

DATE IN 3/23/99	SUSPENSE 4/12/99	ENGINEER MS	LOGGED KV	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

D/K

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☒ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

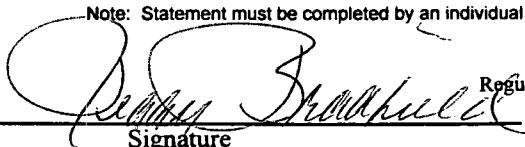
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield



Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

BURLINGTON RESOURCES

SAN JUAN DIVISION

Sent Federal Express

Mr. Michael Stogner
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: San Juan 27-4 Unit #52M
1040'FNL, 1370'FWL Section 29, T-27-N, R-4-W, Rio Arriba County
30-039-not assigned

Dear Mr. Stogner:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Dakota pool. This location is located on a timbered ridge top which is adjacent to an existing access road and well pad (San Juan 27-4 Unit #113 located 840'FNL, 940'FWL API#30-039-21016). If the well were placed 80' to the east to be standard, the cuts would increase, more tree cutting would be required, and the location would be highly visible from a larger area of National Forest Lands. This well is proposed to be drilled as a Mesa Verde-Dakota commingle and DHC-2227 has been issued.

Production from the Dakota pool is to be included in a 320 acre gas spacing and proration unit for the west half (W/2) in Section 29 and is to be dedicated to the San Juan 27-4 Unit #52 (30-039-20148) located at 1750'FSL, 1180'FWL of Section 29. Production from the Mesa Verde pool is to be included in a 320 acre gas spacing and proration unit for the west half (W/2) in Section 29 and is to be dedicated to the San Juan 27-4 Unit #52 (30-039-20148) located at 1750'FSL, 1180'FWL of Section 29. The San Juan 27-4 Unit #52 Dakota well is scheduled in 1999 for recompletion to include and commingle the Mesa Verde.

The following attachments are for your review:

- Application for Permit to Drill.
- Completed C-102 at referenced location.
- Offset operators/owners plat
- 7.5 minute topographic map.

We appreciate your earliest consideration of this application.

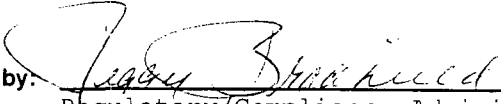
Sincerely,

Peggy Bradfield
Regulatory/Compliance Administrator

xc: NMOCD - Aztec District Office
Bureau of Land Management

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-080670 Unit Reporting Number	
1b. Type of Well GAS	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, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-4 Unit 9. Well Number 52M	
4. Location of Well 1040' FNL, 1370' FWL Latitude 36° 32' 55", Longitude 107° 16' 38"	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 29, T-27-N, R-4-W API # 30-039-	
14. Distance in Miles from Nearest Town 56 miles to Bloomfield	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1040'		
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 400'		
19. Proposed Depth 8474'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7193' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by:  Regulatory/Compliance Administrator		
		10-23-98 Date

PERMIT NO. _____ APPROVAL DATE _____

APPROVED 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, Artesia, NM 87211-0719
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 back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-		2 Pool Code 71599/72319		3 Pool Name Basin Dakota/Blanco Mesaverde		
4 Property Code 7452		5 Property Name SAN JUAN 27-4 UNIT			6 Well Number # 52M	
7 OGRID No. 14538		8 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			9 Elevation 7193	

10 Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	29	27 N	4 W		1040	NORTH	1370	WEST	RIO ARRIBA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres DK:W/320 MV:W/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		16 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Peggy Bradfield Printed Name Regulatory Administrator Title 10-25-98 Date	
		17 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. August 10, 1998 Date of Survey Signature and Seal of Professional Surveyor 7016 Certificate Number	

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #52M
Location: 1040' FNL, 1370' FWL, Sec 29, T-27-N, R-4-W
Rio Arriba County, NM
Latitude 36° 32' 55", Longitude 107° 16' 38"
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7193' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3512'	
Ojo Alamo	3512'	3576'	aquifer
Kirtland	3576'	3668'	gas
Fruitland	3668'	4047'	gas
Pictured Cliffs	4047'	4147'	gas
Lewis	4147'	4500'	gas
Intermediate TD	4247'		
Mesa Verde	4500'	5025'	gas
Chacra	5025'	5748'	gas
Massive Cliff House	5748'	5868'	gas
Menefee	5868'	6245'	gas
Massive Point Lookout	6245'	6720'	gas
Mancos	6720'	7367'	gas
Gallup	7367'	8153'	gas
Greenhorn	8153'	8210'	gas
Graneros	8210'	8376'	gas
Dakota	8376'		gas
TD (4 1/2" liner)	8474'		

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>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-4247'	LSND	8.4-9.0	30-60	no control
4247-8474'	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>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	K-55
8 3/4"	0' - 4247'	7"	20.0#	J-55
6 1/4"	4147' - 8474'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8474' 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/395 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride (1277 cu.ft. of slurry, 100% 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.

7" intermediate casing alternative two stage: Stage collar at 2124'. First stage: cement with 176 sx Class "B" cmt with 7 pps gilsonite, 1/2 pps cellophane, 3% sodium metasilicate. Tailed w/90 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 0.5 pps Cellophane. Second stage: 219 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 7 pps Gilsonite (1277 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 3576'. Two turbolating centralizers at the base of the Ojo Alamo at 3576'. 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 504 sx 50/50 Class "B" Poz with 2% gel, 0.25 flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive (665 cu.ft.), 50% 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 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):

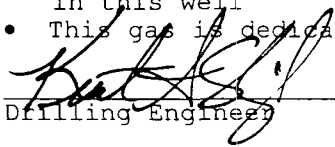
The following equipment will be operational while gas/mist drilling:

- 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 of Section 29 is dedicated to the Mesa Verde and Dakota in this well
- This gas is dedicated.



Drilling Engineer

Date

BURLINGTON RESOURCES OIL AND GAS COMPANY

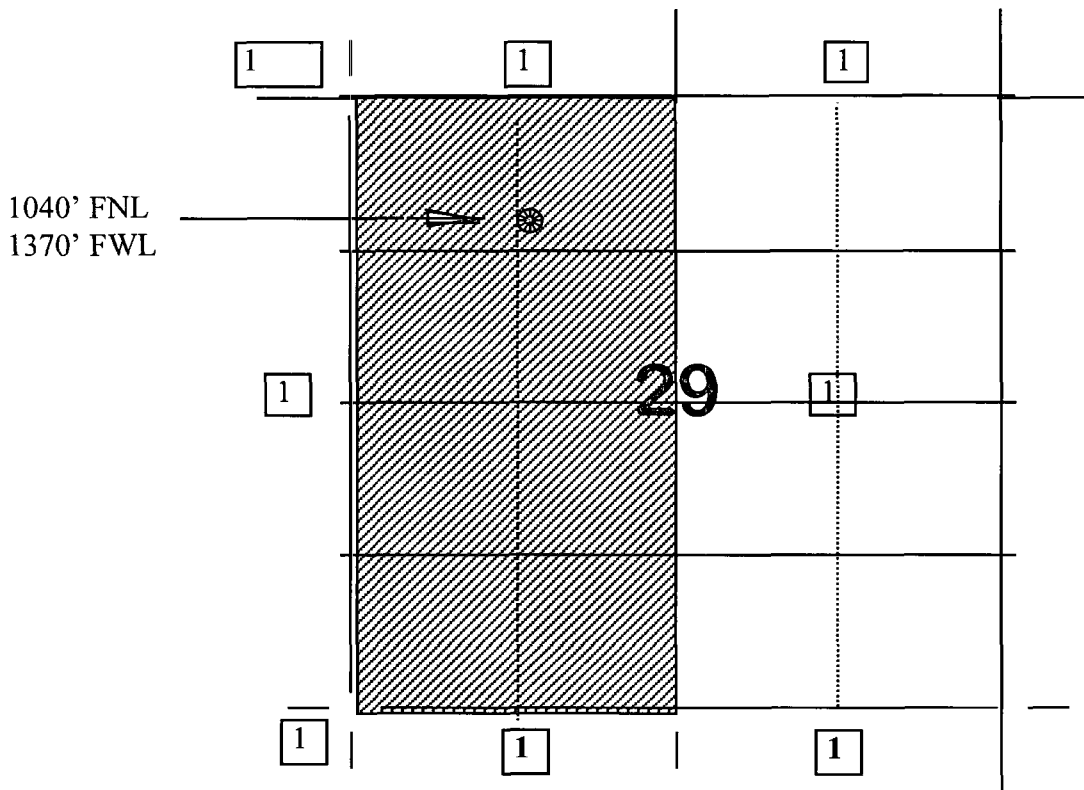
San Juan 27-4 Unit #52M

OFFSET OPERATOR/OWNER PLAT

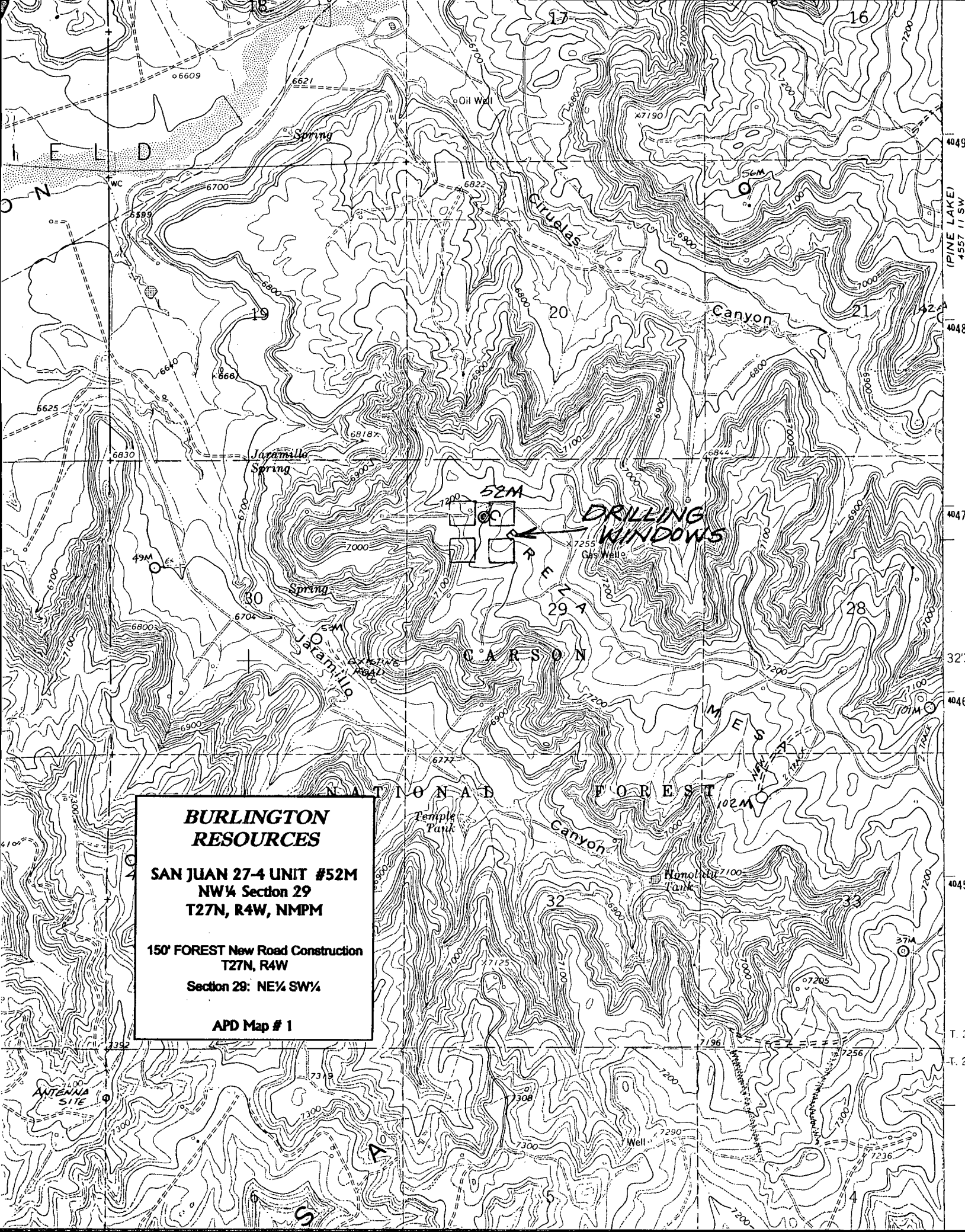
Mesaverde/Dakota Formations

Nonstandard Location

Township 27 North, Range 4 West



1) Burlington Resources

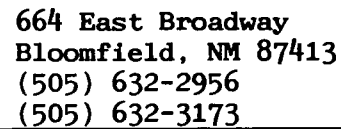


**BURLINGTON
RESOURCES**

**SAN JUAN 27-4 UNIT #52M
NW¼ Section 29
T27N, R4W, NMPM**

**150' FOREST New Road Construction
T27N, R4W
Section 29: NE¼ SW¼**

APD Map # 1



Date: 8/31/98

FS-6200-28b(3/92)

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

03/23/99 14:00:40
OGOMES -TPEZ
PAGE NO: 1

Sec : 29 Twp : 27N Rng : 04W Section Type : NORMAL

D 40.00 Federal owned A	C 40.00 Federal owned	B 40.00 Federal owned	A 40.00 Federal owned
E 40.00 Federal owned	F 40.00 Federal owned	G 40.00 Federal owned A	H 40.00 Federal owned A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

03/23/99 14:00:51
OGOMES -TPEZ
PAGE NO: 2

Sec : 29 Twp : 27N Rng : 04W Section Type : NORMAL

L 40.00 Federal owned A	K 40.00 Federal owned	J 40.00 Federal owned	I 40.00 Federal owned A
M 40.00 Federal owned A	N 40.00 Federal owned	O 40.00 Federal owned	P 40.00 Federal owned A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD : ONGARD 03/23/99 14:00:58
OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TPEZ

API Well No : 30 39 20148 Eff Date : 01-01-1900 WC Status : A
Pool Idn : 71599 BASIN DAKOTA (PRORATED GAS)
OGRID Idn : 14538 BURLINGTON RESOURCES OIL & GAS CO
Prop Idn : 7452 SAN JUAN 27 4 UNIT

Well No : 052
GL Elevation: 99999

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: L	29	27N	04W	FTG 999 F S	FTG 999 F E	P
Lot Identifier:							
Dedicated Acre:							
Lease Type	: F						
Type of consolidation							

(Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 03/23/99 14:01:07
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPEZ

OGRID Idn : 14538 API Well No: 30 39 20148 APD Status(A/C/P): A
Opr Name, Addr: BURLINGTON RESOURCES OIL & GAS C Aprvl/Cncl Date : 01-01-1900
801 CHERRY ST
FT WORTH, TX 76102

Prop Idn: 7452 SAN JUAN 27 4 UNIT Well No: 52

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: L	29	27N	04W			FTG 999 F S	FTG 999 F E
OCD U/L	: L		API	County	: 39			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 99999

State Lease No: Multiple Comp (Y/N) : S
Prpsd Depth : Prpsd Frmtn :

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12