September 19, 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-#153M

1200 FNL, 1385 FWL Section 25, 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 at the request of the Bureau of Land Management.

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

Skaahuld

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

	APPLICATION FOR PERM	IIT TO DRILL, DEEPEN, OR PLUG BACK
1a.	Type of Work DRILL	5. Lease Number NM-013657 Unit Reporting Number
1b.	Type of Well GAS	6. If Indian, All. or Tribe
2.	Operator Meridian Oil Inc.	7. Unit Agreement Name San Juan 28-6 Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, NM (505) 326-9700	8. Farm or Lease Name 87499 San Juan 28-6 Unit 9. Well Number 153M
4.	Location of Well 1200'FNL, 1385'FWL Latitude 36° 38.2, Longitude 1	10. Field, Pool, Wildcat  Blanco MV/Basin Dk  11. Sec., Twn, Rge, Mer. (NMPM)  Sec 25, T-28-N, R-6-W  API # 30-039-
14.	Distance in Miles from Nearest Town 3.5 miles to Gobernador	12. County 13. State Rio Arriba NM
15.	Distance from Proposed Location to Near	rest Property or Lease Line
16.	Acres in Lease	17. Acres Assigned to Well W/2 320
18.	Distance from Proposed Location to Near	rest Well, Drlg, Compl, or Applied for on this Lease
19.	Proposed Depth 7917'	<b>20. Rotary or Cable Tools</b> Rotary
21.	Elevations (DF, FT, GR, Etc.) 6650' GR	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	
24.	Authorized by: Nach Regulatory/Complia	
PERM	IIT NO.	APPROVAL DATE
APPR	OVED BY	TITLE DATE

District | PO Box 1980, Hobbs, NM \$2241-1980 District II PO Drawer OD. Artesia, NM 88211-0719 District III 1008 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Mineran & Natural Resources Department

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

Form C-1 Revised February 21, 19 Instructions on b: Submit to Appropriate District Off

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#### OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #153M

Location: 1200'FNL, 1385'FWL, Sec 25, T-28-N, R-6-W

Rio Arriba County, NM

Latitude 36° 38.2, Longitude 107° 25.3

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6650'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2715'	-
Ojo Alamo	2715'	2873	aquifer
Kirtland	2873	3166'	
Fruitland	3166'	3462'	gas
Pictured Cliffs	3462'	3674'	gas
Lewis	3674'	4083'	gas
Intermediate TD	3724'		
Chacra	4083'	5025'	gas
Upper Cliff House	5025 <b>′</b>	5134'	gas
Massive Cliff House	5134'	5289'	gas
Menefee	5289'	5650 <b>′</b>	gas
Massive Point Lookout	5650'	5812 <b>'</b>	gas
Lower Point Lookout	5812 <b>'</b>	6158 <b>′</b>	gas
Mancos	6158'	6657'	gas
Gallup	6657'	7592'	gas
Greenhorn	7592 <b>'</b>	7651'	gas
Graneros	7651'	7797 <b>'</b>	gas
Dakota	7797 <b>'</b>	7922 <b>′</b>	gas
Encinal	7922 <b>′</b>		gas
TD (5 1/2"liner)	7917'		

#### Logging Program:

#### Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	$\overline{40-50}$	no control
200-3724'	LSND	8.4-9.0	30-60	no control
3724-7917'	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
15 "	0' - 200'	10 3/4"	40.5#	K-55
9 7/8"	0' - 3724'	7 5/8"	26.4#	K-55
6 3/4"	3574' - 7917'	5 1/2"	17.0#	K-55

#### Tubing Program:

0' - 7917' 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 -

10 3/4" x 7 5/8" 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:

 $10\ 3/4$ " surface casing - cement with 311 sx Class "B" cement with 1/4# flocele/sx and 2% calcium chloride (358 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 5/8" intermediate casing -

Lead w/473 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 (437 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 2873. Two turbolating centralizers at the base of the Ojo Alamo at 2873. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

#### 5 1/2" Production Liner -

Cement to circulate liner top. Lead with 95 sx 65/35 Class "B", 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 335 sx 50/50 Class "B" Poz with 1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (620 cu.ft., 75% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- 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 Pictured Cliffs 800 psi Mesa Verde 700 psi Dakota 2600 psi

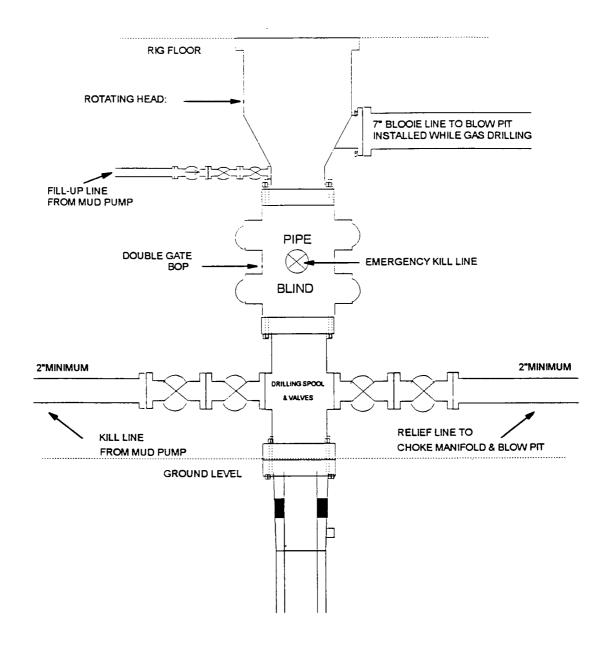
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 25 is dedicated to both the Mesa Verde and Dakota in this well.

• This gas is dedifated.

Drilling Engineer Date

### **BURLINGTON RESOURCES**

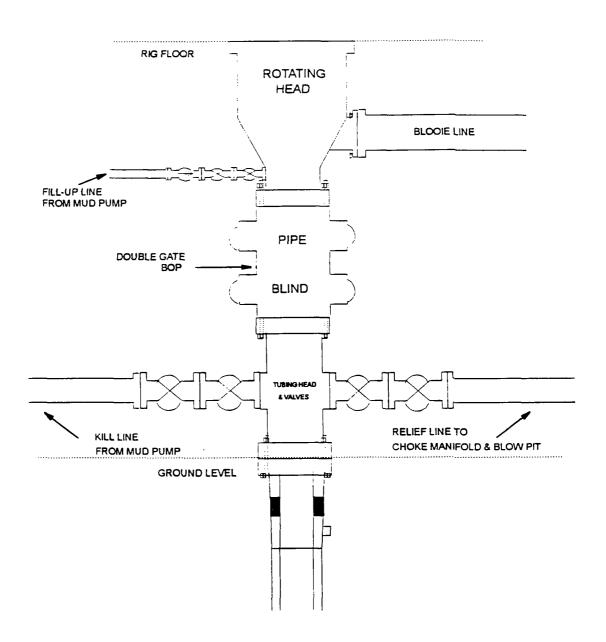
### BOP Configuration 2M psi System



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.

### MERIDIAN OIL INC

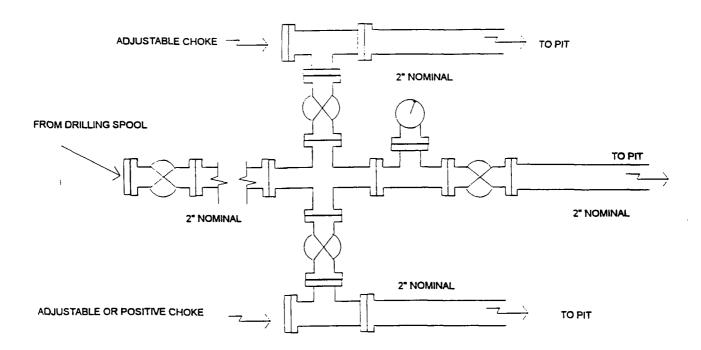
## BOP Configuration 2M psi System



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.

### 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.

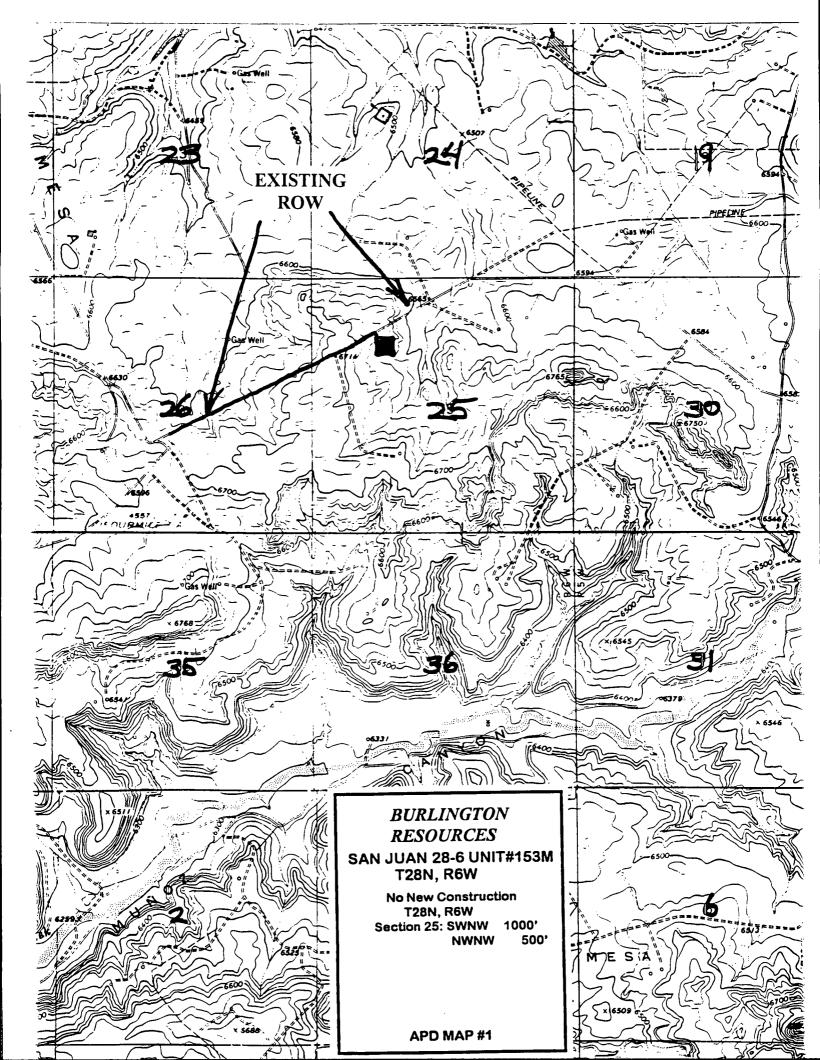


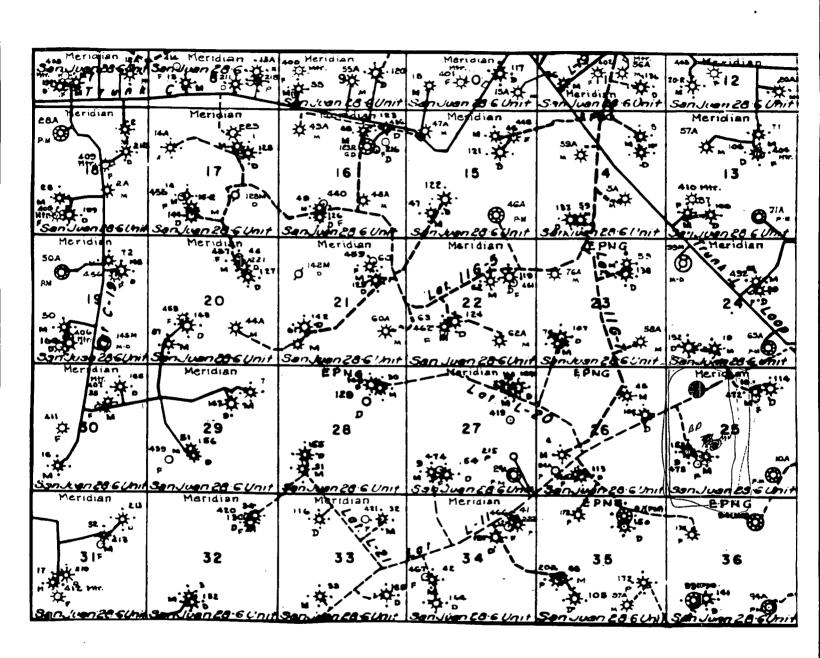
#### San Juan 28-6 Unit #153M Multi-Point Surface Use Plan

- 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. None required.
- 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.

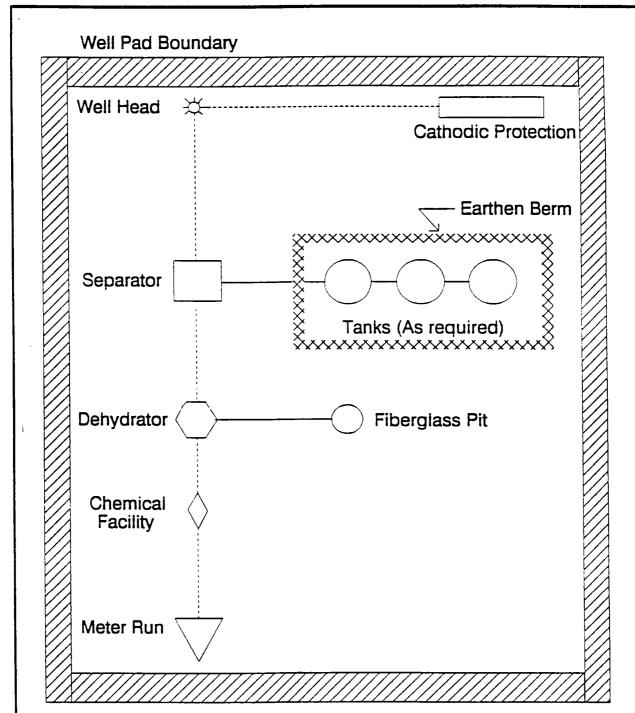
- 10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will 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
- Environmental stipulations as outlined by the responsible 12. Other Information 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.

Regulatory/Compliance Administrator





MERIDIAN OIL INC.
Pipeline Map
T-28-N, R-06-W
San Juan County, New Mexico
SAN JUAN 28-6 UNIT 153M
MAP #1A



PLAT #1

## **MERIDIAN OIL**

ANTICIPATED
PRODUCTION FACILITIES
FOR A
DAKOTA WELL

SRF 8/9

WERELIAN DIL

PLAT #1

PC/FC LOW POTENTIAL

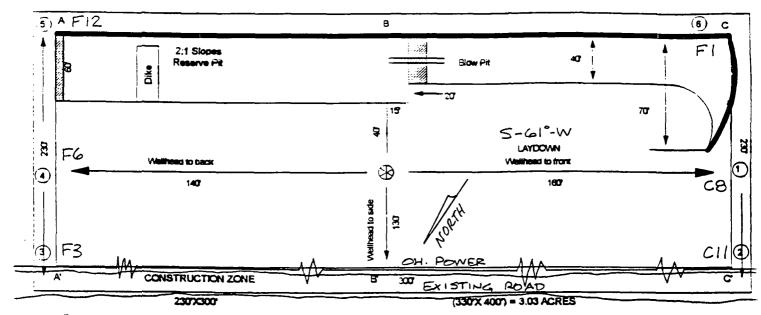
NAME: SAN JUAN 28-6 UNIT \*153M

FOOTAGE: 1200 FNL 1385 FWL

SEC 25 TWN 28 N.R 6 W NMPM

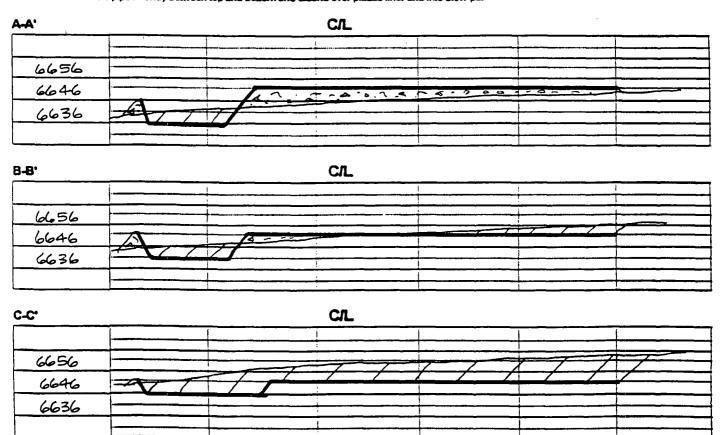
CO: RIO ARRIBA ST. NEW MEXICO

ELEVATION: 6646 DATE: 7/25/96



Reserve P2 Dike : to be 6' above Deep side; ( overflow - 3' wide and 1' above shallow side.)

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

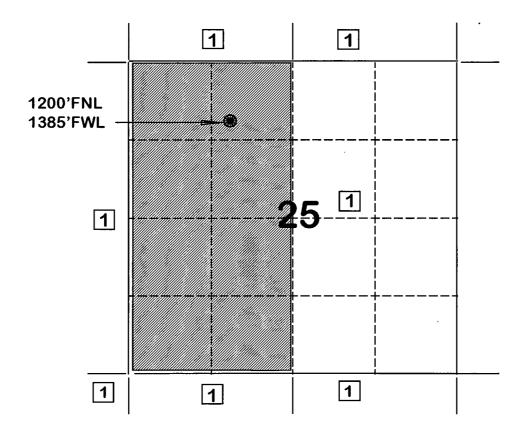


Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least 2 working days prior to construction.

## BURLINGTON RESOURCES OIL AND GAS COMPANY SAN JUAN 28-6 UNIT#153M

# OFFSET OPERATOR \ OWNER PLAT NON STANDARD LOCATION Mesaverde / Dakota Formation Well

Township 28 North, Range 6 West



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

