Proposed Plan of Operation To

Drill Geothermal Test Wells At

McCoy Unit

Churchill County Nevada

United States Geothermal Leases N-17449, N-17450, N-17451, N-17452, N-17454, N-17455, N-17470, N-17471, N-18851, N-18852, N-18854, N-18856, N-19924, N-19925, N-19926, N-19927, N-19928, N-20073, N-24495, N-24496, N-24497, N-24734

Amax Exploration, Inc.

4704 Harlan Street

Denver, Colorado 80212

INDEX

CONTINGENCY PLANS

LOCATIONS AND ROADS

I. CONSTRUCTION PLANS

AMAX Exploration, Inc., Geothermal Group, proposes to drill up to six geothermal test wells on the Federal leased lands in the McCoy Unit Area, Nevada. The planned well locations are shown in Exhibit "A" which depicts topography, lease boundaries, drainage, and existing roads. The wells will be drilled to a minimum depth of 610 meters (2,000 feet). The general equipment layout, well location, and sump location are shown in Exhibit "B". The surveyed locations and surface contours for each site will be submitted upon completion.

The drill sites were selected to utilize natural topographic features and existing roads to eliminate the need for road construction. The construction areas will be stripped of vegetation, graded, and drilling waste containment sumps constructed at each site.

II. EXISTING ROADWAYS

Access to the Federal leases is over existing roads. The access to each planned well site is by existing roads. The roads will be upgraded and maintained in an acceptable manner with the addition of culvert pipes and aggregate where advisable.

The proposed drill sites will be constructed adjacent to existing BLM roads as shown in Exhibit "C" and as described below:

Well No. 56-8

Access will be by use of BLM road segment A-1.

Well No. 47-6

Access will be by use of BLM road segment B-1.

Well No. 87-32

Access will be by use of BLM road segment A-2.

Well No. 13-20

Access will be by use of BLM road segment A-3.

Well No. 24-7

Access will be by use of BLM road segment C-1.

Well No. 37-9

Access will be by use of approximately one half mile of unimproved mine road segment D-1.

III. ARCHEOLOGICAL CLEARANCE

The proposed well sites have all been examined and cleared by the BLM archeologist from the Carson City District Office prior to the issuance of the Federal geothermal leases.

IV. ENVIRONMENTAL PROTECTION AND RESTORATION

A. Fire Control

1. All local, state, and federal fire protection standards applicable to AMAX's activities will be observed.

2. Vegetation at the proposed drill sites is sparse and will be cleared to the extent required for the operations. Smoking will be allowed in designated areas.

3. Exhaust stacks for all engines in service will be equipped with muffling systems recognized and approved for use in the area.

4. Water and suitable fire extinguishing equipment will be available at the drill sites.

B. Soil Erosion

Culverts will be installed and aggregate applied as needed on the existing access roads. Since the well sites were selected to take advantage of the topography only minimal disturbance will occur during pad construction. The locations will be built in accordance with the recognized engineering requirements as specified in the BLM manual "Roads, Trails and Landing Fields".

C. Surface and Groundwater

All surface drainage on the drill sites will be confined to the sumps. All necessary precautions will be taken to prevent runoff of impurities from the drill sites into local drainages.

D. Fish and Wildlife

All requirements of the area regulatory agencies will be complied with to avoid dislocation of wildlife and/or contamination of groundwater.

E. Noise and Air Quality

Noise levels will be maintained within guidelines specified by Federal Occupational Safety Health Act standards. Air Quality will comply with local Air Pollution control standards. Adequate supplies of water will be maintained for dust control during the operation.

F. Safeguards to Public Health

All unattended equipment left following the drilling, felt to be of a hazardous nature, will be secured with a chain link fence. Supervisory personnel will be on the sites during the course

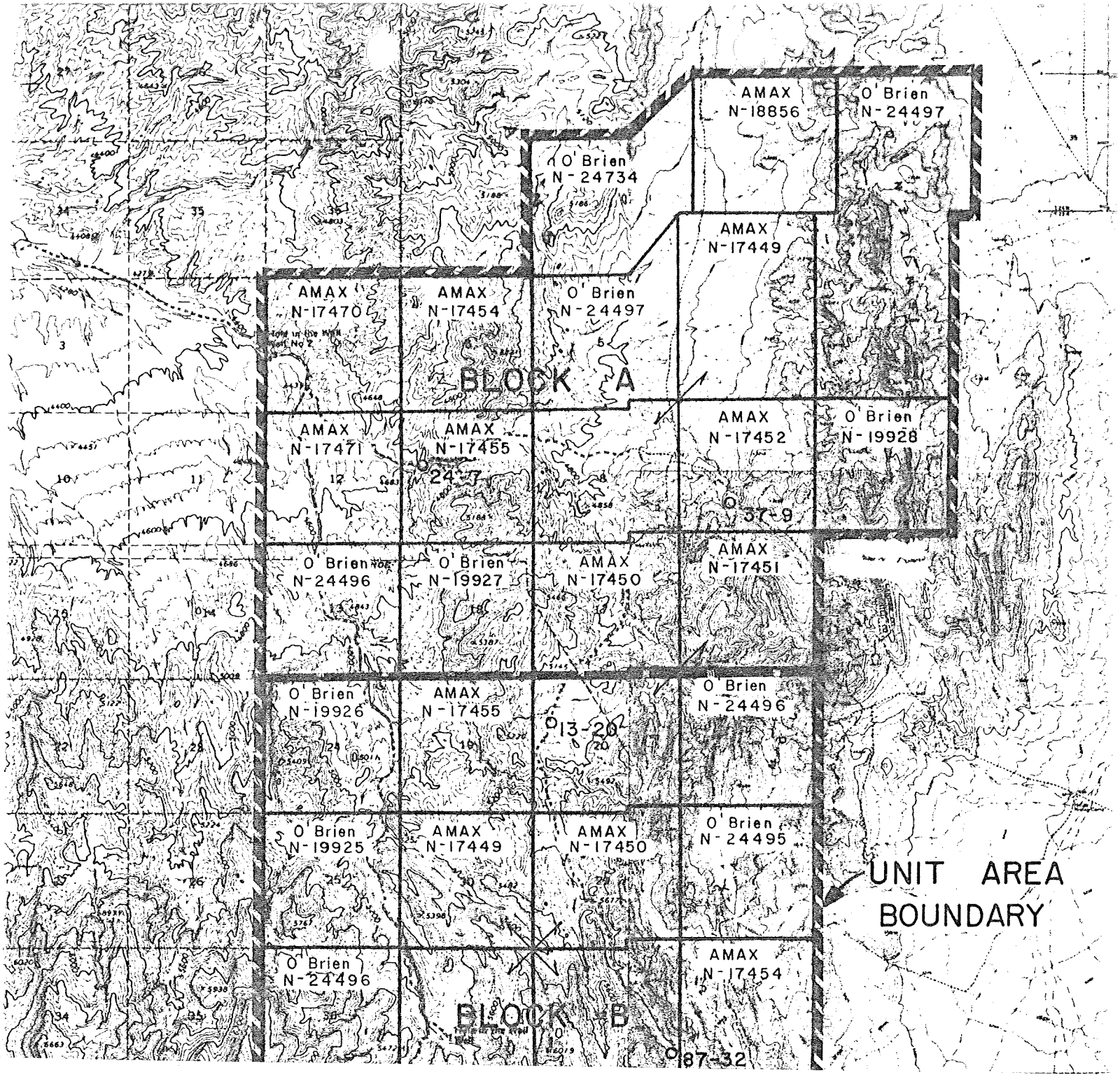
of the operations. All requirements for casing and blowout prevention will be followed.

V. SOLID WASTE DISPOSAL

The area will be kept clean and all solid waste will be removed and transported to an approved dump.

EXHIBIT "A"

Well Locations, Topography and Lease Boundaries


AMAX
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O'Brien
N-24497
O'Brien
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AMAX
N-17449
AMAX
N-17470
AMAX
N-17454
O'Brien
N-24497
BLOCK A
AMAX
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AMAX
N-17455
24-7
AMAX
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O'Brien
N-19928
37-9
O'Brien
N-24496
O'Brien
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AMAX
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13-20
O'Brien
N-24496
O'Brien
N-19925
AMAX
N-17449
AMAX
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O'Brien
N-24495
UNIT AREA
BOUNDARY
O'Brien
N-24496
BLOCK B
AMAX
N-17454
87-32

EXHIBIT "B"

Generalized Drill Pad Layout

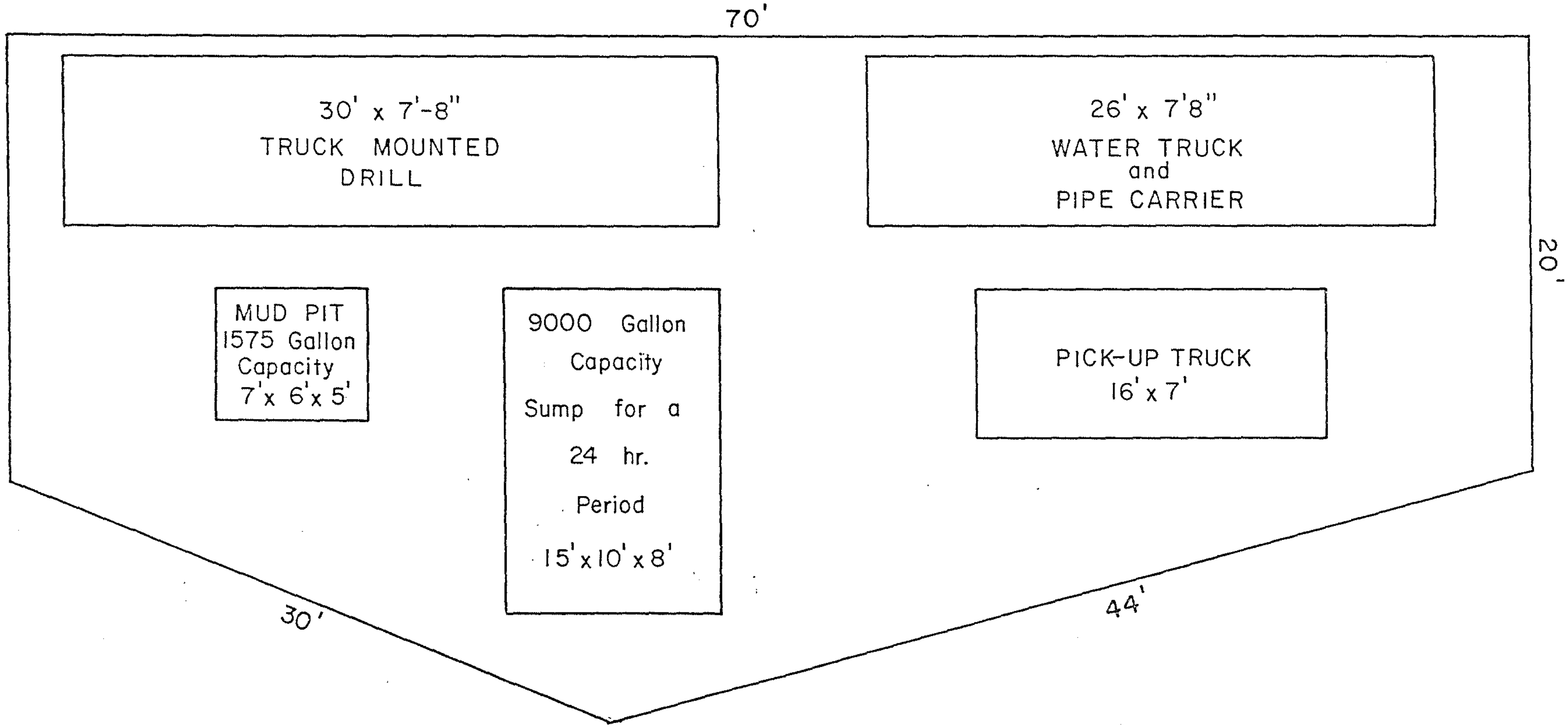


EXHIBIT "B"

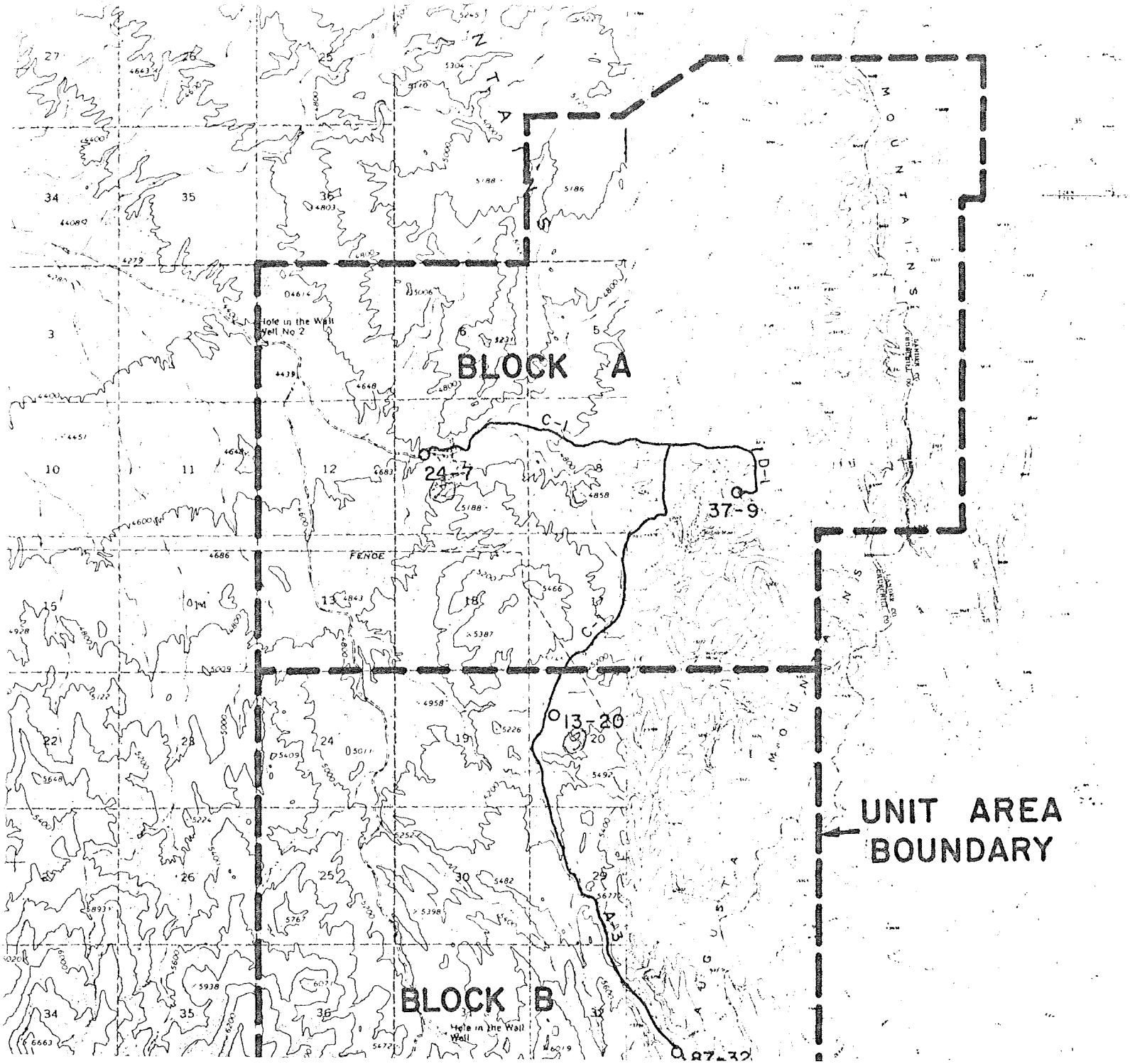
GENERALIZED DRILL

PAD LAYOUT

EXHIBIT "C"

Well Location Map and Access Roads

DETAILS OF WORK


BLOCK A
BLOCK B
UNIT AREA
BOUNDARY
Hole in the Wall Well No 2
Hole in the Wall Well
24-7
37-9
13-20
C-1
D-1
FENCE

I. EARTHWORK AND CONSTRUCTION

A. Introduction

1. General: The following specifications will be followed for drill site and road construction at AMAX Exploration, Inc., drill sites at the McCoy Prospect. These specifications are of a general nature and may require deviations on a case-by-case basis. Special construction requirements shall be described on the plans for individual drill sites.

2. Supervision: Work proposed will be under the supervision of a Civil Engineer and/or an Engineering Geologist to inspect earthwork construction and to assure that suitable materials are placed to design requirements and in conformance with these specifications.

B. Planning

1. Drill Site Locations: Drill sites shall be selected utilizing natural topographic features such as ridges, benches, shoulders and valleys which provide relatively flat areas of sufficient size to accomodate the drilling facility. The site shall be engineered to balance cuts and fills, thereby minimizing changes in natural contours, excavation operations and disturbance of vegetation. Areas of both inactive and active landslides are to be avoided, or if unavoidable, engineered in such a manner to insure the safe drilling and operation of geothermal wells.

2. Road Locations: Access roads shall follow existing trails where possible, in keeping within good design and construction practices. Road widths shall be limited to the width required for use and for safe equipment operation. In general, road widths shall be 15 feet and designated to accommodate single-lane traffic. Turnouts shall be provided at strategic locations. Roads shall follow natural contours of the land.

C. Earthwork

1. Clearing shall consist of the removal of organic growth such as brush, grass, weeds, and other vegetation and debris and the disposal of such material designated for removal including timber, brush, rubbish, and matter occurring within the areas to be cleared. Construction areas for excavation and fill operations at the drill site shall be stipped of all vegetation and organic soils. Brush and tree growth shall be stockpiled and burned, or buried in spoil areas.

2. Earth Fills: All fill areas shall be benched and keyed into undisturbed ground. Embankments shall be placed in six to eight inch lifts, moistened as required, and compacted by tamping rollers or other approved compacting equipment to 90% of ASTM D-1557-70, "Moisture Density Relations Test for Soils". Road fill slopes shall not exceed 3:1 and drill site fill slopes shall not exceed 2:1.

3. Excavations: The engineer will determine in the field the disposition of excavated material, including stockpiling of certain materials excavated for later use. Excavated materials free of organic materials and debris may be used in berms and for mud sump-disposal site liners, providing such materials are approved by the engineer.

Cut slopes shall not exceed 1.5:1. Steeper slopes may be employed on a case-by-case basis by the engineer where sound and durable rock is encountered. The top portion of the cut shall be rounded to climinate a sharp break between the cut and the existing vegetation. The face of the cut shall be roughened or benched to enhance revegtation.

D. Drainage and Erosion Control

1. Access Road and Drill Site Pad: Access road surfaces shall be out-sloped or sloped toward the fill side so that there will be a minimum interuption of natural drainage patterns. All slopes shall be seeded for erosion control as provided herein. The portion of drill pad which will contain equipment capable of dripping oil or fuel shall be sloped toward the sump. The remaining drill pad shall be sloped to drain toward the cut. The slopes shall be approximately two feet per one hundred feet. Drainage swales on the upslope side of the drill site shall be sloped to drain at a gradient between 1% and 2%, or greater with approval by the engineer.

Sand/cement filled bags shall be installed as energy dissipaters where required to reduce flow velocities and prevent erosion. Culverts where necessary shall be installed with sand/cement-filled sand bag headwalls at the entrance, stilling basins at the exit, and shall be extended to existing natural drainage areas.

E. Revegetation of Graded Areas

1. General: Access road and drill site cut and fill slopes and other areas exposed by grading shall be revegetated shall be determined by the engineer.

The revegetative effort shall be done in late summer or early fall, prior to winter snows.

2. Fertilizers: For areas to be revegetated, 14-14-14 granular fertilizer shall be applied at the rate of 300 lbs per acre.

3. Grasses: Grass seeds shall be applied at 60 lbs per acre. The seed mix shall be as follows, depending on availability:

Blando Brome, Wymera Ryegrass or Common Ryegrass	50 lbs. per acre
Red Leafed Clover	10 lbs. per acre

F. Mud Sump

1. General: The disposal site will have the natural characteristics or will be engineered in such a manner to preclude the seepage or migration of any leached and deleterious materials contained within the sump to usable surface and goundwater.

2. Impervious Liner: An impervious soil lining conforming to the inside pit configuration shall be placed in such a manner to resist accidental damage from pumping and other operations. The soil in the sump shall be thoroughly compacted to 90% of ASTM D-1557-70 prior to placement of the liner. A two-foot-thick clay lining of materials approved by the engineer shall then be applied. The lining will be placed in six-inch layers using soil having a suitable clay content. The lining material shall be moistened to optimum moisture content and compacted to at least 95% of ASTM D-1557-70. Each layer will be compacted by means of a sheepsfoot or other suitable compacting roller. The surface of the clay lining will be finished by track-walking with a track-laying tractor. The permeability of the lining as placed shall not exceed 1 x 10 centimeters per second.

The slopes of the containment areas shall not exceed 2:1 and the bottom width shall not be less than five feet. A minimum three foot freeboard shall be maintained at all times.

3. Abandonment: Upon completion of drilling operations at drill site locations, the mud sump-waste disposal area shall be dewatered by solar evaporation or by pumping with the final drying of the waste material by solar evaporation. When the moisture content of the waste material is reduced to

30% or less, the sump contents shall be mixed with native soils and the sump bank-filled. A two-foot-high compacted berm shall be installed between the sump area and the drill site location pad to prevent water from running off the pad onto the sump. The surface of the disposal area shall be sloped to drain, graded for an attractive appearance, and revegetated as specified herein.

II. DRILLING PROGRAM

Well: 610 meter (2,000 foot) Geothermal Test Wells

Location: McCoy Unit Area

Elevation: _____ Ground: _____

A. Tubular Goods Required:

± 20 ft. of 13-3/8", H-40 conductor pipe
± 500 ft. of 8-5/8", 24#/ft., K-55, LT&C casing
± 2800 ft. of 4-1/2", 9-1/2#/ft., K-55, LT&C casing
± 200 ft. of 4-12/" casing as above, but slotted for production

B. Casing Equipment Required:

8-5/8" - Cement float shoe with flapper valve, 2 centralizers, one 5 ft. above show and the other 10 ft. below surface

4-1/2" - Differential fill float collar with top and bottom cement plug, 2 cement baskets, 1 baffle plate, 14 centralizers, 10 ft. off bottom, then one every 200 ft. plus one at 20 ft.

C. Wellhead:

8-5/8" - S. O. W. x 8", 300#R.F. flange, with two 2" 300#R.F. flanged side outlets, and two 2", 300#R.F. gate valves

4-1/2" - S. O. W. x 6", 300#R.F. flange, with two 2", 300#R.F. flanged side outlets, and with two 2", 300#R.F. gate valves

D. Mud Program:

Use lightweight, low solids, fresh water clay base mud. Treat with lignite for temperature stability, bicarbonate of soda for cement contamination.

Depth (ft.)	Weight (lbs./gal.)	Viscosity (sec.)	Fluid Loss (cc/30 sec.)	Treatment
0-500	8.65 - 8.9	50 - 60	No Control	Mix 25 lb/bbl. bentonite Add 1 lb/bbl. soda ash to increase viscosity for cleaning large hole
500-2000	8.7 - 9.2	55 - 65		Continue 24 lb/bbl. bentonite. Add 1 lb/bbl. caustic soda for Ph control. Use bicarbonate of soda to treat out cement when drilling out of shoe Add 3 lb/bbl. lignite below 500 ft. for temperature stability.

Maintain an inventory of cottonseed hulls on location for lost circulation control.

BOPE Requirements:

0 - 500 ft. - none

500 - 2000 ft. - Install manual operated annular blowout preventer (1000 psi W.P.) and 8" 300 lb. R.F. gate valve on 8-5/8" casing as illustrated in Exhibit "E".

A fill-up line will be installed above the BOPE and a kill line will be installed below the BOPE with a direct line to the mud pump and a valve suitable for cementing. A blow-down line will be installed below the BOPE with two valves with one at the wellhead.

BOPE operation will be by manual hydraulic pump and/or by applying nitrogen cylinder pressure to the hydraulic fluid reservoir.

Mud flow line temperature and pit level will be monitored continuously.

Directional Requirements:

Hole will be maintained as near vertical as possible without sacrificing drilling progress. The maximum closure distance at total depth is to be 200 ft. The maximum deviation from vertical is to be 4^{o} or less.

Procedure:

1. Move in rig and rig up to drill well as shown in Exhibit "D"
2. Drill 17-1/2" hole to 20 ft.
3. Run 20 ft. of 13-3/8" conductor pipe.
4. Cement 13-3/8" to surface by pouring redi-mix concrete down hole casing annulus. Mix approximately 1 percent (1 lb/sax.) calcium chloride with cement to accelerate thickening time.
5. Wait on cement 3* hours before drilling out.
6. Make up 12-1/4" bit and drill 12-1/4" hole to ±505 ft.
7. Condition hole and run dual induction log.
8. Run 500 ft. of 8-5/8" - 24 lb/ft., K-55, LT&C casing using casing equipment outlined previously.
9. Center casing in rotary. Make up cementing assembly and cement as follows:

Fill	Length	Type	Total Volume
To surface	500 ft.	200 sax of API type A neat cement	236 $ft.^3$

Excess	Weight	Mix Water	Yield
15%	116.69 $lb./ft.^3$	5.2 gal./sk	1.18 $ft.^3/sk$

10. Wait on cement 8* hours. Cut off 8-5/8" casing and weld on wellhead and install blowout prevention equipment in accordance with Exhibit "D".

* Waiting time subject to cement setting time.

11. Test blowout prevention equipment at 200 psi for 30 minutes. (Note: Casing show may leak. If so, spot cement plug "2 sax of slurry of step 9 with 1 lb/sk calcium chloride " and repeat test.)*

12. Drill out wih 6-3/4" bit using as light a weight on bit as practical for first 100 ft.

13. Drill 6-3/4" (6-1/4" minimum) hole to 2000 ft. Monitor and record mud return and mud pump suction temperature, and mud pump rate (strokes/min.) every 30 ft.± when drilling below 500 ft. Do not let mud return temperature exceed 180° Fahrenheit. When 2000 ft. depth is reached or commercial reservoir is suspected, log and run 4-1/2" casing. If reservoir of quality not sufficient to warrant flow testing is suspected, skip to 14a.

14.

	Interval	Logs
a.	500 - 2000	temperature
b.	500 - 2000	IES (S.P. and DIL)
c.	500 - 2000	G.R., F.D.C., and C.N.L.

15. Go in hole and condition hole and mud for running 4-1/2" casing.

16. Run 200 ft.± of 4-1/2" casing with equipment outlined previously. Place baskets below float collars and baffle plate 1 joint below float collar. Position baskets opposite a firm formation below the deepest fresh water sand. If no fresh water sands are indicated below 500 ft., position baskets and float collar just below 8-5/8" casing. Position slotted casing opposite desired producing zones.

17. Center casing in rotary. Make up cementing assembly and establish circulation. Cement casing as follows:

* Notify District Geothermal Supervisor, USGS Conservation Division in Reno, Nevada (702) 784-5676.

Fill*	Length	Type	Total Volume
0 - 500 ft.	500 ft.	120 sax of API type A neat cement**	142 ft.^{3}

Excess	Weight	Mix Water	Yield
15%	116.7 bl/ft.^{3}	5.2 gal./sk	1.18 ft.^{3}/sk

18. Cement at low pumping rates to maintain laminar flow in annulus.

19. Wait on cement 8 hrs.*** Cut off 4-1/2" casing and 8-5/8" wellhead. Weld on 4-1/2" x 6", 300#R.F. wellhead and install 6",300#R.F. gate valve, flow tee and stripper as illustrated in Exhibit "F".

20. Go in hole with 2-3/8" drill pipe and 3-7/8" and bit and drill out cement and float equipment.

21. Pull out of hole, remove bit, go back in hole to bottom with open ended drill pipe (2-3/8") and displace mud from hole with fresh water. Monitor return temperature during this operation.

21. Pull out of hole, close 6" valve, remove stripper and install test flow line to mud pit for well clean-out flow.

14A. If 2000 ft. depth is reached without drilling formations considered to merit flow testing, complete as a temperature gradient hole as follows:

a. Run 2000 ft. of 1" sch. 40 pipe. Cap bottom end with 3000 psi cap and use sch. 80 pipe couplings.
b. Cement from 500 ft. to surface suing 180 ft.^{3} (152sk) of class A neat cement. See step 9 for properties. Cement by running 1" pipe down annulus to 500 ft. Remove 1" cementing pipe after cement is in place, if possible.

15A. Remove blowout preventer and cut off 8-5/8" casing 3 ft. below grade. Fill 1" pipe with fresh water. Cut, thread and make up 1" pipe cap on 1" pipe 18" below grade, as is illustrated in Exhibit "G".

* Fill and cement volumes to be adjusted for depth if fresh water sands are drilled below 500 feet

** Retard cement with Halad 22 + HR-12 as needed

*** Waiting time subject to cement tests

III. GEOTHERMAL WELL TESTING

A. INTRODUCTION

A short production test will be run on each well, after completion of drilling, but before the drilling rig leaves the location. These tests, normally referred to as rig tests, involve flowing each well into the drilling reserve pit and measuring the time until the pit fills up. The total amount of fluid produced is usually less than three casing volumes for each well. The rig test is satisfactory as a production rate indicator, but inadequate to measure true well and reservoir potential. Additional testing is required to obtain the quantative data necessary to evaluate the geothermal resource. The additional testing will involve large reservoir withdrawals over an extended period of time.

B. DRILL RIG TEST

After drilling and completing the geothermal well, a short flow test is conducted before disassembling the rig. The purpose of this test is to insure the proper installation and functioning of the completion equipment and to estimate the production capacity for the surface equipment needed for subsequent testing. The rig test consists of flowing the well through a temporary venting system, flashing the steam to the atmosphere and collecting the water for proper disposal. Wellhead flowing pressures and temperatures are recorded; and, upon concluding the test, wellbore pressure and temperature data may be collected. Total mass flow rate is monitored during the test. This test generally requires less than one day to complete.

C. RESERVOIR ANALYSIS TEST

Upon determining the approximate production capacity from the drill rig test, surface testing equipment is installed and connected to the well. The test apparatus consists of a separator to segregate and measure the steam and water for individual analysis, a storage system to collect the water and condensed steam for proper disposal, and measuring the sampling devices to determine the fluid properties while flowing.

The general test procedure consists of flowing the well through the surface testing equipment until the well has cleaned up and has obtained stable reservoir flow conditions. During this production period, the wellhead flow conditions are monitored as well as the separate steam and water conditions. Samples of steam condensate and water are periodically collected for chemical and corrosion analysis. Steam quality and water scaling tendencies are also investigated. Heat exchanger tests on steam and water may also be conducted. After the well has flowed for a sufficient time at stable conditions to gather the necessary data, the well is shut-in and downhole pressure and temperature recording devices are run in the well to the reservoir depth record post production transient phenomena. This entire test can be conducted within 10 days under proper conditions; however, extended test periods of over a month may be required to obtain the pertinent data.

1. SHORT TERM TESTS

Production facilities, including a test separator, test manifold, muffling pit, reserve pit, and pumps will be set up on each well and the well produced for approximately three weeks. The well will then be shut-in and the production equipment moved to the next well to test. This process will be repeated until all wells have been tested. The short tests will require 24 hour attended operation to monitor well and equipment performance.

The effluent from the wells will be piped to a manifold which can be used to divert the flow to a muffling pit or to a test separator. Normal procedure is to kick the well off through the muffler, then turn the production through the test separator when the well flow stabilizes. The steam and water will be individually metered down stream of the test separator and discharged into the muffler. The steam will be allowed to vent to the atmosphere and the water will be contained in the reserve pit. Approximately 30% of the total mass flow from the well is expected to flash and be vented to the atmosphere.

The water will be pumped from the reserve pit through the pipeline to one of the other wells for reinjection into the reservoir. The pipeline will be designed on the basis of information derived from the rig tests. Alternate designs being considered are: (1) a welded steel line following the shortest feasible path between wells, or (2) threaded and coupled pipe strung along existing road rights-of-way. In the event welded steel pipe

is used, an attempt will be made to pull it from one location to another to eliminate the necessity of large amounts of brush removal for right-of-way.

The schematic flow chart of the short term flow test facilities is shown in Exhibit "H". The goals and information desired from the short term tests are as follows:

1. Well Productivity
    a. Mass flow rate, steam fraction, water fraction.
    b. Enthalpy, temperature, pressure.
    c. Production rate decline.
    d. Other reservoir data as may be obtainable.
2. Reservoir Fluid Characteristcs
    a. Chemical analysis of water and non-condensable gases.
    b. Ratio of water to non-condensable gases.
3. Production Equipment Performance
    a. Design, size and performance of production equipment.
    b. Problem evaluation for scale, corrosion and sand.
4. Assertation of viability of geothermal resource to determine advisability of further exploratory drilling.

2. LONG TERM TESTS

The long term tests are designed to provide more knowledge of reservoir characteristics. The information from the short tests will be utilized for well selections, and to modify production facilities if the need arises. Either of the wells may be produced for a period of 2 to 4 months. One idle well will be monitored for indications of reservoir interference. Produced water will be reinjected into the reservoir through

the remaining well. It may be necessary to utilize the idle well for some injection if the injection well will not accept all of the water.

The production facilities are expected to be similar to those used for the short term tests except for the addition of more sophisticated automated control equipment designed for unattended operation.

The goals and information desired from the long term tests are as follows:

1. Determination of reservoir and production characteristics over a long time period with sizeable reservoir withdrawals.
2. Determination of effectiveness of applied solutions to production problems encountered in short term tests.
3. Determination of feasibility of commercial power generation.

The long term tests criteria may be extended to other wells if the short term tests encourage the drilling of additional wells, and these wells are completed within the necessary time frame.

3. WATER DISPOSAL

The salt content of water produced during the well tests will require that the water be reinjected into the reservoir. The water produced during the above proposed testing will be injected into the reservoir through one or both of the idle wells. Injection characteristics of the wells will be monitored to determine future injection well requirements and possible injectivity problems.

Any proposal for a pipeline installation as stated above, will be submitted to the appropriate personnel for approval and will be installed in such a manner as to cause minimal interference with other operations. It will be buried at road crossings, but will be laid above ground in other areas. Cleared areas and existing road right-of-ways will be used in as much as possible to minimize vegetation disturbance. The line will be pulled through vegetated areas where possible to eliminate rights-of-ways or vegetation disturbance. The line may be utilized for future tests or incorporated into a future production system.

EXHIBIT "D"

Schematic Diagram for Proposed Well Program

CONTINGENCY PLANS

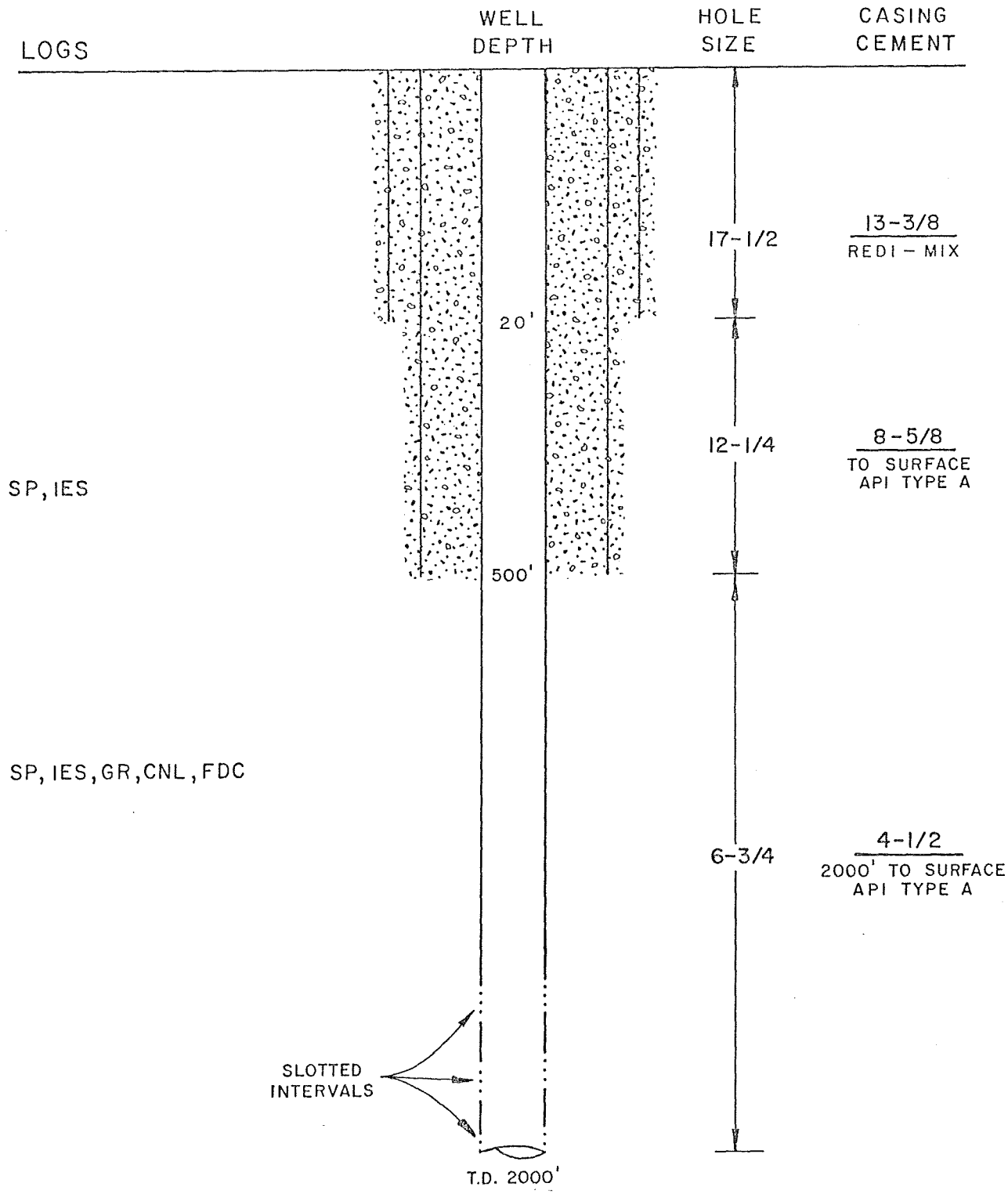


EXHIBIT "D"

SCHEMATIC DIAGRAM

PROPOSED WELL PROGRAM

EXHIBIT "E"

Schematic Diagram Blowout Prevention Equipment

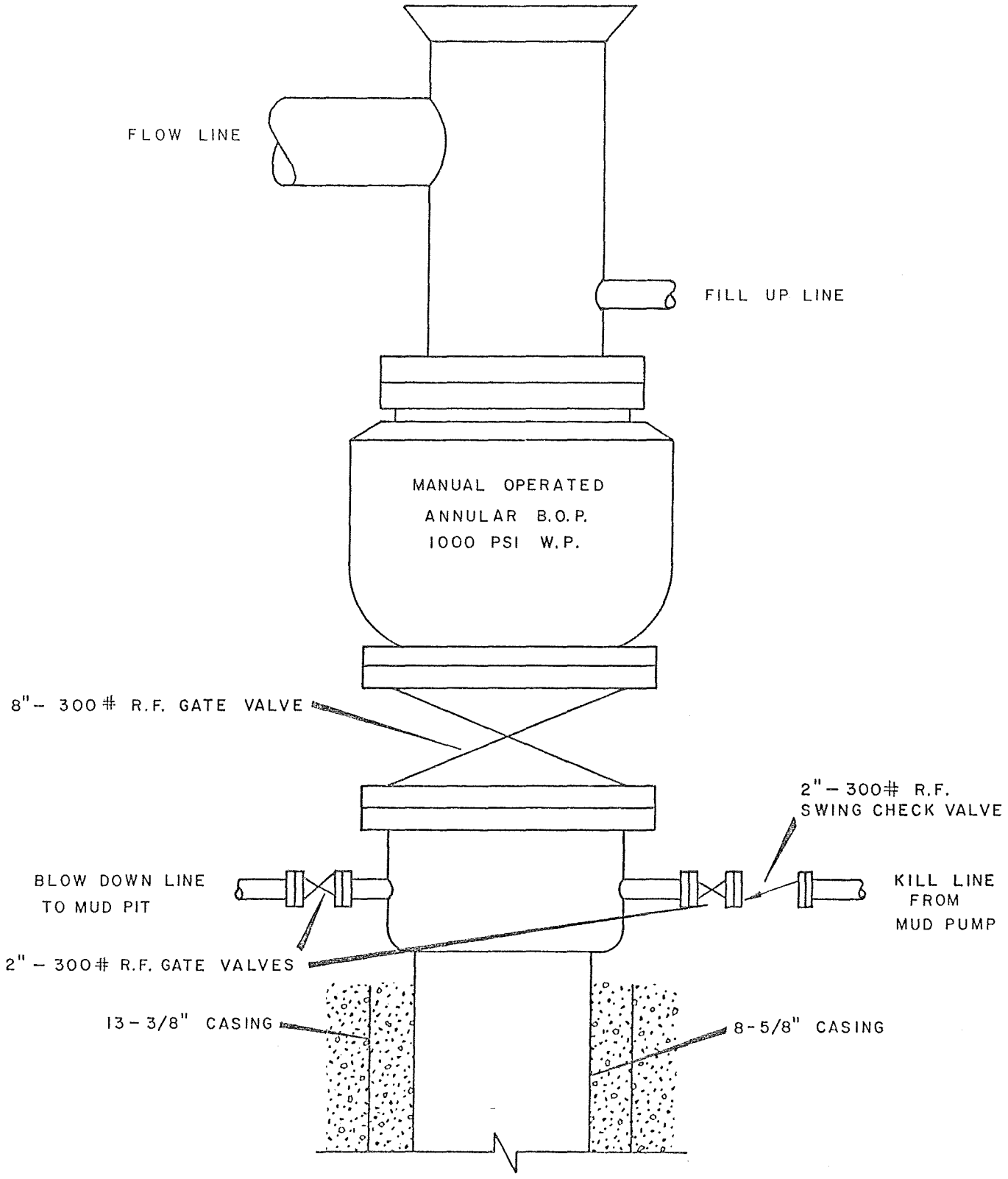


EXHIBIT "E"

BLOWOUT

PREVENTION EQUIPMENT

EXHIBIT "F"

Schematic Diagram of Wellhead Set-up

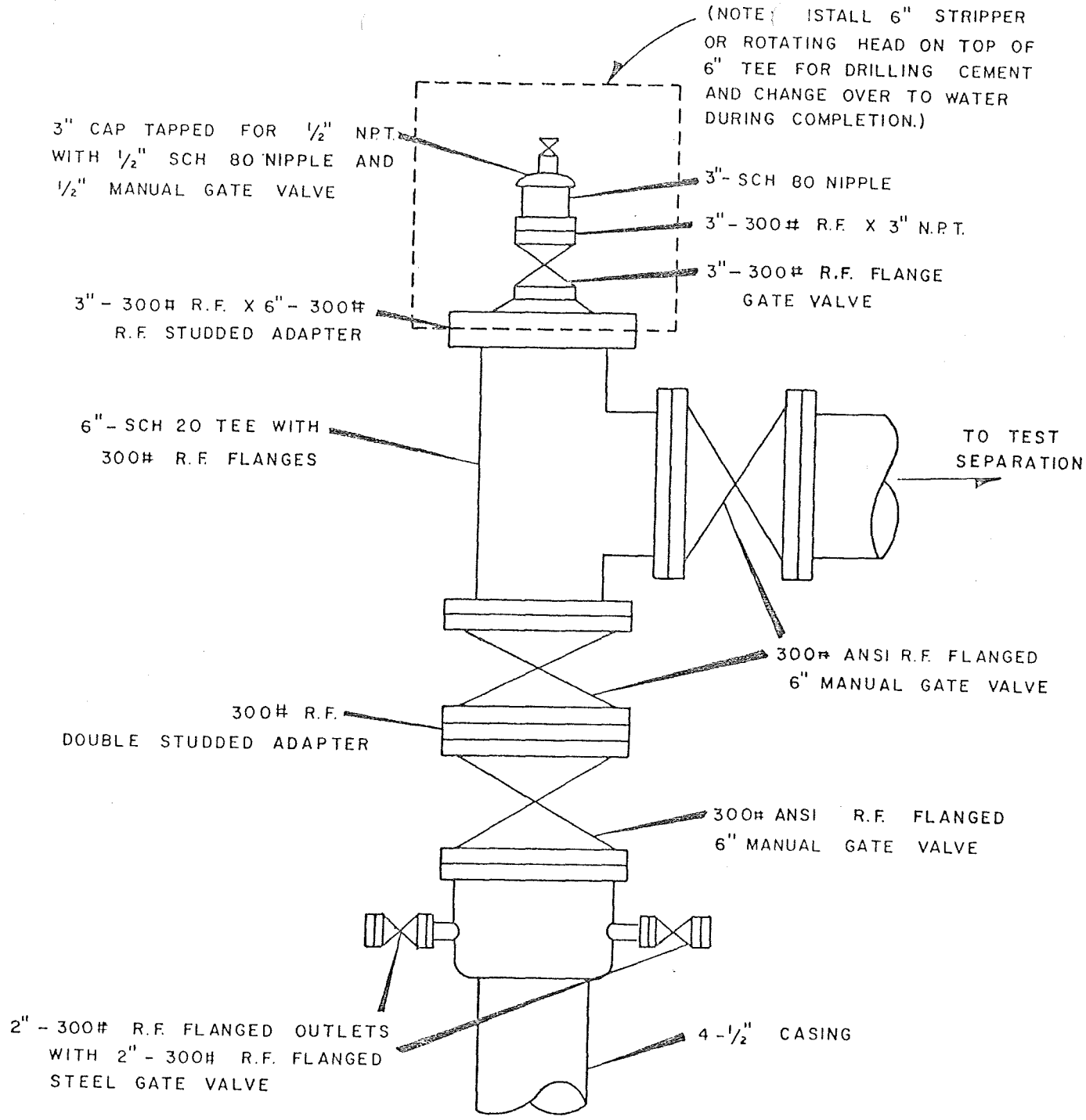


EXHIBIT "F"

AMAX EXPLORATION, INC.
DENVER, COLORADO

WELLHEAD EQUIPMENT

EXHIBIT "G"

Schematic Diagram for Completion As

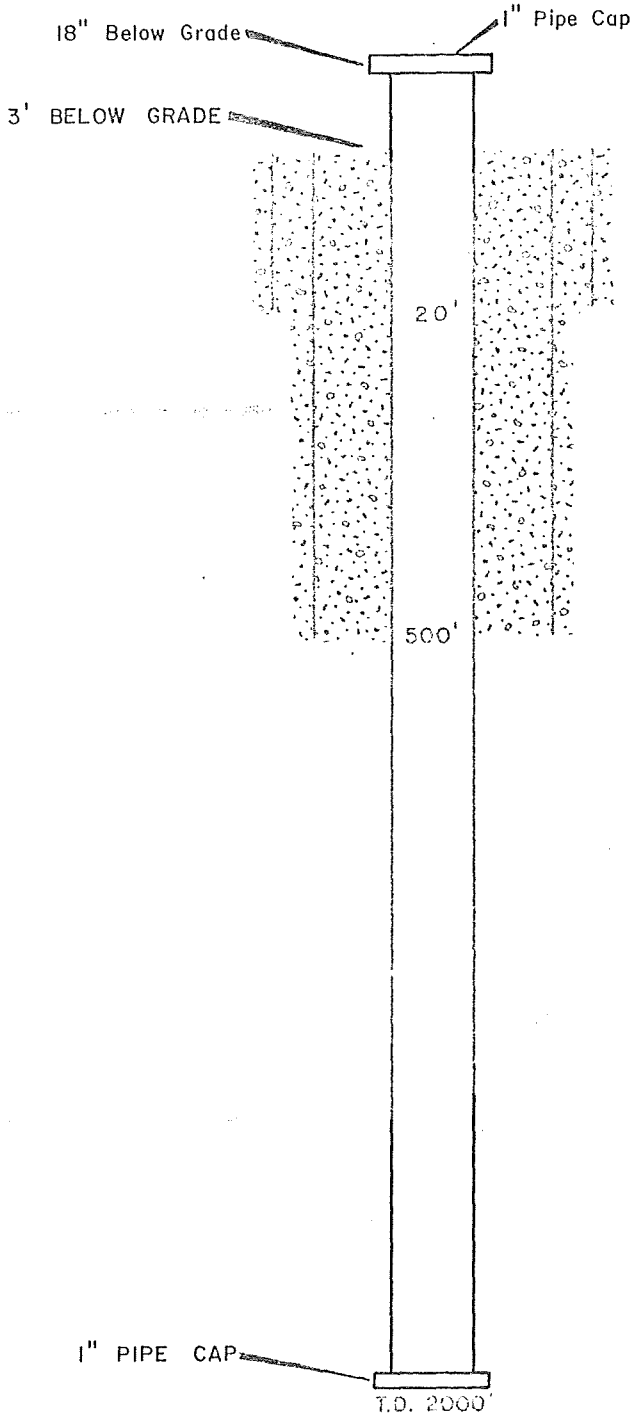
Thermal Gradient Well

GEOLOGIC TOPS

WELL DEPTH

HOLE SIZE

CASING CEMENT



17-1/2

13-3/8
REDI - MIX

12-1/4

8-5/8
TO SURFACE
API TYPE A

6-3/4

1" PIPE
2000' TO SURFACE
API TYPE A

EXHIBIT "G"

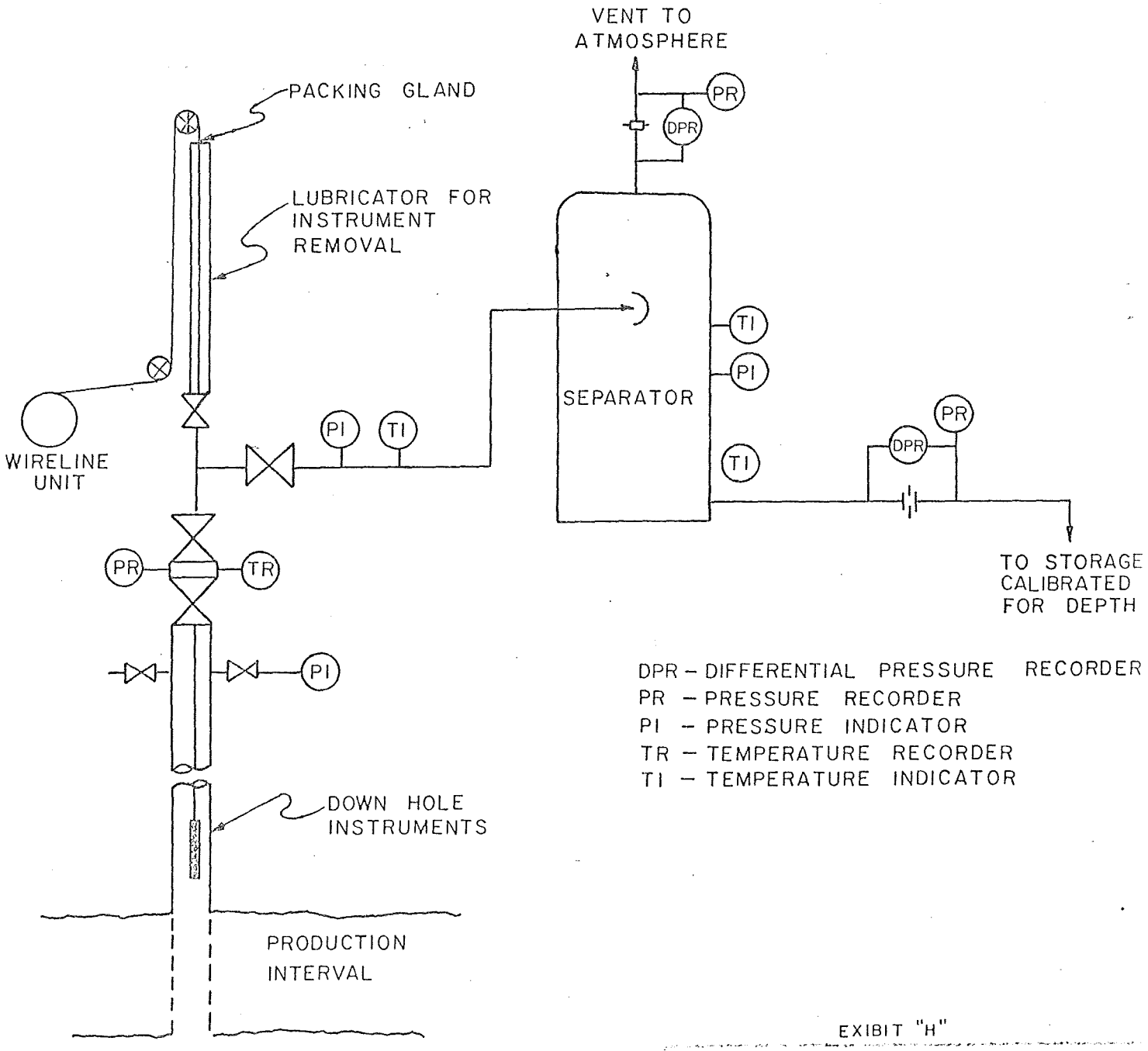
AMAX EXPLORATION, INC.
DENVER, COLORADO

SCHEMATIC DIAGRAM

COMPLETION AS AT

EXHIBIT "H"

Schematic Diagram of Typical Flow Test Equipment



DPR – DIFFERENTIAL PRESSURE RECORDER
PR – PRESSURE RECORDER
PI – PRESSURE INDICATOR
TR – TEMPERATURE RECORDER
TI – TEMPERATURE INDICATOR

EXIBIT "H"

TYPICAL

FLOW TEST

EQUIPMENT

CONTINGENCY PLANS

I. ACCIDENTAL SPILLS AND DISCHARGES

The McCoy Prospect is located approximately 50 miles northwest of Austin, Nevada. The area is uninhabited hill country used for cattle grazing and hunting.

A. Potential Locations Where Discharge Incidents Might Occur

1. Potential locations for accidental spills are:

a. Drilling rigs.

b. Water ponds, or mud pits.

c. Pipelines at wells or drillsites.

2. Drilling Muds - Muds are a mixture of water, chemicals, and solid particles used in drilling operations to lubricate and cool the bit in the hole, and to carry cuttings out of the hole. Drilling muds are stored in sumps at the drilling locations. These sumps are open and are adequately sized to hold the volume necessary for the operation. Potential circumstances of discharge are minimal, but could occur by:

a. Sump overflow.

b. Sump wall seepage or wall breakdown.

c. Mud discharge from elsewhere on location.

d. Shallow lost circulation channeling to surface.

3. Fuel Oil - and Petroleum Products

A discharge of this type would probably be very small and from equipment used in the field. Potential locations for accidental spills are:

a. Drilling equipment and machinery at and around drilling locations.

b. Other miscellaneous equipment and machinery at well sites and on roads.

4. Construction/maintenance debris - Minor consideration, usually able to be cleaned up on the job. Potential locations are the same as for lubricating or fuel oil, (3), above.

B. Possible Water Quality Affects

1. Condensate or drilling muds.

a. Contaminate water possibly making it unsuitable for human or wildlife consumption.

b. Possible detrimental effect to flora of area...

c. Increase turbidity of water by particulates in fluid or by soil erosion.

2. Petroleum products.

a. Contaminate water.

b. Cover wildlife and plant life.

3. Construction debris - possibly increase turbidity.

C. Plan for Clean-up and Abatement

In the event of discharges of condensate, drilling muds, petroleum products or construction debris, the overall contingency plan for the McCoy Project, Churchill and Lander County, Nevada, is as follows:

1. The person responsbile for the operation will make an immediate investigation, then call the Field Drilling Foreman and advise him of spill. The Field Drilling Foreman will in turn call out heavy equipment, regulate field operations, or do other work as applicable for contrl and clean-up of spill. If spill is small (i.e., less than 250 gallons) and easily containable

without endangering watershed, Field Drilling Foreman will direct and supervise complete clean-up and return to normal operations.

2. If spill is larger than 250 gallons, or is not easily contained, or endangers or has entered watershed, Field Drillling Foreman will proceed to take necessary action to curtail, contain and clean up spill, and notify personnel as follows:

a. Call out heavy equipment, regulate field production, etc.

b. Call for contract vacuum trucks or water pump trucks.

c. Call the Drilling Superintendend, and advise of spill:

Percy A. Wicklund
Office (303) 433-6151
Home (303) 233-2255

3. The Drilling Superintendent Notify the following:

a. Geothermal Manager and brief him on the situation and course of action:

William M. Dolan
Office (303) 433-6151
Home (303) 697-8153

b. Notify the following agencies or regulatory bodies as soon as practical and work closely with them in all phases of operations:

United States Geological Survey
District Geothermal Supervisor
63 Keystone Avenue, Suite 102
Office (702) 784-5676
Home (702)

Bureau of Land Management
Carson City District
Carson City, Nevada
Office (702)

Nevada State Fish and Game Department
Regional Office
Fallon, Nevada
Office (702) 423-3171

Water Resources Division
State of Nevada
201 South Fall
Carson City, Nevada
Office (702) 885-4380

United States Geological Survey
Conservation Division
Geothermal Supervisor
Manlo Park, California
Office (415) 323-8111

4. Specific Procedures

   a. For drill water:

      Contain spillage with dikes; if possible, haul to disposal sump or well by vacuum or water trucks.

   b. For drilling mud:

      Repair sump or contain with dikes.

      Haul liquid to another sump or available tank or approved disposal site.

      Dry and solidify other material, compact and bury solids where possible.

   c. For petroleum products:

      Contain spill with available manpower.

      Use absorbents and dispose of same in County and BLM approved area.

   d. For construction debris:

      Pick up or otherwise contain and remove to disposal area.

5. Have source of spill repaired at earliest practical time.

6. Continue working crews, equipment and vacuum trucks on clean-up until all concerned agencies are satisfied.

D. McCoy Field Drilling Supervisor will confirm telephone notification in writing within two (2) weeks. The written report will include:

1. Reason for discharge or spillage.
2. Duration and volume of discharge.
3. Steps taken to correct problem.
4. Steps taken to prevent re-occurence of problem.

II. CONTINGENCY PLAN FOR UNCONTROLLED BLOWOUT

When the means to shut in a control the flow from a well is lost, the AMAX Drilling Supervisor will contact:

Percy A. Wickland
Office (303) 433-6151
Home (303) 233-2255

A. Initiate appropriate control procedures (procedures will vary greatly depending on the magnitude of the problem).

1. If any injuries have occurred, dispatch all injured personnel to the nearest medical facility by the fastest transportation available.

Ambulance Service:
Ground:
Air: (702) 423-2700
(702) 329-9022
(702) 623-2762

Hospital:
Fallon, Nevada (702) 423-3151
Battle Mountain, NV (702) 635-2550

Doctors:
Fallon (702) 423-3126
(702) 423-7161
Battle Mountain

2. Notify the sheriff as soon as possible.

Churchill County Sheriff Fallon, Nevada	(702) 423-3116
Lander County Sheriff Austin Battle Mountain	 (702) 964-3661 (702) 635-5161

3. Secure and maintain control of access roads to area to eliminate entry of unauthorized personnel.

4. Contact the Geothermal Manager and advise of situation:

William M. Dolan
Office (303) 433-6151
Home (303) 697-8153

5. Follow same notification procedure outlined under the Contingency Plan for Spills.

6. Initiate any further or supplemental steps which may be necessary or advisable based on consultation with the Drilling Superintendent.

7. He is to be certain that all safety practices and procedures are being followed and that all members of the drilling crew are performing their assigned duties correctly.

8. Attempt to control the well at the rig site with rig personnel and supervisors, under the direction of the field drilling superintendent.

9. If fluid flow is of an uncontained nature, attempt containment with required equipment to construct sumps and/or dikes as rapidly as possible and as needed.

10. Attempt to construct and/or fabricate and install any wellhead facilities required to contain fluid flow at the well or casing head.

11. Maintain a continuing inspection of the pad area immediately around the well site, subject to erosion, that may cause a failure to the drilling rig structure. Take necessary steps to avert areas of possible erosion by excavation and rebuilding of the area as indicated.

12. Following complete containment of the well, initiate steps to return the area to its normal state prior to the blowout or fluid flow, such as re-seeding with similar and approved vegetation.

B. EMERGENCY PERSONNEL AND SERVICES

Same as for Contingency Plan for Spills and Discharges.

III. HYDROGEN SULFIDE CONTINGENCY PLAN

It is AMAX Exploration, Inc.'s intent to provide a safe working place, not only for its own employees, but also for those of other firms whose services are needed for the drilling and evaluation of the geothermal test wells.

Automatic "hydrogen sulfide" continuous monitoring equipment, such as those provided by F.R. Smith Mud Logging Service, will be installed.

A. Should sufficient amounts of hydrogen sulfide be encountered to require abatement, the following actions will be taken:

1. Notify Drilling Supervisor:

Percy A. Wickland
Office (303) 433-6151
Home (303) 233-255

2. Follow instructions of Drilling Supervisor.

3. Immediately begin to ascertain the source of the H_2S and/or NH_3 and take the required steps to suppress the gas. Drilling will not proceed until the source is determined, the well is circulated and the gas is controlled.

4. The supervisors will make sure all non-essential personnel are out of the potential danger area.

5. Check all gas monitoring devices and increase gas monitoring activities with the portable hand operated gas detector units.

6. AMAX drill foreman will assess the situation, outline a control program and assign duties to each person or group as required to bring the situation under control.

B. EMERGENCY PERSONNEL AND SERVICES

Same as for Contingency Plan for Spill and Discharges.

GENERAL SAFETY PRACTICES

I. SAFETY REGULATIONS

A. The following general safety regulations and such additional regulations issued by Field, Area, or District authority are for your protection.

1. REPORTING PERSONAL INJURIES

All of the job personal injuries, even of a minor nature, must be reported on AMAX Form _____ no later than the end of the shift in which the injury occurred.

2. SMOKING

Smoking will be permitted only in authorized smoking areas.

3. OPEN FLAMES

Open flames are not permitted within 100 feet of the rig.

4. CLOTHING

All employees shall be clothed in a manner which will not impair their safety.

5. HAZARDOUS CHEMICALS

Safety equipment as prescribed by Field, Area, or District authority, shall be worn when handling chemicals.

6. EYE AND HEARING PROTECTION

Adequate eye and face protection devices will be worn when grinding, welding, chipping, pouring chemicals or wherever flying particles may cause eye injury. Hearing protection devices will be worn where required.

7. SAFETY SHOES

Steel-toed safety shoes should be worn by all employees except supervisors, office employees and those unable to do so by reason of physical deformity.

8. SAFETY HATS

Safety hats must be worn by employees and visitors in accordance with the rules established for the particular Field, Area, or District.

9. SAFETY BELTS

Safety belts will be worn on all above ground work as prescribed by Field, Area, or District.

10. SEAT BELTS

While driving company automotive equipment, seat belts must be worn at all times by driver and passengers if vehicle is so equipped.

11. HORSEPLAY

Horseplay or practical jokes will not be permitted.

12. TOOLS

Only tools in good working condition and designed for the particular job being performed shall be used.

13. ELECTRICAL

Only qualified and designated employees shall work on electrical lines and equipment. All rig lighting should be vapor and/or explosive proof. Well heads, blowout preventers and cellar should be illuminated with flood lights located as far away as possible maintaining proper illumination.

14. MACHINERY

Repairs shall not be made on machinery until power is positively locked out at the electrical disconnect. Prime movers, machine or equipment capable of movement, shall be effectively blocked or secured while repairs are being made. All engines should be equipped with explosion resistant or explosion proof ignition systems and water injection system for exhaust. All engine exhaust should be welded to insure a closed system.

15. GUARDS

Guards must not be removed while equipment is operating and must be in place before start-up.

16. HOUSEKEEPING

Good housekeeping is an aid to safety. All employees will keep tools, equipment and area clean and orderly.

17. ACCIDENT PREVENTION RESPONSIBILITY

Each employee is responsible for prevention of accidents to men working under his supervision. It is his responsibility to train

these employees in the safest and most efficient way to work. It is the further responsibility of each employee to correct or report to his supervisor any unsafe condition or practice which he may observe.

18. VIOLATIONS

Employees who violate these safety regulations or others issued by the Field, Area, or District will be subject to disciplinary action.

19. SAFETY HATS

All personnel will wear safety hats while on the project.

20. GAMBLING, LIQUOR AND NARCOTICS

There will be no gambling, intoxicating liquor, or narcotics on Company owned, leased, or operational properties.

21. EAR PROTECTION

All personnel working in high noise level areas as designated by the Company are required to wear hearing protectors at all time.

22. WELDING IN FIELD AREAS

No welding will be done without fire watch with extinguisher. Welding is not to be permitted on the rig unless authorized. If welding is required, approval is required from the Drilling Supervisor.

23. SAFE DRIVING

All personnel will drive with caution on the project. Where steam conditions limit vision, personnel will use vehicle headlights and proceed slowly through the area.

24. EQUIPMENT OPERATION

All personnel will follow State and Federal Safety Regulations and maintain a minimum clearance of 10 feet from overhead high voltage.

25. ELECTRIC HAND TOOLS

Portable electric hand tools with exposed non-current carrying metal parts shall be grounded unless the portable tools are protected by an approved system of double insulation.

26. SAFETY MEETINGS

All personnel will attend and participate in the monthly Safety Meeting.

NOTE: All personnel will be required to read and understand the "Contingency Plan" section of this report.

B. EQUIPMENT REQUIREMENT

The Following list of surface equipment is considered a minimum requirement for geothermal drilling operations (also air drilling, if needed). Additional equipment will be used as needed.

1. Blowout Prevention equipment should conform to specifications set forth in Details of Work, Drilling Procedure, Section C. In addition, the following should be provided or followed.

   a. Water nozzles or sprinklers should be installed to spray on the preventer stack to control temperatures and help preserve rubber elements when circulating temperatures become excessive.

   b. Only high temperature elements should be used in the rotating head.

   c. Ram elements should be checked for temperature damage on every trip and be replaced as needed.

2. An accumulator system should be provided with the following minimum specifications:

   a. Should be of sufficient size to close all of the hydraulically operated equipment, with pumps shut off, and have a minimum of 69 BARS (1000 PSI) remaining on the accumulator.

   b. A backup of Nitrogen bottles or an air compressor driven independently from the rig should be provided. Piping should be such that the nitrogen can be routed through a pressure regulator directly to preventor stack, by-passing the accumulator.

   c. Two operating stations should be provided. These should normally be the main unit (with four-way valve) and a remote unit at the driller's station. The main unit should be at least 15m (50 feet) from well bore in a convenient location.

d. All piping should be 2.54cm (1 inch) minimum steel lines with 207 bars (3000 psi) working pressure. No rubber line should be used. Sufficient swivels should be used to prevent undue stress.

3. Drill string floats are to be used with air drilling to reduce bleed-down time when making connections, and to strip out when the well is flowing.

4. All engines are to be equipped with explosion resistant ignition and explosion-proof or water injection exhaust.

5. All rig lighting is to be vapor and/or explosion proof. Underfloor lights should provide good illumination of well head equipment, but should be located as far from the well head assembly as possible.

6. Rig pumps are to remain connected to the standpipe during air drilling and be ready to operate. Tanks should be filled with mud or water of sufficient volume to fill the well bore. Excess fluid volumes must be provided for hole erosion or losses in loading the hole.

7. The air line from the compressors should have the following:

   a. A positive displacement chemical pump is required for injecting liquids into the air stream. This pump should be capable of injection rates from 1.6 to 4.8m^3 (10 to 30 barrels) per hour. A calibrated chemical mixing tank is also required with a minimum capacity of 1.6m^3 (10 barrels). The pump should be motor/engine driven - air pumps are not satisfactory due to excessive air use.

   b. A 24-hour recording orifice meter to meter air volumes.

   c. An air pressure gauge shall be installed in the standpipe at a location clearly visible to the driller. A gauge should also be clearly visible to compressor operator.

   d. An adjustable choke shall be installed in the air supply line adjacent to the standpipe. This choke shall be used for minor pressure corrections. Air will be regulated to the rig at the normal pressure range.

   e. Be large in diameter to minimize fraction loss.

   f. Contain a pressure-relief valve to guard against pressure too high for the compressors and other equipment.

   g. Install a check valve to prevent any liquids from being pumped back into the compressor.

h. Have connection to a line going to the Bradenhead for reverse circulation, if needed.

i. Connect through a release line to bhe blooie line so that the compressors need not be taken off the line during connections. A 3-way valve or two standard valves for this purpose allow the crew to control air flow from the floor at all times.

The following additional blowout prevention equipment should also be on the rig floor at all times:

1. An inside blowout preventer.

2. A full opening drill string safety valve in the open position. Separate valves shall be maintained to fit all pipe in the drill string.

3. A Kelly cock shall be installed below the swivel and a full opening Kelly cock of such design that it can be run through the blowout preventers shall be installed at the bottom of the Kelly.

In addition, the mud system shall be such that a positive indication can be obtained as to mud volumes required to fill the hole on trips, and other monitoring equipment as follows:

Mud Temperature
Air Temperature
H^2S Monitor Flowline, Floor and Cellar
Mud Pit Levels - Flowline Monitor
Mud Viscosimeter
Hydrocarbon Gas Monitor

C. NOISE AND DUST CONTROL

1. Regulations require that noise levels not exceed 65 dBA at a distance of 457m (1500 feet) from the noise source. Also, vegetation surrounding the drill site must not be excessively degraded from well emissions.

2. Noise levels will be monitored with an approved sound survey instrument at selected points around the drill site to verify compliance with noise level regulations. These checks will be made on a regular basis during periods of peak noise emission from the drill site. The results will be recorded and made available to all parties with interest in the area, if desired.

D. FIRE

1. All local, county, state, and federal fire protection standards applicable to Union's activities will be observed.

2. Vegetation on the drill sites is sparse and will be cleared only to the extent needed for proper operation. Smoking will only be allowed in designated areas.

3. Exhaust stacks from all engines in service will be equipped with muffling systems recognized and approved for use in the area. (See attached safety practices - Section I.)

4. Water and suitable fire extinguishing equipment will be available at the drill site.

NOTE:

AMAX Exploration, Inc. is prepared to submit, upon notification to do so, any further information not included herein which is required. AMAX Exploration, Inc. is also prepared to carry out provisions for minotoring deemed necessary to ensure compliance with regulations and to participate in the collection of data concerning existing air and water quality, noise, seismic and land subsidence activities, in accordance with CFR 270.34 (k) and the January 1977 Guidelines for acquiring this data.