

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 06 2011

Sundry Notices and Reports on Wells

Farmington Field Office
Bureau of Land Management
Lease Number
SF-079266

1. Type of Well
GAS

6. If Indian, All. or
Tribe Name

2. Name of Operator

~~CONOCOPHILLIPS COMPANY~~ Burlington Resources

7. Unit Agreement Name

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

8. Well Name & Number
Vaughn 30N

9. API Well No.

30-039-30533

4. Location of Well, Footage, Sec., T, R, M

2520' 1595'
Surf: Unit L (NWSW), 1830' FSL & 840' FWL, Section 28, T26N, R6W, NMPM
Surf: Unit N (SESW), 900' FSL & 1805' FWL, Section 28, T26N, R6W, NMPM
1100'

10. Field and Pool

Basin DK/Blanco MV

11. County and State
Rio Arriba Co., NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment

Type of Action

☐ Abandonment

☐ Recompletion

☐ Plugging

☐ Casing Repair

☐ Altering Casing

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

☒ Other - Change of Plans

ROVD JAN 10 '11

OIL CONS. DIV.

DIST. 3

13. Describe Proposed or Completed Operations

BR wishes to change the intermediate setting depth on the subject well from 4487' to 4150' (VD) This change is to help us explore the boundaries of the "wet" Cliffhouse line. Attached is the new project proposal and new directional plan.



H₂S POTENTIAL EXIST

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct.

Signed

Brandie Blakley

Brandie Blakley Title

Staff Regulatory Technician

Date

1/5/11

(This space for Federal or State Office use)

APPROVED BY Troy L. Solvers

Title Petroleum Engineer

Date 1/7/2011

CONDITION OF APPROVAL, if any:

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 representations as to any matter within its jurisdiction.

NMOCD

PC

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

VAUGHN 30N

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7233				AFE \$: 1,643,218.84	
Field Name: SAN JUAN		Rig: Aztec Rig 673		State: NM	County: RIO ARRIBA		API #: 3003930533
Geologist:	Phone:	Geophysicist:		Phone:			
Geoscientist:	Phone:	Prod. Engineer:		Phone:			
Res. Engineer: McKee, Cory J		Phone: +1 505-326-9826		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: 36.457031	Longitude: -107.476154	X:	Y:	Section: 28	Range: 006W		
Footage X: 1595 FWL	Footage Y: 2520 FSL	Elevation: 6427	(FT)	Township: 026N			
Tolerance:							
Location: Bottom Hole							
Datum Code: NAD 27		Directional					
Latitude: 36.453141	Longitude: -107.475363	X:	Y:	Section: 28	Range: 006W		
Footage X: 1805 FWL	Footage Y: 1100 FSL	Elevation:	(FT)	Township: 026N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2011		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6442 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	215	6227		☐			9-5/8" casing H-40 , 32.3 ppf, STC, 12-1/4" OH. Cmt w/ 159 cuft. Circulate cement to surface
OJO ALAMO	1999	4443		☐			
KIRTLAND	2147	4295		☐			
FRUITLAND	2231	4211		☐			Possible Gas
PICTURED CLIFFS	2635	3807		☐			
LEWIS	2813	3629		☐			
HUERFANITO BENTONITE	3071	3371		☐			
CHACRA	3520	2922		☐			
Intermediate Casing	4150 ✓	2292		☐			8-3/4" hole. 7", 23 ppf, J-55, LTC casing. Cement with 1008 cubic ft. Circulate cement to surface.
UPPER CLIFF HOUSE	4260	2182		☐			Est. Top Perf - 4263 (2180)
MASSIVE CLIFF HOUSE	4293	2149		☐			
MENEFEE	4337	2105		☐			
POINT LOOKOUT	4864	1578		☐	650		GAS
MANCOS	5191	1251		☐			
UPPER GALLUP	5928	514		☐			
GREENHORN	6793	-351		☐			
GRANEROS	6846	-404		☐			
TWO WELLS	6903	-461		☐	1600		Gas
PAGUATE	6951	-509		☐			
CUBERO	6989	-547		☐			
LOWER CUBERO	7021	-579		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

VAUGHN 30N

DEVELOPMENT

OAK CANYON	7051	-609	☐	
ENCINAL	7085	-643	☐	
Total Depth	7167	-725	☐	6-1/4" hole. 4-1/2", 11.6 ppf, J-55/L-80 LTC, casing. Cement with 390 cubic ft. Circulate cement a minimum of 100' inside the previous string.

Reference Wells:		
Reference Type	Well Name	Comments
Intermediate	Vaughn 27	26N-6W28 NE SW SW
Intermediate	Vaughn 16	26N-6W28 SE NW SW
Production	Vaughn 31E	26N-6W29 SW NE SE
Production	Vaughn 30	26N-6W28 NW NE SW
Production	Vaughn 15E	26N-6W28 NE SE 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 Upper Gallup to TD - mudlogger will call TD

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

Comments:

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01 CONS. DIV.

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ConocoPhillips SJB

San Juan Basin - New Mexico West Wells

Other Named Wells

Vaughn #30N

Principal

Plan: Planned

Standard Planning Report

10 January, 2011

ConocoPhillips or its affiliates
Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Vaughn #30N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6422.0ft (Generic Rig)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6422.0ft (Generic Rig)
Site:	Other Named Wells	North Reference:	True
Well:	Vaughn #30N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal		
Design:	Planned		

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	Other Named Wells		
Site Position:		Northing:	2,108,178.26 ft
From:	Lat/Long	Easting:	643,887.63 ft
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"
		Latitude:	36° 47' 33.793 N
		Longitude:	107° 20' 30.932 W
		Grid Convergence:	0.29 °

Well	Vaughn #30N		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	36° 27' 25.314 N
		Longitude:	107° 28' 34.158 W
		Ground Level:	6,407.0 ft

Wellbore	Principal		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2007	5/1/2008	10.17
			Dip Angle (°)
			63.36
			Field Strength (nT)
			50,920

Design	Planned		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)
	0.0	0.0	0.0
			Direction (°)
			170.66

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	
1,765.2	28.90	170.66	1,704.7	-352.1	57.9	2.00	2.00	0.00	170.66	
3,504.0	28.90	170.66	3,226.9	-1,181.4	194.2	0.00	0.00	0.00	0.00	
4,467.5	0.00	0.00	4,150.0	-1,416.2	232.8	3.00	-3.00	0.00	180.00	
7,484.5	0.00	0.00	7,167.0	-1,416.2	232.8	0.00	0.00	0.00	0.00	Vaughn #30N - PCP

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Vaughn #30N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6422.0ft (Generic Rig)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6422.0ft (Generic Rig)
Site:	Other Named Wells	North Reference:	True
Well:	Vaughn #30N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal		
Design:	Planned		

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	
9 5/8" Surface Casing										
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	1.60	170.66	400.0	-1.1	0.2	1.1	2.00	2.00	0.00	
500.0	3.60	170.66	499.9	-5.6	0.9	5.7	2.00	2.00	0.00	
600.0	5.60	170.66	599.6	-13.5	2.2	13.7	2.00	2.00	0.00	
700.0	7.60	170.66	698.9	-24.8	4.1	25.2	2.00	2.00	0.00	
800.0	9.60	170.66	797.8	-39.6	6.5	40.1	2.00	2.00	0.00	
900.0	11.60	170.66	896.0	-57.7	9.5	58.5	2.00	2.00	0.00	
1,000.0	13.60	170.66	993.6	-79.3	13.0	80.3	2.00	2.00	0.00	
1,100.0	15.60	170.66	1,090.4	-104.1	17.1	105.5	2.00	2.00	0.00	
1,200.0	17.60	170.66	1,186.2	-132.3	21.8	134.1	2.00	2.00	0.00	
1,300.0	19.60	170.66	1,281.0	-163.8	26.9	166.0	2.00	2.00	0.00	
1,400.0	21.60	170.66	1,374.6	-198.5	32.6	201.2	2.00	2.00	0.00	
1,500.0	23.60	170.66	1,466.9	-236.4	38.9	239.6	2.00	2.00	0.00	
1,600.0	25.60	170.66	1,557.8	-277.5	45.6	281.2	2.00	2.00	0.00	
1,700.0	27.60	170.66	1,647.2	-321.7	52.9	326.0	2.00	2.00	0.00	
1,765.2	28.90	170.66	1,704.7	-352.1	57.9	356.9	2.00	2.00	0.00	
1,800.0	28.90	170.66	1,735.1	-368.7	60.6	373.7	0.00	0.00	0.00	
1,900.0	28.90	170.66	1,822.7	-416.4	68.5	422.0	0.00	0.00	0.00	
2,000.0	28.90	170.66	1,910.2	-464.1	76.3	470.3	0.00	0.00	0.00	
2,100.0	28.90	170.66	1,997.8	-511.8	84.1	518.7	0.00	0.00	0.00	
2,101.4	28.90	170.66	1,999.0	-512.5	84.3	519.4	0.00	0.00	0.00	
Ojo Alamo										
2,200.0	28.90	170.66	2,085.3	-559.5	92.0	567.0	0.00	0.00	0.00	
2,270.5	28.90	170.66	2,147.0	-593.1	97.5	601.1	0.00	0.00	0.00	
Kirtland										
2,300.0	28.90	170.66	2,172.9	-607.2	99.8	615.3	0.00	0.00	0.00	
2,366.4	28.90	170.66	2,231.0	-638.9	105.0	647.4	0.00	0.00	0.00	
Fruitland										
2,400.0	28.90	170.66	2,260.4	-654.9	107.7	663.7	0.00	0.00	0.00	
2,500.0	28.90	170.66	2,347.9	-702.6	115.5	712.0	0.00	0.00	0.00	
2,600.0	28.90	170.66	2,435.5	-750.3	123.4	760.3	0.00	0.00	0.00	
2,700.0	28.90	170.66	2,523.0	-798.0	131.2	808.7	0.00	0.00	0.00	
2,800.0	28.90	170.66	2,610.6	-845.7	139.0	857.0	0.00	0.00	0.00	
2,827.9	28.90	170.66	2,635.0	-859.0	141.2	870.5	0.00	0.00	0.00	
Pictured Cliffs										
2,900.0	28.90	170.66	2,698.1	-893.4	146.9	905.3	0.00	0.00	0.00	
3,000.0	28.90	170.66	2,785.7	-941.0	154.7	953.7	0.00	0.00	0.00	
3,031.2	28.90	170.66	2,813.0	-955.9	157.2	968.8	0.00	0.00	0.00	
Lewis										
3,100.0	28.90	170.66	2,873.2	-988.7	162.6	1,002.0	0.00	0.00	0.00	
3,200.0	28.90	170.66	2,960.8	-1,036.4	170.4	1,050.4	0.00	0.00	0.00	
3,300.0	28.90	170.66	3,048.3	-1,084.1	178.2	1,098.7	0.00	0.00	0.00	
3,325.9	28.90	170.66	3,071.0	-1,096.5	180.3	1,111.2	0.00	0.00	0.00	
Huerf. Bent.										
3,400.0	28.90	170.66	3,135.8	-1,131.8	186.1	1,147.0	0.00	0.00	0.00	
3,500.0	28.90	170.66	3,223.4	-1,179.5	193.9	1,195.4	0.00	0.00	0.00	
3,504.0	28.90	170.66	3,226.9	-1,181.4	194.2	1,197.3	0.00	0.00	0.00	

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Vaughn #30N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6422.0ft (Generic Rig)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6422.0ft (Generic Rig)
Site:	Other Named Wells	North Reference:	True
Well:	Vaughn #30N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal		
Design:	Planned		

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)
3,600.0	26.02	170.66	3,312.1	-1,225.1	201.4	1,241.6	3.00	-3.00	0.00
3,700.0	23.02	170.66	3,403.0	-1,266.1	208.2	1,283.1	3.00	-3.00	0.00
3,800.0	20.02	170.66	3,496.0	-1,302.3	214.1	1,319.7	3.00	-3.00	0.00
3,825.4	19.26	170.66	3,520.0	-1,310.7	215.5	1,328.3	3.00	-3.00	0.00
Chacra									
3,900.0	17.02	170.66	3,590.8	-1,333.6	219.3	1,351.5	3.00	-3.00	0.00
4,000.0	14.02	170.66	3,687.2	-1,360.0	223.6	1,378.3	3.00	-3.00	0.00
4,100.0	11.02	170.66	3,784.8	-1,381.4	227.1	1,400.0	3.00	-3.00	0.00
4,200.0	8.02	170.66	3,883.4	-1,397.7	229.8	1,416.5	3.00	-3.00	0.00
4,300.0	5.02	170.66	3,982.7	-1,408.9	231.7	1,427.9	3.00	-3.00	0.00
4,400.0	2.02	170.66	4,082.5	-1,415.0	232.6	1,434.0	3.00	-3.00	0.00
4,467.5	0.00	0.00	4,150.0	-1,416.2	232.8	1,435.2	3.00	-3.00	0.00
7" Intermediate Casing - Vaughn #30N - ICP									
4,500.0	0.00	0.00	4,182.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
4,577.5	0.00	0.00	4,260.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Upper Cliffhouse									
4,600.0	0.00	0.00	4,282.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
4,610.5	0.00	0.00	4,293.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Massive Cliffhouse									
4,654.5	0.00	0.00	4,337.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Menefee									
4,700.0	0.00	0.00	4,382.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
4,800.0	0.00	0.00	4,482.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
4,804.5	0.00	0.00	4,487.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Vaughn #30N - ICP (APD)									
4,900.0	0.00	0.00	4,582.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,682.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,100.0	0.00	0.00	4,782.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,181.5	0.00	0.00	4,864.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Pt. Lookout									
5,200.0	0.00	0.00	4,882.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,300.0	0.00	0.00	4,982.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,082.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,182.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,508.5	0.00	0.00	5,191.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Mancos Shale									
5,600.0	0.00	0.00	5,282.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,382.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,482.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,582.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,682.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,100.0	0.00	0.00	5,782.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,200.0	0.00	0.00	5,882.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,245.5	0.00	0.00	5,928.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
Gallup									
6,300.0	0.00	0.00	5,982.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,082.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,500.0	0.00	0.00	6,182.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,282.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,382.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,482.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,582.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,682.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Vaughn #30N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6422.0ft (Generic Rig)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6422.0ft (Generic Rig)
Site:	Other Named Wells	North Reference:	True
Well:	Vaughn #30N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal		
Design:	Planned		

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)	
7,100.0	0.00	0.00	6,782.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
7,110.5	0.00	0.00	6,793.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Greenhorn										
7,163.5	0.00	0.00	6,846.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Graneros										
7,200.0	0.00	0.00	6,882.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
7,220.5	0.00	0.00	6,903.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Two Wells										
7,268.5	0.00	0.00	6,951.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Paguate										
7,300.0	0.00	0.00	6,982.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
7,306.5	0.00	0.00	6,989.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Upper Cubero										
7,338.5	0.00	0.00	7,021.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Lower Cubero										
7,368.5	0.00	0.00	7,051.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Oak Canyon										
7,400.0	0.00	0.00	7,082.5	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
7,402.5	0.00	0.00	7,085.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
Encinal										
7,484.5	0.00	0.00	7,167.0	-1,416.2	232.8	1,435.2	0.00	0.00	0.00	
4 1/2" Production Casing - Vaughn #30N - PCP - Vaughn #30N - PCP (APD)										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Vaughn #30N - ICP	0.00	0.00	4,150.0	-1,416.2	232.8	1,984,384.96	605,276.69	36° 27' 11.310 N	107° 28' 31.308 W	
- plan hits target center										
- Point										
Vaughn #30N - PCP (AF)	0.00	0.00	7,223.0	-1,416.2	232.8	1,984,384.96	605,276.69	36° 27' 11.310 N	107° 28' 31.308 W	
- plan misses target center by 56.0ft at 7484.5ft MD (7167.0 TVD, -1416.2 N, 232.8 E)										
- Point										
Vaughn #30N - ICP (API)	0.00	0.00	4,487.0	-1,616.4	236.3	1,984,184.76	605,280.86	36° 27' 9.330 N	107° 28' 31.266 W	
- plan misses target center by 200.3ft at 4804.5ft MD (4487.0 TVD, -1416.2 N, 232.8 E)										
- Point										
Vaughn #30N - PCP	0.00	0.00	7,167.0	-1,416.2	232.8	1,984,384.96	605,276.69	36° 27' 11.310 N	107° 28' 31.308 W	
- plan hits target center										
- Point										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
230.0	230.0	9 5/8" Surface Casing	9-5/8	12-1/4	
4,467.5	4,150.0	7" Intermediate Casing	7	8-3/4	
7,484.5	7,167.0	4 1/2" Production Casing	4-1/2	6-1/4	

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Vaughn #30N
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6422.0ft (Generic Rig)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6422.0ft (Generic Rig)
Site:	Other Named Wells	North Reference:	True
Well:	Vaughn #30N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal		
Design:	Planned		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,366.4	2,231.0	Fruitland		0.00		
5,508.5	5,191.0	Mancos Shale		0.00		
7,306.5	6,989.0	Upper Cubero		0.00		
2,270.5	2,147.0	Kirtland		0.00		
3,325.9	3,071.0	Huerf. Bent.		0.00		
3,031.2	2,813.0	Lewis		0.00		
7,402.5	7,085.0	Encinal		0.00		
2,827.9	2,635.0	Pictured Cliffs		0.00		
4,654.5	4,337.0	Menefee		0.00		
7,110.5	6,793.0	Greenhorn		0.00		
7,220.5	6,903.0	Two Wells		0.00		
7,338.5	7,021.0	Lower Cubero		0.00		
4,610.5	4,293.0	Massive Cliffhouse		0.00		
7,268.5	6,951.0	Paguate		0.00		
4,577.5	4,260.0	Upper Cliffhouse		0.00		
3,825.4	3,520.0	Chacra		0.00		
5,181.5	4,864.0	Pt. Lookout		0.00		
2,101.4	1,999.0	Ojo Alamo		0.00		
6,245.5	5,928.0	Gallup		0.00		
7,163.5	6,846.0	Graneros		0.00		
7,368.5	7,051.0	Oak Canyon		0.00		

REFERENCE INFORMATION

RKB @ 6422.0ft (Generic Rig) ...
Ground Elevation 6407.0
Reference Lat: 36° 27' 25.314 N
Reference Long: 107° 28' 34.158 W

Project: San Juan Basin - New Mexico West Well

Site: Other Named Wells

Well: Vaughn #30N

Wellbore: Principal

Design: Planned

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	1765.2	28.90	170.66	1704.7	-352.1	57.9	2.00	170.66	356.9	
4	3504.0	28.90	170.66	3226.9	-1181.4	194.2	0.00	0.00	1197.3	
5	4467.5	0.00	0.00	4150.0	-1416.2	232.8	3.00	180.00	1435.2	
6	7484.5	0.00	0.00	7167.0	-1416.2	232.8	0.00	0.00	1435.2	Vaughn #30N - PCP

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1999.0	2101.4	Ojo Alamo
2147.0	2270.5	Kirtland
2231.0	2366.4	Fruitland
2635.0	2827.9	Pictured Cliffs
2813.0	3031.2	Lewis
3071.0	3325.9	Huerf. Bent.
3520.0	3825.4	Chacra
4260.0	4577.5	Upper Cliffhouse
4293.0	4610.5	Massive Cliffhouse
4337.0	4654.5	Menefee
4864.0	5181.5	Pt. Lookout
5191.0	5508.5	Mancos Shale
5928.0	6245.5	Gallup
6793.0	7110.5	Greenhorn
6846.0	7163.5	Graneros
6903.0	7220.5	Two Wells
6951.0	7268.5	Paguate
6989.0	7306.5	Upper Cubero
7021.0	7338.5	Lower Cubero
7051.0	7368.5	Oak Canyon
7085.0	7402.5	Encinal

