

NSL

9/9/96

# BURLINGTON RESOURCES

SAN JUAN DIVISION

RECEIVED

AUG 19 1996

Oil Conservation Division

August 16, 1996

Sent Federal Express

Mr. William LeMay  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: Ute #22  
2000'FNL, 1925'FEL Section 17, T-32-N, R-14-W, San Juan County, New Mexico  
API # 30-045-29395

Dear Mr. LeMay:

Burlington Resources is applying for administrative approval of a non-standard location for the above location in the Barker Dome Desert Creek formation. This application for the referenced location is due to terrain, the presence of archaeology, and at the request of the Ute Mountain Ute Tribe.

The following attachments are for your review:

1. Application for Permit to Drill.
2. Completed C-102 at referenced location.
3. Offset operators/owners plat - Burlington Resources is the operator of the surrounding proration unit
4. 7.5 minute topographic map showing the orthodox windows, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield  
Regulatory/Compliance Administrator

encs.

8-29-96  
 Attn: Tom Kellahan,  
 In sending/forwarding this application to you,  
 its on a non-standard proration unit  
 that can't be approved administratively.  
 I talked w/ Peggy and told her  
 I was forwarding this  
 matter to  
 you.  
 c.c. - Peggy Bradfield M. Stone

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number I-22-IND-2772 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe Ute Mountain Ute	
2. Operator MERIDIAN OIL	7. Unit Agreement Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700	8. Farm or Lease Name Ute 9. Well Number 22	
4. Location of Well 2000' FNL, 1925' FEL* resurveyed  Latitude 36° 59' 24", Longitude 108° 19' 46"	10. Field, Pool, Wildcat Barker Dome Desert Creek 11. Sec., Twn, Rge, Mer. (NMPM) Sec 17, T-32-N, R-14-W API # 30-045-	
14. Distance in Miles from Nearest Town 11 miles to LaPlata	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1925'	17. Acres Assigned to Well 527 All Sec8; N/2 Sec 17	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 3500'	
19. Proposed Depth 8365'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6236'	22. Approx. Date Work will Start 3rd quarter 1996	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>Wm Beahm</i></u> (Regulatory/Compliance Administrator)	<u>5-28-96</u> Date	

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

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

Archaeological Report submitted by LaPlata Archaeological Consultants LAC 9359a&b  
Threatened and Endangered Species Report submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 PO Drawer DD, Artesia, NM 88211-0719  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
 PO Box 2088  
 Santa Fe, NM 87504-2088

Form C-102  
 Revised February 21, 1994  
 Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-		Pool Code 71560	Pool Name Barker Dome Desert Creek
Property Code 7618	Property Name Ute		Well Number 22
OGRID No. 14538	Operator Name MERIDIAN OIL INC.		Elevation 6236'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
G	17	32 N	14 W		2000	North	1925	East	S.J.

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 527	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>16</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Peggy Bradfield</i>        Signature        Peggy Bradfield        Printed Name        Regulatory/Compliance Adm        Title        5-28-96        Date</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>11-4-94</p> <p>Date of Survey        Signature and Seal of Professional Surveyor:          Certificate Number</p>	

May 10, 1996

OPERATIONS PLAN

**Well Name:** Ute #22  
**Location:** 2000' FNL, 1925' FEL\*resurveyed, Section 17, T-32-N, R-14-W  
San Juan County, NM  
**Formation:** Barker Dome Desert Creek  
**Elevation:** 6236'GR

<b>Formation:</b>	<b>Top</b>	<b>Bottom</b>	<b>Contents</b>
Surface	Menefee	163'	
Point Lookout	163'	645'	fresh water
Mancos	645'	1658'	
<b>8 5/8" surface casing</b>	<b>895'</b>		<b>+ 250' into Mancos</b>
Niobrara	1658'	2320'	
Greenhorn	2320'	2400'	
Graneros	2400'	2446'	
Dakota	2446'	2714'	gas
Morrison	2714'	3213'	fresh water
Junction Creek	3213'	3579'	salt water
Summerville	3579'	3673'	
Todilto	3673'	3685'	
Entrada	3685'	3787'	salt water
Chinle	3787'	5256'	
Cutler	5256'	6845'	
Hermosa	6845'	7968'	
Ismay	7968'	8160'	gas (potentially 100-1580 ppm H <sub>2</sub> S)
Desert Creek	8160'	8263'	gas (potentially 4-11,900 ppm H <sub>2</sub> S)
Akah	8263'	8428'	
Upper Barker Creek	8428'		gas (potentially 0-12,000 ppm H <sub>2</sub> S)
<b>Total Depth</b>	<b>8365'</b>		

Logging Program:

Mud logs - Niobrara to Total Depth  
Wireline Logs - AIT, LDT-APS, DSSI, FMI - to Total Depth

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>Fluid Loss</u>
0 - 90'	Air	N/A	N/A	N/A
90 - SCP	Spud	8.4-8.9	40	No Control
SCP-T.Ismay	Fresh Water	8.4-8.6	26-30	No Control
T.Ismay-TD	LSND/Dispersed	8.4-9.0	36-50	Less than 12

Casing Program: (all casing will be new)

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
26"	0' - 90'	16"		Conductor
12 1/4"	0' - 895'	8 5/8"	24.0#	K-55 LT&C
7 7/8"	0' - 8365'	5 1/2"	17.0#	L-80 LT&C

Tubing Program: 0' - 8365' 2 7/8" tubing

Operations Plan  
Ute #22

**Pressure Control Program:**

12 1/4" hole - diversion only

7 7/8" hole - a 3000 psi WP casinghead will be installed on the surface casing. A 3000 psi WP annulus preventer, a 3000 psi WP double gate preventer equipped with blind and pipe rams, and a 3000 psi x 3000 psi WP drilling spool with kill and choke lines will be nipped up on the casinghead. The annulus preventer will be tested to 500 psi low, 1500 psi high w/test plug for 15 minutes. Pipe and blind rams, choke line, and manifold will be tested at 500 psi low and 3000 psi high with a test plug for 15 minutes. Casing will be tested to 2200 psi (75% burst) prior to drilling the shoe.

Completion - a 5000 psi WP tubinghead will be installed on the production casing. A 5000 psi WP double gate preventer equipped with blind and pipe rams and a 5000 psi drilling spool equipped with kill and choke lines will be nipped up on the tubinghead. One 7" blooie line will be nipped up above the BOP's. A rotating head will be nipped up on top of the blooie line. Pipe and blind rams, choke line, and manifold will be tested at 500 psi and 4000 psi against casing. Casing will be tested to 4000 psi prior to completing the well.

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. Blow out preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. All tests will be reported on the daily drilling report. Preventers will be tested before drilling casing cement plugs.

In the event that a kick is taken while drilling, the following procedure will be followed:

1. Pick up kelly and raise the tool joint above floor.
2. Shut down the mud pump.
3. Close the annular preventer.
4. Record standpipe pressure (SIDPP) after it stabilizes and pit gain.
5. Calculate Initial Circulating Pressure=Slow Circulating Pressure+ SIDPP.
6. Calculate kill mud weight required.
7. Complete kill sheet.
8. Decide whether to raise mud weight or drill under-balanced.

**BOP Configuration:**

26" conductor hole - 0' - 90' - not applicable

12 1/4" surface hole - 90' - 895' - diverter only

**3000 psi system**

7 7/8" production hole - 895' - 8365' - Figures #1 & #2

Operations Plan  
Ute #22

**Float Equipment:**

Surface casing - guide shoe, float collar, centralizers every 4th joint.  
Production casing - float shoe, float collar, centralizers every 4th joint.

**Wellhead Equipment (sour gas service):**

11" 3000 psi x 8 5/8" female thread casinghead  
11" 3000 psi x 7 1/16" 5000 psi tubinghead  
7 1/16" 5000 psi x 2 7/8" 5000 psi adapter  
Tree assembly for single completion gas service.

**Cementing:**

16" conductor casing - Reddymix - grout to surface

8 5/8" surface casing - cement with 351 sx Class "B" 65/35 Pozmix with 0.25 pps flocele, 6% gel and 2% calcium chloride (12.4 ppg, 621 cu.ft. of slurry). Tail with 100 sx Class "B" neat with 0.25 pps and 2% calcium chloride (15.6 ppg weight; 118 cu.ft. of slurry), 100% excess circulated to surface.

5 1/2" production - 1009 sx 50/50 Class "B" blended Silicalite, 3 pps gilsonite, 0.375 pps flocele (11.45 ppg, 2351 cu.ft. of slurry.) Tail with 310 sx Class "G" 50/50 Poz with 2% gel, 5 pps gilsonite, 0.25 pps flocele, and 0.4% Halad-344 (13.5 ppg, 410 cu.ft. of slurry), 100% excess circulated to surface.

**Coring & Drill Stem Test Program:** none planned.

**Anticipated abnormal pressures or temperatures:** none. Anticipated pressure is 3600 psi.

Date:

5/29/96

Drilling Engineer:

Frank Sidel

Anticipated potentially hazardous conditions:

1. H<sub>2</sub>S is anticipated to exist from the Paradox (Ismay) formation to Total Depth.
2. Anticipated concentrations are estimated at 300 - 500 ppm.
3. All gasses encountered will be flared.
4. H<sub>2</sub>S safety equipment will be operational at 1000' above Paradox (Ismay) formation.
5. H<sub>2</sub>S safety equipment will be provided for all personnel on location at all times.
6. All personnel on location will be H<sub>2</sub>S certified.
7. An H<sub>2</sub>S trained professional will be on location at all pertinent times; i.e., DST's, cementing operations, under-balanced drilling, etc.
8. The toxicity of H<sub>2</sub>S gas is as follows:

1 ppm = .0001% (1/10,000 of 1%)	Can smell.
10 ppm = .001% (1/1000 of 1%)	Allowable for 8 hrs. exposure
50 ppm = .005% (5/1000 of 1%)	NOTE: when H <sub>2</sub> S concentration reaches 10 ppm on the rig floor, call for the safety trailer.
100 ppm = .01% (1/100 of 1%)	Kills smell rapidly. Burns eyes and throat.
500 ppm = .05% (5/100 of 1%)	Loses sense of reasoning and balance. Respiratory disturbances in 2-15 min. Needs prompt artificial resuscitation.
700 ppm = .07% (7/100 of 1%)	Will become unconscious quickly. Breathing will stop and death will result if not rescued promptly.
1,000 ppm = .10% (1/10 of 1%)	Unconscious at once. PERMANENT BRAIN DAMAGE MAY RESULT UNLESS RESCUED PROMPTLY.

## H<sub>2</sub>S Drilling Operations Plan

1. Training Program - Meridian Oil will ensure all personnel have been properly H<sub>2</sub>S trained as per API RP 49 prior to three days or 1000 feet prior to penetrating the Pennsylvanian. An initial training session and weekly H<sub>2</sub>S and well control drills for all personnel in each working crew will be conducted. Each training session and drill will be recorded on the drillers log. Two briefing areas will be designated and located at least 150 feet from the wellbore. One such briefing area will be upwind of the well at all times. A contract safety company will be designated and identified to all personnel on-site as responsible for on-site safety and training programs.
2. Protective Equipment - Meridian Oil will ensure respiratory protection equipment program is implemented as per ANSI 2.88.2-1980. Proper breathing apparatus will be readily accessible for all essential personnel, meaning one working breathing apparatus including a five minute escape-type SCBA for the derrickman, available for all essential personnel. The following additional safety equipment will be available for use:
  - a. Effective means of communication when using breathing apparatus.
  - b. A flare gun and flares to ignite well.
  - c. A telephone, radio, mobile phone or other device that provides communication from a safe area, where practical.
3. H<sub>2</sub>S Detection and Monitoring Equipment
  - a. Drilling - will be three sensing points (shale shaker, rig floor, bell nipple) with rapid response sensors capable of sensing a minimum of 10 ppm of H<sub>2</sub>S, in ambient air, which automatically activates visible and audible alarms at levels or threshold limits of 10 and 15 ppm, respectively.

Completion - same as above except sensors will be located at the rig floor, cellar, and shale shaker or circulating tank.

Workover - will have one sensor operational as close to the wellbore as possible.
  - b. All tests on H<sub>2</sub>S monitoring system will be recorded on drillers log.
4. Visible Warning System
  - a. Wind direction indicators (drilling (2); completion/workover (1)) will be located at separate elevations with one indicator clearly visible at all times from principle working areas. The wind indicator will be clearly visible from the briefing areas or additional indicators will be installed at such areas.
  - b. Operation Danger or Caution signs will be displayed along all controlled accesses to the site. each sign will be painted high visibility red, black, and white or yellow with black lettering. Signs will be large enough to be read by all persons entering the wellsite and be placed a minimum of 200 feet but no more than 500 feet from the wellsite.

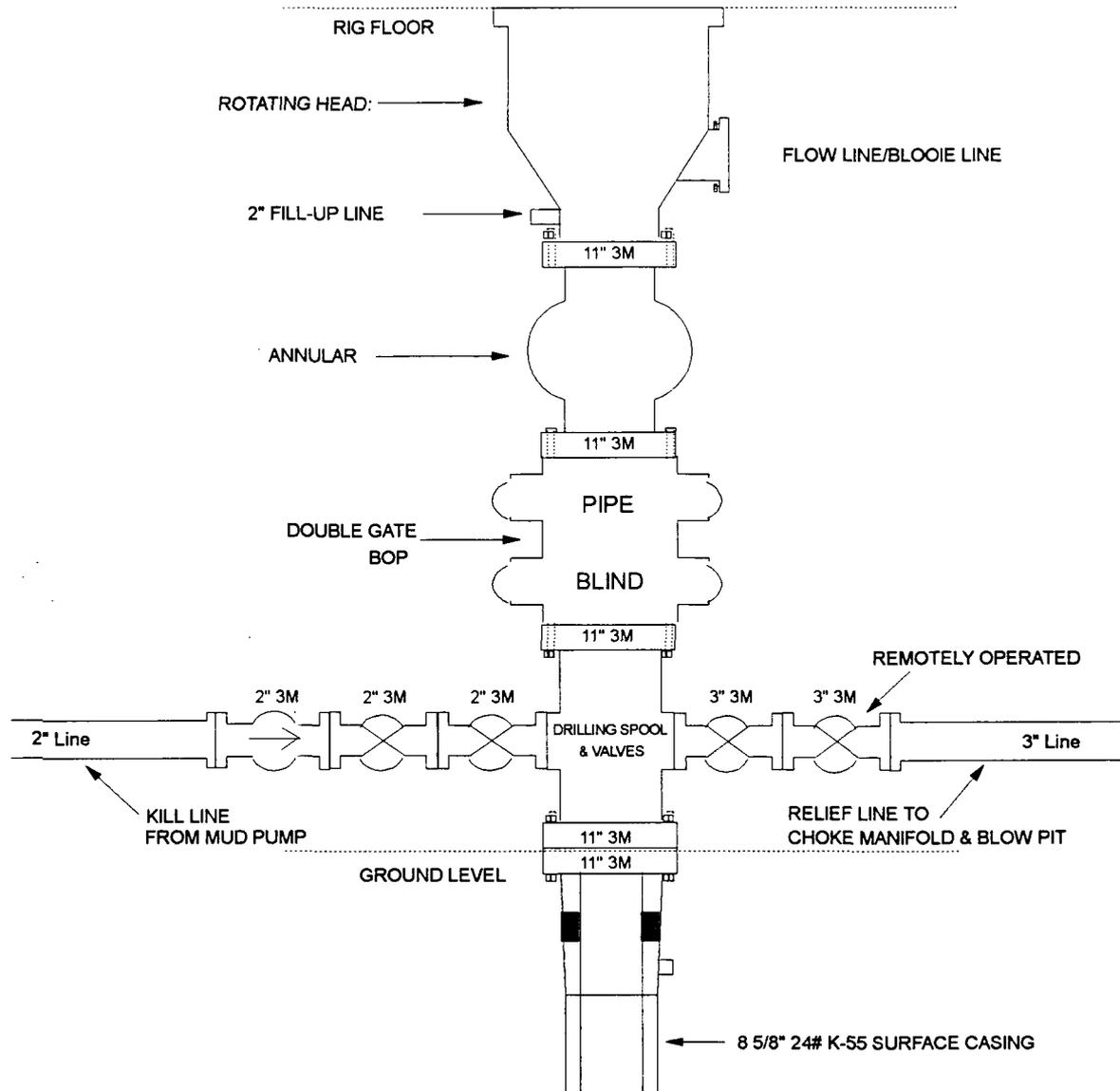
c. The sign(s) will read "DANGER - POISON GAS - HYDROGEN SULFIDE" and in smaller lettering, "Do not approach if red flag is flying".

d. When H<sub>2</sub>S is detected in excess of 10 ppm, red flag(s) will be displayed and visible to all personnel approaching the location under normal lighting and weather conditions.

5. Warning System Response - H<sub>2</sub>S detected above 10 ppm will initiate all non-essential personnel to be moved to a safe area and all essential personnel to don breathing apparatus.

# MERIDIAN OIL INC.

## Drilling Rig Surface Casing BOP Configuration 3,000 psi System

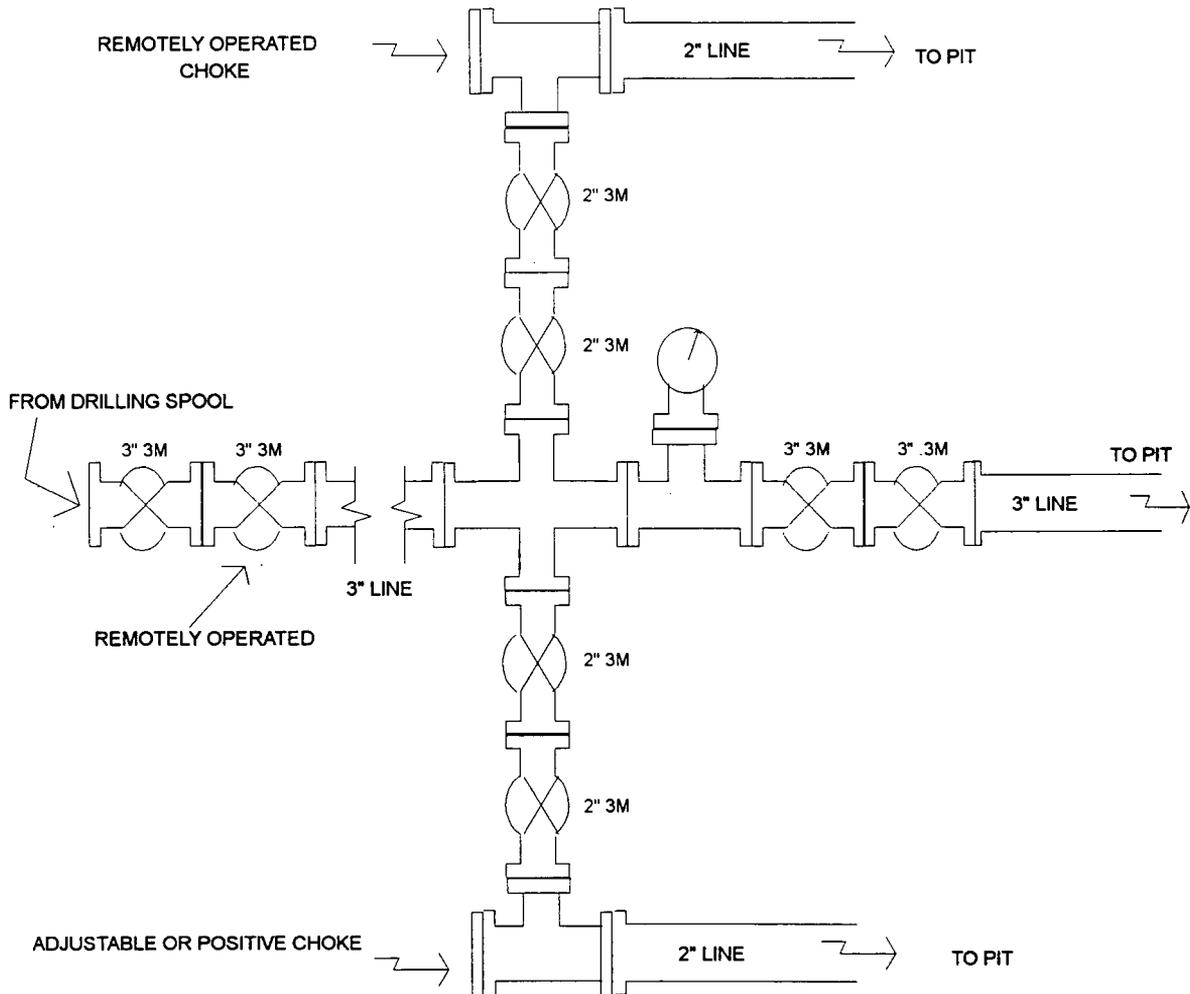


BOP installation from Surface Casing Point to Total Depth. 11" Bore (10" Nominal), 3,000psi working pressure double gate BOP to be equipped with blind and pipe rams. A 3,000psi Annular preventer to be installed on top of rams. A rotating head on the top of Annular preventer. All BOP equipment is 3,000psi working pressure.

Figure #1

# MERIDIAN OIL INC.

## Drilling Rig Choke Manifold Configuration 3000 psi System



Choke manifold installation from surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

Figure #2

# MERIDIAN OIL

Ute #22

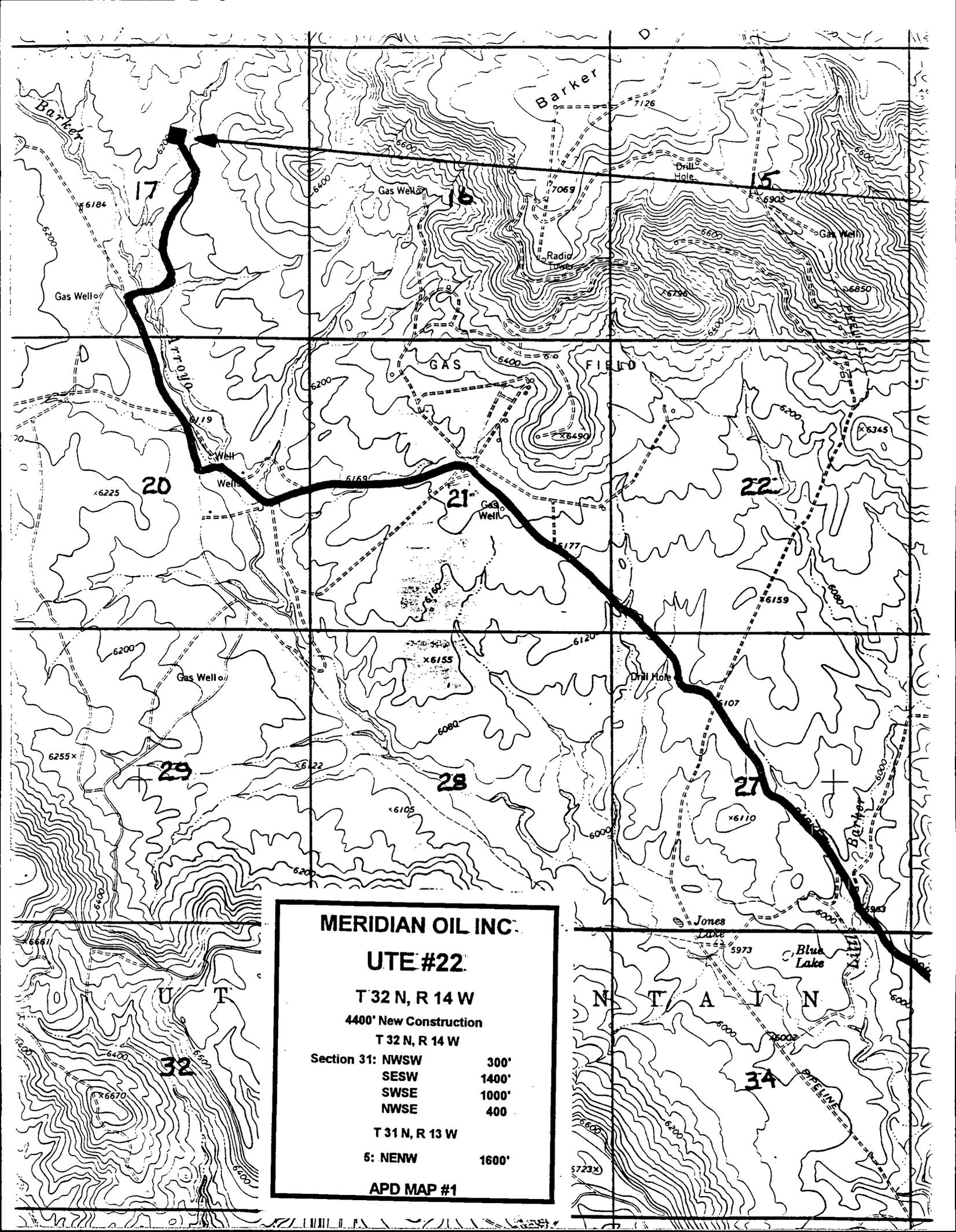
## Multi-Point Surface Use Plan

1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Indian Affairs right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 4400' of access road will be constructed. Pipelines are indicated on Map No. 1A.
3. Location of Existing Wells - Refer to Map No. 1A.
4. Location of Existing and/or Proposed Facilities if Well is Productive -
  - a. On the Well Pad - Refer to Plat No. 1, anticipated production facilities plat.
  - b. Off the Well Pad - Anticipated facilities off the well pad will be applied for as required.
5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from Barker Canyon Water Well located in SE Section 20, T-32-N,R-14-W, New Mexico.
6. Source of Construction Materials - If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
7. Methods of Handling Waste Materials - All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
8. Ancillary Facilities - None anticipated.
9. Wellsite Layout - Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
11. Surface Ownership - Ute Mountain Ute Tribe.
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
13. Operator's Representative and Certification - Meridian Oil Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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.

  
Regulatory/Compliance Administrator      5-28-96  
Date

pb



**MERIDIAN OIL INC.**

**UTE #22.**

T 32 N, R 14 W

4400' New Construction

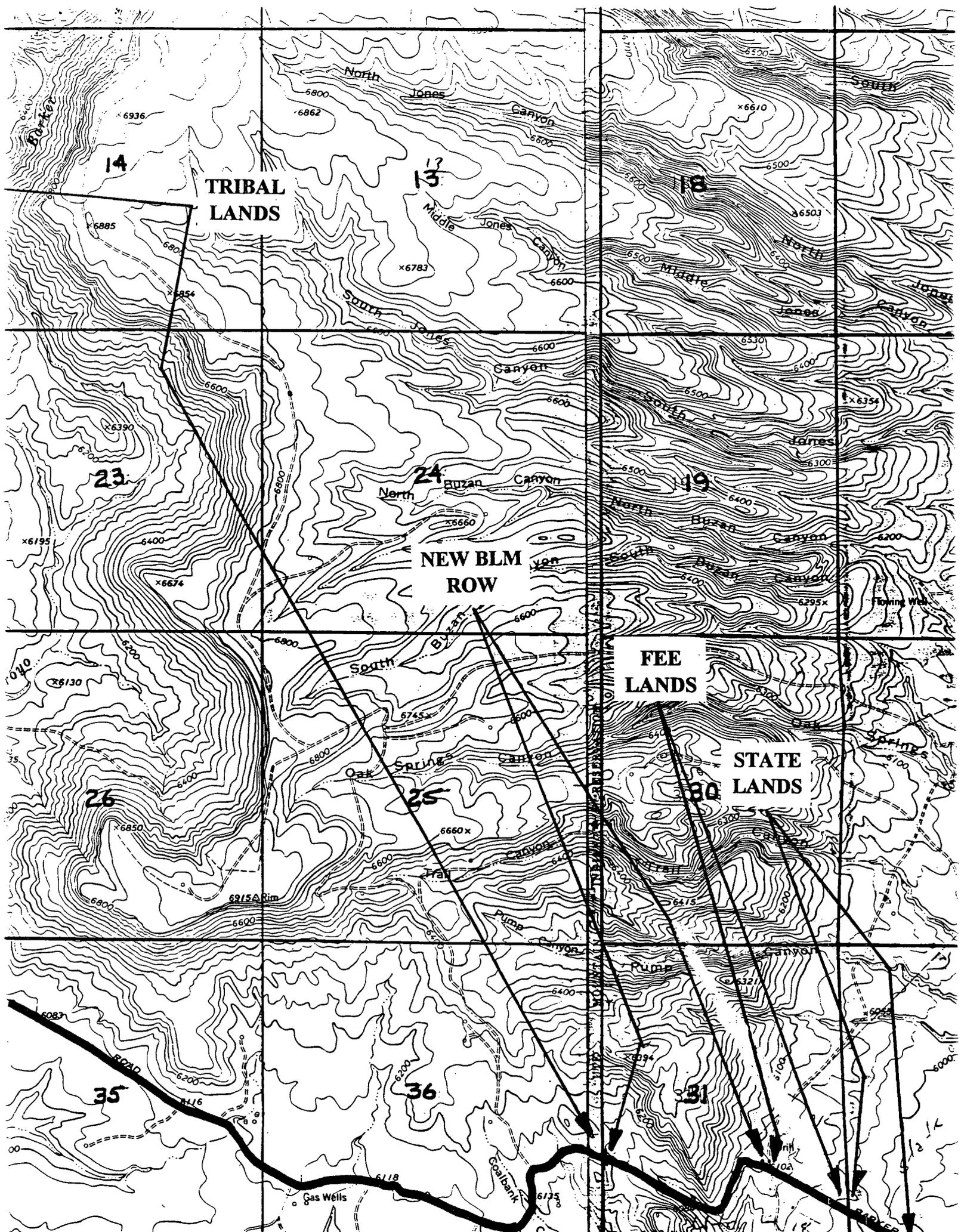
T 32 N, R 14 W

Section 31: NWSW	300'
SESW	1400'
SWSE	1000'
NWSE	400'

T 31 N, R 13 W

5: NENW	1600'
---------	-------

**APD MAP #1**



**TRIBAL  
LANDS**

**NEW BLM  
ROW**

**FEE  
LANDS**

**STATE  
LANDS**

14

13

18

23

24

19

26

25

30

35

36

31

North Jones Canyon

Middle Jones Canyon

South Jones Canyon

North Buzan Canyon

South Buzan Canyon

Oak Springs Canyon

Trail Canyon

Pump Canyon

Pump Canyon

Gas Wells

Goalbank

Flowing Well

Spring

6936

6862

6500

6500

6500

6500

6500

6500

6400

6400

6400

6400

6300

6300

6200

6100

6000

x6885

x6854

x6783

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x6503

x6354

x6390

x6195

x6674

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x6415

6915A Rim

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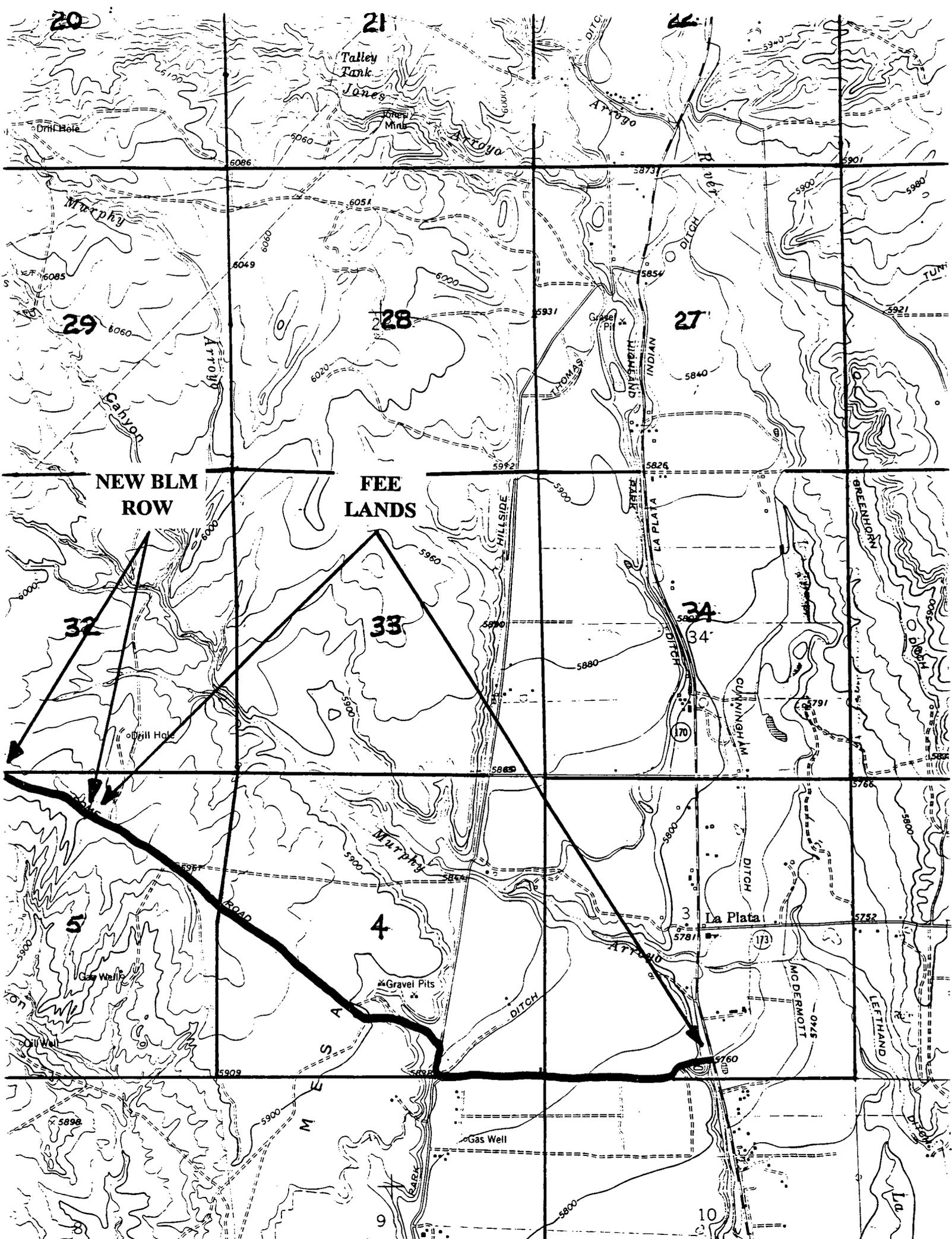
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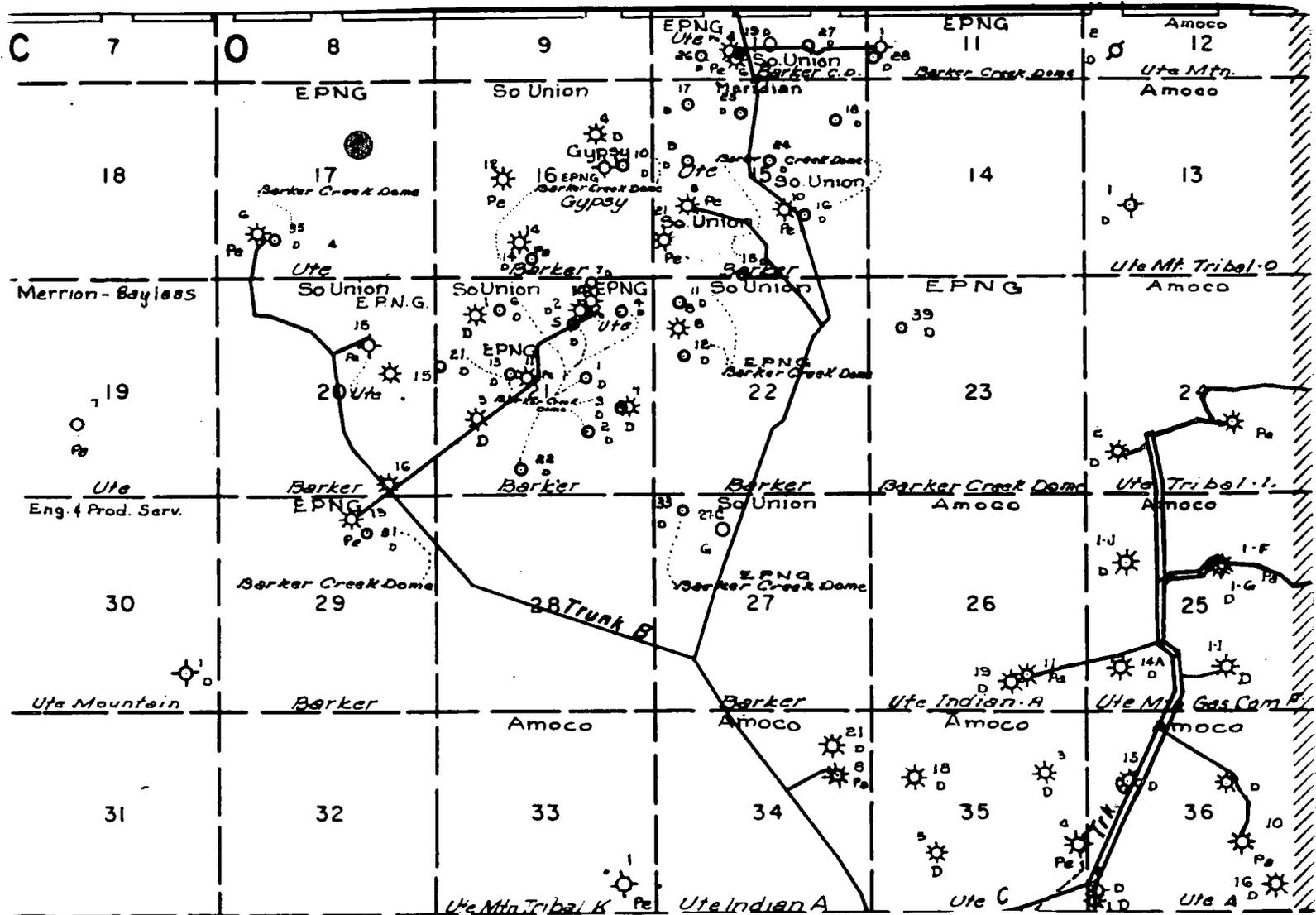
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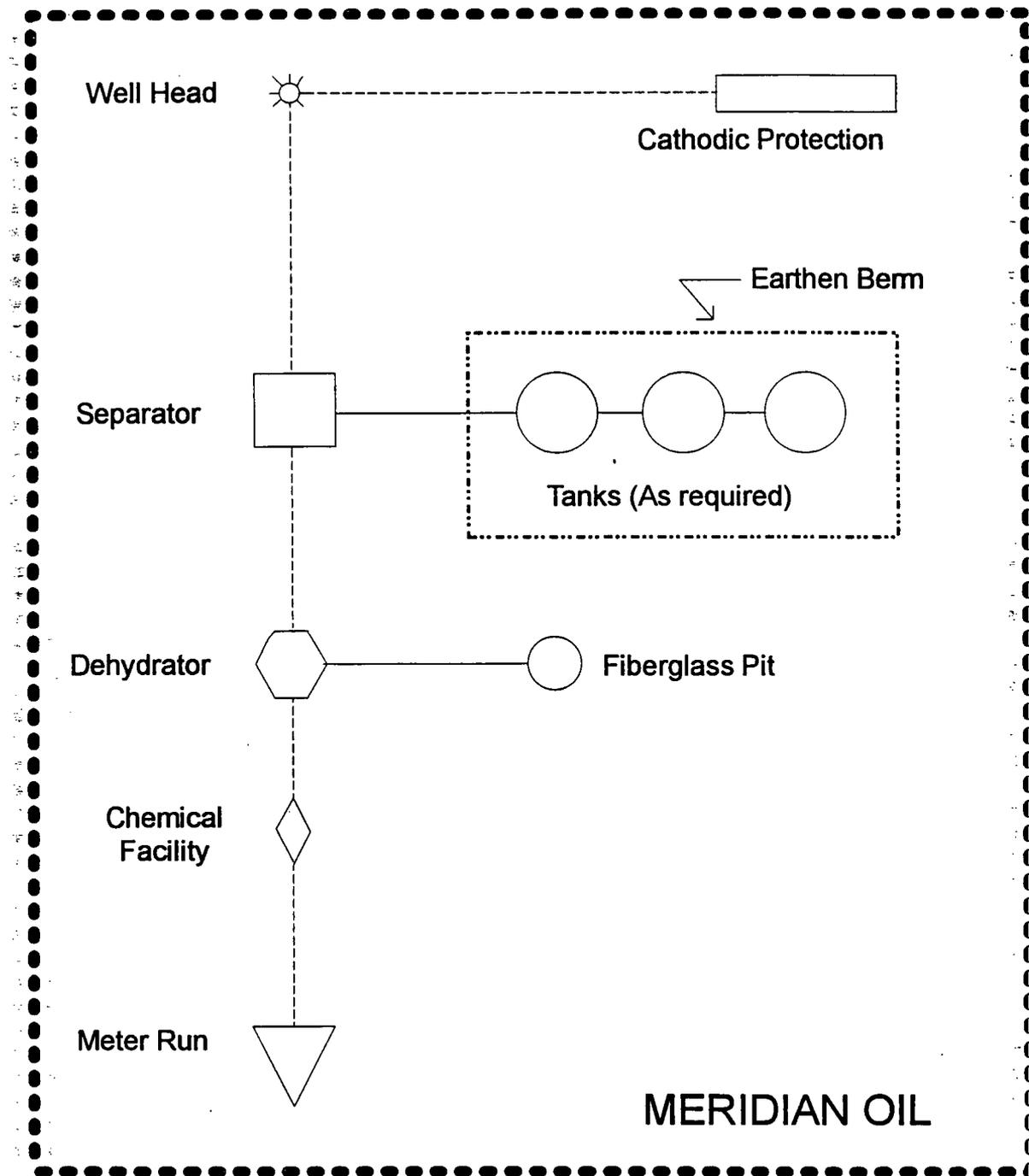




MERIDIAN OIL INC.  
 Pipeline Map  
 T-32-N, R-14-W  
 San Juan County, New Mexico

Ute #22  
 MAP #1A

Well Pad Boundary



ANTICIPATED  
PRODUCTION FACILITIES  
FOR A  
PARADOX WELL

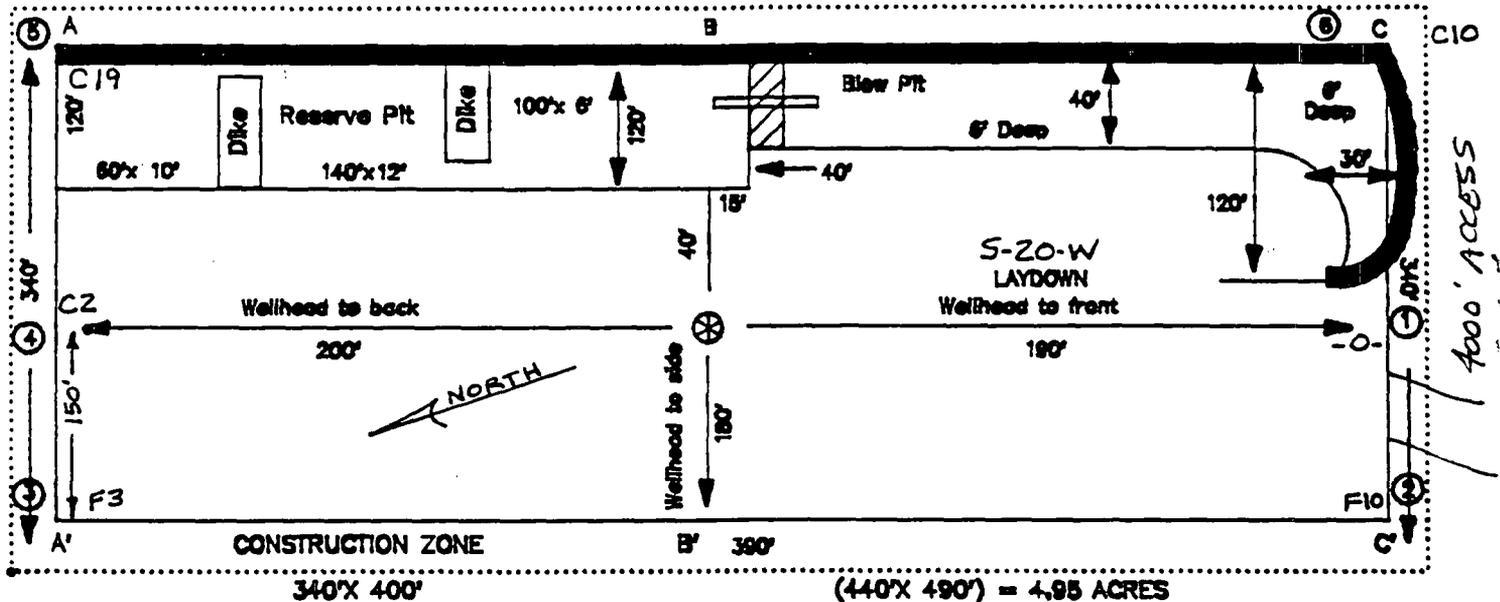
# MERIDIAN OIL

PLAT #3

BARKER DOME

HORIZONTALS

NAME:	MOI UTE #22		
FOOTAGES:	2000' FNL	1925' FEL	
SEC:	17	TWN:	32 N.R. 14 W NMPM
CO:	SAN JUAN	ST:	N.M.
ELEVATIONS:	6236	DATE:	11-3-93



340' X 400'

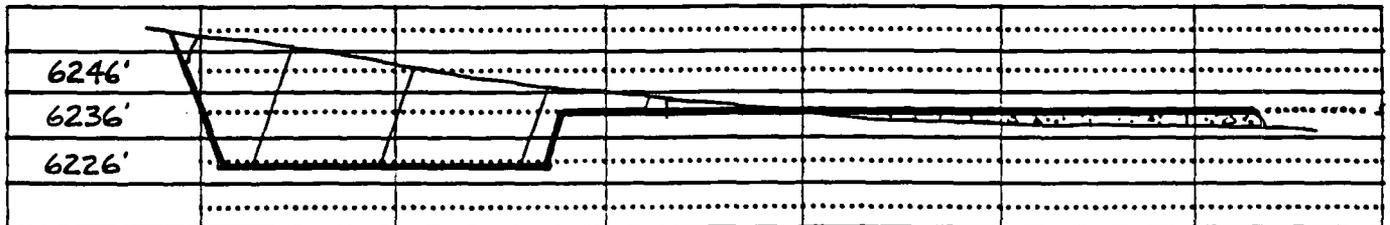
(440' X 490') = 4.95 ACRES

Reserve Pit Dike : to be 6' above Deep side; ( overflow - 3' wide and 1' above shallow side. )

Blow Pit : overflow pipe halfway between top and bottom and extend over plastic liner and into blow pit.

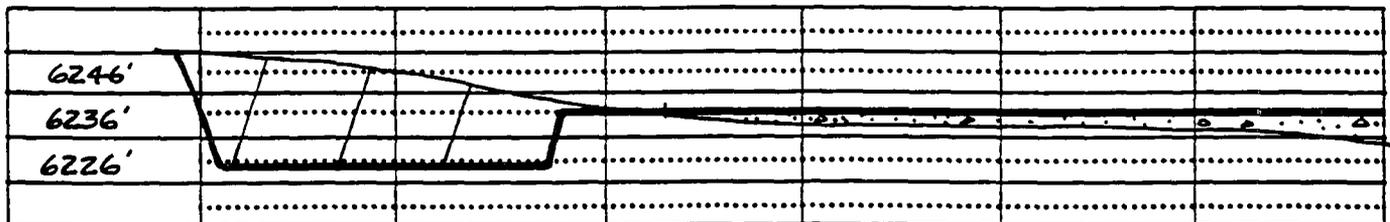
A-A°

C/L



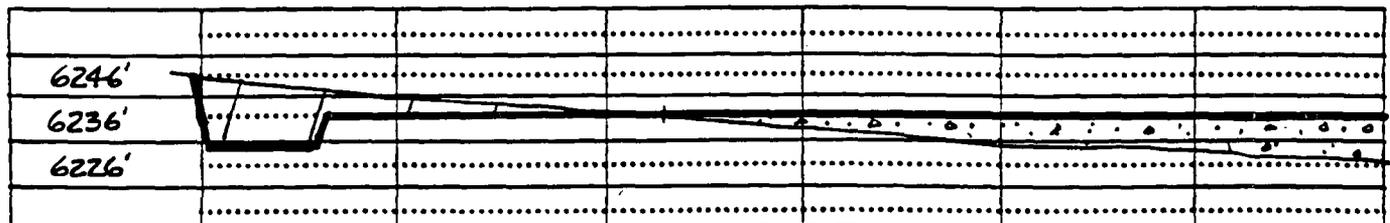
B-B°

C/L

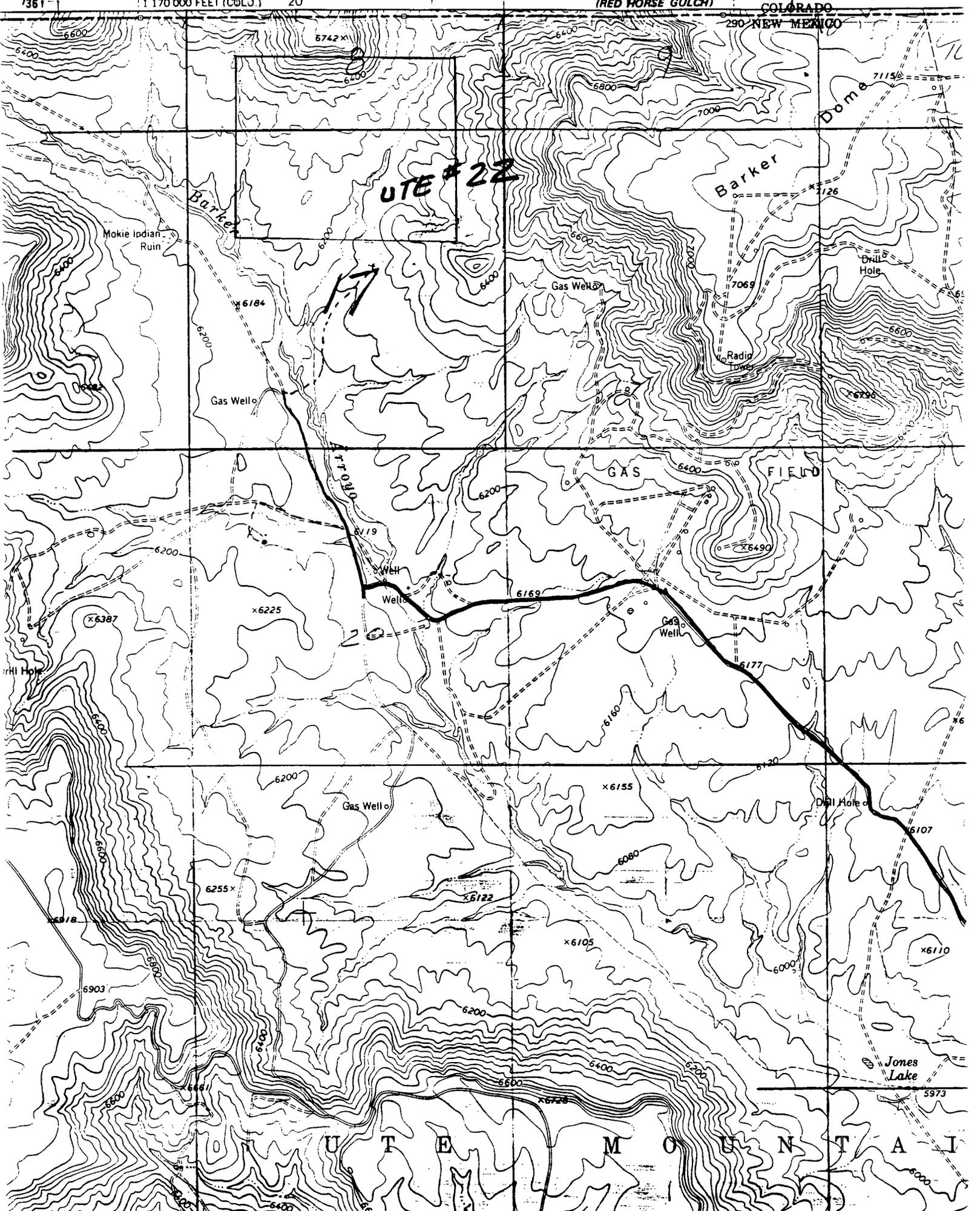


C-C°

C/L







**MERIDIAN OIL INC.**  
DRILLING DEPARTMENT

3535 EAST 30TH STREET. FARMINGTON, NM 87402

P.O. BOX 4289. FARMINGTON, NM 87499

(505) 326-9700 FAX: (505) 326-9563

DATE: 8-29-96

TO: Michael Stagner

COMPANY: NMOCID

TELECOPIER: 827-8177

FROM: Peggy

NO. OF PAGES (including cover): 34

COMMENTS: Plt my phone

message. In case

you are missing this

from our NSI application

on the Ute #22.



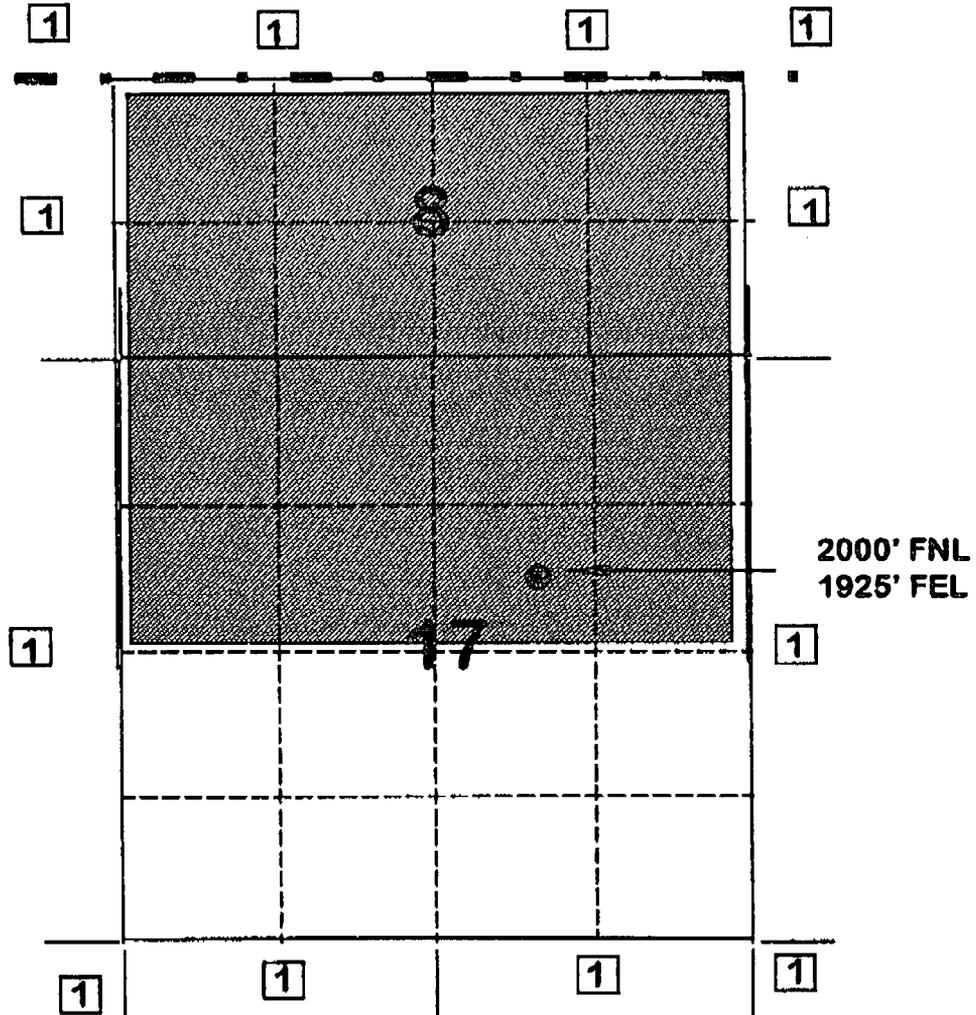
**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**UTE # 22**

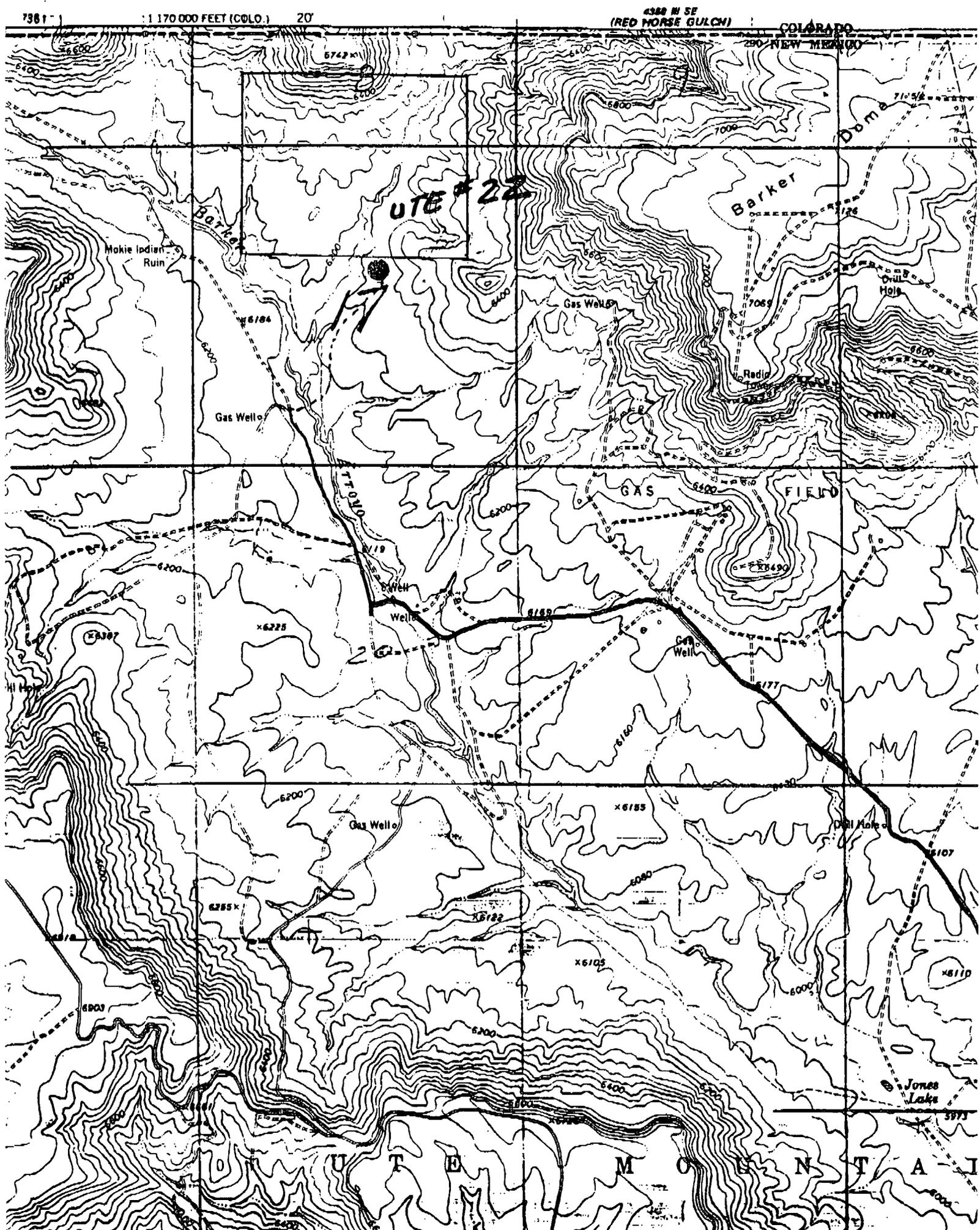
**OFFSET OPERATOR \ OWNER PLAT**

**BARKER DOME DESERT CREEK WELL**

**Township 32 North, Range 14 West**



**1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.**



**KELLAHIN AND KELLAHIN**

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

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W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

**FACSIMILE COVER SHEET**

DATE: September 3, 1996

NUMBER OF PAGES: -5-  
(including cover sheet)

TIME: 9:15 AM (Santa Fe)

\*\*\*

TO: Mike Stogner  
OF: NMOCDFROM: W. THOMAS KELLAHIN, Esq.

FAX NO: (505) 827-8177

REF: Burlington Resources  
Ute #22 NSL and NSP  
Barker Dome Desert Creek Pools

Dear Mike:

I would like to confirm with you that I have provided Peggy Bradfield of Burlington-Farmington with the correct advice:

(1) On August 16, 1996 she filed an administrative NSL for the referenced well which cannot be processed until she obtains an NSP for her spacing unit. See attached C-102)

(2) Order R-46-A (Case 11089) created this pool but did not include any Naps for the irregular sections. (See attached page 3 of that order)

(3) The NSL for the Ute 22 encroaches only toward Burlington

(4) She has a rig ready to start this week--I told her that is was Division practice to allow her to go ahead and commence drilling the well but that she could not get an approved C-104 until we received both an approved NSP and NSL

(5) The BLM has issued an order approving numerous Naps for the pool for the this Ute Mountain Indian property based on the survey and terrain, archaeology and the requests of the Tribe.

Mike Stogner  
NMOCD  
Page 2.

(6) I told her that he Naps for the pool would have to go to hearing and could not be processed administratively (?). Is that correct?

(7) I am preparing an OCD application for hearing to obtain approval for all of the Naps for the pool.

(6) I have enclosed a copy of the plat of the pool.

I am happy to come to your office to discuss. Please let me know..

Regards,



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District I  
PO Box 1988, Hobbs, NM 88241-1988  
District II  
PO Drawer DD, Amalia, NM 88211-0719  
District III  
1000 N. Mescal Rd., Artes, NM 87418  
District IV  
PO Box 1088, Santa Fe, NM 87504-1088

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

APN Number 30-045-		Pool Code 71560		Pool Name Barker Dome Desert Creek	
Property Code 7618		Property Name ite			Well Number 22
OGRID No. 14538		Operator Name MERIDIAN OIL INC.			Stratum 6236'

**10 Surface Location**

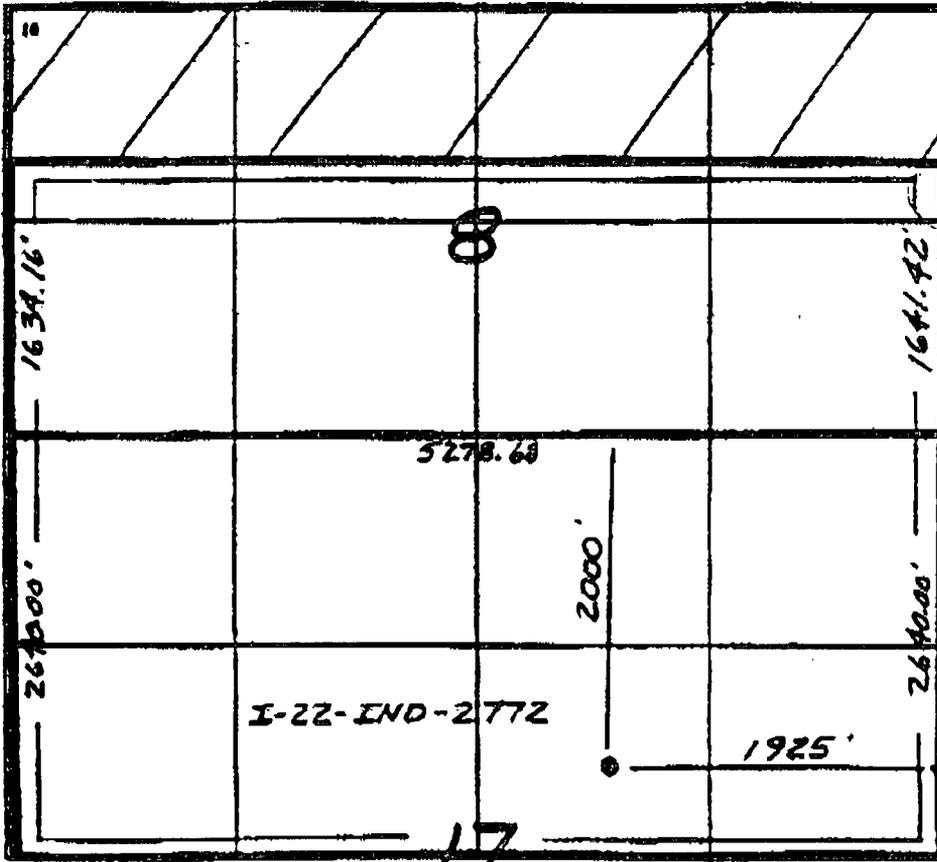
UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
G	17	32 N	14 W		2000	North	1925	East	S.J.

**11 Bottom Hole Location if Different From Surface**

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acre 527	Joint or In-It 	Committation Code 	Order No. 
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**NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**



**17 OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Peggy Bradford*  
 Signature  
 Peggy Bradford  
 Printed Name  
 Regulatory/Compliance Ad  
 Title  
 5-28-96  
 Date

**18 SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was placed from field notes of ground surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  
11-4-94

Date of Survey  
 Signature  
  
 Certification Number

Nomenclature  
Case No. 11089  
Order No. R-46-A  
Page -3-

PROPOSED POOL WELL SPACING

SETBACK REQUIREMENTS

Ismay	160-acres	No closer than 330 feet from the outer boundary of the spacing unit nor closer than 20 feet from any governmental quarter-quarter section line or subdivision inner boundary.
Desert Creek	320-acres	No closer than 790 feet from the outer boundary of the spacing unit nor closer than 130 feet from any governmental quarter-quarter section line or subdivision inner boundary.
Alah/Upper Barker Creek	320-acres	No closer than 790 feet from the outer boundary of the spacing unit nor closer than 130 feet from any governmental quarter-quarter section line or subdivision inner boundary.

d) to amend the well location requirements for the Barker Creek-Paradox (Pennsylvanian) Gas Pool such that wells can be located no closer than 790 feet from the outer boundary of the spacing unit nor closer than 130 feet from any governmental quarter-quarter section line or subdivision inner boundary.

(7) The applicant proposes that the vertical limits of each of the subject pools comprise the following described intervals as found on the log run on the Meridian Oil Inc. Ute Well No. 16 located in Unit I, Section 22, Township 32 North, Range 13 1/2 West, La Plata County, Colorado:

INTERVAL

VERTICAL LIMITS

Ismay (Includes Upper and Lower Ismay)	8502'-8693'
Desert Creek	8693'-8809'
Alah/Upper Barker Creek	8809'-9134'
Barker Creek (Includes Lower Barker Creek and Alkali Gulch)	9134'-9430'

(8) According to applicant's evidence, there have been eleven wells drilled in the subject pool subsequent to its discovery in 1945. The vast majority of the cumulative gas production from the subject pool, which according to applicant's testimony is some 230 BCFG, has originated from the Lower Barker Creek interval.

mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

**RULE 4.** Each well shall be located no closer than 790 feet from the outer boundary of the proration unit nor closer than 130 feet from any governmental quarter-quarter section line or subdivision inner boundary.

**RULE 5.** The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to a deeper horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

(8) Temporary Special Rules and Regulations for the Barker Dome-Ismay Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
BARKER DOME-ISMAY POOL**

**RULE 1.** Each well completed in or recompleted in the Barker Dome-Ismay Pool or in the equivalent vertical limits thereof within one mile of the pool boundary, shall be spaced, drilled, operated, and produced in accordance with the Special Rules hereinafter set forth.

**RULE 2.** Each well completed or recompleted in the Barker Dome-Ismay Pool shall be located on a unit containing 160 acres, more or less, which consists of the NE/4, SE/4, NW/4 or SW/4 of a single governmental section.

**RULE 3.** The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Lands Survey. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified

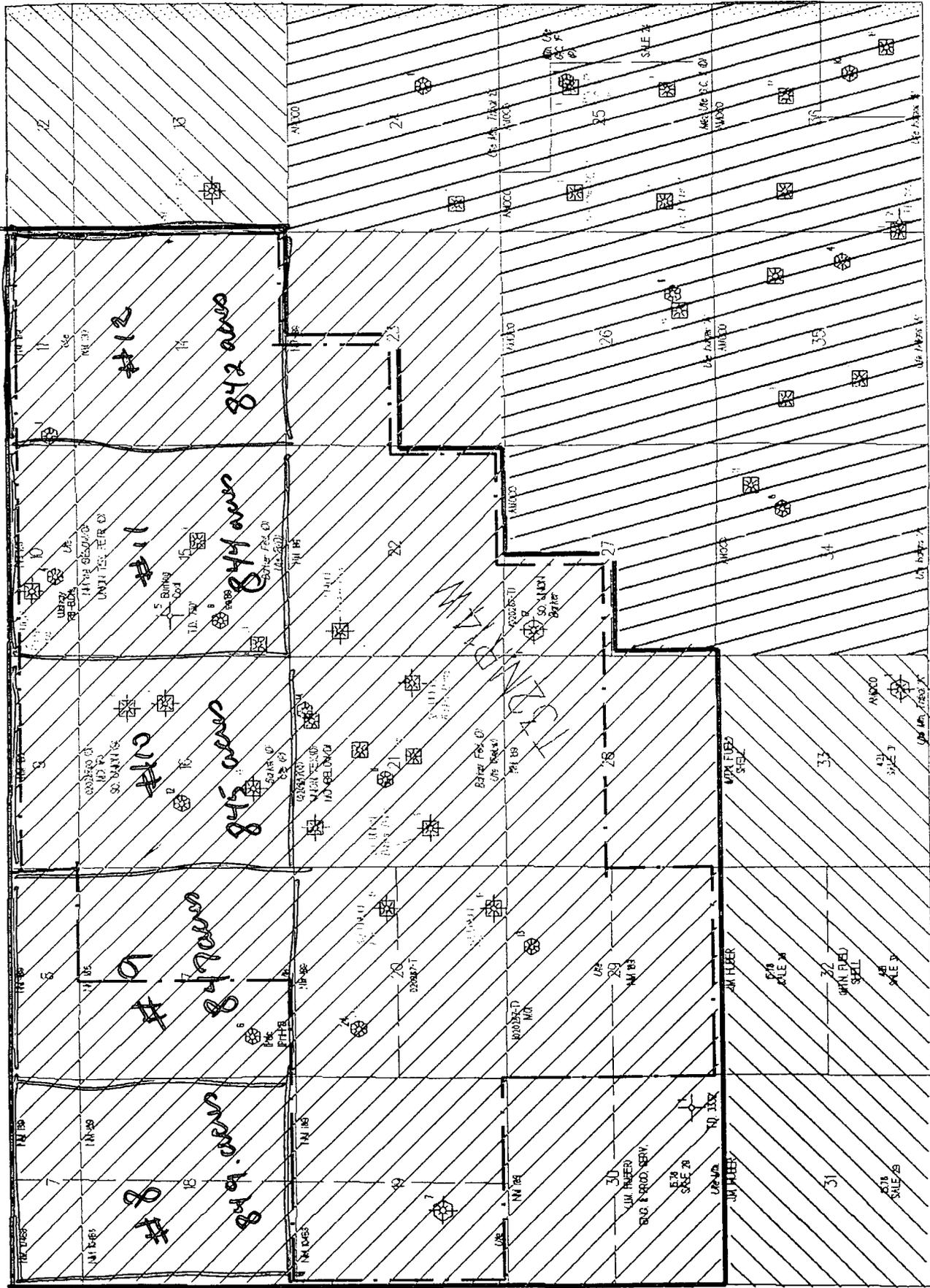
Desert Creek - Upper Barker  
1/20/00



- Current Pool Boundary
- Proposed Pool Boundary
- ▨ Meridian Oil Inc.
- ▧ Ute Mt. Ute Tribe Unleased
- ▩ Amoco Production Company

Contraction & Amendment of  
Barker Creek Paradox Gas Pool  
Township 32 North, Range 14 West  
San Juan County, New Mexico

Lower Barker Creek - 640



--- Current Pool Boundary

— Proposed Pool Boundary

Meridian Oil Inc.

Ute Mt. Ute Tribe Unleased

Amoco Production Company

Contraction & Amendment of  
Barker Creek Paradox Gas Pool  
Township 32 North, Range 14 West  
San Juan County, New Mexico



UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 SAN JUAN RESOURCE AREA OFFICE  
 701 CAMINO DEL RIO  
 DURANGO COLORADO 81301

TRIBAL ENERGY ADMINISTRATION

JUL 13 1995

IN THE MATTER OF THE )  
 PROMULGATION AND )  
 ESTABLISHMENT OF FIELD RULES )  
 TO GOVERN OPERATIONS ON THE )  
 UTE MOUNTAIN UTE ) BLM Order No. UMU-1  
 RESERVATION IN THE ISMAY )  
 FORMATION, DESERT CREEK )  
 FORMATION, AKAH/UPPER )  
 BARKER CREEK FORMATION, AND )  
 LOWER BARKER CREEK/ALKALI )  
 GULCH FORMATION IN THE )  
 BARKER DOME PARADOX GROUP, )  
 LA PLATA AND MONTEZUMA )  
 COUNTIES, COLORADO, AND SAN )  
 JUAN COUNTY, NEW MEXICO. )

Title 43 Code of Federal Regulations (CFR) 3162.3-1(a), authorizes the Bureau of Land Management (BLM) to establish a program which ensures the oil and gas wells are drilled in conformity with an acceptable well spacing plan. The courts and the Interior Board of Land Appeals have held that the BLM has jurisdiction to set well spacing on lands which are held in trust by the United States for Tribes or individual members of a Tribe, decisions and orders of the respective States notwithstanding. See, e.g., Assiniboine & Sioux Tribes of Fort Peck Indian Reservation v. Board of Oil and Gas Conservation of the State of Montana, 792 F.2d 782, 794-96 (9th Cir. 1986); San Juan Citizens Alliance, et al, 129 IBLA 1 (1994). Lacking a cooperative agreement between the Ute Mountain Ute Tribe (Tribe), the BLM, the states of Colorado and New Mexico, governing establishment of spacing on Ute Mountain Ute Indian lands, BLM utilized the existing oil and gas hearing processes of the Colorado Oil and Gas Conservation Commission and the New Mexico Oil Conservation Division for the purposes of notification, public hearing, and receiving recommendations from the respective state bodies. However, in matters involving well spacing and oil and gas operations across state lines within the Ute Mountain Ute Reservation, the BLM authorized officer issues the final governing order pursuant to 43CFR3162.3-1(a) to ensure adequacy and consistency.

### FINDINGS

This matter came before the Bureau of Land Management (BLM) on the application of Meridian Oil Inc., through the New Mexico Oil Conservation Division hearing process on November 10, 1994, in Santa Fe, New Mexico, and through the Colorado Oil and Gas Conservation Commission

hearing process on February 21, 1995, in Denver, Colorado, for an order to establish certain drilling and spacing units for production of gas and associated hydrocarbons from the Ismay Formation, Desert Creek Formation, Akah/Upper Barker Creek Formation, and Lower Barker Creek/Alkali Gulch Formation. The BLM's findings are as follows:

1. Due public notice has been given through the respective state commission hearing processes. No protests were received on this matter before the New Mexico Oil Conservation Division at its hearing on November 10, 1994, under Case No. 11089 and subsequent Order No. R-46-A, or before the Colorado Oil and Gas Conservation Commission at its administrative hearing on February 17, 1995, under Cause No. 515, Docket No. 2-6 and subsequent Order No. 515-1

2. For purposes of identification, the Ismay Formation, the Desert Creek Formation, the Akah/Upper Barker Creek Formation, and the Lower Barker Creek/Alkali Gulch Formation are identified as follows:

(a) Ismay Formation: The Ismay Formation shall be defined as the interval occurring from the top of the Ismay Formation at 8,502 feet to the base of the Ismay Formation at 8,693 feet as identified on the log of the Ute #16 Well located in Lot 1 of Section 22, Township 32 North, Range 13½ West, N.M.P.M., Colorado.

(b) Desert Creek Formation: The Desert Creek Formation shall be defined as the interval occurring from the top of the Desert Creek Formation at 8,693 feet to the base of the Desert Creek Formation at 8,809 feet as identified on the log of the Ute #16 Well located in Lot 1 of Section 22, Township 32 North, Range 13½ West, N.M.P.M., Colorado.

(c) Akah/Upper Barker Creek Formation: The Akah/Upper Barker Creek Formation shall be defined as the interval occurring from the top of the Akah Member at 8,809 feet to the base of the Upper Barker Creek Member at 9,134 feet as identified on the log of the Ute #16 Well located in Lot 1 of Section 22, Township 32 North, Range 13½ West, N.M.P.M., Colorado.

(d) Lower Barker Creek/Alkali Gulch Formation: The Lower Barker Creek/Alkali Gulch Formation shall be defined as the interval occurring from the base of the Akah/Upper Barker Creek Formation at 9,134 feet to the base of the Alkali Gulch Member at 9,444 feet as identified on the log of the Ute #16 Well located in Lot 1 of Section 22, Township 32 North, Range 13½ West, N.M.P.M., Colorado.

3. That the evidence presented at the two respective hearings indicates that the Ismay Formation, the Desert Creek Formation, the Akah/Upper Barker Creek Formation, and the Lower Barker Creek/Alkali Gulch Formation are separate sources of supply for the production of gas and associated hydrocarbon substances underlying the following described lands in San Juan County, New Mexico, and La Plata and Montezuma Counties, Colorado within the Ute Mountain Ute Indian Reservation:

Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico

Section 7: All	Section 8: All
Section 9: All	Section 10: All
Section 11: All	Section 14: All
Section 15: All	Section 16: All
Section 17: All	Section 18: All
Section 19: All	Section 20: All
Section 21: All	Section 22: All
Section 23: All	Section 27: NW/4
Section 28: All	Section 29: All
Section 30: All	Section 31: All
Section 32: All	

Township 32 North, Range 15 West, N.M.P.M., San Juan County, New Mexico

Section 12: All	Section 13: All
Section 24: All	Section 25: All
Section 36: All	

Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado

Section 1: All	Section 2: All
Section 3: All	Section 4: All (Lots 1, 2, 3, 4, E/2E/2)
Section 9: All (Lots 1, 2, 3, 4, E/2E/2)	
Section 10: All	Section 11: All
Section 12: All	Section 13: All
Section 14: All	Section 15: All
Section 16: All (Lots 1, 2, 3, 4, E/2E/2)	
Section 21: All (Lots 1, 2, 3, 4, E/2NE/2)	
Section 22: All (Lots 1, 2, 3, 4, N/2)	
Section 23: All (Lots 1, 2, 3, 4, N/2)	
Section 24: Lots 3, 4; NW/4	

Township 32 North, Range 14 West N.M.P.M., La Plata & Montezuma Counties, Colorado

Section 1: All (Lots 1, 2, 3, 4, S/2N/2, S/2)	
Section 2: All (Lots 1, 2, 3, 4, S/2N/2, S/2)	
Section 3: All (Lots 1, 2, 3, 4, S/2N/2, S/2)	
Section 10: All	Section 11: All
Section 12: All	Section 13: All
Section 14: All	Section 15: All
Section 22: All (Lots 1, 2, 3, 4, N/2)	
Section 23: All (Lots 1, 2, 3, 4, N/2)	
Section 24: All (Lots 1, 2, 3, 4, N/2)	

4. That in order to prevent the waste of oil and gas, as defined by law; to protect the correlative rights of all parties concerned; to prevent the drilling of unnecessary wells, to insure proper and efficient development and promote conservation of the oil and gas resources of the Ute Mountain Ute Tribe, an order should be made which establishes 160-acre drilling and spacing units for the Ismay Formation with the permitted well in each drilling and spacing unit to be located no closer than 330 feet to the outer boundary of the unit, 320-acre drilling and spacing units for the Desert Creek and Akah/Upper Barker Creek Formations consisting of the E/2 and the W/2 or the N/2 and the S/2 to be designated by the operator of the first well to be drilled with the permitted well in each drilling and spacing unit to be located no closer than 790 feet to the outer boundary of the unit, and 640-acre drilling and spacing units for the Lower Barker Creek/Alkali Gulch Formation with the permitted well in each drilling and spacing unit to be located not closer than 790 feet to the outer boundary of the unit for the lands described herein.

5. That the available geologic and engineering data presented indicates that one well will efficiently and economically drain the gas and associated hydrocarbons from an area of approximately 160 acres in the Ismay Formation, from an area of approximately 320 acres in the Desert Creek Formation and Akah/Upper Barker Creek Formation, and from an area of approximately 640 acres in the Lower Barker Creek/Alkali Gulch Formation. In addition, the drilling and spacing units described herein, with the exception of certain irregular sections, are not smaller than the maximum area that can be efficiently and economically drained by one well producing gas and associated hydrocarbon substances from the Ismay Formation, the Desert Creek Formation, the Akah/Upper Barker Creek Formation, and the Lower Barker Creek/Alkali Gulch Formation.

6. That the below-listed wells be designated as the permitted wells for the proposed drilling and spacing units for the Ismay, Desert Creek, Akah/Upper Barker Creek, and Lower Barker Creek/Alkali Gulch Formations in both Colorado and New Mexico:

<u>Well</u>	<u>Location</u>	<u>Producing Formation</u>	<u>Spacing Unit</u>
Ute Com #1	1870' FNL, 1445' FWL Section 13-T32N-R13½W La Plata County, Colorado	Lower Barker Creek	Section 13-T32N-R13½W
Ute #2R	325' FSL, 1435' FWL Section 15-T32N-R13½W La Plata County, Colorado	Ismay Desert Creek	SW¼ Section 15-T32N-R13½W W½ Section 15 & all of Section 16-T32N-R13½W
Ute #2	3000' FSL, 710' FWL Section 15-T32N-R14W La Plata County, Colorado	Lower Barker Creek	Section 15-T32N-R13½W (All) Section 16-T32N-R13½W (All)
Ute #3	990' FSL, 990' FWL Section 14-T32N-R13½W La Plata County, Colorado	Lower Barker Creek	Section 14-T32N-R13½W (All)

Ute #5	990' FSL, 990' FWL Section 11-T32N-R13½W La Plata County, Colorado	Ismay Desert Creek	SW¼ Section 11-T32N R13½W W½ Section 11-T32N- R13½W
Ute #9	990' FNL, 1076' FWL Section 21-T32N-R13½W La Plata County, Colorado	Lower Barker Creek	Section 21-T32N-R13½W & Section 22-T32N-R13½W
Ute #9A	2385' FNL, 955' FEL Section 21-T32N-R13½W La Plata County, Colorado	Ismay Desert Creek	<del>Section 21-T32N-R13½W,</del> Section 21-T32N-R13½ W & W1/2NW¼ & Lot 4 (37.89) of Section 22-T32N-R13½W & E½NE¼ & Lot 1 of Section 24-T32N-R14W
Ute #16	620' FSL, 1030' FEL Section 22-T32N-R13½W La Plata County, Colorado	Ismay	NE¼, Lots 1 & 2 of Section 22-T32N-R13½W
Ute #19	1890' FSL, 661' FWL (BHL) Section 24-T32N-R14W La Plata Co., Colorado	Ismay Desert Creek	Lots 3, 4, & NW¼ (W½) of Section 24-T32N-R14W NW¼, Lots 2, 3, 4, & W½NE¼ of Section 24- T32N-R14W.
Ute #11	2310' FNL, 2310' FWL Section 21-T32N-R14W San Juan County, New Mexico	Lower Barker Creek	Section 21-T32N-R14W (All)
Ute #12	2708' FNL, 1608' FWL Section 16-T32N-R14W San Juan County, New Mexico	Lower Barker Creek	Section 16-T32N-R14W (All) Section 9-T32N-R14W (All)
Ute #13	660' FNL, 1980' FEL Section 29-T-32N-14W San Juan County, New Mexico	Lower Barker Creek	Section 29-T32N-14W (All)
Ute #14	275' FNL, 1364' FEL Section 21-T32N-R14W San Juan County, New Mexico	Lower Barker Creek	Section 21-T32N14W (All)

Ute #4	540' FSL, 1980' FWL Section 10-T32N-R14W San Juan County, New Mexico	Ismay	Section 10-T32N-R14W (All)
Ute #6	1100' FSL, 1000' FWL Section 17-T32N-14W San Juan County, New Mexico	Desert Creek Upper Barker Creek	S½ Section 17-T32N-R14W
Ute #8	1363' FNL, 42.3' FEL (BHL) Section 16-T32N., R14W San Juan County, New Mexico	Ismay	NE¼ Section 16-T32N-R14W
Ute # 24	1595' FNL, 1258' FWL Section 20-T32N-R14W San Juan County, New Mexico	Desert Creek	W½ Section 20-T32N-R14W

The Aztec Ute #1 well located 660' FNL and 660' FWL of section 4-T32N-R13½, La Plata County, Colorado is specifically exempt from the well spacing established herein. This well is temporarily abandoned with limited reserves and resides on the extreme northern portion of the field. However, should this well, at some future time, be recompleted in any of the other pools established by this order, the provision established herein will be in force and effect.

The operator should be granted permission to continue commingling production from the Ute #2R Well from the Ismay and Desert Creek Formations; from the Ute #5 Well from the Ismay and Desert Creek Formations; from the Ute #9A Well from the Ismay and Desert Creek Formations; and from the Ute #19 Well from the Ismay and Desert Creek Formations. The ownership of minerals and the oil and gas leasehold estate of the proposed spacing units for the separate sources of supply from those wells is the same, and correlative rights will not be affected by allowing those wells to be produced from the separate sources of supply and for the production to be commingled.

7. The Authorized Officer (AO), after formal notice from the operator, may grant exceptions to the permitted well locations as described in Finding 4 herein to avoid topographical, surface hazards, and/or archeological sites, among other reasons. These exceptions may be granted provided that the owners of contiguous and cornering units toward which the proposed locations would be moved, file a waiver or consent, in writing, agreeing to said exception.

8. Because several of the irregular units described below are larger than the optimum drainage units described in Finding 5 herein, an additional well may be permitted by the AO after formal notification from the operator and after the owners of contiguous and cornering spacing units which the proposed infill locations would be located, file a waiver or consent, in writing, agreeing to said location. The option to drill additional wells will afford the operator an opportunity to produce, without waste, his just and equitable share from each reservoir and to protect correlative rights,

9. That the following specific drilling and spacing units be established for the irregular sections present in the area and that specific setbacks be approved for the permitted well locations

drilled in the irregular sections provided that the owners of contiguous and cornering units toward which the proposed locations would be moved, file a waiver or consent, in writing, agreeing to said exception as in Finding 7 above:

**Ismay Formation - Approximate 160-acre drilling and spacing unit dedications**

**Township 32 North, Range 13½ West, La Plata County, Colorado**

**Acreage**

1. Section 4: Lots 1 (8.98), 2 (8.97), 3 (8.97), 4 (8.96), E/2E/2 (All)	195.88
2. Section 9: Lots 1 (8.94), 2 (8.94), 3 (8.94), 4 (8.94), E/2E/2 (All)	195.76
3. Section 16: Lots 1 (8.94), 2 (8.93), 3 (8.92), 4 (8.91), E/2E/2 (All)	195.70
4. Section 21: Lots 1 (8.90), 2 (8.88), 3 (8.87), 4 (8.45), E/2NE/4 (All)	144.30
5. Section 22: Lots 3 (37.70), 4 (37.89), NW/4 (W/2)	235.59
6. Section 22: Lots 1 (37.43), 2 (37.55), NE/4 (E/2)	235.98
7. Section 23: Lots 3 (37.52), 4 (37.47), NW/4 (W/2)	234.99
8. Section 23: Lots 1 (37.74), 2 (37.63), NE/4 (E/2)	235.37
9. Section 24: Lots 3 (37.67), 4 (37.71), NW/4 (W/2)	235.38

**Township 32 North, Range 14 West, La Plata County, Colorado**

10. Section 22: Lots 3 (39.59), 4 (39.69), NW/4 (W/2)	239.28
11. Section 22: Lots 1 (39.69), 2 (39.59), NE/4 (E/2)	238.88
12. Section 23: Lots 3 (39.14), 4 (39.27), NW/4 (W/2)	238.41
13. Section 23: Lots 1 (38.87), 2 (39.00), NE/4 (E/2)	237.87
14. Section 24: Lots 3 (38.69), 4 (38.76), NW/4 (W/2)	237.45
15. Section 24: Lots 1 (38.54), 2 (38.61), NE/4 (E/2)	237.15

**\*Township 32 North, Range 14 West, San Juan County, New Mexico\***

16. Section 7: All (209.00)	209.00
17. Section 8: All (207.00)	207.00
18. Section 9: All (205.00)	205.00
19. Section 10: All (204.00)	204.00
20. Section 11: All (202.00)	202.00

**\*Township 32 North, Range 15 West, San Juan County, New Mexico\***

21. Section 12: All (211.00)	211.00
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\*Note\*-Acreage based upon preliminary protraction and subject to revision.

Desert Creek and Akah/Upper Barker Creek Formations - Approximate 320-acre drilling and spacing unit dedications

	<u>Acreage</u>
1. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 4: Lots 1 (8.96), 2 (8.97), 3 (8.97), 4 (8.98), E/2E/2 Section 3: W/2 (320.00)	195.88 <u>320.00</u> <u>515.88</u>
2. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 9: Lots 1 (8.94), 2 (8.94), 3 (8.94), 4 (8.94), E/2E/2 Section 10: W/2 (320.00)	195.76 <u>320.00</u> <u>515.76</u>
3. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 16: Lots 1 (8.91), 2 (8.92), 3 (8.93), 4 (8.94), E/2E/2 Section 15: W/2 (320.00)	195.70 <u>320.00</u> <u>515.70</u>
4. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 21: Lots 1 (8.90), 2 (8.88), 3 (38.07), 4 (8.45), E/2NE/4 Section 22: W1/2NW & lot 4(37.89)	144.30 117.89
<u>Township 32 North, Range 14W, N.M.P.M., La Plata Co., Colorado</u> Section 24: E1/2NE1/4 & lot 1(38.54)	118.54 <u>380.73</u>
5. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 22: NE¼, Lots 1 (37.43), 2 (37.55) & 3 (37.70), E1/2NW1/4	352.68
6. <u>Township 32 North, Range 13 1/2 West, N.M.P.M., La Plata County, Colorado</u> Section 23: NW/4, Lots 2 (37.63), 3 (37.52) & 4 (37.47), W1/2NE/4	352.62
7. <u>Township 32 North, Range 13 1/2 West, N.M.P.M., La Plata County, Colorado</u> Section 23: Lots 1 (37.74) & E1/2NE/4 Section 24: Lots 3(37.67), lot 4(37.71), & NW/4	117.74 <u>235.38</u> <u>353.12</u>
8. <u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 24: NW/4, Lot 2 (38.61), 3 (38.69), 4 (38.76), & W/2NE/4	356.06

9.	<u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 23: NE/4, Lots 1 (38.87), 2 (39.00), 3(39.14), & E1/2NW/4	<u>357.01</u>
10.	<u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 22: Lots 1(39.39), 2(39.49), & NE/4 Section 23: Lot 4(39.27) & W1/2NW/4	238.88 <u>119.27</u> <u>358.15</u>
11.	<u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 22: Lots 3 (39.59), 4(39.69), & NW¼	<u>239.28</u>
12.	<u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u> Section 7: All Section 18: N½	209.00 <u>320.00</u> <u>529.00</u>
13.	<u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u>  Section 8: (All) Section 17: N½	207.00 <u>320.00</u> <u>527.00</u>
14.	<u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u> Section 9: (All) Section 16: N½	205.00 <u>320.00</u> <u>525.00</u>
15.	<u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u> Section 10: (All) Section 15: N½	204.00 <u>320.00</u> <u>524.00</u>
16.	<u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u> Section 11: (All) Section 14: N½	202.00 <u>320.00</u> <u>522.00</u>
17.	<u>*Township 32 North, Range 15 West, N.M.P.M., San Juan County, New Mexico*</u> Section 12 (All) Section 13 N½	211.00 <u>320.00</u> <u>531.00</u>

\*Note\*-Acreage based upon preliminary protraction and subject to revision.

Lower Barker Creek/Alkali Gulch Formation - Approximate 640-acre drilling and spacing unit dedications

	<u>Acreage</u>
1. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 4: Lots 1 (8.96), 2 (8.97), 3 (8.97), 4 (8.98), E/2E/2 (All) Section 3: All	195.88 <u>640.00</u> <u>835.88</u>
2. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 9: Lots 1 (8.94), 2 (8.94), 3 (8.94), 4 (8.94), E/2E/2 (All) Section 10: All	195.76 <u>640.00</u> <u>835.76</u>
3. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 16: Lots 1 (8.91), 2 (8.92), 3 (8.93), 4 (8.94), E/2E/2 (All) Section 15: All	195.70 <u>640.00</u> <u>835.70</u>
4. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 21: Lots 1 (8.90), 2 (8.88), 3 (38.07), 4 (8.45), E/2NE/4 (All) Section 22: Lots 1 (37.43), 2 (37.55), 3 (37.70), 4 (37.89), N/2 (All)	144.30 <u>470.57</u> <u>614.87</u>
5. <u>Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado</u> Section 23: Lots 1 (37.74), 2 (37.63), 3 (37.52), 4 (37.47), N/2 (All) Section 24: NW/4, Lots 3 (37.67), 4 (37.71)	470.36 <u>235.38</u> <u>705.74</u>
6. <u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 22: Lots 1 (39.99), 2 (39.49), 3 (39.59), 4 (39.69), N/2 (All) Section 23: Lots 3 (39.14), 4(39.27), & NW¼ (160.00)	478.16 <u>238.41</u> <u>716.57</u>
7. <u>Township 32 North, Range 14 West, N.M.P.M., La Plata County, Colorado</u> Section 23: Lots 1 (38.87), 2 (39.00), NE¼ Section 24: Lots 1 (38.54), 2 (38.51), 3 (38.69), 4 (38.76), N/2 (All)	237.87 <u>474.60</u> <u>712.47</u>
8. <u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u> Section 7 (All) Section 18 (All)	209.00 <u>640.00</u> <u>849.00</u>

9. <u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u>	
Section 8 (All)	207.00
Section 17 (All)	<u>640.00</u>
	<u>847.00</u>
10. <u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u>	
Section 9 (All)	205.00
Section 16 (All)	<u>640.00</u>
	<u>845.00</u>
11. <u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u>	
Section 10 (All)	204.00
Section 15 (All)	<u>640.00</u>
	<u>844.00</u>
12. <u>*Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico*</u>	
Section 11 (All)	202.00
Section 14 (All)	<u>640.00</u>
	<u>842.00</u>
13. <u>*Township 32 North, Range 15 West, N.M.P.M., San Juan County, New Mexico*</u>	
Section 12 (All)	211.00
Section 13 (All)	<u>640.00</u>
	<u>851.00</u>

\*Note\*-Acreage based upon preliminary protraction and subject to revision.

### ORDER

It is therefore ordered that 160-acre drilling and spacing units be established for the Ismay Formation with the permitted well in each drilling and spacing unit to be located no closer than 330 feet to the outer boundary of the unit. Additionally, 320-acre drilling and spacing units be established for the Desert Creek and Akah/Upper Barker Creek Formations consisting of the E/2 and the W/2 or the N/2 and the S/2 to be designated by the operator of the first well to be drilled with the permitted well in each drilling and spacing unit to be located no closer than 790 feet to the outer boundary of the unit. Furthermore, 640-acre drilling and spacing units be established for the Lower Barker Creek/Akaki Gulch Formation with the permitted well in each drilling and spacing unit to be located not closer than 790 feet to the outer boundary of the unit for the below-described lands:

Township 32 North, Range 14 West, N.M.P.M., San Juan County, New Mexico

Section 7: All	Section 8: All
Section 9: All	Section 10: All
Section 11: All	Section 14: All
Section 15: All	Section 16: All
Section 17: All	Section 18: All
Section 19: All	Section 20: All
Section 21: All	Section 22: All
Section 23: All	Section 27: NW/4
Section 28: All	Section 29: All
Section 30: All	Section 31: All
Section 32: All	

Township 32 North, Range 15 West, N.M.P.M., San Juan County, New Mexico

Section 12: All	Section 13: All
Section 24: All	Section 25: All
Section 36: All	

Township 32 North, Range 13½ West, N.M.P.M., La Plata County, Colorado

Section 1: All  
Section 2: All  
Section 3: All  
Section 4: All (Lots 1, 2, 3, 4, E/2E/2)  
Section 9: All (Lots 1, 2, 3, 4, E/2E/2)  
Section 10: All  
Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 16: All (Lots 1, 2, 3, 4, E/2E/2)  
Section 21: All (Lots 1, 2, 3, 4, E/2NE/2)  
Section 22: All (Lots 1, 2, 3, 4, N/2)  
Section 23: All (Lots 1, 2, 3, 4, N/2)  
Section 24: NW/4, Lots 3&4

Township 32 North, Range 14 West N.M.P.M., La Plata & Montezuma Counties, Colorado

Section 1: All (Lots 1, 2, 3, 4, S/2N/2, S/2)  
Section 2: All (Lots 1, 2, 3, 4, S/2N/2, S/2)  
Section 3: All (Lots 1, 2, 3, 4, S/2N/2, S/2)

Section 10: All  
Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 22: All (Lots 1, 2, 3, 4, N/2)  
Section 23: All (Lots 1, 2, 3, 4, N/2)  
Section 24: All (Lots 1, 2, 3, 4, N/2)

It is further ordered that the existing wells described under Finding no. 6 above be approved as the permitted wells for the designated spacing units with existing commingling of production between the specified zones. Also, that exceptions locations be granted in accordance with the provisions outlined in Finding no. 7 to avoid topographical, archeological, surface hazards, or other factors. Because several of the irregular units described are larger than the optimum drainage units described in Finding no. 5 herein, an additional well may be permitted by the AO after formal notification from the operator and after the owners of contiguous and cornering spacing units which the proposed infill locations would be located, file a waiver or consent, in writing, agreeing to said location. It is also ordered that irregular spacing units described under Finding no. 9 above with special setback provisions be approved contingent upon due notice being given to offsetting operators and that the necessary waivers or consent, in writing, agreeing to said setbacks are filed with the AO.

Jurisdiction is hereby retained for the entry of such further orders as the BLM may deem necessary. The BLM reserves its right to alter, amend or repeal any and/or all of the above orders.

Ordered this 9 day of JUNE, 1995., effective as of March 20, 1995.

BUREAU OF LAND MANAGEMENT  
SAN JUAN RESOURCE AREA

By Kent Hoffman  
Kent Hoffman, Acting Area Manager

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE: 11089 (Reopened)

APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY TO REOPEN CASE 11089  
AND TO AMEND ORDER R-46-A TO CONFORM TO  
BLM ORDER NO. UMU-1,  
SAN JUAN COUNTY, NEW MEXICO

DRAFT

APPLICATION

Comes now BURLINGTON RESOURCES OIL & GAS COMPANY ("Burlington"), by and through its attorneys, Kellahin and Kellahin, and applies to the New Mexico Oil Conservation Division ("NMOCD") to amend Division Order R-46-A to conform to BLM Order No. UMU-1 by (a) more specifically defining the vertical limits (b) allowing for the drilling of certain optional infill wells, and (c) approving certain non-standard gas spacing and proration units for the Barker Dome-Akah/Upper Barker Creek Pool, the Barker Dome-Desert Creek Pool and the Barker Dome-Ismay Pool all within a horizontal area containing all or parts of Sections 7 through 10, 11, 14 through 23, 27 through 30, T32N, R14W, NMPM.

In support the Applicant states:

(1) The Barker Creek-Paradox Gas Pool ("Pool") was establish by Order R-13 issued March 15, 1950 and extended by Order R-6421 dated August 1, 1980.

**DRAFT**

**NMOCD Application  
Meridian Oil Inc.  
Page 2**

(2) By Order R-46-A issued in Case 11089 on February 13, 1995, the NMOCD contracted the Barker Creek-Paradox (Pennsylvanian) Gas Pool, redesignated it the Barker Dome-Paradox Pool and concomitantly created three new gas pools:

- (a) the Barker Dome-Ismay Pool
- (b) the Barker Dome-Akah/Upper Barker Creek Pool
- (c) the Barker Dome-Desert Creek Pool

(3) The current NMOCD pool boundaries for these four pools are the same and are located within the Ute Mountain Ute Reservation as shown on Exhibit "A" attached and consist of the following acreage:

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM

- Sections 8-11: All
- Sections 14-16: All
- Section 17: E/2
- Sections 19-22: All
- Section 23: NW/4
- Section 27: NW/4
- Section 28: N/2
- Section 29: All

(4) The current NMOCD vertical limits and spacing unit sizes for these four pools are as follows:

<b>NAME</b>	<b>LIMITS</b>	<b>SPACING UNITS</b>
(a) the Barker Dome-Ismay Pool	8502'-8693'	160 acres
(b) the Barker Dome-Akah/ Upper Barker Creek Pool	8693'-8809'	320 acres
(c) the Barker Dome-Desert Creek Pool	8809'-9134'	320 acres
(d) Barker Dome-Paradox Pool	9134'-9430'	640 acres

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**NMOCD Application  
Meridian Oil Inc.  
Page 3**

(5) On June 9, 1995, the Bureau of Land Management ("BLM") issued BLM Order No. UMU-1, effective March 20, 1995, declaring that the BLM has jurisdiction to set well spacing on lands which are held in trust by the United States for Tribes or individual members of a Tribe notwithstanding decisions and order of the State of New Mexico.

(6) The BLM also relied upon the Oil Conservation Division of New Mexico's hearing process and relied upon and ultimately adopted the recommendations of the NMOCD as set forth in Order R-46-A.

(7) While the BLM order adopted the NMOCD's recommendation for well spacing, the BLM order also required and approved:

(a) certain non-standard gas proration and spacing units ("NSPs") both larger and smaller in size than the standard sized spacing and proration units authorized by the NMOCD;

(b) special well location setback provisions for these non-standard gas proration and spacing units ("NSPs") at locations closer to the boundaries of those units than authorized by the NMOCD;

(b) infill drilling of an additional well on these NSPs so that the well density is equivalent to that authorized by the NMOCD.

(8) The BLM's decision on these issues was reached in order to avoid topographical, archeological, surface hazards and other factors.

(9) Burlington controls 100% of the gas operating rights in the Pool with 100% of the royalty being owned by the Ute Mountain Ute Tribe.

(10) In order to provide a common means for the orderly development of all four gas pools which is consistent with the BLM order, Burlington requests the Division:

(a) approve the non-standard gas proration and spacing units set for on Exhibit B attached.

(b) approve infill drilling of an additional well on these non-standard gas proration and spacing units.

(c) to identify the vertical limits for these pools as the stratigraphic equivalent interval as found at these depths on the appropriate type log for these pools.

(11) As required, notice is provided to those interest owners as listed on Exhibit "C."

(12) The granting of this Application will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that this matter be set for hearing on October 5, 1996 before a duly appointed Examiner of the Oil Conservation Division and, after notice and hearing as required by law, the Division enter its Order granting this application, as amended.

Respectfully submitted,

KELLAHIN and KELLAHIN

**DRAFT**

By: \_\_\_\_\_

W. Thomas Kellahin  
Post Office Box 2265  
Santa Fe, New Mexico 87504  
(505) 982-4285  
Attorneys for Applicant

## PROPOSED ADVERTISEMENT

CASE 11089 (Reopened) Application of Burlington Resources Oil and Gas Company to Reopen Case 11089 and amend Order R-46-A to conform to BLM Order No. UMU-1, San Juan County, New Mexico.

Applicant, in accordance with BLM Order No. UMU-1, seeks to amend Division Order R-46-A to (a) more specifically define the vertical limits (b) to allow for the drilling of certain optional infill wells, and (c) to approve certain non-standard gas spacing and proration units for the Barker Dome-Akah/Upper Barker Creek Pool, the Barker Dome-Desert Creek Pool and the Barker Dome-Ismay Pool all within a horizontal area containing all or parts of Sections 7 through 10, 11, 14 through 23, 27 through 30, T32N, R14W, NMPM.

Said area is located approximately 9 miles west-northwest of La Plata, New Mexico

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CMD :  
OG6CLOG

ONGARD  
C105-WELL COMPLETION OR RECOMP CASING LOG

09/04/96 15:00:03  
OGOMES -EMF3

OGRID Identifier : 14538 BURLINGTON RESOURCES OIL & GAS CO  
Prop Identifier : 7618 UTE  
API Well Identifier : 30 45 29395 Well No : 22  
Surface Locn - UL : G Sec : 17 Twp : 32N Range : 14W Lot Idn :  
Multiple comp (S/M/C) : N TVD Depth (Feet) : MVD Depth (Feet):  
Spud Date : P/A Date :  
Casing/Linear Record:

-----  
S Size Grade Weight Depth(ft) Depth(ft) Hole Size Cement ---- TOC ----  
(inches) (lb/ft) Top-Liner Bot-Liner (inches) (Sacks) (feet) Code  
-----

E0004: No matching record found. Enter data to create.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM  
PF07 PF08 PF09 COMMENT PF10 TLOG PF11 PF12

CMD :  
OG6C101

ONGARD  
C101-APPLICATION FOR PERMIT TO DRILL

09/04/96 15:00:29  
OGOMES -EMF3

OGRID Idn : 14538 API Well No: 30 45 29395 APD Status(A/C/P): A  
Opr Name, Addr: BURLINGTON RESOURCES OIL & GAS C Aprvl/Cncl Date : 07-23-1996  
801 CHERRY ST  
FT WORTH, TX 76102

Prop Idn: 7618 UTE Well No: 22

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: G	17	32N	14W			FTG 2000 F N	FTG 1925 F E
OCD U/L	: G		API County	: 45				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : R  
Lease typ(F/S/P/N/J/U/I): U Ground Level Elevation : 6236

State Lease No: Multiple Comp (Y/N) : N  
Prpsd Depth : 8365 Prpsd Frmtn : BARKER DOME DESERT CREEK

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12