

AMAX EXPLORATION, INC.

A SUBSIDIARY OF AMAX INC.

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

September 15, 1983

Mr. Richard Hoops
Bureau of Land Management
P. O. Box 12000
300 Booth Street
Reno, NV 89520

Re: McCoy Unit - GDP209

Dear Rich:

Enclosed is one (1) copy of the preliminary temperature log for well 26-8 for 1000 to 2000 feet. Please acknowledge receipt of data by signing one (1) copy of this letter and returning it to the letterhead address.

Sincerely,

AMAX Exploration, Inc.



H. D. Pilkington
Chief Geologist, Geothermal Branch

Enclosure: 1

cc: J. E. Deymonaz
J. L. Emerson

HDP/c

Receipt of data acknowledged by _____.

Date _____, 1983.

GEOHERMAL 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.

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

1b. WELL STATUS:
Suspended -- 4-13-83

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

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

13. LOCATION OF WELL OR FACILITY
SWNW Sec. 8, T22N, R40E, MDBM

4. LEASE SERIAL NO.
N-18852

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

6. UNIT AGREEMENT NAME
McCoy

7. WELL NO.
26-8

8. PERMIT NO.
0209

9. FIELD OR AREA
Wildcat

10. SEC. T., R., B. & M.
SWNW
Sec. 8, T22N, R40E MDBM

11. COUNTY
Churchill

12. STATE
Nevada

14. 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 (X)

See below

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

AMAX plans to move a diamond drill onto 26-8 location between July 20, 1983 and August 22, 1983 to deepen the hole from its present TD of 1002' to a minimum depth of 2010' or perhaps as deep as 4000' using the following drilling plan:

1. Move diamond drill on location.
2. Dig small cellar if needed. Install BOP equipment and test as instructed by the BLM.
3. Core drill HQ to NQ (3-1/2" to 3-3/4" hole) from 1002' to +2010' - +4000'.
4. Complete hole as per attached description.

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 (Use reverse side if needed)

SIGNED [Signature] TITLE Manager, Gov't Relations DATE 6/30/83

(This space for Federal use) APPROVED BY [Signature] TITLE STATE DIRECTOR, NEVADA DATE JUL 1 1983

CONDITIONS OF APPROVAL, IF ANY: SEE ATTACHED CONDITIONS

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.

Completion Method for Well No. 26-8,
McCoy Project, Churchill County, Nevada

Logging Program

1. Bottom hole temperature surveys may be run if hole conditions permit.
2. Surface to TD.
 - a. Temperature
 - b. Gamma
3. Casing point to TD.
 - a. SP
 - b. Induction

Completion Program

1. Run 1-1/2" Sch. 80 steel pipe, capped on bottom, to TD.
2. Remove BOPE.
3. Fill annulus with drill cuttings and/or heavy mud.
4. Cement upper 10 feet of annulus with neat cement.
5. Fill tubing with water.
6. Install 1-1/2" gate valve on tubing approximately one foot below ground level and fill in cellar to base of 1-1/2" valve.
7. Fence in mud pits with 3-strand barbed wire fence.
8. Clean up debris on and around site and fill in trash pit.

Special Stipulations for Temperature Gradient Holes
Greater Than 500' Deep

1. Holes for measuring temperature gradient to determine heat flow shall be limited to the depth authorized in the permit unless otherwise approved by the DSD, Mineral Resources.
2. All wells drilled below 500' shall be equipped with blowout prevention equipment consisting of either:
 - a. An annular bag-type preventer with a full-opening gate valve installed beneath;
 - b. or a double gate BOP (blind and pipe rams, hydraulic or manual). In either case, blowdown and kill lines will be installed beneath the BOPE.
3. If flow line mud temperature should reach 79°C (175°F) without special cooling, further drilling shall stop immediately and the hole will be either:
 - a. equipped with mud cooling and wellhead control equipment, to maintain the mud return temperature at or below 79°C (175°F). If approved by the Supervisor, drilling may then be resumed;
 - b. completed as an observation hole by cementing steel tubing from total depth to surface;
 - c. abandoned by cementing total depth to surface;
 - d. or, if water is encountered of sufficiently good quality that it can be beneficially used for resource management purposes, then with the concurrence of the permittee and provided that, in the opinion of the DSD, Mineral Resources, such action is not in conflict with geothermal regulatory requirements, the appropriate surface management agency may acquire the well for the fair market salvage value of the casing. If the Government acquires the well, the permittee shall be relieved of all further responsibility and liability for the well.

4. If flowing steam or hot water 65°C (150°F) is encountered, further drilling shall stop immediately and the hole will be completed as in 3.b. or c.
5. If the maximum flow line mud temperatures discussed in "3" above are not reached during drilling, the hole may either be:
 - a. completed as an observation hole by running steel tubing to the desired depth and filling the annulus with drilling mud from total depth to 3 meters (10 feet) and with cement 10' to the surface;
 - b. abandoned by filling the hole with drilling mud to within 3 meters (10 feet) of the surface and with cement to the surface; exceptions will be allowed only with specific permission from the Supervisor.
6. If cold flowing artesian water is encountered, hole will be completed as in 4 above, except that plastic tubing may be used.
7. If conditions outlined in either 3, 4 or 5 above are encountered, the DSD, Mineral Resources shall be notified immediately.
8. All changes of location or added wells must be approved by the DSD, Mineral Resources.
9. Holes shall be completed for observation purposes in a manner which shall allow satisfactory subsequent abandonment. Unless otherwise required, this will normally mean cementing the annular area (between the tubing and the hole wall) from 10' to the surface.
10. Holes shall be abandoned in a manner that will prevent subsurface interzonal migration of fluids and surface leakage. As a minimum, the top 3 meters (10 feet) of tubing should be filled with cement. Tubing shall be cut off at ground level or as directed by the DSD, Mineral Resources.

11. The Notice of Completion of Geothermal Resource - Exploration Operations (Form 3200-10) shall be submitted in duplicate within 30 days of abandonment of operations site and shall contain among other items, the following information for each hole drilled:
 - a. Final hole designation and location.
 - b. A drillers log noting water table, fluid and/or mineral contents of identifiable formation intervals.
 - c. Method of completion, cementing, and casing and/or tubing with wellhead components. This may be presented by engineering drawings.
 - d. Details of abandonment or current status of well.
 - e. Any information on drilling difficulties or unusual circumstances encountered which would be helpful in assuring future surety of operations or protection of the environment in the area concerned.
12. Drilling fluids or cuttings shall not be discharged onto the surface where such discharge will contaminate lakes and perennial or intermittent streams. Excavated pits or sumps used in drilling will be backfilled as soon as practicable and restored to conform with the original topography.
13. Unless otherwise authorized, unattended sumps shall be fenced to protect domestic stock or wildlife.
14. Applicant shall contact the DSD, Mineral Resources and the District Manager prior to actual entry upon the land.
15. Upon commencement of operations, a weekly drilling summary shall be reported each Friday morning to Richard Hoops of the office of the DSD, Mineral Resources, at (702) 784-5134, until the well is completed.
16. The operator will provide at least 24 hours advance notice to the DSD, Mineral Resources for blowout prevention tests.

Special Stipulations for all Exploration Operations

1. Except where otherwise noted, all test equipment, both surface and subsurface, will be removed at the completion of the testing, as will all other debris associated with this exploration.
2. When American antiquities or other objects of historic or scientific interest including, but not limited to historic or prehistoric ruins, fossils or artifacts are discovered in the performances of the permit the item(s) or condition(s) will be left intact and immediately brought to the attention of the authorized officer.
3. Upon abandonment all drill sites will be restored as nearly as practicable to original condition. Site reclamation shall include but not be limited to raking drill cuttings into native soil, smoothing out tire tracks, and removing all waste materials from the sites.