

UTAH DIVISION OF OIL, GAS AND MINING

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE X WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/ABD. _____

DATE FILED 1-10-80

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO. U-17245

INDIAN

DRILLING APPROVED: 1-21-80 1-22-80

SPUDDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION: 4550' KB

DATE ABANDONED: Location ABANDONED Well Never DRILLED 4-2-81

FIELD: Greater Cisco AREA 3/86

UNIT:

COUNTY: Grand

WELL NO. Cisco Federal #9

API NO: 43-019-30593

LOCATION 1036' FT. FROM (N) ~~SEX~~ LINE.

682' FT. FROM ~~XX~~ (W) LINE.

NW NW 4 1/4 - 1/4 SEC. 34

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				<u>20S</u>	<u>23E</u>	<u>34</u>	<u>CISCO DRILLING & DEV, CO.</u>

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Cisco Drilling & Development Co.

3. ADDRESS OF OPERATOR
 419 Whalley Ave., New Haven, Connecticut 06511

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 NW1/4NW1/4 Section 34 T20S, R23E, S1M **1036 FNL**
 At proposed prod. zone
 681.5 ft from W-line and ~~424.1 ft from S-line~~

5. LEASE DESIGNATION AND SERIAL NO.
 U-17245

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME
 Federal

9. WELL NO.
 Cisco #9

10. FIELD AND POOL, OR WILDCAT
 GOR Cisco Springs Area

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 T20S, R23E, S1M, Sec. 34

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 4 miles NW of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 681.5 ft.

16. NO. OF ACRES IN LEASE
 1120.00

17. NO. OF ACRES ASSIGNED TO THIS WELL
 160 Acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 3,254.1 ft.

19. PROPOSED DEPTH
 2,500 ft

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 GR 4,540 ft; KB 4,550 ft

22. APPROX. DATE WORK WILL START*
 10-23-79

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 3/4"	7"	20.0 lbs.	150 ft.	75 sks cement thru production zone and cemented 200 ft. above the Dakota formation
6 1/2"	4 1/2"	10.5 lbs.		

It is planned to drill a well at the above location to test the gas production possibilities of the sands in the Dakota, Cedar Mountain, and Morrison formations. The well will be drilled to a point which is near the top of the Entrada formation or to commercial production. Rotary tools with air for circulation will be used to drill the well. The surface casing will be set at about 150 ft., and cemented with returns to the surface. A blowout preventer with hydraulically operated blind and pipe rams will be installed on top of the surface casing; and a rotating head will be used on top of the blowout preventer. 2-inch Fill and Kill lines will be connected below the blind rams. Any gas encountered will be flared at the end of the blewie line, and roughly checked for volume thru a 2-inch line after the pipe rams have been closed. A float valve will be used in the bottom drill collar at all times.

18. ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface geology and vertical depths. Give blowout preventer program, if any.

RECEIVED

SIGNED: Robert P. Kugan TITLE: Geologist DATE: 10-23-79
 (This space for Federal or State office use)

JAN 10 1980

PERMIT NO. 43-019-30593 APPROVAL DATE: January 21, 1980
 DIVISION OF OIL, GAS & MINING

APPROVED BY: _____ TITLE: _____ DATE: _____
 CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

COPY

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. 417245

OPERATOR: Cisco Drilling & Development

WELL NO. 9

LOCATION: 1/2 NW 1/4 sec. 34, T. 20S, R. 23E, S4W

Grand County, Utah

1. Stratigraphy: mancos sh - surface

Dakota ss - 1580

Cedar mtn - 1660

Morrison - 1760

Entrada - 2310

2. Fresh Water: none probable

3. Leasable Minerals:

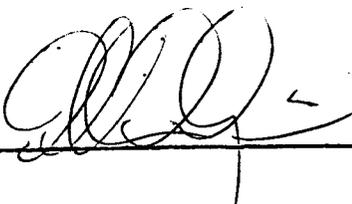
gas from ~ 1600 to TD

4. Additional Logs Needed: adequate

5. Potential Geologic Hazards:

none expected

6. References and Remarks:

Signature: 

Date: 12-6-79

United States Department of the Interior
Geological Survey
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

USUAL ENVIRONMENTAL ASSESSMENT

Date January 3, 1980

Operator Cisco Drilling & Development Co. Well No. Cisco Well #9
Location 681.5 FWL 4244.1' FSL Section 34 Township 20S Range 23E
County Grand State Utah Field/Unit Cisco Springs
Status: Surface Ownership Public Minerals Federal
Lease No. U-17245-D Permit No. _____

Joint Field Inspection Date: December 5, 1979

Field Inspection Participants, Titles, and Organizations:

<u>Ted Rhodes</u>	<u>Operator's agent</u>
<u>John Mudon</u>	<u>Operator's agent</u>
<u>Bob Kershaw</u>	<u>Bureau of Land Management</u>
<u>Glenn Doyle</u>	<u>U. S. Geological Survey</u>
_____	_____
_____	_____
_____	_____

Related Environmental Documents:

Book Mountain Planning Unit Resource Analysis, Bureau of Land Management, Utah.

Prepared by: Glenn M. Doyle
Environmental Scientist
Grand Junction, Colorado

*Well reworked 8/80
250 x 275
250 x 275
3/10 nic x 16
Stockpile
2 ac
MTH 19 (3) a) - e)
Noted - G. Diwachak*

Proposed Action:

On November 6, 1979, Cisco Drilling and Development Co. filed an Application for Permit to Drill the Cisco Well #9 development well, a 2500' gas test of the Entrada sandstone, located at an elevation of 4540' in the NW/4 NW/4, Sec. 34, T20S, R23E on federal mineral lands and public surface; lease No. U-17245.

An objection was raised to the wellsite orientation. The proposed plan placed the reserve pit in a wash and in approximately 6' of fill. To reduce the chances of a spill and/or the potential for significant siltation, the operator's representative agreed to rotate the rig 90° to the west in order to locate the reserve pit in cut. There was no objection raised to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Freshwater sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface Plan are on file in the U.S.G.S. District Office in Salt Lake City, Utah, and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming. The 13-Point Surface Protection Plan is on file in the District Office in Salt Lake City, Utah.

A working agreement has been reached with the Bureau of Land Management, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 180' wide x 250' long and a reserve pit 15' x 30'. The existing jeep trail would be upgraded to 16' wide by approximately .3 mile long from an existing poor condition road.

The operator proposes to construct production facilities on disturbed area of the proposed drill pad. If production is established, plans for a gas flowline would be submitted to the appropriate agencies for approval. The anticipated starting date is January 1980 and duration of drilling activities would be about 7 days.

Enlargement of the reserve pit was suggested by USGS and BLM. Reasoning for this is based on recent experiences by some operators in the Cisco Springs area who have encountered as much as 50 barrels of water/day when drilling in proximity to faults. The operator's representative was unaware of the subsurface structural aspects of the site, as were the government agencies. Therefore, in the interest of making certain that the reserve pit had the capacity to handle fluids in significant quantities, its dimensions were expanded to 25' wide x 100' long. The operator agreed that this was appropriate. Additionally, the operator requested enlarging the pad dimensions to 250' x 275'. This was agreed to by USGS and BLM.

Location and Natural Setting:

The proposed drillsite is approximately 4 miles NW of Cisco, Utah, the nearest town. A poor road runs to within .3 mile of the location. This well is in the Cisco Springs Field.

Topography:

The location lies on a desert alluvial fan composed of Mancos shale and interlaced with intermittent drainage channels. It is bounded on the north and east by rolling hills.

Geology:

The surface geology is Mancos shale. The soil is a sandy clay. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U. S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinyon-juniper association is also present.

Eight inches of topsoil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 2 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated. However, if H₂S or any other toxic substances are encountered, the USGS is to be notified immediately.

Precipitation:

Annual rainfall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rainstorms. This type of storm is rather uncommon as the annual precipitation is around 8".

Winds are medium and gusty, occurring predominantly from SW to NE. Air mass inversions are rare. The climate is semiarid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Several small intermittent drainage channels cross the wellsite. One main, dry channel borders the location on the east and it is this drainage that was the cause for rotation of the rig.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean up all spills or leaks.

Groundwater Hydrology:

Some minor pollution of groundwater systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination, and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of freshwater formations are listed in the 10-Point Subsurface Protection Plan. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Sagebrush, rabbitbush, four-wing saltbush, and a small variety of desert grasses predominate the area.

Proposed action would remove about 2 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations. Rehabilitation would be in accordance with BLM recommendations.

Wildlife:

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit the project area. The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction

operations, activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads.

The overall effect of oil and gas drilling and production activity is significant in Grand County but it is difficult to assess the environmental impact of a single well on state and/or national levels. However, if said well was to produce in sufficient quantity, additional development wells might be anticipated. This additional development, in turn, would lead to greater environmental and socioeconomic consequences.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Book Mountain Planning Unit. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A covered trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternatives to the Proposed Action:

1) Not Approving the Proposed Permit--The Oil and Gas Lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits. Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies' supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

3) Drilling should be permitted, provided the operator incorporates the following mitigative measures into the APD and adheres to them:

- a) To avoid the drainage on the east, operator will rotate the rig 90° to the west. This will place the reserve pit in cut, not fill.
- b) Operator will fence the reserve pit on three sides prior to drilling, and on four sides once the rig has moved off.
- c) Operator will stockpile 8" of topsoil on the SW corner of the location.
- d) Operator will maintain the blooie line at least 125' from the wellhead and direct it into the reserve pit.
- e) Operator will enlarge the reserve pit to 25' wide x 100' long to contain any fluids.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 2 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated

with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for subsurface damage to freshwater aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution would exist through leaks and spills.

If well is a producer, other development wells would be anticipated with substantially greater environmental and economic impacts.



*Cisco Drilling #9, Sec. 34,
T20S, R23E
Grand Co., Utah*

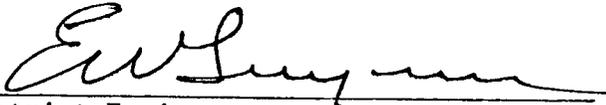
We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

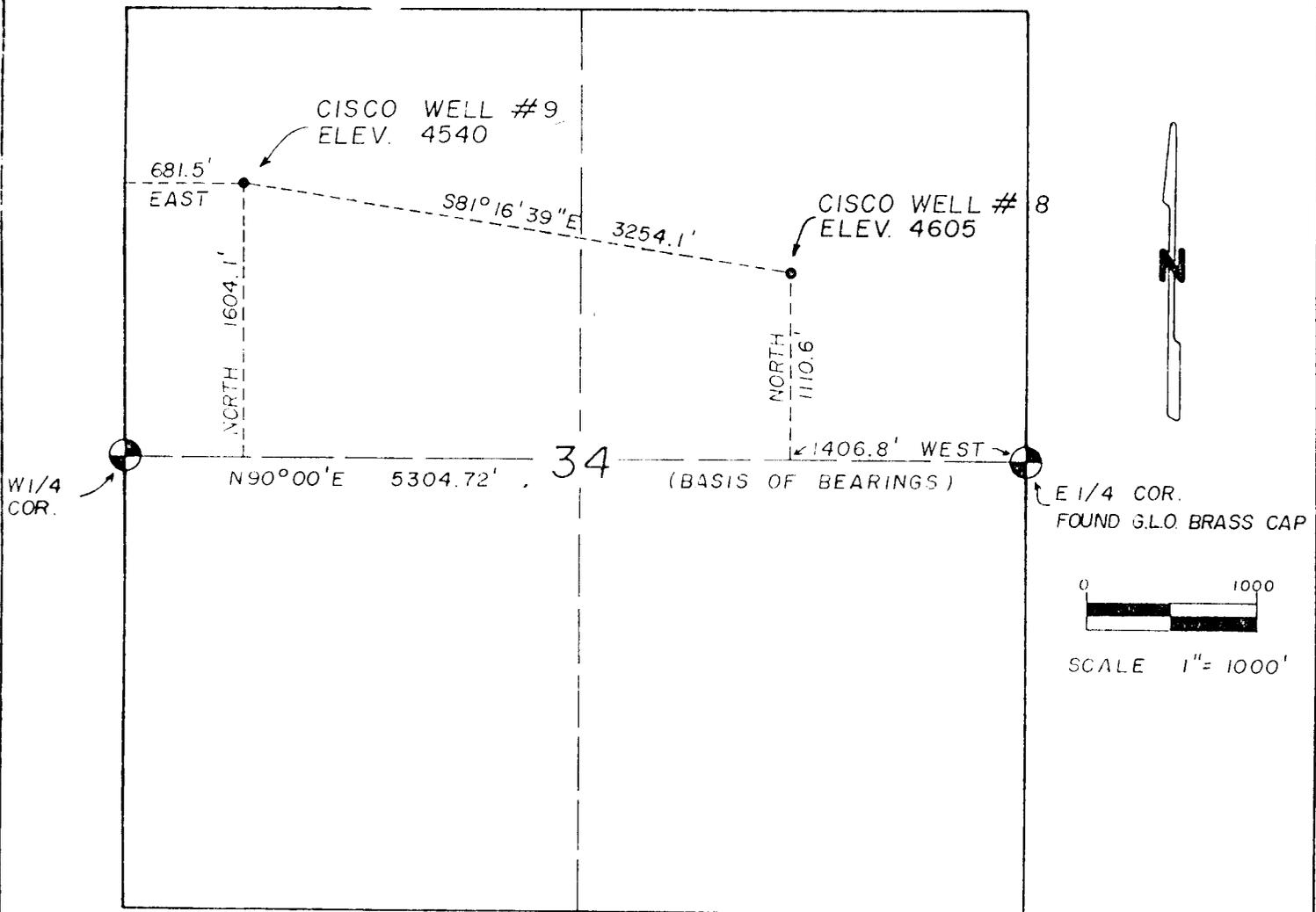
Determination:

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Sec. 102(2)(C).

Date

1/21/80


District Engineer
U. S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District



ELEVATIONS ARE FROM U.S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY TOPOGRAPHIC MAP

CERTIFICATE OF SURVEY

I, MERRITT P. DISMANT, BEING A REGISTERED LAND SURVEYOR DO HEREBY CERTIFY THAT THE SURVEY OF DRILL SITE LOCATION CISCO WELL #8 IN THE SW 1/4 NE 1/4 SECTION 34, AND CISCO WELL #9 IN THE NW 1/4 NW 1/4 SECTION 34, BOTH IN T.20S., R.23E. IN THE SALT LAKE MERIDIAN, GRAND COUNTY, UTAH, AND THE PLAT THEREOF WAS MADE UNDER MY SUPERVISION.

Merritt P. Dismant

MERRITT P. DISMANT

EXHIBIT "A"

PLAT OF THE
 CISCO WELL #8 & CISCO WELL #9
 GRAND COUNTY, UTAH

MINERAL SERVICE COMPANY
 GRAND JUNCTION, COLORADO

BY I.T.S., Inc.	SCALE 1"=1000'	DATE 9/27/79	BY KLF
-----------------	----------------	--------------	--------



United States Department of the Interior

IN REPLY REFER TO
3100
(U-603)

BUREAU OF LAND MANAGEMENT
Moab District
Grand Resource Area
P.O. Box M
Moab, Utah 84532

October 16, 1979

Mr. Robert P. Kirgan, Geologist
Minerals Service Company
P.O. Box 3523
2503 Foresight Circle
Grand Jct., CO 81501

Reference: Staking Request
Cisco Well #9, Lease U-17245
NW $\frac{1}{4}$, Section 34
T. 20 S., R. 23 E., SLB&M
Grand County, Utah

Dear Mr. Kirgan:

This office has no objections to staking the above referenced locations. An archaeological clearance will not be required for this location. If you anticipate major upgrading of existing access roads or construction of new access off the lease, a road right-of-way must be filed.

Sincerely yours,

Acting

C. Delano Backus
Area Manager

cc:
Ed Guynn



Save Energy and You Serve America!

Surface Use Plan

Cisco Drilling & Development Co.

Cisco Well #9

1. EXISTING ROADS - Area Map Exhibit "B" is a reproduction of portions of Danish Flat, Cisco Springs, Cisco Utah Quadrangles.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Cisco, Utah, go north on access road (see map) approximately 3.9 miles northwesterly, then west on existing road to gate, continue west on fair condition existing road for approximately 0.4 miles then, north-west 0.3 miles to location.
 - C. All of the access road is now on existing roads with the exception of the 0.3 miles from existing road to site, which is a poor condition trail.
 - D. This is an exploratory well.
All existing public and ranch roads within a three mile radius are shown on Exhibit "B", and consist of a sandy-dirt surface in good condition.
 - E. The existing roads will require grading, with no additional road material necessary. With production, we anticipate having to grade the roads into the well location but should not have any problems with the existing main approach roads through the Cisco Mesa Area.
2. PLANNED ACCESS ROADS
 - (1) The width of the roads will not exceed 16 feet;
 - (2) The maximum anticipated grade from the preliminary survey will not exceed 2%.
 - (3) No turnouts will be necessary on the access road.
 - (4) Ditches will be constructed where necessary with water turnouts to keep water off the road.
 - (5) No culvers or major cuts or fills will be necessary on the access road.
 - (6) The sage brush and shad scale along the roadway will be pushed aside, and a very shallow cut with a blade will be made.
 - (7) No gates, cattle guards, or fence cuts will be necessary.
 - (8) All new roads or reconstructed roads will be graded to include any low-water crossings desirable and have been center-line flagged.
3. LOCATION OF EXISTING WELLS WITHIN TWO MILE RADIUS
 - (1) Water wells - None
 - (2) Abandoned wells - None

- (3) Temporarily abandoned wells - See Exhibit "B"
- (4) Disposal wells - None
- (5) Drilling wells - None
- (6) Producing wells - Cisco well #'s 1 & 3. See Exhibit "B"
- (7) Shut in wells - See Exhibit "B"
- (8) Injection wells - None
- (9) Monitoring or observation wells - None

4. LOCATION OF EXISTING OR PROPOSED FACILITIES

A plan for the anticipated production equipment, if the well is successful, is submitted on Plat No. 2. When production ceases, this equipment will be removed and the land surface graded, leveled, and reseeded. Presently, there are no tank batteries, production facilities, oil, gas, injection or disposal lines within a one mile radius that the Lessee/Operator owns or controls.

5. LOCATION AND TYPE OF WATER SUPPLY

Since the proposed well is to be drilled with air for circulation, very little water will be required. The water needed will be hauled by truck to the location by Dalgarno Transportation, located in Grand Junction, Colorado and they will get their water at Cisco Springs or from the Colorado River. No water well will be drilled on this lease.

6. SOURCE OF CONSTRUCTION MATERIAL

No additional road material, gravel, sand, or culverts will be required. There will be two low water crossings graded in on the approach road to Cisco Well #9. All existing, new and reconstructed roads are outlined on the enclosed map. The majority of travel on these roads will be during winter months while frost is in the ground. Upon production, only existing materials on the site will be used for permanent road.

7. METHODS FOR HANDLING WASTE DISPOSAL

A reservoir and burn pit will be constructed at the well site as shown on Plat No. 3. All excess water, mud, and drill cuttings will be deposited into the reservoir pit. Burnable material and garbage will be put into the trash pit, which will be fenced to prevent the spreading of debris by the wind. A toilet will be furnished for the human waste. The approximate dimensions of the reservoir pit are shown on Plat No. 3. When the pits are dry and the weather permitting, all pits will be folded in and covered after cessation of drilling operations. Any oil left on the surface of the reservoir pit will be burned off prior to covering the reservoir pit. The reservoir pit will also be fenced on three sides during drilling and will be fenced on the fourth side and overhead flagging installed after drilling is completed and prior to filling.

8. ANCILLARY FACILITIES

No camp facilities other than two or three house trailers at the well site will be needed. No air strips will be required.

9. WELL SITE LAYOUT

A plan for the drilling equipment layout required for the drilling of the proposed well is shown on Plat No. 3. The approximate dimensions of the site, direction of drill rig setting, reservoir pit location with dimensions, and equipment arrangements are shown on this plat. The drilling site is located near the south end of the Cisco Mesa on an area 275'x250' and slopes from the northeast to the southwest. The top soil (approx. 8") will be stockpiled in the northwest corner of this drill site. A cross section of this area is provided in the lower left hand side of Plat No. 3. The maximum cut will be 8'-10' along both the north and east sides of this area with the dirt being moved to the south and west sides. The surface in this area is a sandy shale with very little vegetation. The reservoir pit will be placed on the north side of the site in a natural drainage low area and will be unlined.

10. PLANS FOR RESTORATION OF SURFACE

After drilling operations have been concluded, and the equipment removed, the well site will be cleaned, rat hole and mouse hold filled in; the cellar filled in around well marker or well head; the location and roads leveled and restored to the normal topography; the top soil spread back over the location and reseeded if the well is unsuccessful. If the well is completed for production, the location will be cleaned and leveled for the production equipment; oil on pits will be burned off; the pits will be folded in and leveled. This work will be conducted as soon as feasible, hopefully, within 60 days after the drilling equipment has been removed. When drilling is completed, if there is moisture in the ground, we will reseed by broadcasting. If, during Spring/Summer, the reseeded proves ineffective, we will reseed during the more favorable October-mid-December period by drill.

11. OTHER INFORMATION

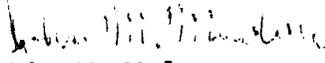
Topography of the land is a desert highland consisting of erosional hills, mesas and plateaus. Upper Sonoran Zone greasewood, saltbrush, sagebrush, rabbit brush grow in a sandy loam saline soil, which supports various insect, rodent and reptile populations.

There are no known archaeological, historical or cultural sites in the area. There are no occupied dwellings in the area.

The surface and mineral ownership are both held by the U.S.A.

12. OPERATOR'S REPRESENTATIVE

Field Representative who can be contacted concerning compliance of this surface use plan is:


John M. Mudon
P. O. Box 3523
Grand Junction, CO 81502
(303) 245-2335

Operation Plan for
Cisco Drilling & Development Co.
Cisco Well #9

LOCATION: NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 34, Township 20 South, Range 23 East, S.L.M.,
Grand County, Utah.
(681.5 ft. from W-line and 4244.1 ft. from S-line)

ELEVATION: 4,540 ft. (GR); 4,550 ft. (KB)

EXPECTED FORMATION TOPS:

<u>Formation</u>	<u>Depth to Top</u>	<u>Thickness</u>	<u>Datum (KB)</u>
Mancos Shale	Surface	1,585 ft.	4,550 ft.
Dakota Sandstone	1,585 ft.	80 ft.	2,965 ft.
Cedar Mountain	1,665 ft.	100 ft.	2,885 ft.
Morrison			
Brushy Basin Shale Member	1,765 ft.	225 ft.	2,785 ft.
Salt Wash Sandstone Member	1,990 ft.	250 ft.	2,560 ft.
Summerville/Curtis	2,240 ft.	75 ft.	2,310 ft.
Entrada Sandstone	2,315 ft.	-----	2,235 ft.

Total depth to top of Entrada: 2,160 ft.

SURFACE CASING: 150 ft. of 7-inch, 20 lbs/ft, K-55, R-3 new casing set and cemented with 75 sks cement with 3% CaCl₂; with returns to the surface. The surface hole, 9 3/4 inch will be drilled to 150 ft. (KB) and will be no more than 1° deviation.

- A. It is planned to drill a 9 3/4-inch surface hole for the new surface casing down to a depth of about 150 ft. and set 7-inch new casing with approximately 75 sks of cement with returns to the surface. A casing head or flange will be mounted on top of the surface casing and a blowout preventer with blind and pipe rams (hydraulic) will be mounted on the casing head, (see plat for diagram & pressure). A rotating head will be mounted on top of the blowout preventer. A blewie line, at least 125 ft. long, will be attached to the rotating head and extended into the reservoir pit.
- B. A 6 1/2-inch hole will be drilled below the surface casing, using air for circulation. A flare will be maintained at the end of the blewie line while drilling below 1,200 ft. This will insure that no gas will be missed. The air drilling will minimize the damage to the prospective hydrocarbon reservoir. The drill rig will be equipped with a Kelly cock and a safety sub on the derrick floor.
- C. Samples of the cuttings will begin at 1,200 ft. 30-ft. samples will be taken from 1,200 ft. to 1,600 ft., and then 10-ft. samples will be taken from 1,600 ft. to total depth.
- D. It is planned to drill the well to a depth which is approximately 50 ft. below the top of the Entrada formation, unless good commercial flow of gas is obtained above this depth. It is anticipated the Dakota formation may produce

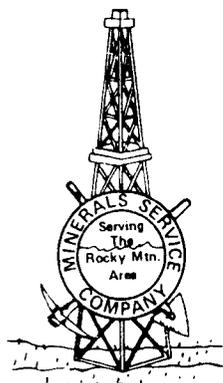
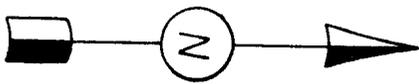
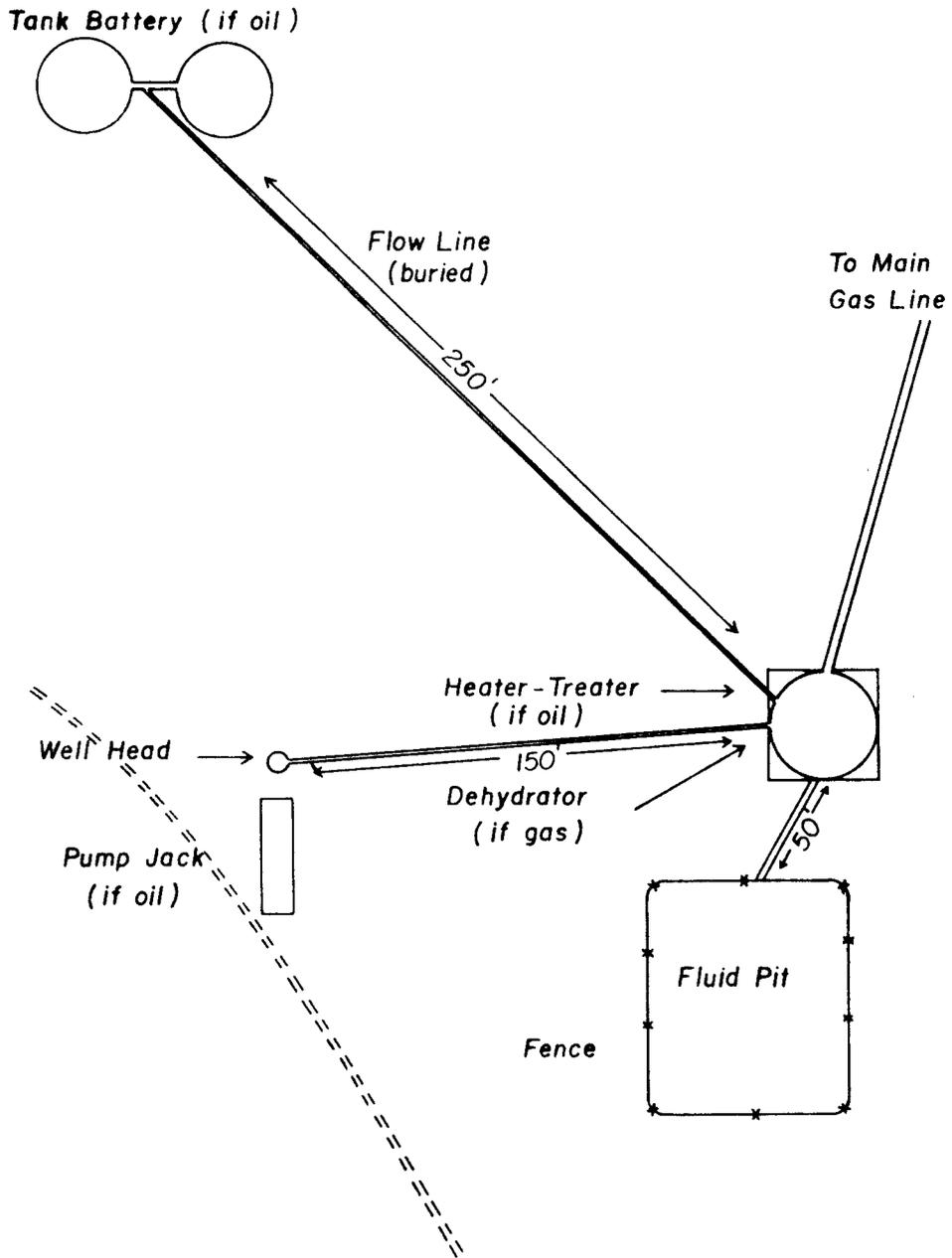
water. If the water produced is significant, it will be necessary to convert from air to drilling fluid. About 800 sx of Barite will be maintained on the drill-site. The reservoir pit is considered sufficient to accommodate even a large volume of water produced.

- E. If a high gas flow (several million cubic feet) and/or when the total depth of the well is reached, electric logs will be run. Prior to running logs, high viscosity mud (not less than 100 vis.) will be pumped into the hole to provide control of the gas and to provide a conductive medium for the logs. The drilling fluid will be used as a control in the event of high pressure gas and the various safety devices -- the blind rams, Kelly cock and safety valve -- will serve further to control any hazardous flow pressure or high temperature by permitting a shut-in of the well. A dual-induction-laterolog will be run from bottom to the top of the hole, and a gamma-density and compensated neutron porosity log will be run from the bottom to a point which is 150 ft. above the top of the Dakota formation.
- F. If good production (over 750 MCF/day) is obtained, 4 1/2-inch diameter, 10.5 lb/ft, K-55, R-3 new casing will be run and cemented conventionally with sufficient R.F.C. cement to cover 200 ft. above the top of the Dakota formation. The production zone will then be perforated, 2 3/8-inch outside diameter tubing run, and completed conventionally.

It is anticipated that the drilling of the well will require less than one week.

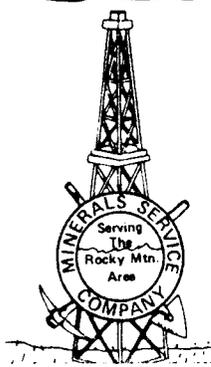
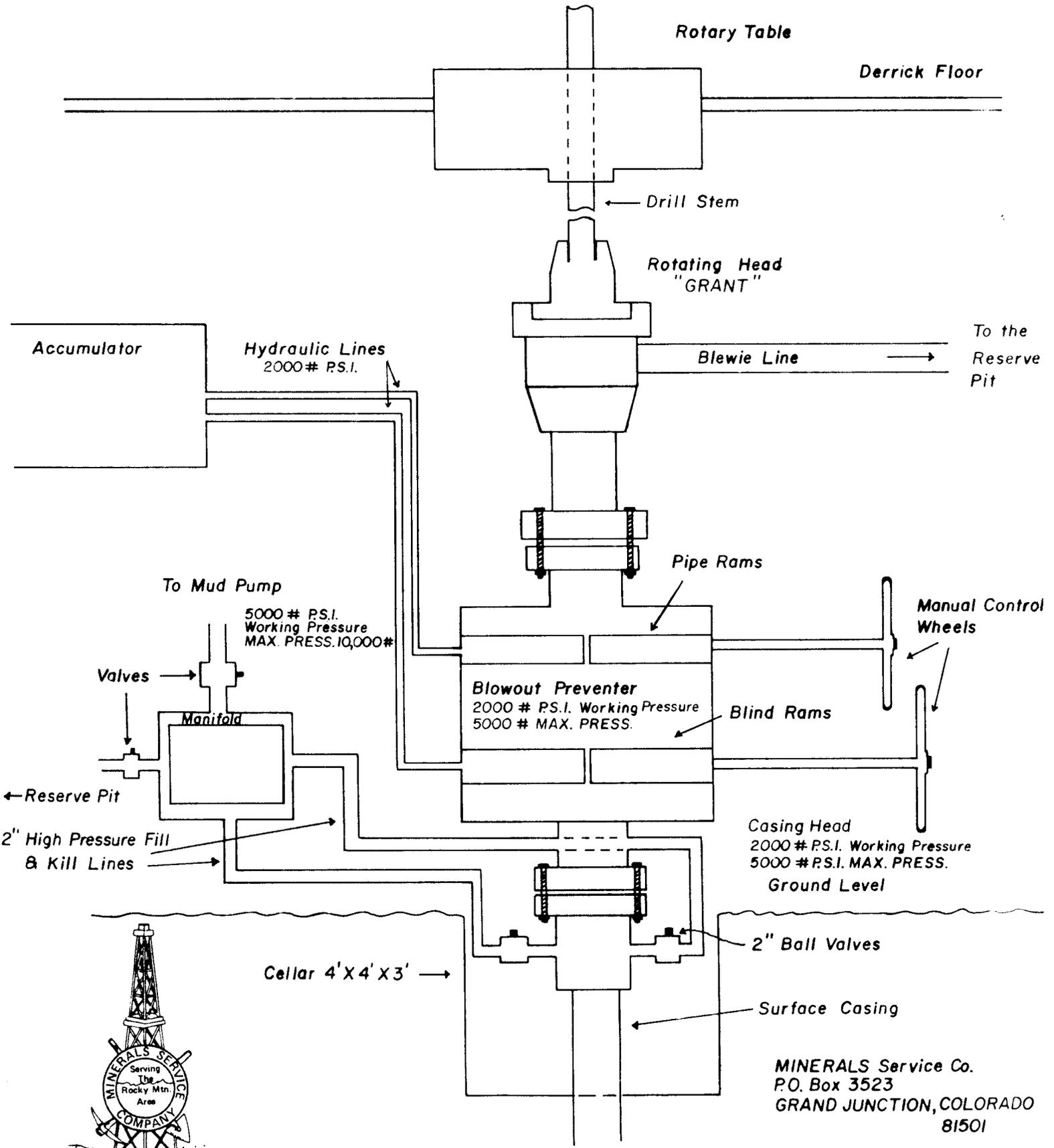
John M. Mudon
John M. Mudon
Field Representative
Minerals Service Company
Grand Junction, CO

PLAN FOR PRODUCTION EQUIPMENT
CISCO DRILLING & DEVELOPMENT
CISCO WELL # 9
N.1/2 SEC. 34-20S.-23E.



MINERALS SERVICE CO.
P.O. BOX 3523
GRAND JUNCTION, COLORADO
81501

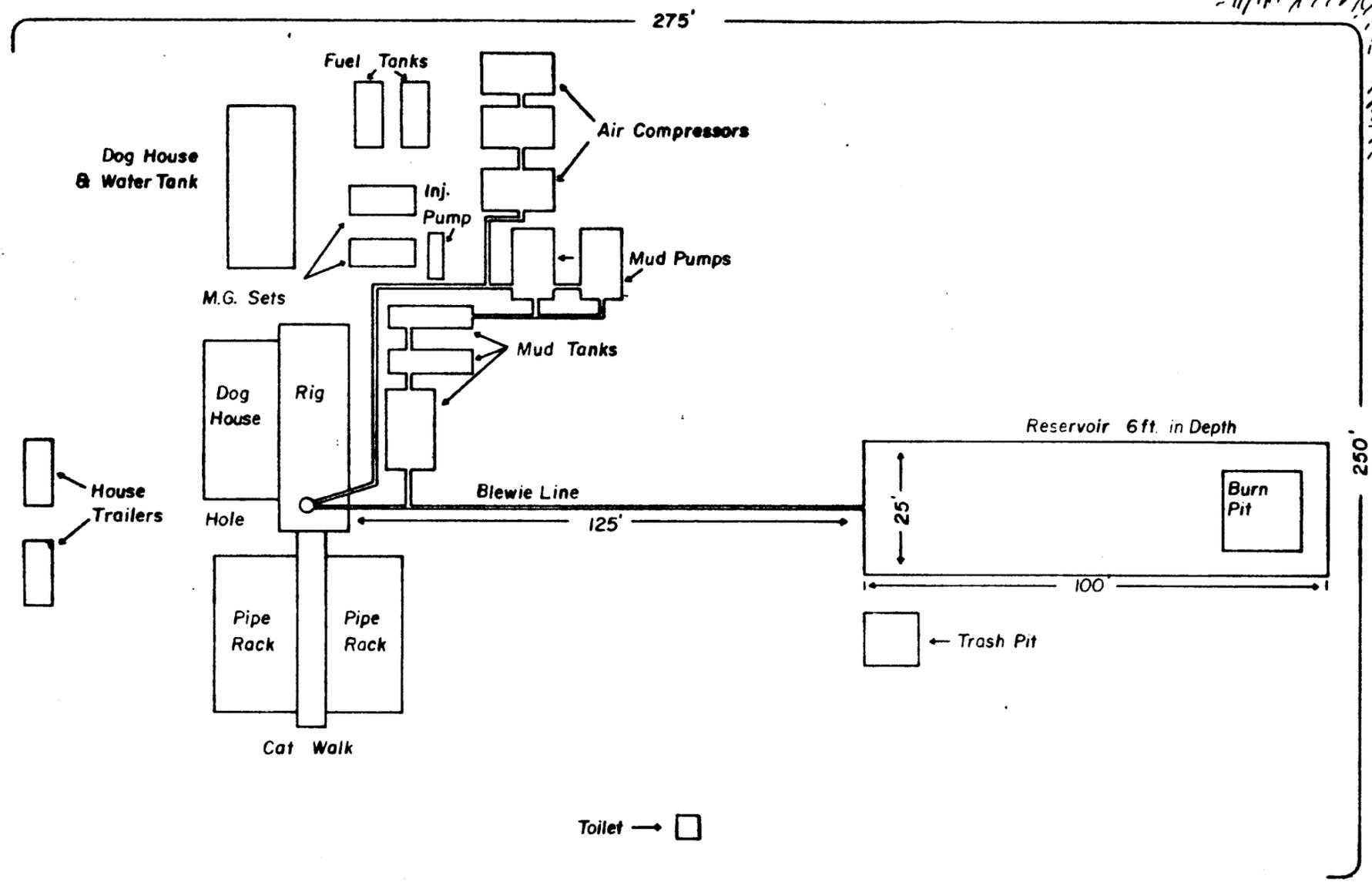
SCHEMATIC DIAGRAM OF
 CONTROL EQUIPMENT FOR
 CISCO DRILLING & DEVELOPMENT CO.
 CISCO WELL # 9
 N. 1/2 SEC. 34 - 20S. - 23E.



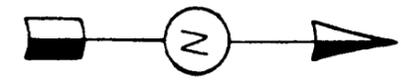
MINERALS Service Co.
 P.O. Box 3523
 GRAND JUNCTION, COLORADO
 81501

LOCATION PLAN FOR
 CISCO DRILLING & DEVELOPMENT CO.
 CISCO WELL # 9
 N.1/2 SEC. 34-20S.-23E.

Top Soil



NOT TO SCALE



MINERALS SERVICE COMPANY
 P.O. BOX 3523
 GRAND JUNCTION, COLORADO
 81501

PLAT No. 2

** FILE NOTATIONS **

DATE: January 10, 1980

Operator: Cisco Drilling & Development

Well No: Cisco Federal #9

Location: Sec. 34 T. 20S R. 23E County: Grand

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number 43-019-30593

CHECKED BY:

Geological Engineer: M.P. Munder 1-18-80

Petroleum Engineer: _____

Director: _____

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. _____

O.K. Rule C-3

Rule C-3(c), Topographic Exception/company owns or controls acreage within a 660' radius of proposed site

Lease Designation Fed

Plotted on Map

Approval Letter Written

ptm

nl
PI

January 22, 1980

~~Cisco Drilling and Development Co.~~
419 Whalley Avenue
New Haven, Connecticut 06511

Re: Cisco Federal #9, Sec. 34, T. 20S, R. 23E., Grand County, Utah
Cisco Federal #10, Sec. 26, T. 20S, R. 23E., Grand County, Utah
Cisco Federal #11, Sec. 28, T. 20S, R. 23E., Grand County, Utah
Cisco Federal #12, Sec. 26, T. 20S, R. 23E., Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas wells is hereby granted in accordance with the Order issued in Case No. 102-16B, dated November 15, 1979.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER
Geological Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API numbers assigned to these wells are #9, 43-019-30593,
#10 - 43-019-30594, #11 - 43-019-30595; #12 - 43-019-30596.

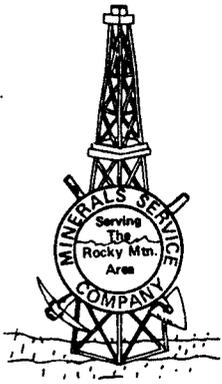
Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

/btm

cc: USGS



MINERALS SERVICE COMPANY

P.O. Box 3523, 2503 Foresight Circle, Grand Junction, Colorado 81502
Telephone 303/245-2335

August 1, 1980

Re: Cisco Drilling
& Development

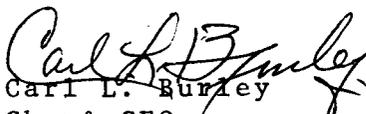
U. S. Geological Survey
1745 West 1700 South
Salt Lake City, Utah 84104

State of Utah Department of
Natural Resources
1588 West North Temple
Salt Lake City, Utah 84116

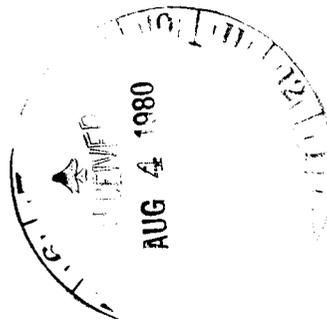
Gentlemen:

Please make a note in your respective files that this company is no longer representing Cisco Drilling & Development Company. Said company presently owes us over \$12,000 for work done for their account, and there is no indication, in spite of demands, that they plan to pay the amount due. Our attorney is presently considering the appropriate legal remedy.

Very truly yours,


Carl L. Burley
Ch. & CEO

CLB/sh





SCOTT M. MATHESON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

CLEON B. FEIGHT
Director

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE McINTYRE

October 10, 1980

Cisco Drilling & Development Co.
419 Whalley Avenue
New Haven, Connecticut 06511

RE: Well No. Cisco Federal #12, Sec. 26, T. 20S, R. 23E, Grand County.,
RE: Well No. Cisco Federal #11, Sec. 28, T. 20S, R. 23E, Grand County.,
RE: Well No. Cisco Federal #9, Sec. 34, T. 20S, R. 23E, Grand County.,

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan on drilling these locations at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Barbara Hill

BARBARA HILL
CLERK TYPIST

/bjh

Conservation Division
2000 Administration Building
1705 West 1700 South
Salt Lake City, Utah 84104

April 2, 1981

Cisco Drilling and Development, Inc.
P.O. Box 5059
Hamden, Connecticut 06517

Re: Return Application for
Permit to Drill
Well No. Q, NW NW Sec. 34
T. 20S., R. 23E.
Grand County, Utah
Lease No. U-17235D & U-17245C
Application Approved: February 22, 1980
& January 29, 1980

Gentlemen:

The applications for Permit to Drill the referenced wells were approved. Since that date no water activity has transpired at the approved locations. Under current district policy, applications for permit to drill are effective for a period of one year. In view of the foregoing this office is recommending the approval of the referenced applications without prejudice. If you intend to drill at these locations on a future date a new application for permit to drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved locations of these wells is to be rehabilitated. A schedule for this rehabilitation must, then be submitted. Your cooperation in this matter is appreciated.

Sincerely,

(Orig. Sgd.) H. A. Hendricks

Doc: JCN, AS, DSG, Damar
BLM-Aoab
State Office (USG)
State Office (BLM)
USGS-Vermil
Well File
ARD Control

RAH/TM/lm

POOR COPY