

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUN 29 2012

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 080516-B Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name San Juan 28-5 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 98C
4. Location of Well Surface: Unit N (SESW), 815' FSL & 2055' FWL BHL : Unit O (SWSE), 935' FSL & 2430' FEL Surface: Latitude: 36.65619° N (NAD83) Longitude: 107.31259° W BHL : Latitude: 36.65652° N (NAD83) Longitude: 107.30866° W	10. Field, Pool, Wildcat Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 13, T28N, R5W API # 30-039- 31129
14. Distance in Miles from Nearest Town 10 miles from Gobernador	12. County Rio Arriba
15. Distance from Proposed Location to Nearest Property or Lease Line 815'	13. State NM
16. Acres in Lease 600.000	17. Acres Assigned to Well 343.45 Acres S/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 680 from SJ 28-5 #101/DK	19. Proposed Depth 6970'
20. Rotary or Cable Tools Rotary	21. Elevations (DF, FT, GR, Etc.) 7483' 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: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	Date <u>6/28/12</u>

Hold C104

for Directional Survey
and "As Drilled" plat

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

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

Threatened and Endangered Species Report attached

Hold C104

SEP 18 2012

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 for Directional Survey and "As Drilled" plat

Example Master Plan Type 3

Bond Numbers NMB-000015 and NMB-000089

Hold C104

for Directional Survey
and "As Drilled" plat

ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
AUTHORIZATION REQUIRED FOR OPERATIONS
ON FEDERAL AND INDIAN LANDS

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

A COMPLETE C-144 MUST BE SUBMITTED TO AND
APPROVED BY THE NMOCDFOR: A PIT, CLOSED
LOOP SYSTEM, BELOW GRADE TANK, OR
PROPOSED ALTERNATIVE METHOD, PURSUANT
TO NMOCDF PART 19.15.17, PRIOR TO THE USE OR
CONSTRUCTION OF THE ABOVE APPLICATIONS.

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, 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 Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102
Revised August 1, 2011

JUN 29 2012

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive, Santa Fe, NM 87505
Bureau of Land Management

Farmington Field Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039- 31129	² Pool Code 72319	³ Pool Name BLANCO MESAVERDE
⁴ Property Code 7460	⁵ Property Name SAN JUAN 28-5 UNIT	⁶ Well Number 98C
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 7483'

¹⁰ Surface Location

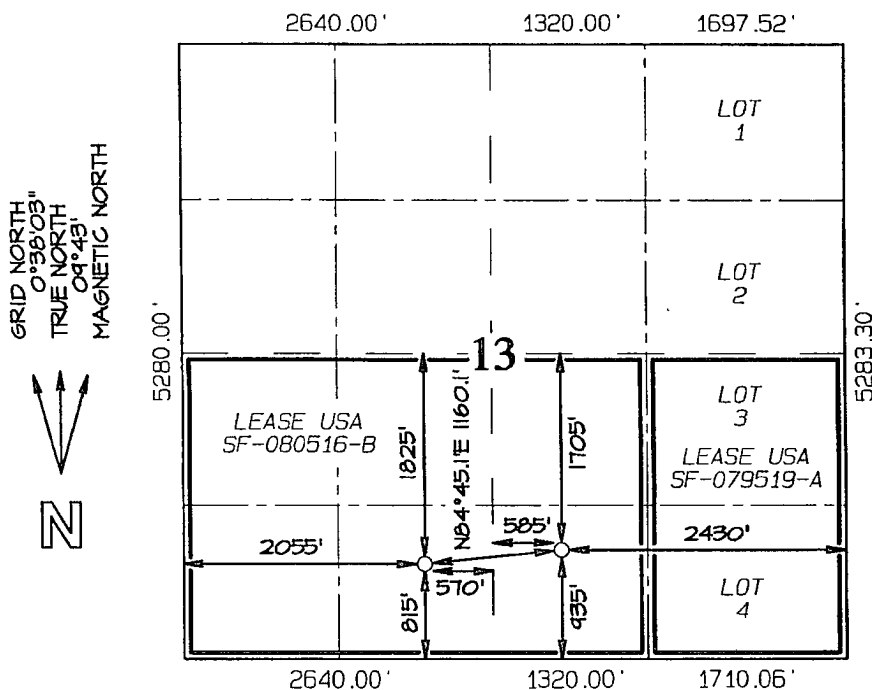
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	28N	5W		815	SOUTH	2055	WEST	RIO ARriba

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
0	13	28N	5W		935	SOUTH	2430	EAST	RIO ARriba

¹² Dedicated Acres 343.45 Acres - (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



SURFACE LOCATION
LAT: 36°39.3708' N
LONG: 107°18.7196' W
DATUM: NAD1927

LAT: 36.65619° N
LONG: 107.31259° W
DATUM: NAD1983

BOTTOM-HOLE
LAT: 36°39.3904' N
LONG: 107°18.4836' W
DATUM: NAD1927

LAT: 36.65652° N
LONG: 107.30866° W
DATUM: NAD1983

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 Kellywood 3/6/12
Signature Date

Arleen Kellywood

Printed Name

arleen.r.kellywood@conocophillips.com

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 Revised: MARCH 5, 2012

Survey Date: OCTOBER 13, 2010

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-5 UNIT 98C

DEVELOPMENT

Lease:		AFE #: WAN.CDR.2030				AFE \$:	
Field Name: SAN JUAN 28-5 UNIT		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA		API #:
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist: Head, Chip F (Charles)		Phone: +1-505-326-9772		Prod. Engineer:		Phone:	
Res. Engineer: Prabowo, Wahyu		Phone: +1-505-326-9797		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
RON	BLANCO MESAVERDE (PRORATED GAS)						
Location: Surface Datum: Code: NAD 27 Directional							
Latitude: 36.656181	Longitude: -107.311989	X:	Y:	Section: 13		Range: 005W	
Footage X: 2055 FWL	Footage Y: 815 FSL	Elevation: 7483	(FT)	Township: 028N			
Tolerance:							
Location: Bottom Hole Datum: Code: NAD 27 Directional							
Latitude: 36.656511	Longitude: -107.308060	X:	Y:	Section: 13		Range: 005W	
Footage X: 2430 FEL	Footage Y: 935 FSL	Elevation:	(FT)	Township: 028N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2016		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 7498		Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	15	7483		☐			
Surface Casing	350	7148		☐		29	12-1/4 hole. 350' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 156 cuft. Circulate cement to surface.
NACIMIENTO	2541	4957		☐			
OJO ALAMO	3821	3677		☐			
KIRTLAND	3956	3542		☐			
FRUITLAND	4034	3464		☐		110	Possible Gas
PICTURED CLIFFS	4437	3061		☐	1384		
LEWIS	4556	2942		☐			
Intermediate Casing	4706	2792		☐		122	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1053 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	5197	2301		☐			
CHACRA	5442	2056		☐			
UPPER CLIFF HOUSE	6034	1464		☐			
MASSIVE CLIFF HOUSE	6234	1264		☐	809	157	Gas
MENEFEE	6306	1192		☐			Gas
POINT LOOKOUT	6620	878		☐			Gas - Est bottom perf ~728' ss (~150' below T/PNLK)
Total Depth	6970	528		☐			6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC/BTC casing. Cement w/ 302 cuft. Circulate cement a minimum of 100' inside the previous casing string.
MANCOS	7151	347		☐		177	
Reference Wells:							
Reference Type	Well Name		Comments				
Production	SAN JUAN 28-5 101		(SW13-28N-5W)				

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-5 UNIT 98C

DEVELOPMENT

Production	SAN JUAN 28-5 98M	(SE13-28N-5W)
Production	SAN JUAN 28-5 44	(SW27-28N-5W)
Production	SAN JUAN 28-5 101M	(NW13-28N5W)

Logging Program:

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

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

GR/CBL

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Directions from the Intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM
to Burlington Resources Oil & Gas Company San Juan 28-5 Unit #98C
815' FSL & 2055' FWL, Section 13, T28N, R5W, N.M.P.M., Rio Arriba County, NM

Latitude : 36.65619°N Longitude : 107.31259°W Datum : NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Easterly on US Hwy 64 for 41.6 miles to Forest Road #314 @ Milepost 105.8;

Go right (South-easterly) on Forest Road #314 for 5.0 miles to fork in road;

Go right (South-westerly) for 0.1 miles to an existing wellpad from which new access continues for 485.2' to staked location.

REFERENCE INFORMATION

WELL @ 7498.0ft (Original Well Elev)
Ground Elevation 7483.0
Reference Lat: 36° 39' 22.248 N
Reference Long: 107° 18' 43.176 W

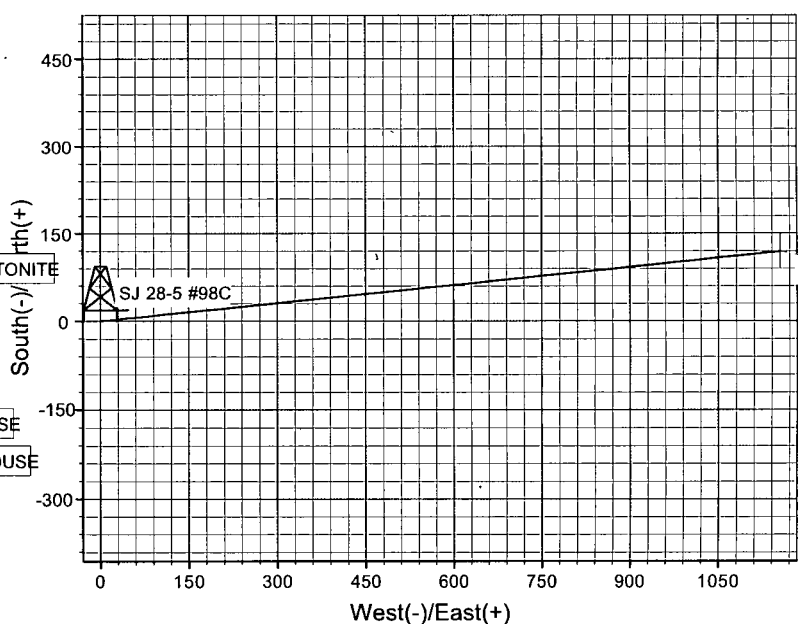
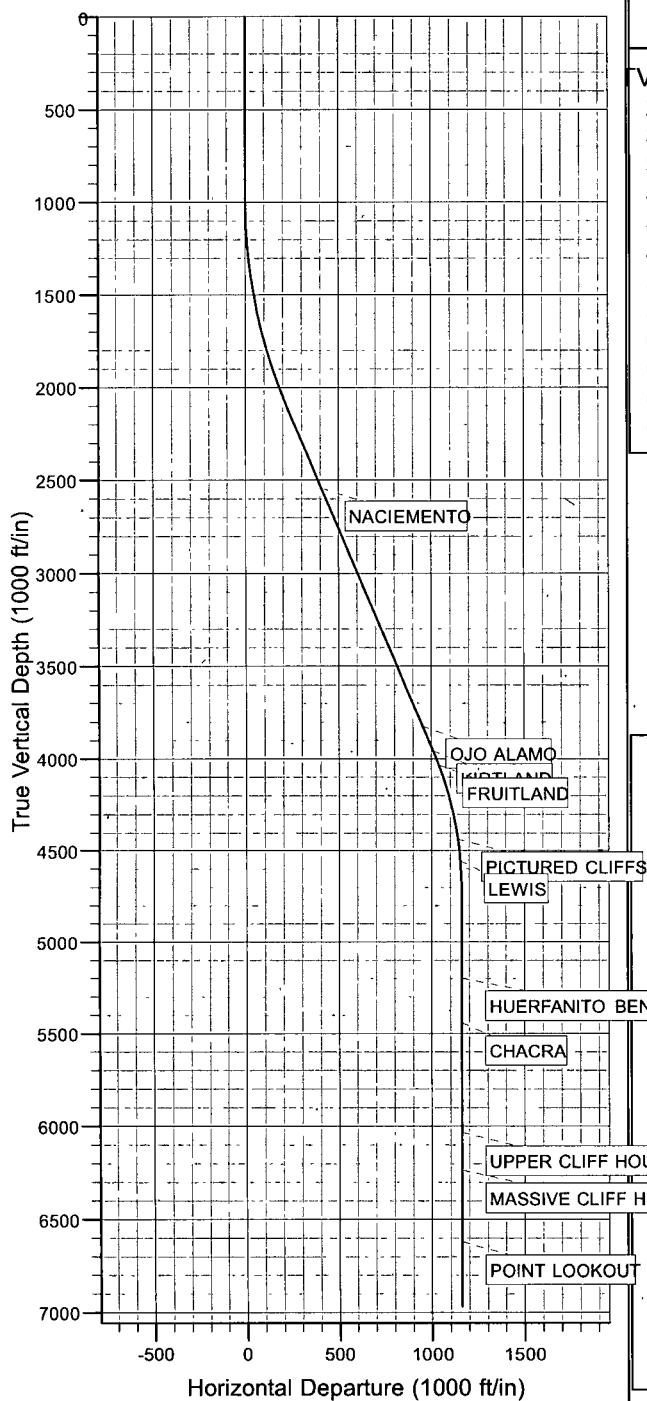
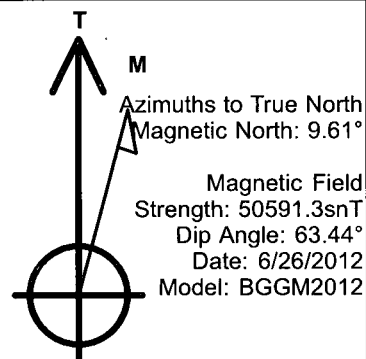
Project: San Juan Basin - New Mexico West V
Site: San Juan 28 Wells
Well: SJ 28-5 #98C
Wellbore: Wellbore #1
Design: Plan #1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	2148.9	22.98	84.11	2118.4	23.3	226.1	2.00	84.11	227.3	
4	4149.7	22.98	84.11	3960.4	103.4	1003.1	0.00	0.00	1008.4	
5	4915.7	0.00	0.00	4706.0	119.0	1153.8	3.00	180.00	1160.0	SJ 28-5 #98C ICP
6	7179.7	0.00	0.00	6970.0	119.0	1153.8	0.00	0.00	1160.0	SJ 28-5 #98C PCP

FORMATION TOP DETAILS

VDPPath	MDPath	Formation
2541.0	2608.0	NACIEMENTO
3821.0	3998.3	OJO ALAMO
3956.0	4144.9	KIRTLAND
4034.0	4229.0	FRUITLAND
4437.0	4645.8	PICTURED CLIFF
4556.0	4765.5	LEWIS
5197.0	5406.7	HUERFANITO BE
5442.0	5651.7	CHACRA
6034.0	6243.7	UPPER CLIFF HO
6234.0	6443.7	MASSIVE CLIFF H
6306.0	6515.7	MENEFEE
6620.0	6829.7	POINT LOOKOUT



SJ 28-5 #98C

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-5 #98C
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 7498 0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7498 0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-5 #98C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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

Site	San Juan 28 Wells
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Site Position:		Northing:	2,046,354.53 ft	Latitude:	36° 37' 24.966 N
From:	Lat/Long	Easting:	579,505.00 ft	Longitude:	107° 33' 44.640 W
Position Uncertainty:	15.0 ft	Slot Radius:	"	Grid Convergence:	0.16 °

Well	SJ 28-5 #98C
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Well Position	+N/-S	0.0 ft	Northing:	2,058,517.50 ft	Latitude:	36° 39' 22.248 N
	+E/-W	0.0 ft	Easting:	652,922.52 ft	Longitude:	107° 18' 43.176 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,483.0 ft

Wellbore	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	6/26/2012	9.61	63.44	50,591

Design	Plan #1
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Audit Notes:	
Version:	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	84.11

Plan Sections	
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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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,148.9	22.98	84.11	2,118.4	23.3	226.1	2.00	2.00	0.00	84.11	
4,149.7	22.98	84.11	3,960.4	103.4	1,003.1	0.00	0.00	0.00	0.00	
4,915.7	0.00	0.00	4,706.0	119.0	1,153.8	3.00	-3.00	0.00	180.00	SJ 28-5 #98C ICP
7,179.7	0.00	0.00	6,970.0	119.0	1,153.8	0.00	0.00	0.00	0.00	SJ 28-5 #98C PCP

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-5 #98C
Company:	ConocoPhillips SJBW	TVD Reference:	WELL @ 7498.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7498.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-5 #98C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
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
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	2.00	84.11	1,100.0	0.2	1.7	1.7	2.00	2.00	0.00
1,200.0	4.00	84.11	1,199.8	0.7	6.9	7.0	2.00	2.00	0.00
1,300.0	6.00	84.11	1,299.5	1.6	15.6	15.7	2.00	2.00	0.00
1,400.0	8.00	84.11	1,398.7	2.9	27.7	27.9	2.00	2.00	0.00
1,500.0	10.00	84.11	1,497.5	4.5	43.3	43.5	2.00	2.00	0.00
1,600.0	12.00	84.11	1,595.6	6.4	62.3	62.6	2.00	2.00	0.00
1,700.0	14.00	84.11	1,693.1	8.7	84.6	85.1	2.00	2.00	0.00
1,800.0	16.00	84.11	1,789.6	11.4	110.4	111.0	2.00	2.00	0.00
1,900.0	18.00	84.11	1,885.3	14.4	139.5	140.2	2.00	2.00	0.00
2,000.0	20.00	84.11	1,979.8	17.7	171.9	172.8	2.00	2.00	0.00
2,100.0	22.00	84.11	2,073.2	21.4	207.5	208.6	2.00	2.00	0.00
2,148.9	22.98	84.11	2,118.4	23.3	226.1	227.3	2.00	2.00	0.00
2,200.0	22.98	84.11	2,165.4	25.4	246.0	247.3	0.00	0.00	0.00
2,300.0	22.98	84.11	2,257.5	29.4	284.8	286.3	0.00	0.00	0.00
2,400.0	22.98	84.11	2,349.5	33.4	323.6	325.3	0.00	0.00	0.00
2,500.0	22.98	84.11	2,441.6	37.4	362.5	364.4	0.00	0.00	0.00
2,600.0	22.98	84.11	2,533.7	41.4	401.3	403.4	0.00	0.00	0.00
2,608.0	22.98	84.11	2,541.0	41.7	404.4	406.5	0.00	0.00	0.00
NACIMIENTO									
2,700.0	22.98	84.11	2,625.7	45.4	440.1	442.4	0.00	0.00	0.00
2,800.0	22.98	84.11	2,717.8	49.4	478.9	481.5	0.00	0.00	0.00
2,900.0	22.98	84.11	2,809.9	53.4	517.8	520.5	0.00	0.00	0.00
3,000.0	22.98	84.11	2,901.9	57.4	556.6	559.6	0.00	0.00	0.00
3,100.0	22.98	84.11	2,994.0	61.4	595.4	598.6	0.00	0.00	0.00
3,200.0	22.98	84.11	3,086.0	65.4	634.3	637.6	0.00	0.00	0.00
3,300.0	22.98	84.11	3,178.1	69.4	673.1	676.7	0.00	0.00	0.00
3,400.0	22.98	84.11	3,270.2	73.4	711.9	715.7	0.00	0.00	0.00
3,500.0	22.98	84.11	3,362.2	77.4	750.8	754.8	0.00	0.00	0.00
3,600.0	22.98	84.11	3,454.3	81.4	789.6	793.8	0.00	0.00	0.00
3,700.0	22.98	84.11	3,546.4	85.4	828.4	832.8	0.00	0.00	0.00
3,800.0	22.98	84.11	3,638.4	89.4	867.3	871.9	0.00	0.00	0.00
3,900.0	22.98	84.11	3,730.5	93.4	906.1	910.9	0.00	0.00	0.00
3,998.3	22.98	84.11	3,821.0	97.3	944.3	949.3	0.00	0.00	0.00
OJO ALAMO									
4,000.0	22.98	84.11	3,822.6	97.4	944.9	950.0	0.00	0.00	0.00
4,100.0	22.98	84.11	3,914.6	101.4	983.8	989.0	0.00	0.00	0.00
4,144.9	22.98	84.11	3,956.0	103.2	1,001.2	1,006.5	0.00	0.00	0.00
KIRTLAND									
4,149.7	22.98	84.11	3,960.4	103.4	1,003.1	1,008.4	0.00	0.00	0.00
4,200.0	21.47	84.11	4,006.9	105.4	1,022.0	1,027.4	3.00	-3.00	0.00
4,229.0	20.60	84.11	4,034.0	106.4	1,032.4	1,037.8	3.00	-3.00	0.00
FRUITLAND									

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-5 #98C
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 7498.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7498.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-5 #98C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,300.0	18.47	84.11	4,100.9	108.9	1,056.0	1,061.6	3.00	-3.00	0.00
4,400.0	15.47	84.11	4,196.6	111.9	1,085.0	1,090.8	3.00	-3.00	0.00
4,500.0	12.47	84.11	4,293.6	114.3	1,109.0	1,114.9	3.00	-3.00	0.00
4,600.0	9.47	84.11	4,391.8	116.3	1,127.9	1,133.9	3.00	-3.00	0.00
4,645.8	8.10	84.11	4,437.0	117.0	1,134.9	1,140.9	3.00	-3.00	0.00
PICTURED CLIFFS									
4,700.0	6.47	84.11	4,490.8	117.7	1,141.7	1,147.8	3.00	-3.00	0.00
4,765.5	4.50	84.11	4,556.0	118.3	1,148.0	1,154.1	3.00	-3.00	0.00
LEWIS									
4,800.0	3.47	84.11	4,590.4	118.6	1,150.4	1,156.4	3.00	-3.00	0.00
4,900.0	0.47	84.11	4,690.3	118.9	1,153.8	1,159.9	3.00	-3.00	0.00
4,915.7	0.00	0.00	4,706.0	119.0	1,153.8	1,160.0	3.00	-3.00	-536.34
SJ 28-5 #98C ICP									
5,000.0	0.00	0.00	4,790.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,100.0	0.00	0.00	4,890.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,200.0	0.00	0.00	4,990.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,090.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,190.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,406.7	0.00	0.00	5,197.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
HUERFANITO BENTONITE									
5,500.0	0.00	0.00	5,290.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,390.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,651.7	0.00	0.00	5,442.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
CHACRA									
5,700.0	0.00	0.00	5,490.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,590.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,690.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,790.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,100.0	0.00	0.00	5,890.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,200.0	0.00	0.00	5,990.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,243.7	0.00	0.00	6,034.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
UPPER CLIFF HOUSE									
6,300.0	0.00	0.00	6,090.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,190.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,443.7	0.00	0.00	6,234.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
MASSIVE CLIFF HOUSE									
6,500.0	0.00	0.00	6,290.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,515.7	0.00	0.00	6,306.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
MENEFEE									
6,600.0	0.00	0.00	6,390.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,490.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,590.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
6,829.7	0.00	0.00	6,620.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
POINT LOOKOUT									
6,900.0	0.00	0.00	6,690.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,790.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,890.3	119.0	1,153.8	1,160.0	0.00	0.00	0.00
7,179.7	0.00	0.00	6,970.0	119.0	1,153.8	1,160.0	0.00	0.00	0.00
SJ 28-5 #98C PCP									

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-5 #98C
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 7498.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 7498.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-5 #98C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
SJ 28-5 #98C PCP	0.00	0.00	6,970.0	119.0	1,153.8	2,058,642.71	654,075.63	36° 39' 23.424 N	107° 18' 29.016 W
- plan hits target center									
- Point									
SJ 28-5 #98C ICP	0.00	0.00	4,706.0	119.0	1,153.8	2,058,642.71	654,075.63	36° 39' 23.424 N	107° 18' 29.016 W
- plan hits target center									
- Point									

Formations				
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip Direction (°)
5,651.7	5,442.0	CHACRA		0.00
6,243.7	6,034.0	UPPER CLIFF HOUSE		0.00
6,443.7	6,234.0	MASSIVE CLIFF HOUSE		0.00
2,608.0	2,541.0	NACIEMENTO		0.00
4,765.5	4,556.0	LEWIS		0.00
3,998.3	3,821.0	OJO ALAMO		0.00
5,406.7	5,197.0	HUERFANITO BENTONITE		0.00
6,515.7	6,306.0	MENEFEE		0.00
4,229.0	4,034.0	FRUITLAND		0.00
4,144.9	3,956.0	KIRTLAND		0.00
6,829.7	6,620.0	POINT LOOKOUT		0.00
4,645.8	4,437.0	PICTURED CLIFFS		0.00