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<u>.</u>	1/19/ 7.8_1	5/4/70					
	NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau -						
		ADMINISTRAT	IVE APPLICATI	ON COVERSH	IEET		
	THIS COVERSH	EET IS MANDATORY FOR ALL AD	MINISTRATIVE APPLICATIONS FO	R EXCEPTIONS TO DIVISION R			
Applic	[PC-P	[NSP-Non-Standard [DD-Directions vnhole Commingling] ool Commingling] [O [WFX-Waterflood Exp [SWD-Salt Water	Proration Unit] [NSL al Drilling] [SD-Simult [CTB-Lease Comming LS - Off-Lease Storage] ansion] [PMX-Pressu Disposal] [IPI-Injecti ecovery Certification]	aneous Dedication] ling] [PLC-Pool/Lea   [OLM-Off-Lease M re Maintenance Expa on Pressure Increase	se Commingling] leasurement] nsion] a] ction Response]		
[1]	TYPE OF A	PPLICATION - Ch	eck Those Which Ap	ply for [A]	GEIVER		
	[A]	Location - Spacing	Unit - Directional Dr P 📮 DD 📮	- 11	APR 1 4 1998		
		k One Only for [B] and			SERVATION DIVISION		
	[B]	DHC CT	orage - Measurement B DPLC D	PC DOLS [	OLM		
	[C]	Injection - Disposa	l - Pressure Increase - X ISWD I		overy PPR		
[2]		-	TO: - Check Those W				
	[A]	u working, Royal	ty or Overriding Roy:	alty interest Owners	5		
	[B]	Offset Operators	s, Leaseholders or Su	face Owner			
	[C]	Application is C	One Which Requires P	ublished Legal Not	ice		
	[D] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office						
	[E]	Given For all of the ab	ove, Proof of Notifica	tion or Publication	is Attached, and/or,		
	<b>[F]</b>	U Waivers are Att	ached				
[3]	INFORMA	<b>FION / DATA SUB</b>	MITTED IS COMPI	LETE - Statement of	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.

$\bigcap$	Note: Statement must be compl	eted by an individual with supervisory capacity.	
Peggy Bradfield	Sillehis	Regulatory/Compliance Administrator	
Print or Type Name	Signature	Title	Date



SAN JUAN DIVISION

April 13, 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 #53M 2005'FSL, 1595'FEL, Section 30, 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 both the Mesa Verde and Dakota pools. This application for the referenced location is for topographic reasons and at the request of the Carson National Forest Service.

Production from the Blanco Mesa Verde pool is to be included in an existing 320 acre gas spacing and proration unit comprising of the East half (E/2) of Section 30 which is currently dedicated to Burlington's San Juan 27-4 Unit #21 (API 30-039-06937), located at a standard gas well location of 850' FNL, 1800' FEL of said Section 30. Production from the Basin Dakota pool is to be included in an existing 320 acre gas spacing and proration unit comprising of the East half (E/2) of Section 30 which is currently dedicated to Burlington's San Juan 27-4 Unit #53 (API 30-039-20150), located at a standard gas well location of 900' FNL 1460' FEL of said Section 30.

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, Shankued

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

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la.	Type of Work	5. Lease Number
	DRILL	SF-080670
		Unit Reporting Number
b.	Type of Well GAS	6. If Indian, All. or Tribe
	Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name
	<b>RESOURCES</b> Oil & Gas Company	San Juan 27-4 Unit
	Address & Phone No. of Operator	8. Farm or Lease Name
	PO Box 4289, Farmington, NM 87499	San Juan 27-4 Unit
	(505) 326-9700	9. Well Number 53M
••	Location of Well	10. Field, Pool, Wildcat
	2005'FSL, 1595'FEL	Blanco MV/Basin Dk
	Latitude 36 <sup>0</sup> 32.3, Longitude 107 <sup>0</sup> 17.13	11. Sec., Twn, Rge, Mer. (NMPM) Sec 30, T-27-N, R-4-W
	Datitude 50 52.5, Dongitude 107 17.15	API # 30-039-
14.	<b>Distance in Miles from Nearest Town</b> 50 miles to Blanco	<b>12. County</b> Rio Arriba NM
5.	Distance from Proposed Location to Nearest Property of 1595'	r Lease Line
6.	Acres in Lease	<b>17. Acres Assigned to Well</b> 320 E/2
8.	Distance from Proposed Location to Nearest Well, Drlg, 200'	Compl, or Applied for on this Lease
19.	Proposed Depth 8017	20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6733'GR	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	
		•
24.	Authorized by: Regulatory/Compliance Admin	Z/12/98 Date
PERM	IT NO APP	ROVAL DATE
PPR	OVED BY TITLE	DATE
	* •	
Archa	eological Report to be submitted by Arboles Contract Arch	aeology
	: This format is issued in lieu of U.S. BLM Form 3160-3	

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District I PO Bax 1980, Hobbs, NM 88241-1980	Stat		
PO Box 1980, Hobbs, NM 55241-1950	Energy, Miner		
District II			
PO Drawer DD, Artesia, NM 88211-0719	OIL CONS		
District III			
1000 Rio Brazos Rd., Aztec. NM \$7410	Santa		

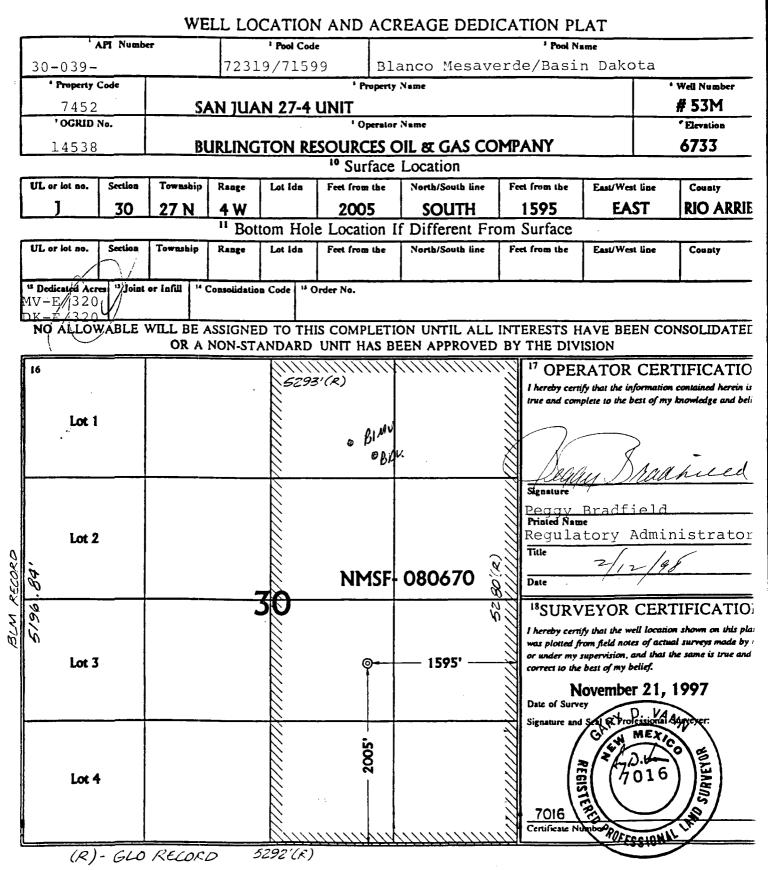
District IV

PO Box 2088, Santa Fc. 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-Revised February 21, 1. Instructions on b Submit to Appropriate District Of: State Lease - 4 Cop Fee Lease - 3 Cop

AMENDED REPO



## OPERATIONS PLAN

Well Name:San Juan 27-4 Unit #53MLocation:2005'FSL, 1595'FEL Sec 30, T-27-N, R-4-WRio Arriba County, NMLatitude 36° 32.3, Longitude 107° 17.13Formation:Blanco Mesa Verde/Basin DakotaElevation:6733'GL

Formation Tops:	Top	Bottom	<u>Contents</u>
Surface	San Jose	2977'	
Ojo Alamo	2977'	3078′	aquifer
Kirtland	3078′	3192′	
Fruitland	3192'	3556'	gas
Pictured Cliffs	3556'	3635'	gas
Lewis	3635'	4015'	gas
Intermediate TD	3735'		
Huerfanito Bentonite	4015'	4517'	gas
Chacra	4517 <i>'</i>	5243′	
Massive Cliff House	5243'	5368'	gas
Menefee	5368'	5725 <i>'</i>	gas
Massive Point Lookout	5725'	6871'	gas
Gallup	6871'	7672′	gas
Greenhorn	7672'	7872'	gas
Dakota	7872 <i>'</i>		gas
TD (4 1/2"liner)	8017'		

#### Logging Program:

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

## <u>Mud Program:</u>

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<u>Interval</u>	Type	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-3735'	LSND	8.4-9.0	30-60	no control
3735-8017'	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' - 3735'	7"	20.0#	J-55
6 1/4"	3635' - 8017'	4 1/2"	10.5#	K-55

#### Tubing Program:

0' - 8017' 2 3/8" 4.70# EUE

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### 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/303 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 (982 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.

#### Page Three

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 3078'. Two turbolating centralizers at the base of the Ojo Alamo at 3078'. 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  $1/2" \ge 7"$  overlap. Cement with 473 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (629 cu.ft., 40% excess to cement 4  $1/2" \ge 7"$  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" x 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.

## <u>Special Drilling Operations (Gas/Mist Drilling):</u>

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 east half is dedicated to the Mesa Verde and the Dakota in this well.

This gas is dedicated Drilling Engineer



- 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.
- 2. Planned Access Road Refer to Map No. 1. None required.
- 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.

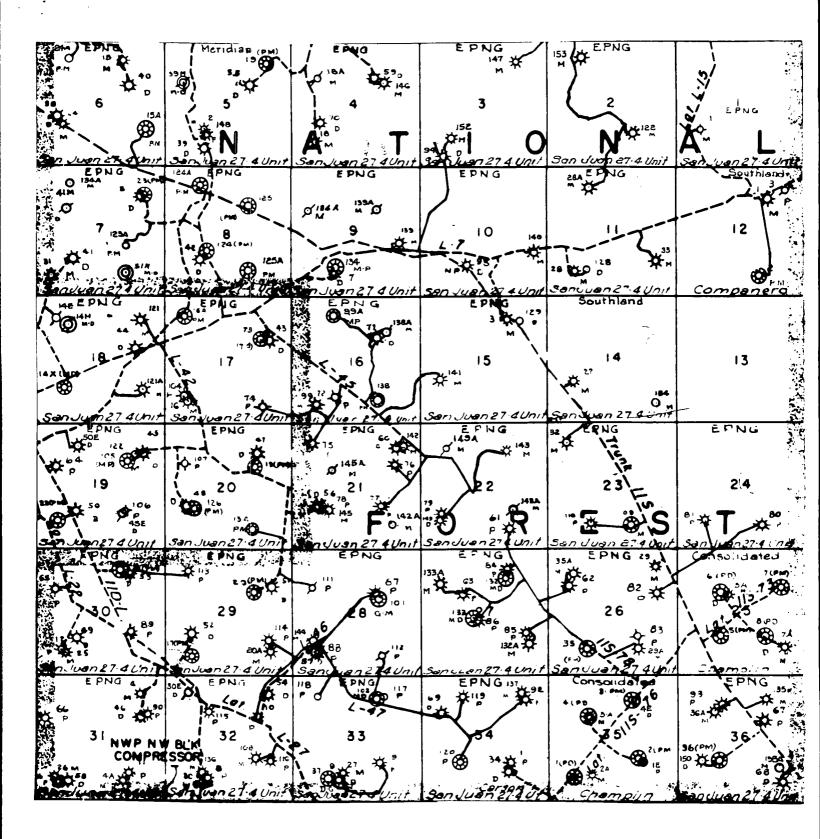
b. Off the Well Pad - Anticipated pipeline facilities as shown on the attached plat from Williams Field Service.

- 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.

adhula Regulatory/Compliance Administrator Date

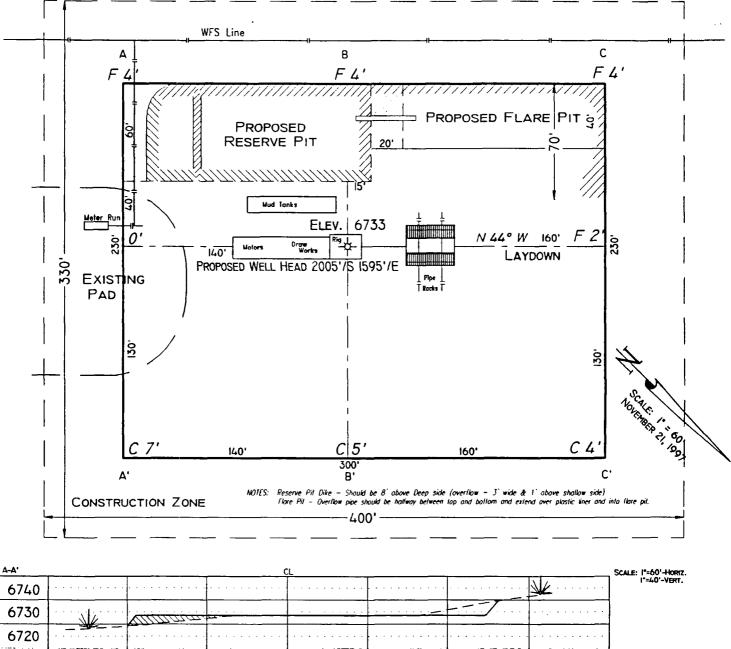
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MERIDIAN OIL INC. Pipeline Map T-27-N, R-04-W Rio Arriba County, New Mexico San Juan 27-4 Unit #53M Map 1A

3/91 adw/mjb

## PAD LAYOUT PLAN & PROFILE BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-4 UNIT 53M 2005' F/SL 1595' F/EL SEC. 30, T27N, R4W, N.M.P.M. RIO ARRIBA COUNTY, NEW MEXICO



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<u>c-c</u> 6740 6730

8-8'

NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pod and/or access road at least twa (2) working days prior to construction.

> VANN SURVEYS 304 N. Locke Farmington, NM

## BURLINGTON RESOURCES OIL AND GAS COMPANY

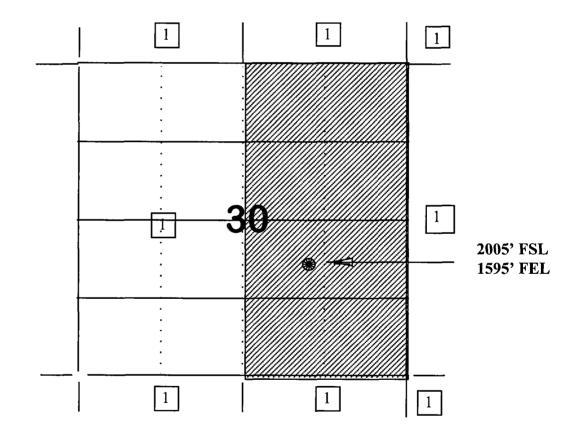
San Juan 27-4 Unit #53M

# **OFFSET OPERATOR/OWNER PLAT**

## **Non Standard Location**

## Mesaverde / Dakota Formations Well

Township 27 North, Range 4 West



1) Burlington Resources

