

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK NOV 15 2012

1a. Type of Work DRILL	5. Lease Number SF-079295 Farmington Field Office Bureau of Land Management Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator ConocoPhillips Company	7. Unit Agreement Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name FEDERAL 9. Well Number 11N	
4. Location of Well Surface: Unit D (NW/NW), 490' FNL & 386' FWL BHL : Unit H (SE/NE), 1400' FNL & 710' FEL Surface: Latitude: 36.478422° N (NAD83) Longitude: 107.426854° W Surface: Latitude: 36.475941° N (NAD83) Longitude: 107.430597° W	10. Field, Pool, Wildcat BLANCO MV/BASIN DK 11. Sec., Twn, Rge, Mer. (NMPM) Surf: Sec. 24, T26N, R6W BHL : Sec. 23, T26N, R6W API # 30-039- 31156	
14. Distance in Miles from Nearest Town 45.2 miles from Bloomfield, NM	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 386'		
16. Acres in Lease 641.610	17. Acres Assigned to Well E/2 (320)	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease N/A		
19. Proposed Depth 7519' the section is subject to technical and procedural review pursuant to 43 CFR 3185.3 and appeal pursuant to 43 CFR 3185.4	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6673' GL	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: Marie E. Jaramillo (Staff Regulatory Tech)	11/15/12 Date	

for Directional Survey
and "As Drilled" plat

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

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 to any department or agency of the United States 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

NMOCDA

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

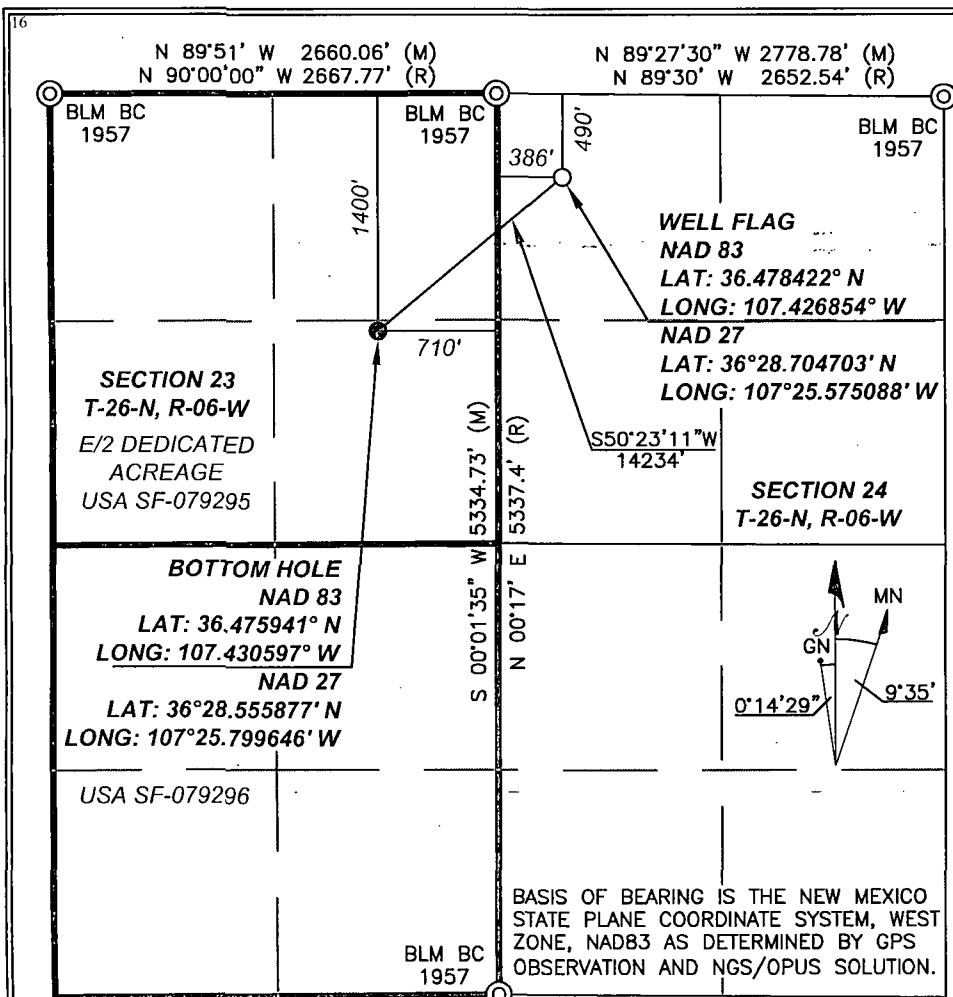
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039- 31156		² Pool Code 72319/71599		³ Pool Name BLANCO MESAVERDE / BASIN DAKOTA	
⁴ Property Code 31535		⁵ Property Name FEDERAL			⁶ Well Number 11N
⁷ OGRID No. 217817		⁸ Operator Name CONOCOPHILLIPS COMPANY			⁹ Elevation 6673

¹⁰ SURFACE LOCATION									
UL or lot no. D	Section 24	Township 26-N	Range 6-W	Lot Idn	Feet from the 490	North/South line NORTH	Feet from the 386	East/West line WEST	County RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. H	Section 23	Township 26-N	Range 6-W	Lot Idn	Feet from the 1400	North/South line NORTH	Feet from the 710	East/West line EAST	County RIO ARRIBA
¹² Dedicated Acres E/2(320)		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. RCVD DEC 17 '12 OIL CONS. DIV.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.
DIST. 3



17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Arleen White 12/17/12
Signature Date
Arleen White
Printed Name
E-mail Address

18 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.

Date of Survey: 07/25/2012
Signature and Seal of Professional Surveyor:

HENRY P. BROADHURST
NEW MEXICO
11393
PROFESSIONAL SURVEYOR

Certificate Number: NM 11393

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

FEDERAL 11N

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1135				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 920		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: 36.478412		Longitude: -107.426251		X:	Y:	Section: 24	Range: 006W
Footage X: 386 FWL		Footage Y: 490 FNL		Elevation: 6673 (FT)		Township: 026N	
Tolerance:							
Location: Bottom Hole				Datum Code: NAD 27		Directional	
Latitude: 36.475931		Longitude: -107.429994		X:	Y:	Section: 23	Range: 006W
Footage X: 710 FEL		Footage Y: 1400 FNL		Elevation: (FT)		Township: 026N	
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6688 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	15	6673		☐			
Surface Casing	300 290	6488		☐	46		12-1/4 hole. 300' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 150 cuft. Circulate cement to surface.
NACIMIENTO	1067	5621		☐			
OJO ALAMO	2437	4251		☐			
KIRTLAND	2608	4080		☐			
FRUITLAND	2684	4004		☐			Possible Gas
PICTURED CLIFFS	3045	3643		☐	469		
LEWIS	3169	3519		☐		103	
HUERFANITO BENTONITE	3502	3186		☐			
CHACRA	3933	2755		☐			
UPPER CLIFF HOUSE	4642	2046		☐			
MASSIVE CLIFF HOUSE	4712	1976		☐	671		Gas - Wet in this area
MENEFEE	4766	1922		☐			Gas - Est top MV perf 4796' tvd (~30' below T/MENF).
Intermediate Casing	4905	1783		☐		133	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1084 cuft. Circulate cement to surface.
POINT LOOKOUT	5282	1406		☐			Gas - Est bot MV perf 5452' tvd (~170' below T/PNLK).
MANCOS	5625	1063		☐			
UPPER GALLUP	6352	336		☐			
GREENHORN	7191	-503		☐			
GRANEROS	7244	-556		☐			
TWO WELLS	7272	-584		☐	2142	180	Gas - Est top DK perf 7282' tvd (~10' below T/TWLS).
PAGUATE	7392	-704		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

FEDERAL 11N

DEVELOPMENT

UPPER CUBERO	7424	-736	☐	Gas
LOWER CUBERO	7432	-744	☐	Gas
OAK CANYON	7459	-771	☐	Gas - Est bot DK perf 7499' tvd (~40' below T/OKCN).
Total Depth	7519	-831	☐	185 6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC/BTC casing. Cement w/ 354 cuft. Circulate cement a minimum of 100' inside the previous casing string.
ENCINAL	7520	-832	☐	
BURRO CANYON	7584	-896	☐	Gas
MORRISON	7615	-927	☐	Lost Circulation in Federal 12N

Reference Wells:		
Reference Type	Well Name	Comments
Production	FEDERAL 11	

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

TD Logs:	☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other
GR/CBL.	
Mud log ~100' above the Gallup down to TD.	
Mudlogger will call TD.	
Est bot DK perf ~20' above TD.	

Additional Information:					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

ConocoPhillips

Survey Report

Company:	ConocoPhillips SJBU	Local Co-ordinate Reference:	Well Federal #11N
Project:	San Juan Basin - New Mexico Central Wells	TVD Reference:	KB @ 6688.0usft (AD 920)
Site:	Other Named Wells	MD Reference:	KB @ 6688.0usft (AD 920)
Well:	Federal #11N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	APD Plan #1	Database:	EDM Central Planning

Project	San Juan Basin - New Mexico Central 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 Central 3002	Using geodetic scale factor	

Site	Other Named Wells				
Site Position:		Northing:	2,023,165.86usft	Latitude:	36° 33' 10.767 N
From:	Lat/Long	Easting:	112,158.73usft	Longitude:	107° 34' 13.630 W
Position Uncertainty:	3.5 usft	Slot Radius:	6-1/8"	Grid Convergence:	-0.79 °

Well	Federal #11N					
Well Position	+N/-S	0.0 usft	Northing:	1,995,465.86 usft	Latitude:	36° 28' 42.282 N
	+E/-W	0.0 usft	Easting:	154,183.46 usft	Longitude:	107° 25' 34.505 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,673.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	10/10/2012	9.56	63.25	50,451

Design	APD Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	230.63

Survey Tool Program	Date	10/11/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	7,802.7	APD Plan #1 (Original Hole)		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
420.0	0.00	0.00	420.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	2.40	230.63	500.0	-1.1	-1.3	1.7	3.00	3.00	0.00	
600.0	5.40	230.63	599.7	-5.4	-6.6	8.5	3.00	3.00	0.00	
700.0	8.40	230.63	699.0	-13.0	-15.8	20.5	3.00	3.00	0.00	
800.0	11.40	230.63	797.5	-23.9	-29.1	37.7	3.00	3.00	0.00	
900.0	14.40	230.63	895.0	-38.1	-46.4	60.0	3.00	3.00	0.00	
1,000.0	17.40	230.63	991.1	-55.4	-67.6	87.4	3.00	3.00	0.00	
1,100.0	20.40	230.63	1,085.7	-76.0	-92.6	119.8	3.00	3.00	0.00	

ConocoPhillips

Survey Report

Company:	ConocoPhillips SJB	Local Co-ordinate Reference:	Well Federal #11N
Project:	San Juan Basin - New Mexico Central Wells	TVD Reference:	KB @ 6688.0usft (AD 920)
Site:	Other Named Wells	MD Reference:	KB @ 6688.0usft (AD 920)
Well:	Federal #11N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	APD Plan #1	Database:	EDM Central Planning

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,200.0	23.40	230.63	1,178.5	-99.6	-121.4	157.1	3.00	3.00	0.00
1,226.4	24.19	230.63	1,202.6	-106.4	-129.7	167.7	3.00	3.00	0.00
1,300.0	24.19	230.63	1,269.8	-125.5	-153.0	197.9	0.00	0.00	0.00
1,400.0	24.19	230.63	1,361.0	-151.5	-184.7	238.9	0.00	0.00	0.00
1,500.0	24.19	230.63	1,452.2	-177.5	-216.3	279.8	0.00	0.00	0.00
1,600.0	24.19	230.63	1,543.4	-203.5	-248.0	320.8	0.00	0.00	0.00
1,700.0	24.19	230.63	1,634.7	-229.5	-279.7	361.8	0.00	0.00	0.00
1,800.0	24.19	230.63	1,725.9	-255.5	-311.4	402.8	0.00	0.00	0.00
1,900.0	24.19	230.63	1,817.1	-281.5	-343.1	443.8	0.00	0.00	0.00
2,000.0	24.19	230.63	1,908.3	-307.5	-374.7	484.7	0.00	0.00	0.00
2,100.0	24.19	230.63	1,999.5	-333.5	-406.4	525.7	0.00	0.00	0.00
2,200.0	24.19	230.63	2,090.7	-359.5	-438.1	566.7	0.00	0.00	0.00
2,300.0	24.19	230.63	2,182.0	-385.5	-469.8	607.7	0.00	0.00	0.00
2,400.0	24.19	230.63	2,273.2	-411.5	-501.4	648.7	0.00	0.00	0.00
2,500.0	24.19	230.63	2,364.4	-437.5	-533.1	689.6	0.00	0.00	0.00
2,600.0	24.19	230.63	2,455.6	-463.5	-564.8	730.6	0.00	0.00	0.00
2,700.0	24.19	230.63	2,546.8	-489.5	-596.5	771.6	0.00	0.00	0.00
2,800.0	24.19	230.63	2,638.1	-515.5	-628.2	812.6	0.00	0.00	0.00
2,900.0	24.19	230.63	2,729.3	-541.4	-659.8	853.6	0.00	0.00	0.00
3,000.0	24.19	230.63	2,820.5	-567.4	-691.5	894.5	0.00	0.00	0.00
3,100.0	24.19	230.63	2,911.7	-593.4	-723.2	935.5	0.00	0.00	0.00
3,200.0	24.19	230.63	3,002.9	-619.4	-754.9	976.5	0.00	0.00	0.00
3,300.0	24.19	230.63	3,094.1	-645.4	-786.6	1,017.5	0.00	0.00	0.00
3,400.0	24.19	230.63	3,185.4	-671.4	-818.2	1,058.5	0.00	0.00	0.00
3,500.0	24.19	230.63	3,276.6	-697.4	-849.9	1,099.4	0.00	0.00	0.00
3,600.0	24.19	230.63	3,367.8	-723.4	-881.6	1,140.4	0.00	0.00	0.00
3,700.0	24.19	230.63	3,459.0	-749.4	-913.3	1,181.4	0.00	0.00	0.00
3,800.0	24.19	230.63	3,550.2	-775.4	-945.0	1,222.4	0.00	0.00	0.00
3,900.0	24.19	230.63	3,641.5	-801.4	-976.6	1,263.3	0.00	0.00	0.00
3,983.9	24.19	230.63	3,718.0	-823.2	-1,003.2	1,297.7	0.00	0.00	0.00
4,000.0	23.55	230.63	3,732.7	-827.3	-1,008.3	1,304.2	4.00	-4.00	0.00
4,100.0	19.55	230.63	3,825.7	-850.6	-1,036.6	1,341.0	4.00	-4.00	0.00
4,200.0	15.55	230.63	3,921.0	-869.8	-1,059.9	1,371.1	4.00	-4.00	0.00
4,300.0	11.55	230.63	4,018.2	-884.6	-1,078.1	1,394.5	4.00	-4.00	0.00
4,400.0	7.55	230.63	4,116.8	-895.1	-1,090.9	1,411.1	4.00	-4.00	0.00
4,500.0	3.55	230.63	4,216.3	-901.3	-1,098.3	1,420.8	4.00	-4.00	0.00
4,588.7	0.00	0.00	4,305.0	-903.0	-1,100.5	1,423.5	4.00	-4.00	0.00
4,600.0	0.00	0.00	4,316.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
4,700.0	0.00	0.00	4,416.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
4,800.0	0.00	0.00	4,516.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
4,900.0	0.00	0.00	4,616.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,000.0	0.00	0.00	4,716.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,100.0	0.00	0.00	4,816.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,188.7	0.00	0.00	4,905.0	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,200.0	0.00	0.00	4,916.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,300.0	0.00	0.00	5,016.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,400.0	0.00	0.00	5,116.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,500.0	0.00	0.00	5,216.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,600.0	0.00	0.00	5,316.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,700.0	0.00	0.00	5,416.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,516.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
5,900.0	0.00	0.00	5,616.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,716.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,100.0	0.00	0.00	5,816.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	ConocoPhillips SJB	Local Co-ordinate Reference:	Well Federal #11N
Project:	San Juan Basin - New Mexico Central Wells	TVD Reference:	KB @ 6688.0usft (AD 920)
Site:	Other Named Wells	MD Reference:	KB @ 6688.0usft (AD 920)
Well:	Federal #11N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	APD Plan #1	Database:	EDM Central Planning

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,200.0	0.00	0.00	5,916.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,016.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,116.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,216.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,316.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,700.0	0.00	0.00	6,416.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,516.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,616.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,716.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,100.0	0.00	0.00	6,816.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,200.0	0.00	0.00	6,916.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,300.0	0.00	0.00	7,016.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,116.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,216.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,316.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,416.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,516.3	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00
7,802.7	0.00	0.00	7,519.0	-903.0	-1,100.5	1,423.5	0.00	0.00	0.00

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
ICP	0.00	0.24	4,905.0	-903.0	-1,100.5	1,994,576.32	153,072.01	36° 28' 33.353 N	107° 25' 47.979 W
- plan hits target center									
- Circle (radius 1.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
300 320.0	300 320.0	32.3# H-40 STC Surf CSG	9-5/8	12-1/4
5,188.7	4,905.0	23# J-55 LTC INT CSG	7	8-3/4
7,802.7	7,519.0	11.6# L-80 LTC Prod CSG	4-1/2	6-1/4

ConocoPhillips

Survey Report

Company:	ConocoPhillips SJB	Local Co-ordinate Reference:	Well Federal #11N
Project:	San Juan Basin - New Mexico Central Wells	TVD Reference:	KB @ 6688.0usft (AD 920)
Site:	Other Named Wells	MD Reference:	KB @ 6688.0usft (AD 920)
Well:	Federal #11N	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	APD Plan #1	Database:	EDM Central Planning

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
15.0	15.0	San Jose		0.00	
1,080.1	1,067.0	Nacimiento		0.00	
2,579.6	2,437.0	Ojo Alamo		0.00	
2,767.0	2,608.0	Kirtland		0.00	
2,850.4	2,684.0	Fruitland		0.00	
3,246.1	3,045.0	Picture Cliffs		0.00	
3,382.1	3,169.0	Lewis		0.00	
3,747.1	3,502.0	Huerfanito Bentonite		0.00	
4,212.4	3,933.0	Chacra		0.00	
4,925.7	4,642.0	Upper Cliff House		0.00	
5,049.7	4,766.0	Menefee		0.00	
5,565.7	5,282.0	Point Lookout		0.00	
5,908.7	5,625.0	Mancos		0.00	
6,635.7	6,352.0	Upper Gallup		0.00	
7,474.7	7,191.0	Greenhorn		0.00	
7,527.7	7,244.0	Graneros		0.00	
7,555.7	7,272.0	Two Wells		0.00	
7,675.7	7,392.0	Paguate		0.00	
7,707.7	7,424.0	Upper Cubero		0.00	
7,715.7	7,432.0	Lower Cubero		0.00	
7,742.7	7,459.0	Oak Canyon		0.00	

Checked By: _____	Approved By: _____	Date: _____
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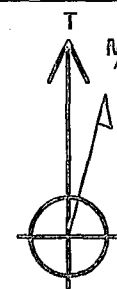
KB @ 6688.0usft (AD 920)
 Ground Elevation 6673.0
 Reference Lat: 36° 28' 42.282 N
 Reference Long: 107° 25' 34.505 W

Project: San Juan Basin - New Mexico Central
 Site: Other Named Wells
 Well: Federal #11N
 Wellbore: Original Hole
 Design: APD Plan #1

ConocoPhillips

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	420.0	0.00	0.00	420.0	0.0	0.0	0.00	0.00	0.0	
3	1226.4	24.19	230.63	1202.6	-106.4	-129.7	3.00	230.63	167.7	
4	3983.9	24.19	230.63	3718.0	-823.2	-1003.2	0.00	0.00	1297.7	
5	4588.7	0.00	0.00	4305.0	-903.0	-1100.5	4.00	180.00	1423.5	
6	5188.7	0.00	0.00	4905.0	-903.0	-1100.5	0.00	0.00	1423.5	ICP
7	7802.7	0.00	0.00	7519.0	-903.0	-1100.5	0.00	0.00	1423.5	



Azimuths to True North
 Magnetic North: 9.56°

Magnetic Field
 Strength: 50451.0snT
 Dip Angle: 63.25°
 Date: 10/10/2012
 Model: BGGM2012

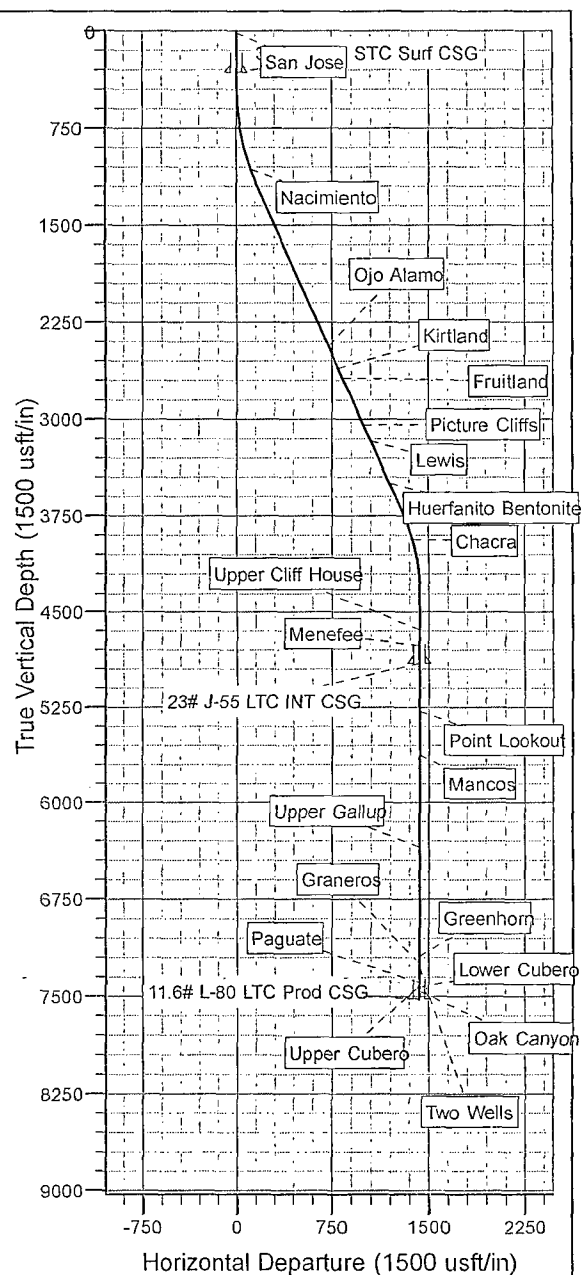
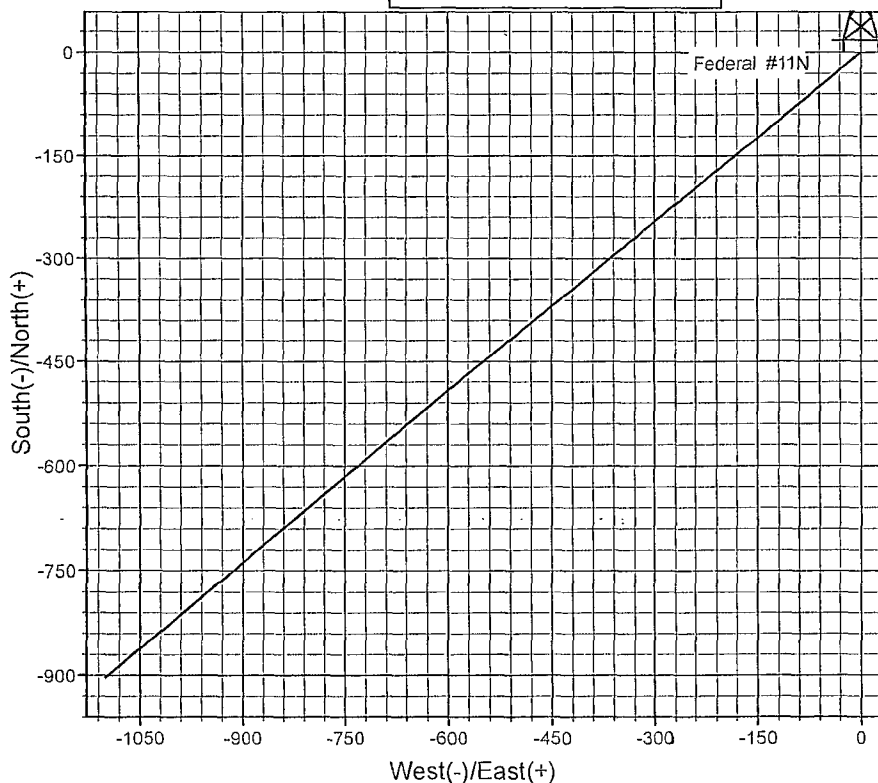
FORMATION TOP DETAILS

IVDPath	MDPath	Formation
15.0	15.0	San Jose
1067.0	1080.1	Nacimiento
2437.0	2579.6	Ojo Alamo
2608.0	2767.0	Kirtland
2684.0	2850.4	Fruitland
3045.0	3246.1	Picture Cliffs
3169.0	3382.1	Lewis
3502.0	3747.0	Huerfano Bentonite
3933.0	4212.4	Chacra
4642.0	4925.0	Upper Cliff House
4766.0	5049.7	Menefee
5282.0	5565.7	Point Lookout
5625.0	5908.7	Mancos
6352.0	6635.7	Upper Gallup
7191.0	7474.7	Greenhorn
7244.0	7527.7	Graneros
7272.0	7555.7	Two Wells
7392.0	7675.7	Paguate
7424.0	7707.7	Upper Cubero
7432.0	7715.7	Lower Cubero
7459.0	7742.7	Oak Canyon

CASING DETAILS

TVD	MD	Name	Size
320.0	320.0	32.3# H-40 STC Surf CSG	9-5/8
4905.0	5188.7	23# J-55 LTC INT CSG	7
7519.0	7802.7	11.6# L-80 LTC Prod CSG	4-1/2

Cement Details in Geo Prog



CONOCOPHILLIPS COMPANY

FEDERAL 11N

490' FNL, 386' FWL

SECTION 24, T-26-N, R-6-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

NAD 83 LAT.: 36.478422° N LONG.: 107.426854° W

NAD 83 LAT.: 36°28'42.3196 N LONG.: 107°25'36.6757 W

ELEV.: 6673 NAVD88

153' NEW ACCESS

FROM BLOOMFIELD, NEW MEXICO:

- GO 1.0 MILE SOUTH ON HWY. 550 AND TURN LEFT (EAST) ON SULLIVAN ROAD, C.R. 4990.
- GO 15.0 MILES EAST TO THE INTERSECTION BY 5MI.BRIDGE.
- CONTINUE 21 MILES SOUTHEAST TO OLD LARGO SCHOOL. STAY LEFT TO CROSS BRIDGE.
- GO 3.6 MILES NORTHEAST UP THRU "ICE CANYON" AND TURN RIGHT (EAST) JUST PAST THE CORRALS.
- GO 0.2 MILES EAST. TURN RIGHT.
- GO 1.8 MILES SOUTHEAST AND STAY LEFT.
- GO 0.8 MILES EAST. TURN RIGHT (SOUTH).
- GO 0.5 MILES. TURN LEFT (EAST).
- GO 0.9 MILES. TURN RIGHT.
- GO 0.4 MILES SOUTH. BEGIN 153' NEW ACCESS ON RIGHT, (50 FEET NORTH OF METER OUT SANCHEZ #1 WELL).