

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

October 17, 1996

DECENTION OCT 2 3 1996

Burlington Resources Oil & Gas Company P. O. Box 4289 Farmington, New Mexico 87499-4289 Attention: Peggy Bradfield

Administrative Order NSL-3723

Dear Ms. Bradfield:

Reference is made to your application dated October 4, 1996 for an unorthodox "infill" gas well location for both the Blanco-Mesaverde and Basin-Dakota Pools for the proposed San Juan "28-6" Unit Well No. 128-M to be drilled 1310 feet from the South line and 1620 feet from the East line (Unit O) of Section 17, Township 28 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

Production from both pools in said well is to be included to the existing standard 320-acre gas spacing and proration units comprising the E/2 of said Section 17, which the Mesaverde production is currently dedicated to Burlington Resources' San Juan "28-6" Unit Well No. 1 (API No. 30-039-07426), located at a standard gas well location 1500 feet from the North line and 1650 feet from the East line (Unit G) of said Section 17 and the Dakota production is currently dedicated to Burlington Resources' San Juan "28-6" Unit Well No. 128 (API No. 30-039-20068), located at a standard gas well location 1800 feet from the North line and 1150 feet from the East line (Unit H) of said Section 17.

By the authority granted me under the provisions of Rule 2(d) of the "General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool/Special Rules and Regulations for the Basin-Dakota Pool", as promulgated by Division Order No. R-8170, as amended, the above-described unorthodox "infill" Dakota/Mesaverde gas well location for the San Juan "28-6" Unit Well No. 128-M is hereby approved.

Sincerely,

William J. LeMay

Director

WJL/MES/kv

cc: Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

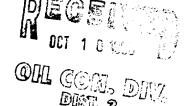
BURLINGTON RESOURCES

SAN JUAN DIVISION

October 4, 1996

Sent Federal Express

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



Re:

San Juan 28-6 Unit #128M

1310'FSL, 1620'FEL Section 17, T-28-N, R-6-W, Rio Arriba County, New Mexico

API # 30-039-(not yet assigned)

Dear Mr. LeMay:

Burlington Resources is applying for administrative approval of a non-standard location for the above location in both the Mesa Verde and Dakota formations. This application for the referenced location is due to terrain, the presence of archaeology, and the presence of pipelines.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- 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

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

	APPLICAT	ION FOR PERMIT TO DRILL, DEEP	PEN, OR PLUG BACK
1a.	Type of Work DRILL	Deceived	5. Lease Number SF-079192 Unit Reporting Number
1b.	Type of Well GAS	IN OCT 1 0 1996	6. If Indian, All. or Tribe
2.	Operator Meridian Oil Inc.	OIL CON. DIV. Dist. 3	7. Unit Agreement Name San Juan 28-6 Unit
3.	Address & Phone No. of PO Box 4289, Far (505) 326-9700	Operator mi ngto n, NM 87499	8. Farm or Lease Name San Juan 28-6 Unit 9. Well Number 128M
4.	Location of Well 1310' FSL, 1620' FEI	Longitude 107° 29.2	10. Field, Pool, Wildcat Blanco MV/Basin Dk 11. Sec., Twn, Rge, Mer. (NMPM) Sec 17, T-28-N, R-6-W API # 30-039-
14.	Distance in Miles from N 6 miles to Goberna		12. County 13. State Rio Arriba NM
15.	Distance from Proposed 1310'	Location to Nearest Property or Lease	e Line
16.	Acres in Lease		17. Acres Assigned to Well E/2 320
18.	Distance from Proposed	Location to Nearest Well, Drlg, Comp	I, or Applied for on this Lease
19.	Proposed Depth 7985'		20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, 6637' GR	Etc.)	22. Approx. Date Work will Start
23.	Proposed Casing and Co See Operations I		
24.	Authorized by:	y Shall hild Story/Compliance Administrat	9-30-96 Date
		col, compliance name state	
PERM	MIT NO	APPROVAL	DATE
APPE	ROVED BY	TITLE	DATE

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

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

NOTE: An APD was approved for this well in this 1/4 Section in February 1981

District 4 PO Has 1980. Hobbs. NM 88241-1988 District 44

Distance ill

PO Drawer OD. Artena. NM 88211-0719

1000 His Brusse Rd., Aziec. NM 87410

State of New Mexico

Form C-10 Reviseu February 21, 199

Fee Lease - 3 Copie

instructions on the

Submit to Appropriate District Offic State Lease - - Conte

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

District (V PO Bug 2088. Santa Fe. NM 87504-2088 AMENDED REPOR WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code 30-039-72319/71599 Blanco Mesaverde/Basin Dakota · Well Number ' Property Name * Property Code 128M San Juan 28-6 Unit 7462 "Eleveuse Operator Name OGRID No. BURLINGTON RESOURCES OIL AND GAS COMPANY 66371 14538 ¹⁰ Surface Location Feet from the East West Line Causty North/South line Section Township Range Lot Ide Feet from the UL or lot Bo. 1620 East R.A. 17 1310 South 0 28 N 6 W 11 Bottom Hole Location If Different From Surface East West tipe County Feet (ross the North/South line Section Townsip Lot Ida UL or lot se. 13 Joint or Infill | 14 Consocidation Code | 15 Order No. E/320 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 5274: 72 17 OPERATOR CERTIFICATION 16 I hereby certify that the information communic harms is true and complete to the best of my translate and belie. Signature Peggy Bradfield QIL CON. DIV. Printed Name বাগো 3 SF-079192 Date "SURVEYOR CERTIFICATION vas piotted from field notes of actual surveys to spervision, and that the se correct to the best of my bolish. 9-20-96 Date of Survi 1620 885 6 ω 5273 40

OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #128M

Location: 1310'FSL, 1620'FEL, Sec 17, T-28-N, R-6-W

Rio Arriba County, NM

Latitude 36° 39.5, Longitude 107° 29.2

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6637'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2725'	
Ojo Alamo	2725'	3165′	aquifer
Fruitland	3165'	3500'	gas
Pictured Cliffs	3500'	3685'	gas
Lewis	3685'	4100'	gas
Intermediate TD	3735'		
Mesa Verde	4100'	5200 ′	gas
Massive Cliff House	5200'	5375'	gas
Menefee	5375'	5715 '	gas
Massive Point Lookout	5715'	7671'	gas
Greenhorn	7671'	7774'	gas
Graneros	7774'	7879'	gas
Dakota	7879 ′		gas
TD (4 1/2"liner)	7985'		

Logging Program:

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-3735'	LSND	8.4-9.0	30-60	no control
3735-7985'	Gas	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program:

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	36. 0#	K-55
8 3/4"	0' - 3735'	7"	20.0#	K-55
6 1/4"	3585' - 6855'	4 1/2"	10.5#	K-55
6 1/4"	6855' - 7985'	4 1/2"	11.6#	K-55

Tubing Program:

0' - 7985' 2 3/8" 4.70# EUE

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" x 2 3/8" x 3000 psi tree assembly.

General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- . Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 163 sx Class "B" cement with 1/4# flocele/sx and 2% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead w/316 sx Class "B" w/3% medisilicate, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride (983 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 12 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 3165'. Two turbolating centralizers at the base of the Ojo Alamo at 3165'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 109 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 289 sx 50/50 Class "B" Poz with 1/4# flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive (587 cu.ft., 30% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

To facilitate higher hydraulic stimulation completion Note: work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 $1/2" \times 7"$ overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The liner top can then be pressure tested to ensure a seal between the liner top and the 7" casing has been achieved. The test pressure shall be the maximum anticipated pressure to which the seal will be exposed (700 psi for the Mesa Verde and 2500 psi for the Dakota). The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.
- The pipe will be rotated and/or reciprocated, if hole conditions permit.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.

Anticipated pore pressures are as follows:

Fruitland Coal 800 psi 800 psi Pictured Cliffs 700 psi Mesa Verde 2500 psi Dakota

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The east half/of Section 17 is dedicated to both the Mesa Verde and Dakota in this well.

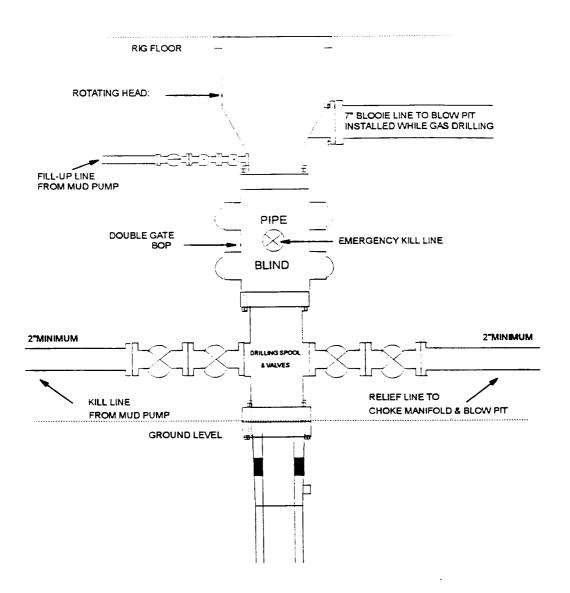
This gas is dedicated.

Drilling Engineer

10-1-96

MERIDIAN OIL INC

BOP Configuration 2M psi System

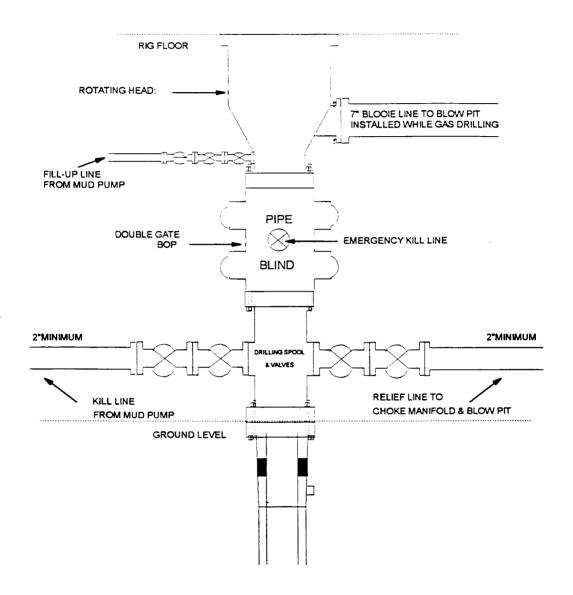


13 5/8" and 11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/ or greater.

FIGURE #1

BURLINGTON RESOURCES

BOP Configuration 2M psi System

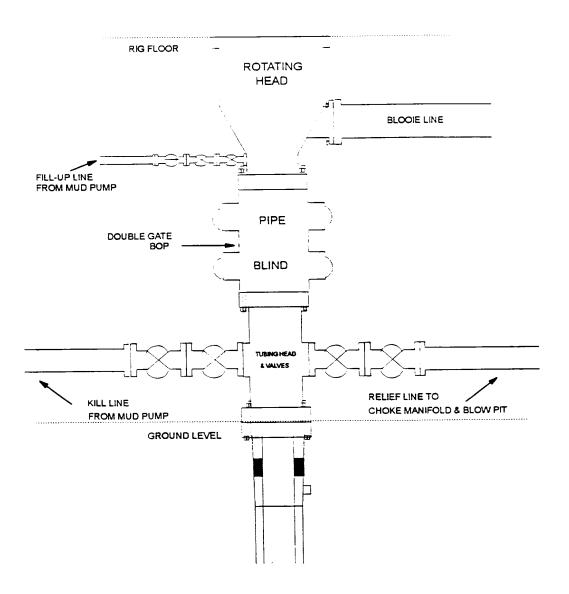


11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

FIGURE #1

MERIDIAN OIL INC

BOP Configuration 2M psi System

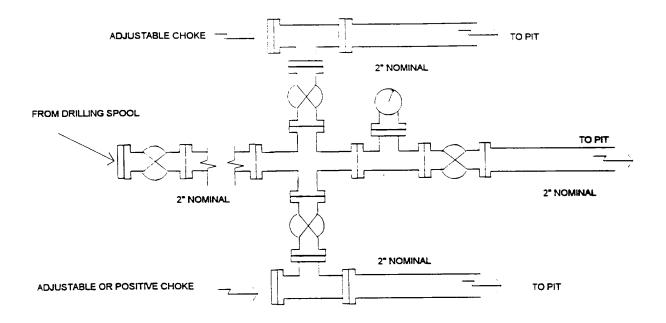


Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 3000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams.

FIGURE #2

MERIDIAN OIL INC.

Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth. 2" minimum, 2000psi working pressure equipment with two chokes.

Figure #3

AMM/06-01-94

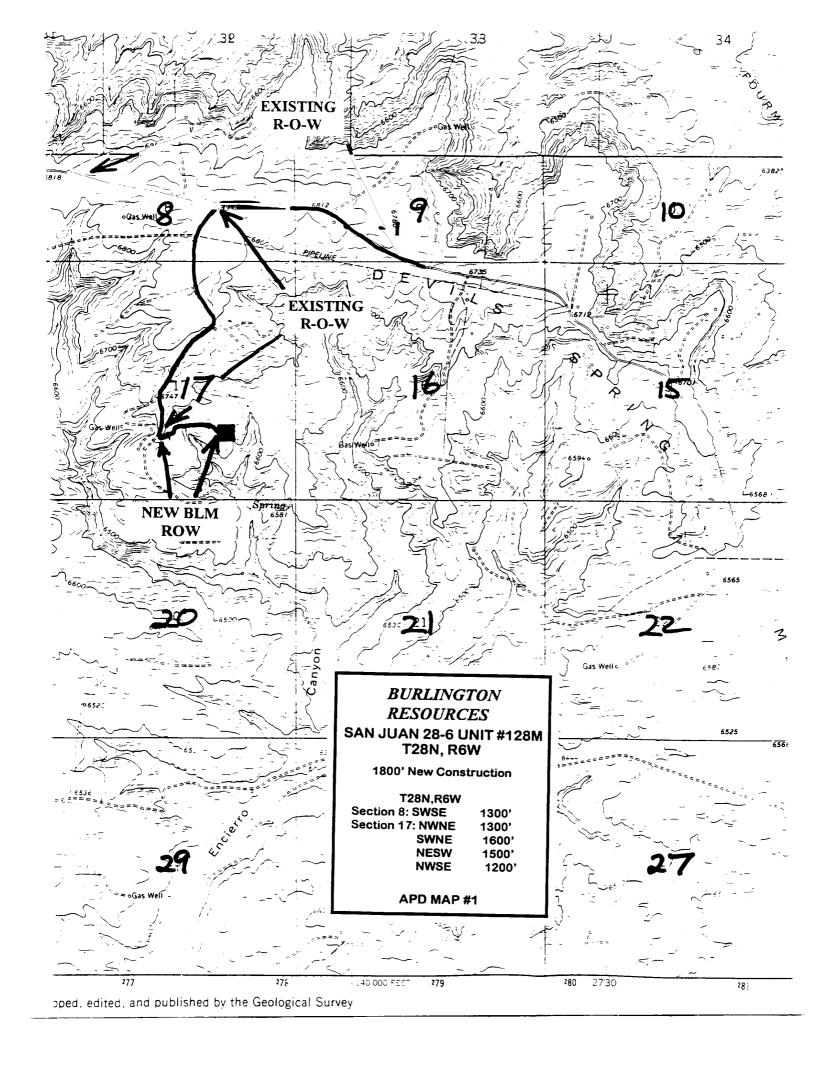


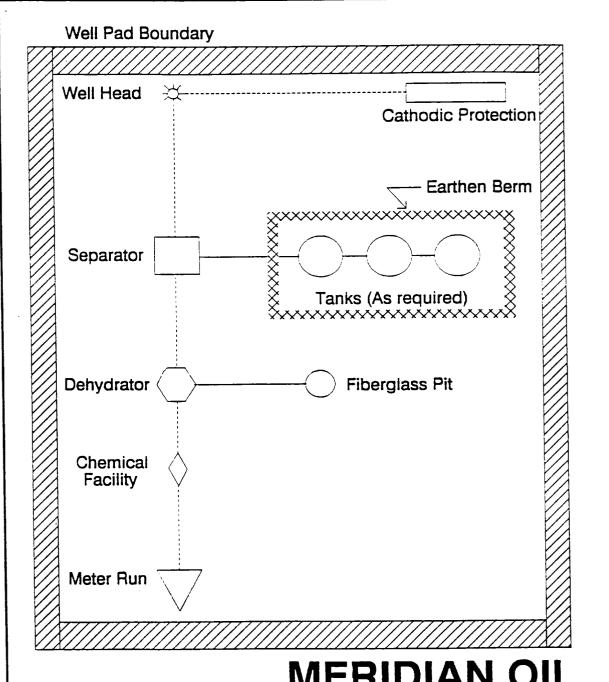
San Juan 28-6 Unit #128M Multi-Point Surface Use Plan

- 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 Land Management 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 1800' 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 San Juan 28-6 Water Well located SW/4 Section 23, T-28-N, R-6-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 Bureau of Land Management
- 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 Burlington Resources Oil & Gas Company 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 Burlington Resources Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Liggra Staatuel 9/3/96
Regulatory/Compliance Administrator Date



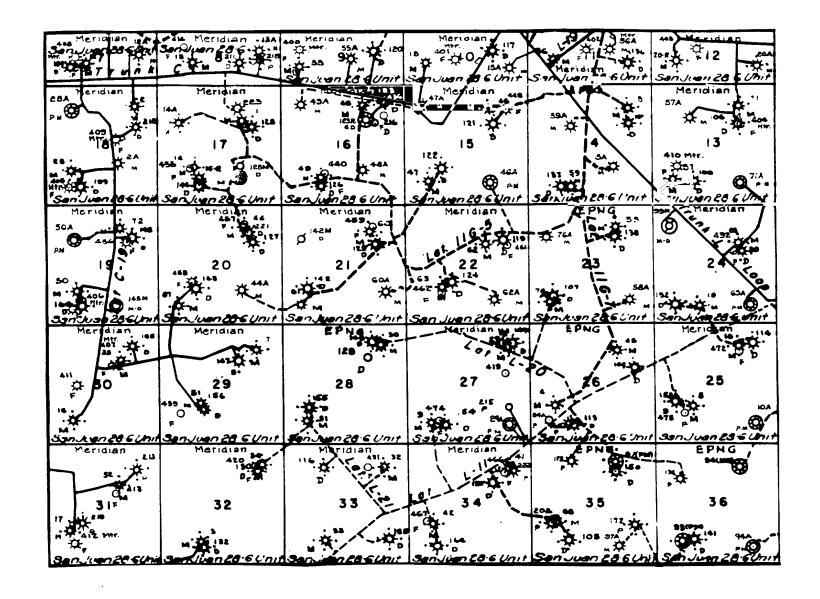


PLAT #1

MERIDIAN OIL

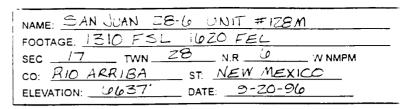
ANTICIPATED PRODUCTION FACILITIES FOR A **DAKOTA WELL**

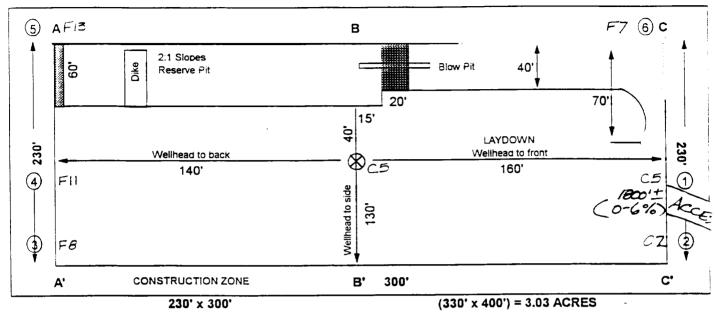
SRF 8/91



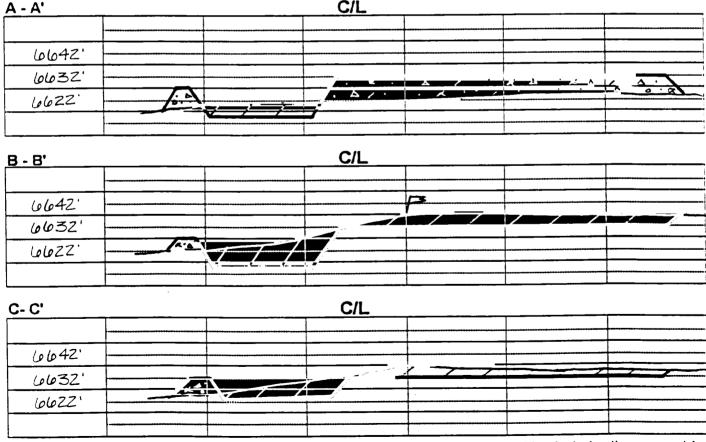
MERIDIAN OIL INC.
Pipeline Map
T-28-N, R-06-W
San Juan County, New Mexico
SAN JUAN 28-6 UNIT 128M
MAP #/A

BURLINGTON RESOURCES PLAT #1





Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side).
Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.



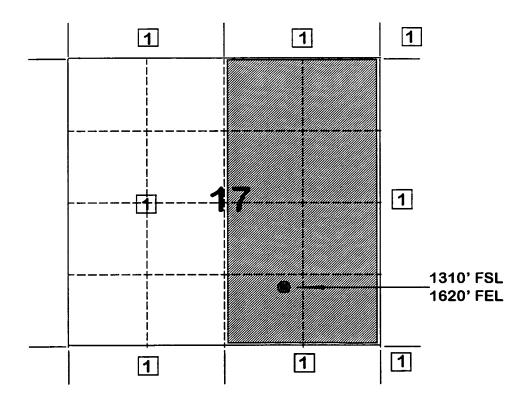
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 28-6 Unit #128M OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Dakota Formations Commingle Well

Township 28 North, Range 6 West



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

