

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUN 14 2012

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG ^{Blanco 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 NM-03560 Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator ConocoPhillips Company		7. Unit Agreement Name NMNM-78413A-MV NMNM-78413C-DK 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 RCVD AUG 10 '12 OIL CONS. DIV. DIST. 3
4. Location of Well Surface: Unit N (SESW), 735' FSL & 1645' FWL BHL : Unit M (SWSW), 710' FSL & 380' FWL Surface: Latitude: 36.538651° N (NAD83) Longitude: 107.601938° W BHL : Latitude: 36.538593° N (NAD83) Longitude: 107.606237° W		10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 29, T27N, R7W API # 30-039-31121
14. Distance in Miles from Nearest Town 25.8 miles from Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 380'		
16. Acres in Lease 1281.440	17. Acres Assigned to Well MV - 320.00 W/2 DK - 320.00 S/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 50' from SJ 28-7 99 MV/DK		
19. Proposed Depth 7512	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6676' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	<u>6-14-12</u> Date	

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE AFM

DATE 8/9/12

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

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

SEP 06 2012

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

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 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. 14 2012
Santa Fe, NM 87505

Form C-102
Revised July 16, 2010

Submit One Copy to Appropriate
District Office

Farmington Field Office
Bureau of Land Management

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-3112	² Pool Code 71599/72319	³ Pool Name BASIN DAKOTA/BLANCO MESAVERDE
⁴ Property Code 31739	⁶ Property Name SAN JUAN 28-7 UNIT	⁵ Well Number 99N
⁷ OGRD No. 21787	⁸ Operator Name CONOCOPHILLIPS COMPANY	⁹ Elevation 6676'

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	29	27-N	7-W		735'	SOUTH	1645'	WEST	RIO ARriba

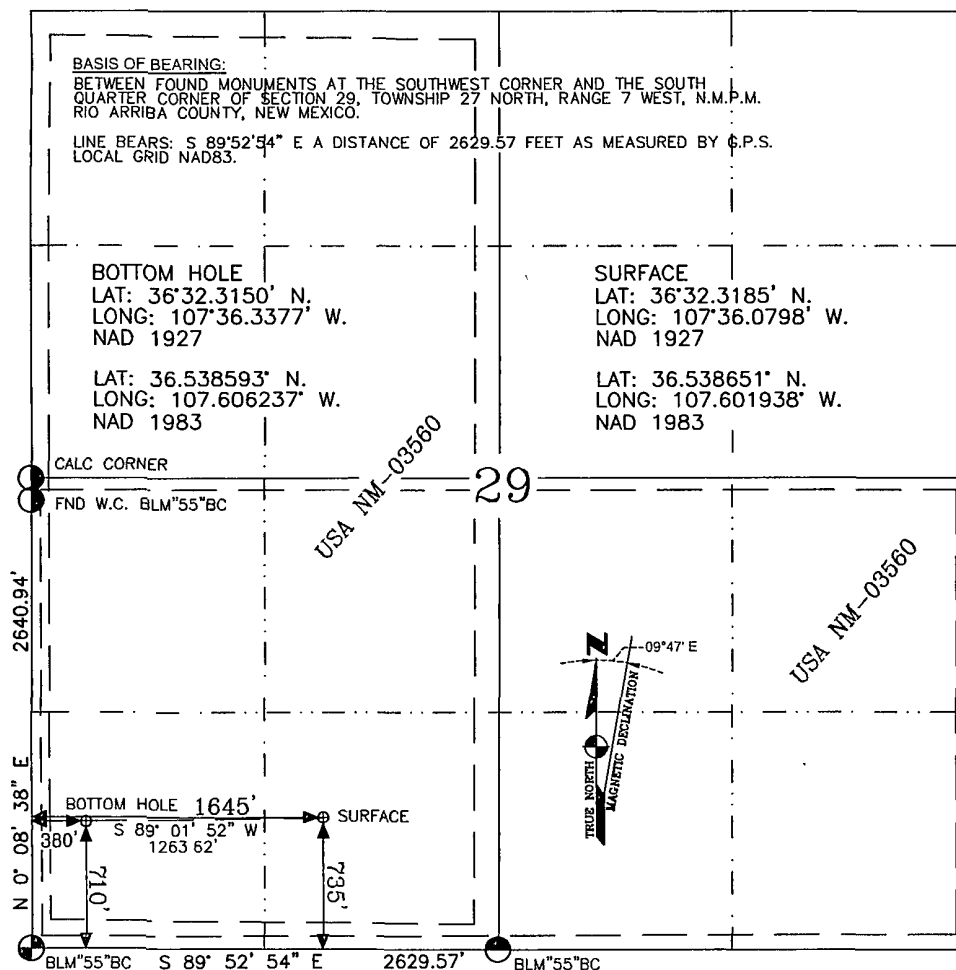
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	29	27-N	7-W		710'	SOUTH	380'	WEST	RIO ARriba

¹² Dedicated Acres DK 320.0 ACRES S/2 MV 320.0 ACRES W/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

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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
a working interest, or to a voluntary pooling agreement
or a compulsory pooling order heretofore entered by the
division.

Arleen Kellywood 7-11-11
Signature Date

Arleen Kellywood
Printed Name

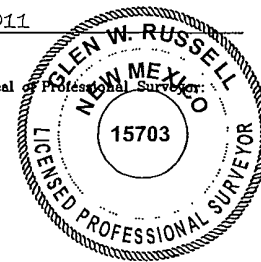
arleen.r.kellywood@conocophillips.com
E-Mail Address

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.

JULY 8, 2011
Date of Survey

Signature and Seal of Professional Surveyor:



GLEN W. RUSSELL
Certificate Number 15703

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 99N

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1023				AFE \$: 0.00	
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: McKee, Cory J		Phone: +1 505-326-9826		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: 36.538642	Longitude: -107.601330	X:	Y:	Section: 29		Range: 007W	
Footage X: 1645 FWL	Footage Y: 735 FSL	Elevation: 6676	(FT)	Township: 027N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.538584	Longitude: -107.605629	X:	Y:	Section: 29		Range: 007W	
Footage X: 380 FWL	Footage Y: 710 FSL	Elevation:	(FT)	Township: 027N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6691		Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	350	6341		☐			12-1/4 hole. 350' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 198 cuft. Circulate cement to surface.
NACIMIENTO	619	6072		☐			
OJO ALAMO	2122	4569		☐			
KIRTLAND	2269	4422		☐			
FRUITLAND	2518	4173		☐			Possible Gas
PICTURED CLIFFS	2923	3768		☐			
LEWIS	3055	3636		☐			
HUERFANITO BENTONITE	3409	3282		☐			
CHACRA	3836	2855		☐			
UPPER CLIFF HOUSE	4498	2193		☐			Gas
MASSIVE CLIFF HOUSE	4587	2104		☐	290		Gas; Cliffhouse is wet
MENEFEE	4626	2065		☐			Est. Top Perf - 4826(1865)
Intermediate Casing	4776	1915		☐		110	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1145 cuft. Circulate cement to surface.
POINT LOOKOUT	5204	1487		☐			
MANCOS	5537	1154		☐			
UPPER GALLUP	6357	334		☐			
GREENHORN	7165	-474		☐			
GRANEROS	7222	-531		☐			
TWO WELLS	7268	-577		☐	2951		Gas
PAGUATE	7276	-585		☐			
UPPER CUBERO	7373	-682		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 UNIT 99N

DEVELOPMENT

LOWER CUBERO	7397	-706	☐	Est. Btm Perf ~7457' (15' above the Encinal top)
ENCINAL	7472	-781	☐	TD - 40' Below T/ENCN
Total Depth	7512	-821	☐	192 6-1/4" hole, 4-1/2" 11.6 ppf, J-55/L-80, LTC casing. Cement w/ 377 cuft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:

Reference Type	Well Name	Comments
Production	HARRINGTON-9M	27N 7W 31 SW NE NE
Production	SJ 28-7-98M	27N 7W 29 SE SE NW
Production	SJ 28-7 UNIT-99	27N 7W 29 NW SE SW

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 28-7 #99N
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6691.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6691.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #99N	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 28-7 #99N				
Well Position	+N/-S	0.0 ft	Northing:	2,015,396.19 ft	Latitude: 36° 32' 19.110 N
	+E/-W	0.0 ft	Easting:	568,155.66 ft	Longitude: 107° 36' 4.788 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level: 6,676.0 ft

Wellbore	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2011	6/7/2012	9.68	63.29	50,504

Design	Plan #1
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Audit Notes:

Version:	Phase: PROTOTYPE	Tie On Depth: 0.0
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Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	269.04

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,244.4	24.89	269.04	2,205.6	-4.5	-266.0	2.00	2.00	0.00	269.04	
4,191.9	24.89	269.04	3,972.2	-18.2	-1,085.5	0.00	0.00	0.00	0.00	
5,021.5	0.00	0.00	4,776.0	-21.2	-1,262.8	3.00	-3.00	0.00	180.00	SJ 28-7 #99N ICP
7,757.5	0.00	0.00	7,512.0	-21.2	-1,262.8	0.00	0.00	0.00	0.00	SJ 28-7 #99N PCP

ConocoPhillips or its affiliates

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Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6691.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #99N	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
619.0	0.00	0.00	619.0	0.0	0.0	0.0	0.00	0.00	0.00
NACIEMENTO									
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	269.04	1,100.0	0.0	-1.7	1.7	2.00	2.00	0.00
1,200.0	4.00	269.04	1,199.8	-0.1	-7.0	7.0	2.00	2.00	0.00
1,300.0	6.00	269.04	1,299.5	-0.3	-15.7	15.7	2.00	2.00	0.00
1,400.0	8.00	269.04	1,398.7	-0.5	-27.9	27.9	2.00	2.00	0.00
1,500.0	10.00	269.04	1,497.5	-0.7	-43.5	43.5	2.00	2.00	0.00
1,600.0	12.00	269.04	1,595.6	-1.1	-62.6	62.6	2.00	2.00	0.00
1,700.0	14.00	269.04	1,693.1	-1.4	-85.1	85.1	2.00	2.00	0.00
1,800.0	16.00	269.04	1,789.6	-1.9	-111.0	111.0	2.00	2.00	0.00
1,900.0	18.00	269.04	1,885.3	-2.4	-140.2	140.2	2.00	2.00	0.00
2,000.0	20.00	269.04	1,979.8	-2.9	-172.7	172.8	2.00	2.00	0.00
2,100.0	22.00	269.04	2,073.2	-3.5	-208.6	208.6	2.00	2.00	0.00
2,152.9	23.06	269.04	2,122.0	-3.8	-228.8	228.9	2.00	2.00	0.00
OJO ALAMO									
2,200.0	24.00	269.04	2,165.2	-4.2	-247.6	247.7	2.00	2.00	0.00
2,244.4	24.89	269.04	2,205.6	-4.5	-266.0	266.1	2.00	2.00	0.00
2,300.0	24.89	269.04	2,256.1	-4.9	-289.4	289.4	0.00	0.00	0.00
2,314.3	24.89	269.04	2,269.0	-5.0	-295.4	295.4	0.00	0.00	0.00
KIRTLAND									
2,400.0	24.89	269.04	2,346.8	-5.6	-331.5	331.5	0.00	0.00	0.00
2,500.0	24.89	269.04	2,437.5	-6.3	-373.6	373.6	0.00	0.00	0.00
2,588.7	24.89	269.04	2,518.0	-6.9	-410.9	411.0	0.00	0.00	0.00
FRUITLAND									
2,600.0	24.89	269.04	2,528.2	-7.0	-415.6	415.7	0.00	0.00	0.00
2,700.0	24.89	269.04	2,618.9	-7.7	-457.7	457.8	0.00	0.00	0.00
2,800.0	24.89	269.04	2,709.6	-8.4	-499.8	499.9	0.00	0.00	0.00
2,900.0	24.89	269.04	2,800.3	-9.1	-541.9	542.0	0.00	0.00	0.00
3,000.0	24.89	269.04	2,891.1	-9.8	-584.0	584.0	0.00	0.00	0.00
3,035.2	24.89	269.04	2,923.0	-10.1	-598.8	598.9	0.00	0.00	0.00
PICTURED CLIFFS									
3,100.0	24.89	269.04	2,981.8	-10.5	-626.0	626.1	0.00	0.00	0.00
3,180.7	24.89	269.04	3,055.0	-11.1	-660.0	660.1	0.00	0.00	0.00
LEWIS									
3,200.0	24.89	269.04	3,072.5	-11.2	-668.1	668.2	0.00	0.00	0.00
3,300.0	24.89	269.04	3,163.2	-11.9	-710.2	710.3	0.00	0.00	0.00
3,400.0	24.89	269.04	3,253.9	-12.6	-752.3	752.4	0.00	0.00	0.00
3,500.0	24.89	269.04	3,344.6	-13.3	-794.4	794.5	0.00	0.00	0.00
3,571.0	24.89	269.04	3,409.0	-13.8	-824.2	824.3	0.00	0.00	0.00
HUERFANITO BENTONITE									
3,600.0	24.89	269.04	3,435.3	-14.0	-836.4	836.6	0.00	0.00	0.00
3,700.0	24.89	269.04	3,526.1	-14.8	-878.5	878.6	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #99N
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6691.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6691.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #99N	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)
3,800.0	24.89	269.04	3,616.8	-15.5	-920.6	920.7	0.00	0.00	0.00
3,900.0	24.89	269.04	3,707.5	-16.2	-962.7	962.8	0.00	0.00	0.00
4,000.0	24.89	269.04	3,798.2	-16.9	-1,004.8	1,004.9	0.00	0.00	0.00
4,041.7	24.89	269.04	3,836.0	-17.2	-1,022.3	1,022.4	0.00	0.00	0.00
CHACRA									
4,100.0	24.89	269.04	3,888.9	-17.6	-1,046.8	1,047.0	0.00	0.00	0.00
4,191.9	24.89	269.04	3,972.2	-18.2	-1,085.5	1,085.6	0.00	0.00	0.00
4,200.0	24.64	269.04	3,979.6	-18.3	-1,088.9	1,089.0	3.00	-3.00	0.00
4,300.0	21.64	269.04	4,071.6	-18.9	-1,128.2	1,128.3	3.00	-3.00	0.00
4,400.0	18.64	269.04	4,165.4	-19.5	-1,162.6	1,162.8	3.00	-3.00	0.00
4,500.0	15.64	269.04	4,261.0	-20.0	-1,192.1	1,192.3	3.00	-3.00	0.00
4,600.0	12.64	269.04	4,357.9	-20.4	-1,216.5	1,216.7	3.00	-3.00	0.00
4,700.0	9.64	269.04	4,456.0	-20.8	-1,235.8	1,236.0	3.00	-3.00	0.00
4,742.5	8.37	269.04	4,498.0	-20.9	-1,242.5	1,242.7	3.00	-3.00	0.00
UPPER CLIFF HOUSE									
4,800.0	6.64	269.04	4,555.0	-21.0	-1,250.0	1,250.2	3.00	-3.00	0.00
4,832.2	5.68	269.04	4,587.0	-21.1	-1,253.5	1,253.6	3.00	-3.00	0.00
MASSIVE CLIFF HOUSE									
4,871.3	4.50	269.04	4,626.0	-21.1	-1,256.9	1,257.1	3.00	-3.00	0.00
MENEFEE									
4,900.0	3.64	269.04	4,654.6	-21.1	-1,259.0	1,259.1	3.00	-3.00	0.00
5,000.0	0.64	269.04	4,754.5	-21.2	-1,262.7	1,262.9	3.00	-3.00	0.00
5,021.5	0.00	0.00	4,776.0	-21.2	-1,262.8	1,263.0	3.00	-3.00	423.66
SJ 28-7 #99N ICP									
5,100.0	0.00	0.00	4,854.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,200.0	0.00	0.00	4,954.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,054.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,154.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,449.5	0.00	0.00	5,204.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
POINT LOOKOUT									
5,500.0	0.00	0.00	5,254.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,354.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,454.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,782.5	0.00	0.00	5,537.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
MANCOS									
5,800.0	0.00	0.00	5,554.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,654.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,754.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,100.0	0.00	0.00	5,854.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,200.0	0.00	0.00	5,954.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,054.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,154.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,254.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,354.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,602.5	0.00	0.00	6,357.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
UPPER GALLUP									
6,700.0	0.00	0.00	6,454.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,554.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,654.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,754.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,854.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,200.0	0.00	0.00	6,954.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #99N
Company:	ConocoPhillips SJB	TVD Reference:	WELL @ 6691.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6691.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #99N	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)
7,300.0	0.00	0.00	7,054.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,154.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,410.5	0.00	0.00	7,165.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
GREENHORN									
7,467.5	0.00	0.00	7,222.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
GRANEROS									
7,500.0	0.00	0.00	7,254.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,513.5	0.00	0.00	7,268.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
TWO WELLS									
7,521.5	0.00	0.00	7,276.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
PAGUATE									
7,600.0	0.00	0.00	7,354.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,618.5	0.00	0.00	7,373.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
UPPER CUBERO									
7,642.5	0.00	0.00	7,397.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
LOWER CUBERO									
7,700.0	0.00	0.00	7,454.5	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
7,717.5	0.00	0.00	7,472.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
ENCINAL									
7,757.5	0.00	0.00	7,512.0	-21.2	-1,262.8	1,263.0	0.00	0.00	0.00
SJ 28-7 #99N PCP									

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									
SJ 28-7 #99N PCP	0.00	0.00	7,512.0	-21.2	-1,262.8	2,015,371.94	566,892.99	36° 32' 18.900 N	107° 36' 20.262 W
- plan hits target center									
- Point									
SJ 28-7 #99N ICP	0.00	0.00	4,776.0	-21.2	-1,262.8	2,015,371.94	566,892.99	36° 32' 18.900 N	107° 36' 20.262 W
- plan hits target center									
- Point									

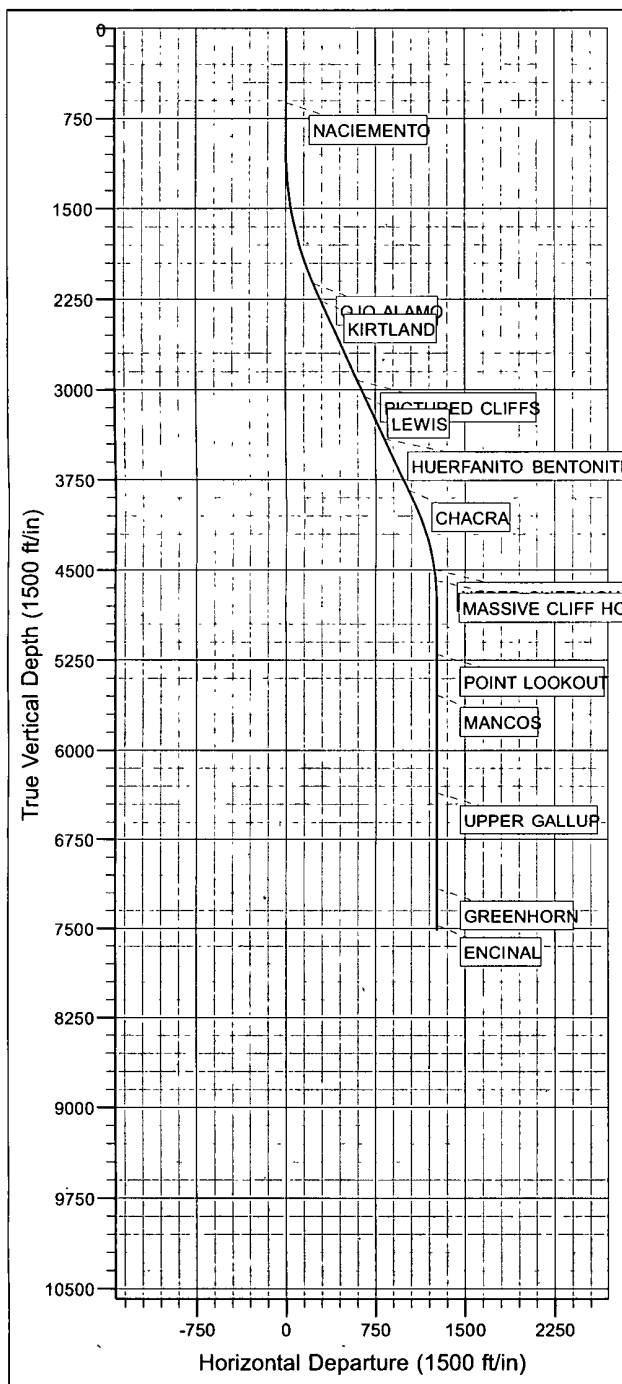
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Planning Report

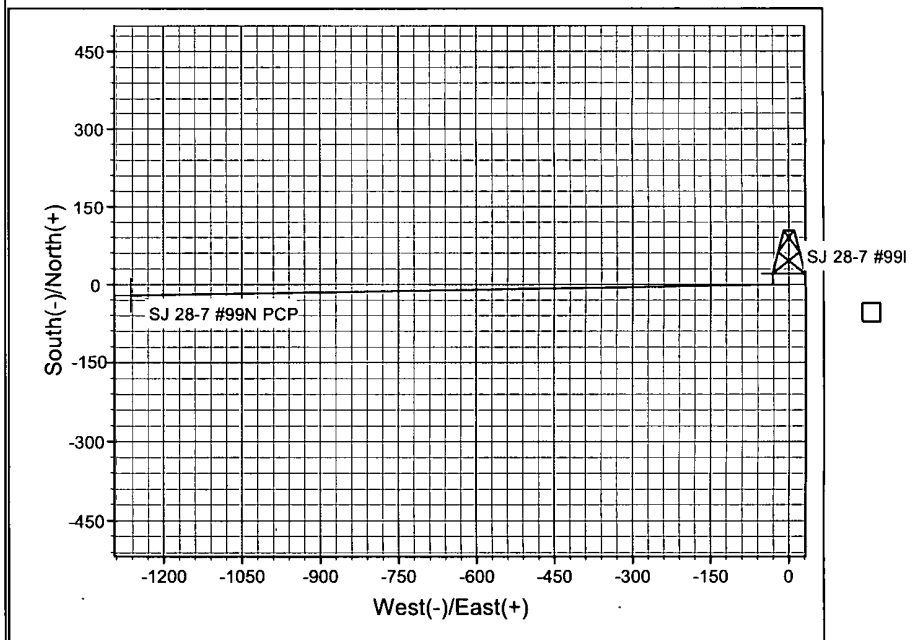
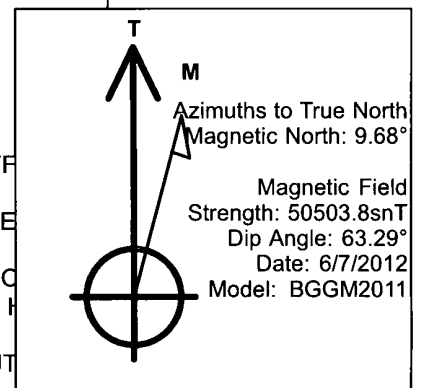
Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #99N
Company:	ConocoPhillips SJBU	TVD Reference:	WELL @ 6691.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	WELL @ 6691 0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #99N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,642.5	7,397.0	LOWER CUBERO		0.00		
619.0	619.0	NACIEMENTO		0.00		
5,449.5	5,204.0	POINT LOOKOUT		0.00		
5,782.5	5,537.0	MANCOS		0.00		
2,588.7	2,518.0	FRUITLAND		0.00		
3,571.0	3,409.0	HUERFANITO BENTONITE		0.00		
4,041.7	3,836.0	CHACRA		0.00		
4,742.5	4,498.0	UPPER CLIFF HOUSE		0.00		
3,035.2	2,923.0	PICTURED CLIFFS		0.00		
7,513.5	7,268.0	TWO WELLS		0.00		
7,410.5	7,165.0	GREENHORN		0.00		
4,871.3	4,626.0	MENEFEE		0.00		
7,467.5	7,222.0	GRANEROS		0.00		
3,180.7	3,055.0	LEWIS		0.00		
7,618.5	7,373.0	UPPER CUBERO		0.00		
2,152.9	2,122.0	OJO ALAMO		0.00		
7,521.5	7,276.0	PAGUATE		0.00		
2,314.3	2,269.0	KIRTLAND		0.00		
4,832.2	4,587.0	MASSIVE CLIFF HOUSE		0.00		
7,717.5	7,472.0	ENCINAL		0.00		
6,602.5	6,357.0	UPPER GALLUP		0.00		

REFERENCE INFORMATION		Project: San Juan Basin - New Mexico West V								
WELL @ 6691.0ft (Original Well Elev)		Site: San Juan 28 Wells								
Ground Elevation 6676.0		Well: SJ 28-7 #99N								
Reference Lat: 36° 32' 19.110 N		Wellbore: Wellbore #1								
Reference Long: 107° 36' 4.788 W		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	2244.4	24.89	269.04	2205.6	-4.5	-266.0	2.00	269.04	266.1	
4	4191.9	24.89	269.04	3972.2	-18.2	-1085.5	0.00	0.00	1085.6	
5	5021.5	0.00	0.00	4776.0	-21.2	-1262.8	3.00	180.00	1263.0	SJ 28-7 #99N ICP
6	7757.5	0.00	0.00	7512.0	-21.2	-1262.8	0.00	0.00	1263.0	SJ 28-7 #99N PCP



FORMATION TOP DETAILS		
VDPPath	MDPath	Formation
619.0	619.0	NACIMIENTO
2122.0	2152.9	OJO ALAMO
2269.0	2314.3	KIRTLAND
2518.0	2588.7	FRUITLAND
2923.0	3035.2	PICTURED CLIFF
3055.0	3180.7	LEWIS
3409.0	3571.0	HUERFANITO BE
3836.0	4041.7	CHACRA
4498.0	4742.5	UPPER CLIFF HO
4587.0	4832.2	MASSIVE CLIFF H
4626.0	4871.3	MENEFEE
5204.0	5449.5	POINT LOOKOUT
5537.0	5782.5	MANCOS
6357.0	6602.5	UPPER GALLUP
7165.0	7410.5	GREENHORN
7222.0	7467.5	GRANEROS
7268.0	7513.5	TWO WELLS
7276.0	7521.5	PAGUATE
7373.0	7618.5	UPPER CUBERO
7397.0	7642.5	LOWER CUBERO
7472.0	7717.5	ENCINAL



Directions from the Post Office in Blanco, NM

To:

CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 UNIT 99N

735' FSL & 1645' FWL,

Section 29, T27N, R7W, N.M.P.M., Rio Arriba County,

New Mexico

Latitude: 36° 32' 19.14620" N

Longitude: 107° 36' 06.97821" W

Nad 83

Go East on Hwy 64 for 1.2 miles,
turn right (southerly) on CR 4450 for 3.7 miles,
stay left at y-Intersec (southeasterly) 5.7 miles,
turn right (south) 0.2 miles across wash,
turn left (southeasterly) for 3.9 miles,
continue (southerly) 3.4 miles,
to the top of Gould Pass,
continue (easterly) 1.9 miles,
turn right (southerly) 0.2 miles,
turn right (southwesterly) 0.4 miles,
continue (southerly) 1.2 miles,
turn left (southeasterly) 1.2 miles,
turn right (southwesterly) 0.6 miles,
stay right (southwesterly) 2.2 miles,
stay right (westerly) 0.1 miles,
to newly staked location twinned on existing well pad,
SAN JUAN 28-7 UNIT 99.