

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 03 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK Farmington Field Office
Bureau of Land Management

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 USA SF-078738 Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator ConocoPhillips Company		7. Unit Agreement Name 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 91M
4. Location of Well Surf: Unit L(NWSW), 1886' FSL & 553' FWL BH: Unit M(SWSW), 710' FSL & 1280' FWL Surf: Latitude: 36.781580° N (NAD83) Longitude: 107.315819° W BH: Latitude: 36.778353° N (NAD83) Longitude: 107.313353° W		10. Field, Pool, Wildcat Basin DK/Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 25, T30N, R5W API # 30-039- 31037
14. Distance in Miles from Nearest Town 60.5 Miles from Bloomfield, NM		12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 553'		
16. Acres in Lease 2219.760	 H2S POTENTIAL EXIST	17. Acres Assigned to Well 320.00 Acres W/2 (MV) 270.04 Acres S/2 (DK)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 100' from COPC San Juan 30-5 Unit #68 (MV)		
19. Proposed Depth 8006'		20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6657' GL		22. Approx. Date Work will Start RCVD MAY 9 '11 OIL CONS. DIV. DIST. 3
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Brandie Blakley</u> Brandie Blakley (Staff Regulatory Technician)		2-23-11 Date

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 5/4/11

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 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 ES-0048 and ES-0085

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOCD JUN 02 2011

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

Hold C104
for Directional Survey
and "As Drilled" plat

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

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

RECEIVED

MAR 03 2011

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 7 Copies

Fee Lease - 3 Copies

Farmington Field Office
Bureau of Land Management

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31037		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 91M
⁷ OGRID No. 217817		⁸ Operator Name CONOCOPHILLIPS COMPANY			⁹ Elevation 6657

¹⁰ SURFACE LOCATION

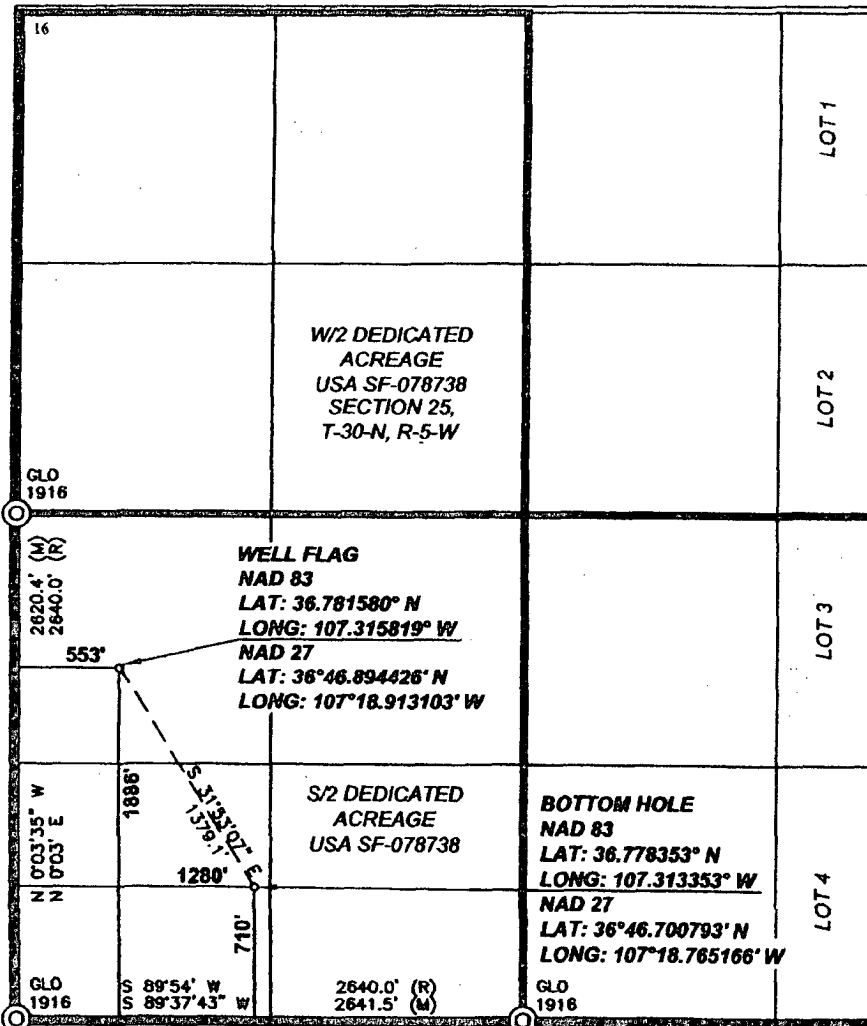
UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	30-N	5-W		1886	SOUTH	553	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	30-N	5-W		710	SOUTH	1280	WEST	RIO ARriba

¹² Dedicated Acres MV -320.00-W/2 DK -270.04-S/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



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 Tafoya 11/6/09
Signature

Printed Name

Regulatory Technician

Title and E-mail Address

November 6, 2009

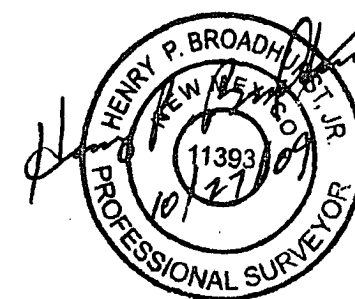
Date

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: 9/22/09

Signature and Seal of Professional Surveyor:



Certificate Number: NM 11393

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 30-5 UNIT 91M

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9339				AFE \$: 1,028,300.87	
Field Name: SAN JUAN		Rig: Aztec Rig 673		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: 36.781573		Longitude: -107.315218		X:	Y:	Section: 25	Range: 005W
Footage X: 553 FWL		Footage Y: 1886 FSL		Elevation: 6657 (FT)	Township: 030N		
Tolerance:							
Location: Bottom Hole Datum: Code: NAD 27 Directional							
Latitude: 36.778346		Longitude: -107.312752		X:	Y:	Section: 25	Range: 005W
Footage X: 1280 FWL		Footage Y: 710 FSL		Elevation: (FT)	Township: 030N		
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6673 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	230	6443		☐			12-1/4 hole. 230' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	1561	5112		☐			
OJO ALAMO	2791	3882		☐			
KIRTLAND	2928	3745		☐			
FRUITLAND	2959	3714		☐			Possible Gas
PICTURED CLIFFS	3565	3108		☐			
LEWIS	3703	2970		☐			
Intermediate Casing	3803	2870		☐	122		8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 937 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	4362	2311		☐			
CHACRA	4657	2016		☐			
UPPER CLIFF HOUSE	5416	1257		☐			Gas; Est. Top Perf - 5417 (1255)
MASSIVE CLIFF HOUSE	5523	1150		☐	802		Gas; Cliffhouse is dry
MENEFEE	5547	1126		☐			
POINT LOOKOUT	5759	914		☐			
MANCOS	6191	482		☐			
UPPER GALLUP	7026	-353		☐			
GREENHORN	7756	-1083		☐			
GRANEROS	7806	-1133		☐			
TWO WELLS	7924	-1251		☐	3360		Gas
PAGUATE	7936	-1263		☐			
UPPER CUBERO	7939	-1266		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 30-5 UNIT 91M

DEVELOPMENT

LOWER CUBERO	7976	-1303	☐	TD - 30' below T/CBRL; Est. Btm Perf - 7990 (- 1318) based on offset wells
Total Depth	8006	-1333	☐	211 6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 572 cuft. Circulate cement a minimum of 100' inside the previous casing string.
ENCINAL	8036	-1363	☐	

Reference Wells:

Reference Type	Well Name	Comments
Production	SJ 30-5 Unit 101	30N 5W 35 SW NE NE
Production	SJ 30-5 Unit 77	30N 5W 36 NW SE NE
Production	SJ 30-5 Unit 93	30N 5W 26 SW NE NE
Production	SJ 30-5 Unit 91	30N 5W 25 SE NW SW
Production	SJ 30-5 Unit 82	30N 5W 25 SE NW 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 30-5 #91M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6673.0ft (H&P RIGS)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6673.0ft (H&P RIGS)
Site:	San Juan 30 Wells	North Reference:	True
Well:	SJ 30-5 #91M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Project:	San Juan Basin - New Mexico 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 30 Wells		
Site Position:		Northing:	2,113,682.53 ft
From:	Lat/Long	Easting:	628,365.80 ft
Position Uncertainty:	15.0 ft	Slot Radius:	"
		Grid Convergence:	0.26 °

Well:	SJ 30-5 #91M, Directional "S" Curve Long, Lewis not included		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Ground Level:	6,657.0 ft

Wellbore:	Principal Wellbore		
Magnetics	Model Name	Sample Date	Declination
	BGGM2010	8/16/2010	9.80
			Dip Angle
			63.64
			Field Strength
			50,899

Design:	Plan #1		
Audit Notes:			
Version:	1	Phase:	PROTOTYPE
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			148.43

Plan Sections:										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
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	
1,474.2	34.63	148.43	1,405.2	-288.2	177.1	3.00	3.00	0.00	148.43	
2,859.4	34.63	148.43	2,545.1	-958.8	589.3	0.00	0.00	0.00	0.00	
3,725.1	0.00	0.00	3,359.0	-1,174.9	722.1	4.00	-4.00	0.00	180.00	SJ 30-5 #91M - VACF
4,169.1	0.00	0.00	3,803.0	-1,174.9	722.1	0.00	0.00	0.00	0.00	SJ 30-5 #91M - ICP
8,372.1	0.00	0.00	8,006.0	-1,174.9	722.1	0.00	0.00	0.00	0.00	SJ 30-5 #91M - 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 #91M
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method

Well SJ 30-5 #91M
RKB @ 6673.0ft (H&P RIGS)
RKB @ 6673.0ft (H&P RIGS)
True
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	148.43	400.0	-1.4	0.9	1.7	3.00	3.00	0.00
500.0	5.40	148.43	499.7	-7.2	4.4	8.5	3.00	3.00	0.00
600.0	8.40	148.43	599.0	-17.5	10.7	20.5	3.00	3.00	0.00
700.0	11.40	148.43	697.5	-32.1	19.7	37.7	3.00	3.00	0.00
800.0	14.40	148.43	795.0	-51.1	31.4	60.0	3.00	3.00	0.00
900.0	17.40	148.43	891.1	-74.5	45.8	87.4	3.00	3.00	0.00
1,000.0	20.40	148.43	985.7	-102.0	62.7	119.8	3.00	3.00	0.00
1,100.0	23.40	148.43	1,078.5	-133.8	82.2	157.1	3.00	3.00	0.00
1,200.0	26.40	148.43	1,169.2	-169.7	104.3	199.2	3.00	3.00	0.00
1,300.0	29.40	148.43	1,257.6	-209.6	128.8	246.0	3.00	3.00	0.00
1,400.0	32.40	148.43	1,343.4	-253.3	155.7	297.3	3.00	3.00	0.00
1,474.2	34.63	148.43	1,405.2	-288.2	177.1	338.3	3.00	3.00	0.00
1,500.0	34.63	148.43	1,426.4	-300.7	184.8	352.9	0.00	0.00	0.00
1,600.0	34.63	148.43	1,508.7	-349.1	214.6	409.8	0.00	0.00	0.00
1,663.5	34.63	148.43	1,561.0	-379.8	233.5	445.9	0.00	0.00	0.00
Nacimiento									
1,700.0	34.63	148.43	1,591.0	-397.5	244.3	466.6	0.00	0.00	0.00
1,800.0	34.63	148.43	1,673.3	-445.9	274.1	523.4	0.00	0.00	0.00
1,900.0	34.63	148.43	1,755.6	-494.3	303.8	580.2	0.00	0.00	0.00
2,000.0	34.63	148.43	1,837.9	-542.7	333.6	637.1	0.00	0.00	0.00
2,100.0	34.63	148.43	1,920.2	-591.2	363.3	693.9	0.00	0.00	0.00
2,200.0	34.63	148.43	2,002.5	-639.6	393.1	750.7	0.00	0.00	0.00
2,300.0	34.63	148.43	2,084.7	-688.0	422.8	807.5	0.00	0.00	0.00
2,400.0	34.63	148.43	2,167.0	-736.4	452.6	864.3	0.00	0.00	0.00
2,500.0	34.63	148.43	2,249.3	-784.8	482.3	921.2	0.00	0.00	0.00
2,600.0	34.63	148.43	2,331.6	-833.2	512.1	978.0	0.00	0.00	0.00
2,700.0	34.63	148.43	2,413.9	-881.6	541.8	1,034.8	0.00	0.00	0.00
2,800.0	34.63	148.43	2,496.2	-930.0	571.6	1,091.6	0.00	0.00	0.00
2,859.4	34.63	148.43	2,545.1	-958.8	589.3	1,125.4	0.00	0.00	0.00
2,900.0	33.00	148.43	2,578.8	-978.0	601.1	1,148.0	4.00	-4.00	0.00
3,000.0	29.00	148.43	2,664.5	-1,021.9	628.1	1,199.5	4.00	-4.00	0.00
3,100.0	25.00	148.43	2,753.6	-1,060.6	651.8	1,244.9	4.00	-4.00	0.00
3,141.0	23.36	148.43	2,791.0	-1,074.9	660.6	1,261.7	4.00	-4.00	0.00
Ojo									
3,200.0	21.00	148.43	2,845.6	-1,093.9	672.3	1,283.9	4.00	-4.00	0.00
3,287.3	17.51	148.43	2,928.0	-1,118.4	687.4	1,312.7	4.00	-4.00	0.00
Kirtland									
3,300.0	17.00	148.43	2,940.1	-1,121.6	689.3	1,316.5	4.00	-4.00	0.00
3,303.0	16.88	148.43	2,943.0	-1,122.3	689.8	1,317.4	4.00	-4.00	0.00
Stage Tool									
3,319.7	16.22	148.43	2,959.0	-1,126.4	692.3	1,322.1	4.00	-4.00	0.00
Fruitland									
3,400.0	13.00	148.43	3,036.7	-1,143.7	702.9	1,342.4	4.00	-4.00	0.00
3,500.0	9.00	148.43	3,134.8	-1,159.9	712.9	1,361.5	4.00	-4.00	0.00
3,600.0	5.00	148.43	3,234.1	-1,170.3	719.3	1,373.7	4.00	-4.00	0.00
3,700.0	1.00	148.43	3,333.9	-1,174.8	722.0	1,378.9	4.00	-4.00	0.00

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 #91M
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 30-5 #91M
TVD Reference: RKB @ 6673.0ft (H&P RIGS)
MD Reference: RKB @ 6673.0ft (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)
3,725.1	0.00	0.00	3,359.0	-1,174.9	722.1	1,379.1	4.00	-4.00	0.00
SJ 30-5 #91M - VACP									
3,800.0	0.00	0.00	3,433.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
3,900.0	0.00	0.00	3,533.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
3,931.1	0.00	0.00	3,565.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Pictured Cliffs									
4,000.0	0.00	0.00	3,633.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,069.1	0.00	0.00	3,703.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Lewis									
4,100.0	0.00	0.00	3,733.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,169.1	0.00	0.00	3,803.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Int - SJ 30-5 #91M - ICP									
4,200.0	0.00	0.00	3,833.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,300.0	0.00	0.00	3,933.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,400.0	0.00	0.00	4,033.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,500.0	0.00	0.00	4,133.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,600.0	0.00	0.00	4,233.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,700.0	0.00	0.00	4,333.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,728.1	0.00	0.00	4,362.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Huerfano Bentonite									
4,800.0	0.00	0.00	4,433.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
4,900.0	0.00	0.00	4,533.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,000.0	0.00	0.00	4,633.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,023.1	0.00	0.00	4,657.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Chacra									
5,100.0	0.00	0.00	4,733.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,200.0	0.00	0.00	4,833.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,300.0	0.00	0.00	4,933.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,400.0	0.00	0.00	5,033.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,500.0	0.00	0.00	5,133.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,233.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,333.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,782.1	0.00	0.00	5,416.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Upper Cliffhouse									
5,800.0	0.00	0.00	5,433.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,889.1	0.00	0.00	5,523.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Massive Cliffhouse									
5,900.0	0.00	0.00	5,533.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
5,913.1	0.00	0.00	5,547.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Menefee									
6,000.0	0.00	0.00	5,633.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,100.0	0.00	0.00	5,733.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,125.1	0.00	0.00	5,759.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Point Lookout									
6,200.0	0.00	0.00	5,833.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,300.0	0.00	0.00	5,933.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,033.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,133.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,557.1	0.00	0.00	6,191.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
Mancos									
6,600.0	0.00	0.00	6,233.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,333.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 30-5 #91M
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6673.0ft (H&P RIGS)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6673.0ft (H&P RIGS)
Site:	San Juan 30 Wells	North Reference:	True
Well:	SJ 30-5 #91M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
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)	
6,800.0	0.00	0.00	6,433.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,533.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,633.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,733.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,833.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,300.0	0.00	0.00	6,933.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,392.1	0.00	0.00	7,026.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Upper Gallup										
7,400.0	0.00	0.00	7,033.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,133.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,233.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,333.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,433.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,533.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,633.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,733.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
8,122.1	0.00	0.00	7,756.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Greenhorn										
8,172.1	0.00	0.00	7,806.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Graneros										
8,200.0	0.00	0.00	7,833.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
8,290.1	0.00	0.00	7,924.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Two Wells										
8,300.0	0.00	0.00	7,933.9	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
8,302.1	0.00	0.00	7,936.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Paguate										
8,305.1	0.00	0.00	7,939.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Upper Cubero										
8,342.1	0.00	0.00	7,976.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
Lower Cubero										
8,372.1	0.00	0.00	8,006.0	-1,174.9	722.1	1,379.1	0.00	0.00	0.00	
TD - Prod - SJ 30-5 #91M - 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 30-5 #91M - VACP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	3,359.0	-1,174.9	722.1	2,102,990.71	652,458.16	36° 46' 42.048 N	107° 18' 45.910 W
SJ 30-5 #91M - PCP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	8,006.0	-1,174.9	722.1	2,102,990.71	652,458.16	36° 46' 42.048 N	107° 18' 45.910 W
SJ 30-5 #91M - ICP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	3,803.0	-1,174.9	722.1	2,102,990.71	652,458.16	36° 46' 42.048 N	107° 18' 45.910 W

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 30-5 #91M
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6673.0ft (H&P RIGS)
Project:	San Juan Basin - New Mexico Wells	MD Reference:	RKB @ 6673.0ft (H&P RIGS)
Site:	San Juan 30 Wells	North Reference:	True
Well:	SJ 30-5 #91M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
230.0	230.0	Surf	9-5/8	12-1/4	
4,169.1	3,803.0	Int	7	8-3/4	
8,372.1	8,006.0	Prod	4-1/2	6-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
5,913.1	5,547.0	Menefee		0.00		
3,287.3	2,928.0	Kirtland		0.00		
7,392.1	7,026.0	Upper Gallup		0.00		
5,889.1	5,523.0	Massive Cliffhouse		0.00		
8,122.1	7,756.0	Greenhorn		0.00		
5,023.1	4,657.0	Chacra		0.00		
8,342.1	7,976.0	Lower Cubero		0.00		
8,372.1	8,006.0	TD		0.00		
3,141.0	2,791.0	Ojo		0.00		
6,125.1	5,759.0	Point Lookout		0.00		
3,931.1	3,565.0	Pictured Cliffs		0.00		
8,305.1	7,939.0	Upper Cubero		0.00		
3,319.7	2,959.0	Fruitland		0.00		
5,782.1	5,416.0	Upper Cliffhouse		0.00		
4,728.1	4,362.0	Huerfanito Bentonite		0.00		
3,303.0	2,943.0	Stage Tool		0.00		
8,172.1	7,806.0	Graneros		0.00		
4,069.1	3,703.0	Lewis		0.00		
1,663.5	1,561.0	Nacimiento		0.00		
8,302.1	7,936.0	Paguate		0.00		
6,557.1	6,191.0	Mancos		0.00		
8,290.1	7,924.0	Two Wells		0.00		

REFERENCE INFORMATION

RKB @ 6673.0ft (H&P RIGS)
Ground Elevation 6657.0
Reference Lat: 36° 46' 53.666 N
Reference Long: 107° 18' 54.786 W

Project: San Juan Basin - New Mexico Well

Site: San Juan 30 Wells

Well: SJ 30-5 #91M

Wellbore: Principal Wellbore

Design: Plan #1

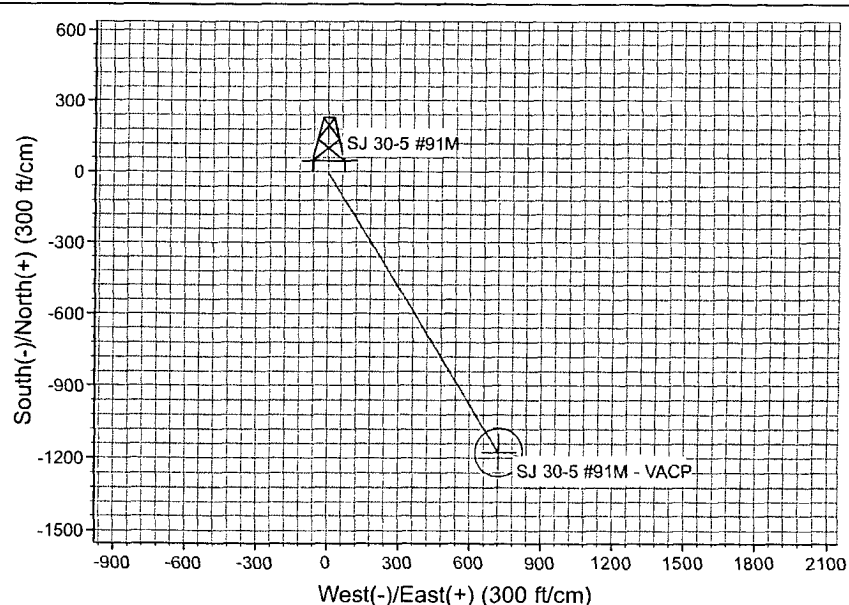
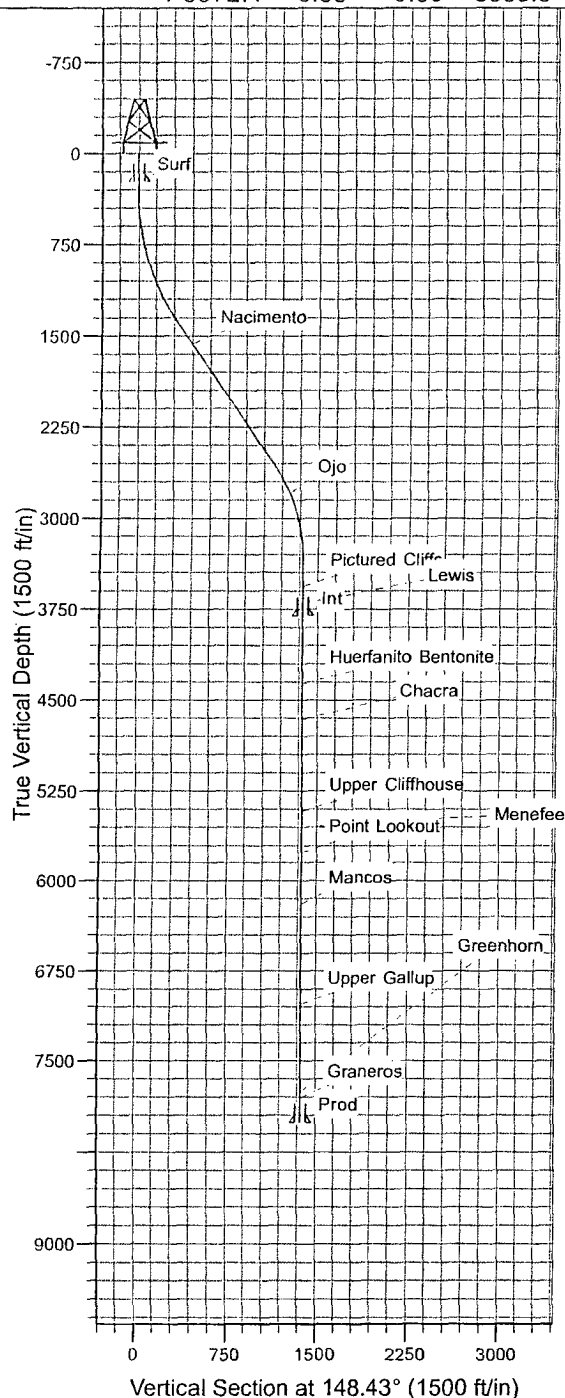
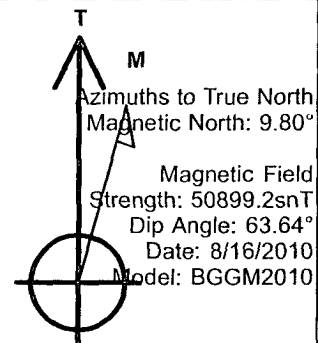
ConocoPhillips

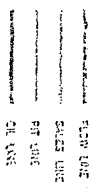
SECTION DETAILS

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	1474.2	34.63	148.43	1405.2	-288.2	177.1	3.00	148.43	338.3	
4	2859.4	34.63	148.43	2545.1	-958.8	589.3	0.00	0.00	1125.4	
5	3725.1	0.00	0.00	3359.0	-1174.9	722.1	4.00	180.00	1379.1	SJ 30-5 #91M - VACP
6	4169.1	0.00	0.00	3803.0	-1174.9	722.1	0.00	0.00	1379.1	SJ 30-5 #91M - ICP
7	8372.1	0.00	0.00	8006.0	-1174.9	722.1	0.00	0.00	1379.1	SJ 30-5 #91M - PCP

FORMATION TOP DETAILS

VDP	MD	Path	Formation
1561.0	1663.5		Nacimiento
2791.0	3141.0		Ojo
2928.0	3287.3		Kirtland
2943.0	3303.0		Stage Tool
2959.0	3319.7		Fruitland
3565.0	3931.1		Pictured Cliffs
3703.0	4069.1		Lewis
4362.0	4728.1		Huerfanito Bentonite
4657.0	5023.1		Chacra
5416.0	5782.1		Upper Cliffhouse
5523.0	5889.1		Massive Cliffhouse
5547.0	5913.1		Menefee
5759.0	6125.1		Point Lookout
6191.0	6557.1		Mancos
7026.0	7392.1		Upper Gallup
7756.0	8122.1		Greenhorn
7806.0	8172.1		Graneros
7924.0	8290.1		Two Wells
7936.0	8302.1		Paguate
7939.0	8305.1		Upper Cubero
7976.0	8342.1		Lower Cubero
8006.0	8372.1		TD





CONOCOPHILLIPS COMPANY

SAN JUAN 30-5 UNIT #91M

1886' FSL, 553' FWL

SECTION 25, T-30-N, R-5-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

NAD 83 LAT.: 36.781580°N LONG.: 107.315819°W

ELEV.: 6657 NAVD88

NO NEW ACCESS

FROM BLOOMFIELD, N.M.:

- GO 37.7 MI. ON HWY. 64. (MILE MARKER 102.3) TURN LEFT (NORTH) ON HWY. 527, ALSO KNOW AS 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 (EASTERLY) AT BLM WARNING SIGN.
- GO 4.7 MI. CROSSING LA FRAGUA WASH, STAYING ON MAIN ROAD EAST. TURN RIGHT (SOUTHEAST) INTO MANUEL CANYON, TOWARD ESPINOSA RANCH.
- GO 0.8 MI. SOUTHEAST TO THE ESPINOSA RANCH, (HOMESTEAD ON LEFT SIDE ON ROAD).
- GO 2.1 MI. FROM ESPINOSA RANCH, SOUTHEAST INTO MANUEL CANYON. TURN LEFT, STAYING IN MANUEL CANYON.
- GO 0.8 MI. EAST TO EXISTING SJ 30-5 UNIT #68 WELL. NEW WELL TWINNED HERE.