

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

August 8, 1997

DECEIVED M AUG 1 8 1997

OIL CON. DIV.

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

Administrative Order NSL-3848

Dear Ms. Bradfield:

Reference is made to your application dated July 24, 1997 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. 206-M to be drilled 1625 feet from the South line and 2260 feet from the East line (Unit J) of Section 10, Township 27 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

Production from the Basin-Dakota Pool is to be included in an existing standard 320-acre gas spacing and proration unit comprising the E/2 of said Section 10 which is currently dedicated to your San Juan "28-6" Unit Well No. 206 (API No. 30-039-20848), located at a standard gas well location 1925 feet from the North line and 1190 feet from the East line (Unit H) of said Section 10 and production from the Blanco-Mesaverde Pool is to be included in an existing standard 320-acre gas spacing and proration unit that also comprises the E/2 of said Section 10 and is currently dedicated to Burlington's San Juan "28-6" Unit Well No. 24 (API No. 30-039-07125), located at a standard gas well location 1804 feet from the North line and 903 feet from the East line (Unit H) of said Section 10.

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" gas well location for the San Juan "28-6" Unit Well No. 206-M is hereby approved.

Sincerely,

William J. Lel

Director

cc:

WJL/MES/kv

Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington



SAN JUAN DIVISION

July 24, 1997

Sent Federal Express

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



OIL GOM. DIV 3

Re:

San Juan 28-6 Unit #206M

1625'FSL, 2260'FEL Section 10, T-27-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:

- Application for Permit to Drill.
- 2. Completed C-102 at referenced location.
- 3. Offset operators/owners plat Burlington is the offset operator
- 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.

Stadnusd

Sincerely,

Peggy Bradfield

Regulatory/Compliance Administrator

xc: Bureau of Land Management

NMOCD - Aztec District Office

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. Type of Work 5. Lease Number DRILL SF-079363 **Unit Reporting Number** 891001051B - Dk 8910010510 - MV 1b. Type of Well 6. If Indian, All. or Tribe GAS 7. Unit Agreement Name 2. Operator BURLINGTON RESOURCES Oil & Gas Company San Juan 28-6 Unit 3. Address & Phone No. of Operator 8. Farm or Lease Name PO Box 4289, Farmington, NM 87499 San Juan 28-6 Unit 9. Well Number (505) 326-9700 206M 4. Location of Well 10. Field, Pool, Wildcat 1625'FSL, 2260'FEL Blanco Mesa Verde/ Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) Latitude 36° 35.2, Longitude 107° 27.2 Sec 10, T-27-N, R-6-W API # 30-039-Distance in Miles from Nearest Town 12. County 13. State 8 miles to Gobernador NM Rio Arriba 15. Distance from Proposed Location to Nearest Property or Lease Line 1625' 16. Acres in Lease 17. Acres Assigned to Well 320 E/2 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 9001 19. Proposed Depth 20. Rotary or Cable Tools 7453' Rotary 21. Elevations (DF, FT, GR, Etc.) 22. Approx. Date Work will Start 6256'GR 23. Proposed Casing and Cementing Program See Operations Plan attached 24. Authorized by: Regulatory/Compliance Administrator APPROVAL DATE PERMIT NO. DATE ____ APPROVED BY TITLE

Archaeological Report to be submitted by Arboles Contract Archaeology Threatened and Endangered Species Report to be submitted NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Diatrics i PO Box 1980, Elobba, NM 88241-1980 Diatrics ii PO Drawer OD, Artema, NM 88211-0719 Diatrics iii

1000 Rio Brass: Ad., Azes, NM 87410

PO Box 2008. Santa Fe. NM 87504-2008

District (V

State of New Mexico
Energy, Minerain 4 Natures Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C Revised February 21. Instructions on Submit to Appropriate District C

State Lease - 4 C

Fee Lanes - J C

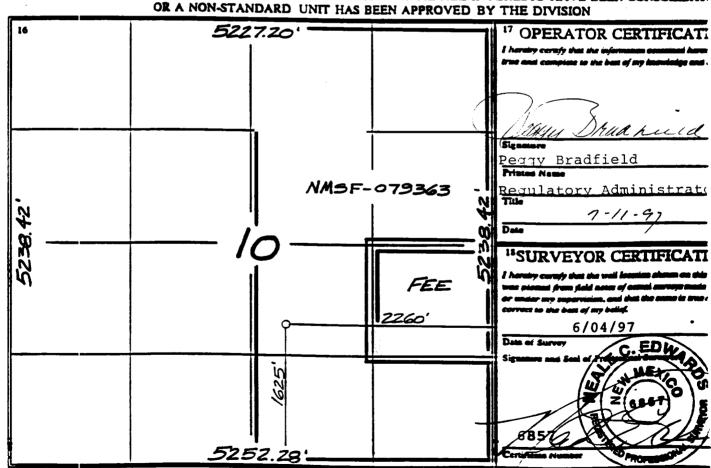
AMENDED REF

WELL LOCATION AND ACREAGE DEDICATION PLAT

AFI Number		1	1 Peel Code		Post Name				
30-039- 72				72319/71599		Blanco Mesaverde/Basin Dakota			
7462	Code				1 Property	Neme			· Well Nomb
7462				San Juan 28-6 Unit					206M
OGRID No. 14538 BURLIN				'Operator Name LINGTON RESOURCES OIL & GAS COMPANY					· Demos
			URLING						6256'
					10 Surface	Location	····		
UL or tot se.	Section	Townsep	Range	Let ids	Feet from the	North/South line	Feet from the	East/West time	County
J	10	27-N	6-W		1625	South	2260	East	R.A.
			11 Bot	tom Hol	e Location I	f Different Fr	om Surface		
UL or lot se.	Section	Townson	Range	Lot ide	Feet from the	North/South line	Fest from the	East/West time	County
	ĺ	i l			1	1			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDAT.

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.



OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #206M

Location: 1625'FSL, 2260'FEL Sec 10, T-27-N, R-6-W

Rio Arriba County, NM

Latitude 36° 35.2, Longitude 107° 27.2

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6256'GL

Formation Tops:	Top	Bottom	<u>Contents</u>
Surface	San Jose	2270'	
Ojo Alamo	2270'	2620'	aquifer
Fruitland	2620'	2980'	gas
Pictured Cliffs	2980'	3108'	gas
Lewis	3108'	3418'	gas
Intermediate TD	3208'		
Mesa Verde	3418'	3936′	gas
Chacra	3936′	4620'	
Massive Cliff House	4620'	4783'	gas
Menefee	4783'	5148'	gas
Massive Point Lookout	5 148'	6351'	gas
Gallup	6351'	7098′	gas
Greenhorn	7098'	7202'	gas
Graneros	7202'	7315'	gas
Dakota	7315′		gas
TD (4 1/2"liner)	7453'		

Logging Program:

Cased hole - CBL - TD to 200' above TOC, GR/CNL across MV/Dk

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3208'	LSND	8.4-9.0	30-60	no control
3208-7453'	Gas	n/a	n/a	n/a

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

Casing Program (as listed, the equivalent, or better):

<u> Hole Size</u>	Depth Interval	<u>Csq.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3208'	7 "	20.0#	J-55
6 1/4"	3108' - 6855'	4 1/2"	10.5#	J-55
6 1/4"	6855' - 7453'	4 1/2"	11.6#	J-55

Tubing Program:

0' - 7453' 2 3/8" 4.70# EUE

EOP 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.

C'ementing:

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/255 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, 2% gel, 1/2# flocele/sx and 10# gilsonite/sx (844 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 2620'. Two turbolating centralizers at the base of the Ojo Alamo at 2620'. 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 106 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 305 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (602 cu.ft., 35% 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.

Note: To facilitate higher hydraulic stimulation completion 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" x 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 bloose 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 2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The east half is dedicated to the Mesa Verde and Dakota in this well.

• This gas is dedicated.

Drilling Engineer

7/14/47

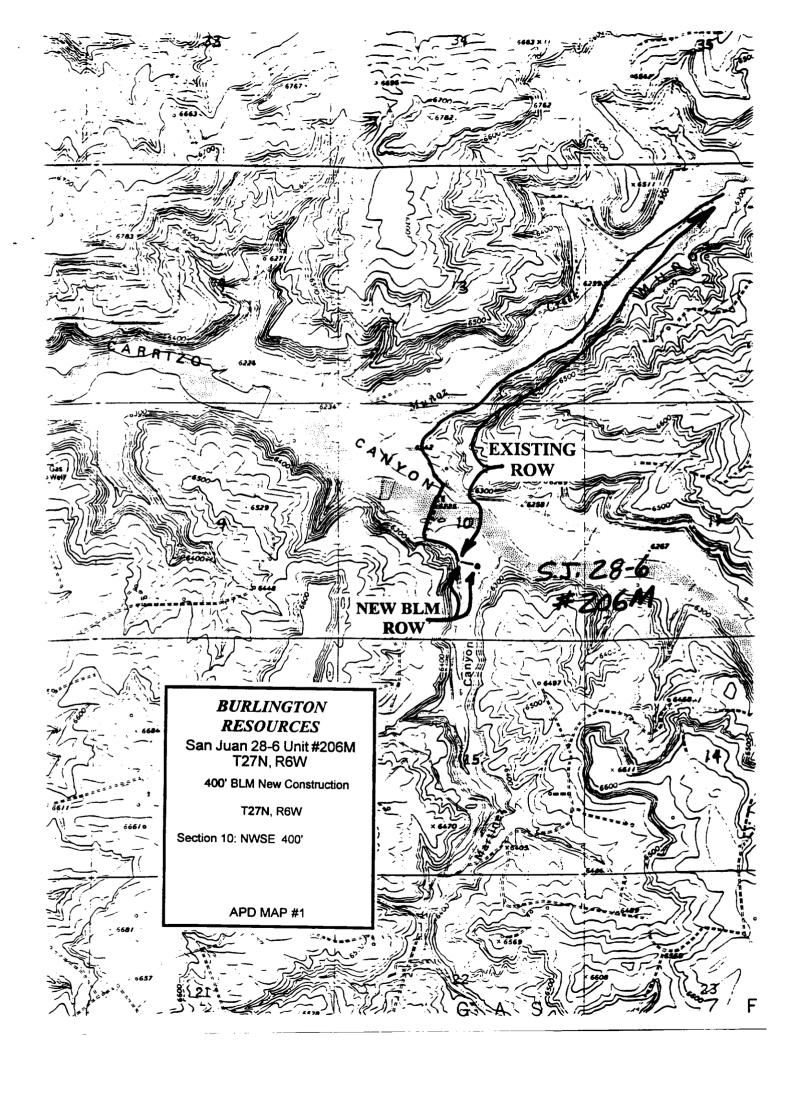


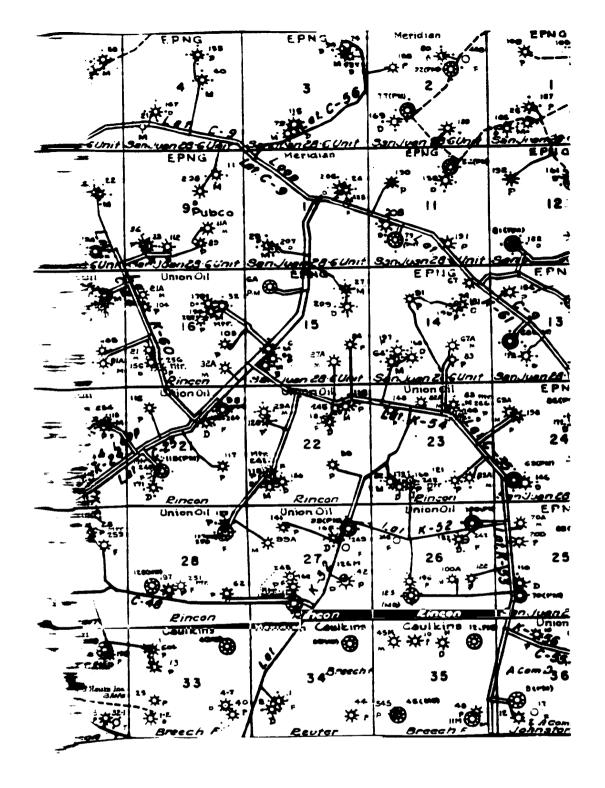
- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- Planned Access Road Refer to Map No. 1. The required new access 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 400' 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 pipeline facilities as shown on the attached plat from El Paso Field Service.
- 5. Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from Lobato Water Hole located NE Section 9, T-27-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.

Regulatory/Compliance Administrator Date

рb





MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-06-W
Rio Arriba County, New Mexico
San Juan 28-6 Unit #206M
Map 1A

3/91 adw/mjb

BURLINGTON RESOURCES PLAT #1

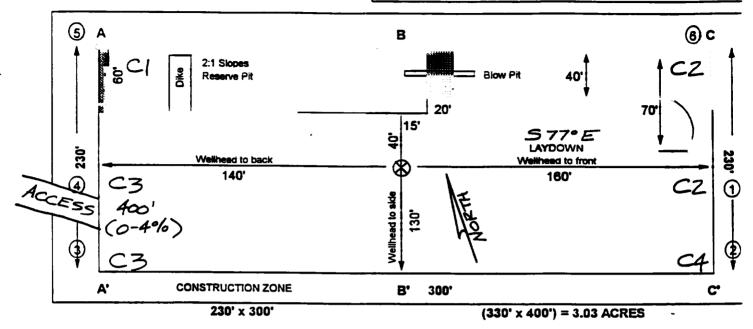
NAME: San Juan 28-6 Unit #206M

FOOTAGE: 1625' FSL, 2260' FEL,

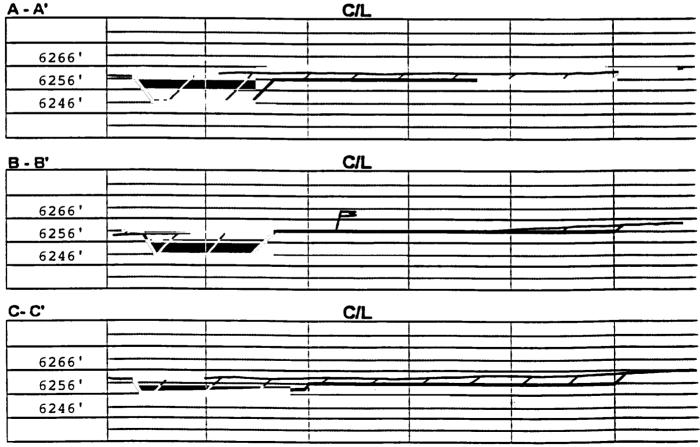
SEC 10 TWN 27 N.R 6 W NMPM

CO: Rio Arriba ST: New Mexico

ELEVATION: 6256' DATE: 6-04-97



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.



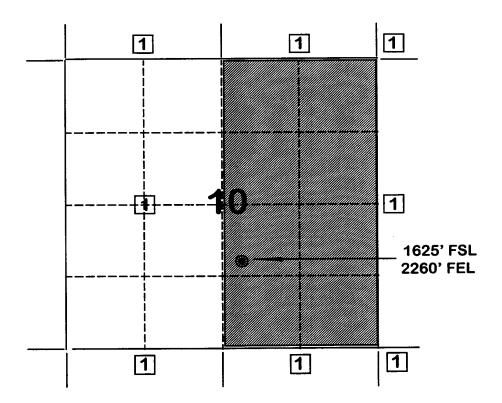
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cabon well pad and/or access road at least two (2) working days prior to construction.

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 28-6 Unit #206M OFFSET OPERATOR \ OWNER PLAT Nonstandard Location

Mesaverde/Dakota Formations Well

Township 27 North, Range 6 West



1) Burlington Resources Oil and Gas Company

