

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

June 20, 1997

DECEIVED Jun 2 6 1997

OIL CON. DIV.

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

Administrative Order DD-176

Dear Ms. Bradfield:

Under the provisions of Rules 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995, Burlington Resources Oil & Gas Company ("Burlington") made application to the New Mexico Oil Conservation Division on May 9, 1997 for authorization to directional drill the proposed San Juan "30-6" Unit Well No. 96-A, Rio Arriba County, New Mexico.

I-26-30N-70

The Division Director Finds That:

- (1) It is our understanding that Burlington proposes to locate said well at an unorthodox surface location 2175 feet from the South line and 5 feet from the East line (Unit I) of Section 26, Township 30 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, kickoff in a west-southwesterly direction and directionally drill to an estimated true vertical depth of 5,800 feet within the Blanco-Mesaverde Pool to a standard subsurface infill gas well location within the NE/4 SE/4 (Unit I) of said Section 26:
- (2) An existing 320-acre standard spacing and proration unit ("GPU") comprising the E/2 of said Section 26 is to be dedicated to said well;
- (3) By Order No. R-8170, as amended, the Division promulgated the "General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool", which includes provisions for 320-acre gas spacing and proration units and well location requirements whereby the initial well drilled on a GPU shall be located be no closer than 790 feet to the outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary and the infill well drilled on an existing GPU shall be in the quarter section not containing a Mesaverde gas well and shall be located with respect to the restrictions as previously described;
- (4) Within this GPU Burlington is also producing Blanco-Mesaverde gas from its San Juan "30-6" Unit Well No. 96 (API No. 30-039-07772), located at a standard gas well location 990 feet from the North line and 1850 feet from the East line (Unit B) of said Section 26;

- (5) According to the subject application it is necessary for the operator to directionally drill the San Juan "30-6" Unit Well No. 96-A in the above-described manner in order to avoid extensive archeology and terrain in the SE/4 of said Section 26;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 SE/4 (Unit I) of said Section 26 that is no closer than 790 feet to the quarter section lines to the east and north, nor closer than 130 feet to either internal quarter-quarter section lines to the south and west; and.
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Burlington Resources Oil & Gas Company ("Burlington"), is hereby authorized to drill its San Juan "30-6" Unit Well No. 96-A at an unorthodox surface location 2175 feet from the South line and 5 feet from the East line (Unit I) of Section 26, Township 30 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, kickoff in a west-southwesterly direction and directionally drill to an estimated true vertical depth of 5,800 feet within the Blanco-Mesaverde Pool to a standard subsurface infill gas well location within the NE/4 SE/4 (Unit I) of said Section 26;
- (2) The "producing area" for said wellbore shall include that area within the NE/4 SE/4 (Unit I) of said Section 26 that is no closer than 790 feet to the quarter section lines to the east and north, nor closer than 130 feet to either internal quarter-quarter section lines to the south and west.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

- (3) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.
- (4) Blanco-Mesaverde gas production from both the existing San Juan "30-6" Unit Well No. 96 (API No. 30-039-07772), located at a standard gas well location 990 feet from the North line and 1850 feet from the East line (Unit B) of said Section 26, and the proposed San Juan "30-6" Unit Well No. 96-A, as described above, shall be attributed to the existing 320-acre standard gas spacing and proration unit

("GPU") comprising the E/2 of said Section 26.

- (5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F and Order No. R-8170, as amended.
- (6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.
- (7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

WJL/MES/kv

cc: Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

SAN JUAN DIVISION

May 7, 1997

Sent Federal Express

New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Att:

Mr. Michael Stogner

Re:

San Juan 30-6 Unit #96A

2175'FSL, 5'FEL Section 26, T-30-N, R-7-W, Rio Arriba County, New Mexico 1650'FSL, 990'FEL Section 26, T-30-N, R-7-W, Rio Arriba County, New Mexico

API # 30-039-(not yet assigned)

Dear Mr. Stogner:

Burlington Resources is applying for administrative approval to directional drill the referenced well. This application is due to the presence of extensive archaeology in this quarter section and terrain.

The following attachments are for your review:

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

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- 4. 7.5 minute topographic map and enlargement of the map to define topographic features.
- 5. Plan views of the proposed well, well profile data, and proposed data as drilling progresses through the various formations.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield

Regulatory/Compliance Representative

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xc:

Bureau of Land Management NMOCD - Aztec District Office

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	APPLICATION FOR PERMIT TO DRILL, DEEPE	EN, OR PLUG BACK
1a.	Type of Work DRILL	5. Lease Number SF-079383 Unit Reporting Number 8910005380
1b.	Type of Well GAS	6. If Indian, All. or Tribe
2.	Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 30-6 Unit
		Jan Juan 30-6 Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499	8. Farm or Lease Name San Juan 30-6 Unit 9. Well Number
	(505) 326-9700	9 6A
4.	Location of Well 2175'FSL, 5'FEL - surface location 1650'FSL, 990'FEL - bottomhole location	10. Field, Pool, Wildcat Blanco Mesa Verde
	Latitude 36° 46′ 57″, Longitude 107° 31′ 52″	11. Sec., Twn, Rge, Mer. (NMPM) Sec 26, T-30-N, R-7-W API # 30-039-
14.	Distance in Miles from Nearest Town 6 miles to Gobernador	12. County 13. State Rio Arriba NM
15.	Distance from Proposed Location to Nearest Property or Lease L	ine
16.	Acres in Lease	17. Acres Assigned to Well 320 E/2
18.	Distance from Proposed Location to Nearest Well, Drlg, Compl, 6	or Applied for on this Lease
19.	Proposed Depth 5761'	20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6249'GR	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	
24.	Authorized by: Regulatory/Compliance Administrato	/-20-97 Date
	, , , , , , , , , , , , , , , , , , , ,	
PERM	IT NO. APPROVAL DA	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 approved in January 1986 for this well in this 1/4 Section

District i
PO Box 1980, Hobbs, NM 88241-1988
District iI
PO Drawer OD, Artena, NM 88211-0719
District iII
1000 Hio Brazos Ad., Aziec, NM 87410
District iV

PO Box 2088. Santa Fe. NM 87504-2088

State of New Mexico Energy, Mineraus & Natural Resources Department

Of CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C Revised February 21. Instructions on

Submit to Appropriate District C

Fee Lease - 3 C

AMENDED REP

WELL LOCATION AND ACREAGE DEDICATION PLAT API Number 1 Poet Code 72319 30-039-Blanco Mesaverde Property Code * Property Name Well Number San Juan 30-6 Unit 96A 7469 OGRID No. Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY 6249' 14538 10 Surrace Location North/South time East West time UL or lot se. Feet (rem the Lot Ida 26 2175 5 30-N 7-W South I East R.A. 11 Bottom Hole Location If Different From Surface Feet (ress the North/South line Feet from use East West time UL or tot se. Севат 26 30-N 7-W 1650 South 990 East R.A. " Joint or Infill | " Consecutation Code | " Order No. 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 5281 32" 17 OPERATOR CERTIFICAT SF-07938 Peggy Bradfield Regulatory Administra B.H: 990' 11/15/96 Date of Survey 50 ্ 5278.68

OPERATIONS PLAN

Well Name: \- San Juan 30-6 Unit #96A

Surface Location: 2175'FSL, 5'FEL Section 26, T-30-N, R-7-W Bottomhole Location: 1650'FSL, 990'FEL Section 26, T-30-N, R-7-W

Rio Arriba County, New Mexico

Latitude 36° 46′57″, Longitude 107° 31′ 52″

Blanco Mesa Verde

Formation:

6249'GL Elevation:

Formation Tops:	Top (TVD)	Bottom	<u>Contents</u>
Surface	San Jose	2161'	aquifer
Ojo Alamo	2161'	2701'	aquifer
Fruitland	2701′	3161'	gas
Pictured Cliffs	3161'	3241'	gas
Lewis	3241'	38 56′	gas
Intermediate TD	3341'		
Mesa Verde	3856'	4176'	gas
Chacra	4176′	4961'	
Massive Cliff House	4961'	5031'	gas
Menefee	5031'	5361'	gas
Point Lookout	5361'		gas
Total Depth	5761'TVD		-

Logging Program:

Cased hole logging - Gamma Ray Neutron from 2800' to TD Mud Logs/Coring/DST - none

Mud Program:

<u> Interval - MD</u>	Type	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-3669'	LSND	8.4-9.0	30-60	no control
3669-6163'	Air/Mist	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):

Measured Hole Size Depth <u>TVD</u> Csq Size Weight Grade

12 1/4" 0' - 200'	0 - 200'	9 5/8"	32.3#	H-40
8 3/4" 0' - 3669	0 - 3341'	7"	20.0#	J-55
6 1/4" 3569' - 6163	3241 - 5761'	4 1/2"	10.5#	J-55
Tubing Program:	0'- 6163'	2 3/8"	4.7#	J-55

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.

BOP Specifications, Wellhead and Tests (cont'd):

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 2000 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 drill crew.
- All BOP tests & 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 3% 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/418 sx Class "B" w/3% sodium metasilicate, 5# gilsonite/sx and 0.375# flocele/sx. Tail w/100 sx 50/50 Class "B" Poz w/2% calcium chloride, 5# gilsonite/sx and 0.25# flocele/sx (1105 cu.ft. of slurry, 100% 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 to determine TOC. Test casing to 1500 psi for 30 minutes.

Cement float shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom in the hold section, 2073'MD to 3669'MD. Bowspring centralizers on every joint in the build section, 1000' MD to 2073'MD. Bowspring centralizers spaced every 4th joint from 1000' MD to surface. Two cement baskets placed at the base of the Ojo Alamo at 2701' TVD.

4 1/2" Production Liner -

Cement to circulate liner top. Lead with 165 sx 65/35 Class "B" poz w/6% gel, 3# gilsonite/sx and 1/4# flocele/sx. Tail with 122 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (468 cu.ft., 75% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff. Bowspring centralizers run every other joint off bottom to 7" casing shoe at 3669'.

- 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 (Air/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.
- · 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 Mesa Verde formation will be completed.
- 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

- 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 east half is dedicated to the Mesa Verde.
- This gas is dedicated.

Aug 2M	3/25/97
Drilling Engineer	Date

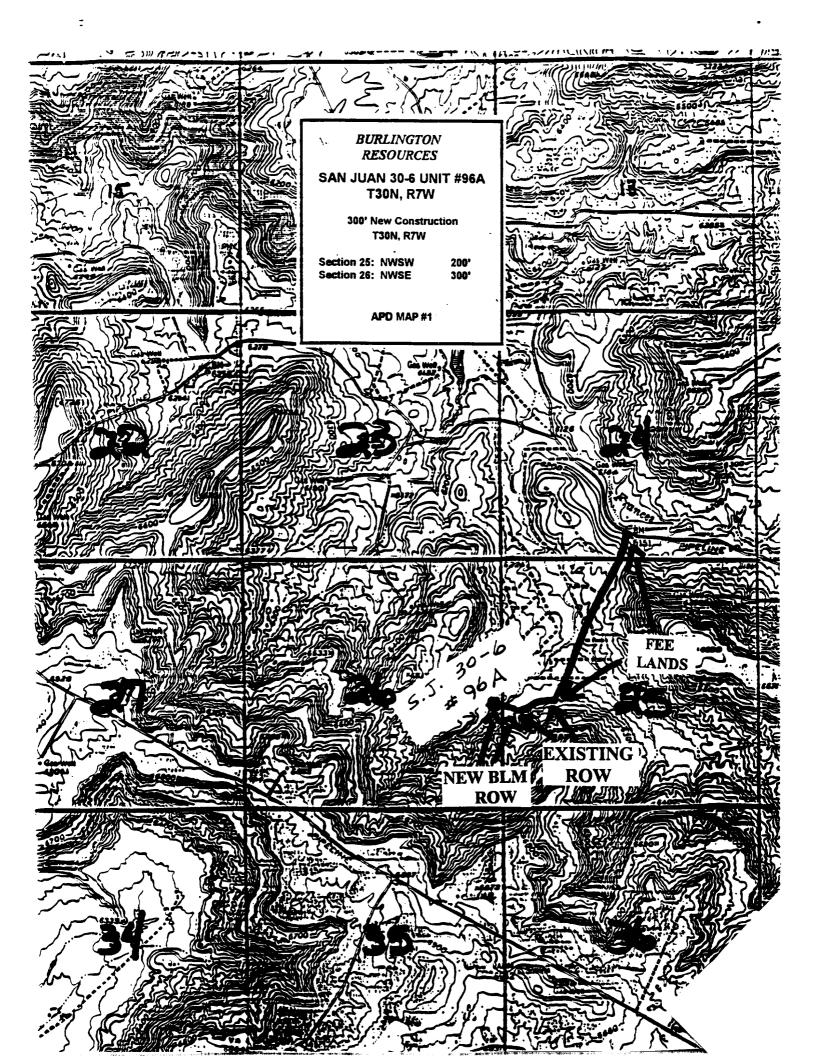


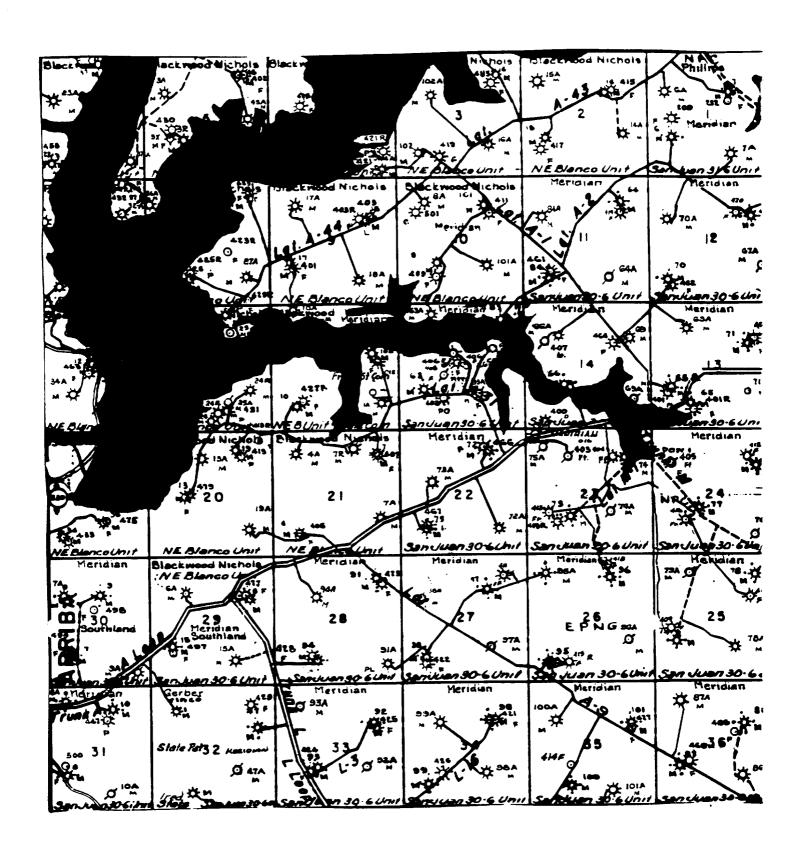
- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- Planned Access Road Refer to Map No. 1. The required new access 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 300' 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 Navajo Dam at Francis Creek located in SE/4 Section 14, T-30-N, R-7-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

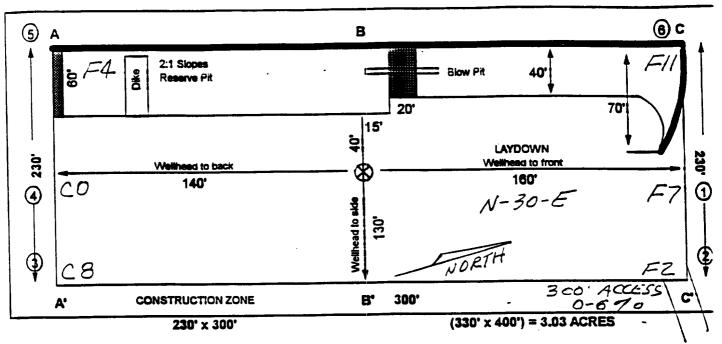




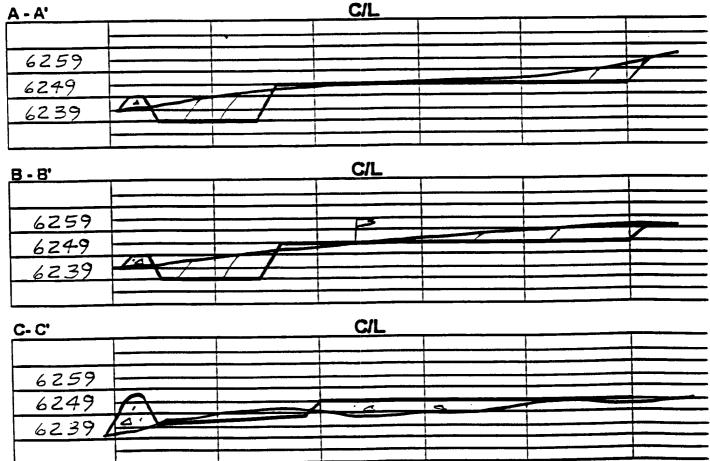
MERIDIAN OIL INC.
Pipeline Map
T-30-N, R-07-W
San Juan County, New Mexico
San Juan 30-6 Unit #96A
Map 1A

BURLINGTON RESOURCES PLAT#1

NAME: SAN JUAN 30-6 UNIT #96A
NAME: AN OUAN JO & WITH JOH
FOOTAGE: 2175' FSL 5' FEL
SEC TWN N,R W NMPM
CO: KIO ARRIBA ST. NEW MEXICO
CO: KIO ARRIBA ST. NEW /VIETICO
ELEVATION: 6249' DATE: 1/15/96
ELEVATION: 6275 DATE. 11715/36



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



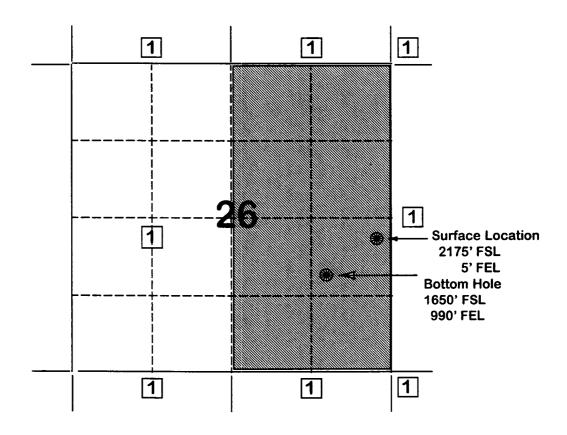
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or ca

BURLINGTON RESOURCES OIL AND GAS COMPANY

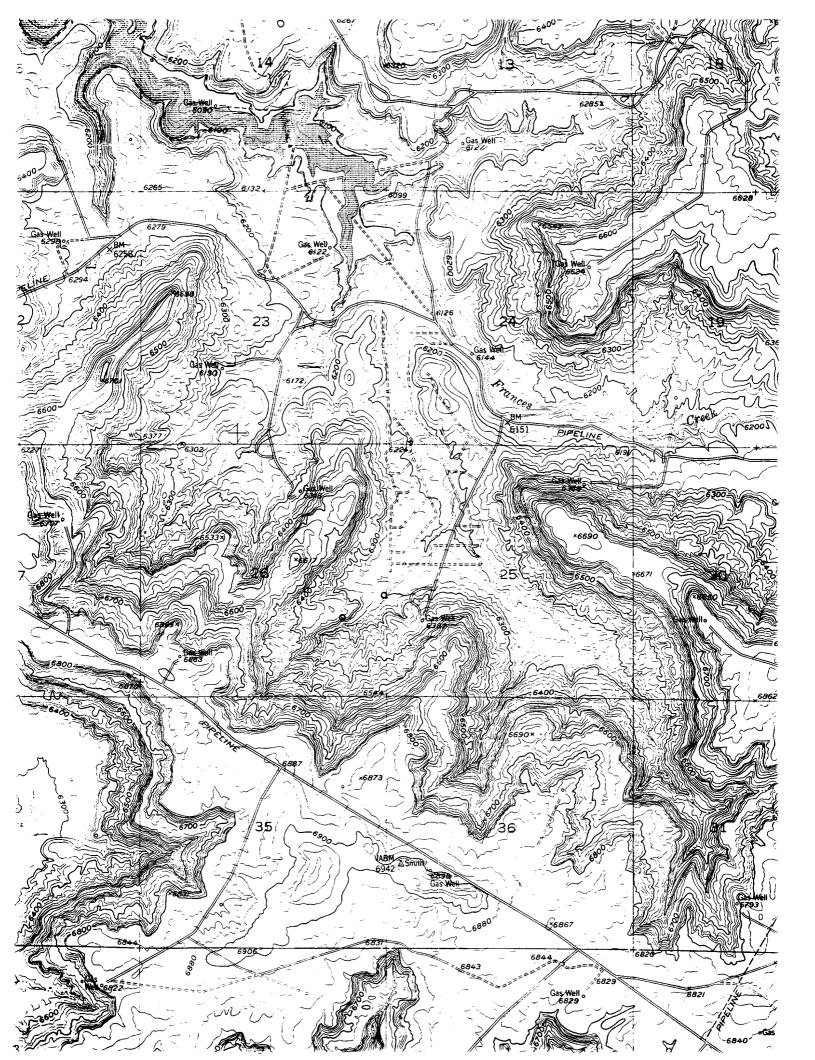
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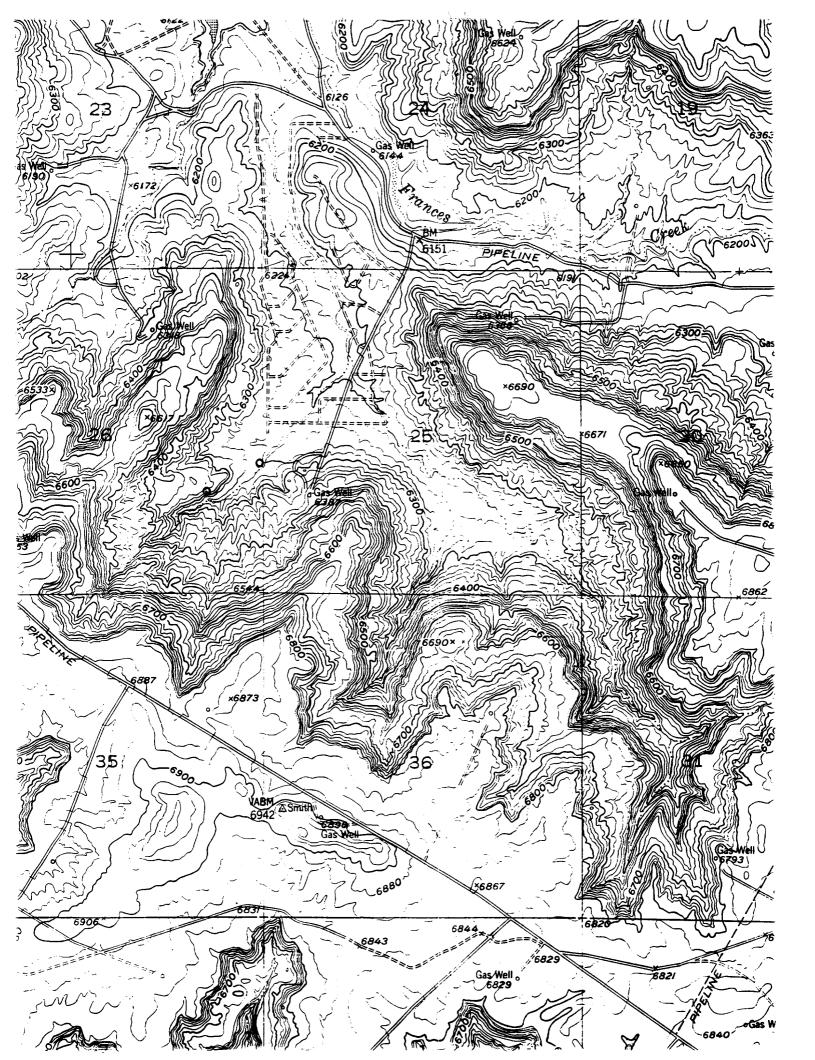
San Juan 30-6 Unit #96A OFFSET OPERATOR \ OWNER PLAT Directional Drilling Mesaverde Formation Well

Township 30 North, Range 7 West



1) Burlington Resources Oil and Gas Company





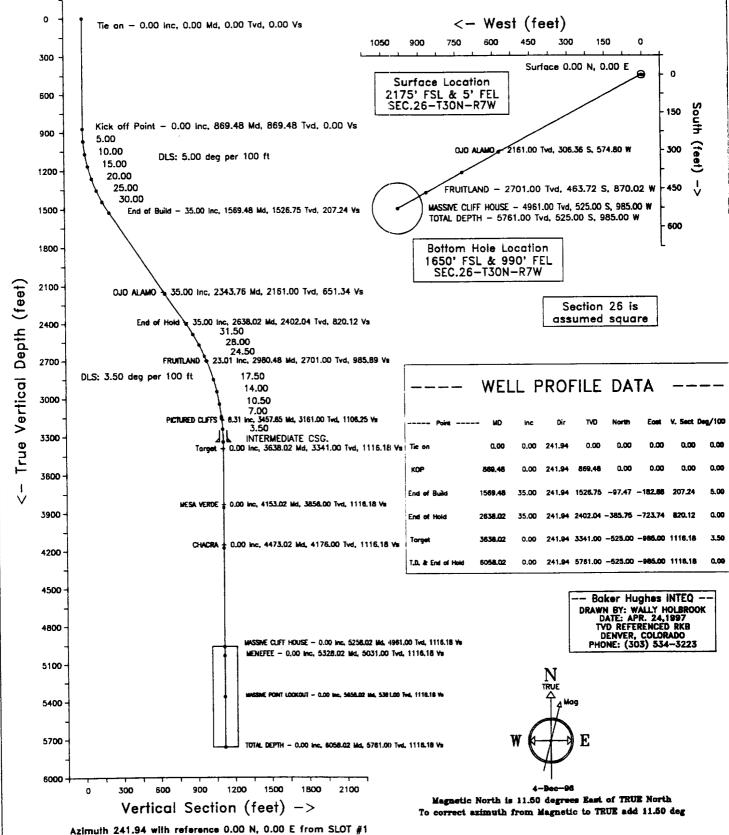
BURLINGTON RESOURCES

Structure: SEC.26-T30N-R7W Well: SAN JUAN 30-6 #96A

Field: RIO ARRIBA COUNTY

Location: NEW MEXICO





BURLINGTON RESOURCES SEC.26-T30N-R7W

SAN JUAN 30-6 #96A SLOT #1 RIO ARRIBA COUNTY NEW MEXICO

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Baker Hughes INTEQ

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Your ref : INITIAL PLAN REV. Our ref : prop2670

License

: 25-Apr-97 : 4-Dec-96 : 24-Apr-97 Date printed Date created Last revised

Field is centred on n36 33 0.000,w107 40 0 Structure is centred on n36 46 21.000,w107 37 16.304

Slot location is n36 46 42.507,w107 37 16.366 Slot Grid coordinates are N 2102691.235, E 562121.744 Slot local coordinates are 2175.00 N 5.00 W

Projection type: mercator - New Mexico West (3003), Spheroid: Clarke - 1866

Reference North is True North

BURLINGTON RESOURCES SEC.26-T30N-R7W, SAN JUAN 30-6 #96A RIO ARRIBA COUNTY, NEW MEXICO

PROPOSAL LISTING Page 1
Your ref: INITIAL PLAN REV. 1
Last revised: 24-Apr-97

		1-			CLIFF
			OJO ALAMO	FRUITLAND	PICTURED (LEWIS
Vert Sect	0.00 0.00 0.00 4.36 17.41	39.05 69.11 107.36 153.52 207.24	454.17 651.34 740.96 820.12 874.95	924.56 968.78 985.89 1007.45	1067.55 1088.76 1103.97 1106.25 1113.12
Dogleg Deg/100ft	00.00 00.00 00.00	5.00 5.00 5.00	0.00 0.00 0.00 3.50	3.50 3.50 3.50	3.50 3.50 3.50 3.50
U L A R A T E S	0.00 E 0.00 E 0.00 E 3.85 W	34.46 W 60.99 W 94.75 W 135.48 W 182.88	400.80 W 574.80 W 653.88 W 723.74 W	815.90 W 854.93 W 870.02 W 889.05 W 918.14 W	942.09 W 960.81 W 974.23 W 976.24 W
RECTANG COORDIN	0.00 N 0.00 N 2.05 S 8.19 S	18.37 S 32.50 S 50.50 S 72.21 S 97.47 S	213.62 S 306.36 S 348.52 S 385.75 S 411.54 S	434.87 S 455.67 S 463.72 S 473.86 S 489.36 S	502.13 S 512.11 S 519.26 S 520.33 S 523.56 S
True Vert Depth	0.00 500.00 869.48 969.35 1068.46	1166.06 1261.40 1353.76 1442.44 1526.75	1879.41 2161.00 2288.99 2402.04 2485.66	2572.46 2662.14 2701.00 2754.34 2848.74	2944.97 3042.68 3141.50 3161.00
Azimuth Degrees	241.94 241.94 241.94 241.94	241.94 241.94 241.94 241.94 241.94	241.94 241.94 241.94 241.94 241.94	241.94 241.94 241.94 241.94 241.94	241.94 241.94 241.94 241.94 241.94
Inclin. Degrees	0.00 0.00 0.00 5.00	15.00 20.00 25.00 30.00	35.00 35.00 35.00 35.00	28.00 24.50 23.01 21.00 17.50	14.00 10.50 7.00 6.31 3.50
Measured Depth	0.00 500.00 869.48 969.48 1069.48	1169.48 1269.48 1369.48 1469.48	2000.00 2343.76 2500.00 2638.02 2738.02	2838.02 2938.02 2980.48 3038.02	3238.02 3338.02 3438.02 3457.65

All data is in feet unless otherwise stated.

Coordinates from SLOT #1 and TVD from RKB (6249.00 Ft above mean seal level).

Bottom hole distance is 1116.18 on azimuth 241.94 degrees from wellhead.

Vertical section is from wellhead on azimuth 241.94 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes INTEQ

FS

SEC.26-T30N-R7W, SAN JUAN 30-6 #96A RIO ARRIBA COUNTY, NEW MEXICO

PROPOSAL LISTING Page 2
Your ref: INITIAL PLAN REV. 1
Last revised: 24-Apr-97

Vert Sect	113	1116.18 MESA VERDE 1116.18 CHACRA	1116.18 1116.18 MASSIVE CLIFF HOUSE 1116.18 MENEFEE 1116.18	1116.18 MASSIVE POINT LOOKOUT 1116.18 1116.18 TOTAL DEPTH
Dogleg Deg/100ft	3.50	0000	000000	0.00
U L A R A T E S	2.31	985.00 W 985.00 W	985.00 W 985.00 W 985.00 W 985.00 W	985.00 W 985.00 W 985.00 W
R E C T A N G C O O R D I N	23.56	525.00 S 525.00 S 525.00 S	525.00 S 525.00 S 525.00 S 525.00 S 525.00 S	525.00 S 525.00 S 525.00 S
Inclin. Azimuth True Vert Degrees Degrees Depth	241. 341.	3702.98 3856.00 4176.00	4202.98 4702.98 4961.00 5031.00	5361.00 5702.98 5761.00
Azimuth Degrees	41.9	241.94 241.94 241.94	241.94 241.94 241.94 241.94 241.94	241.94 241.94 241.94
Inclin. Degrees	3.50	00.00	00.00	00.00
Measured Depth	3538.02 3638.02	000	4500.00 5000.00 5258.02 5328.02 5500.00	5658.02 6000.00 6058.02

All data is in feet unless otherwise stated.

Coordinates from SLOT #1 and TVD from RKB (6249.00 Ft above mean seal level).

Bottom hole distance is 1116.18 on azimuth 241.94 degrees from wellhead.

Vertical section is from wellhead on azimuth 241.94 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes INTEQ

SEC

PROPOSAL LISTING Page 3
Your ref: INITIAL PLAN REV. 1
Last revised: 24-Apr-97

				Comments in wellpath	wellpat	c "		
MD	TVD	Rectangular C	ທຸ	Comment				
343.7	161.0	06.36	74.	OJO ALAMO				
2980.48 3457.65	3161.00	463.72 S 520.33 S		PICTURED CLIFFS	CLIFFS			
537.9	241.0	23.56	82.30	LEWIS				
153.0	856.0	25.00	85.00	MESA VERDE	(+1)			
473.0	176.0	25.00	85.00	CHACRA		•	١.	
258.0	961.0	25.00	85.00	MASSIVE CLIFF HOUSE	LIFF HOUS	6-3		
328.0	031.0	25.00	85.00	MENEFEE				
658.0	361.0	25.00	85.00	MASSIVE POINT	JINT LOOKOUT	Ju'r'		
058.0	761.0	25.00	ω	TOTAL DEPTH	H			
			Casin	Casing positions in string 'A'	s in stri	ng 'A'		
Top MD	Top TVD	Rectangular C	Coords.	Bot MD Ba	Bot TVD	Rectangular Coords.	Coords.	Casing
00.00	0.00	0.00N	0.00E	3638.02	3341.00	525.008	985.00W	INTERMEDIAS
			Targets a	gets associated with this wellpath	vith this	wellpath		
Target 1	name	≡ Geographic		L L	T.V.D.	Rectangular	Rectangular Coordinates	Revised
S J 30-6	5 96A			49	4961.00	525.008	985.00W	14-Mar-97