

CONDITIONS OF APPROVAL FOR APD NO. 148
Well #38-9
AMAX Exploration, Inc.
McCoy Unit, Churchill County, Nevada

1. A detailed drilling report shall be given by telephone to the District Geothermal Supervisor (DGS) in Reno, NV, (702) 784-5676, Monday through Friday at approximately 8:30 a.m. until subject well is completed or abandoned.
2. A copy of this permit, No. 148, the approved drilling program, blowout and noncondensable gas contingency plans, and one copy of each well survey log shall be available at the well site for the Deputy Conservation Manager for Geothermal. In addition, immediately after the completion of each well survey (including daily mud logs), field copies shall be mailed or delivered to the District Geothermal Supervisor, Kietzke Plaza, Bldg. D, Suite 137, 4600 Kietzke Lane, Reno, NV 89502, and the Deputy Conservation Manager for Geothermal, 2465 E. Bayshore Rd., Suite 400, Rm. 401, Palo Alto, CA 94303.
3. In case of emergency, the USGS District Geothermal Supervisor (Mr. Bernard Moroz) or his representative (day number: 702-784-5676, night number: 702-826-8780) shall be notified. In the event that the District Geothermal Supervisory staff is not available, the Deputy Conservation Manager for Geothermal's Engineering Section shall be contacted: Mr. Bruce Hellier, office - (415) 323-8111, Ext. 2845 night - (415) 948-3010 or, Mr. Ellis Hammett, office - (415) 323-8111, Ext. 2845, night - (415) 328-8679.
4. Variance from the approved well program, must be approved by the Reno, Nevada DGS or the Deputy Conservation Manager for Geothermal.

5. A kill line should be installed below the BOPE, leading directly to the mud pumps and fitted with a valve through which cement could be pumped if necessary.
6. A blow-down line should be installed below the BOPE. The blow-down line shall be directed in such a manner as to permit containment of produced fluids and to minimize any safety hazard to personnel.
7. Adequate supply of drilling fluid and materials should be maintained at the drill site to cure any lost circulation problem which may be encountered.
8. Notify the DGS prior to the testing of the BOPE so that the testing may be witnessed.
9. The lessee shall be allowed to drill to mud returns temperatures of 79°C (175°F). Higher temperature limits must be approved by the Supervisor.
10. Inlet and outlet temperatures shall be recorded at frequent intervals during drilling operation. Normally, hourly or 9 meter (30 ft) intervals.
11. ~~If 79°C (175°F) circulating temperature is reached while drilling the hole shall be completed at the depth by cementing steel tubing total depth to surface, or abandoned by cementing total dept to surface.~~
12. Upon completion, the tubing should be hung in the wellhead such that both the annulus and tubing are shut-in. This completion is in lieu of the proposed 10 cement annulus plug. Also, a valve should be placed on the tubing in lieu of a cap.
13. Prior to the abandonment of the well, the abandonment procedure must be approved by the District Geothermal Supervisor.

2-16-81 3/18/81

GEOTHERMAL SUNDRY NOTICES

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 XX		4. LEASE SERIAL NO. N-17452	
1b. WELL STATUS: New well		5. SURFACE MANAGER: BLM () FS () USGS Other (X)	
2. NAME OF LESSEE/OPERATOR AMAX Exploration, Inc.		6. UNIT AGREEMENT NAME McCoy	
3. ADDRESS OF LESSEE/OPERATOR 7100 West 44th Avenue, Wheat Ridge, Colorado 80033		7. WELL NO. 38-9	8. PERMIT NO. 148
13. LOCATION OF WELL OR FACILITY SE 1/4 SW 1/4, Section 9, T23N, R40E, MDBM 4700' from North line of Section 9; 1900' from West line of Sec. 9		9. FIELD OR AREA Wildcat	
		10. SEC. T., R., B.S. N. SE 1/4 SW 1/4, Section 9, T23N, R40E, MDBM	
		11. COUNTY Churchill	
		12. STATE Nevada	
14. TYPE OF WORK			
GEOTECHNICAL WORK ()	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 ()	CHANGE PLANS ()	XX
		OTHER ()	()

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

Revise Application to Drill, Deepen, or Plug Back as follows:

Size of Hole	Size of Casing	Setting Depth
9-7/8"	7"	200'
6"-6 1/4"	2-3/8" (tubing) or NX casing	Surface to TD

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

AMAX Exploration, Inc. proposes to commence drilling activities on Hole NO. 38-9 on or before March 25, 1981.

(Use reverse side if needed)

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

SIGNED Wendy F. Merrill TITLE Supervisor, Land Records and Permits DATE 11/10/80
Wendy F. Merrill

(This space for Federal use)

APPROVED BY William F. Isherwood TITLE Acting DCM, Geothermal DATE 3/18/81

CONDITIONS OF APPROVAL, IF ANY:

APPROVED