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

June 1, 1998

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

Administrative Order NSL-4043

Dear Ms. Bradfield:

Reference is made to your application dated May 9, 1998, which was received by the Division in Santa Fe on May 12, 1998, for an unorthodox gas well location in both the Blanco-Mesaverde and Basin-Dakota Pools for the proposed San Juan "30-6" Unit Well No. 11-A to be drilled 640 feet from the North line and 510 feet from the West line (Unit D) of Section 23, Township 30 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

The existing standard 320-acre gas spacing and proration unit in the Blanco-Mesaverde Pool comprising the W/2 of said Section 23, which is presently dedicated to Burlington Resources Oil & Gas Company's San Juan "30-6" Unit Well No. 11 (API No. 30-039-07793), located at a standard gas well location 1450 feet from the South line and 990 feet from the West line (Unit L) of said Section 23 and the W/2 of said Section 23, being a standard 320-acre gas spacing and proration unit for the Basin Dakota Pool, is to be dedicated to said well.

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 gas well location for the San Juan "30-6" Unit Well No. 11-A is hereby approved.

Sincerely.

Lori Wrotenbery

Director

cc:

LW/MES/kv

New Mexico Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

DECEIVED

BURLINGTON RESOURCES

SAN JUAN DIVISION

May 9, 1998

Sent Federal Express

Ms. Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505 DECEIVED MAY 1 2 1998

OIL CON. DIV DIST. 3

Re:

San Juan 30-6 Unit #11A

640'FNL, 510'FWL, Section 23, T-30-N, R-6-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 both the Mesa Verde and Dakota pools. This application for the referenced location is for topographic and archaeological reasons and at the request of the Bureau of Land Management.

Production from the Blanco Mesa Verde pool is to be included in an existing 320 acre gas spacing and proration unit comprising of the West half (W/2) of Section 23 which is currently dedicated to Burlington's San Juan 30-6 Unit #11 (API 30-039-07793), located at a standard gas well location of 1450'S, 990'W of said Section 23. Production from the Basin Dakota pool is to be included in a 320 acre gas spacing and proration unit comprising of the West half (W/2) of Section 23.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- 2. Completed C-102 at referenced location.
- 3. Offset operators/owners plat Burlington is the operator of the unit.
- 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 PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. Type of Work 5. Lease Number SF-078741 DRILL Unit Reporting Number Type of Well 6. If Indian, All. or Tribe 1b. 7. Unit Agreement Name 2. Operator BURLINGTON RESOURCES Oil & Gas Company San Juan 30-6 Unit 8. Farm or Lease Name 3. Address & Phone No. of Operator San Juan 30-6 Unit PO Box 4289, Farmington, NM 87499 9. Well Number (505) 326-9700 10. Field, Pool, Wildcat 4. Location of Well 640'FN1, 510'FWL Blanco MV/Basin Dk 11. Sec., Twn, Rge, Mer. (NMPM) Latitude 36° 48.2, Longitude 107° 26.2 Sec 23, T-30-N, R-6-W API # 30-039-12. County 13. State 14. Distance in Miles from Nearest Town NM 7 miles to Gobernador RA 15. Distance from Proposed Location to Nearest Property or Lease Line 510' 17. Acres Assigned to Well 16. Acres in Lease 320 W/2 Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 18. 1500' 20. Rotary or Cable Tools **Proposed Depth** 19. Rotary 7920 22. Approx. Date Work will Start 21. Elevations (DF, FT, GR, Etc.) 6438'GR **Proposed Casing and Cementing Program** 23. See Operations Plan attached Authorized by 24. Regulatory/Compliance Administrator APPROVAL DATE PERMIT NO. TITLE DATE APPROVED BY

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. Hoods. NM 88241-1980

State of New Mexico Energy Minerals & Natural Resources Department

Form C Revised February 21.

Revised February 21.

Instructions on
Submit to Appropriate District 0:
State Lease - 4 00
Fee Lease - 3 00

District II PO Drawer CC. Antesia, NM 88211-07:3

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

District III 1000 Rio Brazos Rd., Aztec, NM 87430 District IV PO Box 2088, Santa Fe. NM 87504-2088

AMENDED REPO

y Box 2038. :	Santa Te.	-					· -	
	Of Name			AND AC	REAGE DEDI	CATION PLA	<u> </u>	
'API Number			72319/71599 Blanco Mesaverde/Basin Dakota					
30-039-		1/231	, blauco Mesanei de Pasi de Parei.					Well Number
7469		TINU 8-0E NAUL NAS				11A		
'OGRID No.		BURL T	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY				'Elevation 6438	
14538	1				_ocation			
UL or lot no	Section	Townenso Pange		et from the	North/South line	Feet from the	East/West line	RIC
D	23	30N 6W		540 i	NORTH	510	WEST	ARRI
		11 Bottom		ation If	Different North/South line	From Sunfa	East/West line	Count
UL on lot no.	Section	Townenso . Plange	COE TOTAL	eet from the	ADPONYSOUGH TIME	l reec ii dii die	LOSLY NEST THE	
MV-W/32	<u> </u>	Sa Journe or Infill 14 Cons	Olioation Code	IS Order No.		<u> </u>		
MV-W/32 DK-W/32								
NO ALLO	WABLE W	ILL BE ASSIGNE	D TO THIS (COMPLETION DE	ON UNTIL ALL	INTERESTS HA	AVE BEEN C	ONSOLICA
		 	 	T HAS BE	EN ACCIONED		ATOR CERT	TIFICAT
15 079] 54	268.12'			1	ify that the informative to the best of	
L,					1 .			
510					1			
		i †			1		\bigcirc	
L						Dean	1 Delle	hued
		i I				Signatur	е	
			1			Peggy	Bradfie Name	10
		1			; 2		atory Adı	minist:
<u>. </u>						Title	1-17-98	
5280.00	NMSF-	078741		1	Date			
88			23		-	- 08 SURVI	EYOR CER	
52		1	1,			or under my	city that the well lo know field notes of a supervision, and that we pest of my belief	actual survevs me
					7	Carree to 5	Total or any control	
		1					CU 12 1	998
						Date of		330
		_			· · · · · · · · · · · · · · · · · · ·	Signature and	Seal of The E	DW
					!		W ME	1.78
		1			-			6 10
					4		1	
		1				<u>//583</u>		2/3
			3272.08 			Centific	ate Manager	ONAL

OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #11A

Location: 640'FNL, 510'FWL Sec 23, T-30-N, R-6-W

Rio Arriba County, NM

Latitude 36° 48.2, Longitude 107° 26.2

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6438'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2466'	
Ojo Alamo	2466'	2571'	aquifer
Kirtland	2571'	2907'	
Fruitland	2907'	3231'	gas
Pictured Cliffs	3231'	3443'	gas
Lewis ·	3443'	4058'	gas
Intermediate TD	3543'		
Huerfanito Bentonite	4058'	4422'	gas
Chacra	4422'	5275′	
Massive Cliff House	5275'	5319'	gas
Menefee	5319'	5572′	gas
Massive Point Lookout	5 572'	5976'	gas
Mancos	5976 <i>'</i>	6864′	
Gallup	6 864 ′	7585′	gas
Greenhorn	7585'	7735'	gas
Dakota	7735′		gas
TD (5 1/2"liner)	7920'		

Logging Program:

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

Mud Program:

<u>Interval</u>	Type	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3543'	LSND	8.4-9.0	30-60	no control
3543-7920'	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>	<u>Depth Interval</u>	<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' - 3543'	7 "	20.0#	J-55
6 1/4"	3543' - 7920'	5 1/2"	15.5#	K-55 flushioint

A variance is requested from Onshore Order #2, III, B. The casing collar clearance in the 5 1/2" flushjoint/6 1/4" hole will be 0.375", a 0.047" variance.

Tubing Program:

0' - 7920' 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 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/285 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 (932 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 min.

7" intermediate casing alternative two stage: Stage collar at 2907'. First stage: cement with 144 sx 50/50 Class "B" Poz with 10 ppsi gilsonite, 1/2 pps cellophane, 2% calcium chloride. Second stage: 303 sx Class "B" with 3% sodium metasilicate, 1/2 pps cellophane, 10 pps gilsonite (1065 cu.ft., 100% excess to circulate to surface).

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 2571'. Two turbolating centralizers at the base of the Ojo Alamo at 2571'. 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 cover minimum of 100' of 5 1/2" x 7" overlap. Cement with 227 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (301 cu.ft., 40% excess to cement 5 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. Instead, a long string of 5 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 5 1/2" x 7" casing strings. After completion of the well, a 5 1/2" CIBP will be set above the last fracturing job to cut and pull the 5 1/2" casing above the 7" casing shoe. The 5 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 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 dualled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 300 psi Pictured Cliffs 500 psi Mesa Verde 700 psi Dakota 3000 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

Date

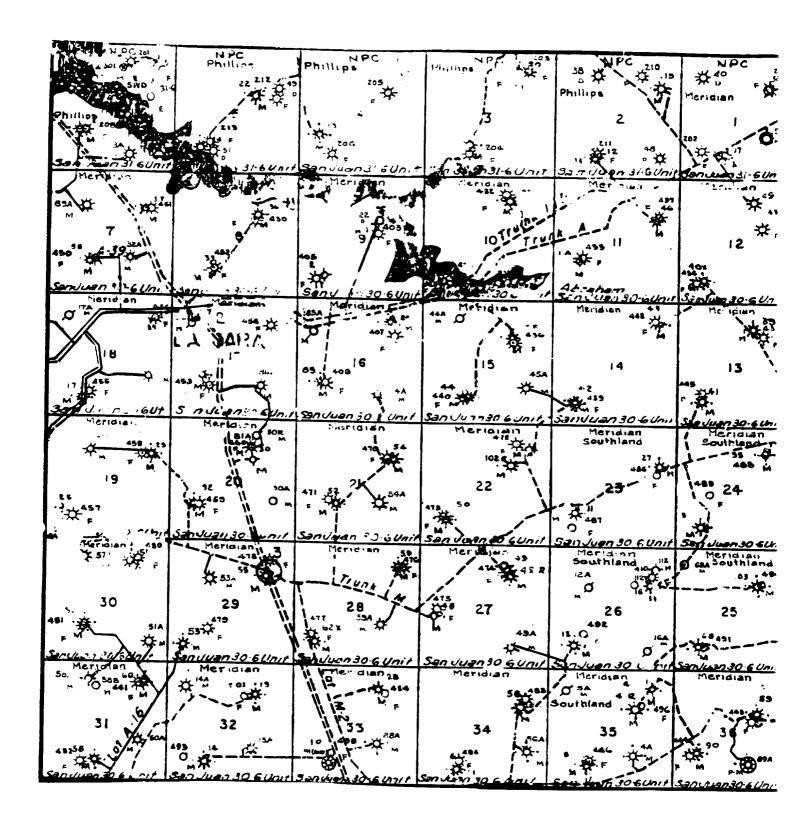


San Juan 30-6 Unit #11A Multi-Point Surface Use Plan

- 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 1085' 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 Services.
- Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from LaJara Water Hole located SW/4 Section 11, T-30-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



MERIDIAN OIL INC.
Pipeline Map
T-30-N, R-06-W
San Juan County, New Mexico
San Juan 30-6 Unit #11A
Map 1A

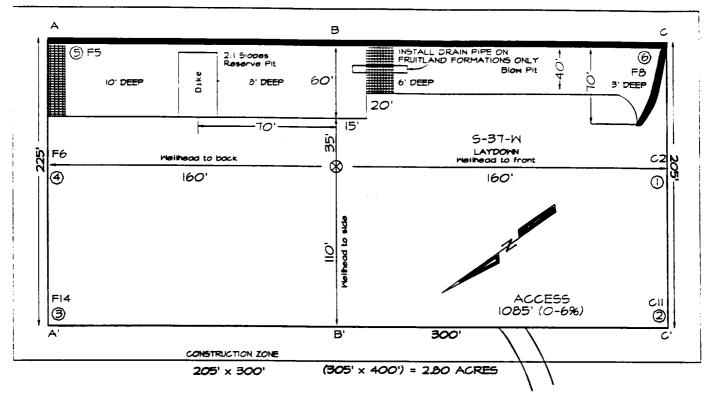
PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY

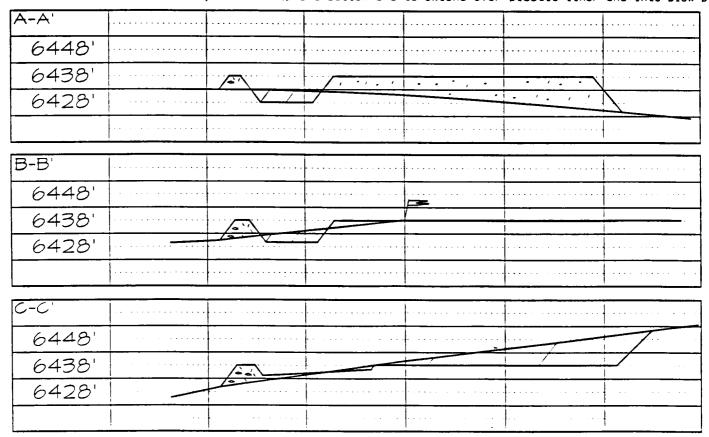
SAN JUAN 30-6 UNIT #11A, 640' FNL & 510' FWL

SECTION 23, T30N, R5W, NMPM, RIO ARRIBA COUNTY, NEW MEXICO

GROUND ELEVATION: 6438' DATE: MARCH 12, 1998



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 pi



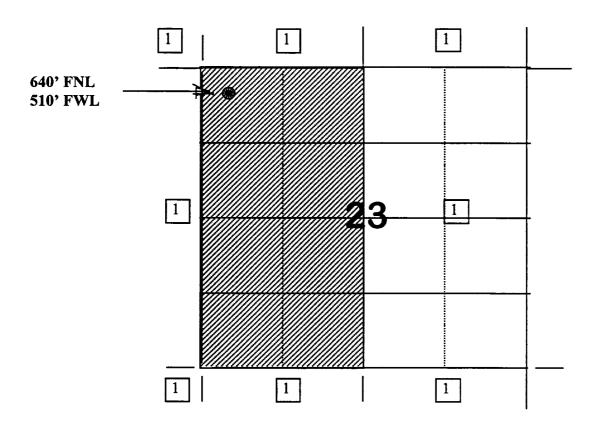
Note: Contractor should call One-Call for location of any marked or unmarked puried pipelines or cap on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 30-6 Unit #11A OFFSET OPERATOR/OWNER PLAT Non Standard Location

Mesaverde / Dakota Formations Well

Township 30 North, Range 6 West



1) Burlington Resources

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 30-6 UNIT #IIA 640' FNL & 510' FWL, SECTION 23, T30N, R6W, N.M.P.M. RIO ARRIBA COUNTY, NEW MEXICO APD MAP # 1085' NEW BLM CONSTRUCTION 440' NWNW SECTION 23, T30N, R6W 605' NE/NE SECTION 22, T30N, R6W 40' SE/SE SECTION 15, T30N, R6W NEW BLM R.O.M. **EXISTING** R.O.W. San Juan Camp

Windmill &

