

MERIDIAN OIL

RECEIVED

SEP 03 1992

DIVISION OF
OIL GAS & MINING

September 2, 1992

State of Utah Natural Resources
Oil, Gas and Mining
355 West North Temple, Ste 350
Salt Lake City, UT 84180-1203

RE: 44-4 Mako Federal
SESE Sec. 4-T31S-R23E
Wildcat
San Juan County, Utah

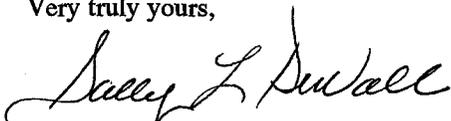
Gentlemen:

Please find enclosed for the above-referenced well location , Application for Permit to Drill and Oil and Gas Order No. 2 with Exhibits.

Please be advised that MERIDIAN OIL INC. requests that all pertinent data for the above-referenced well be granted TIGHT HOLE status for a period of one year.

If you have any questions, please do not hesitate to contact me at (303) 930-9393.

Very truly yours,



Sally L. DuVall
Regulatory Compliance Representative

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
 Meridian Oil Inc.

3. ADDRESS OF OPERATOR
 5613 DTC Parkway, Englewood, CO 80111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 1300'FSL and 585'FEL (SESE)
 At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 20 miles southwest of La Sal Junction

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 585'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 640

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. + 1500'

19. PROPOSED DEPTH 5297'TVD

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6201'GL

22. APPROX. DATE WORK WILL START* 9-15-92

5. LEASE DESIGNATION AND SERIAL NO.
 U-60520

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

7. UNIT AGREEMENT NAME
 Mako

8. FARM OR LEASE NAME
 Mako Federal

9. WELL NO.
 44-4

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 4-T31S-R23E

12. COUNTY OR PARISH 13. STATE
 San Juan UT

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'	Cement to Surface
12-1/4"	8-5/8"	24#	1200'	495 sx "G"
7-7/8"	5-1/2"	15.5#	5300'	170 sx "G"

See Attached Exhibits:

- Operator Self Certification
- Lease Description and Mako Unit Outline
- Exhibit "A" - Survey Plat
- "B" - Eight Point Program
- "C" - BOP Diagram
- "D" - Multi Point Surf. Use Plan
- "E" - Access Roads
- "E-1" - Detail Access Roads
- "E-2" - 1 Mile Radius Map
- "F" - Production Facilities
- "G" - Cut-Fill/Cross-Sections
- "H" - Rig Lay-out

RECEIVED
 CONFIDENTIAL
 SEP 15 1992

DIVISION OF
 OIL GAS & MINING

Meridian Oil Inc. is properly bonded to operate in the State of Utah under BLM Bond No. UT-0414.

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 Sally L. DeWall TITLE Regulatory Compliance Representative DATE 7-21-92

(This space for Federal or State office use)

PERMIT NO. 43-037-31690 APPROVAL DATE APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

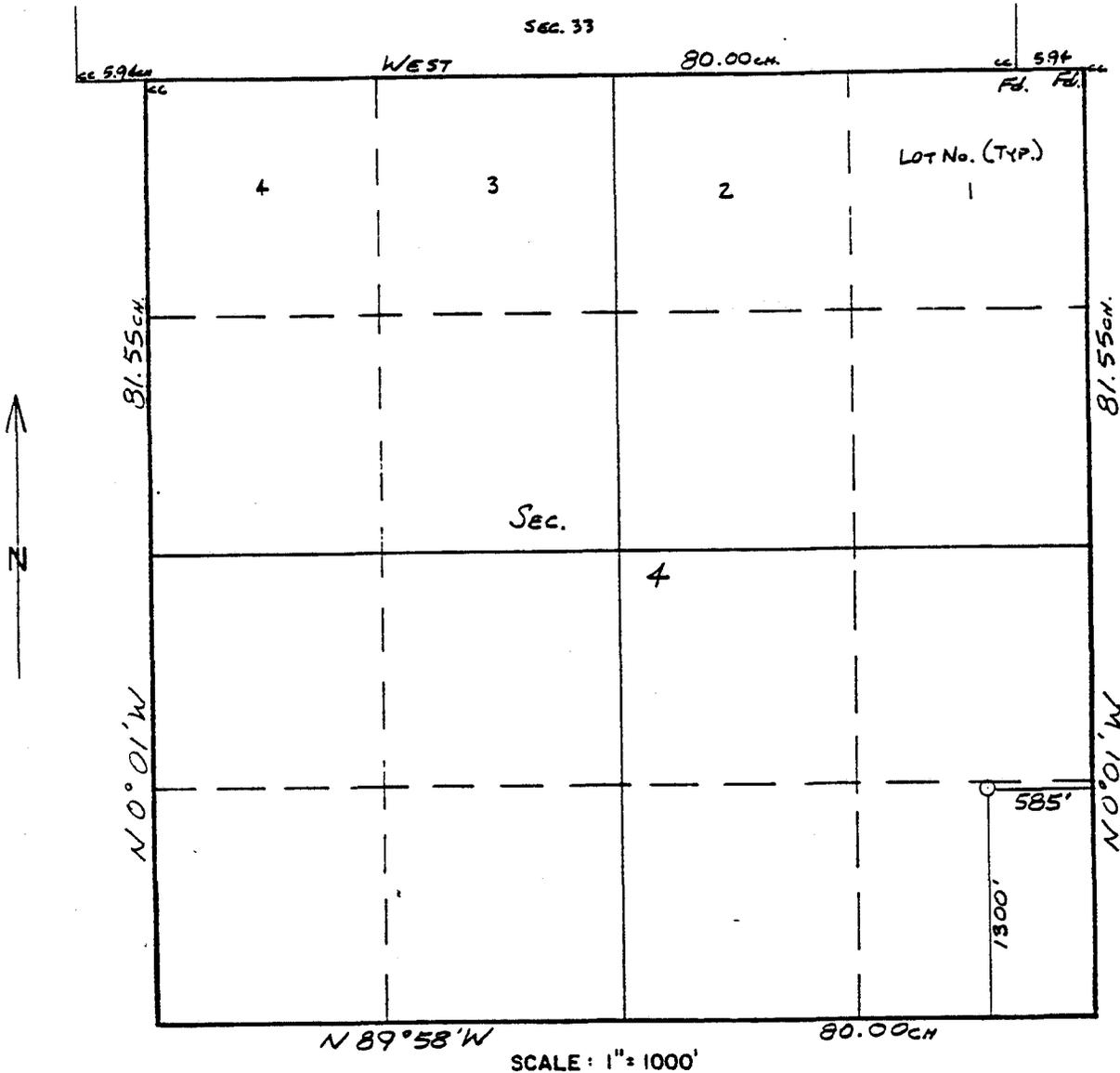
APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

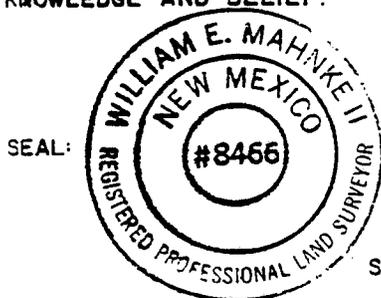
DATE: 7-16-92
 BY: [Signature]
 WELL SPACING: 649-3-3

*See Instructions On Reverse Side

COMPANY MERIDIAN OIL, INC.
 LEASE MAKO FEDERAL WELL NO: 44-4
 SEC. 4, T. 31 S, R. 23 E
 COUNTY SAN JUAN STATE UTAH
 LOCATION 1300'FSL & 585'FEL
 ELEVATION 6201

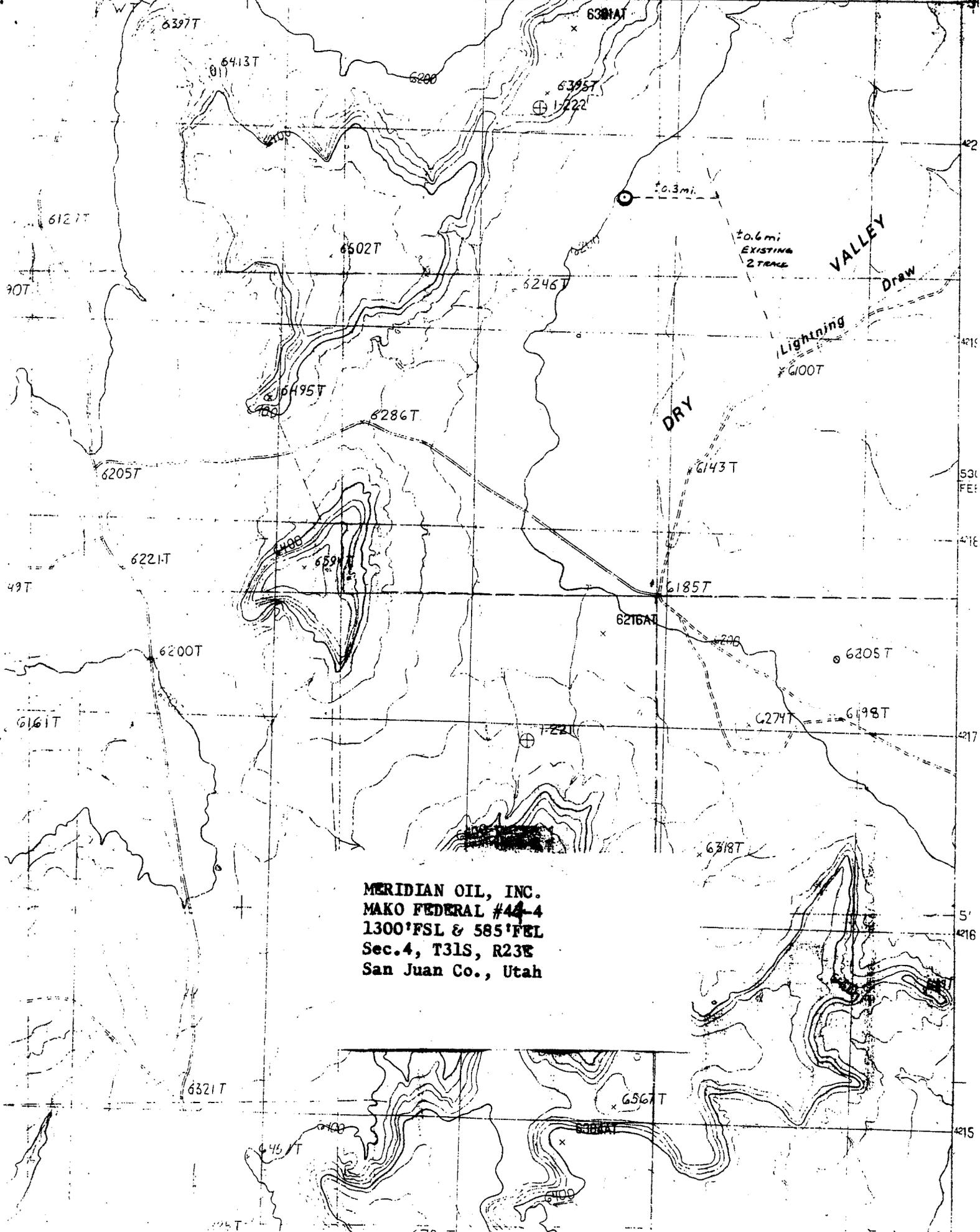


THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD
 NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION
 AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY
 KNOWLEDGE AND BELIEF.




 WILLIAM E. MAHNKE II
 NEW MEXICO P.L.S. NO 8466

SURVEYED JUNE 23, 1992



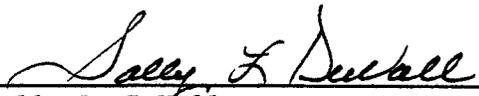
MERIDIAN OIL, INC.
MAKO FEDERAL #44-4
1300'FSL & 585'FEL
Sec.4, T31S, R23E
San Juan Co., Utah

Self-Certification of Operator

Be advised that Meridian Oil Inc. is considered to be the operator of Well No. 44-4 Mako Federal, SESE, Sec. 4-T31S-R23E, San Juan County, Utah, Lease No. U-60520, and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by Bond No. UT-0414, (Principal, St. Paul Fire and Marine Life Insurance, St. Paul, Minnesota) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.



Sally L. Duvall
Regulatory Compliance Representative
Meridian Oil Inc.
5613 DTC Parkway
Englewood, CO 80111
(303) 930-9393

Lease Description

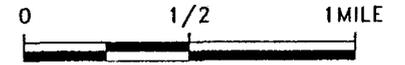
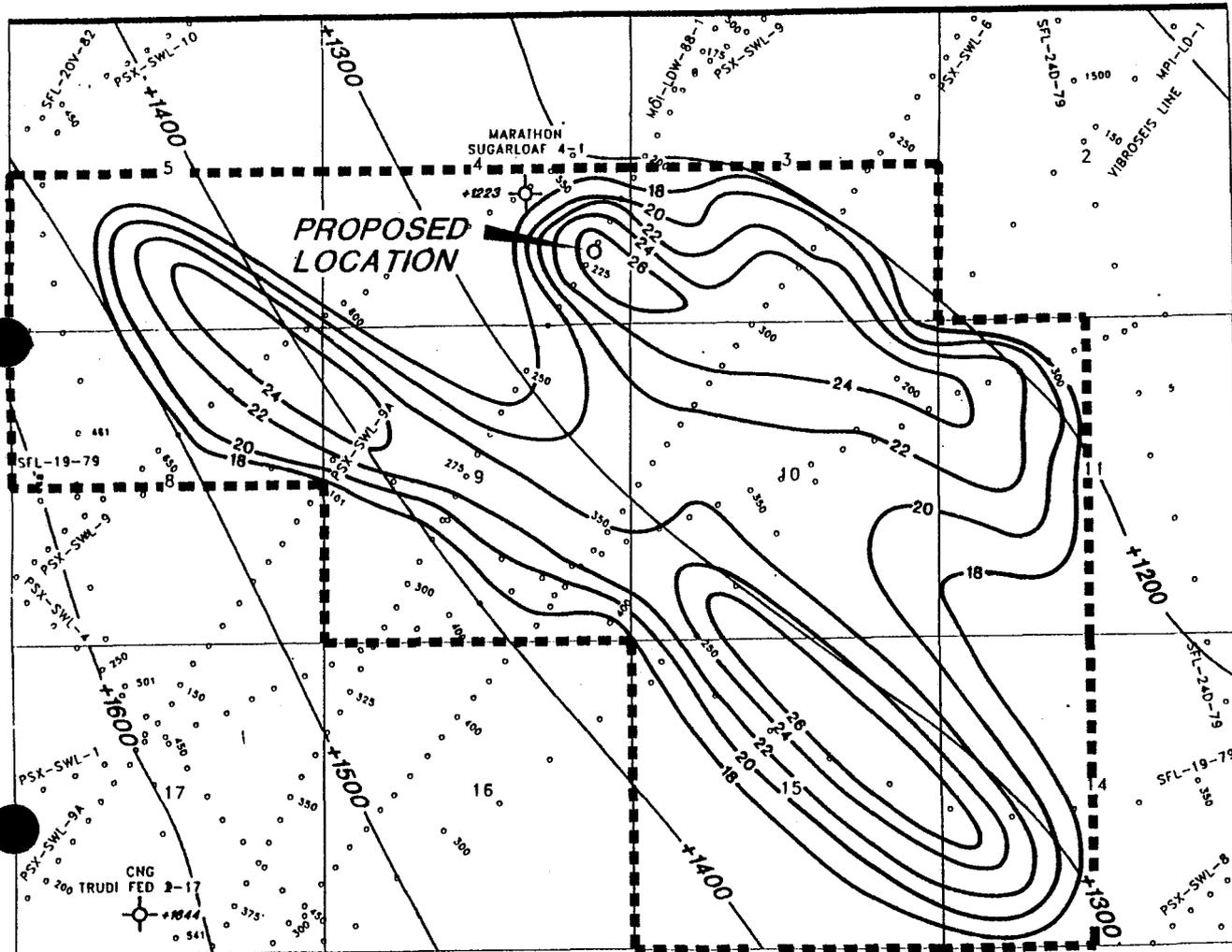
Lease No. U-60520

Township 31 South, Range 23 East

Section 4: All

This lease falls within the outline of the proposed Mako Federal Unit which received preliminary approval by the Bureau of Land Management the week of July 13, 1992. See attached unit outline.

R 23 E



SCALE: 1" = 2000'

----- UNIT OUTLINE

T

STRUCTURE:
UPPER ISMAY
C.I. = 100'

31

ISOCHRON:
UPPER ISMAY-LOWER ISMAY
C.I. = 2 MS

S

EXHIBIT "C"
MAKO UNIT AREA
SAN JUAN COUNTY, UTAH

MERIDIAN OIL INC.
ENGLEWOOD, COLORADO

OIL AND GAS ORDER NO. 1 & 2

Meridian Oil Inc.
5613 DTC Parkway
Englewood, CO 80111
July 20, 1992

LEASE NAME: 44-4 Mako Federal
Lease No. U-60520
1300' FSL and 585' FEL
SESE Sec. 4, T31S, R23E
San Juan County, Utah
5300' Ismay Test

All lease/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. MERIDIAN OIL INC. is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to ensure full compliance.

In addition, Meridian Oil Inc. is responsible under the terms and conditions of the subject lease for the operations on the lease.

A. EIGHT POINT DRILLING PROGRAM

1. and 2. Estimated Tops of Important Geologic Markers:

<u>Marker</u>	<u>Depth</u>	<u>Datum</u>	<u>Possible Oil/Gas or Water</u>
Navajo	178'	(+6036)	
Wingate	614'	(+5600)	
Chinle	964'	(+5250)	
Shinarump	1434'	(+4780)	
Cutler	1538'	(+4676)	
Hermosa	3464'	(+2750)	Gas
Upper Ismay	4984'	(+1230)	Oil and Gas
Porosity	5014'	(+1200)	
Hovenweep	5094'	(+1120)	
Salt	5288'	(+ 926)	

3. Pressure Control Equipment

- a. A 3000 psi WP casinghead will be installed on the surface casing. A 3000 psi WP Annular Preventer and 3000 psi WP double gate preventer equipped with blind and pipe rams will be nipped up on wellhead. (See Attachment).
- b. BOP systems will be consistent with API RP 53. Annular preventer will be tested to 1500 psi against casing. Pipe and blind rams, choke line and manifold will be tested to 2000 psi against casing. Casing will be tested to 2000 psi prior to drilling float shoe. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer 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 once daily to ensure good mechanical condition, 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.

<u>Hole Size</u>	<u>Size</u>	<u>Depth</u>	<u>Casing</u>			
			<u>Weight</u>	<u>Grade</u>	<u>Thrd</u>	<u>Cond</u>
17-1/2	13-3/8	80'	48#	H-40	ST&C	New
12-1/4	8-5/8	1200'	24#	K-55	ST&C	New
7-7/8	5-1/2	5300'	15.5#	K-55	LT&C	New

Cementing Program

Conductor: Redi-Mix to Surface
Surface: Cement to surface. Calculated volumes include 100% excess. Lead of 375 sx "G" w/16% Gel, 3% salt & 1/4#/sk cellophane flakes (Y=2.33). 120 sx tail, consisting of "G" w/1% CaCl & 1/4#/sx cellophane flakes.
Production: Caliper log + 20% on volume w/TOC @ 4000'. 70 sx lead (same as above) plus 100 sx tail (same as above).

5. Proposed Drilling Mud Program

A water base mud system from surface to T.D. Maximum anticipated mud weight is 9.4#/gallon.

A 2-person mud logging unit will be on location from 1500' to T.D., taking 30' samples from surface to 3400' and 10' samples rom 3400' to TD.

<u>Mud:</u>	<u>Interval</u>	<u>Type</u>	<u>WT</u>	<u>VIS</u>	<u>WL</u>	<u>Remarks</u>
	0-4000'	FW	8.5+/-	35+/-	NC	Circ Steel Tanks
	4000-5300'	Polymer	9.0-9.4+/-	35-40+/-	10-12	Circ Steel Tanks

6. Testing Program

DST Planned

Logging Program

<u>LOGS:</u>	<u>Type</u>	<u>Interval</u>	
	GR/DLL/MSFL	BSC to TD	T.D.
	GR/LDT/CNL	4500' to TD	
	GR/BHC Sonic	4500' to TD	T.D.

Coring Program

None planned.

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

7. Anticipated Abnormal BHP or BHT

No abnormal BHP or BHT are expected in this well.

Potentially Hazardous Conditions Anticipated

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

8. Anticipated Starting Dates and Notifications of Operations

The operator will contact the San Juan Resource Area at 801-587-2141, 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 Resource Area, a minimum of 24 hours before spudding. A Sundry Notice 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 BLM District Office, P. O. Box 970, Moab, Utah 84532.

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

If a replacement rig is planned for completion operations, a Sundry Notice 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 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 Resource 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 market will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Federal well number, location by quarter quarter, section, township, range, and Lease Number.

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

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

The following may be inspected and/or witnessed:

1. 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.)

9. Anticipated Start Dates

Date: 9-28-92
3 days to move in drilling rig prior to spud
Days to Drilling: 12
4 days to move drilling rig off and completion rig on.
4 days of initial completion work.
4 days to install production facilities.

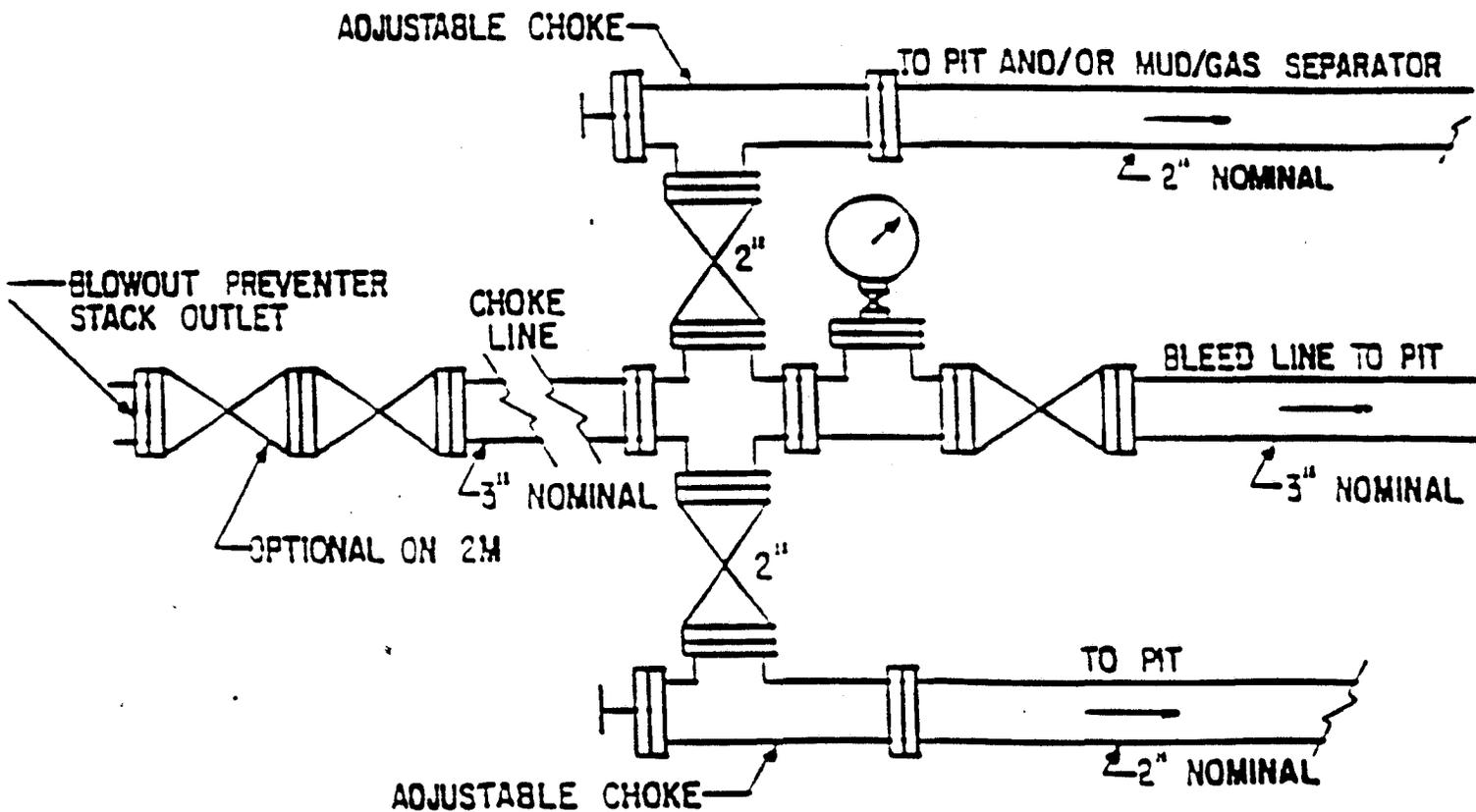
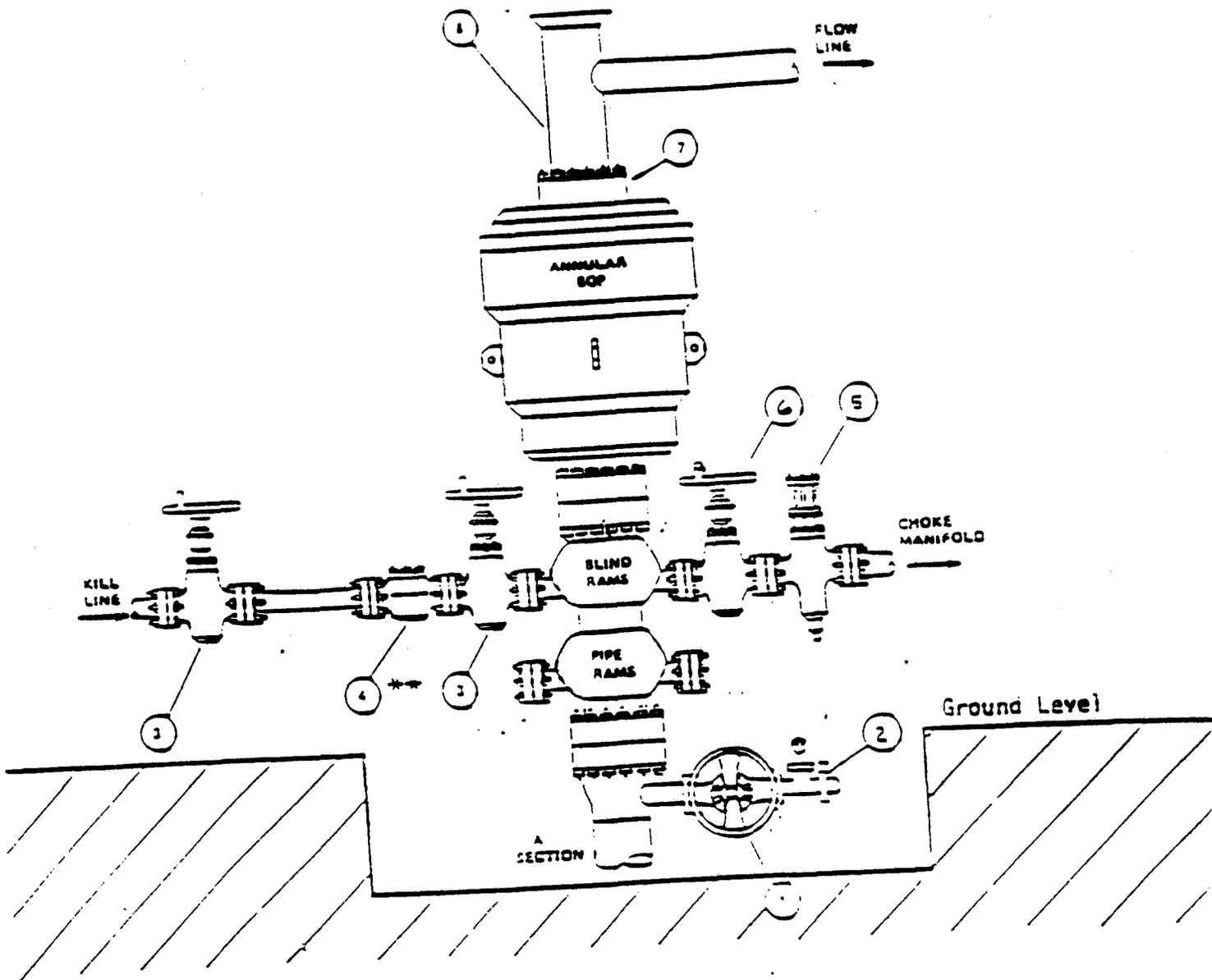


FIG. 3.A.1
TYPICAL CHOKE MANIFOLD ASSEMBLY
FOR 2M AND 3M RATED WORKING
PRESSURE SERVICE — SURFACE INSTALLATION

BLOWOUT PREVENTER (TYPICAL)



1. Screwed or flanged plug or gate valves — 2" minimum nominal dia. — same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve — 2" minimum nominal dia. — same working pressure as BOP stack.
4. Flanged flapper type check valve — 2" minimum nominal dia. — same working pressure as BOP stack.
5. Flanged hydraulically controlled gate valve — 3" minimum nominal dia. — same working pressure as BOP stack.
6. Flanged plug or gate valve — 3" minimum nominal dia. — same working pressure as BOP stack.
7. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.
8. The I.D. of the bell nipple must not be less than the minimum I.D. of the BOP stack.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 09/03/92

OPERATOR: MERIDIAN OIL INC
WELL NAME: MAKO FEDERAL 44-4

OPERATOR ACCT NO: N- 7230

API NO. ASSIGNED: 43-037-31690

LEASE TYPE: FED LEASE NO: U-160500
LOCATION: SESE 04 - T31S - R23E SAN JUAN COUNTY
FIELD: WILDCAT FIELD CODE: 001

RECEIVED AND/OR REVIEWED: <input checked="" type="checkbox"/> Plat <input checked="" type="checkbox"/> Bond (Number <u>federal</u>) <input checked="" type="checkbox"/> Potash (Y/N) <input checked="" type="checkbox"/> Oil shale (Y/N) <input checked="" type="checkbox"/> Water permit (Number <u>no permit</u>) <input checked="" type="checkbox"/> RDCC Review (Y/N) (Date: <u>9-4-90</u>)	LOCATION AND SITING: <input type="checkbox"/> R649-2-3. Unit: _____ <input type="checkbox"/> R649-3-2. General. <input checked="" type="checkbox"/> R649-3-3. Exception. <input type="checkbox"/> Drilling Unit. Board Cause no: _____ Date: _____
--	---

COMMENTS: No producing wells within sec 4.
DDM approved 9-14-90 on lease basis per Main Map DDM.

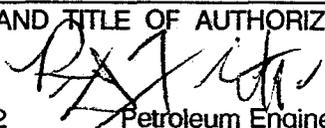
STIPULATIONS: _____

1- Needs water permit
2 RDCC Stipulation

CONFIDENTIAL
PERIOD
EXPIRED
ON 11-6-93

STATE ACTIONS

Mail to:
RDCC Coordinator
116 State Capitol
Salt Lake City, Utah 84114

-
1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)
-
3. APPROXIMATE DATE PROJECT WILL START:
September 15, 1992
-
4. AREAWIDE CLEARING HOUSE(s) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Southeastern Utah Association of Governments
-
5. TYPE OF ACTION: Lease Permit License Land Acquisition
 Land Sale Land Exchange Other _____
-
6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill
-
7. Meridian Oil Inc. proposes to drill the Mako Federal #44-4 well (wildcat) on federal lease U-60520, San Juan County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S. Bureau of Land Management is the primary administrative agency in this action and must issue approval before operations commence.
-
8. LAND AFFECTED (site location map required) (indicate county)
SE/4 SE/4, Section 4, Township 31 South, Range 23 East, San Juan County, Utah
-
9. HAS THE LOCAL GOVERNMENT(s) BEEN CONTACTED?
-
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
See Attachment
-
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
-
12. FOR FURTHER INFORMATION, CONTACT: Frank R. Matthews
PHONE: 538-5340
13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:

DATE: 9/9/92
Petroleum Engineer

WO1187.



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

September 16, 1992

Meridian Oil Inc.
5613 DTC Parkway
Englewood, Colorado 80111

Gentlemen:

Re: Mako Federal 44-4 Well, 1300 feet from the south line, 585 feet from the east line, SE 1/4 SE 1/4, Section 4, Township 31 South, Range 23 East, San Juan County, Utah

Pursuant to Utah Admin. R. 649-3-3, Exception to Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

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

1. The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. Meridian Oil Inc., will be required to comply with any applicable recommendations resulting from the review.
2. Submittal to the division of evidence providing assurance of an adequate and approved supply of water as required by Utah Code Ann. § 73-3, Appropriations, prior to commencing drilling operations.
3. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
4. Notification within 24 hours after drilling operations commence.
5. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.

Page 2
Meridian Oil Inc.
Mako Federal 44-4 Well
September 16, 1992

6. Submittal of the Report of Water Encountered During Drilling, Form 7.
7. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068.
8. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-037-31690.

Sincerely,



R.J. Firth
Associate Director, Oil and Gas

ldc
Enclosures
cc: Bureau of Land Management
J.L. Thompson
WO11

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

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

2. NAME OF OPERATOR
Meridian Oil Inc.

3. ADDRESS OF OPERATOR
5613 DTC Parkway, Englewood, CO 80111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
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At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 20 miles southwest of La Sal Junction

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 585'
16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 640

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. + 1500'
19. PROPOSED DEPTH 5297'TVD

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6201'GL

22. APPROX. DATE WORK WILL START* 9-15-92

5. LEASE DESIGNATION AND SERIAL NO. U-60520
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7. UNIT AGREEMENT NAME Mako
8. FARM OR LEASE NAME Mako Federal
9. WELL NO. 44-4
10. FIELD AND POOL, OR WILDCAT Wildcat
11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Sec. 4-T31S-R23E
12. COUNTY OR PARISH San Juan 13. STATE UT

PROPOSED CASING AND CEMENTING PROGRAM

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12-1/4"	8-5/8"	24#	1200'	495 sx "G"
7-7/8"	5-1/2"	15.5#	5300'	170 sx "G"

RECEIVED

SEP 17 1992

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 Sally L. Duwall TITLE Regulatory Compliance Representative DATE 7-21-92

(This space for Federal or State office use)

PERMIT NO. 43-037-31690

APPROVED BY /S/ WILLIAM C. STRINGER TITLE Assistant District Manager for Minerals DATE SEP 14 1992

CONDITIONS OF APPROVAL, IF ANY:

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

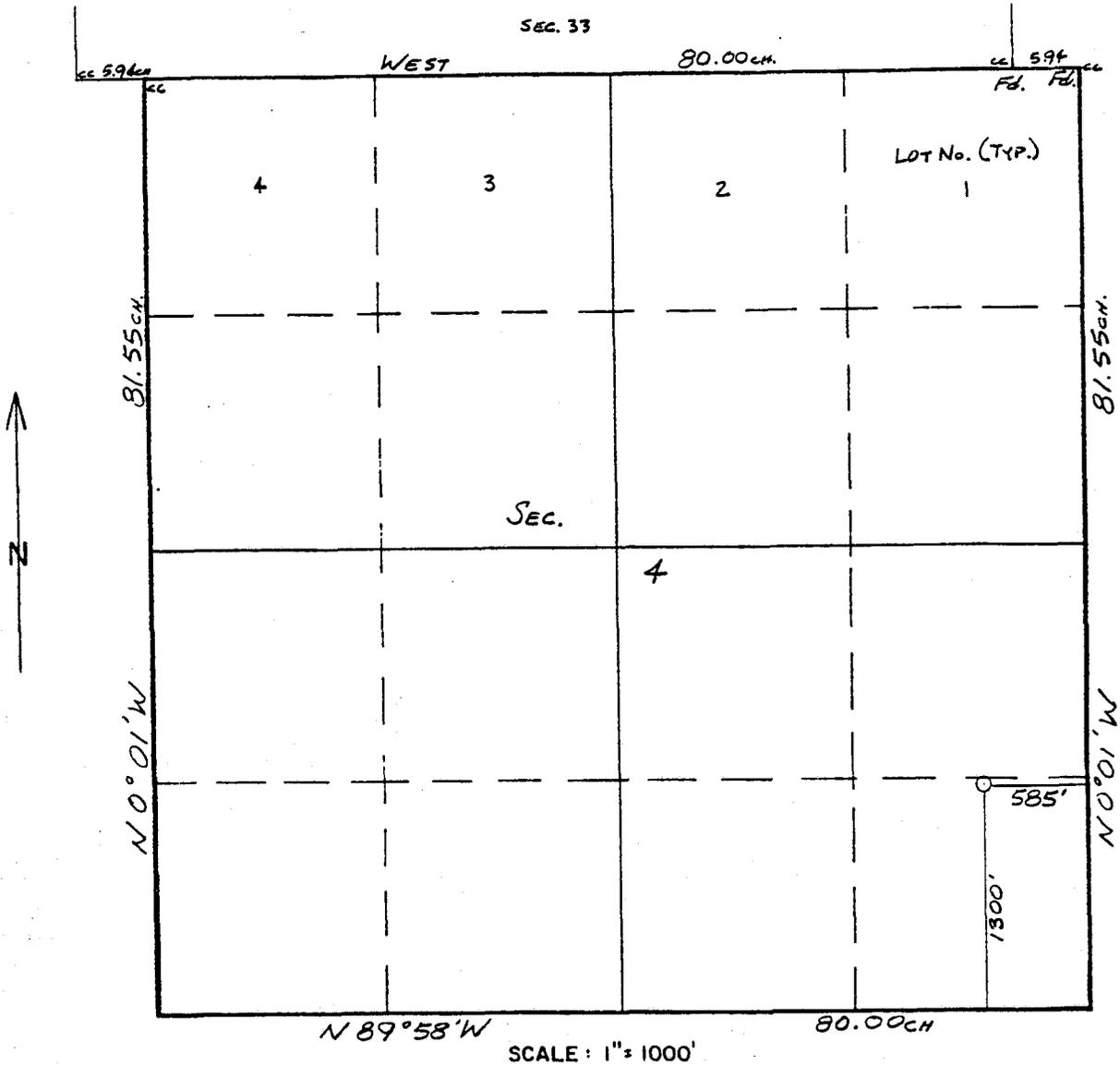
CONDITIONS OF APPROVAL ATTACHED

*See Instructions 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.

dogm

COMPANY MERIDIAN OIL, INC.
 LEASE MAKO FEDERAL WELL NO: 44-4
 SEC. 4, T. 31 S, R. 23 E
 COUNTY SAN JUAN STATE UTAH
 LOCATION 1300'FSL & 585'FEL
 ELEVATION 6201



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD
 NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION
 AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY
 KNOWLEDGE AND BELIEF.




 WILLIAM E. MAHNKE II
 NEW MEXICO P.L.S. No 8466

SURVEYED JUNE 23, 1992

B. SURFACE USE PLAN

1. No drilling will occur between May 15 and June 15 due to antelope fawning.
2. No drilling will occur after December 15 and until February 15 due to antelope wintering, unless it is determined that substantial antelope numbers (more than 15) have moved onto the wintering area by December 15. If drilling has commenced prior to December 15, the activity will be allowed to be completed.

The following stipulations are required by the Authorized Officer:

1. The access (including any existing non-county) road will be brought to Resource (Class III) Road Standards within sixty days of completion of drilling operations if the well is not a dry hole. (ditched, crowned, culverts in place where required, and surfaced with rock.
2. Cattleguards will be placed in the road coming in from the highway where the fences cross the road. Two will be needed.

Meridian Oil, Inc.
Mako Federal 44-4
Lease U-60520
Mako Unit
SESE Section 4, T.31S, R.23E
San Juan County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Meridian Oil, Inc is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT 0414 (Principal - Meridian Oil, Inc.) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

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

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant District Manager. "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 3162.3-2. Safe drilling and operating practices must be observed.
2. Daily drilling and completion progress reports shall be submitted to the District office on a weekly basis.
3. Initial opening of drill stem test tools will be restricted to daylight hours.
4. Monthly Reports of Operations (Form MMS 3160) shall be submitted directly to Minerals Management Service, not BLM.
5. Centralizers shall be placed, at a minimum, on the bottom three joints of each casing string
6. Please be aware that substantial water flows have been encountered in the Cutler Fm. in the area.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant District Manager. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

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

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- Should the well be successfully completed for production, the Assistant District Manager, Minerals Division will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled as soon as production testing begins and hydrocarbons reach the surface. This conference should be coordinated through the Resource Area Office.

Well Completion Report- 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 to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs, core descriptions, core analyses, 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. Samples (cuttings and /or samples) will be submitted when requested by the Assistant District Manager.

Venting/Flaring of Gas- NTL-4A allows venting/flaring of gas during the initial well evaluation period not to exceed 30 days or 50 MMcf. Venting/flaring beyond the initial test period threshold must be approved by the District Office.

Produced Water- Produced waste water may be confined to an 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 to the Assistant District Manager for approval pursuant to NTL-2B.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Assistant District Manager for off-lease measurement, off-lease storage or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the BLM, Moab District Office prior to initiating plugging operations. Table 1 of this document provides the after-hours phone numbers of personnel who are authorized to give plugging instructions.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Assistant District Manager, Minerals Division within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. 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 Area Manager or his representative, or the appropriate surface managing agency.

TABLE 1

NOTIFICATIONS

Notify Jeff Brown, Robert Larson or Bob Turri of the San Juan Resource Area in Monticello, Utah, at (801) 587-2141 for the following:

2 days prior to commencement of dirt work, construction or reclamation;

1 day prior to spudding;

50 feet prior to reaching surface and intermediate casing depths;

3 hours prior to testing BOPE;

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, notify one of the people listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Dale Manchester, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-6239

Eric Jones, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-2214

If unable to reach the above individuals, please call:

Lynn Jackson, Office: (801) 259-6111
Chief, Branch of Fluid Minerals Home: (801) 259-7990



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

October 15, 1992

Lanette Jenike
Meridian Oil Inc.
801 Cherry Street
Fort Worth, Texas 76102

Dear Ms. Jenike:

Re: Request for Completed Entity Action Form - Mako Federal 44-4
SESE Sec. 4, T. 31S, R. 23E - San Juan County, Utah

This is written to remind you that all well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of spudding a new well. This office was notified that your company spudded the Mako Federal 44-4, API Number 43-037-31690, on September 24, 1992. At this time, we have not received an Entity Action Form for this well.

Please review the instructions on the back of the enclosed form. Make sure you choose the proper Action Code to show whether the well will be a single well with its own sales facilities (Code A), a well being added to an existing group of wells having the same tank battery and common division of royalty interest (Code B - show existing Entity Number to which well should be added), or a well being drilled in the participating area of a properly designated unit (Code B). Complete the form and return it to us by October 26, 1992.

Your attention to this matter is appreciated. If we can be of assistance to you, please feel free to call Lisha Romero at the above number.

Sincerely,

Don Staley
Administrative Supervisor

Enclosure
cc: R. J. Firth
File

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

RECEIVED

2. NAME OF OPERATOR: Meridian Oil Inc. NOV 02 1992

3. ADDRESS OF OPERATOR: 5613 DTC Parkway, Englewood, CO 80111 DIVISION OF OIL, GAS & MINING

4. LOCATION OF WELL (Report location clearly and in accordance with any State or Federal regulations):
 At surface 1300' FSL and 585' FEL (SESE)
 At top prod. interval reported below
 At total depth Same

14. PERMIT NO. 43-027-31690 DATE ISSUED 9-16-92

5. LEASE DESIGNATION AND SERIAL NO. U-60520

6. IF INDIAN ALLOTTEE OR TRIBE NAME N/A

7. UNIT AGREEMENT NAME Mako

8. FARM OR LEASE NAME Mako Federal

9. WELL NO. 44-4

10. FIELD AND POOL, OR WILDCAT Wildcat

11. SEC. T. R., M., OR BLOCK AND SURVEY OR AREA Sec. 4-T31S-R23E

12. COUNTY OR PARISH San Juan 13. STATE UT

15. DATE SPUNDED 9-26-92 16. DATE T.D. REACHED 10-6-92 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6214' KB, 6201' GL 19. ELEV. CASINGHEAD N/A

20. TOTAL DEPTH, MD & TVD 5291' TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL. HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS Rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* N/A 25. WAS DIRECTIONAL SURVEY MADE N/A

26. TYPE ELECTRIC AND OTHER LOGS RUN DUAL LATERAL LOG—MICRO SSS TOOL DIL/GR//Cal 1225-5275', LDT-CNL 4290-5250', Bhc Sonic 4240-5270 10-8-92 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
8-5/8	24#	1225'	12-1/4	695 sx	

29. LINER RECORD 30. TUBING RECORD

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

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
N/A	N/A	P & A					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
N/A	N/A	N/A		N/A	N/A	N/A	N/A
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
N/A			N/A	N/A	N/A	N/A	

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

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 Lucy J. Daball TITLE Regulatory Compliance Representative

*(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);

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP MEAS. DEPTH	TRUE VERT. DEPTH
			SEE ATTACHED			

44-4 Mako Federal
SESE Sec. 4-T31S-R23E
San Juan County, Utah

Formation	Depth
Navajo	178'
Wingate	614'
Chinle	964'
Shinarump	1434'
Cutler	1538'
Hermosa	3464
Upper Ismay	4984'
Porosity	5014'
Hovenweep	5094'
Salt	5288'