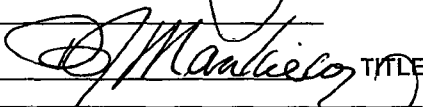


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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 SF-078497 Unit Reporting Number Farmington Field Office Bureau of Land Management	NOV 13 2012
1b. Type of Well GAS		6. If Indian, All. or Tribe	
2. Operator ConocoPhillips Company		7. Unit Agreement Name SAN JUAN 28-7 UNIT	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name SAN JUAN 28-7 UNIT 9. Well Number 238P	RCVD MAR 7 '13 OIL CONS. DIV.
4. Location of Well Surface: Unit N(SE/SW), 1060' FSL & 1613' FWL BHL : Unit M(SW/SW), 1155' FSL & 540' FWL Surface: Latitude: 36.627931° N (NAD83) Longitude: 107.600323° W Bottom: Latitude: 36.628190° N (NAD83) Longitude: 107.603981° W		10. Field, Pool, Wildcat BASIN DAKOTA 11. Sec., Twn, Rge, Mer. (NMPM) Surf: Sec. 29, T28N, R7W BHL : Sec. 29, T28N, R7W API # 30-039- 31155	DIST. 3
14. Distance in Miles from Nearest Town 26 MILES FROM BLOOMFIELD, NM		12. County RIO ARRIBA	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 540'			
16. Acres in Lease 1,639.560	 H ₂ S POTENTIAL EXIST	17. Acres Assigned to Well W/2 (320)	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 71' FROM SAN JUAN 28-7 UNIT 238 (P&A)			
19. Proposed Depth 7194'		20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6168' GL		22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached			
24. Authorized by: Marie E. Jaramillo (Staff Regulatory Tech)		11/12/12 Date	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY  TITLE AFM DATE 2/28/13

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 NMB-000015 and NMB-000089
This action is subject to technical and procedural review pursuant to 43 CFR 3162.3 and appeal pursuant to 43 CFR 3165.4
MAR 18 2013 ca
DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

Hold C104
for Directional Survey
and "As Drilled" plat

PC

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

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

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

RECEIVED

NEW AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Fairington Field Office

¹ API Number 30-039- 31155	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 31739	⁵ Property Name SAN JUAN 28-7 UNIT	⁶ Well Number 238P
⁷ OGRID No. 217817	⁸ Operator Name CONOCOPHILLIPS COMPANY	⁹ Elevation 6168

¹⁰ SURFACE LOCATION

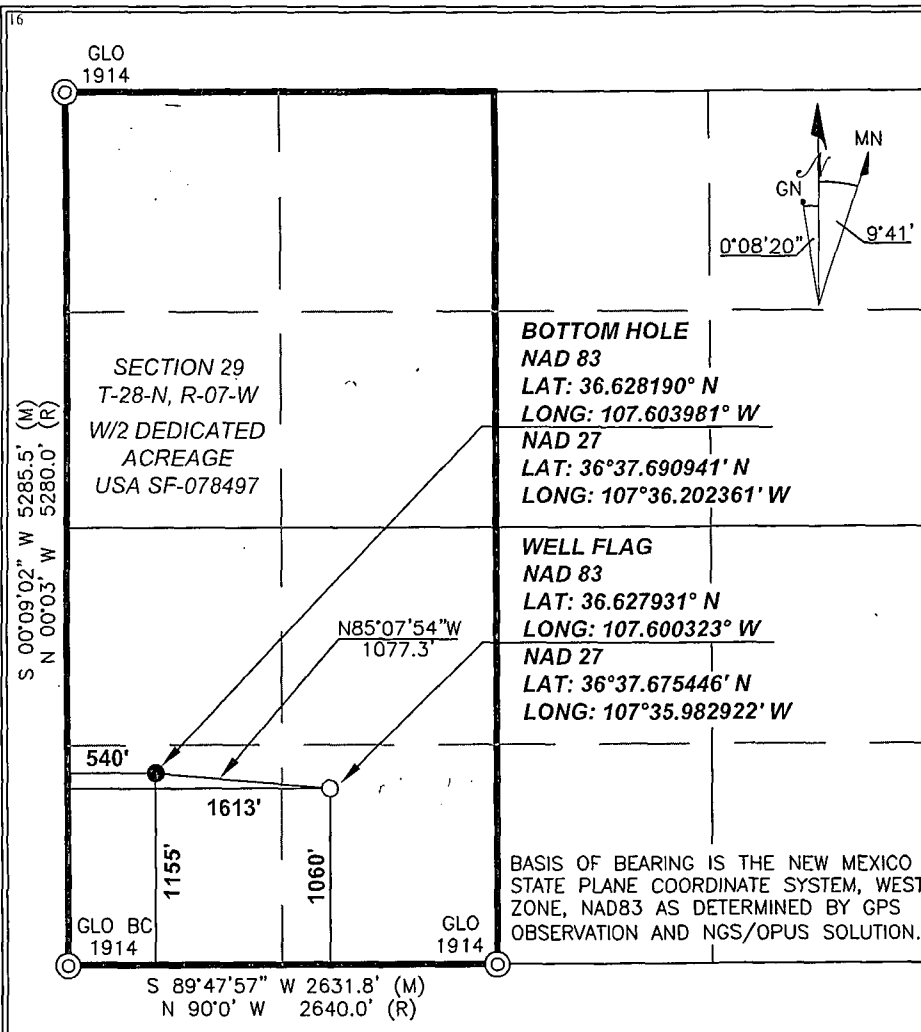
UL or lot no. N	Section 29	Township 28-N	Range 7-W	Lot Idn	Feet from the 1060	North/South line SOUTH	Feet from the 1613	East/West line WEST	County RIO ARRIBA
---------------------------	----------------------	-------------------------	---------------------	---------	------------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------------

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. M	Section 29	Township 28-N	Range 7-W	Lot Idn	Feet from the 1155	North/South line SOUTH	Feet from the 540	East/West line WEST	County RIO ARRIBA
---------------------------	----------------------	-------------------------	---------------------	---------	------------------------------	----------------------------------	-----------------------------	-------------------------------	-----------------------------

¹² Dedicated Acres W/2(320)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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.

Signature: *Marie E. Jaramillo* Date: *11/9/12*

Printed Name: **Marie E. Jaramillo**

Staff Regulatory Tech.

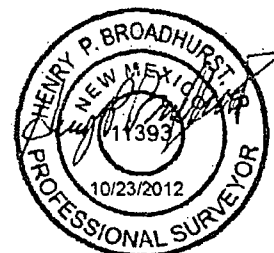
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: **07/13/2012**

Signature and Seal of Professional Surveyor:



Certificate Number: NM 11393

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 238P

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1190				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 711		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)						
Location: Surface		Datum Code: NAD 27				Directional	
Latitude: 36.627923	Longitude: -107.599714	X:	Y:	Section: 29	Range: 007W		
Footage X: 1613 FWL	Footage Y: 1060 FSL	Elevation: 6168	(FT)	Township: 028N			
Tolerance:							
Location: Bottom Hole		Datum Code: NAD 27				Directional	
Latitude: 36.628182	Longitude: -107.603372	X:	Y:	Section: 29	Range: 007W		
Footage X: 540 FWL	Footage Y: 1155 FSL	Elevation:	(FT)	Township: 028N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6183		Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	15	6168		☐			Ground water at 140' in SJ 28-7 193F, Lost circulation in SJ 28-7 215F
Surface Casing	200	5983		☐	56		12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	374	5809		☐			Lost circulation in SJ 28-7 215F
OJO ALAMO	1866	4317		☐			
KIRTLAND	1991	4192		☐			
FRUITLAND	2321	3862		☐			Possible Gas
PICTURED CLIFFS	2752	3431		☐	676		
LEWIS	2862	3321		☐	108		Lost circulation in SJ 28-7 257F
CHACRA	3666	2517		☐			
HUERFANITO BENTONITE	3809	2374		☐			
MASSIVE CLIFF HOUSE	4358	1825		☐	384		Gas - (Borderline to being wet).
UPPER CLIFF HOUSE	4358	1825		☐			Gas
MENEFEE	4474	1709		☐			
Intermediate Casing	4625	1558		☐	140		8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1084 cuft. Circulate cement to surface.
POINT LOOKOUT	4950	1233		☐			
MANCOS	5340	843		☐			
UPPER GALLUP	6121	62		☐			
GREENHORN	6864	-681		☐			
GRANEROS	6922	-739		☐			
TWO WELLS	6966	-783		☐	2557	189	Gas - Est top DK perf 6971' tvd (~5' below T/TWLS).

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 238P

DEVELOPMENT

PAGUATE	7061	-878	☐	Gas
UPPER CUBERO	7089	-906	☐	Gas - Wet in SJ 28-7 151E located in 27n7w21.
LOWER CUBERO	7107	-924	☐	Gas - Est bot DK perf 7174'
ENCINAL	7179	-996	☐	Gas
Total Depth	7194	-1011	☐	193 6-1/4" hole, 4-1/2" 11.6 ppf, L-80, STC/LTC casing. Cement w/ 341 cuft. Circulate cement a minimum of 100' inside the previous casing string.
BURRO CANYON	7218	-1035	☐	Gas
MORRISON	7303	-1120	☐	

Reference Wells:

Reference Type	Well Name	Comments
Production	SAN JUAN 28-7 NP 238R	

Logging Program:

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

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

GR/CBL.

Mud log ~100' above top Gallup down to TD.

Mudlogger will call TD.

Est bot DK perf ~20' above TD.

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
----------	-------	-----------	---------	----------------	---------

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #238P
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6183.0usft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6183.0usft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	Grid
Well:	SJ 28-7 #238P	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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				
Site Position:		Northing:	2,030,915.03 usft	Latitude:	36° 34' 52.543 N
From:	Lat/Long	Easting:	569,619.07 usft	Longitude:	107° 35' 46.386 W
Position Uncertainty:	15.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.14 °

Well	SJ 28-7 #238P					
Well Position	+N/-S	0.0 usft	Northing:	2,047,899.29 usft	Latitude:	36° 37' 40.527 N
	+E/-W	0.0 usft	Easting:	568,551.01 usft	Longitude:	107° 35' 58.975 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	6,168.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	10/3/2012	9.66	63.35	50,519

Design	Design #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	274.87

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	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	
2,083.7	21.67	274.87	2,058.0	17.2	-201.8	2.00	2.00	0.00	274.87	
4,086.9	21.67	274.87	3,919.7	80.0	-939.0	0.00	0.00	0.00	0.00	
4,809.4	0.00	0.00	4,625.0	91.4	-1,073.5	3.00	-3.00	0.00	180.00	28-7 #238P ICP
7,378.4	0.00	0.00	7,194.0	91.4	-1,073.5	0.00	0.00	0.00	0.00	28-7 #238P PCP

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #238P
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6183.0usft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6183.0usft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	Grid
Well:	SJ 28-7 #238P	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
15.0	0.00	0.00	15.0	0.0	0.0	0.0	0.00	0.00	0.00
SAN JOSE									
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
374.0	0.00	0.00	374.0	0.0	0.0	0.0	0.00	0.00	0.00
NACIEMENTO									
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	274.87	1,100.0	0.1	-1.7	1.7	2.00	2.00	0.00
1,200.0	4.00	274.87	1,199.8	0.6	-7.0	7.0	2.00	2.00	0.00
1,300.0	6.00	274.87	1,299.5	1.3	-15.6	15.7	2.00	2.00	0.00
1,400.0	8.00	274.87	1,398.7	2.4	-27.8	27.9	2.00	2.00	0.00
1,500.0	10.00	274.87	1,497.5	3.7	-43.4	43.5	2.00	2.00	0.00
1,600.0	12.00	274.87	1,595.6	5.3	-62.4	62.6	2.00	2.00	0.00
1,700.0	14.00	274.87	1,693.1	7.2	-84.8	85.1	2.00	2.00	0.00
1,800.0	16.00	274.87	1,789.6	9.4	-110.6	111.0	2.00	2.00	0.00
1,879.8	17.60	274.87	1,866.0	11.4	-133.5	134.0	2.00	2.00	0.00
OJO ALAMO									
1,900.0	18.00	274.87	1,885.3	11.9	-139.7	140.2	2.00	2.00	0.00
2,000.0	20.00	274.87	1,979.8	14.7	-172.1	172.8	2.00	2.00	0.00
2,011.9	20.24	274.87	1,991.0	15.0	-176.2	176.9	2.00	2.00	0.00
KIRTLAND									
2,083.7	21.67	274.87	2,058.0	17.2	-201.8	202.5	2.00	2.00	0.00
2,100.0	21.67	274.87	2,073.2	17.7	-207.8	208.6	0.00	0.00	0.00
2,200.0	21.67	274.87	2,166.1	20.8	-244.6	245.5	0.00	0.00	0.00
2,300.0	21.67	274.87	2,259.0	24.0	-281.4	282.4	0.00	0.00	0.00
2,366.7	21.67	274.87	2,321.0	26.1	-305.9	307.0	0.00	0.00	0.00
FRUITLAND									
2,400.0	21.67	274.87	2,352.0	27.1	-318.2	319.4	0.00	0.00	0.00
2,500.0	21.67	274.87	2,444.9	30.2	-355.0	356.3	0.00	0.00	0.00
2,600.0	21.67	274.87	2,537.8	33.4	-391.8	393.2	0.00	0.00	0.00
2,700.0	21.67	274.87	2,630.8	36.5	-428.6	430.1	0.00	0.00	0.00
2,800.0	21.67	274.87	2,723.7	39.6	-465.4	467.1	0.00	0.00	0.00
2,830.5	21.67	274.87	2,752.0	40.6	-476.6	478.3	0.00	0.00	0.00
PICTURED CLIFFS									
2,900.0	21.67	274.87	2,816.6	42.8	-502.2	504.0	0.00	0.00	0.00
2,948.8	21.67	274.87	2,862.0	44.3	-520.2	522.0	0.00	0.00	0.00
LEWIS									
3,000.0	21.67	274.87	2,909.6	45.9	-539.0	540.9	0.00	0.00	0.00
3,100.0	21.67	274.87	3,002.5	49.0	-575.8	577.9	0.00	0.00	0.00
3,200.0	21.67	274.87	3,095.4	52.2	-612.6	614.8	0.00	0.00	0.00
3,300.0	21.67	274.87	3,188.4	55.3	-649.4	651.7	0.00	0.00	0.00
3,400.0	21.67	274.87	3,281.3	58.4	-686.2	688.7	0.00	0.00	0.00
3,500.0	21.67	274.87	3,374.2	61.6	-723.0	725.6	0.00	0.00	0.00
3,600.0	21.67	274.87	3,467.1	64.7	-759.8	762.5	0.00	0.00	0.00
3,700.0	21.67	274.87	3,560.1	67.8	-796.6	799.5	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #238P
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6183.0usft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6183.0usft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	Grid
Well:	SJ 28-7 #238P	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,800.0	21.67	274.87	3,653.0	71.0	-833.4	836.4	0.00	0.00	0.00
3,814.0	21.67	274.87	3,666.0	71.4	-838.5	841.6	0.00	0.00	0.00
CHACRA									
3,900.0	21.67	274.87	3,745.9	74.1	-870.2	873.3	0.00	0.00	0.00
3,967.9	21.67	274.87	3,809.0	76.2	-895.1	898.4	0.00	0.00	0.00
HUERFANITO BENTONITE									
4,000.0	21.67	274.87	3,838.9	77.3	-907.0	910.3	0.00	0.00	0.00
4,086.9	21.67	274.87	3,919.7	80.0	-939.0	942.4	0.00	0.00	0.00
4,100.0	21.28	274.87	3,931.8	80.4	-943.7	947.1	3.00	-3.00	0.00
4,200.0	18.28	274.87	4,025.9	83.3	-977.4	981.0	3.00	-3.00	0.00
4,300.0	15.28	274.87	4,121.6	85.7	-1,006.2	1,009.8	3.00	-3.00	0.00
4,400.0	12.28	274.87	4,218.7	87.7	-1,029.9	1,033.7	3.00	-3.00	0.00
4,500.0	9.28	274.87	4,317.0	89.3	-1,048.6	1,052.4	3.00	-3.00	0.00
4,541.5	8.04	274.87	4,358.0	89.8	-1,054.8	1,058.6	3.00	-3.00	0.00
MASSIVE-UPPER CLIFF HOUSE									
4,600.0	6.28	274.87	4,416.0	90.5	-1,062.1	1,065.9	3.00	-3.00	0.00
4,658.2	4.53	274.87	4,474.0	90.9	-1,067.5	1,071.4	3.00	-3.00	0.00
MENEFEE									
4,700.0	3.28	274.87	4,515.7	91.2	-1,070.4	1,074.2	3.00	-3.00	0.00
4,800.0	0.28	274.87	4,615.6	91.4	-1,073.5	1,077.4	3.00	-3.00	0.00
4,809.4	0.00	0.00	4,625.0	91.4	-1,073.5	1,077.4	3.00	-3.00	0.00
4,900.0	0.00	0.00	4,715.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,000.0	0.00	0.00	4,815.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,100.0	0.00	0.00	4,915.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,134.4	0.00	0.00	4,950.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
POINT LOOKOUT									
5,200.0	0.00	0.00	5,015.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,300.0	0.00	0.00	5,115.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,215.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,315.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,524.4	0.00	0.00	5,340.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
MANCOS									
5,600.0	0.00	0.00	5,415.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,515.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,615.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
5,900.0	0.00	0.00	5,715.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,815.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,100.0	0.00	0.00	5,915.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,015.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,300.0	0.00	0.00	6,115.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,305.4	0.00	0.00	6,121.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
UPPER GALLUP									
6,400.0	0.00	0.00	6,215.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,500.0	0.00	0.00	6,315.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,415.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,700.0	0.00	0.00	6,515.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,615.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
6,900.0	0.00	0.00	6,715.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,815.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
7,048.4	0.00	0.00	6,864.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
GREENHORN									
7,100.0	0.00	0.00	6,915.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database: EDM Central Planning	Local Co-ordinate Reference: Well SJ 28-7 #238P
Company: ConocoPhillips SJBU	TVD Reference: WELL @ 6183.0usft (Original Well Elev)
Project: San Juan Basin - New Mexico West Wells	MD Reference: WELL @ 6183.0usft (Original Well Elev)
Site: San Juan 28 Wells	North Reference: Grid
Well: SJ 28-7 #238P	Survey Calculation Method: Minimum Curvature
Wellbore: Wellbore #1	
Design: Design #2	

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,106.4	0.00	0.00	6,922.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
GRANEROS									
7,150.4	0.00	0.00	6,966.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
TWO WELLS									
7,200.0	0.00	0.00	7,015.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
7,245.4	0.00	0.00	7,061.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
PAGUATE									
7,273.4	0.00	0.00	7,089.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
UPPER CUBERO									
7,291.4	0.00	0.00	7,107.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
LOWER CUBERO									
7,300.0	0.00	0.00	7,115.6	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
7,363.4	0.00	0.00	7,179.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00
ENCINAL									
7,378.4	0.00	0.00	7,194.0	91.4	-1,073.5	1,077.4	0.00	0.00	0.00

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
28-7 #238P ICP	0.00	0.00	4,625.0	91.4	-1,073.5	2,047,990.72	567,477.61	36° 37' 41.457 N	107° 36' 12.142 W
- plan hits target center									
- Point									
28-7 #238P PCP	0.00	0.00	7,194.0	91.5	-1,073.5	2,047,990.77	567,477.58	36° 37' 41.457 N	107° 36' 12.142 W
- plan misses target center by 0.1usft at 7378.4usft MD (7194.0 TVD, 91.4 N, -1073.5 E)									
- Point									

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #238P
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6183.0usft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6183.0usft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	Grid
Well:	SJ 28-7 #238P	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Formations

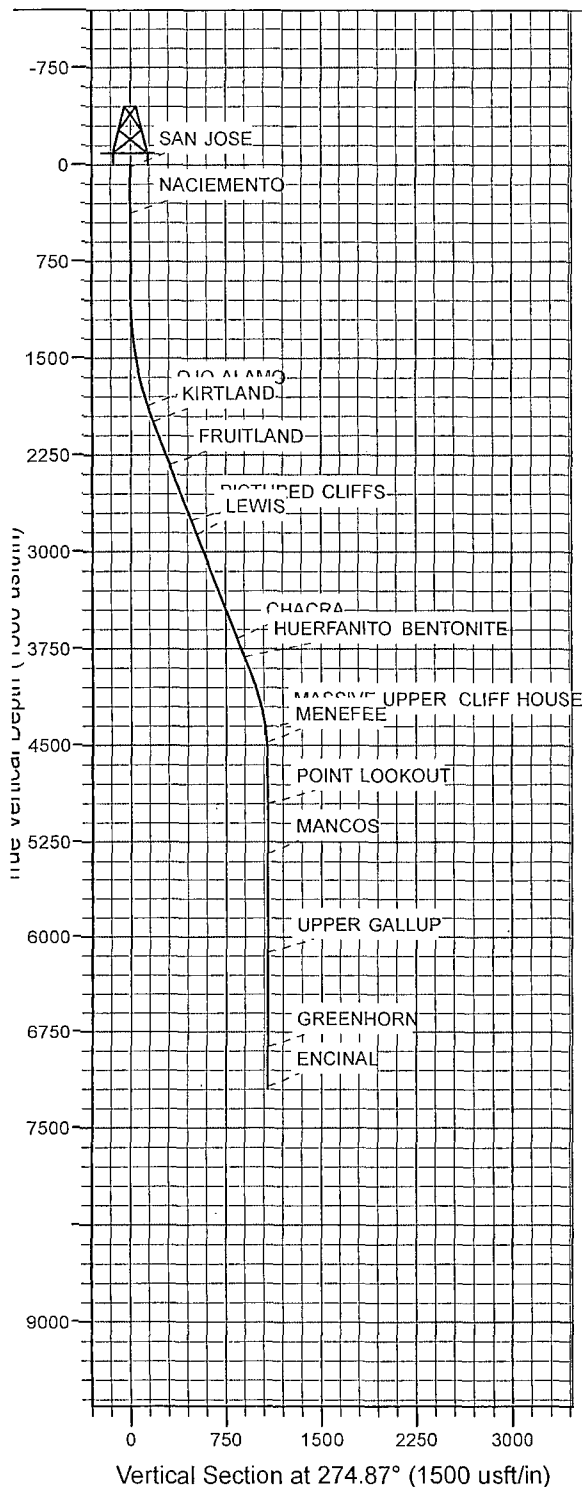
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,048.4	6,864.0	GREENHORN		0.00	
7,245.4	7,061.0	PAGUATE		0.00	
4,541.5	4,358.0	MASSIVE-UPPER CLIFF HOUSE		0.00	
5,134.4	4,950.0	POINT LOOKOUT		0.00	
3,967.9	3,809.0	HUERFANITO BENTONITE		0.00	
3,814.0	3,666.0	CHACRA		0.00	
2,830.5	2,752.0	PICTURED CLIFFS		0.00	
7,363.4	7,179.0	ENCINAL		0.00	
2,366.7	2,321.0	FRUITLAND		0.00	
5,524.4	5,340.0	MANCOS		0.00	
6,305.4	6,121.0	UPPER GALLUP		0.00	
7,291.4	7,107.0	LOWER CUBERO		0.00	
7,106.4	6,922.0	GRANEROS		0.00	
7,273.4	7,089.0	UPPER CUBERO		0.00	
2,011.9	1,991.0	KIRTLAND		0.00	
4,658.2	4,474.0	MENEFEE		0.00	
374.0	374.0	NACIMIENTO		0.00	
15.0	15.0	SAN JOSE		0.00	
1,879.8	1,866.0	OJO ALAMO		0.00	
2,948.8	2,862.0	LEWIS		0.00	
7,150.4	6,966.0	TWO WELLS		0.00	

REFERENCE INFORMATION
 Well @ 6183.0usft (Original Well Elev)
 Round Elevation 6168.0
 Reference Lat: 36° 37' 40.527 N
 Reference Long: 107° 35' 58.975 W

Project: San Juan Basin - New Mexico West V
 Site: San Juan 28 Wells
 Well: SJ 28-7 #238P
 Wellbore: Wellbore #1
 Design: Design #2

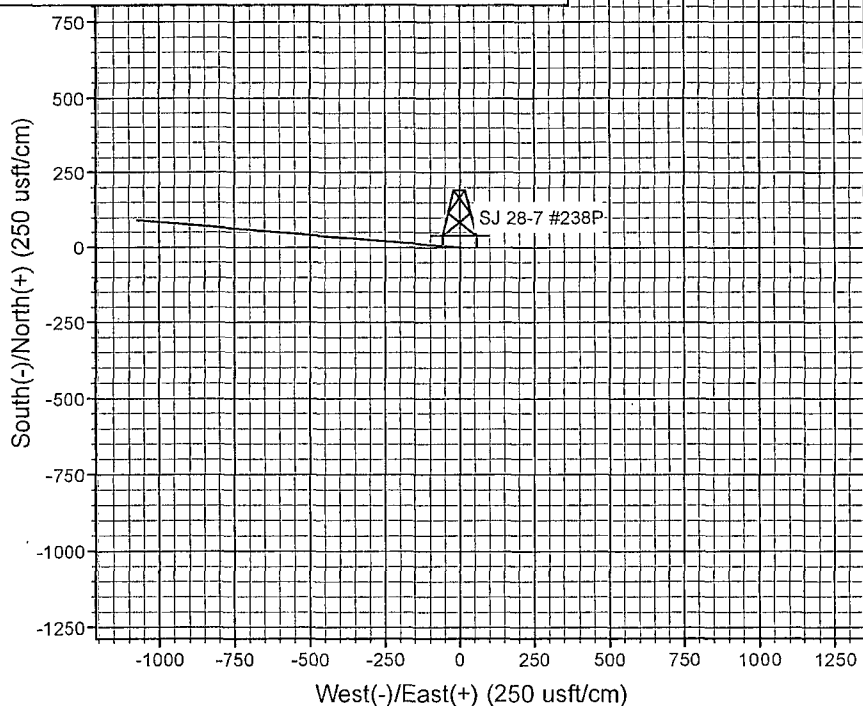
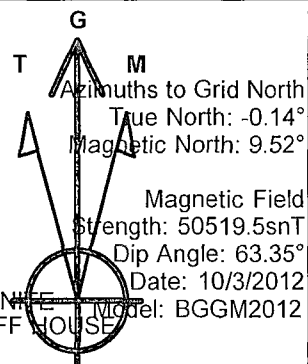
SECTION DETAILS

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	2083.7	21.67	274.87	2058.0	17.2	-201.8	2.00	274.87	202.5	
4	4086.9	21.67	274.87	3919.7	80.0	-939.0	0.00	0.00	942.4	
5	4809.4	0.00	0.00	4625.0	91.4	-1073.5	3.00	180.00	1077.4	28-7 #238P ICP
6	7378.4	0.00	0.00	7194.0	91.4	-1073.5	0.00	0.00	1077.4	28-7 #238P PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
15.0	15.0	SAN JOSE
374.0	374.0	NACIEMENTO
1866.0	1879.8	OJO ALAMO
1991.0	2011.9	KIRTLAND
2321.0	2366.7	FRUITLAND
2752.0	2830.5	PICTURED CLIFFS
2862.0	2948.8	LEWIS
3666.0	3814.0	CHACRA
3809.0	3967.9	HUERFANITO BENTONITE
4358.0	4541.5	MASSIVE UPPER CLIFF HOUSE
4474.0	4658.2	MENELEE
4950.0	5134.4	POINT LOOKOUT
5340.0	5524.4	MANCOS
6121.0	6305.4	UPPER GALLUP
6864.0	7048.4	GREENHORN
6922.0	7106.4	GRANEROS
6966.0	7150.4	TWO WELLS
7061.0	7245.4	PAGUATE
7089.0	7273.4	UPPER CUBERO
7107.0	7291.4	LOWER CUBERO
7179.0	7363.4	ENCINAL



CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 UNIT 238P

1060' FSL, 1613' FWL

SECTION 29, T-28-N, R-7-W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO

NAD 83 LAT.: 36.627931°N LONG.: 107.600323°W

NAD 83 LAT.: 36°37'40.55"N LONG.: 107°36'01.16"W

ELEV.: 6168 NAVD88

TWIN WITH SJ 28-7 #238 P&A, NO NEW ACCESS ROAD

FROM BLOOMFIELD, N.M. AT INTERSECTION OF US HWY 550 AND US HWY 64:

- GO 10.6 MILES EAST ON US HWY. 64 THROUGH BLANCO, N.M. AND ACROSS THE SAN JUAN RIVER TO THE INTERSECTION OF US HWY. 64 & C.R. 4450 (LARGO CANYON). TURN RIGHT & HEAD SOUTH EAST ON C.R. 4450 ALONG THE NORTH SIDE OF LARGO WASH.
- GO 3.6 MILES SOUTH EAST ON C.R. 4450. TURN LEFT, TOWARDS CUTTER DAM.
- GO 5.8 MILES SOUTH EAST TO NINE MILE BRIDGE. CROSS BRIDGE AND CONTINUE SOUTH EAST ON SOUTH SIDE OF WASH.
- GO 4.3 MILES SOUTH EAST INTO CARRIZO CANYON. STAY LEFT AT TURN OFF TO STOVE CANYON, CONTINUE EASTERLY ALONG THE SOUTH SIDE OF CARRIZO.
- GO 1.4 MILES INTO MARTIN CANYON. TURN LEFT.
- GO 0.25 MILES NORTH UP HILL TO WELL PAD. TURN LEFT.
- NEW WELL STAKED AS TWIN, 71 FEET NORTH OF P&A WELL.