

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAY 11 2010

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG ^{BACK} of Land Management
Farmington New Mexico

1a. Type of Work DRILL	5. Lease Number SF-077282 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 RCVD JUN 3 '10 OIL CONS. DIV. DIST. 3	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Grenier A 9. Well Number 4P	
4. Location of Well Surface: Unit L(NWSW), 1360' FSL & 910' FWL Bottomhole: Unit N(SWSW), 1250' FSL & 1900' FWL <i>Lot 14</i> Surface: Latitude: 36.77965° N (NAD83) <i>Lot 12</i> Longitude: 107.85977° W Bottomhole: Latitude: 36.77934° N (NAD83) Longitude: 107.85639° W	10. Field, Pool, Wildcat Blanco MV / Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 26, T30N, R10W API # 30-045- 35750	
14. Distance in Miles from Nearest Town 11 miles / Aztec	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 910'	17. Acres Assigned to Well 316.86 W/2 - MV/DK	
16. Acres in Lease 793.620	 H ₂ S POTENTIAL EXIST	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 70' from Grenier A 4 (DK)	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 7223'	22. Approx. Date Work will Start	
21. Elevations (DF, FT, GR, Etc.) 6116' GL	23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <i>Crystal Tafoya</i> Crystal Tafoya (Regulatory Technician)	Date <i>5/11/2010</i>	

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

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 3165.3 and appeal pursuant to 43 CFR 3165.4

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

NMCCD

Hold C104

for Directional Survey and "As Drilled" plat

PRIOR TO CASING & CEMENT

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

PRIOR TO CASING & CEMENT
NOTIFY AZTEC OGD 24-HRS.
JUN 04 2010

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 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.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

RECEIVED
MAY 11 2010
Bureau of Land Management
Farmington Field Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35150	*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 18531	*Property Name GRENIER A	*Well Number 4P
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	*Elevation 6116'

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
L	26	30N	10W	10	1360	SOUTH	910	WEST	SAN JUAN

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
N	26	30N	10W	14	1250	SOUTH	1900	WEST	SAN JUAN

12 Dedicated Acres 316.86 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

LOT 4 LEASE USA SF-077282 LOT 3				LOT 2		LOT 1		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. <i>Crystal Tafoya</i> 5/3/2010 Signature Date Crystal Tafoya 5/3/2010 Printed Name
SURFACE LOCATION LAT: 36°46.7785' N LONG: 107°51.5490' W DATUM: NAD1927 BOTTOM-HOLE LAT: 36°46.7599' N LONG: 107°51.3466' W DATUM: NAD1927 LAT: 36.77965' N LONG: 107.85977' W DATUM: NAD1983 LAT: 36.77934' N LONG: 107.85639' W DATUM: NAD1983				LOT 7		LOT 8		
LOT 5				LOT 6		LOT 9		
LOT 12				LOT 11		LOT 10		
LOT 13				LOT 14		LOT 15		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. Survey Date: DECEMBER 17, 2009 Signature and Seal of Professional Surveyor JASON C. EDWARDS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15269 JASON C. EDWARDS Certificate Number 15269
LOT 16				LOT 15		LOT 14		

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

GRENIER A 4P

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9409				AFE \$: 889,970.45	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: SAN JUAN		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)						
RON	BLANCO MESAVERDE (PRORATED GAS)						
Location: Surface Datum Code: NAD 27 Directional							
Latitude: 36.779645		Longitude: -107.859151		X:	Y:	Section: 26	Range: 010W
Footage X: 910 FWL		Footage Y: 1360 FSL		Elevation: 6116 (FT)	Township: 030N		
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.779335		Longitude: -107.855771		X:	Y:	Section: 26	Range: 010W
Footage X: 1900 FWL		Footage Y: 1250 FSL		Elevation: (FT)	Township: 030N		
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2011		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6131 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	200	5931	☐			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	1366	4765	☐				
KIRTLAND	1513	4618	☐				
FRUITLAND	2113	4018	☐			Possible Gas	
PICTURED CLIFFS	2680	3451	☐				
LEWIS	2829	3302	☐				
Intermediate Casing	3200	2931	☐			110 8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 766 cuft. Circulate cement to surface.	
HUERFANITO BENTONITE	3401	2730	☐				
CHACRA	3660	2471	☐				
UPPER CLIFF HOUSE	4291	1840	☐			Gas; Est. Top Perf - 4293 (1838)	
MASSIVE CLIFF HOUSE	4400	1731	☐	463		Gas; Borderline Cliffhouse wet	
MENEFEE	4422	1709	☐				
POINT LOOKOUT	4939	1192	☐				
MANCOS	5290	841	☐				
UPPER GALLUP	6178	-47	☐				
GREENHORN	6919	-788	☐				
GRANEROS	6967	-836	☐				
TWO WELLS	7019	-888	☐	2248		Gas	
PAGUATE	7108	-977	☐				
LOWER CUBERO	7161	-1030	☐			Est. Btm Perf - 7203 (- 1072) based on offset wells	
UPPER CUBERO	7161	-1030	☐				
ENCINAL	7223	-1092	☐			TD - T/ENCN	

PROJECT PROPOSAL - New Drill / Sidetrack

GRENIER A 4P

DEVELOPMENT

Total Depth	7223	-1092	☐	192	6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 548 cuft. Circulate cement a minimum of 100' inside the previous casing string.
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Reference Wells:		
Reference Type	Well Name	Comments
Production	Grenier 4 A	30N 10W 26 SW SW
Production	Sunray F 1M	30N 10W 26 SE NW SE
Production	Riddle B 10E	30N 10W 27 NE SW SE
Production	Grenier A 4E	30N 10W 26 NW SE NW

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

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico Wells
Site: Other Named Wells
Well: Grenier A 4P
Wellbore: Original Hole
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well Grenier A 4P
RKB @ 6131.0ft (AWS Rig)
RKB @ 6131.0ft (AWS Rig)
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)
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
215.0	0.00	0.00	215.0	0.0	0.0	0.0	0.00	0.00	0.00
Surface Shoe									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.40	96.52	400.0	-0.2	1.7	1.7	3.00	3.00	0.00
500.0	5.40	96.52	499.7	-1.0	8.4	8.5	3.00	3.00	0.00
600.0	8.40	96.52	599.0	-2.3	20.4	20.5	3.00	3.00	0.00
700.0	11.40	96.52	697.5	-4.3	37.4	37.7	3.00	3.00	0.00
800.0	14.40	96.52	795.0	-6.8	59.6	60.0	3.00	3.00	0.00
900.0	17.40	96.52	891.1	-9.9	86.8	87.4	3.00	3.00	0.00
1,000.0	20.40	96.52	985.7	-13.6	119.0	119.8	3.00	3.00	0.00
1,100.0	23.40	96.52	1,078.5	-17.8	156.1	157.1	3.00	3.00	0.00
1,200.0	26.40	96.52	1,169.2	-22.6	197.9	199.2	3.00	3.00	0.00
1,212.4	26.77	96.52	1,180.3	-23.2	203.4	204.7	3.00	3.00	0.00
1,300.0	26.77	96.52	1,258.5	-27.7	242.6	244.2	0.00	0.00	0.00
1,400.0	26.77	96.52	1,347.8	-32.8	287.4	289.2	0.00	0.00	0.00
1,420.4	26.77	96.52	1,366.0	-33.9	296.5	298.4	0.00	0.00	0.00
Ojo									
1,500.0	26.77	96.52	1,437.1	-37.9	332.1	334.3	0.00	0.00	0.00
1,585.1	26.77	96.52	1,513.0	-42.3	370.2	372.6	0.00	0.00	0.00
Kirtland									
1,600.0	26.77	96.52	1,526.3	-43.0	376.9	379.3	0.00	0.00	0.00
1,700.0	26.77	96.52	1,615.6	-48.2	421.6	424.4	0.00	0.00	0.00
1,800.0	26.77	96.52	1,704.9	-53.3	466.4	469.4	0.00	0.00	0.00
1,900.0	26.77	96.52	1,794.2	-58.4	511.1	514.4	0.00	0.00	0.00
2,000.0	26.77	96.52	1,883.5	-63.5	555.9	559.5	0.00	0.00	0.00
2,100.0	26.77	96.52	1,972.7	-68.6	600.6	604.5	0.00	0.00	0.00
2,200.0	26.77	96.52	2,062.0	-73.7	645.4	649.6	0.00	0.00	0.00
2,257.1	26.77	96.52	2,113.0	-76.6	670.9	675.3	0.00	0.00	0.00
Fruitland									
2,300.0	26.77	96.52	2,151.3	-78.8	690.1	694.6	0.00	0.00	0.00
2,400.0	26.77	96.52	2,240.6	-83.9	734.9	739.7	0.00	0.00	0.00
2,500.0	26.77	96.52	2,329.9	-89.0	779.6	784.7	0.00	0.00	0.00
2,511.1	26.77	96.52	2,339.7	-89.6	784.6	789.7	0.00	0.00	0.00
2,600.0	24.10	96.52	2,420.0	-93.9	822.5	827.9	3.00	-3.00	0.00
2,700.0	21.10	96.52	2,512.4	-98.3	860.7	866.3	3.00	-3.00	0.00
2,800.0	18.10	96.52	2,606.5	-102.1	894.1	899.9	3.00	-3.00	0.00
2,876.8	15.80	96.52	2,680.0	-104.7	916.3	922.3	3.00	-3.00	0.00
Pictured Cliffs									
2,900.0	15.10	96.52	2,702.4	-105.4	922.4	928.4	3.00	-3.00	0.00
3,000.0	12.10	96.52	2,799.5	-108.0	945.8	952.0	3.00	-3.00	0.00
3,030.1	11.20	96.52	2,829.0	-108.7	951.8	958.0	3.00	-3.00	0.00
Lewis									
3,100.0	9.10	96.52	2,897.8	-110.1	964.1	970.4	3.00	-3.00	0.00
3,200.0	6.10	96.52	2,996.9	-111.6	977.2	983.6	3.00	-3.00	0.00
3,300.0	3.10	96.52	3,096.6	-112.5	985.2	991.6	3.00	-3.00	0.00
3,400.0	0.10	96.52	3,196.6	-112.8	988.0	994.4	3.00	-3.00	0.00
3,403.4	0.00	0.00	3,200.0	-112.8	988.0	994.4	3.00	-3.00	-2,801.02
Intermediate Shoe - Grenier A 4P ICP									
3,500.0	0.00	0.00	3,296.6	-112.8	988.0	994.4	0.00	0.00	0.00

ConocoPhillips or its affiliates Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico Wells
Site: Other Named Wells
Well: Grenier A 4P
Wellbore: Original Hole
Design: Plan #1

Local Co-ordinate Reference: Well Grenier A 4P
TVD Reference: RKB @ 6131.0ft (AWS Rig)
MD Reference: RKB @ 6131.0ft (AWS Rig)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,364.4	7,161.0	Upper Cubero		0.00		
7,426.4	7,223.0	Encinal		0.00		
7,364.4	7,161.0	Lower Cubero		0.00		
4,494.4	4,291.0	Upper Cliffhouse		0.00		
6,381.4	6,178.0	Upper Gallup		0.00		
3,863.4	3,660.0	Chacra		0.00		
7,222.4	7,019.0	Two Wells		0.00		
5,142.4	4,939.0	Point Lookout		0.00		
1,585.1	1,513.0	Kirtland		0.00		
2,876.8	2,680.0	Pictured Cliffs		0.00		
1,420.4	1,366.0	Ojo		0.00		
7,122.4	6,919.0	Greenhorn		0.00		
7,311.4	7,108.0	Paguate		0.00		
7,170.4	6,967.0	Graneros		0.00		
3,030.1	2,829.0	Lewis		0.00		
3,604.4	3,401.0	Huerfanito Bentonite		0.00		
4,603.4	4,400.0	Mass. Cliffhouse		0.00		
5,493.4	5,290.0	Mancos		0.00		
4,625.4	4,422.0	Menefee		0.00		
2,257.1	2,113.0	Fruitland		0.00		

REFERENCE INFORMATION

RKB @ 6131.0ft (AWS Rig)
Ground Elevation 6116.0
Reference Lat: 36° 46' 46.710 N
Reference Long: 107° 51' 32.940 W

Project: San Juan Basin - New Mexico Wells

Site: Other Named Wells

Well: Grenier A 4P

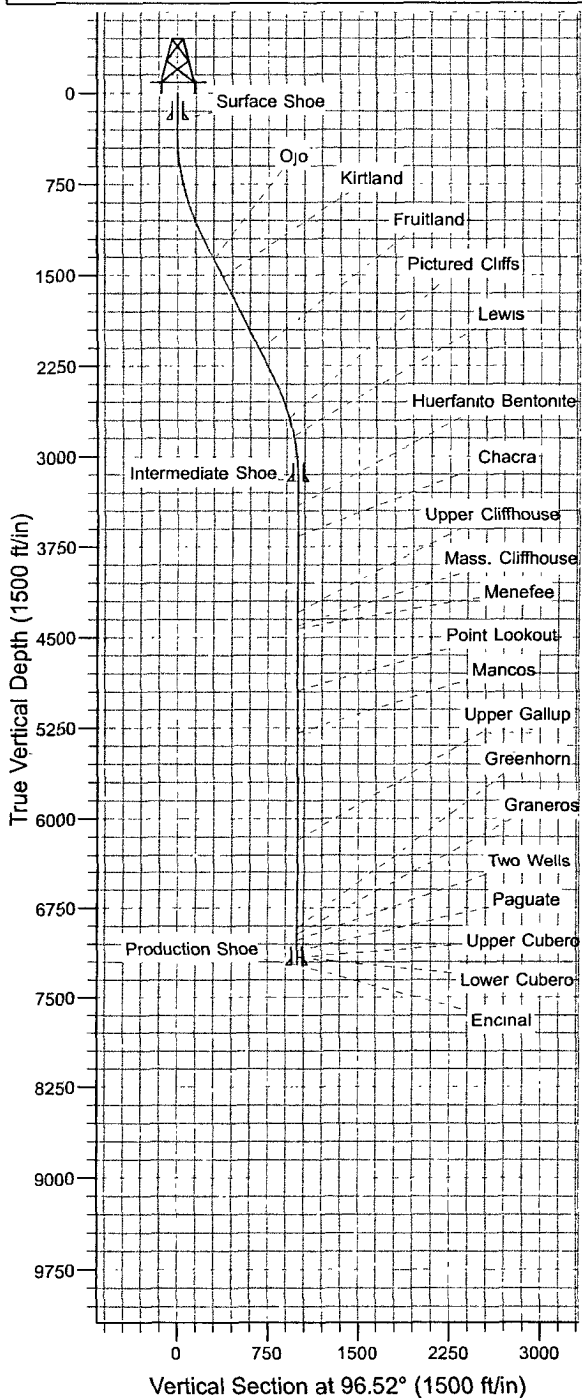
Wellbore: Original Hole

Design: Plan #1

ConocoPhillips

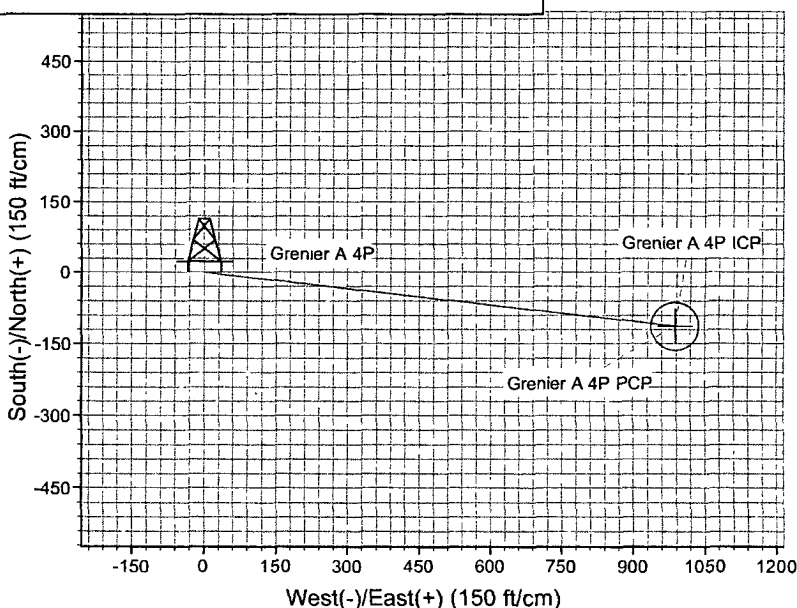
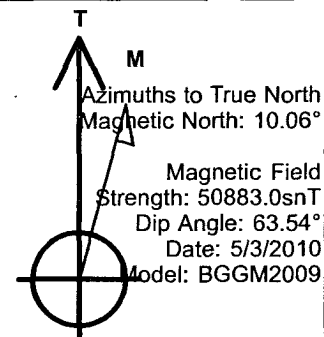
SECTION DETAILS

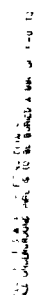
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.0	
3	1212.4	26.77	96.52	1180.3	-23.2	203.4	3.00	96.52	204.7	
4	2511.1	26.77	96.52	2339.7	-89.6	784.6	0.00	0.00	789.7	
5	3403.4	0.00	0.00	3200.0	-112.8	988.0	3.00	180.00	994.4	Grenier A 4P ICP
6	7426.4	0.00	0.00	7223.0	-112.8	988.0	0.00	0.00	994.4	Grenier A 4P PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1366.0	1420.4	Ojo
1513.0	1585.1	Kirtland
2113.0	2257.1	Fruitland
2680.0	2876.8	Pictured Cliffs
2829.0	3030.1	Lewis
3401.0	3604.4	Huerfano Bentonite
3660.0	3863.4	Chacra
4291.0	4494.4	Upper Cliffhouse
4400.0	4603.4	Mass. Cliffhouse
4422.0	4625.4	Menefee
4939.0	5142.4	Point Lookout
5290.0	5493.4	Mancos
6178.0	6381.4	Upper Gallup
6919.0	7122.4	Greenhorn
6967.0	7170.4	Graneros
7019.0	7222.4	Two Wells
7108.0	7311.4	Paguate
7161.0	7364.4	Lower Cubero
7161.0	7364.4	Upper Cubero
7223.0	7426.4	Encinal



[illegible]

Directions from the Intersection of US Hwy 550 & State Hwy 173 in Aztec, NM
to Burlington Resources Oil & Gas Company Grenier A #4P
1360' FSL & 910' FWL, Section 26, T30N, R10W, N.M.P.M., San Juan County, NM
Latitude : 36.77965°N Longitude : 107.85977°W Datum : NAD1983

From the intersection of US Hwy 550 & State Hwy 173 in Aztec, NM, travel Easterly on State Hwy 173 for 8.3 miles;

Go right (South-westerly) for 0.3 miles to 4-way intersection;

Go straight (South-westerly) @ 4-way intersection for 1.5 miles to fork in road;

Go left (North-easterly) for 0.4 miles to staked location which overlaps an existing wellpad.