

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 19 2011

Farmington Field Office

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR RE-OPEN A WELL

1a. Type of Work DRILL	BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS	5. Lease Number SF-079491 Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP		7. Unit Agreement Name San Juan 27-5 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name
		9. Well Number 106P
4. Location of Well Surface: Unit L (NWSW), 1900' FSL & 1125' FWL BHL : Unit K (NESW), 1820' FSL & 2265' FWL Surface: Latitude: 36.600550° N (NAD83) Longitude: 107.314902° W Surface: Latitude: 36.600184° N (NAD83) Longitude: 107.311034° W	10. Field, Pool, Wildcat Blanco MV/Basin DK U.S. CONS. DIV. 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 1, T27N, R5W API# 30-039-31086	RCVD NOV 14 '11 DIST. 3
14. Distance in Miles from Nearest Town 38.5 miles to Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1125'		
16. Acres in Lease 1600.360	17. Acres Assigned to Well 320.00 acres S/2 DK 320.28 acres W/2 MV	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 852' SJ 27-5 #100		
19. Proposed Depth 8747'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7455' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)		9/19/11 Date

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

A gas recovery unit may or may not be used on this location.

Threatened and Endangered Species Report attached

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 any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 3

Bond Numbers NMB-000015 and NMB-000089

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NOV 21 2011

NMOC

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.8
and appeal pursuant to 43 CFR 3165.4

RCVD NOV 14 '11
OIL CONS. DIV.
DIST. 3

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

Hold C104
for Directional Survey
and "As Drilled" plat

PC

Submit one copy to appropriate District Office

Farmington Field Office
Bureau of Land Management

1220 South St. Francis Dr.
Santa Fe, NM 87505

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

GLEN W. RUSSELL
Certificate Number

15703

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-5 UNIT 106P

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1027				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA		API #:
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
FRR	BASIN DAKOTA (PRORATED GAS)						
RON	BLANCO MESAVERDE (PRORATED GAS)						
Location: Surface Datum Code: NAD 27 Directional							
Latitude: 36.600541		Longitude: -107.314302		X:	Y:	Section: 01	Range: 005W
Footage X: 1125 FWL		Footage Y: 1900 FSL		Elevation: 7455 (FT)		Township: 027N	
Tolerance:							
Location: Bottom/Hole Datum Code: NAD 27 Directional							
Latitude: 36.600175		Longitude: -107.310434		X:	Y:	Section: 01	Range: 005W
Footage X: 2265 FWL		Footage Y: 1820 FSL		Elevation: (FT)		Township: 027N	
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 7470 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	7270	200	☐			12-1/4 hole, 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 144 cuft. Circulate cement to surface.
NACIMIENTO	2424	5046		☐			
OJO ALAMO	3754	3716		☐			
KIRTLAND	3878	3592		☐			
FRUITLAND	3934	3536		☐			Possible Gas
PICTURED CLIFFS	4323	3147		☐			
LEWIS	4411	3059		☐			
Intermediate Casing	4561	2909	4733	☐	116		8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1056 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	4905	2565		☐			
CHACRA	5276	2194		☐			Est. Top Perf - 5278 (2192)
UPPER CLIFF HOUSE	5981	1489		☐			Gas
MASSIVE CLIFF HOUSE	6064	1406		☐	795		Gas; Cliffhouse is dry
MENEFEE	6127	1343		☐			
POINT LOOKOUT	6484	986		☐			
MANCOS	7007	463		☐			
UPPER GALLUP	7648	-178		☐			
GREENHORN	8419	-949		☐			
GRANEROS	8482	-1012		☐			
TWO WELLS	8520	-1050		☐	1873		Gas
PAGUATE	8610	-1140		☐			
UPPER CUBERO	8625	-1155		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-5 UNIT 106P

DEVELOPMENT

LOWER CUBERO	8675	-1205	☐	
OAK CANYON	8726	-1256	☐	Est. Btm Perf - 8732 (- 1262) based on offset wells
Total Depth	8747	-1277	8919	☐ 203 6-1/4" hole, 4-1/2" 11.6 ppf, J-55/L-80, LTC casing. Cement w/ 570 cuft. Circulate cement a minimum of 100' inside the previous casing string.
ENCINAL	8747	-1277	☐	TD - T/ENCN

Reference Wells:

Reference Type	Well Name	Comments
Production	SJ 27-5 UNIT-106M	27N 5W 1 SW NE NW
Production	SJ UNIT 27-5-100	27N 5W 1 NE SW SW
Production	SJ 27-5 UNIT-106N	27N 5W 1 NW SW NW

Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other

Cased Hole GR / CBL

Mudlog from 100' above top of GLLP to TD - mudlogger will call TD.

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 27-5 Unit #106P
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 7470.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7470.0ft (Original Well Elev)
Site:	San Juan 27 Wells	North Reference:	True
Well:	SJ 27-5 Unit #106P	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-5 Unit #106P		
Design:	Plan #1		

Project	San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	San Juan 27 Wells		
Site Position:		Northing:	2,032,945.19 ft
From:	Lat/Long	Easting:	677,235.72 ft
Position Uncertainty:	15.0 ft	Slot Radius:	"
		Latitude:	36° 35' 7.965 N
		Longitude:	107° 13' 46.766 W
		Grid Convergence:	0.36 °

Well:	SJ 27-5 Unit #106P, MV/DK S-Curved Directional - Short Step Out		
Well Position	+N/-S	0.0 ft	Northing: 2,038,259.17 ft
	+E/-W	0.0 ft	Easting: 652,354.89 ft
Position Uncertainty	3.0 ft	Wellhead Elevation:	ft
		Latitude:	36° 36' 1.950 N
		Longitude:	107° 18' 51.486 W
		Ground Level:	7,455.0 ft

Wellbore:	SJ 27-5 Unit #106P		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2011	9/12/2011	9.66
			Dip Angle
			(°)
			63.42
			Field Strength
			(nT)
			50,659

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			96.70

Plan Sections										
Measured	Depth	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO
	(ft)	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)
				(ft)			(°/100ft)	(°/100ft)	(°/100ft)	
	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00
	350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00
	1,269.9	18.40	96.70	1,254.1	-17.1	145.4	2.00	2.00	0.00	96.70
	4,119.6	18.40	96.70	3,958.2	-122.1	1,038.7	0.00	0.00	0.00	0.00
	4,732.9	0.00	0.00	4,561.0	-133.5	1,135.6	3.00	-3.00	0.00	180.00
	8,918.9	0.00	0.00	8,747.0	-133.5	1,135.6	0.00	0.00	0.00	0.00
										SJ 27-5 #106P - ICI
										SJ 27-5 #106P - PC

ConocoPhillips or its affiliates

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Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7470.0ft (Original Well Elev)
Site:	San Juan 27 Wells	North Reference:	True
Well:	SJ 27-5 Unit #106P	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-5 Unit #106P		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
230.0	0.00	0.00	230.0	0.0	0.0	0.0	0.00	0.00	0.00
Surface Csg									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.00	96.70	400.0	-0.1	0.4	0.4	2.00	2.00	0.00
500.0	3.00	96.70	499.9	-0.5	3.9	3.9	2.00	2.00	0.00
600.0	5.00	96.70	599.7	-1.3	10.8	10.9	2.00	2.00	0.00
700.0	7.00	96.70	699.1	-2.5	21.2	21.4	2.00	2.00	0.00
800.0	9.00	96.70	798.2	-4.1	35.0	35.3	2.00	2.00	0.00
900.0	11.00	96.70	896.6	-6.1	52.3	52.6	2.00	2.00	0.00
1,000.0	13.00	96.70	994.4	-8.6	72.9	73.4	2.00	2.00	0.00
1,100.0	15.00	96.70	1,091.5	-11.4	96.9	97.6	2.00	2.00	0.00
1,200.0	17.00	96.70	1,187.6	-14.6	124.3	125.2	2.00	2.00	0.00
1,269.9	18.40	96.70	1,254.1	-17.1	145.4	146.4	2.00	2.00	0.00
1,300.0	18.40	96.70	1,282.7	-18.2	154.9	155.9	0.00	0.00	0.00
1,400.0	18.40	96.70	1,377.6	-21.9	186.2	187.5	0.00	0.00	0.00
1,500.0	18.40	96.70	1,472.5	-25.6	217.6	219.0	0.00	0.00	0.00
1,600.0	18.40	96.70	1,567.4	-29.3	248.9	250.6	0.00	0.00	0.00
1,700.0	18.40	96.70	1,662.3	-32.9	280.2	282.2	0.00	0.00	0.00
1,800.0	18.40	96.70	1,757.2	-36.6	311.6	313.7	0.00	0.00	0.00
1,900.0	18.40	96.70	1,852.1	-40.3	342.9	345.3	0.00	0.00	0.00
2,000.0	18.40	96.70	1,947.0	-44.0	374.3	376.8	0.00	0.00	0.00
2,100.0	18.40	96.70	2,041.8	-47.7	405.6	408.4	0.00	0.00	0.00
2,200.0	18.40	96.70	2,136.7	-51.4	437.0	440.0	0.00	0.00	0.00
2,300.0	18.40	96.70	2,231.6	-55.0	468.3	471.5	0.00	0.00	0.00
2,400.0	18.40	96.70	2,326.5	-58.7	499.6	503.1	0.00	0.00	0.00
2,500.0	18.40	96.70	2,421.4	-62.4	531.0	534.6	0.00	0.00	0.00
2,502.7	18.40	96.70	2,424.0	-62.5	531.9	535.5	0.00	0.00	0.00
Nacimiento									
2,600.0	18.40	96.70	2,516.3	-66.1	562.3	566.2	0.00	0.00	0.00
2,700.0	18.40	96.70	2,611.2	-69.8	593.7	597.8	0.00	0.00	0.00
2,800.0	18.40	96.70	2,706.1	-73.5	625.0	629.3	0.00	0.00	0.00
2,900.0	18.40	96.70	2,801.0	-77.1	656.4	660.9	0.00	0.00	0.00
3,000.0	18.40	96.70	2,895.9	-80.8	687.7	692.4	0.00	0.00	0.00
3,100.0	18.40	96.70	2,990.7	-84.5	719.1	724.0	0.00	0.00	0.00
3,200.0	18.40	96.70	3,085.6	-88.2	750.4	755.6	0.00	0.00	0.00
3,300.0	18.40	96.70	3,180.5	-91.9	781.7	787.1	0.00	0.00	0.00
3,400.0	18.40	96.70	3,275.4	-95.6	813.1	818.7	0.00	0.00	0.00
3,500.0	18.40	96.70	3,370.3	-99.2	844.4	850.2	0.00	0.00	0.00
3,600.0	18.40	96.70	3,465.2	-102.9	875.8	881.8	0.00	0.00	0.00
3,700.0	18.40	96.70	3,560.1	-106.6	907.1	913.4	0.00	0.00	0.00
3,800.0	18.40	96.70	3,655.0	-110.3	938.5	944.9	0.00	0.00	0.00
3,900.0	18.40	96.70	3,749.9	-114.0	969.8	976.5	0.00	0.00	0.00
3,904.4	18.40	96.70	3,754.0	-114.1	971.2	977.9	0.00	0.00	0.00
Ojo Alamo									
4,000.0	18.40	96.70	3,844.7	-117.7	1,001.2	1,008.1	0.00	0.00	0.00
4,035.0	18.40	96.70	3,878.0	-119.0	1,012.1	1,019.1	0.00	0.00	0.00
Kirtland									
4,094.1	18.40	96.70	3,934.0	-121.1	1,030.6	1,037.7	0.00	0.00	0.00
Fruitland									

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 27-5 Unit #106P
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Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7470.0ft (Original Well Elev)
Site:	San Juan 27 Wells	North Reference:	True
Well:	SJ 27-5 Unit #106P	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-5 Unit #106P		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,100.0	18.40	96.70	3,939.6	-121.4	1,032.5	1,039.6	0.00	0.00	0.00	
4,119.6	18.40	96.70	3,958.2	-122.1	1,038.7	1,045.8	0.00	0.00	0.00	
4,200.0	15.99	96.70	4,035.0	-124.8	1,062.2	1,069.6	3.00	-3.00	0.00	
4,300.0	12.99	96.70	4,131.8	-127.8	1,087.1	1,094.6	3.00	-3.00	0.00	
4,400.0	9.99	96.70	4,229.8	-130.1	1,106.9	1,114.5	3.00	-3.00	0.00	
4,494.2	7.16	96.70	4,323.0	-131.7	1,120.8	1,128.5	3.00	-3.00	0.00	
Pictured Cliffs										
4,500.0	6.99	96.70	4,328.7	-131.8	1,121.5	1,129.2	3.00	-3.00	0.00	
4,582.7	4.50	96.70	4,411.0	-132.8	1,129.7	1,137.5	3.00	-3.00	0.00	
Lewis										
4,600.0	3.99	96.70	4,428.3	-132.9	1,131.0	1,138.8	3.00	-3.00	0.00	
4,700.0	0.99	96.70	4,528.1	-133.4	1,135.3	1,143.1	3.00	-3.00	0.00	
4,732.9	0.00	0.00	4,561.0	-133.5	1,135.6	1,143.4	3.00	-3.00	0.00	
Int Csg - SJ 27-5 #106P - ICP										
4,800.0	0.00	0.00	4,628.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,728.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,000.0	0.00	0.00	4,828.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,076.9	0.00	0.00	4,905.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Huerf. Bent.										
5,100.0	0.00	0.00	4,928.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,028.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,128.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,400.0	0.00	0.00	5,228.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,447.9	0.00	0.00	5,276.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Chacra										
5,500.0	0.00	0.00	5,328.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,428.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,528.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,628.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,728.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,828.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,100.0	0.00	0.00	5,928.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,152.9	0.00	0.00	5,981.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Upper Cliffhouse										
6,200.0	0.00	0.00	6,028.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,235.9	0.00	0.00	6,064.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Mass. Cliffhouse										
6,298.9	0.00	0.00	6,127.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Menefee										
6,300.0	0.00	0.00	6,128.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,228.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,328.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,428.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,655.9	0.00	0.00	6,484.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Pt. Lookout										
6,700.0	0.00	0.00	6,528.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,628.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,728.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,828.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,928.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,178.9	0.00	0.00	7,007.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Mancos Shale										

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 27-5 Unit #106P
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 7470.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7470.0ft (Original Well Elev)
Site:	San Juan 27 Wells	North Reference:	True
Well:	SJ 27-5 Unit #106P	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-5 Unit #106P		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
7,200.0	0.00	0.00	7,028.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,128.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,228.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,328.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,428.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,528.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,628.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
7,819.9	0.00	0.00	7,648.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Gallup										
7,900.0	0.00	0.00	7,728.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,828.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,928.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,028.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,128.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,228.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,328.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,590.9	0.00	0.00	8,419.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Greenhorn										
8,600.0	0.00	0.00	8,428.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,653.9	0.00	0.00	8,482.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Graneros										
8,691.9	0.00	0.00	8,520.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Two Wells										
8,700.0	0.00	0.00	8,528.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,781.9	0.00	0.00	8,610.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Paguete										
8,796.9	0.00	0.00	8,625.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Upper Cubero										
8,800.0	0.00	0.00	8,628.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,846.9	0.00	0.00	8,675.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Lower Cubero										
8,897.9	0.00	0.00	8,726.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Oak Canyon										
8,900.0	0.00	0.00	8,728.1	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
8,918.9	0.00	0.00	8,747.0	-133.5	1,135.6	1,143.4	0.00	0.00	0.00	
Prod Csg - SJ 27-5 #106P - PCP										

Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 27-5 #106P - ICP	- plan hits target center	0.00	0.00	4,561.0	-133.5	1,135.6	2,038,131.84	653,491.13	36° 36' 0.630 N	107° 18' 37.560 W
- Point										
SJ 27-5 #106P - PCP	- plan hits target center	0.00	0.00	8,747.0	-133.5	1,135.6	2,038,131.84	653,491.13	36° 36' 0.630 N	107° 18' 37.560 W
- Point										

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 27-5 Unit #106P
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 7470.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7470.0ft (Original Well Elev)
Site:	San Juan 27 Wells	North Reference:	True
Well:	SJ 27-5 Unit #106P	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-5 Unit #106P		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
8,653.9	8,482.0	Graneros		0.00		
6,655.9	6,484.0	Pt. Lookout		0.00		
6,298.9	6,127.0	Menefee		0.00		
8,781.9	8,610.0	Paguate		0.00		
8,796.9	8,625.0	Upper Cubero		0.00		
5,447.9	5,276.0	Chacra		0.00		
6,235.9	6,064.0	Mass. Cliffhouse		0.00		
7,178.9	7,007.0	Mancos Shale		0.00		
4,582.7	4,411.0	Lewis		0.00		
2,502.7	2,424.0	Nacimiento		0.00		
3,904.4	3,754.0	Ojo Alamo		0.00		
8,897.9	8,726.0	Oak Canyon		0.00		
7,819.9	7,648.0	Gallup		0.00		
8,590.9	8,419.0	Greenhorn		0.00		
6,152.9	5,981.0	Upper Cliffhouse		0.00		
8,846.9	8,675.0	Lower Cubero		0.00		
4,494.2	4,323.0	Pictured Cliffs		0.00		
4,094.1	3,934.0	Fruitland		0.00		
8,691.9	8,520.0	Two Wells		0.00		
5,076.9	4,905.0	Huerf. Bent.		0.00		
4,035.0	3,878.0	Kirtland		0.00		

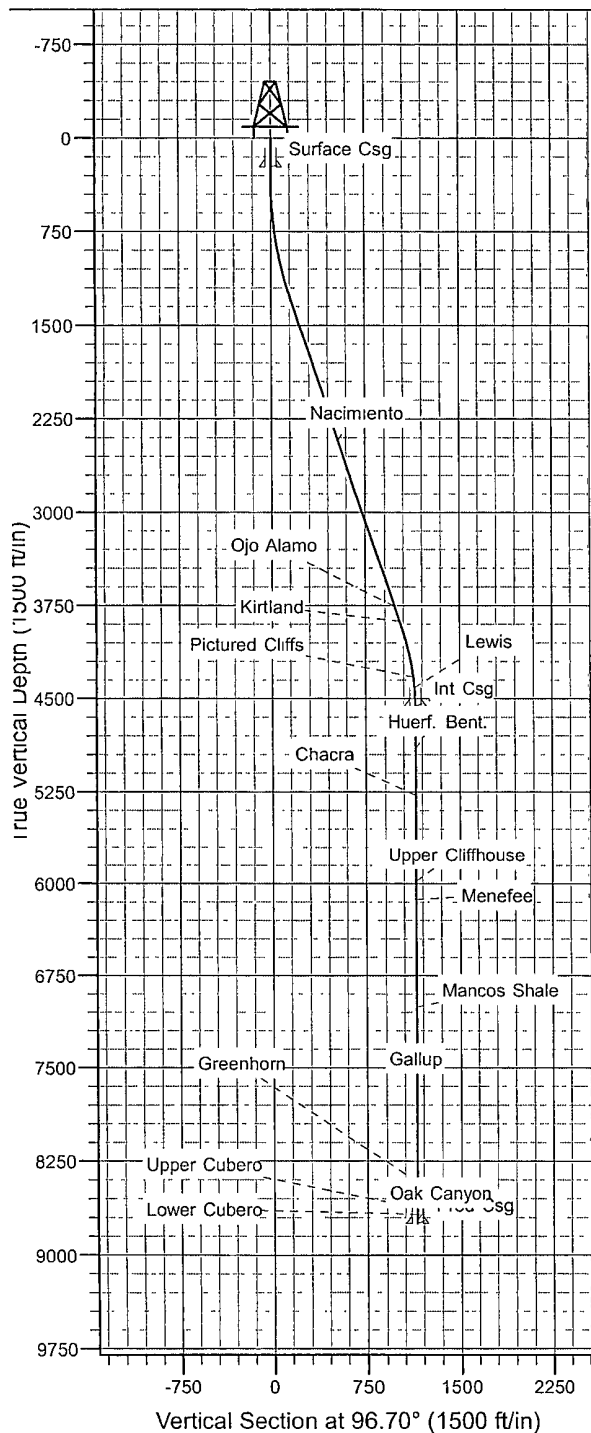
ELL @ 7470.0ft (Original Well Elev)
 round Elevation 7455.0
 Reference Lat: 36° 36' 1.950 N
 Reference Long: 107° 18' 51.486 W

Site: San Juan 27 Wells
 Well: SJ 27-5 Unit #106P
 Wellbore: SJ 27-5 Unit #106P
 Design: Plan #1



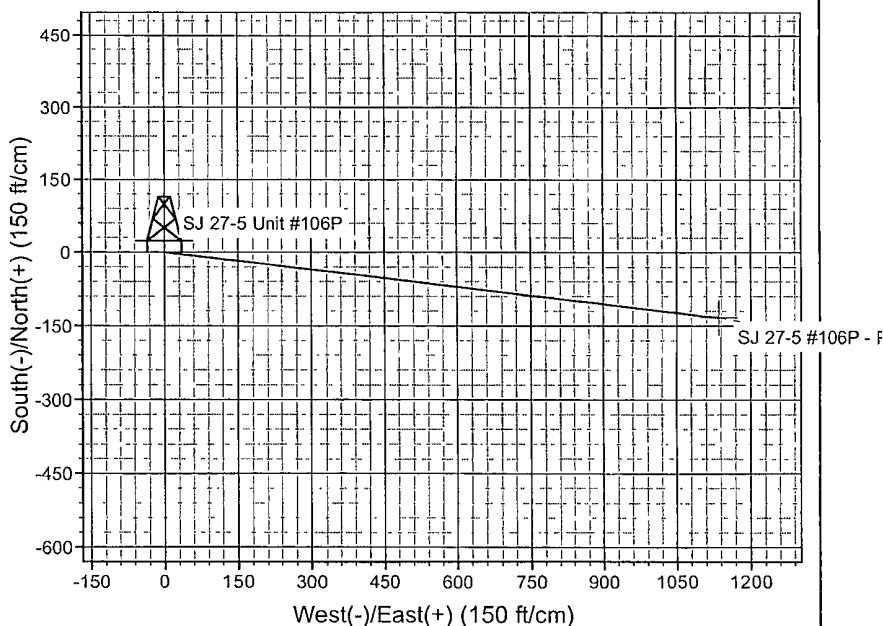
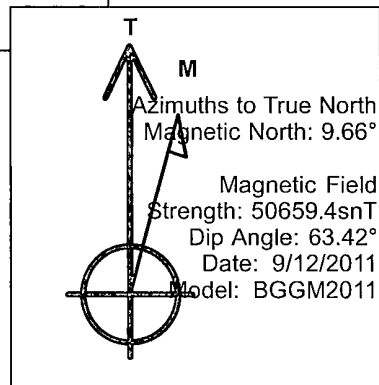
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.0	
3	1269.9	18.40	96.70	1254.1	-17.1	145.4	2.00	96.70	146.4	
4	4119.6	18.40	96.70	3958.2	-122.1	1038.7	0.00	0.00	1045.8	
5	4732.9	0.00	0.00	4561.0	-133.5	1135.6	3.00	180.00	1143.4	SJ 27-5 #106P - ICP
6	8918.9	0.00	0.00	8747.0	-133.5	1135.6	0.00	0.00	1143.4	SJ 27-5 #106P - PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2424.0	2502.7	Nacimiento
3754.0	3904.4	Ojo Alamo
3878.0	4035.0	Kirtland
3934.0	4094.1	Fruitland
4323.0	4494.2	Pictured Cliffs
4411.0	4582.7	Lewis
4905.0	5076.9	Huerf. Bent.
5276.0	5447.9	Chacra
5981.0	6152.9	Upper Cliffhouse
6064.0	6235.9	Mass. Cliffhouse
6127.0	6298.9	Menefee
6484.0	6655.9	Pt. Lookout
7007.0	7178.9	Mancos Shale
7648.0	7819.9	Gallup
8419.0	8590.9	Greenhorn
8482.0	8653.9	Graneros
8520.0	8691.9	Two Wells
8610.0	8781.9	Upper Cubero
8625.0	8796.9	Upper Cubero
8675.0	8846.9	Lower Cubero
8726.0	8897.9	Oak Canyon

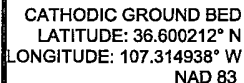


BURLINGTON RESOURCES OIL & GAS COMPANY LP

SAN JUAN 27-5 UNIT #106P, 1900' FSL & 1125' FWL

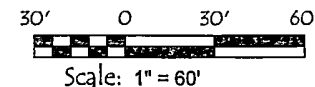
SECTION 1, T-27-N, R-5-W, N.M.P.M., RIO ARRIBA COUNTY, NM

GROUND ELEVATION: 7455', DATE: MARCH 22, 2011



1. VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

2. RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).



Directions from the Post Office
in Blanco, NM
to
Burlington Resources Oil & Gas Company LP
SAN JUAN 27-5 UNIT #106P
1900' FSL & 1125' FWL,
Section 1, T27N, R5W, N.M.P.M., Rio Arriba County,
New Mexico
Latitude: 36° 36' 01.981" N
Longitude: 107° 18' 53.646" W

Nad 83

From the Post Office in Blanco, NM
Take Highway 64 East for 27.6 miles,
To mile post 101.1,

turn right (SOUTHERLY) for 1.1 miles,
turn left (SOUTHEASTERLY) for 1.9 miles,
turn right (SOUTHERLY) for 5.1 miles on Arnorld Ranch Road,
stay right (SOUTHERLY) @ y-intersection for 1.7 miles,
towards the top of Tucker Ridge,
turn right (SOUTH-SOUTHWESTERLY) for 1.1 miles to the
newly staked well location.