

RECEIVED

July 12, 1985

JUL 5 1985

DIVISION OF OIL  
GAS & MINING

TEMPORARY

Milestone Petroleum Inc.  
P.O. Box 4289  
Farmington, NM 87499

Dear Applicant:

RE: TEMPORARY APPLICATION  
NUMBER 09-1429 (T61020)

Enclosed is a copy of approved Temporary Application Number 09-1429 (T61020). This is your authority to construct your works and to divert the water for the uses described.

While this approved application does give you our permission to divert and use water, it does not grant easements through public or private lands in order to gain access to the source nor to convey the water to the place of use, nor does this approval eliminate the need for such other permits as may be required by this Division or any other agency in implementing your diversion.

This application will expire July 12, 1986, and it is expected that no diversion or use of the water will be done after that date unless another proposal has been made and approved.

Your contact with this office, should you need it is with the Area Engineer, Mark Page. The telephone number is (801)637-1303.

Yours truly,

Robert L. Morgan, P.E.  
State Engineer

RLM:slm

Encl.: Copy of approved Temporary Application

# TEMPORARY APPLICATION TO APPROPRIATE WATER STATE OF UTAH

Application No. T61020

09-1429

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NOTE:—The information given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made on the following page under the heading "Explanatory."

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah; for uses indicated by (X) in the proper box or boxes, 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.

JUN 25 1985

WATER RIGHT PRICE

1. Irrigation  Domestic  Stockwatering  Municipal  Power  Mining  Other Uses

2. The name of the applicant is Milestone Petroleum, Inc. N9760

3. The Post Office address of the applicant is Post Office Box 4289, Farmington, NM 87499

4. The quantity of water to be appropriated 3.0 second-feet and/or 3.0 acre-feet

5. The water is to be used for oil well drilling from 7-1-85 to 8-31-85  
(Major Purpose) (Month) (Day) (Month) (Day)

other use period well completion from 9-1-85 to 1-1-86  
(Minor Purpose) (Month) (Day) (Month) (Day)

and stored each year (if stored) from \_\_\_\_\_ to \_\_\_\_\_  
(Month) (Day) (Month) (Day)

6. The drainage area to which the direct source of supply belongs is \_\_\_\_\_  
(Leave Blank)

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7. The direct source of supply is\* A) underground water B) underground water  
(Name of stream or other source)

JUL 15 1985

which is tributary to \_\_\_\_\_, tributary to \_\_\_\_\_

\*Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring.

DIVISION OF GAS & MINING

8. The point of diversion from the source is in San Juan County, situated at a point\*  
A) primary source: Benally Water Hole NWNE Sec. 5, T-39-S, R-25-E

B) secondary source: UGW: N. 900 ft. and E. 1190 ft. from SW Cor. Sec. 28 T-38-S, R-25-E, SLB&M. Both are Cajon Mesa Quad. SEE REVERSE SIDE

\*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of diversion is not defined definitely.

9. The diverting and carrying works will consist of water trucks.

10. If water is to be stored, give capacity of reservoir in acre-feet 1000 gallons height of dam pit  
area inundated in acres \_\_\_\_\_ legal subdivision of area inundated \_\_\_\_\_

11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:  
\_\_\_\_\_  
\_\_\_\_\_ Total \_\_\_\_\_ Acres

12. Is the land owned by the applicant? Yes \_\_\_\_\_ No X If "No," explain on page 2. BLM

13. Is this water to be used supplementally with other water rights? Yes \_\_\_\_\_ No X  
If "yes," identify other water rights on page 2.

14. If application is for power purposes, describe type of plant, size and rated capacity. \_\_\_\_\_

15. If application is for mining, the water will be used in \_\_\_\_\_ Mining District at the \_\_\_\_\_ mine, where the following ores are mined \_\_\_\_\_

16. If application is for stockwatering purposes, number and kind of stock watered \_\_\_\_\_

17. If application is for domestic purposes, number of persons \_\_\_\_\_, or families \_\_\_\_\_

18. If application is for municipal purposes, name of municipality #3037-31161 G1W

19. If application is for other uses, include general description of proposed uses to be utilized as liquid phase of drilling fluid, Milestone Navajo Federal 4-2.

20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. 300 ft. FSL, 2225 ft. FEL, Sec. 4, T-39-S, R-25-E, SLB&M. (N. 300 ft. & W. 2225 ft. from SE Cor. Sec. 4, T39S, R25E, SLB&M)

21. The use of water as set forth in this application will consume 3.0 acre-feet and \_\_\_\_\_ second feet and/ or acre feet will be returned to the natural stream or source at a point described as follows: \_\_\_\_\_

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed application:

We would like to secure use of the water sources mentioned on the reverse side for purposes of drilling a well in Section 4, T-39-S, R-25-E, SLB&M. The water will be used in the well and mixed with well drilling fluid type materials.

Paragraph No. 8: 1) S. 1650 ft. & W. 1980 ft. from NE Cor. Sec. 5, T39S, R25E, SLB&M.  
2) N. 900 ft. & E. 1190 ft. from SW Cor. Sec. 28, T38S, R25E, SLB&M.  
(3-5 miles NE of Hatch Trading Post)

(Use page 4 if additional explanatory is needed.)

The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purpose herein described

Milestone Petroleum Inc.

Signature of Applicant\*

Senior Vice President, Operations

\*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its proper officer, or in the name of the partnership by one of the partners, and the names of the other partners shall be listed. If a corporation or partnership, the affidavit below need not be filled in. If there is more than one applicant, a power of attorney, authorizing one to act for all, should accompany the Application.

DECLARATION OF CITIZENSHIP

STATE OF NEW MEXICO  
County of San Juan } ss

On the 24th day of June, 1985, personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States, or has declared his intention to become such a citizen.

My commission expires: August 11, 1987

[Signature]

Notary Public

(SEAL)

**FEEES FOR APPLICATIONS TO APPROPRIATE WATER IN UTAH**

Flow rate — c.f.s.	Cost	
0.0 to 0.1 .....	\$ 15.00	
over 0.1 to 0.5 .....	30.00	
over 0.5 to 1.0 .....	45.00	
over 1.0 to 15.0 .....	45.00	plus \$7.50 for each cfs above the first cubic
over 15.0 .....	150.00	foot per second.

Storage — acre-feet		
0 to 20 .....	22.50	
over 20 to 500 .....	45.00	
over 500 to 7500 .....	45.00	plus \$7.50 for each 500 a.f. above the first
over 7500 .....	150.00	500 acre feet.

(This section is not to be filled in by applicant)

**STATE ENGINEER'S ENDORSEMENTS**

1. June 25, 1985 Application received by mail over counter in State Engineer's office by SP
2. .... Priority of Application brought down to, on account of .....
3. 7-1-85 Application fee, \$15.00, received by J. J. Rec. No. 18415
4. .... Application microfilmed by ..... Roll No. ....
5. 7/1/85 Indexed by er ..... Platted by .....
6. 6/25/85 Application examined by SP .....
7. .... Application returned, ..... or corrected by office .....
8. .... Corrected Application resubmitted by mail over counter to State Engineer's office.
9. .... Application approved for advertisement by .....
10. .... Notice to water users prepared by .....
11. .... Publication began; was completed .....
- ..... Notice published in .....
12. .... Proof slips checked by .....
13. .... Application protested by .....
- .....
14. .... Publisher paid by M.E.V. No. ....
15. .... Hearing held by .....
16. .... Field examination by .....
17. 6/25/85 Application designated for approval SP S.G.  
rejection
18. 7/12/85 Application copied or photostated by s.l.m. proofread by .....
19. 7/12/85 Application approved  
~~rejected~~
20. **Conditions:**  
This Application is approved, subject to prior rights, as follows:  
a. Actual construction work shall be diligently prosecuted to completion.  
b. Proof of Appropriation shall be submitted to the State Engineer's office by ....NPR.....  
c. **TEMPORARY APPROVAL -- EXPIRES July 12, 1986.**
- .....
- .....  
Robert L. Morgan, P.E., State Engineer
21. .... Time for making Proof of Appropriation extended to .....
- .....
22. .... Proof of Appropriation submitted.
23. .... Certificate of Appropriation, No. ...., issued

WATER RIGHTS DATA BASE  
 ENTERED - DATE 6/26/85 BY MLK  
 VERIFIED - DATE 6/26/85 BY MLK

**TEMPORARY** Application No. T 61020  
09-1420

**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  
 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                      NESW (1500' FSL - 2500' 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)  
 137'

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.  
 1350'

19. PROPOSED DEPTH  
 5850'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 4877' GL (graded)

22. APPROX. DATE WORK WILL START\*  
 June 15, 1986

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

**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. SIGNATURE [Signature] TITLE Sr. Drilling Engineer DATE 3/31/86

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY Kenneth V. Rhea TITLE Acting DISTRICT MANAGER DATE APR 16 1986

CONDITIONS OF APPROVAL, IF ANY:

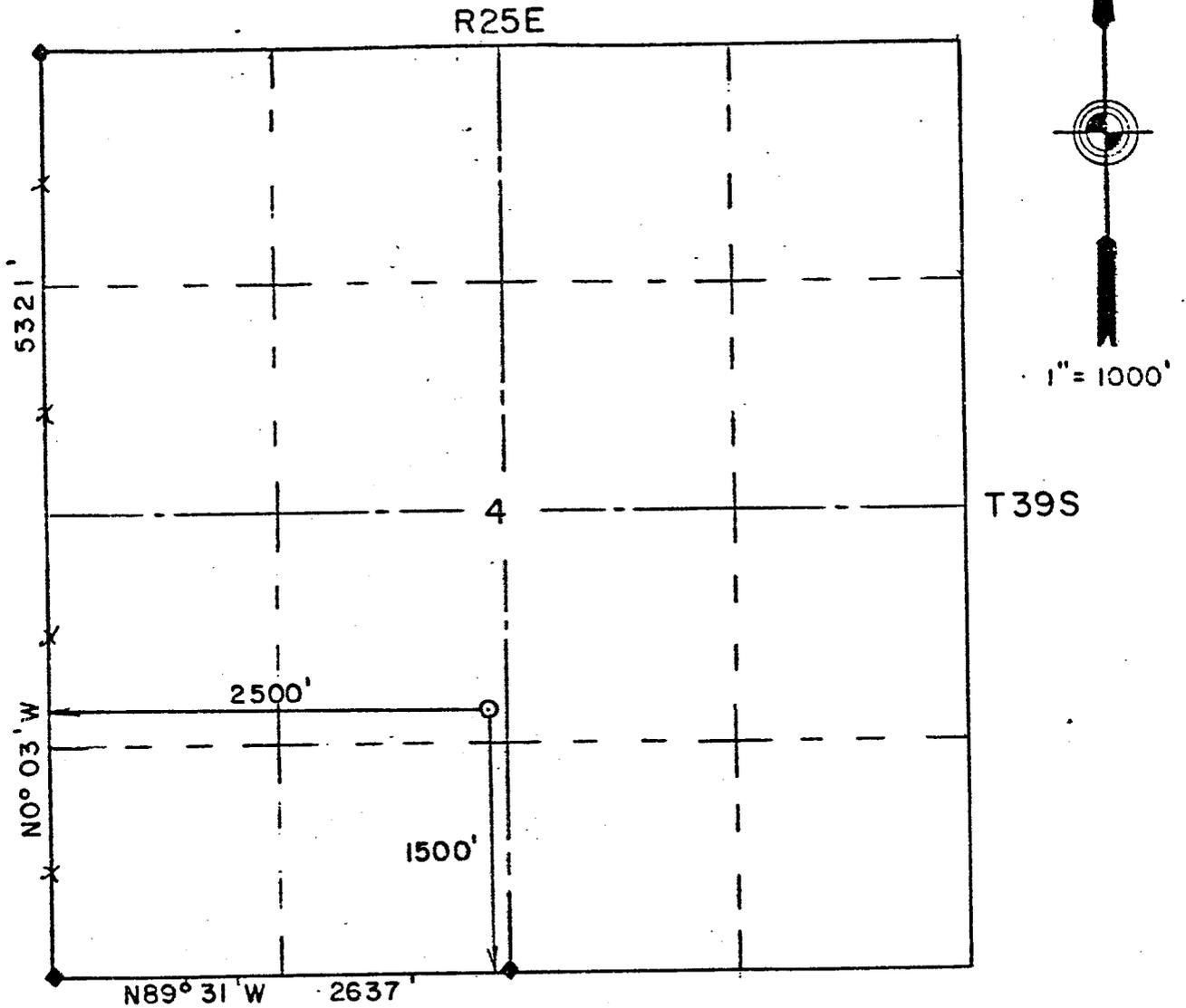
FLARING OR VENTING OF GAS IS SUBJECT OF NTL 4-A DATED 1/1/80

\*See Instructions On Reverse Side

**NOTICE OF APPROVAL**

State of Utah - D06m

WELL LOCATION PLAT



WELL LOCATION DESCRIPTION:

MERIDIAN OIL  
23-4 NAVAJO-FEDERAL  
1500' FS & 2500' FW  
SECTION 4, T39S, R25E, SLM  
SAN JUAN COUNTY, UTAH  
GROUND ELEVATION 4880'

REFERENCES:

200' SOUTH 4873  
200' EAST 4883

13 MARCH, 1986

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

*Gerald G. Huddleston*  
REGISTERED LAND SURVEYOR  
No. 5705  
GERALD G. HUDDLESTON  
Land Surveyor  
STATE OF UTAH

# MERIDIAN OIL

April 8, 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

**RECEIVED**  
APR 10 1986

DIVISION OF  
OIL, GAS & MINING

Attention: Arlene Sollis

Re: Application for Permit to Drill  
23-4 Navajo-Federal  
NESW 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 the above referenced location.

Please be advised that Meridian Oil Inc. requests that all pertinent data for this location 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

# MERIDIAN OIL

April 8, 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

**RECEIVED**  
APR 10 1986

DIVISION OF  
OIL, GAS & MINING

Attention: Arlene Sollis

Re: Request for Exception Location  
23-4 Navajo-Federal  
NESW Section 4-39S-25E  
San Juan County, Utah

Gentlemen:

Meridian Oil Inc. requests the approval to drill an unorthodox location in Section 4-39S-25E of San Juan County, Utah. The above referenced location was staked 1500' FSL - 2500' FWL of Section 4.

A lease ownership plat is attached as Exhibit "A". Meridian Oil Inc. owns 75% of the oil and gas leasehold working interest (Lease U-52333) within a 660' radius of the proposed exception location. BWAB Inc. owns the remaining 25% interest in Lease U-52333 and is participating in the drilling of this well. BWAB Inc. has been notified and is in agreement with this location. No other offset owners are required to be notified since the offset acreage is owned by Meridian and BWAB Inc.

This exception location for the 23-4 Navajo-Federal is requested due to topographical reasons as per attached Exhibit "B".

Thank you for your consideration.

Sincerely,

  
Suzann S. Nelson  
Sr. Operations Technician

Attachments

ssn

cc: BWAB Inc. - Denver, CO  
Cindy Crawley, Bill Mitchell - Meridian Oil, Denver District

1175N

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  
 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 NESW (1500' FSL - 2500' FWL)

At proposed prod. zone Same

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

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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. 1350'

19. PROPOSED DEPTH 5850'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4877' GL (graded)

22. APPROX. DATE WORK WILL START\* June 15, 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 surface
12-1/4	9-5/8	36#	3,300'	Two stage, DV tool @ 1500'.
8-3/4	7	20#	4,200'	Cmt to sfc w/1500 sx "B" Lite.
8-3/4	7	23#	5,850	Single stage, top of cmt @ 2800 Caliper log + 40% excess. "B"Li

CONFIDENTIAL

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

RECEIVED  
 APR 10 1986

DIVISION OF  
 OIL, GAS & MINING

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 3/31/86

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

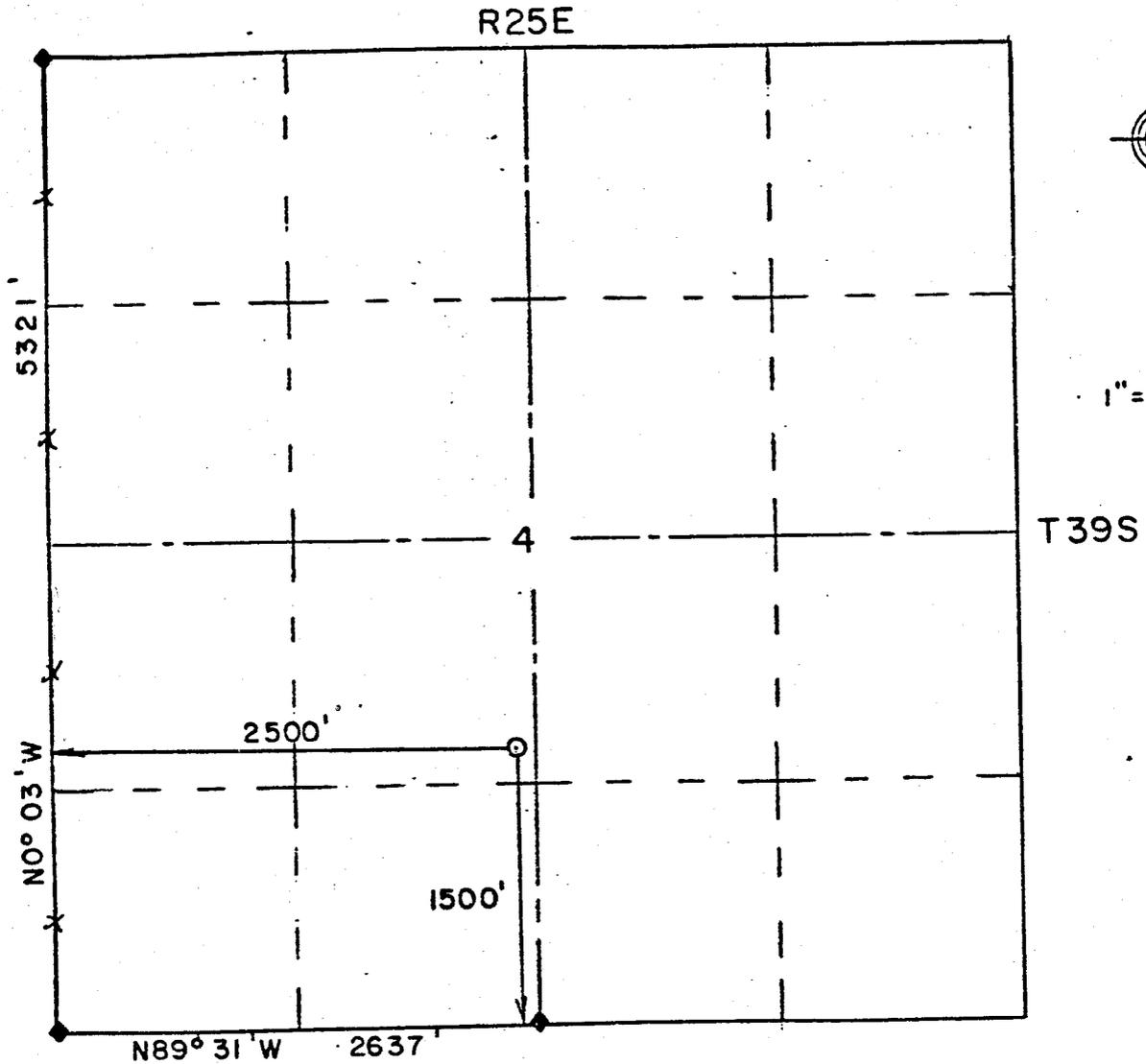
APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING

DATE: 4-18-86  
 BY: John R. Bayne

\*See Instructions on Reverse Side

WELL SPACING: 302/1

WELL LOCATION PLAT



WELL LOCATION DESCRIPTION:

MERIDIAN OIL  
23-4 NAVAJO-FEDERAL  
1500' FS & 2500' FW  
SECTION 4, T39S, R25E, SLM  
SAN JUAN COUNTY, UTAH  
GROUND ELEVATION 4880'

REFERENCES:

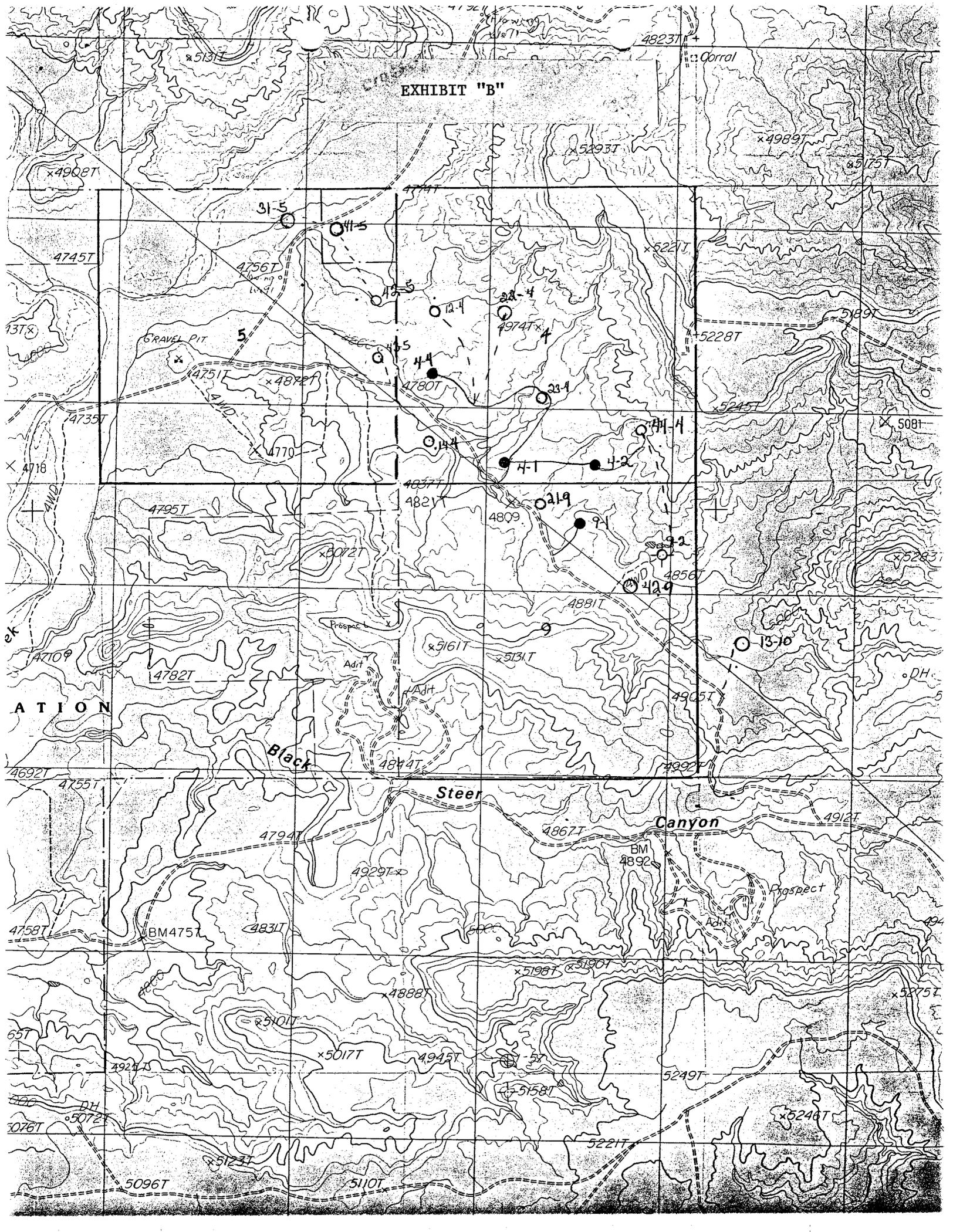
200' SOUTH 4873  
200' EAST 4883

13 MARCH, 1986

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

REGISTERED LAND SURVEYOR  
No. 5705  
GERALD G. HIDDLESTON  
Gerald G. Hiddleston  
Land Surveyor  
STATE OF UTAH

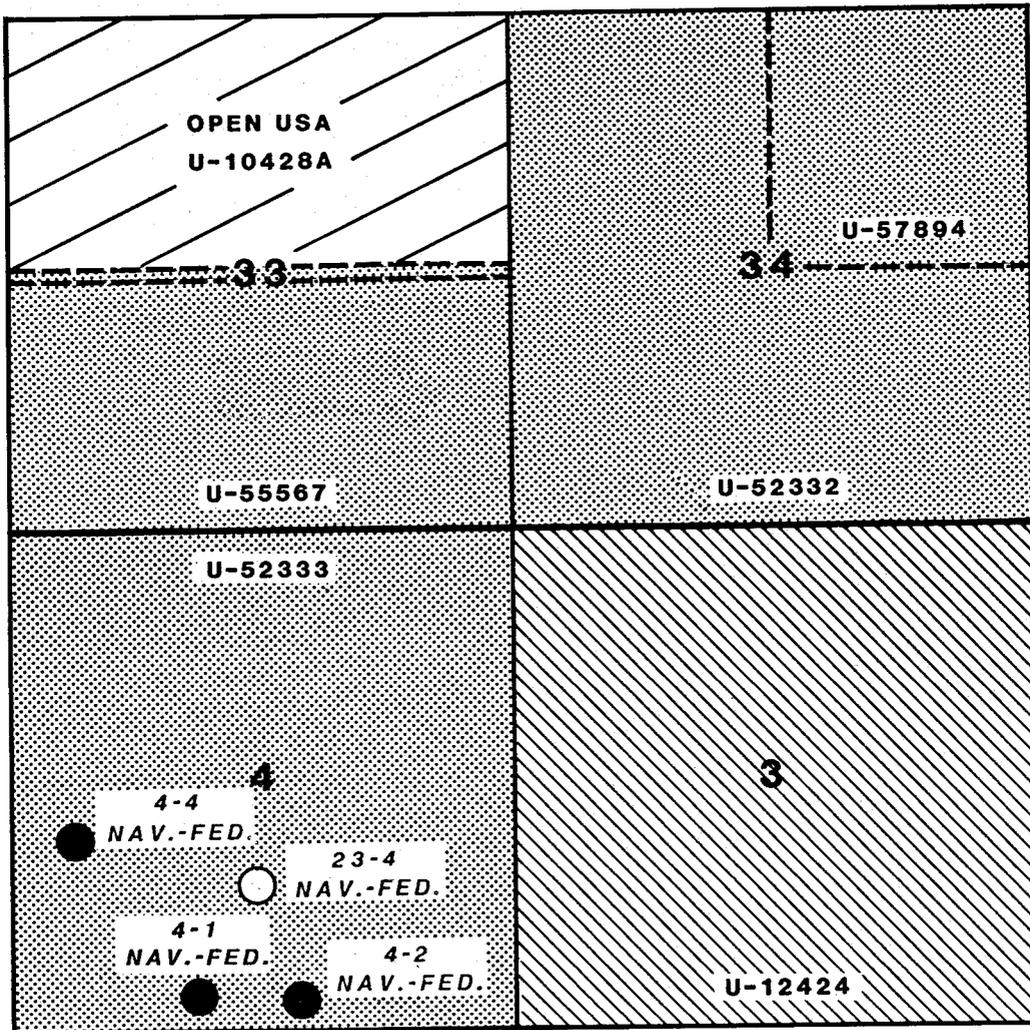
EXHIBIT "B"



# EXHIBIT A

T  
38  
S

T  
39  
S



**R 25 E**

**KEY: LEASEHOLD OWNERSHIP**



MERIDIAN OIL INC. - 75%, BWAB 25%  
(FEDERAL SERIAL NO. U-55567)  
(FEDERAL SERIAL NO. U-52333)  
(FEDERAL SERIAL NO. U-52332)  
(FEDERAL SERIAL NO. U-57894)



OPEN USA - U-10428A



TEXACO INC. (50%), DONALD B. ANDERSON, LTD. (25%),  
CHORNEY OIL COMPANY (25%)  
(FEDERAL SERIAL NO. U-12424)



PROPOSED LOCATION - MOI. #23-4 NAV. FED.  
1500' FSL - 2500' FWL



EXISTING WELL - MOI. #4-1 NAV. FED.  
370' FSL - 1940' FWL



EXISTING WELL - MOI. #4-2 NAV. FED.  
300' FSL - 2225' FEL



EXISTING WELL - MOI. #4-4 NAV. FED.  
1980' FSL - 660' FWL  
(FEDERAL SERIAL NO. U-52333)

**MERIDIAN OIL**

KIVA FIELD  
T 39 S, R 25 E  
SAN JUAN COUNTY, UTAH

SCALE 1" 2000'

1182N/0073N/III

OIL AND GAS ORDER NO. 1

MERIDIAN OIL INC.

LEASE NAME: 23-4 Navajo-Federal  
LEASE NO. U-52333  
LOCATION: NESW Section 4-39S-25E  
1500' FSL - 2500' FWL  
San Juan County, Utah  
Kiva Field

A. EIGHT POINT DRILLING PROGRAM

1. & 2. Estimated Tops:

	Surface	
Morrison		
Entrada	666	
Navajo	851	fresh water
Chinle	1548	
Shinarump	2403	
Cutler	2628	
Hermosa	4508	
Upper Ismay	5480	oil
A Shale	5612	
Lower Ismay	5633	
Desert Creek	5718	oil
Chimney Rock	5803	
Akah	5826	
TD	5850	

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.

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.
12-1/4	9-5/8	3,300	36#	K-55	ST&C	New	Two stage, DV tool @1500' Cement to sfc w/1500 sx "B" Lite (35/65/6) +2% CaCl <sub>2</sub> & 250 sx "B" +2% CaCl <sub>2</sub> .
8-3/4	7	4,200	20#	K-55	ST&C	New	Single stage, top of cement @ 2800'.
8-3/4	7	5,850	23#	K-55	ST&C	New	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 3300' to TD.

6. Testing program:

Lower Desert Creek - Possible  
 Upper Ismay - Probable

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:

One 60' core in the Upper Ismay is 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 H<sub>2</sub>S 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 referenfce 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 maintnance 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 un 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 from Benally water well, located NWNE Section 5-39S-25E.

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 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 (lined/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 6 inches of soil material will be removed from the location and stockpiled on the northwest side of well pad. Topsoil along the access will be reserved in place.

Access to the well pad will be from the north corner.

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 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

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

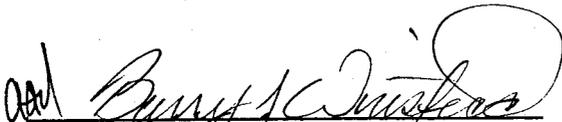
13. Lessee or Operator's Field Representative and Certification

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 |

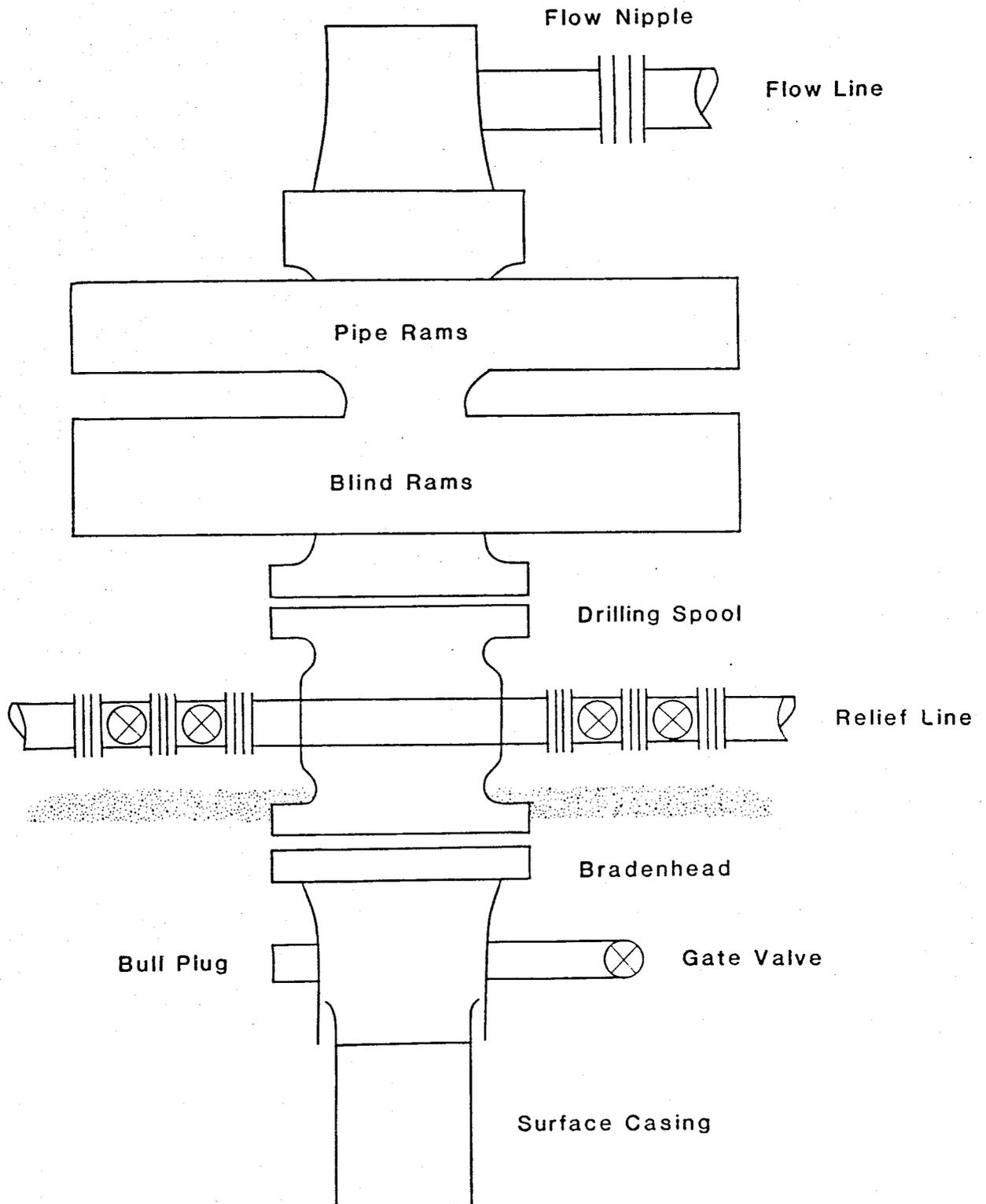
CERTIFICATION:

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

3/31/86  
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

23-4 NAVAJO-FEDERAL

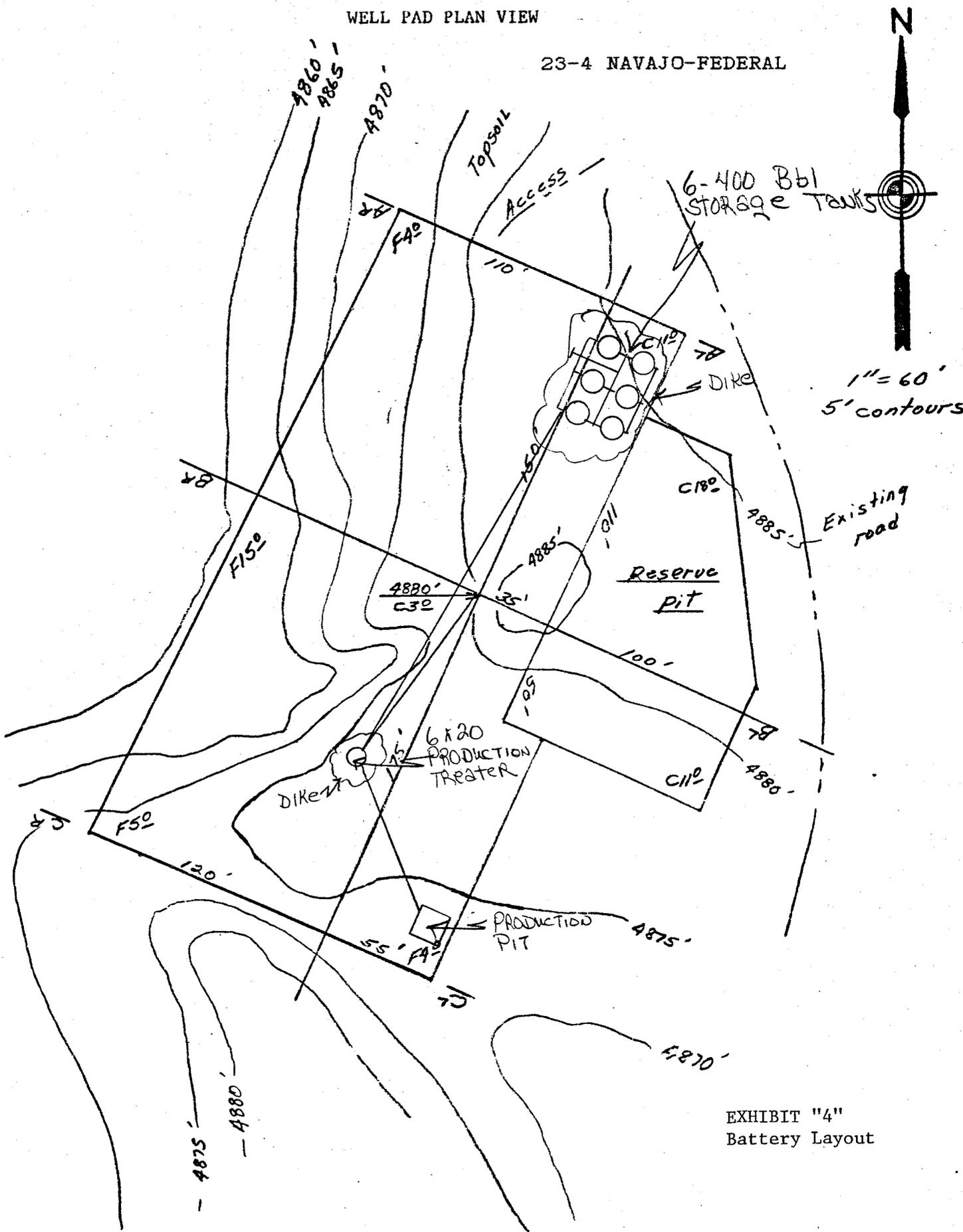


EXHIBIT "4"  
Battery Layout



WELL PAD CROSS-SECTION

23-4 NAVAJO-FEDERAL

Cut   
Fill 

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

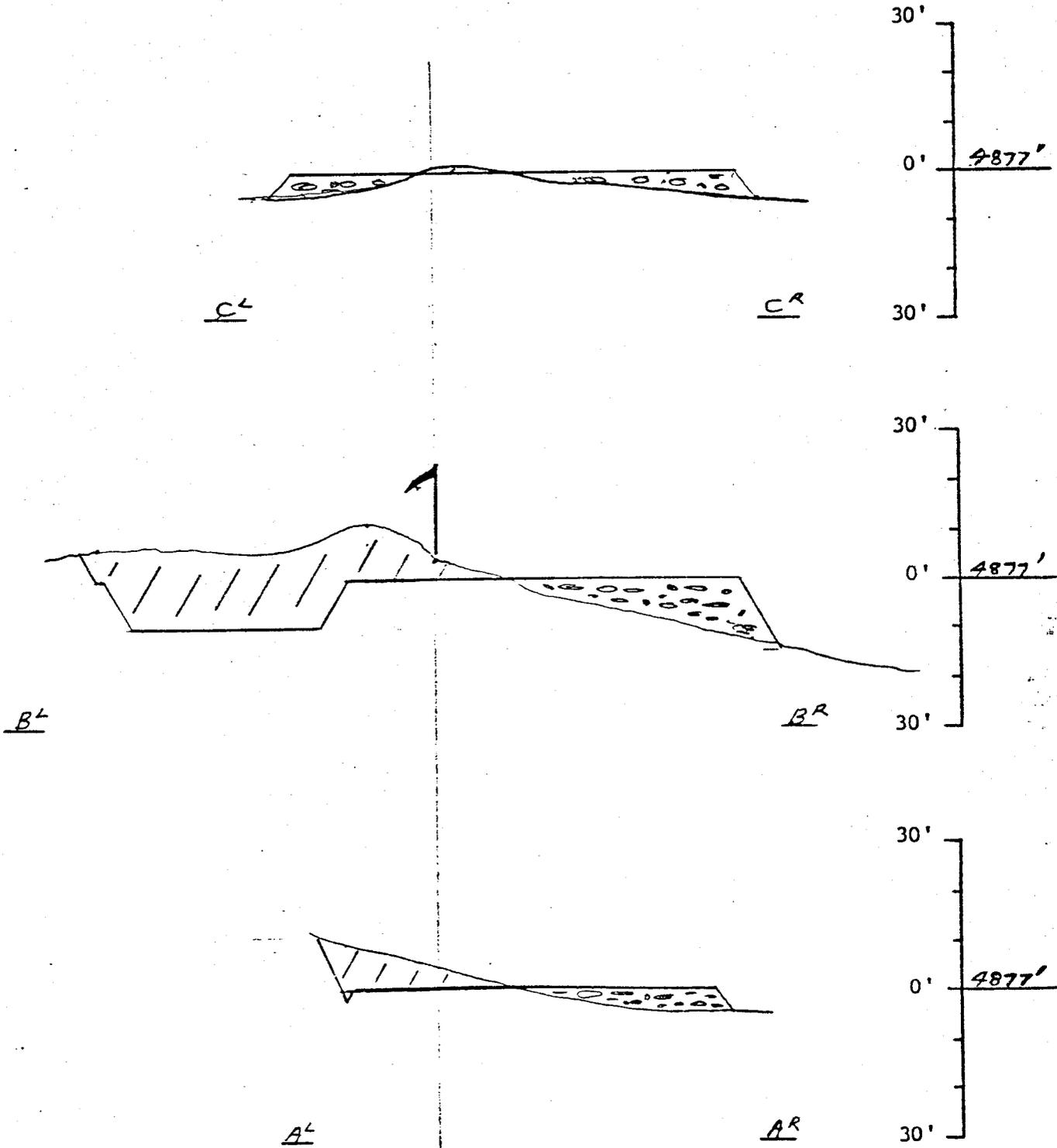


EXHIBIT "9b"  
Cross-Section

042104

OPERATOR Meridian Oil Inc DATE 4-11-86

WELL NAME Navajo Federal 23-4

SEC NE SW 4 T 39S R 25E COUNTY San Juan

43-037-31259  
API NUMBER

Fed.  
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Need water permit  
Exception requested

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 18, 1986

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

Gentlemen:

Re: Well Name: Navajo Federal 23-4 - NE SW Sec. 4, T. 39S, R. 25E  
1500' FSL, 2500' FWL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule 302.1, 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 Incorporated

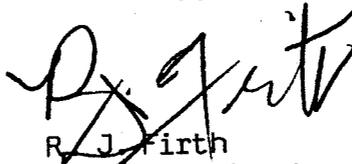
Well Name: Navajo Federal 23-4

April 18, 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 43-037-31259.

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**

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

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

3. 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.  
23-4

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

**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

DIVISION OF  
OIL, GAS & MINING

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  
NESW (1500' FSL - 2500' FWL)

14. PERMIT NO. 43-037-31259

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4877' 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 type="checkbox"/>	(Other) <u>Change Plans</u> <input checked="" type="checkbox"/>	

(Other) \_\_\_\_\_

(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. originally permitted the subject well to set 9-5/8" surface casing at 3300' in the DeChelly formation and cement to surface by the two-stage method with a stage collar at +1500'. The 12-1/4" hole has been drilled to 3300' and the anticipated salt water flow (est. @ 3053') in the DeChelly was not present; therefore, as a matter of economics, the 9-5/8" was set at 1645.53' KB to protect surface fresh water sands and single stage cemented circulating 20 barrels (61 sxs) cement to surface. A basket cementing shoe assembly (diagram attached) was utilized. The 9-5/8" shoe and the remainder of the wellbore (3300' - TD) will be drilled with an 8-3/4" bit. It is proposed that if hydrocarbon shows and open-hole log interpretation indicate dual Upper Ismay/Lower Desert Creek potential, the permitted 7" production design will be set at TD and cemented by a two-stage method with a stage collar at +3500'. Second stage TOC will be +1200'. If dual potential is not indicated, Meridian proposes to run 5-1/2", 15.5#/ft, J-55, LT&C casing at TD and cemented by the two-stage method. Stage collar placement and TOC would be the same as the proposed 7" design.

1212N

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

SIGNED A. Amador TITLE Petroleum Engineer DATE 5/13/86

(This space for Federal or State office use)

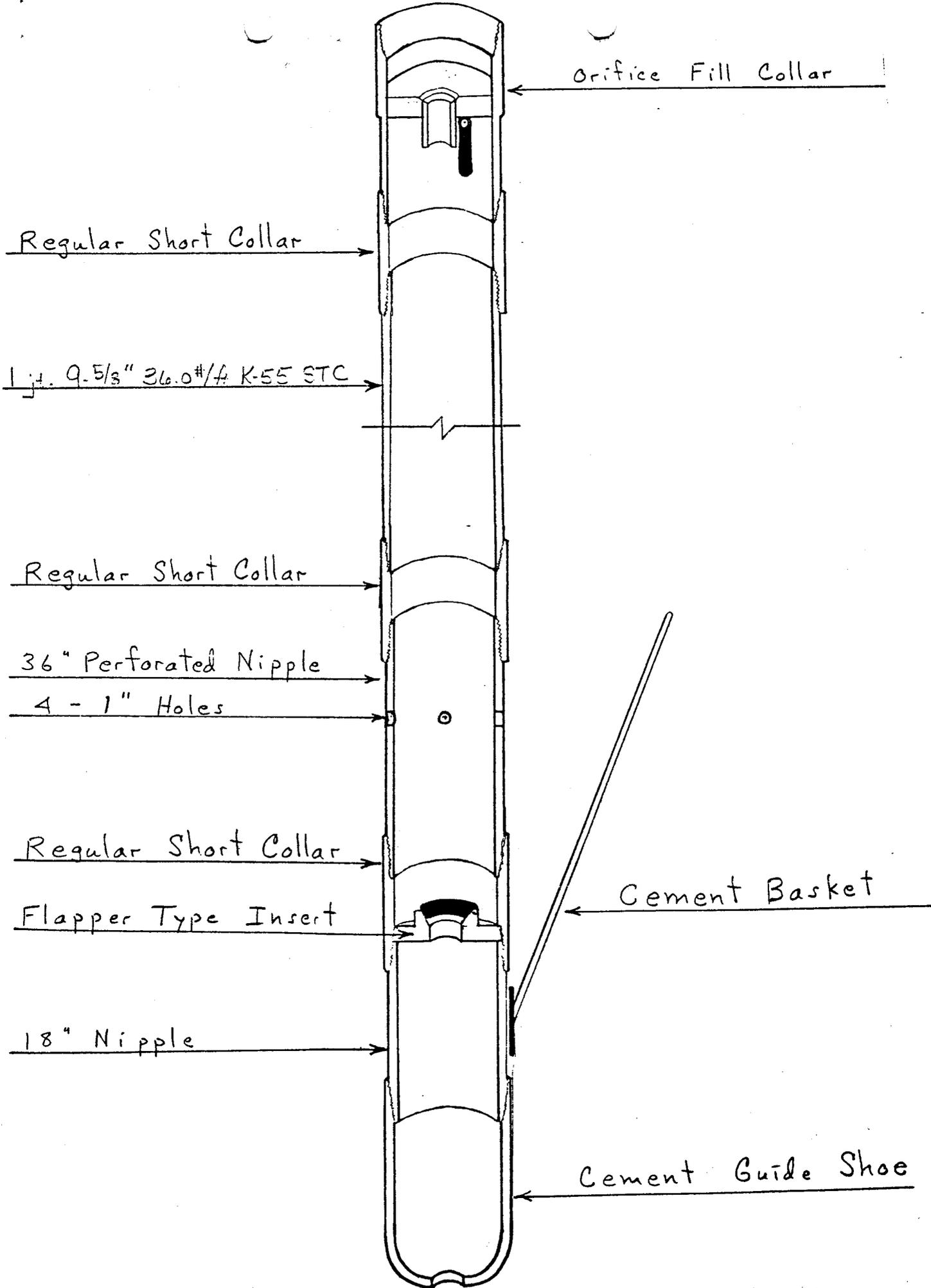
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**

DATE 5-23-86

\*See Instructions on Reverse Side



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPI  
(Other instructions reverse side)

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

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.  
23-4

10. FIELD AND POOL, OR WILDCAT  
Kiva

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

12. COUNTY OR PARISH 13. STATE  
San Juan Utah

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.)

1. OIL WELL  GAS WELL  OTHER

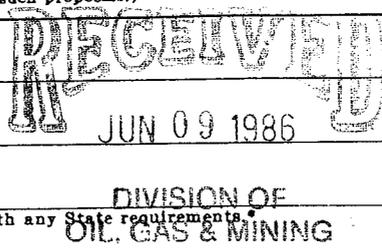
2. NAME OF OPERATOR  
MERIDIAN OIL INC.

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  
NESW (1500' FSL - 2500' FWL)

14. PERMIT NO.  
43-037-31259

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4877' GL



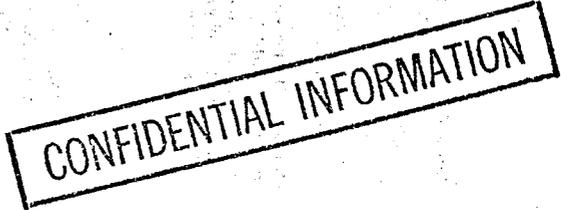
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

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 type="checkbox"/>	(Other) Progress Report - May, 1986 <input checked="" 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.)\*

Exeter, Rig #68 spud well @ 5:30 AM 5-6-86. Ran 93' 13-3/8" 61# K-55 8rd ST&C R-3 casing. Set casing @ 80'. Cemented w/110 sx cement. Drill and run 9-5/8" 36# K-55 casing and set @ 1645.53' KB to protect sfc fresh wtr sands and single stage cemented circulating 20 barrels (61 sx) cmt to surface. Plug down, top w/75 sx Class "B" w/3% CaCl. Cored 5574' - 5634' (60'). Ran DST #1 5584' - 5634') U. Ismay. Times: 15-60-120-240. BHT 124°F. Sample Chamber: 250 psi, 1650 cc total volume, 200 cc oil, 1450 cc mud, .655 cfg. Pressures: HP 3309; FP 230 - 230; SIP 1737 - 1671. Reached TD of 5860' @ 9:00 AM 5-25-86. Logged. Ran DST #2 5731' - 5860' (Desert Creek). Times: 15-60-120-240. BHT 125°F. Cushion 367' wtr. Sample Chamber 90 psi, 2400 cc total volume, tr oil, 2400 cc mud, .035 cfg. Ran 5-1/2" 17# J-55 ST&C R-3 casing, set @ 5860'. Cemented w/1018 sx LW-3, tail in w/305 sx Class "B". Release rig @ 2:00 PM 5-28-86. Waiting on completion rig.



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

SIGNED [Signature] TITLE Sr. Operations Technician DATE 6-4-86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

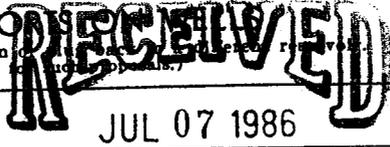
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPLICATE  
(Other instructions on re-  
verse side)

070911

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

**SUNDRY NOTICES AND REPORTS**  
(Do not use this form for proposals to drill or to deepen  
Use "APPLICATION FOR PERMIT" (Form 3160-1)



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  
NESW (1500' FSL - 2500' FWL)

14. PERMIT NO.  
43-037-31259

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4877' GL

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.  
23-4

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

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 type="checkbox"/>	(Other) <u>Progress Report - June, 1986</u> <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.)\*

MIRU completion rig 6-8-86. NU BOP, test to 2000 psi. Drill cement from 5638' - 5817'. Circulate hole w/2% Kcl. RU Schlumberger, ran VDL/CBL/GR/CCL. Perforate 5776' - 5791' w/4 jspf. RU and swabbed well down to 5700'. No entry. RU Dowell, pumped 1500 gal 15% Hcl, .2% A-250 inhibitor. Displace w/35 bbls Kcl. Swab down to 5700', no entry on last 3 runs. RU Schlumberger, set CIBP @ 5760', dumped 20' cement on top, test BP to 2000 psi. Perforated 5609' - 5618' w/4 jspf. Set pkr @ 5570'. RU to swab, swabbed well down, no entry. Load tubing w/2% Kcl, released pkr, moved pkr up to 5537', set pkr. RU Dowell, ran 1000 gal 15% Hcl, .3% W801, .4% A250. Shut in for 12 hrs, FL @ 4700'. Pulled 800', 4 bbls 3 1/2 acid wtr, 1/2 oil, FL remained @ 5200'. Made 5 more swab runs, recovered 2 1/2 bbls acid wtr, 9 1/2 bbls unload. Shut in 19 hrs. Loaded hole, unset pkr, moved TP to 5623', spotted 1 bbl 28% Hcl across perms. Swabbed, recovered 7 1/2 BO, 9 1/2 BW, 35 1/2 bbls under load. Acidized w/11,000 gal DGA215, .1% A250. Swab testing, recovered avg 2 BO/hr. 6/30/86 - SI for BHP buildup.



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

SIGNED [Signature] TITLE Sr. Operations Technician DATE 7-1-86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

RECEIVED

AUG 07 1986

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
4241 State Office Building  
Salt Lake City, UT 84114

DIVISION OF OIL  
GAS & MINING

\*REPORT OF WATER ENCOUNTERED DURING DRILLING\*

081207

Well Name & Number 23-4 Navajo Federal  
Operator MERIDIAN OIL INC. Address P. O. Box 1855, Billings, MT 59103  
Contractor Exeter Drilling Company Address P. O. Box 17349 TA, Denver, CO 80217  
Location NE 1/4 SW 1/4 Sec. 4 T. 39S R. 25E County San Juan

Water Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	3069'	3083'	1 - 2 gpm w/9.2 ppg mud	Salty (22,000 ppm NaCl)
2.				
3.				
4.				
5.				

(Continue on reverse side if necessary)

Honaker Trail 4505', U. Ismay 5479', L. Ismay 5638', Gothic 5691',  
Desert Creek 5699', Chimney Rock 5808', Akah 5823'.

Formation Tops

Remarks Problem water flow was not noticed until core point @ 5570'. A final mud weight of 10.9 ppg was required to control the flow.

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form. N/A

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

081128

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP EN  PLUG BACK  DIFF. RESERV.

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: **NESW (1500' FSL - 2500' FWL)**  
At top prod. interval reported below: **Same**  
At total depth: **Same**

**RECEIVED**  
AUG 08 1986

DIVISION OF OIL, GAS & MINING

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.  
23-4

10. FIELD AND POOL, OR WILDCAT  
Kiva

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

14. PERMIT NO. 43-037-31259 DATE ISSUED 4-18-86

12. COUNTY OR PARISH San Juan 13. STATE UT

15. DATE SPUNDED 5-6-86 16. DATE T.D. REACHED 5-25-86 17. DATE COMPL. (Ready to prod.) 7-18-86 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 4877' 19. ELEV. CASINGHEAD 4889'

20. TOTAL DEPTH, MD & TVD 5860' 21. PLUG, BACK T.D., MD & TVD 5816' 22. IF MULTIPLE COMPL. HOW MANY\* --- 23. INTERVALS DRILLED BY --- ROTARY TOOLS X CABLE TOOLS ---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
5776'-5791'

25. WAS DIRECTIONAL SURVEY MADE  
---

26. TYPE ELECTRIC AND OTHER LOGS RUN  
GR/DLL/MSFL, GR/CNL/LDT/Microlog, GR/Sonic Dual Dipmeter **DEQUICKLOOK** **CYBERLOOK**

27. WAS WELL CORED  
Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1646'	12-1/4"	695 sxs	None
5-1/2"			8-3/4"		

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
---				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	5676'	

31. PERFORATION RECORD (Interval, size and number)

5776'-5791', 4 spf, 4" gun  
5609'-5618', 4 spf, 4" gun

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5776'-5791'	1500 gal 15% Hcl
5760'	CIBP
5609'-5618'	1000 gals 15% Hcl
5609'-5618'	71-1/2 bblj 28% Hcl

33. PRODUCTION 5609'-5618' 11,000 gal OGA 15

DATE FIRST PRODUCTION 7-18-86 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pmpg - 2 1/2 x 1 1/4 x 16' RHBC WELL STATUS (Producing or shut-in) Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-18-86	24	---	→	43	60	10	1450

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
---	---	→	43	60	10	41.3°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
Reinjected or used on lease

TEST WITNESSED BY  
David Overgaard

35. LIST OF ATTACHMENTS  
860813 cp

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *[Signature]* TITLE Senior Drilling Engineer DATE August 5, 1986

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Upper Ismay	5584'	5634'	DST Times: 15-60-120-240. BHT: 124°F. 550' WC. Pipe Rec: est 1 bbl of rec by press from recorder. Above pump out sub (HGC & WCM). Est 80' rec. Sample Chamber: 250 psi, 1650 cc total volume, 200 cc oil, 1450 cc mud, .655 cfg. Pressures: HP 3309, FP 230-230, SIP 1737-1671.
Desert Creek	5731'	5860'	DST Times: 15-60-120-240. BHT: 125°F. 367' WC. Pipe Rec: 1' oil & 367' wtr. Sample Chamber: 90 psi, 2400 cc total volume, tr oil, 2400 cc mud, .035 cfg. Pressures: HP 3205-3196, FP 89-89, FP 89-89, SIP 268-409.

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPT
Honaker Trail Fm	4508'	
U. Ismay	5480'	
Top Ø	5550'	
"A" Shale	5612'	
L. Ismay	5633'	
Desert Creek	5718'	
Chimney Rock	5803'	
Akah	5826'	

10-3-86

Vicky,  
Original APD showed well  
proposed to TD in Akah  
formation. Appears that  
well was completed as  
Ismay - Desert Creek  
producer on 7-18-86.

JRB



UTAH  
NATURAL RESOURCES

To: JOHN  
From: Vicky  
Date: 9-30-86

- For your information and file.
- For necessary action.
- Reply directly to origin with a copy to this office.
- Please draft a reply for signature of \_\_\_\_\_ and \_\_\_\_\_ return by the following date \_\_\_\_\_.

Other on checking this PZ,  
I find a discrepancy. They state  
Akah  
Ismay on the prod report but the  
WCR indicates DSCR.  
— which is correct?

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0126  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ADOPTED OR TRIBE NAME

N/A

050720

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

Navajo-Federal

9. WELL NO.

23-4

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Section 4-39S-25E

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

NESW (1500' FSL - 2500' FWL)

14. PERMIT NO.  
43-037-31259

15. ELEVATIONS (Show whether DF, RT, OR, etc.)  
4889' KB

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)

PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON\*   
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*   
NTL-4A

(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.)\*

Permission to flare gas on a permanent basis is requested for the above captioned well. Average flare for the month of April, as per daily production reports, was 15.7 mcfpd. Meridian Oil Inc is trying to get Koch to tie in this well to the gas sales line. In the event Koch does tie this well in, the only flaring would be on an emergency basis.

RECEIVED  
MAY 06 1987

DIVISION OF  
OIL, GAS & MINING

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

SIGNED W. G. Brown

TITLE Production Superintendent

DATE 5-4-87

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side



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

POW

May 19, 1987

052203

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

Gentlemen:

Re: Requests for Gas Flaring

The Division of Oil, Gas and Mining has received three sundry notices dated May 5, 1987, requesting approval to flare or vent gas from wells in the Kiva Field, San Juan County, Utah. The Division has determined that gas flaring from the subject wells can only be allowed as stated in Rule 311.3 of the Oil and Gas Conservation General Rules. Any gas flaring in excess of the rule must be considered by the Board of Oil, Gas and Mining.

After consultation with staff of the U. S. Bureau of Land Management in Moab, Utah, the Division has established its determinations regarding the referenced gas flaring. The Division's position concerning the three submitted sundry notices is discussed in the following paragraphs.

Navajo Well No. 42-5:

By letter dated December 1, 1986, the Division approved temporary gas flaring from the well until February 1, 1987. This approval was reviewed with the Board and it was stipulated in the approval that any additional requests for flaring must be presented to the Board for approval. Rule 311.3 allows for venting or flaring up to 25 Mcf of gas per day without approval. The Division has determined that this amount is appropriate for the well and you are advised to present the matter to the Board if you desire further relief.

393.85E

Navajo-Federal Well No. 23-4:

43-037-31059 sec 4

Your request indicates that the average daily amount to be flared is 15.7 Mcf of gas per day. Again, in accordance with Rule 311.3, no approval is required for venting or flaring up to 25 Mcf of gas per day. Therefore, no action by the Division is necessary for this well. If you desire to flare additional volumes of gas, you are advised to present such request to the Board.

Page 2  
Meridian Oil Inc.  
May 19, 1987

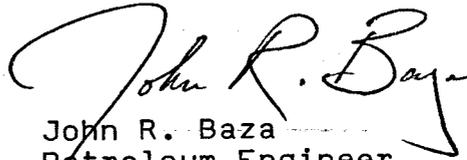
Kiva Central Storage Facility:

It is the opinion of the Division that central production batteries should not be allowed to flare any more gas than would be allowed for the each of the individual wells which are connected to the battery. In this case, it appears from Division records that four separately producing wells are connected to the storage facility; therefore, according to Rule 311.3, each well may vent or flare up to 25 Mcf of gas per day or the flaring may occur at the storage facility up to 100 Mcf per day (four times 25 Mcf per day). Please note that flaring may not be conducted at both the wells and the storage facility in excess of the 25 Mcf per day per well limit. Additional flaring above these limits again must be presented to the Board.

It is also necessary to comply with federal regulations and the federal lease requirements concerning oil and gas operations. Therefore, you are advised to contact the appropriate federal agency and ensure that they do not object to the proposed gas flaring.

Please do not hesitate to contact this office if you have any additional questions. Thank you for your consideration in this matter.

Sincerely,



John R. Baza  
Petroleum Engineer

cc: D. R. Nielson  
R. J. Firth  
Well files  
0314T-32-33



STATE OF UTAH  
NATURAL RESOURCES  
Water Rights

1636 West North Temple • Suite 220 • Salt Lake City, U

kwH ✓  
well file

SSM  
well file

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Robert L. Morgan, State Engineer

tl June 10, 1987

Mr. Tim C. Lechner  
Meridian Oil, Inc.  
175 North 27th Street  
P. O. Box 1855  
Billings, Montana 59103

RECEIVED  
MERIDIAN OIL INC.  
JUL 06 1987  
RATIONS/DRILLING  
BILLINGS REGION

Test Well Request No. 87-09-01 TW  
RE: 42-9 Navajo Federal

ISSUE DATE: June 10, 1987

EXPIRATION DATE: December 10, 1987

Dear Mr. Lechner:

Reference is made to your request to drill, perforate, and test the Wingate sand from 1300 ft. to 1500 ft. Water produced from the subject well is to be utilized for the proposed Kiva Field Waterflood. Performations will need to be sealed if well is used to prevent movement of poor quality water to other aquifers.

This letter grants you permission to proceed with the drilling with the understanding that small diameter casing be used and that no more water be diverted than is necessary to determine the availability of a good water supply. This letter does not grant any permission to proceed with the diversion and use of the water from the test well for any purpose whatsoever.

Following the completion of the drilling, and testing, the casing is to be either pulled and the hole filled from the bottom to the top before the driller leaves the premises or capped until such time as proper filing has been made with the State Engineer and approval given.

The driller must be bonded and have a current license from the State Engineer. Before starting, he must give this Division notice of the day he will begin. Within 30 days after the well has been drilled or abandoned, he must file a well driller's report containing accurate and complete information regarding the work done, which is to become part of the files in this Division pertaining to your test well. This is permission for the licensed driller to begin drilling your test well. Note that the expiration date is **December 10, 1987.**

Very truly yours,

Kent L. Jones, P. E.  
Directing Engineer, Distribution

cc: PLEASE, submit one copy to your Well Driller  
Mr. Mark Page, DIVISION OF WATER RIGHTS, Price Area Office  
Jerry L. Bronicel, Hydrologic Engineer

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL  
(Other instructions  
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.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Water Source Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR MERIDIAN OIL INC.		7. UNIT AGREEMENT NAME N/A	
3. ADDRESS OF OPERATOR P. O. Box 1855, Billings, MT 59103		8. FARM OR LEASE NAME Navajo-Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface SENE (1850' FNL - 1140' FEL)		9. WELL NO. 42-9	
14. PERMIT NO. 43-047-31263		10. FIELD AND POOL, OR WILDCAT Kiva	
15. ELEVATIONS (Show whether DF, ST, OR, etc.) 4868' KB		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA Section 9-39S-25E	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

RECEIVED  
MAY 08 1987  
DIVISION OF OIL, GAS & MINING  
BILLINGS REGION

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input checked="" type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input 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.)\*

Permission is requested to commingle water from the Wingate and Cutler Sands which produce 4000 BWPD and 2150 BWPD respectively. The combined water volume (6150 BWPD) would be adequate for the proposed Kiva Waterflood. Wingate and Cutler water analyses are attached for your information.

RECEIVED  
JUN 15 1987

DIVISION OF  
OIL, GAS & MINING

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

SIGNED Kyle W. Hudson TITLE Petroleum Engineer DATE 6/10/87

(This space for Federal or State office use)

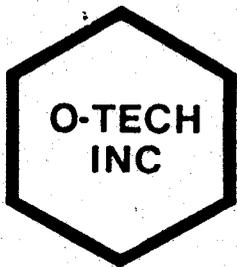
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_

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

CONDITIONS OF APPROVAL, IF ANY:  
Federal approval of this action  
is required before commencing  
operations

\*See Instructions on Reverse Side

DATE 6-29-87  
BY: [Signature]



Meridian Oil Company  
Cutler 100%  
**O-TECH, INC.**  
Sample Date:  
Lab ID:  
**Oilfield Chemical Technology**

P.O. Box 31272 • Billings, Montana 59107 • Phone (406) 245-4341

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Potassium	ND	ND	Sulfate	1640.00	34.14
Sodium	7182.00	312.40	Chloride	11620.0	327.75
Calcium	1188.00	59.28	Carbonate	0	0
Magnesium	104.00	8.62	Bicarbonate	58.00	0.95
Total Iron	41.00	1.47	Hydroxide	0	0
Diss. Iron	ND	ND	Silica	ND	ND
Barium	ND	ND		0	0
Strontium	ND	ND		0	0
Sum +	8515.0	381.70	Sum -	13318	362.80

**Solids**

TDS @ 180C	8870	mg/l
Total Solids, Calc less CO3	21800	mg/l
→ Total Solids, Calc	21800	mg/l
Total Solids, NaCl equiv	20900	mg/l
Suspended Solids, Total	ND	
Suspended Solids, Solvent	ND	
Suspended Solids, acid soluble	ND	

**System Conditions**

System Operation	Normal
Sample Temperature, °F	75.00
Sample pH	7.10

**Dissolved Gassed**

Dissolved Oxygen	ND	
Carbon Dioxide	2	mg/l
Hydrogen Sulfide	0	mg/l

**Other Properties**

Specific Gravity, measured	1.0069	
Specific Gravity, calculated	1.0161	
Resistivity, measured	ND	
Chloride as NaCl	19200	mg/l
Resistivity calculated from NaCl	ND	
Hardness as calcium carbonate	10	mg/l
Conductivity	ND	
Oil & Grease	ND	

**Microbiological**

Sulfate Reducing Bacteria	ND
Aerobic Bacteria	below 1000 colonies/ml

Approved:

Serving The Petroleum Industry Thru Applied Technology  
Richard E. Johnson

Wingate 100%

Sample Date:

Lab ID:

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Potassium	ND	ND	Sulfate	541.00	11.26
Sodium	2858.00	124.32	Chloride	4500.00	126.93
Calcium	288.00	14.37	Carbonate	0	0
Magnesium	55.00	4.56	Bicarbonate	284.00	4.64
Total Iron	55.00	1.97	Hydroxide	0	0
Diss. Iron	ND	ND	Silica	ND	ND
Barium	ND	ND		0	0
Strontium	ND	ND		0	0
Sum +	3256.0	145.10	Sum -	5325.0	142.80

Solids

TDS @ 180C	3460	mg/l
Total Solids, Calc less CO3	8440	mg/l
Total Solids, Calc	8580	mg/l
Total Solids, NaCl equiv	8070	mg/l
Suspended Solids, Total	ND	
Suspended Solids, Solvent	ND	
Suspended Solids, acid soluble	ND	

System Conditions

System Operation	Normal
Sample Temperature, °F	75.00
Sample pH	6.60

Dissolved Gassed

Dissolved Oxygen	ND	
Carbon Dioxide	2	mg/l
Hydrogen Sulfide	0	mg/l

Other Properties

Specific Gravity, measured	1.0028	
Specific Gravity, calculated	1.0067	
Resistivity, measured	ND	
Chloride as NaCl	7420	mg/l
Resistivity calculated from NaCl	ND	
Hardness as calcium carbonate	10	mg/l
Conductivity	ND	
Oil & Grease	ND	

Microbiological

Sulfate Reducing Bacteria	ND
Aerobic Bacteria	below 1000 colonies/ml

Approved:

Richard E. Johnson

Wingate 100%

Sample Date:

Lab ID:

Calcium Carbonate Scale Precipitation Calculations

C	F	SI Index	A Index
0	32.0	ND	ND
10.0	50.0	ND	ND
20.0	68.0	ND	ND
25.0	77.0	ND	ND
30.0	86.0	ND	ND
40.0	104	ND	ND
50.0	122	0.03	7.69
60.0	140	0.32	60.7
70.0	158	0.46	80.6
80.0	176	0.77	113
90.0	194	1.02	130

SYSTEM CONDITIONS

---

Sum Cations:	3256 mg/l	145.1 meq/l
Sum Anions:	5325 mg/l	142.8 meq/l
Specific Gravity		1.00
Ionic Strength		0.16 E-05
System pH		6.60
Surface Temperature		0°F
Downhole Temperature		0°F

Approved:

Richard E. Johnson

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse 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.)

1. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		5. <b>LEASE DESIGNATION AND SERIAL NO.</b> U-52333
2. <b>NAME OF OPERATOR</b> MERIDIAN OIL INC.		6. <b>IF INDIAN, ALLOTTEE OR TRIBE NAME</b> N/A
3. <b>ADDRESS OF OPERATOR</b> P. O. Box 1855, Billings, MT 59103		7. <b>UNIT AGREEMENT NAME</b> N/A
4. <b>LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  NESW (1500' FSL - 2500' FWL)		8. <b>FARM OR LEASE NAME</b> Navajo-Federal
14. <b>PERMIT NO.</b> 43-037-31259	15. <b>ELEVATIONS</b> (Show whether DP, RT, GR, etc.) 4889' KB	9. <b>WELL NO.</b> 23-4
		10. <b>FIELD AND POOL, OR WILDCAT</b> Kiva
		11. <b>SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> Section 4-39S-25E
		12. <b>COUNTY OR PARISH</b> San Juan
		13. <b>STATE</b> Utah

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 type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) Convert to Water Injection <input checked="" 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.)\*

Permission to convert well to water injection well as per attached Conversion Procedure.

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

SIGNED *[Signature]* TITLE Sr. Production Engineer DATE 12/15/87

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

\*See Instructions on Reverse Side

Billings, Montana  
October 13, 1987

### CONVERSION PROCEDURE

23-4 Navajo Federal  
Kiva Field  
San Juan, Utah

#### Discussion:

The following is a program to convert the 23-4 Navajo Federal to a water injection well. The subject well is currently producing  $\pm 12$  BOPD and 1 BWPD. The purpose of converting to water injection is to improve the injection-withdrawal ratio of the Kiva Waterflood. The anticipated injection rate into the 23-4 Navajo Federal is approximately 200 BWPD. Based on an injection profile from the 43-5 Navajo Federal (reservoir characteristics similar to 23-4 Navajo Federal), no additional perforations will be added to the 23-4 Navajo Federal. Treatment of the 23-4 Navajo Federal consists of a paraffin solvent job prior to injecting. Based on prior acid treatments (see attached), an additional acid treatment of the subject well has not been included. Your approval of the attached procedure is recommended.

#### Pertinent Data

Location: (1500' FSL, 2500' FWL), NESW Section 4, T39S-R25E  
Elevation: 4877' GL, 4889' KB  
TD: 5860'  
PBDT: 5816', CIBP set at 5760'  
Formation: Ismay  
Perforations: 5776'-5791' (Desert Creek)  
5609'-5618' (Ismay), perforated with 4 jspf  
Present Status: Producing well (rod pump). Well produces  $\pm 12$  BOPD and 1 BWPD. Currently shut-in.

Surface Casing: 37 jts. 36#/ft. 9-5/8" K-55 ST&C casing (1649'). Set at 1646'. Cemented with 420 sx + 2% CaCl<sub>2</sub> + 1/4#/sk D-29 Cellophane Flake. Tail Slurry: 200 sx Class "B" + 2% CaCl<sub>2</sub> + 1/4#/sk D-29 Cellophane flake. 20 bbl. cement returns.

Production Casing:

<u>Jts.</u>	<u>Description</u>	<u>Length</u>	<u>Depth to Top (KB)</u>
85	5-1/2" 17#/ft. J-55 ST&C	3496.00	(-39.00)
	Stage Collar	1.70	3457.00
45	5-1/2" 17#/ft. J-55 ST&C	1852.00	3458.70
1	5-1/2" 17#/ft. J-55 ST&C	11.90	5310.70
12	5-1/2" 17#/ft. J-55 ST&C	493.60	5322.60
	DFFC	1.80	5816.20
1	5-1/2" 17#/ft. J-55 ST&C	41.20	5818.00
	Guide Shoe	1.10	5859.20
TOTAL		5899.30'	5860.30'

Cemented with 450 sx DS "Lite" + 1/4#/sk D-29 Cellophane Flakes followed by 305 sx Class "B" + 1% D-60 Flac + 2% CaCl<sub>2</sub> + 1/4#/sk D-29 Cellophane Flakes.

Tubing Detail:

<u>Jts.</u>	<u>Description</u>	<u>Length</u>	<u>Depth to Top KB</u>
168	2-7/8" 6.5#/ft. J-55 EUE	5523.20	(-12.00)
	Tubing Anchor Catcher	2.80	5511.20
3	2-7/8" 6.5#/ft. J-55 EUE	99.10	5514.00
	2-1/2" Cup Type SN	1.00	5613.10
	Perf Sub - 2-7/8"	3.00	5614.10
1	2-7/8" 6.5#/ft J-55 tubing	32.00	5617.10
	Bull Plug	0.90	5649.10
TOTAL		5662.00'	5650.00'

Rod String:

<u>No.</u>	<u>Description</u>	<u>Length</u>
1	1-1/4" Sprayed Polished Rod	21'
4	7/8" Pony Rods	20'
65	7/8" Trico Grade "D" Rods	1625'
158	3/4" Trico Grade "D" Rods	3950'
1	2-1/2" x 1-1/4" x 16' RHBC Pump	16'
1	1-1/4" x 22' Gas Anchor	22'

Procedure:

- 1.) MIRU. ND wellhead. TOH and LD (65) 7/8" sucker rods, (158) 3/4" sucker rods, pump and gas anchor. NU BOPE with 2-7/8" pipe rams.
- 2.) TOH with 172 jts. 2-7/8" tubing and BHA. LD tubing anchor, SN and perforated sub.
- 3.) PU and TIH with injection packer, 1 jt. 2-7/8" tubing, Baker "R" Nipple, and ±169 jts. of 2-7/8" tubing. Pressure test tubing to 4500 psi while TIH. Reverse circulate 82 bbl. packer fluid containing O<sub>2</sub> scavenger and corrosion control chemical. Set packer at ±5460'. Pressure test backside to 1500 psi. ND BOPE. NU wellhead. RDMO.
- 4.) Prior to injection, mix 20 gal. OTP-45 and 5 gal. WS-8000 in 30 bbl. filtered injection water. Heat paraffin solvent solution to 200°F. Treat Ismay formation as follows:

<u>Stage</u>	<u>Fluid Pumping Schedule</u>	<u>Vol. (BBL)</u>	<u>Cum Vol. (BBL)</u>	<u>Rate (BBL/MIN)</u>	<u>Temp. (°F)</u>
1	Paraffin Solvent	30	30	1.5	200
2	Injection H <sub>2</sub> O	31	61	1.5	200

- 5.) Allow paraffin solvent to soak for ±2 hours. Place well on injection.

K. W. Hudson  
Petroleum Engineer

KWH/dkc/1082S

Approved: T. C. Lechner / 11/20/87  
T. C. Lechner, Regional Production Engineer (date)

Approved: \_\_\_\_\_ / \_\_\_\_\_  
W. G. Brown, Production Superintendent (date)

Approved: \_\_\_\_\_ / \_\_\_\_\_  
J. Pulley, Recompletion Superintendent (date)

TREATING SUMMARY  
23-4 Navajo Federal

TMT Date	Type	Description	Max. Press. (psi)	ISIP (psi)	5 Min. (psi)	10 Min. (psi)	15 min. (psi)	Swab Rate (bbl/hr)
6/15/86	Acid	15% HCl, 1000 gal., (60) 1.3 S.G. Ball Sealers	4000 @ 3 BEM	3850	-	3650	3550	None
6/17/86	Acid	Spot 32 bbl. 28% HCl followed by 39-1/2 bbl. 28% HCl (2960 gal. total). (60) 1.3 S.G. Ball Sealers	4000 @ 3 bbl/min.	3800	3700	3600	3500	1/2 BPH
6/18/86	Acid	11,000 gal. DGA 215. Pumped Acid: 95 bbl. @ 6 BEM Spacer: 95 bbl. @ 5-1/2 BEM Acid: 95 bbl. @ 5-1/2 - 6 BEM Spacer: 95 bbl. @ 6 BEM Acid: 71 bbl. @ 6 BEM Spacer: 98 bbl. @ 6 BEM	3850 4000 3950-3600 3800 3850 4000	3600	-	-	3600	3.4 BPH

TREATING SUMMARY  
23-4 Navajo Federal

TMT Date	Type	Description	Max. Press. (psi)	ISIP (psi)	5 Min. (psi)	10 Min. (psi)	15 min. (psi)	Swab Rate (bbl/hr)
8/22/87	Acid	4200 gal. 25% HCl, Divert with Benzoic Acid Flakes	2400 @ 2 BEM	2000	1200	720	530	Int. Flow 7 BO/9 BW

SUBJECT

23-4 NAVAJO FEDERAL

CALCULATIONS AND DESIGN DATA

PREPARED BY

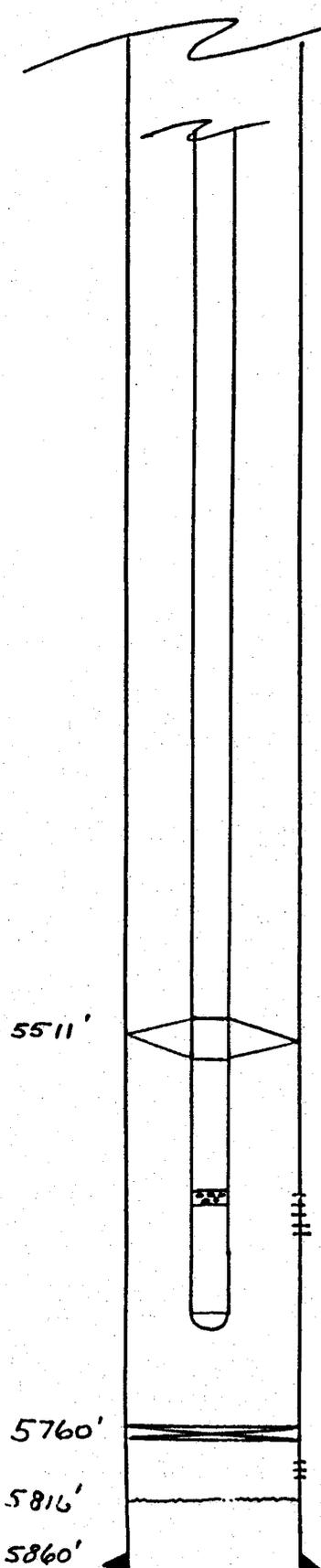
KWH

DATE

10-15-87

SHEET

OF



- 168 JTS 6.5 #/FT J-55 EUE TUBING (5523')
- 65 7/8" TRECO GRADE "D" RODS (1625')
- 158 3/4" TRECO GRADE "D" RODS (3950')

5511'

TUBING ANCHOR CATCHER

ISMAY PERFS : 5609' - 5618'

5760'

CIBP

5816'

← DESERT CREEK PERFS: 5776' - 5791'  
P.B.T.D.

5860'

5 1/2" 17# J-55 STFL CMT W/ 755 SACKS

23-4 Conversion To Injection

EVALUATION FOR AFE

Base Case: Producing Well

13 BOPD                      Constant for 11 years  
   No Gas Sales

Reserves: 52 MBO

Expenses \* 3577/well/month

Waterflood Case: Injection Well

43-5 Injector:    Sept Aug.    10,105 BWI    26 Days    389 BWPD  
   Oct Avg.    10,377 BWI    31 Days    335 BWPD

LOG ANALYSIS

4% Density Porosity CUT-off

43-5     $\phi H = 1.71$   
23-4     $\phi H = 1.86$  (109%)

0% Density Porosity CUT-off

43-5     $\phi H = 3.36$   
23-4     $\phi H = 2.04$  (61%)

Use 60% of 300 BWPD: 180 BWPD

Reservoir Model:    Cumulative Injected    20,783,000 BW

   Cumulative Production    3,193,000 BO

Ratio: 6.5 BW(I) / 1.0 BO(P)

So: 180 BWPD responsible for 2.28 BOPD

Probability of Success: 70%

ECONOMIC SUMMARY

Net Production                      6.6 BOPD  
Reserves                              26.5 MBO

Investment                            25.5 M\$

Profitability at 12% Discount  
Net Cash Flow After Tax            204.3 M\$  
Rate of Return                      28.1 %  
Cash Flow / Investment            8.01  
Payout                                 0.71

POS                                      70%

ok  
1/15/57

STATE OF UTAH  
 DIVISION OF OIL, GAS, AND MINING  
 ROOM 4241 STATE OFFICE BUILDING  
 SALT LAKE CITY, UTAH 84114  
 (801) 533-5771  
 (RULE I-5)

**REC**  
 DEC 21 1987  
 DIV  
 OIL, GAS

FORM NO. DOGM-UIC-1

IN THE MATTER OF THE APPLICATION OF  
MERIDIAN OIL INC.  
 ADDRESS P. O. Box 1855  
Billings, MT ZIP 59103  
 INDIVIDUAL  PARTNERSHIP  CORPORATION   
 FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR  
 INJECT FLUID INTO THE 23-4 WELL  
 SEC. 4 TWP. 39S RANGE 25E  
San Juan COUNTY, UTAH

CAUSE NO. \_\_\_\_\_

ENHANCED RECOVERY INJ. WELL	<input checked="" type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>

APPLICATION

Comes now the applicant and shows the Division the following:

1. That Rule 1-5 (b) 6 authorizes administrative approval of enhanced recovery injections or disposal operations.
2. That the applicant submits the following information.

Lease Name Navajo-Federal	Well No. 23-4	Field Kiva	County San Juan
Location of Enhanced Recovery Injection or Disposal Well <u>NESW</u> Sec. <u>4</u> Twp. <u>39S</u> Rge. <u>25E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input type="checkbox"/> No <input type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>6-14-86</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>1200'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What Oil & Gas
Location of Injection Source(s) <u>42-9 Navajo-Federal SENE Sec. 9-39S-25E</u>	Geologic Name(s) and Depth of Source(s) <u>Wingate Sand 1308-1454</u> <u>Cutler Sand 2205-3106</u>		
Geologic Name of Injection Zone <u>U. Ismay</u>	Depth of Injection Interval <u>5609'</u> to <u>5618'</u> and <u>5776'</u> to <u>5791'</u>		
a. Top of the Perforated Interval: <u>5609'</u>	b. Base of Fresh Water: <u>Wingate 1560'</u>	c. Intervening Thickness (a minus b) <u>4049'</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? <u>YES</u> NO			
Lithology of Intervening Zones <u>Predominately sand stones, shales, limes and anhydrites.</u>			
Injection Rates and Pressures Maximum <u>300</u> B/D <u>3750</u> PSI			
The Names and Addresses of Those To Whom Copies of This Application and Attachments Have Been Sent			
<u>D. E. Overgaard</u>		<u>Bureau of Land Management</u>	
<u>Meridian Oil Inc.</u>		<u>Moab District</u>	
<u>County Road U</u>		<u>P. O. Box 970</u>	
<u>Cortez. CO 81321</u>		<u>Moab, UT 84532</u>	

State of MONTANA)  
 County of YELLOWSTONE)

B. J. Winstead Sr. Staff Engineer  
 Applicant

Before me, the undersigned authority, on this day personally appeared B. J. Winstead known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Suscribed and sworn to before me this 16th day of Dec. 19 87

SEAL

Suzanne S. Nelson

My commission expires February 28, 1990

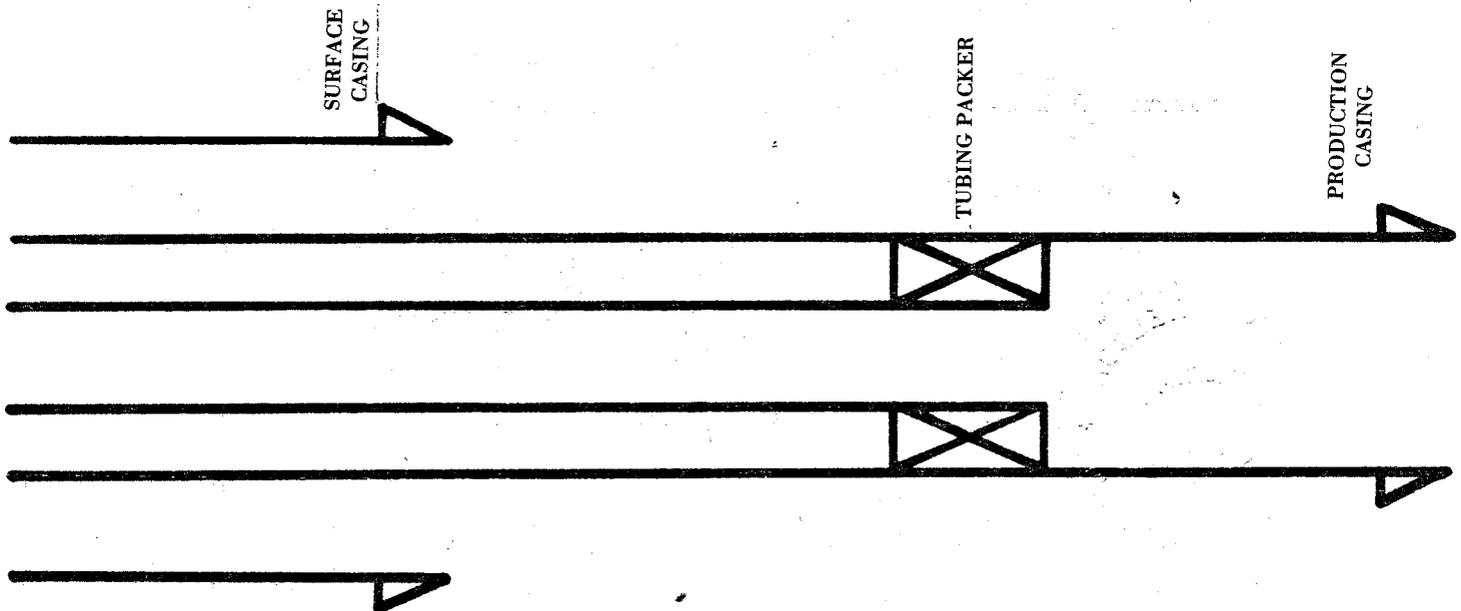
Notary Public in and for Yellowstone County, Montana

1. Attach qualitative and quantitative analysis of fresh water from 2 or more producing wells within 1 mile of injection well showing location of wells and date samples were taken, or statement as to why samples were not submitted. Only fresh water in area is from 42-9 Navajo-Federal (WSW)
2. Attach qualitative and quantitative analysis of representative sample of water to be injected. Attached
3. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within 1/2 mile, together and with name of operator. Attached
4. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division.) Filed
5. Attach Electric or Radioactivity Log of Subject well (if released). Enclosed
6. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval. See Below
7. The original and 6 copies of application, and one complete set of attachments shall be mailed to the Division.
8. Deliver 1 copy of application to landowner on whose land injection well is located and to each operator of a producing leasehold within 1/2 mile of injection well.
9. Affidavit of mailing or delivery shall be filed not later than five days after the application is filed.
10. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county in which the well is located. The Division shall file proof of publication before the application is approved. The notice shall include name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application will be approved administratively.
11. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed September 1st, each year.
12. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
13. If there is less intervening thickness required by Rule I-5 (b) 4 attach sworn evidence and data.

**CASING AND TUBING DATA**

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	13-3/8"	93'	110 sx	Surface	Circ. returns
Intermediate	9-5/8"	1,645'	695 sx	Surface	Circ. returns
Production	5-1/2"	5,860'	1873 sx	3452	Cased hole logs
Tubing	2-7/8"	5,460'	Name - Type - Depth of Tubing Packer Arrowset		
<b>Total Depth</b> 5860'	<b>Geologic Name - Inj. Zone</b> Upper Ismay	<b>Depth - Top of Inj. Interval</b> 5609'	<b>Depth - Base of Inj. Interval</b> 5791'		

SKETCH - SUB-SURFACE FACILITY



Received Dec 21, 1987

UIC CHECKLIST FOR APPLICATION APPROVAL

Federal BLM

43-037-31259

OPERATOR NESW Meridian WELL NUMBER 23-4 (KIVA)  
SEC. 4 T. 39S R. 25E COUNTY San Juan  
API # 43-037-31259

NEW WELL \_\_\_\_\_ DISPOSAL WELL \_\_\_\_\_ ENHANCED RECOVERY WELL

- Plat showing surface ownership Yes submitted No
- Application forms complete Yes  No \_\_\_\_\_
- Schematic of well bore Yes  No \_\_\_\_\_
- Adequate geologic information Yes \_\_\_\_\_ No \_\_\_\_\_
- Rate and Pressure information Yes  No \_\_\_\_\_
- Fluid source Yes  No \_\_\_\_\_
- Analysis of formation fluid Yes submitted No NA
- Analysis of injection fluid Yes  No \_\_\_\_\_
- USDW information Yes  No \_\_\_\_\_
- Mechanical integrity test Yes  No \_\_\_\_\_

- Pending File

Comments: Rate 300 B/D, Pressure 3750

injection zone - Upper Ismay 5609-5618, 5776-5791

no fluid analysis of Ismay

no Plat showing surface ownership

3~~0~~ producing wells

2<sup>H<sub>2</sub>O</sup> Injection wells, 1 gas injection

Reviewed by *[Signature]*

4-1 in Area of review has cement Top at 5068' (should be ok)  
all other wells adequately cemented.

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.)

**RECORDED**  
DEC 23 1987

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection		5. LEASE DESIGNATION AND SERIAL NO. U-52333 POW-13-MC
2. NAME OF OPERATOR MERIDIAN OIL INC.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A 122911
3. ADDRESS OF OPERATOR P. O. Box 1855, Billings, MT 59103		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface NESW (1500' FSL - 2500' FWL)		8. FARM OR LEASE NAME Navajo-Federal
14. PERMIT NO. 43-037-31259		9. WELL NO. 23-4
15. ELEVATIONS (Show whether DF, RT, CR, etc.) 4889' KB		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

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 type="checkbox"/>	(Other) _____	(Other) _____
(Other) Water Injection Line <input checked="" 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. requests permission to lay water injection line from the 23-4 well to the Kiva Central Facility.

Approximately 100' of the 2" steel line will be on surface up the side of the hill and painted a neutral color. Line will cross 12" under Koch Gas Line. Contact Kirk Christensen, Koch Oil Co. 801-548-2216, 24 hrs in advance. Line will be buried 36" deep and follow parallel along existing Koch sales line to the Kiva Central Facility.

Area will be scarified and seeded w/2#/acre Fourwing Saltbrush and 1/2#/acre Yellow sweet clover.

If at any time facilities located on public land authorized by the terms of the lease are no longer included in the lease, the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation determined by the authorized officer.

I hereby certify that the foregoing is true and correct

SIGNED William G. Browne TITLE Production Superintendent DATE 12/18/87

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

**MERIDIAN OIL**

**RECORDED**  
JAN 11 1988

January 8, 1988

**DIVISION OF  
OIL, GAS & MINING**

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

Re: Proposed Water Injection Well  
23-4 Navajo-Federal  
NESW Section 4-39S-25E  
San Juan County, Utah

Dear Mr. Jarvis:

Per your request, enclosed are the following for wells within 1/2 mile of the above referenced well:

Cement Bond Logs  
Completion Reports indicating casing, tubing, etc.

Also enclosed is a Geologic Discussion and a Ownership map for Kiva Field, a copy of Sundry Notice filed for 23-4 requesting permission to convert to water injection, Sundry Notice filed for 42-9 requesting permission to commingle water from Wingate and Cutler Sands and Water Analysis Report for 43-5.

If you have any questions, please call me at 406-256-4122.

Sincerely,



S. S. Nelson  
Sr. Operations Technician

/ssn/1771N

Encl

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUP. .TE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UNIT AGREEMENT NAME

FARM OR LEASE NAME

Navajo Federal

9. WELL NO.

4-1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA

Sec. 4, T-39-S, R-25-E  
SLB&M

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

4862' GL

19. ELEV. CASINGHEAD

4862' GL

23. INTERVALS DRILLED BY

Rotary

25. WAS DIRECTIONAL SURVEY MADE

NO

27. WAS WELL CORED

NO

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.

2. NAME OF OPERATOR

Milestone Petroleum Inc.

3. ADDRESS OF OPERATOR

P. O. Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface 370'S 1940'W

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.)

12-19-84

12-30-84

5-30-85

20. TOTAL DEPTH, MD & TVD 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\*

5827'

5827'

One

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

5771'-5784' (Desert Creek)

5543'-5596' (Upper Ismay)

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR-Sonic, High Resolution Dipmeter, GR-Litho-Den-CNL, CBL-Comp. Laser, Intermountain Geo. Tech, GR-Dual Lateralog-MSFL, Cal,

29. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT FILLED
13 3/8"	48#	211'	17 1/2"	277 cu ft	
8 5/8"	24 & 32#s	3518'	11"	1839 cu ft	
5 1/2"	14 & 15.5#	5825'	7 7/8"	712 cu ft	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	5343'	5343'

31. PERFORATION RECORD (Interval, size and number)

5771-84, 5593-96, 5565-78, 5559, 5551-54, 5543-48; w/2 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5571-5584	13,000 gal 15% Acid / 15,000 gal gel fluid
5543-5593	18,400 gal 15% acid / 26,000 gal gel fluid

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
DC - 1-19-85	Flowing for clean up	Producing					
IS - 5-24-85							
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF	WATER—BBL.	GAS-OIL RATIO
DC - 5-20-85	72	32/64		DC/2810.82	DC/3383	DC/0	DC/1204
IS - 5-30-85				IS/3006.30	IS/2289	IS/0	IS/761
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF	WATER—BBL.	OIL GRAVITY-API (CORR.)	
DC/243	DC/200		DC/936.94	DC/1127	DC/0	DC/40.8	
IS/300	IS/253		IS/1002.1	IS/763	IS/0	IS/41	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

TEST WITNESSED BY

Loren Fothergill

35. LIST OF ATTACHMENTS

CBL & Cement Record

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *[Signature]*

TITLE Drilling Clerk

DATE 6-11-85

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

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.

4-2

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 4, T-39-S, R-25-E  
SLB&M

12. COUNTY OR PARISH

San Juan

13. STATE

UT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other

JAN 11 1988

2. NAME OF OPERATOR

Meridian Oil Inc.

3. ADDRESS OF OPERATOR

PO Box 4289, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 300'S, 2225'E

At top prod. interval reported below

At total depth

CONFIDENTIAL

PERMIT NO. DATE ISSUED

15. DATE SPUDDED 7-24-85 16. DATE T.D. REACHED 8-11-85 17. DATE COMPL. (Ready to prod.) 9-6-85 18. ELEVATIONS (DP, RKB, RT, GR, ETC.)\* 4864' GL 19. ELEV. CASINGHEAD 4864'

20. TOTAL DEPTH, MD & TVD 5825' 21. PLUG, BACK T.D., MD & TVD 5803' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 5524 - 5597' (Upper Ismay) 25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN Dual-Lateralog; MSFL; Sonic; Comp. Neutron; Lithodensity; Dipmeter; Directional log; GR-CCL 27. WAS WELL CORED yes 28. CASING RECORD (Report all strings set in well) yes

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
14"	32.23#	92'	15"	24 sks.	
8 5/8"	32 & 24#	2999'	12 1/4"	1692 cu.ft.	
5 1/2"	15.5#	5825'	7 7/8"	1327 cu.ft.	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5322'	5322'

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL (MD)	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5524-36', 5539-43', 5546-51', 5557-5568', 5571'-82', 5585-92', 5595-5597' w/2 spf		5524-5597'	5000 gal. 15% San-1 acid 28,000 gal. 28% San-1 acid 30,000 gals 40# gel 2,770 gal. flush

33. PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
9-2-85		flowing				shut in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-6-85	24	2"	→	960.73	1890	39	1967
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
300	0	→	960.73	1890	39	41.1	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) vented, to be sold TEST WITNESSED BY L.W. Fothergill

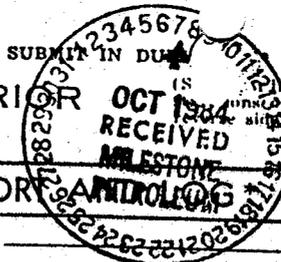
35. LIST OF ATTACHMENTS temp. survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED L. W. Fothergill TITLE Drilling Clerk DATE 10-15-85

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



Form approved,  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT

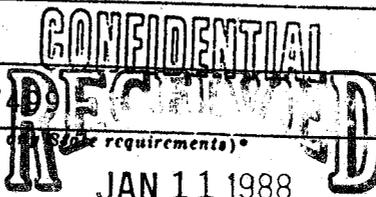
1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PIP'G BACK  DIFF. RENVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Milestone Petroleum

3. ADDRESS OF OPERATOR  
PO Box 4289, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with applicable requirements)\*  
At surface 770'N, 2010'E

At top prod. interval reported below  
At total depth



14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_  
DIVISION OF OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.  
U-52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Federal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.  
9-1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 9, T-39-S, R-25-E

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

15. DATE SPUDDED 7-13-84 16. DATE T.D. REACHED 8-5-84 17. DATE COMPL. (Ready to prod.) 8-22-84 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* (4826' DF) 19. ELEV. CASINGHEAD 4838' GR

20. TOTAL DEPTH, MD & TVD 5823' 21. PLUG, BACK T.D., MD & TVD 5779' 22. IF MULTIPLE COMPL., HOW MANY\* one 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 5519-5586' (Upper Ismay)

25. WAS DIRECTIONAL SURVEY MADE  
26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Induction Dens-Comp. Neutron; Cyberlook; GR Spectro.; Comp. Sonic; 27. WAS WELL CORED yes

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	40#	1525'	12 1/4"	1122 cu.ft.	
5 1/2"	17@15.5	5823'	8 3/4"	2013 cu.ft.	

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	5453'	

31. PERFORATION RECORD (Interval, size and number)

5581-86' w/2 spf. 5561-67',  
5556-58', 5548-52', 5542-45',  
5530-32', 5519-23' w/2 spf.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5519-5586'	2730 gal. 15% acid

33. PRODUCTION

DATE FIRST PRODUCTION 8-22-84 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing for clean up WELL STATUS (Producing or shut-in) shut in

DATE OF TEST 9-13-84 HOURS TESTED 24 CHOKED SIZE 32/64" PROD'N. FOR TEST PERIOD OIL—BBL. 338 GAS—MCF. 372 WATER—BBL. -- GAS-OIL RATIO 1100

FLOW. TUBING PRESS. 75 CASING PRESSURE -0- CALCULATED 24-HOUR RATE OIL—BBL. 338 GAS—MCF. 372 WATER—BBL. -- OIL GRAVITY-API (CORR.) 40.5° API

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) to be sold TEST WITNESSED BY L. W. Fothergill

35. LIST OF ATTACHMENTS  
cementing report and temp. survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Drilling Clerk DATE September 14, 1984

\*(See Instructions and Spaces for Additional Data on Reverse Side)

**CONFIDENTIAL INFORMATION**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

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.  
**4-4**

10. FIELD AND POOL, OR WILDCAT  
**Kiva**

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
**Sec 4-39S-25E**

12. COUNTY OR PARISH  
**San Juan**

13. STATE  
**UT**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP EN  PLUG BACK  DIFF. RESRV.  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)\*  
At surface **NWSW (1980' FNL - 660' FWL)**  
At top prod. interval reported below  
**Same**  
At total depth  
**Same**

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED  
**8-7-85**

15. DATE SPUDDED **8-12-85** 16. DATE T.D. REACHED **8-24-85** 17. DATE COMPL. (Ready to prod.) **3-16-86** 18. ELEVATIONS (DF, RNB, RT, GR, ETC.)\* **4879' GL** 19. ELEV. CASINGHEAD **4892' KB**

20. TOTAL DEPTH, MD & TVD **5843'** 21. PLUG, BACK T.D., MD & TVD **5821'** 22. IF MULTIPLE COMPL., HOW MANY\* **N/A** 23. INTERVALS DRILLED BY ROTARY TOOLS **X** CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
**5513'-5594'** 25. WAS DIRECTIONAL SURVEY MADE  
**No**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**CNLD, BCS, DLM/SFL, Stratigraphic Dipmeter, Perf Depth Record** 27. WAS WELL CORED  
**Yes**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#, 32#	3520'	11"	1194 sxs	None
5-1/2"	15.5#	5843'	7-7/8"	430 sxs	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5484'	5420'

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

5513'-5520', 4 jspf  
5537'-5568', 4 jspf  
5578'-5594', 4 jspf

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5513'-5520'	1000 gal 15% Hcl
5537'-5568'	1000 gal 15% Hcl
5578'-5594'	3000 gal 15% Hcl

33. PRODUCTION

DATE FIRST PRODUCTION **3-16-86** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **Flowing** WELL STATUS (Producing or shut-in) **Producing**

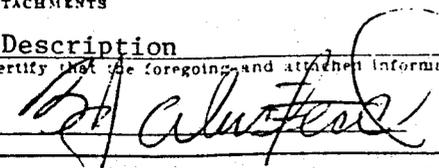
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-16-86	24	32/64"	→	1142	799	0	700

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
325	---	→	1142	799	0	41.5

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **Sold** TEST WITNESSED BY **Jim Burd**

35. LIST OF ATTACHMENTS  
**Core Description**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED  TITLE **Senior Drilling Engineer** DATE **April 4, 1986**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other WATER INJECTION

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  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)  
At surface NENW (330' FNL - 2510' FWL)  
At top prod. interval reported below Same  
At total depth Same

**RECEIVED**  
JAN 11 1988  
DIVISION OF OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.  
U-52333

6. IF INDIAN ALLOTTEE OR TRIBE NAME  
N/A

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Navajo-Federal

9. WELL NO.  
21-9

10. FIELD AND POOL, OR WILDCAT  
Kiva (U. Ismay)

11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA  
Section 9-39S-25E

12. COUNTY OR PARISH  
San Juan

13. STATE  
Utah

14. PERMIT NO. 49-037-31267 DATE ISSUED \_\_\_\_\_

15. DATE SPUDDED 5-3-87 16. DATE T.D. REACHED 5-13-87 17. DATE COMPL. (Ready to prod.) 7-22-87 18. ELEVATIONS (DF. RKB, RT, GR, ETC.)\* 4808' GL 19. ELEV. CASINGHEAD 4818' KB

20. TOTAL DEPTH, MD & TVD 5808' 21. PLUG. BACK T.D., MD & TVD 5680' 22. IF MULTIPLE COMPL. HOW MANY\* N/A 23. INTERVALS DRILLED BY X ROTARY TOOLS X CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
5507' - 5549' (U. Ismay)

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DIL/SFL, DLL/MSFL, BHC/Son/GR/CAL, FDC/CNL

27. WAS WELL CORED  
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	80'	17-1/2"	97 SX	None
9-5/8"	32.3 & 36#	3319'	12-1/4"	1090 SX	None
5-1/2"	17#	5801'	8-3/4"	570 SX	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					2-7/8"	5373'	5406'

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

5732' - 5738'	w/4 jspf	CIBP @ 5700'
5541' - 5549'	w/4 jspf	
5527' - 5538'	w/4 jspf	
5518' - 5524'	w/4 jspf	
5507' - 5514'	w/4 jspf	

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5732' - 5738'	750 gal 15% Hcl
5507' - 5549'	4000 gal 15% Hcl

33.\* PRODUCTION

DATE FIRST PRODUCTION N/A PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Water Injection WELL STATUS (Producing or shut-in) Water Injection Well

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-11-87	24	N/A	→	N/A	N/A	1098	N/A

Inj. FLOW. TUBING PRESS. 2745 CASING PRESSURE 0 CALCULATED 24-HOUR RATE → OIL—BBL. N/A GAS—MCF. N/A WATER—BBL. 1098 OIL GRAVITY-API (CORR.) N/A

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY Dan Sodersten

35. LIST OF ATTACHMENTS \_\_\_\_\_

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED D. P. Harris TITLE Reg. Drilling Engineer DATE 8/18/87

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

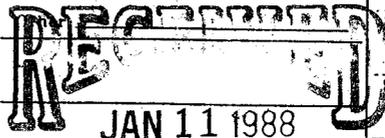
1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other WATER INJECTION

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESER.

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 (1150' FSL - 1110' FWL)  
At top prod. interval reported below Same  
At total depth Same



DIVISION OF  
OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.  
U-52333

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

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Navajo-Federal

9. WELL NO.  
14-4

10. FIELD AND POOL, OR WILDCAT  
Kiva (U. Ismay)

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

14. PERMIT NO. 43-037-31321 DATE ISSUED \_\_\_\_\_

15. DATE SPUDDED 6-1-87 16. DATE T.D. REACHED 6-15-87 17. DATE COMPL. (Ready to prod.) 7-22-87 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 4868' GL 19. ELEV. CASINGHEAD 4881' KB

20. TOTAL DEPTH, MD & TVD 5849' 21. PLUG. BACK T.D., MD & TVD 5761' 22. IF MULTIPLE COMPL. HOW MANY\* N/A 23. INTERVALS DRILLED BY N/A ROTARY TOOLS X CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
5556' - 5614' (U. Ismay) 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
CBL/VDL/GR/CCL, FDC/CNL, DLL/MSFL, BHC/Sonic 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	80'	17-1/2"	90 SX	None
9-5/8"	32.3 & 40#	3300'	12-1/4"	1215 SX	None
5-1/2"	17#	5849'	8-3/4"	669 SX	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8	5396'	5402'

31. PERFORATION RECORD (Interval, size and number)

5605' - 5614'	w/4 jspf
5582' - 5588'	w/4 jspf
5590' - 5592'	w/4 jspf
5569' - 5577'	w/4 jspf
5556' - 5566'	w/4 jspf

32. ACID. SHOT. FRACTURE. CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5605'-5614'	900 gal 15% Hcl
5582'-5592'	800 gal 15% Hcl
5569'-5577'	800 gal 15% Hcl
5556'-5566'	1000 gal 15% Hcl

33. PRODUCTION

DATE FIRST PRODUCTION N/A PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Water Injection WELL STATUS (Producing or shut-in) Water Injection Well

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-12-87	24	N/A	→	N/A	N/A	852	N/A

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
2660	0	→	N/A	N/A	852	N/A

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY Dan Sodersten

35. LIST OF ATTACHMENTS \_\_\_\_\_

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED D.P. Harris TITLE Reg. Drilling Engineer DATE 8/18/87

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**CONFIDENTIAL INFORMATION**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other WATER INJECTION

b. TYPE OF COMPLETION:  
NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.

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 NWSW (2420' FSL-105' FWL) Sec. 4-39S-25E

At top prod. interval reported below NESE (2050' FSL-480' FEL)

At total depth Same

Sec. 5-39S-25E

14. PERMIT NO. 43-037-31317  
DATE ISSUED 6-24-87

DIVISION OF  
GAS & MINING

**RECEIVED**  
JAN 11 1988

5. LEASE DESIGNATION AND SERIAL NO.

U-58728

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

N/A

FARM OR LEASE NAME

Navajo

WELL NO.

43-5

10. FIELD AND POOL, OR WILDCAT

Kiva

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Section 5-39S-25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

15. DATE SPUDDED 7-3-87  
16. DATE T.D. REACHED 7-22-87  
17. DATE COMPL. (Ready to prod.) 9-5-87  
18. ELEVATIONS (OF. RKB, RT, OR, ETC.)\* 4855' GL (graded)  
19. ELEV. CASINGHEAD 4865' KB

20. TOTAL DEPTH, MD & TVD 6042'  
21. PLUG, BACK T.D., MD & TVD 5950'  
22. IF MULTIPLE COMPL., HOW MANY\*  
23. INTERVALS DRILLED BY  
ROTARY TOOLS  
CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
5747'-5781', 5784'-5792'  
25. WAS DIRECTIONAL SURVEY MADE  
Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DIL/MSFL/CAL/GR, FDC/CNL, SONIC/GR, CBL-VDL/GR/CCL  
27. WAS WELL CORED  
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	82'	17-1/2"	90 sxs "B"	None
9-5/8"	32.3 & 36#	3399'	12-1/4"	1325 sxs "B"	None
7"	23#	6041'	8-3/4"	440 sxs "B"	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
N/A					SIZE 2-7/8" DEPTH SET (MD) 5601.23' PACKER SET (MD) 5601.23'

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5964'-5977', 4 jspf, 52 holes	
5784'-5792', 4 jspf, 32 holes	
5767'-5781', 4 jspf, 56 holes	
5747'-5766', 4 jspf, 76 holes	
5964'-5977'	3500 gal 15% HCL
5964'-5977'	10,000 gal 28% HCL
5950'	CIBP
5747'-5792'	4200 gal 28% HCL

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
N/A	Water Injection	Water Injection Well					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL---BBL.	GAS---MCF.	WATER---BBL. AVG	GAS-OIL RATIO
9-15/9-21-87	7 Day Avg.	N/A	→	N/A	N/A	742 BPD	N/A
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL---BBL.	GAS---MCF.	WATER---BBL.	OIL GRAVITY-API (CORR.)	
3750	N/A	→	N/A	N/A	742 BPD Avg.	N/A	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
N/A  
TEST WITNESSED BY  
Daniel A. Sodersten

35. LIST OF ATTACHMENTS  
Magnetic Directional Survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED J.R. Hawn TITLE Reg. Drilling Engineer DATE 9-25-87

\*(See Instructions and Spaces for Additional Data on Reverse Side)

STATE OF UTAH  
 DIVISION OF OIL, GAS, AND MINING  
 ROOM 4241 STATE OFFICE BUILDING  
 SALT LAKE CITY, UTAH 84114  
 (801) 533-5771  
 (RULE I-5)

FORM NO. DOGM-UIC-1

IN THE MATTER OF THE APPLICATION OF  
 MERIDIAN OIL INC.

CAUSE NO. \_\_\_\_\_

ADDRESS P. O. Box 1855  
Billings, MT ZIP 59103  
 INDIVIDUAL  PARTNERSHIP  CORPORATION   
 FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR  
 INJECT FLUID INTO THE 23-4 WELL  
 SEC. 4 TWP. 39S RANGE 25E  
San Juan COUNTY, UTAH

ENHANCED RECOVERY INJ. WELL	<input checked="" type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>

APPLICATION

- Comes now the applicant and shows the Division the following:
1. That Rule 1-5 (b) 6 authorizes administrative approval of enhanced recovery injections or disposal operations.
  2. That the applicant submits the following information.

Lease Name <u>Navajo-Federal</u>	Well No. <u>23-4</u>	Field <u>Kiva</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>NESW</u> Sec. <u>4</u> Twp. <u>39S</u> Rge. <u>25E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>6-14-86</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>1200'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What <u>Oil &amp; Gas</u>
Location of Injection Source(s) <u>42-9 Navajo-Federal SENE Sec. 9-39S-25E</u>	Geologic Name(s) and Depth of Source(s) <u>Wingate Sand 1308-1454</u> <u>Cutler Sand 2205-3106</u>		
Geologic Name of Injection Zone <u>U. Ismay</u>		Depth of Injection Interval <u>5609'</u> to <u>5618'</u> and <u>5776'</u> to <u>5791'</u>	
a. Top of the Perforated Interval: <u>5609'</u>	b. Base of Fresh Water: <u>Wingate 1560'</u>	c. Intervening Thickness (a minus b) <u>4049'</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? <u>YES</u> NO			
Lithology of Intervening Zones <u>Predominately sand stones, shales, limes and anhydrites.</u>			
Injection Rates and Pressures Maximum <u>300</u> B/D <u>3750</u> PSI			
The Names and Addresses of Those To Whom Copies of This Application and Attachments Have Been Sent			
<u>D. E. Overgaard</u>		<u>Bureau of Land Management</u>	
<u>Meridian Oil Inc.</u>		<u>Moab District</u>	
<u>County Road U</u>		<u>P. O. Box 970</u>	
<u>Cortez. CO 81321</u>		<u>Moab, UT 84532</u>	

State of MONTANA)  
 County of YELLOWSTONE)

B. J. Winstead Sr. Staff Engineer  
 Applicant

Before me, the undersigned authority, on this day personally appeared B. J. Winstead  
 known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Suscribed and sworn to before me this 16th day of Dec. 19 87

SEAL

My commission expires February 28, 1990

Jessie S. Nelson  
 Notary Public in and for Yellowstone County, Montana

(OVER)

Operator

Meridian Oil Inc

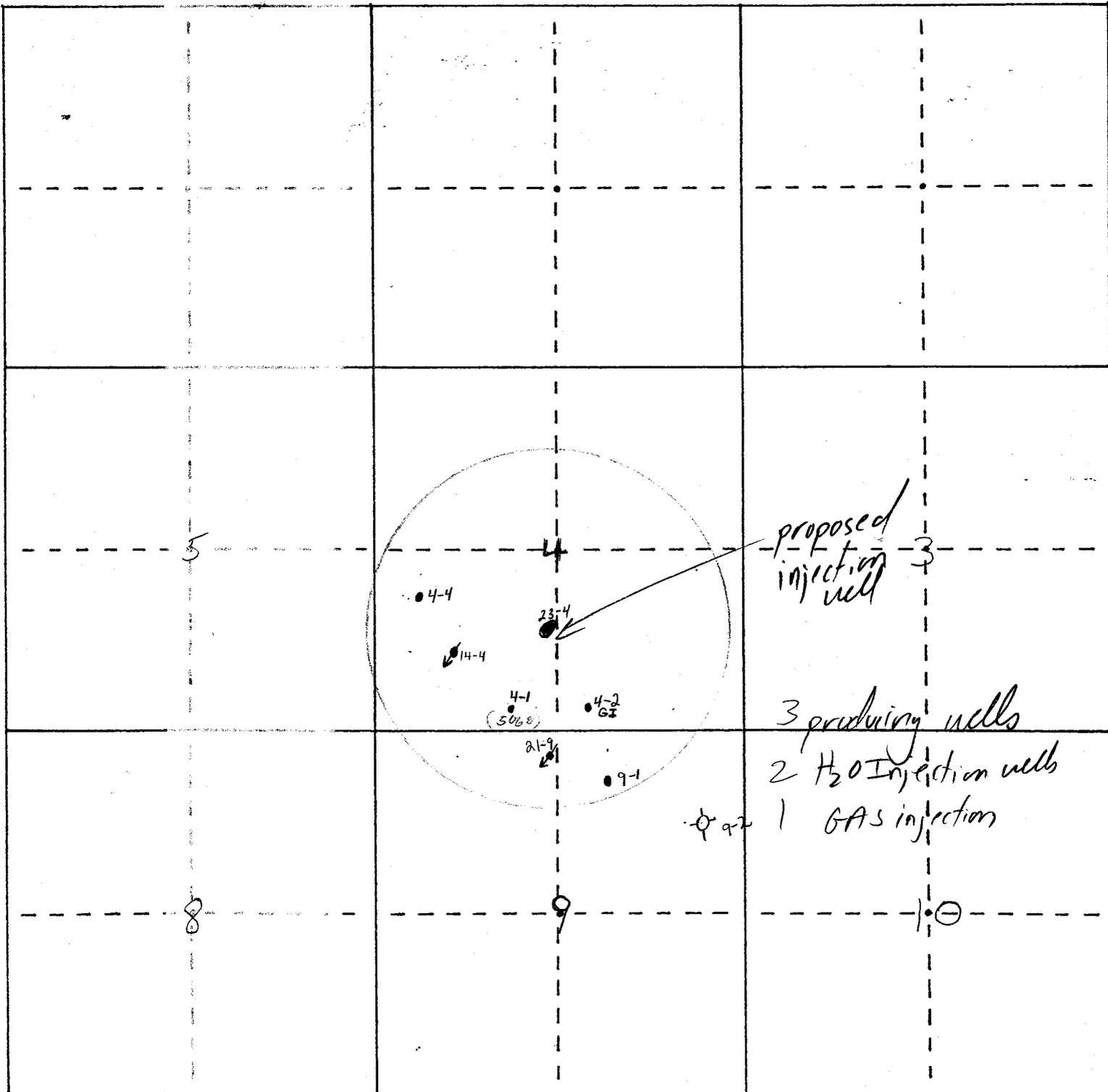
Well

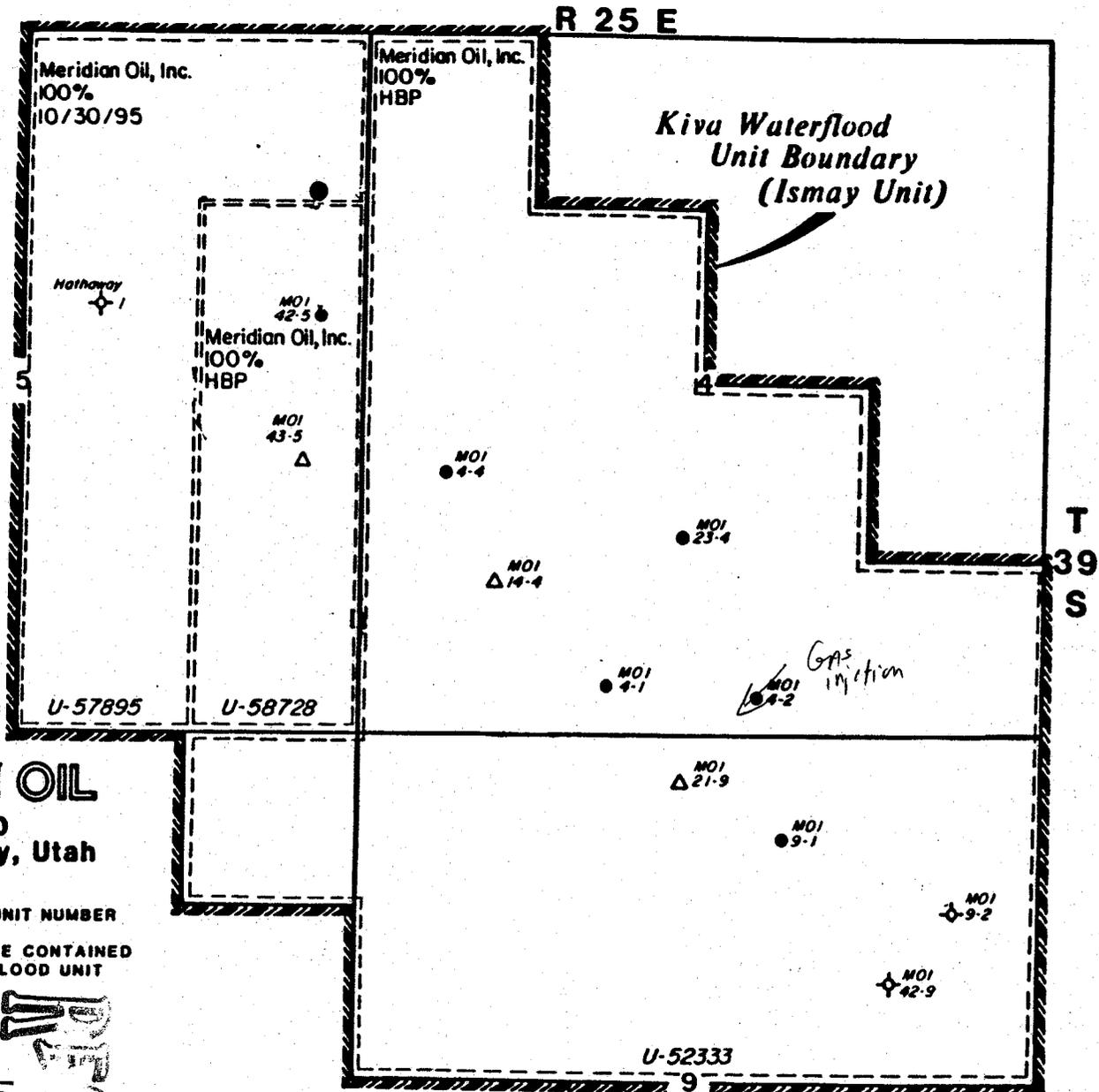
Navajo Federal 23-4

Location

NESW Sec 4, T39S, R. 25E.

San Juan County





**MERIDIAN OIL**  
**KIVA FIELD**  
**San Juan County, Utah**

U-XXXXX FEDERAL LEASE UNIT NUMBER  
 - - - - - FEDERAL ACREAGE CONTAINED  
 IN KIVA WATERFLOOD UNIT

**RECEIVED**  
 JAN 11 1988  
 DIVISION OF  
 OIL, GAS & MINING

LEASE OWNERSHIP

## DISCUSSION

### GEOLOGY

Kiva Field is located in sections 4, 5, and 9 of T39S-R25E of San Juan County, Utah. The field, discovered in August 1984, is approximately 30 miles north-northwest of the Four Corners Area formed by Colorado, Utah, New Mexico and Arizona (see Figure 1). It is located on the southwestern shelf of the Paradox Basin. Kiva Field produces oil and associated gas from Middle Pennsylvanian (Des Moinesian) age carbonate buildups in the Upper Ismay and Lower Desert Creek zones of the Paradox Formation. Regional dip in the area is to the southwest at 80' per mile.

Kiva Field is a northwest-southeast trending carbonate stratigraphic trap. The trap is formed by a lithologic change within the Upper Ismay zone from a limestone and dolomite reservoir facies to a thick offmound anhydrite facies as seen in the Hathaway #1 Glasco in 5-T39S-R25E, and the two Navajo Federal wells in 9-T39S-R25E: 9-2 and 42-9. No water contact has been established at Kiva Field.

The primary reservoir is a series of stacked phylloid algal mounds and dolomite drapes within the Upper Ismay zone of the Paradox Formation.

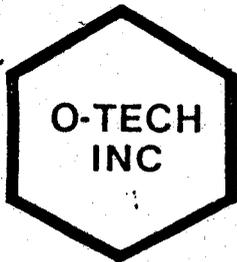
The Upper Ismay reservoir consists of medium to light gray and brown, bioclastic, phylloid algal, lime wackestone to packstone. Porosity in this algal mound facies is dominated by vugs formed by dissolution of bioclasts, algal blades, carbonate cements and micrite matrix. The vugular porosity is enhanced by the presence of intercrystalline and interparticle porosity. Interlayered through the algal limestones are brown, anhydritic to argillaceous, very fine crystalline porous dolomites.

The gross thickness of the Upper Ismay zone averages 140' thick in the vicinity of Kiva Field. The reservoir zone within the Upper Ismay averages 81' thick in the field compared with the equivalent offmound section of 28' thick. The reservoir is capped by a dense nodular anhydrite which averages 30' thick across the producing reservoir and expands to an average 65' thick in the offmound position.

Underlying the Upper Ismay is the Hovenweep Shale. An average of 27' of dark gray to black, calcareous, argillaceous, sapropelic dolomite/shale underlies the mound. The Hovenweep averages 17' in the offmound wells.

An additional porosity zone is developed within the Lower Desert Creek zone of the Paradox Formation in the Navajo Federal 4-1 well. The 14' zone was a brown to medium gray,

earthy, crypto-microcrystalline, argillaceous dolomite. Good pinpoint vugular porosity and fair intercrystalline porosity was present. The porous zone is capped by 14' of Lower Desert Creek anhydrite. It should be noted that only the Upper Ismay zone is being unitized for secondary recovery as the Desert Creek has only tested productive in one well. The 4-1 is dually completed in both zones.



# O-TECH, INC.

Meridian Oil Company

Cutler 100%

Sample Date:

Lab ID:

## Oilfield Chemical Technology

P.O. Box 31272 • Billings, Montana 59107 • Phone (406) 245-4341

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Potassium	ND	ND	Sulfate	1640.00	34.14
Sodium	7182.00	312.40	Chloride	11620.0	327.75
Calcium	1188.00	59.28	Carbonate	0	0
Magnesium	104.00	8.62	Bicarbonate	58.00	0.95
Total Iron	41.00	1.47	Hydroxide	0	0
Diss. Iron	ND	ND	Silica	ND	ND
Barium	ND	ND		0	0
Strontium	ND	ND		0	0
Sum +	8515.0	381.70	Sum -	13318	362.80

### Solids

TDS @ 180C	8870	mg/l
Total Solids, Calc less CO <sub>3</sub>	21800	mg/l
Total Solids, Calc	21800	mg/l
Total Solids, NaCl equiv	20900	mg/l
Suspended Solids, Total	ND	
Suspended Solids, Solvent	ND	
Suspended Solids, acid soluble	ND	

### System Conditions

System Operation	Normal
Sample Temperature, 'F	75.00
Sample pH	7.10

### Dissolved Gassed

Dissolved Oxygen	ND	
Carbon Dioxide	2	mg/l
Hydrogen Sulfide	0	mg/l

### Other Properties

Specific Gravity, measured	1.0069	
Specific Gravity, calculated	1.0161	
Resistivity, measured	ND	
Chloride as NaCl	19200	mg/l
Resistivity calculated from NaCl	ND	
Hardness as calcium carbonate	10	mg/l
Conductivity	ND	
Oil & Grease	ND	

### Microbiological

Sulfate Reducing Bacteria	ND
Aerobic Bacteria	below 1000 colonies/ml

Approved:

Serving The Petroleum Industry Thru Applied Technology

Richard E. Johnson

Wingate 100%  
 Sample Date:  
 Lab ID:

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Potassium	ND	ND	Sulfate	541.00	11.26
Sodium	2858.00	124.32	Chloride	4500.00	126.93
Calcium	288.00	14.37	Carbonate	0	0
Magnesium	55.00	4.56	Bicarbonate	284.00	4.64
Total Iron	55.00	1.97	Hydroxide	0	0
Diss. Iron	ND	ND	Silica	ND	ND
Barium	ND	ND		0	0
Strontium	ND	ND		0	0
Sum +	3256.0	145.10	Sum -	5325.0	142.80

Solids

TDS @ 180C	3460	mg/l
Total Solids, Calc less CO3	8440	mg/l
Total Solids, Calc	8580	mg/l
Total Solids, NaCl equiv	8070	mg/l
Suspended Solids, Total	ND	
Suspended Solids, Solvent	ND	
Suspended Solids, acid soluble	ND	

System Conditions

System Operation	Normal
Sample Temperature, 'F	75.00
Sample pH	6.60

Dissolved Gassed

Dissolved Oxygen	ND	
Carbon Dioxide	2	mg/l
Hydrogen Sulfide	0	mg/l

Other Properties

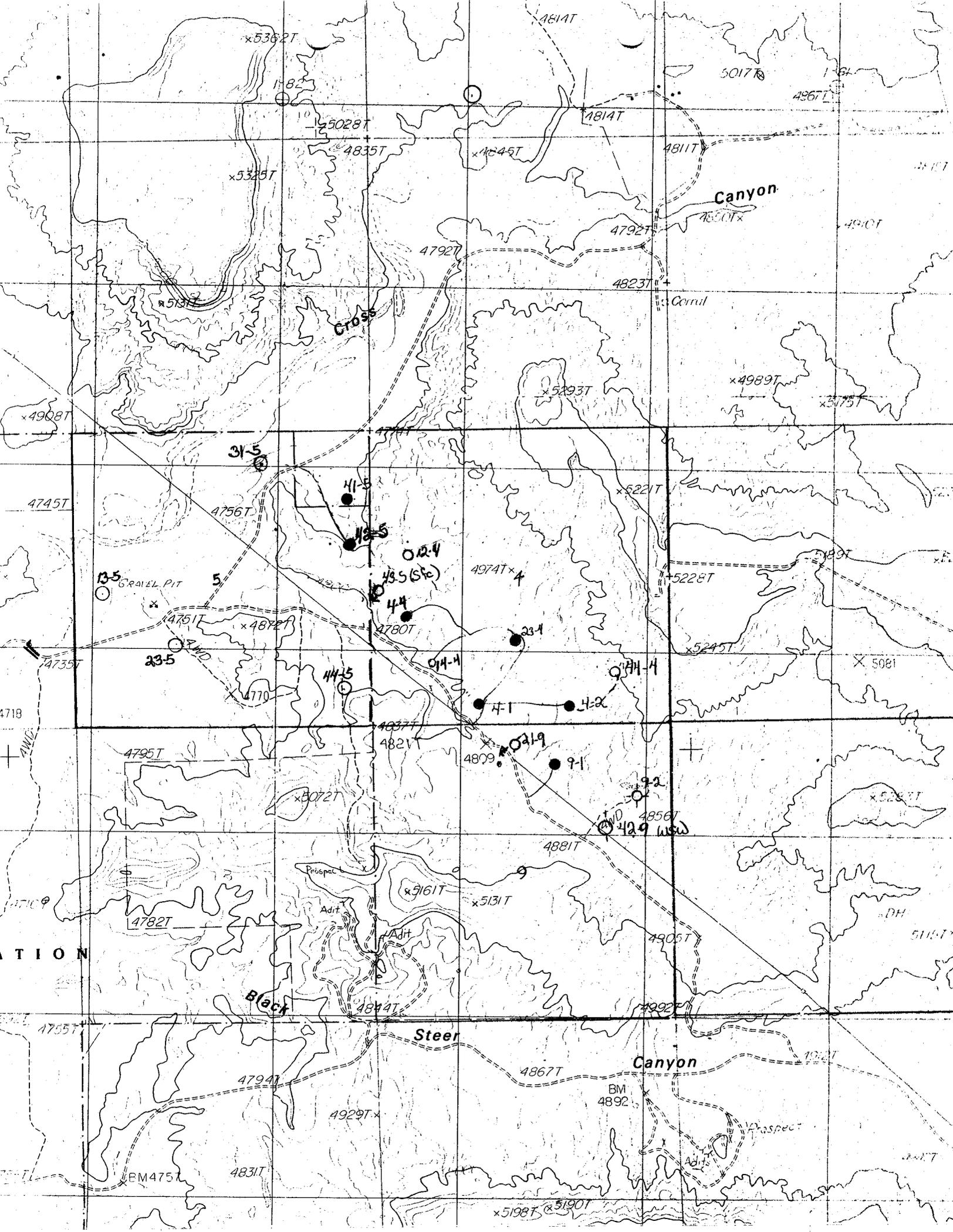
Specific Gravity, measured	1.0028	
Specific Gravity, calculated	1.0067	
Resistivity, measured	ND	
Chloride as NaCl	7420	mg/l
Resistivity calculated from NaCl	ND	
Hardness as calcium carbonate	10	mg/l
Conductivity	ND	
Oil & Grease	ND	

Microbiological

Sulfate Reducing Bacteria	ND
Aerobic Bacteria	below 1000 colonies/ml

Approved:

Richard E. Johnson





ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325

RECEIVED  
JAN 11 1988

DEPT. OF  
OIL, GAS & MINING

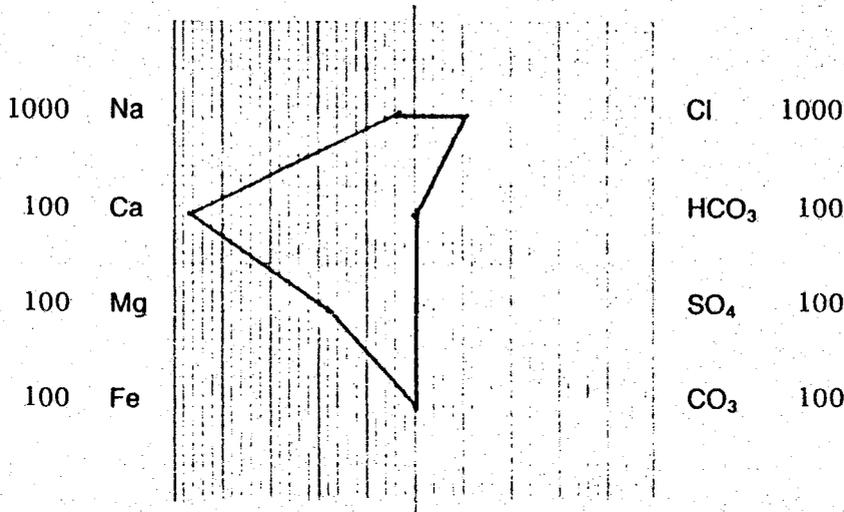
# WATER ANALYSIS REPORT

Lab. No. 87-10490

Field Kiva County San Juan State Utah  
 Well No. 43-5 Navajo Federal Location 2420 FSL, 105 FWL Sec. 4-39S-25E  
 Formation Ismay Depths 5,747-81' 5,784-92'  
 Operator Meridian Oil Company Date Sampled 8/21/87  
 DST. No. \_\_\_\_\_ Sample From Separator Date Submitted 8/25/87  
 Hydrogen Sulfide: Present \_\_\_\_\_ Absent X Other Data \_\_\_\_\_ Date Reported 8/26/87  
Yellow, turbid sample with colorless clear filtrate.

CATIONS	mg/l	meq/l	ANIONS	mg/l	meq/l
Potassium	2,540	65.0	Sulfate	365	7.60
Sodium	45,000	1,960	Chloride	182,000	5,140
Calcium	46,400	2,320	Carbonate	0	0
Magnesium	11,100	912	Bicarbonate	0	0

WATER ANALYSIS PATTERN  
Scale meq/l Per Unit

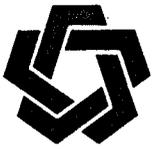


Total Dissolved Solids, mg/l 288,000 Resistivity @ 68°F, ohms/meter<sup>3</sup> 0.050  
 Chloride as NaCl, mg/l 301,000 Specific Gravity @ 60/60°F 1.185  
 pH 4.2 Cation-Anion Balance, % Diff. 0.95

NOTE: Milligrams/liter (mg/l) approximately equivalent to ppm. meq/l = milliequivalents per liter.

REMARKS: cc: Meridian Oil Co., Steve Cruickshank, Box 1855, Billings, Mt.  
 Meridian Oil Co., Dan Soderston, Box 1855, Billings, Mt.  
 Meridian Oil Co., Kyle Hudson, Box 1855, Billings, Mt.





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

January 13, 1988

San Juan Record  
Legal Advertising  
P.O. Box 879  
937 East Highway 666  
Monticello, Utah 84535

Gentlemen:

RE: Cause No. UIC-105

Enclosed is a Notice of Application of Administrative Approval before the Division of Oil, Gas and Mining, Department of Natural Resources, State of Utah.

It is requested that this notice be published ONCE ONLY, as soon as possible, but no later than the 20th day of January. In the event that said notice cannot be published by this date, please notify me immediately by calling 538-5340.

Upon completion of this request, please send proof of publication and statement of cost to the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203.

Sincerely,

A handwritten signature in cursive script that reads "Marjorie L. Anderson".

Marjorie L. Anderson  
Administrative Assistant

mfp

Enclosure



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

January 13, 1988

Newspaper Agency Corporation  
Legal Advertising  
157 Regent Street  
Salt Lake City, Utah 84110

Gentlemen:

RE: Cause No. UIC-105

Enclosed is a Notice of Application of Administrative Approval before the Division of Oil, Gas and Mining, Department of Natural Resources, State of Utah.

It is requested that this notice be published ONCE ONLY, as soon as possible, but no later than the 20th day of January. In the event that said notice cannot be published by this date, please notify me immediately by calling 538-5340.

Upon completion of this request, please send proof of publication and statement of cost to the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203.

Sincerely,

A handwritten signature in cursive script that reads "Marjorie L. Anderson".

Marjorie L. Anderson  
Administrative Assistant

mfp

Enclosure

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH

---oo0oo---

IN THE MATTER OF THE APPLICATION :  
OF MERIDIAN OIL INC. FOR :  
ADMINISTRATIVE APPROVAL OF THE :  
NAVAJO FEDERAL #23-4 WELL : CAUSE NO. UIC-105  
LOCATED IN SECTION 4, TOWNSHIP :  
39 SOUTH, RANGE 25 EAST, :  
S.L.M., SAN JUAN COUNTY, UTAH, :  
AS A CLASS II INJECTION WELL :

---oo0oo---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED  
MATTER.

Notice is hereby given that Meridian Oil Inc. has requested  
administrative approval of the Navajo Federal #23-4 well located  
in Section 4, Township 39 South, Range 25 East, S.L.M., San Juan  
County, Utah, as a Class II injection well.

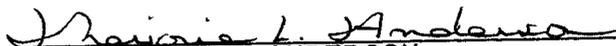
The proposed operating data for the wells is as follows:

INJECTION INTERVAL: Paradox Formation 5609' to 5791'  
MAXIMUM SURFACE PRESSURE: 3750 psig  
MAXIMUM INJECTION RATE: 300 bwpd

Administrative approval of this application will be granted,  
unless objections are filed within fifteen days after publication of  
this notice. Objections should be mailed to the Division of Oil, Gas  
and Mining, Attention: UIC Program Manager, 3 Triad Center, Suite 350,  
355 West North Temple, Salt Lake City, Utah 84180-1203.

DATED this 13th day of January, 1988.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

  
MARJORIE L. ANDERSON  
Administrative Assistant

Publication Was Sent To The Following:

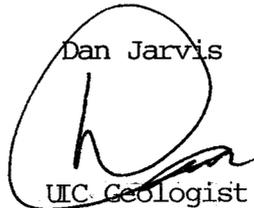
Medidian Oil Inc.  
175 North 27th Street  
P.O. Box 1855  
Billings, MT 59103

Bureau of Land Management  
Moab District  
P.O. Box 970  
Moab, UT 84532

U.S. Environmental Protection Agency  
Region VIII  
Attention: Mike Strieby  
999 18th Street  
Denver, CO 80202

Newspaper Agency Corporation  
Legal Advertising  
143 South Main Street  
Salt Lake City, UT 84111

San Juan Record  
Legal Advertising  
P.O. Box 879  
Monticello, UT 84535

Dan Jarvis  
  
UIC Geologist

143 SOUTH MAIN ST.  
P.O. BOX 45838  
SALT LAKE CITY, UTAH 84145  
FED. TAX I.D. # 87-0217663

Newspaper Agency Corporation

The Salt Lake Tribune

DESERET NEWS

MORNING & SUNDAY

EVENING & SUNDAY

# Affidavit of Publication

STATE OF UTAH }  
County of Salt Lake } ss.

I, Raylene Vigil Hereby certify that the attached advertisement of BEFORE THE DIVISION OF OIL, GAS AND MINING for STATE OF UT NAT'L RES was published by the NEWSPAPER AGENCY CORPORATION, AGENT FOR THE SALT LAKE TRIBUNE and DESERET NEWS, daily newspapers printed in the English language with general circulation in Utah, and published in Salt Lake City, Salt Lake County in the State of Utah.

PUBLISHED ON JAN 23 1988

SUBSCRIBED AND SWORN TO BEFORE ME THIS 24TH DAY OF JANUARY 19 88

BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH CAUSE NO. UIC 105

IN THE MATTER OF THE APPLICATION OF MERIDIAN OIL INC. FOR ADMINISTRATIVE APPROVAL OF THE NAVAJO FEDERAL #23-4 WELL LOCATED IN SECTION 4, TOWNSHIP 39 SOUTH, RANGE 25 EAST, S.L.M. SAN JUAN COUNTY, UTAH, AS A CLASS II INJECTION WELL.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that Meridian Oil Inc. has requested administrative approval of the Navajo Federal #23-4 well located in Section 4, Township 39 South, Range 25 East, S.L.M., San Juan County, Utah, as a Class II injection well.

The proposed operating data for the wells is as follows:

INJECTION INTERVAL: Paradox Formation 560' to 579'

MAXIMUM SURFACE PRESSURE: 3750 psig

MAXIMUM INJECTION RATE: 300 bwpd

Administrative approval of this application will be granted, unless objections are filed within fifteen days after publication of this notice. Objections should be mailed to the Division of Oil, Gas and Mining, Attention: UIC Program Manager, 3 Triad Center, Suite 350, 355 West North Temple, Salt Lake City, Utah 84180-1203.

DATED this 13th day of January, 1988.

STATE OF UTAH DIVISION OF OIL, GAS AND MINING

BY: MARJORIE L. ANDERSON ADMINISTRATIVE ASSISTANT

Y-10

[Signature]

NOTARY PUBLIC

MARCH 1, 1988

COMMISSION EXPIRES

RESIDING IN SALT LAKE COUNTY

## LEGAL ADVERTISING INVOICE

ACCOUNT NAME	AD NUMBER	TELEPHONE			
OF UT NAT'L RES	Y-10	801-538-5340			
SCHEDULE		MISC. CHARGES			
O JAN 23 1988		.00			
CAPTION	SIZE	TIMES	RATE	AD CHARGE	
BEFORE THE DIVISION OF OIL,	55 LINES	1	1.29	70.95	
<b>DUE AND PAYABLE ON RECEIPT OF THIS INVOICE FOR BILLING INFORMATION CALL 801-237-2796</b>				<b>TOTAL AMOUNT DUE</b>	<b>70.95</b>

TO INSURE PROPER CREDIT

**PLEASE RETURN THIS PORTION**

WITH YOUR PAYMENT IN THE ENCLOSED ENVELOPE MAKE CHECKS PAYABLE TO:

**NEWSPAPER AGENCY CORPORATION**

(PLEASE WRITE YOUR ACCOUNT NUMBER ON YOUR CHECK)

BILL TO:  
STATE OF UT NAT'L RES  
3 TRIAD CIR., SUITE 350  
S.L.C. UT 84180

ACCOUNT NUMBER	BILLING DATE
LE-5385340	01/24/88
AD NUMBER	PAY THIS AMOUNT
Y-10	70.95

# AFFIDAVIT OF PUBLICATION

## Public notice

BEFORE THE DIVISION OF OIL, GAS AND MINING, DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

IN THE MATTER OF THE APPLICATION OF MERIDIAN OIL INC. FOR ADMINISTRATIVE APPROVAL OF THE NAVAJO FEDERAL #23-4 WELL LOCATED IN SECTION 4, TOWNSHIP 39 SOUTH, RANGE 25 EAST, S.L.M., SAN JUAN COUNTY, UTAH, AS A CLASS II INJECTION WELL.

\*\*\*

CAUSE NO. UIC-105

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that Meridian Oil Inc. has requested administrative approval of the Navajo Federal #23-4 well located in Section 4, Township 39 South, Range 25 East, S.L.M., San Juan County, Utah, as a Class II injection well.

The proposed operating data for the wells is as follows:

INJECTION INTERVAL: Paradox Formation 5609' to 5791'

MAXIMUM SURFACE PRESSURE: 3750 psig

MAXIMUM INJECTION RATE: 300 bwpd

Administrative approval of this application will be granted, unless objections are filed within fifteen days after publication of this notice. Objections should be mailed to the Division of Oil, Gas and Mining, Attention: UIC Program Manager, 3 Triad Center, Suite 350, 355 West North Temple, Salt Lake City, Utah 84180-1203.

DATED this 13th day of January, 1988.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
s/Marjorie L. Anderson  
Administrative Assistant

Published in The San Juan Record  
January 20, 1988.

I, Joyce Martin, being duly sworn, do hereby affirm and say that I am the publisher of **The San Juan Record**, a weekly newspaper of general circulation published at Monticello,

Utah every Wednesday; that notice of application, Cause No. \_\_\_\_\_

UIC-105

a copy of which is hereunto attached, was published in the regular and entire issue of each number of said newspaper for a period of one issues, the first publication having been made on January 20, 1988. and the last publication having been made on \_\_\_\_\_.

Joyce A. Martin  
Publisher

Subscribed and sworn to before me this 20th day of January,

A.D. 1988

Robert B. Johnson  
Notary Public residing at Monticello, Utah

My commission expires December 2, 1991



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

February 22, 1988

Meridian Oil Inc.  
175 North 27th Street  
P.O. Box 1855  
Billings, MT 59103

Gentlemen:

Re: Navajo Federal #23-4, well located in Section 4, Township 39 South, Range 25 East, S.L.M., San Juan County, Utah

In accordance with Rule R615-5-3(3), Oil and Gas Conservation General Rules, administrative approval for the referenced Class II injection well is granted.

The following actions are necessary to fully comply with this approval:

- 1) Compliance with the UIC requirements for operation, maintenance and reporting for Class II injection wells.
- 2) Conformance with all conditions of the submitted application.

If you have any questions regarding this approval or the necessary requirements, please contact this office.

Best regards,

Dianne R. Nielson  
Director

djj  
7627U

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

File ✓

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other Water Injection

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESRV.

**RECORDED**  
MAR 25 1988

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 or Federal requirements)  
At surface NESW (1500' FSL - 2500' FWL)  
At top prod. interval reported below Same  
At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.  
U-52333 POW/IS-DC

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A 032810

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Navajo-Federal

9. WELL NO.  
23-4

10. FIELD AND POOL, OR WILDCAT  
Kiva

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

14. PERMIT NO. 43-037-31259 DATE ISSUED 4-18-86

12. COUNTY OR PARISH San Juan 13. STATE Utah

15. DATE SPUNDED 5-6-86 16. DATE T.D. REACHED 5-25-86 17. DATE COMPL. (if ready to produce) 3-9-88 Injecting 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)\* 4877' GL 19. ELEV. CASINGHEAD 4889'

20. TOTAL DEPTH, MD & TVD 5860' 21. PLUG. BACK T.D., MD & TVD 5816' 22. IF MULTIPLE COMPL., HOW MANY\* N/A 23. INTERVALS DRILLED BY → ROTARY TOOLS X CABLE TOOLS -----

24. PRODUCTIONS INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Injecting 5609' - 5618' Ismay

25. WAS DIRECTIONAL SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
None

27. WAS WELL CORRED  
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1646'	12-1/4"	620 sxs	-----
5-1/2"	17#	5860'	8-3/4"	755 sxs	-----

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	5481'	5481'

31. PERFORATION RECORD (Interval, size and number)  
None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<u>None</u>	

33.\* PRODUCTION

DATE FIRST PRODUCTION: 3-2-88 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Injecting WELL STATUS (Producing or shut-in) Injecting

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<u>3-2-88</u>	<u>24</u>	<u>-----</u>	<u>→</u>	<u>-----</u>	<u>-----</u>	<u>400</u>	<u>-----</u>

PLUG/TUBING PRESS. Injecting 3725 CASING PRESSURE 0 CALCULATED 24-HOUR RATE → OIL—BBL. 0 GAS—MCF. 0 WATER—BBL. 400 OIL GRAVITY-API (CORR.) N/A

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) N/A TEST WITNESSED BY Dave Overgaard

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED WA Brauer TITLE Production Superintendent DATE 3-17-88

\*(See Instructions and Spaces for Additional Data on Reverse Side)

FORM 3160-5  
December 1989

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. Lease Designation and Serial No.  
U-52333

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals

6. If Indian, Allottee or Tribe Name  
N/A

1. Type of Well      Oil                  Gas  
                         Well XX              Well                  Other

7. If Unit or CA, Agreement Designation  
N/A

2. Name of Operator  
MERIDIAN OIL INC.

8. Well Name and No.  
Navajo Federal 23-4

3. Address and Telephone No.  
5613 DTC PARKWAY; ENGLEWOOD, CO 80111      (303) 930-9300

9. API Well No.  
43-037-31259

4. Location of Well (Footage, Sec., T.R.M. or Survey Description)  
  
NESW (1500' FSL, 2500' FWL)  
Section 9, T39S-R25E  
↑

10. Field and Pool, or Exploratory Area  
Kiva

11. County or Parish, State  
San Juan, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other Clean Out, Reperforate, Acidize Injection Well
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection

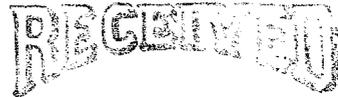
(NOTE: Report results of multiple completion or Well Completion or Recompletion Report and Log form.)

13. 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.)\*

This well was treated as follows and then returned to production: (2-26-92 to 3-1-92):

1. Tbg pickled with 2600 gals 90/10 DAD acid & 1300 gals 15% HCl in 3 stages. Waited 1 hr between stages.
2. Perforated zone 5590-5593' & 5609-5718' w/4" csg guns. Hydrotest.
3. RIH w/Inverted Lok-Set, treat backside, set packer. Acidize zone 5590-5718' w/1200 gals 90/10 DAD acid, 2400 gals 28% LCA, and 1250 gals Diverter w/70 Quality Foam, 3000 gals Produced H<sub>2</sub>O F-75 50 Quality. Wait 1 hour, flow well back.
4. Swab zone 5590-5618' thru packer at 5471'.
5. Return well to production 3/1/92.

I.N.S.



APR 02 1992

DIVISION OF

OIL GAS & MINING

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

SIGNED

*[Signature]*

Title: Supervising Prod. Eng'r      Date 3/31/92

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Condition of Approval, If any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statement or representations as to any matter within its jurisdiction.



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

August 11, 1992

Meridian Oil Inc.  
5613 DTC Parkway  
Englewood, Colorado 80111

Gentlemen:

Re: Pressure Test for Mechanical Integrity, Class II Injection Wells in the Kiva and Kachina Units, San Juan County, Utah

The Underground Injection Control Program which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. It has been past policy of the Division to require pressure testing of all Class II salt water disposal wells and other injection wells not reporting monthly annulus pressures in accordance with rule R649-5-5.3 of the Oil and Gas Conservation General Rules. This rule requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five year period beginning October, 1982. Our records indicate the above referenced wells are due for testing for the second five year period. Attached is a list of wells which need to be tested according to our records. Please make arrangements and ready the wells for testing during the week of September 21, 1992 as outlined below:

1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.

4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
5. All bradenhead valves with exception of the tubing on the injection wells must be shut in 24 hours prior to testing.

Please contact Mr. Dan Jarvis at (801)538-5340 to arrange a meeting time and place or negotiate a different date if this one is unacceptable.

Sincerely,



Gil Hunt  
UIC Program Manager

Idc  
Attachment  
WO152

# WELLS TO BE TESTED

## Kiva Unit

#14-4  
21-9  
23-4  
12-4

## Kachina Unit

#11-19  
42-24  
2

Utah Division of Oil, Gas, and Mining  
 Casing - ~~Bradford~~ Test

*Pressure*

Operator: MERIDIAN OIL COMPANY      Field/Unit:  
 Well: FEDERAL 23-4      Township: 39S      Range: 25E      Sect: 4  
 API: 43-037-31259      Welltype: INJW      Max Pressure: 3750  
 Lease type: FEDERAL      Surface Owner: BLM

Test Date: *9/23/92*  
*9:15 AM.*

CASING STRING	SIZE	SET AT	PRESSURE	OBSERVATIONS
Surface:	133/8	82		
Intermediate:	9 5/8	1645		<i>0 at start</i>
Production:	5 1/2	5860		
Other:		0		
Tubing:	2 7/8			<i>3170 PSI</i>
Packer:		5609		

Recommendations:

*Pressured to 1000 PSI held 15 min  
 NO Pressure loss*

*D. JAMES } DOGM  
 Gil Hunt*

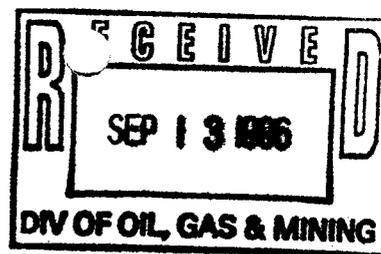
*BOB VIAL Paulo - Meridian  
 MO-TO hot oil*

*Passed MET  
 D. James*

STATE OF UTAH  
INVENTORY OF INJECTION WELLS

OPERATOR	API NO.	WELL	TNS	RGE	SE	WELLTYPE	INDIAN COUNT
*****	*****	*****	***	***	**	*****	*****
EQUITABLE RE	43-013-31370	FEDERAL 13-5	09S	17E	5	INJW	Y
EQUITABLE RE	43-013-31195	ALLEN FEDERA	09S	17E	6	INJW	N
EQUITABLE RE	43-013-31492	11-7J	09S	17E	7	INJW	Y
EQUITABLE RE	43-013-31405	31-7J	09S	17E	7	INJW	Y
EQUITABLE RE	43-047-20252	E. RED WASH	08S	25E	5	INJW	N
EQUITABLE RE	43-047-20261	ERW 4-6	08S	25E	6	INJW	Y
EQUITABLE RE	43-047-32346	42-6X	08S	25E	6	INJW	N
EQUITABLE RE	43-047-20245	AMERADA GUIN	08S	25E	7	INJW	Y
GERRITY OIL	43-047-30566	FEDERAL 14-1	09S	24E	10	INJD	Y
GIANT EXPLOR	43-037-15042	GOthic MESA	41S	23E	16	INJD	Y
GIANT EXPLOR	43-037-31095	CAVE CANYON	38S	24E	3	INJW	N
GIANT EXPLOR	43-037-20292	SENTINEL PEA	41S	26E	27	INJD	Y
GIANT EXPLOR	43-037-16452	9-24	41S	23E	9	INJI	Y
HAY HOT OIL	43-037-30521	MCCRACKEN PT	40S	23E	19	INSD	N
HAY HOT OIL	43-037-30575	FED. 23-32	40S	22E	23	INJI	N
HELD BY PROD	43-013-15122	UTE #1-A	03S	06W	18	INJD	Y
INLAND PRODU	43-013-30843	MONUMENT BUT	08S	16E	34	INJW	Y
INLAND PRODU	43-013-30693	FEDERAL 3-33	08S	16E	33	INJW	N
INLAND PRODU	43-013-30686	FEDERAL 5-35	08S	16E	35	INJW	N
INLAND PRODU	43-013-30745	MONUMENT BUT	08S	16E	35	INJW	N
INLAND PRODU	43-013-30608	MONUMENT BUT	08S	16E	35	INJW	N
INLAND PRODU	43-013-30606	MONUMENT BUT	08S	16E	35	INJW	N
INLAND PRODU	43-013-31264	MONUMENT FED	08S	16E	35	INJW	N
INLAND PRODU	43-013-30605	MONUMENT BUT	08S	16E	35	INJW	N
INLAND PRODU	43-013-30624	STATE 5-36	08S	16E	36	INJW	N
INLAND PRODU	43-013-30592	STATE 1-36	08S	16E	36	INJW	N
INLAND PRODU	43-013-30787	12-32	08S	17E	32	INJW	Y
INLAND PRODU	43-013-31372	14A-28	08S	16E	28	INJW	N
INLAND PRODU	43-013-30779	FED 15-28	08S	16E	28	INJW	N
INLAND PRODU	43-013-31523	GILSONITE 14	08S	17E	32	INJW	Y
INLAND PRODU	43-013-31403	GILSONITE ST	08S	17E	32	INJW	Y
INLAND PRODU	43-013-30658	GILSONITE 7-	08S	17E	32	INJW	Y
JN EXPLORATI	43-043-30223	LOGAN FEDERA	03N	07E	26	INJD	N
MEDALLION EX	43-013-30372	ALTAMONT SWD	03S	06W	24	INJD	Y
✓ MERIDIAN OIL	43-037-31112	NAV FED 4-1	39S	25E	4	INJW	N
✓ MERIDIAN OIL	43-037-31321	14-4 NAV.FED	39S	25E	4	INJW	N
✓ MERIDIAN OIL	43-037-31395	NAVAJO FEDER	39S	25E	4	INJW	N
→ MERIDIAN OIL ←	43-037-31259	FEDERAL 23-4	39S	25E	4	INJW	N
✓ MERIDIAN OIL	43-037-31267	21-9 NAV.FED	39S	25E	9	INJW	N
✓ MERIDIAN OIL	43-037-31298	HAVASU FED.	38S	23E	24	INJW	N
✓ MERIDIAN OIL	43-037-31282	ARABIAN FED.	38S	24E	19	INJW	N
✓ MERIDIAN OIL	43-037-31458	HAVASU FED.	38S	24E	19	INJW	N
MISSION OIL	43-013-31202	UTE 25-6	05S	04W	25	INJI	Y
MOBIL EXPLOR	43-037-16350	H-11	40S	24E	36	INJW	Y
MOBIL EXPLOR	43-037-15617	F-11	40S	24E	36	INJW	Y
MOBIL EXPLOR	43-037-15618	G-12	40S	24E	36	INJI	Y
MOBIL EXPLOR	43-037-15619	I-12	40S	24E	36	INJW	Y
MOBIL EXPLOR	43-037-16377	T-8	40S	25E	28	INJW	Y
MOBIL EXPLOR	43-037-16366	P-7	40S	25E	29	INJW	Y
MOBIL EXPLOR	43-037-16362	N-7	40S	25E	29	INJW	Y
MOBIL EXPLOR	43-037-16359	L-9	40S	25E	31	INJW	Y
MOBIL EXPLOR	43-037-16354	J-11	40S	25E	31	INJW	Y
MOBIL EXPLOR	43-037-15958	L-11	40S	25E	31	INJW	Y
✓ MERIDIAN OIL	43-037-31317	NAV.FED. 43-5	39S	25E	4	INJW	N

MERIDIAN OIL



September 10, 1996

State of Utah  
Division of Oil, Gas and Mining  
355 ~~1594~~ West North Temple  
Salt Lake City, UT 84180

Re: Name Change from Meridian Oil Inc. to  
**Burlington Resources Oil & Gas Co.**

Gentlemen:

Please be advised effective July 11, 1996 Meridian Oil Inc. changed their name and address to:

Burlington Resources Oil & Gas Co.  
3300 North "A" St., Bldg. 6  
Midland, TX 79710-1810

Please see the attached list of wells that Burlington Resources operates in the State of Utah. If you should have any questions, please contact me at (303) 930-9393 or after September 30th at (915) 688-6800.

Sincerely,

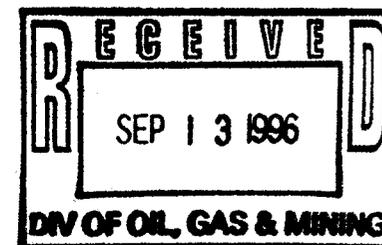
**BURLINGTON RESOURCES OIL & GAS CO.**

A handwritten signature in cursive script, appearing to read "Eileen Danni Dey".

Eileen Danni Dey  
Senior Regulatory Compliance Representative

Enclosure

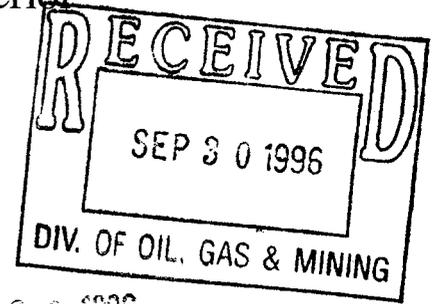
FIELD	WELL NAME	WELL NO	FORMATION/POOL	COUNTY	OCATIO	SEC	TWN	RGE	API NUMBER	FEDERAL LEASE NUMBER	STATE CONTROL NO.
BANNOCK	BANNOCK FEDERAL	21-33	ISMAY	SAN JUAN	NENW	33	038S	024E	43-037-3142500	UTU60786A	10923
CEDAR MOUNTAIN	EAST CANYON UNIT	33-18	CEDAR MOUNTAIN	GRAND	NWSE	18	016S	025E	43-019-1620300	UTU05059	9515
EAST MOUNTAIN	EAST MOUNTAIN FEDERAL	13-35	FERRON	EMERY	NWSW	35	016S	006E	43-015-3023000	57287U6920	10789
EAST MOUNTAIN	EAST MOUNTAIN FEDERAL	32-23	FERRON	EMERY	SWNE	23	016S	006E	43-015-3023100	57287U6920	11075
FERRON	INDIAN CREEK UNIT	1	FERRON	EMERY	SWNW	02	017S	006E	43-015-3008200	57287U6920	02585
FERRON	INDIAN CREEK UNIT	3	FERRON	EMERY	SWSW	02	017S	006E	43-015-3107500	57287U6920	30175 02585
FERRON	INDIAN CREEK UNIT 10176	5	FERRON	EMERY	SENE	10	017S	006E	43-015-3011700	57287U6920	02585
FERRON	INDIAN CREEK UNIT 14176	2	FERRON	EMERY	SWNE	14	017S	006E	43-015-3009100	UTU15202	10907
KACHINA	ARABIAN FEDERAL (wiw)	2	ISMAY	SAN JUAN	NWSW	19	038S	024E	43-037-3128200	UTU56186	10654
KACHINA	ARABIAN FEDERAL	3	ISMAY	SAN JUAN	NESW	19	038S	024E	43-037-3128700	UTU56186	10654
KACHINA	HAVASU FEDERAL (wiw)	11-19	UPPER ISMAY	SAN JUAN	NWNW	19	038S	024E	43-037-3145800	UTU56186	10654
KACHINA	HAVASU FEDERAL	12-19	UPPER ISMAY	SAN JUAN	SWNW	19	038S	024E	43-037-3145700	UTU56186	10654
KACHINA	HAVASU FEDERAL	12-19A	ISMAY	SAN JUAN	SWNW	19	038S	024E	43-037-3145900	UTU56186	10654
KACHINA	HAVASU FEDERAL	22-19	UPPER ISMAY	SAN JUAN	SENE	19	038S	024E	43-037-3127800	UTU56186	10654
KACHINA	HAVASU FEDERAL	41-24	UPPER ISMAY	SAN JUAN	NENE	24	038S	023E	43-037-3127900	UTU20895	10654
KACHINA	HAVASU FEDERAL (wiw)	42-24	UPPER ISMAY	SAN JUAN	SENE	24	038S	023E	43-037-3129800	UTU20895	10654
KACHINA	WASH UNIT (wsu)	2	CUTLER	SAN JUAN	SESE	13	038S	023E	43-037-3132400	UTU20894	10654
KIVA (DESERT CREEK)	NAVAJO FEDERAL	41-5	DESERT CREEK	SAN JUAN	NENE	05	039S	025E	43-037-3142100	UTU57895	31358 10810
KIVA (UPPER ISMAY)	KIVA FEDERAL	24-4	ISMAY	SAN JUAN	SESW	04	039S	025E	43-037-3174500	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (wiw)	12-4	ISMAY	SAN JUAN	SWNW	04	039S	025E	43-037-3139500	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (wiw)	14-4	ISMAY	SAN JUAN	SWSW	04	039S	025E	43-037-3132100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (wiw)	21-9	ISMAY	SAN JUAN	NENW	09	039S	025E	43-037-3126700	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (wiw)	23-4	UPPER ISMAY	SAN JUAN	NESW	04	039S	025E	43-037-3125900	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	4-2	ISMAY	SAN JUAN	SWSE	04	039S	025E	43-037-3116100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	4-4	ISMAY	SAN JUAN	NWSW	04	039S	025E	43-037-3117900	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	42-5	UPPER ISMAY	SAN JUAN	SENE	05	039S	025E	43-037-3126100	83687U6890	10655
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (wsu)	42-9	WINGATE/CUTLER	SAN JUAN	SENE	09	039S	025E	43-037-3126300	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL	9-1	UPPER ISMAY	SAN JUAN	NWNE	09	039S	025E	43-037-3100100	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (WIW)	4-1	ISMAY	SAN JUAN	SESW	04	039S	025E	43-037-3111200	83687U6890	09975
KIVA (UPPER ISMAY)	NAVAJO FEDERAL (WIW)	43-5	ISMAY	SAN JUAN	NWSW	05	039S	025E	43-037-3131700	83687U6890	09975
UNION MESA	HATCH POINT FEDERAL	27-1A	CANE CREEK	SAN JUAN	NESW	27	027S	021E	43-037-3051800	8910184250	02815





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



In Reply Refer To  
3100  
SL-071010C  
(UT-932)

SEP 28 1996

## NOTICE

Burlington Resources Oil & Gas Company : Oil and Gas  
801 Cherry Street, Suite 900 : SL-071010C  
Fort Worth, Texas 76102 :

### Corporate Name Change Recognized

Acceptable evidence has been filed in this office concerning the corporate name change from Meridian Oil Inc. to Burlington Resources Oil & Gas Company.

For our purposes, the name change is recognized effective July 12, 1996, the date the Secretary of State of Delaware certified the name change.

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our field offices, you will be contacted by them.

A rider to Bond No. 400IA9059 (BLM Bond No. MT0719) has been accepted by the Montana State office as of September 16, 1996, its date of receipt. The rider changed the name on the bond from Meridian Oil Inc. to Burlington Resources Oil & Gas Company.

### **ROBERT LOPEZ**

Robert Lopez  
Group Leader,  
Minerals Adjudication Group

#### Enclosure

Exhibit (1 p)

cc: MMS, Data Management Division, P.O. Box 5860, MS 3113, Denver, Colorado 80217  
Moab District Office  
Vernal District Office

bc: State of Utah, ATTN: Lisha Cordova, Division of Oil, Gas and Mining, P.O. Box 145801,  
Salt Lake City, Utah 84114-5801  
Teresa Thompson (UT-931)  
Irene Anderson (UT-932)

Exhibit of Leases Affected

SL-071010C	U-8894A	U-40751	U-61752
SL-071595	U-8895A	U-45051	U-62143
U-0681	U-8897A	U-45929	U-62190
U-0683	U-15202	U-46825	U-63181
U-0684	U-15203	U-51045	UTU-64930
U-0685	U-15204	U-51046	UTU-64931
U-0719	U-16962A	U-51047	UTU-65329
U-0725	U-17024	U-52333	UTU-65607
U-0737	U-17623	U-56186	UTU-65750
U-0741	U-19281	U-56932	UTU-65751
U-0744	U-20016	U-56933	UTU-65868 (ROW)
U-03333	U-20895	U-56934	UTU-65940
U-04049	U-24606	U-57895	UTU-65943
U-04049A	U-39832	U-58728	UTU-66025
U-05059	U-40361	U-60428	UTU-66487
U-08107	U-40440	U-60520	UTU-66584
U-062420	U-40544 (ROW)	U-61556	UTU-66708
UTU-66830	UTU-66831	UTU-67565	UTU-67568
UTU-67569	UTU-67570	UTU-68232	UTU-68664
UTU-68676	UTU-69434	UTU-70115 (ROW)	UTU-70196
UTU-72660	U-60786X (Bannock Unit)	U-63089X (East Mountain Unit)	

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5

Well name and number: \_\_\_\_\_

Field or Unit name: KIVA UNIT API no. \_\_\_\_\_

Well location: Q0 \_\_\_\_\_ sections 4, 5 township 39 S range 25 E county SAN JUAN

Effective Date of Transfer: 7/11/96

---

**CURRENT OPERATOR**

Transfer approved by:

Name EILEEN DANNI DEY Company MERIDIAN OIL INC.

Signature Eileen Danni Dey Address 5613 DTC PARKWAY

Title SR. REGULATORY COMPLIANCE REPRESENTATIVE ENGLEWOOD, CO 80111

Date 10/30/96 Phone (303) 930-9393

Comments: NAME CHANGE ONLY

---

**NEW OPERATOR**

Transfer approved by:

Name EILEEN DANNI DEY Company BURLINGTON RESOURCES

Signature Eileen Danni Dey Address P.O. BOX 51810  
OIL & GAS COMPANY

Title S. REGULATORY COMPLIANCE REP. MIDLAND, TEXAS 79705-1810

Date 10/30/96 Phone (915) 688-9042

Comments: Name change only

---

(State use only)

Transfer approved by [Signature] Title Environ. Manager

Approval Date 10-31-96

\*961101 Appr. copy mailed to Burlington. ✓  
lc

**BURLINGTON RESOURCES  
MID-CONTINENT DIVISION**

**3300 NO. A STREET, BLDG. 6 (79705)  
P.O. BOX 51810  
MIDLAND, TEXAS 79710-1810**

**DRILLING DEPARTMENT  
FAX NO. 915/688-6009**

**DATE:** 10/30 **TIME:** \_\_\_\_\_  
**TO:** Lisha **FAX NO:** (801) 359-3940  
**CITY/STATE:** SLC, UT  
**FROM:** Eileen Day **PHONE:** (915) 688-9042  
**NO. OF PAGES (Including Cover Sheet):** 3

**SPECIAL INSTRUCTIONS:** \_\_\_\_\_  
Sorry so late!!  
\_\_\_\_\_  
Call me if you need  
anything else!

# OPERATOR CHANGE WORKSHEET

1-LEC	6-1-10
2-GL	7-KDR
3-DTS	8-SJ
4-VLD	9-FILE
5-RJF	

Attach all documentation received by the division regarding this change.  
Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (~~well sold~~)       Designation of Agent  
 Designation of Operator       Operator Name Change ~~Only~~

The operator of the well(s) listed below has changed, effective: 7-11-96

TO: (new operator) <u>BURLINGTON RESOURCES O&amp;G CO.</u>	FROM: (old operator) <u>MERIDIAN OIL INC</u>
(address) <u>3300 N "A" ST BLDG 6</u>	(address) <u>PO BOX 3209</u>
<u>MIDLAND TX 79710-1810</u>	<u>ENGLEWOOD CO 80155-3209</u>
<u>EILEEN DANNI DEY</u>	<u>EILEEN DANNI DEY</u>
Phone: <u>(915)688-6800</u>	Phone: <u>(303)930-9393</u>
Account no. <u>N7670</u>	Account no. <u>N7230</u>

WELL(S) attach additional page if needed:      \*KACHINA, KIVA, EAST MOUNTAIN, BANNOCK UNIT'S

Name: <u>**SEE ATTACHED**</u>	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

## OPERATOR CHANGE DOCUMENTATION

- 1 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). *(Rec'd 9-13-96)*
- 2 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). *(Rec'd 9-13-96)*
- 3 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes) no \_\_\_\_\_ If yes, show company file number: #096593. *(E.H. 1-29-82)*
- 4 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- 5 5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. *(i. WIC Program)*
- 6 6. Cardex file has been updated for each well listed above. *(10-3-96)*
- 7 7. Well file labels have been updated for each well listed above. *(10-3-96)*
- 8 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. *(10-3-96)*
- 9 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

**ENTITY REVIEW**

- Lee 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

**BOND VERIFICATION - (~~FEE WELLS ONLY~~)** \*961002 "Rider" 80,000 to Burlington rec'd by Trust Lands Admin.

- Lee 1. (r649-3-1) The NEW operator of any ~~fee~~ lease well listed above has furnished a proper bond.
- N/A 2. A copy of this form has been placed in the new and former operator's bond files.
- N/A 3. The FORMER operator has requested a release of liability from their bond (yes/no) \_\_\_\_\_, as of today's date \_\_\_\_\_. If yes, division response was made to this request by letter dated \_\_\_\_\_.

**LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY**

- N/A 1. Copies of documents have been sent on \_\_\_\_\_ to \_\_\_\_\_ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.  
OTS  
11/4/96

**FILMING**

- VS 1. All attachments to this form have been microfilmed. Today's date: 12-27-96.

**FILING**

- \_\_\_ 1. Copies of all attachments to this form have been filed in each well file.
- \_\_\_ 2. The original of this form, and the original attachments are now being filed in the Operator Change file.

**COMMENTS**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF UTAH  
INVENTORY OF INJECTION WELLS

OPERATOR	API NO.	WELL	TNS	RGE	SE	WELLTYPE	INDIAN COUNT
*****	*****	*****	***	***	**	*****	*****
AMOCO PRODUC	43-043-30139	ISLAND RANCH	04N	07E	26	INJD	N
AMOCO PRODUC	43-043-30106	ANSCHUTZ RAN	04N	07E	34	INJD	N
AMOCO PRODUC	43-043-30209	AREU #W01-02	03N	07E	1	INJG	N
AMOCO PRODUC	43-043-30265	AREU #W02-10	03N	07E	2	INJG	N
AMOCO PRODUC	43-043-30167	AREU #W36-08	04N	07E	36	INJG	N
AMOCO PRODUC	43-043-30255	AREU #W36-14	04N	07E	36	INJG	N
AMOCO PRODUC	43-043-30272	AREU #W19-08	04N	08E	19	INJG	N
AMOCO PRODUC	43-043-30145	AREU #W20-14	04N	08E	20	INJG	N
AMOCO PRODUC	43-043-30154	AREU #W29-12	04N	08E	29	INJG	N
AMOCO PRODUC	43-043-30216	AREU #30-15	04N	08E	30	INJG	N
AMOCO PRODUC	43-043-30248	AREU #W30-12	04N	08E	30	INJG	N
AMOCO PRODUC	43-043-30185	AREU #W30-14	04N	08E	30	INJG	N
AMOCO PRODUC	43-043-30218	AREU #W30-02	04N	08E	30	INJG	N
AMOCO PRODUC	43-043-30280	AREU #W31-05	04N	08E	31	INJG	N
ANADARKO PET	43-007-30167	SHIMMIN TRUS	12S	10E	11	INJI	N
APACHE CORPO	43-037-16169	R-124	40S	25E	24	INJI	Y
APACHE CORPO	43-037-16462	T-316	40S	26E	16	INJI	Y
APACHE CORPO	43-037-16456	T-117	40S	26E	17	INJI	Y
APACHE CORPO	43-037-16188	V-117	40S	26E	17	INJI	Y
APACHE CORPO	43-037-16463	T-317	40S	26E	17	INJI	Y
APACHE CORPO	43-037-16457	T-118	40S	26E	18	INJI	Y
APACHE CORPO	43-037-16458	T-119	40S	26E	19	INJI	Y
APACHE CORPO	43-037-11267	U-421	40S	26E	21	INJI	Y
APACHE CORPO	43-037-16191	V-121	40S	26E	21	INJI	Y
APACHE CORPO	43-037-16194	V-321	40S	26E	21	INJI	Y
APACHE CORPO	43-037-16460	T-121	40S	26E	21	INJW	Y
APACHE CORPO	43-037-16179	T-322	40S	26E	22	INJW	Y
BALLARD & AS	43-037-31293	DEADMAN CANY	37S	24E	20	INJG	N
BARRETT RESO	43-013-15122	UTE #1-A	03S	06W	18	INJD	Y
BAYLESS, ROB	43-043-30198	AAGARD #28-2	03N	08E	28	INJD	N
BERRY VENTUR	43-047-30555	NATURAL DUCK	09S	20E	15	INJW	Y
BERRY VENTUR	43-047-30523	DUCKCREEK 5-	09S	20E	16	INJW	Y
BTA OIL PROD	43-043-30001	FORK D-10	03N	14E	14	INJD	N
BTA OIL PROD	43-043-20186	BRIDGER LAKE	03N	14E	23	INJG	N
BTA OIL PROD	43-043-20010	BRIDGER LAKE	03N	14E	25	INJG	N
BURLINGTON R	43-037-31321	14-4 NAV.FED	39S	25E	4	INJW	N
BURLINGTON R	43-037-31112	NAV FED 4-1	39S	25E	4	INJW	N
BURLINGTON R	43-037-31259	FEDERAL 23-4	39S	25E	4	INJW	N
BURLINGTON R	43-037-31395	NAVAJO FEDER	39S	25E	4	INJW	N
BURLINGTON R	43-037-31317	43-5 NAV.FED	39S	25E	5	INJW	Y
BURLINGTON R	43-037-31267	21-9 NAV.FED	39S	25E	9	INJW	N
BURLINGTON R	43-037-31298	HAVASU FED.	38S	23E	24	INJW	N
BURLINGTON R	43-037-31282	ARABIAN FED.	38S	24E	19	INJW	N
BURLINGTON R	43-037-31458	HAVASU FED.	38S	24E	19	INJW	N
CENTRAL RESO	43-037-31095	CAVE CANYON	38S	24E	3	INJW	N
CHANDLER & A	43-047-15083	WHITE RIVER	08S	22E	9	INJW	Y
CHANDLER & A	43-047-31356	22-20	08S	22E	20	INJW	Y
CHANDLER & A	43-047-32582	STATE 7-16	08S	22E	16	INJW	Y
CHANDLER & A	43-047-32583	GLEN BENCH S	08S	22E	16	INJW	Y
CHANDLER & A	43-047-32756	15-19-8-22	08S	22E	19	INJW	Y
CHEVRON USA	43-047-32306	GYP SUM HILLS	08S	21E	21	INJW	Y
CHEVRON USA	43-047-15219	RWU 100A	07S	22E	21	INJW	Y
CHEVRON USA	43-047-15301	RW #199 (43-	07S	22E	22	INJW	Y

452333  
 452333  
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 458728  
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 430995  
 456186  
 456186

Kiva  
 chg'd 5/97

Kachina  
 chg'd 4/97

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals.

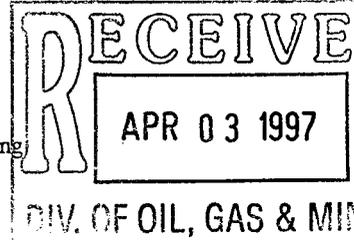
SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	5. Lease Designation and Serial No.
2. Name of Operator MERIT ENERGY COMPANY	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No (972) 701-8377 12222 MERIT DRIVE, DALLAS, TX 75251	7. If Unit or CA, Agreement Designation 83687U6890
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1500' FSL - 2500' FWL , NESW 04 039S 025E, SLM	8. Well Name and No. NAVAJO FEDERAL 23-4
	9. API Well No. 43,037,3125900
	10. Field and Pool, or Exploratory Area KIVA (UPPER ISMAY) ,ISMAY
	11. County or Parish, State SAN JUAN, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>CHANGE OF OPERATOR</u>	<input type="checkbox"/> Dispose Water

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



13. Described 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.)\*

EFFECTIVE AS OF JANUARY 1, 1997, BURLINGTON RESOURCES OIL & GAS COMPANY, THE PRIOR OPERATOR OF RECORD, TRANSFERRED ALL RIGHT, TITLE AND INTEREST IN THE NAVAJO FEDERAL 23-4 WELL TO MERIT PARTNERS, L.P. (AS TO 92.4%) AND MERIT ENERGY PARTNERS III, L.P. (AS TO 7.6%), C/O MERIT ENERGY COMPANY, 12222 MERIT DRIVE, DALLAS, TX 75251. ON APRIL 1, 1997, MERIT ENERGY COMPANY, THE GENERAL PARTNER FOR MERIT PARTNERS, L.P. AND MERIT ENERGY PARTNERS III, L.P., WILL TAKE OVER PHYSICAL OPERATIONS OF SAID WELL ON BEHALF OF SAID LIMITED PARTNERSHIPS AND IS CONSIDERED TO BE THE OPERATOR OF SAID WELL AS OF THAT DATE.

MERIT ENERGY COMPANY IS RESPONSIBLE UNDER THE TERMS AND CONDITIONS OF THE LEASE FOR THE OPERATIONS CONDUCTED UPON THE LEASED LANDS. BOND COVERAGE IN THE AMOUNT OF \$150,000 FOR MERIT ENERGY COMPANY IS PROVIDED UNDER BLM BOND NO. WY3011, IN FAVOR OF THE BUREAU OF LAND MANAGEMENT, U. S. DEPARTMENT OF THE INTERIOR.

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

Signed Martha Rogers Title Manager, Regulatory Affairs Date March 31, 1997

(This space for Federal or State office use)

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Condition of Approval, If any:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	5. Lease Designation and Serial No.
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No (915)688-6800 P. O. BOX 51810, MIDLAND, TX 79710-1810	7. If Unit or CA, Agreement Designation 83687U6890
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1500' FSL - 2500' FWL , NESW 04 039S 025E, SLM	8. Well Name and No. NAVAJO FEDERAL 23-4
	9. API Well No. 43,037,3125900
	10. Field and Pool, or Exploratory Area KIVA (UPPER ISMAY) ,ISMAY
	11. County or Parish, State SAN JUAN , UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>CHANGE OF OPERATOR</u>	<input type="checkbox"/> Dispose Water <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

13. Described 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.)\*

EFFECTIVE JANUARY 1, 1997 , BURLINGTON RESOURCES OIL & GAS COMPANY, THE OPERATOR OF RECORD OF THE NAVAJO FEDERAL 23-4 WELL, TRANSFERRED ALL OF ITS RIGHT, TITLE AND INTEREST IN SAID WELL TO MERIT PARTNERS, L.P. (AS TO 92.4%) AND MERIT ENERGY PARTNERS III, L.P. (AS TO 7.6%), C/O MERIT ENERGY COMPANY, 12222 MERIT DRIVE, DALLAS, TX 75251.

ON APRIL 1, 1997, MERIT ENERGY COMPANY, GENERAL PARTNER FOR MERIT PARTNERS, L.P. AND MERIT ENERGY PARTNERS III, L.P., WILL TAKE OVER PHYSICAL OPERATIONS OF SAID WELL ON BEHALF OF SAID LIMITED PARTNERSHIPS.

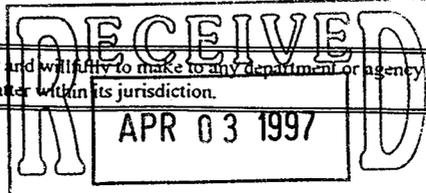
14. I hereby certify that the foregoing is true and correct.

Signed [Signature] Title Attorney-in-Fact Date March 31, 1997  
Kent Beers

(This space for Federal or State office use)

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Condition of Approval, If any: \_\_\_\_\_

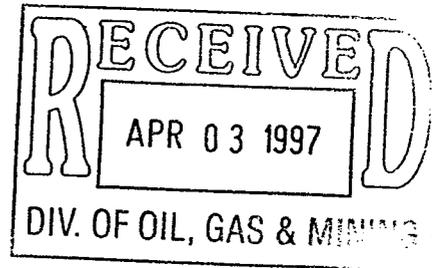
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statement or representations as to any matter within its jurisdiction.



**MERIT ENERGY COMPANY**

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12222 MERIT DRIVE, SUITE 1500  
DALLAS, TEXAS 75251  
(972) 701-8377  
(972) 960-1252 Fax



April 2, 1997

Utah Division of Oil, Gas and Mining  
Attn: Ms. Lisha Cordova  
1594 West North Temple  
Suite 1210  
Salt Lake City, Utah 84114

RE: Change of Operator to Merit Energy Company  
Emery and San Juan County

Dear Ms. Cordova:

Enclosed please find a copy of Form 3160 executed by both parties, Merit Energy and Burlington Resources.

If additional information or forms are required to process this transaction, please contact me at 972-701-8377.

Yours very truly,  
MERIT ENERGY COMPANY

  
Martha J. Rogers  
Manager, Regulatory Affairs

CHANGE OF OPERATOR STATE OF - UT

COUNTY	FIELD NAME	WELL NAME	STR	LSE#	WELLTYPE	APIWELL	COMM NO.	FED CNTRL	ST CNTRL	
EMERY	EAST MOUNTAIN ,FERRON	EAST MOUNTAIN FEDERAL 13-35	35 016S 008E	ML-27626	GAS WELL	43,015,3023000	UT060P49-87U69	57287U6920	025	U56933
EMERY	EAST MOUNTAIN ,FERRON	EAST MOUNTAIN FEDERAL 32-23	23 016S 006E		GAS WELL	43,015,3023100	UT060P49-87U69	57287U6920	025	U17624
EMERY	FERRON ,FERRON	INDIAN CREEK 021762 3	02 017S 006E	ML-27626	GAS WELL	43,015,3017500		57287U6920	025	U15204
EMERY	FERRON ,FERRON	INDIAN CREEK 1	02 017S 006E	ML-27626	GAS WELL	43,015,3008200		57287U6920	025	U15206
EMERY	FERRON ,FERRON	INDIAN CREEK 10176 5	10 017S 006E	ML-27626	GAS WELL	43,015,3011700		57287U6920	025	U15203
EMERY	FERRON ,FERRON	INDIAN CREEK 14176 1	14 017S 006E	UTU15202	GAS WELL	43,015,3009100		UTU15202	109	U15202
SAN JUAN	BANNOCK ,ISMAY	BANNOCK FEDERAL 21-33	33 038S 024E	UTU60786	OIL WELL	43,037,3142500	60786A	UTU60786A	109	U46361
SAN JUAN	KACHINA ,CUTLER	WASH UNIT 2	13 038S 023E	UTU20894	WATER SOURCE	43,037,3132400		UTU20894	106	U20894 (To Water Rights 4-7-97)
SAN JUAN	KACHINA ,ISMAY	ARABIAN FEDERAL 2	19 038S 024E	UTU56186	WATER INJECTED	43,037,3128200		UTU56186	106	U56186
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 11-19	19 038S 024E	UTU56186	WATER INJECTED	43,037,3145800		UTU56186	106	U56186
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 12-19	19 038S 024E	UTU56186	OIL WELL	43,037,3145700		UTU56186	106	U56186
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 12-19A	19 038S 024E	UTU56186	OIL WELL	43,037,3145900		UTU56186	106	U56186
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 22-19	19 038S 024E	UTU56186	OIL WELL	43,037,3127800		UTU56186	106	U56186
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 41-24	24 038S 023E	UTU20895	OIL WELL	43,037,3127900		UTU20895	106	U20895
SAN JUAN	KACHINA ,ISMAY	HAVASU FEDERAL 42-24	24 038S 023E	UTU20895	WATER INJECTED	43,037,3129800		UTU20895	106	U20895

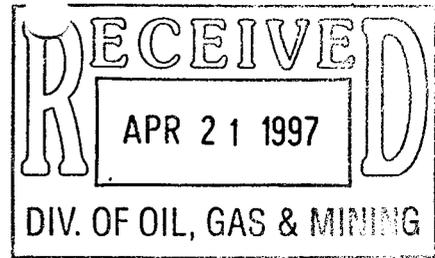
CHANGE OF OPERATOR STATE OF - UT

COUNTY	FIELD NAME	WELL NAME	STR	LSE#	WELLTYPE	APIWELL	COMM NO.	FED CNTRL	ST CNTRL
SAN JUAN	KACHINA ,JSMAY-DESERT CREEK	ARABIAN FEDERAL 3	19 038S 024E	UTU58188	OIL WELL	43,037,3128700		UTU56186	106 <i>456186</i>
SAN JUAN	KIVA (UPPER ISMAY) ,CUTLER	NAVAJO FEDERAL 42-9	09 039S 025E	U-52333	WATER SOURCE	43,037,3126300			<i>452333 (To water Rights 4797)</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	KIVA FEDERAL 24-4	04 039S 025E		OIL WELL	43,037,3174500		83687U6890	099 <i>USA-452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL (WIW) 4-1	04 039S 025E		WATER INJECTED	43,037,3111200		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL (WIW) 43-5	04 039S 025E		WATER INJECTED	43,037,3131700		83687U6890	099 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 12-4	04 039S 025E		WATER INJECTED	43,037,3139500		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 14-4	04 039S 025E		WATER INJECTED	43,037,3132100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 21-9	09 039S 025E		WATER INJECTED	43,037,3126700		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL 23-4	04 039S 025E		WATER INJECTED	43,037,3125900		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL 4-1	04 039S 025E		OIL WELL	43,037,3111200		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL 4-2	04 039S 025E		OIL WELL	43,037,3116100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,JSMAY	NAVAJO FEDERAL 4-4	04 039S 025E		OIL WELL	43,037,3117900		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 42-6	05 039S 025E		OIL WELL	43,037,3128100		83687U6890	106 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 43-5	04 039S 025E		OIL WELL	43,037,3131700		83687U6890	099 <i>458728</i>
SAN JUAN	KIVA (UPPER ISMAY) ,ISMAY	NAVAJO FEDERAL 9-1	09 039S 025E		OIL WELL	43,037,3100100		83687U6890	099 <i>452333</i>
SAN JUAN	KIVA (UPPER ISMAY) ,WINGATE	NAVAJO FEDERAL 42-9	09 039S 025E		WATER SOURCE	43,037,3126300		83687U6890	099 <i>452333 (To water Rights 4797)</i>

MORIS  
REVISED 10.99

## CHANGE OF OPERATOR STATE OF - UT

<u>COUNTY</u>	<u>FIELD NAME</u>	<u>WELL NAME</u>	<u>STR</u>	<u>LSE#</u>	<u>WELLTYPE</u>	<u>APIWELL</u>	<u>COMM NO.</u>	<u>FED CNTRL</u>	<u>ST CNTRL</u>
SAN JUAN	KIVA ,DESERT CREEK	NAVAJO FEDERAL 41-S	05 039S 025E	UTU57895	OIL WELL	43,037,3135800		UTU57895	108 <i>1157895</i>
SAN JUAN	LION MESA ,CANE CREEK	HATCH POINT FEDERAL 27-1A	27 027S 021E	UTU20016	OIL WELL	43,037,3051800		UTU20016	028 <i>1120016</i>



TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5

Well name and number: NAVAJO FEDERAL #23-4

Field or Unit name: KIVA (UPPER ISMAY) API no. 4303731259

Well location: QQ NESW section 4 township 39S range 25E county SAN JUAN

Effective Date of Transfer: April 1, 1997

**CURRENT OPERATOR**

Transfer approved by:

Name EILEEN DANNI DEY Company BURLINGTON RESOURCES OIL & GAS

Signature *Eileen Danni Dey* Address P.O. BOX 51810

Title REGULATORY COMPLIANCE SUPERVISOR MIDLAND, TX 79710-1810

Date 4-8-97 Phone (915) 688-9042

Comments: EFFECTIVE DATE OF SALE IS 1-1-97.  
EFFECTIVE DATE OF TRANSFER OF OPERATIONS IS 4-1-97..

**NEH OPERATOR**

Transfer approved by:

Name Martha J. Rogers Company Merit Energy Company

Signature *Martha Rogers* Address 12222 Merit Drive

Title Manager, Regulatory Affairs Dallas, Texas 75251

Date April 15, 1997 Phone (972) 701-8377

Comments: Eff. date of the sale is 1/1/97 and the eff. date of transfer of operations is 4/1/97

(State use only)

Transfer approved by *[Signature]* Title *Emerson D. Angen*

Approval Date 6-2-97

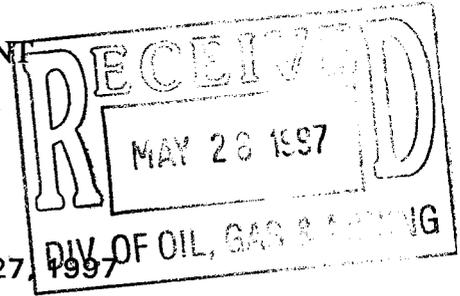
*\* Appr. Copy mailed 6-2-97. Lee*



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



Merit Energy Company  
12222 Merit Drive, Suite 1500  
Dallas, Texas 75251

Re: Kiva (Upper Ismay) Unit  
San Juan County, Utah

Gentlemen:

On May 21, 1997, we received an indenture dated April 1, 1997, whereby Burlington Resources Oil and Gas Company resigned as Unit Operator and Merit Energy Company was designated as Successor Unit Operator for the Kiva (Upper Ismay) Unit, San Juan County, Utah.

The indenture was approved by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective May 27, 1997. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Kiva (Upper Ismay) Unit Agreement.

Your nationwide (Wyoming) oil and gas bond No. 3011 will be used to cover all operations within the Kiva (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: District Manager - Moab (w/enclosure)  
~~Division of Oil, Gas & Mining~~  
Minerals Adjudication Group U-932  
File - Kiva (Upper Ismay) Unit (w/enclosure)  
MMS - Data Management Division  
Agr. Sec. Chron  
Fluid Chron

U-931:TAThompson:tt:5/27/97

Well Status Report  
Utah State Office  
Bureau of Land Management

Lease	Api Number	Well Name	QTR	Section	Township	Range	Well Status	Operator
** Inspection Item: 83687U6890								
✓UTU52333	4303731395	12-4 NAVAJO-FEDERAL	SWNW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731321	14-4 NAVAJO FED	SWSW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731267	21-9 NAVAJO-FEDERAL	NENW	9	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731259	23-4 NAVAJO-FEDERAL	NESW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731745	24-4 KIVAL FEDERAL	SESW	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731112	4-1 NAVAJO FEDERAL	SESW	4	T39S	R25E	WIW	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731161	4-2 NAVAJO FEDERAL	SWSE	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
<del>UTU52333</del>	<del>4303731176</del>	<del>4-3 NAVAJO FEDERAL</del>	<del>NESW</del>	<del>4</del>	<del>T39S</del>	<del>R25E</del>	<del>P+A</del>	<del>BURLINGTON RESOURCES O + G CO</del>
✓UTU52333	4303731179	4-4 NAVAJO FEDERAL	NWSW	4	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
✓UTU58728	4303731261	42-5 NAVAJO-FEDERAL	SENE	5	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO
<del>UTU52333</del>	<del>4303731263</del>	<del>42-9 NAVAJO FEDERAL</del>	<del>SENE</del>	<del>9</del>	<del>T39S</del>	<del>R25E</del>	<del>WSW</del>	<del>BURLINGTON RESOURCES O + G CO</del>
✓UTU58728	4303731317	43-5 NAVAJO (BH 5)	NWSW	4	T39S	R25E	OSI	BURLINGTON RESOURCES O + G CO
✓UTU52333	4303731001	9-1 NAVAJO FEDERAL	NWNE	9	T39S	R25E	POW	BURLINGTON RESOURCES O + G CO

**OPERATOR CHANGE WORKSHEET**

Routing	
1- [initials]	6- [initials]
2- [initials]	7-KAS
3-DTS [initials]	8-SI
4-VLD	9-FILE
5-JRB	

Attach all documentation received by the division regarding this change.  
Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (well sold)
- Designation of Operator
- Designation of Agent
- Operator Name Change Only

The operator of the well(s) listed below has changed, effective: 4-1-97

<p><b>TO:</b> (new operator) <u>MERIT ENERGY COMPANY</u> <b>FROM:</b> (old operator) <u>BURLINGTON RESOURCES O&amp;G</u>                  (address) <u>12222 MERIT DR STE 1500</u> (address) <u>3300 N A ST BLDG 6</u>  <u>DALLAS TX 75251</u>  <u>MARTHA ROGERS</u>                  Phone: <u>(972) 701-8377</u>                  Account no. <u>N4900 (4-30-97)</u></p>	<p><u>MIDLAND TX 79710-1810</u>  <u>MARALENE SPAWN</u>                  Phone: <u>(915) 688-6800</u>                  Account no. <u>N7670</u></p>
--	--

**WELL(S)** attach additional page if needed: **\*KIVA (UPPER ISMAY) UNIT**

Name: <b>**SEE ATTACHED**</b>	API: <u>43-037-31259</u>	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

**OPERATOR CHANGE DOCUMENTATION**

- Sec 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). *(4-3-97) \*LIC 4-21-97*
- Sec 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). *(4-3-97) \*LIC 4-21-97*
- N/A 3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company **registered with the state?** (yes/no) \_\_\_\_\_ If yes, show company file number: \_\_\_\_\_ *\*Kachina Unit chgd 4-30-97.*
- Sec 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- Sec 5. Changes have been entered in the **Oil and Gas Information System** (3270) for each well listed above. *(5-30-97) \*LIC DBASE E. Quattro*
- Sec 6. **Cardex** file has been updated for each well listed above. *(5-30-97)*
- Sec 7. **Well file labels** have been updated for each well listed above. *(5-30-97)*
- Sec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" **memo** for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. *(5-30-97)*
- Sec 9. A folder has been set up for the **Operator Change file**, and a copy of this page has been placed there for reference during routing and processing of the original documents.

**ENTITY REVIEW**

- See 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no)      If entity assignments were changed, attach copies of Form 6, Entity Action Form.  
10655 to 9975 (Kiva Upper Ismay) entity.
- See 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

**BOND VERIFICATION - (FEE WELLS ONLY)**

- N/A/See 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operator's bond files.
3. The FORMER operator has requested a release of liability from their bond (yes/no)     , as of today's date     . If yes, division response was made to this request by letter dated     .

**LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY**

- N/A 1. Copies of documents have been sent on      to      at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.
- N/A 6/15 (1/3/97) 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated      19     , of their responsibility to notify all interest owners of this change.

**FILMING**

- ✓ 1. All attachments to this form have been microfilmed. Today's date: 6.20.97.

**FILING**

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form, and the original attachments are now being filed in the Operator Change file.

**COMMENTS**

970430 Kachina Unit Op. chg. Aprv. is changed. (separate change)  
970530 Kiva Unit Op. chg. Aprv. 5-27-97.

(East Mtn. Unit & Bannock Unit Not Aprv. Yet - See separate chg.)  
when aprv.

INJECTION WELL - PRESSURE TEST

Well Name: NAVAJO FEDERAL 23-4 API Number: 43-037-31259  
 Qtr/Qtr: NE/SW Section: 4 Township: 39S Range: 25E  
 Company Name: MERIT ENERGY COMPANY  
 Lease: State \_\_\_\_\_ Fee \_\_\_\_\_ Federal X Indian \_\_\_\_\_  
 Inspector: J THOMPSON Date: 8/31/99 11:30 Am

Initial Conditions:

Tubing - Rate: \_\_\_\_\_ Pressure: 0 psi

Casing/Tubing Annulus - Pressure: 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>0</u>	<u>0</u>
5	<del>0</del> <u>0</u>	<u>0</u>
10	<u>0</u>	<u>0</u>
15	<u>0</u>	<u>0</u>
20	<u>0</u>	<u>0</u>
25	<u>0</u>	<u>0</u>
30	<u>0</u>	<u>0</u>

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 0 psi

Casing/Tubing Annulus Pressure: 0 psi

COMMENTS: well has been shut in for some time no tubing  
gauge or Annulus gauge. No tubing or packer in hole.  
Operator will submit proper reports to DOGM regarding  
well status and future plans.

[Signature]  
 Operator Representative

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>See attached</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>See attached</b>
2. NAME OF OPERATOR: <b>Merit Energy Company</b>		8. WELL NAME and NUMBER: <b>See attached</b>
3. ADDRESS OF OPERATOR: <b>12222 Merit Dr., Suite</b> CITY <b>Dallas</b> STATE <b>TX</b> ZIP <b>75251</b>		9. API NUMBER:
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>See Attached</b>		10. FIELD AND POOL, OR WILDCAT: <b>See attached</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____		COUNTY: <b>San Juan</b>
		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____  <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Merit Energy Company advises, effective SEPT. 30, 2000, Journey Operating, L.L.C. will become the operator of the wells on the attached list.

Journey Operating, L.L.C.  
1201 Louisiana, Suite 1040  
Houston, TX. 77002  
(713) 655-0595

By: Brian A. Baer  
Brian A. Baer, President

RECEIVED  
OCT 20 2000  
DIVISION OF  
OIL, GAS AND MINING

NAME (PLEASE PRINT) <u>Arlene Valliquette</u>	TITLE <u>Manager - Regulatory Affairs</u>
SIGNATURE <u>Arlene Valliquette</u>	DATE <u>9/29/00</u>

(This space for State use only)

**CHANGE OF OPERATOR**  
**from Merit Energy Company to Journey Operating, L.L.C.**  
**San Juan County, Utah**

**Attachment to Utah Form 19**

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Location of Well
Oil Well	UTU-40361	Bannock	Bannock Federal #21-33	43-037-31425	NE NW (685' FNL & 1520' FWL) Sec. 33-T38S-R24E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park R-124	43-037-16169	NE NE (660' FNL & 660' FEL) Sec. 24-T40S-R25E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park S-216	43-037-15546	SW NW (1820' FNL & 500' FWL) Sec. 16-T40S-R26E
Injection Well	14-20-603-2055-A	Ismay	Ismay Flodine Park T-316	43-037-16462	NE SW (1980' FSL & 1980' FWL) Sec. 16-T40S-R26E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park S-416	43-037-15544	SW SW (1820' FNL & 500' FWL) Sec. 16-T40S-R26E
Oil Well	14-20-603-2055-A	Ismay	Ismay Flodine Park U-416	43-037-15545	SW SE (660' FSL & 1980' FEL) Sec. 16-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-117	43-037-16456	NE NW (775' FNL & 1995' FWL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-217	43-037-16170	SW NW (1980' FNL & 660' FWL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-117	43-037-16188	NE NE (660' FNL & 660' FEL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-217	43-037-16180	SW NE (1980' FNL & 1820' FEL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-317	43-037-16463	NE SW (1980' FSL & 1980' FWL) Sec. 17-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-417	43-037-16185	SW SE (500' FSL & 1820' FEL) Sec. 17-T40S-R26E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-118	43-037-16457	NE NW (660' FNL & 1980' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park S-218	43-037-16171	SW NW (1820' FNL & 660' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-318	43-037-16464	NE SE (1980' FSL & 1980' FWL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park V-318	43-037-16467	NE SE (1980' FSL & 660' FEL) Sec. 18-T40S-R26E
Oil Well	I-149-IND-9123	Ismay	Ismay Flodine Park U-418	43-037-16186	SW SE (660' FSL & 1980' FEL) Sec. 18-T40S-R26E
Injection Well	I-149-IND-9123	Ismay	Ismay Flodine Park T-119	43-037-16458	NE NW (660' FNL & 1980' FWL) Sec. 19-T40S-R26E
Water Source Well	I-149-IND-9123	Ismay	Ismay Flodine Park V-219	43-037-16519	SE NE (1980' FNL & 560' FEL) Sec. 19-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-120	43-037-16190	NE NE (660' FNL & 660' FEL) Sec. 20-T40S-R26E
Water Source Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-220	43-037-20055	SE NE (1950' FNL & 1120' FEL) Sec. 20-T40S-R26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-121	43-037-31629	NW NW (500' FNL & 660' FWL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-121	43-037-16460	NE NW (610' FNL & 2050' FWL) Sec. 21-T40S-R26E
Water Source Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-121	43-037-20056	NW NE (540' FNL & 1980' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-121	43-037-16191	NE NE (660' FNL & 660' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-421	43-037-11267	SW SE (660' FSL & 1980' FEL) Sec. 21-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park V-321	43-037-16194	NE SE (1980' FSL & 670' FEL) Sec. 21-T40S-R26E

**CHANGE OF OPERATOR**  
**from Merit Energy Company to Journey Operating, L.L.C.**  
**San Juan County, Utah**

**Attachment to Utah Form 19**

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Location of Well
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park S-222	43-037-16173	SW NW (2030' FNL & 820' FWL) Sec. 22-T40S-R26E
Injection Well	I-149-IND-9124	Ismay	Ismay Flodine Park T-322	43-037-16179	NE SW (1820' FSL & 1935' FWL) Sec. 22-T40S-26E
Oil Well	I-149-IND-9124	Ismay	Ismay Flodine Park U-422	43-037-16187	SW SE (820' FSL & 2140' FEL) Sec. 22-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park S-227	43-037-16231	SW NW (2140' FNL & 820' FWL) Sec. 27-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park U-127	43-037-31648	NE NE (745' FNL & 595' FEL) Sec. 27-T40S-R26E
Oil Well	NOG-9904-1324	Ismay	Ismay Flodine Park U-227	43-037-16234	SW NE (2120' FNL & 1950' FEL) Sec. 27-T40S-R26E
Oil Well	14-20-603-2058-A	Ismay	Ismay Flodine Park U-234	43-037-16184	SW NE (1980' FNL & 2080' FEL) Sec. 34-T40S-R26E
Water Source Well	UTU-20894	Kachina	Wash Unit #2	43-037-31324	SE SE (470' FSL & 850' FEL) Sec. 13-T38S-R23E
Oil Well	UTU-20895	Kachina	Havasus Federal #41-24	43-037-31279	NE NE (1050' FNL & 500' FEL) Sec. 24-T38S-R23E
Injection Well	UTU-20895	Kachina	Havasus Federal #42-24	43-037-31298	SE NE (1970' FNL & 461' FEL) Sec. 24-T38S-R23E
Injection Well	UTU-56186	Kachina	Arabian Federal #2	43-037-31282	NW SW (2180' FSL & 950' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Arabian Federal #3	43-037-31287	NE SW (1470' FSL & 1750' FWL) Sec. 19-T38S-R24E
Injection Well	UTU-56186	Kachina	Havasus Federal #11-19	43-037-31458	NW NW (940' FNL & 590' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #12-19	43-037-31457	SW NW (1840' FNL & 410' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #12-19A	43-037-31459	SW NW (2520' FNL & 200' FWL) Sec. 19-T38S-R24E
Oil Well	UTU-56186	Kachina	Havasus Federal #22-19	43-037-31278	SW NW (1850' FNL & 1255' FWL) Sec. 19-T38S-R24E
Injection Well	UTU-52333	Kiva	Navajo Federal #12-4	43-037-31395	SW NW (2260' FNL & 440' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #14-4	43-037-31321	SW SW (1150' FSL & 1110' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #23-4	43-037-31259	NE SW (1500' FSL & 2500' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Kiva Federal #24-4	43-037-31745	SE SW (1057' FSL & 1997' FWL) Sec. 4-T39S-R25E
Injection Well	UTU-52333	Kiva	Navajo Federal #4-1	43-037-31112	SE SW (370' FSL & 1940' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #4-2	43-037-31161	SW SE (300' FSL & 2225' FEL) Sec. 4-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #4-4	43-037-31179	NW SW (1980' FSL & 660' FWL) Sec. 4-T39S-R25E
Oil Well	UTU-57895	Kiva	Navajo Federal #42-5	43-037-31261	SE NE (2130' FNL & 320' FEL) Sec. 5-T39S-R25E
Injection Well	UTU-58728	Kiva	Navajo Federal #43-5	43-037-31317	NE SE (1954' FSL & 627' FEL) Sec. 5-T39S-R25E
Oil Well	UTU-52333	Kiva	Navajo Federal #9-1	43-037-31001	NW NE (770' FNL & 2010' FEL) Sec. 9-T39S-R25E

**CHANGE OF OPERATOR**  
**from Merit Energy Company to Journey Operating, L.L.C.**  
**San Juan County, Utah**

**Attachment to Utah Form 19**

<b>Well Type</b>	<b>Lease Serial No.</b>	<b>Field Name</b>	<b>Well Name/Number</b>	<b>API Number</b>	<b>Location of Well</b>
Injection Well	UTU-52333	Kiva	Navajo Federal #21-9	43-037-31267	NE NW (330' FNL & 2510' FWL) Sec. 9-T39S-R25E
Water Source Well	UTU-52333	Kiva	Navajo Federal #42-9	43-037-31263	SE NE (1850' FNL & 1140' FEL) Sec. 9-T39S-R25E

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number Navajo Federal #23-4	API Number 4303731259
Location of Well	Field or Unit Name Kiva (Upper Ismay) Unit
Footage : 1500' FSL & 2500' FWL	County : San Juan
QQ, Section, Township, Range: NESW 4 39S 25E	State : UTAH
	Lease Designation and Number UTU-52333

**EFFECTIVE DATE OF TRANSFER:** 9/30/00

**CURRENT OPERATOR**

Company: <u>Merit Energy Company</u>	Name: <u>Arlene Valliquette</u>
Address: <u>12222 Merit Drive, Suite 1500</u>	Signature: <u><i>Arlene Valliquette</i></u>
<u>city Dallas state TX zip 75251</u>	Title: <u>Manager - Regulatory Affairs</u>
Phone: <u>(972) 701-8377</u>	Date: <u>9/29/00</u>
Comments:	

**NEW OPERATOR**

Company: <u>Journey Operating, L.L.C.</u>	Name: <u>Brian A. Baer</u>
Address: <u>1201 Louisiana, Suite 1040</u>	Signature: <u><i>Brian A. Baer</i></u>
<u>city Houston state TX zip 77002</u>	Title: <u>President</u>
Phone: <u>(713) 655-0595</u>	Date: <u>10/6/00</u>
Comments:	

(This space for State use only)

Transfer approved by: *A. Hunt* Approval Date: 11/9/01  
Title: *Field Services Manager*

Comments: well due for mechanical integrity test.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

IN REPLY REFER TO  
UT-931

January 4, 2001

Journey Operating, L.L.C.  
Attn: Sandra Meche  
Louisiana Place  
1201 Louisiana Street  
Houston, Texas 77002

Re: Kiva (Upper Ismay) Unit  
San Juan County, Utah

Gentlemen:

We received an indenture dated September 30, 2000, whereby Merit Energy Company resigned as Unit Operator and Journey Operating, L.L.C. was designated as Successor Unit Operator for the Kiva (Upper Ismay) Unit, San Juan County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective January 4, 2001. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Kiva (Upper Ismay) Unit Agreement.

Your nationwide (Wyoming) oil and gas bond No. 3354 will be used to cover all operations within the Kiva (Upper Ismay) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Moab (w/enclosure)  
~~Division of Oil, Gas & Mining~~  
Minerals Adjudication Group U-932  
File - Kiva (Upper Ismay) Unit (w/enclosure)  
MMS - Data Management Division  
Agr. Sec. Chron  
Fluid Chron

UT931:TAThompson:tt:1/4/01

## Results of query for MMS Account Number 83687U6890

API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Quarter	Field Name	Production Zo
4303731001	MERIT ENERGY COMPANY	9-1 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	9	NWNE	KIVA	ISMAY
4303731112	MERIT ENERGY COMPANY	4-1 NAVAJO FEDERAL	WIW	UTU52333	83687U6890	39S	25E	4	SESW	KIVA	DESERT CREE
4303731161	MERIT ENERGY COMPANY	4-2 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	SWSE	KIVA	ISMAY
<del>4303731176</del>	<del>MERIT ENERGY COMPANY</del>	4-3 NAVAJO FEDERAL	P+A	UTU52333	83687U6890	39S	25E	4	NESW	KIVA	
4303731179	MERIT ENERGY COMPANY	4-4 NAVAJO FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	NWSW	KIVA	ISMAY
4303731259	MERIT ENERGY COMPANY	23-4 NAVAJO-FEDERAL	TA	UTU52333	83687U6890	39S	25E	4	NESW	KIVA	ISMAY-DESER CREEK
4303731261	MERIT ENERGY COMPANY	42-5 NAVAJO-FEDERAL	POW	UTU58728	83687U6890	39S	25E	5	SENE	KIVA	ISMAY
4303731263	MERIT ENERGY COMPANY	42-9 NAVAJO-FEDERAL	WSW	UTU52333	83687U6890	39S	25E	9	SENE	KIVA	
4303731267	MERIT ENERGY COMPANY	21-9 NAVAJO-FEDERAL	WIW	UTU52333	83687U6890	39S	25E	9	NENW	KIVA	ISMAY

4303731317	MERIT ENERGY COMPANY	43-5 NAVAJO (BH 5)	OSI	UTU58728	83687U6890	39S	25E	4	NWSW	KIVA	ISMAY
4303731321	MERIT ENERGY COMPANY	14-4 NAVAJO FED	WIW	UTU52333	83687U6890	39S	25E	4	SWSW	KIVA	ISMAY
4303731395	MERIT ENERGY COMPANY	12-4 NAVAJO-FEDERAL	WIW	UTU52333	83687U6890	39S	25E	4	SWNW	KIVA	ISMAY
4303731745	MERIT ENERGY COMPANY	24-4 KIVAL FEDERAL	POW	UTU52333	83687U6890	39S	25E	4	SESW	KIVA	ISMAY

DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. GLH		4-KAS ✓
2. CDW		5- <del>570</del> ✓
3. JLT		6-FILE

Enter date after each listed item is completed

**X Change of Operator (Well Sold)**

Designation of Agent

Operator Name Change (Only)

Merger

The operator of the well(s) listed below has changed, effective: **9-30-2000**

<b>FROM:</b> (Old Operator):
MERIT ENERGY COMPANY
Address: 12222 MERIT DR.
DALLAS, TX 75251
Phone: 1-(972)-701-8377
Account N4900

<b>TO:</b> ( New Operator):
JOURNEY OPERATING LLC
Address: 1201 LOUISIANA, SUITE 1040
HOUSTON, TX 77002
Phone: 1-(713)-655-0595
Account N1435

**CA No.** **Unit: KIVA (UPPER ISMAY)**

**WELL(S)**

NAME	API NO.	ENTITY NO.	SEC. TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
NAVAJO FEDERAL 4-1	43-037-31112	9975	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 12-4	43-037-31395	10864	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 14-4	43-037-31321	10780	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 23-4	43-037-31259	9975	04-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 43-5	43-037-31317	9975	05-39S-25E	FEDERAL	WI	A
NAVAJO FEDERAL 21-9	43-037-31267	10759	09-39S-25E	FEDERAL	WI	A
KIVA FEDERAL 24-4	43-037-31745	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 4-2	43-037-31161	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 4-4	43-037-31179	9975	04-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 42-5	43-037-31261	9975	05-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 9-1	43-037-31001	9975	09-39S-25E	FEDERAL	OW	P
NAVAJO FEDERAL 42-9	43-037-31263	99998	09-39S-25E	FEDERAL	WSW	I

**OPERATOR CHANGES DOCUMENTATION**

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 10/23/2000
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 10/23/2000
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 01/05/2001

4. Is the new operator registered in the State of Utah: YES Business Number: 4822566-0161
5. If **NO**, the operator was contacted on: \_\_\_\_\_
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: 01/04/2001
7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: 01/04/2001
8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A
9. **Underground Injection Control ("UIC") Proj:** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 01/08/2001

**DATA ENTRY:**

1. Changes entered in the **Oil and Gas Database** on: 01/05/2001
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 01/05/2001
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

**STATE BOND VERIFICATION:**

1. State well(s) covered by Bond No.: N/A

**FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed has furnished a bond: N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A
3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

**FILMING:**

1. All attachments to this form have been **MICROFILMED** on: 2-21-01

**FILING:**

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on: \_\_\_\_\_

**COMMENTS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

June 19, 2001

Journey Operating, LLC  
1201 Louisiana, Suite 1040  
Houston, TX 77002

Re: Pressure Test for Mechanical Integrity, Navajo Federal 23-4 Well, Section 4,  
Township 39 South, Range 15 East, San Juan County, Utah

Gentlemen:

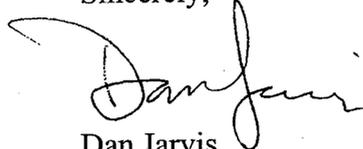
The Underground Injection Control Program, which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class, II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least once in every five-year period beginning in October 1982. Please make arrangements and ready the well for testing during the week of July 23, 2001 as outlined below:

1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.
4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
5. All bradenhead valves with exception of the tubing on the injection wells must be shut-in 24 hours prior to testing.

Page 2  
Journey Operating, LLC  
June 19, 2001

Please contact me at (801) 538-5336 to arrange a meeting time and place or negotiate a different date, if this one is unacceptable.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Jarvis". The signature is written in a cursive style with a large, sweeping initial "D".

Dan Jarvis  
UIC Geologist

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

FORM APPROVED  
Budget Bureau No.: 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or reentry to an  
abandoned well. Use Form 3160-3 (APD) for such proposals*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

5. Lease Designation and Serial No.

**UTU-52333**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Navajo Federal 23-4**

9. API Number

**43-037-31259**

10. Field and Pool or Exploratory Area

**Kiva; Upper Ismay**

11. County or Parish, State

**San Juan County, UT**

1. Type of well

Oil Well     Gas Well     Other     Injection Well

2. Name of Operator

**Journey Operating, L.L.C.**

3a. Address and Telephone No.

**1201 Louisiana, Suite 1040, Houston, Tx 77002**

3b. Phone No. (include area code)

**713-655-0595**

4. Location of Well (Footage, Sec, T,R, or Survey Description)

**1500' FSL & 2500' FWL (NE SW) -  
Sec 4, T 39S, R 25E**

**12 CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

**TYPE OF SUBMISSION**

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

**TYPE OF ACTION**

<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input checked="" type="checkbox"/> Temporarily Abandon	_____
<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated starting date of starting any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be preformed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operations result in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Journey Operating, L.L.C. would like to request permission to temporarily abandon this well. We would set a CIBP at 5500' with a wireline unit. Then we would fill the casing with treated packer fluid and pressure test the well to 1000 psig. I have attached a copy of the well bore schematic.

14 I hereby certify that the foregoing is true and correct

Signed: Sandra McShea Title: **Sr. Regulatory Analyst**

Date: **7/17/01**

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United State any false, fictious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*See Instructions on Reverse Side**

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 8-10-01

By: [Signature]

**Federal Approval of this  
Action is Necessary**

COPIES SENT TO OPERATOR  
Date: 8-13-01  
Initiator: CHD

**RECEIVED**

JUL 20 2001

DIVISION OF  
OIL, GAS AND MINING

K.B. ELEV. 4889'  
 D.F. ELEV. \_\_\_\_\_  
 GROUND LEVEL 4877'  
 CORR. \_\_\_\_\_

**SURFACE CASING**

SIZE 13 3/8 WEIGHT 61# DEPTH 92'  
 GRADE K-55 CMT. 110 sxs

**INTERMEDIATE CASING**

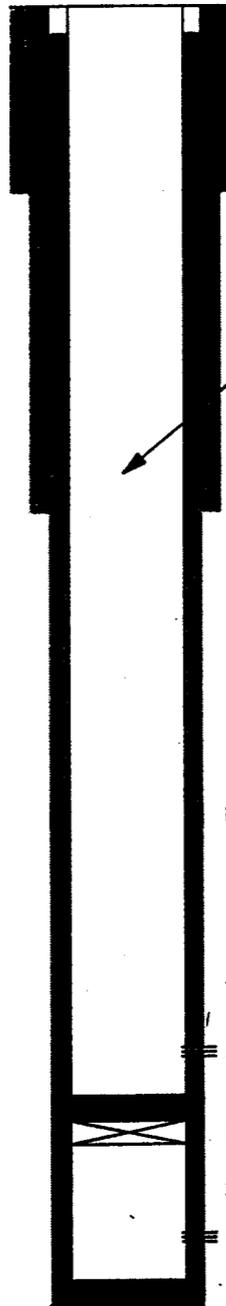
SIZE 9 5/8" WEIGHT 36# DEPTH 1649'  
 GRADE K-55 CMT. 695 sxs

HOLE 8 3/4"  
 SIZE

**PRODUCTION STRING**

SIZE 5 1/2" WEIGHT 17# DEPTH 5860'  
 GRADE J-55 CMT. 755 sx (1st stage)  
 CMT. 1523 sxs (2nd stage)

PBTD @ 5740'  
 TD @ 5860'



TOC @ 50' By CBL.

HOLE 17 1/2"  
 SIZE

TUBING None  
 SIZE

HOLE 12 1/4"  
 SIZE

DV Tool @ 3458'.

**Existing Ismay Perforations:**

≡ 5590 - 93, 5609 - 18

CIBP @ 5760' W/20' of cmt on top.

**Existing Desert Creek Perforations:**

≡ 5776 - 91

**INDIVIDUAL WELL HISTORY**

LEASE & WELL NO. Navajo Federal #23 - 4  
 FIELD NAME Kiva Field  
 LOCATION 1500' FSL, 2500' FWL, NE-SW, Section 4, T-39-S, R-25-E

FORMER NAME N/A  
 COUNTY & STATE San Juan County, Utah  
 API NO. 43-037-31259

**EQUIPMENT DETAILS**

**TUBING DETAIL:**

K.B.	12
165 jts 2 7/8", 6.5#, J-55, 8rd, tbg	5425.86
Baker 2 7/8", 2.25, R - nipple	0.9
1 jt 2 7/8", 6.5#, J-55, 8rd, tbg	32.98
Baker Inverted Lokset PKR	6.9

RODS \_\_\_\_\_ -5/8"  
 \_\_\_\_\_ -3/4"  
 \_\_\_\_\_ -7/8"  
 \_\_\_\_\_ -1"

Total Length = 5478.64

**PUMP SIZE**

CSG. AND COLLARS @ \_\_\_\_\_

**WELL HISTORY: Spud Date: 5/6/86**

Jun-86 Perf Desert Creek F/5776 - 91 (4 JSPF). Acidize W/1500 gals 15% HCL & 90 - 1.3 SpGr BS @ 3800 psi & 1/2 BPM. Set CIBP @ 5760' W 20' cmt on top of CIBP. PBTD @ 5740'.  
 Perf Upper Ismay F/5609 - 18 (4 JSPF). Acidize W/1000 gals 15% HCL & 60 - 1.3 SpGr BS @ 4000 psi & 3 BPM.  
 Re-acidize Upper Ismay W/3000 gals 28% HCL & 60 - 1.3 SpGr BS @ 4000 psi & 3 BPM.  
 Re-acidize Upper Ismay W/11000 gals DGA 215 in 3 stages @ 4000 psi & 6 BPM. IP = 43 BOPD + 10 BWPD + 60 MCFPD.  
 Mar-88 Convert well to water injection well into the Upper Ismay. Inject 30 BBLS of 200 DEG paraffin solvent prior to conversion.  
 Jan-91 Attempt to run inj. profile survey. Could not get below 5610' W/logging tool.  
 Feb-92 CO well to PBTD @ 5740'. Perforate Upper Ismay F/5590 - 93 & Reperforate Upper Ismay F/5609 - 5618 (4 JSPF). Acidize all perms W/1200 gals 90/10 DAD acid & 2400 gals 28% LCA in 70% quality foam. Return well to injection.  
 Sep-95 POOH & LD 2 7/8" tbg & inj. PKR. TA well.

**WELL HISTORY (CONT.)**

**SPECIAL TEST (CORE, PRESSURE, ETC.)**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

FORM APPROVED  
Budget Bureau No.: 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or reentry to an abandoned well. Use Form 3160-3 (APD) for such proposals*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of well  
 Oil Well     Gas Well     Other     Injection Well

2. Name of Operator  
 Journey Operating, L.L.C.

3a. Address and Telephone No.  
 1201 Louisiana, Suite 1040, Houston, Tx 77002

3b. Phone No. (include area code)  
 713-655-0595

4. Location of Well (Footage, Sec, T,R, or Survey Description)  
 1500' FSL & 2500' FWL (NE SW)  
 Sec 4, T 39S, R 25E

5. Lease Designation and Serial No.  
 UTU-52333

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
 Navajo Federal 23-4

9. API Number  
 43-037-31259

10. Field and Pool or Exploratory Area  
 Kiva; Upper Ismay

11. County or Parish, State  
 San Juan County, UT

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input checked="" type="checkbox"/> Temporarily Abandon	_____
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated starting date of starting any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operations result in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Journey Operating L.L.C. temporarily abandon this well on August 21, 2001 per the attached activity report. A MIT was run on the well after the T&A was complete and it held 1000 psig for one hour. I have attached the chart for your records and review.

14 I hereby certify that the foregoing is true and correct

Signed: *Shirley Meche* Title: Sr. Regulatory Analyst Date: 9/28/01

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United State any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

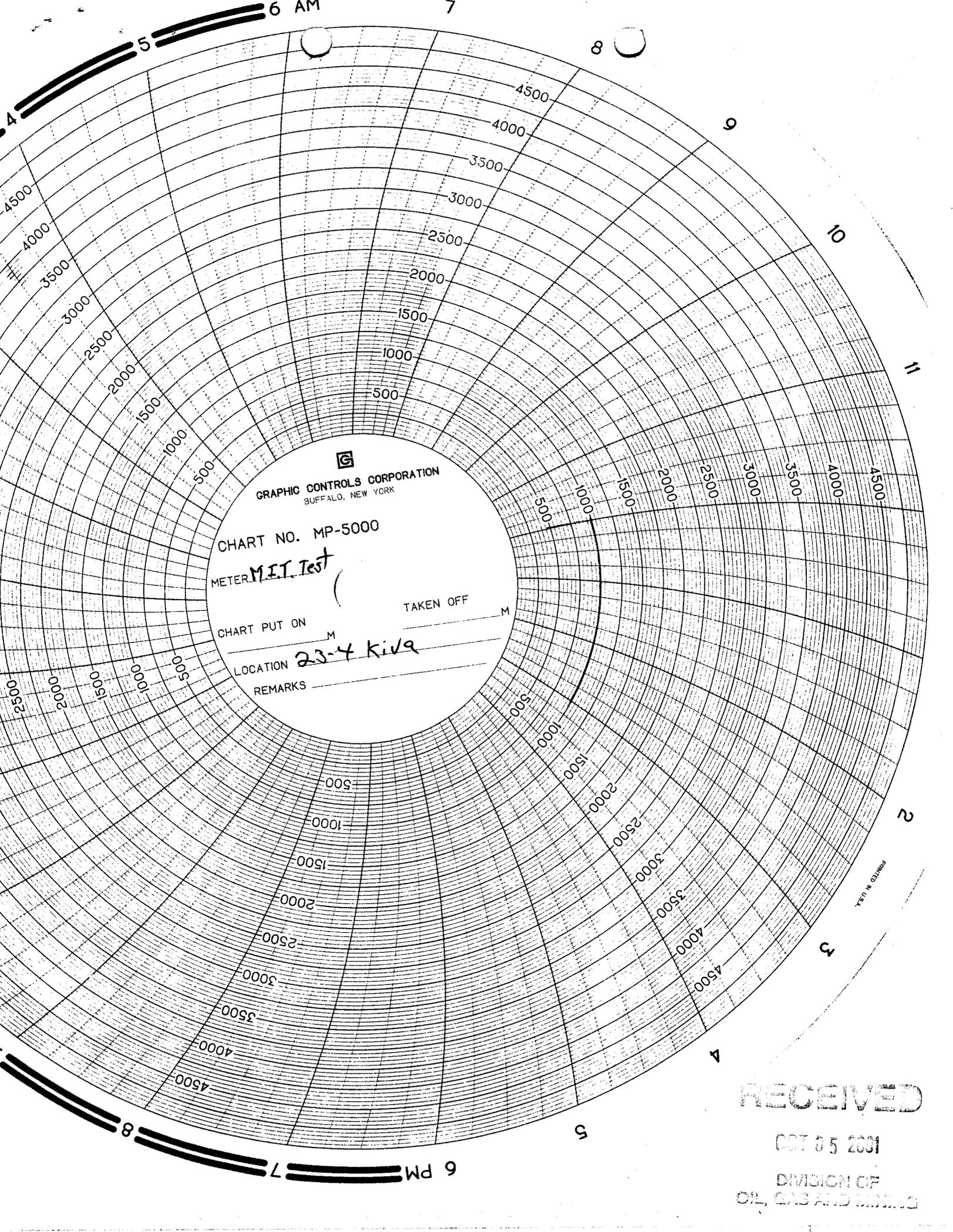
\*See Instructions on Reverse Side

**RECEIVED**

OCT 05 2001

DIVISION OF  
OIL, GAS AND MINING





GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

CHART NO. MP-5000

METER *M.I.T. Test*

CHART PUT ON \_\_\_\_\_ M TAKEN OFF \_\_\_\_\_ M

LOCATION *23-4 kvlg*

REMARKS \_\_\_\_\_

RECEIVED

OCT 05 2001

DIVISION OF  
OIL, GAS AND MINING

4 5 6 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM 7 8

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ
2. CDW

**X Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **6/9/2006**

<b>FROM:</b> (Old Operator): N1435-Journey Operating, LLC 201 Louisiana, Suite 1040 Houston, TX 77002 Phone: 1 (713) 655-0595	<b>TO:</b> ( New Operator): N0265-Citation Oil & Gas Corp 8223 Willow Place South Houston, TX 77070 Phone: 1 (281) 517-7800
---	---

WELL NAME	CA No.			Unit:		KIVA		
	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
NAVAJO FEDERAL 9-1	09	390S	250E	4303731001	9975	Federal	OW	P
NAVAJO FED 4-1	04	390S	250E	4303731112	9975	Federal	WI	A
NAVAJO FEDERAL 4-2	04	390S	250E	4303731161	9975	Federal	OW	S
NAVAJO FEDERAL 4-4	04	390S	250E	4303731179	9975	Federal	OW	P
NAVAJO FED 23-4	04	390S	250E	4303731259	9975	Federal	WI	I
NAVAJO FEDERAL 42-5	05	390S	250E	4303731261	9975	Federal	OW	S
NAVAJO FEDERAL 42-9	09	390S	250E	4303731263	9975	Federal	WS	A
NAVAJO FED 21-9	09	390S	250E	4303731267	9975	Federal	WI	A
NAVAJO FED 43-5	04	390S	250E	4303731317	9975	Federal	WI	A
NAVAJO FED 14-4	04	390S	250E	4303731321	9975	Federal	WI	A
NAVAJO FED 12-4	04	390S	250E	4303731395	9975	Federal	WI	A
24-4 KIVA FEDERAL	04	390S	250E	4303731745	9975	Federal	OW	P

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/23/2006
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/23/2006
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: \_\_\_\_\_
- Is the new operator registered in the State of Utah: YES Business Number: 793304-0143
- (R649-9-2)Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 7/6/2006 BIA \_\_\_\_\_
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 7/6/2006
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/30/2006

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 7/31/2006
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 7/31/2006
- Bond information entered in RBDMS on: n/a
- Fee/State wells attached to bond in RBDMS on: n/a
- Injection Projects to new operator in RBDMS on: 7/31/2006
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: 104061650
- Indian well(s) covered by Bond Number: 104061656

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:

See Attached List

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

See Attached List

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL

OIL WELL  GAS WELL  OTHER \_\_\_\_\_

8. WELL NAME and NUMBER:

See Attached List

2. NAME OF OPERATOR:

Journey Operating, L.L.C. *N 1435*

9. API NUMBER:

See Attach

3. ADDRESS OF OPERATOR:

1201 Louisiana, Suite 1040 *HOUSTON* Houston STATE TX ZIP 77002

PHONE NUMBER:

(713) 655-0595

10. FIELD AND POOL, OR WILDCAT:

See Attached List

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See Attached List

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Journey Operating, L.L.C. advises, effective June 9, 2006, Citation Oil & Gas Corp. will become the operator of the wells on the attached list.

Citation Oil & Gas Corp. (N0265)  
8223 Willow Place South  
Houston, TX 77070  
(281) 517-7800  
Bond No.: 104325628 - \$120,000

*BLM BOND = 104061650  
BIA BOND = 104061656*

By: *Robert T. Kennedy*  
Robert T. Kennedy  
Sr. Vice President Land

NAME (PLEASE PRINT) Brian A. Baer

TITLE President

SIGNATURE

*Brian A. Baer*

DATE 6/9/2006

(This space for State use only)

APPROVED *7/13/2006*

*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

RECEIVED

JUN 23 2006

DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number Navajo Federal #23-4	API Number 4303731259
Location of Well Footage : 1500' FSL & 2500 FWL County : San Juan	Field or Unit Name Kiva
QQ, Section, Township, Range: NESW 4 39S 25E State : UTAH	Lease Designation and Number UTU-52333

**EFFECTIVE DATE OF TRANSFER:** 6/9/2006

**CURRENT OPERATOR**

Company: Journey Operating, L.L.C.  
 Address: 1201 Louisiana, Suite 1040  
city Houston state TX zip 77002  
 Phone: (713) 655-0595  
 Comments:

Name: Brian A. Baer  
 Signature: *Brian A. Baer*  
 Title: President  
 Date: 6/29/2006

**NEW OPERATOR**

Company: Citation Oil & Gas Corp.  
 Address: 8223 Willow Place South  
city Houston state TX zip 77070  
 Phone: (281) 517-7800  
 Comments:

Name: Robert T. Kennedy  
 Signature: *Robert T. Kennedy*  
 Title: Sr. Vice President Land  
 Date: 7-11-06

(This space for State use only)

Transfer approved by: *Don [Signature]*  
 Title: *UIC 6-8010413*

Approval Date: *7/14/06*

Comments:

**RECEIVED**  
**JUL 17 2006**

DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS AND MINING**

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

UTU52333

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

Kiva Unit 83687U6890

8. WELL NAME and NUMBER:

Navajo Federal 23-4

9. API NUMBER:

4303731259

10. FIELD AND POOL, OR WILDCAT:

Kiva Upper Ismay

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL

OIL WELL  GAS WELL  OTHER Water Injection Well

2. NAME OF OPERATOR:

Citation Oil & Gas Corp.

3. ADDRESS OF OPERATOR:

P.O. Box 690688 CITY Houston STATE TX ZIP 77269-0688

PHONE NUMBER:

(281) 517-7194

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1500' FSL & 2500' FWL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 4 39S 25E

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input checked="" type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>3/28/2007</u>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Integrity</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp. requests approval to retain this wellbore in a Temporarily Abandoned status pending possible future utility in the Kiva Unit. The well was successfully tested for mechanical integrity on 3/28/2007 and a copy of MIT is attached for your review.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 04-23-07

By: [Signature]

COPY SENT TO OPERATOR

Date: 04-24-07

Initials: [Signature]

NAME (PLEASE PRINT) Debra Harris

TITLE Regulatory Compliance Coordinator

SIGNATURE [Signature]

DATE 4/3/2007

(This space for State use only)

**RECEIVED**

**APR 20 2007**

**DIV. OF OIL, GAS & MINING**

NAVAJO FEDERAL 23-4  
KIVA FIELD; SAN JUAN Co, UT.

IMIT    EMIT          **MIT Tests**

API Well No: 43-037-31259-00-00    **NAVAJO FED 23-4**    Multiple Tests for This Well >>> 03/28/2007 00:00  
 CITATION OIL & GAS CORP    SAN JUAN    09/28/2001 00:00  
 09/23/1992 00:00  
 IMIT Test Date/Time: 03/28/2007 0:00    Reason For Test: 5-year Test  
 Data for Wells Using APM    Type of IMIT    Date to edit/view data for this well:  
 Ann. Mon. Result :    Other Internal MIT

Initial Test Pressure: 1100 psig    Test Result: Acceptable    Well Status: Static  
 Final Test Pressure: 1100 psig    Witnessed? Yes    Inj. Pressure:    psig  
 Duration of Test: 20 min.    Insp. Name:    Inj. Rate:    BPD

Date Mod:

Notes: Surface equipment rusted up, some problems getting valves open, well tested ok. Well has been inactive for extended period of time.

NEXT MIT: 3/28/2012

API Well No: 43-037-31259-00-00    **NAVAJO FED 23-4**    Multiple Tests for This Well >>> 03/28/2007 00:00  
 CITATION OIL & GAS CORP    SAN JUAN    09/28/2001 00:00  
 09/23/1992 00:00  
 IMIT Test Date/Time: 09/28/2001 0:00    Reason For Test: Post Workover Test  
 Data for Wells Using APM    Type of IMIT    Date to edit/view data for this well:  
 Ann. Mon. Result :    Std. Annulus Pres. Test

Initial Test Pressure: 1000 psig    Test Result: Acceptable    Well Status: Static  
 Final Test Pressure: 1000 psig    Witnessed? No    Inj. Pressure:    psig  
 Duration of Test: 60 min.    Insp. Name:    Inj. Rate:    BPD

Date Mod: 10/05/2001

Notes: MIT RAN AFTER WELL T&A COMPLETED;SEE HISTORY RECORD:

NEXT MIT: 3/28/2012 *1/m*

API Well No: 43-037-31259-00-00		NAVAJO FED. 23.4		Multiple Tests for This Well >>>		03/28/2007 00:00
CITATION OIL & GAS CORP.		SAN JUAN				09/28/2001 00:00
IMIT Test Date/Time: 09/23/1992 0:00		Reason For Test:				09/23/1992 00:00
Data for Wells Using APM			Type of IMIT		Date to edit/view data for this well:	
Ann. Mon. Result :		Std. Annulus Pres. Test				
Initial Test Pressure: _____ psig		Test Result: Acceptable		Well Status: _____		
Final Test Pressure: _____ psig		Witnessed? Yes		Inj. Pressure: _____ psig		
Duration of Test: _____ min.		Insp. Name: _____		Inj. Rate: _____ BPD		
				Date Mod: 05/12/1999		
Notes: 1000 PSI HELD 15 MIN..						
		NEXT MIT: 3/28/2012				

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU52333
2. NAME OF OPERATOR: Citation Oil & Gas Corp.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Kiva Unit 83687U6890
3. ADDRESS OF OPERATOR: P.O. Box 690688 CITY Houston STATE TX ZIP 77269-0688		7. UNIT or CA AGREEMENT NAME: Kiva Unit 83687U6890
PHONE NUMBER: (281) 517-7194		8. WELL NAME and NUMBER: Navajo Federal 23-4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1500' FSL & 2500' FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 4 39S 25E		9. API NUMBER: 4303731259
COUNTY: San Juan		10. FIELD AND POOL, OR WLD/CAT: Kiva Upper Ismay
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input checked="" type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 3/28/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp. requests approval to retain this wellbore in a Temporarily Abandoned status pending possible future utility in the Kiva Unit. The well was successfully tested for mechanical integrity on 3/28/2007 and a copy of MIT is attached for your review.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 5/5/08  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 5/6/2008  
Initials: KS

NAME (PLEASE PRINT) <u>Debra Harris</u>	TITLE <u>Regulatory Compliance Coordinator</u>
SIGNATURE <u>[Signature]</u>	DATE <u>4/3/2008</u>

(This space for State use only)

RECEIVED  
APR 07 2008  
DIV. OF OIL, GAS & MINING

NAVAJO FEDERAL 23-4  
KIVA FIELDS; SAN JUAN Co, UT.

MIT Tests

API Well No: 43-037-31259-00-00

Multiple Tests for This Well >>> 03/28/2007 00:00  
09/28/2001 00:00  
09/23/1992 00:00

IMIT Test Date/Time: 03/28/2007 0:00 Reason For Test: 5-year Test

Data for Wells Using APM Type of IMIT: Other Internal MIT Date to edit/view data for this well:

Ann. Mon. Result:

Initial Test Pressure: 1100 psig Test Result: Acceptable Well Status: Static  
Final Test Pressure: 1100 psig Witnessed? Yes Inj. Pressure: psig  
Duration of Test: 20 min. Insp. Name: Inj. Rate: BPD

Date Mod: 03/28/2007

Notes: Surface equipment rusted up, some problems getting valves open, well tested ok. Well has been inactive for extended period of time.

NEXT MIT: 3/28/2012

API Well No: 43-037-31259-00-00

Multiple Tests for This Well >>> 03/28/2007 00:00  
09/28/2001 00:00  
09/23/1992 00:00

IMIT Test Date/Time: 09/28/2001 0:00 Reason For Test: Post Workover Test

Data for Wells Using APM Type of IMIT: Std. Annulus Pres. Test Date to edit/view data for this well:

Ann. Mon. Result:

Initial Test Pressure: 1000 psig Test Result: Acceptable Well Status: Static  
Final Test Pressure: 1000 psig Witnessed? No Inj. Pressure: psig  
Duration of Test: 60 min. Insp. Name: Inj. Rate: BPD

Date Mod: 09/28/2001

Notes: MIT RAN AFTER WELL T&A COMPLETED; SEE HISTORY RECORD.

NEXT MIT: 3/28/2012 ✓m

API Well No: 43-037-31259-00-00

Multiple Tests for This Well >>>  
03/28/2007 00:00  
09/28/2001 00:00  
09/23/1992 00:00

IMIT Test Date/Time: 09/23/1992 0:00 Reason For Test:

Data for Wells Using APM

Type of IMIT

Date to edit/view data for this well:

Ann. Mon. Result :

Std. Annulus Pres. Test

Initial Test Pressure: psig

Test Result: Acceptable

Well Status:

Final Test Pressure: psig

Witnessed? Yes

Inj. Pressure: psig

Duration of Test: min.

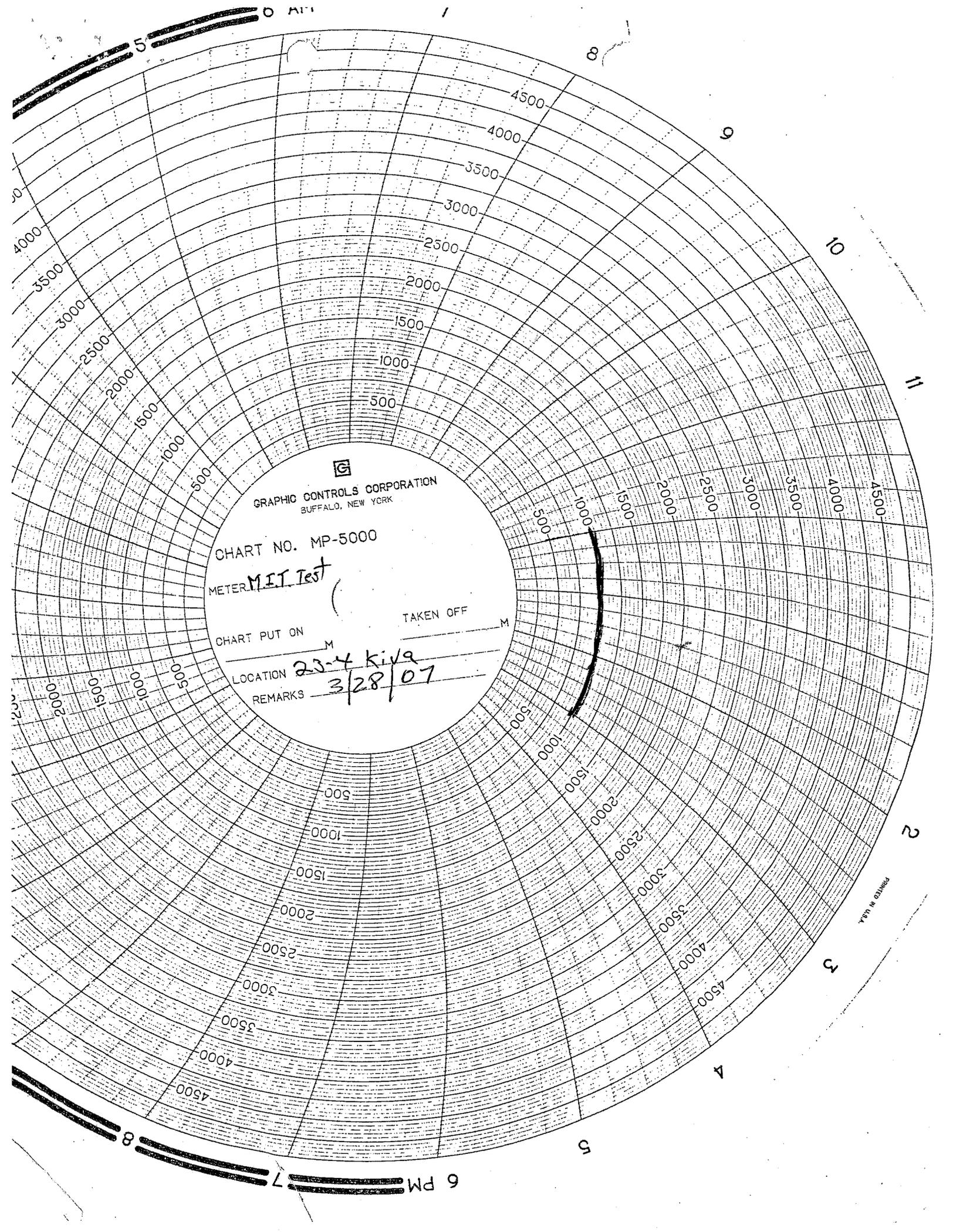
Insp. Name:

Inj. Rate: BPD

Date Mod:

Notes: 1000 PSI HELD 15 MIN.

NEXT MIT: 3/28/2012



GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

CHART NO. MP-5000

METER MEI Test

CHART PUT ON M \_\_\_\_\_ TAKEN OFF M \_\_\_\_\_

LOCATION 23-4 kiva

REMARKS 3/28/07

PRINTED IN U.S.A.

6 PM

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU52333</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>		7. UNIT or CA AGREEMENT NAME: <b>Kiva Unit 83687U6890</b>
2. NAME OF OPERATOR: <b>Citation Oil &amp; Gas Corp.</b>		8. WELL NAME and NUMBER: <b>Navajo Federal 23-4</b>
3. ADDRESS OF OPERATOR: <b>P.O. Box 690688</b> CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77269-0688</b>		9. API NUMBER: <b>4303731259</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1500' FSL &amp; 2500' FWL</b>		10. FIELD AND POOL, OR WILDCAT: <b>Kiva Upper Ismay</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESW 4 39S 25E</b>		COUNTY: <b>San Juan</b> STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start:  	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only)  Date of work completion: <b>3/28/2007</b>	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input checked="" type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp. requests approval to retain this wellbore in a Temporarily Abandoned status pending possible future utility in the Kiva Unit. The well was successfully tested for mechanical integrity on 3/28/2007 and a copy of MIT is attached for your review.

COPY SENT TO OPERATOR

Date: 6/4/2009  
Initials: KS

NAME (PLEASE PRINT) Debra Harris TITLE Regulatory Compliance Coordinator  
SIGNATURE *Debra Harris* DATE 5/11/2009

**APPROVED BY THE STATE**  
**OF UTAH DIVISION OF**  
**OIL, GAS, AND MINING**  
DATE: 6/2/09  
BY: *[Signature]*

**RECEIVED**  
**MAY 18 2009**

DIV. OF OIL, GAS & MINING

(5/2000) \* UIC Form 2 (Part 2) shall be submitted for this well on a monthly basis. missing reports from last MIT should be submitted.

43-037-31259

NAVASO FEDERAL 23-4  
KIVA FIELD; SAN JUAN Co, UT.

MIT EMIT

### MIT Tests

API Well No: 43-037-31259-00-00

NAVASO FEDERAL 23-4  
KIVA FIELD; SAN JUAN Co, UT.

Multiple Tests for  
This Well >>>

03/28/2007 00:00  
09/28/2001 00:00  
09/23/1992 00:00

IMIT Test Date/Time: 03/28/2007 0:00

Reason For Test: 5-year Test

Data for Wells Using APM

Type of IMIT

Date to edit/view  
data for this well:

Ann. Mon. Result :

Other Internal MIT

Initial Test Pressure: 1100 psig

Test Result: Acceptable

Well Status: Static

Final Test Pressure: 1100 psig

Witnessed? Yes

Inj. Pressure: psig

Duration of Test: 20 min.

Insp. Name:

Inj. Rate: BPD

Date Mod: 04/10/2007

Notes: Surface equipment rusted up, some problems getting valves open, well tested ok. Well has been inactive for extended period of time.

NEXT MIT: 3/28/2012

API Well No: 43-037-31259-00-00

NAVASO FEDERAL 23-4  
KIVA FIELD; SAN JUAN Co, UT.

Multiple Tests for  
This Well >>>

03/28/2007 00:00  
09/28/2001 00:00  
09/23/1992 00:00

IMIT Test Date/Time: 09/28/2001 0:00

Reason For Test: Post Workover Test

Data for Wells Using APM

Type of IMIT

Date to edit/view  
data for this well:

Ann. Mon. Result :

Std. Annulus Pres. Test

Initial Test Pressure: 1000 psig

Test Result: Acceptable

Well Status: Static

Final Test Pressure: 1000 psig

Witnessed? No

Inj. Pressure: psig

Duration of Test: 60 min.

Insp. Name:

Inj. Rate: BPD

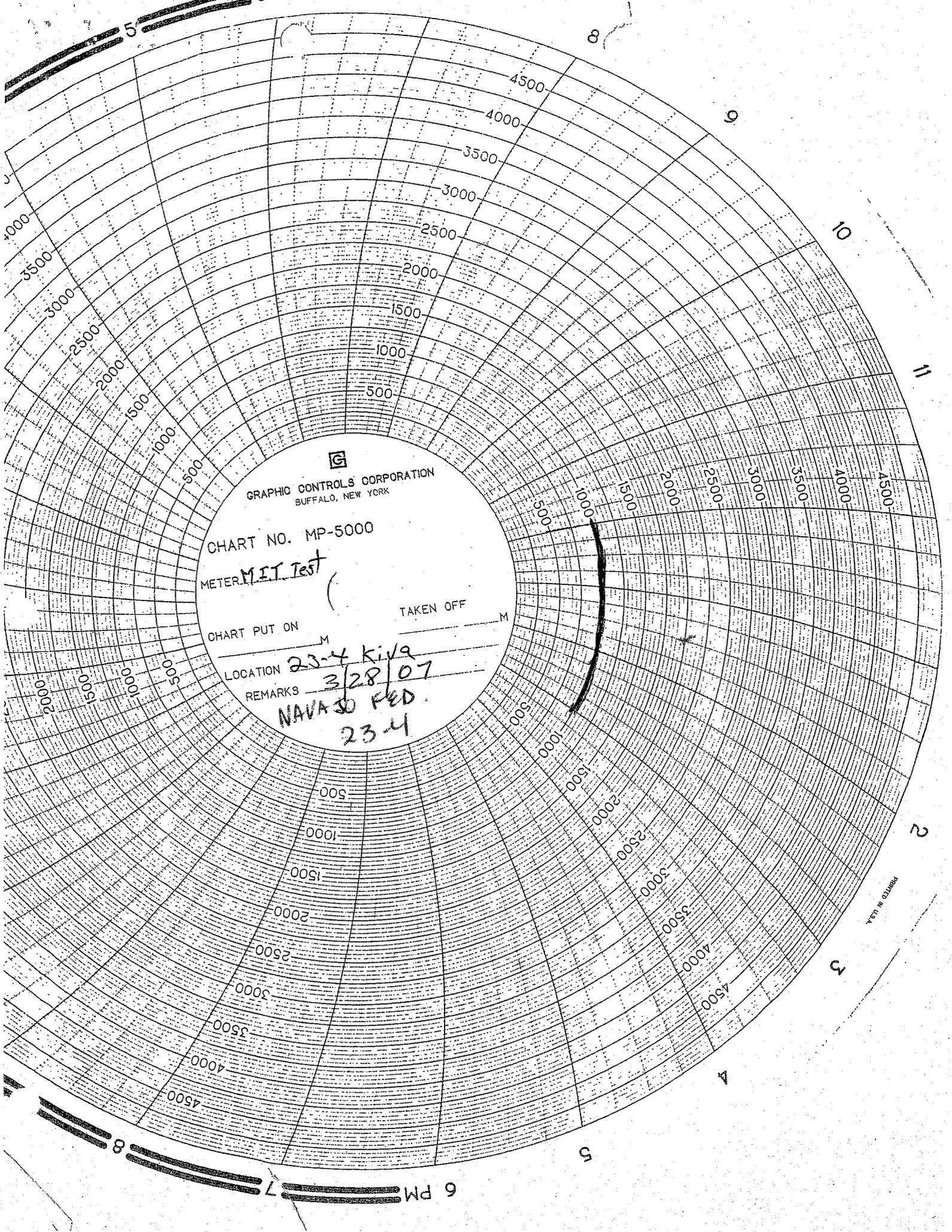
Date Mod: 11/05/2001

Notes: MIT RAN AFTER WELL T&A COMPLETED;SEE HISTORY RECORD.

NEXT MIT: 3/28/2012 *vm*

NAVASO FEDERAL 234

API Well No:	43-037-31259-00-00	NAVASO FEDERAL	Multiple Tests for This Well >>>	03/28/2007 00:00 09/28/2001 00:00 09/23/1992 00:00
IMIT Test Date/Time:	09/23/1992 0:00	Reason For Test:		
Data for Wells Using APM		Type of IMIT	Date to edit/view data for this well:	
Ann. Mon. Result :		Std. Annulus Pres. Test		
Initial Test Pressure:		psig	Test Result:	Acceptable
Final Test Pressure:		psig	Witnessed?	Yes
Duration of Test:		min.	Insp. Name:	
			Well Status:	
			Inj. Pressure:	
			Inj. Rate:	
				psig
				BPD
			Date Mod:	09/23/1992
Notes:	1000 PSI HELD 15 MIN.			
		NEXT MIT:	3/28/2012	



GRAPHIC CONTROLS CORPORATION  
BUFFALO, NEW YORK

CHART NO. MP-5000  
METER MIT Test

CHART PUT ON \_\_\_\_\_ M  
TAKEN OFF \_\_\_\_\_ M

LOCATION 23-4 Kiva

REMARKS 3/28/07

NAVA SO PED.  
23-4

PRINTED IN U.S.A.

6 PM 7 8

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU52333</b>
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1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>			7. UNIT or CA AGREEMENT NAME: <b>Kiva Unit 83687U6890</b>
2. NAME OF OPERATOR: <b>Citation Oil &amp; Gas Corp.</b>			8. WELL NAME and NUMBER: <b>Navajo Federal 23-4</b>
3. ADDRESS OF OPERATOR: <b>P.O. Box 690688</b> CITY <b>Houston</b> STATE <b>TX</b> ZIP <b>77269-0688</b>		PHONE NUMBER: <b>(281) 891-1565</b>	9. API NUMBER: <b>4303731259</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1500' FSL &amp; 2500' FWL</b>			10. FIELD AND POOL, OR WILDCAT: <b>Kiva Upper Ismay</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESW 4 39S 25E</b>			COUNTY: <b>San Juan</b>
			STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
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	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
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	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**Citation Oil & Gas Corp. requests approval to plug and abandon the refernced well with the attached procedure.**

**COPY SENT TO OPERATOR**  
Date: 6/10/2010  
Initials: KS

NAME (PLEASE PRINT) Bridget Lisenbe    TITLE Permitting Analyst  
SIGNATURE Bridget Lisenbe    DATE 4/20/2010

(This space for State use only)

**APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING**  
DATE: 6/9/10  
BY: [Signature]  
*\* See conditions of Approval (Attached)*

Federal Approval Of This Action Is Necessary

**RECEIVED**  
**APR 26 2010**  
DIV. OF OIL, GAS & MINING

## PLUG AND ABANDON PROCEDURE

PROJECT: Plug and Abandon the Navajo Federal 23-4 In Kiva Unit

PRESENT FORMATION AND COMPLETION: Desert Creek (Below CIBP), Ismay (Below CIBP)

TUBING: None, the well is temporarily abandoned.

MISC.: Test casing integrity above the CIBP @ 5550' before proceeding with P&A operations.

### PROCEDURE

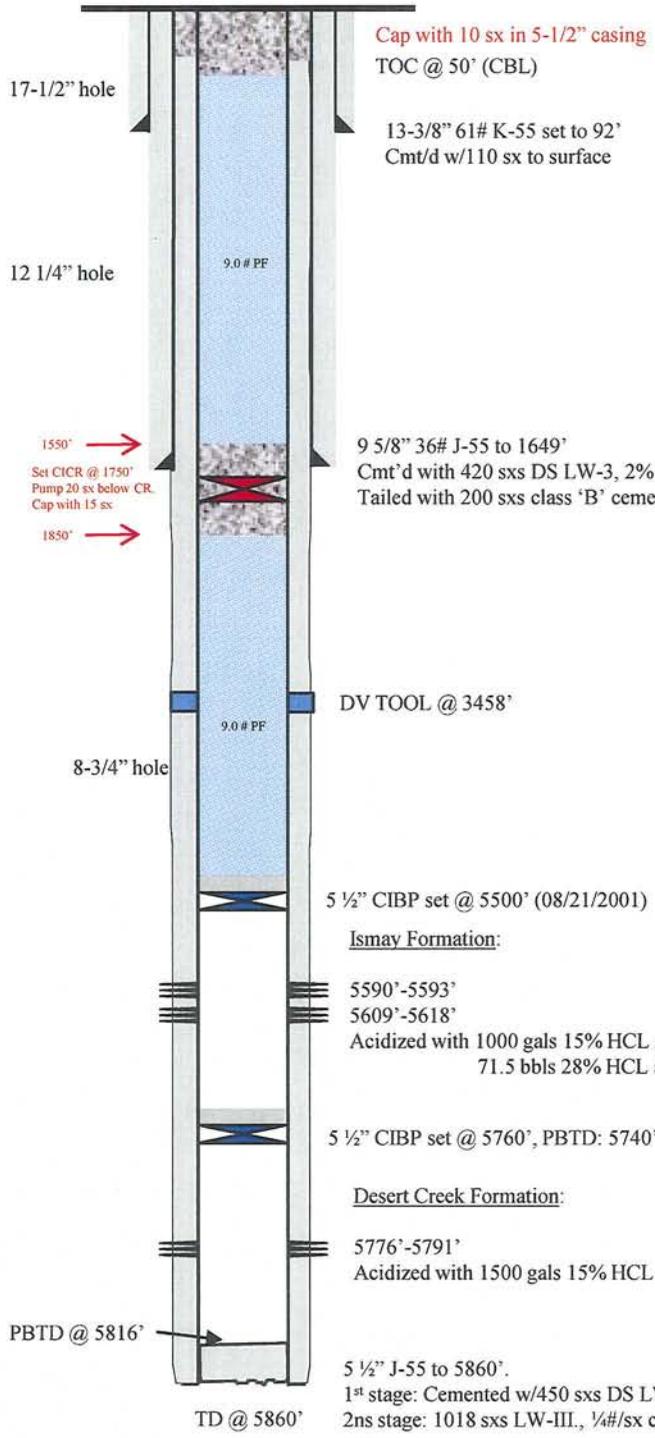
✓ **Move in 2000' of 2-7/8" WS on location for P&A.**

1. MI RU PU. Stand and tally 2000' of 2-7/8" WS. ND WH and NU BOP.
2. PU & RIH with 4 3/4" bit and scraper to 2000' to check for obstructions. Load hole and pressure test to 1000 PSI. If test is good, release pressure, POOH with bit and scraper and proceed to P&A.
3. Load and circulate 9# PF.
4. TIH with CICR and tubing. Set CICR at 1750'. Sting in and out. Sting back in.
5. RU cementers. Establish injection rate and mix and pump 20 sx cement below CICR. Sting out and cap with 15 sx. POOH with tubing and stinger. WOC to set.
6. Circulate 9# PF to surface. SI BOP and PT to 500#.
7. Run 3 jnts of tubing. Spot 10 sack plug in production casing and 15 sacks into 9 5/8" to 5 1/2" annulus to completely plug the hole.
8. Cap casing string with steel plate. Clean off location. Reclaim location and install P&A marker.

# CITATION OIL AND GAS CORPORATION WELLBORE DIAGRAM AND INFORMATION **PROPOSED**

**Well Name:** Navajo Federal 23-4      **Field:** Kiva  
**Date:** 04/19/10      **Location:** Sec.4. T39S, R25E  
**County:** San Juan      **State:** Utah

**Surface:** 1500' FSL & 2500' FWL Sec. 4 T39S R25E  
 San Juan County, UT  
**Completed:** 07/18/1986  
**Elevation:** 4877'  
**KB:** 4889'  
**API #:** 43-037-31259



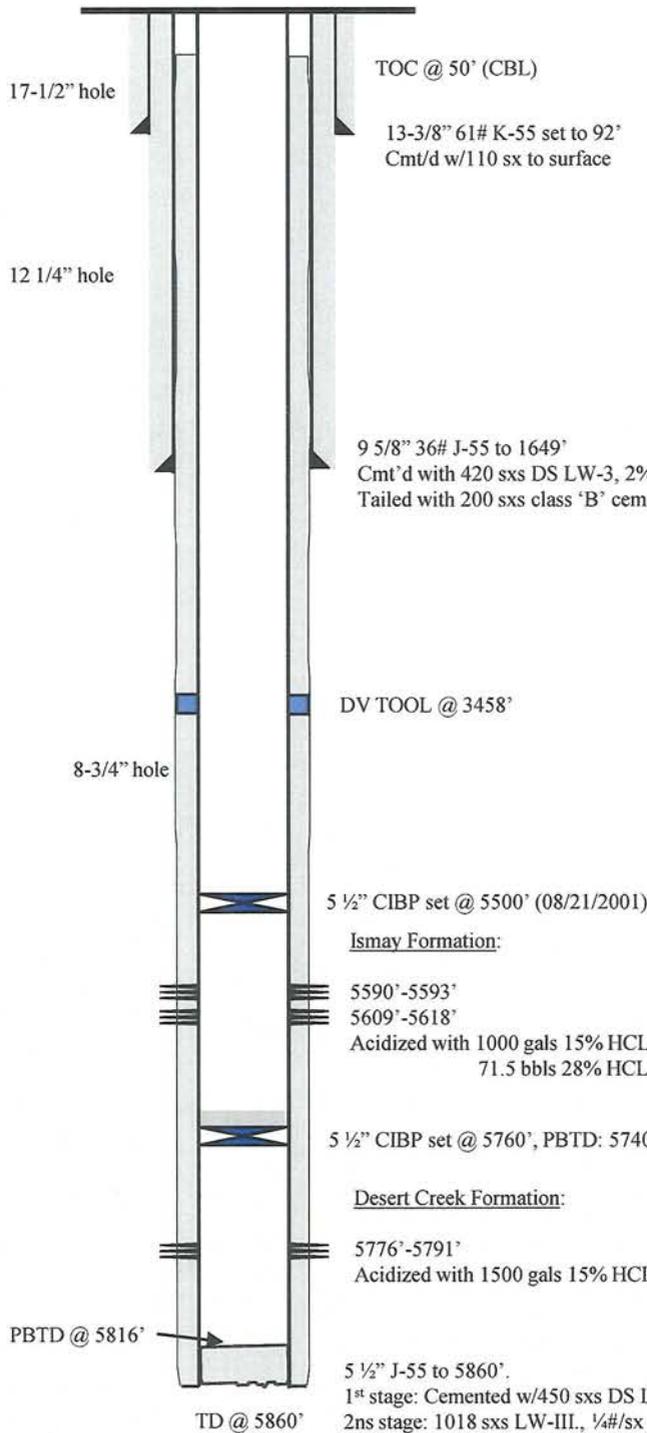
**Well History:**  
 06/86: Perf Desert Creek (5776'-91') 4 JSPF. Acidize (see WBD)  
 Set CIBP @ 5760' w/20' cmt on top of CIBP.  
 Perf Ismay (5609'-18') 4 JSPF. Acidize (See WBD)  
**IP: 43 BOPD + 10 BWPD + 60 MCFPD**  
 03/88: Convert to WIW into upper Ismay. Inject 30 BBLs of 200 DEG. Paraffin solvent prior to conversion  
 01/91: Attempt to run injection survey. Could not get below 5610' with logging tool.  
 02/92: CO well to PBTD @ 5740'. Perforate upper Ismay from 5590'-93' and reperforate upper Ismay from 5609'-18' Acidize all perfs with 1200 gal 90/10 DAD acid and 2400 gals 28% LCA in 70% quality foam. RTJ  
 09/95: POOH & LD 2 7/8" tubing and injection packer. TA well

# CITATION OIL AND GAS CORPORATION WELLBORE DIAGRAM AND INFORMATION

**Well Name:** Navajo Federal 23-4  
**Date:** 04/19/10  
**County:** San Juan

**Field:** Kiva  
**Location:** Sec.4, T39S, R25E  
**State:** Utah

**Surface:** 1500' FSL & 2500' FWL Sec. 4 T39S R25E  
 San Juan County, UT  
**Completed:** 07/18/1986  
**Elevation:** 4877'  
**KB:** 4889'  
**API #:** 43-037-31259



**Well History:**  
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 09/95: POOH & LD 2 7/8" tubing and injection packer. TA well



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## ***CONDITIONS OF APPROVAL TO PLUG AND ABANDON WELL***

Well Name and Number: Navajo Fed 23-4  
API Number: 43-037-31259  
Operator: Citation Oil & Gas Corp.  
Reference Document: Original Sundry Notice dated April 20, 2010,  
received by DOGM on April 26, 2010.

### FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

#### Approval Conditions:

1. Notify Jeff Brown (435-587-1525) of the BLM Monticello Field Office at least 24-hours prior to starting plugging operations.
2. Tag the CIBP set at 5500' in 2001. Ensure that the CIBP is capped with at least 100 feet (12 sx) of cement. Add to cement cap if necessary.
3. Pressure test 5-1/2" x 9-5/8" annulus to ensure there is competent cement across the 9-5/8" casing shoe. Pressure annulus to 300 psi, wait 30 minutes and record any pressure decline.
  - a. If the annulus holds pressure, continue plugging as proposed.
  - b. If the annulus does not hold pressure
    - i. perforate the 5-1/2" casing at approximately 1700' (50 feet or more below the 9-5/8" shoe.
    - ii. Set the CICR above perforations.
    - iii. Increase the volume of cement squeezed through the CICR to fill a minimum of 100 feet of annulus (50' above and 50' below the shoe) and the volume of the 5-1/2" casing between the CICR and the perforations.
    - iv. Cap the CICR with sufficient cement to extend a minimum of 50 feet above the 9-5/8" shoe.
4. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) and Eric Jones (435-259-2117) of the BLM Moab Field Office prior to continuing with the procedure.
5. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

Dustin K. Doucet  
Petroleum Engineer

June 9, 2010

Date

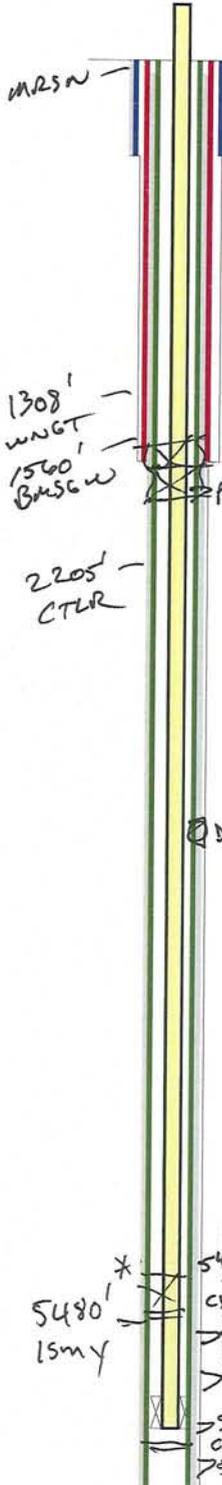


# Wellbore Diagram

API Well No: 43-037-31259-00-00 Permit No: UIC-105.1 Well Name/No: NAVAJO FED 23-4  
 Company Name: CITATION OIL & GAS CORP  
 Location: Sec: 4 T: 39S R: 25E Spot: NESW  
 Coordinates: X: 661269 Y: 4143057  
 Field Name: KIVA  
 County Name: SAN JUAN

### String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)
SURF	82	13.325		
II	1645	9.625	36	
BASK	3458	5.5		
PROD	5860	5.5	17	7.661
TI	5609	2.875		
PKR	5609			



Cement from 82 ft. to surface

Surface: 13.325 in. @ 82 ft.

Hole: Unknown Plug #3

$$\text{IN} (105\text{ft}) (1.15) (7.661) = 88' \text{ } \checkmark_{\text{O.R.}}$$

$$\text{OUT} (155\text{ft}) (1.15) (3.716) = 64' \text{ } \checkmark_{\text{O.R.}}$$

$9\frac{5}{8}'' \times 5\frac{1}{2}''$

$11'' \times 5\frac{1}{2}'' (108)$

$\rightarrow 3.716$

$\rightarrow 1.578$

Intermediate: 9.625 in. @ 1645 ft.

Hole: Unknown

Plug #2

if does not test @ shoe

Below  $50' / (1.15) (7.661) = 6\text{ft}$

out  $100' / (1.15) (1.578) = 28\text{ft}$

$50' / (1.15) (3.716) = 12\text{ft}$

Above  $50' = 6\text{ft}$

### Cement Information

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	5860	50	LT	450
PROD	5860	50	B	305
PROD	5860	50	HC	1018
PROD	5860	50	D	100
SURF	82	0		

\* 52ft total minimum if no cement @ shoe  
 \* 125ft total minimum across shoe if cement @ shoe

### Perforation Information

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
5609	5791			
5590	5593			

### Formation Information

Formation	Depth
MRSN	0
WNGT	1308
BMSW	1560
CTLR	2205
ISMY	5480

\* Add Plug #1

minimum 100' cement on top of case @ 5500'

Cement from 5860 ft. to 50 ft.  $100' / (1.15) (7.661) = 12\text{ft}$

Packer: @ 5609 ft.

Tubing: 2.875 in. @ 5609 ft.

Production: 5.5 in. @ 5860 ft.

Hole: Unknown

TD: 5860 TVD: PBSD: 0

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**UTU52333**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:  
**Kiva Unit 83687U6890**

1. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER Water Injection Well

8. WELL NAME and NUMBER:  
**Navajo Federal 23-4**

2. NAME OF OPERATOR:  
**Citation Oil & Gas Corp.**

9. API NUMBER:  
**4303731259**

3. ADDRESS OF OPERATOR:  
**P.O. Box 690688** CITY **Houston** STATE **TX** ZIP **77269-0688** PHONE NUMBER: **(281) 891-1565**

10. FIELD AND POOL, OR WILDCAT:  
**Kiva Upper Ismay**

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: **1500' FSL & 2500' FWL** COUNTY: **San Juan**  
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **NESW 4 39S 25E** STATE: **UTAH**

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
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	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**Citation Oil & Gas Corp. requests approval to plug and abandon the referenced well with the attached procedure.**

**COPY SENT TO OPERATOR**  
**Date: OCT 17 2011**  
**Initials: KS**

NAME (PLEASE PRINT) Bridget Lisenbe TITLE Permitting Analyst

SIGNATURE *Bridget Lisenbe* DATE 8/17/2011

**RECEIVED**  
**AUG 22 2011**

(This space for State use only)

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

Federal Approval Of This Action Is Necessary

DIV. OF OIL, GAS & MINING

DATE: 8/11/2011 (See Instructions on Reverse Side)

*\* Conditions of Approval from June 9, 2010 approval are still valid (Attached)*



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## **CONDITIONS OF APPROVAL TO PLUG AND ABANDON WELL**

Well Name and Number: Navajo Fed 23-4  
API Number: 43-037-31259  
Operator: Citation Oil & Gas Corp.  
Reference Document: Original Sundry Notice dated April 20, 2010,  
received by DOGM on April 26, 2010.

### FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

#### Approval Conditions:

1. Notify Jeff Brown (435-587-1525) of the BLM Monticello Field Office at least 24-hours prior to starting plugging operations.
2. Tag the CIBP set at 5500' in 2001. Ensure that the CIBP is capped with at least 100 feet (12 sx) of cement. Add to cement cap if necessary.
3. Pressure test 5-1/2" x 9-5/8" annulus to ensure there is competent cement across the 9-5/8" casing shoe. Pressure annulus to 300 psi, wait 30 minutes and record any pressure decline.
  - a. If the annulus holds pressure, continue plugging as proposed.
  - b. If the annulus does not hold pressure
    - i. perforate the 5-1/2" casing at approximately 1700' (50 feet or more below the 9-5/8" shoe.
    - ii. Set the CICR above perforations.
    - iii. Increase the volume of cement squeezed through the CICR to fill a minimum of 100 feet of annulus (50' above and 50' below the shoe) and the volume of the 5-1/2" casing between the CICR and the perforations.
    - iv. Cap the CICR with sufficient cement to extend a minimum of 50 feet above the 9-5/8" shoe.
4. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) and Eric Jones (435-259-2117) of the BLM Moab Field Office prior to continuing with the procedure.
5. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

Dustin K. Doucet  
Petroleum Engineer

June 9, 2010

Date



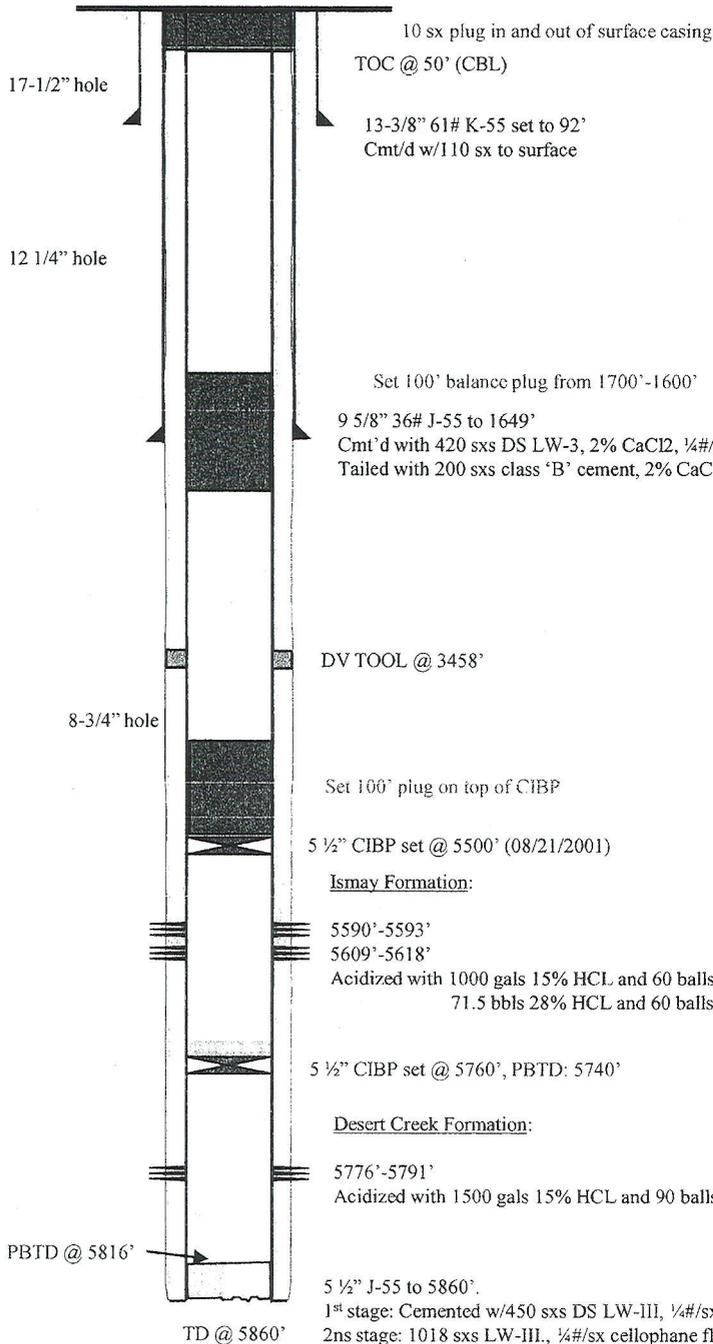
# Proposed P&A

## CITATION OIL AND GAS CORPORATION

### WELLBORE DIAGRAM AND INFORMATION

**Well Name:** Navajo Federal 23-4      **Field:** Kiva  
**Date:** 04/19/10      **Location:** Sec.4, T39S, R25E  
**County:** San Juan      **State:** Utah

<b>Surface:</b>	1500' FSL & 2500' FWL Sec. 4 T39S R25E San Juan County, UT
<b>Completed:</b>	07/18/1986
<b>Elevation:</b>	4877'
<b>KB:</b>	4889'
<b>API #:</b>	43-037-31259



**Well History:**

06/86: Perf Desert Creek (5776'-91') 4 JSPF. Acidize (see WBD)  
Set CIBP @ 5760' w/20' cmt on top of CIBP.  
Perf Ismay (5609'-18') 4 JSPF. Acidize (See WBD)  
**IP: 43 BOPD + 10 BWPD + 60 MCFPD**

03/88: Convert to WIW into upper Ismay. Inject 30 BBLs of 200 DEG. Paraffin solvent prior to conversion

01/91: Attempt to run injection survey. Could not get below 5610' with logging tool.

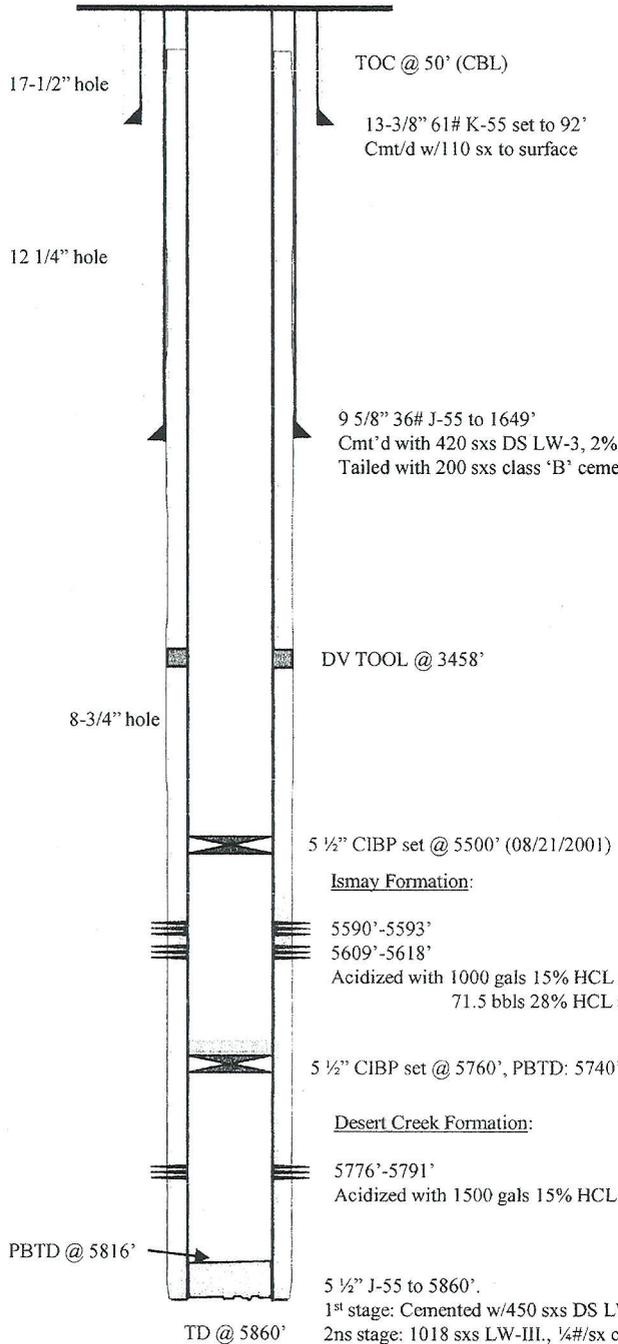
02/92: CO well to PBTD @ 5740'. Perforate upper Ismay from 5590'-93' and reperforate upper Ismay from 5609'-18' Acidize all perms with 1200 gal 90/10 DAD acid and 2400 gals 28% LCA in 70% quality foam. RTJ

09/95: POOH & LD 2 7/8" tubing and injection packer. TA well

# CITATION OIL AND GAS CORPORATION WELLBORE DIAGRAM AND INFORMATION

**Well Name:** Navajo Federal 23-4      **Field:** Kiva  
**Date:** 04/19/10      **Location:** Sec.4, T39S, R25E  
**County:** San Juan      **State:** Utah

**Surface:** 1500' FSL & 2500' FWL Sec.4 T39S R25E  
 San Juan County, UT  
**Completed:** 07/18/1986  
**Elevation:** 4877'  
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**API #:** 43-037-31259



**Well History:**

06/86: Perf Desert Creek (5776'-91') 4 JSPF. Acidize (see WBD)  
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**IP: 43 BOPD + 10 BWPD + 60 MCFPD**

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01/91: Attempt to run injection survey. Could not get below 5610' with logging tool.

02/92: CO well to PBTB @ 5740'. Perforate upper Ismay from 5590'-93' and reperforate upper Ismay from 5609'-18' Acidize all perfs with 1200 gal 90/10 DAD acid and 2400 gals 28% LCA in 70% quality foam. RTJ

09/95: POOH & LD 2 7/8" tubing and injection packer. TA well

## PLUG AND ABANDON PROCEDURE

PROJECT: Plug and Abandon the Navajo Federal 23-4 In Kiva Unit

PRESENT FORMATION AND COMPLETION: Desert Creek (Below CIBP), Ismay (Below CIBP)

TUBING: None, the well is temporarily abandoned.

MISC.: Test casing integrity above the CIBP @ 5550' before proceeding with P&A operations.

### PROCEDURE

- ✓ Move in 2000' of 2-7/8" WS on location for P&A.
- 1. MI RU PU. Stand and tally 2000' of 2-7/8" WS. ND WH and NU BOP.
- 2. PU & RIH with 4 3/4" bit and scraper to 2000' to check for obstructions. Load hole and pressure test to 1000 PSI. If test is good, release pressure, POOH with bit and scraper and proceed to P&A.
- 3. Load and circulate 9# PF.
- 4. TIH with CICR and tubing. Set CICR at 1750'. Sting in and out. Sting back in.
- 5. RU cementers. Establish injection rate and mix and pump 20 sx cement below CICR. Sting out and cap with 15 sx. POOH with tubing and stinger. WOC to set.
- 6. Circulate 9# PF to surface. SI BOP and PT to 500#.
- 7. Run 3 jnts of tubing. Spot 10 sack plug in production casing and 15 sacks into 9 5/8" to 5 1/2" annulus to completely plug the hole.
- 8. Cap casing string with steel plate. Clean off location. Reclaim location and install P&A marker.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU52333
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>		7. UNIT or CA AGREEMENT NAME: Kiva Unit 83687U6890
2. NAME OF OPERATOR: Citation Oil & Gas Corp.		8. WELL NAME and NUMBER: Navajo Federal 23-4
3. ADDRESS OF OPERATOR: P.O. Box 690688 CITY <u>Houston</u> STATE <u>TX</u> ZIP <u>77269-0688</u>		9. API NUMBER: 4303731259
		10. FIELD AND POOL, OR WILDCAT: Kiva Upper Ismay
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>1500' FSL &amp; 2500' FWL</u>		COUNTY: <u>San Juan</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>NESW 4 39S 25E</u>		STATE: <u>UTAH</u>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
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<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>11/10/2011</u>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Citation Oil & Gas Corp MIRU on 11/7/2011. Jeff brown w/ BLM Notified. TIH 2 7/8" tbg to tag CIBP @ 5502'. Plug #1 - mix & pmp 24 sxs, Class B cmt f/ 5502' - 5285' TOL. OK by E Jones & J Brown w/ BLM to spot inside plugs for plugs 2 & 3 & top off annulus w/ poly pipe after cutting WH 11/9/11 @ 3:00 PM. Eric Jones w/ BLM contacted by phone. Jeff Brown w/ BLM on loc. On 11/9/2011 tag top cmt @ 5303'. Pmp mud f/ 5303' - 1750'. Plug #2 - mix & pmp 24 sxs, Class B cmt f/ 1751' - 1534' TOC. Circ mud. Plug #3 - mix & pmp 14 sxs, Class B cmt f/ 100' - surf. Mix & pmp 10 sxs to top-off csgs. Jeff Brown contacted by phone. RDMO on 11/10/2011. Well P&A'd on 11/10/2011.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

NAME (PLEASE PRINT) <u>Kimberly Moorhead</u>	TITLE <u>Completion Analyst</u>
SIGNATURE	DATE <u>1/19/2012</u>

(This space for State use only)

**RECEIVED  
FEB 03 2012**

## INSTRUCTIONS

**This form shall be submitted by the operator to show the intention and/or completion of the following:**

- miscellaneous work projects and actions for which other specific report forms do not exist;
- all other work and events as identified in section 11, Type of Action, or as required by the Utah Oil and Gas Conservation General Rules, including:
  - minor deepening of an existing well bore,
  - plugging back a well,
  - recompleting to a different producing formation within an existing well bore (intent only),
  - reperforating the current producing formation,
  - drilling a sidetrack to repair a well,
  - reporting monthly the status of each drilling well.

**This form is not to be used for proposals to**

- drill new wells,
- reenter previously plugged and abandoned wells,
- significantly deepen existing wells below their current bottom-hole depth,
- drill horizontal laterals from an existing well bore,
- drill hydrocarbon exploratory holes such as core samples and stratigraphic tests.

**Use Form 3, Application for Permit to Drill (APD) for such proposals.**

**NOTICE OF INTENT** - A notice of intention to do work on a well or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency, the operator may obtain verbal approval to commence work. Within five days after receiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

**SUBSEQUENT REPORT** - A subsequent report shall be submitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

**WELL ABANDONMENT** - Proposals to abandon a well and subsequent reports of abandonment should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, and method of parting of any casing, liner, or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

In addition to any Sundry Notice forms submitted, **Form 8, Well Completion or Recompletion Report and Log** must be submitted to the division to report the results of the following operations:

- completing or plugging a new well,
- reentering a previously plugged and abandoned well,
- significantly deepening an existing well bore below the current bottom-hole depth,
- drilling horizontal laterals from an existing well bore,
- drilling hydrocarbon exploratory holes such as core samples and stratigraphic tests,
- recompleting to a different producing formation.

Send to:

Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

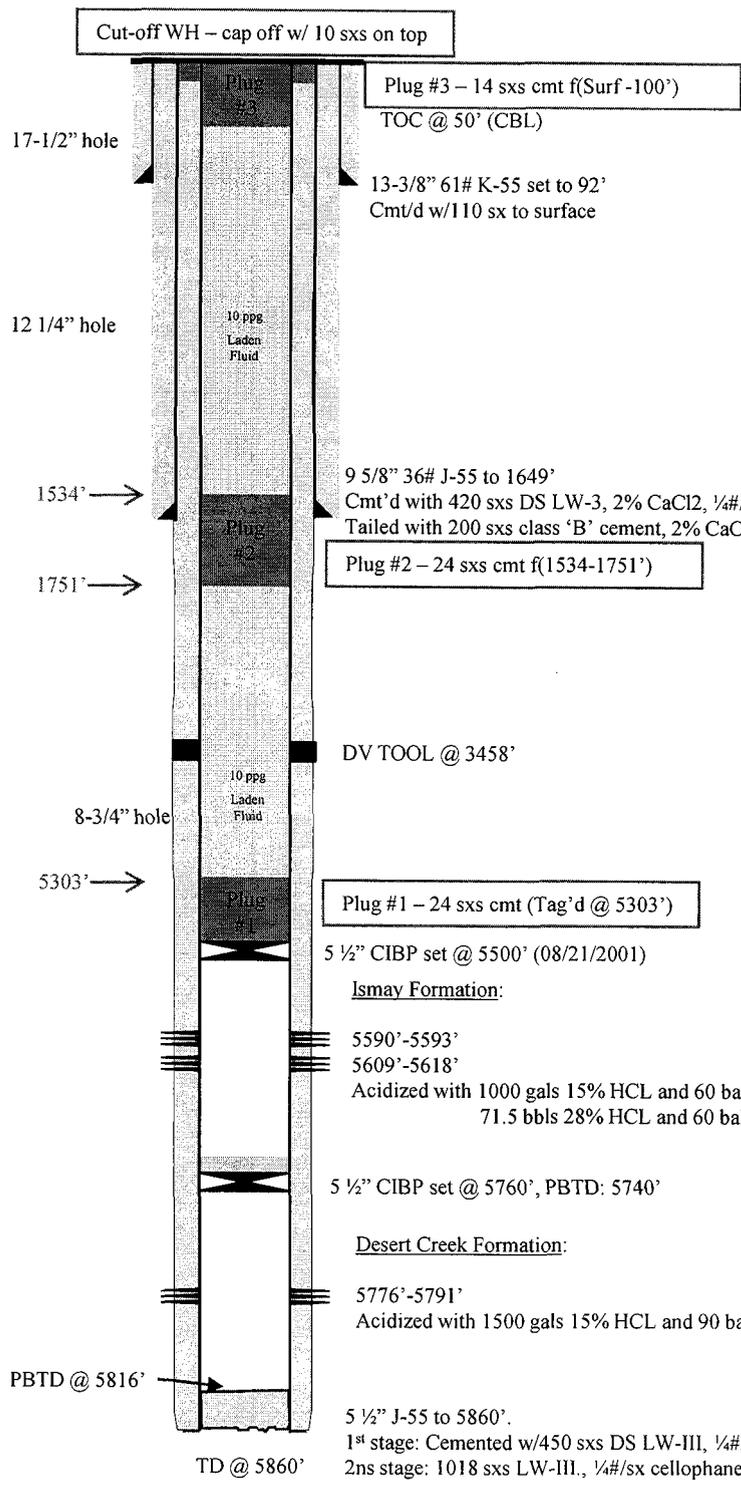
Fax: 801-359-3940

# CITATION OIL AND GAS CORPORATION

## WELLBORE DIAGRAM AND INFORMATION

### P&A'd

**Well Name:** Navajo Federal 23-4      **Field:** Kiva  
**Date:** 11/8/11 (P&A'd)      **Location:** Sec.4, T39S, R25E  
**County:** San Juan      **State:** Utah



**Surface:** 1500' FSL & 2500' FWL Sec. 4 T39S R25E  
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**Completed:** 07/18/1986  
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