

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 11 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Farmington Field Office
Bureau of Land Management

1a. Type of Work DRILL	5. Lease Number USA SF-081240 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 OK Needs CA NMNM-73255-MV
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Horton 9. Well Number 1B RCVD APR 13 '11 OIL CONS. DIV. DIST. 3
4. Location of Well Surface: Unit I (NESE), 1426' FSL & 773' FEL Bottomhole: Unit O (SWSE), 995' FSL & 1915' FEL Surface: Latitude: 36.9381919° N (NAD83) Longitude: 107.9533507° W Bottomhole: Latitude: 36.9369621° N (NAD83) Longitude: 107.9572329° W	10. Field, Pool, Wildcat Basin DK/Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 35, T32N, R11W API# 30-045-35252
14. Distance in Miles from Nearest Town 16 Miles from Aztec, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 773'	
16. Acres in Lease 160 Acres	17. Acres Assigned to Well 320.00 (S/2)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 72' from BR-Horton 1B (MV)	
19. Proposed Depth 7701'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6343' GL	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Brandie Blakley</u> Brandie Blakley (Staff Regulatory Technician)	<u>2-9-11</u> Date

Hold C104
for Directional Survey
and "As Drilled" plat

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 2/11/11

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-0000015 and NMB-0000029

BLM'S APPROVAL OR ACCEPTANCE OF THIS APPLICATION DOES NOT RELIEVE THE APPLICANT FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

APR 20 2011

NMOC

PC

RECEIVED

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

DISTRICT II
1301 W. 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, N.M. 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

FEB 11 2011

Form C-102

Revised July 18, 2010

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

Farmington Field Office
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-045 ¹ API Number 35252	² Pool Code 71599/72319	Basin DAKOTA / MESA VERDE	³ Pool Name Bianco
⁴ Property Code 18548	⁵ Property Name HORTON		⁶ Well Number IB
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		⁹ Elevation 6343

¹⁰ Surface Location

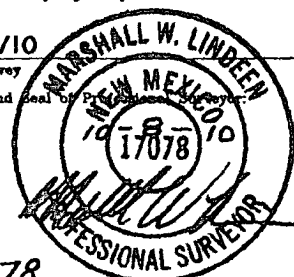
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	35	32 N	11 W		1426	SOUTH	773	EAST	SAN JUAN

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
O	35	32 N	11 W		995	SOUTH	1915	EAST	SAN JUAN

¹² Dedicated Acres 320.00 (S/2)	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

¹⁶ S 88°00'51" W 2536.71' BEARINGS & DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NAD 83.		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.	
SURFACE LAT: 36.9381919° N LONG: 107.9533507° W NAD 83 LAT: 36°56.29136' N LONG: 107°57.16369' W NAD 27		Signature <u>Brandie Blakley</u> 10-17-10 Date Printed Name blaklbn@conocophillips.com E-mail Address	
SECTION 35 USA NM-048		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.	
USA NM-010989 BHL LAT: 36.9369621° N LONG: 107.9572329° W NAD 83 LAT: 36°56.21757' N LONG: 107°57.39662' W NAD 27		Date of Survey <u>9/24/10</u> Signature and Seal of Professional Surveyor  Certificate Number <u>17078</u>	

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HORTON 1B

DEVELOPMENT

Lease:		AFE #: WAN.CDR.0113		AFE \$: 914,346.95	
Field Name: SAN JUAN		Rig: Aztec Rig 730		State: NM	County: SAN JUAN
Geologist:		Phone:		Geophysicist:	
Geoscientist:		Phone:		Prod. Engineer:	
Res. Engineer:		Phone:		Proj. Field Lead:	
				Phone:	

Primary Objective (Zones):	
Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)
RON	BLANCO MESAVERDE (PRORATED GAS)

RECEIVED

MAR 22 2011

Bureau of Land Management
Farmington Field Office

Location: Surface		Datum Code: NAD 27		Directional	
Latitude: 36.938189	Longitude: -107.952728	X:	Y:	Section: 35	Range: 011W
Footage X: 773 FEL	Footage Y: 1426 FSL	Elevation: 6343	(FT)	Township: 032N	
Tolerance:					

Location: Bottom Hole		Datum Code: NAD 27		Directional	
Latitude: 36.936960	Longitude: -107.956610	X:	Y:	Section: 35	Range: 011W
Footage X: 1915 FEL	Footage Y: 995 FSL	Elevation:	(FT)	Township: 032N	
Tolerance:					

Location Type: Year Round	Start Date (Est.): 1/1/2012	Completion Date:	Date In Operation:
---------------------------	-----------------------------	------------------	--------------------

Formation Data: Assume KB = 6358	Units = FT
----------------------------------	------------

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	230	6128		☐			12-1/4 hole. 230' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
KIRTLAND	1314	5044		☐			
FRUITLAND	2470	3888		☐			Possible Gas
PICTURED CLIFFS	3104	3254		☐			
LEWIS	3235	3123		☐			
Intermediate Casing	3385	2973		☐	122		8-3/4" hole. 7", 23 ppf, J-55, LTC casing. Cement with 826 cu ft. Circulate cement to surface.
HUERFANITO BENTONITE	3776	2582		☐			
CHACRA	4203	2155		☐			
UPPER CLIFF HOUSE	4600	1758		☐			Gas; Est. Top Perf - 4604 (1754)
MASSIVE CLIFF HOUSE	4826	1532		☐	250		Gas; Cliffhouse is dry
MENEFEE	4960	1398		☐			
POINT LOOKOUT	5323	1035		☐			
MANCOS	5673	685		☐			
UPPER GALLUP	6690	-332		☐			
GREENHORN	7382	-1024		☐			
GRANEROS	7434	-1076		☐			
TWO WELLS	7498	-1140		☐	2670		Gas
PAGUATE	7576	-1218		☐			
UPPER CUBERO	7602	-1244		☐			
LOWER CUBERO	7611	-1253		☐			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HORTON 1B

DEVELOPMENT

ENCINAL	7661	-1303	☐	TD - 40' below T/ENCN; Est. Btm Perf - 7681 (- 1323) based on offset wells
Total Depth	7701	-1343	☐	216 6-1/4" hole. 4-1/2", 11.6 ppf, L-80, LTC casing. Cement with 587 cu ft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:		
Reference Type	Well Name	Comments
Production	Childers 1	31N 11W 1 NW NE NW
Production	State Com M 10	32N 11W 36 NE NW SW
Production	Moore 11	32N 11W 35 NE SW NW
Production	Childers 3	31N 11W 1 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
----------	---

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	Local Co-ordinate Reference:	Well Horton #1B
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6358.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6358.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Horton #1B	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 1927 (Exact solution)	System Datum:	Mean Sea 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 ft	Latitude:	36° 47' 33.793 N
From:	Lat/Long	Easting:	643,887.63 ft	Longitude:	107° 20' 30.932 W
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"	Grid Convergence:	0.29 °

Well:	Horton #1B, Directional "S" Curve Long, No Lewis					
Well Position	+N-S	0.0 ft	Northing:	2,160,788.87 ft	Latitude:	36° 56' 17.482 N
	+E-W	0.0 ft	Easting:	465,106.72 ft	Longitude:	107° 57' 9.821 W
Position Uncertainty		3.5 ft	Wellhead Elevation:	ft	Ground Level:	6,343.0 ft

Wellbore:	Principal Wellbore				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	BGGM2010	11/30/2010	10.05	63.64	50,876

Design:	Plan #1				
Audit Notes:					
Version:	1	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	248.46	

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N-S	+E-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,372.3	31.57	248.46	1,319.9	-103.8	-262.9	3.00	3.00	0.00	248.46	
2,622.6	31.57	248.46	2,385.1	-344.0	-871.8	0.00	0.00	0.00	0.00	
3,674.9	0.00	0.00	3,385.0	-447.8	-1,134.7	3.00	-3.00	0.00	180.00	Horton #1B - ICP
7,990.9	0.00	0.00	7,701.0	-447.8	-1,134.7	0.00	0.00	0.00	0.00	Horton #1B - PCP

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Horton #1B
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6358.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6358.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Horton #1B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
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
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
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.40	248.46	400.0	-0.6	-1.6	1.7	3.00	3.00	0.00
500.0	5.40	248.46	499.7	-3.1	-7.9	8.5	3.00	3.00	0.00
600.0	8.40	248.46	599.0	-7.5	-19.1	20.5	3.00	3.00	0.00
700.0	11.40	248.46	697.5	-13.8	-35.0	37.7	3.00	3.00	0.00
800.0	14.40	248.46	795.0	-22.0	-55.8	60.0	3.00	3.00	0.00
900.0	17.40	248.46	891.1	-32.1	-81.3	87.4	3.00	3.00	0.00
1,000.0	20.40	248.46	985.7	-44.0	-111.4	119.8	3.00	3.00	0.00
1,100.0	23.40	248.46	1,078.5	-57.7	-146.1	157.1	3.00	3.00	0.00
1,200.0	26.40	248.46	1,169.2	-73.1	-185.3	199.2	3.00	3.00	0.00
1,300.0	29.40	248.46	1,257.6	-90.3	-228.8	246.0	3.00	3.00	0.00
1,365.4	31.36	248.46	1,314.0	-102.4	-259.6	279.1	3.00	3.00	0.00
Kirtland									
1,372.3	31.57	248.46	1,319.9	-103.8	-262.9	282.6	3.00	3.00	0.00
1,400.0	31.57	248.46	1,343.5	-109.1	-276.4	297.1	0.00	0.00	0.00
1,500.0	31.57	248.46	1,428.7	-128.3	-325.1	349.5	0.00	0.00	0.00
1,600.0	31.57	248.46	1,513.9	-147.5	-373.8	401.8	0.00	0.00	0.00
1,700.0	31.57	248.46	1,599.1	-166.7	-422.5	454.2	0.00	0.00	0.00
1,800.0	31.57	248.46	1,684.3	-186.0	-471.2	506.6	0.00	0.00	0.00
1,900.0	31.57	248.46	1,769.5	-205.2	-519.9	558.9	0.00	0.00	0.00
2,000.0	31.57	248.46	1,854.7	-224.4	-568.6	611.3	0.00	0.00	0.00
2,100.0	31.57	248.46	1,939.9	-243.6	-617.3	663.6	0.00	0.00	0.00
2,200.0	31.57	248.46	2,025.1	-262.8	-666.0	716.0	0.00	0.00	0.00
2,300.0	31.57	248.46	2,110.3	-282.0	-714.7	768.3	0.00	0.00	0.00
2,400.0	31.57	248.46	2,195.5	-301.3	-763.4	820.7	0.00	0.00	0.00
2,500.0	31.57	248.46	2,280.7	-320.5	-812.1	873.0	0.00	0.00	0.00
2,600.0	31.57	248.46	2,365.9	-339.7	-860.8	925.4	0.00	0.00	0.00
2,622.6	31.57	248.46	2,385.1	-344.0	-871.8	937.2	0.00	0.00	0.00
2,700.0	29.25	248.46	2,451.9	-358.4	-908.2	976.4	3.00	-3.00	0.00
2,720.7	28.63	248.46	2,470.0	-362.1	-917.5	986.4	3.00	-3.00	0.00
Fruitland									
2,800.0	26.25	248.46	2,540.4	-375.5	-951.5	1,022.9	3.00	-3.00	0.00
2,900.0	23.25	248.46	2,631.2	-390.9	-990.5	1,064.8	3.00	-3.00	0.00
3,000.0	20.25	248.46	2,724.0	-404.5	-1,024.9	1,101.8	3.00	-3.00	0.00
3,100.0	17.25	248.46	2,818.7	-416.3	-1,054.8	1,134.0	3.00	-3.00	0.00
3,200.0	14.25	248.46	2,915.0	-426.2	-1,080.1	1,161.1	3.00	-3.00	0.00
3,300.0	11.25	248.46	3,012.5	-434.3	-1,100.6	1,183.2	3.00	-3.00	0.00
3,392.9	8.46	248.46	3,104.0	-440.2	-1,115.4	1,199.1	3.00	-3.00	0.00
Pictured Cliffs									
3,400.0	8.25	248.46	3,111.0	-440.6	-1,116.3	1,200.1	3.00	-3.00	0.00
3,500.0	5.25	248.46	3,210.3	-444.9	-1,127.3	1,211.9	3.00	-3.00	0.00
3,524.8	4.50	248.46	3,235.0	-445.6	-1,129.2	1,214.0	3.00	-3.00	0.00
Lewis									
3,600.0	2.25	248.46	3,310.1	-447.3	-1,133.3	1,218.4	3.00	-3.00	0.00
3,674.9	0.00	0.00	3,385.0	-447.8	-1,134.7	1,219.9	3.00	-3.00	148.87
7" Intermediate Casing - Horton #1B - ICP									
3,700.0	0.00	0.00	3,410.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Horton #1B
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6358.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6358.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Horton #1B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
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	0.00	0.00	3,510.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,610.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,710.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,065.9	0.00	0.00	3,776.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Huerfano Bentonite									
4,100.0	0.00	0.00	3,810.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,200.0	0.00	0.00	3,910.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,010.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,110.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,492.9	0.00	0.00	4,203.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Chacra									
4,500.0	0.00	0.00	4,210.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,310.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,700.0	0.00	0.00	4,410.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,510.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
4,889.9	0.00	0.00	4,600.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Upper Cliffhouse									
4,900.0	0.00	0.00	4,610.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,710.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,100.0	0.00	0.00	4,810.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,115.9	0.00	0.00	4,826.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Massive Cliffhouse									
5,200.0	0.00	0.00	4,910.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,249.9	0.00	0.00	4,960.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Menefee									
5,300.0	0.00	0.00	5,010.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,110.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,210.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,310.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,612.9	0.00	0.00	5,323.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Point Lookout									
5,700.0	0.00	0.00	5,410.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,510.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,610.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
5,962.9	0.00	0.00	5,673.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Mancos									
6,000.0	0.00	0.00	5,710.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,100.0	0.00	0.00	5,810.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,200.0	0.00	0.00	5,910.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,010.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,110.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,210.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,310.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,410.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,510.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,610.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
6,979.9	0.00	0.00	6,690.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
Upper Gallup									
7,000.0	0.00	0.00	6,710.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
7,100.0	0.00	0.00	6,810.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
7,200.0	0.00	0.00	6,910.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,010.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Horton #1B
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6358.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6358.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Horton #1B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
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)	
7,400.0	0.00	0.00	7,110.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,210.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,310.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,671.9	0.00	0.00	7,382.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Greenhorn										
7,700.0	0.00	0.00	7,410.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,723.9	0.00	0.00	7,434.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Graneros										
7,787.9	0.00	0.00	7,498.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Two Wells										
7,800.0	0.00	0.00	7,510.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,865.9	0.00	0.00	7,576.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Paguete										
7,891.9	0.00	0.00	7,602.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Upper Cubero										
7,900.0	0.00	0.00	7,610.1	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
7,900.9	0.00	0.00	7,611.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Lower Cubero										
7,950.9	0.00	0.00	7,661.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Encinal										
7,990.9	0.00	0.00	7,701.0	-447.8	-1,134.7	1,219.9	0.00	0.00	0.00	
Total Depth - 4 1/2" Production Casing - Horton #1B - PCP										

Targets									
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Horton #1B - PCP	0.00	0.00	7,701.0	-447.8	-1,134.7	2,160,342.52	463,971.55	36° 56' 13.054 N	107° 57' 23.797 W
- plan hits target center									
- Circle (radius 100.0)									
Horton #1B - ICP	0.00	0.00	3,385.0	-447.8	-1,134.7	2,160,342.52	463,971.55	36° 56' 13.054 N	107° 57' 23.797 W
- plan hits target center									
- Circle (radius 100.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
230.0	230.0	9 5/8" Surface Casing	9-5/8	12-1/4	
3,674.9	3,385.0	7" Intermediate Casing	7	8-3/4	
7,990.9	7,701.0	4 1/2" Production Casing	4-1/2	6-1/4	

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Horton #1B
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6358.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6358.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Horton #1B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,889.9	4,600.0	Upper Cliffhouse		0.00		
7,671.9	7,382.0	Greenhorn		0.00		
7,787.9	7,498.0	Two Wells		0.00		
3,524.8	3,235.0	Lewis		0.00		
7,950.9	7,661.0	Encinal		0.00		
7,900.9	7,611.0	Lower Cubero		0.00		
4,065.9	3,776.0	Huerfanito Bentonite		0.00		
6,979.9	6,690.0	Upper Gallup		0.00		
7,723.9	7,434.0	Graneros		0.00		
3,392.9	3,104.0	Pictured Cliffs		0.00		
7,865.9	7,576.0	Paguate		0.00		
1,365.4	1,314.0	Kirtland		0.00		
5,612.9	5,323.0	Point Lookout		0.00		
7,990.9	7,701.0	Total Depth		0.00		
2,720.7	2,470.0	Fruitland		0.00		
5,115.9	4,826.0	Massive Cliffhouse		0.00		
7,891.9	7,602.0	Upper Cubero		0.00		
5,249.9	4,960.0	Menefee		0.00		
4,492.9	4,203.0	Chacra		0.00		
5,962.9	5,673.0	Mancos		0.00		

REFERENCE INFORMATION

RKB @ 6358.0ft (AWS RIGS)
Ground Elevation 6343.0
Reference Lat: 36° 56' 17.482 N
Reference Long: 107° 57' 9.821 W

Project: San Juan Basin - New Mexico West V

Site: Other Named Wells

Well: Horton #1B

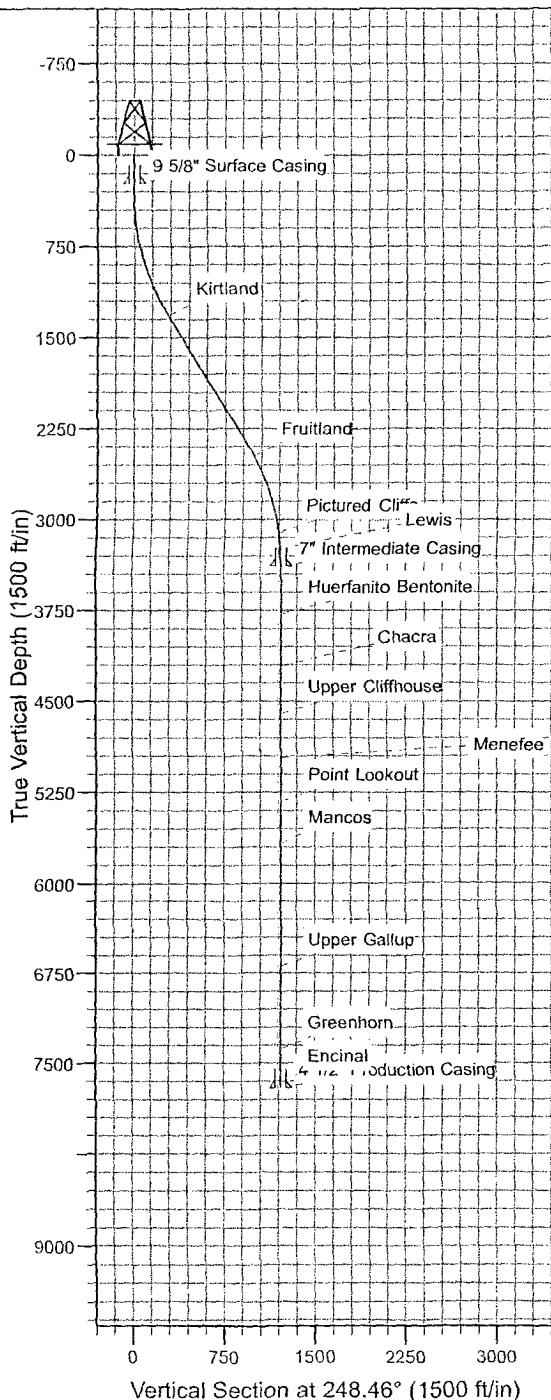
Wellbore: Principal Wellbore

Design: Plan #1

ConocoPhillips

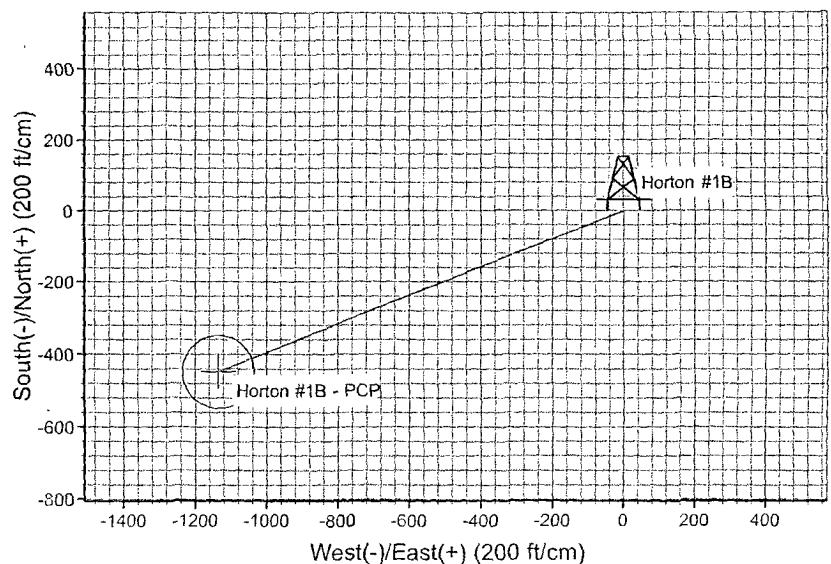
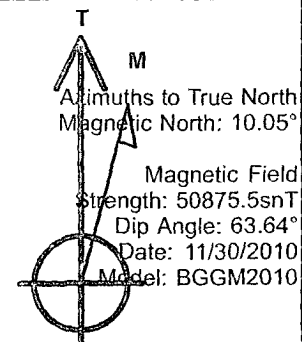
SECTION DETAILS

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	1372.3	31.57	248.46	1319.9	-103.8	-262.9	3.00	248.46	282.6	
4	2622.6	31.57	248.46	2385.1	-344.0	-871.8	0.00	0.00	937.2	
5	3674.9	0.00	0.00	3385.0	-447.8	-1134.7	3.00	180.00	1219.9	Horton #1B - ICP
6	7990.9	0.00	0.00	7701.0	-447.8	-1134.7	0.00	0.00	1219.9	Horton #1B - PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1314.0	1365.4	Kirtland
2470.0	2720.7	Fruitland
3104.0	3392.9	Pictured Cliffs
3235.0	3524.8	Lewis
3776.0	4065.9	Huerfano Bentonite
4203.0	4492.9	Chacra
4600.0	4889.9	Upper Cliffhouse
4826.0	5115.9	Massive Cliffhouse
4960.0	5249.9	Menefee
5323.0	5612.9	Point Lookout
5673.0	5962.9	Mancos
6690.0	6979.9	Upper Gallup
7382.0	7671.9	Greenhorn
7434.0	7723.9	Graneros
7498.0	7787.9	Two Wells
7576.0	7865.9	Paguate
7602.0	7891.9	Upper Cubero
7611.0	7900.9	Lower Cubero
7661.0	7950.9	Encinal
7701.0	7990.9	Total Depth



BURLINGTON RESOURCES OIL & GAS COMPANY LP

HORTON 1B

1426' FSL & 773' FEL (SURFACE)

995' FSL & 1915' FEL (BOTTOM HOLE)

LATITUDE: 36.9381919° N

LONGITUDE: 107.9533507° W

NAD 83

SECTION 35, T-32-N, R-11-W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

**FROM THE INTERSECTION OF U.S. HIGHWAY 550
AND NM HIGHWAY 516 IN AZTEC, NEW MEXICO.**

**TRAVEL NORTHEASTERLY ON U.S. HIGHWAY 550 FOR 10.9 MILES.
TURN LEFT ONTO C.R. 2300 AND TRAVEL 2.0 MILES NORTHWESTERLY.
TURN LEFT AND TRAVEL SOUTHERLY 0.7 MILE.
TURN RIGHT AND TRAVEL WESTERLY 0.7 MILE.
BEAR LEFT AT Y-INTERSECTION AND TRAVEL SOUTHWESTERLY 1.2 MILES.
BEAR RIGHT AND TRAVEL WESTERLY 0.5 MILE UNTIL REACHING
PROPOSED HORTON 1B WELL LOCATION.**