BURLINGTON RESOURCES

SAN JUAN DIVISION

January 28, 1997

Sent Federal Express

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

Re:

San Juan 29-7 Unit #66A

2040'FNL, 2175'FWL Section 22, T-29-N, R-7-W, Rio Arriba County, New Mexico

GIL CORPERVATION DEVISION

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.
- 2. Completed C-102 at referenced location.

Stadpued

- 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.

Sincerely,

Peggy Bradfield

Regulatory/Compliance Representative

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	APPLICATION FOR PERMIT TO DRILL, DEEPE	N, OR PLUG BACK
1a.	Type of Work DRILL	5. Lease Number SF-078399 Unit Reporting Number 891001650A-Dk 8910016500-MV
1b.	Type of Well GAS	6. If Indian, All. or Tribe
2.	Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 29-7 Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 29-7 Unit 9. Well Number 66A
4.	Location of Well 2040' FNL, 2175' FWL	10. Field, Pool, Wildcat Blanco Mesa Verde Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM)
	Latitude 36° 42′ 45″, Longitude 107° 33′ 33″	Sec 22, T-29-N, R-7-W API# 30-039-
14.	Distance in Miles from Nearest Town 5 miles to Navajo City	12. County 13. State Rio Arriba NM
15.	Distance from Proposed Location to Nearest Property or Lease 2040'	Line
16.	Acres in Lease	17. Acres Assigned to Well 320 W/2
18.	Distance from Proposed Location to Nearest Well, Drlg, Compl,	or Applied for on this Lease
19.	Proposed Depth 8057'	20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6788'GR	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	
24.	Authorized by: Regulatory/Compliance Administrato	1-20.47 Date
PERM	IIT NO APPROVAL D	ATE
APPR	OVED 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 submitted for this well in January 1986 in this 1/4 Section

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer OD, 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 pack
Submit to Appropriate District Office
State Lease - 4 Copies

State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

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OPERATIONS PLAN

Well Name: San Juan 29-7 Unit #66A

Location: 2040'FNL, 2175'FWL Sec 22, T-29-N, R-7-W

Rio Arriba County, NM

Latitude 36° 42′45″, Longitude 107° 33′33″

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6788'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2650'	- -
Ojo Alamo	2650'	3145 '	aquifer
Fruitland	3145'	3600 '	gas
Pictured Cliffs	3600 '	3755 '	gas
Lewis	3755 '	4250'	gas
Intermediate TD	3805'		
Mesa Verde	4250 ′	4560'	gas
Chacra	4560 ′	5300 ′	
Massive Cliff House	5300 '	5440'	gas
Menefee	5440'	5770 ′	gas
Massive Point Lookout	5770 '	7010 ′	gas
Gallup	7010 '	7735 ′	gas
Greenhorn	7735 '	7835 '	gas
Graneros	7835 '	7915 '	gas
Dakota	7915 '		gas
TD	8057'		

Logging Program:

Cased hole -Gamma Ray/Neutron

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3805'	LSND	8.4-9.0	30-60	no control
3805-8057'	Gas	n/a	n/a	n/a

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

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

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3805'	7"	20.0#	J-55
6 1/4"	3705 ' - 6855'	4 1/2"	10.5#	J~55
6 1/4"	6855' - 8057'	4 1/2"	11.6#	J-55

Tubing Program:

0' - 8057' 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/309 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 (1001 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 3145'. Two turbolating centralizers at the base of the Ojo Alamo at 3145'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 112 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 298 sx 50/50 Class "B" Poz with 1/4# flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive (603 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.

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 $1/2" \times 7"$ 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 The test pressure shall be the maximum been achieved. 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 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 west half is dedicated to the Mesa Verde and Dakota in this well.

• This gas is dedicated.

Drilling Engineer

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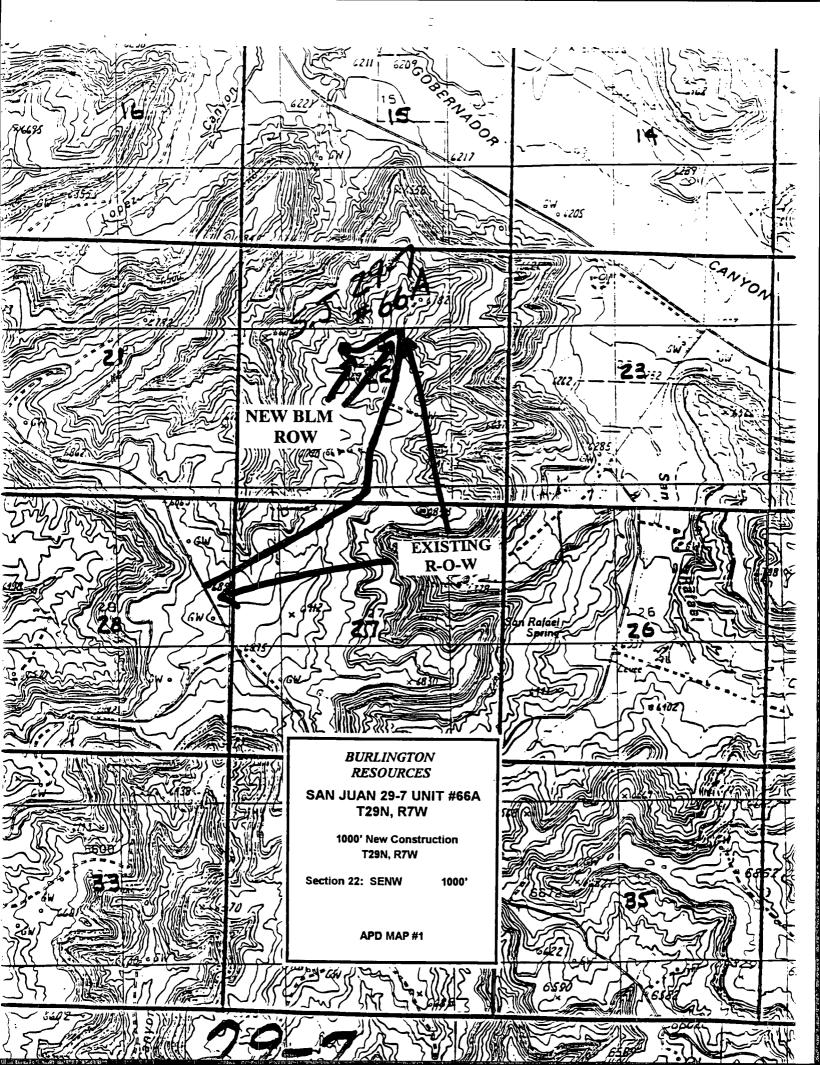
San Juan 29-7 Unit #66A Multi-Point Surface Use Plan

- 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.
- 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 1000' 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 Services.
- 5. Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from San Juan 29-6 Water Well #1 in located in SW/4 Section 28, T-29-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.

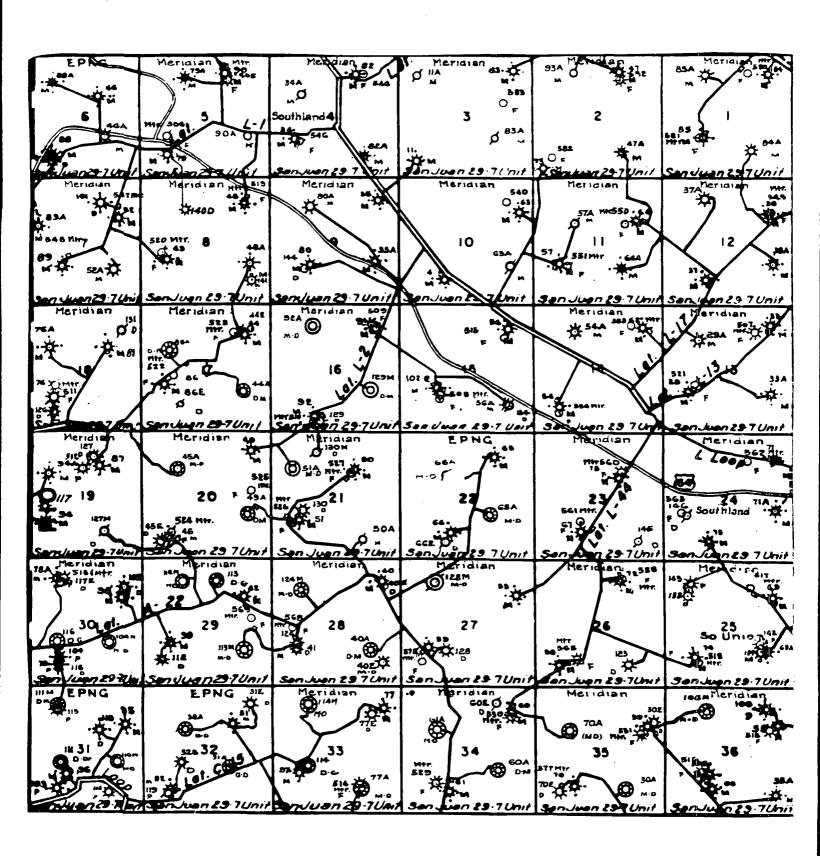
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be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

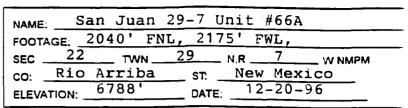


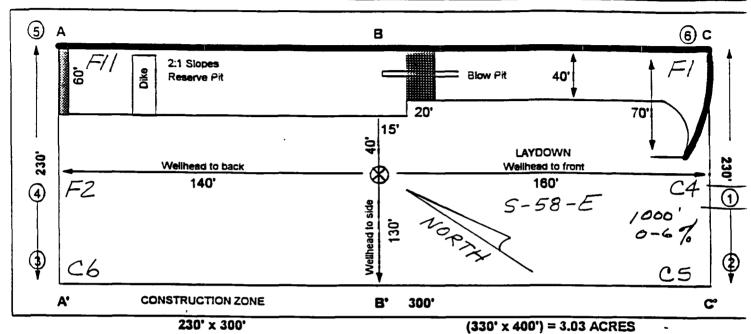
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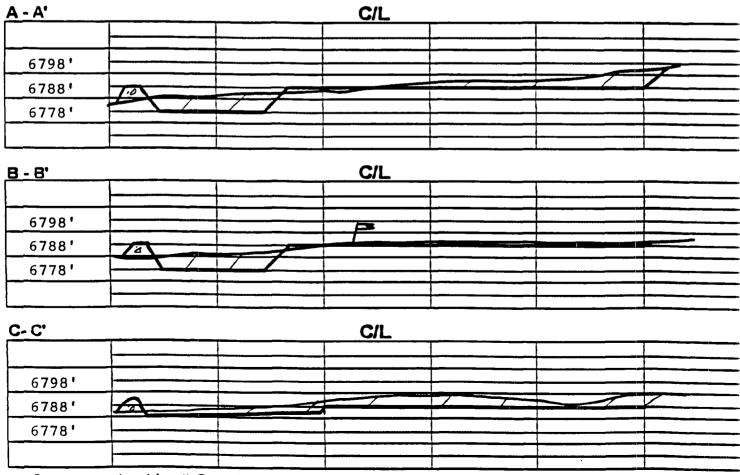
MERIDIAN OIL INC.
Pipeline Map
T-29-N, R-07-W
San Juan County, New Mexico
San Juan 29-7 Unit #66A
Map 1A

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.

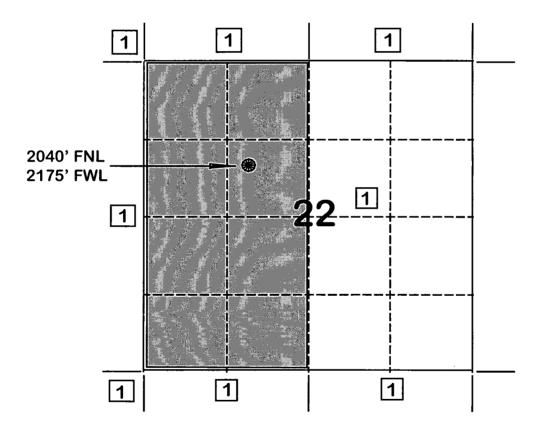


Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cabl.

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 29-7 Unit #66A OFFSET OPERATOR \ OWNER PLAT Nonstandard Location Mesaverde/Dakota Formations Well

Township 29 North, Range 7 West



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

