

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 08 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Farmington Field Office
Bureau of Land Management

1a. Type of Work DRILL	5. Lease Number SF-080538 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator ConocoPhillips Company	7. Unit Agreement Name DK-OPA MV-NMNM784194 San Juan 30-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 30-5 Unit 9. Well Number 8P	
4. Location of Well Surface: Unit H(ENE), 2288' FNL & 723' FEL BHL: Unit I(NESE), 1445' FSL & 710' FEL Surface: Latitude: 36.828120° N (NAD83) Longitude: 107.320172° W BHL: Latitude: 36.823870° N (NAD83) Longitude: 107.320116° W	10. Field, Pool, Wildcat Blanco MV / Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 11, T30N, R5W API # 30-039- 31050	
14. Distance in Miles from Nearest Town 59.6 miles from Bloomfield, NM	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 710'	17. Acres Assigned to Well 320.00 acres E/2	
16. Acres in Lease 1886.390 acres		
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 71.6' SJ 30-5 Unit 8N-8M (MV/DK)	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 8311' This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4		
21. Elevations (DF, FT, GR, Etc.) 6809' 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	Date <u>April 7, 2011</u>	
24. Authorized by: <u>Dollie L. Busse</u> Dollie L. Busse (Staff Regulatory Tech.)		

Hold C104
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 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 ES-0048 and ES-0085

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

A NMOC

SEP 18 2012 ca

APPROVAL OF THIS
OPERATOR 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

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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

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 October 12, 2005

Submit to Appropriate District Office

State Lease - 7 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31050		² Pool Code 71599 / 72319		³ Pool Name BASIN DAKOTA / BLANCO MESAVERDE	
⁴ Property Code 31327		⁵ Property Name SAN JUAN 30-5 UNIT			⁶ Well Number 8P
⁷ OGRID No. 217817		⁸ Operator Name CONOCOPHILLIPS COMPANY			⁹ Elevation 6809

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
H	11	30-N	5-W		2288	NORTH	723	EAST	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
I	11	30-N	5-W		1445	SOUTH	710	EAST	RIO ARRIBA

¹² Dedicated Acres 320.00 (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

¹⁶ GLO 1916 BASIS OF BEARING IS THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION AND NGS/OPUS SOLUTION.	N 89°53'22" W N 89°46' E		5269.1' (M) 5260.2' (R)	GLO 1916
			2288'	2640.0' (R) 2636.1' (M)
	WELL FLAG NAD 83 LAT: 36.828120° N LONG: 107.320172° W NAD 27 LAT: 36°49.686808' N LONG: 107°19.174301' W	E/2 DEDICATED ACREAGE USA SF-080538 SECTION 11, T-30-N, R-5-W		0°03' E 0°25'48" W N Z
			723'	
			S 0°55'10" E 1547.1'	GLO 1916
				2640.0' (R) 2643.8' (M)
BOTTOM HOLE NAD 83 LAT: 36.823870° N LONG: 107.320116° W NAD 27 LAT: 36°49.431846' N LONG: 107°19.170911' W			710'	
			1445'	0°03' E 0°25'48" W N N
GLO 1916 N 89°40' E N 89°53'20" W			5266.1' (R) 5280.7' (M)	GLO 1916

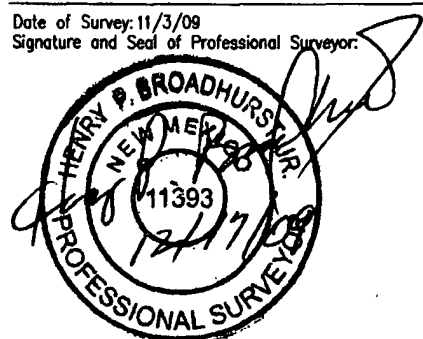
¹⁷ OPERATOR CERTIFICATION

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

Crystal Tafuya 1/13/2010
Signature
Crystal Tafuya
Printed Name
Regulatory Technician
Title and E-mail Address
January 13, 2010
Date

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: 11/3/09
Signature and Seal of Professional Surveyor:


Certificate Number: NM 11393

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 30-5 UNIT 8P

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9360				AFE \$: 1,103,884.44	
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						
RON	BLANCO MESAVERDE (PRORATED GAS)						
FRR	BASIN DAKOTA (PRORATED GAS)						
Location: Surface							
Datum Code: NAD 27		Directional					
Latitude: 36.828113	Longitude: -107.319571	X:	Y:	Section: 11		Range: 005W	
Footage X: 723 FEL	Footage Y: 2288 FNL	Elevation: 6809	(FT)	Township: 030N			
Tolerance:							
Location: Bottom Hole							
Datum Code: NAD 27		Directional					
Latitude: 36.823863	Longitude: -107.319515	X:	Y:	Section: 11		Range: 005W	
Footage X: 710 FEL	Footage Y: 1445 FSL	Elevation:	(FT)	Township: 030N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6825 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	230	6595		☐			12-1/4 hole. 230' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	1650	5175		☐			
OJO ALAMO	2896	3929		☐			
KIRTLAND	3105	3720		☐			
FRUITLAND	3202	3623		☐			Possible Gas
PICTURED CLIFFS	3768	3057		☐			
LEWIS	3839	2986		☐			
Intermediate Casing	3939	2886		☐			124 8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 980 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	4563	2262		☐			
CHACRA	4919	1906		☐			
UPPER CLIFF HOUSE	5481	1344		☐			Gas; Est. Top Perf - 5482 (1342)
MASSIVE CLIFF HOUSE	5763	1062		☐	604		Gas; Cliffhouse is dry
MENEFEE	5814	1011		☐			
POINT LOOKOUT	5985	840		☐			
MANCOS	6435	390		☐			
UPPER GALLUP	7299	-474		☐			
GREENHORN	8019	-1194		☐			
GRANEROS	8064	-1239		☐			
TWO WELLS	8176	-1351		☐	3180		Gas
PAGUATE	8188	-1363		☐			
UPPER CUBERO	8197	-1372		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 30-5 UNIT 8P

DEVELOPMENT

LOWER CUBERO	8237	-1412	☐	Est. Btm Perf - 8295 (- 1471) based on offset wells
ENCINAL	8311	-1486	☐	TD - T/ENCN
Total Depth	8311	-1486	☐	219 6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 595 cuft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:

Reference Type	Well Name	Comments
Production	SCHALK 1-57	30N 5W 12 SW NE NW
Production	SJ 30-5 113	30N 5W 11 SW NE SW
Production	SJ 30-5 112	30N 5W 12 NE SW SE

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
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico Wells
Site: San Juan 30 Wells
Well: SJ 30-5 #8P
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 30-5 #8P
TVD Reference: RKB @ 6825.0ft (H&P RIGS)
MD Reference: RKB @ 6825.0ft (H&P RIGS)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: San Juan Basin - New Mexico Wells, New Mexico, Directional "S"

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico West 3003

System Datum: Mean Sea Level
Using geodetic scale factor

Site: San Juan 30 Wells

Site Position: Northing: 2,113,682.53 ft Latitude: 36° 48' 28.968 N
From: Lat/Long Easting: 628,365.80 ft Longitude: 107° 23' 41.454 W
Position Uncertainty: 15.0 ft Slot Radius: " Grid Convergence: 0.26 °

Well: SJ 30-5 #8P, Directional "S" Curve, Lewis not included

Well Position: +N/-S 0.0 ft Northing: 2,121,097.58 ft Latitude: 36° 49' 41.208 N
+E/-W 0.0 ft Easting: 650,363.82 ft Longitude: 107° 19' 10.458 W
Position Uncertainty: 3.5 ft Wellhead Elevation: ft Ground Level: 6,809.0 ft

Wellbore: Principal Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	8/9/2010	9.81	63.68	50,926

Design: Plan #1

Audit Notes:

Version: 1 Phase: PROTOTYPE Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	179.39

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,474.4	34.63	179.39	1,405.4	-338.4	3.6	3.00	3.00	0.00	179.39	
3,154.7	34.63	179.39	2,788.0	-1,293.3	13.8	0.00	0.00	0.00	0.00	
4,020.5	0.00	0.00	3,602.0	-1,547.0	16.5	4.00	-4.00	0.00	180.00	SJ 30-5 #8P - VACP
4,357.5	0.00	0.00	3,939.0	-1,547.0	16.5	0.00	0.00	0.00	0.00	SJ 30-5 #8P - ICP
8,729.5	0.00	0.00	8,311.0	-1,547.0	16.5	0.00	0.00	0.00	0.00	SJ 30-5 #8P - PCP

ConocoPhillips or its affiliates

Planning Report

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Site: San Juan 30 Wells
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TVD Reference: RKB @ 6825 0ft (H&P RIGS)
MD Reference: RKB @ 6825 0ft (H&P RIGS)
North Reference: True
Survey Calculation Method: Minimum Curvature

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
Surf									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.40	179.39	400.0	-1.7	0.0	1.7	3.00	3.00	0.00
500.0	5.40	179.39	499.7	-8.5	0.1	8.5	3.00	3.00	0.00
600.0	8.40	179.39	599.0	-20.5	0.2	20.5	3.00	3.00	0.00
700.0	11.40	179.39	697.5	-37.7	0.4	37.7	3.00	3.00	0.00
800.0	14.40	179.39	795.0	-60.0	0.6	60.0	3.00	3.00	0.00
900.0	17.40	179.39	891.1	-87.4	0.9	87.4	3.00	3.00	0.00
1,000.0	20.40	179.39	985.7	-119.8	1.3	119.8	3.00	3.00	0.00
1,100.0	23.40	179.39	1,078.5	-157.1	1.7	157.1	3.00	3.00	0.00
1,200.0	26.40	179.39	1,169.2	-199.2	2.1	199.2	3.00	3.00	0.00
1,300.0	29.40	179.39	1,257.6	-245.9	2.6	246.0	3.00	3.00	0.00
1,400.0	32.40	179.39	1,343.4	-297.3	3.2	297.3	3.00	3.00	0.00
1,474.4	34.63	179.39	1,405.4	-338.4	3.6	338.4	3.00	3.00	0.00
1,500.0	34.63	179.39	1,426.4	-352.9	3.8	352.9	0.00	0.00	0.00
1,600.0	34.63	179.39	1,508.7	-409.7	4.4	409.8	0.00	0.00	0.00
1,700.0	34.63	179.39	1,591.0	-466.6	5.0	466.6	0.00	0.00	0.00
1,771.7	34.63	179.39	1,650.0	-507.3	5.4	507.3	0.00	0.00	0.00
Nacimiento									
1,800.0	34.63	179.39	1,673.3	-523.4	5.6	523.4	0.00	0.00	0.00
1,900.0	34.63	179.39	1,755.6	-580.2	6.2	580.3	0.00	0.00	0.00
2,000.0	34.63	179.39	1,837.9	-637.1	6.8	637.1	0.00	0.00	0.00
2,100.0	34.63	179.39	1,920.1	-693.9	7.4	693.9	0.00	0.00	0.00
2,200.0	34.63	179.39	2,002.4	-750.7	8.0	750.8	0.00	0.00	0.00
2,300.0	34.63	179.39	2,084.7	-807.5	8.6	807.6	0.00	0.00	0.00
2,400.0	34.63	179.39	2,167.0	-864.4	9.2	864.4	0.00	0.00	0.00
2,500.0	34.63	179.39	2,249.3	-921.2	9.8	921.3	0.00	0.00	0.00
2,600.0	34.63	179.39	2,331.5	-978.0	10.4	978.1	0.00	0.00	0.00
2,700.0	34.63	179.39	2,413.8	-1,034.9	11.0	1,034.9	0.00	0.00	0.00
2,800.0	34.63	179.39	2,496.1	-1,091.7	11.6	1,091.7	0.00	0.00	0.00
2,900.0	34.63	179.39	2,578.4	-1,148.5	12.3	1,148.6	0.00	0.00	0.00
3,000.0	34.63	179.39	2,660.7	-1,205.3	12.9	1,205.4	0.00	0.00	0.00
3,100.0	34.63	179.39	2,742.9	-1,262.2	13.5	1,262.2	0.00	0.00	0.00
3,154.7	34.63	179.39	2,788.0	-1,293.3	13.8	1,293.3	0.00	0.00	0.00
3,200.0	32.82	179.39	2,825.6	-1,318.4	14.1	1,318.5	4.00	-4.00	0.00
3,282.3	29.53	179.39	2,896.0	-1,361.0	14.5	1,361.1	4.00	-4.00	0.00
Ojo Alamo									
3,300.0	28.82	179.39	2,911.5	-1,369.6	14.6	1,369.7	4.00	-4.00	0.00
3,400.0	24.82	179.39	3,000.7	-1,414.7	15.1	1,414.8	4.00	-4.00	0.00
3,500.0	20.82	179.39	3,092.9	-1,453.5	15.5	1,453.6	4.00	-4.00	0.00
3,513.0	20.30	179.39	3,105.0	-1,458.1	15.6	1,458.1	4.00	-4.00	0.00
Kirtland									
3,564.9	18.23	179.39	3,154.0	-1,475.2	15.7	1,475.3	4.00	-4.00	0.00
Stage Tool									
3,600.0	16.82	179.39	3,187.5	-1,485.8	15.9	1,485.8	4.00	-4.00	0.00
3,615.1	16.22	179.39	3,202.0	-1,490.1	15.9	1,490.1	4.00	-4.00	0.00
Fruitland									
3,700.0	12.82	179.39	3,284.2	-1,511.3	16.1	1,511.4	4.00	-4.00	0.00

ConocoPhillips or its affiliates
Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico Wells
Site: San Juan 30 Wells
Well: SJ 30-5 #8P
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 30-5 #8P
TVD Reference: RKB @ 6825 0ft (H&P RIGS)
MD Reference: RKB @ 6825 0ft (H&P RIGS)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
3,800.0	8.82	179.39	3,382.4	-1,530.1	16.3	1,530.2	4.00	-4.00	0.00
3,900.0	4.82	179.39	3,481.6	-1,542.0	16.5	1,542.1	4.00	-4.00	0.00
4,000.0	0.82	179.39	3,581.5	-1,546.9	16.5	1,547.0	4.00	-4.00	0.00
4,020.5	0.00	0.00	3,602.0	-1,547.0	16.5	1,547.1	4.00	-4.00	-874.48
SJ 30-5 #8P - VACP									
4,100.0	0.00	0.00	3,681.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,186.5	0.00	0.00	3,768.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Pictured Cliffs									
4,200.0	0.00	0.00	3,781.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,257.5	0.00	0.00	3,839.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Lewis									
4,300.0	0.00	0.00	3,881.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,357.5	0.00	0.00	3,939.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Int - SJ 30-5 #8P - ICP									
4,400.0	0.00	0.00	3,981.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,500.0	0.00	0.00	4,081.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,600.0	0.00	0.00	4,181.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,700.0	0.00	0.00	4,281.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,800.0	0.00	0.00	4,381.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,900.0	0.00	0.00	4,481.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
4,981.5	0.00	0.00	4,563.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Huerfano Bentonite									
5,000.0	0.00	0.00	4,581.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,100.0	0.00	0.00	4,681.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,200.0	0.00	0.00	4,781.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,300.0	0.00	0.00	4,881.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,337.5	0.00	0.00	4,919.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Chacra									
5,400.0	0.00	0.00	4,981.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,500.0	0.00	0.00	5,081.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,181.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,281.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,381.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
5,899.5	0.00	0.00	5,481.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Upper Cliffhouse									
5,900.0	0.00	0.00	5,481.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,581.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,100.0	0.00	0.00	5,681.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,181.5	0.00	0.00	5,763.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Massive Cliffhouse									
6,200.0	0.00	0.00	5,781.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,232.5	0.00	0.00	5,814.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Menefee									
6,300.0	0.00	0.00	5,881.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,400.0	0.00	0.00	5,981.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,403.5	0.00	0.00	5,985.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Point Lookout									
6,500.0	0.00	0.00	6,081.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,181.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,281.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,381.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
6,853.5	0.00	0.00	6,435.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
 Company: ConocoPhillips SJBU
 Project: San Juan Basin - New Mexico Wells
 Site: San Juan 30 Wells
 Well: SJ 30-5 #8P
 Wellbore: Principal Wellbore
 Design: Plan #1

Local Co-ordinate Reference: Well SJ 30-5 #8P
 TVD Reference: RKB @ 6825.0ft (H&P RIGS)
 MD Reference: RKB @ 6825.0ft (H&P RIGS)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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)
Mancos									
6,900.0	0.00	0.00	6,481.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,581.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,100.0	0.00	0.00	6,681.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,200.0	0.00	0.00	6,781.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,300.0	0.00	0.00	6,881.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,400.0	0.00	0.00	6,981.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,081.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,181.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,281.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,717.5	0.00	0.00	7,299.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Upper Gallup									
7,800.0	0.00	0.00	7,381.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,481.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,581.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,100.0	0.00	0.00	7,681.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,200.0	0.00	0.00	7,781.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,300.0	0.00	0.00	7,881.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,400.0	0.00	0.00	7,981.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,437.5	0.00	0.00	8,019.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Greenhorn									
8,482.5	0.00	0.00	8,064.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Graneros									
8,500.0	0.00	0.00	8,081.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,594.5	0.00	0.00	8,176.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Two Wells									
8,600.0	0.00	0.00	8,181.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,606.5	0.00	0.00	8,188.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Paguate									
8,615.5	0.00	0.00	8,197.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Upper Cubero									
8,655.5	0.00	0.00	8,237.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
Lower Cubero									
8,700.0	0.00	0.00	8,281.5	-1,547.0	16.5	1,547.1	0.00	0.00	0.00
8,729.5	0.00	0.00	8,311.0	-1,547.0	16.5	1,547.1	0.00	0.00	0.00

Enclnal - Prod - SJ 30-5 #8P - PCP

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico Wells
Site: San Juan 30 Wells
Well: SJ 30-5 #8P
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 30-5 #8P
TVD Reference: RKB @ 6825.0ft (H&P RIGS)
MD Reference: RKB @ 6825.0ft (H&P RIGS)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name	hit/miss target Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 30-5 #8P - VACP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	3,602.0	-1,547.0	16.5	2,119,550.74	650,388.64	36° 49' 25.911 N	107° 19' 10.255 W
SJ 30-5 #8P - PCP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	8,311.0	-1,547.0	16.5	2,119,550.74	650,388.64	36° 49' 25.911 N	107° 19' 10.255 W
SJ 30-5 #8P - ICP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	3,939.0	-1,547.0	16.5	2,119,550.74	650,388.64	36° 49' 25.911 N	107° 19' 10.255 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
230.0	230.0	Surf	9-5/8	12-1/4
4,357.5	3,939.0	Int	7	8-3/4
8,729.5	8,311.0	Prod	4-1/2	6-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,337.5	4,919.0	Chacra		0.00	
6,181.5	5,763.0	Massive Cliffhouse		0.00	
8,594.5	8,176.0	Two Wells		0.00	
7,717.5	7,299.0	Upper Gallup		0.00	
3,513.0	3,105.0	Kirtland		0.00	
1,771.7	1,650.0	Nacimiento		0.00	
3,282.3	2,896.0	Ojo Alamo		0.00	
8,729.5	8,311.0	Encinal		0.00	
6,403.5	5,985.0	Point Lookout		0.00	
4,186.5	3,768.0	Pictured Cliffs		0.00	
8,615.5	8,197.0	Upper Cubero		0.00	
5,899.5	5,481.0	Upper Cliffhouse		0.00	
8,482.5	8,064.0	Graneros		0.00	
8,606.5	8,188.0	Paguate		0.00	
6,232.5	5,814.0	Menefee		0.00	
6,853.5	6,435.0	Mancos		0.00	
8,437.5	8,019.0	Greenhorn		0.00	
4,981.5	4,563.0	Huerfano Bentonite		0.00	
3,564.9	3,154.0	Stage Tool		0.00	
4,257.5	3,839.0	Lewis		0.00	
8,655.5	8,237.0	Lower Cubero		0.00	
3,615.1	3,202.0	Fruitland		0.00	

REFERENCE INFORMATION

RKB @ 6825.0ft (H&P RIGS)
Ground Elevation 6809.0
Reference Lat: 36° 49' 41.208 N
Reference Long: 107° 19' 10.458 W

Project: San Juan Basin - New Mexico Well
Site: San Juan 30 Wells
Well: SJ 30-5 #8P
Wellbore: Principal Wellbore
Design: Plan #1

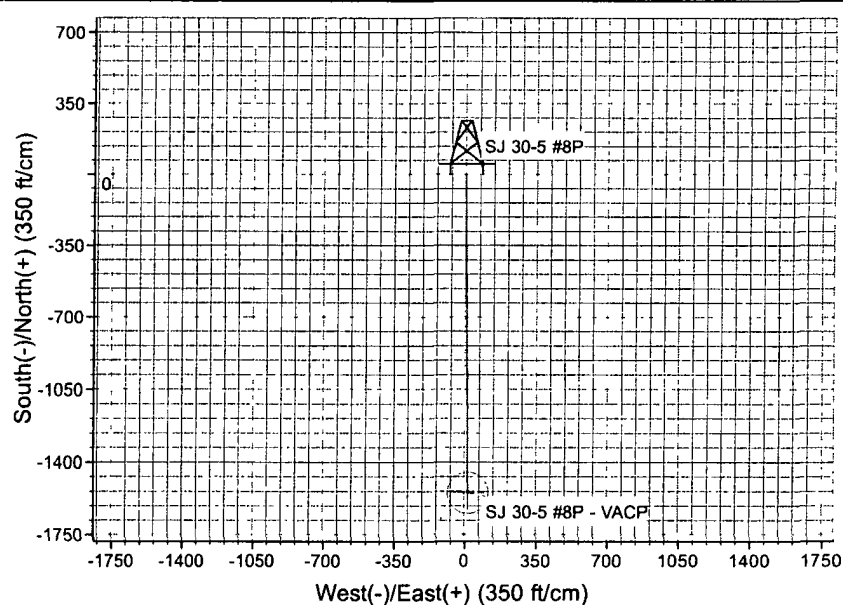
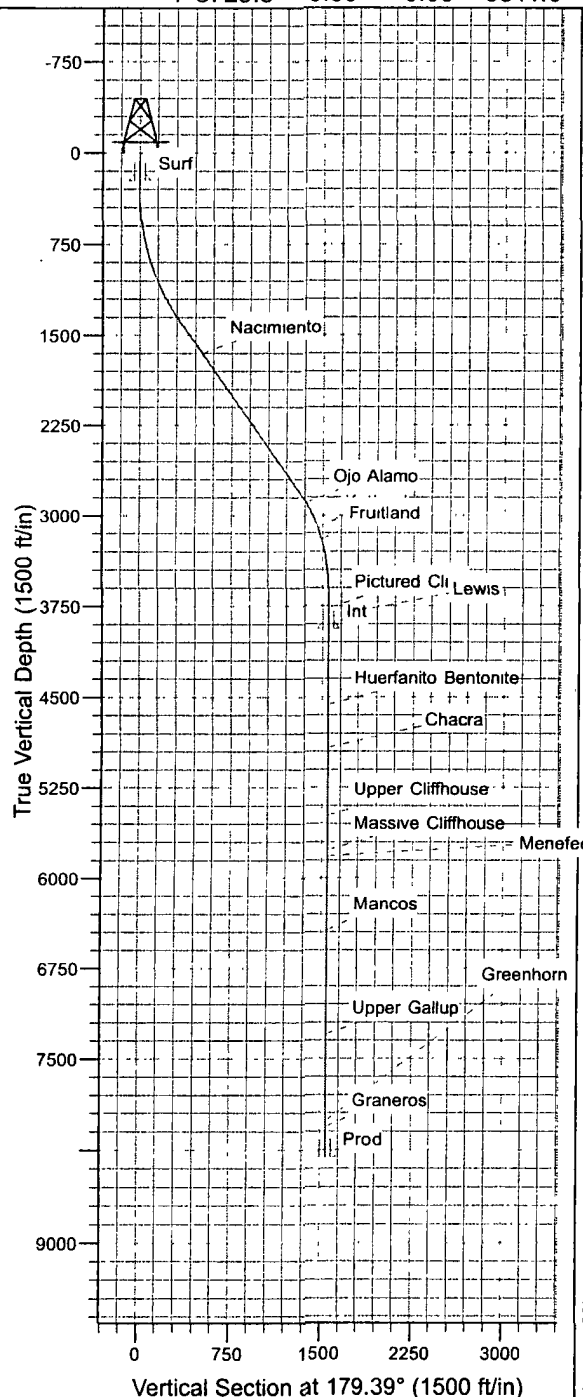
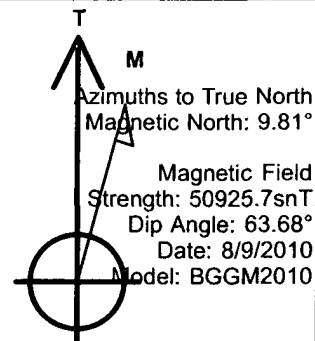
ConocoPhillips

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	320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.0	
3	1474.4	34.63	179.39	1405.4	-338.4	3.6	3.00	179.39	338.4	
4	3154.7	34.63	179.39	2788.0	-1293.3	13.8	0.00	0.00	1293.3	
5	4020.5	0.00	0.00	3602.0	-1547.0	16.5	4.00	180.00	1547.1	SJ 30-5 #8P - VACP
6	4357.5	0.00	0.00	3939.0	-1547.0	16.5	0.00	0.00	1547.1	SJ 30-5 #8P - ICP
7	8729.5	0.00	0.00	8311.0	-1547.0	16.5	0.00	0.00	1547.1	SJ 30-5 #8P - PCP

FORMATION TOP DETAILS

VDP	MD	Formation
1650.0	1771.7	Nacimiento
2896.0	3282.3	Ojo Alamo
3105.0	3513.0	Kirtland
3154.0	3564.9	Stage Tool
3202.0	3615.1	Fruitland
3768.0	4186.5	Pictured Cliffs
3839.0	4257.5	Lewis
4563.0	4981.5	Huerfano Bentonite
4919.0	5337.5	Chacra
5481.0	5899.5	Upper Cliffhouse
5763.0	6181.5	Massive Cliffhouse
5814.0	6232.5	Menefee
5985.0	6403.5	Point Lookout
6435.0	6853.5	Mancos
7299.0	7717.5	Upper Gallup
8019.0	8437.5	Greenhorn
8064.0	8482.5	Graneros
8176.0	8594.5	Two Wells
8188.0	8606.5	Paguate
8197.0	8615.5	Upper Cubero
8237.0	8655.5	Lower Cubero
8311.0	8729.5	Encinal



CONOCOPHILLIPS COMPANY

SAN JUAN 30-5 UNIT #8P

2288' FNL, 723' FEL

SECTION 11, T-30-N, R-5-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

NAD 83 LAT.: 36.828120°N LONG.: 107.320172°W

ELEV.: 6809 NAVD88

NEW ACCESS 475.5'

FROM BLOOMFIELD, NEW MEXICO:

- **GO 37.7 MI. EAST ON HWY. 64 (MILE MARKER 102.3). TURN LEFT (NORTH) ON HWY. 527, AKA SIMMS MARINA ROAD.**
- **GO 8.0 MI. NORTH ON HWY. 527 (SIMMS MARINA ROAD). TURN RIGHT ONTO ROSA ROAD.**
- **GO 6.4 MI. ALONG ROSA ROAD CROSSING LA JARA WASH. TURN RIGHT (WESTERLY) AT BLM SIGN.**
- **GO 5.2 MI. CROSSING LA FRAGUA WASH STAYING ON MAIN ROAD HEADING EAST TOWARDS THE "DEAD COTTONWOOD BY STOCK POND" IN THE SOUTHEAST PART OF SECTION 16, T-30-N, R-5-W. TURN LEFT (NORTH).**
- **GO 0.15 MI. NORTH. TURN RIGHT JUST PAST THE "DEAD COTTONWOOD BY STOCK POND."**
- **GO 2.1 MI. NORTH CROSSING LOPEZ WASH AND CLIMBING UPHILL ONTO A SMALL MESA. CONTINUE NORTHERLY TO AN EXISTING BURROWING PIT AND A RIGHT HAIR PIN TURN.**
- **THE SJ 30-5 UNIT #8P IS ON THE SOUTH SIDE OF THIS ROAD.**