

RECEIVED

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 31 2012

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

Farmington Field
Bureau of Land Management

5. Lease Serial No

SF-078415

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

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

6 If Indian, Allottee or Tribe Name

7 If Unit of CA/Agreement, Name and/or No

8 Well Name and No.

HILL 3M

9 API Well No.

30-045-35271

4 Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface UNIT P (SESE), 590' FSL & 719' FEL, Sec. 10, T29N, R8W

Bottomhole UNIT O (SWSE), 725' FSL & 1872' FEL, Sec. 10, T29N, R8W

10 Field and Pool or Exploratory Area

BLANCO MV/BASIN DK

11. Country or Parish, State

San Juan

New Mexico

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☒ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other Intermediate

Casing Setting Depth

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 recomple 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 recomple 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.)

Burlington Resources requests permission to change the intermediate casing setting depth from the APD approved depth of 3266' to 3750', (+/- 484') to reduce potential torque associated with the original directional drilling plan. The new Project Proposal and Directional Plan are attached.

**RCVD NOV 5 '12
OIL CONS. DIV.
DIST. 3**

Hold C104

for Directional Survey
and "As Drilled" plat

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

Regulatory Technician

Title

Signature

Denise Journey

Date

10/31/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Office

Date

NOV 02 2012

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

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)

NMOCD

ConocoPhillips SJB

San Juan Basin - New Mexico West Wells

Other Named Wells

Hill #3M

Principal Wellbore

Plan: Plan #1

Standard Planning Report

29 October, 2012

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hill #3M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6305.0usft (Aws rigs)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6305.0usft (Aws rigs)
Site:	Other Named Wells	North Reference:	Grid
Well:	Hill #3M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Project	San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"		
Map System:	US State Plane 1027 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	Other Named Wells			
Site Position:		Northing:	2,108,178.26 usft	Latitude: 36° 47' 33.793 N
From:	Lat/Long	Easting:	643,887.63 usft	Longitude: 107° 20' 30.932 W
Position Uncertainty:	15.0 usft	Slot Radius:	6-1/8"	Grid Convergence: 0.29 °

Well	Hill #3M, Directional "S" Curve Short, Lewis Included			
Well Position	+N/-S	0.0 usft	Northing:	2,086,513.56 usft
	+E/-W	0.0 usft	Easting:	552,048.23 usft
Position Uncertainty	3.5 usft	Wellhead Elevation:	usft	Ground Level: 6,290.0 usft

Wellbore	Principal Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	11/16/2010	9.91	63.53	50,805

Design	Plan #1			
Audit Notes:				
Version:	1	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	278.33

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,229.0	24.87	278.33	1,203.2	25.7	-175.3	3.00	3.00	0.00	278.33	
3,150.8	24.87	278.33	2,946.8	142.8	-975.0	0.00	0.00	0.00	0.00	
3,979.8	0.00	0.00	3,750.0	168.5	-1,150.2	3.00	-3.00	0.00	180.00	Hill #3M - ICP
7,762.8	0.00	0.00	7,533.0	168.5	-1,150.2	0.00	0.00	0.00	0.00	Hill #3M - PCP

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hill #3M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6305.0usft (Aws rigs)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6305.0usft (Aws rigs)
Site:	Other Named Wells	North Reference:	Gnd
Well:	Hill #3M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

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
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
230.0	0.00	0.00	230.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8" 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
500.0	3.00	278.33	500.0	0.4	-2.6	2.6	3.00	3.00	0.00
588.3	5.65	278.33	588.0	1.3	-9.2	9.3	3.00	3.00	0.00
Nacimiento									
600.0	6.00	278.33	599.6	1.5	-10.4	10.5	3.00	3.00	0.00
700.0	9.00	278.33	698.8	3.4	-23.3	23.5	3.00	3.00	0.00
800.0	12.00	278.33	797.1	6.0	-41.3	41.7	3.00	3.00	0.00
900.0	15.00	278.33	894.3	9.4	-64.4	65.1	3.00	3.00	0.00
1,000.0	18.00	278.33	990.2	13.5	-92.5	93.5	3.00	3.00	0.00
1,100.0	21.00	278.33	1,084.4	18.4	-125.5	126.9	3.00	3.00	0.00
1,200.0	24.00	278.33	1,176.8	23.9	-163.4	165.1	3.00	3.00	0.00
1,229.0	24.87	278.33	1,203.2	25.7	-175.3	177.1	3.00	3.00	0.00
1,300.0	24.87	278.33	1,267.6	30.0	-204.8	207.0	0.00	0.00	0.00
1,400.0	24.87	278.33	1,358.4	36.1	-246.4	249.0	0.00	0.00	0.00
1,500.0	24.87	278.33	1,449.1	42.2	-288.0	291.1	0.00	0.00	0.00
1,600.0	24.87	278.33	1,539.8	48.3	-329.6	333.1	0.00	0.00	0.00
1,700.0	24.87	278.33	1,630.5	54.4	-371.2	375.2	0.00	0.00	0.00
1,800.0	24.87	278.33	1,721.3	60.5	-412.9	417.3	0.00	0.00	0.00
1,900.0	24.87	278.33	1,812.0	66.6	-454.5	459.3	0.00	0.00	0.00
2,000.0	24.87	278.33	1,902.7	72.7	-496.1	501.4	0.00	0.00	0.00
2,044.4	24.87	278.33	1,943.0	75.4	-514.6	520.1	0.00	0.00	0.00
Ojo									
2,100.0	24.87	278.33	1,993.4	78.8	-537.7	543.4	0.00	0.00	0.00
2,200.0	24.87	278.33	2,084.2	84.9	-579.3	585.5	0.00	0.00	0.00
2,240.6	24.87	278.33	2,121.0	87.3	-596.2	602.6	0.00	0.00	0.00
Kirtland									
2,300.0	24.87	278.33	2,174.9	91.0	-620.9	627.5	0.00	0.00	0.00
2,400.0	24.87	278.33	2,265.6	97.1	-662.5	669.6	0.00	0.00	0.00
2,500.0	24.87	278.33	2,356.3	103.2	-704.1	711.7	0.00	0.00	0.00
2,600.0	24.87	278.33	2,447.1	109.3	-745.8	753.7	0.00	0.00	0.00
2,700.0	24.87	278.33	2,537.8	115.3	-787.4	795.8	0.00	0.00	0.00
2,741.0	24.87	278.33	2,575.0	117.8	-804.4	813.0	0.00	0.00	0.00
Fruitland									
2,800.0	24.87	278.33	2,628.5	121.4	-829.0	837.8	0.00	0.00	0.00
2,900.0	24.87	278.33	2,719.2	127.5	-870.6	879.9	0.00	0.00	0.00
3,000.0	24.87	278.33	2,810.0	133.6	-912.2	922.0	0.00	0.00	0.00
3,100.0	24.87	278.33	2,900.7	139.7	-953.8	964.0	0.00	0.00	0.00
3,150.8	24.87	278.33	2,946.8	142.8	-975.0	985.4	0.00	0.00	0.00
3,200.0	23.39	278.33	2,991.7	145.7	-994.9	1,005.5	3.00	-3.00	0.00
3,203.6	23.29	278.33	2,995.0	146.0	-996.3	1,006.9	3.00	-3.00	0.00
Pictured Cliffs									
3,300.0	20.39	278.33	3,084.5	151.1	-1,031.8	1,042.8	3.00	-3.00	0.00
3,333.5	19.39	278.33	3,116.0	152.8	-1,043.1	1,054.2	3.00	-3.00	0.00
Lewis									
3,400.0	17.39	278.33	3,179.1	155.8	-1,063.8	1,075.2	3.00	-3.00	0.00
3,490.5	14.68	278.33	3,266.0	159.5	-1,088.5	1,100.1	3.00	-3.00	0.00
7" Intermediate Casing									

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hill #3M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6305.0usft (Aws rgs)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6305.0usft (Aws rgs)
Site:	Other Named Wells	North Reference:	Grid
Well:	Hill #3M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

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)
3,500.0	14.39	278.33	3,275.2	159.8	-1,090.9	1,102.5	3.00	-3.00	0.00
3,600.0	11.39	278.33	3,372.7	163.0	-1,113.0	1,124.9	3.00	-3.00	0.00
3,700.0	8.39	278.33	3,471.2	165.5	-1,130.0	1,142.0	3.00	-3.00	0.00
3,800.0	5.39	278.33	3,570.5	167.3	-1,141.8	1,154.0	3.00	-3.00	0.00
3,900.0	2.39	278.33	3,670.2	168.3	-1,148.6	1,160.8	3.00	-3.00	0.00
3,979.8	0.00	0.00	3,750.0	168.5	-1,150.2	1,162.5	3.00	-3.00	0.00
3,981.8	0.00	0.00	3,752.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Huerfano Bentonite									
4,000.0	0.00	0.00	3,770.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,100.0	0.00	0.00	3,870.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,197.8	0.00	0.00	3,968.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Chacra									
4,200.0	0.00	0.00	3,970.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,300.0	0.00	0.00	4,070.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,400.0	0.00	0.00	4,170.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,500.0	0.00	0.00	4,270.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,600.0	0.00	0.00	4,370.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,700.0	0.00	0.00	4,470.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,781.8	0.00	0.00	4,552.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Upper Cliffhouse									
4,800.0	0.00	0.00	4,570.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
4,895.8	0.00	0.00	4,666.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Massive Cliffhouse									
4,900.0	0.00	0.00	4,670.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,000.0	0.00	0.00	4,770.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,054.8	0.00	0.00	4,825.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Menefee									
5,100.0	0.00	0.00	4,870.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,200.0	0.00	0.00	4,970.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,300.0	0.00	0.00	5,070.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,400.0	0.00	0.00	5,170.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,440.8	0.00	0.00	5,211.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Point Lookout									
5,500.0	0.00	0.00	5,270.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,600.0	0.00	0.00	5,370.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,700.0	0.00	0.00	5,470.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,570.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
5,827.8	0.00	0.00	5,598.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Mancos									
5,900.0	0.00	0.00	5,670.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,770.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,100.0	0.00	0.00	5,870.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,200.0	0.00	0.00	5,970.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,070.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,170.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,270.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,370.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,671.8	0.00	0.00	6,442.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
Upper Gallup									
6,700.0	0.00	0.00	6,470.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,570.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,670.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00

ConocoPhillips Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hill #3M
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6305.0usft (Aws rigs)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6305.0usft (Aws rigs)
Site:	Other Named Wells	North Reference:	Grid
Well:	Hill #3M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

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)	
7,000.0	0.00	0.00	6,770.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,870.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,970.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,070.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,170.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,410.8	0.00	0.00	7,181.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Greenhorn										
7,467.8	0.00	0.00	7,238.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Graneros										
7,500.0	0.00	0.00	7,270.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,509.8	0.00	0.00	7,280.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Two Wells										
7,600.0	0.00	0.00	7,370.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,613.8	0.00	0.00	7,384.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Paguate										
7,640.8	0.00	0.00	7,411.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Upper Cubero										
7,672.8	0.00	0.00	7,443.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Lower Cubero										
7,700.0	0.00	0.00	7,470.2	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
7,732.8	0.00	0.00	7,503.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Encinal										
7,762.8	0.00	0.00	7,533.0	168.5	-1,150.2	1,162.5	0.00	0.00	0.00	
Total Depth - 4 1/2" Production Casing										

Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Hill #3M - PCP		0.00	359.90	7,533.0	168.5	-1,150.2	2,086,682.05	550,898.10	36° 44' 4.418 N	107° 39' 34.689 W
- plan hits target center										
- Circle (radius 100.0)										
Hill #3M - ICP		0.00	359.90	3,750.0	168.5	-1,150.2	2,086,682.05	550,898.10	36° 44' 4.418 N	107° 39' 34.689 W
- plan hits target center										
- Circle (radius 100.0)										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
230.0	230.0	9 5/8" Surface Casing	9-5/8	12-1/4		
3,490.5	3,286.0	7" Intermediate Casing	7	8-3/4		
7,762.8	7,533.0	4 1/2" Production Casing	4-1/2	6-1/4		

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hill #3M
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6305.0usft (Aws rigs)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6305.0usft (Aws rigs)
Site:	Other Named Wells	North Reference:	Grid
Well:	Hill #3M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
2,044.4	1,943.0	Ojo		0.00			
6,671.8	6,442.0	Upper Gallup		0.00			
5,440.8	5,211.0	Point Lookout		0.00			
3,333.5	3,116.0	Lewis		0.00			
7,732.8	7,503.0	Encinal		0.00			
4,895.8	4,666.0	Massive Cliffhouse		0.00			
588.3	588.0	Nacimiento		0.00			
3,203.6	2,995.0	Pictured Cliffs		0.00			
5,827.8	5,598.0	Mancos		0.00			
7,467.8	7,238.0	Graneros		0.00			
2,741.0	2,575.0	Fruitland		0.00			
7,613.8	7,384.0	Paguate		0.00			
7,640.8	7,411.0	Upper Cubero		0.00			
4,197.8	3,968.0	Chacra		0.00			
2,240.6	2,121.0	Kirtland		0.00			
3,981.8	3,752.0	Huerfano Bentonite		0.00			
4,781.8	4,552.0	Upper Cliffhouse		0.00			
7,509.8	7,280.0	Two Wells		0.00			
7,762.8	7,533.0	Total Depth		0.00			
7,672.8	7,443.0	Lower Cubero		0.00			
5,054.8	4,825.0	Menefee		0.00			
7,410.8	7,181.0	Greenhorn		0.00			

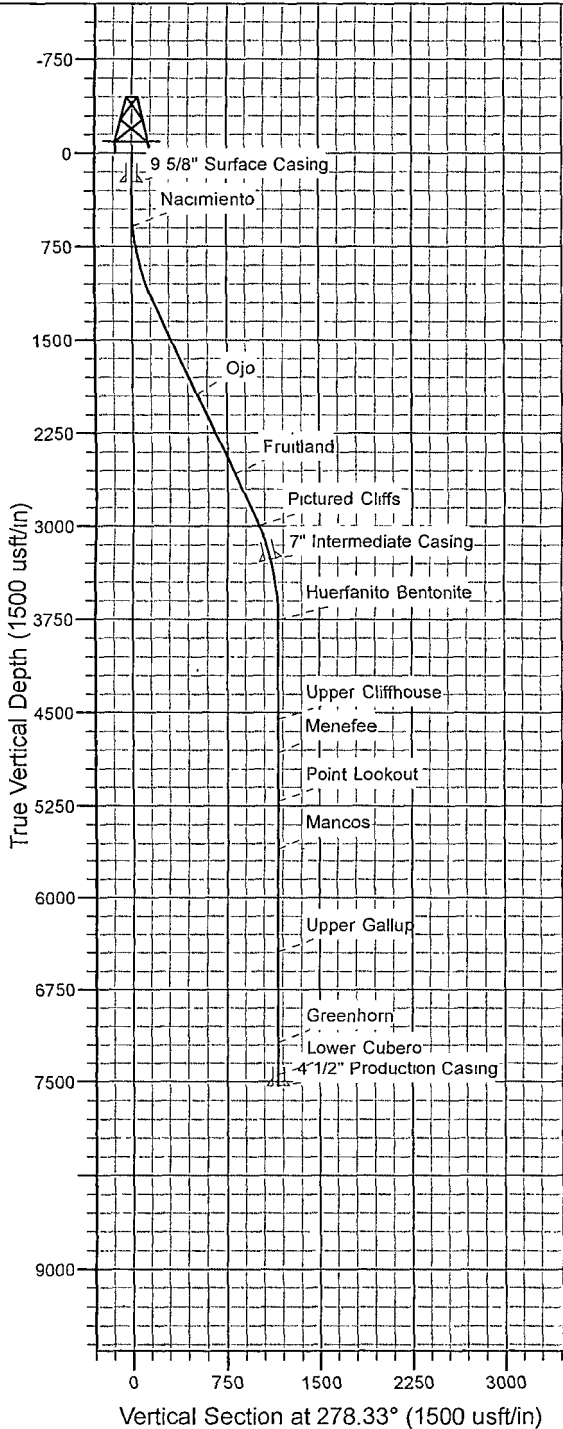
REFERENCE INFORMATION

RKB @ 6305.0usft (Aws rigs)
Ground Elevation 6290.0
Reference Lat: 36° 44' 2.731 N
Reference Long: 107° 39' 20.563 W

Project: San Juan Basin - New Mexico West V
Site: Other Named Wells
Well: Hill #3M
Wellbore: Principal Wellbore
Design: Plan #1

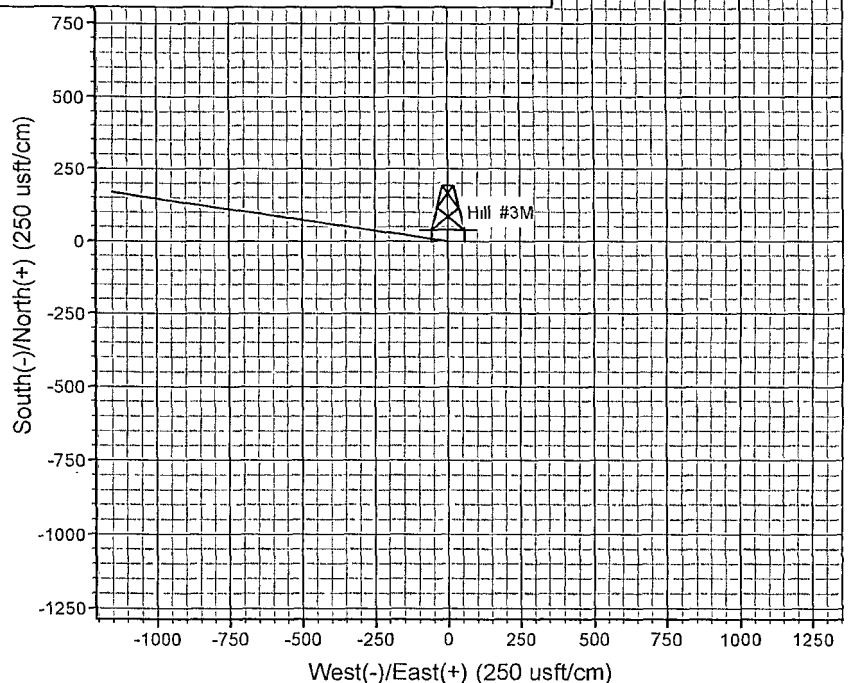
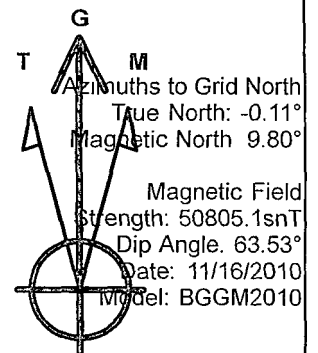
SECTION DETAILS

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1229.0	24.87	278.33	1203.2	25.7	-175.3	3.00	278.33	177.1	
4	3150.8	24.87	278.33	2946.8	142.8	-975.0	0.00	0.00	985.4	
5	3979.8	0.00	0.00	3750.0	168.5	-1150.2	3.00	180.00	1162.5	Hill #3M - ICP
6	7762.8	0.00	0.00	7533.0	168.5	-1150.2	0.00	0.00	1162.5	Hill #3M - PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
588.0	588.3	Nacimiento
1943.0	2044.4	Ojo
2121.0	2240.6	Kirtland
2575.0	2741.0	Fruitland
2995.0	3203.6	Pictured Cliffs
3116.0	3333.5	Lewis
3752.0	3981.8	Huerfanito Bentonite
3968.0	4197.8	Chacra
4552.0	4781.8	Upper Cliffhouse
4666.0	4895.8	Massive Cliffhouse
4825.0	5054.8	Menefee
5211.0	5440.8	Point Lookout
5598.0	5827.8	Mancos
6442.0	6671.8	Upper Gallup
7181.0	7410.8	Greenhorn
7238.0	7467.8	Graneros
7280.0	7509.8	Two Wells
7384.0	7613.8	Paguate
7411.0	7640.8	Upper Cubero
7443.0	7672.8	Lower Cubero
7503.0	7732.8	Encinal
7533.0	7762.8	Total Depth



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HILL 3M

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9065				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: SAN JUAN		API #: 3004535271
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							
Latitude: 36.734094		Longitude: -107.655709		X:	Y:	Section: 10	Range: 008W
Footage X: 719 FEL		Footage Y: 590 FSL		Elevation: 6290 (FT)		Township: 029N	
Tolerance:							
Location: Bottom Hole							
Latitude: 36.734564		Longitude: -107.659639		X:	Y:	Section: 10	Range: 008W
Footage X: 1872 FEL		Footage Y: 725 FSL		Elevation: (FT)		Township: 029N	
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2013		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6305 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6105		☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	588	5717		☐			
OJO ALAMO	1943	4362		☐			
KIRTLAND	2121	4184		☐			
FRUITLAND	2575	3730		☐			Possible Gas
PICTURED CLIFFS	2995	3310		☐			
LEWIS	3116	3189		☐			
Intermediate Casing	3750	2555		☐	114		8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 845 cuft. Circulate cement to surface.
HUERFANITO BENTONITE	3752	2553		☐			
CHACRA	3968	2337		☐			Est. Top Perf - 3970 (2335)
UPPER CLIFF HOUSE	4552	1753		☐			Gas; Cliff House is dry
MASSIVE CLIFF HOUSE	4666	1639		☐	294		Gas
MENEFEE	4825	1480		☐			
POINT LOOKOUT	5211	1094		☐			
MANCOS	5598	707		☐			
UPPER GALLUP	6442	-137		☐			
GREENHORN	7181	-876		☐			
GRANEROS	7238	-933		☐			
TWO WELLS	7280	-975		☐	2622		Gas
PAGUATE	7384	-1079		☐			
UPPER CUBERO	7411	-1106		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HILL 3M

DEVELOPMENT

LOWER CUBERO	7443	-1138	☐	
ENCINAL	7503	-1198	☐	TD - 30' below T/ENCN; Est. Btm Perf - 7518 (- 1208) based on offset wells
Total Depth	7533	-1228	☐	198 6-1/4" hole, 4-1/2" 11.6 ppf, L-80 LTC & BTC casing. Cement w/ 497 cuft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:		
Reference Type	Well Name	Comments
Production	Lively 4	29N 8W 14 SE NW NW
Production	Roelofs Com 5	29N 8W 10 SW SE SE
Production	Roelofs 2E	29N 8W 15 SE NW NE
Production	Roelofs 2	29N 8W 10 NE SW SW

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

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

Comments: Location/Tops/Logging - MV/DKNM029N008W10SE2 Avoid P - there are existing MV & DK wells located there. Prefer a BHL in J, O, I. Topo could be a challenge.

Zones - MV/DKNM029N008W10SE2

General/Work Description - 07/19/12 - Sperate Menefee Stage - ARM

SIMOPS.....9/30/11....Max....Completions will plan and conduct completion operations / frac rigup - rig down SIMOPS based on planned activities and actual circumstances.

Projects will get plat of 'post drilling' location showing potential real estate available for facilities and completion operations. Completions will then be asked if they can conduct their work (including fracs) with facilities present. SIMOPS will be planned and executed based on the review

12-2-10 (JGV) Allocation type: Compositional Approved Unit (as of 12/1/2010): NO DK needed: yes MV needed: yes
11/16/2010.-Drilling Cost Estimate: Base Line of \$ 117.74 /ft for a 1163-ft short step out well. Drill directionally to intermediate casing point. After TD, POOH backreaming & L/D directional tools. Single stages cement job. Not expecting losses. Intermediate casing set at 3266-ft TVD, 100-ft TVD below Lewis. Combined 4 1/2" 11.6#/ft BTC & L-80 LTC will be run all the way to TD. Nearest well to location BR-Hill #3A MV, 407-ft away. Existing well on pad DH - Roelof Com #5, 50-ft away. Estimated 11 days. Cost changed to \$ 108.21 /ft. Open Pit Location, Lewis included. Apply SIMOPS Policy. Multi well pad. NS

11/16/2010 - The H2S contingency plan will not be submitted. The 29-8 section 10 area does not show wells with H2S gas concentration. NS

8/23/10 - Removed from deferred PTRRC rig kr

2/27/09 Economic with additional \$400M on MV side. DK becomes marginal when directional costs are added.
1 FWT5 INCL 11000