

UTAH OIL AND GAS CONSERVATION COMMISSION

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

DATE FILED **4-23-86**

LAND: FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. **U-52333** INDIAN _____

DRILLING APPROVED: **4-28-86**

SPUDED IN: _____

COMPLETED: _____ PUT TO PRODUCING: _____

INITIAL PRODUCTION: _____

GRAVITY A.P.I. _____

GOR: _____

PRODUCING ZONES: _____

TOTAL DEPTH: _____

WELL ELEVATION: _____

DATE ABANDONED: **4-2-87 LA'd.**

FIELD: **KIVA**

UNIT: _____

COUNTY: **SAN JUAN**

WELL NO. **NAVAJO FEDERAL 14-4** API #**43-037-31265**

LOCATION **790' FSL** FT. FROM (N) (S) LINE. **510' FWL** FT. FROM (E) (W) LINE. **SW SW** 1/4 - 1/4 SEC. **4**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
39S	25E	4	MERIDIAN OIL INC.				

MERIDIAN OIL

April 21, 1986

State of Utah Natural Resources
Oil, Gas and Mining
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attention: Arlene Sollis

RECEIVED
APR 23 1986

DIVISION OF
OIL, GAS & MINING

Re: Applications for Permit to Drill
14-4 Navajo-Federal
SWSW Section 4-39S-25E
44-4 Navajo-Federal
SESE Section 4-39S-25E
San Juan County, Utah
Federal Lease No. U-52333

Gentlemen:

Enclosed are three copies of Form 3160-3, Application for Permit to Drill with attachments for each of the above referenced locations.

Please be advised that Meridian Oil Inc. requests that all pertinent data for these locations be granted TIGHT HOLE status.

If you have any questions, please do not hesitate to call me at 406-256-4122.

Sincerely,



S. S. Nelson
Sr. Operations Technician

ssn

Encl

1175N

13

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.
U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
--

7. UNIT AGREEMENT NAME
--

8. FARM OR LEASE NAME
Navajo-Federal

9. WELL NO.
14-4

10. FIELD AND POOL, OR WILDCAT
Kiva

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
Section 4-39S-25E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

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
MERIDIAN OIL INC.

3. ADDRESS OF OPERATOR
P. O. Box 1855, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface SWSW (790' FSL - 510' FWL)
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
6 miles east Hatch Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 510'
16. NO. OF ACRES IN LEASE 2920.8
17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1200'
19. PROPOSED DEPTH 5,765' *pld*
20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4787' GL (graded)
22. APPROX. DATE WORK WILL START* 3rd Quarter, 1986

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48#	80'	Redi-Mix to sfc.
11	8-5/8	24#	2,000	Two stage, DV tool @ 1500'.
11	8-5/8	32#	3,250'	Cmt to sfc w/1500 sx "B" Lite.
7-7/8	5-1/2	15.5#	5,765'	Single stage, top of cmt @ 2750' Caliper log +40% excess, "B" Lite.

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APR 23 1986

DIVISION OF
OIL, GAS & MINING

CONFIDENTIAL INFORMATION

Oil and Gas Order #1
Attachments:
Survey Plat
Eight Point Drilling Program
Thirteen Point Surface Use Plan

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

24. SIGNED *[Signature]* TITLE Sr. Drilling Engineer DATE 4/21/86

(This space for Federal or State office use)

PERMIT NO. 43-037-31265

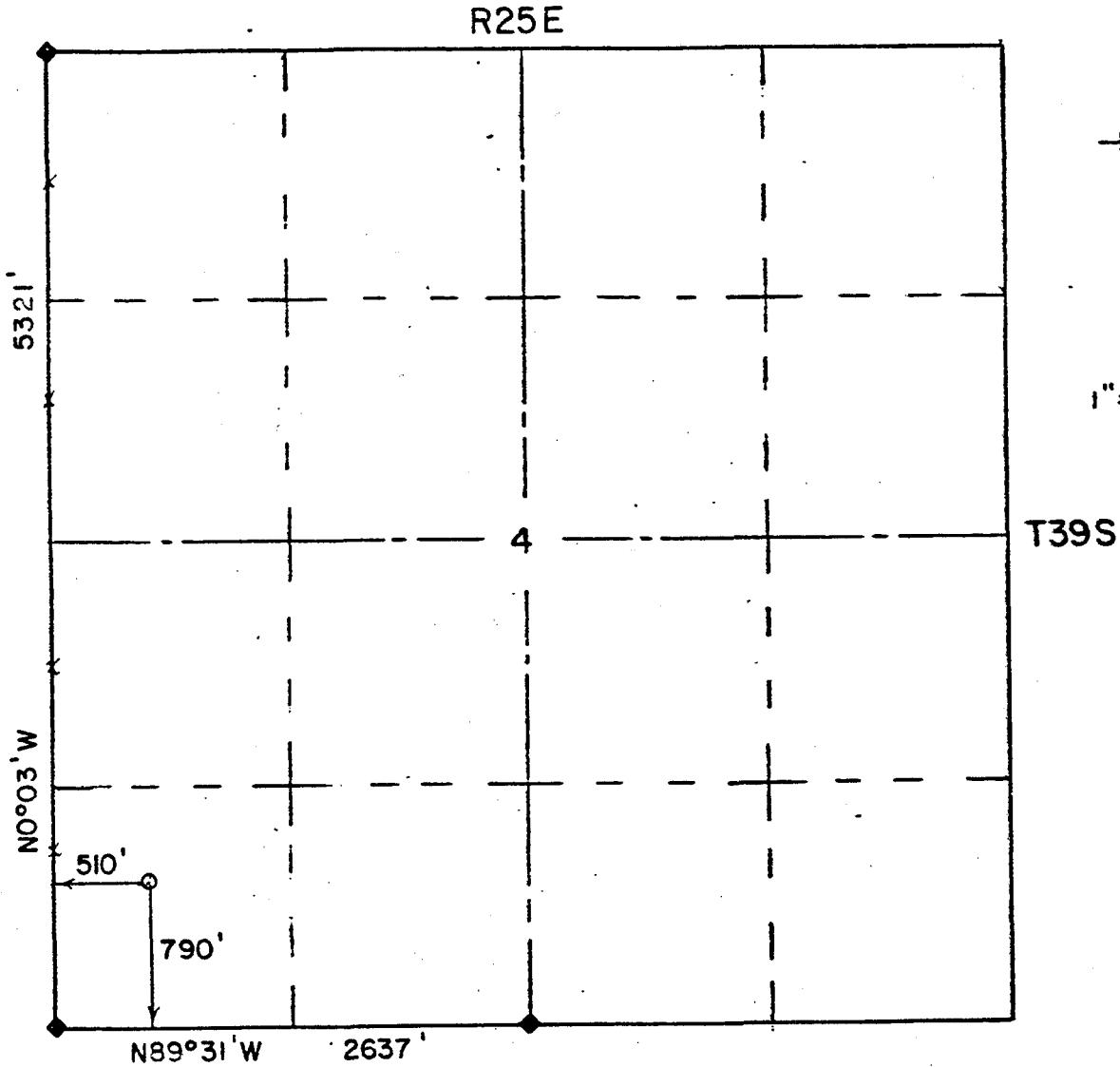
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

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

DATE: 4-28-86
BY: *[Signature]*

*See Instructions On Reverse Side
WELL SPACING: 3/2

WELL LOCATION PLAT



WELL LOCATION DESCRIPTION:

MERIDIAN OIL

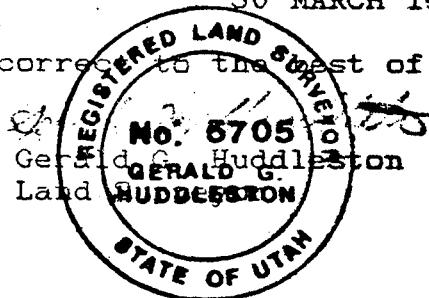
14-4 NAVAJO-FEDERAL
790' FS & 510' FW
SECTION 4, T39S, R25E, SLM
SAN JUAN COUNTY, UTAH
GROUND ELEVATION 4788'

REFERENCES:

200' WEST 4786'
200' EAST 4791'

30 MARCH 1986

The above plat is true and correct to the best of my knowledge and belief.



OIL AND GAS ORDER NO. 1

MERIDIAN OIL INC.

LEASE NAME: 14-4 Navajo-Federal
 LEASE NO. U-52333
 LOCATION: SWSW Section 4-39S-25E
 790' FSL - 510' FWL
 San Juan County, Utah
 Kiva Field

A. EIGHT POINT DRILLING PROGRAM1.& 2. Estimated Tops:

Morrison	Surface	
Entrada	581	
Navajo	766	fresh water
Chinle	1463	
Shinarump	2318	
Cutler	2543	
Hermosa	4423	
Upper Ismay	5395	oil
A Shale	5527	
Lower Ismay	5548	
Desert Creek	5633	oil
Chimney Rock	5718	
Akah	5741	
TD	5765	

3. Pressure Control Equipment:

- a. A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams.
- b. BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. Casing program:

Anticipated cement tops will be reported as to depth, not the expected number of sacks. The San Juan Resource Area will be notified 1 day before running casing strings and cement.

CONFIDENTIAL INFORMATION

Hole Size	Size	Depth	Casing				Cementing Program
			Weight	Grade	Thrd	Cond	
17-1/2	13-3/8	80	48#	H-40	ST&C	New	Redi-Mix to surface.
11	8-5/8	2,000	24#	K-55	ST&C	New	Two stage, DV tool @ 1500' Cement to sfc w/1500 sx "B" Lite (35/65/6) +2% CaCl ₂ & 250 sx "B" +2% CaCl ₂ .
11	8-5/8	3,250	32#	K-55	ST&C	New	
7-7/8	5-1/2	5,765	15.5#	K-55	LT&C	New	Single stage, top of cmt @ 2750'. Caliper log + 40% excess. "B" Lite (35/65/6) + 1/4#/sx Flocele & Class "B" + fluid loss additive.

5. Proposed drilling mud program:

A water base mud system from surface to TD. Maximum anticipated mud weight is 10#/gallon.

A mud logging unit will be on location from 3250' to TD.

6. Testing program:

Lower Desert Creek - Possible
 Upper Ismay - Probable

CONFIDENTIAL INFORMATION

Logging program:

Cal/GR/DLL/MSFL Base surface casing to TD (GR to surface)
 Cal/GR/Sonic Base surface casing to TD (GR to surface displays)
 Cal/GR/CNL/Lithoden 5200' to TD
 Dipmeter: If Desert Creek indicates productive.

Coring program:

None planned.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. If requested, samples (cuttings, fluids, and/or gases) will be submitted to the District Manager.

7. Anticipated abnormal BHP or BHT:

No abnormal BHP or BHT are expected in this well.

Potentially hazardous conditions anticipated:

No H₂S has been found, reported or is known to exist at these depths in this area.

8. Anticipated Starting Dates and Notifications of Operations

The operator will contact the San Juan Resource Area at 801-587-2201, 48 hours before beginning any dirt work.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the San Juan Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5) will be sent within 24 hours after spudding, reporting the spud date and time. The Sundry will be sent to the District Manager. If the spudding is on a weekend or holiday, the Sundry will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations," starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the BLM District Office, P. O. Box 970, Moab, Utah 84532.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

If a replacement rig is planned for completion operations, a Sundry Notice (Form 3160-5) to that effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergencies, verbal approval can be given by the District Petroleum Engineer.

If the well is successfully completed for production, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than 5 business days following the date on which the well is placed on production.

No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergencies, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5), will be filed with the District Manager, within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.

Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager, or the appropriate surface manager.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Fed, well number, location by 1/4 1/4 section, township and range, Lease number.

A first production conference will be scheduled within 15 days after receipt of the first production notice. The San Juan Area Manager will schedule the conference.

Other: A separate rig will be used for completion operations.

The following may be inspected and/or witnessed:

1. The cementing and testing of surface casing.
2. (Dry Hole) Setting and testing of surface casing shoe plug.
3. (Depleted Producer) The setting and testing of plugs across the producing horizon and if applicable, the surface casing shoe plug and/or annulus (casing to formation) squeeze jobs.

Notify the San Juan Resource Area (Mike Wade) one day or on dry hole as soon as possible prior to the above at (801) 587-2201 (Home) (801) 587-2026 or if unable to reach Mike, call Moab District office Greg Noble at (801) 259-6111 (Home) (801) 259-8811.



B. THIRTEEN POINT SURFACE USE PLAN

1. Existing Roads (Yellow)

- a. Location of proposed well in relation to town or other reference point:
6 miles east of Hatch Trading Post.
- b. Proposed route to location. (See attached Exhibit "1").
- c. Existing and new access shall be maintained in good or better condition.
- d. An encroachment permit will be obtained from the San Juan County Road Dept., (801) 587-2231, ext. 43.

2. Planned Access Roads (Blue)

- a. The maximum total width will be 25 feet.
- b. Maximum grade is 0%.
- c. There will be no turnouts.
- d. Road is centerline flagged.
- e. Road will be drained as needed.
- f. If well is drilled during wet winter conditions, surface materials may be required to avoid maintenance problems.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the San Juan Area Manager.

The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drill rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.

The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossing; and culverts will be determined at the appropriate field inspection.

3. Location of Existing Wells (1 mile radius)

- a. Existing wells in the area are shown on attached Exhibit "1".

4. Location of Existing and/or Proposed Facilities if Well is Productive

Battery facility is shown on attached Exhibit "4".

All permanent (on site for 6 months or longer) above ground facilities (including pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be Desert Brown.

All flowlines will be buried parallel to existing roads unless authorized otherwise by BLM.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.

All loading lines will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter on or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meter installations and at least quarterly thereafter. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the San Juan Area Manager. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply

All water needed for drilling purposes will be obtained at a point: N 798.06 ft & E 1876.41 ft from SW corner of Section 28, T38S, R25E.

Use of water for this operation will be approved by obtaining a temporary use permit from the Utah State Engineer, (801) 637-1303 and by receiving permission from the landowner or surface management agency to use the land containing the water source.

6. Source of Construction Materials

Native soil materials from drilling location and access trail, which is available, will be used. Any additional materials needed will be hauled in from authorized commercial sources.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. Methods for Handling Waste Disposal

The reserve pit will not be lined with commercial bentonite sufficient to prevent seepage. At least half of the capacity will be in cut.

Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.

A trash pit will be constructed near the mud tanks and dug at least six feet into solid undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.

A burning permit is required for burning trash between May 1 and October 31. This can be acquired by contacting the State fire Warden, John Baker, at (801) 587-2705.

Produced waste water will be confined to a unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. Ancillary Facilities

Camp facilities will not be required.

9. Well Site Layout

Rig layout is shown on attached Exhibit "9a".

Cuts and fills are shown on attached Exhibit "9b".

The top 12 inches of soil material will be removed from the location and stockpiled on the south side of well pad. Topsoil along the access will be reserved in place.

Access to the well pad will be from the east.

10. Reclamation:

- a. Immediately on completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator/holder or his contractor will contact the San Juan Resource Area office in Monticello, Utah, (801) 587-2201, 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 8 - 12 inches deep with the contour.

- f. Water bars will be built as follows to control erosion.

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

<u>3</u> lbs/acre Indian ricegrass (<u>Oryzopsis hymenoides</u>)
<u>3</u> lbs/acre Galleta (<u>Hilaria jamesii</u>)
<u>3</u> lbs/acre crested wheatgrass (<u>Agropyron desertorum</u>)
<u>2</u> lbs/acre Fourwing saltbush (<u>Atriplex canescens</u>)

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.
- i. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

11. Surface Ownership: Federal
Mineral Ownership: Federal

12. Other Information

A low water crossing will be required on access.

There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator/holder that they are subject to prosecution for disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will be done by a BLM approved archaeologist only if damage occurs.

This permit will be valid for a period of one year from the date of approval. After permit termination a new application will be filed for approval for any future operations.

Your contact with the District Office is: Greg Noble.
Office Phone: 801-259-6111 Address: P. O. Box 970, Moab, UT 84532.

Resource Area Manager's Address and contacts:
Address: P. O. Box 7, Monticello, UT 84535

Your contact is: Rich McClure
Office Phone: 801-587-2201

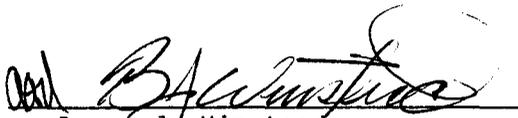
13. Lessee or Operator's Field Representative and Certification

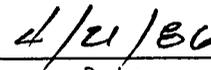
Meridian Oil Inc.
P. O. Box 1855
Billings, Montana 59103

1.	Johnny L. Wright, Drilling Supt.	406-256-4175	406-252-2889
2.	Rick Muncrief, Area Drilling Engineer	406-256-4155	406-245-9896
3.	Barry Winstead, Sr. Drilling Engineer	406-256-4030	406-656-7521
4.	John Pulley, Drilling Manager	406-256-4124	406-259-6156

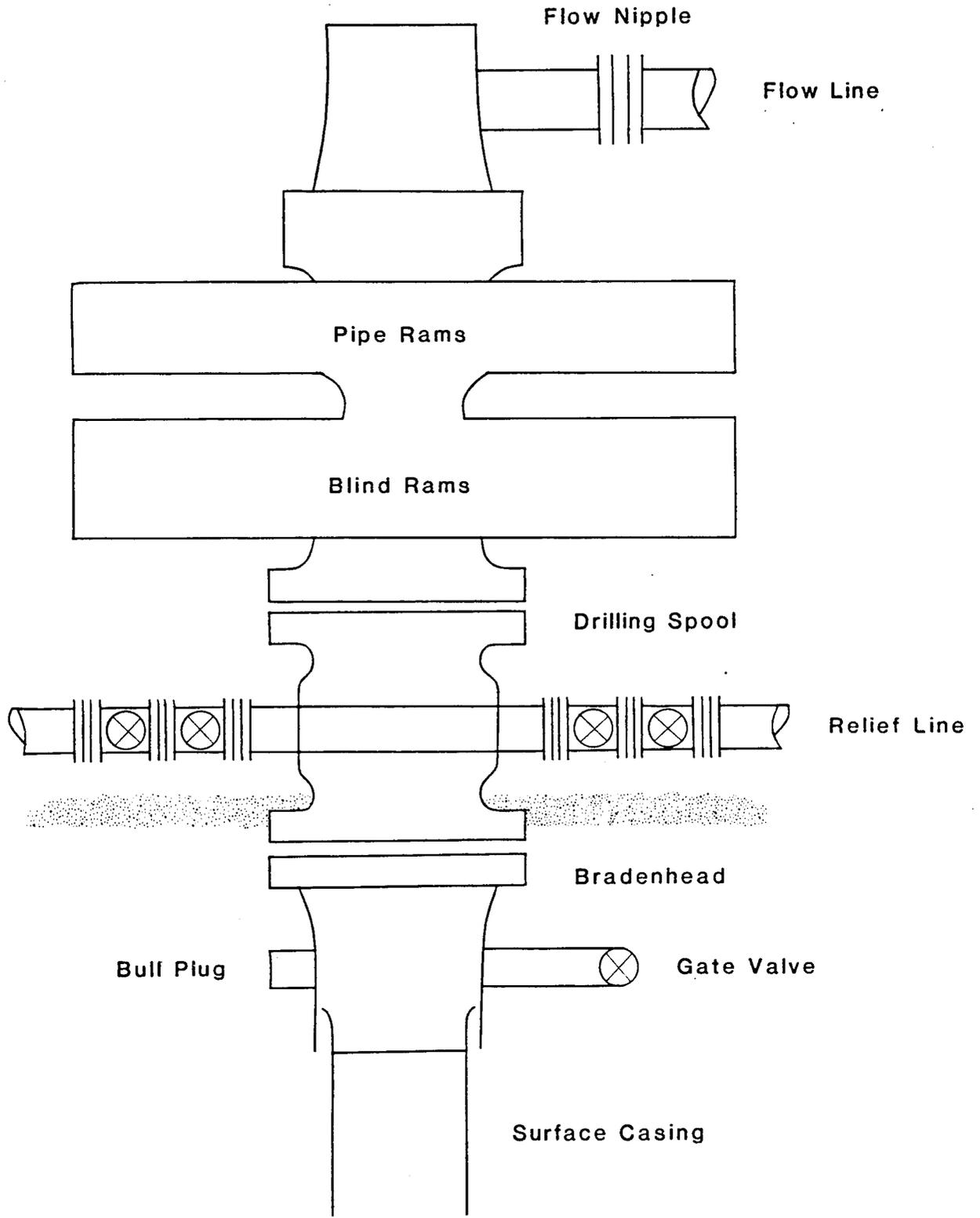
CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and, that the work associated with the operations proposed herein will be performed by Meridian Oil Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.


Barry J. Winstead
Sr. Drilling Engineer


Date

TYPICAL B.O.P. INSTALLATION



Series 900 Double Gate B.O.P.,
rated at 3000 psi Working Pressure.

When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line.

WELL PAD PLAN VIEW

14-4 Navajo-Federal



1"=60'

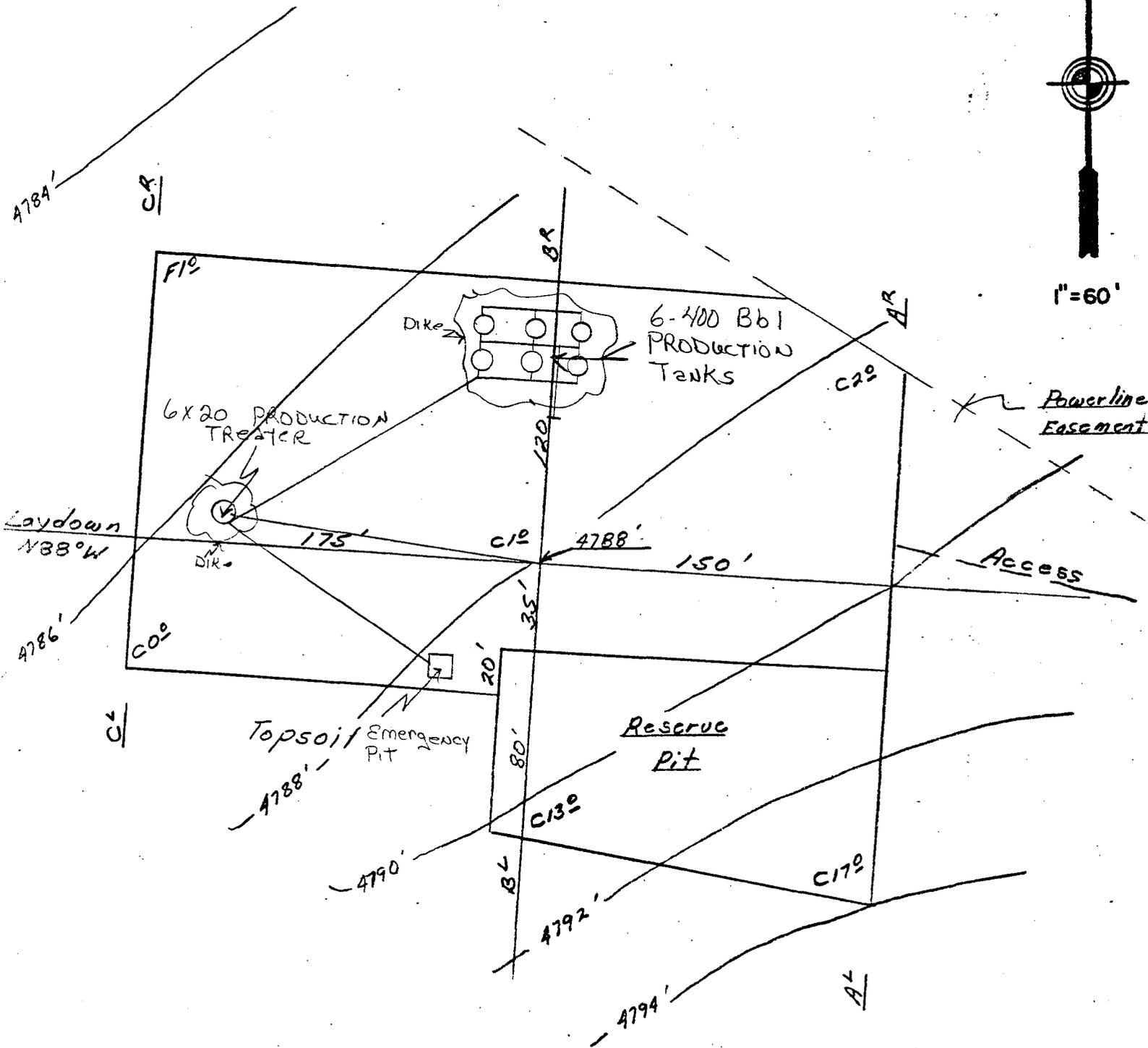


EXHIBIT "4"
Battery Layout

WELL PAD PLAN VIEW

14 - 4 Navajo - Federal



1" = 60'

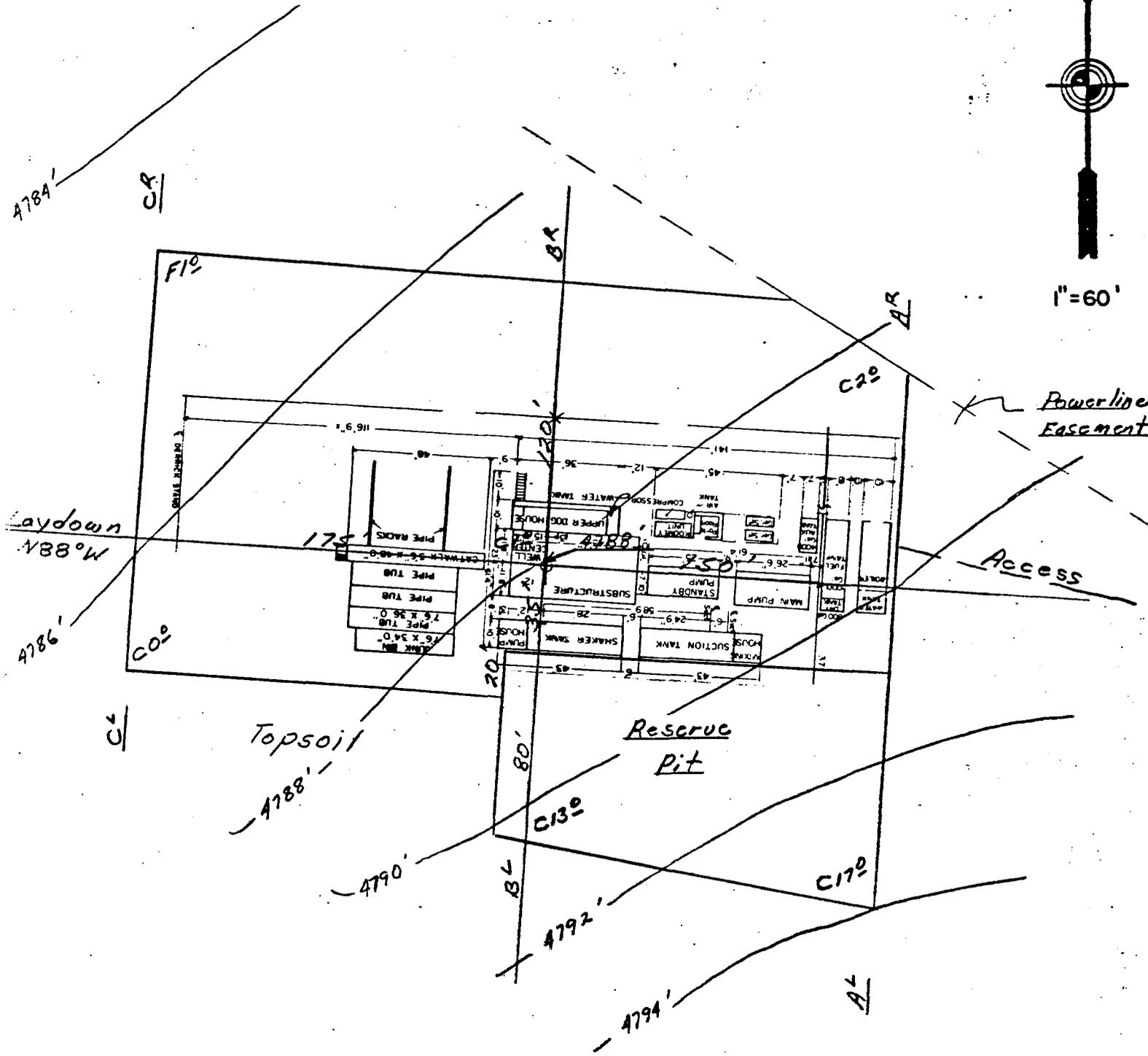


EXHIBIT "9a"
Rig Layout

WELL PAD CROSS-SECTION

14-4 Navajo - Federal

Cut 
Fill 

Scales: 1" = 60' H.
1" = 30' V.

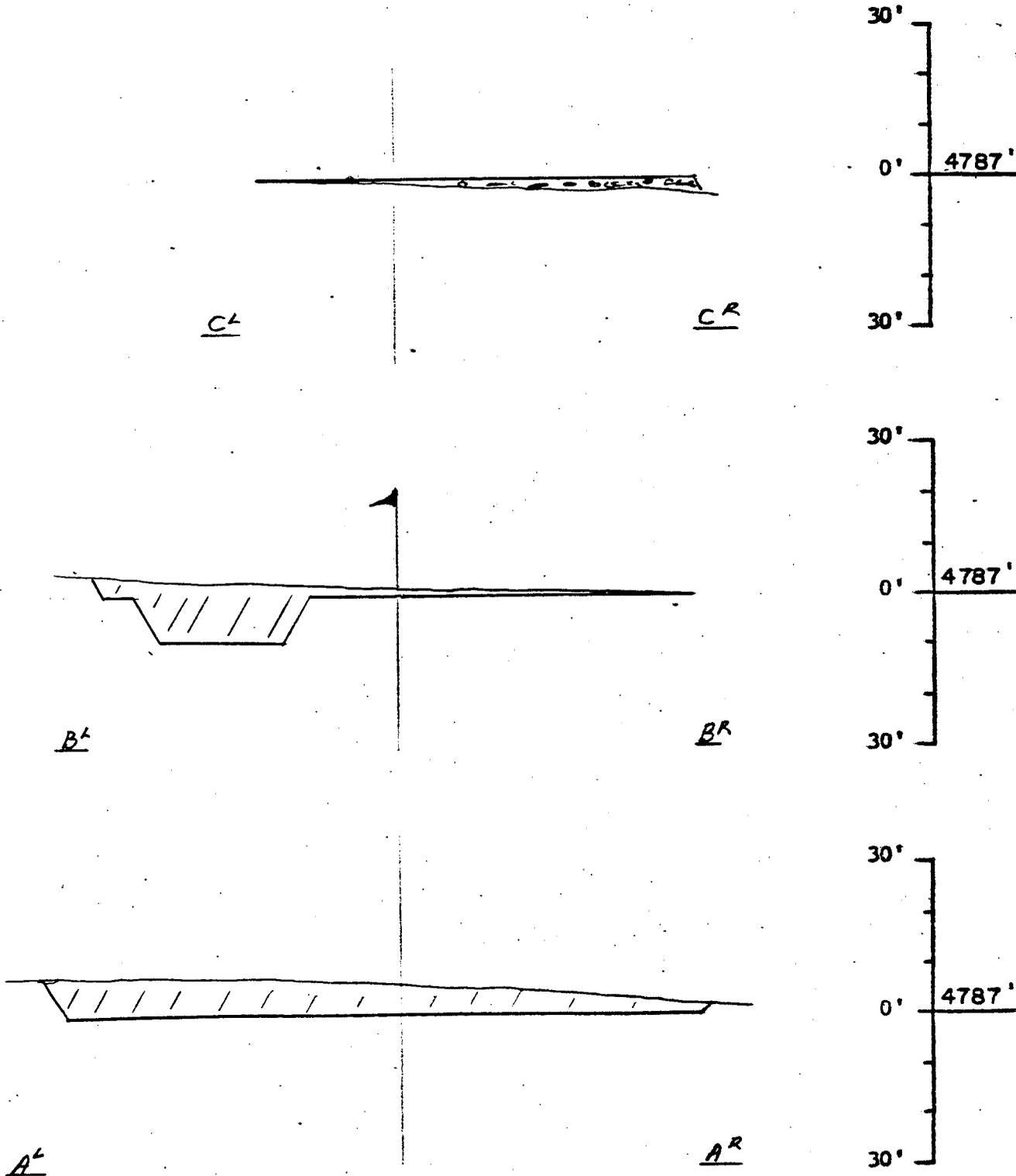


EXHIBIT "9b"
Cross-Sections

CONFIDENTIAL

OPERATOR Meridian Oil Inc DATE 4-24-86
WELL NAME Navajo Fed 144
SEC SWSW 4 T 39S R 25E COUNTY San Juan

43-037-31265
API NUMBER

Fed
TYPE OF LEASE

CHECK OFF:

- | | | |
|---|--------------------------------|--|
| <input checked="" type="checkbox"/> PLAT | <input type="checkbox"/> BOND | <input checked="" type="checkbox"/> NEAREST WELL |
| <input checked="" type="checkbox"/> LEASE | <input type="checkbox"/> FIELD | <input type="checkbox"/> POTASH OR OIL SHALE |

PROCESSING COMMENTS:

No other well within 920'
Need water permit

APPROVAL LETTER:

SPACING: 203 _____ UNIT 302
 _____ CAUSE NO. & DATE 302.1

STIPULATIONS:

1- Water



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 28, 1986

Meridian Oil Incorporated
P. O. Box 1855
Billings, Montana 59103

Gentlemen:

Re: Well Name: Navajo Federal 14-4 - SW SW Sec. 4, T. 39S, R. 25E
790' FSL, 510' FWL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule 302, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

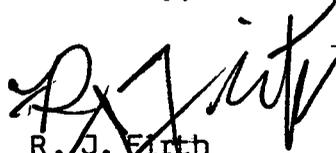
1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule 311.3, Associated Gas Flaring, Oil and Gas Conservation General Rules.

Page 2
Meridian Oil Company
Well Name: Navajo Federal 14-4
April 28, 1986

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at each drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable State and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.
6. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31265.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson

8159T

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
 MERIDIAN OIL INC.

3. ADDRESS OF OPERATOR
 P. O. Box 1855, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface SWSW (790' FSL - 510' FWL)
 At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 6 miles east Hatch Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	510'	16. NO. OF ACRES IN LEASE	2920.8	17. NO. OF ACRES ASSIGNED TO THIS WELL	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1200'	19. PROPOSED DEPTH	5,765'	20. ROTARY OR CABLE TOOLS	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4787' GL (graded)

5. LEASE DESIGNATION AND SERIAL NO.
 U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 --

7. UNIT AGREEMENT NAME
 --

8. FARM OR LEASE NAME
 Navajo-Federal

9. WELL NO.
 14-4

10. FIELD AND POOL, OR WILDCAT
 Kiva

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 4-39S-25E

12. COUNTY OR PARISH	13. STATE
San Juan	Utah

22. APPROX. DATE WORK WILL START*
 3rd Quarter, 1986

RECEIVED
 MAY 05 1986

DIVISION OF
 OIL, GAS & MINING

SIGNED *Bob C. [Signature]* TITLE Sr. Drilling Engineer DATE 4/21/86

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
Kenneth V. Rhea **Acting DISTRICT MANAGER**
 APPROVED BY _____ TITLE _____ DATE MAY 01 1986

FLARING OR VENTING OF
 GAS IS SUBJECT OF NTL 4-A
 DATED 1/1/80

NOTICE OF APPROVAL

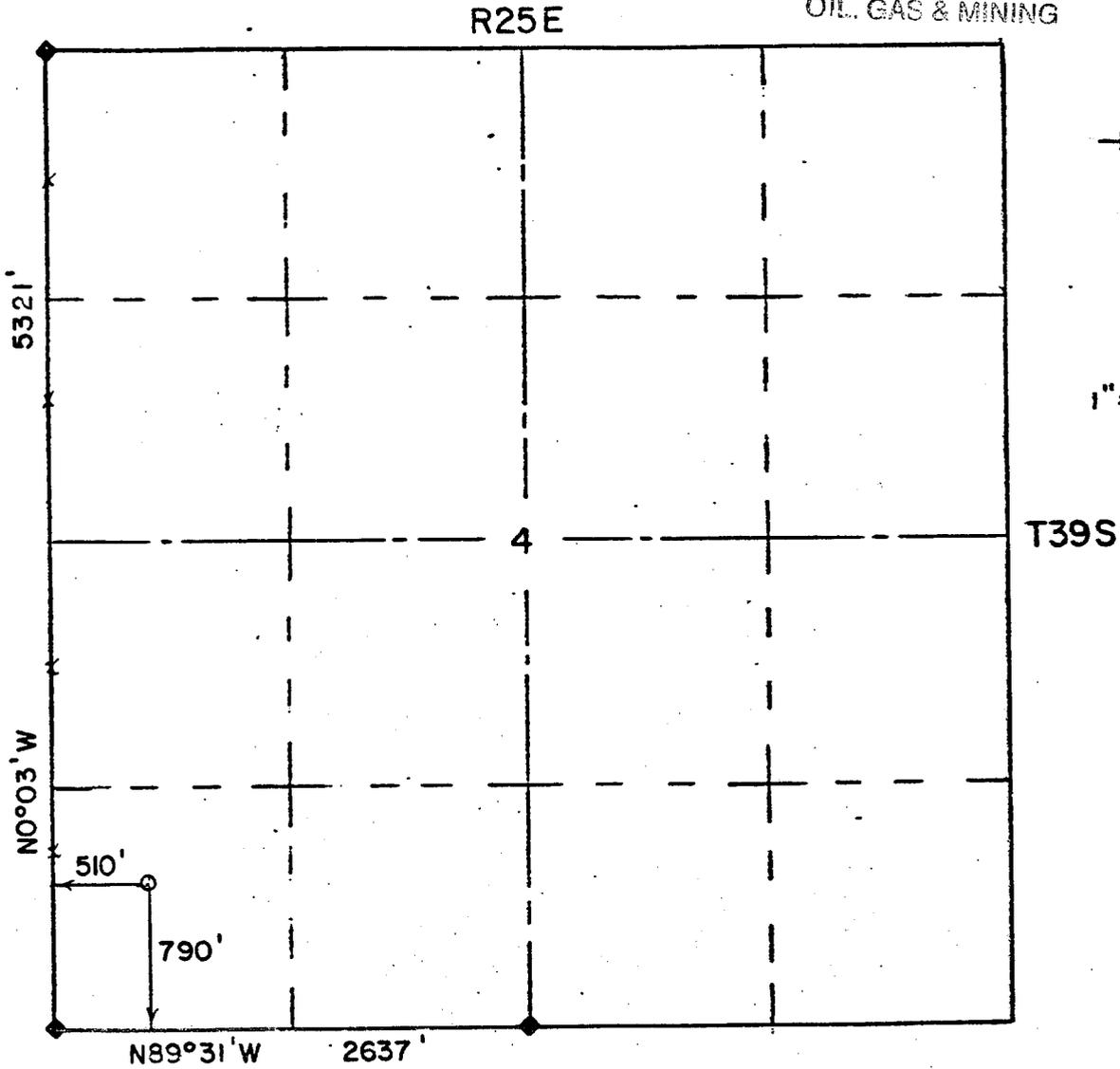
*See Instructions On Reverse Side

copy sent

WELL LOCATION PLAT

RECEIVED
MAY 05 1986

DIVISION OF
OIL, GAS & MINING



WELL LOCATION DESCRIPTION:

REFERENCES:

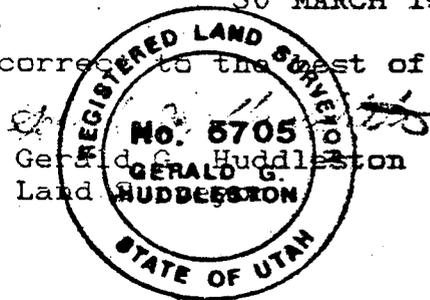
MERIDIAN OIL

14-4 NAVAJO-FEDERAL
790' FS & 510' FW
SECTION 4, T39S, R25E, SLM
SAN JUAN COUNTY, UTAH
GROUND ELEVATION 4788'

200' WEST 4786'
200' EAST 4791'

30 MARCH 1986

The above plat is true and correct to the best of my knowledge and belief.



Gerald G. Huddleston
Land Surveyor

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other Instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
MAY 19 1986

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
MERIDIAN OIL INC.

3. ADDRESS OF OPERATOR
P. O. Box 1855, Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
SWSW (790' FSL - 510' FWL)

5. LEASE DESIGNATION AND SERIAL NO.
U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
--

7. UNIT AGREEMENT NAME
--

8. FARM OR LEASE NAME
Navajo-Federal

9. WELL NO.
14-4

10. FIELD AND POOL, OR WILDCAT
Kiva

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 4-39S-25E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. PERMIT NO.
43-037-31265

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4787' GL (graded)

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>	

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Meridian Oil Inc. has permitted the #14-4 Navajo-Federal well to drill an 11" surface hole to a depth of 3250'. If the salt water flow (est @ 2968') in the DeChelly formation has not been encountered by 3250', Meridian proposes to set the 8-5/8" surface casing off bottom at +1600' and cement by the single-stage method circulating cement to surface. A basket cementing shoe assembly (diagram attached) will be utilized for cementing in this situation on the bottom of the 8-5/8" casing. The proposed method would be used only in the absence of the salt water flow and would protect surface fresh water sands at the alternate setting depth of +1600'. If 8-5/8" surface casing is set off bottom, the 5-1/2" production casing will be set at TD and cemented by the two-stage method with a stage collar placed at +3450'. The proposed second stage TOC would be +1200'. In the event the salt water flow is encountered, surface and production casing will be set and cemented as originally permitted.

CONFIDENTIAL
O.G.M.

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

SIGNED A. Arnold Hall TITLE Petroleum Engineer DATE 5/15/86

(This space for Federal or State office use)

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

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 5-23-86
BY: John R. Doye

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

MERIDIAN OIL

March 24, 1987

State of Utah Natural Resources
Oil, Gas and Mining
355 W. North Temple
3 Triad center, Ste 350
Salt Lake City, Utah 84180-1203

Attention: Arlene Sollis

Re: Application for Permit to Drill
14-4 Navajo-Federal
SWSW Section 4-39S-25E
Federal Lease No. U-52333
San Juan County, Utah
Permit No. 43-037-31265

Gentlemen:

Enclosed are three copies of Form 3160-3, Application for Permit to Drill with attachments for the above referenced location. This location was moved from 790' FSL - 510' FWL to 1150' FSL - 1110' FWL.

Please cancel Permit No. 43-037-31265, which is due to expire April 28, 1987 and re-permit as per the attached Application for Permit to Drill.

If you have any questions, please do not hesitate to call me at 406-256-4122.

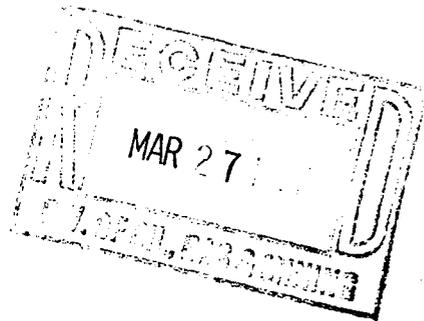
Sincerely,



S. S. Nelson
Sr. Operations Technician

/ssn/1423N

Encl





STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

040301

April 2, 1987

Meridian Oil Inc.
P. O. Box 1855
Billings, Montana 59103

Gentlemen:

RE: Well No. Navajo-Federal 14-4 - Sec.4, T.39S, R.25E,
San Juan County, Utah - API NO. 43-037-31265

Per your request, approval to drill the subject well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza".

John R. Baza
Petroleum Engineer

sb
cc: BLM-Moab
D. R. Nielson
R. J. Firth
Well file
0327T-68

RECEIVED
APR 24 1987

3162 (U-065)
(U-52333)

042902

QA

DIVISION OF
OIL, GAS & MINING

Moab District
P. O. Box 970
Moab, Utah 84532

APR 23 1987

13-037-31005

Meridian Oil Inc.
P. O. Box 1855
Billings, MT 59103

Re: Rescinding Application for
Permit to Drill
Well No. Navajo-Federal 14-4
Sec. 4, T. 39 S., R. 25 E.
San Juan County, Utah
Lease U-52333

Gentlemen:

The Application for Permit to Drill the referenced well was approved on May 1, 1986. Since that date, no known activity has transpired at the approved location.

On March 24, 1987 you requested that we cancel the existing permit on this location. In view of the foregoing, this office is rescinding the approval of the referenced application.

If you have any questions, please contact the Branch of Fluid Minerals (801) 259-6111.

Sincerely yours,

/s/ James J. Travis

ACTING District Manager

cc:

State of Utah, Division of Oil, Gas and Mining ✓
San Juan Resource Area

bcc:

U-942, Utah State Office

CFreudiger/cf 4/21/87

TEMPORARY FILING FOR WATER IN THE STATE OF UTAH

RECEIVED

8 1987

Rec. by

DL

JUL 13 1987

WATER RIGHTS

90.00

PRICE

22645

TEMPORARY APPLICATION TO APPROPRIATE WATER

WATER RIGHTS SALT LAKE

Microfilmed

Roll #

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

* WATER USER CLAIM NO. 09 - 1521

* APPLICATION NO. A T62677

1. PRIORITY OF RIGHT: July 8, 1987

* FILING DATE: July 8, 1987

2. OWNER INFORMATION

Name(s): MERIDIAN OIL INC. * Interest: 100 %

Address: P.O. Box 1855 BILLENGS, MT 59103

Is the land owned by the applicant? Yes _____ No X

(If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: _____ cfs and/or 350 ac-ft

4. SOURCE: 42-9 NAVAJO FEDERAL * DRAINAGE: _____

which is tributary to _____
which is tributary to _____

POINT(S) OF DIVERSION: _____ COUNTY: SAN JUAN

LOCATION: SE/NE (1850' FNL, 1140' FEL) SEC. 9, T39S - R25E
S. 1850 ft. & W. 1140 ft. from NE Cor. Sec. 9, T39S, R25E, SLB&M.

(3 miles NE of Hatch Trading Post) _____ Cajon Mesa Quad

Description of Diverting Works: 9 5/8" CASING SET @ 3285' (SEE ATTACHED)

* COMMON DESCRIPTION: _____

5. POINT(S) OF REDIVERSION

The water will be rediverted from N/A at a point: _____

Description of Rediverting Works: _____

6. POINT(S) OF RETURN

The amount of water consumed is _____ cfs or 350 ac-ft

The amount of water returned is _____ cfs or 0 ac-ft

The water will be returned to the natural stream/source at a point(s): N/A

7. STORAGE

Reservoir Name: N/A Storage Period: from _____ to _____

Capacity: _____ ac-ft. Inundated Area: **RECEIVED** acres

Height of dam: _____ feet

Legal description of inundated area by 40 acre tract: _____ **AUG 3 1987**

DIVISION OF OIL GAS & MINING

* These items are to be complete by Division of Water Rights

8. List any other water rights which are or will supplement this application N/A

9. NATURE AND PERIOD OF USE

Stockwatering:	From _____	to _____
Domestic:	From _____	to _____
Municipal:	From _____	to _____
Mining:	From _____	to _____
Power:	From _____	to _____
Other: <u>WATERFLOOD</u>	From <u>7/1/87</u>	to <u>6/30/88</u>
Irrigation:	From _____	to _____

10. PURPOSE AND EXTENT OF USE

Stockwatering (number and kind): _____

Domestic: _____ Families and/or _____ Persons

Municipal (name): _____

Mining: _____ Mining District in the _____ Mine

Ores mined: _____

Power: Plant name: _____ Type: _____ Capacity: _____

Other (describe): SECONDARY RECOVERY - OIL & GAS, WATER SOURCE FOR KEVA WATERFLOOD

Irrigation: _____ acres. Sole supply of _____ acres

Legal description of irrigated area by 40 acre tract: _____

11. PLACE OF USE 43-037-31267-W1W (21-9) 43-037-31265-1A (14-4)

Legal description of areas of use other than irrigation, if not the same as irrigated area above, by 40 acre tract: 21-9 NAVAJO FEDERAL NE/NW (330' FNL - 2510' FWL) SEC 9 T39S - R2SE
14-4 NAVAJO FEDERAL SW/SW (1150' FSL - 1110' FWL) SEC 4 T39S - R2SE
43-5 NAVAJO FEDERAL ~~NE/SE~~ (2420' FSL - 105' FWL) SEC 5 T39S - R2SE
43-037-31317-W1W (43-5) NE/SE

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary): LAND OWNER - FEDERAL LEASE # U-52333.
WATER PRODUCTION FROM THE 42-9 IS TO BE UTILIZED FOR THE PROPOSED KEVA WATERFLOOD. TWO SANDS, THE CUTLER & WINGATE, HAVE BEEN COMPLETED AND PUMP TESTED AT 2150 BWPD AND 4000 BWPD (EST) RESPECTIVELY.

The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Kyle W. Hudson
 Signature of Applicant(s)

COMBINED PRODUCTION FROM THE WINGATE AND CUTLER SANDS WOULD PROVIDE ADEQUATE WATER SUPPLY FOR THE PROPOSED KEVA WATERFLOOD. WATER FROM THE 42-9 NAVAJO FEDERAL WELL BE INJECTED INTO THE THREE INJECTION WELLS LISTED ABOVE (SEE ATTACHED MAP).

STATE ENGINEER'S ENDORSEMENT

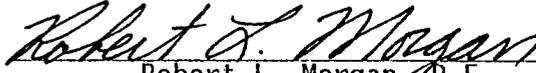
WATER RIGHT NUMBER: 09 - 1521

APPLICATION NO. T62677

1. July 8, 1987 Application received by MP.
 2. July 10, 1987 Application designated for APPROVAL by MP and SG.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated July 31, 1987, subject to prior rights and this application will expire on July 31, 1988.


Robert L. Morgan, P.E.
State Engineer