

TEC-25

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOHERMAL BRANCH

August 3, 1982

Mr. Bernie Moroz
District Supervisor,
Minerals Management Service
4600 Kietzkie Lane
Bldg. D., Ste. 137
Reno, Nevada 89502

Re: NOI GS-321-N31423 Alum Unit, Nevada

Dear Bernie:

Pursuant to GRO Order No. 2, the enclosed analyses are for water samples collected from the flow line while well 56-29 was blowing about 60 gpm from a depth of 785 feet. The samples were collected after the well had been flowing, by air lift long enough for the water to become clear and free of any foaming agents.

Sincerely,

AMAX EXPLORATION, INC.



H. D. Pilkington
Chief Geologist, Geothermal Branch

HDP/c

Enclosures (2)

cc: J. E. Deymonaz w/o encl.
J. L. Emerson

LAB Amax - Denver

ANALYTICAL REPORT

DATE 1-5-82
ANALYST PK, MS, TC
TYPE SAMPLES Geothermal

REQ. NO. 12419 JOB NO. _____
PROJECT 1186 (56-29)
REQUESTED BY Demonez

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	W14298	2700	320	87	20	190	31	10	33	230	4600	5.3
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-Na, K, Ca, Mg, SiO₂, Li - AA. F - Specific Ion Electrode
Cl - Titrametric; SO₄ - Turbidimetric; B - Spectrophotometric

REMARKS: W14298 collected from flow line when well was at 785 feet with air lift flow about 60 gpm (well 56-29).

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

- Copies to:
- 1. J. F. Demonez At Geothermal
 - 2. H. D. Pilkington At "
 - 3. Harry Olson At "
 - 4. Geothermal Office "
 - 5. E J Rowe

LAB Amax - Denver

ANALYTICAL REPORT

DATE 1-5-82

REQ. NO. 12419 JOB NO. _____

ANALYST PK, MS, PP

PROJECT 1186

TYPE SAMPLES Geothermal Water

REQUESTED BY Demonez

SAMPLE	Cu ppb	Mo ppb	Mn ppb	Cond microhm/cm	SAMPLE	ph	CO ₃ ^{AS} CaCO ₃	HCO ₃ ^{AS} CaCO ₃	
01	w14298	<2	15	150	13,000	31	8.5	2	12
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-

REMARKS: Determination-Mo+Cu - Color; Ph - electrometric; CO₃ + HCO₃ - Titrimetric, Cond. - Cond. Bridge; Mn - AA.

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2. HD Pilkington At "
3. Harry Olson At "
4. Geothermal Office "
5. E. J. Rowe

LAB Amax - Denver

ANALYTICAL REPORT

DATE 1-7-82

REQ. NO. 12419 JOB NO. _____

ANALYST PK

PROJECT 1186

TYPE SAMPLES Geothermal Water

REQUESTED BY Demonaz

	SAMPLE	Fe PPM					SAMPLE						
01	14298	4.1					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- Sample Weight-
Determination- A. A.

REMARKS:

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2. H.D. Pilkington At
3. H. Olson At
4. Geothermal Office
5. E.J. Rowe

LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 2/10/82

REQ. NO. 12419 JOB NO. _____

ANALYST M.S

PROJECT 1186

TYPE SAMPLES GEOHERMAL WATERS

REQUESTED BY JOHN E. DEYMONAZ

	SAMPLE	PPM \pm CO_3	PPM \times HCO_3			SAMPLE					
01	W14298	19	124			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-

Sample Weight-

Determination-

* as $CaCO_3$

REMARKS:

⇒ ORIGINAL ANSWERS MIS-CALCULATED BY A FACTOR OF 10

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Copies to:

1. H. J. OLSON At GEOHERMAL
2. D. PILKINGTON At "
3. GEOHERMAL OFFICE At "
4. E. J. ROWE At CEDAR
5. J. E. DEYMONAZ At GEOHERMAL

DEN 121974

LAB Amax - Denver

ANALYTICAL REPORT

DATE 1-5-82
 ANALYST PK, MS, TC
 TYPE SAMPLES w

REQ. NO. 9191 JOB NO. _____
 PROJECT 1186 (56-29)
 REQUESTED BY Deymonaz

	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	W14297	2700	320	87	20	190	31		10	33	210	4700	5.1
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-Na, K, Ca, Mg, SiO₂, + Li done by AA. Borons done Spectrophotometrically, SO₄ done Turbidimetrically; Cl - Titrimetric; REMARKS: fl. - electrometric

W14297 - Collected from flow line when well was at 785 feet, water from interval 665-775 feet.

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1. J.E. Demonez At Geothermal
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 3. H. Olson At "
 4. Geothermal Office At "
 5. E. J. Rowe At "

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ANALYTICAL REPORT

DATE 1-5-82

REQ. NO. 9191 JOB NO. _____

ANALYST PK, PP, TC

PROJECT 1186

TYPE SAMPLES Geoth. water

REQUESTED BY J. Deymonez

	SAMPLE	Cu ppb	Mo ppb	Cond. µmhos/cm				SAMPLE					
01	W14297	<2	15	13,000				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-

Sample Weight-

Determination- Cu + Mo - Color ; Conductivity - Cond. Bridge.

REMARKS: CO₃ - HCO₃ answers will follow at a later date.

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4. Harry Olson At "
5. E. S. Rowe At "

LAB AMAX - DENVER

ANALYTICAL REPORT

DATE 2/10/82

REQ. NO. 9191 JOB NO. _____

ANALYST M.S

PROJECT 1186

TYPE SAMPLES GEOTHERMAL WATERS

REQUESTED BY JOHN E. DEYMONAZ

	SAMPLE	PPM _x CO ₃	PPM _x HCO ₃			SAMPLE					
01	W14297	9	135			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-

Sample Weight-

Determination-

REMARKS:

* as CaCO₃

→ ORIGINAL ANSWERS MIS-CALULATED BY A FACTOR OF 10

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LAB Amaz - Denver

ANALYTICAL REPORT

DATE 1-7-82

REQ. NO. 9191 JOB NO. _____

ANALYST PK

PROJECT 1186

TYPE SAMPLES Geothermal Water

REQUESTED BY Demonaz

SAMPLE	Fe Ppm					SAMPLE					
01	14297	4.0				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					
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23						53					
24						54					
25						55					
26						56					
27						57					
28						58					
29						59					
30						60					

METHODS: Digestion-

Sample Weight-

Determination- A.A.

REMARKS:

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