..... LI... L 0.05
AL.... L 0.1 CR..... MG... 0.1
AS.... L 0.005 CS..... MN... L 0.05
AU..... CU..... MO...
B..... F..... 3.4 NA... 139. SI02. 74.
BA..... FE+3..... NA+K. S04.. 157.
BE..... FE(TOT). L 0.05
CA.... 14. P04.. 0.004
CD..... H2S.....
CL.... 56. K..... 2.6
CO.....

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00160

GEO THERM FILE ID: 0015967

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ROBBIE WELL
WELL/SPRING NUMBER..... 39S-20E-4-BAA

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 39S 020E 04 NW OF NE NE LAT/LONG... 42-10.43 N 120-22.47 W
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.
AMBIENT 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG..... CO3..... LI... 0.1
AL.... 0.1 CR..... MG... 0.49
AS.... 0.072 CS..... MN... L 0.02

AU....	CU.....	MO....	SI02..	126.
B.....	F..... 3.7	NA....	163.	
BA.....	FE+3....	NA+K..	S04..	227.
BE.....	FE(TOT). L 0.05			
CA..... 18.				
CD.....	H2S.....	P04..	0.015	
CL..... 99.				
CO.....	K..... 5.9			

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00161

 GEOTHERM FILE ID: 0015961

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ROCKFORD (OLD DETER) RANCH
 WELL/SPRING NUMBER..... 40S-20E-1-CC

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 40S 020E 01 SW OF SW LAT/LONG... 42-06.350N 120-17.327W
 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.. WELLHEAD
 TEMPERATURE (C)..... 77.
 AMBIENT 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.
 PH..... 8.3 AT(C) 77.
 SPECIFIC CONDUCTANCE..... 1152.
 ALKALINITY..... 326. AS CaCO3
 TOTAL DISSOLVED SOLIDS... 813.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....	CO3.....	LI....	0.22	
AL.... L 0.1	CR.....	MG....	0.15	
AS.... L 0.005	CS.....	MN.... L 0.05		
AU....	CU.....	MO....	SI02..	74.
B.....	F..... 3.7	NA....	238.	
BA.....	FE+3....	NA+K..	S04..	75.
BE.....	FE(TOT). L 0.05			
CA.... 4.2				
CD....	H2S.....	P04..	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..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00162

GEO THERM FILE ID: 0000707

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... SUMMER LAKE HOT SPRING (WOODWARD)
 KGRA..... SUMMER LAKE HOT SPRING
 WARING NUMBER..... 42

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 33S 017E 12 NE OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... SLIDE MTN, 1:24000, KLAMATH FALLS 1:250000

COORDINATES
 LAT/LONG... 42-43.53 N 120-38.75 W
 UTM ZONE... +10
 NORTHING... 4732806.
 EASTING.... 692746.

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
 PH..... 8.43
 SPECIFIC CONDUCTANCE..... 1790.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 10.	LI.... 0.15	SB.... L 0.2
AL....	CR.....	MG.... 0.1	SC....
AS.... 0.02	CS..... L 0.1	MN.... L 0.02	SE....
AU.... L 0.1	CU..... 0.02	MO....	SI02.. 94.
B.... 6.9	F..... 2.2	NA.... 390.	
BA.... L 0.1	FE+3....	NA+K..	S04.. 120.
BE.... L 0.1	FE(TOT).. L 0.02	NB....	SR.... 0.07
BR.... 1.			
CA.... 2.1	HCO3.... 406.		
CA+MG.	HG.....	PB.... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.18	
CL.... 280.	I.....	RB.... L 0.02	
CO.... L 0.05	K..... 4.6		

ISOTOPES (0/00)

DEL D OF WATER..... -115.0
 DEL O(18) OF WATER... -13.32
 DEL O(18) OF S04..... -4.00

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 14
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00163

GEO THERM FILE ID: 0002229

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... SUMMER LAKE HOT SPRING (WOODWARD)
 KGRA..... SUMMER LAKE HOT SPRING
 WARING NUMBER..... 42

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 33S 017E 12 NE OF NE
 STATE..... OREGON
 COUNTY..... LAKE
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 42-43.53 N 120-38.75 W
 UTM ZONE... +10
 NORTHING... 4732806.
 EASTING.... 692746.

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.

WATER ANALYSIS

DATE/ANALYST..... USGS
 PH..... 8.5
 SPECIFIC CONDUCTANCE..... 1760.
 TOTAL DISSOLVED SOLIDS... 1120.

ISOTOPES (0/00)

ANALYSIS IN PPM

AL.....	CR.....	MG...	0.4	SI02.	96.
AU.....	CU.....	MO...			
B..... 1.0	F..... 2.2	NA...	399.	S04..	111.
BA.....	FE+3....	NA+K.			
BE.....	FE(TOT).. 0.03				
CA..... 1.4	HC03.... 374.	NO3..	0.1		
CL..... 285.					
CO.....	K..... 6.8				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 14
 REFERENCE..... TRAUGER, 1950

RECORD 00164

GEOTHERM FILE ID: 0000703

GEOTHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BELKNAP HOT SPRINGS
 KGRA..... NEAR BELKNAP-FOLEY HOT SPRINGS
 WARNING NUMBER..... 18

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	16S 006E 11 NE	LAT/LONG... 44-11.65 N 122-02.90 W
STATE..... OREGON		UTM ZONE... +10
COUNTY..... LANE		NORTHING... 4893663.
GEOLOGIC PROVINCE..		EASTING... 576052.
MAP REFERENCE..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000		

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 71.0
 DISCHARGE..... 300. L/MIN
 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG... L 0.02	CO3..... L 1.	LI... 0.95	SB... L 0.2	DEL D OF WATER.....	-95.8
AL.....	CR.....	MG... 0.2	SC...	DEL O(18) OF WATER...	-11.74
AS... 0.35	CS..... L 0.1	MN... 0.02	SE...	DEL O(18) OF S04.....	0.35
AU... L 0.1	CU..... 0.01	MO...	SI02.		
B..... 6.4	F..... 1.2	NA... 690.			

BA.....	FE+3.....	NA+K.	S04..	170.
BE..... L 0.1	FE(TOT). 0.02	NB...	SR...	1.4
BR..... 33.				
CA..... 210.	HC03..... 17.			
CA+MG.	HG..... L 0.0001	PB... L 0.06		
CD..... L 0.01	H2S.....	P04.. 0.21		
CL..... 1300.	I..... 0.2	RB... 0.05		
CO..... L 0.05	K..... 15.			

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00165

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0002230

NAME OF SAMPLE SOURCE... BELKNAP HOT SPRINGS
 KGRA..... NEAR BELKNAP-FOLEY HOT SPRINGS
 WARING NUMBER..... 18

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 16S 006E 11 NE
 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.
 EASTING... 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.....	MG... Q 13.		
AS.....	CS.....	MN... T		
AU.....	CU.....	MO... Q 102.	81.	
B.....	F.....	NA... Q 364.		
BA.....	FE+3.....	NA+K.	S04.. Q 168.	
CA..... Q 455.				
CL..... Q 1343.				
CO.....	K..... Q 69.			

ISOTOPES (0/00)

OTHER ANALYTICAL DATA... CHEMISTRY RECALCULATED; REPORTED:
 FE2O3+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..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00166

GEOOTHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015423

NAME OF SAMPLE SOURCE... BIGELOW HOT SPRINGS
 WELL/SPRING NUMBER..... 15S/6E-26BA

SPECIFIC CONDUCTANCE..... 2890.

ANALYSIS IN MG/L

AG..... L 0.02	CO3..... L 1.	LI... 0.52	SB... L 0.2
AL.....	CR.....	MG... 0.1	SC...
AS.....	CS..... L 0.1	MN... L 0.02	
AU..... L 0.1	CU..... L 0.01	MO...	SI02. 50.
B..... 5.1	F..... 0.8	NA... 392.	S04.. 260.
BA..... L 0.1	FE+3.....	NA+K.	SR... 2.0
BE..... L 0.1	FE(TOT). L 0.02	NB...	
CA..... 225.	HCO3..... 19.	PB... L 0.06	
CA+MG.	HG..... 0.0005	RB... 0.03	
CD..... L 0.01			
CL..... 788.	I.....		
CO..... L 0.05	K..... 6.3		

ISOTOPES (0/00)

DEL D OF WATER..... -92.5
 DEL O(18) OF WATER... -11.97

REFERENCE AND IDENTIFICATION

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

RECORD 00168

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015426

NAME OF SAMPLE SOURCE... COUGAR RESERVOIR HOT SPRINGS (RIDER)
 WELL/SPRING NUMBER..... 17S/5E-20BB

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 17S 005E 20 NW OF NW
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500; SALEM 1:250000
 OTHER LOCALITY INFORMATION: UPPER SPRING

LAT/LONG... 44-04.95 N 122-14.00 W
 UTM ZONE... +10
 NORTHING... 4881105.
 EASTING... 561383.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/03/08 BOWEN, R.
 SAMPLE NUMBER..... WS-76 ORE DEPT ENVIRONMENTAL QUALITY
 TEMPERATURE (C)..... 42.0
 DISCHARGE..... 114. L/MIN
 OTHER SAMPLE INFORMATION.. SEVERAL WARM SPRINGS IN CREEK .

WATER ANALYSIS

DATE/ANALYST..... 1976/06/28 JOHNSON, ELLEN M.
 PH..... Q 8.2
 SPECIFIC CONDUCTANCE..... 2660.
 ALKALINITY..... 15. AS CaCO3
 TOTAL DISSOLVED SOLIDS... 1763.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....	CO3.....	LI... 0.64	
AL..... L 0.05	CR.....	MG... 0.2	
AS..... 0.1	CS.....	MN... L 0.05	
AU.....	CU.....	MO... 320.	SI02. 47.
B..... 6.2	F..... 0.87	NA+K.	S04.. 185.
BA.....	FE+3.....		
BE.....	FE(TOT). 0.1	NH4.. 0.12	
BI.....	GA.....	P04.. 0.08	
CA..... 196.			
CD.....	H2S.....		
CL..... 693.			

CO..... K..... 6.8
 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... 03
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00169

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015424

NAME OF SAMPLE SOURCE... FOLEY SPRINGS
 KGRA..... BELKNAP-FOLEY HOT SPRINGS
 WELL/SPRING NUMBER..... 16S/6E-28BB
 WARING NUMBER..... 19

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 16S 006E 28 NW OF NW
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500, SALEM 1:250000

LAT/LONG... 44-09.20 N 122-05.85 W
 UTM ZONE... +10
 NORTHING... 4889083.
 EASTING... 572173.

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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....	CO3.....	LI... 0.96		
AL... L 0.01	CR.....	MG... 0.8		
AS... 0.21				
AU.....	CU.....	MO... SI02. 60.		
B..... 10.	F..... 0.81	NA... 475.		
BA.....	FE+3.....	NA+K. S04.. 550.		
BE.....	FE(TOT), L 0.05			
BI.....	GA.....	NH4.. L 0.01		
CA... 494.				
CD.....	H2S.....	P04.. 0.06		
CL... 1304.				
CO.....	K..... 11.			

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 02
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00170

GEO THERM SAMPLE FILE

 GEOTHERM FILE ID: 0015973

NAME OF SAMPLE SOURCE... FRISSEL ROAD SPRING

KGRA..... BELKNAP-FOLEY
 WELL/SPRING NUMBER..... 16S-6E-2-CD

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 16S 006E 02 SE OF SW
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. WESTERN CASCADES
 MAP REFERENCE..... MCKENZIE BRIDGE 1:62500

COORDINATES
 LAT/LONG... 44-12.06 N 122-03. W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/08/08 BROWN, DAVID
 SAMPLE NUMBER..... WS79-270
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 18.
 AMBIENT 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.

ANALYSIS IN MG/L

AG.....		CO3.....		LI... L	0.01		
AL.... L	0.1	CR.....		MG... L	0.88		
AS.... L	0.005	CS.....		MN... L	0.02		
AU.....		CU.....		MO... L		SI02..	14.
B.....	0.09	F..... L	0.1	NA... L	1.7		
BA.....		FE+3... L		NA+K.. L		SO4..	0.5
BE.....		FE(TOT). L	0.05				
CA.....	2.6	HCO3... L		NO3.. L	0.07		
CD.....		H2S.....		P04.. L	0.004		
CL.... L	0.6						
CO.... L		K.....	0.3				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00171

GEOHERM FILE ID: 0015968

GEOHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KITSON HOT SPRING
 KGRA..... MCCREDIE HOT SPRINGS
 WELL/SPRING NUMBER..... 22S-4E-6-AD

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 22S 004E 06 SE OF NE
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. WESTERN CASCADES
 MAP REFERENCE..... OAKRIDGE 1:62500

COORDINATES
 LAT/LONG... 43-41.3 N 122-2.5 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/08/08 WOLLER, NEIL
 SAMPLE NUMBER..... WS79-279
 POINT OF COLLECTION.. PIPE LEADING FROM ORIFICE.
 TEMPERATURE (C)..... 44.
 AMBIENT TEMP (C)..... 17.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/02 BANERJEE, KALA C.
PH..... 7.5
SPECIFIC CONDUCTANCE..... 10500.
ALKALINITY..... 18. AS CAC03
TOTAL DISSOLVED SOLIDS... 6500.

ISOTOPES (0/00)

ANALYSIS IN MG/L
AG.... CO3..... LI... 2.0
AL.... 0.14 CR..... MG... 1.5
AS.... 0.125 CS..... MN... 0.12
AU.... CU..... MO... SI02. 49.
B..... F..... 2.6 NA... 1370.
BA.... FE+3..... NA+K. S04.. 149.
BE.... FE(TOT). 0.05
CA.... 720. HC03..... NO3.. L 0.02
CD.... H2S..... P04.. 0.081
CL.... 3340.
CO.... K..... 25.

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00172

GEOHERM FILE ID: 0015468

GEOHERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KITSON SPRINGS
KGRA..... NEAR MCCREDIE HOT SPRINGS
WARNING NUMBER..... 23

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 22S 004E 06 NE
STATE..... OREGON
COUNTY..... LANE
GEOLOGIC PROVINCE.. CASCADES
MAP REFERENCE..... OAKRIDGE 1:62500

LAT/LONG... 43-41.35 N 122-22.50 W
UTM ZONE... +10
NORTHING... 4837324.
EASTING.... 550371.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1978/05/11 MARINER, R. H. AND EVANS, W. C.
POINT OF COLLECTION.. INFLOW PIPE TO SWIMMING POOL
TEMPERATURE (C)..... 43.
WATER TREATMENT..... FIELD FILTERED, ACIDIFIED, SILICA DILUTION, AND ALKALINITY DETERMINED ON A COOLED SAMPLE.

WATER ANALYSIS

DATE/ANALYST..... 1978/07/00 BARNES GROUP
PH..... 7.31 AT(C) 43.
SPECIFIC CONDUCTANCE..... 10100.
ALKALINITY..... 24. AS HC03

ISOTOPES (0/00)

ANALYSIS IN MG/L
AG.... CO3..... LI... 2.0
AL.... 0.002 CR..... MG... 1.6
AS.... CS..... 0.1 MN... 0.15
AU.... CU..... L 0.01 MO... SI02. 45.
B.... 22. F..... 2.4 NA... 1500.
BA.... FE+3..... NA+K. S04.. 210.
BE.... FE(TOT). L 0.04
BR.... GE..... NI... L 0.02
CA.... 710. HG..... L 0.0001 PB... L 0.1
CA+MG. H2S..... L 0.5
CD.... L 0.01

CL.... 3450. I..... RB... 0.1 ZN... L 0.01
CO.... L 0.02 K..... 26.

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 06
REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00173

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002232

NAME OF SAMPLE SOURCE... KITSON SPRINGS
KGRA..... NEAR MCCREDIE HOT SPRINGS
WARING NUMBER..... 23

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 22S 004E 06
STATE..... OREGON
COUNTY..... LANE
GEOLOGIC PROVINCE..

COORDINATES
LAT/LONG... 43-41.35 N 122-22.50 W
UTM ZONE... +10
NORTHING... 4837324.
EASTING... 550371.

MAP REFERENCE..... OAKRIDGE 1:62500
OTHER LOCALITY INFORMATION: 7 MI. SOUTHEAST OF OAKRIDGE, ORE.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1958/03/30 FETH, J.
SAMPLE NUMBER..... LAB# 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.

ANALYSIS IN PPM

AG....		CO3..... N	LI... 1.8		
AL.... 0.27		CR.....	MG... 5.7		
AS.... N		CS.....	MN... N		
AU....		CU.....	MO... 1450.	SI02. 47.	
B.... 25.		F..... 2.8	NA... 197.	S04..	
BA....		FE+3....			
BE....		FE(TOT). 0.01			
BI....		GA.....	NH4.. 0.5		
BR.... 6.6					
CA.... 726.		HC03..... 27.	N03.. 2.7		
CD....		H2S..... N	P04.. 0.54		
CL.... 3420.		I..... 0.9			
CO....		K..... 28.			

ISOTOPES (0/00)

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 00174

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015975

NAME OF SAMPLE SOURCE... MCCREDIE HOT SPRING NO. 2
 KGRA..... MCCREDIE HOT SPRINGS
 WELL/SPRING NUMBER..... 21S-4E-36-BC

LOCATION TOWNSHIP-RANGE COORDINATES
 COUNTRY..... UNITED STATES 21S 004E 36 SW OF NW LAT/LONG... 43-42.6 N 122-17.3 W
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. WESTERN CASCADES
 MAP REFERENCE..... OAKRIDGE 1:62500
 OTHER LOCALITY INFORMATION: SPRING LOCATED ON SOUTH SIDE OF SALT CREEK.

SAMPLE DESCRIPTION AND CONDITIONS
 DATE/COLLECTOR..... 1979/08/08 WOLLER, NEIL AND GEST, DON
 SAMPLE NUMBER..... WS79-276
 POINT OF COLLECTION.. WIER BOX
 TEMPERATURE (C)..... 62.
 AMBIENT TEMP (C)..... 18.

WATER ANALYSIS
 DATE/ANALYST..... 1979/10/02 BANERJEE, KALA C.
 PH..... 7.2 AT(C) 62.
 SPECIFIC CONDUCTANCE..... 6750.
 ALKALINITY..... 16. AS CAC03
 TOTAL DISSOLVED SOLIDS... 4200.

ANALYSIS IN MG/L ISOTOPES (0/00)

AG.....	CO3.....	LI...	1.5		
AL..... 0.47	CR.....	MG...	2.4		
AS..... 0.108	CS.....	MN...	0.13		
AU.....	CU.....	MO...		SI02..	78.
B..... 9.9	F..... 2.3	NA...	885.	S04..	272.
BA.....	FE+3.....	NA+K.			
BE.....	FE(TOT).. 0.43				
CA..... 456.	HCO3.....	N03..	0.02		
CD.....	H2S.....	P04..	0.06		
CL..... 2030.					
CO.....	K..... 22.				

REFERENCE AND IDENTIFICATION
 COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION.. OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00175

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0000783

NAME OF SAMPLE SOURCE... MCCREDIE SPRINGS
 KGRA..... MCCREDIE HOT SPRINGS
 WARING NUMBER..... 22

LOCATION TOWNSHIP-RANGE COORDINATES
 COUNTRY..... UNITED STATES 21S 004E 36 SW OF NW LAT/LONG... 43-42.35 N 122-17.20 W
 STATE..... OREGON UTM ZONE... +10
 COUNTY..... LANE NORTHING... 4839233.
 GEOLOGIC PROVINCE.. EASTING... 557474.
 MAP REFERENCE..... OAKRIDGE 1:62500, ROSEBERG 1:250000

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, DILUTED

WATER ANALYSIS

DATE/ANALYST..... 1974/00/00 BARNES GROUP
PH..... 7.29
SPECIFIC CONDUCTANCE..... 6730.
ALKALINITY..... 21. AS HCO3

ANALYSIS IN MG/L

AG.... L 0.02 C03..... LI... 1.4 SB... L 0.2
AL.... 0.010 CR..... MG... 0.9
AS.... CS..... 0.1 MN... 0.1
AU.... L 0.1 CU..... 0.02 MO... S102. 79.
B..... 18. F..... 2.7 NA... 1000.
BA.... L 0.1 FE+3..... NA+K. S04.. 240.
BE.... L 0.1 FE(TOT). 0.02 NH4.. 0.26
BI..... GA.....
CA.... 460. HG..... PB... L 0.06
CA+MG. H2S..... P04.. 0.61
CD.... L 0.01 I..... RB... 0.11
CL.... 2200. K..... 22.
CO.... L 0.05

ISOTOPES (0/00)

DEL D OF WATER..... -94.0

GAS ANALYSIS

ANALYSIS IN VOLUME %

CH4.. L 1.
C2H6. N2... 98.
CO2.. L 1.

ISOTOPES (00/0)

OTHER ANALYTICAL DATA... 02+AR=1

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
COMPILER CROSS INDEX... 05
REFERENCE..... MARINER AND OTHERS, 1975

RECORD 00176

GEO THERM FILE ID: 0015425

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MCCREDIE SPRINGS
KGRA..... MCCREDIE HOT SPRINGS
WELL/SPRING NUMBER..... 21S/4E-36BC
WARNING NUMBER..... 22

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 21S 004E 36 SW OF NW
STATE..... OREGON
COUNTY..... LANE
GEOLOGIC PROVINCE..
MAP REFERENCE..... OAKRIDGE 1:62500, ROSEBERG 1:250000

COORDINATES

LAT/LONG... 43-42.35 N 122-17.20 W
UTM ZONE... +10
NORTHING... 4839233.
EASTING.... 557474.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/03/10 BOWEN, R.
SAMPLE NUMBER..... WS 76-062 ORE DEPT ENV QUAL
TEMPERATURE (C)..... 71.0
DISCHARGE..... 76. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1976/06/28 JOHNSON, ELLEN M., OREGON DEPT. ENV. QUAL.
PH..... 7.4 AT(C) 71.
SPECIFIC CONDUCTANCE..... 6770.
ALKALINITY..... 16. AS CAC03
TOTAL DISSOLVED SOLIDS... 4420.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.... C03..... LI... 2.0

AL.....		CR.....		MG...	0.9		
AS.....	0.08	CS.....		MN...	0.05		
AU.....		CU.....		MO...		SI02.	65.
B.....	18.	F.....	2.7	NA...	910.		
BE.....		FE(TOT).	0.1				
RI.....		GA.....		NH4..	0.21		
CA.....	500.						
CA+MG.		HG.....		PB... L	0.05		
CD.....		H2S.....		P04..	0.11		
CL.....	2232.						
CO.....		K.....	28.				

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 05
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00177

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015974

NAME OF SAMPLE SOURCE... WALL CREEK WARM SPRINGS
 WELL/SPRING NUMBER..... 20S-4E-26-BC

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 20S 004E 26 SW OF NW LAT/LONG... 43-48.5 N 122-18.2 W
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE.. WESTERN CASCADES
 MAP REFERENCE..... SARDINE BUTTE 1:62500

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/08/08 WOLLER, NEIL
 SAMPLE NUMBER..... WS79-277
 POINT OF COLLECTION.. ORIFICE
 TEMPERATURE (C)..... 40.
 AMBIENT TEMP (C)..... 18.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/02 BANERJEE, KALA C.
 PH..... 7.6 AT(C) 40.
 SPECIFIC CONDUCTANCE..... 2288.
 ALKALINITY..... 35. AS CAC03
 TOTAL DISSOLVED SOLIDS... 1500.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....		LI...	0.43		
AL.....	0.52	CR.....		MG...	0.53		
AS.....	0.076	CS.....		MN...	0.04		
AU.....		CU.....		MO...		SI02.	73.
B.....		F.....	4.0	NA...	299.		
BA.....		FE+3....		NA+K.		S04..	160.
BE.....		FE(TOT).	0.32				
CA.....	114.	HCO3....		N03.. L	0.02		
CD.....		H2S.....		P04..	0.022		
CL.....	600.						
CO.....		K.....	8.5				

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE GRANT NO. DE-FC07-79ET27220

RECORD 00178

GEO THERM FILE ID: 0015401

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... WALL CREEK WARM SPRINGS
 WELL/SPRING NUMBER..... 20S/4E-26BC
 WARING NUMBER..... 21

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 20S 004E 26 SW OF NW
 STATE..... OREGON
 COUNTY..... LANE
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... SARDINE BUTTE 1:62500, ROSEBERG 1:250000

COORDINATES
 LAT/LONG... 43-48.45 N 122-18.55 W
 UTM ZONE... +10
 NORTHING... 4850509.
 EASTING.... 555567.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/03/10 BOWEN, RICHARD G.
 SAMPLE NUMBER..... WS76-064 ORE. DEPT. ENV. QUAL.
 TEMPERATURE (C)..... 41.0
 DISCHARGE..... 11. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 76/06/28 JOHNSON, ELLEN M., ORE. DEPT. ENV. QUAL.
 PH..... 7.2
 SPECIFIC CONDUCTANCE..... 2340.
 ALKALINITY..... 34.
 TOTAL DISSOLVED SOLIDS... 1461.

ANALYSIS IN MG/L

AG....	CO3.....	LI... 0.57			
AL.... L 0.05	CR.....	MG... 1.			
AS.... 0.07	CS.....	MN... L 0.05			
AU....	CU.....	MO... 3102. 63.			
B.... 6.6	F..... 4.1	NA... 315.			
BA....	FE+3... 0.05	NA+K. 304.. 108.			
BI....	GA.....	NH4.. 0.1			
CA.... 130.					
CD....	H2S.....	P04.. 0.16			
CL.... 602.					
CO....	K..... 11.				

ISOTOPES (0/00)

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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00179

GEO THERM FILE ID: 0015412

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... ALKALI FLAT GRADIENT WELL
 WELL/SPRING NUMBER..... 17S/45E-8AA

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 17S 045E 08 NE OF NE
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MOORES HOLLOW 1:62500, BOISE 1:250000

COORDINATES
 LAT/LONG... 44-06.60 N 117-13.60 W
 UTM ZONE... +11
 NORTHING... 4883899.
 EASTING.... 481860.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1975/05/08 HULL, D. A.

SAMPLE NUMBER..... ORE DEPT ENVIRONMENTAL QUALITY
 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..... 115. AS CAC03
 TOTAL DISSOLVED SOLIDS... 1381.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI...	0.4		
AL....	0.01	CR.....		MG...	0.5		
AS....	0.001	CS.....		MN...	0.05		
AU....		CU.....		MO...		SI02.	32.
B.....	14.	F.....	2.2	NA...	482.		
BA....		FE+3....		NA+K.		S04..	135.
BE....		FE(TOT)..	0.1				
BI....		GA.....		NH4..	0.92		
CA....	16.	HCO3....		N03..	0.03		
CL....	598.						
CO....		K.....	6.7				

QUALIFICATION FIELD..... PH MEASURED IN LAB.

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 28
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00180

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015411

NAME OF SAMPLE SOURCE... ARTESIAN WELL
 WELL/SPRING NUMBER..... 21S/46E-33DD

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	21S 046E 33 SE OF SE	LAT/LONG...	43-41.8 N 117-05.7 W
STATE.....	OREGON		UTM ZONE...	+11
COUNTY.....	MALHEUR		NORTHING...	4837972.
GEOLOGIC PROVINCE..			EASTING....	492345.
MAP REFERENCE.....	ADRIAN 1:24000, BOISE 1:250000			

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/03/03 BOWEN, R. AND HULL, D.
 SAMPLE NUMBER..... ORE DEPT ENVIRONMENTAL QUALITY
 POINT OF COLLECTION.. WELL HEAD
 TEMPERATURE (C)..... 46.0

WATER ANALYSIS

DATE/ANALYST..... 1977/04/27 BANERJEE, KALA C.
 PH..... 9.5
 SPECIFIC CONDUCTANCE..... 670.
 ALKALINITY..... 77. AS CAC03
 TOTAL DISSOLVED SOLIDS... 443.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG....		CO3.....		LI...	0.04		
AL....	0.1	CR.....		MG...	0.1		
AS....	0.01	CS.....		MN...	L 0.05		
AU....		CU.....		MO...		SI02.	44.

RECORD 00182

GEO THERM FILE ID: 0015405

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JONESBORO WARM SPRING
WELL/SPRING NUMBER..... 20S/39E-29DC

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 20S 039E 29 SW OF SE
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE..
MAP REFERENCE..... WESTFALL BUTTE 1:62500, BOISE 1:250000

COORDINATES
LAT/LONG... 43-47.5 N 117-57.5 W
UTM ZONE... +11
NORTHING... 4848964.
EASTING... 422896.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... DELLECHAIE, F.
SAMPLE NUMBER..... AMAX EXPLORATION 89873
TEMPERATURE (C)..... 44.5

WATER ANALYSIS

PH..... 9.6

ANALYSIS IN MG/L

AG....	CO3.....	48.	LI... L 0.1		
AL....	CR.....		MG... L 0.1		
AU....	CU.....		MO... S102.	70.	
B..... L 0.1	F.....	0.8	NA... 72.		
BA....	FE+3....		NA+K. S04..	38.	
CA.... 1.0	HCO3....	50.			
CL.... 11.					
CO....	K.....	0.7			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 24
REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00183

GEO THERM FILE ID: 0015407

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... JUNTURA WARM SPRING #1
WELL/SPRING NUMBER..... 21S/38E-9C

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 21S 038E 09 SW
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE..
MAP REFERENCE..... BEULAH 1:62500, BURNS 1:250000

COORDINATES
LAT/LONG... 43-45.5 N 118-04.0 W
UTM ZONE... +11
NORTHING... 4845369.
EASTING... 414132.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... DELLECHAIE, F.
SAMPLE NUMBER..... AMAX EXPLORATION 90214
TEMPERATURE (C)..... 25.0

WATER ANALYSIS

PH..... 9.4

ANALYSIS IN PPM

AG....	CO3..... N		LI... L 0.1		
AL....	CR.....		MG... 21.		
AU....	CU.....		MO... S102.	55.	
B..... L 1.0	F.....	1.0	NA... 24.		
BA....	FE+3....		NA+K. S04..	16.	

ISOTOPES (0/00)

CA..... 48. HCO3..... 204.
 CL..... 120.
 CO..... K..... 8.2

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 25
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00184

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015409

NAME OF SAMPLE SOURCE... JUNTURA WARM SPRING #2
 WELL/SPRING NUMBER..... 21S/38E-17B

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 21S 038E 17 NW
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BEULAH 1:62500, BURNS 1:250000

COORDINATES
 LAT/LONG... 43-45.5 N 118-05.5 W
 UTM ZONE... +11
 NORTHING... 4845395.
 EASTING.... 412119.

SAMPLE DESCRIPTION AND CONDIIIONS

DATE/COLLECTOR..... DELLECHIE, F.
 SAMPLE NUMBER..... AMAX EXPLORATION 90215
 TEMPERATURE (C)..... 35.0

WATER ANALYSIS

PH..... 9.7

ANALYSIS IN PPM

AG.....	CO3..... 28.	LI... L 0.1		
AL.....	CR.....	MG... L 0.1		
AU.....	CU.....	MO...	SI02. 79.	
B..... L 1.0	F..... 1.3	NA... 78.		
BA.....	FE+3.....	NA+K. 43.		
CA..... 1.0	HCO3..... 76.			
CL..... 140.				
CO.....	K..... 0.8			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 26
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00185

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0000725

NAME OF SAMPLE SOURCE... LUCE HOT SPRINGS
 WARING NUMBER..... 84

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 24S 037E 20
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MCEWEN BUTTE 1:24000

COORDINATES
 LAT/LONG... 43-28.15 N 118-12.08 W
 UTM ZONE... +11
 NORTHING... 4813402.
 EASTING.... 402826.

SAMPLE DESCRIPTION AND CONDIIIONS

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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... L 1.	LI.... 0.27	SB... L 0.2
AL....	CR.....	MG.... 0.5	SC... L 0.2
AS.... 0.04	CS..... L 0.1	MN.... 0.04	
AU.... L 0.1	CU..... 0.01	MO....	SI02. 110.
B..... 6.6	F..... 4.8	NA.... 240.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 290.
BE.... L 0.1	FE(TOT). L 0.02	NB....	SR... 0.42
BI....	GA.....	NH4.. 0.514	
BR.... 0.5			
CA.... 34.	HCO3.... 160.		
CA+MG.	HG..... 0.0001	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.21	
CL.... 140.	I..... 0.03	RB... 0.04	
CO.... L 0.05	K..... 9.7		

ISOTOPES (0/00)

DEL D OF WATER..... -134.0
 DEL O(18) OF WATER... -15.15

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

RECORD 00186

GEO THERM FILE ID: 0000784

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MITCHELL BUTTE HOT SPRINGS
 WARNING NUMBER..... 79

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 21S 045E 12 NE OF NE
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... MITCHELL BUTTE 1:24000, BOISE 1:250000

COORDINATES

LAT/LONG... 43-45.78 N 117-09.34 W
 UTM ZONE... +11
 NORTHING... 4845346.
 EASTING... 487470.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1972/00/00 BARNES GROUP
 TEMPERATURE (C)..... 62.0
 DISCHARGE..... 60. L/MIN
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED
 DEPOSITS OR ALTERATION... TRAVERTINE
 PERTINENT LITHOLOGY..... PLIOCENE CONGLOMERATE, SANDSTONE, SILTSTONE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 8.69
 SPECIFIC CONDUCTANCE..... 559.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 3.	LI.... 0.03	SB... L 0.2
AL.... 0.015	CR.....	MG.... L 0.1	SC... L 0.2
AS.... L 0.01	CS..... L 0.1	MN.... L 0.02	
AU.... L 0.1	CU..... L 0.01	MO....	SI02. 94.
B..... 0.49	F..... 10.	NA.... 110.	

ISOTOPES (0/00)

DEL D OF WATER..... -137.3
 DEL O(18) OF WATER... -16.68

OTHER ANALYTICAL DATA... 02+AR=12

REFERENCE AND IDENTIFICATION

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

RECORD 00188

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015413

NAME OF SAMPLE SOURCE... NORTH HARPER BLM WELL
 WELL/SPRING NUMBER..... 19S/45E-9DB

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 19S 045E 09 NW OF SE
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... JAMIESON 1:62500, BAKER 1:250000

COORDINATES
 LAT/LONG... 43-55.76 N 117-12.72 W
 UTM ZONE... +11
 NORTHING... 4863830.
 EASTING... 482982.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1976/06/11 BOWEN, R. G.
 SAMPLE NUMBER..... ORE DEPT OF ENVIRONMENTAL QUALITY
 POINT OF COLLECTION.. WELL HEAD
 TEMPERATURE (C)..... 36.0
 WELL DEPTH (M)..... 212.

WATER ANALYSIS

DATE/ANALYST..... 1976/07/07 JOHNSON, ELLEN M.
 PH..... Q 8.0
 SPECIFIC CONDUCTANCE..... 714.
 ALKALINITY..... 157. AS CaCO3
 TOTAL DISSOLVED SOLIDS... 476.

ANALYSIS IN MG/L

AG....		CO3.....		LI... 0.21	
AL.... L 0.05		CR.....		MG... 0.5	
AS.... 0.05		CS.....		MN... L 0.05	
AU....		CU.....		MO... 40.	SI02..
B.... 0.26		F..... 1.6		NA... 134.	S04.. 121.
BA....		FE+3.....		NA+K.	
BE....		FE(TOT). L 0.05		NH4.. 0.25	
BI....		GA.....		NO3.. 0.14	
CA.... 3.0		HCO3.....		P04.. 0.13	
CD....		H2S.....			
CL.... 4.3					
CO....		K..... 2.2			

ISOTOPES (0/00)

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... 29
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00189

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015979

NAME OF SAMPLE SOURCE... UNNAMED (J. SEIDER PROPERTY)
 WELL/SPRING NUMBER..... 19S-43E-30-BAC

LOCATION TOWNSHIP-RANGE COORDINATES

COUNTRY..... UNITED STATES 19S 043E 30 SW OF NE OF NW LAT/LONG... 43-53.50 N 117-29.00 W
STATE..... OREGON
COUNTY..... 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..... WS79-348
POINT OF COLLECTION.. ORIFICE
TEMPERATURE (C)..... 82.
AMBIENT 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.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....		LI...	0.1		
AL.....	0.06	CR.....		MG...	0.04		
AS.....	0.005	CS.....		MN... L	0.02		
AU.....		CU.....		MO...		SI02.	130.
B.....	5.3	F.....	7.0	NA...	143.		
BA.....		FE+3....	L 0.05	NA+K.		S04..	78.
CA.....	3.5	HCO3....		N03.. L	0.02		
CD.....		H2S.....		P04..	0.008		
CL.....	74.						
CO.....		K.....	3.1				

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE CONTRACT NO. DE-FC07-79ET27220

RECORD 00190

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0000786

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING AT THREE FORKS
WARING NUMBER..... 85C

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 35S 045E 03
STATE..... OREGON
COUNTY..... MALHEUR
GEOLOGIC PROVINCE..
MAP REFERENCE..... JORDAN VALLEY 1:250000
LAT/LONG... 42-32.0 N 117-10.9 W
UTM ZONE... +11
NORTHING... 4708796.
EASTING.... 485081.

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

DATE/ANALYST..... 1973/00/00 BARNES GROUP
PH..... 8.11
SPECIFIC CONDUCTANCE..... 338.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 1.	LI... 0.04	SB... L 0.2	DEL D OF WATER..... -127.4
AL....	CR.....	MG... 0.7	SC...	DEL O(18) OF WATER... -16.09
AS....	CS..... L 0.1	MN... L 0.02		
AU.... L 0.1	CU..... L 0.01	MO...	SI02. 40.	
B..... 0.11	F..... 4.2	NA... 61.		
BA.... L 0.1	FE+3....	NA+K.	S04.. 34.	
BE.... L 0.1	FE(TOT). L 0.02	NB...	SR... 0.06	
CA.... 11.	HCO3.... 108.			
CA+MG.	HG.....	PB... L 0.06		
CD.... L 0.01				
CL.... 18.	I.....	RB... L 0.02		
CO.... L 0.05	K..... 1.2			

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 18
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00191

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0002239

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING AT THREE FORKS
 WARING NUMBER..... 85C

<u>LOCATION</u>	<u>TOWNSHIP-RANGE</u>
COUNTRY..... UNITED STATES	35S 045E 03
STATE..... OREGON	
COUNTY..... MALHEUR	
GEOLOGIC PROVINCE..	
MAP REFERENCE..... JORDAN VALLEY 1:250000	

COORDINATES
 LAT/LONG... 42-32.0 N 117-10.9 W
 UTM ZONE... +11
 NORTHING... 4708796.
 EASTING.... 485081.

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....	CO3..... 11.			
AL....	CR.....	MG... 1.6		
AU....	CU.....	MO... 44.	SI02. 44.	
B.....	F..... 4.9	NA... 62.		
BA....	FE+3....	NA+K.	S04.. 31.	
BE....	FE(TOT). 0.02			
CA.... 12.	HCO3.... 97.	N03.. 2.9		
CL.... 19.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 18
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00192

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000733

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR MCDERMITT
 WARING NUMBER..... 86

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 042E 25
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... JORDAN VALLEY 1:250000

COORDINATES
 LAT/LONG... 42-04.7 N 117-45.6 W
 UTM ZONE... +11
 NORTHING... 4658539.
 EASTING.... 437134.

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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 13.	LI... 0.06	SB... L 0.2
AL.... 0.013	CR.....	MG... L 0.1	SC... L 0.02
AS.... 0.05	CS..... L 0.1	MN... L 0.02	
AU.... L 0.1	CU..... L 0.01	MO... L 0.02	SI02. 72.
B..... 1.1	F..... 6.6	NA... 130.	
BA.... L 0.1	FE+3....	NA+K.	S04.. 52.
BE.... L 0.1	FE(TOT). L 0.02	NB... L 0.05	SR... L 0.05
BI....	GA.....	NH4.. 0.103	
BR.... 0.4			
CA.... 0.6	HCO3..... 237.		
CA+MG.	HG..... 0.0001	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.06	
CL.... 14.	I..... 0.008	RB... L 0.02	
CO.... L 0.05	K..... 1.0		

ISOTOPES (0/00)

DEL D OF WATER..... -134.6
 DEL O(18) OF WATER... -16.95

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 19
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00193

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRING NEAR MCDERMITT
 WARING NUMBER..... 86

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 40S 042E 25
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... JORDAN VALLEY 1:250000

COORDINATES
 LAT/LONG... 42-04.7 N 117-45.6 W
 UTM ZONE... +11
 NORTHING... 4658539.
 EASTING.... 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..... LAB# 356
 TEMPERATURE (C)..... 53.5
 DISCHARGE..... 1514. L/MIN

GEO THERM FILE ID: 0002238

PERTINENT LITHOLOGY..... FROM ALLUVIUM, PROVABLY ON TERTIARY LAKE

WATER ANALYSIS

DATE/ANALYST..... 1958/03/24 WHITE AD AND SCHUCH
 PH..... 9.2
 SPECIFIC CONDUCTANCE..... 604.
 TOTAL DISSOLVED SOLIDS... 426.

ANALYSIS IN PPM

AG....		CO3.....	43.	LI....	N		
AL....		CR.....		MG....	N		
AU....		CU.....		MO....		S102.	90.
B.....	0.7	F.....	7.0	NA....	135.		
BA....		FE+3....		NA+K.		S04..	46.
CA....	1.2	HC03....	176.	NO3..	N		
CL....	15.						
CO....		K.....	1.8				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 19
 REFERENCE..... U.S. GEOLOGICAL SURVEY, UNPUBLISHED DATA

RECORD 00194

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000721

NAME OF SAMPLE SOURCE... UNNAMED HOT SPRINGS NEAR LITTLE VALLEY
 WARNING NUMBER..... 76

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	19S 043E 30 NW	LAT/LONG...	43-53.48 N 117-30.00 W
STATE.....	OREGON		UTM ZONE...	+11
COUNTY.....	MALHEUR		NORTHING...	4859709.
GEOLOGIC PROVINCE..			EASTING....	459839.
MAP 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 MICROMETRE 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.

ANALYSIS IN MG/L

AG....	L 0.02	CO3.....	1.	LI....	0.11	SB....	L 0.2
AL....		CR.....		MG....	L 0.05	SC....	
AS....		CS.....	L 0.1	MN....	L 0.02	SE....	
AU....	L 0.1	CU.....	L 0.01	MO....		S102.	115.
B.....	4.7	F.....	6.8	NA....	160.		
BA....	L 0.1	FE+3....		NA+K.		S04..	110.
BE....	L 0.1	FE(TOT).	L 0.02	NB....		SR....	L 0.05
CA....	3.2	HC03....	127.				
CA+MG.		HG.....	0.0007	PB....	L 0.06		
CD....	L 0.01						
CL....	74.	I.....		RB....	0.02		
CO....	L 0.05	K.....	3.2				

ISOTOPES (0/00)

DEL D OF WATER..... -139.7
 DEL O(18) OF WATER... -16.52
 DEL O(18) OF S04..... -8.63

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 06
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00195

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015414

NAME OF SAMPLE SOURCE... UNNAMED WARM SPRING NEAR BULLY CREEK
 WELL/SPRING NUMBER..... 18S/43E-40A

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 18S 043E 04 NE OF SE
 STATE..... OREGON
 COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... JAMIESON 1:62500, BOISE 1:250000

LAT/LONG... 44-01.95 N 117-26.95 W
 UTM ZONE... +11
 NORTHING... 4875364.
 EASTING... 464007.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1977/06/24 BOWEN, R.
 SAMPLE NUMBER..... ORE DEPT OF ENVIRONMENTAL QUALITY
 TEMPERATURE (C)..... 37.0
 DISCHARGE..... 76. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1977/11/29 BANERJEE, KALA C.
 PH..... 7.8 AT(C) 35.
 SPECIFIC CONDUCTANCE..... 115.
 ALKALINITY..... 37. AS CAC03
 TOTAL DISSOLVED SOLIDS... 181.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....		LI... 0.04			
AL..... 0.28		CR.....		MG... 15.			
AS..... 0.02		CS.....		MN... 0.05			
AU.....		CU.....		MO... 1.4	SI02.	99.	
B..... 0.15		F..... 0.7		NA... 1.4	S04..	1.0	
BA.....		FE+3.....		NA+K.			
BE.....		FE(TOT). 0.4		NH4.. 0.28			
BI.....		GA.....		NO3.. 0.06			
CA..... 37.		HCO3.....					
CL..... 0.5							
CO.....		K..... 0.4					

OTHER ANALYTICAL DATA... CO2 PRESENT

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 30
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00196

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000685

NAME OF SAMPLE SOURCE... VALE HOT SPRINGS
 KGRA..... VALE HOT SPRINGS
 WARING NUMBER..... 77

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 18S 045E 20 SW OF SE
 STATE..... OREGON

LAT/LONG... 43-58.96 N 117-13.98 W
 UTM ZONE... +11

COUNTY..... MALHEUR
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... VALE EAST 1:24000, BOISE 1:250000

NORTHING... 4869758.
 EASTING.... 481313.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/00/00 BARNES GROUP
 TEMPERATURE (C)..... 73.0
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED

WATER ANALYSIS

DATE/ANALYST..... 1974/00/00 BARNES GROUP
 PH..... 7.47
 SPECIFIC CONDUCTANCE..... 1530.
 ALKALINITY..... 143. AS HCO3

ANALYSIS IN MG/L

AG.... L 0.02	CO3.....	LI... 0.28	SB... L 0.2
AL.... 0.017	CR.....	MG... 0.8	SC... 0.8
AS....	CS..... L 0.1	MN... 0.04	SE... 0.04
AU.... L 0.1	CU..... L 0.01	MO... 0.04	SI02.. 130.
B.... 9.4	F..... 6.1	NA... 310.	S04.. 100.
BA.... L 0.1	FE+3....	NA+K.	
BE.... L 0.1	FE(TOT). L 0.02		
BI....	GA.....	NH4.. 1.0	
CA.... 19.			
CA+MG.	HG.....	PB... L 0.06	
CD.... L 0.01			
CL.... 360.	I.....	RB... 0.09	
CO.... L 0.05	K..... 16.		

ISOTOPES (0/00)

DEL D OF WATER..... -135.0
 DEL O(18) OF WATER... -15.18
 DEL O(18) OF S04..... -6.56

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00197

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0003002

NAME OF SAMPLE SOURCE... VALE HOT SPRINGS
 WARING NUMBER..... 77

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	18S 045E 20 SW OF SE	LAT/LONG... 43-58.96 N 117-14.98 W
STATE..... OREGON	B&M: WILLAMETTE	UTM ZONE... +11
COUNTY..... MALHEUR		NORTHING... 4869762.
GEOLOGIC PROVINCE.. MAP REFERENCE..... VALE EAST 1:24000		EASTING.... 479977.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1974/08/07
 TEMPERATURE (C)..... 90.

WATER ANALYSIS

ANALYSIS IN MG/L

AL....	CR.....	MG... 0.8	SC... 0.8
AS....	CS.....	MN... 0.04	SE... 0.04
BA....	FE+3....	NA+K.	S04.. 112.
CL.... 350.			

ISOTOPES (0/00)

DEL O(18) OF WATER... -15.00
 DEL O(18) OF S04..... -3.91

REFERENCE AND IDENTIFICATION

COMPILED BY..... SWANSON, JAMES R.
 COMPILER AFFILIATION... U. S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05

REFERENCE..... NEHRING AND OTHERS, 1979

RECORD 00198

GEO THERM FILE ID: 0015972

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS
KGRA..... BREITENBUSH HOT SPRINGS
WELL/SPRING NUMBER..... 9S-7E-20-A

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 09S 007E 20 NE
STATE..... OREGON
COUNTY..... MARION
GEOLOGIC PROVINCE.. WESTERN CASCADES
MAP REFERENCE..... BREITENBUSH HOT SPRINGS 1:62500

COORDINATES
LAT/LONG... 44-46.87 N 121-58.5 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/08/27 HARTLEY, GEORGE W.
SAMPLE NUMBER..... WS79-271
POINT OF COLLECTION.. PIPE LEADING FROM SPRING.
TEMPERATURE (C)..... 98.
AMBIENT TEMP (C)..... 19.

WATER ANALYSIS

DATE/ANALYST..... 1979/10/02 BANERJEE, KALA C.
PH..... 8.0 AT(C) 98.
SPECIFIC CONDUCTANCE..... 4110.
ALKALINITY..... 116. AS CAC03
TOTAL DISSOLVED SOLIDS... 2463.

ANALYSIS IN MG/L

AG.....	C03.....	LI...	1.8		
AL.... L 0.1	CR.....	MG...	1.5		
AS.... 0.38	CS.....	MN... L	0.02		
AU.....	CU.....	MO...		SI02.	175.
B.... 4.6	F..... 3.9	NA...	651.	S04..	126.
BA.....	FE+3.....	NA+K.			
BE.....	FE(TOT).. 0.36				
CA.... 103.	HCO3.....	N03..	0.57		
CD.....	H2S.....	P04..	0.172		
CL.... 1160.					
CO....	K..... 16.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI

RECORD 00199

GEO THERM FILE ID: 0000701

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS
KGRA..... BREITENBUSH HOT SPRINGS

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 09S 007E 20 NE
STATE..... OREGON
COUNTY..... MARION
GEOLOGIC PROVINCE.. WESTERN CASCADES
MAP REFERENCE..... BREITENBUSH HOT SPRINGS 1:62500

COORDINATES
LAT/LONG... 44-46.86 N 121-58.54 W
UTM ZONE... +10
NORTHING... 4958916.
EASTING... 581043.

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 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED
 DEPOSITS OR ALTERATION..... TRAVERTINE
 PERTINENT LITHOLOGY..... ROCK TYPE: ANDESITE

WATER ANALYSIS

DATE/ANALYST..... 1972/00/00 BARNES GROUP
 PH..... 7.31
 SPECIFIC CONDUCTANCE..... 4030.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... L 1.	LI.... 1.8	SB... L 0.2
AL....	CR.....	MG.... 1.3	SC...
AS.... 0.51	CS..... 0.1	MN.... 0.22	SE...
AU.... L 0.1	CU..... 0.01	MO....	SI02.. 83.
B..... 4.1	F..... 3.4	NA.... 720.	
BA.... L 0.1	FE+3....	NA+K..	S04.. 140.
BE.... L 0.1	FE(TOT).. 0.02	NB....	SR... 0.73
BR.... 5.			
CA.... 100.	HCO3.... 142.		
CA+MG.	HG..... 0.0002	PB... L 0.06	
CD.... L 0.01	H2S.....	P04.. 0.25	
CL.... 1300.	I..... 0.1	RB... 0.18	
CO.... L 0.05	K..... 31.		

ISOTOPES (0/00)

DEL D OF WATER..... -97.5
 DEL O(18) OF WATER... -11.66
 DEL O(18) OF S04..... -2.67

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00200

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015445

NAME OF SAMPLE SOURCE... BREITENBUSH HOT SPRINGS - WELL
 KGRA..... BREITENBUSH HOT SPRINGS
 WELL/SPRING NUMBER..... 9S/7E-20A
 WARING NUMBER..... 06

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 09S 007E 20 NE
 STATE..... OREGON
 COUNTY..... MARION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... BREITENBUSH HOT SPRINGS 1:62500

COORDINATES

LAT/LONG... 44-46.86 N 121-58.54 W
 UTM ZONE... +10
 NORTHING... 4958916.
 EASTING... 581043.

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 GEYERSING

WATER ANALYSIS

DATE/ANALYST..... 1978/03/16 BANERJEE, KALA C.
 PH..... 8.5
 ALKALINITY..... 72. AS CAC03
 TOTAL DISSOLVED SOLIDS... 2439.

ANALYSIS IN MG/L

AG....	CO3.....	LI.... 1.9	
AL....	CR.....	MG.... 1.3	SC...

ISOTOPES (0/00)

DEL O(18) OF WATER... -12.59

AS.....	0.54	CS.....		MN....		SE....		DEL 0(18) OF S04.....	-3.28
AU.....		CU.....		MO....		SI02..	Q 182.		
B.....	5.4	F.....	4.0	NA....	690.	S04..	96.		
BA.....		FE+3....		NA+K.					
CA.....	90.								
CL.....	1170.								
CO.....		K.....	34.						

QUALIFICATION FIELD..... SIO2 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..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA ; NEHRING AND OTHERS

RECORD 00201

GEO THERM FILE ID: 0015415

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... CORBETT WARM SPRING
 WELL/SPRING NUMBER..... 1N/4E-27DA

LOCATION

COUNTRY..... UNITED STATES TOWNSHIP-RANGE 01N 004E 27 NE OF SE
 STATE..... OREGON
 COUNTY..... MULTNOMAH
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... WASHOUGAL 1:24000, VANCOUVER 1:250000

COORDINATES

LAT/LONG... 45-32.5 N 122-17.5 W
 UTM ZONE... +10
 NORTHING... 5043152.
 EASTING... 555301.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... HULL, D.
 SAMPLE NUMBER..... ORE DEQ WS-75-103
 TEMPERATURE (C)..... 18.0
 DISCHARGE..... 76. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1975/04/16 L. W. S.
 PH..... 8.2
 SPECIFIC CONDUCTANCE..... 570.
 ALKALINITY..... 104. AS CAC03
 TOTAL DISSOLVED SOLIDS... 327.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.....		CO3.....		LI....	0.03		
AL.....	0.16	CR.....		MG....	0.8		
AS.....	0.12	CS.....		MN....	0.1		
AU.....		CU.....		MO....		SI02..	44.
B.....	1.2	F.....	2.4	NA....	86.	S04..	5.9
BA.....		FE+3....		NA+K.			
BE.....		FE(TOT)..	0.2				
BI.....		GA.....		NH4..	0.01		
CA.....	22.	HCO3....		N03..	0.01		
CD.....		H2S.....		P04..	0.05		
CL.....	77.						
CO.....		K.....	8.9				

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... 01
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00202

GEO THERM FILE ID: 0015416

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... YMCA CAMP COLLINS
WELL/SPRING NUMBER..... 1S/4E-10BB

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

COORDINATES
LAT/LONG... 45-30.2 N 122-18.3 W
UTM ZONE... +10
NORTHING... 5038884.
EASTING.... 554297.

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.

ANALYSIS IN MG/L

AG.....		CO3.....	5.0				
AL.....		CR.....		MG...	0.2		
AU.....		CU.....		MO...		SI02.	60.
B.....	0.38	F.....	3.2	NA...	10.		
BA.....		FE+3.....		NA+K.		S04..	1.2
BE.....		FE(TOT)..	0.06				
CA.....	5.2	HCO3.....	114.	N03..	0.5		
CL.....	92.						
CO.....		K.....	9.6				

ISOTOPES (0/00)REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
COMPILER AFFILIATION.. OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
COMPILER CROSS INDEX... 02
REFERENCE..... NEWCOMB, 1972

RECORD 00203

GEO THERM FILE ID: 0015347

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... BINGHAM SPRINGS

LOCATION TOWNSHIP-RANGE
COUNTRY..... UNITED STATES 03N 037E 18 SE OF NE
STATE..... OREGON
COUNTY..... UMATILLA
GEOLOGIC PROVINCE..
MAP REFERENCE..... BINGHAM SPRINGS 1:24000, PENDLETON 1:250000

COORDINATES
LAT/LONG... 45-44.47 N 118-13.96 W
UTM ZONE... +11
NORTHING... 5065811.
EASTING.... 404105.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1954/04/01
TEMPERATURE (C)..... 34.4
DISCHARGE..... 322. L/MIN

WATER ANALYSIS

PH..... 8.6
SPECIFIC CONDUCTANCE..... 765.
TOTAL DISSOLVED SOLIDS... 464.

ANALYSIS IN PPM

ISOTOPES (0/00)

AG....		CO3.....	9.0				
AL....		CR.....		MG...	3.5		
AU....		CU.....		MO...		SI02.	68.
B.....	10.	F.....	4.0	NA...	133.		
BA....		FE+3....		NA+K.		S04..	0.2
BE....		FE(TOT).	0.2				
CA....	14.	HCO3....	64.	N03..	0.2		
CD....		H2S.....		P04..	0.2		
CL....	192.						
CO....		K.....	7.6				

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... HOGENSON, 1964

RECORD 00204

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000785

NAME OF SAMPLE SOURCE... LEHMAN SPRINGS
 WARNING NUMBER..... 08

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY.....	UNITED STATES	05S 033E 12 NW OF SE NE	LAT/LONG...	45-09.06 N 118-39.55 W
STATE.....	OREGON		UTM ZONE...	+11
COUNTY.....	UMATILLA		NORTHING...	5000847.
GEOLOGIC PROVINCE..			EASTING....	369572.
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.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.... L 0.02	CO3.....	13.	LI...	0.03	SB... L 0.2	DEL D OF WATER.....	-121.3
AL....	CR.....		MG...	0.1	SC...	DEL O(18) OF WATER...	-16.52
AS.... 0.02	CS..... L 0.1		MN... L 0.02				
AU.... L 0.1	CU..... L 0.01		MO...		SI02.	44.	
B..... 0.12	F..... 2.1		NA...	53.			
BA.... L 0.1	FE+3....		NA+K.		S04..	23.	
BE.... L 0.1	FE(TOT). L 0.02		NB...		SR... L 0.05		
BR.... 0.006							
CA.... 0.9	HCO3....	101.	PB... L 0.06				
CA+MG.	HG.....	0.0003	P04..	0.12			
CD.... L 0.01	H2S.....		RB... L 0.02				
CL.... 5.4	I.....	0.001					
CO.... L 0.05	K.....	0.7					

GAS ANALYSIS

ISOTOPES (00/0)

ANALYSIS IN VOLUME %
 CH4.. L 0.1

C2H6. N2... 94.
 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... 03
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00205

GEOITHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015418

NAME OF SAMPLE SOURCE... COVE WARM SPRING
 WELL/SPRING NUMBER..... 3S/40E-22BB
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 03S 040E 22 NW OF NW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... COVE 1:24000, GRANGEVILLE 1:250000

COORDINATES

LAT/LONG... 45-17.67 N 117-48.38 W
 UTM ZONE... +11
 NORTHING... 5015765.
 EASTING.... 436773.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1957/06/02
 TEMPERATURE (C)..... 29.4
 DISCHARGE..... 855. L/MIN

WATER ANALYSIS

PH..... 9.8
 SPECIFIC CONDUCTANCE..... 150.
 TOTAL DISSOLVED SOLIDS... 109.

ISOTOPES (0/00)

ANALYSIS IN MG/L
 AG..... CO3..... 32.
 AU..... CU..... MO... SI02. 29.
 B..... 0.08 F..... 0.3 NA... 30.
 BA..... FE+3..... 0.03 NA+K. S04.. 8.8
 CA..... 1.6 HCO3..... 5.0 NO3.. N
 CL..... 5.0
 CO..... K..... 0.5

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00206

GEOOTHERM SAMPLE FILE

GEOOTHERM FILE ID: 0015980

NAME OF SAMPLE SOURCE... CRESTON SHAW WELL
 WELL/SPRING NUMBER..... 1S-39E-31-DD
LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 01S 039E 31 SE OF SE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. BLUE MOUNTAINS
 MAP REFERENCE..... IMBLER 1:24000

COORDINATES

LAT/LONG... 45-27.12 N 117-58.19 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/12/06 GEST, D.
 SAMPLE NUMBER..... WS79-381

POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 22.
 AMBIENT 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. AS CAC03
 TOTAL DISSOLVED SOLIDS... 161.

ANALYSIS IN MG/L

AG.....	CO3.....	LI... L 0.01		
AL.... L 0.05	CR.....	MG... 0.55		
AS.... L 0.005	CS.....	MN... L 0.02		
AU.....	CU.....	MO... 72.	SI02..	
B..... L 0.2	F..... 0.4	NA... 19.		
BA.....	FE+3....	NA+K..	S04..	3.8
BE.....	FE(TOT).. 0.06			
CA..... 8.5				
CD.....	H2S.....	P04.. 0.018		
CL..... 0.9				
CO.....	K..... 5.1			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES. DOE GRANT NO. DE-FC07-79ET27220

RECORD 00207

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000711

NAME OF SAMPLE SOURCE... HOT LAKE
 WARING NUMBER..... 11

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES	04S 039E 05 NW OF SE	LAT/LONG... 45-14.63 N 117-57.51 W
STATE..... OREGON		UTM ZONE... +11
COUNTY..... UNION		NORTHING... 5010267.
GEOLOGIC PROVINCE..		EASTING... 424774.
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
 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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 12.	LI... 0.03	SB... L 0.2
AL....	CR.....	MG... L 0.1	SC... 48.
AS.... 0.01	CS..... L 0.1	MN... L 0.02	SE... 48.
AU.... L 0.1	CU..... 0.01	MO... 130.	SI02..
B..... 2.9	F..... 1.7	NA... 56.	
BA.... L 0.1	FE+3....	NA+K..	

ISOTOPES (0/00)

DEL D OF WATER.....	-127.7
DEL O(18) OF WATER...	-16.56
DEL O(18) OF S04.....	4.63

BE.... L 0.1 FE(TOT). L 0.02 NB... SR... L 0.05
 BR.... 0.4
 CA.... 4.9 HCO3.... 75.
 CA+MG. HG..... 0.0032 PB... L 0.06
 CD.... L 0.01 H2S..... PO4.. 0.09
 CL.... 140. I..... 0.08 RB... L 0.02
 CO.... L 0.05 K..... 2.7

GAS ANALYSIS

ISOTOPES (00/0)

ANALYSIS IN VOLUME %

CH4.. 9.
 C2H6. N2... 90.
 CO2.. L 1.

OTHER ANALYTICAL DATA... 02+AR=2

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 02
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975; NEHRING AND OTHERS, 1979

RECORD 00208

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0000713

NAME OF SAMPLE SOURCE... MEDICAL HOT SPRINGS
 WARING NUMBER..... 12

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 06S 04E 25 NE LAT/LONG... 45-01.08 N 117-37.48 W
 STATE..... OREGON UTM ZONE... +11
 COUNTY..... UNION NORTHING... 4984923.
 GEOLOGIC PROVINCE.. EASTING.... 450781.
 MAP REFERENCE..... FLAGSTAFF BUTTE 1:24000, GRANGEVILLE 1:250000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1973/00/00 BARNES GROUP
 TEMPERATURE (C)..... 60.0
 DISCHARGE..... 200. L/MIN
 WATER TREATMENT..... PRESSURE-FILTERED THROUGH A .45 MICROMETRE MEMBRANE, PORTION ACIDIFIED, DILUTED
 DEPOSITS OR ALTERATION... TRAVERTINE
 PERTINENT LITHOLOGY..... ROCK TYPE: BASALT

WATER ANALYSIS

DATE/ANALYST..... 1973/00/00 BARNES GROUP
 PH..... 8.23
 SPECIFIC CONDUCTANCE..... 1173.

ISOTOPES (0/00)

ANALYSIS IN MG/L

AG.... L 0.02	CO3.... L 1.	LI... 0.05	SB... L 0.2	DEL D OF WATER.....	-130.2
AL....	CR.....	MG... 0.2	SC...	DEL O(18) OF WATER...	-16.99
AS....	CS..... L 0.1	MN... L 0.02			
AU.... L 0.1	CU..... L 0.01	MO...	SI02. 80.		
B.... 2.2	F..... 1.2	NA... 190.			
BA.... L 0.1	FE+3....	NA+K.	S04.. 400.		
BE.... L 0.1	FE(TOT). L 0.02	NB...	SR... 0.8		
BR.... 0.2					
CA.... 72.	HCO3.... 26.				
CA+MG.	HG..... 0.0004	PB... L 0.06			
CD.... L 0.01					
CL.... 77.	I.....	RB... 0.02			
CO.... L 0.05	K..... 7.0				

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00209

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0002241

NAME OF SAMPLE SOURCE... MEDICAL HOT SPRINGS
 WARING NUMBER..... 12

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 06S 04E 25 SE OF NE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... FLAGSTAFF BUTTE 1:24000, GRANGEVILLE 1:250000
 OTHER LOCALITY INFORMATION: 20 MI. NNE OF BAKER

COORDINATES
 LAT/LONG... 45-01.08 N 117-37.48 W
 UTM ZONE... +11
 NORTHING... 4984923.
 EASTING... 450781.

SAMPLE DESCRIPTION AND CONDITIONS

TEMPERATURE (C)..... 60.0
 DISCHARGE..... 189. L/MIN

WATER ANALYSIS

TOTAL DISSOLVED SOLIDS... 896.

ANALYSIS IN PPM

AG....	CO3..... Q 11.			
AL....	CR.....	MG... Q 1.2		
AU....	CU.....	MO... SI02. 97.		
B....	F.....	NA... Q 191.		
BA....	FE+3....	NA+K. S04.. Q 432.		
CA.... Q 62.				
CL.... Q 77.				
CO....	K..... Q 3.4			

ISOTOPES (0/00)

QUALIFICATION FIELD..... SOLUTES CALCULATED FROM:
 CACL2=55.52, MGCL2=4.66, KCL=6.42, NACL=57.58, NA2SO3=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
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 07
 REFERENCE..... LINDGREN, 1901

RECORD 00210

GEOHERM SAMPLE FILE

GEOHERM FILE ID: 0015981

NAME OF SAMPLE SOURCE... U.P. RR NO. 1
 WELL/SPRING NUMBER..... 3S-38E-5-CB

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 03S 038E 05 NW OF SW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE.. BLUE MOUNTAINS
 MAP REFERENCE..... LA GRANDE SE 1:24000

COORDINATES
 LAT/LONG... 45-19.54 N 118-07.20 W

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/12/06 GEST. D.
 SAMPLE NUMBER..... W579-382
 POINT OF COLLECTION.. WELLHEAD
 TEMPERATURE (C)..... 25.5

AMBIENT TEMP (C)..... 8.
DISCHARGE..... 379. L/MIN

WATER ANALYSIS

DATE/ANALYST..... 1980/01/28 BANERJEE, KALA C.
PH..... 8.2 AT(C) 26.
SPECIFIC CONDUCTANCE..... 129.
ALKALINITY..... 60. AS CAC03
TOTAL DISSOLVED SOLIDS... 160.

ANALYSIS IN MG/L

AG.....	CO3.....	LI...	0.01		
AL.... L 0.05	CR.....	MG...	0.39		
AS.... L 0.005	CS.....	MN... L 0.02			
AU.....	CU.....	MO...		SI02.	84.
B..... L 0.2	F..... 0.1	NA...	19.		
BA.....	FE+3.....	NA+K.		S04..	3.9
BE.....	FE(TOT). L 0.05				
CA..... 5.4					
CD.....	H2S.....	P04..	0.016		
CL..... 0.9					
CO.....	K..... 5.7				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
REFERENCE..... DOGAMI IN-HOUSE STUDIES; DOE CONTRACT NO. DE-FC07-79ET27220

RECORD 00211

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015982

NAME OF SAMPLE SOURCE... U.P. RR NO. 2
WELL/SPRING NUMBER..... 3S-38E-5-CB

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 03S 038E 05 NW OF SW LAT/LONG... 45-20.00 N 118-07.17 W
STATE..... OREGON
COUNTY..... UNION
GEOLOGIC PROVINCE.. BLUE MOUNTAINS
MAP REFERENCE..... LA GRANDE SE 1:24000

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1979/12/28 BLACK, G.
SAMPLE NUMBER..... WS79-378
POINT OF COLLECTION.. WELLHEAD
TEMPERATURE (C)..... 26.
AMBIENT TEMP (C)..... 8.
DISCHARGE..... 284. L/MIN

WATER ANALYSIS

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.

ANALYSIS IN MG/L

AG.....	CO3.....	LI...	0.01		
AL.... L 0.05	CR.....	MG...	0.62		
AS.... L 0.005	CS.....	MN... L 0.02			
AU.....	CU.....	MO...		SI02.	80.
B..... L 0.2	F..... 0.7	NA...	24.		
BA.....	FE+3..... L 0.05	NA+K.		S04..	2.4

ISOTOPES (0/00)

CA.... 5.0
 CD.... H2S..... P04.. 0.026
 CL.... 0.9
 CO.... K..... 6.1

REFERENCE AND IDENTIFICATION

COMPILED BY..... RICCIO, JOSEPH F.
 COMPILER AFFILIATION... OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
 REFERENCE..... DOGAMI IN-HOUSE STUDIES, DOE CONTRACT NO. DE-FC07-79ET27220

RECORD 00212

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015946

NAME OF SAMPLE SOURCE... WAGNER WELL

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 01S 038E 24 SE OF SE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 45-27.43 N 117-59.84 W
 UTM ZONE... +11
 NORTHING... 5034004.
 EASTING.... 422020.

MAP REFERENCE..... IMBLER 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.

ANALYSIS IN PPM

AG....	CO3.....	4.9			
AL....	CR.....		MG... 0.8		
B.... 0.1	F.....	2.0	NA... 28.		
BA....	FE+3....		NA+K.	S04.. 8.3	
CA.... 3.6	HCO3....	62.	NO3.. 0.2		
CL.... 3.1					
CO....	K.....	4.0			

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 05
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00213

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015943

NAME OF SAMPLE SOURCE... WELL
 WELL/SPRING NUMBER..... 03S/38E-06

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 03S 038E 06 SE OF NE
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..

COORDINATES
 LAT/LONG... 45-20.07 N 118-05.83 W
 UTM ZONE... +11
 NORTHING... 5020478.
 EASTING.... 414029.

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. AS HCO3
ANALYSIS IN PPM
 AL..... CR..... MG... 0.2
 AU..... CU..... MO... SI02. 71.
 B..... F..... 0.5 NA... 19.
 BA..... FE+3..... NA+K. S04.. 4.5
 CA..... 10.
 CL..... 1.
 CO..... K..... 5.

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00214

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015944

NAME OF SAMPLE SOURCE... WELL
 WELL/SPRING NUMBER..... 03S/38E-05

LOCATION

TOWNSHIP-RANGE

COORDINATES

COUNTRY..... UNITED STATES 03S 038E 05 NW OF SW
 STATE..... OREGON
 COUNTY..... UNION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LA GRANDE SE 1:24000

LAT/LONG... 45-19.89 N 118-05.43 W
 UTM ZONE... +11
 NORTHING... 5020138.
 EASTING... 414546.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/01/21
 TEMPERATURE (C)..... 27.
 WELL DEPTH (M)..... 468.
 DISCHARGE..... 1093. LPM
 PERTINENT LITHOLOGY..... ALTERNATING LAYERS OF TUFF AND BASALT

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH
 PH..... 7.9

ANALYSIS IN PPM
 AL..... CR..... MG... 0.3
 AU..... CU..... MO... SI02. 84.
 B..... F..... 0.5 NA... 27.
 BA..... FE+3..... NA+K. S04.. 3.3
 CA..... 5.
 CL..... 3.2
 CO..... K..... 5.

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00215

GEO THERM SAMPLE FILE

GEO THERM FILE ID: 0015945

NAME OF SAMPLE SOURCE... WELL
 WELL/SPRING NUMBER..... 03S/38E-05M

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 03S 038E 05 NW OF SW
 COUNTY..... UNION
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... LA GRANDE SE 1:24000

COORDINATES
 LAT/LONG... 45-19.89 N 118-05.43 W
 UTM ZONE... +11
 NORTHING... 5020138.
 EASTING.... 414546.

SAMPLE DESCRIPTION AND CONDITIONS

DATE/COLLECTOR..... 1955/01/21
 TEMPERATURE (C)..... 25.
 WELL DEPTH (M)..... 437.
 DISCHARGE..... 1060. LPM
 PERTINENT LITHOLOGY..... BASALT AND TUFF IN ALTERNATING LAYERS

WATER ANALYSIS

DATE/ANALYST..... OREGON STATE BOARD OF HEALTH
 PH..... 7.9
 ALKALINITY..... 63. AS HC03

ANALYSIS IN PPM

AL.....	CR.....	MG... 1.3			
AU.....	CU.....	MO... 72.	SI02.		
B.....	F..... 0.5	NA... 30.	S04..	4.8	
BA.....	FE+3....	NA+K.			
CA... 4.8					
CL... 2.1					
CO.....	K..... 5.				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... MARINER, R. H.
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... HAMPTON AND BROWN, 1964

RECORD 00216

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... COOK CREEK WARM SPRING
 WELL/SPRING NUMBER..... 5N/48E-30 BB

GEO THERM FILE ID: 0015410

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE
 STATE..... OREGON 05N 048E 30 NW OF NW
 COUNTY..... WALLOWA
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... WAPSHILLA CREEK 1:24000, GRANGEVILLE 1:250000

COORDINATES
 LAT/LONG... 45-53.49 N 116-52.41 W
 UTM ZONE... +11
 NORTHING... 5081782.
 EASTING.... 509815.

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.

ANALYSIS IN MG/L

AG.....	CO3.....	LI... L 0.01
AL... 0.16	CR.....	MG... 1.1
AS... 0.12	CS.....	MN... L 0.05

ISOTOPES (0/00)

AU.....	CU.....	MO....	SI02..	46.
B.....	F.....	NA....	62.	
BA.....	FE+3....	NA+K..	S04..	164.
BE.....	FE(TOT)..			
BI.....	GA.....	NH4..	L	0.01
CA.....	36. HCO3....	N03..		0.13
CD.....	H2S.....	P04..		0.05
CL.....	20.			
CO.....	K.....			2.5

QUALIFICATION FIELD..... PH RANGE: 7.9-8.0

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 01
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00217

GEOTERM SAMPLE FILE

GEOTERM FILE ID: 0015417

NAME OF SAMPLE SOURCE... J. SANDOZ WELL

LOCATION TOWNSHIP-RANGE
 COUNTRY..... UNITED STATES 01N 012E 38
 STATE..... OREGON
 COUNTY..... WASCO
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... WHITE SALMON 1:62500, THE DALLES 1:250000

COORDINATES
 LAT/LONG... 45-33.8 N 121-16.6 W
 UTM ZONE... +10
 NORTHING... 5046759.
 EASTING... 634491.

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

PH..... 7.9
 SPECIFIC CONDUCTANCE..... 378.
 ALKALINITY..... AS CaCO3
 TOTAL DISSOLVED SOLIDS... 314.

ANALYSIS IN MG/L

ISOTOPES (0/00)

AG.....	CO3.....	N		
AL.....	N CR.....		MG...	4.6
AS.....	CS.....		MN... N	
AU.....	CU.....		MO...	SI02.. 95.
B.....	F.....	1.6	NA....	62.
BA.....	FE+3....		NA+K..	S04.. 1.5
BE.....	FE(TOT)..	0.04		
CA.....	16. HCO3....	234.	N03..	U.... L 0.0001
CD.....	H2S.....		P04..	N
CL.....	7.5			
CO.....	K.....	11.		

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 03
 REFERENCE..... OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, UNPUBLISHED DATA

RECORD 00218

GEO THERM FILE ID: 0000699

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... KAHNEETAH HOT SPRINGS
 WARING NUMBER..... 07

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 08S 013E 20 SE OF SW NE
 STATE..... OREGON
 COUNTY..... WASCO
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... EAGLE BUTTE 1:24000, BEND 1:250000

COORDINATES
 LAT/LONG... 44-51.72 N 121-12.05 W
 UTM ZONE... +10
 NORTHING... 4968978.
 EASTING... 642146.

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
 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.

ANALYSIS IN MG/L

AG.... L 0.02	CO3..... 9.	LI.... 0.52	SB... L 0.2
AL....	CR.....	MG... L 0.05	SC... L 0.02
AS....	CS..... L 0.1	MN... L 0.02	
AU.... L 0.1	CU..... L 0.01	MO... 325.	SI02. 104.
B.... 2.6	F..... 21.	NA... 34.	S04.. 34.
BA.... L 0.1	FE+3....	NA+K.	SR... L 0.05
BE.... L 0.1	FE(TOT). L 0.02	NB... L 0.06	
CA.... 3.2	HCO3.... 493.	PB... L 0.06	
CA+MG.	HG..... 0.0003	RB... 0.02	
CD.... L 0.01	I.....		
CL.... 155.	K..... 3.4		
CO.... L 0.05			

ISOTOPES (0/00)

DEL D OF WATER..... -118.9
 DEL O(18) OF WATER... -14.75

REFERENCE AND IDENTIFICATION

COMPILED BY..... SANFORD, LINDA
 COMPILER AFFILIATION... U.S. GEOLOGICAL SURVEY
 COMPILER CROSS INDEX... 01
 REFERENCE..... MARINER AND OTHERS, 1974; MARINER AND OTHERS, 1975

RECORD 00219

GEO THERM FILE ID: 0015403

GEO THERM SAMPLE FILE

NAME OF SAMPLE SOURCE... MILTON MARTIN WELL
 WELL/SPRING NUMBER..... 1N/13E-32AC

LOCATION
 COUNTRY..... UNITED STATES TOWNSHIP-RANGE 01N 013E 32 SW OF NE
 STATE..... OREGON
 COUNTY..... WASCO
 GEOLOGIC PROVINCE..
 MAP REFERENCE..... THE DALLES 1:62500, THE DALLES 1:250000

COORDINATES
 LAT/LONG... 45-31.70 N 121-12.95 W
 UTM ZONE... +10
 NORTHING... 5042975.
 EASTING... 639325.

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.

ANALYSIS IN MG/L

AG....		CO3..... N				
AL....	1.0	CR.....	MG....	2.9		
AS....		CS.....	MN....	N		
AU....		CU.....	MO....		SI02.	84.
B.....		F..... 0.9	NA....	41.		
BA....		FE+3....	NA+K.		S04..	2.4
BE....		FE(TOT). 0.03				
CA....	15.	HCO3.... 167.	N03..	N	U....	L 0.0001
CD....		H2S.....	P04..	N		
CL....	6.0					
CO....		K..... 7.2				

ISOTOPES (0/00)

REFERENCE AND IDENTIFICATION

COMPILED BY..... BOWEN, RICHARD G.
 COMPILER AFFILIATION... OREGON DEPT. GEOLOGY AND MINERAL INDUSTRIES
 COMPILER CROSS INDEX... 02
 REFERENCE..... NEWCOMB, 1972