

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

June 26, 1998

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

OIL GON DIV Administrative Order NSL-4076
DESTA S

Dear Ms. Bradfield:

Reference is made to your application dated June 22, 1998 for an exception to the well location requirements provided within the "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-10987, for Burlington Resources Oil & Gas Company's ("Burlington") proposed San Juan "27-4" Unit Well No. 3-A to be drilled at an unorthodox gas well location in both the Blanco-Mesaverde and Basin-Dakota Pools 2145 feet from the South line and 630 feet from the East line (Unit I) of Section 15, Township 27 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

Gas production from the Blanco-Mesaverde Pool is to be included in an existing standard 320-acre stand-up gas spacing and proration unit comprising the E/2 of Section 15 which is currently dedicated to Burlington's San Juan "27-4" Unit Well No. 3 (API No. 30-039-07090), located at a standard gas well location 990 feet from the North line and 1750 feet from the East line (Unit B) of Section 15.

Gas production from the Basin-Dakota Pool is to be dedicated to a standard lay-down 320-acre gas spacing and proration unit comprising the S/2 of Section 15.

The application has been duly filed under the provisions of Rules 104.F and 605.B of the Rules and Regulations of the New Mexico Oil Conservation Division ("Division").

By the authority granted me under the provisions of Division Rule 104.F(2), the above-described unorthodox Blanco-Mesaverde "infill" gas well location and Basin-Dakota gas well location for the San Juan "27-4" Unit Well No. 3-A is hereby approved. Both of the aforementioned San Juan "27-4" Unit Well Nos. 3 and 3-A and both spacing units will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest, New Mexico.

Sincerely

Lortwrotende Director

cc:

LW/MES/kv

New Mexico Oil Conservation Division - Aztec U. S. Bureau of Land Management - Farmington

rotenberg

BURLINGTON RESOURCES

SAN JUAN DIVISION

June 22, 1998

Sent Federal Express

Ms. Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re:

San Juan 27-4 Unit #3A

2145'FSL, 630'FEL, Section 15, T-27-N, R-4-W, Rio Arriba County, NM

30-039-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Blanco Mesa Verde and Basin Dakota pools. This application for the referenced location is for topographic and archaeological reasons, and especially at the request of the U.S. Forest Service that is the surface owner.

Production from the Blanco Mesa Verde pool is to be included in a standard 320 acre gas spacing and proration unit comprising of the east half (E/2) of Section 15 which is currently dedicated to the San Juan 27-4 Unit #3 (30-039-07090) located at 990'FNL, 1750'FEL of Section 15. Production from the Basin Dakota is to be included in a standard 320 acre gas spacing and proration unit comprising of the south half (S/2) of Section 15. There are no other Dakota wells in the south half of Section 15.

The following attachments are for your review:

Application for Permit to Drill.

2. Completed C-102 at referenced location.

3. Offset operators/owners plat.

4. 7.5 minute topographic map, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield

Regulatory/Compliance Administrator

XC:

NMOCD - Aztec District Office

Bureau of Land Management - Farmington District Office

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	APPLICATION FOR PE	RMIT TO DRILL, DEEP	EN, OR PLUG BACK
1a. 1b.	Type of Work DRILL Type of Well GAS	FORIVED JUL 2 3 1058	5. Lease Number SF-080674 Unit Reporting Number 891001054A - MV NMSF080674-Dk 6. If Indian, All. or Tribe
2.	Operator BURLINGTON RESOURCES Oil & Gas	Company	7. Unit Agreement Name San Juan 27-4 Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, N (505) 326-9700	IM 87499	8. Farm or Lease Name San Juan 27-4 Unit 9. Well Number 3A
4.	Location of Well 2145'FSL, 630'FEL Latitude 36 ⁰ 34' 18", Longit	ude 107 ⁰ 13' 56"	10. Field, Pool, Wildcat Blanco MV/Basin Dk 11. Sec., Twn, Rge, Mer. (NMPM) Sec 15,T-27-N,R-4-W API # 30-039-
14.	Distance in Miles from Nearest Town 60 miles to Bloomfield		12. County 13. State RA NM
15.	Distance from Proposed Location to Nec	arest Property or Lease Li	ne
16.	Acres in Lease		17. Acres Assigned to Well 320 E/2-MV; S/2-Dk
18.	Distance from Proposed Location to Ne	arest Well, Drig, Compl, o	or Applied for on this Lease
19.	Proposed Depth 8235'		20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6864'GR		22. Approx. Date Work will Start
23.	Additionized by	ned - LASSE Liance Administrat	<i>L-15-98</i> or Date
PERM	IT NO.	APPROVAL I	DATE
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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artessa, NM 87211-0719
District III

1000 Rio Bossos Rd., Azecc, NM 87410

PO Box 2088, Santa Fe, NM 87504-2068

District IV

State of New Mexico

Energy, Minerals & Natural Resources Department

Form
Revised February 2
Instructions

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Submit to Appropriate Distric

State Lease - 4

Fee Lease - 5

AMENDED R

1,	API Number	-		¹ Pool Code		¹ Pool Name			
30-039-			7231	19/71599 Blanco Mesaverde/Basin Dakota					
* Property C	ode				1 Property	Name			• Well Numb
7452 SA			AN JU	UAN 27-4 UNIT				# 3A	
1 OCERED No.				Operator Name					· Elevenon
4538		B	URLING	RLINGTON RESOURCES OIL & GAS COMPANY					686
					¹⁰ Surface L	ocation			
IL or Lot No.	Section	Township	Range	Lot Ide	Feet from the	North/South time	Feet from the	East/West line	County
I	15	27 N	4 W		2145	SOUTH	630	EAST	RIO A
			" Bott	om Hole	Location If	Different Prop	n Surface		
UL or lot no.	Section	Township	Range	Lot ide	Fest from the	North/South line	Post from the	East/West line	County
IV-E/320		or infili	Consolidatio	m Code 15	Order No.				
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					NMSF	- 080674	Peggy Printed P	4	ld

18 SURVEYOR CERTIFICAL bereby certify that the well location shows

as pioled from field notes of actual surveys or under my supervision, and that the same correct to the best of my belief.

April 29, 1998

Date of Survey
Signature and Seal of Profession

GIR NIE.

701

7016
Certificate Number

630'

(R) - GLO Record

/ /5273'(R) // ////

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #3A

Location: 2145'FSL, 630'FEL Sec 15, T-27-N, R-4-W

Rio Arriba County, NM

Latitude 360 34' 18", Longitude 1070 13' 56"

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6864'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	3196'	
Ojo Alamo	3196'	3415'	aquifer
Kirtland	3415'	3446'	
Fruitland	3446'	3755'	gas
Pictured Cliffs	3755'	3991'	gas
Lewis	3991'	4287'	gas
Intermediate TD	4091'		
Huerfanito Bentonite	4287'	4365'	gas
Chacra	4365'	5506′	
Massive Cliff House	5506'	5583'	gas
Menefee	5583'	5909'	gas
Massive Point Lookout	5 909'	6936'	gas
Gallup	6 936′	7869'	gas
Greenhorn	7869'	8059'	gas
Dakota	8059'		gas
TD (4 1/2"liner)	8235'		

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
200-4091'	LSND	8.4-9.0	30-60	no control
4091-8235'	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):

<u> Hole Size</u>	Depth Interval	Csq.Size	Wt.	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4091'	7"	20.0#	J-55
6 1/4"	3991' - 8235'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 8235' 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 8 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/335 sx Class "B" w/3% metasilicate, 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, 10# gilsonite/sx (1076 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 8 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 3415'. Two turbolating centralizers at the base of the Ojo Alamo at 3415'. 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. Cement with 459 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (610 cu.ft., 40% excess to cement 4 $1/2" \times 7"$ 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. Instead, 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" CIBP will be set above the last fracturing job to cut and pull the 4 1/2" casing above the 7" casing shoe. The 4 1/2" bridge plug will then be milled and the two strings of tubing will be run for a dual completion.

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
- 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 700 psi Mesa Verde 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 the south half is dedicated to the Dakota in this well.
- This gas is dedicated.

Drilling Engineer Date

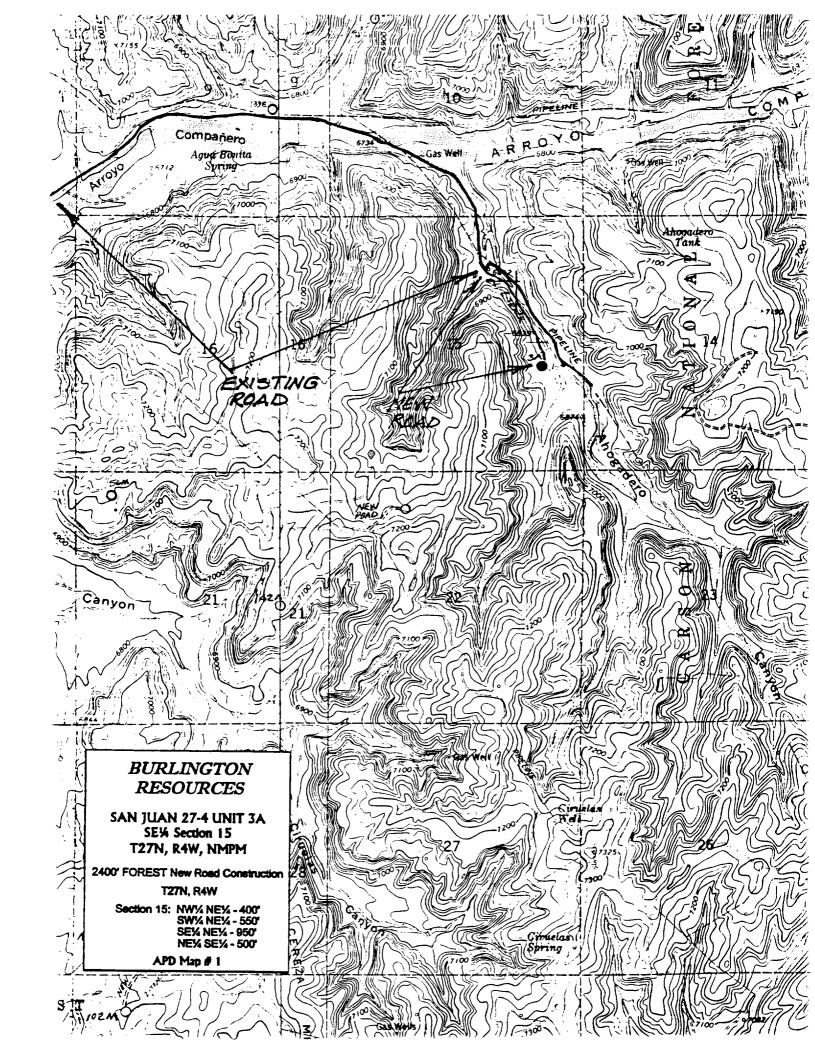


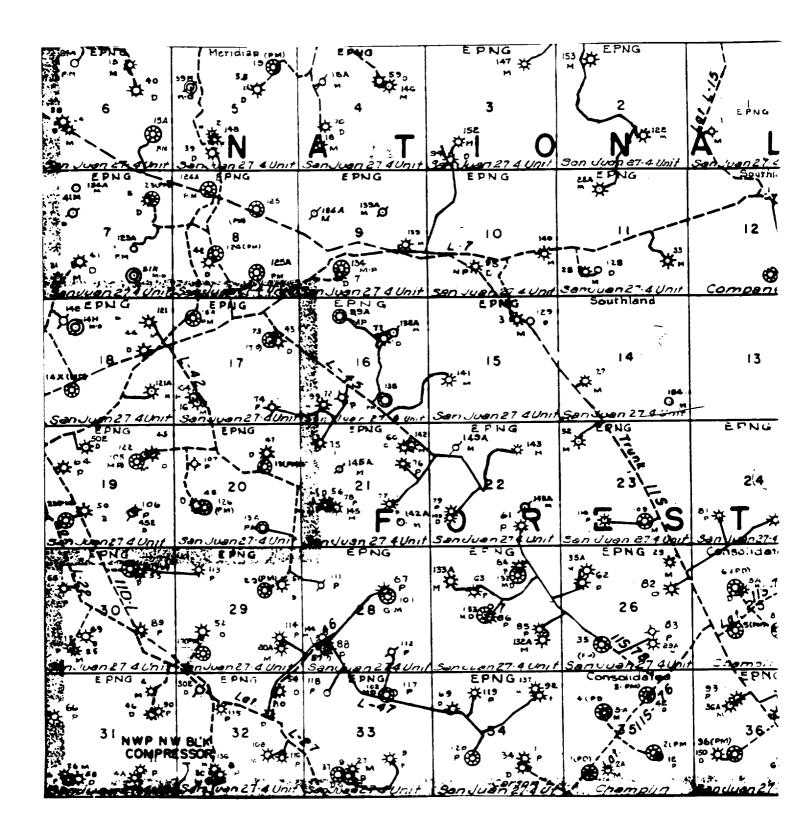
San Juan 27-4 Unit #3A Multi-Point Surface Use Plan

- 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 2500' 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 Williams Field Service.
- 5. Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from Companero Water Hole located SE Section 18, T-27-N, R-4-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 Carson National Forest
- 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.

equiatory/Compliance Administrator Date

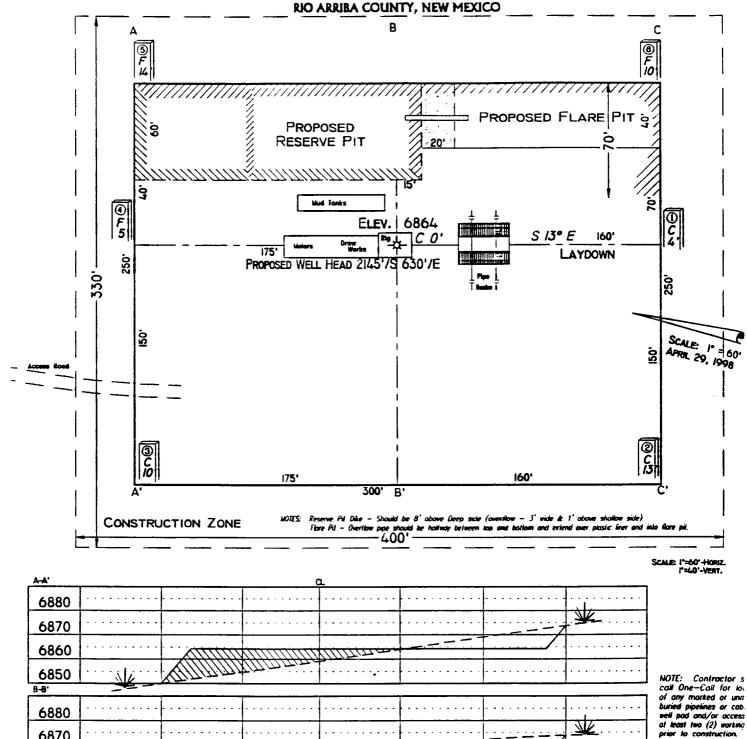


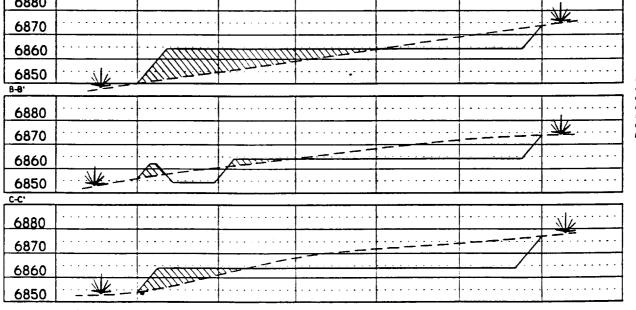


MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-04-W
Rio Arriba County, New Mexico
San Juan 27-4 Unit 3A
Map 1A

PAD LAYOUT PLAN & PROFILE BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-4 UNIT 3A 2145' F/SL 840' F/EL

SEC. 15, T27N, R4W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO





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304 N. Lo.

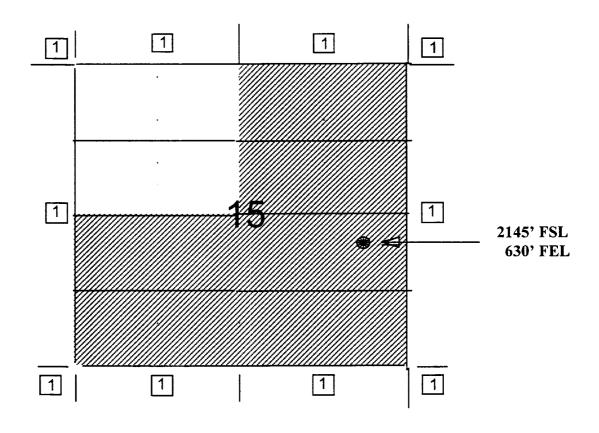
Farmington,

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-4 Unit #3A OFFSET OPERATOR \ OWNER PLAT Nonstandard Location

Mesaverde (E/2) / Dakota (S/2) Formations Well

Township 27 North, Range 4 West



1) Burlington Resources

