

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

Farmington Field
Bureau of Land Management

5. Lease Serial No
SF-079403

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No
San Juan 27-5 Unit

8. Well Name and No.
San Juan 27-5 Unit 128N

9. API Well No.
30-039-30611

10. Field and Pool or Exploratory Area
Blanco MV/Basin Mancos/Basin DK

11. Country or Parish, State
Rio Arriba, New Mexico

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Burlington Resources Oil & Gas Company LP

3a. Address
PO Box 4289, Farmington, NM 87499

3b. Phone No (include area code)
(505) 326-9700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Surface Unit 1 (NESE), 1509' FSL & 940' FEL, Sec. 27, T27N, R5W
Bottomhole Unit 1 (NESE), 1289' FSL & 940' FEL, Sec. 27, T27N, R5W

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Nudge Well
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

For anti-collision issues with the two wells we are twinned with on this well (#162 & #162R), Burlington Resources is now proposing to nudge this well approximately 220' due south of the surface location. Attached is a new Project Proposal, Directional Drill Plan, & C102. Please note that the Surface Casing setting depth was also changed to 200' from 350' and the TD is also slightly different.

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

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations

RCVD MAY 23 '12
OIL CONS. DIV.
DIST. 3

Hold C104
for Directional Survey
and "As Drilled" plat

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)

DENISE JOURNEY

Title **REGULATORY TECHNICIAN**

Signature

Denise Journey

Date

5/15/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Shea C. Valt

Title

PE

Date

5/16/12

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

FEO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

(Instruction on page 2)

OPERATOR
NMOCD

Hold C104
for Directional Survey
and "As Drilled" plat

PC

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, N.M. 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, N.M. 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

Farmington Field Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30611	² Pool Code 71599/72319/97232	³ Pool Name DAKOTA / MESA VERDE
⁴ Property Code 7454	⁵ Property Name SAN JUAN 27-5 UNIT	⁶ Well Number 128N
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6542

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
I	27	27 N	5 W	LOT 9	1509	SOUTH	940	EAST	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
I	27	27 N	5 W	LOT 9	1289	SOUTH	940	EAST	RIO ARRIBA

¹² Dedicated Acres 310.51 (DK S/2) 294.64 (MV E/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

¹⁶ N 89°52'51" W LEGEND: ○ = SURFACE LOCATION ● = BOTTOM HOLE LOCATION LOT 4 34.82 LOT 3 35.25 LOT 5 35.00 LOT 6 35.44 SECTION 27	5264.02' 00°17'38" LOT 2 35.71 LOT 1 36.12 G.N.=GRID NORTH T.N.=TRUE NORTH CONVERGENCE AT SURFACE LOCATION USA SF-079403 LOT 7 35.94 LOT 8 36.38	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 <u>Denise Journey</u> Date <u>5/15/12</u> Printed Name <u>Denise Journey</u> E-mail Address <u>Denise.Journey@conocophillips.com</u>
USA SF-079394 S 1°30'48" E 219.67' BEARINGS & DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NAD 83, UNLESS OTHERWISE NOTED. S 89°24'54" W 2707.39'	SURFACE LAT: 36.542367° N LONG: 107.339810° W NAD 83 LOT 9 37.15 BOTTOM HOLE LAT: 36°32.5414' N LONG: 107°20.3526' W NAD 27 LOT 10 37.85 LOT 11 38.11 LOT 12 37.40	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. 05/05/08 Date of Survey Signature and Seal of Professional Surveyor <u>Marshall W. Linden</u> 17078 Certificate Number

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-5 UNIT 128N

DEVELOPMENT

Lease:		AFE #: WAN.CDR.8079				AFE \$: 2,115,837.70	
Field Name: SAN JUAN 27-5 UNIT		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA		API #: 3003930611
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						
R20076	DAKOTA(R20076)						
RCO085	MANCOS(RCO085)						
R20002	MESAVERDE(R20002)						
Location: Surface Datum Code: NAD 27 Straight Hole							
Latitude: 36.542357		Longitude: -107.339209		X:	Y:	Section: 27	Range: 005W
Footage X: 940 FEL		Footage Y: 1509 FSL		Elevation: 6542 (FT)		Township: 027N	
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6558 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6358		☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
OJO ALAMO	2569	3989		☐			
KIRTLAND	2902	3656		☐			
FRUITLAND	3014	3544		☐			Possible Gas
PICTURED CLIFFS	3313	3245		☐			
LEWIS	3393	3165		☐			
Intermediate Casing	3493	3065		☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Cement with 787 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	3663	2895		☐			
CHACRA	4272	2286		☐			Est. Top Perf - 4272 (2286)
UPPER CLIFF HOUSE	4934	1624		☐			Gas
MASSIVE CLIFF HOUSE	4956	1602		☐	714		Gas
MENEFEE	5074	1484		☐			
POINT LOOKOUT	5468	1090		☐			
MANCOS	5941	617		☐			
UPPER GALLUP	6614	-56		☐			
PAGUATE	7130	-572		☐			
GREENHORN	7406	-848		☐			
GRANEROS	7465	-907		☐			
TWO WELLS	7489	-931		☐	1950		Gas
UPPER CUBERO	7616	-1058		☐			
LOWER CUBERO	7658	-1100		☐			Est TD ~20' above TD.
ENCINAL	7729	-1171		☐			TD ~T/Encinal
Total Depth	7729	-1171		☐			6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 577 cuft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 27-5 UNIT 128N

DEVELOPMENT

Reference Type	Well Name	Comments
Production	SJ 27-5 128M	27N-5W27 NE SW SE
Production	SJ 27-5 79E	27N-5W27 NW SE NE
Production	SJ 27-5 162R	27N-5W27 SW NE SE
Production	SJ 27-5 129	27N-5W26 SE NW SW

Logging Program:

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

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

Quad combo & ECS for Mancos.

Additional Information:

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

SJB (NM Central)

SEC 27-T27N-R5W

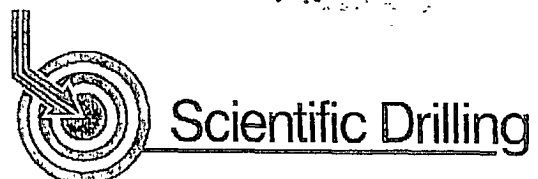
San Juan 27-5 Unit #128N

OH

Plan: Plan 1

Standard Planning Report

14 May, 2012



Database:	EDM 2003 21 Single User Db	Local Co-ordinate Reference:	Well San Juan 27-5 Unit #128N
Company:	ConocoPhillips	TVD Reference:	GL 6542' & KB 15' @ 6557.0ft (AWS 711)
Project:	SJB (NM Central)	MD Reference:	GL 6542' & KB 15' @ 6557 0ft (AWS 711)
Site:	SEC 27-T27N-R5W	North Reference:	True
Well:	San Juan 27-5 Unit #128N	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	SJB (NM Central), New Mexico, S-Type MV/DK Wells		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		Using Well Reference Point
Map Zone:	New Mexico Central 3002		Using geodetic scale factor

Site	SEC 27-T27N-R5W				
Site Position:		Northing:	2,018,443.76 ft	Latitude:	36° 32' 32.484 N
From:	Lat/Long	Easting:	180,037.82 ft	Longitude:	107° 20' 21.156 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-0.65 °

Well	San Juan 27-5 Unit #128N, 1509' FSL 940' FEL					
Well Position	+N/-S	0.0 ft	Northing:	2,018,443.76 ft	Latitude:	36° 32' 32.484 N
	+E/-W	0.0 ft	Easting:	180,037.82 ft	Longitude:	107° 20' 21.156 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,542.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2011	05/10/12	9.58	63.34	50,550

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	180.00

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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
750.0	6.00	180.00	749.5	-15.7	0.0	2.00	2.00	0.00	180.00	
2,604.5	6.00	180.00	2,593.8	-209.5	0.0	0.00	0.00	0.00	0.00	
2,804.5	0.00	0.00	2,793.4	-220.0	0.0	3.00	-3.00	0.00	180.00	
3,504.1	0.00	0.00	3,493.0	-220.0	0.0	0.00	0.00	0.00	0.00	SJ 27-5 128N ICP
7,740.1	0.00	0.00	7,729.0	-220.0	0.0	0.00	0.00	0.00	0.00	SJ 27-5 128N PCP

Database:	EDM 2003 21 Single User Db	Local Co-ordinate Reference:	Well San Juan 27-5 Unit #128N
Company:	ConocoPhillips	TVD Reference:	GL 6542' & KB 15' @ 6557 0ft (AWS 711)
Project:	SJB (NM Central)	MD Reference:	GL 6542' & KB 15' @ 6557 0ft (AWS 711)
Site:	SEC 27-T27N-R5W	North Reference:	True
Well:	San Juan 27-5 Unit #128N	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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
Surface Casing									
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
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	1.00	180.00	500.0	-0.4	0.0	0.4	2.00	2.00	0.00
600.0	3.00	180.00	599.9	-3.9	0.0	3.9	2.00	2.00	0.00
700.0	5.00	180.00	699.7	-10.9	0.0	10.9	2.00	2.00	0.00
750.0	6.00	180.00	749.5	-15.7	0.0	15.7	2.00	2.00	0.00
800.0	6.00	180.00	799.2	-20.9	0.0	20.9	0.00	0.00	0.00
900.0	6.00	180.00	898.6	-31.4	0.0	31.4	0.00	0.00	0.00
1,000.0	6.00	180.00	998.1	-41.8	0.0	41.8	0.00	0.00	0.00
1,100.0	6.00	180.00	1,097.5	-52.3	0.0	52.3	0.00	0.00	0.00
1,200.0	6.00	180.00	1,197.0	-62.7	0.0	62.7	0.00	0.00	0.00
1,300.0	6.00	180.00	1,296.4	-73.2	0.0	73.2	0.00	0.00	0.00
1,400.0	6.00	180.00	1,395.9	-83.6	0.0	83.6	0.00	0.00	0.00
1,500.0	6.00	180.00	1,495.3	-94.1	0.0	94.1	0.00	0.00	0.00
1,600.0	6.00	180.00	1,594.8	-104.5	0.0	104.5	0.00	0.00	0.00
1,700.0	6.00	180.00	1,694.2	-115.0	0.0	115.0	0.00	0.00	0.00
1,800.0	6.00	180.00	1,793.7	-125.4	0.0	125.4	0.00	0.00	0.00
1,900.0	6.00	180.00	1,893.2	-135.9	0.0	135.9	0.00	0.00	0.00
2,000.0	6.00	180.00	1,992.6	-146.4	0.0	146.4	0.00	0.00	0.00
2,100.0	6.00	180.00	2,092.1	-156.8	0.0	156.8	0.00	0.00	0.00
2,200.0	6.00	180.00	2,191.5	-167.3	0.0	167.3	0.00	0.00	0.00
2,300.0	6.00	180.00	2,291.0	-177.7	0.0	177.7	0.00	0.00	0.00
2,400.0	6.00	180.00	2,390.4	-188.2	0.0	188.2	0.00	0.00	0.00
2,500.0	6.00	180.00	2,489.9	-198.6	0.0	198.6	0.00	0.00	0.00
2,578.6	6.00	180.00	2,568.0	-206.8	0.0	206.8	0.00	0.00	0.00
Ojo Alamo									
2,600.0	6.00	180.00	2,589.3	-209.1	0.0	209.1	0.00	0.00	0.00
2,604.5	6.00	180.00	2,593.8	-209.5	0.0	209.5	0.00	0.00	0.00
2,700.0	3.13	180.00	2,689.0	-217.1	0.0	217.1	3.00	-3.00	0.00
2,800.0	0.13	180.00	2,788.9	-220.0	0.0	220.0	3.00	-3.00	0.00
2,804.5	0.00	0.00	2,793.4	-220.0	0.0	220.0	3.00	-3.00	0.00
2,900.0	0.00	0.00	2,888.9	-220.0	0.0	220.0	0.00	0.00	0.00
2,912.1	0.00	0.00	2,901.0	-220.0	0.0	220.0	0.00	0.00	0.00
Kirtland									
3,000.0	0.00	0.00	2,988.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,024.1	0.00	0.00	3,013.0	-220.0	0.0	220.0	0.00	0.00	0.00
Fruitland									
3,100.0	0.00	0.00	3,088.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,188.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,288.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,323.1	0.00	0.00	3,312.0	-220.0	0.0	220.0	0.00	0.00	0.00
Pictured Cliffs									
3,400.0	0.00	0.00	3,388.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,403.1	0.00	0.00	3,392.0	-220.0	0.0	220.0	0.00	0.00	0.00
Lewis									
3,500.0	0.00	0.00	3,488.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,504.1	0.00	0.00	3,493.0	-220.0	0.0	220.0	0.00	0.00	0.00
Intermediate Casing									

Database: EDM 2003 21 Single User Db
Company: ConocoPhillips
Project: SJB (NM Central)
Site: SEC 27-T27N-R5W
Well: San Juan 27-5 Unit #128N
Wellbore: OH
Design: Plan 1

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

Well San Juan 27-5 Unit #128N
GL 6542' & KB 15' @ 6557 0ft (AWS 711)
GL 6542' & KB 15' @ 6557 0ft (AWS 711)
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)
3,600.0	0.00	0.00	3,588.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,673.1	0.00	0.00	3,662.0	-220.0	0.0	220.0	0.00	0.00	0.00
Huerfanito Bentonite									
3,700.0	0.00	0.00	3,688.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,788.9	-220.0	0.0	220.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,888.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,000.0	0.00	0.00	3,988.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,088.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,188.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,282.1	0.00	0.00	4,271.0	-220.0	0.0	220.0	0.00	0.00	0.00
Chacra									
4,300.0	0.00	0.00	4,288.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,388.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,488.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,588.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,688.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,788.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,888.9	-220.0	0.0	220.0	0.00	0.00	0.00
4,944.1	0.00	0.00	4,933.0	-220.0	0.0	220.0	0.00	0.00	0.00
Upper Cliff House									
4,966.1	0.00	0.00	4,955.0	-220.0	0.0	220.0	0.00	0.00	0.00
Massive Cliff House									
5,000.0	0.00	0.00	4,988.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,084.1	0.00	0.00	5,073.0	-220.0	0.0	220.0	0.00	0.00	0.00
Menefee									
5,100.0	0.00	0.00	5,088.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,188.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,288.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,388.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,478.1	0.00	0.00	5,467.0	-220.0	0.0	220.0	0.00	0.00	0.00
Point Lookout									
5,500.0	0.00	0.00	5,488.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,588.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,688.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,788.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,888.9	-220.0	0.0	220.0	0.00	0.00	0.00
5,951.1	0.00	0.00	5,940.0	-220.0	0.0	220.0	0.00	0.00	0.00
Mancos									
6,000.0	0.00	0.00	5,988.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,088.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,188.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,288.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,388.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,488.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,588.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,624.1	0.00	0.00	6,613.0	-220.0	0.0	220.0	0.00	0.00	0.00
Upper Gallup									
6,700.0	0.00	0.00	6,688.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,788.9	-220.0	0.0	220.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,888.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,988.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,088.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,140.1	0.00	0.00	7,129.0	-220.0	0.0	220.0	0.00	0.00	0.00

Database:	EDM 2003 21 Single User Db	Local Co-ordinate Reference:	Well San Juan 27-5 Unit #128N
Company:	ConocoPhillips	TVD Reference:	GL 6542' & KB 15' @ 6557.0ft (AWS 711)
Project:	SJB (NM Central)	MD Reference:	GL 6542' & KB 15' @ 6557 0ft (AWS 711)
Site:	SEC 27-T27N-R5W	North Reference:	True
Well:	San Juan 27-5 Unit #128N	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)
Paguate									
7,200.0	0.00	0.00	7,188.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,288.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,388.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,416.1	0.00	0.00	7,405.0	-220.0	0.0	220.0	0.00	0.00	0.00
Greenhorn									
7,475.1	0.00	0.00	7,464.0	-220.0	0.0	220.0	0.00	0.00	0.00
Graneros									
7,499.1	0.00	0.00	7,488.0	-220.0	0.0	220.0	0.00	0.00	0.00
Two Wells									
7,500.0	0.00	0.00	7,488.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,588.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,626.1	0.00	0.00	7,615.0	-220.0	0.0	220.0	0.00	0.00	0.00
Upper Cubero									
7,668.1	0.00	0.00	7,657.0	-220.0	0.0	220.0	0.00	0.00	0.00
Lower Cubero									
7,700.0	0.00	0.00	7,688.9	-220.0	0.0	220.0	0.00	0.00	0.00
7,739.1	0.00	0.00	7,728.0	-220.0	0.0	220.0	0.00	0.00	0.00
Encinal									
7,740.1	0.00	0.00	7,729.0	-220.0	0.0	220.0	0.00	0.00	0.00
Production Casing									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 27-5 128N ICP - plan hits target center - Point	0.00	0.00	3,493.0	-220.0	0.0	2,018,223.77	180,035.33	36° 32' 30.309 N	107° 20' 21.156 W
SJ 27-5 128N PCP - plan hits target center - Point	0.00	0.00	7,729.0	-220.0	0.0	2,018,223.77	180,035.33	36° 32' 30.309 N	107° 20' 21.156 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
200.0	200.0	Surface Casing	9-5/8	12-1/4
3,504.1	3,493.0	Intermediate Casing	7	8-3/4
7,740.1	7,729.0	Production Casing	4-1/2	6-1/4

Database: EDM 2003 21 Single User Db
Company: ConocoPhillips
Project: SJB (NM Central)
Site: SEC 27-T27N-R5W
Well: San Juan 27-5 Unit #128N
Wellbore: OH
Design: Plan 1

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

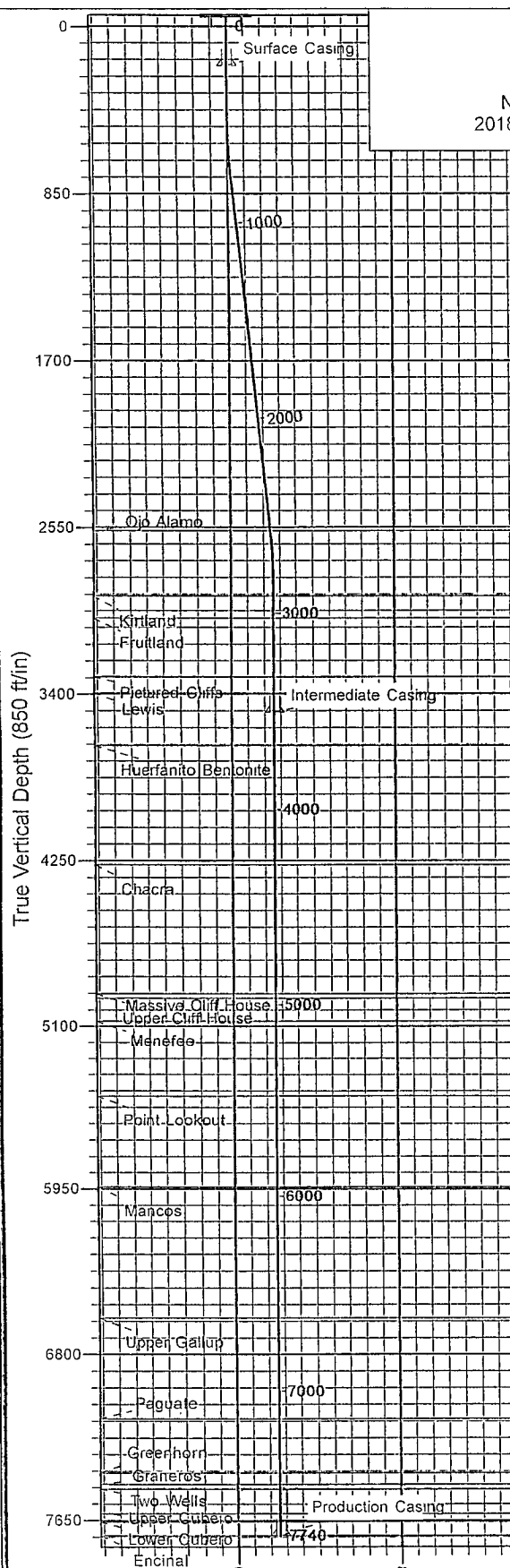
Well San Juan 27-5 Unit #128N
GL 6542' & KB 15' @ 6557.0ft (AWS 711)
GL 6542' & KB 15' @ 6557 0ft (AWS 711)
True
Minimum Curvature

Formations

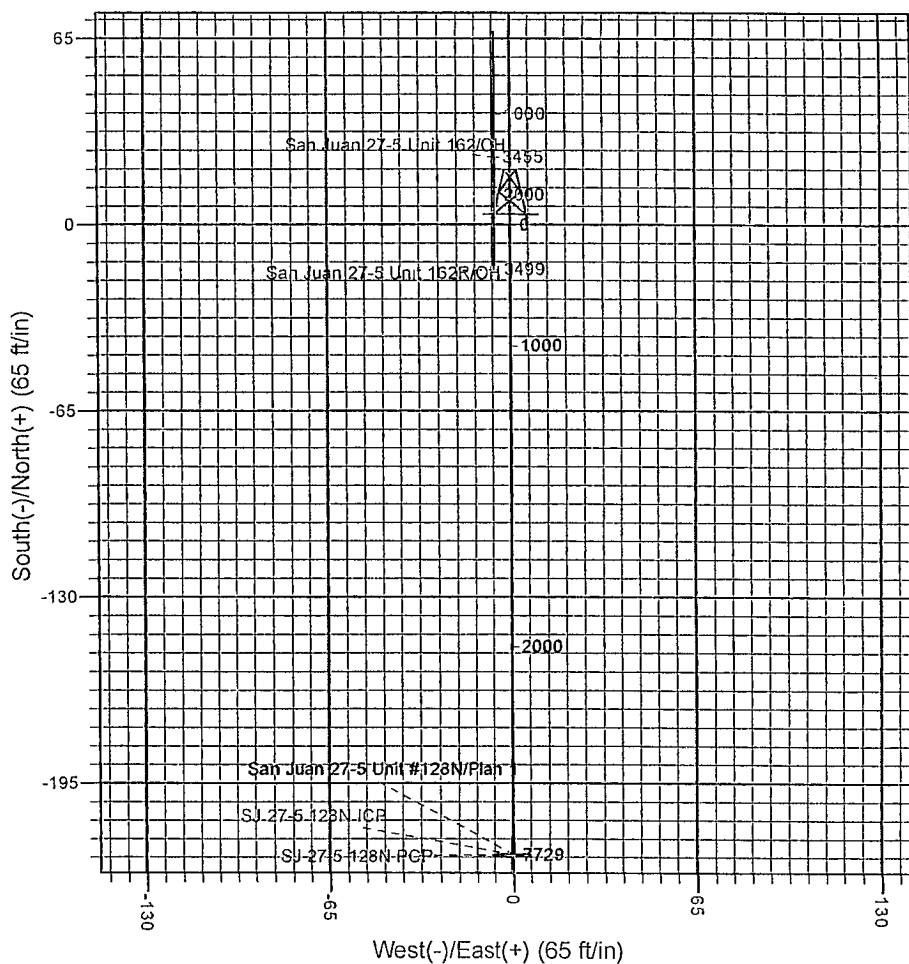
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,578.6	2,568.0	Ojo Alamo		0.00	
2,912.1	2,901.0	Kirtland		0.00	
3,024.1	3,013.0	Fruitland		0.00	
3,323.1	3,312.0	Pictured Cliffs		0.00	
3,403.1	3,392.0	Lewis		0.00	
3,673.1	3,662.0	Huerfanto Bentonite		0.00	
4,282.1	4,271.0	Chacra		0.00	
4,944.1	4,933.0	Upper Cliff House		0.00	
4,966.1	4,955.0	Massive Cliff House		0.00	
5,084.1	5,073.0	Menefee		0.00	
5,478.1	5,467.0	Point Lookout		0.00	
5,951.1	5,940.0	Mancos		0.00	
6,624.1	6,613.0	Upper Gallup		0.00	
7,140.1	7,129.0	Paguate		0.00	
7,416.1	7,405.0	Greenhorn		0.00	
7,475.1	7,464.0	Graneros		0.00	
7,499.1	7,488.0	Two Wells		0.00	
7,626.1	7,615.0	Upper Cubero		0.00	
7,668.1	7,657.0	Lower Cubero		0.00	
7,739.1	7,728.0	Encinal		0.00	

WELL DETAILS: San Juan 27-5 Unit #128N
 GL 6542' & KB 15' @ 6557.0ft (AWS 711)
 Ground Level 6542.0

Northing 2018443.76 Easting 180037.82 Latitude 36° 32' 32.484 N Longitude 107° 20' 21.156 W



Vertical Section at 180.00° (850 ft/in)



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	450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.0	
3	750.0	6.00	180.00	749.5	-15.7	0.0	2.00	180.00	15.7	
4	2604.5	6.00	180.00	2593.8	-209.5	0.0	0.00	0.00	209.5	
5	2804.5	0.00	0.00	2793.4	-220.0	0.0	3.00	180.00	220.0	
6	3504.1	0.00	0.00	3493.0	-220.0	0.0	0.00	0.00	220.0	SJ 27-5 128N ICP
7	7740.1	0.00	0.00	7729.0	-220.0	0.0	0.00	0.00	220.0	SJ 27-5 128N PCP

Date 11:01, May 14 2012

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well San Juan 27-5 Unit #128N, True North
 Vertical (TVD) Reference: GL 6542' & KB 15' @ 6557.0ft (AWS 711)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: GL 6542' & KB 15' @ 6557.0ft (AWS 711)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: SJB (NM Central)

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico Central 3002
 System Datum: Mean Sea Level