LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 5121 JOB NO.

ANALYST S. Hoatson PROJECT 864

TYPE SAMPLES GEOTHERMAL WATER REQUESTED BY Mark Avery

	SAMPLE	Na PPM	K PPM	Ca PPM	Mg PPM	SiO_2 PPM		SAMPLE	Li PPM	B PPM	SO_4 PPM	Cl PPM	F PPM
01	W-14998	230.	18.	24.	13.	44.	31	W-14998	0.3	1.2	58.	22.	4.2
02							32						
03							33						
04							34						
05							35						
06							36						
07							37						
08							38						
09							39						
10	W-						40	W-					
11							41						
12							42						
13							43						
14							44						
15							45						
16							46						
17							47						
18							48						
19							49						
20	W-						50	W-					
21							51						
22							52						
23							53						
24							54						
25							55						
26							56						
27							57						
28							58						
29							59						
30							60						

METHODS: Digestion- Sample Weight-

Determination- Na, K, Ca, Mg, SiO_2, Li: AA
B: CARMINIC ACID COLORIMETRIC
F: SPECIFIC ION ELECTRODE
Cl: MERCURIMETRIC TITRATION
SO_4: TURBIDIMETRIC

REMARKS:

NOTE: Mail Original to
AMAX Exploration, Inc.,
P. O. Box C
Denver, Colorado 80226

Copies to:
1. John Deymonaz At Geothermal
2. Geothermal Office At
3. E. J. Rowe At Denver Lab
4. S. C. Hoatson Denver Lab

DEN 121974

LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 5121 JOB NO.

ANALYST S.H. M.F. PROJECT 864

TYPE SAMPLES GEOTHERMAL WATER REQUESTED BY Mark Avery

	SAMPLE		Cu PPB	Mo PPB				SAMPLE	pH	CO_3 PPM	HCO_3 PPM		
01	W14998		<2	5			31	W14998	8.4	28.	472.		
02							32						
03							33						
04							34						
05							35						
06							36						
07							37						
08							38						
09							39						
10							40						
11							41						
12							42						
13							43						
14							44						
15							45						
16							46						
17							47						
18							48						
19							49						
20							50						
21							51						
22							52						
23							53						
24							54						
25							55						
26							56						
27							57						
28							58						
29							59						
30							60						

METHODS: Digestion- Sample Weight-

Determination- Cu, Mo - Colorimetric
pH - Electrometric
CO_3, HCO_3 - Electrometric Titration

REMARKS:

$CO_3 + HCO_3$ reported as ppm $CaCO_3$

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LAB Amax- Denver

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 5121 JOB NO. _____

ANALYST S. Hoatson PROJECT 864

TYPE SAMPLES Geothermal Waters REQUESTED BY Mark Avery

	SAMPLE		Temp. °C	Cond.				SAMPLE					
01	W14998		25	1128			31						
02							32						
03							33						
04							34						
05							35						
06							36						
07							37						
08							38						
09							39						
10							40						
11							41						
12							42						
13							43						
14							44						
15							45						
16							46						
17							47						
18							48						
19							49						
20							50						
21							51						
22							52						
23							53						
24							54						
25							55						
26							56						
27							57						
28							58						
29							59						
30							60						

METHODS: Digestion-

Determination-
Wheatstone Bridge

Sample Weight-

Cond. = conductivity in umhos/cm

REMARKS:

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LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 12403 JOB NO.

ANALYST S. Hoatson PROJECT 864

TYPE SAMPLES GEOTHERMAL WATER REQUESTED BY Mark Avery

	SAMPLE	Na PPM	K PPM	Ca PPM	Mg PPM	SiO_2 PPM		SAMPLE	Li PPM	B PPM	SO_4 PPM	Cl PPM	F PPM
01	W-14999	230.	16.	33.	11.	35.	31	W-14999	0.3	1.2	53.	23.	4.2
02	15000	230.	16.	35.	12.	35.	32	15000	0.3	1.2	57.	23.	4.2
03							33						
04							34						
05							35						
06							36						
07							37						
08							38						
09							39						
10	W-						40	W-					
11							41						
12							42						
13							43						
14							44						
15							45						
16							46						
17							47						
18							48						
19							49						
20	W-						50	W-					
21							51						
22							52						
23							53						
24							54						
25							55						
26							56						
27							57						
28							58						
29							59						
30							60						

METHODS: Digestion- Sample Weight-

Determination- Na, K, Ca, Mg, SiO_2, Li: AA
B: CARMINIC ACID COLORIMETRIC
F: SPECIFIC ION ELECTRODE
Cl: MERCURIMETRIC TITRATION
SO_4: TURBIDIMETRIC

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DEN 12197

LAB Amax-Denver

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 12403 JOB NO. _____

ANALYST S. Hoatson PROJECT 864

TYPE SAMPLES Geothermal REQUESTED BY Mark Avery

	SAMPLE		Temp. °C	Cond.				SAMPLE					
01	W14999		25	1190			31						
02	15000		25	1201			32						
03							33						
04							34						
05							35						
06							36						
07							37						
08							38						
09							39						
10							40						
11							41						
12							42						
13							43						
14							44						
15							45						
16							46						
17							47						
18							48						
19							49						
20							50						
21							51						
22							52						
23							53						
24							54						
25							55						
26							56						
27							57						
28							58						
29							59						
30							60						

METHODS: Digestion-

Determination-
Wheatstone Bridge

Sample Weight-

Cond. = conductivity in umhos/cm

REMARKS:

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LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 6/19/81 REQ. NO. 12403 JOB NO.

ANALYST S.H, M.E. PROJECT 864

TYPE SAMPLES GEOTHERMAL WATER REQUESTED BY Mark Avery

	SAMPLE	Cu PPB	Mo PPB		SAMPLE	pH	CO_3 PPM	HCO_3 PPM
01	W14999	<2	2	31	W14999	7.9	0	538
02	15000	<2	4	32	15000	7.8	0	530
03				33				
04				34				
05				35				
06				36				
07				37				
08				38				
09				39				
10				40				
11				41				
12				42				
13				43				
14				44				
15				45				
16				46				
17				47				
18				48				
19				49				
20				50				
21				51				
22				52				
23				53				
24				54				
25				55				
26				56				
27				57				
28				58				
29				59				
30				60				

METHODS: Digestion- Sample Weight-

Determination- Cu, Mo - Colorimetric
pH - Electrometric
CO_3, HCO_3 - Electrometric Titration

REMARKS:

CO_3 & HCO_3 reported as ppm $CaCO_3$

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AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14998 Date 05/10/81 Time 1430

Name GEOTHERMAL WELL 864 - 38-9 Location: Co. CHURCHILL State NEVADA

Sec. _____ Twp. _____ R. _____ ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 34.44 DISCHARGE 25 gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH 550'

ODOR slight H_2S BORE 6 5/8"

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE slt. metallic, sulfur taste. STATIC HEAD _____

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION sparse (scrub brush) ARTESIAN HEAD _____

FLUID ISSUES FROM splitter hose 20' from well-head. ROCK DATA:

TYPE (SURFACE) silicified conglomerate

COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) silicified congl., quartzite

TYPE _____ WATER USED FOR _____

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES MCCOY - 864 (AMAX)

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15000 Date 05/13/81 Time 0913

Name 864: 38-9 (GEOTHERMAL WELL) Location: Co. CHURCHILL State NV

Sec. _____ Twp. _____ R. _____; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), (well) (with pipe) drilling in progress, creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 116° F

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR H_2S (v. slight)

FLUID COLOR none (clear)

FLUID TASTE poor

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ISSUES FROM _____

DISCHARGE 100-150 gpm/Lpm

WELL DATA:

DEPTH 1300'

BORE 8 5/8"

PUMP TYPE _____

STATIC HEAD about 450'

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) RC (congl.)

COLOR green-red-gray

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

RX TYPE (AT DEPTH) chert (PPh)

WATER USED FOR _____

IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES AMAX - 864

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14999 Date 05/12/81 Time 0903

Name GEOTHERMAL WELL 864:38-9 Location: Co. CHURCHILL State NV.

Sec. _____ Twp. _____ R. _____; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °F - 116° 46.66 DISCHARGE 100-125 gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH 1200'

ODOR slt. sulfur BORE 8 5/8"

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE yech! STATIC HEAD 450' approx.

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION sparse scrub brush ARTESIAN HEAD _____

FLUID ISSUES FROM rotary table connection ROCK DATA:

& splitter hose. TYPE (SURFACE) silici

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) chert (green) [PPh]

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer

PROPERTY OWNED BY AMAX.

PREVIOUS AND/OR CURRENT LEASES AMAX - (MCCOY - 864)