GTLT - 5

(6-18)-25S-19W
Amax Exploration, Inc.
(Hidalgo County)

GTR-6 3-G (PA); Animas 55-J; T-128-F(PA); T-130-K(PA); 206-B (PA); GTR-6 4-D(PA); GTR-6 5-K(PA); GTR-6 6-N(PA); 231-G(PA); No.1; T-135-L(PA) & T-131-B(PA)

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

November 18, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: AMAX Exploration, Inc.'s Drilling activities under "Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well" dated February 15, 1980 - Animas Project (672) Hole Nos. 672-206, 672-225, 672-227 and 672-231

Dear Mr. Ulvog:

This letter is written to inform you about AMAX Exploration, Inc.'s drilling activities to date at the Animas Project in Hidalgo County, New Mexico.

Enclosed is Table I indicating the following drilling information for each hole listed:

1) Hole number and location
2) Elevation at drill site
3) Land status at drill site
4) Commencement and completion dates
5) Total depth and method of drilling

Please be advised that this letter does not constitute completion and abandonment notification. Notices of Completion will be filed at a later date after final temperature measurements have been completed, the holes abandoned, and the reclamation activities carried out.

AMAX Exploration, Inc. requests that the case file for the remainder of the holes permitted under the above-referenced permit by the New Mexico Oil Conservation Commission be left open.

If I can be of further assistance concerning our drilling activities at the Animas Project, please contact me at your earliest convenience.

Sincerely,

AMAX EXPLORATION, INC.

Carolyn J. Holtgrewe
Permit Assistant

CJH/bsw
Enclosure

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

TABLE I

Drilling Information on the Animas Project

Hole No.	Location	Elevation	Land Status	Commencement Date	Completion Date	Depth	Drilling Method
672-206	NW/4NW/4NE/4 Section 8, T25S, R19W, NMPM	4,270'	AMAX Lease GTR-006-1	9/21/80	9/26/80	930'	Mud
672-225	SW/4SE/4SW/4, Section 6, T25S, R19W, NMPM	4,190'	AMAX Lease NM-34790	9/16/80	9/20/80	1,000'	Mud
672-227	NW/4NW/4SE/4, Section 7, T25S, R19W, NMPM	4,200'	AMAX Lease NM-34790	10/2/80	10/4/80	820'	Mud
672-231	NE/4SW/4NE/4, Section 18, T25S, R19W, NMPM	4,230'	AMAX Lease NM-34790	9/26/80	10/2/80	904'	Mud

NO. OF COPIES RECEIVED	3	
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File	1	✓
N.M.B.M.		
U.S.G.S.		
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State [X] Fee [ ]
5a. State Lease No.: GTR-006

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]
7. Unit Agreement Name: NA
2. Name of Operator: AMAX Exploration, Inc.
8. Farm or Lease Name: NA
3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212
9. Well No.: 3
4. Location of Well: UNIT LETTER G, 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE, SECTION 6 TOWNSHIP 25S RANGE 19W NMPM.
10. Field and Pool, or Wildcat: NA
15. Elevation (Show whether DF, RT, GR, etc.): 4200' ground level
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Completion and Abandonment Information [X]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 2.54cm (1") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings. The drilling program was completed on November 6, 1976

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of. Abandonment of hole occurred between December 16 and December 18, 1976.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Darrell Olson TITLE Managing Geologist, Geothermal DATE January 5, 1977

APPROVED BY Carl Wong TITLE SENIOR PETROLEUM GEOLOGIST DATE 8/30/77

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

RECEIVED
SEP 22 1976
OIL CONSERVATION COMM.

5A. Indicate Type of Lease: STATE [x] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [x] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [x] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 3

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well UNIT LETTER ~~NA~~ G LOCATED 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE OF SEC. 6 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <500 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 4200' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN THE EVENT WELL-BORE EXTENDS BELOW FRESH WATER SANDS, OPERATOR AGREES TO EITHER SET CASING OR PLUG BACK HOLE TO PROTECT SUCH ACQUIFERS. UPON CONCLUSION OF TEMPERATURE OBSERVATION PERIOD WELL IS TO BE PLUGGED WITH CEMENT FROM SURFACE TO TEN FEET OF DEPTH OR GREATER.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	32

Unit Letter	Section	Township	Range	County
NA	6	25S	19W	Hidalgo

RECEIVED SEP 22 1976 OIL CONSERVATION COM. Santa Fe

Actual Footage Location of Well: 2000 feet from the North line and 2000 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4200'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

NA

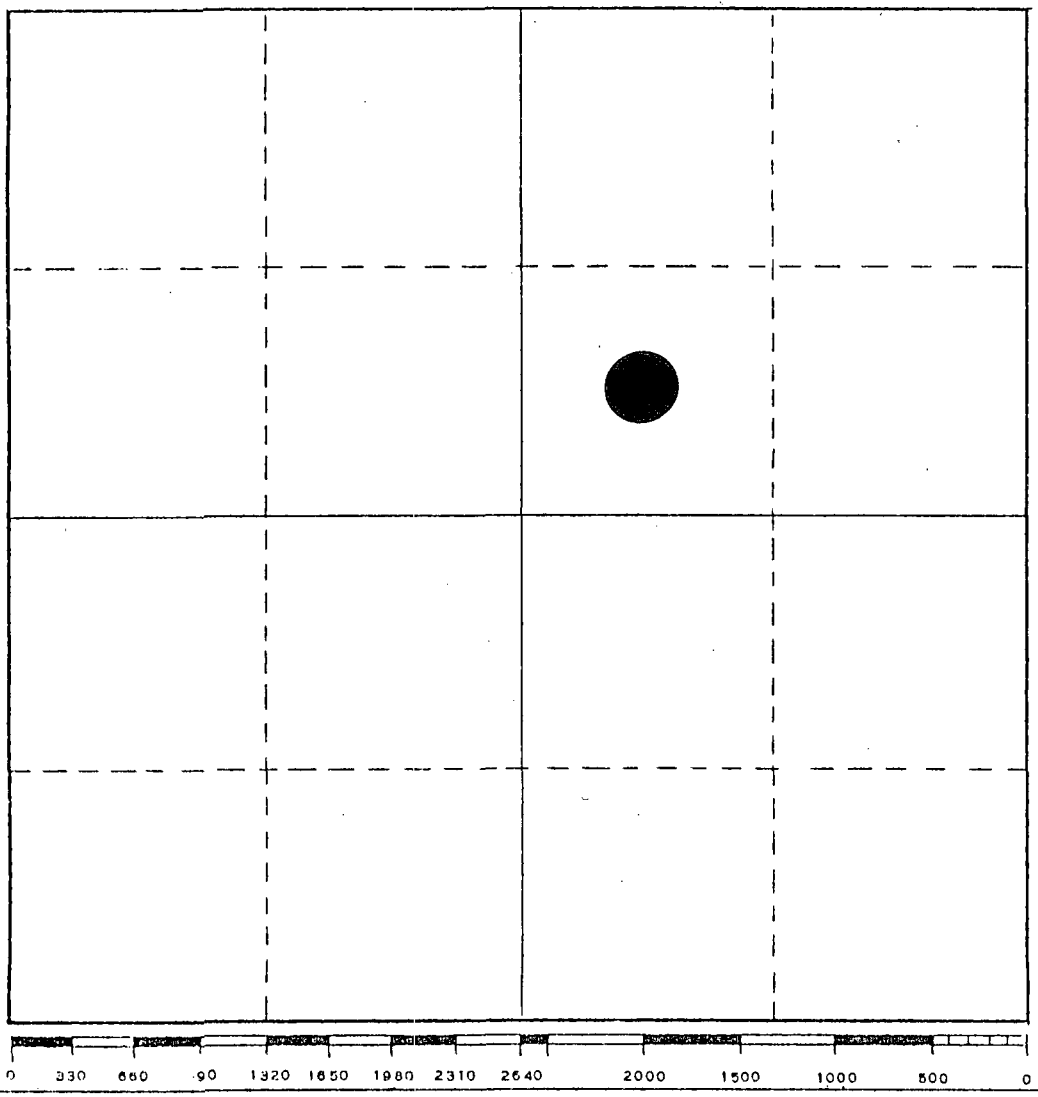
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

RECEIVED
SEP 22 1976
OIL CONSERVATION COM.
Santa Fe

5A. Indicate Type of Lease: STATE [x] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [x] Deepen [ ] Plug-Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [x]
Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 3

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER NA LOCATED 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE OF SEC. 6 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
<500 feet	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4200' ground level	multiple		October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	3

Unit Letter	Section	Township	Range	County
NA	6	25S	19W	Hidalgo

Actual Footage Location of Well: 2000 feet from the North line and 2000 feet from the East line

RECEIVED SEP 23 1976 OIL CONSERVATION COMM.

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4200'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

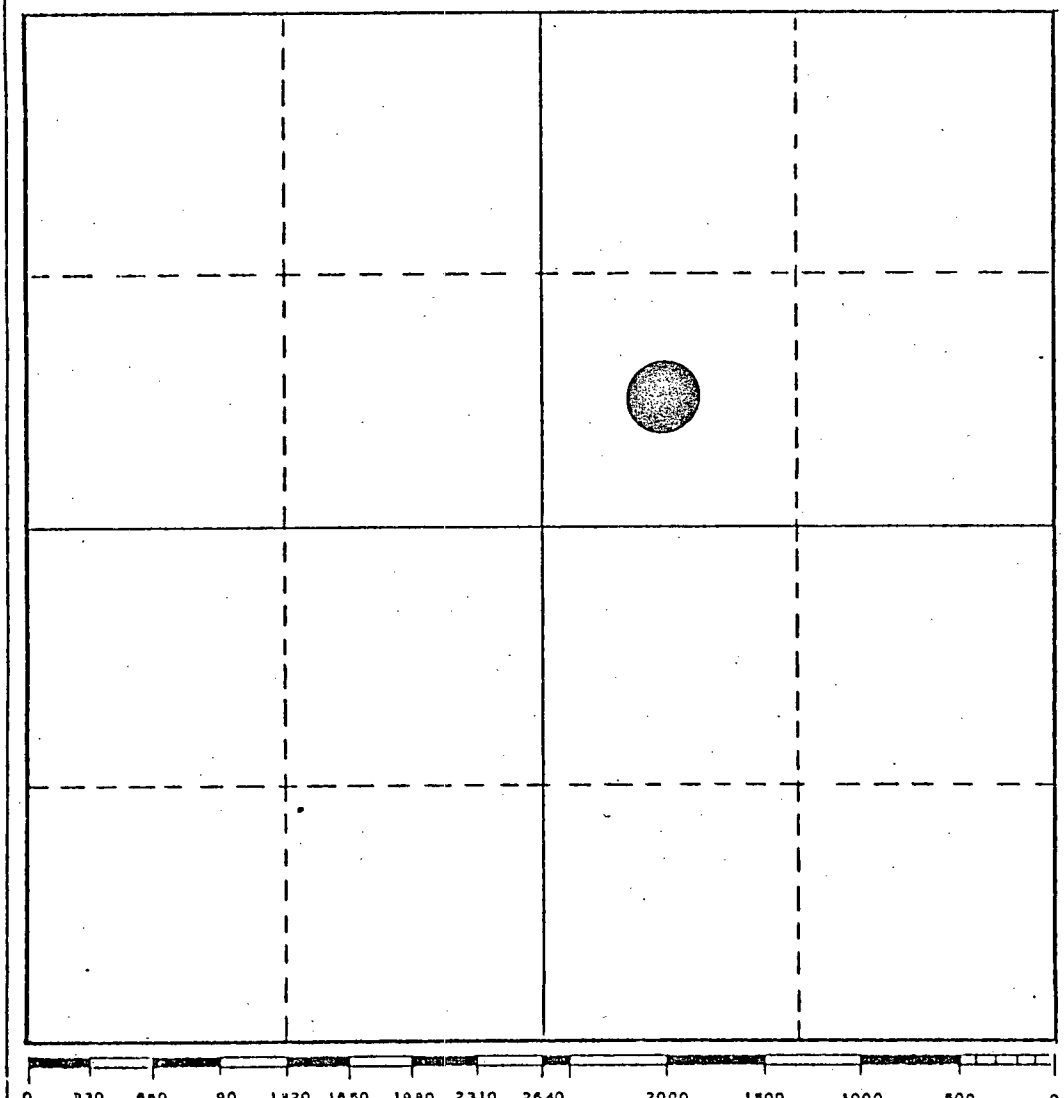
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploratio

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

December 12, 1985

Mr. Roy E. Johnson
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal Well No. 55
Animas Project, Hidalgo County

Dear Mr. Johnson:

Pursuant to our phone conversation please find enclosed a Geothermal Sundry Notice which supplements the plugging work approved for Steam Reserve Corporation's deep geothermal well at Animas. The previous Sundry Notice provided that the well would be left open at the top and turned over to Mr. Burgett. SRC now plans to set two additonal cement plugs, one at the casing shoe and one at the surface as described on the attached Sundry Notice.

Work is planned to commence for plugging of the well on or about December 17, 1985. We look forward to receiving your approved Sundry Notice.

Very truly yours,

STEAM RESERVE CORPORATION

Anita Clement

Anita Clement
Permit Administrator

LC Zones
2275
4060
Gas Kicks 2600 - 2800
6050 - 6130

Form G-103.
Adopted 10/1/74

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Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee X
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration; Low-Temp Thermal ☐ Injection/Disposal ☐
7. Unit Agreement Name: N/A
2. Name of Operator: Steam Reserve Corporation
8. Farm or Lease Name: NM-34790 - Minerals; Dale Burgett - Surface
3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401
9. Well No.: 55
4. Location of Well: Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.
10. Field and Pool, or Wildcat: Wildcat
15. Elevation (*Show whether DF, RT, GR, etc.*): GR - 4201'
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations (*Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work*) SEE RULE 203.

Plugging of Well No. 55

On November 1, 1985, Steam Reserve Corporation submitted a Sundry Notice which described the proposed plugging method for Well No. 55 at Animas.

This Sundry Notice serves to supplement that program by adding two additional cement plugs as follows:

1. Cement Plug set at the casing shoe from 1000' to 1100', and

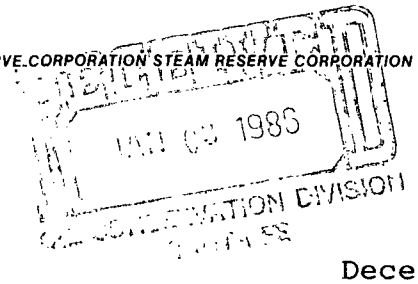
2. A 50' surface plug at the top of the hole.

Work on the well is expected to start on December 17, 1985.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 12-12-85

APPROVED BY _____ TITLE _____ DATE _____



December 30, 1985

Mr. Roy E. Johnson
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal Well
No. 55 - Animas Project, Hidalgo County

Dear Mr. Johnson:

Steam Reserve Corporation completed abandonment work at its geothermal exploration well No. 55 at the above-referenced project. Attached is a Sundry Notice with a detailed description of the work performed. Also included for your records are job logs and summary from Halliburton Services, and description of work from American Well Servicing Company.

Upon approval of the Sundry Notice please return one copy to me for completion of our files.

Very truly yours,

STEAM RESERVE CORPORATION

Anita Clement

Anita Clement
Permit Administrator

/ac

Form G-103
Adopted 10/1/74

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U. S. G. S		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒

5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals
Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From
The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (*Show whether DF, RT, GR, etc.*): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	☒
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER	☐		

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

See attached for description of plugging and abandonment work completed on Well No. 55, Animas Project, Hidalgo County.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE Dec. 310, 1985

APPROVED BY Roy E. Johnson TITLE Senior Petroleum Geologist DATE 1-6-86

ABANDONMENT WORK
ANIMAS 55-7
DECEMBER 20-23, 1985
John E. Deymonaz

12/20 Halliburton and American Well Servicing Co. move equipment to Lordsburg, N.M.

12/21 American moves workover rig to Animas 55-7 and sets up. Worked tubing for 2 hours, pulling up to 100,000 pounds, could not pull free. Halliburton arrived about noon, hooked up pumps and circulated through tubing for 2 hours while American worked the tubing. Pulled free about 2 PM. Pulled tubing back to 5500 feet and set 70 sack (98 cubic feet) plug from 5500-5400 feet. Pulled 33 joints and circulated. After 30 minutes circulation hole began unassisted two-phase flow which lasted for about 30 minutes. Flow was through 3 inch flow line at bottom of wellhead. Leakage at top of wellhead was prevented by stripper assembly.

12/22 Circulate through tubing, well began unassisted two-phase flow for about 30 minutes. Pulled tubing to 2090 feet and set 170 sack plug (238 cubic feet) from 2090-1890 feet. Stood back six stands of tubing (600 feet) and WOC for three hours. RIH, tag cement at 1980 feet. Pull tubing to 1500 feet and set 100 sack plug (140 cubic feet) from 1500-1400 feet. Pull tubing to 1100 feet, set 80 sack plug (112 cubic feet) from 1100-1000 feet stand back six stands and WOC three hours. RIH, tag cement at 1050 feet. Pull tubing to 50 feet and plug from 50 feet to surface using 50 sacks (56 cubic feet). Flush out wellhead with water, shut down.

12/23 American and Halliburton rig down equipment and leave location. Dale Burgett crew dig out cellar below wellhead, cut off wellhead and erect monument of 4 inch casing. Cellar will be filled in and monument will be approximately six feet above ground level.

Equipment removed from well and laid down on drill pad includes:

213 joints (7189 feet) of J55 2-7/8 inch tubing. Includes 4 joints already on location.
4 2-7/8 inch Baker Model L sliding sleeves.
1 2-7/8 inch bull nosed check valve.
3 3 inch Barton geothermal gate valves.
1 13 5/8" x 7 1/16" adapter spool.
1 7 1/16" x 2 7/8" 8 round 3M adapter spool.
1 13 5/8" x 13 3/8" casing hear w/ 2 3" ext. flanges.
2 3 inch companion flanges.
Misc studs and nuts.

HALLIBURTON SERVICES

JOB LOG

WELL NO. 3 LEASE Hannas 57 TICKET NO. 228499-7

CUSTOMER Steam Reserves (AmHx) PAGE NO. 1

JOB TYPE Plug to Abandon DATE 12-21-85

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1100							On Location & Set up
1	1230	1.5	0	1		2000		Circulated hole to pump Tbg loose
	1255		32.0			1100		Shut down
	1348	1.0	32.0	1		2000		Circulated while working Tbg
	1350		40.0	1		1300		Pipe free - circulated
	1418		110.0					Shut down & Pull Tbg
	1545							Circulate hole
	1700		450	1				
	1704		20	1			*	H_2O Ahead - 1st Plug @ 5400-5500'
	1714		17.5	1				Cmt - 70 SK - H w/ 25# CCH-1, .75% CFR-2, .4% HR-12
	1721		1.0	1				H_2O Spacer
	1721		30.1	1				Disp
	1730		~~39~~	1				On Spot
	1800		10.0	1				Pump down Tbg
	805			1				Shut down
								Return 12-22-85 @ 0800
12-22-85	0730							On Location
2	0825	2.0	20.0	1		500		Pump down Tbg
	0835							Shut down
							*	2nd Plug Set @ 1830-2080' (200')
2	0930	3.0	20.0	1		350		H_2O Ahead
	0945	3.0	42.2	1		500		Cmt 110 SK H w/ 25# CCH-1, .75% CFR-2, .4% HR-12
	0956	3.0	1.0	1		100		H_2O Spacer
	959	4.5	9.3	1		200		Displace
	1001					0	*	Plug on Spot - Wait = hr @ Tag ~~1785'~~ 1980'
								3rd Plug Set @ 1400-1500' (100')
2	1307	2.0	20.0	1		200		H_2O Ahead
	1321	3.5	35.0	1		250		Cmt - 100 SK H w/ 3% CCH-1, .75% CFR-2, .4% HR-12
	1330	3.5	1.0	1		0		H_2O Spacer
	1330	3.5	6.6	1		0		Displace
	1332	3				0		Plug on Spot
	1344	3.0	~~8~~ 8.0	1		~~50~~ 0		Circulated hole
	1353	5.0	15.0	1		250		Circulation broke
	1355		20.0					Shut down
								Continued on page 2

CUSTOMER

HALLIBURTON SERVICES

JOB LOG

WELL NO. #5 LEASE Amoms ST TICKET NO. 228499-7

CUSTOMER Steam Reserves (AMOMX) PAGE NO. 2

JOB TYPE Plug to Abandon DATE 12-22-85

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
							*	4½ Plug Set @ 1000'-1100' (50' in + out)
2	1404	2.5	20.0	1		250		H2O Ahead
	1416	2.5	20.0	1		50		Cmt - 88 SKS H w/ 5% SSA-1, .75% CFR-2, 2/10% HR-12
	1424	2.5	.9	1				H2O Spacer
	1424	2.5	4.6	1				Displace
	1426							Plug on Spot
								Wait 3 hrs + Tag
								Tagged Plug @ 1050'
2	1722	2.5		1				Loaded hole
	1728	2.5	17.0	1				Circulation broke
	1750		20.0	1				Shut down
	1742	1.5	4.0	1				Cmt - 40 SK H w/ 5% SSA-1, .75% CFR-2, 2/10% HR-12
	1745							Shut down
							*	Surf Plug Set @ 50' to Surface
								Job Complete

CUSTOMER

HALLIBURTON SERVICES
A Division of Halliburton Company
DUNCAN, OKLAHOMA 73536

FORM 1906 R-4

WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO INVOICE & TICKET NO. 228499-7

DISTRICT Artesia, NM DATE 12-21-85

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Steam Reserves (Amax) (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. #5 LEASE Amax 57 SEC. _____ TWP. _____ RANGE _____

FIELD _____ COUNTY Hidalgo STATE NM OWNED BY Prime

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

PACKER: TYPE _____ SET AT _____

TOTAL DEPTH 7000' MUD WEIGHT _____

BORE HOLE _____

INITIAL PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF

PRESENT PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	U	54.5	13 3/8	0	1050	
LINER						
TUBING	U	6.5	2 7/8	0	5500	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED _____

Circulated Hole - Plug to Abandon

Refer to Job Log

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

(a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.

(b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for, damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.

(c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.

(d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof arising from a service operation performed by Halliburton hereunder.

(e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.

(f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.

(g) Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.

(h) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.

(i) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTIABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

(j) Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.

(k) This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.

(l) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED John E Dayman (CUSTOMER)

DATE 12-21-85

TIME 11:00 A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

HALLIBURTON SERVICES
JOB SUMMARY
FORM 2025

HALLIBURTON LOCATION: Artesia, NM — BILLED ON TICKET NO. 2284997

CUSTOMER: Plains Resources (Amax) — LEASE: Animas 57 — WELL NO. #5 — JOB TYPE: PTA — DATE: 12-21-85

WELL DATA

FIELD ____ SEC. ____ TWP. ____ RNG. ____ COUNTY Hidalgo STATE NM

FORMATION NAME ____ TYPE ____

FORMATION THICKNESS ____ FROM ____ TO ____

INITIAL PROD: OIL ____ BPD. WATER ____ BPD. GAS ____ MCFD

PRESENT PROD: OIL ____ BPD. WATER ____ BPD. GAS ____ MCFD

COMPLETION DATE ____ MUD TYPE ____ MUD WT. 10#

PACKER TYPE ____ SET AT ____

BOTTOM HOLE TEMP. 296° F PRESSURE ____

MISC. DATA ____ TOTAL DEPTH 7000'

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	U	54.5	13 3/8	0	1050	
LINER						
TUBING	U	6.5	2 7/8	0	5500	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 12/20	DATE 12/21	DATE 12/21	DATE 12/22
TIME 1600	TIME 1100	TIME 1230	TIME 1750

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
D. Gray	HT 400	
D. Henke	3737	Artesia
		NM
D. Does		
P. Saboni	Bulk	"
D. Harvey		"

MATERIALS

TREAT. FLUID ____ DENSITY ____ LB/GAL.-API

DISPL. FLUID ____ DENSITY ____ LB/GAL.-API

PROP. TYPE ____ SIZE ____ LB.

PROP. TYPE ____ SIZE ____ LB.

ACID TYPE ____ GAL. ____ %

ACID TYPE ____ GAL. ____ %

ACID TYPE ____ GAL. ____ %

SURFACTANT TYPE ____ GAL. ____ IN ____

NE AGENT TYPE ____ GAL. ____ IN ____

FLUID LOSS ADD. TYPE ____ GAL.-LB. ____ IN ____

GELLING AGENT TYPE ____ GAL.-LB. ____ IN ____

FRIC. RED. AGENT TYPE ____ GAL.-LB. ____ IN ____

BREAKER TYPE ____ GAL.-LB. ____ IN ____

BLOCKING AGENT TYPE ____ GAL.-LB. ____

PERFPAC BALLS TYPE ____ QTY. ____

OTHER ____

OTHER ____

DEPARTMENT: Cement

DESCRIPTION OF JOB: Plug to Abandon

JOB DONE THRU: TUBING ☒ CASING ☐ ANNULUS ☐ TBG./ANN. ☐

CUSTOMER REPRESENTATIVE X [signature]

HALLIBURTON OPERATOR [signature] COPIES REQUESTED

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	70		H		B	35% SSA-1, .75% CFR 2, .4% HR-12	1.4	16.4
2	170		H		B	" " " " " "	1.4	16.4
3	100		H		B	" " " " " "	1.4	16.4
4	50		H		B	" " " " " "	1.4	16.4
5	40		H		B	" " " " " "	1.4	16.4

SUMMARY

PRESSURES IN PSI

CIRCULATING ____ DISPLACEMENT ____

BREAKDOWN ____ MAXIMUM ____

AVERAGE ____ FRACTURE GRADIENT ____

SHUT-IN: INSTANT ____ 5-MIN. ____ 15-MIN. ____

HYDRAULIC HORSEPOWER

ORDERED ____ AVAILABLE ____ USED ____

AVERAGE RATES IN BPM

TREATING ____ DISPL. ____ OVERALL ____

CEMENT LEFT IN PIPE

FEET ____ REASON ____

VOLUMES

PRESLUSH: BBL.-GAL. ____ TYPE ____

LOAD & BKDN: BBL.-GAL. ____ PAD: BBL.-GAL. ____

TREATMENT: BBL.-GAL. ____ DISPL: BBL.-GAL. ____

CEMENT SLURRY: BBL.-GAL. ____

TOTAL VOLUME: BBL.-GAL. ____

REMARKS

Refer to Job Log

CUSTOMER

HALLIBURTON SERVICES
A DIVISION OF HALLIBURTON COMPANY

TICKET NO. 228499-7

FORM 1906 R9 - - PAGE 1 OF 2 PAGES

WELL NO. – FARM OR LEASE NAME	COUNTY	STATE	CITY/OFFSHORE LOCATION	DATE
#5 Animas 57	Hidalgo	NM		12-22-85

CHARGE TO	OWNER	TICKET TYPE (CHECK ONE)	NITROGEN JOB
Steam Reserve Corporation Steam Reserve	Same	SERVICE ☒ SALES ☐	YES ☐ NO ☐
ADDRESS	**CONTRACTOR**	**LOCATION**	**CODE**
1707 Cole Boulevard	American Well Service	1 Artesia	20310
CITY, STATE, ZIP	**SHIPPED VIA** / **FREIGHT CHARGES**	**LOCATION**	**CODE**
Golden, Colorado 80401	Hawco ☐ PPD ☐ COLLECT	2	
	DELIVERED TO	**LOCATION**	**CODE**
	Location	3	
	ORDER NO.	**REFERRAL LOCATION**	
	WELL TYPE / **WELL CATEGORY**	**WELL PERMIT NO.**	
	04 Thermal / 02 Workover		
	TYPE AND PURPOSE OF JOB		
	115 Plug to Abandon	B–	

DUNCAN USE ONLY

As consideration, the above-named Customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists. Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account. These terms and conditions shall be governed by the law of the state where services are performed or equipment or materials are furnished.

Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATE PRECEDING SENTENCE. Halliburton's liability and customer's exclusive remedy in any cause of action (whether in contract, tort, product liability, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials or their return to Halliburton or, at Halliburton's option, to the allowance to the customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	LOC.	ACCOUNT	DESCRIPTION	UNITS 1 QTY	UNITS 1 MEAS	UNITS 2 QTY	UNITS 2 MEAS	UNIT PRICE	AMOUNT	
000-117		1		MILEAGE Pump Trk	321	mi			2.10	674	10
019-000	000-117	1		Mileage Pickup	346	mi			.80	276	80
009-019		1		Pump Service Charge	7000	ft	1st 8 hrs			1385	00
009-027		1		Additional Pump Service	Per Hrs		2	Hours	800.00	1600	00
999-052		1		Operators Expenses	3	ea	4	Day	80.00	960	00
500-082		1		Driver's Expenses	2	ea	4	Day	80.00	640	00

THIS IS AN INVOICE

NOT

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO. B– 13,306 60

WAS JOB SATISFACTORILY COMPLETED? _____

WAS OPERATION OF EQUIPMENT SATISFACTORY? _____

WAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____

X John E. Deymonaz
CUSTOMER OR HIS AGENT (PLEASE PRINT)

X John E Deymonaz
CUSTOMER OR HIS AGENT (SIGNATURE)

Thank You.

TAX REFERENCES

SUB TOTAL	
TAX	
TAX	
TAX	
TOTAL	18842 50

Dwight Gray
HALLIBURTON OPERATOR

JOB TOTAL $ 18,842.50

CUSTOMER

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND OR WITH RESPECT TO SERVICES FURNISHED UNDER

AMERICAN WELL SERVICING COMPANY

(PLEASE PRINT)

Nº 023627

Date 12-20-85

Company AMAX Lease ANIMAS Well No. 55-7 Depth 7000

Mailing Address _____ County HIDALGO State NEW MEXICO

Contract Number _____ Company Work Order No. _____

TIME CHARGED FROM	TO	DESCRIPTION OF WORK (Separate each operation to the nearest hour)
7.00 A/M		DROVE RIG FROM PECOS YARD TO
	8.30	LORDSBURG N. M. SHUT DOWN TILL
		FURTHER ORDERS.
		(A) 7973.56
		HOBCO 18,842.50

NAME	HOURS	OCCUPATION	TYPE OF EQ.	UNIT NUMBER
CATARINO CARRASCO	13½	Crew Chief	96' Derrick	71
GERARDO LOPEZ	13½	Derrick Man	66' Derrick	
ROSENDO LUJAN	13½	Floor Hand	Swab Unit	
ELMER PARKS	13½	Floor Hand	Gang Truck	
			Pick-Up	71

OTHER: PUSHER 250.00 PER DAY

PRICING

UNIT W/CREW AT $ 110.00

TOTAL $ 1485.00

FUEL CHARGE N/C

AUXILIARY EQUIPMENT USED

Hydraulic Tubing Tongs _____

Tubing Wiper Rubber _____

Trip Permit 38.28

Hydraulic Rod Tongs _____

Rod Overshot _____

Back-Off Tool _____

Out of town crew expense 5 men @ 45.00 225.00

Swab Cups: No. _____

Oil Saver Rubbers: No. _____

Sand Line Charge _____

Light Plant _____

Rod Stripper Rubber _____

Tong & Slip Dies _____

3 1/2" to 5 1/8" Casing Tongs _____

SALES TAX N/C

TOTAL $ 1,998.28

WELL RECORD

2" Tubing:	Jts Pulled _____	Ran _____
2½" Tubing:	Jts Pulled _____	Ran _____
7/8" Rods	Pulled _____	Ran _____
3/4" Rods	Pulled _____	Ran _____
5/8" Rods	Pulled _____	Ran _____

Rod Subs _____

Pump _____

Gas Anchor 1

Packer _____

Mud Anchor _____

CUSTOMER AGREES TO PAY ALL INVOICES OR SERVICES ON A NET 30-day basis from date on which purchases were invoiced. American Well Servicing Company shall not be liable for or does not agree to hold Customer harmless from damages that occur "down hole" or any loss of production, or any loss of oil in place. Any invoice not paid in accordance with its terms will be assessed interest not to exceed the maximum contract permitted under Texas law per annum or pro rata part thereof from the date due until paid.

Wesley Lerma
AWS Representative

Company Representative

AMERICAN WELL SERVICING COMPANY

(PLEASE PRINT)

Nº 023628

Date 12/31/85

Company AMEX Lease ANIMAS Well No. 55-7 Depth

Mailing Address County Hidalgo State N.M.

Contract Number Company Work Order No.

TIME CHARGED | **DESCRIPTION OF WORK**

FROM	TO	(Separate each operation to the nearest hour)
7:00	7:00	DROVE to LOCATION, put MAT UNDER CELLAR Rigged up, BROKE OFF WELL HEAD, LATCHED ON to TUBING, TUBING WAS STUCK, pulled up to 100 THOUSAND POUND, WORKED TUBING FOR 2 HRS, COULDNT COME LOOSE, STOOD by FOR HALLIBURTON, to CIRCULATE WELL CIRC. for 3 HRS, WORKED on TUBING and got LOOSE, pulled 59 JTS out HOLE, CIRC. 750 BBL. IN 2 HRS and WELL STARTED FLOWING CIRCULATED till, STOPPED, SET FIRST PLUG, pulled 33 JTS out of HOLE, CIRC. WELL, to SEE IF CLEAR of CEMENT, SHUT WELL IN SHUT DOWN, DROVE BACK to MOTEL

PRICING

UNIT W/CREW AT $	110.00
TOTAL $	1320.00
FUEL CHARGE	N/C

AUXILIARY EQUIPMENT USED

Hydraulic Tubing Tongs	110.00
Tubing Wiper Rubber	26.00
Trip Permit	
Hydraulic Rod Tongs	
Rod Overshot	
Back-Off Tool	
Swab Unit Out of town crew expense	45.00 225.00
Swab Cups: No.	
Oil Saver Rubbers: No.	
Sand Line Charge	
Light Plant	
Rod Stripper Rubber	
Tong & Slip Dies	20.00
3 1/2" to 5 1/8" Casing Tongs	
SALES TAX	N/C
TOTAL $	1951.00

NAME	HOURS	OCCUPATION	TYPE OF EQ.	UNIT NUMBER
CATARINO CARRASCO	12	Crew Chief	96' Derrick	#71
GERARDO LOPEZ	12	Derrick Man	66' Derrick	
ROSENDO LUJAN	12	Floor Hand	Swab Unit	
ELMER PARKS	12	Floor Hand	Gang Truck	
			Pick-Up	

OTHER: PUSHER 250.00 PER DAY

WELL RECORD

2" Tubing:	Jts Pulled	8	Ran	
2⅛" Tubing:	Jts Pulled	83	Ran	
7/8" Rods	Pulled		Ran	
3/4" Rods	Pulled		Ran	
5/8" Rods	Pulled		Ran	

Rod Subs

Pump

Gas Anchor

Packer

Mud Anchor

CUSTOMER AGREES TO PAY ALL INVOICES OR SERVICES ON A NET 30-day basis from date on which purchases were invoiced. American Well Servicing Company shall not be liable for or does not agree to hold Customer harmless from damages that occur "down hole" or any loss of production, or any loss of oil in place. Any invoice not paid in accordance with its terms will be assessed interest not to exceed the maximum contract permitted under Texas law per annum or pro rata part thereof from the date due until paid.

Wesley Cerny
AWS Representative

JE Dempsey
Company Representative

AMERICAN WELL SERVICING COMPANY

(PLEASE PRINT)

Nº 023629

Date 12/22/85

Company AMEX Lease ANIMAS Well No. 55-7 Depth

Mailing Address County Hidalgo State N.M.

Contract Number Company Work Order No.

TIME CHARGED FROM	TO	DESCRIPTION OF WORK (Separate each operation to the nearest hour)
7:00	8:30	Drove to location, pulled out 69 jts of 2⅛ T.B.G. and SET plug, and stood by for cement 3 hrs, to set, tagged cement and layed down tubing to 3rd plug, then pulled to 4th plug and cement and stood by for 3 more hrs, tagged cement, pulled out to hole, and cemented last plug out surface, then cleaned up location, and Rigged down.

NAME	HOURS	OCCUPATION	TYPE OF EQ.	UNIT NUMBER
CATARINO CARRASCO	13½	Crew Chief	96' Derrick	#71
GERARDO LOPEZ	13½	Derrick Man	66' Derrick	
ROSENDO LUJAN	13½	Floor Hand	Swab Unit	
ELMER PARKS	13½	Floor Hand	Gang Truck	
			Pick-Up	

OTHER: Pusher 250.00 Per Day

PRICING

UNIT W/CREW AT $	110.00
TOTAL $	1485.00
FUEL CHARGE	N/C

AUXILIARY EQUIPMENT USED

Hydraulic Tubing Tongs	110.00
Tubing Wiper Rubber	
Trip Permit	
Hydraulic Rod Tongs	
Rod Overshot	
Back-Off Tool (3 new @ 45.00)	225.00
Out of town crew expense	
Swab Cups: No.	
Oil Saver Rubbers: No.	
Sand Line Charge	
Light Plant	
Rod Stripper Rubber	
Tong & Slip Dies	20.00
3 1/2" to 5 1/8" Casing Tongs	
SALES TAX	N/C
TOTAL $	2090.00

WELL RECORD

2" Tubing:	Jts Pulled	Ran
2⅛" Tubing:	Jts Pulled 126	Ran
7/8" Rods	Pulled	Ran
3/4" Rods	Pulled	Ran
5/8" Rods	Pulled	Ran
Rod Subs		
Pump		
Gas Anchor		
Packer		
Mud Anchor		

CUSTOMER AGREES TO PAY ALL INVOICES OR SERVICES ON A NET 30-day basis from date on which purchases were invoiced. American Well Servicing Company shall not be liable for or does not agree to hold Customer harmless from damages that occur "down hole" or any loss of production, or any loss of oil in place. Any invoice not paid in accordance with its terms will be assessed interest not to exceed the maximum contract permitted under Texas law per annum or pro rata part thereof from the date due until paid.

Wesley Curry
AWS Representative

J E Dayton
Company Representative

AMERICAN WELL SERVICING COMPANY

(PLEASE PRINT)

Nº 023630

Date 12-23-85

Company AMEX Lease ANIMAS Well No. 55-7 Depth

Mailing Address County Hidalgo State N.M

Contract Number Company Work Order No.

TIME CHARGED FROM	TO	DESCRIPTION OF WORK (Separate each operation to the nearest hour)
7.00AM	8.00	DROVE Rig FROM Lordsburg to PECOS YARD.
		TOTAL (A) 7,973.56
		HOWCO TOTAL 18,842.50
		JED TOTAL

NAME	HOURS	OCCUPATION	TYPE OF EQ.	UNIT NUMBER
CATARINO CARRASCO	13	Crew Chief	96' Derrick	
GERARDO LOPEZ	13	Derrick Man	66' Derrick	
RAENDO LUJAN	13	Floor Hand	Swab Unit	
ELIAS PARKS	13	Floor Hand	Gang Truck	
			Pick-Up	

OTHER: PUSHERS PER DAY 250.00

PRICING

UNIT W/CREW AT $ 110.00

TOTAL $ 1430.00

FUEL CHARGE N/C

AUXILIARY EQUIPMENT USED

Hydraulic Tubing Tongs

Tubing Wiper Rubber

Trip Permit 38.28

Hydraulic Rod Tongs

Rod Overshot

Back-Off Tool

SMEND Out of town crew expense 225.00

Swab Cups: No.

Oil Saver Rubbers: No.

Sand Line Charge

Light Plant

Rod Stripper Rubber

Tong & Slip Dies

3 1/2" to 5 1/8" Casing Tongs

SALES TAX

TOTAL $ 1943 —

WELL RECORD

2" Tubing: Jts Pulled Ran

2½" Tubing: Jts Pulled Ran

7/8" Rods Pulled Ran

3/4" Rods Pulled Ran

5/8" Rods Pulled Ran

Rod Subs

Pump

Gas Anchor

Packer

Mud Anchor

CUSTOMER AGREES TO PAY ALL INVOICES OR SERVICES ON A NET 30-day basis from date on which purchases were invoiced. American Well Servicing Company shall not be liable for or does not agree to hold Customer harmless from damages that occur "down hole" or any loss of production, or any loss of oil in place. Any invoice not paid in accordance with its terms will be assessed interest not to exceed the maximum contract permitted under Texas law per annum or pro rata part thereof from the date due until paid.

Wesley Curry
AWS Representative

J E Dorsey
Company Representative

November 1, 1985

Mr. Roy E. Johnson
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico

Re: Animas Project, Well No. 55
Hidalgo County, New Mexico

Dear Mr. Johnson:

Enclosed is a Sundry Notice describing the modified plan for plugging the above-referenced geothermal well at Steam Reserve Corporation's Animas project. The proposed method of plugging Well No. 55 is a result of reviewing your letter dated October 21, 1985 and Mr. Dean Pilkington's discussion of this date with the Bureau of Land Management.

We hope this new plan is acceptable to you and approval will be forthcoming.

Very truly yours,

STEAM RESERVE CORPORATION

Anita Clement

Anita Clement
Permit Administrator

/ac
encls.

Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED		
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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

Revised Plugging Plan for Well No. 55

Bring in workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 5500 feet. Place cement plug from 5500 to 5400 feet. Pull up and set bridge plug at 2090 feet, place cement plug from 2090 to 1890 feet (plug goes from 100' into the Paleozoics to 100' into the Tertiary Volcanics). Test location and strength of plug by tagging plug with drill string or tubing, pull up and set bridge plug at 1500'. Place cement plug from 1500 to 1400'. Test location and stength of plug by tagging plug with drill string or tubing. Pull out of hole. The well will be turned over to Dale Burgett contingent upon BLM approval and Mr. Burgett meeting the necessary BLM requirements.

The modified plan has been proposed after reviewing your letter dated October 21, 1985. SRC believes that the proposed plan will adequately protect the formation from possible contamination. Any potential hydrocarbon resources in the vicinity of Well No. 55 were driven off at the time of granitic intrusions into the Paleozoics section in Late Cretaceous or Early Tertiary times.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE Nov. 1, 1985

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Tops: 1900' - Top Cret. - Majado
3195 - Top Paleozoics - Permain?
4470 Top Miss
5928 Top Montoya
5982 Top El Paso
6755 Top Bliss SS.

25-50 sx plugs @ these tops

10-10-85 Call Armando Lopez w/ BLM. Roswell and recommended this plugging program

October 11, 1985

Roy E. Johnson
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal Well No. 55
Animas Project, Hidalgo County

Dear Mr. Johnson:

Pursuant to your phone conversation with Dean Pilkington, please find enclosed a Sundry Notice (Form G-103) describing the proposed method of plugging and abandonment you agreed upon for SRC's deep geothermal well No. 55 at the above-referenced project.

Operations on the well are expected to commence in late November, and we will notify you by phone prior to start-up.

If the described operations meet with your approval, please sign one copy of the enclosed Sundry Notice and return to me at the letterhead address. Also, please feel free to call me or Dean Pilkington if we can be of assistance.

Very truly yours,

Anita Clement

Anita Clement
Permit Administrator

AC/m
Enc.
cc: D. Pilkington

Form G-103
Adopted 10/1/74

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

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5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: STEAM RESERVE CORPORATION

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, Colorado 80401-3293

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	☒
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER	☐		

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any*

Plugging and Abandonment Well 55-7

Bring workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 2090 feet. Place cement plug from 2090 to 1890 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull up and set bridge plug at 1412 feet. Place cement plug from 1412 to 900 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull out of hole and set bridge plug or packer in 13 3/8" casing at a depth of 50 feet. Cement to surface with local ready-mix truck.

Weld plate onto top of well head, back fill cellar and reclaim sump with spoil from construction. Restore surface to the approximate original contour.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Reita Clement TITLE Attorney-in-Fact DATE 10-11-85

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

50 YEARS
1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

May 10, 1985

Steam Reserve Corp.
1707 Cole Boulevard
Golden, CO 80401

Re: Animas Project
Well No. 55
Sec. 7, T-25S,
R-19W, Hidalgo
County, NM

Gentlemen:

Enclosed please find your approved Geothermal Sundry Notices for the above referenced well. Please note that this approval is for a six-month period and at which time this well is to be properly cased and cemented or in the alternative, plugged and abandoned according to the New Mexico Oil Conservation Division rules and regulations.

Should you have any questions pertaining to this matter, please contact me at this office.

Sincerely,

Roy E. Johnson

ROY E. JOHNSON
Senior Petroleum Geologist

REJ/dp

Encs.

April 15, 1985

Roy E. Johnson
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal Well No. 55, Animas Project, Hidalgo County

Dear Mr. Johnson:

Enclosed is Geothermal Sundry Notice Form G-103 for the above-referenced well. The well was completed on February 18, 1985 and put into suspension, and a Sundry Notice was filed with your office. On March 11th SRC went back into the hole and pulled the tubing which had been installed to 3,018 feet. New tubing was installed to a depth of 6,919 feet to allow more complete temperature observations. The drill site was cleaned up and Well No. 55 was again placed in suspension.

Very truly yours,

Anita Clement

Anita Clement
Permit Administrator

AC/m
Enc.

letter

February 23, 1985

Mr. Roy E. Johnson
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal
Well No. 55, Animas Project, Hidalgo County

Dear Mr. Johnson:

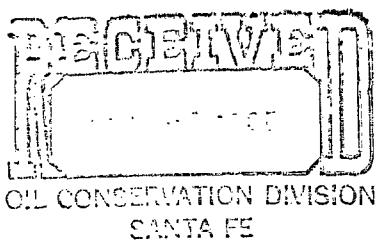
Enclosed is a geothermal sundry notice Form No. G-103 for the above-referenced well. The well and has been put into suspension to allow further testing to determine temperatures and obtain additional well data. I will keep you advised of any future activities on the project.

Very truly yours,

Anita Clement

Anita Clement
Permit Administrator

/ac
encl.



Form G-103
Adopted 10/1/74

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U. S. G. S		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease State ☐ Fed. & Fee ☒
5.a State Lease No. N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals ~~Archie Green - Surface~~

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No. 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*: GR 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER Change of Operator ☒		OTHER ☐	

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Steam Reserve Corporation is the new Operator for Well No. 55. Steam Reserve Corporation is a subsidiary of AMAX Exploration, Inc., the former operator of this well.

Note: Steam Reserve Corporation holds record title to all former AMAX Exploration, Inc. geothermal leases in New Mexico.

RECEIVED
OCT 26 1984
OIL CONSERVATION DIVISION
SANTA FE

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Gary L. Burnett TITLE ATTORNEY-IN-FACT DATE 10-23-84

APPROVED BY Roy E. Johnson TITLE DISTRICT SUPERVISOR DATE 10-29-84

CONDITIONS OF APPROVAL, IF ANY:

October 23, 1984

Mr. Roy Johnson
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico

Re: Animas Project - Well No. 55
Hidalgo County, New Mexico

Dear Mr. Johnson:

Enclosed please find three copies of Form G-103 changing the name of operator from AMAX Exploration, Inc. to Steam Reserve Corporation. A rider to the $10,000 Multiple-Well Geothermal Bond #224 45 94 changing the principal from AMAX to Steam Reserve was previously submitted to you.

Steam Reserve Corporation plans to start drilling operations on or about November 20th. A modified drilling program is also enclosed for your review. Thanks in advance for granting the extension we discussed on the phone today.

Very truly yours,

Anita Clement

Anita Clement
Permit Administrator

/ac
encl.

December 17, 1984

Mr. R. E. Johnson
Oil Conservation Commission
State of New Mexico
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Steam Reserve Corporation's Geothermal Well No. 55
Animas Project, Hidalgo County, New Mexico

Dear Mr. Johnson:

Enclosed please find a Sundry Notice Form G-103 to advise you that Steam Reserve Corporation intends to commence drilling operations for the above-referenced geothermal well on or about December 27, 1984. Also enclosed for your review is a modified drilling plan for Well No. 55.

Very truly yours,

Anita Clement

Anita Clement
Permit Administrator

/ac
encls.

Form G-103
Adopted 10/1/74

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DISTRIBUTION		
File	✓	
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Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

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7. Unit Agreement Name: N/A
2. Name of Operator: Steam Reserve Corporation
8. Farm or Lease Name: NM-34790 - Minerals ~~Dale Burgett - Surface~~
3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401
9. Well No.: 55
4. Location of Well: Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.
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PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☒	PLUG & ABANDONMENT	☐
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER	☐		

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Steam Reserve Corporation plans to start mobilization for Well No. 55 at its Animas project the week of December 18th. Spud-in for the proposed 5000-8000' exploration well is scheduled to be on or about December 27, 1984.
A detailed drilling program is enclosed.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Gary L. Bennett TITLE Attorney-in-Fact DATE 12/18/84

APPROVED BY Roy E. Johnson TITLE DISTRICT SUPERVISOR DATE 12-28-84

CONDITIONS OF APPROVAL, IF ANY:

DRILLING PROGRAM

STEAM RESERVE CORPORATION	Prepared By Otis L. Day	Date: Sept. 11, 1984

Lease and Well Number Animas - 55-7	AFE No.
Field, County and State Lighting Dock KGRA - Hidalgo, New Mexico	Division Geothermal
Location NW-SE SEC. 7, T25S R19W	

Datum and Elevation	K.B.	Prop. Total Depth	Est. Drlg Time	Est. Total Time
	14' Ft.	6000' Ft.	45 Days	60 Days

SEQUENCE OF OPERATIONS:

1. On the existing location have a company specializing in conductor and rat hole drilling, drill a 36" hole to a depth of 25' to 30'. Install a joint of 30" lapweld, plainended casing. Level the casing and cement using local ready-mix. Construct a 10'x 10'x 6' cellar around the existing conductor pipe with a cement floor and buried 8"fiberglass drain to the sump. It is recommended that the rat and mouse holes be dug at the same time as the conductor pipe hole.

2. Move in the rotary tools and rig up over the conductor pipe. Weld on a 30"riser of the same casing as the conductor pipe and install the flow line and fill up line.

3. Mix Spud Mud as recommended by the mud company . (See mud program.)

4. Spud-in with a 17-1|2"bit on a 26"hole opener and center punch hole inside the conductor pipe. Drill 26"hole to 60'. Pick up 17-1|2" BHA and drill to 300' as indicated by lithology. Survey at 150' and 300'. Open hole to 26"to 300'.

5. Run and cement 20", 94lb., H-40 Buttress casing. Tack weld or Bakerlok all couplings. Cement using a stab-in float shoe. Cement to surface.(See cement program). W.O.C. 6 hours.

6. Cut off 20"casing and weld on 20"flange. Install Blow Out Preventer on 20" flange as in attached Drawing 001. Test preventer with 200 psi. Connect picture nipple and flow line.

7. Drill a 17-1|2" hole to 1000' using mud as the circulating medium. Run a wire

Lease and Well Number: Animas - 55-7

AFE No.

SEQUENCE OF OPERATIONS:

7. (cont.) line deviation survey every 150' or as necessary. Run a locked-in BHA to prevent exessive hole deviation and to stabilize the bit and drill collars in the large diameter hole. Circulate and condition mud and hole and run an Eastman Multi-shot directional survey on the trip out of the hole to run the 13-3|8" casing.

8. Run and cement the 13-3|8", 54.50lb., K-55, Buttress Casing. Tack weld or Baker-lok the bottom 4 joints. Cement to surface and W.O.C. 12 hours.

9. Install 13-3|8"wellhead and nipple up blow out preventers as in attached Drawing 002. Test casing and preventers to 500 psi.

10. Drill out 13-3|8"casing with a 12-1|4"bit to 6000' or the first entry or loss circulation zone that is determined to be of sufficient temperature to run 9-5|8" casing. A sand plug would be set across this zone and a cement plug set on top of the sand plug. Circulation would be established and the hole conditioned to run the 9-5|8"casing. A minimum of 200' of lap will be used into the 13-3|8" surface casing. Totally cement the annulus of the 9-5|8"liner as per the cement program. W.O.C. 12 hours.

11. Make changes to the BOPE stack to drill with air if necessary. Retest the stack if changes are made. If no changes are made to the stack then clean out to the top of the liner and test the liner lap. Squeeze if necessary until lap will hold a pressure test. Drill out the 9-5|8"liner using a 8-1|2"bit to the top of the float collar and test the casing with 500 psi. Drill out the cement and float collars and displace mud with fresh water or brine.

12. Drill the 8-1|2"hole with fresh water or brine as hole conditions dictate. Clean out cement and sand plugs and continue drilling if necessary. Test or temperature survey as required by the Geologic and Engineering staff at significant entrys or loss circulation zones. It may be deemed advantageous to install a rotating head and air drilling equipment during the drilling of this section of hole. If commerical temperatures and fluid volumes are attained the hole will be completed as outlined in the casing and cementing programs.

MUD PROGRAM

Well Animas 55-7

Mud, Logging, Wellhead and BHA Programs

Interval	Type	Weight	PV-YP	Fluid Loss	Solids	PH
0' - 300'	Gel and Water -lime	8.4	10-15|20-30	10-12cc	5	10
300' - 1000'	Gel and Water-low solids	8.5-8.8	15-20|10-15	10cc	4-5	8.5-9.5
1000' - 6000' -TD	polymer-low solids	8.5-8.8	6-10|4-8	10cc	4-5	10-11

Remarks A Gel and Water, low solids system with fluid loss kept at 10cc or less -- As temperatures become elevated the treatment with polymer thinners will become necessary to control fluid loss and rheological properties. PH should be maintained above 10

WELLHEAD PROGRAM

API Nominal Size	Working Pressure PSI	Type	Remarks
20"	600 API (2000 psi)	Weld on Flange 21¼"Bore	Rental
13-3/8" x 12"	400 ANSI(960 psi)	13-3/8" SOW x 12" 400 ANSI	WKM or CWH
10-3/4" x 10"	400 ANSI(960 psi)	10-3/4" SOW x 10" 400 ANSI	WKM or CWH
10" x 10"	400 ANSI(960 psi)	10" 400 ANSI x 10" 400 ANSI	WKM or CWH
	WKM Power Seal Gate Valve or CWH Rotary Disc Valve		

LOGGING PROGRAM

Interval	Log Type and Scale	Remarks
0' - 300'	No Wireline logs	
300'- 1000	Electric and temperature	
1000' - 6000'	" " "	
	and others as required by the Geologic and Engineering staffs.	

BHA PROGRAM

Hole sizes-Depths

As determined by the Drilling Consultant or Drilling Manager

DIRECTIONAL

DIRECTIONAL

Drill hole as straight as possible

CASING PROGRAM — Size 20" — Depth 300' — Well Animas 55-7

Interval	Weight lb-ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
0' - 300'	94	H - 40	Buttress	4.22	4.09	3.47	49.72(jt.)

DESIGN CONDITIONS

Surface Burst Pressure	- 500	PSI	Outside mud Wt. (collapse)	- 9.6	PPG
Inside Mud Wt. (Burst)	- 9.6	PPG	Inside Mud Wt. (collapse)	- -0-	PPG
Outside Mud Wt. (Burst	- 8.6	PPG	Form. Press. Grad. at Shoe (coll.)	-	PPG
Frac. Grad. at Shoe (Burst)	-	PPG	Biaxial Load, (coll.) [x] Burst [x]	Bouy Yes - No -	

SLURRY DESCRIPTION AND PROPERTIES

900 cu. ft. (783 sacks) of Class "G" cement blended with 3 per cent $CaCl_2$.

		Desired Top surface	Excess 100 per cent
Slurry Vol.- Cu.Ft. - (Slurry No.)	900		
Slurry Yield - Cubic Ft. - Sack	1.15		
Slurry Density - PPG	118		
Thickening Time - Depth - Hrs.-Min.	4 hours		
Compressive Strength - PSI - Hours	1870psi at 100°F in 8 hours - 3885 psi at 100°F in 24 hrs.		

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening

1. Threadlock bottom 4 joints
2. Tackweld bottom 4 joints and Float Equip.
3. Use HOWCO FS with drill pipe stab-in Assy

Centralizers and Scratchers - Number, Type and Spacing

1. Two centralizers around bottom two collars
2. No scratchers to be run.

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.

1. Cement through drill pipe from bottom
2. Run Min. of 100 cu. ft. of water ahead as preflush

Pressure Testing and Landing

1. Maximum differential pressure will be approximately 150 psi
2. Test casing and surface equipment to 200 psi.

BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see drawing	3000 psi	21"	Hydril	200 psi		

CASING PROGRAM

Size	Depth	Well
13-3/8"	1000'	Animas 55-7

Interval	Weight lb-ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
0' - 1000'	61#	K-55	Buttress	6.18	4.90	1.23	5.56

DESIGN CONDITIONS

Surface Burst Pressure	-	500	PSI	Outside mud Wt. (collapse)		-8.8	PPG
Inside Mud Wt. (Burst)	-	8.8	PPG	Inside Mud Wt. (collapse)		- -0-	PPG
Outside Mud Wt. (Burst	-	8.6	PPG	Form. Press. Grad. at Shoe (coll.)	-		PPG
Frac. Grad. at Shoe (Burst)	-		PPG	Biaxial Load, (coll.) [x] Burst [ ]		Bouy Yes - No - x	

SLURRY DESCRIPTION AND PROPERTIES

Class "G" cement blended with 1:1 perlite + 40% silica flour + 3% gel + 0.5% CFR-2

Slurry retarded as needed for temperature

			Desired Top Surface	Excess 100%
Slurry Vol.- Cu.Ft. - (Slurry No.)				
Slurry Yield - Cubic Ft. - Sack	2.12			
Slurry Density - PPG	100 @ surf.	& 116 @ Btm.		
Thickening Time - Depth - Hrs.-Min.	2 -3 hours			
Compressive Strength - PSI - Hours	± 1100 /24 hrs.			

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening

1. Use HOWCO stab-in Float Collar. Threadlock bottom 4 jts. & Tack weld bottom of collars
2. Position Float Collar 2 jts. above Guide Shoe

Centralizers and Scratchers - Number, Type and Spacing

1. Use 1 centralizer in the middle of the bottom jt. & over the collar of every third jt. to the shoe of the 20" casing . (300'±)

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.

1. As needed.

Pressure Testing and Landing

1. Maximum differential pressure expected is approximately 750 psi
2. Displace with Mud.
3. Test casing and surface equipment to 500 psi with State Representative notified.

BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see Drawing	900 psi	12¾"	Annular & CSO	500 psi	500 psi	500psi

CASING PROGRAM | Size 9-5/8" | Depth 6000' | Well Animas 55-7

Interval	Weight lb-ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
800' - 6000'	43.50#	N-80	Buttress	1.75	1.57	1.25	2.31

DESIGN CONDITIONS

Surface Burst Pressure	- 1727	PSI	Outside mud Wt. (collapse)	- 8.8	PPG
Inside Mud Wt. (Burst)	- 8.8	PPG	Inside Mud Wt. (collapse)	- -0-	PPG
Outside Mud Wt. (Burst	- 8.6	PPG	Form. Press. Grad. at Shoe (coll.)	- 12.0	PPG
Frac. Grad. at Shoe (Burst)	-	PPG	Biaxial Load, (coll.) [ ] Burst [ ]	Bouy Yes - x No -	

SLURRY DESCRIPTION AND PROPERTIES

Class "G" cement + 50# Spherelite / sk. + 40% SSA-1 + 5% lime + 4% Gel + 1% CFR-2 + .5% Halad 22
Tailed - in with Class "G" + 40% SSA-1 + 0.5% CFR-2, - Both slurrys retarded as needed for temperature.

	-1-	-2-	Desired Top 800'	Excess ± 50%
Slurry Vol.- Cu.Ft. - (Slurry No.)				
Slurry Yield - Cubic Ft. - Sack	3.45	1.62		
Slurry Density - PPG	12.0	15.6		
Thickening Time - Depth - Hrs.-Min.	3½ -4½ hrs.	2-3 hrs.		
Compressive Strength - PSI - Hours	750-24 hrs.	2300-8 hrs.		

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening
1. Run Float Shoe and Float Collar on top of second jt.
2. Run Midway circulating type hanger

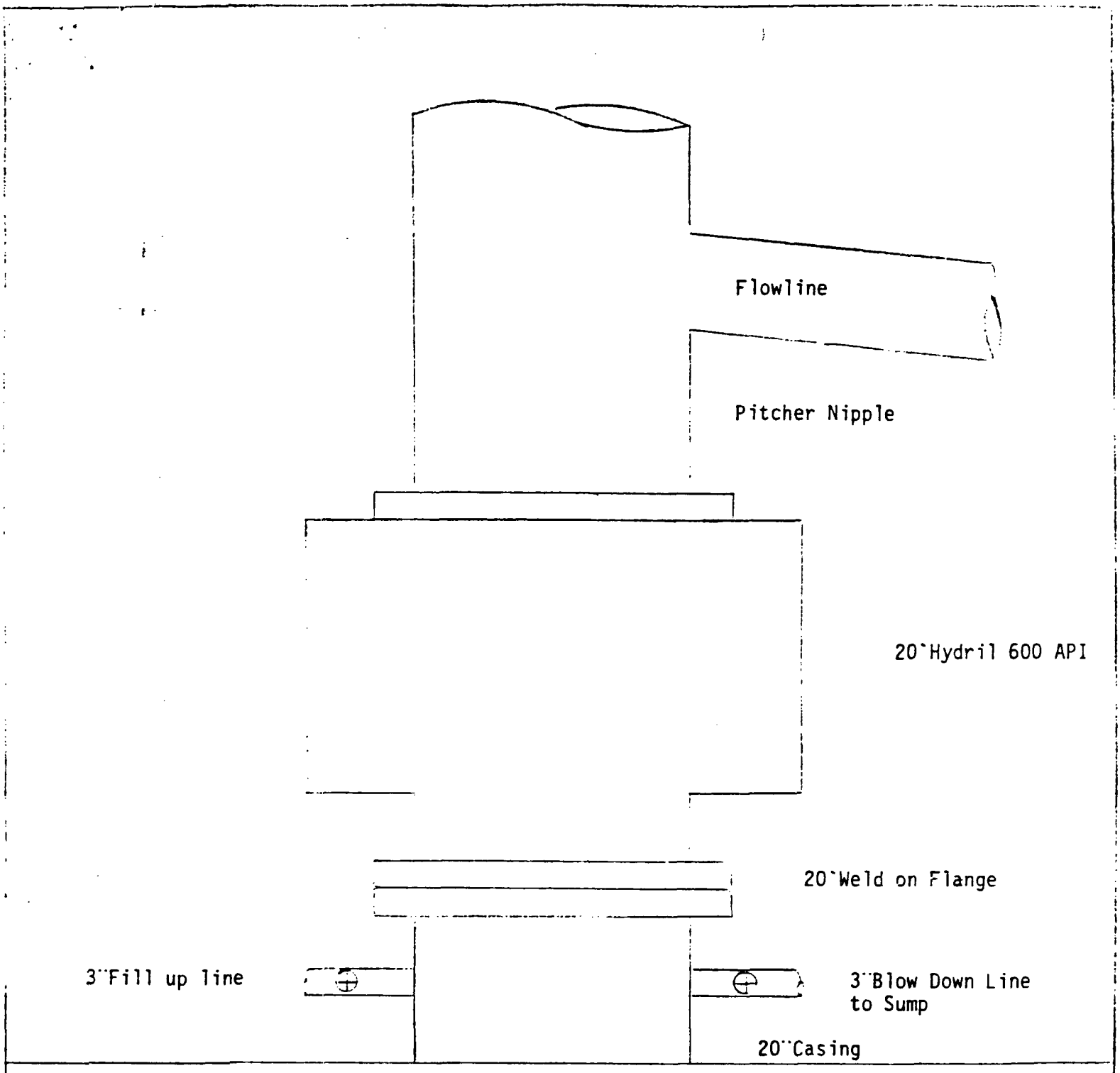
Centralizers and Scratchers - Number, Type and Spacing
1. Run 2 centralizers in lap area and 2 on each of the bottom jts.

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.
1. Circulate at least 2 complete rounds before cementing.

Pressure Testing and Landing
1. WOC 12 hours. Clean out to the top of the 9-5/8" liner. Test lap to 500 psi Squeeze lap if necessary. Clean out and retest until a test is obtained.

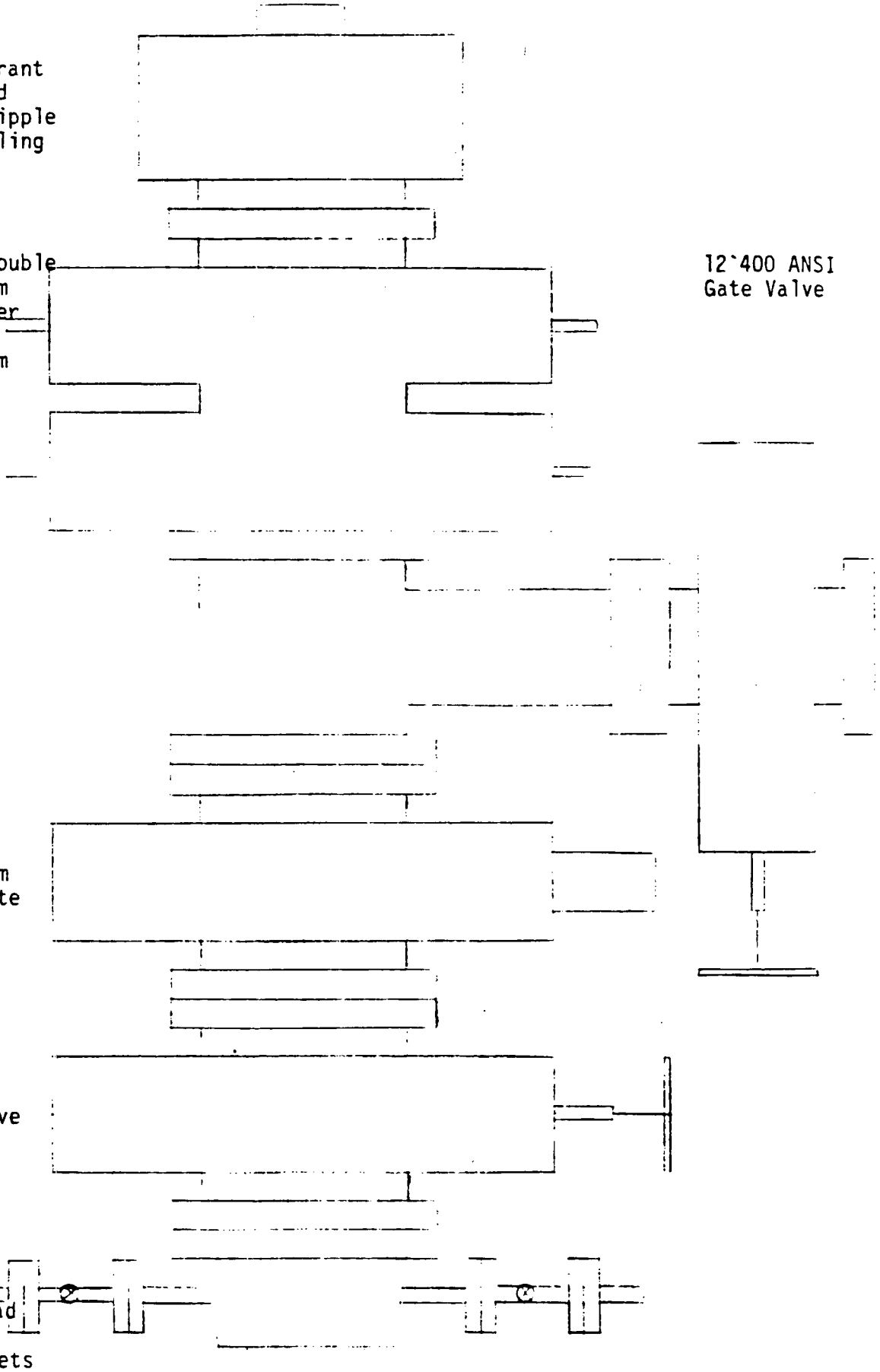
(No change in BOPE until Tie-Back) BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see Draw. 002	960 psi	12¼"	Annular and CSO	500 PSI	500 PSI	500 PSI



BLOW OUT PREVENTER STACK FOR 20`` CASING

Drawing No. 001



BLOW OUT PREVENTER STACK FOR 13-3/8`Casing

Drawing No. 002

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

October 23, 1984

Steam Reserve Corporation
1707 Cole Boulevard
Golden, Colorado 80401

Attention: Anita Clement

RE: Extension of APD for Animas
Well No. 55
Hidalgo County, New Mexico

Dear Anita;

As per your request of September 24, 1984, for the above referenced well, you are hereby authorized a 180 day extension on this well. This permit shall expire on March 22, 1985.

If any further assistance is needed in this matter, please contact me at this office.

Sincerely,

Roy E. Johnson

ROY E. JOHNSON
SR. PETROLEUM GEOLOGIST

REJ/bok

September 24, 1984

Mr. R. E. Johnson
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well No. 55, Hidalgo County, New Mexico - Animas Project

Dear Mr. Johnson:

Pursuant to our phone conversation Steam Reserve Corporation, a wholly owned subsidiary of AMAX Exploration, Inc. is planning to drill a geothermal exploration well at its Animas project in Hidalgo County, New Mexico. Drill pad construction for the above-referenced well has been completed and Steam Reserve Corporation hereby requests an extension of the approved permit so as to begin drilling operations on or before December 15, 1984.

With this letter we would also like to advise you that all future operations will be conducted by Steam Reserve Corporation which holds record title to all former AMAX Exploration, Inc. geothermal leases in New Mexico.

Your earliest approval of this extension would be appreciated.

Very truly yours,

Anita Clement

Anita Clement

/ac

Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N. M. B. M.		
U. S. G. S		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. Fee ☒
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other-Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, Colorado 80401-3293

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From
The South Line, Section 7 Township 25 So. Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☒	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER Suspension ☐		OTHER ☐	

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

Well #55 was previously placed in suspension with tubing hung to 3018'. On March 11, 1985 SRC moved rig back onto drill site. The old tubing was pulled out of hole and 2 7/8" tubing was installed to a new depth of 6919' with sleeves set at four intervals so well can be unloaded at various depths, if desired, during future testing. Tubing was filled with water for temperature observation in April/May. The top of casing was flanged to the tubing and a 3" valve installed on top. Well is again placed in suspension.

AUTHORIZATION FOR MAINTENANCE IN SHUT-IN OR TEMPORARY ABANDONMENT STATUS EXPIRES 10-15-85

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 4-15-85

APPROVED BY Roy E Johnson TITLE DISTRICT SUPERVISOR DATE 4-15-85

CONDITIONS OF APPROVAL, IF ANY:

Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N. M. B. M.		
U. S. G. S		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease State ☐ Fed. & Fee ☒

5.a State Lease No. N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (*Show whether DF, RT, GR, etc.*): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☒
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER Suspension ☒		OTHER ☐	

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Well No. 55 was drilled to a depth of 7001 feet. Drilling rig was released on 2-18-85 and the well was put into suspension. 2-7/8" EUE tubing (capped on the bottom) was hung to 3018 feet and filled with water to allow equilibrium temperature measurements to be made at a future date. A 3" valve is installed on top.

The original casing program was altered and casing was set as follows:

Hole Size	Casing Size	Interval	
36"	30"	0-30'	
26"	20"	0-360'	Cemented with 760 sacks Class H Cement
17-½"	13-3/8"	0-1050'	Cemented with 780 sacks Class H Cement

AUTHORIZATION FOR MAINTENANCE IN SHUT-IN OR TEMPORARY ABANDONMENT STATUS EXPIRES 10-15-85

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE Feb. 22, 1985

APPROVED BY Ron E. Johnson TITLE DISTRICT SUPERVISOR DATE 4-15-85

CONDITIONS OF APPROVAL, IF ANY:

AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

1707 COLE BOULEVARD • GOLDEN, COLORADO 80401 • (303) 234-9020 • TELEX: 45-556

GOVERNMENTAL AFFAIRS

January 19, 1984

Mr. Carl Ulvog
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well No. 55, Hidalgo County, New Mexico - AMAX's Animas Project

Dear Mr. Ulvog:

It now appears that AMAX will not commence drilling operations at Animas until approximately May 31, 1984. You recently extended the subject permit until January 30, 1984. Would you be so kind as to grant an additional extension after the current permit expires in order to allow AMAX to spud in the well as late as May 31, 1984.

Thank you for your assistance in this matter.

Very truly yours,

AMAX EXPLORATION, INC.

Joyce Emerson
Manager of Government Relations

JE/ac

APPROVED 1/24/84

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 7-24-84
UNLESS DRILLING UNDERWAY

Carl Ulvog

DISTRICT SUPERVISOR

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. BOX 2088 SANTA FE 87501

Form G-102
Adopted 10/1/74

RECEIVED
MAR 04 1983
OIL CONSERVATION DIVISION
SANTA FE

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
AMAX Exploration, Inc.	NM-34790 -- Minerals Archie Green -- Surface	55

Unit Letter	Section	Township	Range	County
	7	25S	19W	Hidalgo

Actual Footage Location of Well:
2411.9 feet from the East line and 2329.1 feet from the South line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4201'			Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

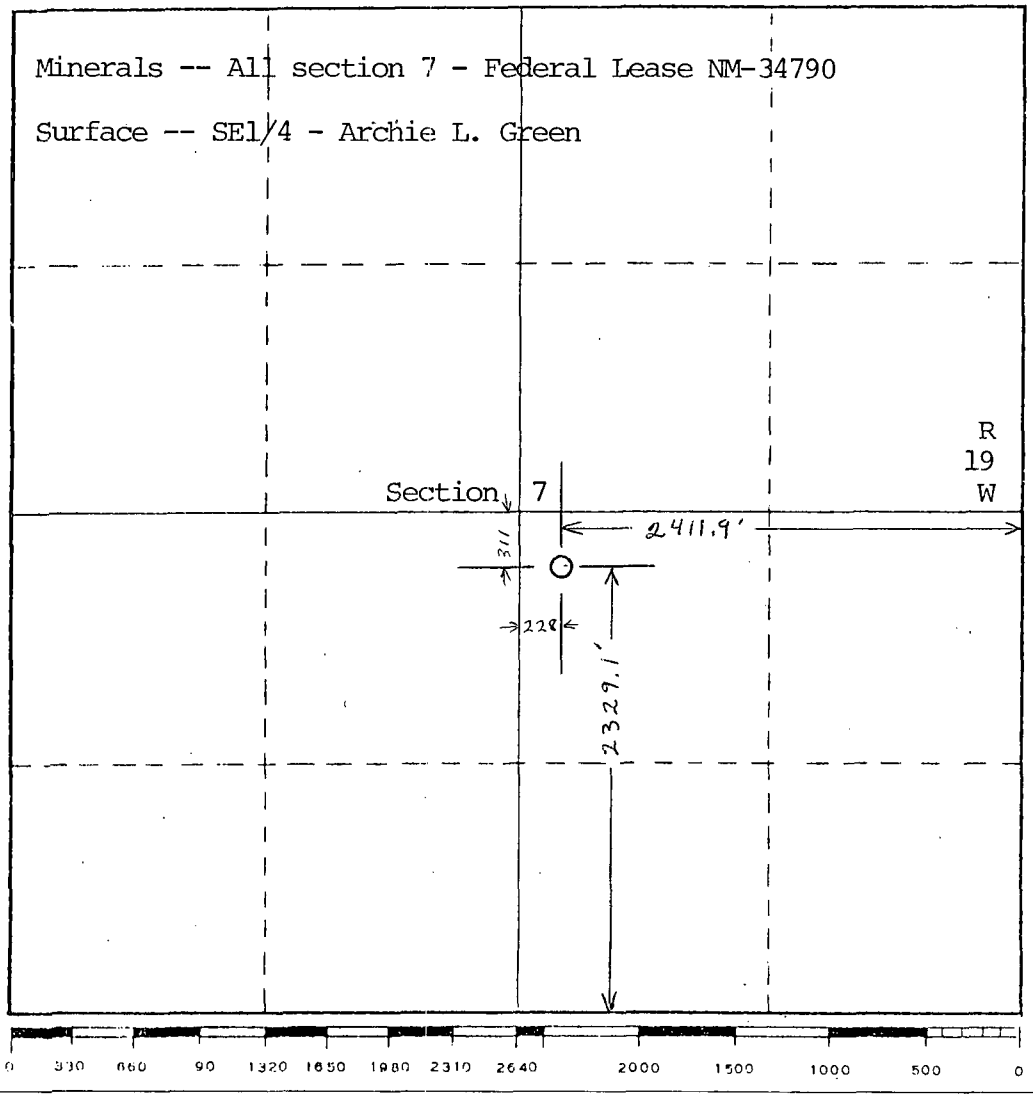
3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

T25S



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Joyce Emerson

Position: Mgr., Gov't. Relations

Company: AMAX Exploration, Inc.

Date: 2/24/83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

(see attached)

Date Surveyed

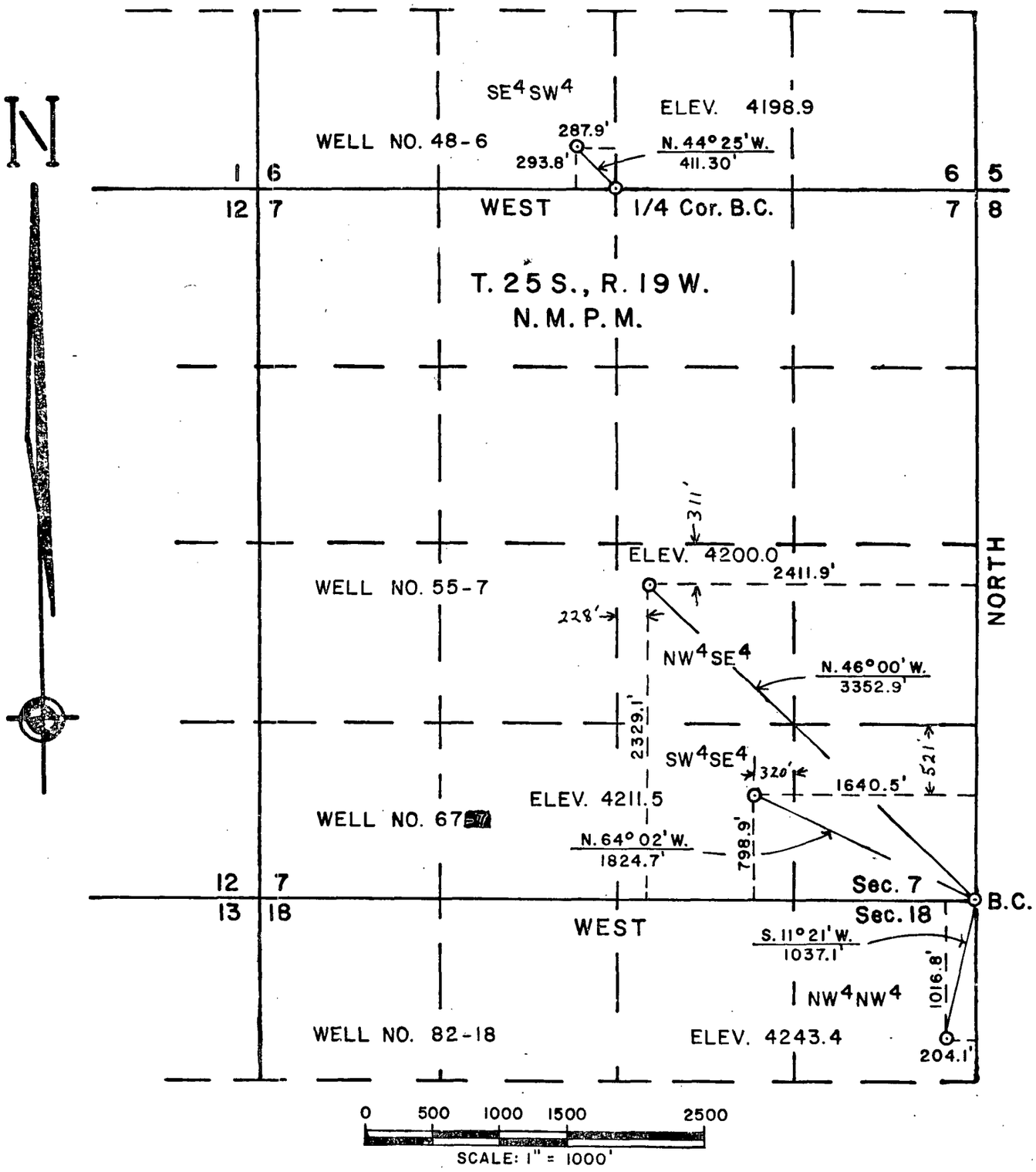
Registered Professional Engineer and/or Land Surveyor

Certificate No.

AMAX EXPLORATION, INC.

GEOTHERMAL WELLS

SECTIONS 6-7 &18, T.25S., R.19W., N.M.P.M.
HIDALGO COUNTY, NEW MEXICO



LAND SURVEYOR'S CERTIFICATE

This Plat and the information hereon is the result of an actual field survey made by me or under my supervision and meets the accuracy requirements for this survey.

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO NO 5418 VICTOR TOPMILLER, JR.

Vic Topmiller Jr. R.L.S. No. 5418 December 8, 1982

VIC TOPMILLER JR. & ASSOC'S. SILVER CITY, NEW MEXICO

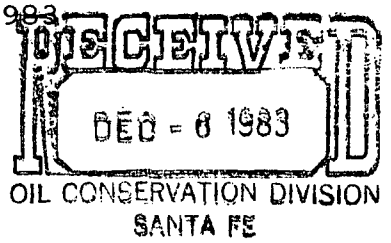
AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

1707 COLE BOULEVARD • GOLDEN, COLORADO 80401 • (303) 234-9020 • TELEX: 45-556

LAW DEPARTMENT

December 2, 1983



Mr. Carl Ulvog
New Mexico Oil Conservation
P.O. 2088
Santa Fe, New Mexico 87501

Re: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well
No. 55 in Hidalgo County, New Mexico
AMAX's Animas Project

Dear Mr. Ulvog:

As per our phone conversation today, AMAX would like to request an extension to the above-referenced permit which was approved by you and expired on November 1, 1983. AMAX would like to start construction of the drill pad on that location by December 15, 1983 and begin drilling operations by mid-January, 1984.

Thank you for your earliest consideration to this request.

Very truly yours,

AMAX EXPLORATION, INC.

Anita Clement

Anita Clement
Legal Secretary

/ac

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 1-30-84
UNLESS DRILLING UNDERWAY

Carl Ulvog
DISTRICT SUPERVISOR

AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

1707 COLE BOULEVARD • GOLDEN, COLORADO 80401 • (303) 234-9020 • TELEX: 45-556

LAW DEPARTMENT

February 2, 1984

State of New Mexico
Energy and Minerals Department
P.O. Box 2770
113 Washington Avenue
Santa Fe, New Mexico 87503

Re: Powers of Attorney for Steam Reserve Corporation

Dear Sir:

Enclosed are Powers of Attorney authorizing Gary L. Bennett and Joyce L. Emerson as attorneys-in-fact to act on behalf of Steam Reserve Corporation. Please establish a file in the name of Steam Reserve Corporation.

Very truly yours,

AMAX EXPLORATION, INC.

Anita Clement

Anita Clement

/ac
enclosures

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that Steam Reserve Corporation, a Delaware corporation (hereinafter called the "Company"), qualified to do business in the States of Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, Colorado, New Mexico, Montana and Wyoming does hereby appoint Joyce L. Emerson its true and lawful attorney for the Company and in the name of the Company or in her own name or otherwise as may be required by Law:

(1) For the purposes of acquiring, utilizing or disposing of geothermal and related property interests, to sign, without the necessity of a corporate seal or attestation, permits, leases, applications, and bonds, instruments of title and such other documents of any type or nature which may be required to accomplish the foregoing.

(2) To prepare, file, and/or accept for the Company, with regard to the Company's geothermal operations in the aforementioned states, such notices of intent to conduct geothermal operations, notices of completion of operations, and applications for the acquisition, utilization or disposal of water as may be required or convenient to the accomplishment of the foregoing.

This appointment is personal to Joyce L. Emerson and may not be delegated or assigned by her, and any attempt to so delegate or assign this appointment shall render it void for all purposes.

This appointment shall expire at midnight, December 31, 1984.

IN WITNESS WHEREOF, Steam Reserve Corporation, has hereunto executed and affixed its corporate seal this 1st day of February, 1984.

ATTEST:

Assistant Secretary

STEAM RESERVE CORPORATION

Vice President

STATE OF COLORADO)
) ss.
COUNTY OF JEFFERSON)

The foregoing instrument was acknowledged before me this 1st day of February, 1984, by William M. Dolan, the Vice President of Steam Reserve Corporation, on behalf of the corporation.

Anita Clement
Notary Public

My commission expires:

My Commission Expires May 2, 1986

AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

1707 COLE BOULEVARD • GOLDEN, COLORADO 80401 • (303) 234-9020 • TELEX: 45-556

GOVERNMENTAL AFFAIRS

August 4, 1983

Mr. Carl Ulvog
Chief Geologist
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Carl:

Thank you for extending AMAX's permit for Well No. 55 until November 1, 1983.

With regard to the Cockrell well at AMAX's Animas project, there are no plans to re-enter the Cockrell well. Thus, the case file for the well can be closed. Let me know if there is any documentation necessary to complete the file.

Very truly yours,

AMAX EXPLORATION, INC.

Joyce

Joyce Emerson
Manager of Government Relations

JE/ac

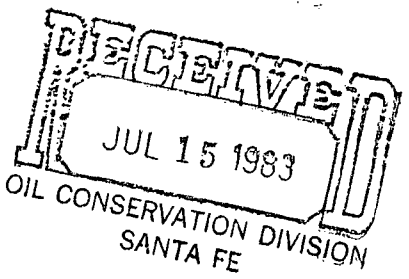
AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

1707 COLE BOULEVARD • GOLDEN, COLORADO 80401 • (303) 234-9020 • TELEX: 45-556

GOVERNMENTAL AFFAIRS

July 1, 1983



Mr. Carl Ulvog
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well No. 55 in Hidalgo County, New Mexico -- Request for Extension of Permit.

Dear Carl:

As we discussed on the phone today, the above referenced permit expires on July 4, 1983. AMAX herewith requests an extension of 120 days in which to commence drilling Well No. 55.

Thank you for your consideration of this request.

Very truly yours,

Joyce L. Emerson
Manager of Government Relations

JLE/da

NMOCD

RECEIVED
DEC 19 1983
OIL CONSERVATION DIVISION
SANTA FE

Form: USGS 9-1958

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

Form Approved
Budget Bureau No. _____

GEOTHERMAL SUNDRY NOTICE

The U.S. Geological Survey requests this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operations.

4. LEASE SERIAL NO. NM-34790

5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)

1a. WELL TYPE: PRODUCTION ( ) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) OTHER (X) Exploration

6. UNIT AGREEMENT NAME N/A

1b. WELL STATUS: New

7. WELL NO. 55-7

8. PERMIT NO.

2. NAME OF LESSEE/OPERATOR AMAX Exploration, Inc.

9. FIELD OR AREA Wildcat

3. ADDRESS OF LESSEE/OPERATOR 1707 Cole Blvd., Golden, Colorado 80401

10. SEC. T., R., B.& M. NW¼NW¼SE¼ Sec. 7, T25S, R19W

13. LOCATION OF WELL OR FACILITY NW¼NW¼SE¼, Section 7, T25S, R19W

11. COUNTY Hidalgo

12. STATE New Mexico

14. TYPE OF WORK

CHANGE PLANS	( )	CONVERT TO INJECTION	( )	PULL OR ALTER CASING	( )
SITE AND ROAD CONSTRUCTION	X	FRACTURE TEST	( )	MULTIPLE COMPLETE	( )
CONSTRUCT NEW PRODUCTION FACILITIES	( )	SHOOT OR ACIDIZE	( )	ABANDON	( )
ALTER EXISTING PRODUCTION FACILITIES	( )	REPAIR WELL	( )	OTHER	( )

15. DESCRIBE PROPOSED OPERATIONS (Use this space for well activities only. See instructions for current well conditions on reverse)

(1) Construction of a drill pad for well No. 55-7.

The pad dimensions will be 300' X 300' and will include a sump 150' X 100' X 10'.

(2) Access (see map).

Stipulation:
Approved subject to road being Arch-cleard

BUREAU OF LAND MANAGEMENT
RECEIVED
NOV 21 1983
DIST. 6 N. M.
ROSWELL, NEW MEXICO

16. DESCRIBE PROPOSED OPERATIONS (Use this space for all activities other than well work)

(Use reverse side if needed)

17. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Manager, Govt Relations DATE 11/18/83

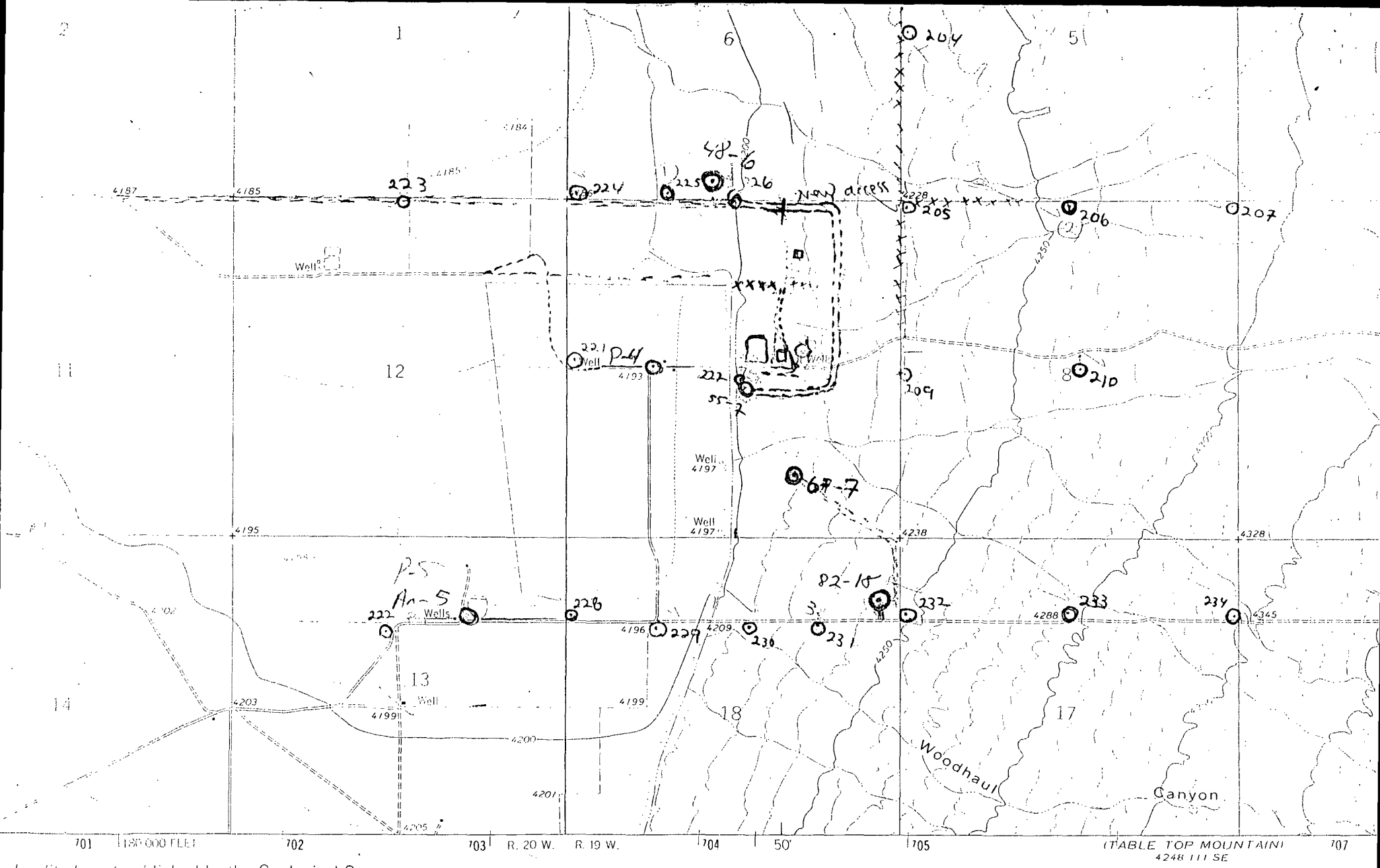
(This space for Federal use)

APPROVED BY Orig. Sgd. Earl R. Cunningham TITLE District Manager DATE DEC 16 1983

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.34, 30 CFR 270.35, 30 CFR 270.45, 30 CFR 270.71-1, 30 CFR 270.72; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)



ed, edited, and published by the Geological Survey

by USGS and USC&GS

aphy by photogrammetric methods from aerial
graphs taken 1963 and planetable surveys 1965

ic projection - 1927 North American datum
1 foot grid based on New Mexico coordinate system, west zone
meter Universal Transverse Mercator grid ticks,
2, shown in blue

dashed line, indicate selected fence lines

SCALE 1:24 000

1 0 1 2 0

1000 0 1000 2000 3000 4000 5000

1 5 0

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

MN
GN
1°10'
21 MILS
12½°
222 MILS

UTM GRID AND 1965 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

NM OIL CONS. COMMISSION
~~Drawer DD~~ Santa Fe
~~Artesia, NM 88210~~

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

Form Approved
Budget Bureau No.

GEOTHERMAL DRILLING PERMIT

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

4. LEASE SERIAL NO.: NM 34790

5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)

1a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

6. UNIT AGREEMENT NAME: N/A

1b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

7. WELL NO.: 25-7

8. PERMIT NO.:

1c. WELL STATUS: New

9. FIELD OR AREA: Wildcat

2. NAME OF LESSEE/OPERATOR: AMAX Exploration, Inc.

10. SEC., T., R., B. & M.: ~~SWSWNE~~ NWSWSE Sec. 7 T25S, R19W

3. ADDRESS OF LESSEE/OPERATOR: 1707 Cole Blvd., Golden CO 80401

15. LOCATION OF WELL
At surface: ~~SWSWNE~~ NWSWSE Sec. 7, T25S R19W NMPM
At proposed prod. zone: same

11. COUNTY: Hidalgo

12. STATE: New Mexico

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE: 2400 West of Line

13. APPROX. STARTING DATE: Spring 1983

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE: 150 ft. from ΔT Well 672-227

14. ACRES ASSIGNED (WELL SPACING):

RECEIVED
DEC 19 1983
OIL CONSERVATION DIVISION
SANTA FE

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH: MEASURED: 5-7000' TRUE VERTICAL: 5-7000'

20. ELEVATIONS: ESTIMATED (X) FINAL ( ) 4201
REFERENCE DATUM: GR (X) MAT ( ) DF ( ) KB ( ) RT ( ) CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
20"	13-3/8"				0	50	Cement to Surface
12¼"	9-5/8"				0	700	Cement to Surface

22. PROPOSED WORK SUMMARY

1. Drill 20" hole to 50 feet
2. Set 13-3/8" conductor casing - cement
3. Drill 12-¼" hole to 700 feet
4. Run 9-5/8" casing - cement to surface
5. Install and test BOPE
6. Drill 8-3/4" to 6¼" hole to TD

(Use additional space on reverse side of form)

23. SIGNED G. H. Bennett TITLE Mgr. - Land Dept. DATE 12/2/82

(This space for Federal use)

APPROVED BY 'Orig. Sgd.' Earl R. Cunningham TITLE District Manager DATE DEC 16 1983

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

INSTRUCTIONS

GENERAL: This form shall be submitted for any application to drill for, test, extract, produce, dispose and/or utilize the actual geothermal resource on Federally leased lands or lands covered by a unit or cooperative agreement.

ITEM 1C: Show the current status for existing wells; I=injecting, F=flowing, P=pumping, HE=heat exchange, SI=shut-in, WS=water supply, OB=observation, O=other (explain).

ITEM 7: Number wells using the Modified Kettleman Well Numbering System (see below).

ITEM 15: Show the surface location coordinates from the nearest section corner or tract lines and if the well is to be directionally drilled, the proposed production zone coordinates (top and bottom) from the surface location.

ITEM 19: Indicate reference datum from which measurement was made (see item 20).

ITEM 20: If the reference datum shown is not the graded mat, also show the measurement from the mat surface (e.g. mat-to-derrick floor (DF)measurement, mat-to-rotary table (RT) measurement, mat-to-kelly bushing (KB) measurement, etc.).

ITEM 21: For subsequent well work the latest well conditions along with all proposed additions and changes must be shown. To show current well conditions, either fill out this item or attach the latest completion report on the subject well.

ITEM 22: Summarize other pertinent existing data such as producing and injecting zones, type, size, and density of perforations and perforated intervals, etc., in addition to the proposed work. Indicate reasons for changes undertaken.

PROCEDURE FOR NUMBERING GEOTHERMAL WELLS USING THE MODIFIED KETTLEMAN WELL NUMBERING SYSTEM

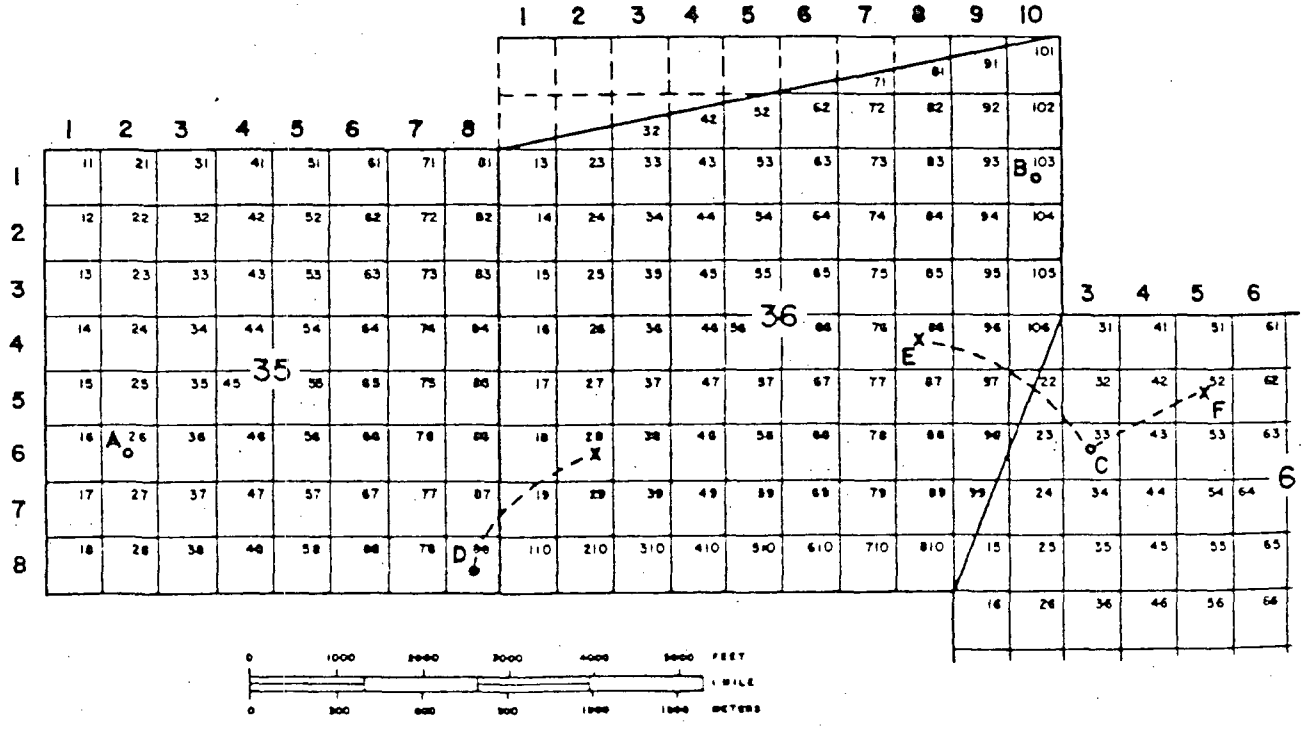
1. Subdivide the sections where the wells are to be located into 10-acre (660 feet X 660 feet) subdivisions. Number each horizontal and vertical subdivision starting in the northwest corner of each section with 1, 1 and increasing to the east and south. A regular 640-acre section contains 64 subdivisions numbered from 11 to 88 (vertical digit first, followed by horizontal digit).

2. Number the first vertical well with the number of the 10-acre subdivision in which it is located, followed by the section number. (See Examples "A", "B", and "C", below.) If the first well is directionally drilled, number it with the subdivision number of its surface location, followed by the subdivision number in which the bottom of the completion interval lies and that section number (if different from the surface section number), and followed by the surface section number. (See Example "D".)

3. Subsequent wells drilled from the same 10-acre surface location are numbered in the manner described above with an A, B, C, etc., added following the surface subdivision number. (See Examples "E" and "F".)

4. For sections with irregular boundaries, align a 10-acre grid pattern North-South, running through the westernmost section point or line, and East-West, running through the northernmost section point or line. Number wells according to the 10-acre grid, subdividing as far as possible to the east and south.

Example A	26-35	Example D	Directional 88(28-36)-35
Example B	103-36	Example E	Directional 33A(86-36)-6
Example C	33-6	Example F	Directional 33B(52)-6



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Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

RECEIVED
MAR 04 1983
OIL CONSERVATION DIVISION
SANTA FE

Form G-101
Adopted 10/1/74

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease
STATE ☐ Fed. & FEE ☒

5.a State Lease No.

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐

b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☐ Exploration Temp Observation ☐ Injection/Disposal ☐

7. Unit Agreement Name
Animas

8. Farm or Lease Name
NM-34790 - Minerals
Archie Green - Surface

9. Well No.
55

2. Name of Operator
AMAX Exploration, Inc.

3. Address of Operator
1707 Cole Boulevard, Golden, CO 80401

10. Field and Pool, or Wildcat
Wildcat

4. Location of Well
UNIT LETTER _____ LOCATED 2411.9 FEET FROM THE East LINE
AND 2329.1 FEET FROM THE South LINE OF SEC. 7 TWP. 25S RGE. 19W NMPM

12. County
Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
7000'		Mud

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
GR 4201	BOND 224-45-94	Unknown	May 1, 1983

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
20"	13-3/8"		50'		
12-1/4"	9-5/8"		700'		

See attached "Proposed Plan of Exploration"

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 7-4-83
UNLESS DRILLING UNDERWAY

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

PERMIT EXTENDED TO 11-1-83
Carl Ulvog

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Gov't Relations Date 2/28/83

(This space for State Use)

APPROVED BY Carl Ulvog TITLE DISTRICT SUPERVISOR DATE 4/5/83

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

April 5, 1983

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Amax Exploration, Inc.
1707 Cole Boulevard
Golden, Colorado 80401

Attention: Joyce Emerson

Administrative Order GNSL-5

Gentlemen:

Reference is made to your application for a non-standard location for your Well No. 55 to be located 2411.9 feet from the East line and 2329.1 feet from the South line of Section 7, Township 25 South, Range 19 West, NMPM, Hidalgo County, New Mexico.

By authority granted me under the provisions of Rule 104 C of the Division Rules and Regulations, the above-described unorthodox location is hereby approved.

Sincerely,

JOE D. RAMEY,
Director

JDR/RLS/dr

cc: Oil Conservation Division - Santa Fe
Oil & Gas Engineering Committee - Hobbs
Oil & Gas Division - State Land Office - Santa Fe

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

345 Middlefield Road
Menlo Park, CA 94025

IN REPLY REFER TO:
MS-92

JAN 25 1983

Memorandum

To: Interested Parties

From: Deputy Minerals Manager, Geothermal

Subject: Plan of Operation for Exploration, AMAX Exploration, Inc., Federal Lease NM-34790, Lightning Dock, KGRA, Hidalgo County, New Mexico
Ref: 2403-01 (POO/CER 210-83)

AMAX Exploration, Inc., has submitted a Plan of Operation for exploration in accordance with 30 CFR 270.34 to construct access roads and to drill up to four (4) geothermal test wells on Federal Lease NM-34790 in the Lightning Dock KGRA, Hidalgo County, New Mexico. A map of the proposed drilling sites is enclosed for your information.

A Categorical Exclusion Review (CER 210-83) will be prepared by the Office of the Deputy Minerals Manager for Geothermal for the proposed action.

You are invited to participate in a field inspection to be led by Mr. Douglas Koza, Acting Salt Lake City District Geothermal Supervisor, on February 16, 1983. Participants are asked to meet at 10:30 a.m. near the intersection of Interstate 10 and State Highway 338 located approximately 10 miles west of Lordsburg, New Mexico.

We urge you to send written comments and will appreciate hearing from you even if you are of the opinion that the existing regulations, lease terms, and operational orders provide adequate environmental protection.

All comments concerning the proposed actions should be received no later than March 2, 1983 by:

Deputy Minerals Manager, Geothermal
U.S. Bureau of Land Management
345 Middlefield Road, MS-92
Menlo Park, California 94025

Tel: (415) 323-8111, ext 2841; FTS 467-2841

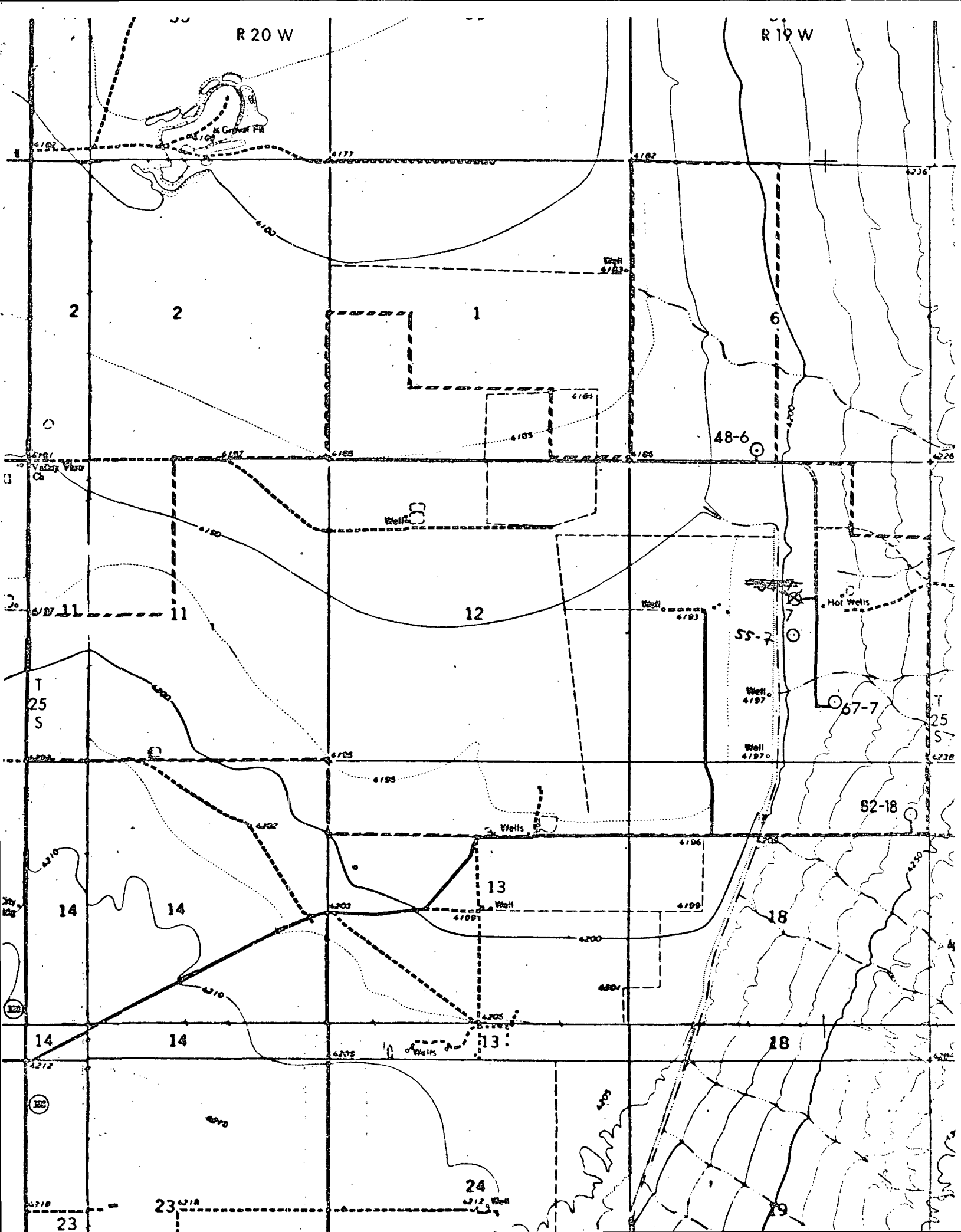
All comments will be given serious consideration in the preparation of the Categorical Exclusion Review and any subsequent conditions of approval.

The Office of the Deputy Minerals Manager for Geothermal will distribute copies of the completed final CER to the Las Cruces BLM District Office, the lessee, the Geothermal Environmental Advisory Panel (GEAP) and the U.S. Fish and Wildlife Service. Other interested parties may receive a copy of the final CER upon request. Copies of the CER will also be available for inspection during normal business hours at the Office of the Deputy Minerals Manager for Geothermal, Menlo Park, California, the District Geothermal Supervisor's Office, Reno, Nevada and the BLM, Las Cruces District Manager's Office.

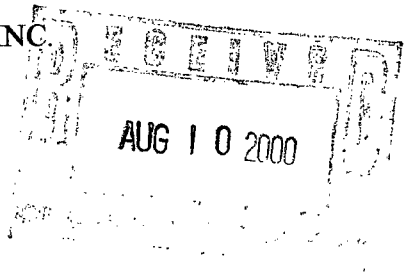
Richard M. Bloyd

Enclosure

Joyce Emerson (Amax)
303-231-0617
Arch Green - Surface owner
Expect spudding 6/1/83


R 20 W
R 19 W
T 25 S
48-6
55-7
67-7
82-18
Hot Wells
Valley View
Wells
Well

LIGHTNING DOCK GEOTHERMAL, INC.
224 WEST GREENING AVENUE
LAS CRUCES, NM 88005



August 7, 2000

Roy Johnson
Oil Conservation Division
2048 S. Pacheco
Santa Fe, NM 87505

Dear Mr. Johnson:

As we discussed by telephone on today's date, our firm is planning to reenter the federally-permitted well 55-7, located on our geothermal lease NM 34790 in the Animas Valley. The attached Sundry Notice has been approved by the Las Cruces Field Office of the BLM.

This well was illegally re-entered by Dale Burgett sometime prior to October 1986. He drilled out the cement plugs originally installed at surface to 50 feet and 1,000 to 1,100 feet of depth. Subsequently, he used 5,000 gallons of 30 ° Baume hydrochloric acid to dissolve remnants of the cement plugs, while concurrently surging and air-lifting. He next used a turbine pump to conduct a 24-hour flow test at a measured flow rate of about 475 gpm. This reentry was not authorized by either the lease holder or the federal government; subsequently, on September 15, 1999, the U.S. District Court issued an Order which temporarily and permanently enjoined Burgett from using the well and ordered that the pump be removed, and further ordered a temporary and permanent injunction against Burgett doing anything else to the well.

Our first action upon reentering the well is to tag and confirm the cement plug originally installed a 1,400 to 1,500 feet of depth. Following confirmation that the plug is in place, we will use compressed air to air-lift water samples from three different horizons in the well: at or about 650 feet, at or about 1,050 feet, and at or about 1,250 feet of depth. Small quantities of water will be disposed on the land surface using the reserve pits, originally dug to support the drilling of this well, to contain produced fluids. Multiple samples will be acquired at each of the three horizons. Next, the work-over rig will support geophysical logging, followed by a controlled 48-hour air-lifted flow test designed to measure reservoir characteristics. The flow rate on this flow test will be selected so that all produced fluid is contained in the reserve pits.

We will advise you of the date of the planned action and provide summary results of the testing.

Sincerely,

Roy A. Cunniff

Encl.: Approved Sundry Notice for Well 55-7

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces Field Office
1800 Marquess
Las Cruces, NM 88005
www.nm.blm.gov

IN REPLY REFER TO:
NMNM 34790
3260 (03000)

Mr. Roy Cuniff
President
Lightning Dock Geothermal, Inc.
224 West Greening
Las Cruces, NM 88005

JUL 21 2000

Dear Mr. Cuniff:

We received your appeal of the amended Sundry Notice you submitted on May 25, 2000. We have also received the appeal withdrawal letter. We reviewed your reasons and hereby extend the time to February 1, 2001. We will also notify and modify Mr. Burgett's Sundry Notice so the dates do not conflict with your proposed testing. Please advice us as soon as you have acquired the necessary equipment for the testing operation and have completed a surface owner agreement. As before, we need at least a 3-day advance notice so that a qualified engineering technician can be present to witness commencement of the operations and, specifically, removal of the BLM seal that will be placed on the well casing. Once your operations are nearing completion, please advice this office so we can have Mr. Burgett proceed with the plugging operations. Be advised that the plugging operations have been directed by the Courts and will have to be completed in a timely manner to avoid any potential contamination that could result because of Well 55-7 being left open. Please furnish this office with any results that may affect the plugging of Well 55-7. Modifications of Mr. Burgett's Sundry Notice could occur as a result of your investigations. As previously agreed, variations to the agreed upon dates will be reviewed as necessary.

If at anytime the testing program is not in compliance with the prior approved Sundry Notice, this letter, or with the PET directions, he/she will order a shutdown to your operations and you will be directed to take whatever corrective action is needed. Any questions should be directed to Joe Torrez at (505) 525-4374.

Sincerely,

FOR Amy L. Lueders
Field Manager

cc:
Mr. Dale Burgett
Mr. John Zavitz
Mr. Grant Vaughn

received
7/21/2000 Rec

n 3260-3
nerly 9-1958)
e 1988)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0132
Expires: September 30, 1990

GEOTHERMAL SUNDRY NOTICE

e Bureau of Land Management (BLM) requests this form or other BLM-approved forms to be prepared
d filed in **triplicate** with requisite attachments with the authorized officer. The authorized officer must
prove this permit prior to any lease operations.

6. Lease Serial No.
NM-34790

7. Surface Manager: ☒ BLM ☐ FS ☒ Other

8. Unit Agreement Name
N/A

Well Type: ☐ Production ☐ Injection ☐ Heat Exchange ☐ Observation ☒ Other
TEST FOR DISCOVERY WELL 55-7

9. Well No.
55-7

10. Permit No.

Well Status:
IN TESTING CONDITION

11. Field or Area
ANIMAS

Name of Lessee/Operator
LIGHTNING DOCK GEOTHERMAL, INC

12. Sec., T., R., B. & M. NW¼ SE¼
SEC. 7, T 25 S, R 19 W

Address of Lessee/Operator
124 W. GREENWAY AVE, LAS CRUCES, NM 88005

13. County
HIDALGO

Location of Well or Facility 2411.9' OF THE E. LINE AND 2329.' OF THE S. LINE OF SEC. 7, T 25 S, R 19 W

14. State
NEW MEXICO

Type of Work

☐ Change Plans	☐ Convert to Injection	☐ Pull or Alter Casing
☐ Site and Road Construction	☐ Fracture Test	☐ Multiple Complete
☐ Construct New Production Facilities	☐ Shoot or Acidize	☐ Abandon
☐ Alter Existing Production Facilities	☐ Repair Well	☒ Other

15. Describe Proposed Operations *(Use this space for well activities only. See instructions for current well conditions on reverse)*

The current configuration of the well, as reported to us by the Federal Government, is that the well is open from surface to approximately 1,500 feet of depth, more or less, with the cement plugs originally set from 1500 to 1400 feet, from 1100 to ~~1050~~ 1000 feet, and from 50 feet to surface reportedly having been drilled out by Dale Burgett. In addition, Mr. Burgett reportedly has introduced a large quantity of strong acid into the well, and has performed drill stem and pumping tests on the well. These actions call into question the possible integrity of the surface casing set to 1050 feet of depth using 13 3/8-inch steel pipe which was then cemented to the surrounding formations, and also of the integrity of the well bore below the bottom of the surface casing. We have been advised that the BLM has set into motion a requirement that Mr. Burgett re-establish the cement plugs at their original horizons.

The lessee who concurrently is also the Designated Operator on this well by ownership thru legal succession thru AMAX, SRC, and GPI, plans to reenter Well 55-7 to conduct a series of scientific tests and measurements on this well prior to permitting the BLM to require Mr. Burgett to re-establish the cement plugs at their original horizons. The proposed work includes a series of temperature measurements of the well, a suite of geophysical logs to be run into the surface casing and open well bore below 1050 feet, and a series of controlled flow tests to acquire water samples for analyses and to determine reservoir characteristics. It is anticipated that the controlled flow tests might be conducted by use of a series of tests conducted over time, with pressure monitoring equipment used to evaluate hydraulic properties within the well bore zone of influence. Produced geothermal water would be directed into the existing reserve pit located adjacent to the well. Moreover, depending on the amount of water produced, this geothermal water would be allowed to cool and then used to circulate and condition the well before temperature and other geophysical logs are acquired.

Since the work outlined herein will be conducted in a sequential step-wise manner, with intervening periods of data review and analyses, the entire program could take considerable time to complete. We will submit a Plan Of Operations prior to the start of the scientific testing programs.

16. Describe Proposed Operations *(Use this space for all activities other than well work)*

17. I hereby certify that the foregoing is true and correct

Signed [signature] Title PRESIDENT, LIGHTNING DOCK GEOTHERMAL, INC. Date 24 APRIL 2000

(This space for Federal use)

Approved by [signature] Title FIELD OFFICE MGR Date 5/22/00
Conditions of Approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Form 3260-3
(formerly 9-1958)
(June 1988)

UNITED STATES
DEPARTMENT OF THE INTE
BUREAU OF LAND MANAGE

New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504
Attention: Roy Johnson

FILE

GEOTHERMAL SUNDRY NOTICE

The Bureau of Land Management (BLM) requests this form or other BLM-approved forms to be prepared and filed in **triplicate** with requisite attachments with the authorized officer. The authorized officer must approve this permit prior to any lease operations.

LAS [illegible] 1005

1a. Well Type: ☐ Production ☐ Injection ☐ Heat Exchange ☐ Observation ☒ Other
TEST FOR DISCOVERY WELL 55-7

1b. Well Status:
IN TRESPASS CONDITION

2. Name of Lessee/Operator
LIGHTNING DOCK GEOTHERMAL, INC

3. Address of Lessee/Operator
214 W. GREENING AVE, LAS CRUCES, NM 88005

4. Location of Well or Facility 2411.9' OF THE E. LINE AND 2329.' OF THE S. LINE OF SEC. 7, T 25 S, R 19 W

6. Lease Serial No.
NM-34790

7. Surface Manager: ☒ BLM ☐ FS ☒ Other

8. Unit Agreement Name
N/A

9. Well No.
55-7

10. Permit No.

11. Field or Area
ANIMAS

12. Sec., T., R., B. & M. NW¼ SE¼ SEC. 7, T 25 S, R 19 W

13. County
HIDALGO

14. State
NEW MEXICO

5. Type of Work

☐ Change Plans	☐ Convert to Injection	☐ Pull or Alter Casing
☐ Site and Road Construction	☐ Fracture Test	☐ Multiple Complete
☐ Construct New Production Facilities	☐ Shoot or Acidize	☐ Abandon
☐ Alter Existing Production Facilities	☐ Repair Well	☒ Other

15. Describe Proposed Operations *(Use this space for well activities only. See instructions for current well conditions on reverse)*

The current configuration of the well, as reported to us by the Federal Government, is that the well is open from surface to approximately 1,500 feet of depth, more or less, with the cement plugs originally set from 1500 to 1400 feet, from 1100 to 1050 (1001) feet, and from 50 feet to surface reportedly having been drilled out by Dale Burgett. In addition, Mr. Burgett reportedly has introduced a large quantity of strong acid into the well, and has performed drill stem and pumping tests on the well. These actions call into question the possible integrity of the surface casing set to 1050 feet of depth using 13 3/8-inch steel pipe which was then cemented to the surrounding formations, and also of the integrity of the well bore below the bottom of the surface casing. We have been advised that the BLM has set into motion a requirement that Mr. Burgett re-establish the cement plugs at their original horizons.

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17. I hereby certify that the foregoing is true and correct

Signed [signature] Title PRESIDENT, LIGHTNING DOCK GEOTHERMAL, INC. Date 24 APRIL 2000

(This space for Federal use)

Approved by [signature] Title ACFO, Field Office Mgr. Date 5/22/00
Conditions of Approval, if any:

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Form 3260-3
(formerly 9-1958)
(June 1988)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504
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LAS [illegible] NM

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TEST FOR DISCOVERY WELL 55-7

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IN TRESPASS CONDITION

2. Name of Lessee/Operator

LIGHTNING DOCK GEOTHERMAL, INC

3. Address of Lessee/Operator

214 W. GREENING AVE, LAS CRUCES, NM 88005

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N/A

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55-7

10. Permit No.

11. Field or Area
ANIMAS

12. Sec., T., R., B. & M. NW¼ SE¼
Sec. 7, T 25 S, R 19 W

13. County
HIDALGO

14. State
NEW MEXICO

5. Type of Work

☐ Change Plans	☐ Convert to Injection	☐ Pull or Alter Casing
☐ Site and Road Construction	☐ Fracture Test	☐ Multiple Complete
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Since the work outlined herein will be conducted in a sequential step-wise manner, with intervening periods of data review and analyses, the entire program could take considerable time to complete. We will submit a Plan Of Operations prior to the start of the scientific testing programs.

16. Describe Proposed Operations *(Use this space for all activities other than well work)*

17. I hereby certify that the foregoing is true and correct

Signed [signature] Title PRESIDENT, LIGHTNING DOCK GEOTHERMAL, INC. Date 24 APRIL 2000

(This space for Federal use)

Approved by [signature] Title ACTG, Field Office Mgr. Date 5/22/00
Conditions of Approval, if any:

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces Field Office
1800 Marquess
Las Cruces, NM 88005
www.nm.blm.gov

IN REPLY REFER TO:
NMNM 34790
3260 (03000)

MAY 25 2000

Mr. Roy Cuniff, President
Lightning Dock Geothermal, Inc.
224 West Greening
Las Cruces, NM 88005

Dear Mr. Cuniff:

Your Sundry Notice has been approved as amended. You may commence your operations upon agreement with the surface owner for entry and use of the existing reserve pit. You have until August 1, 2000, to complete your studies and remove your equipment, at which time, Mr. Dale Burgett will commence to plug and abandon Well 55-7 as directed by this office and the courts. Please note that variations of these dates will have to be approved in advance by this office.

We do not plan on using any of the data you acquire in the plugging program unless something out of the ordinary is detected. Preparation of the well by the operator prior to closing will identify any additional changes if needed. Your operation as proposed should not interfere with the court directed closing of Well 55-7 which is scheduled to commence no sooner than August 1, 2000. Be advised that this office will need at least 3 days advanced notice so that a qualified Petroleum Engineering Technician (PET) can be present to witness commencement of your testing operations. If at anytime, the testing program is not in compliance with the approved Sundry Notice or with the PET directions, he/she will order a shutdown of your operations and you will be directed to take whatever corrective action is needed. If you have any questions, please call Joe Torrez at (505) 525-4374.

Sincerely,

Amy L. Lueders
Field Manager

cc:
Mr. Dale Burgett
Mr. John Zavitz

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces Field Office
1800 Marquess
Las Cruces, NM 88005
www.nm.blm.gov

IN REPLY REFER TO:
NMNM 34790
3260 (03000)

MAY 25 2000

Mr. Dale Burgett
Burgett Investments, Inc.
H.C. 65 Box 265A
Animas, NM 88020

Dear Mr. Burgett:

Your Sundry Notice has been approved as amended. You may commence plugging operations no sooner than August 1, 2000, and complete operations no later than August 31, 2000. Variations of these dates will have to be approved in advance by this office. The time window will allow Lightning Dock Geothermal, Inc., an opportunity to test the well casing as well as the reservoir.

Lightning Dock, the lessee and operating rights owner, has submitted a Sundry Notice which has been approved subject to an agreement with the surface owner and completing their work prior to August 1, 2000. They are bonded by an individual lease bond I/L NM028003. Their operation should not interfere with the court directed closing of Well 55-7 which is scheduled to commence no sooner than August 1, 2000. Be advised that this office will need at least 3 days advanced notice so that a qualified Petroleum Engineering Technician (PET) can be present to witness and approve of all plugging operations. If at anytime, the plugging program is not in compliance with the approved Sundry Notice or with the PET directions, he/she will order a shutdown of the plugging operations and you will be directed to take whatever corrective action is needed to comply with the order. If you have any questions, please call Joe Torrez at (505) 525-4374.

Sincerely,

Amy L. Lueders
Field Manager

cc:
Lightning Dock Geothermal, Inc.
Mr. John Zavitz

New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504
Attention: Roy Johnson

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other Geothermal - Exploration	5. Lease Designation and Serial No.: NM 34790
2. Name of Operator: Rosette	6. If Indian, Allottee or Tribe Name: N/A
3. Address and Telephone No.	7. If Unit or CA, Agreement Designation: N/A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2411.9 of the E. line and 2329.1 of the southline sec. 7, T25 S, R 19W. NMPM	8. Well Name and No.: 55-7
	9. API Well No.: N/A
	10. Field and Pool, or Exploratory Area: Lighting dock KGRA
	11. County or Parish, State: Hidalgo, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☒ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plugging Plan for 55-7

This well is plugged under a court order of the U.S. District Court even though it is an irrigation well. I do not relinquish any ownership or claim that I have in this well.

The well was open to 1400 feet. Plugging is planned as follows: A ten-foot bentonite plug will be set at 1200 feet (Note: Well filled with lost circulation material and drilling mud to 1200 feet). A 100 foot cement plug will be set from 1400-1300', and tag plug, sealing the pipe and formation. Drilling mud will be in the annulus between the plug. A 50-foot cement plug will be set from 50-0 feet; marker will be welded on casing.

Test location and strength of plug set @ 1400-1500' by tagging plug. If no plug is present, set 100' cement plug @ 1400-1500' and tag plug.

14. I hereby certify that the foregoing is true and correct

Signed Hal Bennett Title CEO Rosette Inc Date 4/24/00

(This space for Federal or State office use)

Approved by Title LCFO, Field Office Manager Date 5/22/00
Conditions of approval, if any:

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504
Attention: Roy Johnson

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. Lease Designation and Serial No.
NM 34790

6. If Indian, Allottee or Tribe Name
N/A

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation
N/A

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other Geothermal - Exploration

8. Well Name and No.
55-7

2. Name of Operator
Rosette

9. API Well No.
N/A

3. Address and Telephone No.

10. Field and Pool, or Exploratory Area
Lighting dock KGRA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2411.9 of the E. line and 2329.1 of the southline sec. 7, T25 S, R 19W. NMPM

11. County or Parish, State
Hidalgo, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☒ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

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This well is plugged under a court order of the U.S. District Court even though it is an irrigation well. I do not relinquish any ownership or claim that I have in this well.

The well was open to 1400 feet. Plugging is planned as follows: A ten-foot bentonite plug will be set at 1200 feet (Note: Well filled with lost circulation material and drilling mud to 1200 feet). A 100 foot cement plug will be set F/1400-1500', and tag plug, sealing the pipe and formation. Drilling mud will be in the annulus between the plug. A 20-foot cement plug will be set F/0-50 feet; marker will be welded on casing.

Test location and strength of plug set F/1400-1500' by tagging plug. If no plug is present, set 100' cement plug F/1400-1500' and tag plug.

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title CEO Rosette Inc Date 4/24/00

(This space for Federal or State office use)

Approved by [signature] Title LCFO, Field Office Manager Date 5/22/00

Conditions of approval, if any:

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N. M. B. M.		
U. S. G. S.		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒

5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit–" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

Plugging of Well No. 55

On November 1, 1985, Steam Reserve Corporation submitted a Sundry Notice which described the proposed plugging method for Well No. 55 at Animas.

This Sundry Notice serves to supplement that program by adding two additional cement plugs as follows:

1. Cement Plug set at the casing shoe from 1000' to 1100', and

2. A 50' surface plug at the top of the hole.

Work on the well is expected to start on December 17, 1985.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 12-12-85

APPROVED BY _____ TITLE _____ DATE _____

Form G-103
Adopted 10/1/74

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N. M. B. M.		
U. S. G. S		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒

5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit —" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well: Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (*Show whether DF, RT, GR, etc.*): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

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This Sundry Notice serves to supplement that program by adding two additional cement plugs as follows:

1. Cement Plug set at the casing shoe from 1000' to 1100', and

2. A 50' surface plug at the top of the hole.

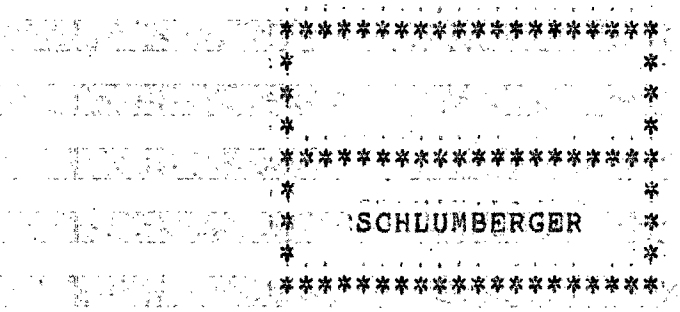
Work on the well is expected to start on December 17, 1985.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 12-12-85

APPROVED BY _____ TITLE _____ DATE _____

ANALYST: K.H. MOYES 18-FEB-85 18:45:49



HIGH RESOLUTION DIPMETER - CLUSTER LISTING

COMPANY : STEAM RESERVES CORP.

WELL : ANIMAS 55-7

FIELD : WILDCAT

COUNTY : HILDAGO

STATE : N. MEXICO

COUNTRY : USA

REFERENCE: RMCC.17133

LOGGED : 14-FEB-85

PROCESSED: 18-FEB-85

ANALYST: K.H. MOYES 18-FEB-85 18:45:49

SCHLUMBERGER

HIGH RESOLUTION DIPMETER - CLUSTER LISTING

COMPANY : STEAM RESERVES CORP.

WELL : ANIMAS 55-7

FIELD : WILDCAT

COUNTY : HILDAGO

STATE : N. MEXICO

COUNTRY : USA

REFERENCE: RMCC.17133

LOGGED : 14-FEB-85

PROCESSED: 18-FEB-85

COMPANY : STEAM RESERVES CORP.
WELL : ANIMAS 55-7

CORRELATION PARAMETERS :

COR. INT. FT	COR. STEP %	SEARCH ANG DEG	NB OF DIP
4.0	50.0	40.0	2

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
1054.00	.5	93	.5	314	12.7	12.6	B
1056.00	19.4	347	.5	324	13.1	13.2	
1058.00	.8	187	.5	323	13.4	13.9	B
1060.00	8.1	30	.6	315	13.6	13.8	D
1062.00	56.3	354	.6	309	14.0	13.8	
1064.00	26.6	225	.6	310	14.4	13.8	
1066.00	27.2	353	.6	268	14.5	14.0	
1068.00	71.5	298	.6	213	14.3	14.0	
1070.00	25.2	337	.6	223	14.2	13.9	
1072.00	16.4	287	.7	228	14.2	13.8	
1074.00	29.3	261	.7	227	14.4	13.6	
1076.00	26.3	48	.7	225	14.7	13.5	
1078.00	10.8	273	.7	225	14.8	13.5	
1080.00	2.6	248	.8	224	14.3	13.5	
1082.00	7.8	200	.8	224	13.9	13.4	
1084.00	64.1	150	.9	224	13.8	13.4	
1086.00	78.7	204	.9	222	13.9	13.4	
1088.00	23.5	133	.9	221	14.0	13.4	
1090.00	32.5	24	.9	222	14.1	13.6	
1092.00	33.8	18	.9	221	14.2	14.0	
1094.00	71.8	152	1.0	221	14.2	14.3	
1096.00	47.4	148	1.0	223	14.0	14.5	
1098.00	37.6	37	1.0	225	14.0	14.8	
1100.00	11.4	334	1.0	225	14.1	15.0	D
1102.00	1.8	162	1.1	225	14.1	15.1	
1104.00	1.9	212	1.1	223	13.7	14.5	
1106.00	7.2	247	1.1	222	13.4	13.7	D
1108.00	9.3	293	1.1	221	13.5	13.5	B
1110.00	10.5	296	1.1	219	13.5	13.7	B
1112.00	16.0	296	1.0	218	13.6	13.9	D
1114.00	32.9	331	1.0	218	13.6	13.8	D
1116.00	25.8	337	.9	217	13.7	13.6	B
1118.00	21.8	322	.9	215	13.8	13.4	B
1120.00	50.1	217	.9	214	13.8	13.3	D
1122.00	23.2	327	.9	214	13.9	13.4	D
1124.00	42.1	217	.9	217	14.1	13.3	B
1126.00	24.7	24	.9	222	14.2	13.0	
1128.00	43.7	133	.9	223	13.9	12.9	
1130.00	56.7	220	.9	223	13.6	12.9	
1132.00	44.8	196	.9	223	13.5	13.1	
1134.00	66.5	264	.9	222	13.1	13.0	
1136.00	6.7	8	.9	220	12.6	13.0	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1138.00	19.2	279	.8	222	12.6	13.1	
1140.00	83.7	54	.8	225	12.6	13.3	
1142.00	22.6	147	.8	225	12.5	13.1	
1144.00	77.5	323	.8	220	12.5	12.8	
1146.00	37.3	97	.8	216	12.6	12.7	
1148.00	38.2	209	.8	214	12.7	12.6	
1150.00	5.5	244	.8	211	13.0	12.6	
1152.00	31.9	207	.8	209	13.2	12.6	
1154.00	23.4	302	.8	209	13.2	12.5	
1156.00	46.5	190	.8	210	13.0	12.4	
1158.00	45.3	169	.8	209	12.7	12.4	
1160.00	63.0	335	.8	208	12.9	12.5	
1162.00	31.4	307	.9	208	13.1	12.7	
1164.00	83.9	351	.9	208	12.7	12.7	
1166.00	15.5	273	.9	208	12.3	12.5	
1168.00	82.8	287	.9	209	12.5	12.4	
1170.00	82.4	258	.9	211	12.6	12.3	
1172.00	36.9	97	.8	212	12.7	12.3	B
1174.00	37.6	91	.8	213	12.7	12.5	
1176.00	21.2	129	.8	214	12.7	12.7	
1178.00	27.9	157	.7	214	12.7	12.8	
1180.00	11.5	15	.7	215	12.4	12.7	
1182.00	26.4	259	.7	215	12.2	12.4	
1184.00	33.1	232	.7	212	12.3	12.3	
1186.00	32.8	227	.7	210	12.4	12.4	
1188.00	29.8	320	.7	207	12.4	12.5	
1190.00	36.1	2	.7	203	12.4	12.5	
1192.00	51.7	342	.8	202	12.4	12.7	
1194.00	6.8	151	.8	201	12.6	12.8	B
1196.00	9.3	138	.9	202	12.8	12.9	B
1198.00	60.0	19	.9	204	13.0	12.8	
1200.00	41.0	93	.9	201	13.1	12.7	B
1202.00	41.7	61	.9	198	12.9	12.6	
1204.00	61.9	99	.9	198	12.6	12.6	
1206.00	54.9	85	.9	199	12.6	12.5	
1208.00	54.3	87	.8	200	12.6	12.5	
1210.00	54.3	267	.8	200	12.6	12.7	
1212.00	13.9	315	.8	201	12.6	12.7	
1214.00	11.4	277	.8	201	12.4	12.7	D
1216.00	45.7	138	.7	204	12.3	12.6	
1218.00	10.9	256	.7	203	12.2	12.4	B
1220.00	10.0	245	.7	199	12.1	12.3	B

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
1222.00	10.7	259	.7	199	12.3	12.5	D
1224.00	81.8	244	.7	199	12.5	12.7	
1226.00	47.9	115	.8	199	12.7	12.9	
1228.00	40.6	58	.8	199	12.8	12.7	
1230.00	63.1	313	.8	198	12.9	12.4	
1232.00	15.7	258	.8	197	13.0	12.4	D
1234.00	25.4	278	.8	196	13.1	12.5	
1236.00	27.0	99	.8	197	13.2	12.6	
1238.00	10.7	323	.8	199	12.8	12.6	B
1240.00	13.5	292	.8	197	12.5	12.7	B
1242.00	8.4	259	.8	193	12.5	12.8	B
1244.00	6.9	233	.8	193	12.6	12.9	B
1246.00	4.7	355	.8	195	12.5	12.7	D
1248.00	.4	59	.8	195	12.5	12.6	D
1250.00	43.2	346	.7	195	12.7	12.7	
1252.00	46.3	312	.6	197	12.7	12.6	
1254.00	39.3	60	.5	200	12.5	12.6	B
1256.00	36.6	55	.5	203	12.3	12.7	B
1258.00	12.4	262	.5	200	12.5	12.6	
1260.00	30.2	179	.5	198	12.6	12.6	
1262.00	82.1	100	.4	197	12.7	12.5	
1264.00	32.8	358	.4	192	12.6	12.5	
1266.00	44.5	238	.4	187	12.5	12.6	
1268.00	46.1	236	.5	185	12.5	12.7	
1270.00	52.8	149	.5	184	12.7	12.7	
1272.00	36.4	359	.6	181	12.7	12.6	
1274.00	62.3	155	.6	181	12.6	12.6	
1276.00	29.4	25	.6	184	12.6	12.7	
1278.00	36.9	46	.7	183	12.7	12.6	
1280.00	32.5	279	.7	178	12.6	12.6	
1282.00	46.7	68	.7	171	12.5	12.6	
1284.00	17.6	253	.6	170	12.6	12.7	
1286.00	45.0	50	.6	172	12.6	12.8	
1288.00	32.1	29	.6	172	12.6	12.8	
1290.00	72.4	223	.5	174	12.6	12.7	
1292.00	41.6	57	.4	178	12.7	12.6	
1294.00	30.9	359	.3	178	12.7	12.6	
1296.00	60.6	151	.3	181	12.6	12.6	
1298.00	39.2	240	.3	179	12.6	12.5	
1300.00	84.7	56	.2	174	12.5	12.4	
1302.00	82.3	65	.2	173	12.6	12.5	
1304.00	42.4	57	.2	175	12.6	12.6	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX
FT	DEG	DEG	DEG	DEG	IN	IN	(BEST=A)
1306.00	45.4	320	.2	178	12.6	12.6	
1308.00	22.7	247	.3	180	12.6	12.6	
1310.00	39.2	305	.3	183	12.6	12.6	
1312.00	32.7	17	.3	184	12.5	12.6	
1314.00	47.8	322	.3	179	12.3	12.6	
1316.00	78.5	199	.3	173	12.4	12.5	
1318.00	58.9	73	.3	172	12.6	12.5	
1320.00	32.4	324	.4	171	12.7	12.4	
1322.00	27.6	279	.4	166	12.6	12.5	
1324.00	14.0	164	.4	164	12.5	12.5	
1326.00	16.6	131	.4	168	12.5	12.5	
1328.00	80.7	132	.3	175	12.5	12.5	
1330.00	26.7	105	.2	177	12.5	12.5	
1332.00	50.7	47	.2	179	12.5	12.5	
1334.00	54.3	92	.1	179	12.5	12.5	
1336.00	75.8	348	0	0	12.5	12.4	
1338.00	70.8	350	0	0	12.5	12.4	
1340.00	77.5	282	0	0	12.5	12.4	
1342.00	77.0	13	.2	163	12.3	12.2	
1344.00	32.8	29	.2	151	12.3	12.1	
1346.00	35.5	33	.3	145	12.5	12.4	
1348.00	38.8	335	.4	145	12.5	12.4	
1350.00	62.2	11	.5	143	12.6	12.4	
1352.00	46.8	197	.6	139	12.7	12.4	
1354.00	47.9	161	.7	136	12.9	12.5	
1356.00	77.7	151	.7	136	12.7	12.7	B
1358.00	78.0	137	.7	138	12.5	12.8	B
1360.00	5.6	292	.7	141	12.4	12.7	
1362.00	38.0	357	.6	143	12.4	12.5	
1364.00	33.8	126	.5	141	12.4	12.4	
1366.00	56.7	293	.4	139	12.6	12.3	
1368.00	40.0	115	.3	137	12.7	12.3	
1370.00	23.8	346	.2	133	12.6	12.4	
1372.00	52.9	284	.2	130	12.5	12.5	
1374.00	44.9	160	.2	127	12.3	12.4	
1376.00	24.8	107	.3	126	12.3	12.4	
1378.00	80.1	100	.3	127	12.4	12.5	
1380.00	52.1	341	.3	128	12.4	12.4	
1382.00	31.0	71	.4	128	12.4	12.4	B
1384.00	30.9	40	.4	128	12.5	12.4	B
1386.00	39.6	277	.4	128	12.5	12.4	
1388.00	17.5	260	.5	132	12.5	12.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1390.00	3.5	299	.4	135	12.5	12.4	B
1392.00	.4	311	.4	135	12.4	12.4	D
1394.00	48.9	68	.4	136	12.4	12.4	
1396.00	53.4	329	.4	137	12.5	12.5	
1398.00	52.7	198	.4	137	12.7	12.5	
1400.00	57.2	179	.4	137	12.8	12.5	
1402.00	7.8	56	.4	139	12.7	12.6	
1404.00	27.7	144	.4	139	12.5	12.7	
1406.00	49.8	352	.3	135	12.4	12.9	
1408.00	80.9	14	.3	129	12.4	13.0	
1410.00	29.7	355	.3	123	12.5	13.0	
1412.00	37.6	334	.3	121	12.6	12.9	
1414.00	33.1	27	.3	121	12.5	12.9	
1416.00	6.2	258	.4	121	12.5	12.9	
1418.00	39.4	197	.4	125	12.4	12.9	
1420.00	25.8	43	.5	127	12.5	12.9	
1422.00	70.3	280	.6	121	13.1	13.2	
1424.00	64.2	254	.7	117	14.5	14.3	
1426.00	69.8	255	.7	115	16.7	16.1	
1428.00	36.2	252	.8	115	17.9	17.4	
1430.00	42.2	96	.8	115	18.6	18.3	
1432.00	77.3	82	.8	115	18.8	18.6	
1434.00	81.4	173	.8	117	18.8	18.7	
1436.00	59.4	155	.7	119	18.8	18.8	
1438.00	48.3	347	.7	123	18.7	18.8	
1440.00	24.4	338	.7	127	18.7	18.7	
1442.00	39.7	341	.7	129	18.7	18.8	
1444.00	34.4	357	.7	127	18.8	18.8	
1446.00	21.0	138	.6	126	18.8	18.8	
1448.00	17.5	116	.5	124	18.8	18.8	
1450.00	83.2	311	.4	120	18.8	18.8	
1452.00	76.0	10	.4	115	18.8	18.8	
1454.00	84.8	225	.4	108	18.7	18.8	
1456.00	13.3	61	.5	103	18.7	18.8	
1458.00	29.2	110	.5	98	18.7	18.8	
1460.00	26.9	120	.5	96	18.3	18.8	
1462.00	24.1	254	.4	92	17.9	18.8	
1464.00	50.7	229	.4	86	17.7	18.7	
1466.00	80.7	354	.5	88	17.7	18.5	
1468.00	33.0	148	.5	94	18.3	18.4	
1470.00	33.1	1	.5	91	18.7	18.4	
1472.00	19.8	6	.5	83	18.5	18.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1474.00	33.0	103	.5	73	18.3	18.4	
1476.00	53.8	24	.4	70	18.2	18.3	
1478.00	46.9	287	.5	69	18.1	18.3	
1480.00	73.2	313	.5	68	18.0	18.4	
1482.00	32.2	290	.5	67	17.6	18.5	
1484.00	21.0	329	.4	67	17.1	18.3	
1486.00	23.8	324	.4	70	16.6	18.1	
1488.00	23.7	5	.4	74	16.0	17.9	D
1490.00	23.6	18	.5	78	15.5	17.7	D
1492.00	21.4	19	.4	82	15.2	17.8	B
1494.00	21.9	13	.4	83	14.9	17.8	D
1496.00	23.3	358	.4	82	14.5	17.4	B
1498.00	13.2	342	.5	81	14.0	17.1	B
1500.00	10.9	347	.5	81	13.6	17.0	D
1502.00	11.6	349	.5	82	13.4	17.0	D
1504.00	17.8	30	.5	82	13.2	17.0	
1506.00	15.1	337	.5	83	13.2	17.0	D
1508.00	12.3	330	.5	84	13.2	17.1	B
1510.00	7.8	178	.5	85	13.4	17.3	
1512.00	13.9	200	.5	87	13.9	17.6	
1514.00	13.7	274	.5	89	14.3	17.8	
1516.00	26.4	271	.5	90	14.2	17.9	
1518.00	48.1	353	.5	90	13.9	17.9	
1520.00	16.4	32	.4	89	13.8	17.8	D
1522.00	34.2	69	.4	90	13.7	17.9	
1524.00	33.5	74	.4	90	13.7	18.0	
1526.00	14.7	27	.5	84	13.7	18.0	B
1528.00	17.3	20	.5	79	13.7	17.9	B
1530.00	18.4	30	.5	77	13.9	17.9	D
1532.00	21.5	34	.5	77	14.2	18.0	D
1534.00	26.5	42	.4	78	14.5	18.1	
1536.00	9.9	94	.4	76	14.8	18.2	
1538.00	14.8	33	.4	75	15.2	18.3	
1540.00	21.0	35	.5	76	15.6	18.3	
1542.00	30.1	18	.5	79	16.2	18.3	
1544.00	85.1	294	.5	80	16.6	18.3	
1546.00	54.4	308	.6	80	17.0	18.4	
1548.00	16.4	297	.6	81	17.2	18.4	
1550.00	22.3	254	.6	86	17.5	18.5	
1552.00	47.9	344	.6	90	17.7	18.5	
1554.00	49.2	328	.7	89	17.8	18.5	
1556.00	45.4	315	.7	84	17.7	18.3	

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DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
1558.00	20.8	51	.7	77	17.5	17.9	
1560.00	25.9	282	.8	76	17.3	17.7	
1562.00	34.4	282	.8	78	17.5	17.7	
1564.00	39.4	96	.8	78	17.9	17.6	
1566.00	39.0	116	.9	77	17.9	17.3	
1568.00	44.5	126	.9	74	17.7	17.0	
1570.00	35.7	319	.9	73	17.6	16.7	
1572.00	11.9	110	.9	74	17.5	16.6	
1574.00	10.2	108	.9	75	17.3	16.5	
1576.00	63.5	305	1.0	76	17.2	16.4	B
1578.00	37.5	190	1.0	77	17.1	15.9	
1580.00	29.9	207	1.1	79	16.5	15.0	
1582.00	47.9	304	1.1	81	16.2	14.4	
1584.00	46.7	331	1.2	82	17.0	14.7	
1586.00	9.8	314	1.2	82	18.0	15.0	D
1588.00	8.2	304	1.2	83	18.1	14.9	B
1590.00	8.8	331	1.3	85	17.9	14.6	D
1592.00	6.5	324	1.4	85	17.4	14.5	D
1594.00	37.4	16	1.4	84	16.6	14.5	
1596.00	52.0	42	1.5	82	15.6	14.6	
1598.00	8.6	198	1.5	80	14.5	14.7	
1600.00	23.6	169	1.6	81	13.7	14.6	
1602.00	11.5	330	1.7	82	13.4	14.7	
1604.00	10.5	67	1.8	83	13.7	15.0	
1606.00	39.4	281	1.8	83	14.0	15.1	
1608.00	37.6	287	1.8	82	14.0	15.0	
1610.00	10.6	256	1.8	81	13.8	14.9	
1612.00	13.4	226	1.8	80	13.6	14.9	
1614.00	12.1	311	1.8	82	13.6	14.9	
1616.00	6.5	309	1.8	83	14.0	15.0	
1618.00	6.8	192	1.8	83	14.1	15.1	
1620.00	23.6	296	1.9	83	13.9	15.1	
1622.00	23.5	262	1.9	85	13.9	15.1	
1624.00	31.0	290	2.0	87	13.8	15.1	
1626.00	43.7	66	2.0	89	13.8	15.1	
1628.00	34.2	6	2.0	90	13.6	15.2	
1630.00	34.9	350	2.1	91	13.6	15.5	
1632.00	26.0	325	2.1	90	13.9	15.5	
1634.00	58.0	321	2.1	89	14.2	15.3	
1636.00	59.7	315	2.2	90	14.3	15.2	
1638.00	27.9	239	2.2	92	14.4	15.1	
1640.00	27.8	259	2.2	92	14.4	15.1	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1642.00	12.6	285	2.2	91	14.6	15.1	D
1644.00	13.0	290	2.3	92	15.0	15.2	D
1646.00	35.4	268	2.3	93	15.3	15.2	
1648.00	31.1	255	2.3	93	15.2	15.2	
1650.00	17.1	19	2.3	94	15.1	15.1	
1652.00	8.2	326	2.3	96	15.1	15.1	D
1654.00	14.5	331	2.3	96	15.3	15.0	D
1656.00	4.1	333	2.3	96	15.5	14.9	D
1658.00	3.1	332	2.3	96	15.7	14.9	B
1660.00	2.5	349	2.3	97	15.8	14.9	B
1662.00	26.1	318	2.3	97	15.8	14.7	
1664.00	32.3	171	2.4	98	15.5	14.6	
1666.00	31.4	280	2.4	101	15.1	14.6	
1668.00	49.9	96	2.4	101	14.9	14.5	
1670.00	39.4	38	2.4	101	14.6	14.4	
1672.00	45.7	70	2.4	100	14.3	14.4	
1674.00	30.2	119	2.3	101	14.3	14.6	
1676.00	35.8	293	2.3	102	14.2	14.8	
1678.00	53.1	18	2.3	101	14.0	15.0	
1680.00	39.4	336	2.3	101	13.9	15.0	D
1682.00	39.9	327	2.3	100	13.6	14.9	B
1684.00	13.6	197	2.3	99	13.7	14.5	
1686.00	24.3	145	2.3	99	13.9	14.0	
1688.00	42.2	27	2.3	99	14.1	13.7	
1690.00	83.2	201	2.2	99	14.4	13.5	
1692.00	35.9	110	2.1	100	14.6	13.5	
1694.00	75.5	109	2.1	103	14.4	13.6	
1696.00	34.6	14	2.1	104	14.3	13.6	
1698.00	30.4	293	2.2	103	14.1	13.6	
1700.00	2.6	143	2.2	104	13.8	13.3	
1702.00	24.1	262	2.3	103	13.4	13.4	
1704.00	33.6	244	2.3	103	13.1	13.7	
1706.00	16.1	161	2.4	105	12.8	13.9	D
1708.00	16.0	156	2.4	106	12.7	14.0	D
1710.00	25.5	311	2.4	105	12.6	13.9	D
1712.00	26.1	312	2.4	105	12.5	14.0	D
1714.00	33.8	316	2.4	105	12.6	14.0	D
1716.00	32.1	315	2.4	106	12.9	14.1	D
1718.00	13.2	237	2.4	106	13.5	14.2	
1720.00	51.1	208	2.3	106	13.8	14.3	
1722.00	34.0	138	2.3	105	13.8	14.5	
1724.00	37.1	201	2.3	104	13.6	14.5	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1726.00	40.1	331	2.2	104	13.3	14.5	
1728.00	18.4	334	2.2	104	13.1	14.5	
1730.00	33.5	315	2.3	104	13.1	14.6	D
1732.00	31.7	28	2.3	103	13.5	14.6	
1734.00	23.3	321	2.3	104	14.3	14.2	D
1736.00	81.9	221	2.4	105	14.7	14.0	
1738.00	17.6	281	2.4	105	15.1	14.2	
1740.00	57.2	7	2.5	106	15.4	14.5	
1742.00	40.6	333	2.5	106	15.6	14.4	D
1744.00	33.4	326	2.5	107	15.5	14.4	B
1746.00	33.0	318	2.5	108	15.5	14.6	B
1748.00	13.4	188	2.6	109	15.4	14.7	
1750.00	36.2	122	2.6	109	15.4	14.9	
1752.00	17.5	321	2.6	108	15.4	15.2	
1754.00	18.0	312	2.5	107	15.4	15.5	B
1756.00	20.3	300	2.5	107	15.3	15.6	B
1758.00	44.1	46	2.5	107	15.0	15.1	
1760.00	30.5	72	2.5	107	14.9	14.7	
1762.00	36.0	48	2.5	106	15.0	14.8	
1764.00	20.6	292	2.5	106	15.4	15.2	D
1766.00	20.2	287	2.5	106	15.8	15.6	D
1768.00	16.8	273	2.5	108	15.9	15.7	D
1770.00	32.1	269	2.5	109	15.5	15.6	
1772.00	32.4	50	2.6	109	15.0	15.5	
1774.00	65.8	142	2.6	109	15.0	15.5	
1776.00	41.0	223	2.6	109	15.3	15.6	
1778.00	19.2	349	2.6	109	15.4	15.7	
1780.00	19.3	347	2.6	108	15.5	15.6	
1782.00	33.7	40	2.6	106	15.6	15.5	
1784.00	20.7	105	2.6	106	15.6	15.6	D
1786.00	24.4	108	2.6	107	15.6	15.7	B
1788.00	25.0	113	2.6	108	15.6	15.7	B
1790.00	23.4	267	2.6	109	15.8	15.7	
1792.00	19.8	280	2.6	111	16.0	15.9	
1794.00	42.7	322	2.6	110	16.3	16.0	
1796.00	56.8	304	2.6	110	16.3	15.9	
1798.00	21.9	171	2.6	110	16.2	15.9	
1800.00	40.6	216	2.6	109	16.2	15.8	
1802.00	36.5	146	2.6	110	16.4	15.8	
1804.00	36.6	146	2.6	111	16.8	15.8	
1806.00	31.9	175	2.6	112	17.0	15.9	
1808.00	19.5	201	2.6	113	17.0	15.9	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1810.00	20.5	259	2.6	113	16.8	15.9	
1812.00	20.0	199	2.6	113	16.5	16.1	
1814.00	20.1	186	2.6	112	16.0	16.3	
1816.00	39.8	322	2.6	111	15.8	16.3	
1818.00	19.5	317	2.6	110	15.6	16.3	
1820.00	32.1	299	2.6	109	15.6	16.3	
1822.00	34.1	277	2.6	109	15.6	16.4	
1824.00	42.2	275	2.6	109	15.6	16.3	
1826.00	4.6	207	2.7	109	15.5	16.2	
1828.00	14.6	253	2.7	109	15.4	16.2	
1830.00	17.3	289	2.7	108	15.4	16.3	
1832.00	12.2	291	2.6	108	15.4	16.3	
1834.00	56.7	239	2.6	108	15.3	16.3	
1836.00	35.0	2	2.6	107	15.2	16.2	
1838.00	17.2	315	2.6	107	15.1	16.0	
1840.00	30.7	66	2.5	108	15.1	15.9	
1842.00	10.5	211	2.6	108	15.0	15.8	D
1844.00	8.3	214	2.6	108	14.8	15.7	B
1846.00	9.7	238	2.6	106	14.5	15.6	D
1848.00	42.0	105	2.6	105	14.5	15.6	
1850.00	26.5	37	2.6	105	14.4	15.5	
1852.00	6.4	66	2.5	105	14.4	15.5	
1854.00	12.8	320	2.5	105	14.4	15.6	
1856.00	14.4	109	2.5	105	14.6	15.7	
1858.00	14.5	213	2.5	106	14.6	15.8	
1860.00	18.4	114	2.5	106	14.6	15.8	
1862.00	73.4	118	2.5	106	14.7	15.8	
1864.00	33.4	126	2.5	107	14.9	15.8	
1866.00	42.0	119	2.4	109	15.2	15.8	
1868.00	82.2	336	2.4	109	15.3	15.8	
1870.00	33.9	331	2.4	108	15.3	15.8	
1872.00	27.4	77	2.4	107	15.3	15.9	
1874.00	22.1	47	2.3	106	15.3	15.8	
1876.00	43.7	13	2.3	106	15.3	15.8	
1878.00	71.0	49	2.4	106	15.5	15.8	D
1880.00	53.7	135	2.4	106	15.5	16.0	
1882.00	81.9	43	2.4	106	15.5	16.5	D
1884.00	39.1	324	2.4	106	15.5	16.9	
1886.00	44.0	10	2.4	107	15.4	17.0	
1888.00	78.9	229	2.4	107	15.2	16.9	D
1890.00	75.7	226	2.4	106	15.1	16.8	D
1892.00	53.7	304	2.4	105	15.0	16.9	

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
1894.00	83.5	215	2.4	107	14.8	17.1	
1896.00	26.0	91	2.4	108	14.6	17.1	
1898.00	46.6	154	2.4	108	14.4	17.0	
1900.00	78.8	128	2.4	108	14.4	17.0	
1902.00	53.9	297	2.4	110	14.3	16.9	
1904.00	43.1	95	2.4	111	14.2	16.8	
1906.00	7.7	164	2.4	110	14.1	16.8	
1908.00	78.8	359	2.4	109	14.2	16.8	
1910.00	47.4	244	2.4	107	14.5	17.0	
1912.00	49.4	218	2.4	107	14.6	17.0	
1914.00	62.7	332	2.4	106	14.4	17.0	
1916.00	35.3	163	2.4	106	14.4	17.1	
1918.00	35.0	100	2.4	105	14.6	17.1	
1920.00	43.1	61	2.4	105	14.7	17.1	
1922.00	18.8	290	2.4	105	14.9	17.2	
1924.00	23.1	304	2.4	106	15.1	17.6	
1926.00	34.0	311	2.4	108	15.1	18.0	
1928.00	18.1	119	2.3	110	15.2	18.0	
1930.00	39.6	79	2.3	111	15.3	18.1	
1932.00	.9	359	2.4	113	15.2	18.0	
1934.00	42.3	37	2.4	113	15.0	17.7	
1936.00	42.7	62	2.5	112	15.1	17.6	
1938.00	27.0	168	2.5	111	15.2	17.4	
1940.00	46.3	56	2.4	112	15.2	17.4	
1942.00	66.0	346	2.4	112	15.1	17.5	
1944.00	35.1	141	2.5	112	15.0	17.5	
1946.00	24.2	155	2.5	111	14.9	17.6	
1948.00	44.1	283	2.5	111	14.8	17.6	
1950.00	40.2	286	2.6	112	14.6	17.6	
1952.00	34.5	310	2.6	112	14.5	17.6	
1954.00	28.9	351	2.5	112	14.3	17.6	
1956.00	36.5	10	2.5	113	14.0	17.6	
1958.00	35.2	357	2.5	114	13.9	17.6	
1960.00	40.3	126	2.5	115	14.1	17.7	
1962.00	48.8	318	2.5	115	14.0	17.6	B
1964.00	43.0	15	2.5	115	13.9	17.4	
1966.00	47.6	171	2.5	117	13.7	17.2	
1968.00	39.6	14	2.5	118	13.4	17.0	
1970.00	32.0	89	2.5	119	13.1	16.8	
1972.00	42.8	1	2.5	119	13.0	16.7	
1974.00	52.5	7	2.5	120	12.8	16.4	
1976.00	16.8	131	2.5	121	12.7	16.0	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
1978.00	10.6	85	2.5	122	12.6	15.8	B
1980.00	12.0	80	2.5	122	12.7	15.7	B
1982.00	12.2	73	2.5	123	12.9	15.8	B
1984.00	8.6	83	2.4	122	13.0	15.9	D
1986.00	14.1	234	2.3	122	13.0	16.0	
1988.00	10.1	83	2.2	122	13.0	16.3	B
1990.00	22.4	143	2.1	121	12.9	16.3	B
1992.00	22.2	146	2.1	121	13.0	16.3	B
1994.00	16.7	127	2.1	121	13.0	16.3	A
1996.00	17.1	124	2.0	122	13.1	16.3	A
1998.00	18.2	126	1.9	122	13.2	16.3	A
2000.00	17.3	130	1.9	122	13.2	16.3	A
2002.00	17.6	129	1.9	122	13.2	16.3	A
2004.00	29.1	196	1.9	123	13.3	16.3	
2006.00	16.2	121	1.8	125	13.3	16.3	A
2008.00	16.8	122	1.8	127	13.3	16.3	A
2010.00	16.2	122	1.7	130	13.3	16.2	A
2012.00	15.8	116	1.7	132	13.3	16.2	A
2014.00	16.3	116	1.6	132	13.3	16.2	A
2016.00	16.2	117	1.5	131	13.3	16.2	A
2018.00	16.2	116	1.5	131	13.2	16.2	A
2020.00	16.2	117	1.5	133	13.2	16.2	A
2022.00	16.1	115	1.5	135	13.3	16.1	A
2024.00	14.3	111	1.5	134	13.3	16.0	A
2026.00	14.2	110	1.5	135	13.3	16.0	A
2028.00	14.8	106	1.5	135	13.4	16.0	A
2030.00	15.3	105	1.4	134	13.4	15.9	A
2032.00	15.8	106	1.4	134	13.4	15.9	A
2034.00	16.3	116	1.4	133	13.4	15.8	A
2036.00	16.7	117	1.3	133	13.5	15.8	A
2038.00	16.2	115	1.3	133	13.4	15.9	A
2040.00	14.6	113	1.2	134	13.4	15.9	A
2042.00	13.7	111	1.2	134	13.3	15.9	A
2044.00	13.4	111	1.1	134	13.3	15.9	A
2046.00	12.9	111	1.1	133	13.3	15.7	A
2048.00	11.9	111	1.1	134	13.3	15.6	A
2050.00	11.6	109	1.1	134	13.4	15.4	A
2052.00	10.2	102	1.0	134	13.4	15.2	A
2054.00	9.7	100	1.0	133	13.4	15.1	A
2056.00	13.9	115	1.0	133	13.4	14.9	A
2058.00	13.3	113	1.0	134	13.4	14.8	A
2060.00	12.3	106	.9	137	13.3	14.8	A

FILE : 1

	FORMATION			BOREHOLE			
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2062.00	12.6	107	.9	139	13.3	14.7	A
2064.00	12.5	106	.9	139	13.3	14.6	A
2066.00	12.4	102	.9	139	13.3	14.4	A
2068.00	13.8	93	.8	138	13.3	14.1	A
2070.00	16.8	83	.8	139	13.3	14.0	A
2072.00	12.0	107	.8	141	13.2	14.0	A
2074.00	12.0	93	.7	143	13.2	14.0	A
2076.00	10.5	96	.7	143	13.2	14.0	A
2078.00	9.6	103	.6	143	13.1	13.9	A
2080.00	14.1	116	.6	142	13.1	13.9	A
2082.00	20.2	124	.6	142	13.1	13.9	A
2084.00	23.2	131	.6	145	13.1	13.9	
2086.00	13.7	97	.6	147	13.1	13.9	A
2088.00	13.8	95	.7	147	13.1	13.8	A
2090.00	14.1	87	.6	146	13.1	13.7	A
2092.00	15.0	81	.6	146	13.1	13.9	C
2094.00	9.6	79	.6	144	13.3	14.4	A
2096.00	7.1	113	.6	144	13.3	14.7	A
2098.00	6.9	113	.6	145	13.3	14.6	A
2100.00	14.8	74	.6	147	13.3	14.6	A
2102.00	15.4	72	.5	149	13.2	14.7	A
2104.00	12.1	71	.5	151	13.2	14.7	A
2106.00	11.7	80	.5	152	13.2	14.6	A
2108.00	12.0	81	.5	154	13.2	14.4	A
2110.00	12.1	82	.4	160	13.3	14.3	A
2112.00	12.3	83	.4	168	13.3	14.4	A
2114.00	12.6	76	.4	175	13.3	14.4	A
2116.00	13.0	73	.4	177	13.4	14.4	A
2118.00	12.6	74	.4	177	13.5	14.4	A
2120.00	12.6	73	.5	179	13.5	14.5	A
2122.00	12.7	72	.5	183	13.5	14.7	A
2124.00	12.3	74	.5	187	13.6	14.9	A
2126.00	13.5	87	.5	191	13.6	14.9	A
2128.00	13.2	73	.5	194	13.7	14.9	A
2130.00	12.8	62	.5	197	13.7	15.1	A
2132.00	13.2	68	.5	199	13.7	15.2	A
2134.00	14.2	66	.5	201	13.8	15.3	A
2136.00	13.5	67	.5	199	13.8	15.2	A
2138.00	13.1	68	.4	199	13.6	15.1	A
2140.00	14.0	68	.4	198	13.6	15.1	A
2142.00	15.0	72	.4	198	13.6	15.1	A
2144.00	27.8	114	.5	199	13.6	15.1	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2146.00	12.4	58	.5	199	13.6	15.1	B
2148.00	14.0	64	.5	199	13.6	15.0	B
2150.00	16.1	57	.6	200	13.6	14.9	D
2152.00	16.7	49	.6	202	13.5	14.9	A
2154.00	16.7	57	.7	205	13.4	14.9	A
2156.00	18.9	50	.7	206	13.4	14.9	A
2158.00	19.0	51	.8	207	13.3	14.8	A
2160.00	16.9	54	.8	208	13.2	14.8	A
2162.00	15.8	55	.9	208	13.2	14.7	A
2164.00	16.6	45	.9	209	13.1	14.7	C
2166.00	12.8	70	1.0	211	13.0	14.6	C
2168.00	15.9	156	.9	211	12.9	14.6	
2170.00	17.6	55	.9	212	12.9	14.6	A
2172.00	18.0	54	1.0	212	12.9	14.6	A
2174.00	11.2	53	1.0	212	12.9	14.6	A
2176.00	14.4	55	1.0	213	12.9	14.8	A
2178.00	16.4	56	1.0	215	13.0	15.1	A
2180.00	18.6	55	1.0	216	12.9	15.4	A
2182.00	18.5	55	1.0	218	12.8	15.5	A
2184.00	19.0	56	1.0	220	12.8	15.6	A
2186.00	20.3	55	1.0	222	12.8	15.5	A
2188.00	20.3	54	1.1	223	12.8	15.4	A
2190.00	21.1	54	1.2	222	12.8	15.3	A
2192.00	21.3	54	1.3	222	12.7	15.3	A
2194.00	22.3	50	1.4	222	12.7	15.2	A
2196.00	20.6	48	1.5	223	12.6	15.2	A
2198.00	20.6	50	1.6	224	12.6	15.3	A
2200.00	20.5	48	1.6	225	12.6	15.4	A
2202.00	20.4	48	1.7	226	12.6	15.4	A
2204.00	17.2	58	1.7	228	12.7	15.5	A
2206.00	16.8	58	1.7	229	12.8	15.6	A
2208.00	14.1	47	1.7	228	12.9	15.7	A
2210.00	20.2	78	1.7	226	12.9	15.9	A
2212.00	21.0	78	1.8	227	12.9	16.1	A
2214.00	19.9	56	1.8	228	12.9	16.2	C
2216.00	24.3	99	1.8	228	13.0	16.2	
2218.00	23.6	42	1.8	229	13.1	16.3	C
2220.00	36.4	58	1.8	230	13.2	16.3	
2222.00	23.4	42	1.8	229	13.2	16.2	
2224.00	14.0	94	1.9	229	13.2	16.2	D
2226.00	14.9	93	1.9	230	13.2	16.2	D
2228.00	16.9	98	2.0	231	13.2	16.0	D

COMPANY : STEAM RESERVES CORP.
WELL : ANIMAS 55-7

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2230.00	18.6	106	2.0	233	13.1	15.6	B
2232.00	40.9	237	2.0	234	13.1	15.3	
2234.00	19.8	110	2.1	234	13.1	15.1	D
2236.00	32.2	83	2.1	234	13.1	15.0	
2238.00	16.5	108	2.2	234	13.0	15.0	D
2240.00	24.3	95	2.2	234	13.0	15.0	D
2242.00	16.8	106	2.2	233	13.1	15.1	A
2244.00	15.6	111	2.2	233	13.2	15.2	A
2246.00	12.9	103	2.2	235	13.4	15.2	A
2248.00	13.6	107	2.2	236	13.4	15.2	A
2250.00	15.4	110	2.2	237	13.4	15.2	A
2252.00	16.1	113	2.2	236	13.3	15.1	A
2254.00	20.6	135	2.2	235	13.3	15.0	A
2256.00	14.5	123	2.2	235	13.2	15.0	A
2258.00	18.6	108	2.3	237	13.2	15.0	A
2260.00	19.8	105	2.3	237	13.2	15.0	A
2262.00	18.1	108	2.4	239	13.2	14.8	A
2264.00	16.3	110	2.4	239	13.1	14.6	A
2266.00	17.7	111	2.4	238	13.0	14.3	A
2268.00	17.5	105	2.5	239	12.9	14.3	A
2270.00	19.6	107	2.5	239	12.9	14.3	A
2272.00	20.7	98	2.5	239	12.8	14.2	A
2274.00	47.6	266	2.6	239	12.9	14.2	
2276.00	15.2	107	2.6	239	13.0	14.3	A
2278.00	16.8	98	2.6	240	13.2	14.4	A
2280.00	17.9	105	2.7	241	13.3	14.4	A
2282.00	19.8	107	2.7	241	13.5	14.4	A
2284.00	22.7	109	2.7	241	13.5	14.5	A
2286.00	22.1	110	2.7	241	13.6	14.6	A
2288.00	11.2	125	2.7	242	13.7	14.6	D
2290.00	15.1	125	2.7	243	13.7	14.7	B
2292.00	14.9	135	2.7	243	13.6	14.6	B
2294.00	40.4	65	2.7	243	13.4	14.6	
2296.00	17.0	81	2.6	243	13.3	14.4	
2298.00	39.7	77	2.6	243	13.1	14.3	
2300.00	79.3	195	2.7	244	13.1	14.4	
2302.00	56.1	43	2.7	244	13.5	14.8	
2304.00	69.1	136	2.7	244	13.6	14.9	
2306.00	49.3	26	2.8	244	13.3	14.7	
2308.00	22.9	102	2.8	245	13.2	14.6	C
2310.00	24.4	103	2.8	245	13.5	14.5	C
2312.00	25.4	100	2.9	245	13.5	14.4	C

FILE : 1

	FORMATION			BOREHOLE				
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2314.00	39.7	26	2.9	244	13.5	14.3	
2316.00	27.8	91	2.9	244	13.4	14.2	C
2318.00	19.4	94	2.9	244	13.3	14.2	C
2320.00	21.4	96	3.0	245	13.2	14.1	A
2322.00	17.0	101	3.0	247	13.0	14.1	A
2324.00	17.3	102	3.0	248	13.0	14.2	A
2326.00	19.8	95	3.1	247	13.1	14.3	A
2328.00	19.5	104	3.1	246	13.1	14.2	A
2330.00	19.2	105	3.1	247	13.2	14.5	A
2332.00	19.2	106	3.1	248	13.3	14.9	A
2334.00	19.4	107	3.1	248	13.3	15.0	A
2336.00	18.5	107	3.1	249	13.3	15.0	A
2338.00	17.9	108	3.1	248	13.3	14.9	A
2340.00	15.8	108	3.1	249	13.4	14.8	A
2342.00	18.2	109	3.1	249	13.2	14.6	A
2344.00	18.2	102	3.1	250	13.1	14.5	B
2346.00	16.6	137	3.1	250	13.0	14.3	D
2348.00	19.0	136	3.1	251	12.9	14.2	B
2350.00	16.3	113	3.1	251	12.9	14.0	B
2352.00	13.5	111	3.2	251	12.8	13.8	A
2354.00	12.7	116	3.2	251	12.7	13.8	A
2356.00	12.5	116	3.2	251	12.7	13.8	A
2358.00	13.6	115	3.2	251	12.8	14.0	C
2360.00	14.8	113	3.2	252	12.8	14.1	B
2362.00	16.7	105	3.2	253	12.8	14.4	B
2364.00	24.7	325	3.2	253	12.8	14.7	
2366.00	31.1	338	3.3	255	13.1	14.9	
2368.00	38.6	347	3.3	257	13.2	14.8	
2370.00	60.1	125	3.4	257	13.3	14.6	
2372.00	67.7	323	3.4	258	13.5	14.6	
2374.00	30.3	137	3.4	258	13.5	14.6	
2376.00	21.3	129	3.4	259	13.5	14.6	B
2378.00	22.5	131	3.4	259	13.4	14.5	B
2380.00	25.0	128	3.4	259	13.3	14.4	B
2382.00	27.1	128	3.4	260	13.1	14.2	B
2384.00	24.1	120	3.4	259	13.0	14.0	D
2386.00	14.1	186	3.3	258	12.8	13.7	B
2388.00	18.9	109	3.3	258	12.8	13.7	D
2390.00	13.1	187	3.3	258	12.7	13.9	B
2392.00	9.8	151	3.2	259	12.7	14.1	B
2394.00	16.4	212	3.2	260	12.7	14.1	D
2396.00	15.2	214	3.2	263	12.6	14.0	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2398.00	17.8	219	3.2	265	12.6	14.0	
2400.00	40.6	228	3.1	265	12.8	14.0	
2402.00	11.0	171	3.1	265	12.9	14.0	A
2404.00	9.9	167	3.1	265	12.9	14.0	A
2406.00	8.4	155	3.1	265	12.8	13.9	A
2408.00	8.3	154	3.2	265	12.8	14.0	A
2410.00	7.9	195	3.2	267	12.9	14.1	C
2412.00	32.6	162	3.2	267	12.8	14.1	
2414.00	13.0	182	3.2	267	12.8	13.9	C
2416.00	13.6	175	3.2	266	12.8	13.8	A
2418.00	15.8	185	3.2	265	12.7	13.6	A
2420.00	16.3	176	3.3	264	12.8	13.5	A
2422.00	17.0	171	3.3	264	13.0	13.2	A
2424.00	16.9	178	3.3	265	12.9	12.8	A
2426.00	16.8	184	3.4	267	12.9	12.9	
2428.00	34.9	116	3.4	269	12.9	13.2	
2430.00	34.6	116	3.4	271	13.0	13.3	
2432.00	43.3	131	3.4	271	13.2	13.3	
2434.00	13.8	33	3.4	271	13.6	13.6	
2436.00	16.1	115	3.3	272	13.8	13.9	B
2438.00	19.0	125	3.3	275	13.4	13.3	B
2440.00	37.2	173	3.3	276	13.1	12.8	
2442.00	78.4	14	3.3	276	13.0	12.5	
2444.00	47.0	257	3.3	276	13.0	12.3	
2446.00	13.0	136	3.3	277	13.0	12.4	A
2448.00	13.1	127	3.3	276	13.0	12.8	A
2450.00	14.9	119	3.3	275	12.9	13.2	C
2452.00	15.9	115	3.4	274	12.9	13.3	A
2454.00	21.4	136	3.4	274	12.9	13.4	A
2456.00	16.1	141	3.4	274	12.9	13.4	A
2458.00	12.1	141	3.4	275	13.0	13.3	A
2460.00	17.2	142	3.5	275	13.0	13.3	A
2462.00	18.0	126	3.5	275	13.1	13.3	A
2464.00	7.5	196	3.4	274	13.1	13.3	
2466.00	10.6	110	3.4	274	13.2	13.5	C
2468.00	27.0	224	3.3	273	13.1	13.5	D
2470.00	11.4	110	3.3	271	13.0	13.0	C
2472.00	14.1	203	3.2	272	12.9	12.8	C
2474.00	11.1	162	3.1	273	12.7	12.8	A
2476.00	11.7	164	3.1	274	12.7	12.8	A
2478.00	7.9	208	3.1	275	12.8	12.7	C
2480.00	10.0	183	3.1	276	12.8	12.8	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2482.00	10.4	185	3.2	276	12.8	12.9	A
2484.00	6.9	183	3.2	275	12.8	12.7	A
2486.00	6.1	155	3.3	275	12.8	12.5	A
2488.00	10.1	127	3.3	276	12.8	12.5	A
2490.00	15.0	113	3.4	276	13.0	12.7	A
2492.00	15.9	111	3.4	275	13.0	12.9	A
2494.00	15.0	111	3.4	275	12.8	13.1	A
2496.00	14.1	104	3.4	274	12.7	13.3	A
2498.00	16.6	113	3.5	273	12.7	13.3	A
2500.00	17.2	114	3.5	273	12.8	13.2	A
2502.00	14.2	116	3.5	273	12.9	13.1	A
2504.00	12.9	119	3.5	273	13.1	13.0	A
2506.00	12.3	118	3.5	273	13.4	13.0	A
2508.00	11.7	116	3.5	273	13.6	13.0	A
2510.00	11.0	111	3.5	273	13.6	12.8	A
2512.00	11.9	121	3.4	273	13.3	12.6	B
2514.00	12.8	112	3.4	275	12.9	12.7	B
2516.00	48.7	174	3.3	276	12.7	12.7	
2518.00	9.9	130	3.3	278	12.7	12.7	D
2520.00	12.6	126	3.3	279	12.7	12.6	D
2522.00	7.2	66	3.4	281	12.7	12.6	D
2524.00	11.4	118	3.5	281	12.8	12.7	D
2526.00	12.5	125	3.5	282	12.9	12.8	B
2528.00	30.3	68	3.5	282	12.9	12.9	
2530.00	7.1	143	3.5	282	12.9	12.7	D
2532.00	5.7	156	3.5	282	13.0	12.5	D
2534.00	3.2	176	3.5	282	13.1	12.5	B
2536.00	9.7	239	3.4	281	13.0	12.7	B
2538.00	10.0	228	3.4	279	13.0	12.9	B
2540.00	50.0	160	3.4	278	13.0	13.0	
2542.00	33.7	152	3.4	277	12.8	12.9	B
2544.00	36.0	151	3.4	278	12.9	12.9	B
2546.00	20.1	146	3.5	278	13.1	12.9	B
2548.00	33.1	145	3.5	278	13.3	12.9	B
2550.00	37.6	144	3.4	278	13.6	12.8	B
2552.00	38.1	125	3.4	278	13.5	12.6	B
2554.00	59.7	136	3.3	279	13.0	12.7	
2556.00	42.8	138	3.3	279	12.7	12.8	
2558.00	43.8	139	3.2	279	12.6	12.8	
2560.00	70.4	1	3.1	278	12.8	12.8	
2562.00	20.4	111	3.1	277	12.9	12.7	B
2564.00	20.1	102	3.2	276	12.8	12.5	B

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2566.00	21.4	121	3.2	275	12.8	12.5	B
2568.00	18.6	106	3.3	275	12.7	12.4	D
2570.00	21.1	116	3.4	275	12.7	12.4	D
2572.00	17.5	121	3.5	275	12.7	12.4	B
2574.00	19.6	114	3.5	277	12.9	12.4	B
2576.00	22.3	106	3.5	278	13.1	12.4	D
2578.00	21.3	122	3.5	279	13.5	12.6	B
2580.00	21.3	118	3.5	277	13.4	12.8	B
2582.00	28.1	112	3.4	276	13.0	12.8	D
2584.00	42.1	215	3.4	276	12.8	13.0	
2586.00	3.1	82	3.4	277	12.5	13.1	B
2588.00	4.0	337	3.4	279	12.4	13.0	B
2590.00	2.4	308	3.5	281	12.4	12.9	B
2592.00	3.4	180	3.5	282	12.4	12.8	
2594.00	51.8	130	3.5	283	12.5	12.7	
2596.00	23.6	103	3.5	283	12.7	12.7	
2598.00	33.1	97	3.4	282	12.8	12.6	
2600.00	14.0	152	3.4	281	12.7	12.5	
2602.00	13.5	154	3.3	281	12.8	12.6	
2604.00	19.8	113	3.3	280	12.7	12.6	
2606.00	18.9	102	3.3	279	12.7	12.7	
2608.00	15.9	141	3.3	278	12.7	12.8	
2610.00	16.3	303	3.3	278	12.7	12.9	
2612.00	19.7	118	3.3	278	12.8	13.2	C
2614.00	15.7	109	3.4	277	12.9	13.3	C
2616.00	40.8	115	3.4	278	12.9	13.2	
2618.00	12.9	92	3.4	278	12.8	13.1	C
2620.00	15.2	119	3.4	278	12.7	13.1	A
2622.00	15.3	122	3.4	279	12.6	13.2	A
2624.00	15.8	120	3.4	280	12.6	13.2	A
2626.00	20.8	110	3.3	281	12.6	13.4	A
2628.00	20.2	110	3.3	281	12.8	13.6	A
2630.00	19.2	108	3.3	281	12.7	13.3	A
2632.00	19.9	95	3.3	281	12.6	12.8	C
2634.00	14.6	106	3.3	280	12.8	12.7	A
2636.00	14.2	101	3.3	280	12.8	12.8	A
2638.00	17.5	99	3.4	280	12.8	13.0	A
2640.00	13.9	123	3.4	280	12.8	13.0	C
2642.00	20.3	127	3.4	279	12.8	12.9	A
2644.00	21.0	117	3.3	278	13.0	12.7	A
2646.00	15.4	110	3.3	278	13.2	12.6	A
2648.00	16.3	112	3.3	277	13.3	12.5	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2650.00	17.1	126	3.4	277	13.3	12.6	A
2652.00	15.7	124	3.4	278	13.4	12.8	A
2654.00	14.8	118	3.5	278	13.6	13.1	A
2656.00	15.0	118	3.5	277	13.8	13.3	C
2658.00	14.7	120	3.6	278	13.6	13.5	A
2660.00	14.3	121	3.6	279	13.4	13.6	A
2662.00	14.1	119	3.6	279	13.1	13.5	A
2664.00	14.2	117	3.6	280	13.0	13.3	A
2666.00	36.3	113	3.6	279	12.9	12.9	
2668.00	19.1	128	3.6	279	12.8	12.6	D
2670.00	23.0	80	3.6	278	12.7	12.5	
2672.00	16.8	137	3.7	278	12.6	12.5	D
2674.00	14.6	106	3.7	278	12.6	12.6	D
2676.00	13.4	120	3.7	278	12.7	12.7	D
2678.00	13.7	118	3.7	278	12.9	12.9	B
2680.00	17.4	129	3.7	278	12.8	13.0	D
2682.00	81.9	64	3.8	279	12.9	13.1	
2684.00	32.3	236	3.7	278	13.0	13.2	
2686.00	14.9	130	3.8	277	13.1	13.3	D
2688.00	13.9	123	3.8	277	13.0	13.2	A
2690.00	14.7	126	3.8	278	12.8	13.2	A
2692.00	16.8	126	3.8	278	12.8	13.2	A
2694.00	17.7	121	3.8	279	12.9	13.3	A
2696.00	18.5	112	3.9	280	12.9	13.1	A
2698.00	19.1	101	3.9	281	13.0	12.8	A
2700.00	16.6	124	4.0	282	13.1	12.9	C
2702.00	20.0	120	4.0	284	13.0	13.1	A
2704.00	20.0	129	4.0	285	13.0	13.2	C
2706.00	16.2	127	4.0	285	13.1	13.1	C
2708.00	13.4	119	3.9	284	13.2	12.9	C
2710.00	18.3	129	3.9	284	13.3	12.8	A
2712.00	18.7	118	3.8	284	13.2	12.7	A
2714.00	11.8	129	3.8	284	13.1	12.6	A
2716.00	16.4	137	3.8	283	13.0	12.7	A
2718.00	16.8	125	3.8	283	12.9	12.8	A
2720.00	21.5	150	3.8	284	13.1	12.9	C
2722.00	76.2	34	3.8	284	13.3	12.9	
2724.00	28.4	155	3.8	283	13.1	12.8	
2726.00	78.2	67	3.9	283	12.9	13.1	
2728.00	31.1	216	3.9	283	12.9	13.4	
2730.00	15.2	83	3.9	283	13.0	13.4	B
2732.00	15.3	89	3.9	282	12.9	13.1	B

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2734.00	17.4	92	3.9	281	12.9	12.8	B
2736.00	25.9	136	3.8	281	13.0	12.7	
2738.00	12.7	122	3.9	281	13.1	12.7	D
2740.00	7.2	130	3.9	281	13.3	12.7	D
2742.00	10.7	121	3.9	282	13.4	12.8	B
2744.00	10.8	119	4.0	282	13.3	13.0	B
2746.00	12.3	113	4.1	282	13.0	13.2	A
2748.00	13.6	109	4.1	281	12.8	13.0	A
2750.00	14.6	125	4.2	282	12.9	12.9	C
2752.00	79.8	166	4.2	283	12.9	12.8	
2754.00	13.9	114	4.2	283	12.8	12.8	A
2756.00	13.8	110	4.2	282	12.9	12.8	A
2758.00	15.0	118	4.3	283	13.0	12.8	A
2760.00	18.9	122	4.3	284	13.0	12.8	A
2762.00	19.1	113	4.3	285	13.0	12.9	A
2764.00	31.2	265	4.3	286	13.0	12.8	
2766.00	27.5	94	4.3	288	13.0	12.8	
2768.00	9.2	104	4.3	288	13.0	12.9	C
2770.00	15.3	132	4.3	289	12.8	13.1	A
2772.00	12.1	125	4.3	289	12.7	13.4	A
2774.00	12.2	119	4.3	289	12.8	13.7	A
2776.00	17.1	137	4.3	288	12.8	13.7	A
2778.00	9.9	125	4.2	288	12.9	13.5	A
2780.00	28.2	175	4.2	288	13.2	13.3	
2782.00	29.0	160	4.2	287	13.4	13.1	
2784.00	15.1	128	4.2	286	13.4	13.1	A
2786.00	19.3	129	4.3	286	13.2	13.0	A
2788.00	19.5	120	4.3	287	13.0	12.8	A
2790.00	17.8	117	4.4	288	12.9	12.6	A
2792.00	17.6	115	4.4	288	12.9	12.6	A
2794.00	21.4	119	4.5	288	12.8	12.7	A
2796.00	16.9	116	4.5	288	12.9	12.8	A
2798.00	15.8	113	4.5	289	13.1	12.8	A
2800.00	15.9	114	4.5	289	13.2	12.9	C
2802.00	39.9	335	4.4	288	13.2	13.0	
2804.00	35.6	359	4.4	287	13.1	13.1	
2806.00	37.0	343	4.4	286	13.1	13.0	
2808.00	57.3	28	4.4	286	13.0	12.9	
2810.00	84.5	51	4.4	287	13.0	12.9	
2812.00	29.7	199	4.4	286	12.9	13.0	
2814.00	26.2	149	4.4	286	12.8	13.1	
2816.00	36.1	161	4.4	286	12.8	13.2	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2818.00	60.8	163	4.4	284	12.6	13.3	
2820.00	35.4	3	4.4	284	12.5	13.3	
2822.00	43.6	266	4.4	283	12.6	13.3	
2824.00	63.2	350	4.4	283	12.6	13.4	
2826.00	51.1	65	4.4	283	12.6	13.4	
2828.00	83.4	56	4.5	284	12.6	13.5	
2830.00	13.6	115	4.5	286	12.7	13.5	D
2832.00	17.2	106	4.5	286	12.7	13.5	B
2834.00	17.4	97	4.6	286	12.7	13.5	B
2836.00	19.2	90	4.6	286	12.7	13.3	D
2838.00	26.4	90	4.7	287	12.9	12.9	
2840.00	26.5	55	4.7	287	13.2	12.6	
2842.00	39.2	94	4.7	288	13.4	12.7	
2844.00	39.3	198	4.7	288	13.4	12.8	
2846.00	62.1	151	4.7	288	13.3	12.8	
2848.00	20.9	126	4.7	289	13.2	12.8	D
2850.00	21.0	120	4.7	289	13.2	12.8	B
2852.00	16.7	113	4.6	289	13.2	12.8	B
2854.00	16.1	115	4.6	289	13.3	12.8	B
2856.00	18.0	118	4.6	288	13.4	12.8	B
2858.00	18.4	111	4.6	288	13.4	12.7	D
2860.00	38.7	294	4.5	290	13.3	12.7	
2862.00	44.2	49	4.5	291	13.2	12.7	
2864.00	16.8	136	4.5	291	13.3	12.8	D
2866.00	49.6	313	4.5	291	13.2	12.9	
2868.00	48.9	284	4.5	290	13.0	12.8	
2870.00	15.1	114	4.4	290	12.8	12.9	B
2872.00	15.1	109	4.4	291	12.7	12.9	B
2874.00	87.8	156	4.5	291	12.7	12.9	
2876.00	18.0	117	4.5	292	12.6	12.8	D
2878.00	17.3	118	4.5	293	12.6	12.8	B
2880.00	14.5	126	4.5	293	12.5	12.8	D
2882.00	16.1	81	4.5	293	12.6	12.9	C
2884.00	16.2	110	4.5	293	12.6	13.0	A
2886.00	19.6	119	4.6	293	12.7	13.1	A
2888.00	19.6	121	4.6	293	12.7	13.2	A
2890.00	16.7	126	4.6	293	12.7	13.3	A
2892.00	19.5	104	4.6	293	12.6	13.3	C
2894.00	8.4	107	4.6	293	12.6	13.3	A
2896.00	8.8	108	4.7	293	12.5	13.3	A
2898.00	15.7	111	4.7	293	12.5	13.3	A
2900.00	17.2	113	4.7	293	12.5	13.3	C

FILE : 1

	FORMATION		BOREHOLE				
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2902.00	25.5	135	4.6	293	12.5	13.3	
2904.00	15.1	116	4.6	293	12.6	13.4	B
2906.00	14.9	115	4.6	293	12.7	13.4	D
2908.00	9.9	153	4.6	293	12.7	13.5	D
2910.00	47.9	117	4.6	293	12.5	13.5	
2912.00	80.7	200	4.6	293	12.4	13.6	
2914.00	18.2	102	4.5	293	12.5	13.6	D
2916.00	83.7	80	4.5	293	12.5	13.7	
2918.00	26.6	38	4.5	293	12.5	13.8	
2920.00	51.5	357	4.5	293	12.6	13.8	
2922.00	44.4	113	4.4	293	12.6	13.9	
2924.00	75.2	339	4.4	293	12.7	14.0	
2926.00	16.4	126	4.4	294	12.8	14.0	A
2928.00	19.8	129	4.4	294	12.8	14.0	A
2930.00	18.3	126	4.4	294	12.8	14.1	A
2932.00	14.6	104	4.4	294	12.7	14.2	A
2934.00	14.7	94	4.4	293	12.6	14.2	A
2936.00	14.1	126	4.5	294	12.6	14.3	A
2938.00	14.2	125	4.5	294	12.6	14.3	A
2940.00	7.5	155	4.5	295	12.6	14.3	D
2942.00	20.7	147	4.5	295	12.7	14.4	C
2944.00	23.7	139	4.5	295	12.7	14.3	C
2946.00	22.6	126	4.6	295	12.8	14.2	A
2948.00	21.8	130	4.6	295	12.9	14.1	A
2950.00	22.7	134	4.6	295	13.0	14.1	A
2952.00	41.9	81	4.7	295	13.1	14.0	
2954.00	16.8	114	4.7	295	13.3	14.0	A
2956.00	18.4	118	4.7	295	13.6	13.9	A
2958.00	19.2	122	4.7	295	13.9	13.7	A
2960.00	19.2	123	4.6	295	14.1	13.4	A
2962.00	21.0	124	4.6	295	14.1	13.2	
2964.00	10.5	46	4.6	294	13.9	13.1	
2966.00	14.2	98	4.6	294	13.4	13.0	
2968.00	77.4	207	4.6	294	13.1	12.9	
2970.00	47.0	52	4.6	295	13.0	12.8	
2972.00	74.5	327	4.6	296	12.9	12.7	
2974.00	55.5	37	4.5	296	12.8	12.7	
2976.00	41.5	6	4.5	296	12.9	12.8	
2978.00	15.1	58	4.5	297	12.9	13.0	
2980.00	38.9	62	4.4	296	12.9	13.2	
2982.00	42.7	79	4.4	297	12.9	13.4	
2984.00	86.6	133	4.4	298	12.8	13.5	

FILE : 1

	FORMATION		BOREHOLE				
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
2986.00	14.2	28	4.3	297	12.7	13.3	
2988.00	8.2	55	4.2	296	12.7	12.9	
2990.00	82.5	58	4.1	295	12.7	12.7	
2992.00	62.6	50	4.1	295	12.7	12.9	
2994.00	72.5	165	4.1	297	12.8	12.8	
2996.00	43.3	42	4.1	297	12.8	12.6	
2998.00	48.4	216	4.1	298	12.9	12.7	
3000.00	77.3	31	4.1	298	13.1	12.9	
3002.00	40.9	87	4.1	297	13.1	13.1	
3004.00	47.0	205	4.0	297	13.0	13.1	B
3006.00	31.9	100	4.0	297	12.8	13.2	
3008.00	6.8	233	3.9	297	12.7	13.3	
3010.00	41.9	135	3.9	296	12.6	13.4	
3012.00	22.8	109	3.9	295	12.7	13.7	
3014.00	42.7	81	4.0	295	12.9	13.9	
3016.00	61.0	99	4.0	296	13.2	14.1	
3018.00	73.2	332	4.0	298	13.3	14.3	
3020.00	83.3	5	4.0	297	13.5	14.5	
3022.00	53.8	145	4.0	296	13.6	14.8	
3024.00	57.6	5	4.0	295	13.6	15.0	
3026.00	85.8	67	4.0	295	14.0	14.9	
3028.00	51.6	81	4.0	296	14.5	15.0	
3030.00	27.7	6	4.0	296	14.6	15.0	
3032.00	26.4	341	4.0	296	14.6	14.9	
3034.00	81.1	76	4.1	296	14.7	14.9	
3036.00	37.5	10	4.1	295	14.8	14.8	
3038.00	48.6	330	4.1	295	14.9	14.7	
3040.00	12.8	167	4.1	294	14.9	14.6	
3042.00	32.4	134	4.1	295	14.7	14.4	
3044.00	72.9	349	4.0	295	14.5	14.3	
3046.00	80.2	355	4.0	294	14.5	14.2	
3048.00	84.6	198	3.9	294	14.4	14.0	
3050.00	32.3	85	3.9	295	14.3	13.8	
3052.00	51.6	27	3.9	294	14.5	13.7	
3054.00	26.6	159	3.9	293	14.8	13.7	
3056.00	56.3	278	3.9	292	15.0	13.7	
3058.00	40.8	337	3.9	294	15.2	13.4	
3060.00	27.4	132	3.9	294	15.4	13.2	
3062.00	74.6	291	3.9	295	15.5	13.2	
3064.00	28.2	137	3.9	295	15.4	13.2	
3066.00	32.7	138	3.9	294	14.9	13.1	
3068.00	26.3	106	3.9	293	14.6	13.1	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3070.00	20.0	151	3.8	293	14.7	13.3	
3072.00	24.9	327	3.8	293	14.8	13.2	
3074.00	15.2	29	3.8	292	14.6	12.6	
3076.00	21.0	40	3.7	291	14.3	12.4	
3078.00	15.3	351	3.7	291	14.4	12.9	
3080.00	8.5	151	3.7	290	14.8	13.5	
3082.00	26.5	74	3.6	290	15.2	13.9	
3084.00	73.7	255	3.6	290	15.5	14.3	
3086.00	15.4	244	3.5	290	15.4	14.5	
3088.00	24.2	248	3.5	290	15.2	14.2	
3090.00	24.6	232	3.5	291	15.2	14.2	
3092.00	33.8	281	3.5	292	15.3	14.1	
3094.00	44.8	30	3.5	292	15.5	14.0	
3096.00	66.7	21	3.5	292	15.5	14.0	
3098.00	71.1	156	3.6	292	15.3	14.0	
3100.00	81.7	357	3.6	292	15.2	14.0	
3102.00	47.4	41	3.6	292	15.2	14.0	
3104.00	17.5	32	3.6	293	15.3	14.0	
3106.00	56.2	329	3.6	293	15.4	14.1	
3108.00	80.5	322	3.7	293	15.5	14.1	
3110.00	79.2	335	3.7	292	15.7	14.2	
3112.00	75.2	18	3.7	293	15.8	14.3	
3114.00	37.8	127	3.6	293	15.9	14.3	
3116.00	38.4	127	3.6	293	15.8	14.3	
3118.00	29.9	58	3.5	292	15.9	14.4	
3120.00	39.2	29	3.5	292	16.0	14.5	
3122.00	18.2	294	3.4	291	15.7	14.5	
3124.00	56.4	222	3.4	291	15.4	14.6	
3126.00	78.8	223	3.4	291	15.3	14.7	
3128.00	68.7	260	3.3	291	15.1	14.8	
3130.00	34.8	260	3.3	291	15.0	14.7	
3132.00	45.6	321	3.3	291	14.8	14.6	
3134.00	29.5	288	3.3	291	14.5	14.6	
3136.00	12.0	204	3.3	291	14.5	14.5	
3138.00	38.3	174	3.3	292	14.5	14.4	
3140.00	80.8	164	3.3	291	14.5	14.6	
3142.00	80.1	182	3.3	291	14.7	14.8	
3144.00	83.8	153	3.3	290	14.7	14.8	
3146.00	81.4	137	3.3	289	14.6	14.5	
3148.00	37.7	341	3.3	290	14.9	14.3	
3150.00	40.3	158	3.3	292	15.1	13.9	
3152.00	71.8	322	3.3	291	14.9	13.6	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3154.00	6.2	227	3.3	290	14.5	13.5	
3156.00	79.9	148	3.3	289	14.1	13.5	
3158.00	35.0	193	3.3	288	13.9	13.3	
3160.00	28.4	301	3.3	288	13.8	13.3	
3162.00	43.6	156	3.3	288	13.7	13.4	
3164.00	71.9	349	3.3	288	13.8	13.6	
3166.00	41.0	122	3.3	289	13.9	13.7	
3168.00	35.0	27	3.2	288	14.0	13.8	
3170.00	35.6	238	3.2	288	14.3	14.1	
3172.00	39.8	9	3.2	288	14.5	14.3	
3174.00	9.8	343	3.1	287	14.6	14.6	
3176.00	59.0	150	3.1	287	14.5	14.8	
3178.00	63.6	156	3.1	286	14.6	14.9	
3180.00	9.6	58	3.0	287	14.7	15.0	
3182.00	20.5	57	2.9	287	14.8	15.1	
3184.00	21.0	45	2.9	287	14.9	15.2	
3186.00	16.4	151	2.9	288	15.0	15.2	
3188.00	21.7	164	2.9	288	15.2	15.1	
3190.00	22.9	137	2.9	288	15.3	15.1	
3192.00	20.1	174	2.9	288	15.5	15.1	
3194.00	10.3	39	2.9	288	15.7	15.1	
3196.00	10.0	137	3.0	287	15.8	15.1	
3198.00	13.4	154	3.0	287	15.7	14.9	
3200.00	39.7	159	3.0	287	15.3	14.8	
3202.00	24.2	139	3.1	286	14.7	14.4	
3204.00	45.9	258	3.1	286	14.5	14.2	
3206.00	42.2	21	3.1	285	14.3	14.0	
3208.00	41.9	138	3.2	284	13.9	13.9	
3210.00	41.8	28	3.2	284	13.6	13.8	
3212.00	42.2	16	3.2	284	13.5	13.7	
3214.00	19.4	251	3.2	284	13.5	13.7	
3216.00	15.3	247	3.2	284	13.4	13.7	
3218.00	10.5	72	3.2	284	13.5	13.7	
3220.00	28.0	258	3.2	284	13.6	13.7	
3222.00	50.1	357	3.2	285	13.8	13.8	
3224.00	14.4	153	3.1	287	13.9	13.8	
3226.00	18.5	71	3.2	288	13.8	13.6	
3228.00	32.9	83	3.1	289	13.9	13.6	
3230.00	26.2	346	3.1	289	14.1	13.7	
3232.00	17.7	85	3.1	288	13.9	13.6	
3234.00	10.6	103	3.0	287	13.9	13.6	
3236.00	8.2	290	3.0	286	13.9	13.8	

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
3238.00	73.8	143	2.9	284	14.0	14.2	
3240.00	39.6	128	2.9	283	14.1	14.3	
3242.00	13.2	99	2.9	283	13.9	14.0	D
3244.00	25.3	157	2.8	283	13.7	13.5	D
3246.00	18.0	80	2.8	282	13.7	13.4	B
3248.00	20.2	89	2.8	282	13.9	13.5	B
3250.00	22.4	64	2.8	282	14.1	13.5	D
3252.00	46.0	23	2.8	283	14.0	13.5	
3254.00	39.8	41	2.8	282	13.7	13.5	
3256.00	23.2	151	2.8	282	13.6	13.5	D
3258.00	24.1	161	2.9	282	13.6	13.6	D
3260.00	24.5	151	2.9	281	13.5	13.6	B
3262.00	32.7	186	2.9	281	13.5	13.6	
3264.00	52.0	137	2.9	281	13.4	13.5	
3266.00	12.9	176	2.9	281	13.5	13.7	D
3268.00	18.0	193	2.9	279	13.5	13.9	B
3270.00	20.8	182	2.9	279	13.6	13.9	D
3272.00	59.0	277	2.9	280	13.7	13.9	
3274.00	35.9	43	2.8	280	13.7	13.8	
3276.00	36.3	108	2.8	280	13.8	13.6	
3278.00	33.4	179	2.8	281	13.8	13.4	
3280.00	26.2	245	2.8	281	13.8	13.3	
3282.00	36.9	46	2.7	282	13.8	13.2	B
3284.00	37.9	40	2.7	283	13.7	13.2	B
3286.00	32.1	30	2.7	283	13.6	13.3	D
3288.00	29.7	193	2.7	283	13.5	13.3	
3290.00	20.7	239	2.7	283	13.5	13.3	
3292.00	40.8	55	2.7	282	13.4	13.3	D
3294.00	15.1	149	2.6	281	13.5	13.5	B
3296.00	15.0	146	2.6	281	13.7	13.7	B
3298.00	22.7	107	2.6	280	14.0	13.8	
3300.00	21.9	117	2.6	280	14.1	13.7	
3302.00	40.1	71	2.5	281	14.0	13.8	
3304.00	21.5	62	2.5	281	14.1	14.1	
3306.00	19.8	112	2.4	280	14.1	14.1	C
3308.00	15.9	84	2.4	279	13.9	13.8	C
3310.00	10.1	125	2.3	277	13.8	13.6	A
3312.00	6.5	101	2.3	278	13.8	13.6	A
3314.00	9.2	109	2.3	278	13.6	13.5	A
3316.00	9.4	97	2.3	280	13.4	13.3	A
3318.00	36.6	73	2.3	280	13.2	13.2	
3320.00	8.3	130	2.2	278	13.2	13.2	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3322.00	22.1	211	2.3	278	13.3	13.3	B
3324.00	10.3	165	2.3	277	13.5	13.3	D
3326.00	11.0	169	2.3	278	13.5	13.4	B
3328.00	16.6	104	2.2	277	13.2	13.4	B
3330.00	25.2	181	2.2	275	13.0	13.4	
3332.00	50.1	256	2.2	275	13.1	13.3	
3334.00	9.5	204	2.2	275	13.1	13.3	B
3336.00	9.0	197	2.2	275	13.1	13.3	B
3338.00	12.8	170	2.2	275	13.2	13.3	D
3340.00	62.5	102	2.2	275	13.2	13.4	
3342.00	18.5	41	2.2	275	13.3	13.5	
3344.00	7.3	128	2.2	275	13.3	13.4	B
3346.00	7.4	117	2.1	274	13.4	13.2	B
3348.00	21.4	239	2.1	273	13.4	13.1	
3350.00	6.7	219	2.1	272	13.3	13.3	D
3352.00	5.6	152	2.1	271	13.1	13.5	D
3354.00	7.6	162	2.1	271	13.0	13.5	B
3356.00	7.2	169	2.0	272	13.1	13.3	B
3358.00	81.6	214	2.1	271	13.1	13.1	
3360.00	17.2	178	2.1	272	13.0	13.0	D
3362.00	9.6	159	2.1	273	13.1	13.0	C
3364.00	9.4	159	2.1	273	13.2	13.0	A
3366.00	11.6	165	2.1	274	13.6	13.1	A
3368.00	11.5	166	2.1	274	14.0	13.1	A
3370.00	9.4	150	2.1	274	14.1	13.1	B
3372.00	9.7	145	2.1	275	13.6	13.1	B
3374.00	22.4	162	2.1	276	13.2	13.1	D
3376.00	53.1	11	2.1	276	13.2	13.2	
3378.00	38.6	155	2.1	276	13.2	13.3	
3380.00	11.2	169	2.1	278	13.1	13.5	D
3382.00	21.8	16	2.1	280	13.0	13.6	
3384.00	31.4	73	2.1	281	13.0	13.5	
3386.00	10.7	199	2.0	281	13.2	13.4	D
3388.00	15.8	132	2.0	282	13.4	13.4	D
3390.00	11.0	104	2.0	282	13.5	13.5	D
3392.00	14.5	109	1.9	281	13.5	13.5	D
3394.00	10.5	140	1.8	281	13.5	13.4	B
3396.00	9.6	136	1.8	280	13.6	13.4	B
3398.00	18.5	282	1.8	280	13.7	13.4	
3400.00	25.8	115	1.8	279	13.9	13.6	
3402.00	9.2	121	1.8	280	14.2	14.2	D
3404.00	6.7	113	1.8	281	14.3	14.2	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3406.00	6.3	98	1.8	282	14.3	14.0	D
3408.00	38.0	152	1.8	283	14.5	14.2	
3410.00	79.0	110	1.8	282	14.4	14.1	
3412.00	33.5	316	1.8	282	14.3	13.9	
3414.00	11.9	234	1.8	282	14.0	13.7	
3416.00	13.1	111	1.8	281	13.8	13.5	D
3418.00	13.1	110	1.8	281	13.9	13.4	D
3420.00	29.1	136	1.8	280	14.0	13.3	
3422.00	16.8	113	1.8	281	13.9	13.1	B
3424.00	16.8	121	1.8	283	14.0	13.2	D
3426.00	25.4	106	1.8	284	13.9	13.2	B
3428.00	44.9	95	1.9	283	13.7	13.2	
3430.00	15.6	51	1.9	282	13.6	13.1	D
3432.00	14.8	106	1.9	282	13.7	13.0	D
3434.00	25.0	6	1.9	281	13.9	13.0	
3436.00	33.8	5	1.9	280	13.8	13.0	
3438.00	34.1	354	1.9	279	13.4	13.1	
3440.00	39.8	97	2.0	278	13.0	13.2	
3442.00	34.0	128	2.0	278	12.8	13.2	
3444.00	79.5	346	2.0	277	12.7	13.1	
3446.00	26.0	116	2.1	277	12.8	13.2	D
3448.00	22.0	108	2.1	278	13.0	13.3	B
3450.00	21.2	109	2.1	280	13.2	13.4	B
3452.00	22.1	97	2.2	280	13.5	13.4	B
3454.00	16.9	114	2.2	278	13.6	13.4	A
3456.00	16.7	104	2.2	277	13.6	13.4	A
3458.00	12.2	113	2.3	276	13.4	13.3	C
3460.00	18.5	114	2.3	276	13.4	13.4	A
3462.00	40.9	310	2.3	274	13.6	13.5	
3464.00	79.7	29	2.3	273	13.8	13.5	
3466.00	86.4	51	2.4	272	13.8	13.2	
3468.00	49.9	70	2.4	272	13.7	13.0	
3470.00	41.1	87	2.5	273	13.7	12.8	
3472.00	25.0	346	2.5	273	13.5	12.7	
3474.00	40.4	341	2.6	271	13.1	12.6	
3476.00	14.2	102	2.7	270	12.9	12.5	D
3478.00	16.5	20	2.7	270	12.9	12.5	
3480.00	15.2	111	2.7	272	13.0	12.7	B
3482.00	14.3	103	2.8	272	13.1	13.4	B
3484.00	13.8	107	2.8	272	13.2	13.6	B
3486.00	24.6	280	2.9	273	13.0	13.1	
3488.00	58.8	344	2.9	275	12.9	12.8	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3490.00	36.4	163	2.9	278	12.9	12.7	
3492.00	50.6	13	2.9	280	12.9	12.8	
3494.00	45.9	108	2.9	280	12.9	12.8	
3496.00	4.3	97	3.0	280	12.9	12.7	
3498.00	15.2	191	3.0	280	12.9	12.7	
3500.00	74.8	271	3.0	279	12.9	12.7	D
3502.00	43.2	20	3.0	280	12.8	12.8	
3504.00	45.9	327	3.0	278	12.8	12.9	
3506.00	39.3	224	3.1	277	12.7	12.9	
3508.00	27.1	285	3.1	277	12.7	13.0	
3510.00	36.2	140	3.1	277	12.8	13.0	
3512.00	37.1	227	3.0	277	13.0	13.1	
3514.00	24.8	104	3.0	276	12.9	13.3	
3516.00	42.2	245	3.0	276	12.9	13.3	
3518.00	54.0	210	3.0	277	13.0	13.0	
3520.00	39.1	49	3.0	279	13.0	12.7	
3522.00	10.8	112	2.9	280	12.9	12.9	
3524.00	77.5	358	2.9	280	12.8	13.0	D
3526.00	58.1	340	2.9	281	12.8	13.0	
3528.00	41.2	188	2.8	282	12.9	13.0	
3530.00	55.8	85	2.7	282	12.9	12.9	
3532.00	42.8	286	2.6	283	12.9	12.9	
3534.00	33.8	249	2.6	283	12.9	12.9	
3536.00	37.2	264	2.6	283	13.0	12.8	
3538.00	23.0	157	2.6	282	13.0	12.7	
3540.00	10.8	348	2.6	281	12.9	12.7	
3542.00	7.0	308	2.6	281	13.1	12.6	
3544.00	17.6	326	2.6	280	13.2	12.5	
3546.00	17.8	199	2.7	278	13.2	12.6	
3548.00	37.6	51	2.7	278	13.0	12.7	
3550.00	39.1	88	2.8	279	13.0	12.9	
3552.00	42.2	234	2.8	280	13.1	13.3	
3554.00	45.0	46	2.7	279	13.2	13.2	
3556.00	15.3	332	2.7	279	13.3	13.0	
3558.00	25.7	72	2.6	280	13.3	13.0	
3560.00	80.8	29	2.6	281	13.2	13.1	
3562.00	80.4	192	2.5	282	13.0	13.2	
3564.00	14.5	211	2.4	284	12.8	13.3	
3566.00	20.7	218	2.4	287	12.9	13.6	
3568.00	44.4	301	2.3	288	13.1	13.5	
3570.00	13.3	117	2.3	290	13.2	13.1	B
3572.00	13.4	111	2.3	290	13.4	13.1	B

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
3574.00	11.2	132	2.3	289	13.5	13.2	D
3576.00	12.6	134	2.3	288	13.6	13.4	B
3578.00	13.1	139	2.4	288	13.7	13.5	D
3580.00	43.9	259	2.3	288	13.9	13.4	
3582.00	57.3	227	2.3	289	14.3	13.2	
3584.00	63.7	225	2.3	291	14.1	13.1	
3586.00	49.1	187	2.3	292	14.0	13.4	
3588.00	18.6	86	2.3	291	14.3	13.7	B
3590.00	39.0	81	2.2	291	14.7	13.7	B
3592.00	36.8	78	2.2	292	14.6	13.8	D
3594.00	31.3	83	2.2	291	14.2	13.9	D
3596.00	37.7	78	2.2	292	14.2	14.0	D
3598.00	39.3	84	2.2	292	14.2	14.1	B
3600.00	38.1	325	2.2	292	14.3	14.2	
3602.00	20.8	132	2.2	294	14.3	14.3	B
3604.00	21.0	147	2.2	294	14.5	14.4	B
3606.00	22.8	117	2.2	294	14.5	14.4	D
3608.00	20.1	107	2.2	294	14.4	14.3	B
3610.00	23.3	348	2.2	295	14.4	14.3	
3612.00	20.9	122	2.3	295	14.7	14.2	D
3614.00	21.6	125	2.3	296	14.7	14.0	D
3616.00	17.2	117	2.3	297	14.3	13.9	D
3618.00	6.6	197	2.4	298	13.9	13.9	
3620.00	16.5	87	2.4	297	13.9	13.8	D
3622.00	14.3	92	2.5	298	13.8	13.8	D
3624.00	19.9	81	2.5	298	13.8	13.7	D
3626.00	18.4	123	2.5	297	13.7	13.6	D
3628.00	18.3	329	2.6	297	13.6	13.6	
3630.00	23.4	102	2.6	297	13.5	13.7	
3632.00	38.9	129	2.7	298	13.3	13.6	
3634.00	39.1	176	2.7	299	13.1	13.6	
3636.00	22.2	100	2.8	299	13.1	13.6	
3638.00	36.3	287	2.9	298	12.9	13.5	
3640.00	34.7	80	2.9	296	12.8	13.5	
3642.00	34.5	347	2.9	296	12.8	13.6	
3644.00	27.2	12	3.0	296	12.9	13.7	
3646.00	23.1	97	3.0	297	13.1	13.7	
3648.00	24.8	101	3.0	297	13.1	13.5	C
3650.00	17.4	108	3.0	297	13.3	13.2	C
3652.00	27.2	82	3.1	297	13.3	13.0	C
3654.00	27.5	80	3.2	297	13.2	12.9	C
3656.00	21.7	105	3.2	297	13.2	12.9	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3658.00	21.5	100	3.3	298	13.3	12.9	A
3660.00	18.4	105	3.3	298	13.4	12.7	A
3662.00	18.9	104	3.4	298	13.4	12.6	A
3664.00	17.3	101	3.5	298	13.6	12.9	A
3666.00	24.8	103	3.5	298	13.8	13.3	C
3668.00	24.1	98	3.6	297	13.7	13.3	B
3670.00	19.5	109	3.6	297	13.3	12.8	D
3672.00	16.4	117	3.6	296	13.1	12.8	B
3674.00	25.3	76	3.7	295	12.9	12.7	
3676.00	33.6	147	3.7	295	12.9	12.6	
3678.00	14.7	115	3.7	295	13.1	13.0	B
3680.00	15.1	113	3.7	297	13.3	13.3	B
3682.00	15.8	110	3.7	298	13.2	13.3	B
3684.00	16.2	179	3.7	297	13.2	13.5	
3686.00	42.2	219	3.7	297	13.4	13.8	
3688.00	34.5	54	3.8	298	13.5	13.8	
3690.00	13.7	106	3.8	298	13.4	13.6	B
3692.00	15.1	98	3.9	300	13.3	13.5	B
3694.00	15.5	88	3.9	301	13.3	13.5	B
3696.00	10.4	107	3.9	302	13.3	13.5	D
3698.00	24.1	98	3.8	303	13.4	13.6	B
3700.00	11.1	77	3.8	303	13.5	13.4	D
3702.00	6.2	93	3.8	302	14.1	14.0	B
3704.00	6.0	96	3.8	302	14.6	14.9	B
3706.00	33.1	75	3.8	304	14.4	14.6	
3708.00	33.6	67	3.8	303	14.0	13.8	
3710.00	19.1	40	3.9	302	13.7	13.4	C
3712.00	16.2	95	3.9	303	13.7	13.4	A
3714.00	14.1	82	3.9	304	13.8	13.6	A
3716.00	14.3	86	3.9	304	14.0	13.9	A
3718.00	16.4	113	3.9	304	14.1	14.0	A
3720.00	15.2	109	3.9	304	14.0	13.9	C
3722.00	11.9	62	3.9	304	14.0	13.8	A
3724.00	12.0	56	3.9	304	13.9	13.8	A
3726.00	13.1	63	3.9	303	14.1	14.0	A
3728.00	12.1	104	3.9	304	14.4	14.3	A
3730.00	9.0	89	3.8	304	14.4	14.4	A
3732.00	15.4	62	3.8	304	14.2	14.2	A
3734.00	11.5	44	3.8	304	14.0	14.0	A
3736.00	8.8	36	3.8	305	13.9	14.1	A
3738.00	7.4	119	3.8	304	13.9	14.0	A
3740.00	9.7	87	3.8	303	13.8	13.7	A

FILE : 1

	FORMATION		BOREHOLE				
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3742.00	32.0	212	3.8	303	13.6	13.6	
3744.00	49.7	220	3.8	303	13.9	13.8	
3746.00	12.5	117	3.8	302	14.2	13.9	A
3748.00	11.8	111	3.7	303	14.4	13.7	A
3750.00	13.2	97	3.7	303	14.5	13.4	A
3752.00	17.4	100	3.7	302	14.2	13.3	A
3754.00	15.2	94	3.6	301	14.0	13.4	A
3756.00	13.9	110	3.6	302	13.8	13.5	A
3758.00	15.0	104	3.6	303	13.7	13.6	A
3760.00	12.1	106	3.7	303	13.7	13.5	C
3762.00	12.9	104	3.7	303	13.8	13.3	A
3764.00	11.0	105	3.7	302	13.8	13.4	A
3766.00	41.1	235	3.7	301	13.8	13.7	
3768.00	9.7	114	3.7	301	13.8	13.9	C
3770.00	9.3	111	3.7	301	13.9	13.7	C
3772.00	20.8	107	3.8	302	13.8	13.6	A
3774.00	12.2	127	3.7	301	13.5	13.5	C
3776.00	17.0	104	3.8	300	13.4	13.6	A
3778.00	17.1	96	3.8	300	13.5	13.5	A
3780.00	15.5	126	3.9	300	13.6	13.6	C
3782.00	33.0	32	3.9	300	13.7	13.8	
3784.00	15.6	94	4.0	299	13.8	13.9	A
3786.00	15.4	89	4.0	299	13.9	13.9	C
3788.00	15.4	115	4.0	299	13.9	13.9	A
3790.00	15.1	109	3.9	300	14.0	13.9	A
3792.00	20.3	105	3.9	300	14.0	13.7	C
3794.00	7.2	79	3.9	300	13.9	13.6	C
3796.00	18.1	76	3.9	300	13.8	13.6	C
3798.00	18.0	69	3.9	300	13.6	13.5	C
3800.00	13.6	71	3.9	301	13.7	13.5	C
3802.00	17.3	84	3.9	302	13.6	13.4	A
3804.00	15.6	64	3.8	303	13.4	13.4	A
3806.00	13.2	95	3.8	304	13.4	13.6	A
3808.00	12.4	91	3.8	305	13.6	13.8	A
3810.00	36.0	352	3.9	305	13.8	14.1	
3812.00	15.0	101	3.9	304	13.7	13.8	A
3814.00	13.6	98	4.0	303	13.6	13.5	C
3816.00	10.3	51	3.9	303	13.6	13.7	C
3818.00	10.9	43	3.9	304	13.5	14.0	C
3820.00	36.1	51	3.9	305	13.6	14.5	
3822.00	9.7	107	4.0	304	14.0	15.0	C
3824.00	11.3	102	4.0	303	14.0	15.0	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3826.00	13.2	97	4.0	303	13.9	15.0	C
3828.00	14.1	106	4.0	302	13.8	15.0	B
3830.00	15.8	122	4.0	303	13.6	14.5	B
3832.00	16.3	122	4.0	304	13.6	14.2	B
3834.00	14.4	111	4.0	303	13.7	14.3	B
3836.00	15.1	102	4.0	303	13.7	14.2	B
3838.00	20.5	7	4.0	304	13.6	14.2	
3840.00	16.6	323	4.0	304	13.5	14.1	
3842.00	32.4	44	4.1	303	13.5	14.4	
3844.00	33.5	119	4.1	303	13.4	14.4	
3846.00	79.7	212	4.1	302	13.3	14.0	
3848.00	12.7	86	4.0	302	13.2	13.6	B
3850.00	12.0	83	4.0	303	13.2	13.0	B
3852.00	11.9	84	4.0	303	13.2	12.9	B
3854.00	39.5	92	4.0	303	13.3	13.2	
3856.00	82.9	135	3.9	302	13.3	13.0	
3858.00	53.9	148	3.9	300	13.0	12.3	
3860.00	44.9	319	3.9	300	12.9	12.2	
3862.00	27.4	122	4.0	300	13.1	12.2	
3864.00	33.2	230	4.0	300	13.3	12.3	
3866.00	7.1	129	4.0	300	13.7	12.7	D
3868.00	32.0	81	4.0	300	14.0	13.0	
3870.00	63.6	99	4.0	300	14.2	13.1	
3872.00	56.7	177	3.9	300	14.4	13.1	
3874.00	48.0	141	3.9	300	14.3	13.1	
3876.00	31.2	224	3.8	300	13.9	12.8	
3878.00	11.3	85	3.8	300	13.6	12.5	D
3880.00	16.8	337	3.8	299	13.6	12.5	
3882.00	12.7	89	3.8	299	13.7	12.5	B
3884.00	12.5	85	3.8	297	13.8	12.7	B
3886.00	14.1	90	3.8	297	13.6	12.6	B
3888.00	73.3	253	3.8	298	13.4	12.5	
3890.00	10.9	78	3.8	299	13.5	12.7	A
3892.00	11.0	82	3.9	299	13.6	12.8	A
3894.00	11.0	66	4.0	299	13.7	12.7	C
3896.00	11.3	76	4.0	299	13.8	12.6	C
3898.00	17.7	103	4.1	299	13.8	12.6	A
3900.00	17.8	104	4.1	299	13.6	12.6	A
3902.00	11.0	95	4.0	298	13.4	12.6	A
3904.00	11.3	96	4.0	299	13.5	12.7	A
3906.00	18.6	102	4.0	299	13.6	12.8	C
3908.00	16.2	112	4.0	300	13.5	12.8	A

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
3910.00	15.6	108	4.0	300	13.2	12.7	A
3912.00	22.5	95	4.0	301	12.9	12.8	C
3914.00	22.7	78	4.0	300	12.7	12.8	C
3916.00	21.4	84	4.0	299	12.7	12.8	A
3918.00	21.0	77	4.0	299	12.5	12.8	A
3920.00	26.9	1	4.0	298	12.5	12.8	
3922.00	14.0	97	4.0	297	12.6	13.0	A
3924.00	14.2	96	4.1	296	12.4	13.0	A
3926.00	42.9	57	4.1	296	12.4	13.0	
3928.00	2.6	56	4.1	296	12.7	13.0	D
3930.00	8.9	95	4.1	295	12.9	13.0	D
3932.00	9.9	94	4.2	295	13.1	13.1	B
3934.00	14.3	86	4.2	295	13.2	13.2	B
3936.00	10.8	68	4.2	295	13.2	13.3	D
3938.00	7.8	87	4.3	295	12.9	13.4	B
3940.00	60.4	96	4.3	294	12.8	13.4	
3942.00	40.5	173	4.3	294	12.7	13.6	
3944.00	17.3	101	4.4	294	12.7	13.8	B
3946.00	16.5	98	4.4	295	12.8	13.9	D
3948.00	18.4	125	4.3	295	12.8	14.0	C
3950.00	14.3	125	4.3	295	12.8	13.9	A
3952.00	15.9	137	4.4	296	12.7	13.7	A
3954.00	15.1	119	4.4	296	12.7	13.7	A
3956.00	12.5	103	4.4	295	12.8	13.8	A
3958.00	12.5	102	4.4	295	12.9	13.8	A
3960.00	13.2	98	4.5	296	13.1	13.9	A
3962.00	8.2	94	4.5	296	13.2	13.9	A
3964.00	10.3	100	4.5	296	13.2	13.9	A
3966.00	17.6	129	4.4	296	13.2	13.9	A
3968.00	21.9	141	4.4	295	13.2	13.9	B
3970.00	22.0	137	4.4	295	13.2	13.9	B
3972.00	22.2	77	4.4	296	13.2	13.9	D
3974.00	18.6	140	4.4	296	13.3	13.8	D
3976.00	41.0	158	4.4	296	13.4	13.8	
3978.00	15.4	86	4.4	296	13.5	13.8	B
3980.00	15.3	83	4.4	296	13.6	13.7	B
3982.00	11.5	98	4.4	296	13.6	13.7	B
3984.00	11.5	98	4.4	296	13.5	13.7	B
3986.00	12.8	96	4.4	297	13.5	13.7	B
3988.00	12.5	86	4.4	297	13.6	13.7	A
3990.00	13.3	86	4.5	297	13.6	13.8	A
3992.00	15.6	86	4.5	296	13.6	13.7	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
3994.00	11.8	118	4.4	295	13.6	13.6	A
3996.00	14.6	118	4.4	296	13.6	13.6	A
3998.00	15.7	117	4.4	295	13.6	13.5	A
4000.00	13.1	122	4.4	295	13.5	13.4	C
4002.00	15.7	100	4.5	296	13.3	13.3	A
4004.00	17.8	95	4.5	297	13.3	13.2	C
4006.00	16.9	96	4.5	297	13.3	13.2	C
4008.00	16.2	101	4.6	296	13.3	13.1	C
4010.00	12.3	114	4.6	296	13.4	13.1	A
4012.00	13.1	97	4.6	296	13.4	13.1	A
4014.00	13.7	85	4.7	296	13.4	13.0	A
4016.00	13.2	114	4.7	296	13.3	13.0	A
4018.00	13.0	112	4.7	296	13.4	13.3	A
4020.00	59.9	288	4.7	296	13.4	13.4	
4022.00	19.6	131	4.8	297	13.3	13.5	A
4024.00	19.6	129	4.8	297	13.3	13.6	A
4026.00	11.0	95	4.8	297	13.4	13.7	A
4028.00	11.2	99	4.8	297	13.5	13.7	A
4030.00	12.5	98	4.8	296	13.7	13.9	A
4032.00	10.8	90	4.8	296	13.8	14.1	A
4034.00	9.9	92	4.8	295	13.7	14.0	A
4036.00	10.6	93	4.8	295	13.5	13.8	A
4038.00	12.2	95	4.8	294	13.7	13.7	C
4040.00	23.3	59	4.8	293	13.7	13.7	D
4042.00	24.8	57	4.8	293	13.7	13.8	B
4044.00	21.3	76	4.8	293	13.8	14.0	B
4046.00	18.5	79	4.9	293	14.1	14.1	C
4048.00	15.1	76	4.9	292	14.2	14.0	D
4050.00	61.1	192	5.0	292	14.1	14.0	
4052.00	44.8	94	5.0	292	14.1	14.2	
4054.00	29.2	359	5.1	292	14.1	14.3	
4056.00	15.1	75	5.1	292	14.0	14.3	B
4058.00	15.0	75	5.1	293	14.0	14.4	B
4060.00	29.9	40	5.1	293	14.0	14.5	D
4062.00	29.1	32	5.1	293	13.8	14.4	D
4064.00	9.8	277	5.1	294	13.5	14.1	
4066.00	26.1	258	5.1	295	13.8	14.0	
4068.00	28.5	261	5.1	294	14.1	14.1	
4070.00	60.3	96	5.1	294	14.1	14.0	
4072.00	12.6	112	5.1	294	14.2	13.7	B
4074.00	11.1	121	5.1	294	13.9	13.6	B
4076.00	12.3	115	5.2	294	13.6	13.4	B

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4078.00	16.2	109	5.2	295	13.0	13.1	B
4080.00	11.7	234	5.1	295	12.7	12.9	
4082.00	14.8	256	5.1	295	12.5	12.8	
4084.00	36.5	27	5.0	296	12.6	12.9	
4086.00	39.8	4	4.9	295	12.9	13.0	
4088.00	31.8	316	4.8	293	13.0	12.9	
4090.00	9.7	341	4.8	293	12.9	12.9	
4092.00	24.9	50	4.7	292	12.9	13.2	
4094.00	25.7	59	4.6	292	13.0	13.5	
4096.00	36.7	2	4.5	293	13.0	13.5	
4098.00	45.8	5	4.4	293	13.1	13.3	
4100.00	38.5	257	4.3	292	13.1	13.3	
4102.00	76.0	301	4.3	291	13.0	13.4	D
4104.00	78.8	300	4.4	291	13.0	13.4	D
4106.00	36.2	72	4.4	291	13.1	13.5	
4108.00	36.3	5	4.4	291	13.4	13.6	
4110.00	63.2	137	4.4	291	13.8	13.7	
4112.00	35.7	256	4.4	291	13.7	13.6	
4114.00	26.6	113	4.4	291	13.8	13.6	
4116.00	16.4	84	4.4	291	13.8	13.5	
4118.00	47.1	118	4.4	291	13.5	13.3	
4120.00	33.4	176	4.4	290	13.3	13.1	
4122.00	36.4	113	4.4	291	13.1	12.9	
4124.00	31.7	82	4.4	291	13.0	12.7	
4126.00	55.6	126	4.5	291	13.1	12.7	
4128.00	15.4	101	4.5	290	13.3	12.7	A
4130.00	15.9	97	4.5	290	13.6	12.9	A
4132.00	16.2	89	4.5	289	13.7	13.0	A
4134.00	16.4	83	4.5	289	13.8	13.1	A
4136.00	19.0	75	4.5	290	13.8	13.2	A
4138.00	17.1	97	4.6	289	13.8	13.0	A
4140.00	15.8	103	4.6	289	13.8	13.0	A
4142.00	47.7	61	4.6	289	13.8	12.9	
4144.00	24.5	147	4.6	288	13.8	12.9	
4146.00	18.5	91	4.6	288	13.8	12.7	B
4148.00	25.2	81	4.6	288	13.7	12.7	D
4150.00	39.3	40	4.6	288	13.6	12.7	B
4152.00	14.8	92	4.6	288	13.5	12.7	D
4154.00	16.2	92	4.6	288	13.5	12.8	B
4156.00	16.4	94	4.6	287	13.4	12.9	B
4158.00	19.9	86	4.6	287	13.2	12.9	D
4160.00	27.6	185	4.7	287	13.1	12.9	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4162.00	79.3	38	4.7	288	13.0	12.8	
4164.00	58.9	290	4.6	288	12.9	12.7	
4166.00	38.5	208	4.6	288	12.9	12.6	
4168.00	30.3	66	4.6	288	12.8	12.5	
4170.00	56.8	247	4.6	288	12.8	12.4	
4172.00	37.4	126	4.6	288	12.8	12.4	
4174.00	40.1	25	4.7	287	12.7	12.6	
4176.00	42.4	45	4.7	288	12.7	12.6	
4178.00	66.6	142	4.8	287	12.7	12.6	
4180.00	23.1	327	4.8	287	12.6	12.7	
4182.00	35.2	339	4.9	287	12.5	12.6	
4184.00	38.5	213	4.9	286	12.5	12.6	D
4186.00	29.2	112	5.0	285	12.4	12.7	D
4188.00	32.0	221	5.0	285	12.4	12.7	D
4190.00	31.6	215	5.0	286	12.5	12.6	D
4192.00	81.8	59	5.1	286	12.5	12.6	D
4194.00	48.1	125	5.1	287	12.4	12.6	
4196.00	23.7	51	5.2	287	12.5	12.5	D
4198.00	83.4	58	5.2	287	12.6	12.5	D
4200.00	8.5	159	5.2	287	12.7	12.5	
4202.00	49.6	346	5.1	288	12.7	12.4	
4204.00	62.0	51	5.1	289	12.7	12.3	
4206.00	13.3	263	5.1	289	12.7	12.4	
4208.00	58.2	140	5.1	290	12.6	12.4	
4210.00	76.5	235	5.0	290	12.6	12.3	
4212.00	57.7	180	5.0	291	12.6	12.3	
4214.00	50.8	319	5.0	291	12.5	12.3	
4216.00	75.0	348	5.1	291	12.5	12.3	D
4218.00	70.1	145	5.1	292	12.5	12.3	
4220.00	67.9	274	5.1	292	12.5	12.4	D
4222.00	76.5	349	5.1	292	12.5	12.5	D
4224.00	70.8	31	5.1	291	12.5	12.4	
4226.00	59.5	189	5.1	290	12.5	12.4	
4228.00	56.2	308	5.1	291	12.5	12.5	
4230.00	27.1	312	5.0	290	12.5	12.6	
4232.00	57.9	211	5.0	290	12.6	12.6	
4234.00	50.2	105	5.0	290	12.6	12.5	
4236.00	55.7	68	5.0	290	12.6	12.4	
4238.00	18.7	233	5.0	290	12.5	12.4	
4240.00	87.0	100	5.1	292	12.5	12.4	
4242.00	25.2	179	5.1	293	12.5	12.4	
4244.00	40.4	290	5.1	292	12.6	12.5	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4246.00	53.8	290	5.1	290	12.6	12.5	
4248.00	87.8	147	5.1	289	12.5	12.4	
4250.00	21.3	300	5.1	289	12.5	12.4	
4252.00	39.6	272	5.1	288	12.5	12.4	
4254.00	36.7	136	5.1	287	12.5	12.5	
4256.00	77.8	237	5.0	286	12.5	12.7	
4258.00	77.1	248	5.0	287	12.6	12.7	
4260.00	30.2	292	5.0	288	12.6	12.7	
4262.00	22.5	277	4.9	289	12.6	12.8	
4264.00	21.8	11	5.0	289	12.7	12.9	
4266.00	56.2	132	5.0	287	12.8	13.0	
4268.00	23.9	320	4.9	288	12.8	13.0	
4270.00	24.1	325	4.9	290	12.7	13.2	
4272.00	59.6	64	4.9	290	12.7	13.3	D
4274.00	12.3	73	4.8	289	12.7	13.3	
4276.00	58.1	61	4.8	290	12.8	13.1	D
4278.00	45.4	146	4.7	292	13.3	13.0	
4280.00	34.8	218	4.7	291	13.5	13.3	D
4282.00	30.9	292	4.7	290	13.6	13.8	
4284.00	22.6	159	4.7	288	13.7	14.1	
4286.00	78.7	334	4.7	289	14.1	14.2	
4288.00	66.6	139	4.7	290	14.4	14.3	
4290.00	49.0	119	4.7	289	14.4	14.5	
4292.00	48.4	31	4.7	288	14.5	14.7	
4294.00	39.6	16	4.7	289	14.6	14.8	
4296.00	47.2	41	4.7	290	14.6	14.7	
4298.00	46.7	45	4.7	292	14.6	14.4	
4300.00	79.4	34	4.8	292	14.6	14.2	
4302.00	69.2	171	4.8	291	14.6	14.1	
4304.00	17.8	37	4.8	292	14.7	14.1	
4306.00	33.6	19	4.8	293	14.8	14.2	
4308.00	68.3	186	4.8	292	14.9	14.2	
4310.00	78.4	10	4.8	292	15.0	14.2	
4312.00	61.1	154	4.8	292	15.1	14.3	
4314.00	43.1	109	4.7	292	15.1	14.4	
4316.00	27.9	130	4.7	292	15.2	14.6	
4318.00	60.5	42	4.7	293	15.2	14.5	
4320.00	60.5	46	4.7	292	15.3	14.3	
4322.00	49.1	69	4.6	291	15.4	14.3	
4324.00	79.7	287	4.6	291	15.2	14.2	
4326.00	57.2	200	4.6	291	14.9	14.4	
4328.00	30.4	258	4.6	291	14.7	14.7	

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DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
4330.00	19.8	105	4.6	292	14.4	14.5	
4332.00	54.2	85	4.7	292	14.3	14.2	
4334.00	26.1	310	4.7	293	14.2	13.8	
4336.00	29.6	227	4.7	293	14.2	13.7	
4338.00	26.0	284	4.7	293	14.2	13.6	
4340.00	37.2	174	4.7	294	14.3	13.8	B
4342.00	33.0	178	4.8	294	14.6	14.3	D
4344.00	30.8	318	4.8	294	14.8	14.7	
4346.00	50.3	87	4.8	293	14.7	14.6	
4348.00	31.2	263	4.9	293	14.7	14.5	
4350.00	45.1	185	4.9	293	14.7	14.6	
4352.00	40.0	54	5.0	293	14.7	14.8	
4354.00	80.3	13	5.0	292	14.8	15.0	
4356.00	86.0	105	5.0	292	14.9	15.1	
4358.00	27.8	342	5.0	291	15.0	15.1	
4360.00	23.1	266	4.9	291	15.3	15.2	
4362.00	41.2	252	4.9	291	15.7	15.5	
4364.00	54.6	83	4.9	290	15.7	15.6	
4366.00	35.3	312	5.0	291	15.5	15.5	
4368.00	42.1	205	5.0	292	15.3	15.4	
4370.00	54.4	162	5.0	291	15.2	15.2	
4372.00	47.1	167	4.9	292	15.2	15.0	
4374.00	24.5	7	4.9	292	15.1	14.6	
4376.00	51.9	322	4.9	291	14.8	14.4	
4378.00	40.4	198	5.0	291	14.4	14.2	
4380.00	37.8	169	5.0	291	14.4	14.0	
4382.00	51.9	314	5.0	292	14.4	13.9	
4384.00	27.4	227	5.0	292	14.4	13.8	
4386.00	74.2	238	5.0	292	14.3	13.6	
4388.00	20.9	37	5.0	291	14.3	13.5	
4390.00	8.5	160	5.0	292	14.2	13.4	
4392.00	57.8	92	4.9	292	14.2	13.6	
4394.00	51.5	184	4.9	291	14.5	13.4	
4396.00	89.1	150	4.8	290	14.7	13.1	
4398.00	52.5	123	4.8	289	14.7	13.1	
4400.00	20.8	93	4.7	288	14.8	13.3	
4402.00	17.7	92	4.7	287	15.1	13.5	
4404.00	41.5	164	4.6	287	15.3	13.6	
4406.00	28.6	276	4.6	287	15.2	13.8	
4408.00	34.1	119	4.5	288	15.0	13.9	
4410.00	75.1	161	4.5	287	14.9	14.1	
4412.00	81.2	352	4.5	287	14.9	14.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4414.00	72.9	330	4.5	285	14.5	14.3	
4416.00	44.1	161	4.5	284	14.0	14.0	
4418.00	51.5	154	4.4	285	13.5	13.8	
4420.00	40.1	19	4.4	285	13.2	13.5	
4422.00	36.3	14	4.4	284	13.1	13.2	
4424.00	27.0	26	4.4	284	13.1	13.2	
4426.00	36.2	154	4.4	283	13.0	13.4	
4428.00	67.5	176	4.5	284	13.0	13.4	
4430.00	74.7	291	4.4	284	13.3	13.1	
4432.00	68.8	278	4.4	284	13.3	12.8	
4434.00	76.9	262	4.3	283	13.0	12.9	
4436.00	12.9	152	4.3	283	12.7	13.0	
4438.00	13.2	145	4.3	284	12.6	12.9	
4440.00	46.1	12	4.3	285	12.7	12.7	
4442.00	83.4	87	4.3	284	12.9	12.6	
4444.00	77.5	155	4.4	283	12.7	12.7	
4446.00	3.7	94	4.5	283	12.6	12.8	
4448.00	74.7	264	4.5	283	12.7	12.7	B
4450.00	50.2	119	4.5	283	12.6	12.6	
4452.00	55.8	56	4.5	282	12.6	12.7	
4454.00	76.9	309	4.5	282	12.7	12.8	
4456.00	64.4	105	4.5	282	12.8	12.9	
4458.00	64.9	101	4.5	283	12.9	12.7	
4460.00	18.2	291	4.5	283	12.9	12.6	
4462.00	20.5	38	4.4	284	12.8	12.5	
4464.00	66.6	254	4.4	284	12.9	12.5	
4466.00	45.0	104	4.4	283	13.0	12.6	
4468.00	36.5	44	4.4	282	12.9	12.7	
4470.00	22.2	61	4.4	282	13.1	13.0	B
4472.00	21.4	73	4.4	283	13.2	13.2	D
4474.00	44.8	130	4.4	282	13.2	13.2	
4476.00	14.6	64	4.5	282	13.0	13.2	B
4478.00	13.9	62	4.5	281	13.1	13.4	B
4480.00	20.5	62	4.5	281	13.2	14.0	B
4482.00	16.2	35	4.6	280	13.2	14.6	D
4484.00	21.2	107	4.6	281	13.5	14.7	
4486.00	18.9	99	4.6	283	14.0	15.1	
4488.00	20.5	49	4.6	282	14.0	15.2	
4490.00	20.2	58	4.6	281	13.4	14.5	D
4492.00	9.3	149	4.6	281	13.3	13.9	D
4494.00	8.8	138	4.6	280	13.2	13.8	D
4496.00	7.7	113	4.6	279	13.2	13.9	B

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4498.00	7.1	119	4.6	278	13.4	14.0	D
4500.00	8.9	124	4.6	278	14.0	14.8	D
4502.00	22.7	248	4.6	279	14.2	15.4	
4504.00	23.4	149	4.6	280	13.8	14.7	D
4506.00	26.7	151	4.7	279	13.5	14.1	D
4508.00	21.6	195	4.7	278	13.5	14.0	
4510.00	28.1	326	4.7	279	13.7	13.8	
4512.00	18.5	54	4.7	279	13.8	13.7	
4514.00	53.0	114	4.7	278	13.9	13.7	
4516.00	44.5	11	4.7	278	13.8	13.8	
4518.00	7.5	92	4.7	277	13.5	14.0	
4520.00	15.6	109	4.6	277	13.0	14.1	
4522.00	24.3	161	4.5	277	12.9	13.7	B
4524.00	22.0	152	4.5	276	13.2	13.3	
4526.00	19.5	102	4.6	276	13.2	13.1	A
4528.00	14.0	108	4.6	275	13.2	13.1	A
4530.00	12.9	100	4.6	274	13.1	13.1	A
4532.00	16.7	92	4.6	275	13.1	13.1	C
4534.00	7.8	112	4.6	275	13.1	13.0	C
4536.00	11.0	94	4.6	275	13.1	12.9	C
4538.00	20.5	106	4.7	275	13.1	12.7	A
4540.00	19.3	110	4.7	276	13.2	12.7	A
4542.00	15.7	104	4.7	276	13.5	12.7	A
4544.00	14.3	116	4.7	276	13.6	12.7	A
4546.00	20.0	111	4.8	276	13.5	12.7	A
4548.00	20.5	114	4.8	277	13.2	12.9	A
4550.00	21.6	121	4.9	278	12.9	13.1	A
4552.00	20.6	118	4.9	278	12.9	13.2	A
4554.00	24.8	103	4.9	277	13.0	13.2	A
4556.00	35.7	56	4.9	278	13.0	13.2	
4558.00	7.7	113	4.9	279	12.8	13.2	C
4560.00	13.5	124	4.9	280	12.9	13.3	A
4562.00	14.7	122	4.9	279	12.9	13.4	A
4564.00	14.9	117	4.9	277	12.8	13.4	
4566.00	13.6	118	4.8	276	12.8	13.3	
4568.00	25.6	319	4.8	276	12.8	13.2	
4570.00	28.8	289	4.7	276	12.9	13.0	
4572.00	20.5	322	4.7	277	12.9	12.7	
4574.00	24.5	223	4.7	277	12.9	12.5	
4576.00	29.0	201	4.7	278	13.0	12.5	
4578.00	46.2	73	4.8	279	13.0	12.7	
4580.00	21.7	89	4.7	278	13.0	12.6	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4582.00	65.8	265	4.7	276	13.0	12.3	
4584.00	36.7	102	4.7	276	13.0	12.3	
4586.00	55.6	169	4.7	275	13.0	12.4	
4588.00	85.9	188	4.7	275	12.8	12.4	
4590.00	86.5	24	4.8	274	12.8	12.5	
4592.00	13.9	71	4.8	274	12.9	12.5	
4594.00	77.9	298	4.8	275	13.0	12.5	
4596.00	38.2	107	4.8	275	13.0	12.5	
4598.00	26.9	214	4.9	275	12.9	12.6	
4600.00	59.2	196	4.9	276	12.9	12.6	
4602.00	27.4	132	4.9	277	12.7	12.6	
4604.00	63.2	296	4.9	278	12.5	12.6	
4606.00	52.6	276	4.9	278	12.5	12.6	
4608.00	40.5	316	4.9	277	12.5	12.8	
4610.00	32.1	171	4.9	277	12.5	13.0	
4612.00	44.8	157	4.9	279	12.5	12.9	
4614.00	24.9	77	4.9	280	12.5	12.7	
4616.00	38.0	122	4.8	281	12.5	12.5	
4618.00	12.2	52	4.8	282	12.5	12.4	
4620.00	38.1	104	4.8	283	12.5	12.4	
4622.00	25.1	317	4.8	281	12.5	12.5	
4624.00	43.2	118	4.8	280	12.5	12.7	
4626.00	58.9	114	4.7	280	12.7	12.9	
4628.00	21.0	194	4.6	280	12.8	12.8	
4630.00	72.5	160	4.5	278	12.6	12.7	
4632.00	81.0	179	4.5	277	12.5	12.6	
4634.00	29.7	116	4.4	277	12.6	12.6	
4636.00	23.8	111	4.4	278	12.8	12.8	
4638.00	46.8	95	4.5	278	12.8	12.8	
4640.00	74.8	301	4.6	278	12.6	12.7	
4642.00	25.4	85	4.6	278	12.8	12.9	
4644.00	24.2	41	4.6	279	13.2	12.9	
4646.00	54.4	83	4.6	279	13.3	12.9	
4648.00	39.2	63	4.5	279	13.2	13.0	
4650.00	19.3	29	4.5	279	12.8	13.0	
4652.00	78.0	312	4.5	279	12.7	13.0	
4654.00	56.9	206	4.5	280	12.6	12.8	
4656.00	40.2	148	4.6	281	12.5	12.7	
4658.00	23.6	185	4.7	280	12.6	12.7	
4660.00	51.1	222	4.7	280	12.6	12.6	
4662.00	21.2	216	4.7	280	12.7	12.6	
4664.00	34.4	130	4.7	279	12.8	12.6	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4666.00	27.5	128	4.7	280	12.8	12.7	B
4668.00	39.4	332	4.7	280	13.1	12.8	
4670.00	31.3	348	4.7	281	13.3	12.9	
4672.00	40.8	53	4.7	281	13.2	13.0	
4674.00	45.4	135	4.7	280	13.1	13.1	
4676.00	29.6	78	4.8	279	13.0	13.2	
4678.00	39.5	26	4.8	278	12.8	13.1	
4680.00	19.7	248	4.8	278	12.7	12.9	
4682.00	75.6	158	4.8	279	12.8	13.0	
4684.00	63.0	264	4.8	279	12.8	13.3	
4686.00	50.3	8	4.7	279	12.6	13.3	
4688.00	24.7	57	4.7	280	12.6	13.1	D
4690.00	28.2	52	4.7	281	12.8	12.9	B
4692.00	31.2	142	4.8	280	12.8	12.9	D
4694.00	25.3	141	4.8	279	12.7	12.9	D
4696.00	25.6	146	4.7	281	12.7	12.9	D
4698.00	10.1	273	4.7	283	12.8	12.7	
4700.00	29.8	153	4.7	283	12.8	12.6	D
4702.00	29.8	312	4.7	281	12.8	12.8	
4704.00	32.7	219	4.7	281	12.8	12.9	
4706.00	33.9	262	4.7	282	12.8	12.8	
4708.00	44.6	99	4.7	283	12.8	12.7	
4710.00	21.1	131	4.7	283	12.7	12.7	
4712.00	39.9	83	4.8	283	12.6	12.7	
4714.00	61.9	183	4.8	282	12.6	12.8	
4716.00	34.8	2	4.8	283	12.6	12.8	
4718.00	38.7	288	4.8	283	12.7	13.0	
4720.00	52.0	82	4.8	283	12.7	13.2	
4722.00	76.5	159	4.8	283	12.7	13.3	
4724.00	51.1	358	4.8	282	12.7	13.2	
4726.00	43.1	203	4.8	280	12.8	13.0	
4728.00	4.7	308	4.8	279	12.6	13.1	
4730.00	35.4	230	4.7	279	12.5	13.1	
4732.00	39.1	142	4.7	280	12.5	13.1	
4734.00	19.7	281	4.7	280	12.7	13.1	
4736.00	29.3	247	4.7	279	13.1	13.1	
4738.00	31.9	324	4.7	280	13.0	13.0	
4740.00	27.8	105	4.7	282	12.7	12.8	
4742.00	30.3	282	4.7	282	12.5	12.6	
4744.00	71.9	171	4.7	282	12.4	12.4	
4746.00	35.2	158	4.7	282	12.5	12.5	
4748.00	50.1	337	4.7	283	12.6	12.7	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4750.00	86.0	184	4.7	282	12.6	12.6	
4752.00	18.7	27	4.7	281	12.4	12.5	
4754.00	28.3	321	4.7	281	12.4	12.5	
4756.00	39.2	297	4.6	282	12.5	12.6	
4758.00	53.9	25	4.7	282	12.6	12.6	
4760.00	59.1	148	4.7	281	12.7	12.6	
4762.00	61.9	11	4.8	281	12.7	12.5	
4764.00	83.2	143	4.8	282	12.7	12.6	
4766.00	68.3	165	4.8	283	12.9	12.8	
4768.00	24.5	134	4.8	282	13.2	12.8	D
4770.00	26.7	120	4.9	282	13.3	12.6	B
4772.00	17.1	131	4.9	282	13.5	12.5	D
4774.00	14.5	126	4.9	283	13.7	12.5	D
4776.00	41.3	126	4.9	283	13.8	12.6	
4778.00	44.8	130	4.9	283	13.5	12.6	
4780.00	17.1	126	4.9	282	13.1	12.6	D
4782.00	21.4	80	4.9	282	12.8	12.6	
4784.00	48.4	139	4.9	282	12.7	12.7	
4786.00	26.6	145	4.8	283	12.7	12.7	
4788.00	18.1	103	4.8	283	12.8	12.8	A
4790.00	14.9	111	4.8	283	12.8	12.7	A
4792.00	9.1	126	4.8	283	12.7	12.6	A
4794.00	13.1	123	4.8	284	12.7	12.6	A
4796.00	13.2	122	4.8	285	12.6	12.7	A
4798.00	12.3	93	4.8	284	12.6	12.7	A
4800.00	14.2	96	4.8	284	12.6	12.6	A
4802.00	13.8	117	4.8	286	12.6	12.6	A
4804.00	12.2	105	4.8	285	12.7	12.6	A
4806.00	11.4	102	4.8	284	12.9	12.6	A
4808.00	13.8	127	4.9	284	13.0	12.6	A
4810.00	12.5	84	4.9	283	13.2	12.6	A
4812.00	15.1	77	4.9	283	13.3	12.6	A
4814.00	17.4	131	4.9	284	13.5	12.5	C
4816.00	15.8	116	4.9	284	13.5	12.4	A
4818.00	16.1	117	5.0	284	13.4	12.3	A
4820.00	16.6	114	5.0	284	13.4	12.3	A
4822.00	14.6	106	5.0	283	13.4	12.3	A
4824.00	15.0	106	5.0	283	13.3	12.3	A
4826.00	20.1	124	5.0	283	13.2	12.3	C
4823.00	18.1	123	4.9	283	13.2	12.3	A
4830.00	16.8	136	4.9	283	13.2	12.3	A
4832.00	14.8	128	4.9	283	13.2	12.4	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4834.00	15.7	117	4.9	283	12.8	12.4	C
4836.00	18.3	93	4.9	284	12.5	12.4	C
4838.00	42.4	133	4.8	284	12.5	12.5	
4840.00	15.6	115	4.8	284	12.6	12.5	A
4842.00	14.9	109	4.9	285	12.7	12.5	C
4844.00	19.1	126	4.9	285	12.7	12.6	C
4846.00	17.0	115	4.9	285	12.7	12.6	C
4848.00	18.8	103	4.9	285	12.8	12.6	A
4850.00	17.6	102	4.8	285	12.8	12.6	A
4852.00	36.2	56	4.8	285	12.9	12.5	
4854.00	59.3	253	4.8	285	13.1	12.5	
4856.00	50.9	84	4.8	284	13.0	12.4	
4858.00	31.1	16	4.8	284	12.8	12.4	
4860.00	31.7	15	4.8	285	12.7	12.4	
4862.00	19.4	320	4.8	285	12.8	12.4	
4864.00	28.2	124	4.8	285	12.9	12.4	
4866.00	46.6	125	4.8	284	12.9	12.3	
4868.00	78.9	230	4.8	284	13.0	12.4	
4870.00	78.7	230	4.8	284	13.1	12.4	
4872.00	63.6	102	4.8	284	13.2	12.4	
4874.00	17.2	51	4.8	284	13.2	12.5	
4876.00	37.6	96	4.8	284	13.0	12.5	
4878.00	25.8	48	4.7	284	12.7	12.6	
4880.00			4.7	284	12.7	12.6	
4882.00	23.3	117	4.8	285	12.8	12.6	
4884.00	14.9	126	4.8	285	12.9	12.5	D
4886.00	15.1	127	4.8	285	12.8	12.5	D
4888.00	41.8	198	4.9	285	12.7	12.5	
4890.00	9.2	256	4.9	284	12.7	12.5	D
4892.00	15.2	136	4.9	284	12.8	12.5	D
4894.00	15.4	134	4.9	285	12.9	12.4	D
4896.00	15.0	129	4.9	285	13.0	12.4	B
4898.00	9.9	138	4.9	285	12.8	12.4	D
4900.00	5.6	189	4.9	285	12.6	12.4	B
4902.00	17.1	123	4.9	286	12.4	12.4	B
4904.00	18.9	279	4.9	287	12.5	12.4	
4906.00	12.6	134	4.9	287	12.6	12.4	D
4908.00	13.1	122	4.9	287	12.6	12.5	D
4910.00	19.5	114	4.8	287	12.6	12.6	B
4912.00	19.1	119	4.7	289	12.6	12.7	B
4914.00	20.3	124	4.6	290	12.6	12.8	D
4916.00	46.2	313	4.5	290	12.5	12.7	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
4918.00	18.3	124	4.5	290	12.4	12.4	B
4920.00	19.5	124	4.5	290	12.3	12.5	B
4922.00	22.0	19	4.6	291	12.2	12.6	
4924.00	26.3	174	4.6	292	12.2	12.7	
4926.00	25.4	127	4.7	292	12.3	12.8	
4928.00	82.3	204	4.7	292	12.5	13.0	
4930.00	28.0	111	4.7	293	12.6	12.9	
4932.00	13.9	151	4.8	293	12.5	12.8	D
4934.00	13.4	170	4.8	293	12.5	12.7	
4936.00	38.5	186	4.8	292	12.6	12.6	
4938.00	15.8	131	4.8	291	12.6	12.6	D
4940.00	16.0	129	4.9	290	12.5	12.6	D
4942.00	17.3	135	4.9	289	12.6	12.7	B
4944.00	20.1	112	5.0	289	12.6	12.7	D
4946.00	46.1	352	5.0	288	12.5	12.8	
4948.00	24.7	97	4.9	288	12.5	12.9	
4950.00	26.0	194	4.9	288	12.4	12.8	D
4952.00	30.2	179	4.9	287	12.4	12.7	
4954.00	12.6	118	4.8	288	12.4	12.8	
4956.00	34.5	217	4.8	289	12.4	12.8	D
4958.00	27.4	212	4.7	289	12.6	12.7	B
4960.00	36.7	135	4.7	290	12.6	12.7	
4962.00	12.8	66	4.7	290	12.7	12.6	
4964.00	13.9	63	4.7	290	12.8	12.6	
4966.00	85.1	65	4.7	291	12.8	12.7	
4968.00	47.1	239	4.7	292	12.7	12.8	
4970.00	48.6	280	4.7	293	12.6	13.0	
4972.00	44.0	95	4.7	293	12.6	13.0	
4974.00	26.9	124	4.7	293	12.6	13.1	
4976.00	32.1	32	4.7	292	12.6	13.1	
4978.00	82.5	81	4.7	292	12.6	13.0	
4980.00	39.4	38	4.7	292	12.6	12.8	
4982.00	47.3	85	4.8	291	12.6	12.8	
4984.00	38.4	195	4.8	290	12.5	12.8	
4986.00	34.1	333	4.8	289	12.5	12.9	
4988.00	16.1	244	4.8	289	12.5	13.0	
4990.00	16.3	230	4.8	289	12.4	13.1	
4992.00	58.5	137	4.8	289	12.4	13.2	
4994.00	62.6	119	4.8	289	12.3	13.3	
4996.00	53.8	130	4.8	289	12.3	13.4	
4998.00	20.7	120	4.7	289	12.4	13.4	B
5000.00	36.5	200	4.7	289	12.3	13.3	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5002.00	54.1	333	4.7	289	12.3	13.1	
5004.00	22.0	135	4.6	288	12.4	13.0	D
5006.00	20.5	136	4.6	289	12.4	13.1	D
5008.00	23.0	114	4.6	290	12.5	13.1	D
5010.00	23.1	116	4.6	292	12.6	13.0	D
5012.00	19.4	139	4.7	292	12.6	13.0	D
5014.00	23.0	129	4.7	291	12.5	13.0	D
5016.00	59.1	321	4.7	292	12.5	13.0	
5018.00	76.4	277	4.6	293	12.5	13.0	
5020.00	51.3	277	4.6	292	12.6	13.1	
5022.00	53.2	147	4.6	292	12.6	13.1	
5024.00	18.8	128	4.6	293	12.6	13.1	D
5026.00	16.1	142	4.7	292	12.6	13.2	B
5028.00	16.2	122	4.7	291	12.5	13.2	D
5030.00	29.1	309	4.7	290	12.4	13.4	
5032.00	66.3	283	4.7	289	12.4	13.5	
5034.00	73.0	254	4.7	288	12.4	13.6	
5036.00	72.5	257	4.7	289	12.4	13.7	
5038.00	9.8	168	4.7	290	12.4	14.0	D
5040.00	21.6	245	4.7	290	12.3	14.1	
5042.00	28.1	39	4.6	291	12.3	14.0	
5044.00	45.1	216	4.6	291	12.4	13.8	
5046.00	55.1	57	4.6	290	12.5	13.5	
5048.00	38.3	296	4.5	289	12.7	13.4	
5050.00	24.1	38	4.5	288	12.8	13.2	
5052.00	58.2	9	4.4	287	12.9	13.1	
5054.00	30.5	258	4.4	287	13.0	13.0	
5056.00	53.1	26	4.4	288	12.9	12.8	
5058.00	81.8	356	4.4	290	12.7	12.6	
5060.00	59.3	100	4.4	291	12.6	12.5	
5062.00	29.3	123	4.5	291	12.6	12.5	
5064.00	33.8	190	4.4	290	12.6	12.6	
5066.00	35.9	351	4.4	290	12.7	12.6	
5068.00	72.9	254	4.4	290	12.7	12.6	
5070.00	7.3	87	4.5	289	12.8	12.6	
5072.00	31.0	214	4.5	288	12.9	12.5	
5074.00	30.8	217	4.5	289	12.9	12.5	
5076.00	31.6	27	4.5	289	12.9	12.4	
5078.00	33.0	111	4.5	289	13.0	12.5	D
5080.00	32.0	119	4.5	289	13.1	12.5	D
5082.00	53.1	176	4.5	290	13.2	12.5	
5084.00	16.8	57	4.5	290	13.3	12.6	

FILE : 1

	FORMATION			BOREHOLE			
DEPTH	DIP	DIP AZIMUTH	DEVIAT	DEVIAT AZIMUTH	CALIPER 1-3	CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5086.00	88.3	79	4.5	290	13.5	12.6	
5088.00	43.6	72	4.5	289	13.5	12.5	
5090.00	42.3	65	4.5	288	13.3	12.5	
5092.00	35.6	211	4.5	287	13.3	12.5	D
5094.00	32.4	203	4.4	287	13.0	12.5	D
5096.00	23.1	350	4.4	287	12.8	12.6	D
5098.00	14.8	4	4.3	288	12.7	12.6	D
5100.00	23.7	356	4.3	289	12.6	12.5	B
5102.00	32.6	256	4.2	289	12.6	12.4	
5104.00	17.4	146	4.2	289	12.7	12.4	
5106.00	52.2	48	4.2	290	12.7	12.4	
5108.00	19.1	119	4.2	289	12.7	12.5	A
5110.00	19.2	114	4.2	289	12.6	12.5	A
5112.00	35.6	288	4.2	289	12.6	12.5	
5114.00	18.2	121	4.2	288	12.6	12.5	A
5116.00	18.1	120	4.2	288	12.6	12.6	A
5118.00	18.6	113	4.1	289	12.5	12.7	A
5120.00	18.9	114	4.2	290	12.5	12.8	A
5122.00	18.7	107	4.2	290	12.5	12.9	A
5124.00	18.1	119	4.2	291	12.6	12.8	C
5126.00	18.4	111	4.2	291	12.7	12.8	A
5128.00	17.6	103	4.3	290	12.7	12.8	A
5130.00	32.1	92	4.4	289	12.6	12.8	
5132.00	48.6	127	4.4	288	12.6	12.8	
5134.00	48.3	105	4.4	288	12.5	12.6	
5136.00	17.4	110	4.5	288	12.5	12.5	C
5138.00	17.9	111	4.5	287	12.5	12.6	A
5140.00	17.6	121	4.5	287	12.5	12.6	C
5142.00	18.3	111	4.4	288	12.5	12.5	A
5144.00	20.1	115	4.4	288	12.5	12.4	A
5146.00	23.2	106	4.3	286	12.5	12.4	D
5148.00	63.1	19	4.3	286	12.5	12.4	
5150.00	27.4	136	4.3	286	12.5	12.4	B
5152.00	27.3	133	4.3	285	12.5	12.5	B
5154.00	21.9	111	4.3	285	12.5	12.5	D
5156.00	18.0	204	4.3	284	12.5	12.5	D
5158.00	19.0	208	4.3	283	12.4	12.5	B
5160.00	18.6	118	4.3	282	12.4	12.5	B
5162.00	18.3	110	4.3	282	12.5	12.6	B
5164.00	21.8	24	4.3	282	12.6	12.7	
5166.00	33.7	141	4.3	283	12.7	12.8	D
5168.00	32.7	137	4.3	284	12.6	12.7	D

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5170.00	18.4	121	4.3	285	12.5	12.5	D
5172.00	71.4	13	4.4	284	12.5	12.5	
5174.00	41.8	70	4.4	285	12.7	12.5	
5176.00	8.0	4	4.5	285	12.9	12.5	
5178.00	13.6	312	4.5	284	13.0	12.5	
5180.00	20.2	117	4.5	284	12.9	12.6	B
5182.00	21.0	118	4.5	283	12.8	12.5	D
5184.00	16.6	109	4.5	284	12.6	12.4	D
5186.00	24.8	327	4.4	284	12.5	12.4	
5188.00	57.5	250	4.4	284	12.5	12.4	
5190.00	63.7	282	4.4	284	12.6	12.5	
5192.00	46.4	76	4.4	284	12.7	12.5	
5194.00	17.1	107	4.4	283	12.6	12.5	
5196.00	64.4	239	4.4	284	12.6	12.4	
5198.00	14.7	0	4.3	284	12.6	12.5	
5200.00	10.6	349	4.3	283	12.6	12.5	
5202.00	15.4	120	4.3	283	12.7	12.5	
5204.00	14.3	86	4.2	282	12.6	12.5	
5206.00	32.1	333	4.1	282	12.7	12.6	
5208.00	32.4	330	4.0	282	12.9	12.8	
5210.00	14.0	128	3.9	282	12.8	12.7	
5212.00	78.4	26	3.9	283	12.6	12.6	
5214.00	37.2	49	4.0	283	12.6	12.6	
5216.00	12.5	124	4.0	283	12.8	12.7	
5218.00	12.5	119	4.0	282	12.8	12.9	
5220.00	71.6	272	4.0	280	12.9	12.9	
5222.00	19.9	316	4.1	278	13.1	13.1	
5224.00	17.3	273	4.2	279	13.1	13.1	
5226.00	33.7	266	4.2	281	12.9	12.8	
5228.00	35.2	74	4.2	281	12.8	12.7	
5230.00	30.0	117	4.3	281	12.9	12.6	
5232.00	37.9	26	4.3	281	13.0	12.6	
5234.00	57.4	236	4.3	282	12.9	12.6	
5236.00	31.6	315	4.4	282	12.8	12.6	
5238.00	49.6	189	4.4	282	12.7	12.5	
5240.00	23.5	126	4.4	281	12.6	12.5	
5242.00	15.3	134	4.4	280	12.7	12.5	
5244.00	53.1	77	4.4	280	12.8	12.6	
5246.00	16.6	273	4.4	281	12.8	12.6	
5248.00	62.5	275	4.3	282	12.8	12.6	
5250.00	13.5	82	4.3	283	12.9	12.5	D
5252.00	9.7	84	4.2	283	12.8	12.4	D

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5254.00	14.8	112	4.2	284	12.7	12.4	B
5256.00	14.8	110	4.2	284	12.7	12.4	B
5258.00	10.8	121	4.1	284	12.8	12.4	D
5260.00	12.7	115	4.1	284	12.9	12.5	D
5262.00	17.9	136	4.1	285	13.1	12.6	B
5264.00	16.5	136	4.1	285	13.5	12.9	D
5266.00	20.8	266	4.0	286	13.6	13.0	
5268.00	28.0	113	3.9	286	13.2	12.9	D
5270.00	29.2	124	3.9	286	13.0	12.9	B
5272.00	22.6	134	3.8	286	13.1	12.9	B
5274.00	20.4	138	3.8	287	13.1	12.8	B
5276.00	54.5	73	3.7	284	12.8	13.1	
5278.00	16.3	160	3.8	283	12.6	13.0	D
5280.00	18.4	113	3.9	287	12.8	12.8	D
5282.00	15.9	116	4.0	288	12.9	12.8	B
5284.00	19.0	107	4.0	288	12.9	12.7	D
5286.00	18.1	109	4.0	288	12.7	12.6	A
5288.00	18.0	107	4.1	288	12.6	12.6	A
5290.00	88.2	105	4.1	287	12.5	12.5	
5292.00	14.3	112	4.1	287	12.5	12.4	A
5294.00	17.3	103	4.1	288	12.5	12.5	A
5296.00	15.0	83	4.1	287	12.5	12.4	C
5298.00	15.1	84	4.1	287	12.5	12.4	A
5300.00	15.0	83	4.0	287	12.5	12.4	A
5302.00	11.6	116	4.0	288	12.5	12.4	C
5304.00	41.7	36	4.0	288	12.5	12.4	
5306.00	16.2	1	4.0	288	12.5	12.4	
5308.00	14.5	106	4.0	288	12.5	12.4	C
5310.00	14.8	107	4.0	287	12.5	12.4	A
5312.00	16.7	106	4.0	288	12.5	12.4	A
5314.00	16.9	112	4.0	289	12.5	12.4	C
5316.00	16.6	96	4.0	289	12.6	12.4	A
5318.00	16.5	95	3.9	288	12.6	12.4	A
5320.00	19.1	114	3.9	288	12.6	12.5	C
5322.00	11.3	1	3.9	288	12.5	12.6	
5324.00	14.5	122	3.9	288	12.5	12.6	C
5326.00	14.5	117	3.9	289	12.6	12.7	B
5328.00	34.2	213	3.9	288	12.6	12.7	
5330.00	68.0	79	4.0	288	12.5	12.9	
5332.00	34.7	43	4.0	289	12.5	13.1	
5334.00	39.1	34	4.0	289	12.5	12.9	
5336.00	11.5	63	4.0	289	12.5	12.7	

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DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
5338.00	58.6	164	4.0	289	12.4	12.6	D
5340.00	58.5	164	4.0	289	12.4	12.6	D
5342.00	20.9	223	4.0	288	12.4	12.6	
5344.00	76.4	50	4.1	289	12.4	12.6	
5346.00	36.7	131	4.1	289	12.5	12.7	
5348.00	28.0	45	4.1	289	12.6	12.8	
5350.00	28.0	46	4.0	289	12.6	12.7	
5352.00	12.8	19	4.0	289	12.5	12.7	D
5354.00	13.4	15	4.0	290	12.6	12.8	D
5356.00	4.3	258	4.0	289	12.6	13.3	
5358.00	49.7	70	4.0	289	12.6	13.7	
5360.00	12.9	72	4.0	289	12.6	13.3	D
5362.00	11.9	41	4.0	289	12.6	12.9	D
5364.00	12.5	40	4.0	289	12.7	13.6	D
5366.00	47.1	145	4.0	289	12.8	14.6	
5368.00	20.7	126	4.0	289	12.9	14.4	D
5370.00	33.6	169	4.0	289	12.8	13.4	
5372.00	35.5	170	4.0	289	12.6	12.7	
5374.00	13.5	106	4.0	289	12.5	12.6	D
5376.00	12.8	106	4.0	289	12.5	12.6	D
5378.00	46.4	7	4.0	290	12.5	12.6	
5380.00	19.6	128	4.0	290	12.5	12.6	D
5382.00	19.4	123	4.0	290	12.5	12.6	B
5384.00	19.3	123	3.9	291	12.5	12.5	B
5386.00	17.3	117	3.9	290	12.4	12.5	A
5388.00	18.0	118	3.9	290	12.4	12.5	A
5390.00	19.5	126	3.9	290	12.4	12.5	A
5392.00	18.5	122	3.9	290	12.4	12.5	A
5394.00	13.5	108	3.9	290	12.5	12.5	A
5396.00	13.5	108	3.9	290	12.5	12.5	A
5398.00	18.4	118	3.8	290	12.4	12.5	A
5400.00	18.4	119	3.8	292	12.4	12.5	A
5402.00	18.6	120	3.8	292	12.4	12.5	A
5404.00	16.3	122	3.8	292	12.5	12.5	A
5406.00	16.3	122	3.8	292	12.5	12.5	A
5408.00	15.3	117	3.8	293	12.5	12.5	A
5410.00	15.3	117	3.8	292	12.5	12.5	A
5412.00	18.3	110	3.8	292	12.5	12.5	A
5414.00	18.3	111	3.8	292	12.4	12.5	A
5416.00	18.2	122	3.8	293	12.4	12.5	A
5418.00	18.1	122	3.7	293	12.5	12.5	A
5420.00	17.0	111	3.7	293	12.5	12.5	

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DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
5422.00	18.9	109	3.7	292	12.4	12.5	
5424.00	17.0	109	3.7	292	12.4	12.5	A
5426.00	17.3	108	3.7	292	12.4	12.5	A
5428.00	13.9	121	3.7	292	12.4	12.5	A
5430.00	14.5	108	3.7	292	12.5	12.6	A
5432.00	18.9	147	3.7	292	12.4	12.6	
5434.00	52.0	334	3.6	292	12.3	12.5	D
5436.00	21.6	15	3.6	292	12.3	12.6	
5438.00	19.7	86	3.6	292	12.5	12.7	
5440.00	20.2	88	3.6	292	12.6	12.7	
5442.00	48.9	335	3.6	292	12.5	12.7	D
5444.00	48.8	336	3.6	292	12.6	12.7	D
5446.00	32.3	208	3.6	292	12.5	12.7	D
5448.00	29.7	146	3.6	293	12.4	12.6	
5450.00	12.6	112	3.7	293	12.5	12.6	
5452.00	16.3	105	3.7	293	12.5	12.6	
5454.00	41.8	188	3.7	293	12.5	12.6	
5456.00	39.9	158	3.7	294	12.5	12.6	
5458.00	27.5	305	3.7	294	12.4	12.5	D
5460.00	27.1	304	3.7	293	12.2	12.5	D
5462.00	5.5	234	3.7	293	12.2	12.5	
5464.00	20.4	148	3.6	293	12.3	12.6	
5466.00	47.3	103	3.6	293	12.3	12.6	
5468.00	67.5	105	3.6	293	12.2	12.6	
5470.00	30.4	41	3.6	293	12.3	12.7	
5472.00	5.7	322	3.7	293	12.4	12.7	
5474.00	30.5	172	3.7	293	12.4	12.6	
5476.00	14.4	152	3.7	293	12.4	12.6	
5478.00	47.8	2	3.7	294	12.4	12.7	
5480.00	46.0	231	3.7	294	12.5	12.7	
5482.00	30.4	235	3.7	294	12.5	12.7	
5484.00	27.9	268	3.7	295	12.4	12.7	
5486.00	76.3	178	3.8	296	12.5	12.7	
5488.00	44.8	60	3.7	296	12.5	12.7	
5490.00	17.2	97	3.7	296	12.5	12.7	A
5492.00	17.2	99	3.7	296	12.5	12.7	A
5494.00	14.0	125	3.7	296	12.5	12.7	A
5496.00	15.5	122	3.7	296	12.5	12.7	A
5498.00	15.9	127	3.7	296	12.5	12.7	C
5500.00	20.3	109	3.7	296	12.5	12.7	C
5502.00	21.3	101	3.7	296	12.5	12.7	C
5504.00	12.0	108	3.7	295	12.5	12.6	C

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5506.00	16.2	311	3.7	295	12.4	12.6	B
5508.00	6.1	162	3.7	295	12.4	12.6	C
5510.00	17.2	108	3.7	295	12.4	12.6	A
5512.00	17.3	108	3.7	296	12.5	12.6	A
5514.00	17.0	107	3.7	296	12.5	12.7	A
5516.00	15.7	102	3.7	295	12.5	12.7	A
5518.00	13.7	105	3.7	295	12.5	12.7	A
5520.00	12.5	112	3.7	295	12.4	12.6	A
5522.00	14.5	117	3.7	294	12.4	12.6	A
5524.00	15.6	125	3.7	295	12.4	12.6	A
5526.00	16.0	126	3.7	295	12.4	12.6	A
5528.00	13.9	115	3.7	294	12.4	12.6	A
5530.00	13.2	116	3.8	294	12.4	12.6	A
5532.00	13.8	112	3.8	294	12.4	12.6	A
5534.00	13.7	111	3.8	294	12.4	12.6	A
5536.00	16.0	118	3.8	295	12.4	12.7	A
5538.00	15.9	117	3.8	295	12.5	12.7	A
5540.00	10.5	118	3.8	295	12.5	12.7	B
5542.00	10.7	116	3.8	294	12.5	12.7	B
5544.00	37.0	24	3.8	294	12.5	12.7	D
5546.00	36.5	24	3.8	295	12.5	12.7	D
5548.00	40.5	22	3.8	294	12.5	12.7	D
5550.00	31.8	31	3.8	294	12.5	12.7	D
5552.00	17.0	158	3.8	294	12.5	12.7	D
5554.00	16.7	116	3.9	294	12.5	12.7	A
5556.00	17.7	118	3.9	295	12.5	12.7	A
5558.00	18.3	120	3.9	295	12.5	12.7	A
5560.00	17.5	118	3.9	296	12.5	12.8	A
5562.00	17.8	117	3.9	296	12.5	12.8	A
5564.00	18.1	113	3.9	295	12.5	12.8	A
5566.00	16.8	112	3.9	295	12.5	12.8	A
5568.00	15.8	113	3.9	295	12.5	12.8	A
5570.00	16.0	108	3.9	295	12.5	12.9	C
5572.00	41.7	167	3.9	295	12.5	12.9	D
5574.00	15.4	104	4.0	296	12.5	12.8	C
5576.00	14.9	101	4.0	295	12.5	12.8	C
5578.00	15.0	111	4.0	296	12.5	12.8	A
5580.00	15.0	111	4.0	295	12.5	12.8	A
5582.00	15.3	113	4.0	295	12.5	12.8	C
5584.00	15.3	114	4.0	295	12.5	12.8	A
5586.00	15.2	115	4.0	294	12.5	12.8	A
5588.00	16.1	115	4.1	294	12.5	12.8	C

FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
5590.00	15.5	112	4.1	294	12.5	12.8	C
5592.00	15.4	114	4.1	294	12.5	12.8	A
5594.00	14.4	113	4.1	294	12.5	12.8	A
5596.00	17.9	115	4.1	294	12.5	12.8	A
5598.00	17.9	107	4.1	294	12.5	12.8	A
5600.00	17.4	122	4.1	294	12.5	12.8	C
5602.00	17.2	113	4.1	294	12.5	12.8	C
5604.00	15.9	123	4.1	293	12.5	12.8	A
5606.00	33.9	152	4.2	293	12.5	12.8	
5608.00	24.0	319	4.2	294	12.5	12.8	
5610.00	9.3	114	4.1	294	12.5	12.8	C
5612.00	10.6	118	4.1	293	12.5	12.8	C
5614.00	11.6	119	4.2	293	12.5	12.8	A
5616.00	12.5	119	4.2	293	12.5	12.8	A
5618.00	13.6	122	4.2	292	12.5	12.8	A
5620.00	14.1	122	4.2	292	12.5	12.9	A
5622.00	14.2	124	4.2	292	12.5	12.9	C
5624.00	13.9	127	4.2	292	12.5	12.9	C
5626.00	16.2	126	4.3	292	12.5	12.9	A
5628.00	16.6	119	4.3	292	12.5	12.9	C
5630.00	14.1	125	4.3	292	12.5	12.9	C
5632.00	15.0	124	4.3	292	12.5	12.9	A
5634.00	15.8	120	4.4	292	12.5	12.9	A
5636.00	15.9	119	4.4	292	12.5	12.9	A
5638.00	14.5	119	4.4	292	12.5	12.9	B
5640.00	14.4	121	4.4	293	12.5	13.0	D
5642.00	13.7	105	4.4	292	12.5	13.0	B
5644.00	12.8	110	4.4	292	12.5	13.0	B
5646.00	14.4	117	4.5	292	12.5	13.0	B
5648.00	14.8	120	4.5	292	12.5	13.0	B
5650.00	14.1	119	4.5	292	12.5	13.0	D
5652.00	14.2	117	4.5	291	12.5	13.0	D
5654.00	44.4	45	4.5	291	12.5	13.0	
5656.00	12.6	117	4.5	291	12.5	13.0	D
5658.00	47.7	212	4.6	290	12.6	13.0	
5660.00	53.4	223	4.6	290	12.6	13.1	
5662.00	41.6	252	4.6	290	12.6	13.1	
5664.00	43.1	255	4.7	289	12.6	13.1	
5666.00	30.5	305	4.7	288	12.6	13.1	
5668.00	14.1	118	4.7	288	12.6	13.1	D
5670.00	14.3	117	4.8	288	12.6	13.1	B
5672.00	13.8	114	4.8	288	12.6	13.1	D

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5674.00	13.1	118	4.8	288	12.6	13.1	D
5676.00	14.5	25	4.8	288	12.6	13.1	
5678.00	13.4	117	4.8	287	12.6	13.1	A
5680.00	14.3	118	4.8	287	12.6	13.1	A
5682.00	14.6	118	4.8	287	12.6	13.1	A
5684.00	14.7	119	4.8	287	12.7	13.1	A
5686.00	15.0	116	4.9	287	12.7	13.1	A
5688.00	60.4	95	4.9	286	12.7	13.1	
5690.00	66.7	54	4.9	286	12.6	13.0	
5692.00	39.7	52	4.9	286	12.6	13.0	
5694.00	14.7	109	5.0	286	12.7	13.1	D
5696.00	15.2	117	5.0	286	12.7	13.1	D
5698.00	15.6	119	5.0	286	12.7	13.1	D
5700.00	15.5	120	5.0	286	12.7	13.1	D
5702.00	15.0	119	5.0	285	12.6	13.0	A
5704.00	15.8	115	5.1	285	12.6	13.0	A
5706.00	15.5	115	5.1	285	12.6	13.1	C
5708.00	15.3	117	5.0	285	12.6	13.1	C
5710.00	15.6	119	5.0	285	12.6	13.0	A
5712.00	15.2	121	5.0	285	12.6	13.1	A
5714.00	15.1	122	5.0	286	12.6	13.1	A
5716.00	15.3	123	5.0	285	12.6	13.1	A
5718.00	15.0	123	5.1	284	12.6	13.1	A
5720.00	15.4	121	5.1	284	12.6	13.1	A
5722.00	15.5	122	5.1	285	12.6	13.1	A
5724.00	16.0	124	5.1	285	12.6	13.1	A
5726.00	16.3	125	5.2	285	12.6	13.1	A
5728.00	16.1	124	5.2	285	12.6	13.1	A
5730.00	16.1	122	5.2	285	12.6	13.1	A
5732.00	17.0	120	5.2	285	12.6	13.1	A
5734.00	16.6	120	5.2	284	12.6	13.2	A
5736.00	16.3	120	5.2	284	12.6	13.2	A
5738.00	15.8	120	5.3	284	12.6	13.1	A
5740.00	15.9	120	5.3	284	12.6	13.1	A
5742.00	16.0	119	5.3	284	12.6	13.1	A
5744.00	15.7	115	5.3	285	12.6	13.2	A
5746.00	15.7	114	5.3	285	12.6	13.1	A
5748.00	15.9	113	5.3	285	12.6	13.1	A
5750.00	15.8	111	5.4	285	12.6	13.1	A
5752.00	15.2	107	5.4	285	12.6	13.1	A
5754.00	14.9	103	5.4	285	12.6	13.1	A
5756.00	15.0	106	5.4	285	12.6	13.1	A

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5758.00	16.4	115	5.5	285	12.6	13.1	A
5760.00	17.4	126	5.5	286	12.7	13.0	A
5762.00	16.4	118	5.4	286	12.6	13.1	A
5764.00	15.9	116	5.5	285	12.7	13.1	A
5766.00	16.4	101	5.5	286	12.7	13.1	C
5768.00	16.2	93	5.5	286	12.7	13.1	A
5770.00	19.1	83	5.5	285	12.6	13.1	A
5772.00	19.0	86	5.5	285	12.7	13.1	A
5774.00	16.5	100	5.5	285	12.6	13.1	C
5776.00	16.1	117	5.6	285	12.6	13.1	A
5778.00	16.9	124	5.6	285	12.6	13.1	A
5780.00	20.1	112	5.6	285	12.6	13.1	C
5782.00	18.4	118	5.6	285	12.6	13.1	A
5784.00	17.9	119	5.7	285	12.6	13.1	A
5786.00	17.6	120	5.7	285	12.6	13.2	A
5788.00	17.9	121	5.7	285	12.7	13.2	A
5790.00	19.1	136	5.8	285	12.7	13.2	D
5792.00	18.2	122	5.8	285	12.7	13.2	D
5794.00	17.0	121	5.8	285	12.7	13.2	B
5796.00	18.3	124	5.9	284	12.7	13.2	B
5798.00	60.4	148	5.9	285	12.7	13.2	
5800.00	61.7	155	5.9	285	12.7	13.2	
5802.00	41.0	285	6.0	284	12.7	13.2	
5804.00	47.9	278	5.9	285	12.6	13.2	
5806.00	16.5	120	6.0	284	12.6	13.2	D
5808.00	16.5	120	6.0	284	12.6	13.1	D
5810.00	57.3	91	6.0	285	12.6	13.1	
5812.00	31.6	59	6.0	285	12.6	13.1	
5814.00	16.3	125	6.0	285	12.6	13.1	D
5816.00	40.9	41	6.0	285	12.6	13.1	
5818.00	28.7	308	6.0	285	12.6	13.1	
5820.00	17.9	130	6.1	286	12.6	13.1	D
5822.00	17.8	128	6.1	285	12.6	13.1	A
5824.00	18.1	126	6.1	285	12.6	13.1	A
5826.00	17.8	125	6.1	285	12.6	13.1	A
5828.00	17.9	125	6.1	285	12.6	13.0	A
5830.00	18.0	123	6.1	285	12.6	13.0	A
5832.00	18.2	123	6.1	286	12.6	13.0	A
5834.00	18.2	123	6.1	286	12.6	13.0	A
5836.00	15.1	126	6.2	286	12.6	13.0	A
5838.00	15.8	123	6.2	286	12.7	13.0	A
5840.00	16.9	120	6.2	286	12.7	13.0	A

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5842.00	17.1	119	6.2	286	12.6	12.9	A
5844.00	17.5	121	6.2	287	12.6	12.9	A
5846.00	13.8	124	6.2	287	12.6	12.9	C
5848.00	19.1	118	6.2	287	12.6	12.9	A
5850.00	19.6	117	6.2	287	12.6	12.9	A
5852.00	20.7	115	6.2	286	12.6	12.9	A
5854.00	21.3	113	6.2	286	12.6	12.9	C
5856.00	38.8	256	6.2	287	12.6	12.9	B
5858.00	21.3	109	6.2	286	12.6	12.9	C
5860.00	20.7	111	6.3	286	12.6	12.9	C
5862.00	21.1	112	6.3	286	12.6	12.9	A
5864.00	21.0	112	6.3	286	12.7	12.9	A
5866.00	20.9	112	6.3	285	12.7	12.9	A
5868.00	20.4	111	6.3	285	12.7	12.9	A
5870.00	18.4	127	6.3	285	12.7	12.9	C
5872.00	28.2	76	6.4	286	12.7	12.9	
5874.00	43.9	193	6.4	285	12.8	13.0	D
5876.00	44.0	195	6.4	285	12.8	13.0	D
5878.00	44.7	194	6.4	285	12.8	13.0	D
5880.00	39.1	191	6.4	285	12.8	13.0	D
5882.00	33.9	179	6.4	285	12.8	13.0	B
5884.00	34.6	192	6.4	285	12.8	13.1	D
5886.00	41.3	196	6.5	285	12.9	13.1	D
5888.00	15.4	132	6.5	285	12.9	13.1	D
5890.00	15.7	131	6.5	285	12.8	13.1	D
5892.00	18.1	124	6.5	286	12.8	13.1	A
5894.00	16.1	128	6.5	286	12.8	13.1	A
5896.00	16.6	136	6.5	286	12.8	13.1	A
5898.00	15.8	134	6.5	286	12.8	13.1	A
5900.00	15.2	132	6.6	286	12.8	13.1	D
5902.00	15.3	135	6.6	285	12.8	13.0	B
5904.00	15.4	135	6.6	285	12.8	13.0	A
5906.00	16.4	130	6.7	286	12.8	13.0	A
5908.00	17.2	127	6.7	286	12.8	13.0	A
5910.00	19.1	124	6.7	286	12.8	13.0	A
5912.00	22.7	101	6.7	286	12.8	13.0	A
5914.00	23.7	103	6.7	286	12.8	13.0	A
5916.00	23.7	106	6.7	286	12.8	13.0	A
5918.00	24.1	81	6.7	286	12.8	12.9	C
5920.00	17.1	96	6.7	286	12.8	12.8	A
5922.00	32.3	303	6.8	286	12.8	12.8	
5924.00	43.8	202	6.8	286	12.7	12.7	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
5926.00	14.7	143	6.8	286	12.7	12.6	
5928.00	17.3	130	6.8	286	12.7	12.6	
5930.00	16.7	129	6.8	286	12.6	12.5	
5932.00	31.7	199	6.8	287	12.5	12.4	
5934.00	14.4	7	6.8	287	12.5	12.3	
5936.00	18.3	2	6.8	287	12.5	12.3	
5938.00	87.9	48	6.7	287	12.5	12.3	
5940.00	21.7	58	6.7	286	12.5	12.4	
5942.00	16.5	125	6.7	285	12.6	12.5	A
5944.00	16.5	126	6.8	285	12.6	12.6	A
5946.00	15.0	105	6.8	285	12.7	12.7	A
5948.00	15.2	103	6.8	285	12.7	12.8	A
5950.00	34.8	15	6.8	286	12.8	12.9	
5952.00	15.9	104	6.8	286	12.8	13.0	C
5954.00	16.8	104	6.9	287	12.9	13.1	A
5956.00	19.4	109	6.9	287	12.9	13.2	A
5958.00	36.0	308	6.9	287	13.0	13.3	
5960.00	73.2	230	6.9	287	13.0	13.3	
5962.00	22.3	91	6.9	287	13.1	13.4	D
5964.00	22.1	89	6.9	287	13.1	13.5	D
5966.00	26.5	88	6.9	287	13.2	13.5	D
5968.00	19.7	100	7.0	287	13.2	13.5	D
5970.00	54.3	76	7.0	286	13.2	13.5	
5972.00	27.9	345	7.1	287	13.2	13.5	
5974.00	16.6	203	7.1	287	13.2	13.4	
5976.00	9.6	212	7.2	287	13.1	13.4	
5978.00	43.3	147	7.2	287	13.1	13.4	
5980.00	26.5	98	7.3	288	13.2	13.5	D
5982.00	26.2	103	7.3	288	13.1	13.5	
5984.00	23.2	106	7.3	288	13.0	13.2	
5986.00	40.8	350	7.3	287	12.9	12.8	
5988.00	65.9	147	7.4	288	12.8	12.8	
5990.00	43.8	106	7.4	288	12.8	12.8	
5992.00	44.9	133	7.4	287	12.8	12.8	
5994.00	14.3	188	7.4	288	12.9	12.9	
5996.00	70.3	233	7.5	288	12.9	12.9	
5998.00	21.5	302	7.5	289	12.9	12.9	
6000.00	7.4	164	7.5	289	12.9	12.9	
6002.00	8.6	173	7.5	289	12.8	12.8	
6004.00			7.5	289	12.8	12.8	
6006.00	12.1	356	7.5	289	12.9	12.8	
6008.00	26.4	235	7.5	289	12.9	12.8	D

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6010.00	28.2	226	7.4	289	12.9	12.8	D
6012.00	5.6	244	7.5	289	12.9	12.8	
6014.00	46.7	117	7.5	289	12.9	12.8	
6016.00	53.5	55	7.5	289	12.9	12.8	
6018.00	79.2	211	7.5	289	13.0	12.8	
6020.00	49.1	41	7.5	289	13.0	12.8	
6022.00	45.9	145	7.5	290	13.0	12.9	
6024.00	33.0	250	7.5	290	13.0	12.8	
6026.00	34.5	180	7.5	290	13.1	12.7	
6028.00	8.2	191	7.5	290	13.1	12.8	B
6030.00	7.7	184	7.5	290	13.1	12.9	B
6032.00	9.0	163	7.5	290	13.2	13.0	B
6034.00	9.0	155	7.5	290	13.2	13.0	D
6036.00	47.6	87	7.6	290	13.2	13.0	
6038.00	4.4	167	7.6	290	13.2	13.1	D
6040.00	32.4	291	7.6	290	13.2	13.1	
6042.00	50.6	76	7.6	290	13.2	13.1	
6044.00	7.8	211	7.6	290	13.2	13.1	D
6046.00	9.1	197	7.6	290	13.2	13.1	D
6048.00	3.9	294	7.6	291	13.2	13.0	
6050.00	5.1	149	7.6	291	13.1	12.9	D
6052.00	39.7	103	7.7	291	13.0	12.9	
6054.00	9.6	253	7.7	290	12.9	12.9	
6056.00	10.3	178	7.7	290	12.9	12.9	B
6058.00	10.4	178	7.7	290	12.9	12.8	B
6060.00	20.9	175	7.7	290	12.9	12.8	D
6062.00	17.9	76	7.7	290	12.9	12.8	
6064.00	8.8	183	7.7	290	13.0	12.8	D
6066.00	9.9	188	7.8	290	12.9	12.8	B
6068.00	10.5	191	7.8	290	12.9	12.8	B
6070.00	9.3	176	7.8	291	12.9	12.8	D
6072.00	17.1	2	7.8	291	12.9	12.9	D
6074.00	8.2	186	7.8	291	12.9	12.9	D
6076.00	12.0	197	7.8	291	12.8	12.8	B
6078.00	2.8	346	7.8	291	12.8	12.8	
6080.00	7.6	185	7.8	292	12.8	12.9	D
6082.00	18.8	33	7.8	292	12.8	13.0	
6084.00	16.6	126	7.8	292	12.9	12.9	
6086.00	46.9	104	7.9	292	13.0	12.8	
6088.00	45.6	106	7.9	292	13.0	12.8	
6090.00	79.1	213	7.8	292	12.9	12.8	
6092.00	33.9	55	7.8	292	12.9	12.7	

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DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
6094.00	40.1	110	7.8	293	12.8	12.7	
6096.00	34.6	149	7.8	293	12.8	12.7	
6098.00	13.6	220	7.8	293	12.8	12.7	
6100.00	11.6	214	7.8	293	12.8	12.7	
6102.00	51.5	162	7.8	292	12.8	12.7	
6104.00	23.9	322	7.8	292	12.8	12.7	
6106.00	19.9	330	7.8	293	12.9	12.7	
6108.00	26.7	242	7.8	293	13.3	13.0	
6110.00	66.7	340	7.7	292	13.9	13.7	
6112.00	42.7	167	7.7	292	14.0	13.7	
6114.00	39.4	150	7.7	292	13.5	13.2	
6116.00	51.3	219	7.8	292	13.2	13.1	
6118.00	22.7	306	7.8	292	13.4	13.2	
6120.00	82.8	220	7.8	292	13.3	13.1	
6122.00	69.9	50	7.8	293	13.2	12.9	
6124.00	54.8	110	7.9	294	13.7	13.5	
6126.00	22.1	257	7.9	294	14.3	14.4	
6128.00	20.6	219	7.8	294	14.7	14.8	
6130.00	30.7	241	7.8	294	14.8	14.6	D
6132.00	28.2	241	7.8	293	14.3	14.2	D
6134.00	31.5	240	7.8	293	13.8	13.9	D
6136.00	86.7	295	7.9	293	13.8	13.9	
6138.00	50.3	48	7.9	294	14.1	14.1	
6140.00	39.5	169	7.9	294	14.3	14.3	
6142.00	5.4	81	7.9	293	14.6	14.6	C
6144.00	1.3	353	7.9	293	14.5	14.3	A
6146.00	1.3	336	7.9	293	13.7	13.5	A
6148.00	42.7	248	7.9	293	13.1	13.1	
6150.00	43.8	257	7.9	294	12.9	12.9	
6152.00	52.2	245	7.9	294	12.8	12.7	
6154.00	10.9	187	7.9	293	12.6	12.7	A
6156.00	9.9	174	7.9	293	12.7	12.7	A
6158.00	39.2	79	7.9	294	13.2	12.9	
6160.00	13.3	223	7.8	294	13.7	13.4	C
6162.00	9.4	178	7.8	294	13.9	14.0	D
6164.00	5.3	183	7.8	294	14.0	14.0	D
6166.00	3.0	229	7.8	293	13.9	13.7	D
6168.00	12.1	130	7.8	294	13.5	13.4	B
6170.00	13.3	138	7.7	294	13.3	13.3	B
6172.00	13.2	144	7.7	295	13.3	13.3	B
6174.00	12.7	141	7.7	295	13.6	13.4	B
6176.00	20.3	281	7.7	295	14.2	13.8	D

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6178.00	6.7	121	7.7	296	14.6	14.1	D
6180.00	30.0	59	7.7	296	13.7	13.6	
6182.00	8.4	101	7.7	296	12.6	13.0	D
6184.00	8.2	336	7.7	296	12.5	12.9	
6186.00	62.6	132	7.8	296	12.6	12.9	
6188.00	4.9	62	7.7	296	12.6	12.9	
6190.00	10.2	48	7.7	296	12.6	12.9	D
6192.00	14.7	85	7.7	295	12.6	12.8	B
6194.00	17.4	87	7.7	295	12.4	12.7	D
6196.00	13.9	97	7.7	295	12.4	12.6	B
6198.00	13.0	98	7.8	296	12.4	12.6	B
6200.00	12.2	348	7.8	295	12.4	12.7	
6202.00	8.3	82	7.8	295	12.4	12.6	A
6204.00	12.5	110	7.8	296	12.3	12.7	A
6206.00	14.0	107	7.8	296	12.4	12.7	A
6208.00	13.8	99	7.8	296	12.4	12.7	C
6210.00	6.6	67	7.8	296	12.4	12.7	C
6212.00	7.1	64	7.8	295	12.3	12.7	C
6214.00	9.1	80	7.9	295	12.3	12.7	A
6216.00	8.5	71	7.9	296	12.3	12.7	A
6218.00	9.7	114	7.9	295	12.3	12.7	A
6220.00	10.7	113	7.9	295	12.3	12.7	A
6222.00	13.9	108	8.0	294	12.4	12.8	B
6224.00	13.0	107	8.0	295	12.4	12.8	B
6226.00	12.3	108	8.0	295	12.4	12.8	D
6228.00	48.3	125	8.1	295	12.4	12.8	B
6230.00	45.2	129	8.1	296	12.4	12.9	D
6232.00	27.9	155	8.1	296	12.4	12.9	
6234.00	23.3	160	8.2	296	12.3	13.0	D
6236.00	15.7	174	8.2	296	12.3	12.9	D
6238.00	16.8	166	8.2	295	12.3	12.9	B
6240.00	16.2	164	8.2	295	12.3	12.9	B
6242.00	15.8	142	8.2	295	12.3	12.8	A
6244.00	15.7	139	8.2	295	12.3	12.8	A
6246.00	15.8	143	8.3	296	12.3	12.8	A
6248.00	15.9	144	8.2	295	12.3	12.8	A
6250.00	17.5	132	8.2	295	12.3	12.8	C
6252.00	21.1	140	8.3	295	12.3	12.8	A
6254.00	19.9	141	8.3	295	12.3	12.8	A
6256.00	16.9	142	8.3	295	12.3	12.8	A
6258.00	12.2	132	8.3	295	12.3	12.8	C
6260.00	13.5	124	8.4	295	12.3	12.9	A

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6262.00	14.0	125	8.4	295	12.3	12.9	A
6264.00	15.9	133	8.5	295	12.3	12.9	A
6266.00	15.0	101	8.5	295	12.3	12.9	C
6268.00	8.5	65	8.5	295	12.3	12.9	C
6270.00	9.3	284	8.6	295	12.3	12.9	
6272.00	16.0	116	8.6	295	12.3	12.9	A
6274.00	15.1	125	8.6	295	12.3	12.9	A
6276.00	9.4	120	8.6	295	12.3	12.9	A
6278.00	8.8	116	8.6	295	12.3	12.9	A
6280.00	34.7	160	8.7	295	12.3	12.9	
6282.00	8.4	122	8.7	295	12.3	12.9	C
6284.00	8.9	134	8.8	295	12.3	12.9	B
6286.00	36.7	249	8.8	295	12.3	12.9	D
6288.00	36.2	248	8.8	295	12.3	12.9	D
6290.00	5.4	43	8.9	295	12.3	12.9	D
6292.00	7.1	78	8.9	295	12.3	12.9	D
6294.00	43.1	255	8.9	294	12.3	12.9	D
6296.00	37.1	253	8.9	294	12.3	12.9	B
6298.00	48.7	200	9.0	294	12.3	12.9	
6300.00	8.7	121	9.0	294	12.3	12.9	B
6302.00	8.3	121	9.1	294	12.3	12.9	B
6304.00	8.8	142	9.1	294	12.3	12.9	D
6306.00	8.4	139	9.1	294	12.3	12.9	D
6308.00	10.3	137	9.1	294	12.3	13.0	D
6310.00	2.9	137	9.2	293	12.3	12.9	D
6312.00	9.9	139	9.2	293	12.3	12.9	B
6314.00	10.5	147	9.2	293	12.3	12.9	D
6316.00	10.1	148	9.3	293	12.3	12.9	B
6318.00	9.1	144	9.3	294	12.3	13.0	B
6320.00	8.7	128	9.3	293	12.3	13.0	B
6322.00	16.5	68	9.4	293	12.3	13.0	B
6324.00	45.8	48	9.4	293	12.3	13.0	
6326.00	27.9	53	9.4	293	12.3	13.0	
6328.00	11.9	174	9.4	292	12.3	13.0	D
6330.00	15.3	150	9.5	292	12.3	13.0	D
6332.00	38.8	31	9.5	292	12.3	13.0	
6334.00	1.3	242	9.5	292	12.3	13.0	D
6336.00	1.1	223	9.5	291	12.3	13.0	B
6338.00	7.8	159	9.6	292	12.3	13.0	B
6340.00	8.3	164	9.6	292	12.3	12.9	B
6342.00	9.0	172	9.6	292	12.3	12.9	B
6344.00	8.1	159	9.6	292	12.3	12.9	A

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6346.00	10.4	155	9.7	292	12.3	12.9	A
6348.00	9.8	161	9.7	292	12.3	12.9	A
6350.00	10.6	160	9.8	292	12.3	12.9	A
6352.00	11.6	154	9.8	292	12.3	12.9	A
6354.00	11.6	149	9.8	292	12.3	12.8	A
6356.00	11.8	164	9.9	292	12.3	12.8	A
6358.00	11.6	171	9.9	292	12.3	12.8	A
6360.00	12.5	172	9.9	292	12.3	12.7	A
6362.00	12.3	171	9.9	292	12.3	12.7	A
6364.00	32.7	206	9.9	291	12.4	12.7	
6366.00	19.6	181	10.0	291	12.4	12.7	B
6368.00	19.6	181	10.0	291	12.3	12.6	B
6370.00	14.3	184	10.0	291	12.3	12.6	D
6372.00	20.7	167	10.1	292	12.3	12.6	D
6374.00	11.1	114	10.1	291	12.3	12.7	
6376.00	53.7	52	10.1	291	12.4	12.7	
6378.00	42.8	196	10.1	291	12.4	12.8	
6380.00	49.1	67	10.1	291	12.4	12.8	
6382.00	32.8	269	10.1	291	12.3	12.9	
6384.00	25.9	29	10.2	290	12.4	12.8	
6386.00	14.4	197	10.2	290	12.4	12.9	D
6388.00	47.1	159	10.2	289	12.4	12.8	
6390.00	31.3	191	10.2	290	12.4	12.8	
6392.00	41.2	17	10.2	290	12.4	12.8	
6394.00	71.8	171	10.3	291	12.4	12.8	
6396.00	41.0	60	10.3	291	12.4	12.8	
6398.00	21.9	64	10.3	291	12.4	12.8	
6400.00	61.9	38	10.3	291	12.4	12.7	
6402.00	7.6	128	10.3	291	12.3	12.7	B
6404.00	6.5	131	10.3	291	12.3	12.6	B
6406.00	8.6	141	10.3	290	12.3	12.6	D
6408.00	9.6	110	10.4	290	12.3	12.6	A
6410.00	10.2	109	10.4	290	12.3	12.6	A
6412.00	10.2	115	10.5	291	12.3	12.6	A
6414.00	15.4	125	10.5	290	12.3	12.6	A
6416.00	15.5	124	10.6	290	12.3	12.6	A
6418.00	12.2	109	10.6	291	12.3	12.6	A
6420.00	12.6	108	10.6	290	12.3	12.6	A
6422.00	9.7	101	10.6	290	12.3	12.5	C
6424.00	9.8	101	10.7	291	12.4	12.6	C
6426.00	13.0	126	10.7	290	12.3	12.5	C
6428.00	9.9	147	10.7	291	12.3	12.6	A

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6430.00	8.3	150	10.7	291	12.4	12.6	A
6432.00	8.1	152	10.7	291	12.4	12.6	A
6434.00	15.1	139	10.8	290	12.3	12.6	A
6436.00	15.7	144	10.8	290	12.4	12.5	A
6438.00	10.1	131	10.8	290	12.3	12.5	A
6440.00	11.4	125	10.8	289	12.3	12.5	A
6442.00	11.1	104	10.9	289	12.3	12.5	A
6444.00	9.8	103	10.9	290	12.3	12.4	A
6446.00	14.5	159	10.9	290	12.3	12.4	A
6448.00	14.2	156	10.9	289	12.3	12.4	B
6450.00	9.6	82	10.9	289	12.3	12.4	B
6452.00	20.6	90	10.9	289	12.3	12.4	D
6454.00	13.7	96	11.0	289	12.3	12.4	B
6456.00	18.8	156	11.1	289	12.3	12.5	B
6458.00	18.7	154	11.1	289	12.3	12.5	B
6460.00	17.1	143	11.1	289	12.3	12.5	D
6462.00	17.9	294	11.1	289	12.3	12.5	
6464.00	13.4	303	11.1	289	12.2	12.5	
6466.00	14.8	107	11.2	289	12.3	12.5	D
6468.00	7.9	128	11.1	288	12.4	12.5	A
6470.00	7.9	130	11.2	288	12.3	12.5	A
6472.00	10.4	122	11.2	289	12.3	12.4	A
6474.00	9.8	115	11.3	289	12.3	12.4	A
6476.00	9.4	117	11.3	289	12.4	12.4	A
6478.00	10.4	142	11.3	289	12.3	12.4	C
6480.00	12.9	122	11.3	289	12.4	12.4	C
6482.00	10.2	136	11.3	289	12.3	12.4	A
6484.00	10.2	139	11.3	289	12.3	12.4	A
6486.00	11.1	153	11.4	288	12.2	12.4	A
6488.00	8.1	265	11.4	289	12.2	12.4	
6490.00	81.4	190	11.5	289	12.1	12.3	
6492.00	75.9	59	11.6	289	12.3	12.4	
6494.00	59.8	107	11.6	288	12.3	12.4	
6496.00	6.8	101	11.6	289	12.4	12.5	
6498.00	52.0	163	11.7	289	12.4	12.5	
6500.00	40.8	159	11.7	289	12.3	12.5	
6502.00	15.1	105	11.7	289	12.3	12.5	
6504.00	50.8	119	11.7	288	12.3	12.5	
6506.00	44.9	126	11.7	288	12.3	12.5	
6508.00	35.0	124	11.8	288	12.3	12.5	
6510.00	62.2	293	11.8	288	12.3	12.4	
6512.00	40.2	46	11.8	288	12.3	12.4	D

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6514.00	86.6	246	11.8	288	12.3	12.4	
6516.00	32.7	128	11.9	289	12.3	12.5	
6518.00	39.9	46	11.9	288	12.3	12.5	B
6520.00	36.9	50	11.9	288	12.3	12.5	D
6522.00	38.7	136	12.0	288	12.3	12.6	
6524.00	77.1	89	12.0	288	12.2	12.6	
6526.00	13.6	42	12.0	288	12.3	12.6	
6528.00	53.9	233	12.0	288	12.3	12.6	
6530.00	64.0	25	12.0	287	12.3	12.6	
6532.00	28.1	130	12.1	287	12.3	12.5	
6534.00	40.7	271	12.1	288	12.3	12.6	
6536.00	14.1	159	12.1	288	12.3	12.6	
6538.00	7.3	234	12.1	288	12.3	12.6	
6540.00	31.8	177	12.2	288	12.3	12.6	
6542.00	69.0	210	12.2	288	12.3	12.6	
6544.00	40.5	190	12.2	288	12.3	12.6	
6546.00	34.8	159	12.3	288	12.2	12.6	
6548.00	35.5	160	12.3	288	12.2	12.5	
6550.00	68.6	55	12.3	289	12.3	12.5	
6552.00	89.0	67	12.4	289	12.3	12.4	
6554.00	32.8	126	12.4	288	12.3	12.4	
6556.00	23.3	124	12.5	288	12.3	12.4	
6558.00	49.7	241	12.5	288	12.3	12.4	
6560.00	27.1	293	12.5	288	12.3	12.4	
6562.00	58.5	88	12.5	288	12.3	12.4	
6564.00	70.3	331	12.6	288	12.3	12.4	
6566.00	4.5	120	12.7	287	12.4	12.4	
6568.00	29.3	172	12.7	288	12.3	12.4	
6570.00	69.3	147	12.8	288	12.3	12.4	
6572.00	71.6	283	12.8	288	12.3	12.4	
6574.00	61.6	59	12.8	288	12.3	12.4	
6576.00	55.4	13	12.9	287	12.3	12.4	
6578.00	36.4	123	12.9	287	12.3	12.4	
6580.00	82.0	292	12.9	287	12.3	12.4	
6582.00	47.9	128	13.0	287	12.3	12.4	
6584.00	72.5	2	13.0	287	12.3	12.4	
6586.00	58.9	132	13.0	287	12.3	12.4	
6588.00	83.7	63	13.0	287	12.2	12.4	
6590.00	35.4	98	13.1	287	12.3	12.4	
6592.00	72.6	116	13.1	288	12.3	12.4	
6594.00	30.4	40	13.1	287	12.3	12.4	
6596.00	48.6	121	13.2	286	12.3	12.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6598.00	33.5	178	13.2	286	12.3	12.3	
6600.00	33.1	179	13.3	287	12.3	12.3	
6602.00	37.8	96	13.3	287	12.3	12.3	
6604.00	56.0	81	13.3	287	12.3	12.4	
6606.00	66.2	98	13.4	286	12.3	12.4	
6608.00	67.3	101	13.4	285	12.3	12.5	
6610.00	49.1	91	13.4	285	12.3	12.6	
6612.00	44.2	90	13.5	286	12.3	12.6	
6614.00	73.8	106	13.5	286	12.3	12.6	
6616.00	72.8	105	13.5	286	12.3	12.5	
6618.00	29.9	96	13.6	287	12.3	12.5	
6620.00	57.4	128	13.6	286	12.3	12.5	
6622.00	45.1	50	13.7	286	12.2	12.5	
6624.00	40.7	26	13.7	286	12.3	12.5	
6626.00	5.1	167	13.8	286	12.3	12.4	
6628.00	2.0	188	13.8	287	12.3	12.4	
6630.00	11.4	179	13.9	287	12.3	12.3	
6632.00	13.4	176	13.9	287	12.3	12.3	
6634.00	39.5	119	13.8	286	12.2	12.3	
6636.00	35.8	117	13.8	286	12.3	12.3	
6638.00	50.3	187	13.9	286	12.3	12.3	
6640.00	49.4	189	14.0	287	12.3	12.3	
6642.00	26.0	41	14.1	287	12.7	12.3	
6644.00	24.4	48	14.2	287	13.0	12.4	
6646.00	51.2	172	14.2	287	12.8	12.5	
6648.00	6.6	143	14.2	287	12.5	12.6	D
6650.00	6.0	143	14.3	287	12.3	12.7	D
6652.00	16.1	166	14.3	287	12.3	12.7	
6654.00	15.0	159	14.4	287	12.3	12.8	D
6656.00	45.3	174	14.4	287	12.3	12.7	
6658.00	12.4	209	14.4	287	12.3	12.6	D
6660.00	13.2	197	14.3	287	12.3	12.6	D
6662.00	7.3	162	14.3	286	12.3	12.5	D
6664.00	7.8	160	14.4	286	12.3	12.5	B
6666.00	7.2	178	14.4	287	12.3	12.4	B
6668.00	8.4	159	14.4	287	12.3	12.4	A
6670.00	5.4	224	14.5	287	12.3	12.4	A
6672.00	7.7	235	14.5	287	12.3	12.4	C
6674.00	16.2	119	14.5	286	12.3	12.4	C
6676.00	14.0	153	14.5	286	12.3	12.4	C
6678.00	12.2	127	14.6	287	12.3	12.4	A
6680.00	5.9	167	14.6	287	12.3	12.4	C

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DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6682.00	83.3	307	14.6	287	12.3	12.5	
6684.00	35.1	320	14.6	287	12.3	12.5	
6686.00	6.6	170	14.6	287	12.3	12.6	A
6688.00	6.5	143	14.6	287	12.3	12.6	
6690.00	22.6	158	14.6	287	12.3	12.6	B
6692.00	35.6	187	14.7	287	12.3	12.6	
6694.00	39.2	176	14.7	287	12.3	12.6	
6696.00	38.2	61	14.7	287	12.3	12.5	
6698.00	80.6	176	14.7	287	12.2	12.4	
6700.00	69.1	78	14.7	287	12.1	12.4	
6702.00	78.0	74	14.7	287	12.2	12.7	
6704.00	46.7	152	14.8	288	12.3	12.7	
6706.00	25.7	170	14.8	288	12.3	12.7	B
6708.00	24.1	174	14.8	287	12.3	12.6	D
6710.00	29.9	140	14.8	288	12.3	12.5	B
6712.00	28.5	139	14.8	288	12.3	12.4	D
6714.00	38.0	188	14.9	287	12.2	12.4	D
6716.00	37.7	189	14.9	288	12.2	12.4	D
6718.00	33.6	164	14.9	288	12.2	12.5	D
6720.00	39.6	182	14.9	288	12.3	12.6	D
6722.00	28.4	204	14.9	288	12.3	12.6	D
6724.00	21.0	169	15.0	287	12.3	12.6	D
6726.00	7.2	41	15.0	287	12.3	12.5	
6728.00	84.7	143	15.0	288	12.3	12.4	
6730.00	22.3	194	15.0	288	12.3	12.4	D
6732.00	25.8	188	15.0	288	12.3	12.3	D
6734.00	19.6	142	15.0	288	12.3	12.3	
6736.00	19.8	143	15.1	288	12.3	12.3	
6738.00	20.8	145	15.1	288	12.3	12.3	
6740.00	21.4	185	15.1	288	12.3	12.3	D
6742.00	62.6	94	15.1	288	12.3	12.3	
6744.00	22.6	198	15.1	288	12.3	12.3	D
6746.00	12.9	268	15.1	288	12.3	12.3	
6748.00	21.7	273	15.1	289	12.3	12.4	
6750.00	28.7	349	15.2	288	12.3	12.5	
6752.00	75.1	107	15.2	288	12.3	12.5	
6754.00	6.5	86	15.2	288	12.3	12.5	
6756.00	57.4	87	15.2	288	12.2	12.5	
6758.00	56.0	86	15.2	288	12.2	12.5	
6760.00	17.5	148	15.2	288	12.3	12.5	D
6762.00	55.8	49	15.2	288	12.2	12.5	
6764.00	12.1	157	15.2	288	12.2	12.5	B

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FILE : 1

DEPTH FT	FORMATION DIP DEG	FORMATION DIP AZIMUTH DEG	BOREHOLE DEVIAT DEG	BOREHOLE DEVIAT AZIMUTH DEG	BOREHOLE CALIPER 1-3 IN	BOREHOLE CALIPER 2-4 IN	QUALITY INDEX (BEST=A)
6766.00	14.5	170	15.2	288	12.2	12.5	D
6768.00	13.5	122	15.2	288	12.3	12.5	C
6770.00	70.9	113	15.2	288	12.2	12.5	
6772.00	16.4	133	15.3	288	12.2	12.4	
6774.00	9.7	138	15.3	288	12.2	12.3	A
6776.00	10.3	139	15.3	288	12.2	12.3	A
6778.00	16.6	150	15.3	288	12.2	12.2	C
6780.00	17.0	149	15.4	288	12.3	12.2	C
6782.00	9.2	142	15.4	288	12.3	12.2	A
6784.00	9.1	155	15.4	288	12.1	12.2	C
6786.00	49.7	153	15.4	288	12.0	12.2	
6788.00	39.8	162	15.5	289	12.1	12.3	
6790.00	57.7	174	15.5	289	12.2	12.4	
6792.00	9.4	171	15.5	289	12.2	12.4	D
6794.00	.7	356	15.5	289	12.3	12.4	D
6796.00	8.9	192	15.5	288	12.3	12.4	D
6798.00	7.2	186	15.6	289	12.3	12.3	B
6800.00	10.1	164	15.6	289	12.3	12.2	B
6802.00	44.1	155	15.6	289	12.4	12.2	
6804.00	20.0	203	15.6	288	12.4	12.1	
6806.00	76.3	183	15.6	289	12.3	12.1	
6808.00	54.8	207	15.7	289	12.3	12.1	
6810.00	45.5	165	15.7	289	12.3	12.2	
6812.00	39.1	136	15.7	289	12.3	12.2	
6814.00	83.7	169	15.8	289	12.3	12.2	
6816.00	20.1	180	15.8	289	12.3	12.2	
6818.00	39.6	33	15.8	288	12.3	12.2	
6820.00	7.8	24	15.8	288	12.3	12.2	
6822.00	82.2	141	15.9	288	12.3	12.2	
6824.00	9.2	0	15.9	289	12.3	12.2	
6826.00	41.0	52	15.9	289	12.3	12.2	
6828.00	88.6	333	15.9	289	12.3	12.1	
6830.00	44.3	161	15.9	289	12.3	12.1	
6832.00	29.7	298	16.0	289	12.2	12.0	
6834.00	87.7	40	16.0	288	12.2	12.0	
6836.00	34.7	38	16.0	288	12.3	12.0	
6838.00	74.6	29	16.1	288	12.3	12.0	B
6840.00	80.9	26	16.1	289	12.2	11.9	D
6842.00	69.7	161	16.1	289	12.2	11.9	
6844.00	32.4	258	16.2	289	12.2	11.9	
6846.00	83.4	283	16.3	289	12.1	11.9	B
6848.00	42.5	68	16.3	288	12.1	11.9	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6850.00	43.9	71	16.4	288	12.2	12.0	
6852.00	38.2	47	16.4	288	12.2	12.1	
6854.00	22.3	228	16.5	289	12.2	12.2	
6856.00	56.1	97	16.5	289	12.3	12.3	
6858.00	55.4	94	16.6	288	12.2	12.3	
6860.00	32.5	77	16.6	288	12.3	12.3	
6862.00	34.4	338	16.6	288	12.3	12.3	
6864.00	22.1	322	16.6	288	12.2	12.3	
6866.00	41.1	29	16.6	288	12.3	12.3	
6868.00	53.1	63	16.7	288	12.2	12.3	
6870.00	29.3	107	16.7	288	12.1	12.3	
6872.00	44.1	351	16.8	288	12.0	12.3	
6874.00	15.8	283	16.8	287	12.2	12.3	B
6876.00	39.0	83	16.8	288	12.2	12.3	
6878.00	47.1	64	16.8	288	12.2	12.3	
6880.00	19.4	290	16.8	288	12.2	12.3	D
6882.00	30.0	297	16.8	288	12.2	12.3	
6884.00	31.3	231	16.8	288	12.2	12.3	
6886.00	41.0	223	16.8	288	12.1	12.3	
6888.00	46.4	171	16.8	288	12.0	12.4	
6890.00	37.1	109	16.8	288	12.0	12.5	
6892.00	19.8	308	16.8	287	11.9	12.5	
6894.00	46.0	270	16.8	287	11.9	12.5	
6896.00	59.1	76	16.8	288	12.0	12.6	
6898.00	79.2	264	16.9	288	12.1	12.6	
6900.00	46.9	18	16.9	287	12.2	12.5	
6902.00	52.9	202	16.9	287	12.3	12.3	
6904.00	57.8	190	17.0	288	12.4	12.3	
6906.00	59.0	41	17.0	289	12.3	12.3	
6908.00	67.3	354	17.0	289	12.1	12.2	
6910.00	59.0	52	17.1	289	12.0	12.2	
6912.00	44.4	94	17.1	289	12.0	12.1	
6914.00	40.1	84	17.1	289	12.0	12.1	
6916.00	55.1	88	17.2	290	11.9	12.1	
6918.00	42.3	126	17.2	289	11.8	11.9	
6920.00	46.9	160	17.3	289	11.9	11.9	
6922.00	35.2	116	17.4	289	12.0	12.0	
6924.00	26.6	14	17.4	289	12.1	11.9	
6926.00	34.3	213	17.4	289	12.2	11.9	
6928.00	32.2	210	17.5	289	12.2	11.9	
6930.00	25.2	187	17.5	289	12.1	11.9	B
6932.00	39.2	68	17.5	288	12.1	11.8	

FILE : 1

DEPTH	FORMATION DIP	FORMATION DIP AZIMUTH	BOREHOLE DEVIAT	BOREHOLE DEVIAT AZIMUTH	BOREHOLE CALIPER 1-3	BOREHOLE CALIPER 2-4	QUALITY INDEX (BEST=A)
FT	DEG	DEG	DEG	DEG	IN	IN	
6934.00	25.0	178	17.5	288	12.1	11.8	D
6936.00	25.3	185	17.6	288	12.1	11.7	B
6938.00	30.8	178	17.6	288	11.9	11.6	D
6940.00	11.3	91	17.6	287	11.7	11.5	
6942.00	20.6	164	17.6	288	11.6	11.5	
6944.00	19.2	52	17.7	288	11.5	11.5	
6946.00	35.8	189	17.7	288	11.5	11.5	
6948.00	89.4	65	17.7	288	11.5	11.6	
6950.00	27.5	137	17.7	288	11.5	11.6	
6952.00	80.4	113	17.8	288	11.6	11.7	
6954.00	53.4	69	17.8	288	11.9	11.7	
6956.00	57.3	65	17.8	288	12.0	11.7	
6958.00	53.9	79	17.9	287	12.0	11.6	D
6960.00	55.2	79	17.9	288	12.1	11.6	B
6962.00	56.7	83	17.9	288	12.1	11.5	B
6964.00	68.5	247	17.9	288	12.1	11.4	D
6966.00	66.1	243	18.0	288	12.0	11.4	D
6968.00	64.9	312	18.0	288	12.0	11.4	
6970.00	71.6	166	18.0	288	12.1	11.3	
6972.00	67.6	237	18.0	288	12.1	11.3	
6974.00	69.3	112	18.0	288	12.1	11.3	
6976.00	41.7	72	18.0	287	12.1	11.3	
6978.00	34.2	76	18.1	287	12.1	11.2	
6980.00	58.1	113	18.1	287	12.1	11.2	
6982.00	54.2	113	18.2	288	12.1	11.2	
6984.00	54.1	114	18.2	288	12.1	11.1	
6986.00	65.8	262	18.2	288	12.1	11.1	
6988.00	21.4	254	18.3	288	12.1	11.1	
6990.00	36.1	48	18.3	287	12.1	11.0	
6992.00	44.6	206	18.3	287	12.1	11.0	
6994.00	58.5	220	18.3	287	12.1	10.9	
6996.00	81.2	26	18.3	288	12.0	10.8	
6998.00	55.4	86	18.3	288	11.9	10.5	D
7000.00	51.4	86	18.3	288	11.9	10.3	D
7002.00	54.0	83	18.3	287	11.8	10.2	D
7004.00	52.9	84	18.3	287	11.8	10.0	D
7008.00	23.8	102	18.2	287	11.5	9.5	

Form G-103
Adopted 10/1/74

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SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

Revised Plugging Plan for Well No. 55

Bring in workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 5500 feet. Place cement plug from 5500 to 5400 feet. Pull up and set bridge plug at 2090 feet, place cement plug from 2090 to 1890 feet (plug goes from 100' into the Paleozoics to 100' into the Tertiary Volcanics). Test location and strength of plug by tagging plug with drill string or tubing, pull up and set bridge plug at 1500'. Place cement plug from 1500 to 1400'. Test location and Stength of plug by tagging plug with drill string or tubing. Pull out of hole. The well will be turned over to Dale Burgett contingent upon BLM approval and Mr. Burgett meeting the necessary BLM requirements.

The modified plan has been proposed after reviewing your letter dated October 21, 1985. SRC believes that the proposed plan will adequately protect the formation from possible contamination. Any potential hydrocarbon resources in the vicinity of Well No. 55 were driven off at the time of granitic intrusions into the Paleozoics section in Late Cretaceous or Early Tertiary times.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE Nov. 1, 1985

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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Adopted 10/1/74

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SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

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1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration; Low-Temp Thermal ☐ Injection/Disposal ☐
7. Unit Agreement Name: N/A
2. Name of Operator: Steam Reserve Corporation
8. Farm or Lease Name: NM-34790 - Minerals; Dale Burgett - Surface
3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401
9. Well No.: 55
4. Location of Well: Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.
10. Field and Pool, or Wildcat: Wildcat
15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work) SEE RULE 203.

Revised Plugging Plan for Well No. 55

Bring in workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 5500 feet. Place cement plug from 5500 to 5400 feet. Pull up and set bridge plug at 2090 feet, place cement plug from 2090 to 1890 feet (plug goes from 100' into the Paleozoics to 100' into the Tertiary Volcanics). Test location and strength of plug by tagging plug with drill string or tubing, pull up and set bridge plug at 1500'. Place cement plug from 1500 to 1400'. Test location and stength of plug by tagging plug with drill string or tubing. Pull out of hole. The well will be turned over to Dale Burgett contingent upon BLM approval and Mr. Burgett meeting the necessary BLM requirements.

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18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE Nov. 1, 1985

APPROVED BY _____ TITLE _____ DATE _____

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SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: STEAM RESERVE CORPORATION

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, Colorado 80401-3293

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	☒
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER			☐

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any

Plugging and Abandonment Well 55-7

Bring workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 2090 feet. Place cement plug from 2090 to 1890 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull up and set bridge plug at 1412 feet. Place cement plug from 1412 to 900 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull out of hole and set bridge plug or packer in 13 3/8" casing at a depth of 50 feet. Cement to surface with local ready-mix truck.

Weld plate onto top of well head, back fill cellar and reclaim sump with spoil from construction. Restore surface to the approximate original contour.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 10-11-85

APPROVED BY _____ TITLE _____ DATE _____

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Adopted 10/1/74

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SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fed. & Fee ☒
5.a State Lease No.: N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration
Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: STEAM RESERVE CORPORATION

8. Farm or Lease Name: NM-34790 - Minerals Dale Burgett - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, Colorado 80401-3293

9. Well No.: 55

4. Location of Well
Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From
The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): GR - 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	☒
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER	☐		

17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any

Plugging and Abandonment Well 55-7

Bring workover rig unto location, pull 2 7/8" tubing. Run in hole and set bridge plug at 2090 feet. Place cement plug from 2090 to 1890 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull up and set bridge plug at 1412 feet. Place cement plug from 1412 to 900 feet. Test location and strength of plug by tagging plug with drill string or tubing with a minimum of 15,000 lbs. Pull out of hole and set bridge plug or packer in 13 3/8" casing at a depth of 50 feet. Cement to surface with local ready-mix truck.

Weld plate onto top of well head, back fill cellar and reclaim sump with spoil from construction. Restore surface to the approximate original contour.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Anita Clement TITLE Attorney-in-Fact DATE 10-11-85

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DRILLING PROGRAM

STEAM RESERVE CORPORATION

Prepared By Otis L. Day

Date: Sept. 11, 1984

Lease and Well Number
Animas - 55-7

AFE No.

Field, County and State
Lighting Dock KGRA - Hidalgo, New Mexico

Division
Geothermal

Location
NW-SE SEC. 7, T25S R19W

Datum and Elevation	K.B.	Prop. Total Depth	Est. Drlg Time	Est. Total Time
	14' Ft.	6000' Ft.	45 Days	60 Days

SEQUENCE OF OPERATIONS:

1. On the existing location have a company specializing in conductor and rat hole drilling, drill a 36" hole to a depth of 25' to 30'. Install a joint of 30" lapweld, plainended casing. Level the casing and cement using local ready-mix. Construct a 10'x 10'x 6' cellar around the existing conductor pipe with a cement floor and buried 8"fiberglass drain to the sump. It is recommended that the rat and mouse holes be dug at the same time as the conductor pipe hole.

2. Move in the rotary tools and rig up over the conductor pipe. Weld on a 30"riser of the same casing as the conductor pipe and install the flow line and fill up line.

3. Mix Spud Mud as recommended by the mud company . (See mud program.)

4. Spud-in with a 17-1|2"bit on a 26"hole opener and center punch hole inside the conductor pipe. Drill 26"hole to 60'. Pick up 17-1|2" BHA and drill to 300' as indicated by lithology. Survey at 150' and 300'. Open hole to 26"to 300'.

5. Run and cement 20", 94lb., H-40 Buttress casing. Tack weld or Bakerlok all couplings. Cement using a stab-in float shoe. Cement to surface.(See cement program). W.O.C. 6 hours.

6. Cut off 20"casing and weld on 20"flange. Install Blow Out Preventer on 20" flange as in attached Drawing 001. Test preventer with 200 psi. Connect picture nipple and flow line.

7. Drill a 17-1|2" hole to 1000' using mud as the circulating medium. Run a wire

Lease and Well Number	AFE No.
Animas - 55-7	

SEQUENCE OF OPERATIONS:

7. (cont.) line deviation survey every 150' or as necessary. Run a locked-in BHA to prevent exessive hole deviation and to stabilize the bit and drill collars in the large diameter hole. Circulate and condition mud and hole and run an Eastman Multi-shot directional survey on the trip out of the hole to run the 13-3|8" casing.

8. Run and cement the 13-3|8", 54.50lb., K-55, Buttress Casing. Tack weld or Baker-lok the bottom 4 joints. Cement to surface and W.O.C. 12 hours.

9. Install 13-3|8"wellhead and nipple up blow out preventers as in attached Drawing 002. Test casing and preventers to 500 psi.

10. Drill out 13-3|8"casing with a 12-1|4"bit to 6000' or the first entry or loss circulation zone that is determined to be of sufficient temperature to run 9-5|8" casing. A sand plug would be set across this zone and a cement plug set on top of the sand plug. Circulation would be established and the hole conditioned to run the 9-5|8"casing. A minimum of 200' of lap will be used into the 13-3|8" surface casing. Totally cement the annulus of the 9-5|8"liner as per the cement program. W.O.C. 12 hours.

11. Make changes to the BOPE stack to drill with air if necessary. Retest the stack if changes are made. If no changes are made to the stack then clean out to the top of the liner and test the liner lap. Squeeze if necessary until lap will hold a pressure test. Drill out the 9-5|8"liner using a 8-1|2"bit to the top of the float collar and test the casing with 500 psi. Drill out the cement and float collars and displace mud with fresh water or brine.

12. Drill the 8-1|2"hole with fresh water or brine as hole conditions dictate. Clean out cement and sand plugs and continue drilling if necessary. Test or temperature survey as required by the Geologic and Engineering staff at significant entrys or loss circulation zones. It may be deemed advantageous to install a rotating head and air drilling equipment during the drilling of this section of hole. If commerical temperatures and fluid volumes are attained the hole will be completed as outlined in the casing and cementing programs.

MUD PROGRAM

Well Animas 55-7

Mud, Logging, Wellhead and BHA Programs

Interval	Type	Weight	PV-YP	Fluid Loss	Solids	PH
0' - 300'	Gel and Water -lime	8.4	10-15|20-30	10-12cc	5	10
300' - 1000'	Gel and Water-low solids	8.5-8.8	15-20|10-15	10cc	4-5	8.5-9.5
1000' - 6000' -TD	polymer-low solids	8.5-8.8	6-10|4-8	10cc	4-5	10-11

Remarks A Gel and Water, low solids system with fluid loss kept at 10cc or less -- As temperatures become elevated the treatment with polymer thinners will become necessary to control fluid loss and rheological properties. PH should be maintained above 10

WELLHEAD PROGRAM

API Nominal Size	Working Pressure PSi	Type	Remarks
20"	600 API (2000 psi)	Weld on Flange 21¼"Bore	Rental
13-3/8" x 12"	400 ANSI(960 psi)	13-3/8" SOW x 12" 400 ANSI	WKM or CWH
10-3/4" x 10"	400 ANSI(960 psi)	10-3/4" SOW x 10" 400 ANSI	WKM or CWH
10" x 10"	400 ANSI(960 psi)	10" 400 ANSI x 10" 400 ANSI	WKM or CWH
	WKM Power Seal Gate Valve or CWH Rotary Disc Valve		

LOGGING PROGRAM

Interval	Log Type and Scale	Remarks
0' - 300'	No Wireline logs	
300'- 1000	Electric and temperature	
1000' - 6000'	" " "	
	and others as required by the Geologic and Engineering staffs.	

BHA PROGRAM

Hole sizes-Depths

As determined by the Drilling Consultant or Drilling Manager

DIRECTIONAL

DIRECTIONAL

Drill hole as straight as possible

CASING PROGRAM | Size 20" | Depth 300' | Well Animas 55-7

Interval	Weight lb-ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
0' - 300'	94	H - 40	Buttress	4.22	4.09	3.47	49.72(jt.)

DESIGN CONDITIONS

Surface Burst Pressure	- 500	PSI	Outside mud Wt. (collapse)	- 9.6	PPG
Inside Mud Wt. (Burst)	- 9.6	PPG	Inside Mud Wt. (collapse)	- -0-	PPG
Outside Mud Wt. (Burst	- 8.6	PPG	Form. Press. Grad. at Shoe (coll.)	-	PPG
Frac. Grad. at Shoe (Burst)	-	PPG	Biaxial Load, (coll.) [x] Burst [x]	Bouy Yes - No - x	

SLURRY DESCRIPTION AND PROPERTIES

900 cu. ft. (783 sacks) of Class "G" cement blended with 3 per cent $CaCl_2$.

		Desired Top surface	Excess 100 per cent
Slurry Vol.- Cu.Ft. - (Slurry No.)	900		
Slurry Yield - Cubic Ft. - Sack	1.15		
Slurry Density - PPG	118		
Thickening Time - Depth - Hrs.-Min.	4 hours		
Compressive Strength - PSI - Hours	1870psi at 100°F in 8 hours - 3885 psi at 100°F in 24 hrs.		

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening

1. Threadlock bottom 4 joints
2. Tackweld bottom 4 joints and Float Equip.
3. Use HOWCO FS with drill pipe stab-in Assy.

Centralizers and Scratchers - Number, Type and Spacing

1. Two centralizers around bottom two collars
2. No scratchers to be run.

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.

1. Cement through drill pipe from bottom
2. Run Min. of 100 cu. ft. of water ahead as preflush

Pressure Testing and Landing

1. Maximum differential pressure will be approximately 150 psi
2. Test casing and surface equipment to 200 psi.

BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see drawing	3000 psi	21"	Hydril	200 psi		

CASING PROGRAM

Size	Depth	Well
13-3/8"	1000'	Animas 55-7

Interval	Weight lb-Ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
0' - 1000'	61#	K-55	Buttress	6.18	4.90	1.23	5.56

DESIGN CONDITIONS

Surface Burst Pressure	-	500	PSI	Outside mud Wt. (collapse)		-8.8	PPG
Inside Mud Wt. (Burst)	-	8.8	PPG	Inside Mud Wt. (collapse)		- -0-	PPG
Outside Mud Wt. (Burst	-	8.6	PPG	Form. Press. Grad. at Shoe (coll.)	-		PPG
Frac. Grad. at Shoe (Burst)	-		PPG	Biaxial Load, (coll.) [x] Burst [ ]		Bouy Yes - No - x	

SLURRY DESCRIPTION AND PROPERTIES

Class "G" cement blended with 1:1 perlite + 40% silica flour + 3% gel + 0.5% CFR-2

Slurry retarded as needed for temperature

			Desired Top Surface	Excess 100%	
Slurry Vol.- Cu.Ft. - (Slurry No.)					
Slurry Yield - Cubic Ft. - Sack	2.12				
Slurry Density - PPG	100 @ surf.	& 116 @ Btm.			
Thickening Time - Depth - Hrs.-Min.	2 -3 hours				
Compressive Strength - PSI - Hours	± 1100 /24 hrs.				

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening

1. Use HOWCO stab-in Float Collar. Threadlock bottom 4 jts. & Tack weld bottom of collars
2. Position Float Collar 2 jts. above Guide Shoe.

Centralizers and Scratchers - Number, Type and Spacing

1. Use 1 centralizer in the middle of the bottom jt. & over the collar of every third jt. to the shoe of the 20" casing . (300'±)

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.

1. As needed.

Pressure Testing and Landing

1. Maximum differential pressure expected is approximately 750 psi
2. Displace with Mud.
3. Test casing and surface equipment to 500 psi with State Reprensentative notified.

BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see Draw #02	000 psi	12¼"	Annular & CSO	500 psi	500 psi	500psi

CASING PROGRAM | Size 9-5/8" | Depth 6000' | Well Animas 55-7

Interval	Weight lb-ft	Grade	Jt. Type	Calculated Safety Factors Top Burst	Bot. Burst	Collapse	Tension
800' - 6000'	43.50#	N-80	Buttress	1.75	1.57	1.25	2.31

DESIGN CONDITIONS

Surface Burst Pressure	- 1727	PSI	Outside mud Wt. (collapse)	- 8.8	PPG
Inside Mud Wt. (Burst)	- 8.8	PPG	Inside Mud Wt. (collapse)	- -0-	PPG
Outside Mud Wt. (Burst	- 8.6	PPG	Form. Press. Grad. at Shoe (coll.)	- 12.0	PPG
Frac. Grad. at Shoe (Burst)	-	PPG	Biaxial Load, (coll.) ☐ Burst ☐	Bouy Yes - X No -	

SLURRY DESCRIPTION AND PROPERTIES

Class "G" cement + 50# Spherelite / sk. + 40% SSA-1 + 5% lime + 4% Gel + 1% CFR-2 + .5% Halad 22A
Tailed - in with Class "G" + 40% SSA-1 + 0.5% CFR-2, - Both slurrys retarded as needed
for temperature.

	-1-	-2-	Desired Top 800'	Excess ± 50%
Slurry Vol.- Cu.Ft. - (Slurry No.)				
Slurry Yield - Cubic Ft. - Sack	3.45	1.62		
Slurry Density - PPG	12.0	15.6		
Thickening Time - Depth - Hrs.-Min.	3½ -4½ hrs.	2-3 hrs.		
Compressive Strength - PSI - Hours	750-24 hrs.	2300-8 hrs.		

RUNNING AND CEMENTING INSTRUCTIONS

Shoe, Collar's and Joint Strengthening
1. Run Float Shoe and Float Collar on top of second jt.
2. Run Midway circulating type hanger

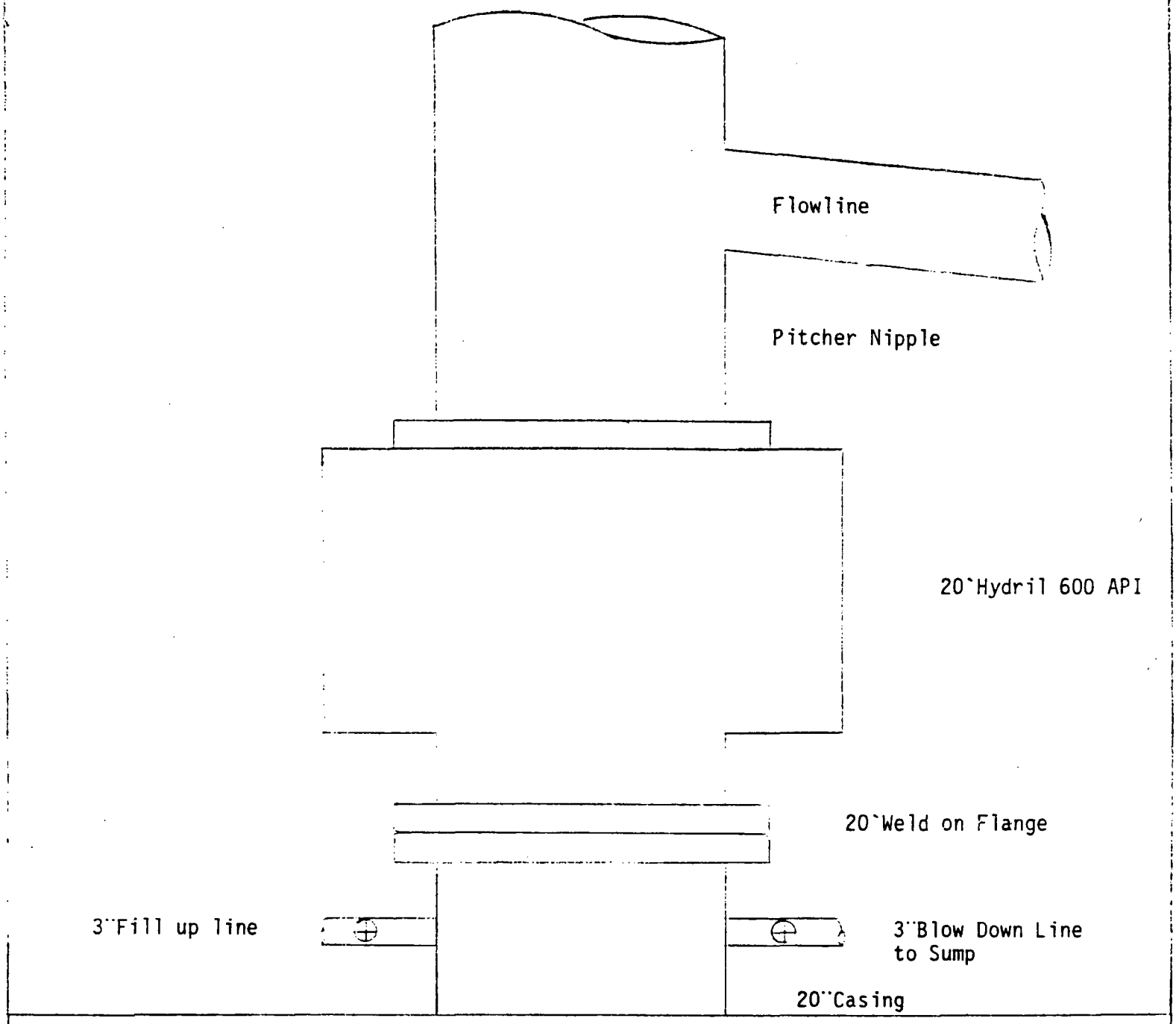
Centralizers and Scratchers - Number, Type and Spacing
1. Run 2 centralizers in lap area and 2 on each of the bottom jts.

Preflush, Displacement Rate, Plugs, Reciprocation, Etc.
1. Circulate at least 2 complete rounds before cementing.

Pressure Testing and Landing
1. WOC 12 hours. Clean out to the top of the 9-5/8" liner. Test lap to 500 psi
Squeeze lap if necessary. Clean out and retest until a test is obtained.

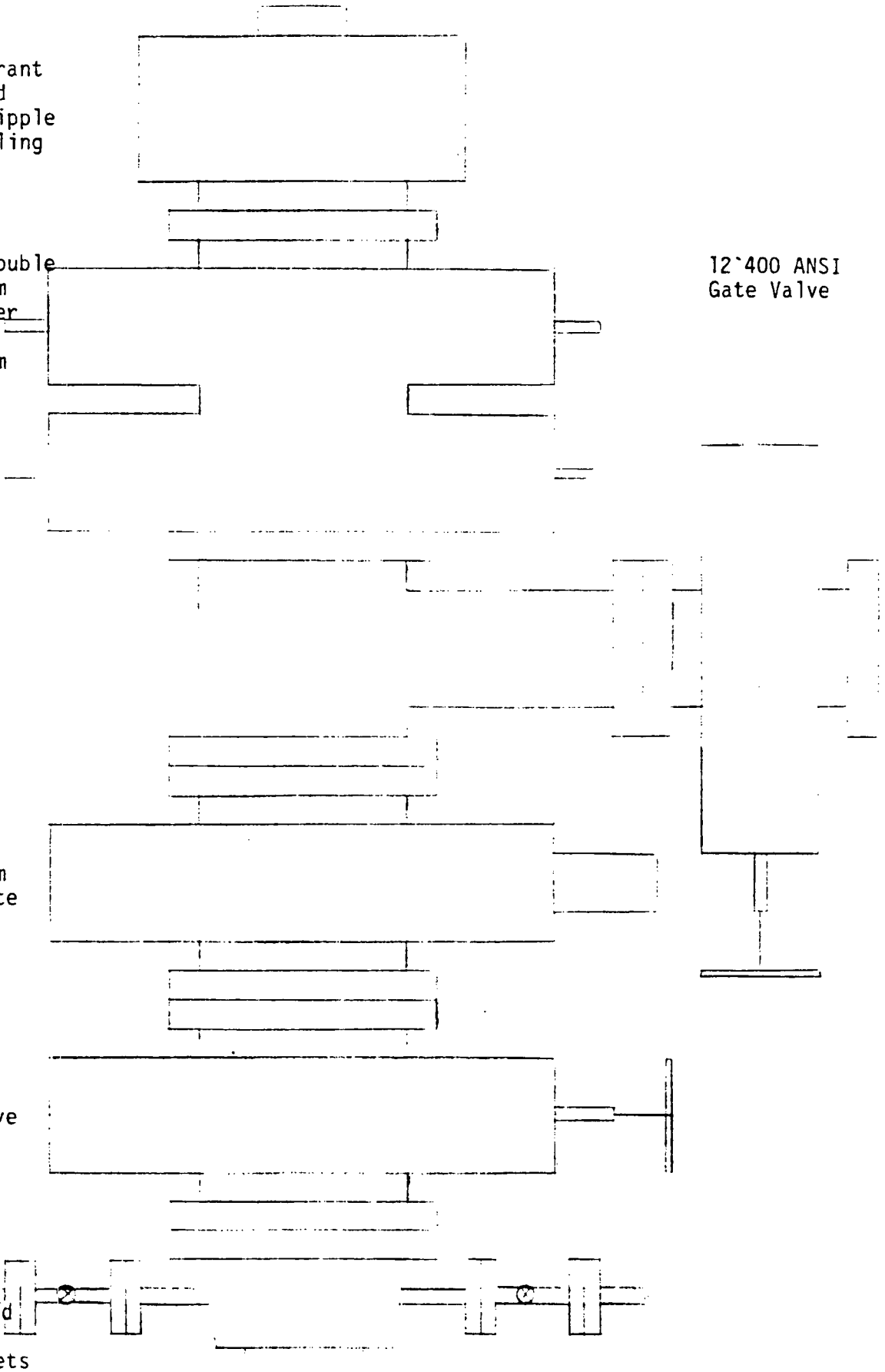
(No change in BOPE until Tie-Back) BOP PROGRAM

API Stack	Working Pressure	Min. Bore inches	Type	Test Pressures - PSI Ram Type	Annular	Rot. Head
see Draw. 002	960 psi	12¼"	Annular and CSO	500 PSI	500 PSI	500 PSI



BLOW OUT PREVENTER STACK FOR 20`` CASING

Drawing No. 001



BLOW OUT PREVENTER STACK FOR 13-3/8`Casing

Drawing No. 002

Form G-103
Adopted 10/1/74

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U. S. G. S		
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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease State ☐ Fed. & Fee ☒

5.a State Lease No. N/A

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation ☐ Other: Geothermal Exploration; Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name

2. Name of Operator: Steam Reserve Corporation

8. Farm or Lease Name: NM-34790 - Minerals Archie Green - Surface

3. Address of Operator: 1707 Cole Blvd., Golden, CO 80401

9. Well No. 55

4. Location of Well: Unit Letter 2411.9 Feet From The East Line and 2329.1 Feet From The South Line, Section 7 Township 25 South Range 19 West NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*: GR 4201'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	☐
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER Change of Operator	☒			OTHER	☐		

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Steam Reserve Corporation is the new Operator for Well No. 55. Steam Reserve Corporation is a subsidiary of AMAX Exploration, Inc., the former operator of this well.

Note: Steam Reserve Corporation holds record title to all former AMAX Exploration, Inc. geothermal leases in New Mexico.

RECEIVED
OCT 30 1984
OIL CONSERVATION DIVISION
SANTA FE

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Gary L. Bennett TITLE Attorney-in-Fact DATE 10-23-84

APPROVED BY Roy E. Johnson TITLE DISTRICT SUPERVISOR DATE 10-29-84

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

October 15, 1984

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Steam Reserve Corporation
1707 Cole Boulevard
Golden, Colorado 80401

Re: $10,000 Multiple-Well Geothermal Bond,
AMAX Exploration, Inc., Principal
Firemen's Insurance Company of Newark, New Jersey, Surety, Hidalgo County
Bond No. 224 45 94

Gentlemen:

We are in receipt of the rider changing the name of principal on the above-captioned geothermal bond to Steam Reserve Corporation. Before we can approve this rider, it will be necessary to send Mr. Roy Johnson of this office G-103's on any well covered by this bond.

Just as soon as this has been done, I will proceed with the processing of this rider.

Sincerely,

DIANE RICHARDSON
Administrative Secretary

dr/

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that Steam Reserve Corporation, a Delaware corporation (hereinafter called the "Company"), qualified to do business in the States of Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, Colorado, New Mexico, Montana and Wyoming does hereby appoint Gary L. Bennett its true and lawful attorney for the Company and in the name of the Company or in his own name or otherwise as may be required by Law:

(1) For the purposes of acquiring, utilizing or disposing of geothermal and related property interests, to sign, without the necessity of a corporate seal or attestation, permits, leases, applications, and bonds, instruments of title and such other documents of any type or nature which may be required to accomplish the foregoing.

(2) To prepare, file, and/or accept for the Company, with regard to the Company's geothermal operations in the aforementioned states, such notices of intent to conduct geothermal operations, notices of completion of operations, and applications for the acquisition, utilization or disposal of water as may be required or convenient to the accomplishment of the foregoing.

This appointment is personal to Gary L. Bennett and may not be delegated or assigned by him, and any attempt to so delegate or assign this appointment shall render it void for all purposes.

This appointment shall expire at midnight, December 31, 1984.

IN WITNESS WHEREOF, Steam Reserve Corporation, has hereunto executed and affixed its corporate seal this 1st day of February, 1984.

ATTEST:

/Assistant Secretary

STEAM RESERVE CORPORATION

Vice President

STATE OF COLORADO)
) ss.
COUNTY OF JEFFERSON)

The foregoing instrument was acknowledged before me this 1st day of February, 1984, by William M. Dolan, the Vice President of Steam Reserve Corporation, on behalf of the corporation.

Notary Public

My commission expires:

My Commission Expires May 2, 1986

Eastman Whipstock
A PETROLANE COMPANY

REPORT
of
SUB-SURFACE
DIRECTIONAL
SURVEY

STEAM RESERVES CORPORATION
COMPANY

ANIMAS 55 WELL NO. 7
WELL NAME

HIDALGO COUNTY, NEW MEXICO BD2-165
LOCATION

JOB NUMBER	TYPE OF SURVEY	DATE
WT0185-S0160	MAGNETIC MULTI SHOT SURVEY	6-JAN-85

SURVEY BY	OFFICE
TROY ONEY	WEST TEXAS

FORM D-302 R2

STEAM RESERVES CORPORATION
ANIMAS 55 WELL NO. 7
HIDALGO COUNTY, NEW MEXICO BD2-165
JAN. 7, 1985

EASTMAN WHIPSTOCK, INC.
MAGNETIC MULTI SHOT SURVEY WT0185-S0160
SURVEYOR: TROY ONEY (360'-1031')

VERTICAL SECTION CALCULATED IN PLANE OF PROPOSAL

DIRECTION N 0 DEG 0 MIN E

ZERO POINT AT 0.00 0.00

Eastman Whipstock
A PETROLANE COMPANY

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

STEAM RESERVES CORPORATION
ANIMAS 55 WELL NO. 7
HIDALGO COUNTY, NEW MEXICO BD2=165

COMPUTATION TIME 07:57:40 DATE 07-JAN-84

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES FEET		DOGLEG SEVERITY DG/100FT
360.	0 0	0	0.	360.00	0.00	0.00	0.00	0.00
CASING ASSUMED VERTICAL TO 360 FT.								
373.	0 15	N 58 W	13.	373.00	0.01	0.01 N	0.02 W	1.92
465.	0 45	S 83 W	92.	465.00	0.19	0.19 N	0.79 W	0.63
559.	0 15	N 58 W	94.	558.99	0.36	0.36 N	1.58 W	0.61
654.	0 15	N 65 W	95.	653.99	0.56	0.56 N	1.94 W	0.03
748.	0 15	S 34 W	94.	747.99	0.46	0.46 N	2.31 W	0.35
842.	0 15	S 20 W	94.	841.99	0.09	0.09 N	2.49 W	0.06
937.	0 30	S 7 W	95.	936.98	-0.51	0.51 S	2.64 W	0.28
1031.	1 15	S 17 W	94.	1030.98	-1.91	1.91 S	2.93 W	0.81

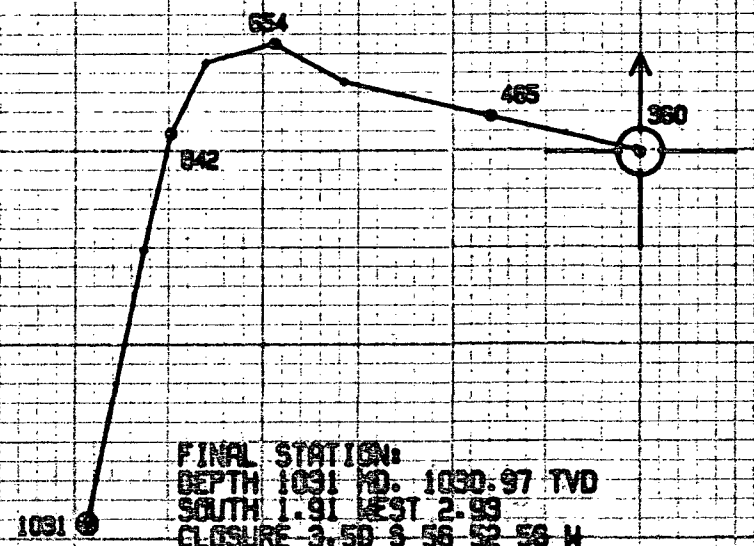
FINAL CLOSURE - DIRECTION: S 56 DEGS 53 MINS W
DISTANCE: 3.50 FEET

STERM RESERVES CORPORATION
ANIMAS 55 WELL NO. 1
HIDALGO COUNTY, NEW MEXICO B02-165

EASTMAN WHIPSTOCK, INC.

HORIZONTAL PROJECTION

SCALE 1 IN. = 1 FEET
DEPTH INDICATOR: MD



FINAL STATION:
DEPTH 1031 MD, 1030.97 TVD
SOUTH 1.91 WEST 2.99
CLOSURE 3.50 S 56 52 56 W

Eastman Whipstock
A PETROLANE COMPANY
P.O. Box 6341/Midland, Texas 79711-0341/(915) 563-0511

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, TROY ONEY, in the employ of Eastman Whipstock, Inc., did on the days of JAN. 6th, 1985 thru JAN. 6th, 1985 conduct or supervise the taking of a MAGNETIC MULTI SHOT survey by the method of magnetic orientation from a depth of 360 feet to 1031 feet, with recordings of inclination and direction being obtained at approximate intervals of 94 feet.

This survey was conducted at the request of STEAM RESERVES CORP. for their ANIMAS 55 WELL NO. 7, HIDALGO County, State of NEW MEXICO, in the _____ field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Troy Oney
Directional Supervisor/Surveyor

The data for this survey has been examined by me and confirms to principles and procedures set forth by Eastman Whipstock, Inc.

Before me, the undersigned authority, on this day personally appeared TROY ONEY, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this information is a true statement of facts therein recited.

Subscribed and sworn to before me on this 24TH day of JAN, 1985.

Roy L. Steinke
Notary Public in and for the
County of Midland, Texas

NOTARY PUBLIC STATE OF TEXAS
ROY L. STEINKE
Notary Public, State of Texas
My Commission Expires July 9, 1985

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

JAN 17 1978
CONSERVATION COM.
Santa

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease State [ ] Fee [X]

5a. State Lease No.
NA

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name
NA

2. Name of Operator
AMAX Exploration, Inc.

8. Farm or Lease Name
Gomez

3. Address of Operator
4704 Harlan Street, Denver, Colorado 80212

9. Well No.
T-128

4. Location of Well
UNIT LETTER F, 2000 FEET FROM THE North LINE AND 2500 FEET FROM THE West LINE, SECTION 7 TOWNSHIP 25S RANGE 19W NMPM.

10. Field and Pool, or Wildcat
NA

15. Elevation (Show whether DF, RT, GR, etc.)
4195' (GR)

12. County
Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER completion and abandonment [X]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 204.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 1.91cm (3/4") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings.

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Olson TITLE Managing Geologist, Geothermal Exploration DATE January 13, 1978

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 1-18-78

CONDITIONS OF APPROVAL, IF ANY:

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Land Office		
BLM	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe, New Mexico 87501

Form C-101

APR 11 19[illegible]
OIL CONSERVATION COMM.
Santa Fe

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

3A. Indicate Type of Lease: STATE [ ] FEE [X]

5. State Lease No.: NA

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: Gomez

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: T-128

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER F LOCATED 2000' FEET FROM THE north LINE AND 2500' FEET FROM THE west LINE OF SEC. 7 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: 500 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: rotary

21. Elevations (Show whether DF, RT, etc.): 4195'

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor: Southwest Drilling & Exploration, Inc.

22. Approx. Date Work will start: April 18, 1977

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6" diameter	1 inch in outside diameter PVC pipe	5 ounce	total depth	cement upper 10 feet	

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

In the event well-bore extends below fresh water sands, operator agrees to either set casing or plug back hole to protect such acquifers. Upon conclusion of temperature observation period well is to be plugged with cement from surface to ten feet of depth or greater.

APPROVAL VALID
FOR 90 DAYS UNLESS
DRILLING COMMENCED

EXPIRES 7/11/77

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Harry J. Olson Title Managing Geologist, Geothermal Exploration Date April 6, 1977

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/11/77

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	Gomez	T-128

Unit Letter	Section	Township	Range	County
NA	7	25S	19W	Hidalgo

Actual Footage Location of Well:
2000' feet from the north line and 2500' feet from the west line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4195'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

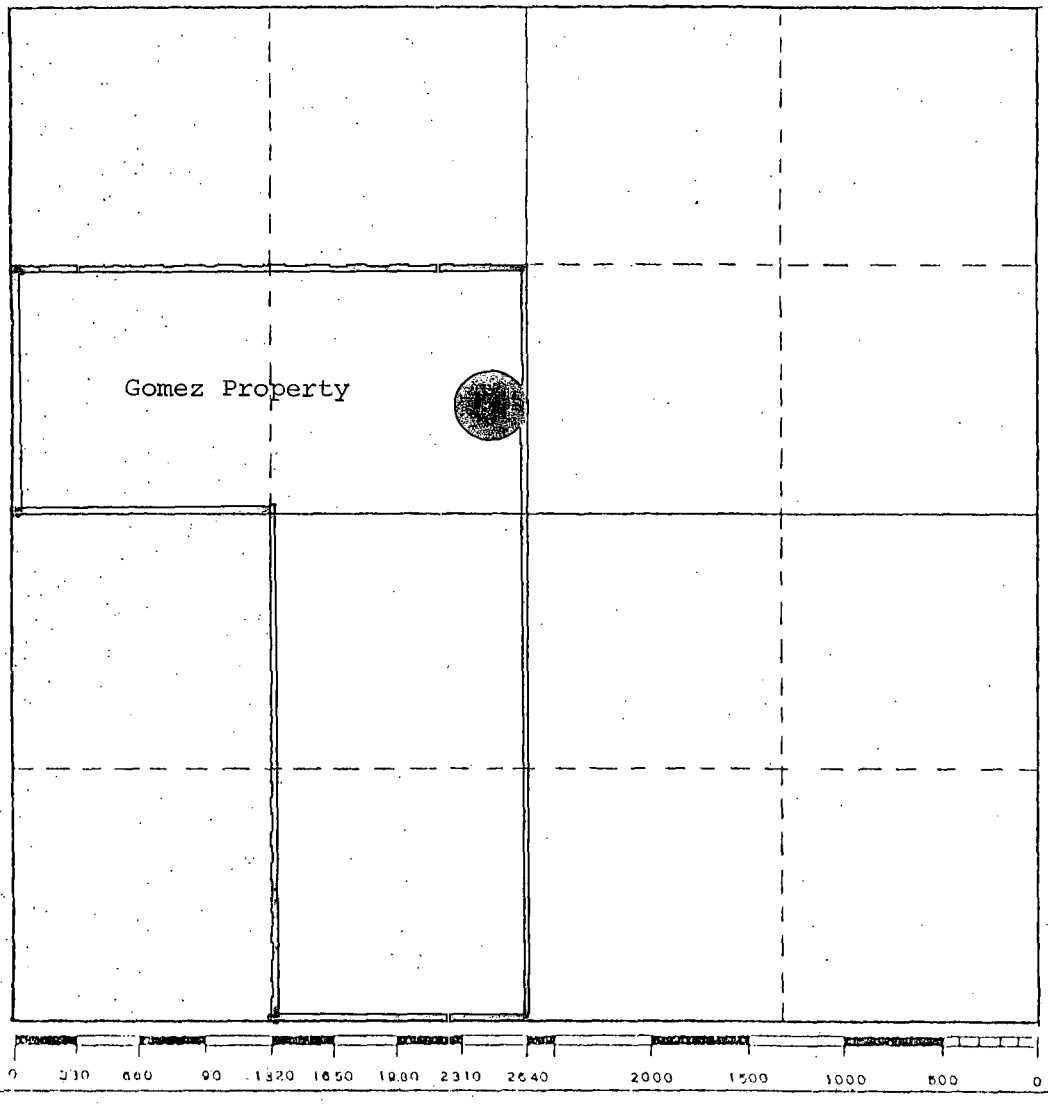
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Harry J. Olson

Position: Managing Geologist, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: April 6, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		✓
N.M.B.M.		
U.S.G.S.		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

SEP 21 1977

5. Indicate Type of Lease: State [ ] Fee [X]

6. State Lease No.: NA

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: Gomez

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

9. Well No.: T-130

4. Location of Well: UNIT LETTER K, 1500 FEET FROM THE South LINE AND 1500 FEET FROM THE West LINE, SECTION 7 TOWNSHIP 25S RANGE 19W NMPM.

10. Field and Pool, or Wildcat: NA

15. Elevation (Show whether DF, RT, GR, etc.): 4195 ft. GR

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Completion and Abandonment [X]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 201.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 1.91cm (3/4") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings.

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Olson TITLE Managing Geologist Geothermal Exploration DATE September 8, 1977

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/26/77

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	4	
DISTRIBUTION		
File	1	✓
N.M.B.M.	1	
U.S.G.S.	1	
Operator	1	
Land Office		
BLM	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe, New Mexico 87501

Form C-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

APR 11 1977
OIL CONSERVATION COM.
Santa Fe

5A. Indicate Type of Lease: State [ ] Fee [X]

5. State Lease No.: COMM. NA

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

1b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: Gomez

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: T-130

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER K LOCATED 1500' FEET FROM THE south LINE

1500' FEET FROM THE west LINE OF SEC. 7 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
500 feet	Alluvium or Tertiary Volcanics	rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4195'	multiple	Southwest Drilling & Exploration, Inc.	April 18, 1977

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6" diameter	1 inch in outside diameter PVC pipe	5 ounce	total depth	cement upper 10 feet	

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

In the event well-bore extends below fresh water sands, operator agrees to either set casing or plug back hole to protect such acquifers. Upon conclusion of temperature observation period well is to be plugged with cement from surface to ten feet of depth or greater.

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED

EXPIRES 7/11/77

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Harry J. Olsen Title Managing Geologist, Geothermal Exploration Date April 6, 1977

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/11/77

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	Gomez	T-130

Unit Letter	Section	Township	Range	County
NA	7	25S	19W	Hidalgo

Actual Footage Location of Well:

1500' feet from the south line and 1500' feet from the west line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4195'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

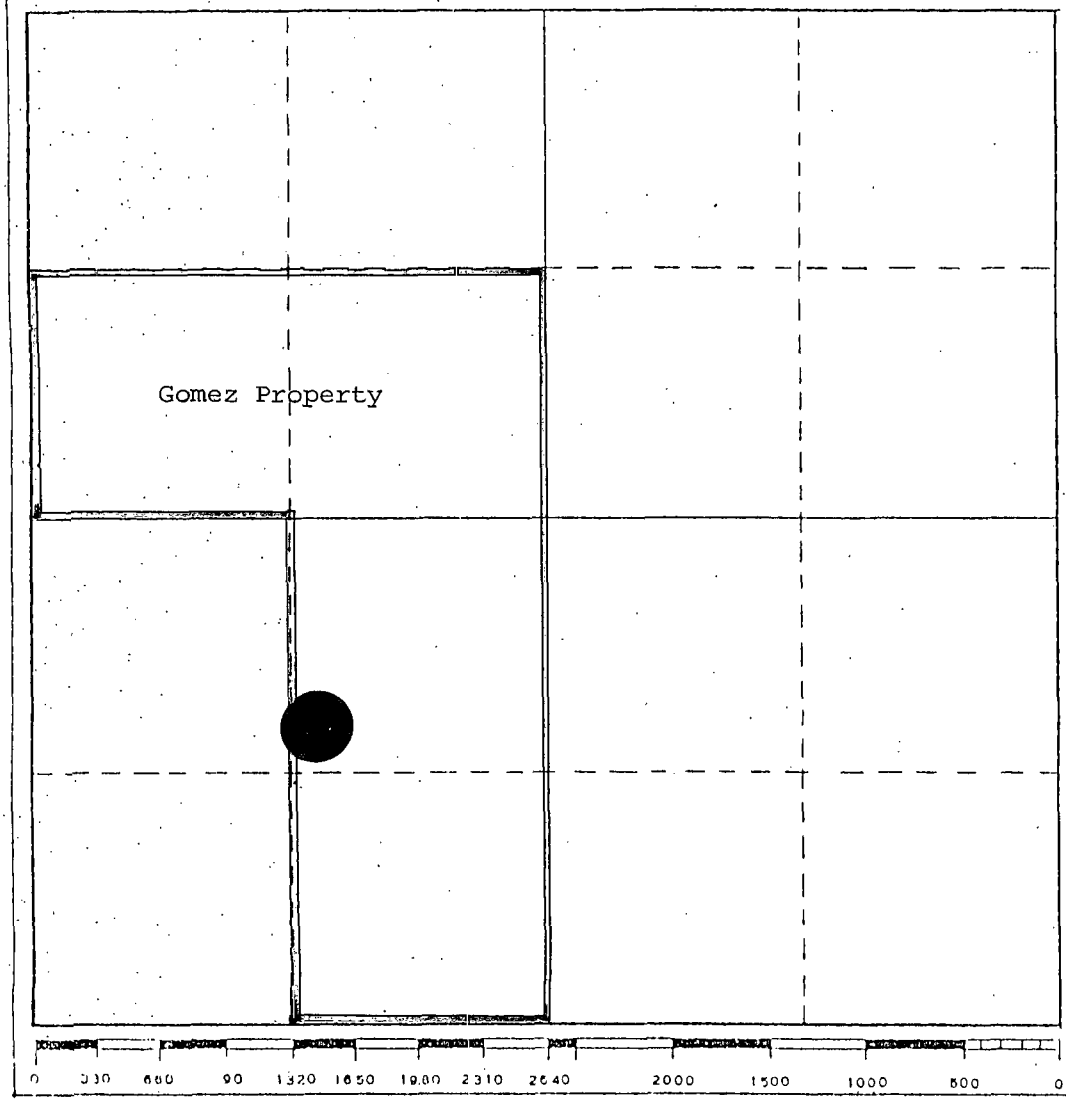
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Harry J. Olson

Name: Harry J. Olson

Position: Managing Geologist, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: April 6, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyer

Certificate No.

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File	1	✓
N. M. B. M.		
U. S. G. S		
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
Adopted 10/1/74

RECEIVED
MAY 25 1981
OIL CONSERVATION DIVISION
SANTA FE

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease State XX Fee ☐

5.a State Lease No. GTR-006-1

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit –" (Form G-101) for Such Proposals.)

1. Type of well: Geothermal Producer ☐ Temp. Observation XX; Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: N/A

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: N/A

3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033

9. Well No.: 672-206

4. Location of Well
Unit Letter B 2,300 Feet From The East Line and 50 Feet From The North Line, Section 8 Township 25S Range 19W NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*: 4,270' GR

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG & ABANDONMENT XX
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Please refer to Exhibit A

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Wendy E. Merrill

SIGNED Wendy E. Merrill TITLE Supervisor, Land Records and Permits DATE May 8, 1981

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 6/12/81

CONDITIONS OF APPROVAL, IF ANY:

EXHIBIT A

METHOD OF COMPLETION

After the drill hole was completed and the drill stem removed from the hole, a 1" diameter iron pipe, which had been capped on the bottom, was inserted into the hole. The pipe was filled with water and capped. The area around the intruded pipe was then backfilled with drill cuttings.

ABANDONMENT PROCEDURE

The iron pipe was cut off below ground level and the upper 3m (10 feet) was filled with cement. Any remaining depression was filled with soil and raked to restore the site to its original appearance and contour. All drilling-related refuse was removed and disposed of properly.

LITHOLOGIC LOG

Project: Animas

Hole: 672-206

Elevation: 4,270 feet (1,302m)

Date Drilled: 9/21/80-9/26/80

Location: T25S R19W Sec. 8 NW/NW/NE

Method: mud

Geologist: Alan Shenker

Gamma: background

Depth (m)	Description
0-6	Alluvium, predominantly coarse, very coarse sand and granules, consisting of a variety of welded tuff lithologies (similar to those observed below 143m in hole 672-225). Minor $CaCO_3$.
6-30	Same mixed volcanic alluvium as above, but with boulder throughout.
30-55	Same mixed volcanic alluvium as above with boulders, but somewhat cemented with $CaCO_3$, evidenced by decreased penetration rates in drilling.
55-67	Reddish brown (oxidized) fine-grained ash flow tuff. Interval represents upper weathered or altered surface of an extensive flow unit.
67-93	Reddish dark gray fine-grained ash flow tuff containing quartz fragments (both euhedral and rounded). Small spots of iron oxide are common throughout as are blebs of bright green epidote (?) and/or chlorite.
93-117	Reddish brown fine-grained ash flow tuff. Probably represents the oxidized interflow and/or fractured portion of the dark gray tuff. Drilling rates up significantly.
117-125	Reddish brown sandy clay. Extremely weathered or altered version of the ash flow tuff. Strongly effervescent in HCI.
125-146	Reddish dark gray ash flow tuff. Same as 67-93m interval. Common iron-oxide specks.
146-155	Reddish dark gray ash flow tuff with some reddish brown clayey zones (fast drilling breaks).
155-168	Mostly reddish dark gray ash flow tuff with varying amounts of reddish brown and brown clayey horizons.
168-195	Reddish dark gray ash flow tuff.
195-229	Reddish brown and brown clayey altered ash flow tuff.
229-240	Hard reddish dark gray ash flow tuff.
240-244.5	Red clayey altered ash flow tuff. Very easy drilling.
244.5-277	Generally hard reddish dark gray ash flow tuff with minor amounts of reddish brown and brown altered clayey material; possibly up-hole contamination.

LITHOLOGIC LOG

Project: Animas

Hole: 672-206

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (m)	Description
277-282	Soft brown clayey altered ash flow tuff. Easy drilling.
282-284+	Extremely hard reddish dark gray ash flow tuff.
	Conductivity Samples:
	K672-206-2 - 67-93m K672-206-6 - 240-244.5m

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

(1)

ΔT Well No. 672-206

Property-Project Animas 672 Depth Logged 284 m

Map Swallow Fork Peak Scale 1:24,000 Date: Drilled 9/21-9/26/80 Logged 11-20-80

State N.M. County Hidalgo, ___ of NW of NW of NE of Sec 8 T 25S R 19W

Instrument Fluid Dynamics 167 Operator Shenker Elevation 4250' (ft/m)

Comments Battery @ 10.2 v

Card A

Date Logged

JUSTIFY

Proj No (1–5)	Well No (6–10)	DA (11–12)	MO (14–15)	YR (17–18)	19*	20*
672	206	20	11	80	C	M

*19-Write F if Fahrenheit, 20-Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)	Drilled DA (61–62)	Drilled MO (64–65)	Drilled YR (67–68)
Jeff Shenk's Ferric.	AES/		21	09	80

(Approx. location, water well?, oil test?, etc.)

Card

Map Location **

Scale Unit IN CM (21–25)	Map Size (7.5, 15., 60.) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	32.	07.9	108.	52.5

Use decimals

** Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−)(E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	80
12.40	22.10	4270.	F

Use decimals

Write M if if meters

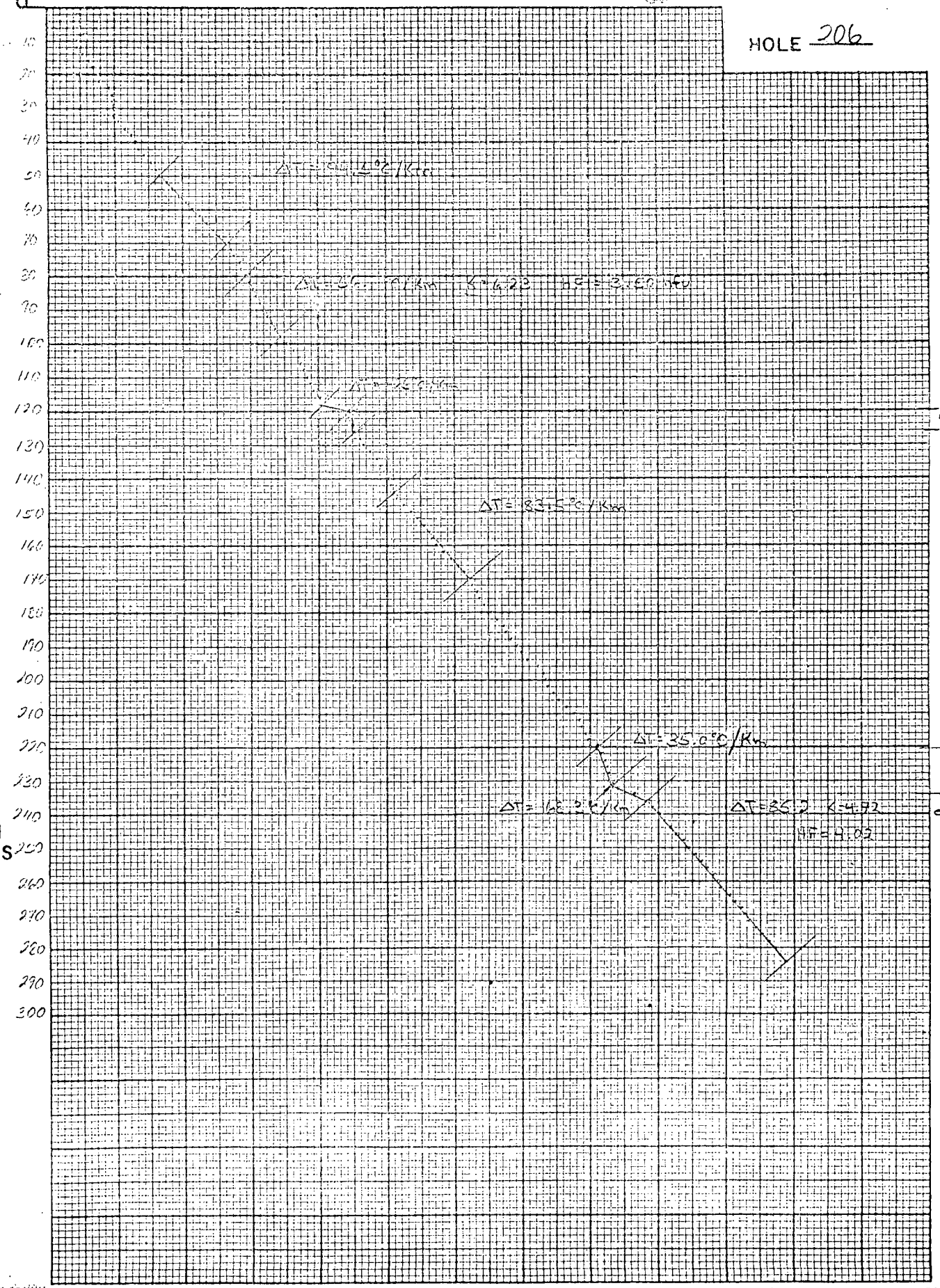
Best cond. (−K)

Downward extrapolations (−ΔK)

Segment	Start	End	K	ΔK
Segment 1 = Depths	50.	70.		
Segment 2	80.	98.	6.23	.5
Segment 3	116.	118.		
Segment 4	118.	124.		
Segment 5	144.	170.		
Segment 6	220.	232.		
Segment 7	232.	236.		
Segment 8	236.	284.	−4.72	−.5
Segment 9	.999			
Segment 10				

After final segment Start = .999

HOLE 206


ΔT = 12.2°C/Km
ΔT = 8.3°C/Km
ΔT = 35.0°C/Km
ΔT = 25.2 K = 4.92
HF = 4.02
Aquifer @ 29°C
Water entry? 37°C
DEPTH METERS
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
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250
260
270
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290
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28
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32
34
36
38
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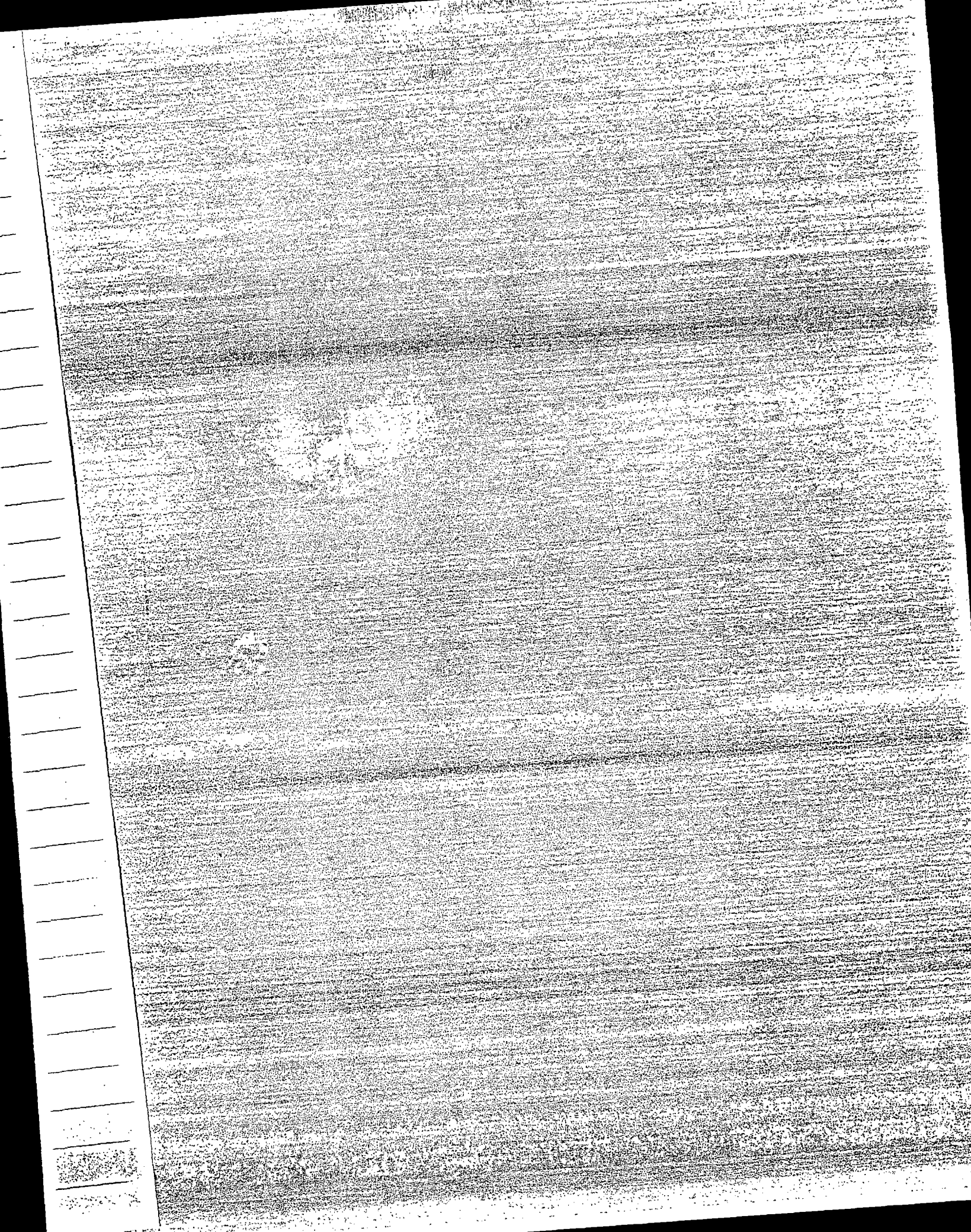
42
44
TEMPERATURE °C



Date Logged: 11-20-80

ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
42	10.08	22.72				H_2O	
43	10.05	22.80	.08	80		↓	
44	10.02	22.87	.07	70			
45	9.964	23.01	.14	140			
46	9.943	23.07	.06	60			
47	9.904	23.17	.10	100			
48	9.875	23.24	.07	70			
49	9.852	23.29	.05	50			
50	9.824	23.37	.08	80			
51	9.787	23.47	.10	100			
52	9.743	23.59	.12	120			
53	9.711	23.67	.08	80			
54	9.676	23.76	.10	100			
55	9.640	23.86	.10	100			
56	9.601	23.96	.10	100			
57	9.569	24.04	.08	80			
58	9.538	24.13	.09	90			
59	9.504	24.22	.09	90			
60	9.464	24.33	.11	110			
61	9.424	24.43	.10	100			
62	9.374	24.57	.14	140			
63	9.336	24.67	.10	100			
64	9.301	24.77	.10	100			
65	9.269	24.85	.08	80			
66	9.237	24.94	.09	90			
67	9.207	25.02	.09	90			
68	9.184	25.09	.06	60			
			.08	80			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
69	9.156	25.17				H_2O	
			.09	90		↓	
70	9.123	25.26					
			.08	80			
71	9.095	25.34					
			.07	70			
72	9.069	25.41					
			.05	50			
73	9.051	25.46					
			.07	70			
74	9.028	25.53					
			.06	60			
75	9.008	25.59					
			.06	60			
76	8.985	25.65					
			.07	70			
77	8.962	25.72					
			.05	50			
78	8.942	25.77					
			.06	60			
79	8.924	25.83					
			.04	40			
80	8.907	25.87					
			.04	40			
81	8.894	25.91					
			.09	90			
82	8.864	26.00					
			.06	60			
83	8.844	26.06					
			.05	50			
84	8.825	26.11					
			.05	50			
85	8.809	26.16					
			.03	30			
86	8.797	26.19					
			.04	40			
87	8.783	26.23					
			.08	80			
88	8.752	26.31					
			.04	40			
89	8.744	26.35					
			.06	60			
90	8.723	26.41					
			.06	60			
91	8.704	26.46					
			.07	70			
92	8.683	26.53					
			.06	60			
93	8.661	26.59					
			.05	50			
94	8.644	26.64					
			.09	90			
95	8.614	26.73					
			.05	50			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
96	8.598	26.78				H_2O	
			.04	40		↓	
98	8.583	26.82					
			.06	60			
100	8.563	26.88					
			.11	110			
102	8.534	26.97					
			.11	110			
104	8.498	27.08					
			.21	105			
106	8.428	27.29					
			.12	60			
108	8.389	27.41					
			.09	45			
110	8.360	27.50					
			.07	35			
112	8.339	27.57					
			.11	55			
114	8.302	27.68					
			.11	55			
116	8.267	27.79					
			.10	50			
118	8.236	27.89					
			.17	85			
120	8.182	28.06					
			.85	425			
122	7.915	28.91					
			-.02	-10			
124	7.922	28.89					
			.06	30			
126	7.903	28.95					
			.07	35			
128	7.882	29.02					
			.04	20			
130	7.871	29.06					
			.20	100			
132	7.811	29.26					
			.11	55			
134	7.778	29.37					
			.16	80			
136	7.730	29.52					
			.21	105			
138	7.666	29.74					
			.10	50			
140	7.639	29.84					
			.12	60			
142	7.601	29.96					
			.06	30			
144	7.586	30.02					
			.13	65			
146	7.548	30.15					
			.08	40			
148	7.523	30.23					
			.11	55			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
146	7.492	30.34				H_2O	
			.18	90		↓	
148	7.412	30.52					
			.24	120			
150	7.372	30.76					
			.19	95			
152	7.320	30.95					
			.20	100			
154	7.262	31.15					
			.11	55			
156	7.233	31.26					
			.08	40			
158	7.211	31.34					
			.09	45			
160	7.188	31.43					
			.23	115			
162	7.124	31.66					
			.28	140			
164	7.048	31.94					
			.18	90			
166	7.001	32.12					
			.15	75			
168	6.962	32.27					
			.13	65			
170	6.928	32.40					
			.13	65			
172	6.893	32.53					
			.11	55			
174	6.866	32.64					
			.12	60			
176	6.825	32.76					
			.13	65			
178	6.800	32.89					
			.15	75			
180	6.763	33.04					
			.23	115			
182	6.705	33.27					
			.18	90			
184	6.659	33.45					
			.08	40			
186	6.638	33.53					
			.14	60			
188	6.603	33.67					
			.16	80			
190	6.564	33.83					
			.16	80			
192	6.525	33.99					
			.20	100			
194	6.476	34.19					
			.29	145			
196	6.408	34.48					
			.13	65			
198	6.377	34.61					
			.04	20			

K=Conductivity

Date Logged: 11-20-80 ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
200	6.366	34.65				H_2O	
			.13	65		↓	
202	6.337	34.78					
			.12	65			
204	6.314	34.91					
			.15	75			
206	6.271	35.06					
			.25	125			
208	6.212	35.31					
			.23	115			
210	6.161	35.54					
			.13	65			
212	6.121	35.67					
			.11	55			
214	6.106	35.78					
			.08	40			
216	6.091	35.86					
			.11	55			
218	6.064	35.97					
			.25	125			
220	6.007	36.22					
			.10	50			
222	5.986	36.32					
			.13	65			
224	5.958	36.45					
			.05	25			
226	5.947	36.50					
			.03	15			
228	5.940	36.53					
			.03	15			
230	5.934	36.56					
			.08	40			
232	5.916	36.64					
			.72	360			
234	5.763	37.36					
			.19	95			
236	5.703	37.65					
			.18	90			
238	5.665	37.83					
			.18	90			
240	5.628	38.01					
			.19	95			
242	5.590	38.20					
			.19	95			
244	5.553	38.39					
			.18	90			
246	5.515	38.57					
			.18	90			
248	5.480	38.75					
			.15	75			
250	5.450	38.90					
252	5.417	39.07	.17	185			
			.20	100			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-206

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
254	5.380	39.24				H_2O	
			.19	95		↓	
256	5.346	39.46					
			.16	80			
258	5.312	39.62					
			.16	80			
260	5.282	39.78					
			.16	80			
262	5.250	39.94					
			.17	85			
264	5.221	40.11					
			.15	75			
266	5.192	40.26					
			.16	80			
268	5.163	40.42					
			.12	60			
270	5.141	40.54					
			.13	65			
272	5.116	40.67					
			.16	80			
274	5.087	40.83					
			.21	105			
276	5.050	41.04					
			.20	100			
278	5.013	41.24					
			.18	90			
280	4.982	41.42					
			.16	80			
282	4.954	41.58					
			.16	80			
284	4.925	41.74					
99999.							

K=Conductivity

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

November 18, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: AMAX Exploration, Inc.'s Drilling activities under "Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well" dated February 15, 1980 - Animas Project (672) Hole Nos. 672-206, 672-225, 672-227 and 672-231

Dear Mr. Ulvog:

This letter is written to inform you about AMAX Exploration, Inc.'s drilling activities to date at the Animas Project in Hidalgo County, New Mexico.

Enclosed is Table I indicating the following drilling information for each hole listed:

1) Hole number and location
2) Elevation at drill site
3) Land status at drill site
4) Commencement and completion dates
5) Total depth and method of drilling

Please be advised that this letter does not constitute completion and abandonment notification. Notices of Completion will be filed at a later date after final temperature measurements have been completed, the holes abandoned, and the reclamation activities carried out.

AMAX Exploration, Inc. requests that the case file for the remainder of the holes permitted under the above-referenced permit by the New Mexico Oil Conservation Commission be left open.

If I can be of further assistance concerning our drilling activities at the Animas Project, please contact me at your earliest convenience.

Sincerely,

AMAX EXPLORATION, INC.

Carolyn J. Holtgrewe
Permit Assistant

CJH/bsw
Enclosure

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

TABLE I

Drilling Information on the Animas Project

Hole No.	Location	Elevation	Land Status	Commencement Date	Completion Date	Depth	Drilling Method
672-206	NW/4NW/4NE/4 Section 8, T25S, R19W, NMPM	4,270'	AMAX Lease GTR-006-1	9/21/80	9/26/80	930'	Mud
672-225	SW/4SE/4SW/4, Section 6, T25S, R19W, NMPM	4,190'	AMAX Lease NM-34790	9/16/80	9/20/80	1,000'	Mud
672-227	NW/4NW/4SE/4, Section 7, T25S, R19W, NMPM	4,200'	AMAX Lease NM-34790	10/2/80	10/4/80	820'	Mud
672-231	NE/4SW/4NE/4, Section 18, T25S, R19W, NMPM	4,230'	AMAX Lease NM-34790	9/26/80	10/2/80	904'	Mud

Form G-101
Adopted 10/

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File	1	✓
N.M.B.M.	1	
U.S.G.S.	1	
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE [X] FEE [ ]
5.a State Lease No.: GTR-006-1

1a. Type of Work: Drill [XX] Deepen [ ] Plug Back [ ]
b. Type of Well: Geothermal Producer [ ] Temp Observation [XX] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA
8. Farm or Lease Name: NA
9. Well No.: 672-206
10. Field and Pool, or Wildcat: Wildcat

2. Name of Operator: AMAX Exploration, Inc.
3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033
4. Location of Well: UNIT LETTER B LOCATED 2,300 FEET FROM THE East LINE AND 50 FEET FROM THE North LINE OF SEC. 8 TWP. T25S RGE. R19W NMPM
12. County: Hildago

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
2,000'	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4,260' ground level	$10,000 Multiple-	Not known at this time	2/15/80

Well Geothermal Exploratory, Development, Injection, or Disposal Well Bond

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
*9 7/8"	7"	17 pound	200'	40	Surface
*6 1/4"	1-1/4"	steel pipe	2,000'	3	

*Hole sizes will not exceed this diameter, but may be smaller depending on bit size availability

(1) Drill 9 7/8" hole to 200'
(2) Run 7" casing
(3) Cement 7" casing to surface
(4) Drill 6 1/4" hole to 2,000'
(5) Run 1 1/4" steel pipe to 2,000'
(6) Cement the top 10' of the 1 1/4" pipe
(7) Fill the 1 1/4" pipe with water
(8) Measure temperature of hole

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 5-14-80
UNLESS DRILLING UNDERWAY

RECEIVED
FEB - 1 1980
OIL CONSERVATION DIVISION
SANTA FE

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed William M. Dolan Title Attorney-in-fact
Manager, Geothermal Exploration Date January 28, 1980

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/15/80

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. BOX 2088 SANTA FE 87501

Form G-102
Adopted 10/1/7

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006-1	672-206

Unit Letter	Section	Township	Range	County
B	8	T25S	R19W	Hildago

Actual Footage Location of Well:
2,300 feet from the East line and 50 feet from the North line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4,260'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

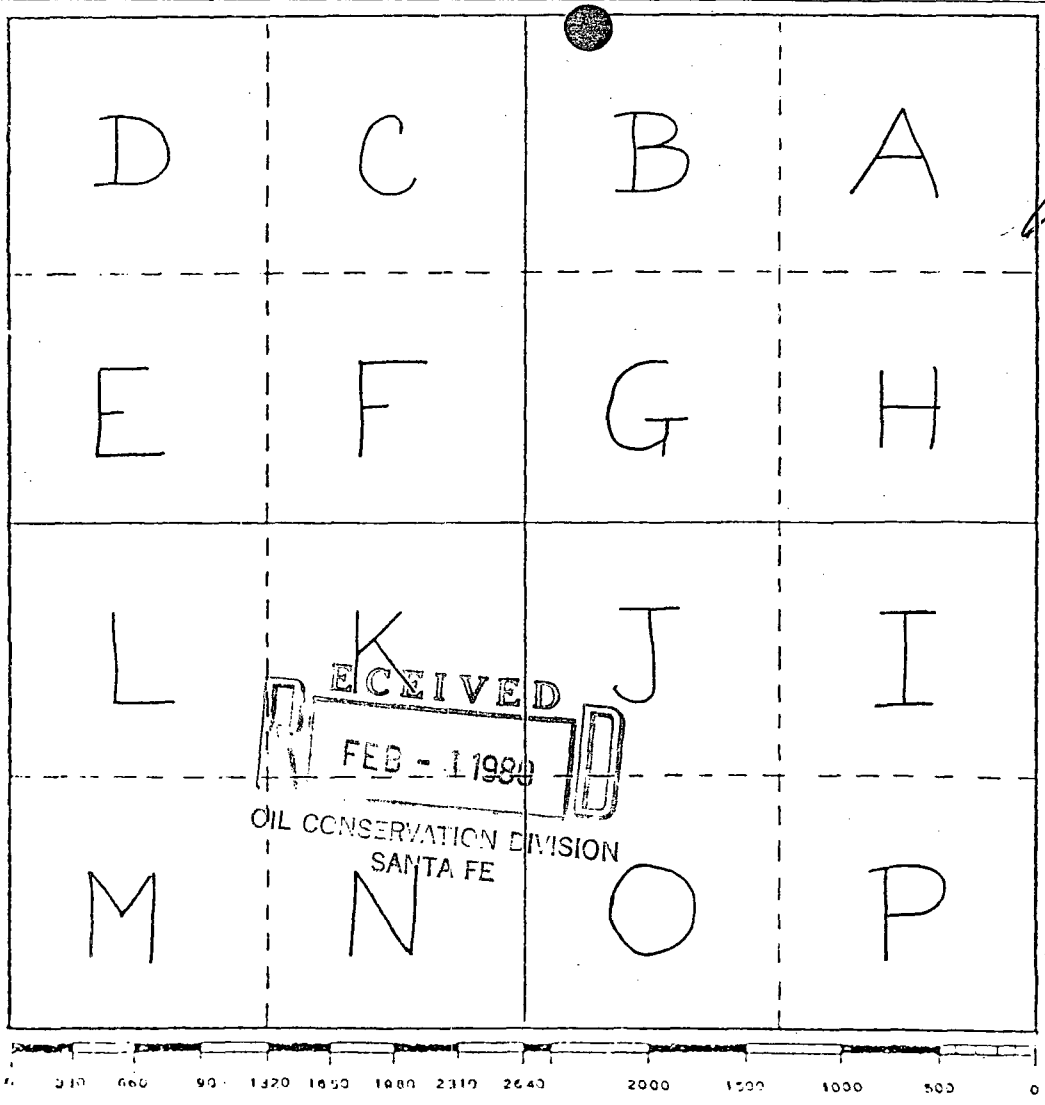
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Attorney-in-fact
Manager, Geothermal Exploratio

Company: AMAX Exploration, Inc.

Date: January 28, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: NA

Registered Professional Engineer and/or Land Surveyor

Certificate No. -

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

April 29, 1980

Amax Exploration, Inc.
Geothermal Branch
7100 West 44th Avenue
Wheat Ridge, Colorado 80033

Gentlemen:

We are in receipt of your letter dated April 22, 1980, requesting extensions for drilling permits on Form G-101 on the following wells:

NA - Well No. 672-206 Unit B, Section 8, Township 25 South, Range 19 West, Hidalgo County, New Mexico, and NA Well No. 672-231 Unit G, Section 18, Township 25 South, Range 19 West, Hidalgo County, New Mexico.

You are hereby granted an additional 90 day extension on each of the above mentioned wells. This permit will expire July 29, 1980.

Very truly yours,

LESLIE A. CLEMENTS
Oil & Gas Inspector

LC/og
cc: Well Files

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

April 22, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well for drilling thermal temperature gradient observation holes to 2,000' or less in Hidalgo County, New Mexico. (Animas Exploration, Inc.: Animas Project - Project No. 672)

Dear Mr. Ulvog:

AMAX Exploration, Inc. requests an extension of our approved permits which will expire on May 14, 1980. AMAX Exploration, Inc. requests extensions for the following permits:

1. Well No. 672-206
2. Well No. 672-231

AMAX Exploration, Inc. anticipates commencing drilling operations in late May, 1980. AMAX Exploration, Inc. personnel will notify the Oil Conservation Commission within 24 hours prior to commencing operations.

Thank you for your assistance with this matter.

Sincerely,

Wendy E. Merrill

Wendy E. Merrill
Permit Coordinator

Enclosure

cc: Harry Olson
Dean Pilkington
Andy Pfaff
Chris Tower

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

WEM/sm

Form G-101
Adopted 10/

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SANTA FE

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK--GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE [X] FEE [ ]

5.a State Lease No.: GTR-006-1

1a. Type of Work: Drill [XX] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [XX] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 672-206

3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033

10. Field and Pool, or Wildcat: Wildcat

4. Location of Well: UNIT LETTER B LOCATED 2,300 FEET FROM THE East LINE AND 50 FEET FROM THE North LINE OF SEC. 8 TWP. T25S RGE. R19W NMPM

12. County: Hildago

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
2,000'	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4,260' ground level	$10,000 Multiple-Well Geothermal Exploratory, Development, Injection, or Disposal Well Bond	Not known at this time	2/15/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
*9 7/8"	7"	17 pound	200'	40	Surface
*6 1/4"	1-1/4"	steel pipe	2,000'	3	

*Hole sizes will not exceed this diameter, but may be smaller depending on bit size availability

(1) Drill 9 7/8" hole to 200'
(2) Run 7" casing
(3) Cement 7" casing to surface
(4) Drill 6 1/4" hole to 2,000'
(5) Run 1 1/4" steel pipe to 2,000'
(6) Cement the top 10' of the 1 1/4" pipe
(7) Fill the 1 1/4" pipe with water
(8) Measure temperature of hole

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 5-14-80
UNLESS DRILLING UNDERWAY

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

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OIL CONSERVATION DIVISION
SANTA FE

ABOVE) SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productiv ne. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed William M. O'Dolan Title Attorney-in-fact
Manager, Geothermal Exploration Date January 28, 1980

(This space for State Use)

APPROVED BY Carl Wilson TITLE SENIOR PETROLEUM GEOLOGIST 2/15/80

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

November 18, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: AMAX Exploration, Inc.'s Drilling activities under "Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well" dated February 15, 1980 - Animas Project (672) Hole Nos. 672-206, 672-225, 672-227 and 672-231

Dear Mr. Ulvog:

This letter is written to inform you about AMAX Exploration, Inc.'s drilling activities to date at the Animas Project in Hidalgo County, New Mexico.

Enclosed is Table I indicating the following drilling information for each hole listed:

1) Hole number and location
2) Elevation at drill site
3) Land status at drill site
4) Commencement and completion dates
5) Total depth and method of drilling

Please be advised that this letter does not constitute completion and abandonment notification. Notices of Completion will be filed at a later date after final temperature measurements have been completed, the holes abandoned, and the reclamation activities carried out.

AMAX Exploration, Inc. requests that the case file for the remainder of the holes permitted under the above-referenced permit by the New Mexico Oil Conservation Commission be left open.

If I can be of further assistance concerning our drilling activities at the Animas Project, please contact me at your earliest convenience.

Sincerely,

AMAX EXPLORATION, INC.

Carolyn J. Holtgrewe

Carolyn J. Holtgrewe
Permit Assistant

CJH/bsw
Enclosure

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

TABLE I

Drilling Information on the Animas Project

Hole No.	Location	Elevation	Land Status	Commencement Date	Completion Date	Depth	Drilling Method
672-206	NW/4NW/4NE/4 Section 8, T25S, R19W, NMPM	4,270'	AMAX Lease GTR-006-1	9/21/80	9/26/80	930'	Mud
672-225	SW/4SE/4SW/4, Section 6, T25S, R19W, NMPM	4,190'	AMAX Lease NM-34790	9/16/80	9/20/80	1,000'	Mud
✓ 672-227	NW/4NW/4SE/4, Section 7, T25S, R19W, NMPM	4,200'	AMAX Lease NM-34790	10/2/80	10/4/80	820'	Mud
672-231	NE/4SW/4NE/4, Section 18, T25S, R19W, NMPM	4,230'	AMAX Lease NM-34790	9/26/80	10/2/80	904'	Mud

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Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State [X] Fee [ ]
5a. State Lease No.: GTR-006

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]
7. Unit Agreement Name: NA
2. Name of Operator: AMAX Exploration, Inc.
8. Farm or Lease Name: NA
3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212
9. Well No.: 4
4. Location of Well: UNIT LETTER D, 800 FEET FROM THE North LINE AND 500 FEET FROM THE West LINE, SECTION 8 TOWNSHIP 25S RANGE 19W NMPM.
10. Field and Pool, or Wildcat: NA
15. Elevation (Show whether DF, RT, GR, etc.): 4300' ground level
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Completion and Abandonment Information [X]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 2.54cm (1") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings. The drilling program was completed on November 6, 1976

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of. Abandonment of hole occurred between December 16 and December 18, 1976.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry O Cesson TITLE Managing Geologist, Geothermal DATE January 5, 1977

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 8/30/77

CONDITIONS OF APPROVAL, IF ANY:

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Operator	1	
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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SEP 22 1976

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [x] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 4

3. Address of Operator: 4704 Harlan St., Denver, CO 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER ~~NA~~ D LOCATED 800 FEET FROM THE North LINE AND 500 FEET FROM THE West LINE OF SEC. 8 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
<750 feet	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4300' ground level	multiple		October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 750 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is than filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN THE EVENT WELL-BORE EXTENDS BELOW FRESH WATER SANDS, OPERATOR AGREES TO EITHER SET CASING OR PLUG BACK HOLE TO PROTECT SUCH ACQUIFERS. UPON CONCLUSION OF TEMPERATURE OBSERVATION PERIOD WELL IS TO BE PLUGGED WITH CEMENT FROM SURFACE TO TEN FEET OF DEPTH OR GREATER.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	4

Unit Letter	Section	Township	Range	County
NA	8	25S	19W	Hidalgo

Actual Footage Location of Well: 800 feet from the North line and 500 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4300'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

NA

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

NA

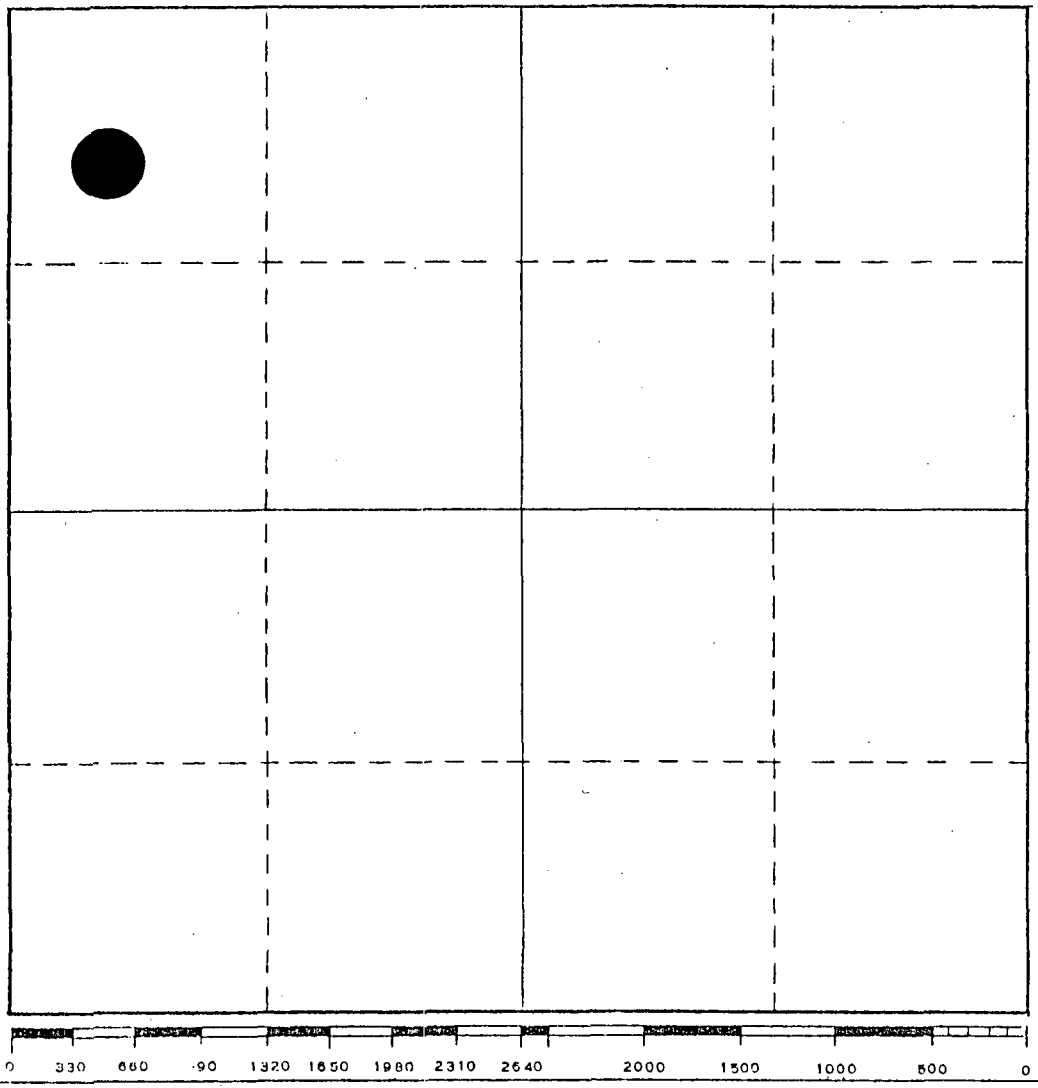
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

SEP 2

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5A. Indicate Type of Lease STATE [X] FEE [ ]

5. State Lease No. GTR-006

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 4

3. Address of Operator: 4704 Harlan St., Denver, CO 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well UNIT LETTER NA LOCATED 800 FEET FROM THE North LINE AND 500 FEET FROM THE West LINE OF SEC. 8 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <750 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 4300' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 750 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is than filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	4

Unit Letter	Section	Township	Range	County
NA	8	25S	19W	Hidalgo

Actual Footage Location of Well: 800 feet from the North line and 500 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4300'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

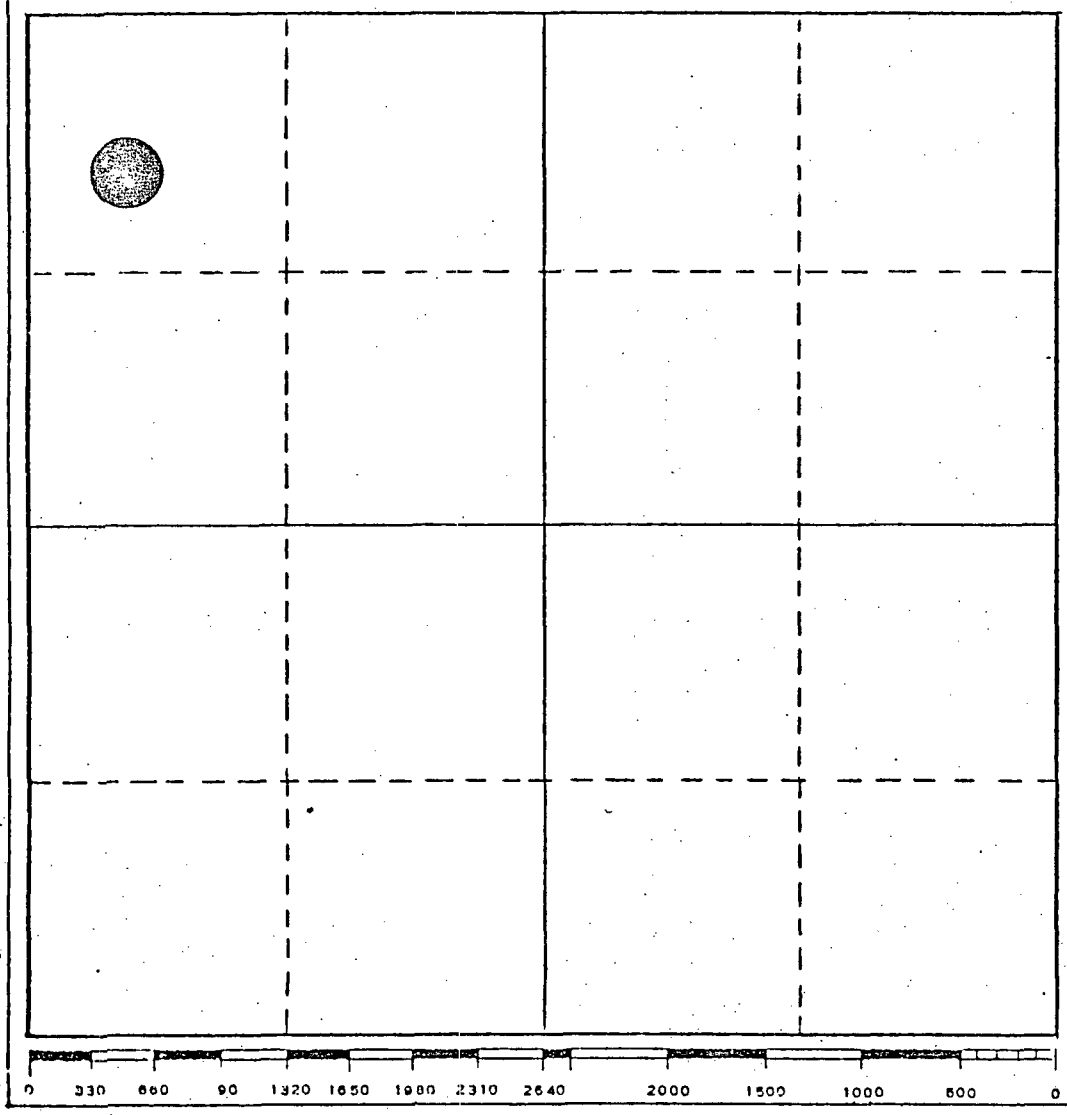
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: NA

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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File	1	✓
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Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1-74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State [X] Fee [ ]

5a. State Lease No.: GTR-006

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: NA

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

9. Well No.: 5

4. Location of Well: UNIT LETTER K, 2000 FEET FROM THE South LINE AND 2000 FEET FROM THE West LINE, SECTION 8 TOWNSHIP 25S RANGE 19W NMPM.

10. Field and Pool, or Wildcat: NA

15. Elevation (Show whether DF, RT, GR, etc.): 4250' ground level

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Completion and Abandonment Information [X]	

17. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 203.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 2.54cm (1") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings. The drilling program was completed on November 6, 1976

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of. Abandonment of hole occurred between December 16 and December 18, 1976.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Cason TITLE Managing Geologist, Geothermal DATE January 5, 1977

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 8/30/77

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SEP 22 1976

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [x] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [x] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 5

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER ~~NA~~ K LOCATED 2000 FEET FROM THE South LINE AND 2000 FEET FROM THE West LINE OF SEC. 8 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <500 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 4250' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN THE EVENT WELL-BORE EXTENDS BELOW FRESH WATER SANDS, OPERATOR AGREES TO EITHER SET CASING OR PLUG BACK HOLE TO PROTECT SUCH ACQUIERS. UPON CONCLUSION OF TEMPERATURE OBSERVATION PERIOD WELL IS TO BE PLUGGED WITH CEMENT FROM SURFACE TO TEN FEET OF DEPTH OR GREATER.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	5

Unit Letter	Section	Township	Range	County
NA K	8	25S	19W	Hidalgo

Actual Footage Location of Well:

2000 feet from the South line and 2000 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4250'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

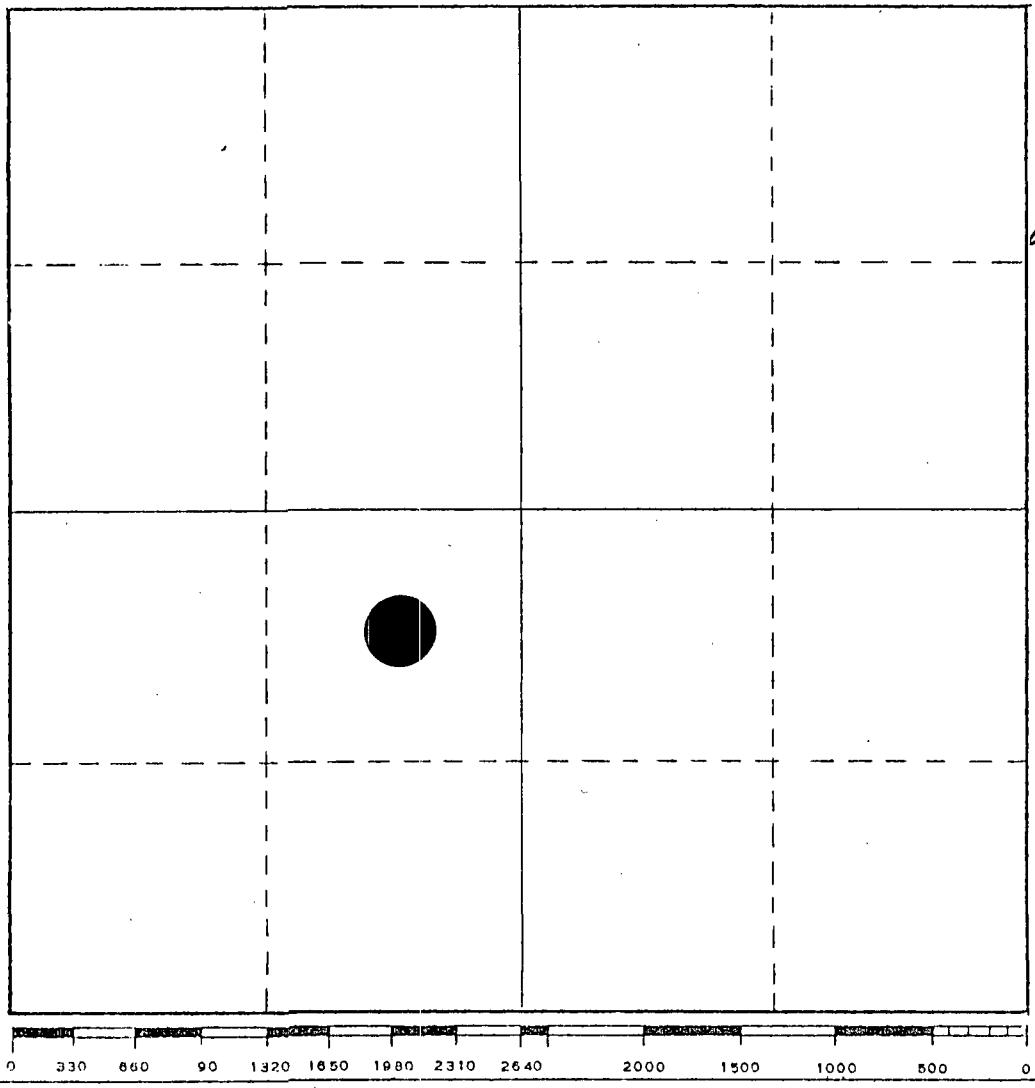
NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SEP 22

OIL CONSERVATION COMM.

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [x] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [x] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 5

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER NA LOCATED 2000 FEET FROM THE South LINE AND 2000 FEET FROM THE West LINE OF SEC. 8 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <500 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: Rotary

21. Elevations: (Show whether DF, RT, etc.): 4250' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	5

Unit Letter	Section	Township	Range	County
NA	8	25S	19W	Hidalgo

Actual Footage Location of Well:
2000 feet from the South line and 2000 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4250'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

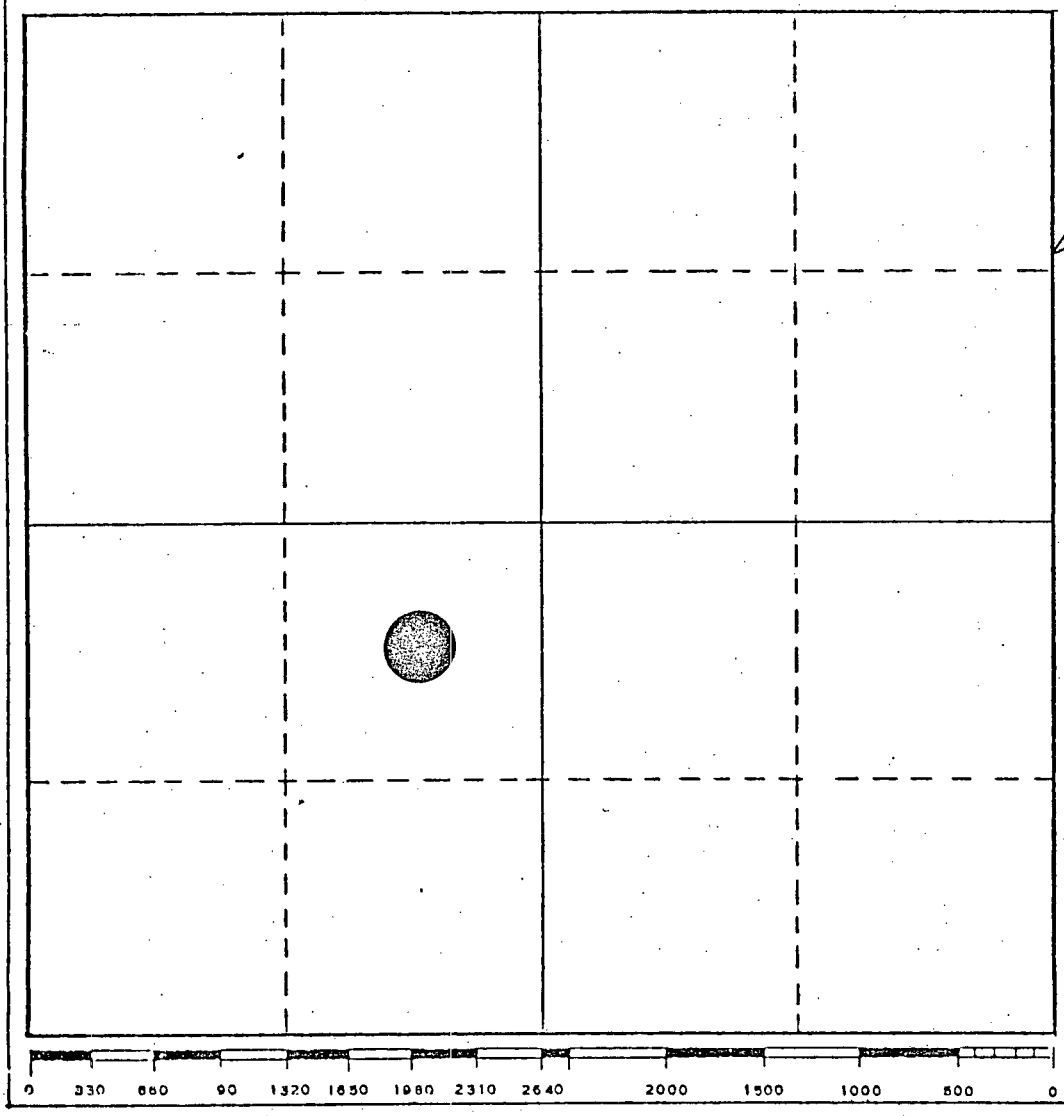
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State [X] Fee [ ]

5a. State Lease No.: GTR-006

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: NA

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

9. Well No.: 6

4. Location of Well: UNIT LETTER G, 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE, SECTION 18 TOWNSHIP 25S RANGE 19W NMPM.

10. Field and Pool, or Wildcat: NA

15. Elevation (Show whether DF, RT, GR, etc.): 4225'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]			COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[X]
PULL OR ALTER CASING	[ ]	CHANGE PLANS	[ ]	CASING TEST AND CEMENT JOB	[ ]		
OTHER	[ ]			OTHER Completion and Abandonment Information	[X]		

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 201.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 2.54cm (1") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings. The drilling program was completed on November 6, 1976

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of. Abandonment of hole occurred between December 16 and December 18, 1976.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Cason TITLE Managing Geologist, Geothermal DATE January 5, 1976

APPROVED BY Carl Weng TITLE SENIOR PETROLEUM GEOLOGIST DATE 5/25/77

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS
ON
GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State [X] Fee [ ]
5a. State Lease No.: GTR-006

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]
7. Unit Agreement Name: NA
2. Name of Operator: AMAX Exploration, Inc.
8. Farm or Lease Name: NA
3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212
9. Well No.: 6
4. Location of Well: UNIT LETTER G, 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE, SECTION 18 TOWNSHIP 25S RANGE 19W NMPM.
10. Field and Pool, or Wildcat: NA
15. Elevation (Show whether DF, RT, GR, etc.): 4225'
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Completion and Abandonment Information [X]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 201.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 2.54cm (1") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings. The drilling program was completed on November 6, 1976

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of. Abandonment of hole occurred between December 16 and December 18, 1976.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Anson TITLE Managing Geologist, Geothermal DATE January 5, 1976

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 5/25/77

CONDITIONS OF APPROVAL, IF ANY:

Memorandum from:

MARK H. ALLDREDGE

Mr. Carl Ulvog

In accordance with our discussion of 10/13/76 herein submitted is Form G-103 proposing relocation of Hole # 6 approved earlier by the Commission on 9/24/76.

Thank you

Mark H Alldredge

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.
4704 HARLAN STREET, DENVER, COLORADO 80212

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Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

RECEIVED
OCT 18 1976
OIL CONSERVATION COMM.
Santa Fe

Form C-103

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

5. Indicate Type of Lease: State [X] Fee [ ]

5A. State Lease No.: GTR - 006

1. Type of Well: Geothermal Producer [ ] Low-Temp Thermal [ ] Temp Observation [X] Injection/Disposal [ ]

7. Unit Agreement Name: N.A.

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: NA

3. Address of Operator: 4704 Harlan St., Denver, Colorado 80212

9. Well No.: 6

4. Location of Well: UNIT LETTER ____, 2000 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE, SECTION 18 TOWNSHIP 25S RANGE 19W NMPM.

10. Field and Pool, or Wildcat: NA

15. Elevation (Show whether DF, RT, (GR) etc.): 4225'

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER relocate drill site [ ]		OTHER [ ]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

AMAX Exploration, Inc. requests approval of the relocation of drill site #6 originally located 700 feet from the south line and 2000 feet from the west line of section 18, T25S, R19W, and approved by your office 9/24/76, to the location listed above. Access to this revised site will be less disruptive to the local environment and less hazardous to the drill rig. The revised site remains within the same lease unit as the original site. All other procedures and stipulations prevail.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED [signature] TITLE Manager, Geothermal Exploration DATE 10-14-76

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 10/21/76

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	5	
DISTRIBUTION		
File	1	✓
N.M.B.M.	1	
U.S.G.S.	1	
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

SEP 22 1976

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 6

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER ~~NA~~ N LOCATED 700 FEET FROM THE South LINE AND 2000 FEET FROM THE West LINE OF SEC. 18 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <500 feet

19A. Formation: Alluvium or Tertiary volcanics

20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 4220' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN THE EVENT WELL-BORE EXTENDS BELOW FRESH WATER SANDS, OPERATOR AGREES TO EITHER SET CASING OR PLUG BACK HOLE TO PROTECT SUCH ACQUIFERS. UPON CONCLUSION OF TEMPERATURE OBSERVATION PERIOD WELL IS TO BE PLUGGED WITH CEMENT FROM SURFACE TO TEN FEET OF DEPTH OR GREATER.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	6

Unit Letter	Section	Township	Range	County
NA	18	25S	19W	Hidalgo

Actual Footage Location of Well:

700 feet from the South line and 2000 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4220'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

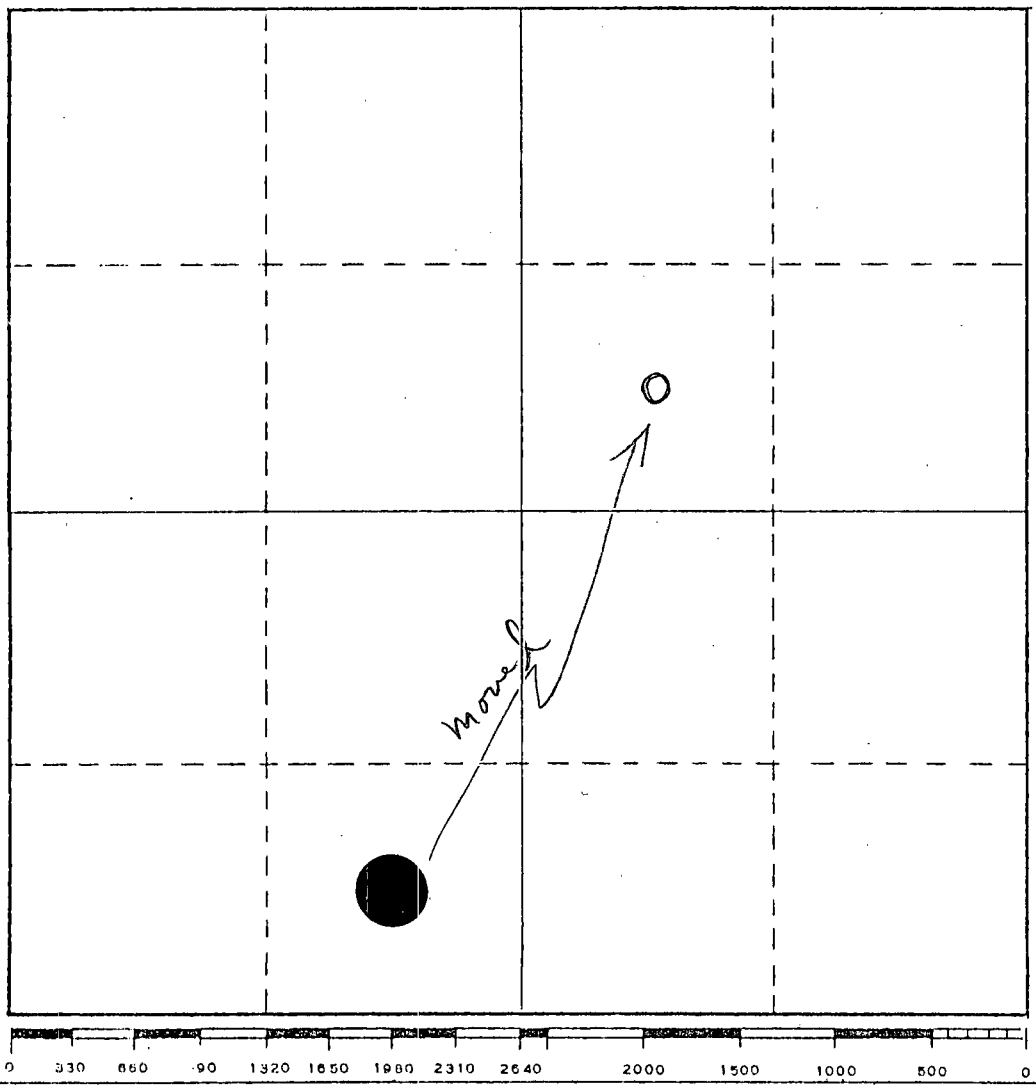
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

NO. OF COPIES RECEIVED		
DISTRIBUTION		
File		
N.M.B.M.		
U.S.G.S.		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-101

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

SEP 22 [illegible]

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Lease No.: GTR-006

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA

8. Farm or Lease Name: NA

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: 6

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER NA LOCATED 700 FEET FROM THE South LINE AND 2000 FEET FROM THE West LINE OF SEC. 18 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: <500 feet

19A. Formation: Alluvium or Tertiary volcanics

20. Rotary or C.T.: Rotary

21. Elevations (Show whether DF, RT, etc.): 4220' ground level

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor:

22. Approx. Date Work will start: October 1, 1976

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6 inch diameter	1" in outside diameter PVC pipe	5 ounces	total depth	NA	NA

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [signature] Title Manager, Geothermal Exploration Date 9-20-76

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/24/76

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form G-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006	6

Unit Letter	Section	Township	Range	County
NA	18	25S	19W	Hidalgo

Actual Footage Location of Well:

700 feet from the South line and 2000 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4220'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

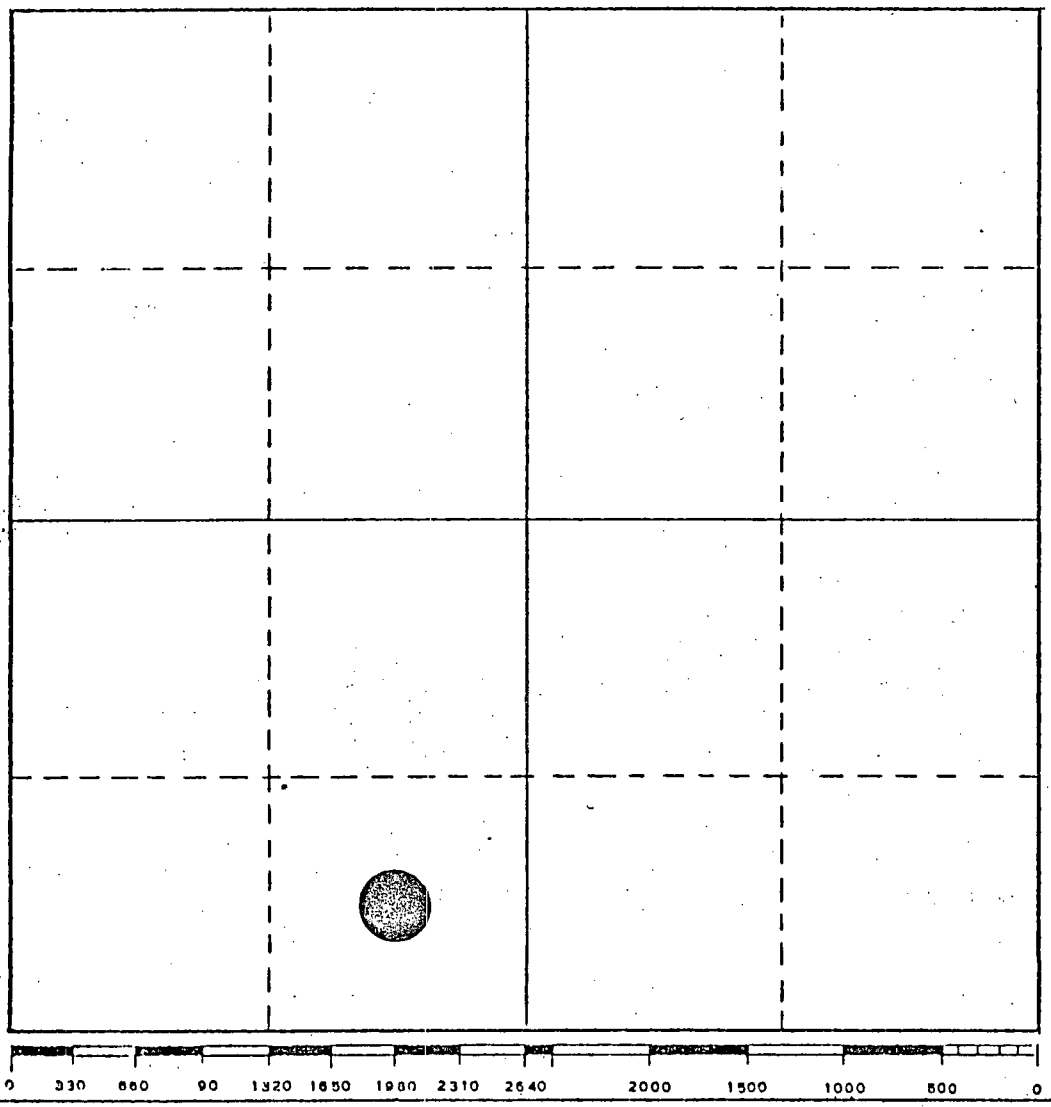
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Manager, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: 9-20-76

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

NO. OF COPIES RECEIVED		
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N. M. B. M.		
U. S. G. S		
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

RECEIVED
MAY 25 1981
OIL CONSERVATION DIVISION
SANTA FE

Form G-103
Adopted 10/1/74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit --" (Form G-101) for Such Proposals.)

1. Type of well — Geothermal Producer ☐ Temp. Observation XX — Low-Temp Thermal ☐ Injection/Disposal ☐

2. Name of Operator: AMAX Exploration, Inc.

3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033

4. Location of Well: Unit Letter G 1,190 Feet From The North Line and 1,350 Feet From The East Line, Section 18 Township 25S Range 19W NMPM.

5. Indicate Type of Lease: State XX Fee ☐

5.a State Lease No.: GTR-006-1

7. Unit Agreement Name: N/A

8. Farm or Lease Name: N/A

9. Well No.: 672-231

10. Field and Pool, or Wildcat: Wildcat

12. County: Hidalgo

15. Elevation *(Show whether DF, RT, GR, etc.)*: 4,230' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐			COMMENCE DRILLING OPNS.	☐	PLUG & ABANDONMENT	X
PULL OR ALTER CASING	☐	CHANGE PLANS	☐	CASING TEST AND CEMENT JOB	☐		
OTHER	☐			OTHER	☐		

17. Describe Proposed or completed Operations *(Clearly state all pertinent details, and give pertinenet dates, including estimated date of starting any proposed work)* SEE RULE 203.

Please refer to Exhibit A

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Wendy E. Merrill

SIGNED Wendy E. Merrill TITLE Supervisor, Land Records and Permits DATE May 8, 1981

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 6/12/81

CONDITIONS OF APPROVAL, IF ANY:

EXHIBIT A

METHOD OF COMPLETION

After the drill hole was completed and the drill stem removed from the hole, a 1" diameter iron pipe, which had been capped on the bottom, was inserted into the hole. The pipe was filled with water and capped. The area around the intruded pipe was then backfilled with drill cuttings.

ABANDONMENT PROCEDURE

The iron pipe was cut off below ground level and the upper 3m (10 feet) was filled with cement. Any remaining depression was filled with soil and raked to restore the site to its original appearance and contour. All drilling-related refuse was removed and disposed of properly.

LITHOLOGIC LOG

Project: Animas

Hole: 672-231

Elevation: 4,230ft. (1,289m)

Date Drilled: 9/26/80-10/1/80

Location: T25S R19W Sec. 18 NE/SW/NE

Method: mud

Geologist: Bill Huntsman

Gamma: background

Depth (m)	Description
0-7	Volcanic alluvium consisting of welded tuff pebbles to sub-rounded sand. Moderate amounts of light brown clay. Also containing minor amounts of $CaCO_3$.
7-18	Alluvium, pebble size sub-rounded to angular fragments of welded tuffs exhibiting primary oxidation and no cementing agents. Minor brown clays and a trace of kaolinite.
18-25	Light brown clay; soft and slightly sticky. Unit contain 50% volcanic fragments as above and is primarily oxidized.
25-40	Light gray welded ash flow tuff in gravel size pieces with moderate amounts of light brown and yellow clays. Minor amounts of fine-grained, sub-rounded black and white sandstone with calcium cement.
40-46	Light gray pink welded tuff gravels. Sub-rounded with traces of goethite and kaolinite. Slightly harder gravels decreased the penetration rate.
46-64	Light reddish gray, fine-grained ash flow tuff with abundant quartz fragments. Small sub-rounded pebbles to sub-angular fragments with minor amounts of goethite staining.
64-162	Light pink, medium gray sandstone. Granitic composition with weak silica cement. Very soft and somewhat "rotton" in appearance. Poor sorted sub-angular fragments of quartz, feldspar and biotite with an increase in silica cement with depth. Traces of a green stain, possibly chlorite or glauconite and no secondary oxidation. Also minor welded ash flow chips.
162-168	Light pink gray welded tuff with abundant reworked quartz grains and sandstone described above.
168-177	Gray sandstone; fine to medium grained. Sandstone appears to be reduced and is cemented with silica.
177-186	Welded ash flow tuff, that is pink, white, gray and black in color. Small sub-angular chips with abundant quartz and traces of iron oxide.
186-189	White and pink, dark gray ash flow tuff with minor amounts of clay.

LITHOLOGIC LOG

Project: Animas

Hole: 672-231

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (m)	Description
189-192	Welded ash flow tuff, slightly harder than unit above with a marked decrease in penetration rates. Loose grains of quartz and biotite with no secondary oxidation.
192-195	Dark gray red welded ash flow, very similar to a fine grain arkosic sandstone in lithology.
195-204	As above with 40% dark gray very fine sandstone. Hard with silica cement, traces of kaolinite and minor secondary oxidation.
204-210	White, light pink gray welded ash flow tuff. Minor sands, no traces of 2 ox and slightly harder drilling.
210-244	Gray welded ash flow tuff composed of quartz and glass shards. Penetration rate of this unit was twenty nine meters in 10 hours. At 220 meters primary chalcedony in thin bands on edges of the welded tuff along with a strong hemitite stain. Another fracture occurs at 235 meters.
244-247	Light pink ash flow tuffs and welded tuffs as above.
247-259	Light to medium gray welded ash flow tuff.
259-275	Gray ash flow tuff containing quartz, feldspar, and glass. Rocks appear slightly rotted or weakened in zones but displays no secondary oxidation.

Conductivity Samples:

672-231-1	80-86m
672-231-2	226-228m
672-231-3	270-275m

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

(1)

ΔT Well No. 672-231

Property-Project Animas 672 Depth Logged 267 m

Map [illegible] Scale 1:24 000 Date: Drilled 9/26-10/2/80 Logged 11-20-80

State N.M. County Hidalgo, ___ of SW of NW of NE of Sec 18 T25S R19W

Instrument [illegible] 167 Operator Shenker Elevation 4230 (ft/m)

Comments [illegible] battery @ 12 volts

Date Logged

JUSTIFY

Card A

Proj No (1-4)	Well No (5-10)	DA (11-12)	MO (13-15)	YR (16-18)	19	20
672	231	20	11	80	C	M

*19-Write F if Fahrenheit, 20-Write F if Feet

Site Description (21-50)	Operator (51-53)	Editor (54-60)	Drilled DA (61-62)	MO (63-65)	YR (66-68)
300 ft. N of [illegible]	AES	/	26	09	80

(Approx. location, water well?, oil test?, etc.)

Map Location **

Card

Scale Unit IN CM (21-25)	Map Size (7.5, 15., 60.) (26-30)	N Lat Degree (31-35)	N Lat Min (36-40)	W Long Degree (41-45)	W Long Min (46-50)
CM	7.5	32.	07.5	108.	52.5

Use decimals

** Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-)(E,+)

Northing (51-60)	Easting (61-70)	Elev (71-75)	76-79	80
4.30	17.10	4230.		F

Use decimals

← Write M if if meters

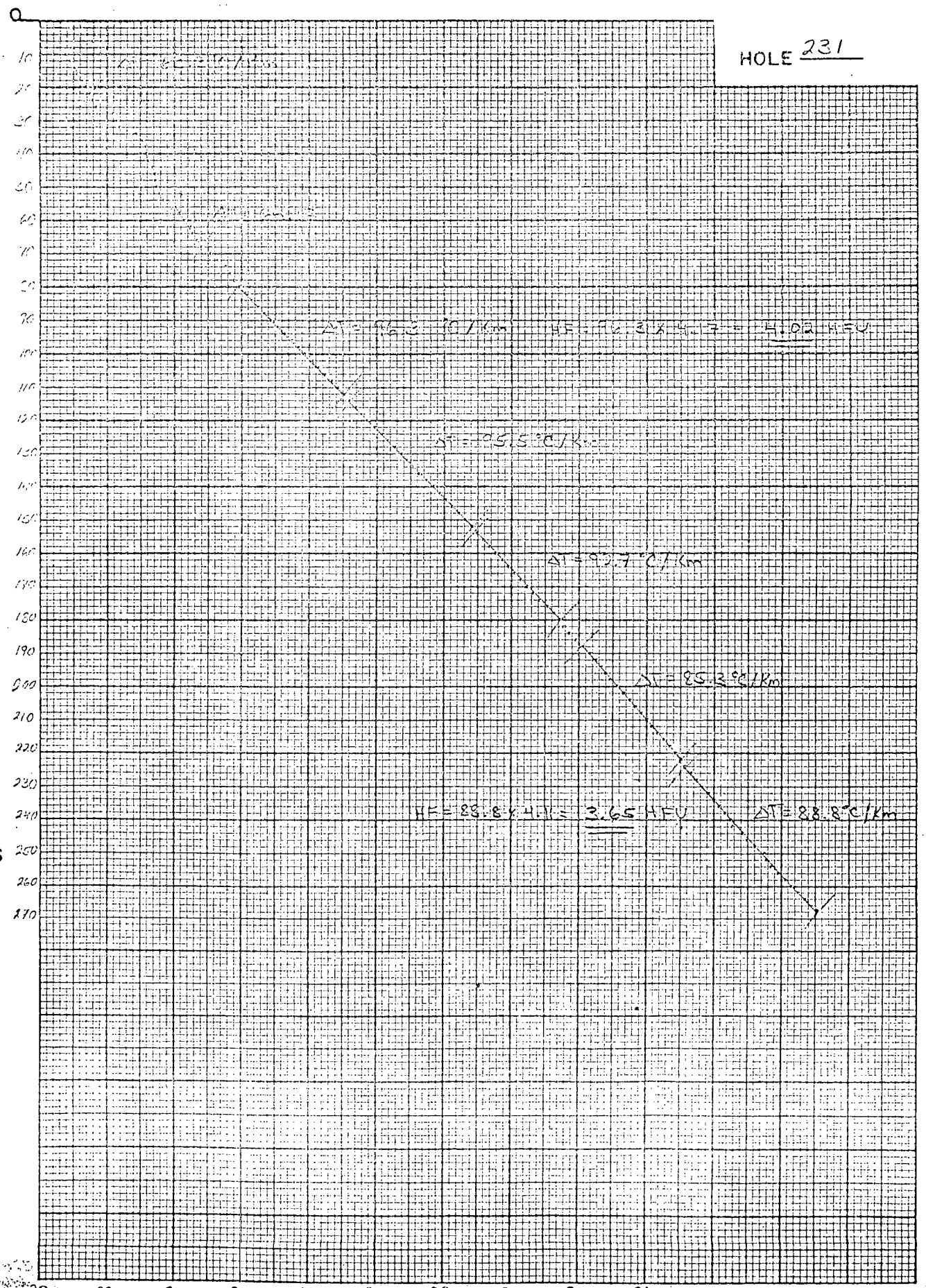
Segment	Depths Start	End	Conductivity K	ΔK
Segment 1	10.	22.		
Segment 2	54.	68.		
Segment 3	20.	112.	-4.17	-.5
Segment 4	114.	152.		
Segment 5	154.	120.		
Segment 6	188.	222.		
Segment 7	224.	267.	4.11	.5
Segment 8	999			
Segment 9				
Segment 10				

Best cond. (-K)

Downward extrapolations (-ΔK)

After final segment Start = 999

HOLE 231


ΔT = 85.2 °C/Km
HF = 72.3 x 4.7 = 4.02 HFU
ΔT = 85.2 °C/Km
ΔT = 97.7 °C/Km
ΔT = 85.2 °C/Km
HF = 88.8 x 4.1 = 3.65 HFU
ΔT = 88.8 °C/Km
DEPTH METERS
TEMPERATURE °C

Date Logged: 11-20-80

ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
2	10.22	20.92					
			.69	345			
4	10.52	21.61					
			-.02	-10			
6	10.54	21.59					
			-.62	-310			
8	10.80	20.97					
			-.19	-95			
10	10.88	20.78					
			.12	60			
12	10.83	20.90					
			.12	60			
14	10.78	21.02					
			.14	70			
16	10.72	21.16					
			.14	70			
18	10.66	21.30					
			.10	50			
20	10.62	21.40					
			.14	170			
22	10.56	21.54					
			.05	25			
24	10.54	21.59					
			.07	35			
26	10.51	21.66					
			.39	390			
27	10.35	22.05					
			.15	150			
28	10.29	22.20					
			.05	50			
29	10.27	22.25					
			.05	50			
30	10.25	22.30					
			.05	50			
31	10.23	22.35					
			.05	50			
32	10.21	22.40					
			.05	50			
33	10.19	22.45					
			.42	420			
34	10.02	22.87					
			.17	170			
35	9.955	23.04					
			.02	20			
36	9.948	23.06					
			.06	60			
37	9.923	23.12					
			.03	30			
38	9.913	23.15					
			.02	20			
39	9.904	23.17					
			.02	20			
40	9.897	23.19					

Y-Conductivity

.01

10

Date Logged: 11-20-80 ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
41	9.890	23.20					
			.02	20			
42	9.882	23.22					
			.26	260			
43	9.785	23.48					
			.10	100			
44	9.745	23.58					
			.01	10			
45	9.740	23.59					
			.02	20			
46	9.735	23.61					
			.00	0			
47	9.734	23.61					
			.01	10			
48	9.728	23.62					
			.03	30			
49	9.717	23.65					
			.04	40			
50	9.704	23.69					
			.07	70			
51	9.677	23.76					
			.03	30			
52	9.666	23.79					
			.01	10			
53	9.662	23.80					
			.08	80			
54	9.630	23.88					
			.08	80			
55	9.600	23.96					
			.07	70			
56	9.574	24.03					
			.06	60			
57	9.551	24.09					
			.07	70			
58	9.527	24.16					
			.06	60			
59	9.502	24.22					
			.09	90			
60	9.471	24.31					
			.14	140			
61	9.418	24.45					
			.04	40			
62	9.402	24.49					
			.03	30			
63	9.391	24.52					
			.05	50			
64	9.373	24.57					
			.04	40			
65	9.358	24.61					
			.04	40			
66	9.344	24.65					
			.02	20			
67	9.336	24.67					

K-Conductivity

13 130

Date Logged: 11-20-80 ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
68	9.290	24.66					
69	9.230	24.96	.16	160			
70	9.188	25.08	.12	120			
71	9.150	25.19	.11	110			
72	9.116	25.28	.09	90			
73	9.047	25.48	.20	200			
74	9.025	25.54	.06	60			
75	9.007	25.59	.05	50			
76	8.991	25.63	.04	40			
77	8.965	25.71	.08	80			
78	8.939	25.78	.07	70			
79	8.909	25.87	.09	90			
80	8.880	25.95	.08	80			
81	8.846	26.05	.10	100			
82	8.816	26.14	.09	90			
83	8.779	26.24	.10	100			
84	8.750	26.33	.09	90			
85	8.714	26.44	.11	110			
86	8.676	26.55	.11	110			
87	8.655	26.61	.06	60			
88	8.629	26.69	.08	80			
89	8.600	26.77	.08	80			
90	8.563	26.87	.10	100			
91	8.537	26.96	.09	90			
92	8.504	27.06	.10	100			
93	8.465	27.18	.12	120			
94	8.430	27.29	.11	110			
			.11	110			

K=Conductivity

Date Logged: 11-20-80 ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
95	8.394	27.40					
			.07	70			
96	8.352	27.53					
			.10	100			
97	8.319	27.63					
			.08	80			
98	8.292	27.71					
			.09	90			
99	8.265	27.80					
			.19	95			
100	8.226	27.89					
			.19	95			
102	8.168	28.10					
			.17	85			
104	8.113	28.27					
			.19	95			
106	8.055	28.46					
			.20	100			
108	7.993	28.66					
			.19	95			
110	7.933	28.85					
			.18	90			
112	7.879	29.03					
			.17	85			
114	7.829	29.20					
			.20	100			
116	7.768	29.40					
			.17	85			
118	7.717	29.57					
			.19	95			
120	7.662	29.76					
			.21	110			
122	7.600	29.97					
			.19	95			
124	7.545	30.16					
			.19	95			
126	7.489	30.35					
			.19	95			
128	7.436	30.54					
			.19	95			
130	7.381	30.73					
			.17	85			
132	7.325	30.90					
			.15	75			
134	7.291	31.05					
			.20	100			
136	7.238	31.25					
			.25	125			
138	7.168	31.50					
			.20	100			
140	7.113	31.70					
			.17	85			
142	7.067	31.87					
			.23	115			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
144	7.020	32.05					
			.18	90			
146	6.971	32.23					
			.22	110			
148	6.914	32.45					
			.20	100			
150	6.862	32.65					
			.18	90			
152	6.816	32.83					
			.17	85			
154	6.772	33.00					
			.19	95			
156	6.725	33.19					
			.18	90			
158	6.678	33.37					
			.21	105			
160	6.627	33.58					
			.17	85			
162	6.585	33.75					
			.16	80			
164	6.546	33.91					
			.16	80			
166	6.505	34.07					
			.19	95			
168	6.460	34.26					
			.19	95			
170	6.414	34.45					
			.19	95			
172	6.369	34.64					
			.20	100			
174	6.321	34.84					
			.23	115			
176	6.268	35.07					
			.19	95			
178	6.223	35.26					
			.15	75			
180	6.190	35.41					
			.15	75			
182	6.155	35.56					
			.19	95			
184	6.113	35.75					
			.19	95			
186	6.070	35.94					
			.20	100			
188	6.025	36.14					
			.21	105			
190	5.980	36.35					
			.16	80			
192	5.944	36.51					
			.14	70			
194	5.914	36.65					
			.15	75			
196	5.881	36.80					
			.17	85			

K=Conductivity

Date Logged: 11-20-90 ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
198	5.845	36.97					
			.21	105			
200	5.800	37.18					
			.19	95			
202	5.761	37.37					
			.15	75			
204	5.729	37.52					
			.16	80			
206	5.696	37.68					
			.15	75			
208	5.664	37.82					
			.18	90			
210	5.629	38.01					
			.17	85			
212	5.594	38.18					
			.15	75			
214	5.563	38.33					
			.16	80			
216	5.532	38.49					
			.17	85			
218	5.497	38.66					
			.20	100			
220	5.458	38.86					
			.18	90			
222	5.424	39.04					
			.17	85			
224	5.391	39.21					
			.14	70			
226	5.364	39.35					
			.15	75			
228	5.335	39.50					
			.16	80			
230	5.304	39.66					
			.17	85			
232	5.273	39.83					
			.18	90			
234	5.240	40.01					
			.16	80			
236	5.209	40.17					
			.17	85			
238	5.177	40.34					
			.12	60			
240	5.156	40.46					
			.12	60			
242	5.134	40.58					
			.23	115			
244	5.091	40.81					
			.18	90			
246	5.058	40.99					
			.22	110			
248	5.019	41.21					
			.25	125			
250	4.976	41.46					
			.09	45			

K=Conductivity

Date Logged: 11-20-80

ΔT Well No. 672-231

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
252	4.959	41.55					
			.10	50			
254	4.942	41.65					
			.26	130			
256	4.896	41.91					
			.21	105			
258	4.859	42.12					
			.18	90			
260	4.828	42.30					
			.20	100			
262	4.794	42.50					
			.20	100			
264	4.760	42.70					
			.20	100			
266	4.727	42.90					
			.13	130			
267	4.705	43.03					
99999.							

K=Conductivity

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

November 18, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: AMAX Exploration, Inc.'s Drilling activities under "Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well" dated February 15, 1980 — Animas Project (672) Hole Nos. 672-206, 672-225, 672-227 and 672-231

Dear Mr. Ulvog:

This letter is written to inform you about AMAX Exploration, Inc.'s drilling activities to date at the Animas Project in Hidalgo County, New Mexico.

Enclosed is Table I indicating the following drilling information for each hole listed:

1) Hole number and location
2) Elevation at drill site
3) Land status at drill site
4) Commencement and completion dates
5) Total depth and method of drilling

Please be advised that this letter does not constitute completion and abandonment notification. Notices of Completion will be filed at a later date after final temperature measurements have been completed, the holes abandoned, and the reclamation activities carried out.

AMAX Exploration, Inc. requests that the case file for the remainder of the holes permitted under the above-referenced permit by the New Mexico Oil Conservation Commission be left open.

If I can be of further assistance concerning our drilling activities at the Animas Project, please contact me at your earliest convenience.

Sincerely,

AMAX EXPLORATION, INC.

Carolyn J. Holtgrewe

Carolyn J. Holtgrewe
Permit Assistant

CJH/bsw
Enclosure

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

TABLE I

Drilling Information on the Animas Project

Hole No.	Location	Elevation	Land Status	Commencement Date	Completion Date	Depth	Drilling Method
672-206	NW/4NW/4NE/4 Section 8, T25S, R19W, NMPM	4,270'	AMAX Lease GTR-006-1	9/21/80	9/26/80	930'	Mud
672-225	SW/4SE/4SW/4, Section 6, T25S, R19W, NMPM	4,190'	AMAX Lease NM-34790	9/16/80	9/20/80	1,000'	Mud
672-227	NW/4NW/4SE/4, Section 7, T25S, R19W, NMPM	4,200'	AMAX Lease NM-34790	10/2/80	10/4/80	820'	Mud
672-231	NE/4SW/4NE/4, Section 18, T25S, R19W, NMPM	4,230'	AMAX Lease NM-34790	9/26/80	10/2/80	904'	Mud

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

April 29, 1980

Amax Exploration, Inc.
Geothermal Branch
7100 West 44th Avenue
Wheat Ridge, Colorado 80033

Gentlemen:

We are in receipt of your letter dated April 22, 1980, requesting extensions for drilling permits on Form G-101 on the following wells:

NA - Well No. 672-206 Unit B, Section 8, Township 25 South, Range 19 West, Hidalgo County, New Mexico, and NA Well No. 672-231 Unit G, Section 18, Township 25 South, Range 19 West, Hidalgo County, New Mexico.

You are hereby granted an additional 90 day extension on each of the above mentioned wells. This permit will expire July 29, 1980.

Very truly yours,

LESLIE A. CLEMENTS
Oil & Gas Inspector

LC/og
cc: Well Files

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.

GEOTHERMAL BRANCH

April 22, 1980

Mr. Carl Ulvog
Senior Petroleum Geologist
State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Permit to Drill, Deepen, or Plug Back Geothermal Resources Well for drilling thermal temperature gradient observation holes to 2,000' or less in Hidalgo County, New Mexico. (Animas Exploration, Inc.: Animas Project - Project No. 672)

Dear Mr. Ulvog:

AMAX Exploration, Inc. requests an extension of our approved permits which will expire on May 14, 1980. AMAX Exploration, Inc. requests extensions for the following permits:

1. Well No. 672-206
2. Well No. 672-231

AMAX Exploration, Inc. anticipates commencing drilling operations in late May, 1980. AMAX Exploration, Inc. personnel will notify the Oil Conservation Commission within 24 hours prior to commencing operations.

Thank you for your assistance with this matter.

Sincerely,

Wendy E. Merrill

Wendy E. Merrill
Permit Coordinator

Enclosure

cc: Harry Olson
Dean Pilkington
Andy Pfaff
Chris Tower

7100 WEST 44TH AVENUE, WHEAT RIDGE, COLORADO 80033 • TELEPHONE (303) 420-8100 - TELEX 45-556

WEM/sm

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U.S.G.S.		
Operator		
Land Office		

RECEIVED
APR 23 1980
OIL CONSERVATION DIVISION
SANTA FE

Form G-101
Adopted 10/

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK--GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE XX FEE [
5.a State Lease No.: GTR-006-1

1a. Type of Work: Drill XX Deepen [ ] Plug Back [ ]
b. Type of Well: Geothermal Producer [ ] Temp Observation XX; Low-Temp Thermal [ ] Injection/Disposal [ ]

7. Unit Agreement Name: NA
8. Farm or Lease Name: NA
9. Well No.: 672-231
10. Field and Pool, or Wildcat: Wildcat

2. Name of Operator: AMAX Exploration, Inc.
3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033
4. Location of Well: UNIT LETTER G LOCATED 1,350 FEET FROM THE East LINE AND 1,390 FEET FROM THE North LINE OF SEC. 18 TWP. T25S RGE. R19W NMPM
12. County: Hildago

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
2,000'	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4,230' ground level	$10,000 Multiple Well Geothermal Exploratory, Development, Injection, or Disposal Well Bond	Not known at this time	2/15/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
*9 7/8"	7"	17 pound	200'	40	Surface
*6 1/4"	1-1/4"	steel pipe	2,000'	3	

*Hole sizes will not exceed this diameter, but may be smaller depending on bit size availability

(1) Drill 9 7/8" hole to 200'
(2) Run 7" casing
(3) Cement 7" casing to surface
(4) Drill 6 1/4" hole to 2,000'
(5) Run 1 1/4" steel pipe to 2,000'
(6) Cement the top 10' of the 1 1/4" pipe
(7) Fill the 1 1/4" pipe with water
(8) Measure temperature of hole

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 5-14-80
UNLESS DRILLING UNDERWAY

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

RECEIVED
FEB - 4 1980
OIL CONSERVATION DIVISION
SANTA FE

I ABOVE) SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productiv
one. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed William M. Dolan Title Attorney-in-fact Manager, Geothermal Exploration Date January 28, 1980

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/15/80

Form G-101
Adopted 10/

NO. OF COPIES RECEIVED		
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File	1	✓
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U.S.G.S.	1	
Operator	1	
Land Office	1	

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK--GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE XX FEE [
5.a State Lease No.: GTR-006-1

1a. Type of Work: Drill XX Deepen ☐ Plug Back ☐
b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☐ Temp Observation XX Injection/Disposal ☐

7. Unit Agreement Name: NA
8. Farm or Lease Name: NA
9. Well No.: 672-231
10. Field and Pool, or Wildcat: Wildcat

2. Name of Operator: AMAX Exploration, Inc.
3. Address of Operator: 7100 W. 44th Avenue - Wheat Ridge, Colorado 80033
4. Location of Well: UNIT LETTER G LOCATED 1,350 FEET FROM THE East LINE AND 1,390 FEET FROM THE North LINE OF SEC. 18 TWP. T25S RGE. R19W NMPM
12. County: Hildago

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
2,000'	Alluvium or Tertiary Volcanics	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4,230' ground level	$10,000 Multiple Well Geothermal Exploratory, Development, Injection, or Disposal Well Bond	Not known at this time	2/15/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
*9 7/8"	7"	17 pound	200'	40	Surface
*6 1/4"	1-1/4"	steel pipe	2,000'	3	

*Hole sizes will not exceed this diameter, but may be smaller depending on bit size availability

(1) Drill 9 7/8" hole to 200'
(2) Run 7" casing
(3) Cement 7" casing to surface
(4) Drill 6 1/4" hole to 2,000'
(5) Run 1 1/4" steel pipe to 2,000'
(6) Cement the top 10' of the 1 1/4" pipe
(7) Fill the 1 1/4" pipe with water
(8) Measure temperature of hole

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 5-14-80
UNLESS DRILLING UNDERWAY

RECEIVED
FEB - 4 1980
OIL CONSERVATION COMMISSION
SANTA FE

OIL CONSERVATION COMMISSION TO BE NOTIFIED WITHIN 24 HOURS OF BEGINNING OPERATIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed William M. Dolan Title Attorney-in-fact Manager, Geothermal Exploration Date January 28, 1980

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 2/15/80

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. BOX 2088 SANTA FE 87501

Form C-102
Adopted 10/1/7

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	GTR-006-1	672-231

Unit Letter	Section	Township	Range	County
G	18	T25S	R19W	Hildago

Actual Footage Location of Well:
1,350 feet from the East line and 1,390 feet from the North line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4,230'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

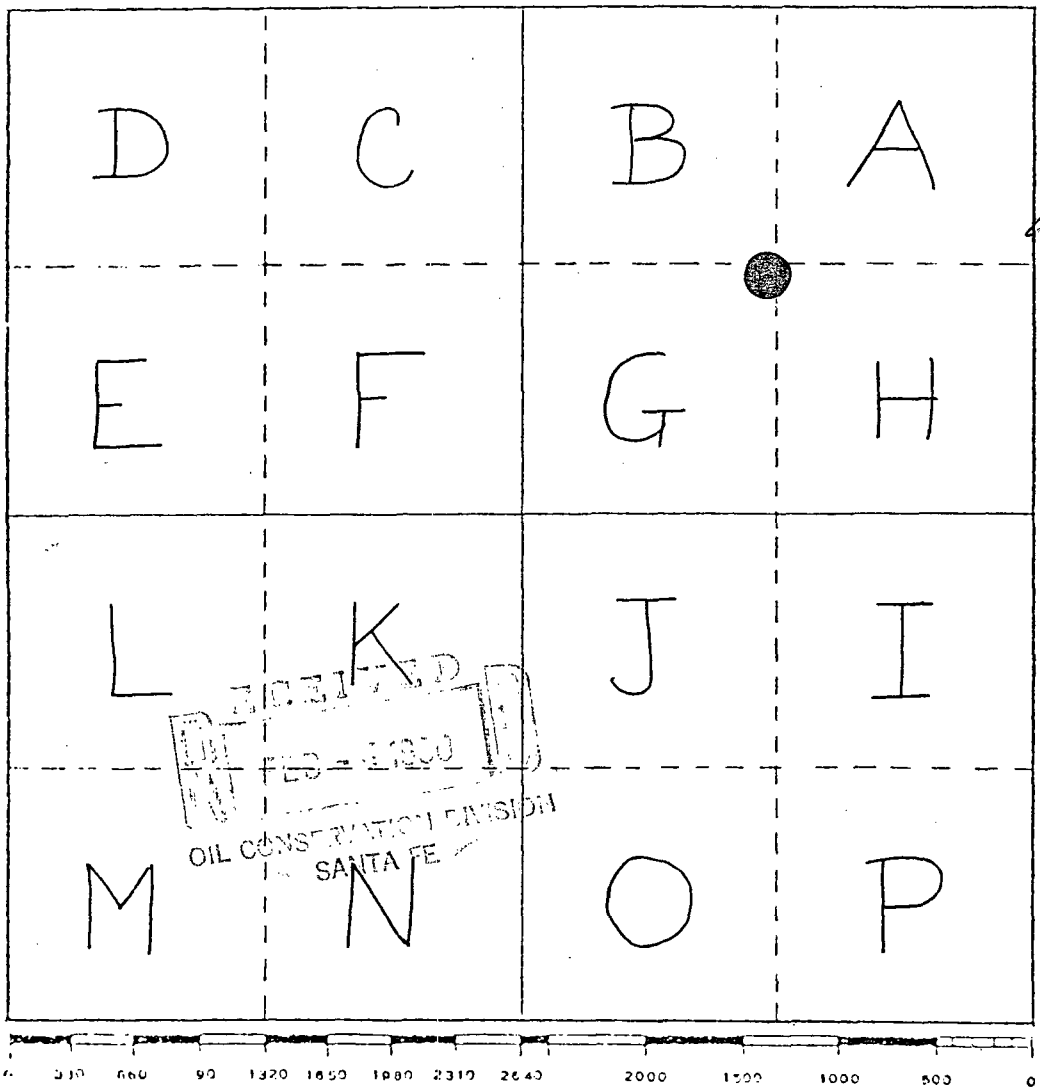
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William M. Dolan

Position: Attorney-in-fact
Manager, Geothermal Exploratio

Company: AMAX Exploration, Inc.

Date: January 28, 1980

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: NA

Registered Professional Engineer and/or Land Surveyor

Certificate No. —

No. 110645 D

STATE ENGINEER
SANTA FE, NEW MEXICO

OFFICIAL RECEIPT

CONTROL NUMBER

DATE December 6, 1983

FILE NO A-45

AM'T REC'D	GW	SW	TOTAL
CASH	5.00		5.00
CHECK			

BANK

FOR PAYMENT AS INDICATED BELOW

Application for Permit to Change Location of Well

NAME AND ADDRESS

Thomas W. McCants

Star Route Box 265

Animas, New Mexico 88020

FOR USE BY ADMINISTRATIVE DIVISION

FOR USE BY SANTA FE OFFICE ONLY

WATER RIGHTS

DATE	EARNED GW	EARNED SW	REFUND	TRANSCRIPT EXP.	BALANCE

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF HIDALGO } ss.

Jack A. Walz, being first duly sworn, says that he is the manager of the LORDSBURG LIBERAL, a weekly newspaper of general circulation, published in the City of Lordsburg, in said county and state, and has been such during the time hereinafter mentioned, and that the advertisement headed, Notice is hereby given

a copy of which is hereto attached, was printed and published in every copy of each issue of said newspaper for a period of three (3) consecutive weeks; to wit: first publication December 9, 19 83; last publication December 23, 19 83

Publication fee $ 59.64 (Plus Tax)

Jack A. Walz
Manager

STATE OF NEW MEXICO
COUNTY OF HIDALGO } ss.

Subscribed and sworn to before me this 28th day of December, 19 83

Reyes O. Corral
Notary Public

My commission expires April 2, 19 86

OFFICIAL SEAL
REYES O. CORRAL
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 4/2/86

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

50 YEARS
1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

July 3, 1985

Commercial Union Insurance Companies
P. O. Box 20666
El Paso, Texas 79998

Attention: Terry Romero

Re: $10,000 Multiple-Well Geothermal
Well Bond
Thomas W. McCants, Principal
American Employers' Insurance, Surety
Bond No. AR 71381-16

Dear Ms. Romero:

The Oil Conservation Division hereby approves release of the above-referenced multiple-well geothermal bond effective this date.

Sincerely,

R. L. STAMETS,
Director

dr/

cc: Oil Conservation Division
Santa Fe (Roy Johnson)

Thomas W. McCants
Star Route, Box 265
Animas, New Mexico

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Adopted 10-1-74
Revised 10-1-78

DESIGNATION OF AGENT

In compliance with Rule 100, New Mexico Oil Conservation Division Rules and Regulations, Geothermal Resources, BEALL CO. OF NEW MEXICO, INC. (Name of Operator), whose address is P.O. Box 467, City VASHON, State WA. 98070, hereby designates TOM McCANTS (Name of Designee), whose address is 265 STAR ROUTE, City ANIMAS, New Mexico, as designated agent, who shall be the repository for all well records for each geothermal well drilled by BEALL CO. OF NEW MEXICO (Name of Operator) in the State of New Mexico *.

Further, that in accordance with Rule 200 B of said Rules and Regulations, all such well records shall remain in custody of said Designated Agent within the State of New Mexico until all required forms and attachments pertaining to each such well have been filed with the Division, and that these well records shall be available for inspection, during normal business hours, by the Division or its representatives, or the State Engineer or his representatives.

This Designation supersedes all previous designations made for the above-described purpose.

Comes now T. W. BEALL, after being first duly sworn, upon his (or her) oath deposes and says that he (or she) has read the foregoing and that he (or she) is familiar with same, and that with full power and authority to do so, he (or she) hereby executes this Designation of Agent.

T.W. Beall
Signature

PRESIDENT
Position

SUBSCRIBED AND SWORN to before me on this 3rd day of August 1983.

My Commission Expires:
Feb. 3, 1985

Patricia J. Helsley
Notary Public in and for the State of Washington, residing at Vashon.

AGENT'S ACCEPTANCE:

Comes now Tom McCant, after being first duly sworn, upon his (or her) oath deposes and says that he (or she) has read the foregoing and that he (or she) is familiar with same, and that he (or she) hereby accepts Designation of Agent for Tom McCant (Name of Operator) in accordance with and subject to the above conditions and provisions.

Tom McCant
Designated Agent

SUBSCRIBED AND SWORN to before me on this 10 th day of August, 1983.

My Commission Expires:
11-8-1984

Julia K. Fisher
Notary Public

*Should the owner or operator filing this form choose to appoint more than one agent, each for a given area, "State of New Mexico" should be deleted, and "County(ies) of _____" inserted, with the County(ies) named. A separate form must be filed for each agent.

NOTE: An individual who is a resident of New Mexico may designate himself as agent.

OFFICIAL SEAL
Signature: Julia K. Fisher
JULIA K. FISHER
NOTARY PUBLIC-NEW MEXICO
NOTARY BOND FILED WITH SECRETARY OF STATE
My Commission Expires 11-8-1984

TAXATION & REVENUE DEPARTMENT

OIL & GAS ACCOUNTING DIVISION • P.O. Box 2308 • Santa Fe, New Mexico 87504-2308

February 22, 1984

AMAX Exploration, Inc.
Geothermal Division
1704 Cole Boulevard
Golden, Colorado 80401

Certified-Return
Receipt Requested
No. P506250808

Gentlemen:

We have been advised by Minerals Management Services that you are producing geothermal energy in the form of steam from a well located in Section 7, Township 25 South, Range 19 West, Hidalgo County, New Mexico.

The New Mexico Oil and Gas Conservation tax, 7-30-1 to 7-30-26 NMSA 1978, levies a tax on geothermal energy. A Copy of the tax act is enclosed.

Please provide this office with a description of your operation, date of first sales and the monthly value of sales.

Upon our receipt of the above information we will advise you as to the manner in which to report and remit the Conservation tax on your geothermal sales.

Very truly yours,

OIL AND GAS ACCOUNTING DIVISION

Antonio L. Martinez 5847
ANTONIO L. MARTINEZ
Division Director

MC:co
Enclosure

cc: Carl Ulvog ✓
Energy & Minerals Dept.
Oil Conservation Division

2/21/84

Memo

From
CARL ULVOG
Chief Geologist

To File –

Beal, Burgett, McCanta etc

Sent today, in accord with telephone call –

Forms G-101 – 15 copies
" G-102 – 6 copies
G-103 – 6 copies
G-105 – 15 copies
G-112 – 5 copies
G-110 – 6 copies

One-well Low temp bond – 5 copies
" " Disposal " – 2 "
Designation of Agent – 2 "

plus McCanta corrected sheets
of G-101 & G-112

Plus note, copy attached.

Oil Conservation Division
P.O. Box 2088 Santa Fe, N.M. 87501

2/21/84

Memo

From
CARL ULVOG
Chief Geologist

To Tom McCants

Please see letter and attachments sent to Tom Beal on 2/14/84 to help get applications in acceptable form. O.C.D. is not allowed to make changes over somebody else's signature – naturally!

Sorry if I sent letter to Beal by mistake, but I definitely understood you to say that Beal filled out forms and you just signed them. See also your "Designation of Agent". C.U.

Oil Conservation Division
P.O. Box 2088 Santa Fe, N.M. 87501

Tom Beal
Star Route 260-B
Animas, N.M. 88020
Ph. 548-2494

Oil Conservation Division
P.O. Box 2088 Santa Fe, N.M. 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

February 14, 1984

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Mr. Tom Beal
Star Route 260-B
Animas, New Mexico 88020

Dear Mr. Beal:

In accordance with our telephone discussion this date, I am returning one copy of each form submitted to this office on February 2, 1984. These applications, pertaining to production Wells #1 and #2 and injection Well #3, are erroneous in ways which are partially enumerated as follows:

Wells #1 and #2 - Locations not in agreement with verbal descriptions of intended drilling. No Farm or Lease name provided (Item 8). Insufficient cement on casing indicated. Proposed operation - needlessly repetitious and detailed - states, "There is no potable water in this section." (The surface owner reports using this water for stock and household use.) Is it really the intent to use "serrated" casing as reported? (Serrated means notched or toothed along the edge.) Reference is made to... "a thin rock like layer"... If this is not rock, is it some un-natural material? It is not necessary to describe the surface installation to obtain a drilling permit. (Inspection of the completed well includes investigation of surface conditions.)

Well #3 - Location probably erroneous. Insufficient cement for casing indicated. The column titled "Top of Cement" refers to the top of the cement which is in the annulus between the drilled hole and the casing therein. (As you will note by Rule G-108 of the regulations, referring to casing and cementing, this top should be at the surface.) "Name of Proposed Injection Formation" means just that; i.e., Quaternary, Tertiary, Cretaceous, or whatever. "Proposed Intervals of Injection" refers to the depths in the hole, not times of the day.

The Oil Conservation Division is not concerned with water usage as such (that is under the State Engineer's jurisdiction), consequently the injection is only for one of the purposes given. (Rules 501 and 502). The "Daily Injection Volume" does not refer to rate; it means amounts per 24 hour period. The comments with respect to "Mineralized" water are very confusing.

Apparently the answer "No" means the water is not "Unfit for Domestic, Stock, Irrigation, or Other General Use." The next answer "Yes" implies that the water is "Unfit" for such use - obviously contradictary. The application also states there are no other "...Operators Within One Half Mile of This Injection Well." This would mean that all mineral and surface rights within 880 yards of the proposed well are controlled by the well operator; which of course includes an existing geothermal facility.

Attached are copies of portions of the O.C.D. Geothermal Rules. If these rules and the above enumerated conditions are not sufficient to permit you to properly reapply for the desired actions, please so advise.

Yours truly,

Carl Ulvog,
Geothermal Supervisor

CU/mk

Enclosures

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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FEB - 2 1984
OIL CONSERVATION DIVISION

Form C-101
Adopted 10-1-74
Revised 10-1-78

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U.S.G.S.		
Operator		
Land Office		

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK--GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE ☐ BLM FEE ☐

5.a ~~State Lease No.~~ NM 34790

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐

b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☒ Temp Observation ☐ Injection/Disposal ☐

7. Unit Agreement Name

8. Farm or Lease Name: X

2. Name of Operator: Tom McCants

9. Well No.: One

3. Address of Operator: St. Rt 265 Animas NM 88020

10. Field and Pool, or Wildcat

4. Location of Well: UNIT LETTER ____ LOCATED 1816 FEET FROM THE F W L LINE AND 526.6 FEET FROM THE F/N L LINE OF SEC. 7 TWP. 25 RGE. 19 W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
200'	gravel	X

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
		Oasis Drilling	Feb. 1. 1984

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
10"	8"	27.5	200'	10 sacks X	X

The well will be drilled by Oasis who has drilled most of water and geothermal wells in the area that are shallow. The first 75' should caved and at 100' a thin rock like layer X then the next 100 feet should be sand. The casing will be serated X from 75' to bottom. Hot water should flow at 75' and Continue to bottom. The well will have two pieces of 8" x 2" x channel iron welded to each side of casing at top and bedded in Cement slab. There is no potable water X in the section.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Tom McCants Title operator Date 1-20-84

(This space for State Use)

APPROVED BY ____ TITLE ____ DATE ____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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OIL CONSERVATION DIVISION
SANTA FE

Form G-101
Adopted 10-1-74
Revised 10-1-78

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b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☒ Temp Observation ☐ Injection/Disposal ☐

7. Unit Agreement Name

8. Farm or Lease Name: X

2. Name of Operator: Tom McCants

9. Well No.: Two

3. Address of Operator: St. Route 265 Animas N.M. 88020

10. Field and Pool, of: Wildcat

4. Location of Well: UNIT LETTER ____ LOCATED 488.3 FEET FROM THE F.W.L. LINE AND 6656 FEET FROM THE F/N/L LINE OF SEC. 7 TWP. 25 RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
200'	gravel	X

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
		Oasis Drilling	Feb. 1. 1984

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
10"	8"	27.5	200'	10 sacks X	X

The well will be drilled by Oasis who has drilled most of water and geothermal wells in the area that are shallow. The first 75' should caved and at 100' a thin rock like layer× then the next 100 feet should be sand. The casing will be sealed× from 75' to bottom. Hot water should show at 75' and continue to bottom. The well will have two pieces of 8" x 2" x channel iron welded to each side of casing at top and bedded in cement slab. There is no potable water× in the section.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Tom McCants Title agent Date 1-20-84

(This space for State Use)

APPROVED BY ____ TITLE ____ DATE ____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-112
Adopted 10-1-74
Revised 10-1-78

APPLICATION TO PLACE WELL ON INJECTION-GEOTHERMAL RESOURCES AREA

Operator: Tom McCants		Address: St. Rt. 265 Animas 88020	
Lease Name: Animas Lessee	Well No.: No 3	Field: Lightning Dock	County: Hidalgo

Location: Unit Letter ____ ; Well Is Located 1706 Feet From The FW Line And 295 Feet From The FNL Line, Section 7 Township 25 Range 19 W NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Conductor Pipe					
Surface Casing	8"	200	10 X	8'x8' sq. X	top of ground
Long String					
Tubing			Name, Model and Depth of Tubing Packer		

Name of Proposed Injection Formation: From 75 foot to bottom X	Top of Formation	Bottom of Formation: gravel
Is Injection Through Tubing, Casing, or Annulus? Tubing	Perforations or Open Hole? Perforation	Proposed Interval(s) of Injection: daily from 8 to 14 hours depending on Temp. outside X
Is This a New Well Drilled For Injection? Yes	If Answer is No, For What Purpose was Well Originally Drilled?	Has Well Ever Been Perforated in Any Zone Other Than the Proposed Injection Zone?

List All Such Perforated Intervals and Sacks of Cement used to Seal Off or Squeeze Each: Perforated interval every foot X. Surface to T.D.?

Depth of Bottom of Deepest Fresh Water Zone in This Area: unknown	Is This Injection for Purpose of Pressure Maintenance or Water Disposal? (See Rules 501 and 502): To conserve water X				
Anticipated Daily Injection Volume: 100 gal min X	Minimum: 50 X	Maximum: 100 gal X	Open or Closed Type System: closed	Is Injection to be by Gravity or Pressure? pressure	Approx. Pressure (psi): 35 lbs
Answer Yes or No Whether the Following Waters are Mineralized to such a Degree as to be Unfit for Domestic, Stock, Irrigation, or Other General Use: No X	Water to be Injected: yes X	Natural Water in Injection Zone: same water X	Are Water Analyses Attached?		

Name and Address of Surface Owner (or Lessee, if State or Federal Land): Tom McCants Star Route 265

List Names and Addresses of all Operators Within One-Half (½) Mile of This Injection Well: none X

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SANTA FE

Have Copies of this Application Been Sent to Each Operator Within One-Half Mile of this Well?	Yes ○ No ☐		
Are the Following Items Attached to this Application (see Rule 503)	Plat of Area: Yes ☒ No ☐	Electrical Log: Yes ☐ No ☒	Diagrammatic Sketch of Well: Yes ☐ No ☒

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Tom McCants (Signature) — Operator (Title) — 1/9/84 (Date)

NOTE: Should waivers from all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Division will hold the application for a period of 20 days from the date of receipt by the Division's Santa Fe office. If at the end of the 20-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 503.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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SANTA FE

Form C-101
Adopted 10-1-74
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5. Indicate Type of Lease STATE ☐ FEE ☐

5.a State Lease No.

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐

b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☐ Temp Observation ☐ Injection/Disposal ☒

7. Unit Agreement Name

8. Farm or Lease Name ?

9. Well No. 3?

2. Name of Operator TOM MCCANTS

3. Address of Operator Rt. 1 Box 265 Animas N.M. 88020

10. Field and Pool, or Wildcat

4. Location of Well UNIT LETTER ? LOCATED ? FEET FROM THE ? LINE AND ? FEET FROM THE ? LINE OF SEC. ? TWP. ? RGE. ? NMPM

12. County ?

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
?	?	?

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
?	?	?	?	?	?

Is this supposed to be application for permit to drill the No. 3 well described by Form G-112? If so, it seems rather incomplete!

N ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive one. Give blowout preventer program, if any.

hereby certify that the information above is true and complete to the best of my knowledge and belief.

gned ? Title ? Date ?

(This space for State Use)

PPROVED BY _____ TITLE _____ DATE _____

ONDITIONS OF APPROVAL, IF ANY:

C. DRILLING AND PRODUCTION

RULE G-100. DESIGNATION OF AGENT

Any person who had drilled or is drilling or proposes to drill any geothermal well shall file a "Designation of Agent" (on a form approved by the Division) with the Division. The designated agent shall be a resident of this state and shall be the repository for all well records of wells drilled by the owner or operator for whom he is agent (See Rule G-200 B). All changes of address of the agent shall be immediately reported to the Division in writing. Upon termination of any agent's authority, a new Designation of Agent shall be filed with the Division within ten days.

RULE G-101. PLUGGING BOND

A. Any person who has drilled or is drilling or proposes to drill any geothermal resources well shall post with the Division, and obtain approval thereof, a bond, in a form approved by the Division, conditioned to plug such well, if non-productive or when abandoned, in such a way as to confine all fluids in their native strata. Each such bond shall be executed by a responsible surety company authorized to transact business in the State of New Mexico and shall describe, or by subsequent rider describe, the name and exact location of the well, or wells, covered by the bond. Bonds may be either one-well bonds or multi-well bonds, in the amounts stated below in accordance with type of bond and depth of well(s):

(1) ONE-WELL BONDS

Projected Depth of Proposed Well or Actual Depth of Existing Well	Amount of Bond
X Less than 500 feet deep ("shallow")	$2,000
500 feet to 2,000 feet deep ("intermediate")	$3,000
More than 2,000 feet deep ("deep")	$5,000

(a) Revised plans for an actively drilling shallow or intermediate well being drilled under a one-well bond may be approved by the Division for drilling as much as 15 percent deeper than the maximum depth on the well's bond, provided, however, any well drilled more than 15 percent deeper than the maximum allowed depth on the bond must be covered by a new bond in the amount prescribed for the deeper depth bracket, in which case the old bond will be released.

(2) MULTI-WELL BONDS

Projected Depth of Proposed Wells or Actual Depth of Existing Wells	Amount of Bond
X Less than 500 feet deep ("shallow")	$10,000
500 feet to 2,000 feet deep ("intermediate")	$10,000
More than 2,000 feet deep ("deep")	$10,000

(a) Not more than ten shallow wells may be drilled under a $10,000 multi-well bond. A $2,000 one-well bond shall be posed for each additional shallow well drilled or an additional $10,000 multi-well bond must be posted for each additional ten (or portion thereof) shallow wells drilled.

(b) Not more than six intermediate wells may be drilled under a $10,000 multi-well bond. A $3,000 one-well bond shall be posted for each additional intermediate well drilled or an additional $10,000 multi-well bond must be posted for each additional six (or portion thereof) intermediate wells drilled.

(c) Not more than four deep wells may be drilled under a $10,000 multi-well bond. A $5,000 one-well bond shall be posted for each additional deep well drilled or an additional $10,000 multi-well bond must be posted for each additional four (or portion thereof) deep wells drilled.

(d) The $10,000 multi-well bond may be used to cover the drilling of a combination of wells, i.e., shallow and intermediate, shallow and deep, intermediate and deep, or shallow, intermediate and deep, provided however, that the $10,000 capacity of the bond shall be charged in an amount equal to the one-well bond requirement for each such combination well according to its depth.

(1) Conductor Pipe. A minimum of 90 feet and a maximum of 200 feet. In special cases the Division may allow conductor pipe to be run and cemented at deeper depths. Annular space is to be cemented solid to the surface. An annular blowout-preventer or equivalent approved by the Division shall be installed on conductor pipe on exploratory wells and on development wells when deemed necessary by the Division. Note: For thermal gradient wells and low-temperature thermal wells the conductor pipe requirement may be reduced or waived by the Division.

The above conductor pipe requirements are not meant to be applicable to the single or double joint of large diameter pipe often run to keep mud out of the cellar.

(2) Surface Casing. Except in the case of thermal gradient wells and low-temperature thermal wells, the surface casing hole shall be logged with an electrical or radioactivity log, or equivalent, before running casing. Note: This requirement may vary from area to area, depending upon the amount of subsurface data available, and may be waived under certain conditions. Requests for exceptions to the logging requirement should be noted on Form G-101 when applying for a drilling permit.

Surface casing shall provide for control of formation fluids, for protection of useable ground water, and for adequate anchorage for blowout-prevention equipment. All surface casing shall be, if possible, cemented solid to the surface.

(a) Length of Surface Casing.

(1) In areas where subsurface geological conditions are variable or unknown, surface casing in general shall be set at a depth equalling or exceeding 10 percent of the proposed total depth of the well. A minimum of 200 feet and a maximum of 1,500 feet of surface casing shall be set.

(2) In areas of known high formation pressure, surface casing shall be set at a depth determined by the Division after a careful study of geological conditions. The Division will make such a determination within 30 days. Drilling shall not commence until such determination has been made.

(3) Within the confines of designated geothermal fields, the depth at which surface casing shall be set shall be determined by the Division on the basis of known field conditions. Requirements (a)(1) and (a)(2) above may be waived for low-temperature thermal wells.

(3) Intermediate Casing. Intermediate casing shall be required for protection against anomalous pressure zones, caveins, washouts, abnormal temperature zones, uncontrollable lost circulation zones or other drilling hazards. Intermediate casing strings shall be, if possible, cemented solid to the surface. This requirement (to circulate cement) may be waived if the production casing will be cemented to the surface.

(4) Production Casing. Production casing may be set above or through the producing or injection zone and cemented above the objective zones. Sufficient cement shall be used to exclude overlying formation fluids from the zone, to segregate zones, and to prevent movement of fluids behind the casing into zones that contain useable ground water. Production casing shall either be cemented solid to the surface or lapped into intermediate casing, if run. If the production casing is lapped into an intermediate string, the casing overlap shall be at least 50 feet, the lap shall be cemented solid, and it shall be pressure tested to ensure its integrity.

In order to reduce casing corrosion, production casing used to produce corrosive brine reservoirs shall be of the same nominal inside diameter from the shoe of the casing to the ground surface.

(5) Casing and Cement Tests. All casing strings shall be tested after cementing and before commencing any other operations on the well. Form G-103 shall be filed for each casing string reporting the grade and weight of pipe used. In the case of combination strings utilizing pipe of varied grades or weights, the footage of each grade and weight used shall be reported. The results of the casing test, including actual pressure held on the pipe and the pressure drop observed, shall also be reported on the Form G-103. See Rule G-203C(2).

(a) Casing strings in wells drilled with rotary tools shall be pressure-tested. Minimum casing test pressure shall be approximately one-third of the manufacturer's rated internal yield pressure except that the test pressure shall not be less than 600 pounds per square inch and need not

natural resources of the State of New Mexico.

RULE G-201. APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK-GEOTHERMAL RESOURCES WELL (FORM G-101)

Before commencement of drilling or deepening operations of any geothermal resources well, or before plugging a well back to another zone, the operator of the well shall obtain a permit to do so. To obtain such a permit the operator shall submit to the Division FOUR copies of Form G-101, Application for Permit to Drill, Deepen, or Plug Back-Geothermal Resources Well, completely filled in. If the operator has an approved bond in accordance with Rule G-101 and has filed satisfactory "Designation of Agent" (Rule G-100), and the proposed well meets the spacing and well location requirements (Rule G-104), one copy of the Drilling Permit will be returned to him on which will be noted the Division's approval, with any modification deemed advisable. If the proposal cannot be approved for any reason, the Forms G-101 will be returned with the cause for rejection stated thereon.

Each copy of Form G-101 must be accompanied by one copy of Form G-102, Geothermal Resources Well Location and Acreage Dedication Plat. (See Rule G-202.)

If the well is to be drilled on state land, FIVE copies of Forms G-101 and G-102 shall be submitted, the extra copy being for the State Land Office.

RULE G-202. GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT. (FORM G-102)

Form G-102 is a dual purpose form used to show the exact location of the well and the acreage dedicated thereto. The form is also used to show the ownership and status of each lease contained within the dedicated acreage. When there is more than one working interest or royalty owner on a given lease, designation of the majority owner et al. will be sufficient.

All information required on -102 shall be filled in and certified by the operator of the well except the well location on the plat. This is to be plotted from the outer boundaries of the section and certified by a registered professional engineer and/or land surveyor, registered in the State of New Mexico, or a surveyor approved by the Division. The surveyed location of thermal gradient wells is not required. Instead, an estimated location in a given quarter-quarter section will suffice.

Form G-102 shall be submitted in QUADRUPLICATE or QUINTUPLICATE as provided in Rule G-201.

Amended Form G-102 (in QUADRUPLICATE or QUINTUPLICATE) shall be filed in the event there is a change in any of the information previously submitted. The well location need not be certified when filing amended Form G-102.

RULE G-203. SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELL (FORM G-103)

Form G-103 is a dual purpose form to be filed with the Santa Fe office of the Division to obtain approval prior to commencing certain operations and also to report various completed operations.

A. Form G-103 as a Notice of Intention

Form G-103 shall be filed in DUPLICATE by the operator and approval obtained from the Division prior to:

(1) Effecting a change of plans from those previously approved on Form G-101 or Form G-103.

(2) Altering a drilling well's casing program or pulling casing or otherwise altering an existing well's casing installation.

(3) Temporarily abandoning a well. (See Rule G-303 B.)

(4) Plugging and abandoning a well. (See Rules G-302 and G-303 A.)

(5) Performing remedial work on a well which, when completed, will affect the original status of the well. (This shall include making new perforations in existing wells or squeezing old perforations in existing wells, but is not applicable to new wells in the process of being completed not to old wells being deepened or plugged back to another zone when such recompletion has been authorized by an approved Form G-101, Application for Permit to Drill, Deepen, or Plug Back, nor to acidizing, fracturing, or cleaning out previously completed wells.)

In the case of well plugging operations, the Notice of Intention shall include a detailed statement of the proposed work, including plans for shooting and pulling

2/7/84

Memo

From

CARL ULVOG

Chief Geologist

To McCants Geothermal File

1st well ± 200 yds. NW of greenhouse
drld ± 1 mo. ago to 225' [warm]

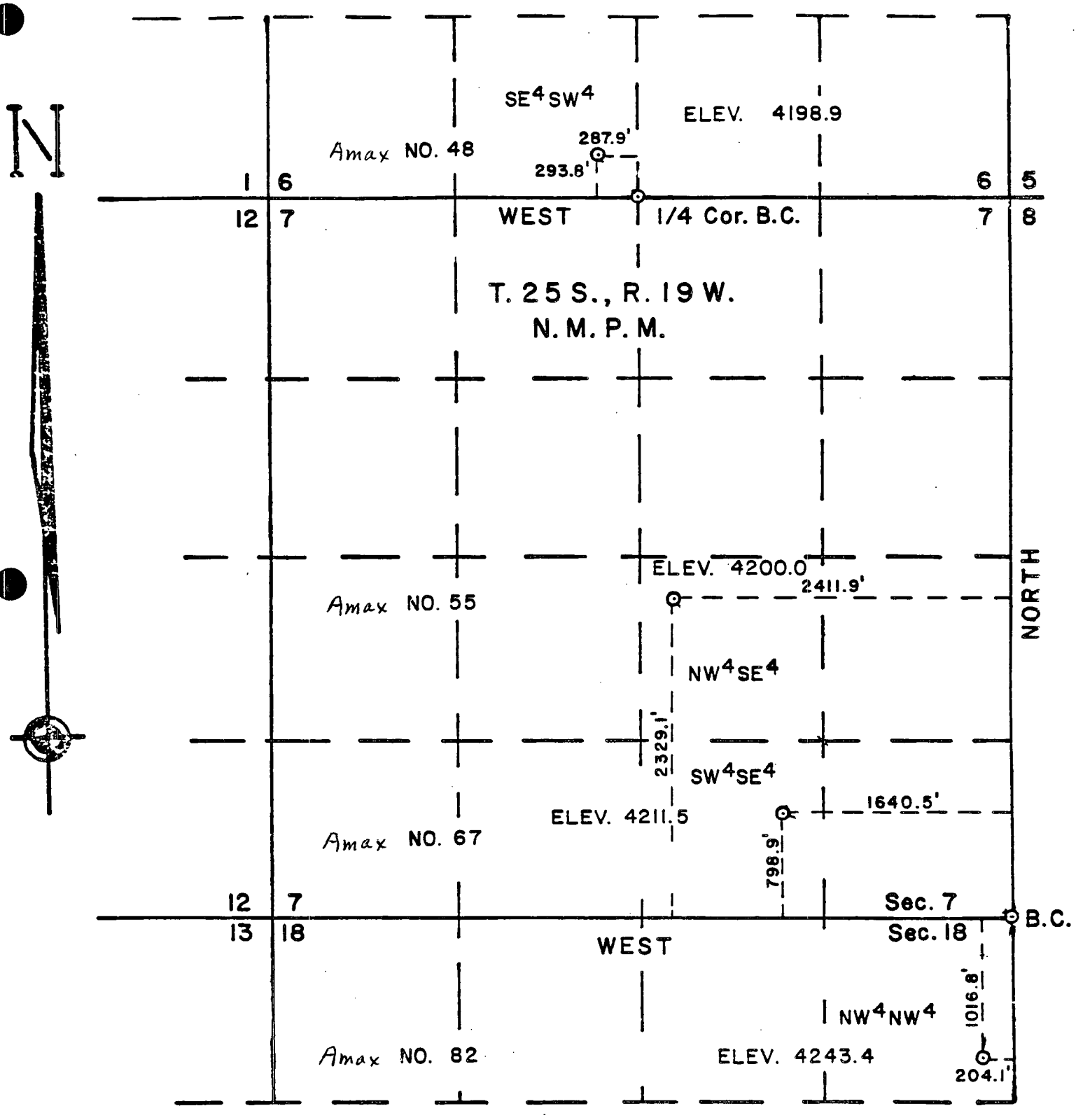
2nd well ± 1½ mi. W of 1st well
(½ way between greenhouse & highway)
by old homestead & irrig well.
drld to 140' [cold]

according to Oasis Drlg, Co.
Artesia, NM 548-2287

Oil Conservation Division
P.O. Box 2088 Santa Fe, N.M. 87501

GEOTHERMAL WELLS

SECTIONS 6-7 &18, T.25S., R.19W., N.M.P.M.
HIDALGO COUNTY, NEW MEXICO



± 16 mi S-SW of Lordsburg

± 5 mi. N-NE of Cotton City

0 500 1000 1500 2500

SCALE: 1" = 1000'

LAND SURVEYOR'S CERTIFICATE

This Plat and the information hereon is the result of an actual field survey made by me or under my supervision and

REGISTERED LAND SURVEYOR STATE OF

LEGAL NOTICE

NOTICE is hereby given that on December 6, 1983, Thomas W. McCants, Star Route Box 26 Animas, New Mexico 88020 filed application number A-45-S-2 with the STATE ENGINEER f permit to appropriate 387 acre feet per annum of shallow ground water of the Animas Valle Underground Water Basin by drilling a supplemental well to be located in the NE¼NW¼ of Sectio 12, Township 25 South, Range 20 West, N.M.P.M., to be used to supplement wells A-45 and A-45 located in the SW¼NE¼NW¼ of Section 12, Township 25 South, Range 20 West, N.M.P.M., and in th SW¼NW¼NE¼ of Section 7, Township 25 South, Range 19 West, N.M.P.M., for the supplement irrigation of 258 acres of land described as follows:

SUBDIVISION	SECTION	TOWNSHIP	RANGE	ACRE
Part S½NE¼SW¼	1	25S	20W	5
Part SE¼SW¼	1	25S	20W	30
Part S½NW¼SE¼	1	25S	20W	13
Part S½NE¼SE¼	1	25S	20W	6
Part SE¼SE¼	1	25S	20W	23
Part SW¼SE¼	1	25S	20W	39
Part NE¼NW¼	12	25S	20W	4
Part NW¼NE¼	12	25S	20W	36
Part NE¼NE¼	12	25S	20W	18
SE¼SW¼	6	25S	19 W	40
NW¼NE¼	7	25S	19W	40

Any person, firm, association, corporation, the State of New Mexico or the United States of Ame ica, deeming that the granting of the above application will impair or be detrimental to their wate rights, may protest in writing the proposal set forth in said application. The protest shall set forth a protestant's reasons why the application should not be approved and must be filed, in triplicat with S.E. Reynolds, State Engineer, District III, P.O. Box 844, Deming, New Mexico, within ten (1 days after the date of the last publication of this Notice.

D9,16,

Since 1887
Lordsburg Liberal
Publishing Co., Inc.

P. O. Box L Phone 542-3471 Lordsburg, N.M. 88045

Tom Neall
c/o Thomas W. McCants
Star Route Box 26
Animas, NM 88020

STATEMENT OF YOUR ACCOUNT FOR December 23, 19 83

DAY	DESCRIPTION	CHARGES	CREDITS	BALANCE
Dec. 9, 16, 23, 1983	- Legal Notice			
	26 Lines - 3 col.			
	Notice to Border river			
		62.17		62.17

Accounts are due and payable upon receipt of statement.

NM OIL CONS. COMMISSION
Drawer DD
ARTESIA, NM 88210

RECEIVED BY
FEB 22 1984
O. C. D.
ARTESIA, OFFICE

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

Form Approved
Budget Bureau No.

GEOTHERMAL DRILLING PERMIT

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

4. LEASE SERIAL NO.: NM 34790
5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)
6. UNIT AGREEMENT NAME
7. WELL NO.: one
8. PERMIT NO.
9. FIELD OR AREA: Lightning Dock Area
10. SEC. T., R. B.& M.: 7, 25, 19W.
11. COUNTY: Hidalgo
12. STATE: N M
13. APPROX. STARTING DATE: Jan 20 - 1984
14. ACRES ASSIGNED (WELL SPACING)

1a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

1b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

1c. WELL STATUS: Gas well pumping

2. NAME OF LESSEE/OPERATOR: Tom McCants operator Amax Lessee

3. ADDRESS OF LESSEE/OPERATOR: 1707 Colo Blvd, Golden Colo 80401 — operator Star Route [illegible]

15. LOCATION OF WELL
At surface: 481.6 FWL and 525.6 FNL — see survey
At proposed prod. zone: same for it

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16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE: 1/2 Mile

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE: 1/4 mile

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH
MEASURED:
TRUE VERTICAL:

20. ELEVATIONS: ESTIMATED ( ) FINAL ( )
REFERENCE DATUM: GR ( ) MAT ( ) DF ( ) KB ( ) RT ( ) CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
10"	8"	27 lb.	welded				10 bags

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SANTA FE

22. PROPOSED WORK SUMMARY

The well will be drilled by Oasis, who has drilled most of water and geothermal wells in the area that are shallow. The first 75 feet should show gravel, at 100' there should be a thin rock like layer at 100-105', the remaining 100' should be in gravel. The casing will be serrated from 75' to bottom. Hot water should show at 75' continue to the bottom. The well will have 2 8" x 2" - 11.5 lb. Channel pieces welded to each side of casing at the top and bedded in cement slab.

(Use additional space on reverse side of form)

23.

SIGNED: Thomas W. McCants TITLE: operator DATE: 12-4-83

(This space for Federal use)

APPROVED BY: (Orig. Sgd.) Earl R. Cunningham TITLE: District Manager DATE: FEB 21 1984

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)

INSTRUCTIONS

GENERAL: This form shall be submitted for any application to drill for, test, extract, produce, dispose and/or utilize the actual geothermal resource on Federally leased lands or lands covered by a unit or cooperative agreement.

ITEM 1C: Show the current status for existing wells; I=injecting, F=flowing, P=pumping, HE=heat exchange, SI=shut-in, WS=water supply, OB=observation, O=other (explain).

ITEM 7: Number wells using the Modified Kettleman Well Numbering System (see below).

ITEM 15: Show the surface location coordinates from the nearest section corner or tract lines and if the well is to be directionally drilled, the proposed production zone coordinates (top and bottom) from the surface location.

ITEM 19: Indicate reference datum from which measurement was made (see item 20).

ITEM 20: If the reference datum shown is not the graded mat, also show the measurement from the mat surface (e.g. mat-to-derrick floor (DF)measurement, mat-to-rotary table (RT) measurement, mat-to-kelly bushing (KB) measurement, etc.).

ITEM 21: For subsequent well work the latest well conditions along with all proposed additions and changes must be shown. To show current well conditions, either fill out this item or attach the latest completion report on the subject well.

ITEM 22: Summarize other pertinent existing data such as producing and injecting zones, type, size, and density of perforations and perforated intervals, etc., in addition to the proposed work. Indicate reasons for changes undertaken.

PROCEDURE FOR NUMBERING GEOTHERMAL WELLS USING THE MODIFIED KETTLEMAN WELL NUMBERING SYSTEM

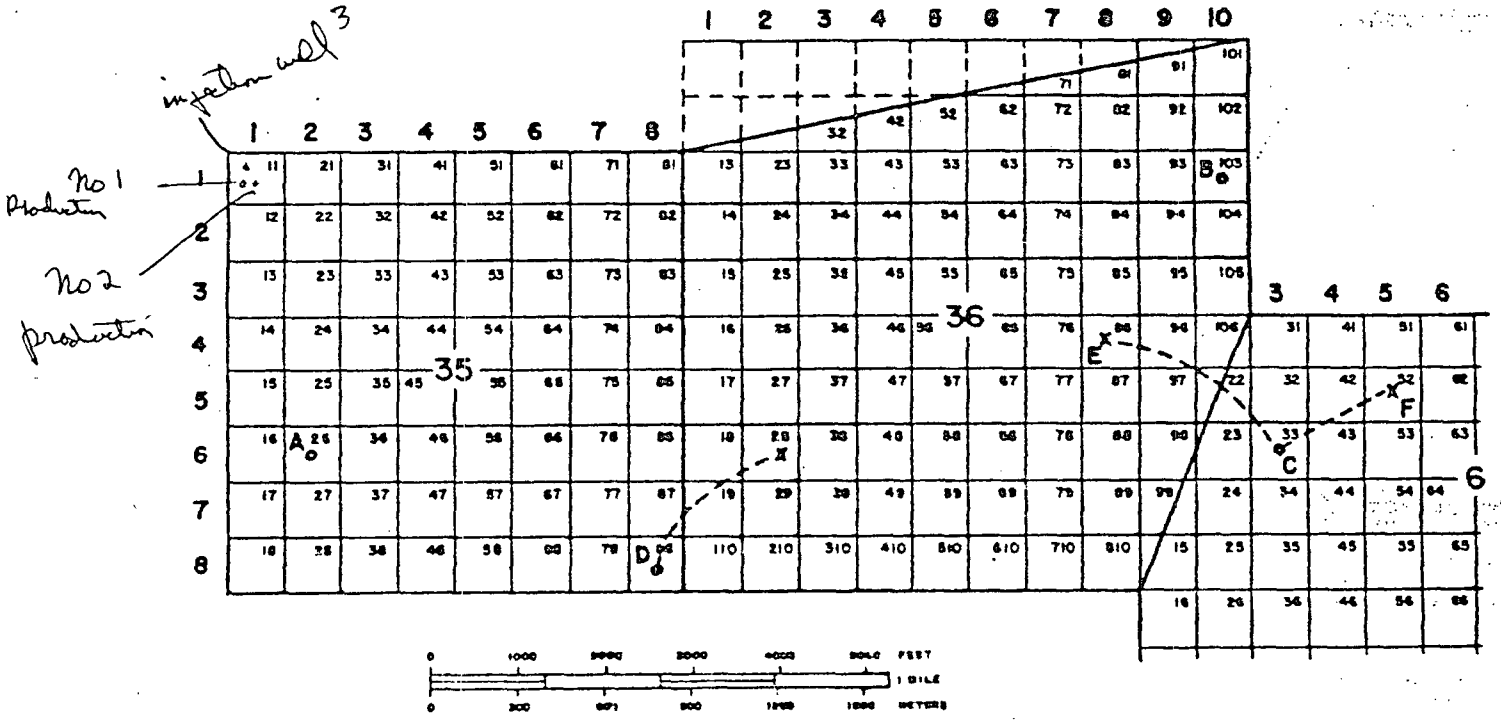
1. Subdivide the sections where the wells are to be located into 10-acre (660 feet X 660 feet) subdivisions. Number each horizontal and vertical subdivision starting in the northwest corner of each section with 1, 1 and increasing to the east and south. A regular 640-acre section contains 64 subdivisions numbered from 11 to 88 (vertical digit first, followed by horizontal digit).

2. Number the first vertical well with the number of the 10-acre subdivision in which it is located, followed by the section number. (See Examples "A", "B", and "C", below.) If the first well is directionally drilled, number it with the subdivision number of its surface location, followed by the subdivision number in which the bottom of the completion interval lies and that section number (if different from the surface section number), and followed by the surface section number. (See Example "D".)

3. Subsequent wells drilled from the same 10-acre surface location are numbered in the manner described above with an A, B, C, etc., added following the surface subdivision number. (See Examples "E" and "F".)

4. For sections with irregular boundaries, align a 10-acre grid pattern North-South, running through the westernmost section point or line, and East-West, running through the northernmost section point or line. Number wells according to the 10-acre grid, subdividing as far as possible to the east and south.

Example A	26-35	Example D	Directional 88(28-36)-35
Example B	103-36	Example E	Directional 33A(86-36)-6
Example C	33-6	Example F	Directional 33B(52)-6



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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SANTA FE

Form C-101
Adopted 10-1-74
Revised 10-1-78

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APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease STATE ☐ FEE ☐

5.a State Lease No.

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐

b. Type of Well: Geothermal Producer ☐ Temp Observation ☐ Low-Temp Thermal ☐ Injection/Disposal ☒

7. Unit Agreement Name

8. Farm or Lease Name

2. Name of Operator: TOM MCCANTS

9. Well No.

3. Address of Operator: St. Rt. 265 Animas N.M. 88020

10. Field and Pool, or Wildcat

4. Location of Well: UNIT LETTER _____ LOCATED _____ FEET FROM THE _____ LINE AND _____ FEET FROM THE _____ LINE OF SEC. _____ TWP. _____ RGE. _____ NMPM

12. County

19. Proposed Depth	19A. Formation	20. Rotary or C.T.

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed _____ *Title* _____ *Date* _____

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NM OIL CONS. COMMISSION
Drawer DD
RECEIVED BY NM 88210

FEB 22 1984

O. C. D.
ARTESIA, OFFICE

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

GEOTHERMAL DRILLING PERMIT

Form Approved
Budget Bureau No.

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

1a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

1b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

1c. WELL STATUS: Gas well pumping

2. NAME OF LESSEE/OPERATOR: Tom McCants ... Amos Lessee

3. ADDRESS OF LESSEE/OPERATOR: 1707 Cole Blvd, Golden Colo 80401 — operator Star Route Box 26 Animas NM

15. LOCATION OF WELL
At surface: 481.6 FWL and 525.6 FNL ... Survey
At proposed prod. zone: same ...

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE: 1/2 mile

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE: 1/4 mile

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ROSWELL, NEW MEXICO

4. LEASE SERIAL NO.: NM 34790
5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)
6. UNIT AGREEMENT NAME
7. WELL NO.: One
8. PERMIT NO.
9. FIELD OR AREA: Lightning Dock Area
10. SEC., T., R., B.& M.: 7, 25, 19W. Lightning
11. COUNTY: Hidalgo
12. STATE: N.M.
13. APPROX. STARTING DATE: Jan 20 1984
14. ACRES ASSIGNED (WELL SPACING)

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH
MEASURED:
TRUE VERTICAL:

20. ELEVATIONS: ESTIMATED ( ) FINAL ( )
REFERENCE DATUM: GR ( ) MAT ( ) DF ( ) KB ( ) RT ( ) CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
10"	8"	27 lb.	welded			200	10 bags

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OIL CONSERVATION DIVISION
SANTA FE

22. PROPOSED WORK SUMMARY

The well will be drilled by Oasis, who has drilled most of water and geothermal wells in the area that are shallow. The first 75 feet should show gravel, at 100' there should be a thin rock like layer at 100-105', the remaining 100' should be in gravel. The Casing will be serrated from 75' to bottom. Hot water should show at 75' continue to the bottom. The well will have 2 8" x 2" - 11.5 lb. Channel pieces welded to each side of Casing at the top and bedded in Cement Slab.

(Use additional space on reverse side of form)

23.

SIGNED Thomas W. McCant TITLE operator DATE 12-4-83

(This space for Federal use)

APPROVED BY (Orig. Sgd.) Earl R. Cunningham TITLE District Manager DATE FEB 21 1984

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)

INSTRUCTIONS

GENERAL: This form shall be submitted for any application to drill for, test, extract, produce, dispose and/or utilize the actual geothermal resource on Federally leased lands or lands covered by a unit or cooperative agreement.

ITEM 10: Show the current status for existing wells; I=injecting, F=flowing, P=pumping, HE=heat exchange, SI=shut-in, WS=water supply, OB=observation, O=other (explain).

ITEM 17: Number wells using the Modified Kettleman Well Numbering System (see below).

ITEM 15: Show the surface location coordinates from the nearest section corner or tract lines and if the well is to be directionally drilled, the proposed production zone coordinates (top and bottom) from the surface location.

ITEM 19: Indicate reference datum from which measurement was made (see item 20).

ITEM 20: If the reference datum shown is not the graded mat, also show the measurement from the mat surface (e.g. mat-to-derrick floor (DF)measurement, mat-to-rotary table (RT) measurement, mat-to-kelly bushing (KB) measurement, etc.).

ITEM 21: For subsequent well work the latest well conditions along with all proposed additions and changes must be shown. To show current well conditions, either fill out this item or attach the latest completion report on the subject well.

ITEM 22: Summarize other pertinent existing data such as producing and injecting zones, type, size, and density of perforations and perforated intervals, etc., in addition to the proposed work. Indicate reasons for changes undertaken.

PROCEDURE FOR NUMBERING GEOTHERMAL WELLS USING THE MODIFIED KETTLEMAN WELL NUMBERING SYSTEM.

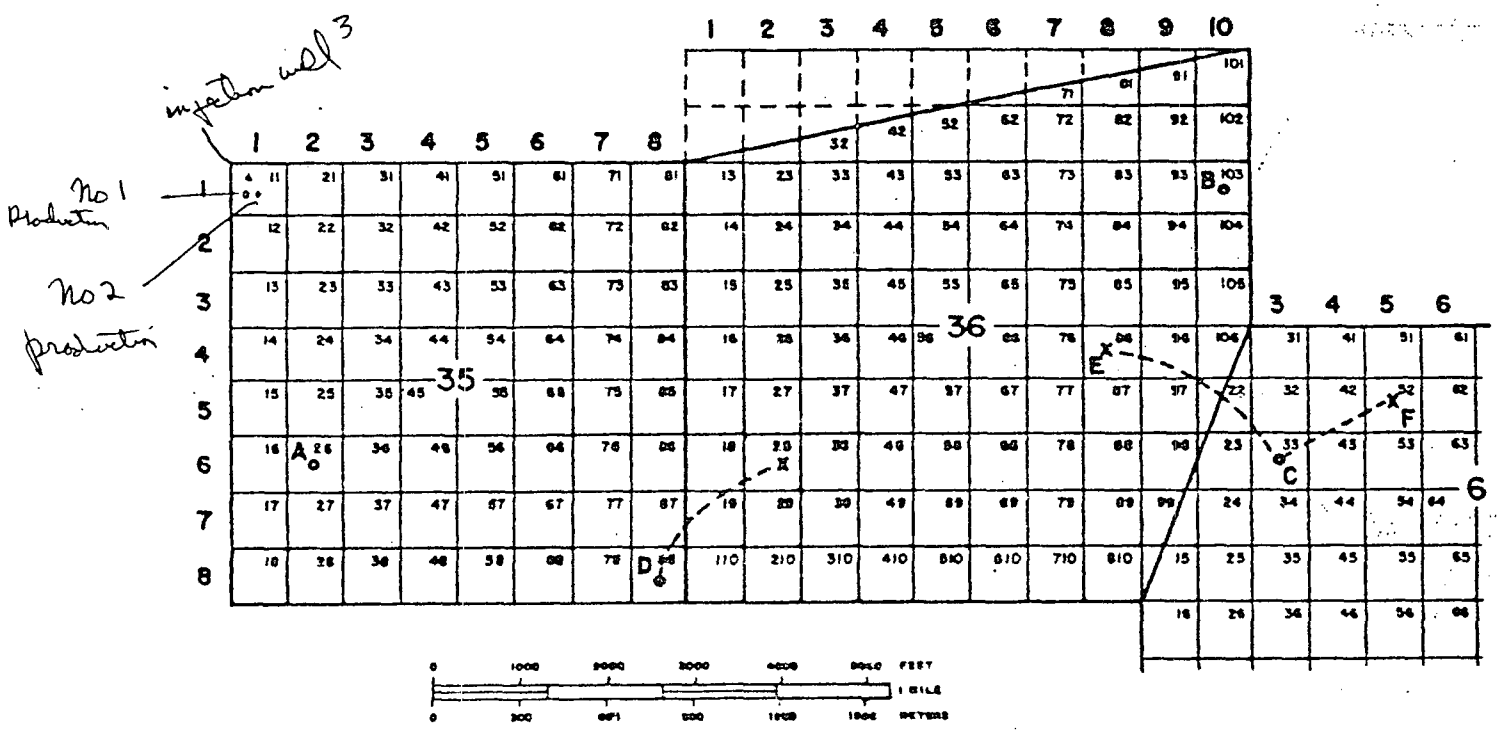
1. Subdivide the sections where the wells are to be located into 10-acre (660 feet X 660 feet) subdivisions. Number each horizontal and vertical subdivision starting in the northwest corner of each section with 1, 1 and increasing to the east and south. A regular 640-acre section contains 64 subdivisions numbered from 11 to 88 (vertical digit first, followed by horizontal digit).

2. Number the first vertical well with the number of the 10-acre subdivision in which it is located, followed by the section number. (See Examples "A", "B", and "C", below.) If the first well is directionally drilled, number it with the subdivision number of its surface location, followed by the subdivision number in which the bottom of the completion interval lies and that section number (if different from the surface section number), and followed by the surface section number. (See Example "D".)

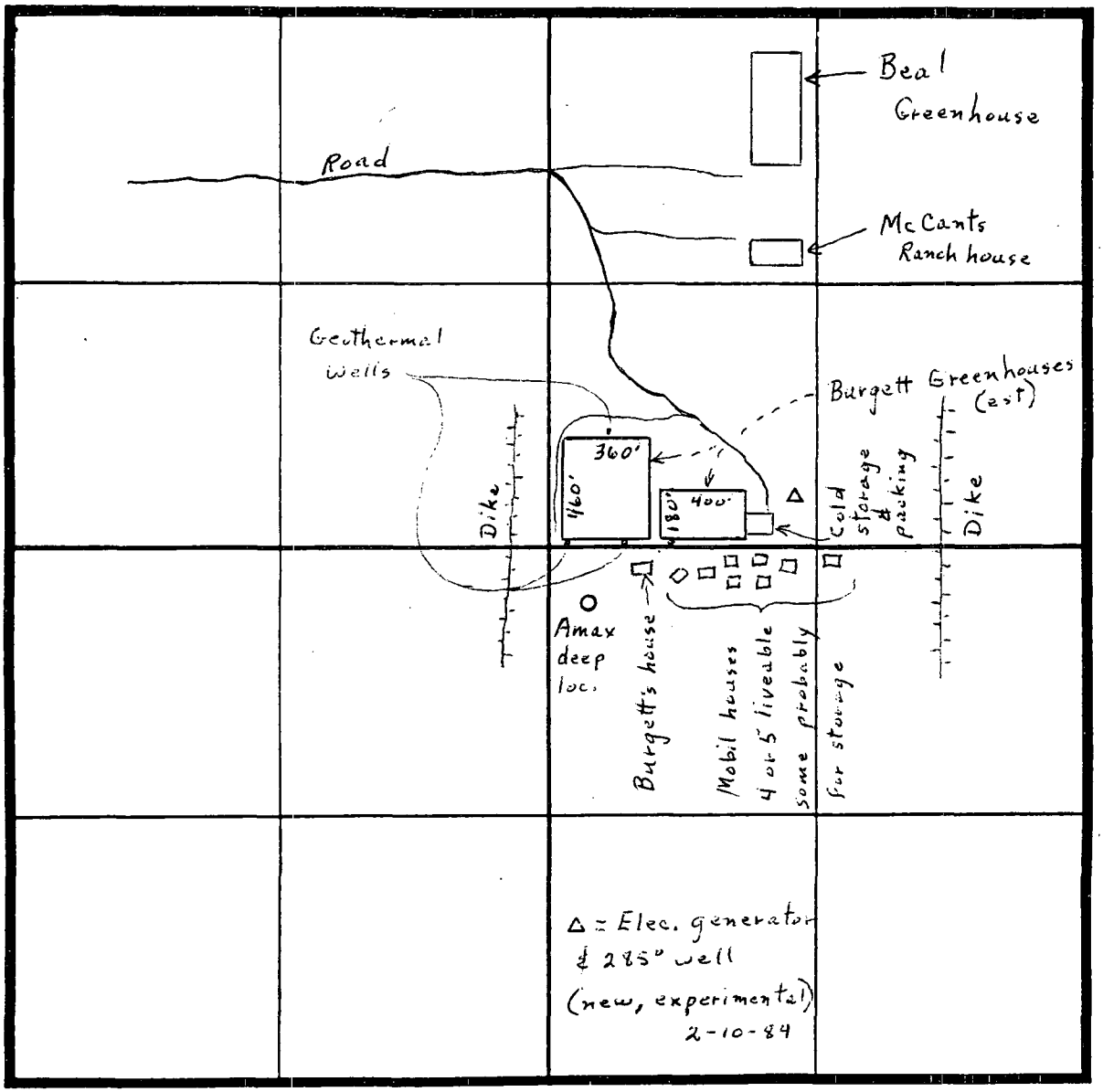
3. Subsequent wells drilled from the same 10-acre surface location are numbered in the manner described above with an A, B, C, etc., added following the surface subdivision number. (See Examples "E" and "F".)

4. For sections with irregular boundaries, align a 10-acre grid pattern North-South, running through the westernmost section point or line, and East-West, running through the northernmost section point or line. Number wells according to the 10-acre grid, subdividing as far as possible to the east and south.

Example A	26-35	Example D	Directional 88(28-36)-35
Example B	103-36	Example E	Directional 33A(86-36)-6
Example C	33-6	Example F	Directional 33B(52)-6



Sec. 7 Township No. 25 South of Range No. 19 West



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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SANTA FE

Form C-101
Adopted 10-1-74
Revised 10-1-78

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Operator		
Land Office		

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK--GEOTHERMAL RESOURCES WELL

5. Indicate Type of Lease: STATE ☐ BLM FEE ☐

5.a ~~State Lease~~ No. NM 34790

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐

b. Type of Well: Geothermal Producer ☐ Low-Temp Thermal ☒ Temp Observation ☐ Injection/Disposal ☐

7. Unit Agreement Name

8. Farm or Lease Name

2. Name of Operator: Tom McCants

9. Well No.: one

3. Address of Operator: Rt. Rt. 265 Animas N.M. 88020

10. Field and Pool, or Wildcat

4. Location of Well: UNIT LETTER ___ LOCATED 518.6 FEET FROM THE F W.L. LINE AND 525.6 FEET FROM THE F N.L. LINE OF SEC. 7 TWP. 25 RGE. 19 W. NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
200'	gravel	

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
?		Oasis Drilling	Feb. 1. 1984

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
10"	8"	27.5	200'	10 sacks	

The well will be drilled by Oasis who has drilled most of water and geothermal wells in the area that are shallow. The first 75' should caved and at 100' a thin rock like layer then the next 100 feet should be caved. The casing will be serated from 75' to bottom. Hot water should flow at 75' and Continue to bottom. The well will have two pieces of 8" x 2" channel iron welded to each side of casing at top and bedded in Cement slab. There is no potable water in the section.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. Give blowout preventer program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Tom McCants Title agent Date 1-20-84

(This space for State Use)

APPROVED BY ___ TITLE ___ DATE ___

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form G-102
Adopted 10-1-74
Revised 10-1-78

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Tom McCants	Golden Cobra 82401 AMAX 1707 Cole BLVD	No 1

Unit Letter	Section	Township	Range	County
	7	25	19W	Hidalgo

Actual Footage Location of Well:
481.6 feet from the WL line and 525.6 feet from the NL line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
	200 ft. bmd		Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.

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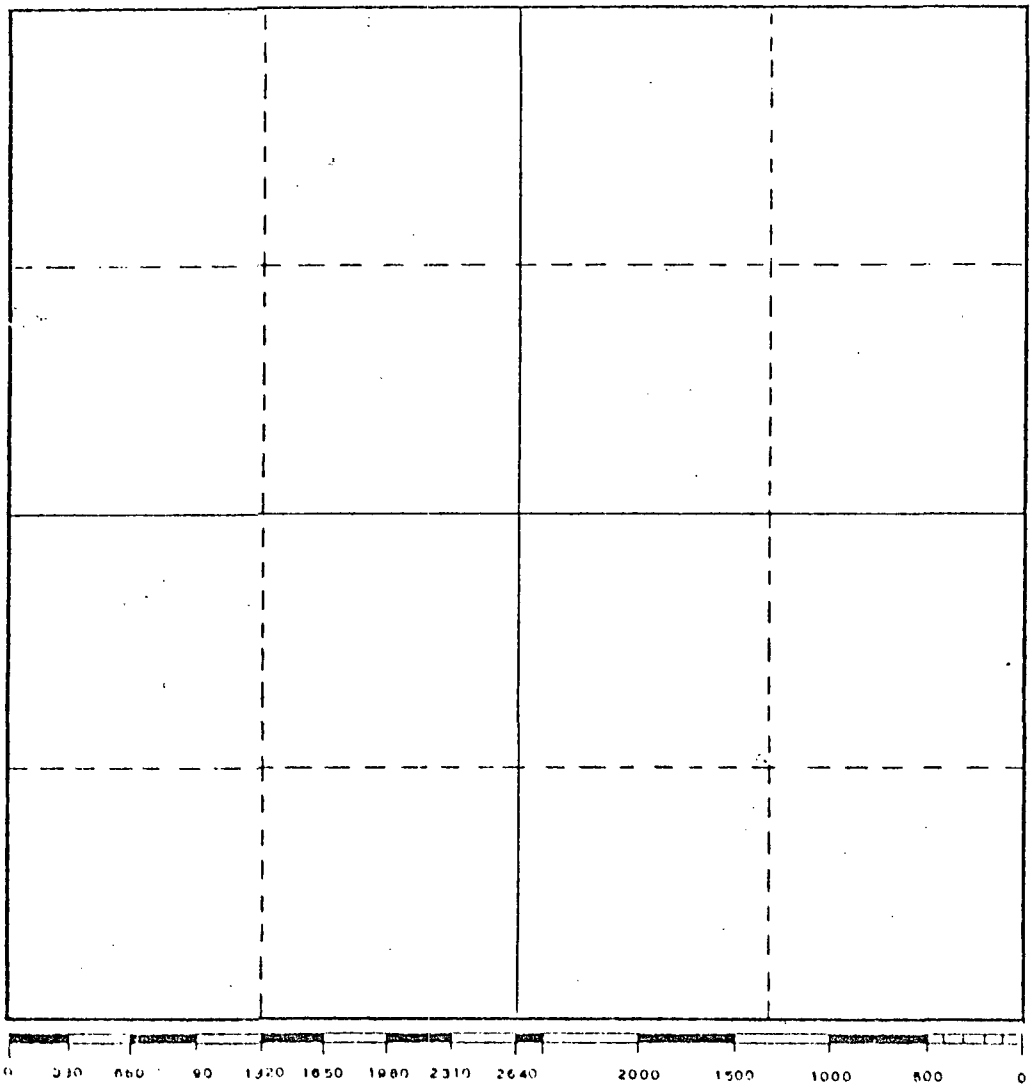
SANTA FE



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

GEOTHERMAL DRILLING PERMIT

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OIL CONSERVATION DIVISION
SANTA FE

Form Approved
Budget Bureau No. _____

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

LEASE SERIAL NO.: NM 34790

5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)

6. UNIT AGREEMENT NAME

7. WELL NO.: one

8. PERMIT NO.

9. FIELD OR AREA: Lightning Dock Area

10. SEC. T., R., B. & M.: 7, 25, 19W.

11. COUNTY: Hidalgo

12. STATE: NM

13. APPROX. STARTING DATE: Jan 2c 1984

14. ACRES ASSIGNED (WELL SPACING)

a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

c. WELL STATUS: One well pumping

d. NAME OF LESSEE/OPERATOR
Tom McCutcheon Amoco Lessee

e. ADDRESS OF LESSEE/OPERATOR
1707 Cole Blvd, Golden Colo 80401 — operator State Bond 65 Animas NM 88020

15. LOCATION OF WELL
At surface: 481.6 FWL and 525.6 FNL
At proposed prod. zone: same for ft.

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE
2 Miles

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE
¼ mile

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH
MEASURED:
TRUE VERTICAL:

20. ELEVATIONS: ESTIMATED ( ) FINAL ( )
REFERENCE DATUM: GR ( ) MAT ( ) DF ( ) KB ( ) RT ( )
CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
10"	2"	27 lb.	welded			200	to logs

22. PROPOSED WORK SUMMARY

The well will be drilled by Oasis, who has drilled most of water and geothermal wells in the area that are shallow. The first 75 feet should show gravel, at 100' there should be a thin rock like layer at 100-105', the remaining 100' should be in gravel. The casing will be serated from 75' to bottom. Hot water should show at 75' continue to the bottom. The well will have ± 8"x 2" - 11.5 lb. channel irons welded to each side of casing at the top and bedded in Cement Slab.

(Use additional space on reverse side of form)

23.

SIGNED Thomas A. McCutcheon TITLE operator DATE 12-4-83

(This space for Federal use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

GEOTHERMAL DRILLING PERMIT

RECEIVED BY COMMISSION
Drawer DD
Artesia, NM 88210
FEB 22 1984
O.C.D.
ARTESIA, OFFICE

Form Approved
Budget Bureau No.

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

4. LEASE SERIAL NO. NM 34790
5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)
6. UNIT AGREEMENT NAME
7. WELL NO. two
8. PERMIT NO.
9. FIELD OR AREA Lightning Dock Area
10. SEC. T., R., B.&M. 7, 25, 19W.
11. COUNTY Hidalgo
12. STATE N.M.
13. APPROX. STARTING DATE Jan 20 1984
14. ACRES ASSIGNED (WELL SPACING)

1a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

1b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

1c. WELL STATUS: One well pumping

2. NAME OF LESSEE/OPERATOR
Tom McCarty operator Amax Lessee

3. ADDRESS OF LESSEE/OPERATOR
1707 Colo Blvd, Golden Colo 80401 — operator Star Route Box 265 Animas NM 88020

15. LOCATION OF WELL
At surface 488.3' F.W.L and 665.6' F.[illegible] see survey
At proposed prod. zone
same [illegible]

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE
2 miles

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE
1/4 mile

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ROSWELL, NEW MEXICO

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH 200
MEASURED:
TRUE VERTICAL: 200

20. ELEVATIONS: ESTIMATED ( ) FINAL ( )
REFERENCE DATUM: GR ( ) MAT ( ) DF ( ) KB ( ) RT ( ) CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
10"	8"	27 lb.	welded			200	10 bags

RECEIVED
FEB 27 1984
OIL CONSERVATION DIVISION
SANTA FE

22. PROPOSED WORK SUMMARY

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(Use additional space on reverse side of form)

23.

SIGNED Thomas W. McCarty TITLE operator DATE 12-4-83

(This space for Federal use)

APPROVED BY Orig. Sgd. Earl R. Cunningham TITLE District Manager DATE FEB 21 1984

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1023); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.

(See instructions on reverse side)

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ITEM 10: Show the current status for existing wells; I=injecting, F=flowing, P=pumping, HE=heat exchange, SI=shut-in, WS=water supply, OB=observation, C=other (explain).

ITEM 7: Number wells using the Modified Kettleman Well Numbering System (see below).

ITEM 15: Show the surface location coordinates from the nearest section corner or tract lines and if the well is to be directionally drilled, the proposed production zone coordinates (top and bottom) from the surface location.

ITEM 19: Indicate reference datum from which measurement was made (see item 20).

ITEM 20: If the reference datum shown is not the graded mat, also show the measurement from the mat surface (e.g. mat-to-derrick floor (DF)measurement, mat-to-rotary table (RT) measurement, mat-to-kelly bushing (KB) measurement, etc.).

ITEM 21: For subsequent well work the latest well conditions along with all proposed additions and changes must be shown. To show current well conditions, either fill out this item or attach the latest completion report on the subject well.

ITEM 22: Summarize other pertinent existing data such as producing and injecting zones, type, size, and density of perforations and perforated intervals, etc., in addition to the proposed work. Indicate reasons for changes undertaken.

PROCEDURE FOR NUMBERING GEOTHERMAL WELLS USING THE MODIFIED KETTLEMAN WELL NUMBERING SYSTEM

1. Subdivide the sections where the wells are to be located into 10-acre (660 feet X 660 feet) subdivisions. Number each horizontal and vertical subdivision starting in the northwest corner of each section with 1, 1 and increasing to the east and south. A regular 640-acre section contains 64 subdivisions numbered from 11 to 88 (vertical digit first, followed by horizontal digit).

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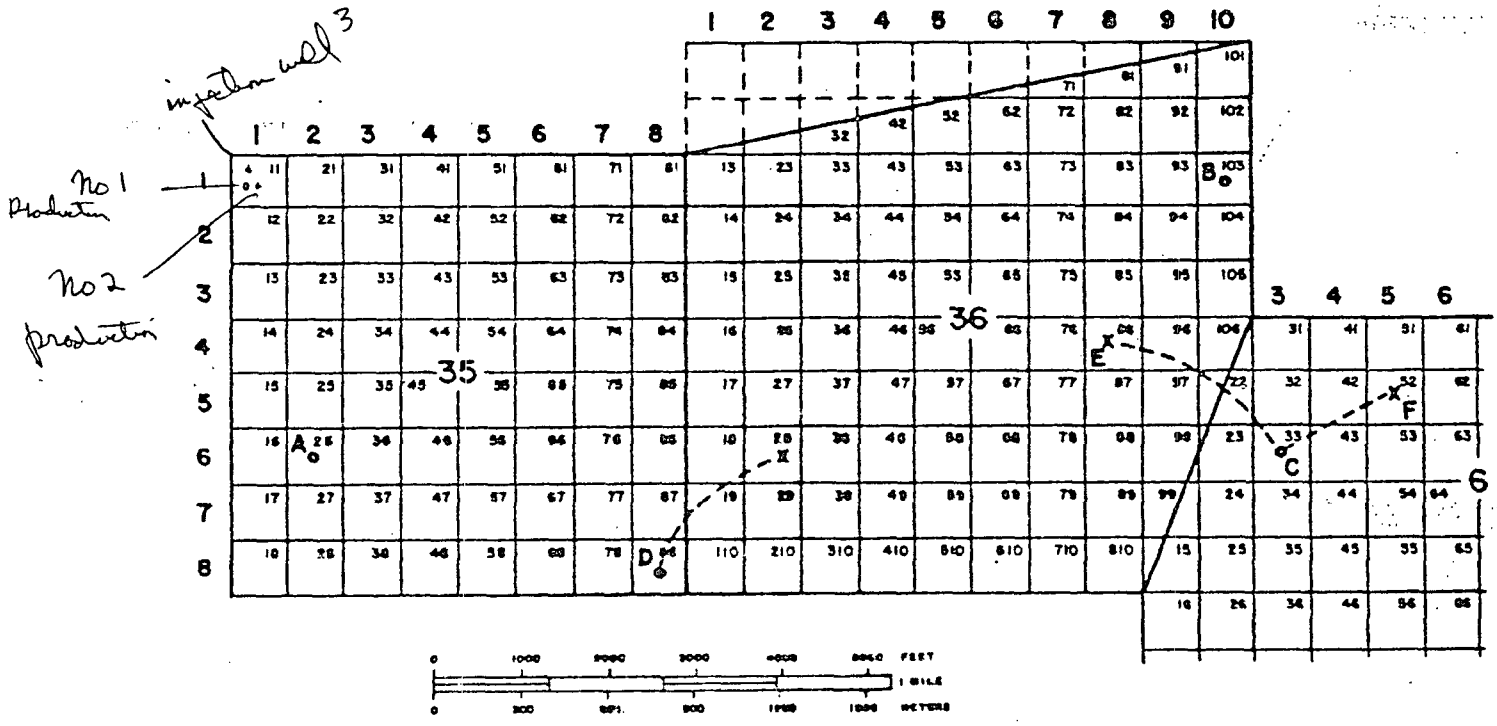
3. Subsequent wells drilled from the same 10-acre surface location are numbered in the manner described above with an A, B, C, etc., added following the surface subdivision number. (See Examples "E" and "F".)

4. For sections with irregular boundaries, align a 10-acre grid pattern North-South, running through the westernmost section point or line, and East-West, running through the northernmost section point or line. Number wells according to the 10-acre grid, subdividing as far as possible to the east and south.

Example A	26-35	Example D	Directional 88(28-36)-35
Example B	103-36	Example E	Directional 33A(86-36)-6
Example C	33-6	Example F	Directional 33B(52)-6



NM OIL CONS. COMMISSION
RECEIVED BY
Drawer DD
Artesia, NM 88210
FEB 22 1984
O. C. D.
ARTESIA, OFFICE

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

Form Approved
Budget Bureau No.

GEOTHERMAL DRILLING PERMIT

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

4. LEASE SERIAL NO. NM 34790
5. SURFACE MANAGER: BLM ( ) FS ( ) Other (X)
6. UNIT AGREEMENT NAME
7. WELL NO. two
8. PERMIT NO.
9. FIELD OR AREA Lightning Dock Area
10. SEC. T., R., B.& M. 7, 25, 19W.
11. COUNTY Hidalgo
12. STATE N.M.
13. APPROX. STARTING DATE Jan 20 1984
14. ACRES ASSIGNED (WELL SPACING)

1a. TYPE OF WORK: DRILL NEW WELL (X) REDRILL ( ) DEEPEN ( ) PLUG BACK ( ) DIRECTIONALLY DRILL ( ) OTHER ( )

1b. WELL TYPE: PRODUCTION (X) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

1c. WELL STATUS: One well pumping

2. NAME OF LESSEE/OPERATOR
Tom McCarty operator Amax lessee

3. ADDRESS OF LESSEE/OPERATOR
1701 Cole Blvd, Golden Colo 80401 — operator Sla[illegible]

15. LOCATION OF WELL
At surface 488.3' F.W.L and 665.6' F[illegible] see survey
At proposed prod. zone same 200 ft.

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE
2 miles

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE
1/4 mile

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JAN 10 1984
OIL & GAS
ROSWELL, NEW MEXICO

18. DRILLING MEDIA AND CHARACTERISTICS: AIR ( ) WATER ( ) MUD (X) FOAM ( ) Other ( )

19. PROPOSED DEPTH 200
MEASURED:
TRUE VERTICAL: 200

20. ELEVATIONS: ESTIMATED ( ) FINAL ( )
REFERENCE DATUM: GR ( ) MAT ( ) DF ( ) KB ( ) RT ( ) CASINGHEAD FLANGE ( ) OTHER ( )

21. EXISTING AND/OR PROPOSED CASING AND CEMENTING PROGRAM (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH Top	SETTING DEPTH Bottom	QUANTITY OF CEMENT
10"	8"	27 lb.	welded			200	10 bags

RECEIVED
FEB 27 1984
OIL CONSERVATION DIVISION
SANTA FE

22. PROPOSED WORK SUMMARY

The well will be drilled by Oasis who has drilled most of water and geothermal wells in the area that are shallow. The first 75 feet should show gravel, at 100' there should be a thin rock like layer at 100'-105, the remaining 100' should be in gravel. The Casing will be serrated from 75' to bottom. Hot water should show at 75' Continuing to the bottom. The well will have 8" x 2' - 11.5 lb. channel pieces welded to each side of casing at the top and welded in a cement slab.

(Use additional space on reverse side of form)

23.

SIGNED Thomas W. McCarty TITLE operator DATE 12-4-83

(This space for Federal use)

APPROVED BY Orig. Sgd. Earl R. Cunningham TITLE District Manager DATE FEB 21 1984

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(See instructions on reverse side)

READ INSTRUCTIONS ON BACK **Revised March 1979**

APPLICATION TO APPROPRIATE UNDERGROUND WATERS IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

'83 DEC 8

STATE ENGINEER
DEMING, NM

110659 D $1.00

1. Name and Address of Applicant: File No. A-444

Thomas W. McCants

Star Route, Box 265

Animas, New Mexico 88020

2. Describe well location under one of the following subheadings:

a. NW ¼ NW ¼ NE ¼ of Sec. 7 Twp. 25 S Rge. 9 W N.M.P.M., in Hidalgo County.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, recorded in _____ County.

d. X = _____ feet, Y = _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

e. Give street address or route and box No. of property upon which well is to be located, or location by direction and distance from known landmarks _____

3. Approximate depth (if known) 300 feet; outside diameter of casing 8 inches.

Name of driller (if known) Oasis Drilling

4. Use of water (check appropriate box or boxes):

- ☒ One household, non-commercial trees, lawn and garden not to exceed 1 acre.
- ☐ Livestock watering.
- ☐ More than one household, non-commercial trees, lawns and gardens not to exceed a total of 1 acre.
- ☐ Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources.
- ☐ Construction of public works, highways and roads.

If any of the last four were marked, give name and nature of business under Remarks. (Item 5)

5. Remarks: Well to be drilled and used on rental property - 8 inch casing to be necked down to 7 inch.

I, Thomas W. McCants, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Thomas W. McCants, Applicant

By: _____ Date: December 8, 1983

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered 4 on the reverse side hereof. This permit will automatically expire unless this well is drilled or driven and the well record filed on or before December 31, 1984.

S.E. Reynolds, State Engineer

By: _____
L. T. Lutham, Supervisor, District III

Date: December 8, 1983 File No. A-444

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-112
Adopted 10-1-74
Revised 10-1-78

APPLICATION TO PLACE WELL ON INJECTION-GEOTHERMAL RESOURCES AREA

Operator: Tom McCants		Address: St. Rt. 265 Animas 88020	
Lease Name: Amaya Lessee	Well No.: no 3	Field: Lightning Dock	County: Hidalgo

Location
Unit Letter ____ ; Well Is Located N 704 Feet From The F W Line And 295 Feet From The F N. L Line, Section 7 Township 25 Range 19 W NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Conductor Pipe					
Surface Casing	8"	200	10	8'x8' sq.	top of ground
Long String					
Tubing			Name, Model and Depth of Tubing Packer		

Name of Proposed Injection Formation: From 75 foot to bottom	Top of Formation	Bottom of Formation: gravel
Is Injection Through Tubing, Casing, or Annulus? Tubing	Perforations or Open Hole? Perforations	Proposed Interval(s) of Injection: daily from 8 to 14 hours depending on Temp. outside
Is This a New Well Drilled For Injection? Yes	If Answer is No, For What Purpose was Well Originally Drilled?	Has Well Ever Been Perforated in Any Zone Other Than the Proposed Injection Zone?

List All Such Perforated Intervals and Sacks of Cement used to Seal Off or Squeeze Each: Perforated interval every foot

Depth of Bottom of Deepest Fresh Water Zone in This Area: unknown	Is This Injection for Purpose of Pressure Maintenance or Water Disposal? (See Rules 501 and 502): To conserve water				
Anticipated Daily Injection Volume: 100 gal min	Minimum: 50	Maximum: 100 gal.	Open or Closed Type System: closed	Is Injection to be by Gravity or Pressure? pressure	Approx. Pressure (psi): 35 lbs
Answer Yes or No Whether the Following Waters are Mineralized to such a Degree as to be Unfit for Domestic, Stock, Irrigation, or Other General Use: No		Water to be Injected: yes	Natural Water in Injection Zone: same water		Are Water Analyses Attached?

Name and Address of Surface Owner (or Lessee, if State or Federal Land): Tom McCants Star Route 265

List Names and Addresses of all Operators Within One-Half (½) Mile of This Injection Well: none

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OIL CONSERVATION DIVISION
SANTA FE

Have Copies of this Application Been Sent to Each Operator Within One-Half Mile of this Well?	Yes ☐ No ☐		
Are the Following Items Attached to this Application (see Rule 503)	Plat of Area: Yes ☒ No ☐	Electrical Log: Yes ☐ No ☒	Diagrammatic Sketch of Well: Yes ☐ No ☒

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Tom McCants (Signature) Operator (Title) 1/9/84 (Date)

NOTE: Should waivers from all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Division will hold the application for a period of 20 days from the date of receipt by the Division's Santa Fe office. If at the end of the 20-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 503.

BLM Las Cruces

RECEIVED BY
FEB 22 1984
O. C. D.
ARTESIA, OFFICE

Form: USGS 9-1957

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY, CONSERVATION DIVISION

Form Approved
Budget Bureau No.

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1c. WELL STATUS: Gas well pumping

2. NAME OF LESSEE/OPERATOR
Tom McCarthy operator Amax Lessee

3. ADDRESS OF LESSEE/OPERATOR
1701 Colo Blvd, Golden Colo 80401 — operator Star Route Box [illegible] Animas NM

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RECEIVED
JAN 10 1984

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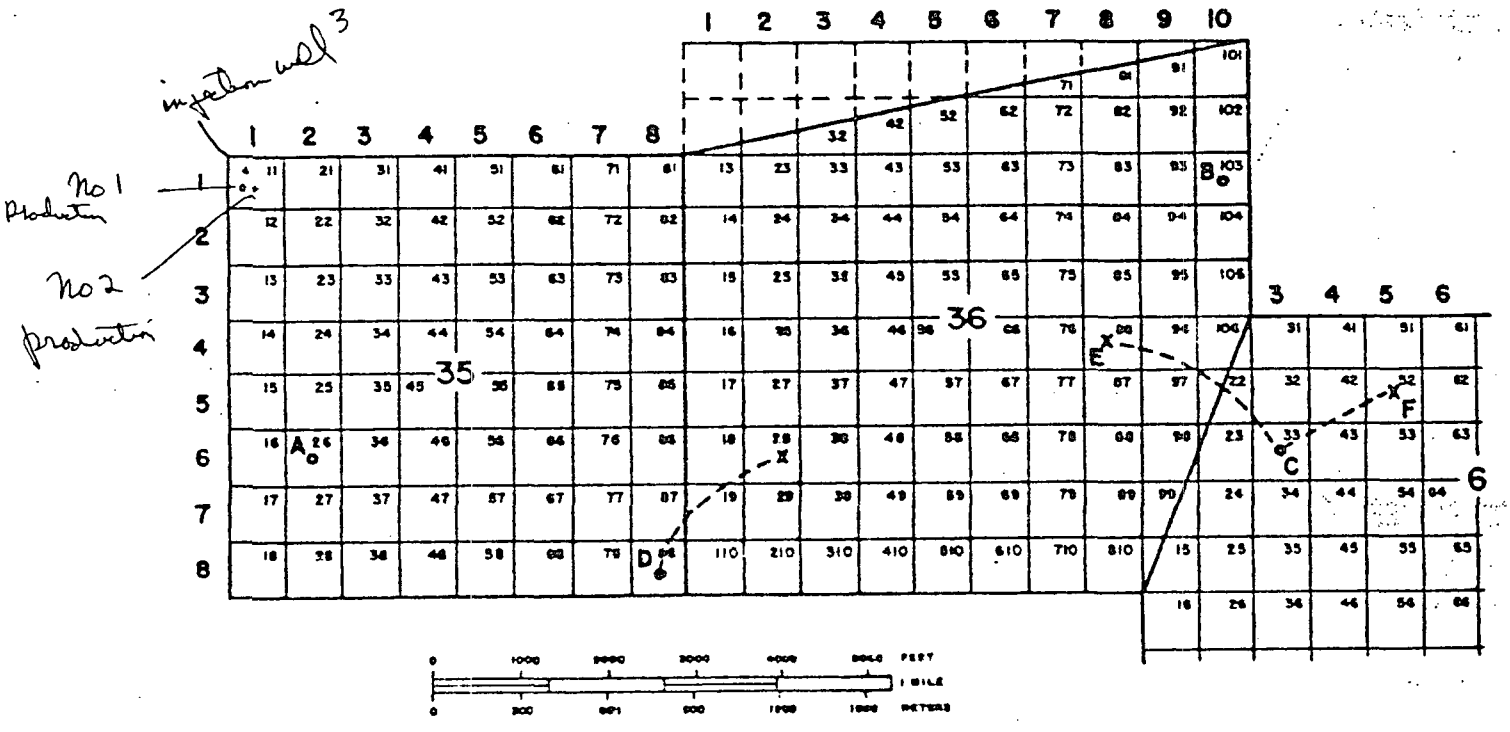
Example B	103-36	Example E	Directional 33A(86-36)-6
Example C	33-6	Example F	Directional 33B(52)-6



The Beall Company

floriculture

November 15, 1983

Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Please cancel our designation of agent, Tom McCants; because of Amex's plans we were unable to drill in the area.

Sincerely,

Tom Beall

Tom Beall

TB/ja

Disregard
per
Tom Beall
11/21/83

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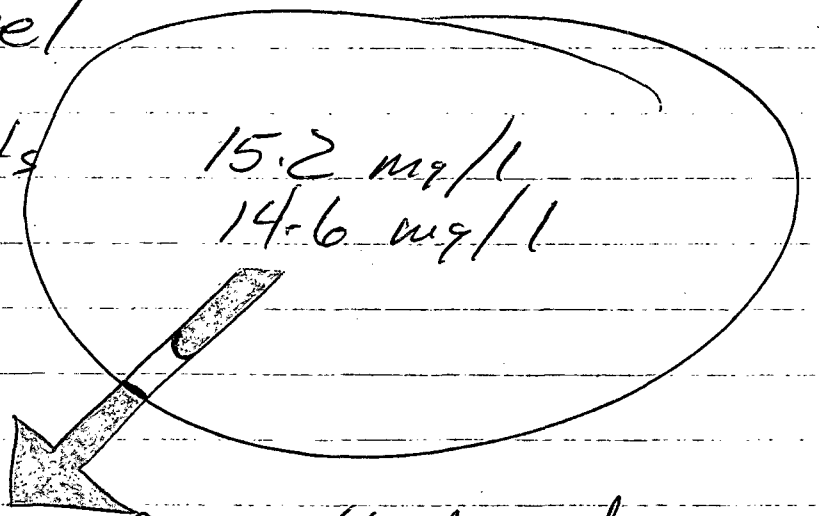
NOV 21 1983
OIL CONSERVATION DIVISION
SANTA FE

Animas Valley H_2O

Fl. level

McCants 15.2 mg/l
Beal 14.6 mg/l



Directly out of well head

- Hildalgo County - Water Quality -
  USGS Reports ?
  Computer Printouts - ?

8/16/83

Memo

From
CARL ULVOG
Chief Geologist

To File - Beal, McCants, etc.

Tom McCants called today. It sounds as if he intends to drill the wells for Beal's greenhouse. He claims to have geothermal lease from Feds and is surface owner.

I told him if Federal minerals are involved he had better see the BLM in Las Cruces.

McCants phone 548-2260

Designation of Agent goofed up. It shows Beall Co. of N. M., Inc. as operator. Then McCants signs form as agent for himself. (He is supposed to be agent for Beall.)

Get act together fellows!

Oil Conservation Division
P.O. Box 2088 Santa Fe, N.M. 87501

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File		✓
N.M.B.M.		
U.S.G.S.		
Operator		
Land Office		

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

SEP 21 1977

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

5. Indicate Type of Lease: State ☐ Fee ☒

5a. State Lease No.: NA

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer ☐ Temp Observation ☒ Low-Temp Thermal ☐ Injection/Disposal ☐

7. Unit Agreement Name: NA

2. Name of Operator: AMAX Exploration, Inc.

8. Farm or Lease Name: Rudiger

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

9. Well No.: T-135

4. Location of Well: UNIT LETTER L, 2300 FEET FROM THE South LINE AND 500 FEET FROM THE West LINE, SECTION 18, TOWNSHIP 25S, RANGE 19W, NMPM.

10. Field and Pool, or Wildcat: NA

15. Elevation (Show whether DF, RT, GR, etc.): 4200 ft. GR

12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER Completion and Abandonment ☒	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 203.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 1.91cm (3/4") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings.

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Harry J. Olson TITLE Managing Geologist Geothermal Exploration DATE September 8, 1977

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/26/77

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

DIRECTOR
JOE D. RAMEY

LAND COMMISSIONER
PHIL R. LUCERO

STATE GEOLOGIST
EMERY C. ARNOLD

September 26, 1977

Amax Exploration, Inc.
4704 Harlan Street
Denver, Colorado 80212

Attention: Harry Olson

Gentlemen:

The transmittal letter that accompanied your Completion Reports (Forms G-103) describes six wells which were drilled and another six locations which were not drilled presumably abandoned sites).

You will note that your T-135 is reported both as completed and plugged and also as abandoned without drilling. Another location - permit approved on 4/11/77 - is not discussed, being your T-134.

Because of the density of drilling in and near Section 12, Township 25 South, Range 20 West and Section 18, Township 25 South, Range 19 West, and because you were still drilling in that vicinity when I made an inspection tour of your older well sites (accompanied by Cindy Heliker) I am not now certain which of the two locations were drilled. However, I was under the impression that you had intended to abandon the location for T-135 due to its proximity to your T-131 and the #6, drilled earlier.

Kindly review your records and determine the action taken with respect to these two locations, T-134 and T-135. Meantime the Form G-103 submitted for the latter location will be held in suspense.

Yours truly,

CARL ULVOG
Senior Geologist

CU/og

TELEX. 45-558

AMAX EXPLORATION, INC.
A SUBSIDIARY OF AMAX INC.
4704 HARLAN STREET • DENVER, COLORADO 80212 • (303) 433-6151

SEP 21 1977

September 8, 1977

Mr. Carl Ulvog, Senior Geologist
Oil Conservation Commission
State of New Mexico
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Notice of Completion and Abandonment of six Geothermal Temperature Observation wells in Hidalgo County, New Mexico.

Dear Mr. Ulvog:

It is the intention of this letter to notify your office of the completion and abandonment of six temperature observation wells for which permits were submitted under the cover of our letter dated April 7, 1977. These six wells are:

T-126, T-127, T-130, T-131, T-135, and T-136

Attached hereto please find "Sundry Notices and Reports on Geothermal Resources Wells" (Form G-103) containing Completion and Abandonment data for each of these wells.

Please note that the following wells were not drilled:

T-125, T-128, T-129, T-132, T-133, and T-135

Please inform me as to any deficiencies that might exist in the completion and abandonment data enclosed.

Thank you.

Sincerely,

Larry Hall

Larry Hall
Geothermal Property Manager

LH:1

Enclosure

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088 Santa Fe, 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

RECEIVED
APR 11 1977
OIL CONSERVATION COMM.
Santa Fe

Form G-101

5A. Indicate Type of Lease: STATE [ ] FEE [X]

5. State Lease No.: NA

1a. Type of Work: Drill [X] Deepen [ ] Plug Back [ ]

7. Unit Agreement Name: NA

b. Type of Well: Geothermal Producer [ ] Temp Observation [X] Low-Temp Thermal [ ] Injection/Disposal [ ]

8. Farm or Lease Name: Rudiger

2. Name of Operator: AMAX Exploration, Inc.

9. Well No.: T-135

3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212

10. Field and Pool, or Wildcat: NA

4. Location of Well: UNIT LETTER L LOCATED 2300' FEET FROM THE south LINE AND 500' FEET FROM THE west LINE OF SEC. 18 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
500 feet	Alluvium or Tertiary Volcanics	rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4200'	single	Southwest Drilling & Exploration, Inc.	April 18, 1977

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
4 3/4 to 6" diameter	1 inch in outside diameter PVC pipe	5 ounce	total depth	cement upper 10 feet	

Drilling of one (1) geothermal hole to depths not to exceed 500 feet. A 1 inch in outside diameter PVC pipe capped on the bottom will be inserted into the hole to total depth. The hole will be backfilled with cuttings. The inserted PVC pipe is then filled with water and the system allowed to reach equilibrium with the surrounding strata. Temperature measurements will be taken from the holes over the ensuing months.

In the event well-bore extends below fresh water sands, operator agrees to either set casing or plug back hole to protect such acquifers. Upon conclusion of temperature observation period well is to be plugged with cement from surface to ten feet of depth or greater.

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED.
EXPIRES 7/11/77

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Barry J. Eason Title Managing Geologist, Geothermal Exploration Date April 6, 1977

(This space for State Use)

APPROVED BY Carl Mroz TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/11/77

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-102

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
AMAX Exploration, Inc.	Rudiger	T-135

Unit Letter	Section	Township	Range	County
NA	18	25S	19W	Hidalgo

Actual Footage Location of Well:
2300' feet from the south line and 500' feet from the west line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4200'	NA	NA	NA Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. NA

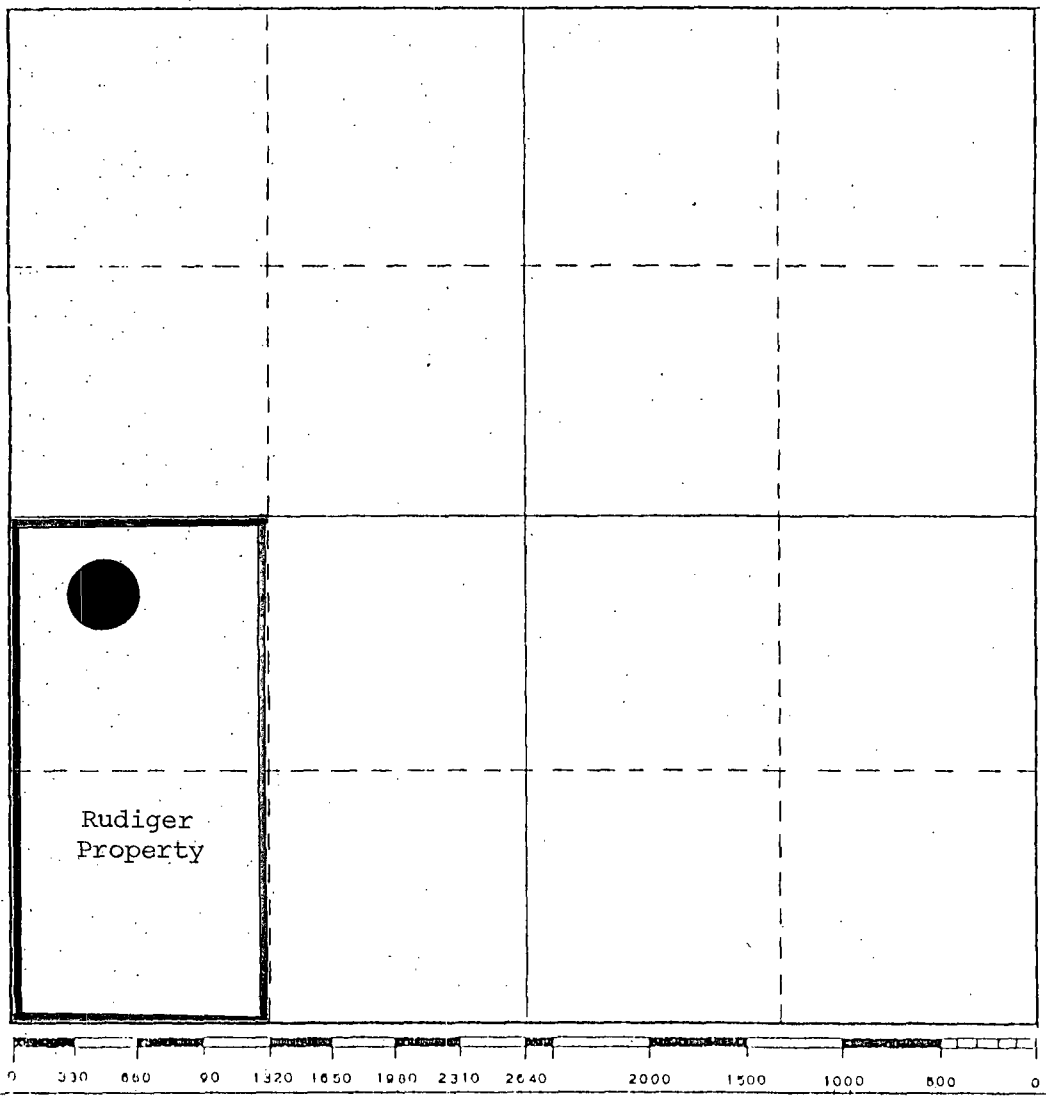
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). NA

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? NA

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Harry J. Olson

Name: Harry J. Olson

Position: Managing Geologist, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: April 6, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

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NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088, Santa Fe 87501

Form G-103
10-1 74

SUNDRY NOTICES AND REPORTS ON GEOTHERMAL RESOURCES WELLS

SEP 21 1977

5. Indicate Type of Lease: State ☐ Fee ☒
6. State Lease No.: NA

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM G-101) FOR SUCH PROPOSALS.)

1. Type of Well: Geothermal Producer ☐ Temp Observation ☒ Low-Temp Thermal ☐ Injection/Disposal ☐
7. Unit Agreement Name: NA
2. Name of Operator: AMAX Exploration, Inc.
8. Farm or Lease Name: Green
3. Address of Operator: 4704 Harlan Street, Denver, Colorado 80212
9. Well No.: T-131
4. Location of Well: UNIT LETTER B, 1100 FEET FROM THE North LINE AND 2000 FEET FROM THE East LINE, SECTION 18 TOWNSHIP 25S RANGE 19W NMPM.
10. Field and Pool, or Wildcat: NA
15. Elevation (Show whether DF, RT, GR, etc.): 4220 ft. GR
12. County: Hidalgo

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER Completion and Abandonment ☒	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 201.

Method of Completion

After the drill hole is completed and the drill rods removed from the hole, a PVC pipe of approximately 1.91cm (3/4") in outside diameter which has been capped on the bottom is inserted into the hole. The pipe is filled with water and capped. The space around the intruded pipe is then backfilled with drill cuttings.

Abandonment Procedure

The PVC pipe is cut off below ground level. The upper 3 meters (10 feet) is filled with cement. Any remaining depression is filled with soil and the area is raked to restore the site to its original appearance and contour. All drilling related refuse is removed and properly disposed of.

Order No. R-4860
Exhibit No. D

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Barry J. Eason TITLE Managing Geologist Geothermal Exploration DATE September 8, 1977

APPROVED BY Carl Uvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 9/26/77

CONDITIONS OF APPROVAL, IF ANY:

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4. Location of Well: UNIT LETTER B LOCATED 1100' FEET FROM THE north LINE AND 2000' FEET FROM THE east LINE OF SEC. 18 TWP. 25S RGE. 19W NMPM

12. County: Hidalgo

19. Proposed Depth: 500 feet

19A. Formation: Alluvium or Tertiary Volcanics

20. Rotary or C.T.: rotary

21. Elevations (Show whether DF, RT, etc.): 4220'

21A. Kind & Status Plug. Bond: multiple

21B. Drilling Contractor: Southwest Drilling & Exploration, Inc.

22. Approx. Date Work will start: April 18, 1977

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
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Signed Harry J. Olson Title Managing Geologist, Geothermal Exploration Date April 6, 1977

(This space for State Use)

APPROVED BY Carl Ulvog TITLE SENIOR PETROLEUM GEOLOGIST DATE 4/11/77

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Form G-102

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APR 11 1977

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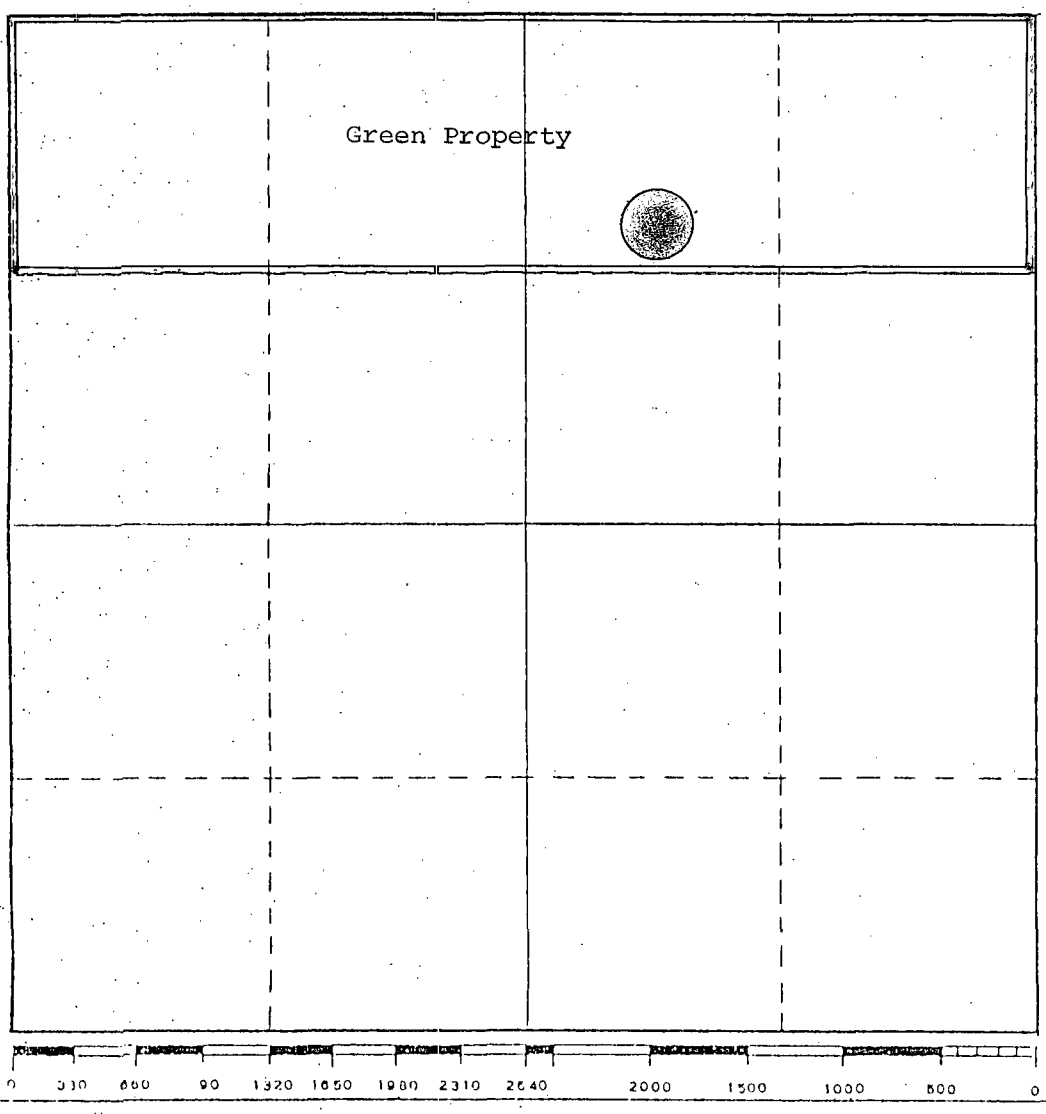

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Harry J. Olson

Name: Harry J. Olson

Position: Managing Geologist, Geothermal Exploration

Company: AMAX Exploration, Inc.

Date: April 6, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

NA

Date Surveyed

Registered Professional Engineer and/or Land Surveyer

Certificate No.