submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
FEB 01 2010
Bureau of Land Management
Farmington Field Office

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
NMNM-06892

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
CONOCOPHILLIPS COMPANY

8. **Well Name & Number**
Reese Mesa 101H

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-045-26977

4. **Location of Well, Footage, Sec., T, R, M**
Surface: Unit P (SESE), 1100' FSL & 940' FEL, Section 13, T32N, R8W, NMPM
Bottomhole: Unit B (NWNE), 700' FNL & 1500' FEL, Section 13, T32N, R8W, NMPM

10. **Field and Pool**
Basin Fruitland Coal

11. **County and State**
San Juan, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission	Type of Action			
X Notice of Intent	Abandonment	Change of Plans	X Other – APD Lateral	
	Recompletion	New Construction		
Subsequent Report	Plugging	Non-Routine Fracturing		
	Casing Repair	Water Shut off		
Final Abandonment	Altering Casing	Conversion to Injection		

RCVD FEB 17 '10
OIL CONS. DIV.
DIST. 3

13. Describe Proposed or Completed Operations

ConocoPhillips wishes to add two laterals to the original wellbore in the upper coal inter- tongue. Please see attached plat, C102 package, directional drill plan and project proposal.

Also please note that the footages on the well for the surface location changed slightly from the original survey, The original Footages showed 1100' FSL 945' FEL. The new footages are 1100' FSL and 940' FEL. Please note the correction in your records. Also note the well name change to Reese Mesa 101H since this will now be lateral well.

14. I hereby certify that the foregoing is true and correct.

Signed Patsy Clugston Patsy Clugston Title Sr. Regulatory Specialist Date 1/28/10

(This space for Federal or State Office use)
APPROVED BY Troy L. Salyers Title Petroleum Engineer Date 2/11/2010
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* Refer to Case 14280 R-13109

Hold C104
for Directional Survey
and "As Drilled" plat - for each Lateral

NMOCD

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.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-26977	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
18606	REESE MESA	101 H

[7] OGRID No.	[8] Operator Name	[9] Elevation
143538	BURLINGTON RESOURCES OIL & GAS COMPANY LP	7033'

[10] Surface Location

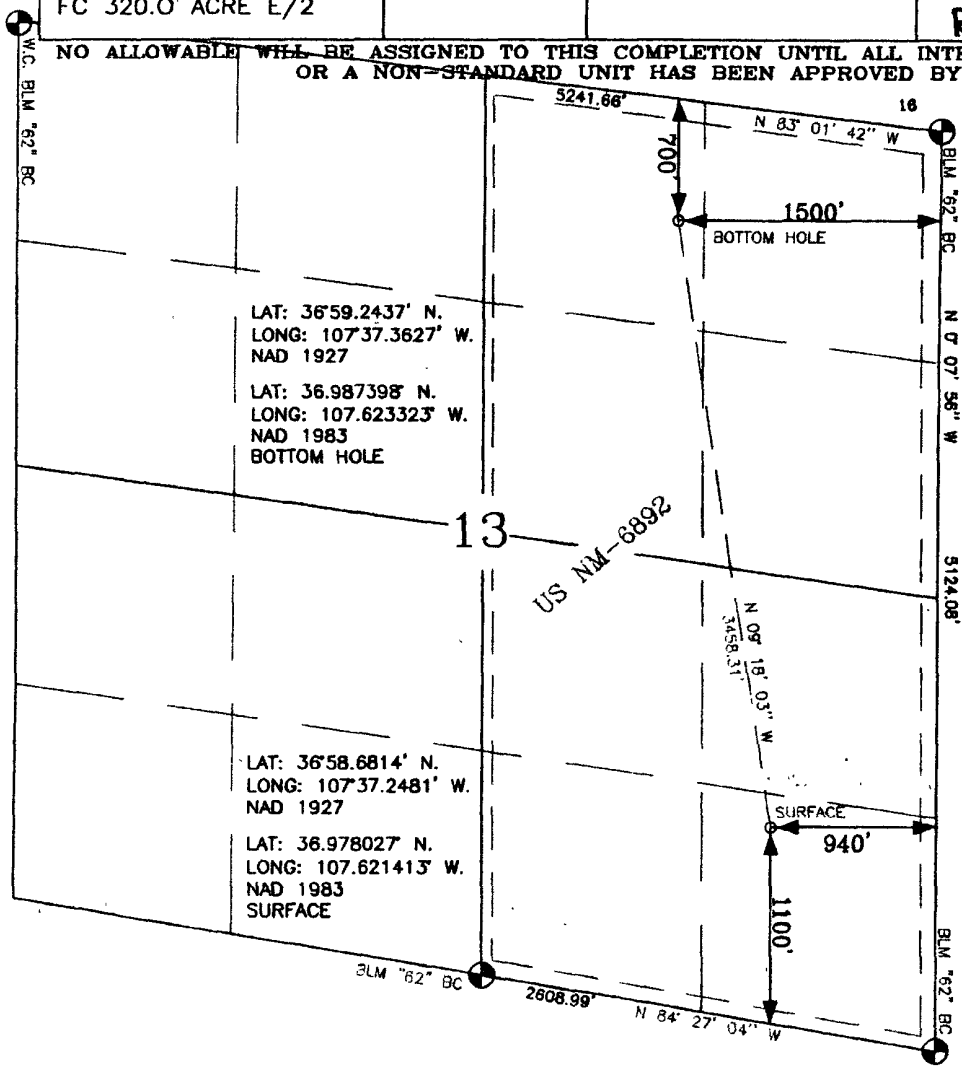
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	13	32-N	8-W		1100'	SOUTH	940'	EAST	SAN JUAN

[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
B	13	32-N	8-W		700'	NORTH	1500'	EAST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
FC 320.0 ACRE E/2			R-13169

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



[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.

Signature

Patsy Clugston 1/31/10
Printed Name

[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.

7
Date of Survey

Signature and Seal of Professional Surveyor:

GLEN R. RUSSELL
NEW MEXICO
15703
LICENSED PROFESSIONAL SURVEYOR

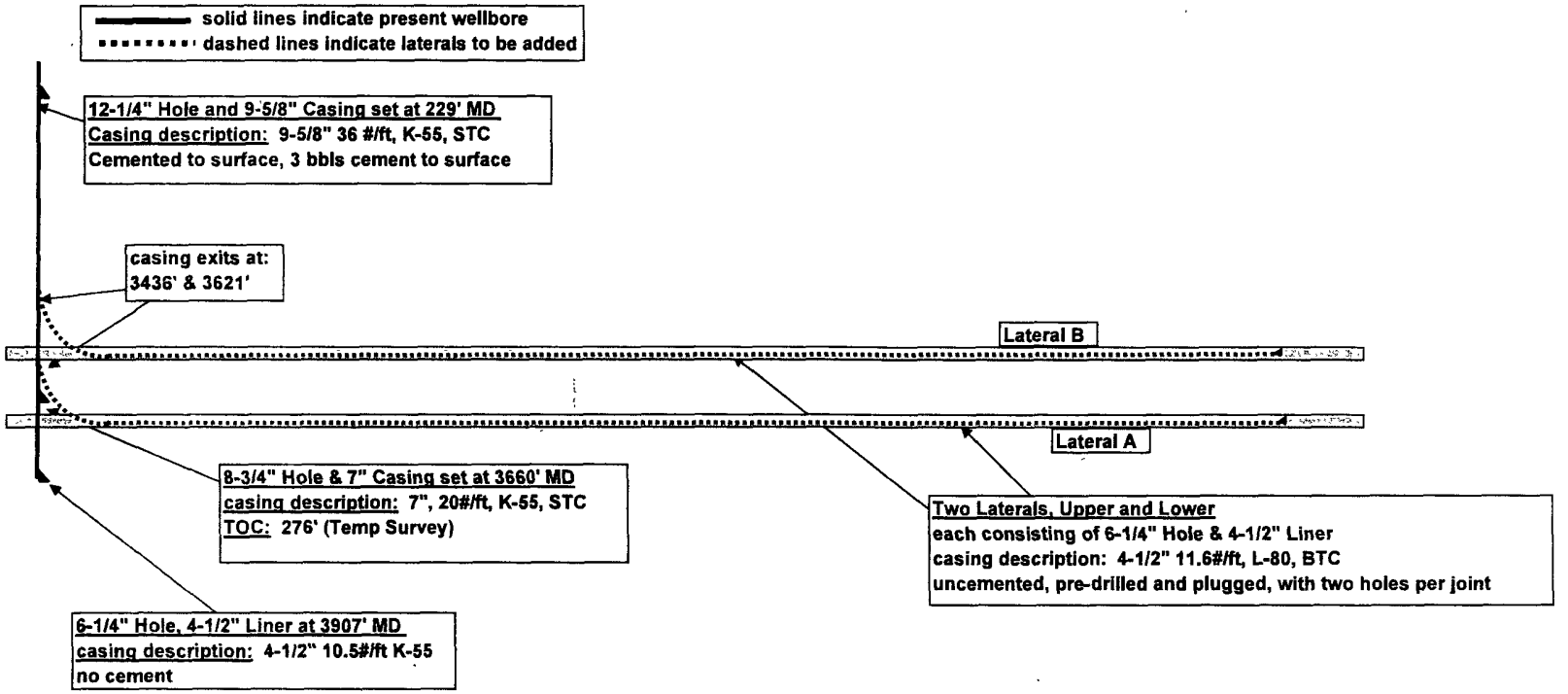
Certificate Number 15703

Reese Mesa 101 Lateral

GL 7033'
KB 7048' (Aztec 730)

Directional Plan lateral A (Plan No. 3) accompanies this document
Directional Plan Lateral B (Plan No. 3) accompanies this document

	State of New Mexico, San Juan County	MD ft	TVD ft	
Surface location:	T32N, R08W, Section 13, 1100' FSL, 940' FEL	NA	NA	
Lateral B (upper lateral), beginning of prod. interval	T32N, R08W, Section 13, 1383' FSL, 987' FEL	3887'	3723'	landed at 90° in the upper coal
Lateral B (upper lateral), end of prod. interval	T32N, R08W, Section 13, 700' FNL, 1500' FEL	7057'	3689'	lateral total depth & 4-1/2" casing depth
Lateral A (lower lateral), beginning of prod. interval	T32N, R08W, Section 13, 1388' FSL, 987' FEL	4076'	3908'	landed at 90° in the lower coal
Lateral A (lower lateral), end of prod interval	T32N, R08W, Section 13, 700' FNL, 1500' FEL	7242'	3884'	lateral total depth & 4-1/2" casing depth



BOP program and drilling mud program will be per basin-wide standards for top-set coal wells.

ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

REESE MESA 101 LATERAL **DEVELOPMENT**

Lease:	AFE #: WAN.CDR.8262			AFE $: 3,100,000.00
Field Name: SAN JUAN	Rig: Aztec Rig 730	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
JCV	BASIN FRUITLAND COAL (GAS)

Location: Surface	Datum Code: NAD 27				Horizontal
Latitude: 36.978023	Longitude: -107.620801	X:	Y:	Section: 13	Range: 008W
Footage X: 940 FEL	Footage Y: 1100 FSL	Elevation: 7033 (FT)	Township: 032N		
Tolerance:					
Location: Bottom Hole	Datum Code: NAD 27				Horizontal
Latitude: 36.987394	Longitude: -107.622711	X:	Y:	Section: 13	Range: 008W
Footage X: 1500 FEL	Footage Y: 700 FNL	Elevation: (FT)	Township: 032N		
Tolerance:					

Location Type: Restricted Start Date (Est.): 1/1/2011 Completion Date: Date In Operation:

Formation Data: Assume KB = 7048 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Total Depth	0	7048	☐			
OJO ALAMO	2694	4354	☐			
KIRTLAND	2762	4286	☐			
FRUITLAND	3304	3744	☐			
EXIT MAIN BORE UPPER LATERAL	3436	3612	☐			
EXIT MAIN BORE LOWER LATERAL	3621	3427	☐			
PATH 3400' F/SHL UPPER LATERAL	3689	3359	☐			
PATH 3000' F/SHL UPPER LATERAL	3696	3353	☐			
PATH 2500' F/SHL UPPER LATERAL	3704	3344	☐			
PATH 2000' F/SHL UPPER LATERAL	3714	3334	☐			
PATH 1500' F/SHL UPPER LATERAL	3716	3333	☐			
PATH 1000' F/SHL UPPER LATERAL	3719	3330	☐			
PATH 500' F/SHL UPPER LATERAL	3722	3326	☐			
PATH 100' F/SHL UPPER LATERAL	3723	3325	☐			
PATH 2500' F/SHL LOWER LATERAL	3881	3167	☐			
PATH 3000' F/SHL LOWER LATERAL	3882	3166	☐			

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ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

REESE MESA 101 LATERAL **DEVELOPMENT**

PATH 3400' F/SHL LOWER LATERAL	3884	3164	☐
PATH 2000' F/SHL LOWER LATERAL	3884	3164	☐
PATH 1500' F/SHL LOWER LATERAL	3890	3158	☐
PATH 1000' F/SHL LOWER LATERAL	3897	3151	☐
PATH 500' F/SHL LOWER LATERAL	3905	3143	☐
PATH 100' F/SHL LOWER LATERAL	3910	3138	☐

Reference Wells:

Reference Type	Well Name	Comments
Production	Reese Mesa 101	32N-8W-13 NW SE SE
Production	Reese Mesa 5	32N-8W-13 SW NE NW
Production	Reese Mesa 3	32N-8W-13 NW SE NE

Logging Program:

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

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

MWD - Gamma Ray from start of open hole section to TD

Mudlog from kick off point to TD

Additional Information:

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

Comments: Location/Tops/Logging - The Reese Mesa 101S will be temporarily abandoned by setting a bridge plug over the completed zones prior to the drilling and production of the Reese Mesa 101 Lateral. The Reese Mesa 101S will remain in the temporarily abandoned state during the production of the Reese Mesa 101 Lateral unless a density exception is granted, at which time it will be brought back on production. The Resource Assessment Team requests that the Land Department apply for an exception to the density rule in the NE 1/4 of Section 13 T32N R8W.

Zones -

It is proposed that we should approach Santa Fe about granting an exception to the density rule in the NE 1/4 of Section 13 in T32N R8W so that we can re-enter the Reese Mesa 101 wellbore and drill horizontal laterals to the North. Reasons for the proposal include:

One less rig move (no need to re-enter the 101S) thus less traffic, less harm to the environment, etc.
Dramatically accelerated rates (revenue for NM), and increased ultimate recovery
ConocoPhillips operates all of the offset coal wells.
Improve implementation practices along the state line that will be able to compete with Colorado's 80-Acre infill program without doubling the number of wells
The well would remain within the drill block setbacks (it would actually be drilled down the center of the drill block, minimizing interference possibilities with offset drill blocks).

If we can't get an exception to the density rule, we will temporarily abandon the Reese Mesa 101S while we drill and produce the re-entry in the 101.

General/Work Description - 4/14/09-R-Order for well density exception approved - see Doc Mgmt wfp
Lateral re-entry
5/5/08-This project will replace the remedial wfp

CEC Notified bottom hole is Unit Letter Spot B, and the API# 3004526977 will remain the same. CEC

No H2S contingency plan needed as of 12/3/09 no H2S nearby. Dalessandro

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Scientific Drilling
Directional Drilling Operations

ConocoPhillips

SJB (NM West)
SEC 13-T32N-R8W
Reese Mesa #101

Lateral A

Plan: Plan #3

Standard Planning Report

20 November, 2009

ConocoPhillips

Scientific Drilling
Directional Drilling Operations

Project: SJB (NM West)
Site: SEC 13-T32N-R8W
Well: Reese Mesa #101
Wellbore: Lateral A
Design: Plan #3

ConocoPhillips

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Reese Mesa #101, True North
Vertical (TVD) Reference: DFE @ 7048 0ft (AWS 730)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: DFE @ 7048.0ft (AWS 730)
Calculation Method: Minimum Curvature

PROJECT DETAILS

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

WELL DETAILS: Reese Mesa #101

Ground Level: 7033.0

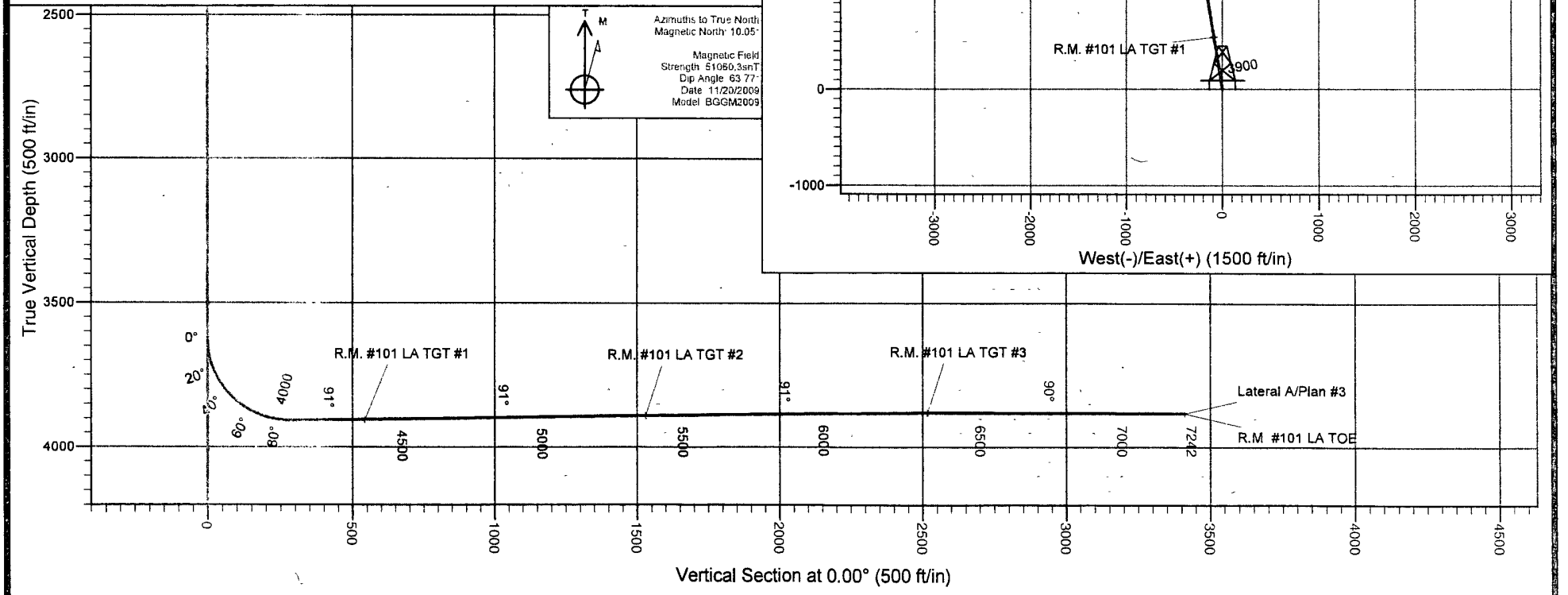
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	2175338.06	562080.38	36° 58' 40.883 N	107° 37' 14.886 W

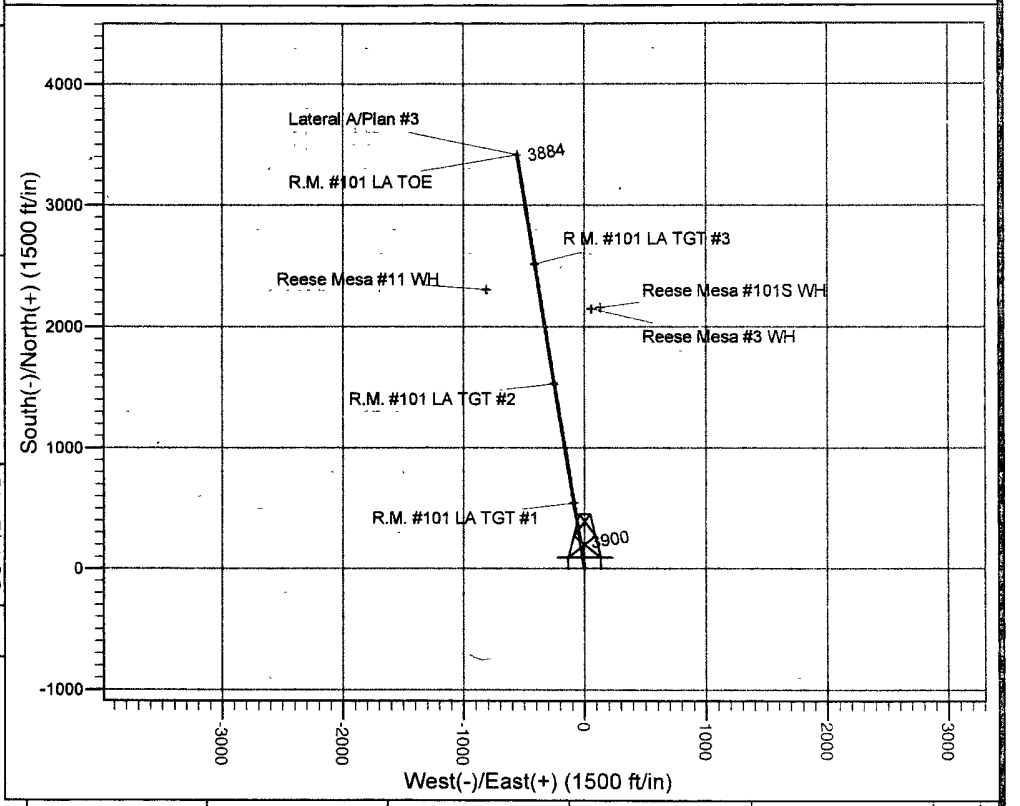
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	3621.2	0.00	0.00	3621 2	0.0	0.0	0.00	0.00	0.0	
2	4076 2	91.00	350 66	3907 6	287.6	-47 2	20.00	350.68	287 6	
3	4092.0	90 68	350.66	3907 4	303.2	-49.8	2.00	-177.17	303 2	
4	4335 1	90.68	350 66	3904.5	543.1	-89 2	0.00	0.00	543.1	R.M #101 LA TGT #1
5	4336.6	90.83	350 74	3904 5	544.5	-89.4	11 34	27.91	544.5	
6	5334.7	90 83	350 74	3890 0	1529.6	-250.0	0.00	0.00	1529.6	R M. #101 LA TGT #2
7	5337 6	90 51	350 69	3890 0	1532.4	-250.5	11.25	-171.31	1532.4	
8	6335.4	90.51	350 69	3881.0	2517.0	-411.8	0 00	0.00	2517 0	R.M. #101 LA TGT #3
9	6340 9	89 84	350 73	3881 0	2522.4	-412.7	12.29	176.94	2522 4	
10	7242.3	89.84	350 73	3883 5	3412.1	-557 9	0.00	0 00	3412.1	R.M. #101 LA TOE

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Reese Mesa #101S WH	0 0	2159.7	129.0	2177497 88	562204.56	Circle (Radius 5 0)
Reese Mesa #11 WH	0 0	2307.2	-811 6	2177643.24	561263.75	Circle (Radius 5 0)
Reese Mesa #3 WH	0 0	2150.6	56.0	2177488.62	562131 56	Circle (Radius 5.0)
R.M. #101 LA TGT #3	3881.0	2517 0	-411.8	2177853.93	561663.00	Point
R.M. #101 LA TOE	3883.5	3412 1	-557.9	2178748.63	561514.91	Point
R.M. #101 LA TGT #2	3890 0	1529.6	-250.0	2176866 97	561826.99	Point
R.M. #101 LA TGT #1	3904.5	543.1	-89.2	2175880.91	561989.98	Point





Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #3		

Project SJB (NM West), 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 West 3003		Using geodetic scale factor

Site SEC 13-T32N-R8W

Site Position:		**Northing:**	2,175,338.06 ft	**Latitude:**	36° 58' 40.883 N
From:	Lat/Long	**Easting:**	562,080.38 ft	**Longitude:**	107° 37' 14.886 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	6-1/8"	**Grid Convergence:**	0.13 °

Well Reese Mesa #101, Re-entry CBM HZ

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,175,338.06 ft	**Latitude:**	36° 58' 40.883 N
	+E/-W	0.0 ft	**Easting:**	562,080.38 ft	**Longitude:**	107° 37' 14.886 W
Position Uncertainty		3.5 ft	**Wellhead Elevation:**	ft	**Ground Level:**	7,033.0 ft

Wellbore Lateral A

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	11/20/2009	10.05	63.77	51,060

Design Plan #3

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	3,621.2

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

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
3,621.2	0 00	0.00	3,621.2	0.0	0.0	0.00	0.00	0.00	0.00	
4,076.2	91.00	350.68	3,907 6	287.6	-47.2	20.00	20.00	0.00	350.68	
4,092.0	90.68	350.66	3,907.4	303.2	-49.8	2.00	-2.00	-0.10	-177.17	
4,335.1	90.68	350.66	3,904.5	543.1	-89.2	0.00	0.00	0.00	0.00	R.M. #101 LA TGT
4,336.6	90.83	350.74	3,904.5	544.5	-89.4	11.34	10.02	5.31	27.91	
5,334.7	90.83	350.74	3,890.0	1,529.6	-250.0	0.00	0.00	0.00	0.00	R.M. #101 LA TGT
5,337.6	90.51	350.69	3,890.0	1,532.4	-250.5	11.25	-11.12	-1.70	-171.31	
6.335.4	90.51	350.69	3.881 0	2.517 0	-411.8	0 00	0.00	0.00	0 00	R.M. #101 LA TGT
6.340 9	89.84	350 73	3.881.0	2.522 4	-412.7	12 29	-12 27	0 66	176.94	
7,242.3	89.84	350.73	3,883.5	3.412.1	-557.9	0 00	0.00	0.00	0.00	R.M. #101 LA TOE

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #3		

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
3,621.2	0.00	0.00	3,621.2	0.0	0.0	0.0	0.00	0 00	0.00
3,625.0	0.76	350.68	3,625.0	0.0	0.0	0.0	20.00	20.00	0.00
3,650.0	5.76	350 68	3,650.0	1.4	-0.2	1.4	20.00	20.00	0.00
3,675.0	10.76	350.68	3,674.7	5.0	-0.8	5.0	20.00	20.00	0.00
3,700.0	15.76	350.68	3,699.0	10.6	-1.7	10.6	20.00	20.00	0.00
3,725.0	20.76	350.68	3,722.7	18.4	-3.0	18.4	20.00	20.00	0.00
3,750.0	25.76	350.68	3,745 7	28.1	-4.6	28.1	20.00	20.00	0.00
3,775.0	30.76	350.68	3,767.7	39.8	-6.5	39.8	20.00	20.00	0.00
3,800.0	35 76	350.68	3,788.6	53.3	-8.7	53.3	20.00	20.00	0.00
3,825.0	40.76	350.68	3,808.2	68.6	-11.3	68.6	20.00	20.00	0.00
3,850.0	45.76	350.68	3,826.4	85.5	-14.0	85.5	20.00	20.00	0.00
3,875.0	50.76	350.68	3,843.1	103.9	-17.0	103.9	20.00	20.00	0 00
3,900.0	55.76	350.68	3,858.0	123.6	-20.3	123.6	20.00	20.00	0.00
3,925.0	60.76	350.68	3,871.2	144.6	-23.7	144.6	20.00	20.00	0.00
3,950.0	65.76	350.68	3,882.4	166.6	-27.3	166.6	20.00	20.00	0.00
3,975.0	70.76	350.68	3,891.7	189.5	-31.1	189.5	20.00	20.00	0.00
4,000.0	75.76	350.68	3,898.9	213.2	-35.0	213.2	20.00	20.00	0.00
4,025.0	80.76	350.68	3,904.0	237.3	-38.9	237.3	20.00	20.00	0.00
4,050.0	85.76	350.68	3,906.9	261.8	-43.0	261.8	20.00	20.00	0.00
4,076.2	91.00	350.68	3,907.6	287.6	-47.2	287.6	20.00	20.00	0.00
4,092.0	90.68	350.66	3,907.4	303.2	-49.8	303.2	2.00	-2.00	-0.10
4,100.0	90.68	350.66	3,907.3	311.1	-51.1	311.1	0.00	0.00	0.00
4,200.0	90.68	350.66	3,906.1	409.8	-67.3	409.8	0.00	0.00	0.00
4,300.0	90.68	350.66	3,904.9	508.5	-83.5	508.5	0.00	0.00	0.00
4,335.1	90.68	350.66	3,904.5	543.1	-89.2	543.1	0.00	0.00	0.00
4,336.6	90.83	350.74	3,904.5	544.5	-89.4	544.5	11.34	10.02	5.31
4,400.0	90.83	350.74	3,903.6	607.1	-99.6	607.1	0.00	0.00	0.00
4,500.0	90.83	350.74	3,902.1	705.8	-115.7	705.8	0.00	0.00	0.00
4,600.0	90.83	350.74	3,900.7	804.5	-131.8	804.5	0 00	0.00	0.00
4,700.0	90.83	350.74	3,899.2	903.2	-147.9	903.2	0.00	0.00	0.00
4,800.0	90.83	350.74	3,897.8	1,001.9	-164.0	1,001.9	0.00	0.00	0.00
4,900.0	90.83	350.74	3,896.3	1,100.6	-180.1	1,100.6	0.00	0.00	0.00
5,000.0	90.83	350.74	3,894.9	1,199.3	-196.2	1,199.3	0.00	0.00	0.00
5,100.0	90.83	350.74	3,893.4	1,297.9	-212.2	1,297.9	0.00	0.00	0.00
5,200.0	90.83	350.74	3,892.0	1,396.6	-228.3	1,396.6	0.00	0.00	0.00
5,300.0	90.83	350.74	3,890.5	1,495.3	-244.4	1,495.3	0.00	0.00	0.00
5,334.7	90.83	350.74	3,890.0	1,529.6	-250.0	1,529.6	0.00	0.00	0.00
5,337.6	90.51	350.69	3,890.0	1,532.4	-250.5	1,532.4	11.25	-11.12	-1.70
5,400.0	90.51	350.69	3,889.4	1,594.0	-260.6	1,594.0	0.00	0.00	0.00
5,500.0	90.51	350.69	3,888.5	1,692.7	-276.7	1,692.7	0.00	0.00	0.00
5,600.0	90.51	350.69	3,887.6	1,791.4	-292.9	1,791.4	0.00	0.00	0.00
5,700.0	90.51	350.69	3,886.7	1,890.0	-309.1	1,890.0	0.00	0.00	0 00
5,800.0	90.51	350.69	3,885.8	1,988.7	-325.2	1,988.7	0 00	0 00	0.00
5,900.0	90.51	350.69	3,884.9	2,087.4	-341.4	2,087.4	0.00	0.00	0.00
6,000.0	90.51	350.69	3,884.0	2,186.1	-357.6	2,186.1	0.00	0 00	0 00
6,100 0	90.51	350.69	3,883.1	2,284 8	-373.7	2,284.8	0.00	0.00	0 00
6,200.0	90.51	350 69	3,882.2	2,383.4	-389.9	2,383.4	0 00	0.00	0.00
6,300.0	90.51	350 69	3,881.3	2,482.1	-406.1	2,482 1	0.00	0.00	0 00
6,335.4	90 51	350.69	3,881.0	2,517.0	-411.8	2,517.0	0.00	0.00	0.00
6,340.9	89.84	350.73	3,881.0	2,522.4	-412.7	2,522.4	12.29	-12.27	0.66
6,400.0	89.84	350.73	3,881.1	2,580.8	-422.2	2,580.8	0.00	0.00	0.00
6,500.0	89.84	350.73	3,881.4	2,679.5	-438.3	2,679.5	0 00	0.00	0 00
6,600.0	89.84	350.73	3,881.7	2,778.2	-454.4	2,778.2	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral A		
Design:	Plan #3		

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)
6,700.0	89.84	350.73	3,882.0	2,876.9	-470.5	2,876.9	0.00	0.00	0.00
6,800.0	89.84	350.73	3,882.3	2,975.6	-486.7	2,975.6	0.00	0.00	0.00
6,900.0	89.84	350.73	3,882.5	3,074.3	-502.8	3,074.3	0.00	0.00	0.00
7,000.0	89.84	350.73	3,882.8	3,173.0	-518.9	3,173.0	0.00	0.00	0.00
7,100.0	89.84	350 73	3,883.1	3,271.7	-535.0	3,271.7	0.00	0.00	0.00
7,200.0	89.84	350.73	3,883.4	3,370.4	-551.1	3,370.4	0.00	0.00	0.00
7,242.3	89.84	350.73	3,883.5	3,412.1	-557.9	3,412.1	0.00	0.00	0.00

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
Reese Mesa #11 WH - plan misses target center by 2445.8ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 5.0)	0 00	0.00	0.0	2,307.2	-811.6	2,177,643.24	561,263.75	36° 59' 3.696 N	107° 37' 24.888 W
Reese Mesa #101S W - plan misses target center by 2163.6ft at 0 0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 5.0)	0.00	0.00	0.0	2,159.7	129.0	2,177,497.88	562,204.56	36° 59' 2.238 N	107° 37' 13.296 W
Reese Mesa #3 WH - plan misses target center by 2151.3ft at 0.0ft MD (0.0 TVD, 0 0 N, 0.0 E) - Circle (radius 5.0)	0.00	0.00	0.0	2,150.6	56.0	2,177,488.62	562,131.56	36° 59' 2.148 N	107° 37' 14.196 W
R.M. #101 LA TGT #3 - plan hits target center - Point	0.00	0.00	3,881.0	2,517.0	-411.8	2,177,853.93	561,663.00	36° 59' 5.771 N	107° 37' 19.961 W
R.M. #101 LA TOE - plan hits target center - Point	0.00	0.00	3,883.5	3,412.1	-557.9	2,178,748.63	561,514.91	36° 59' 14.621 N	107° 37' 21.762 W
R.M. #101 LA TGT #2 - plan hits target center - Point	0.00	0.00	3,890.0	1,529.6	-250.0	2,176,866.97	561,826.99	36° 58' 56.008 N	107° 37' 17.967 W
R.M. #101 LA TGT #1 - plan hits target center - Point	0.00	0.00	3,904.5	543.1	-89.2	2,175,880.91	561,989.98	36° 58' 46.253 N	107° 37' 15.985 W

Scientific Drilling
Directional Drilling Operations

ConocoPhillips

SJB (NM West)
SEC 13-T32N-R8W
Reese Mesa #101

Lateral B

Plan: Plan #3

Standard Planning Report

20 November, 2009

ConocoPhillips

Scientific Drilling
Directional Drilling Operations

Project: SJB (NM West)
Site: SEC 13-T32N-R8W
Well: Reese Mesa #101
Wellbore: Lateral B
Design: Plan #3

ConocoPhillips

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Reese Mesa #101, True North
Vertical (TVD) Reference: DFE @ 7048.0ft (AWS 730)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: DFE @ 7048.0ft (AWS 730)
Calculation Method: Minimum Curvature

PROJECT DETAILS

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level

WELL DETAILS: Reese Mesa #101

Ground Level 7033.0

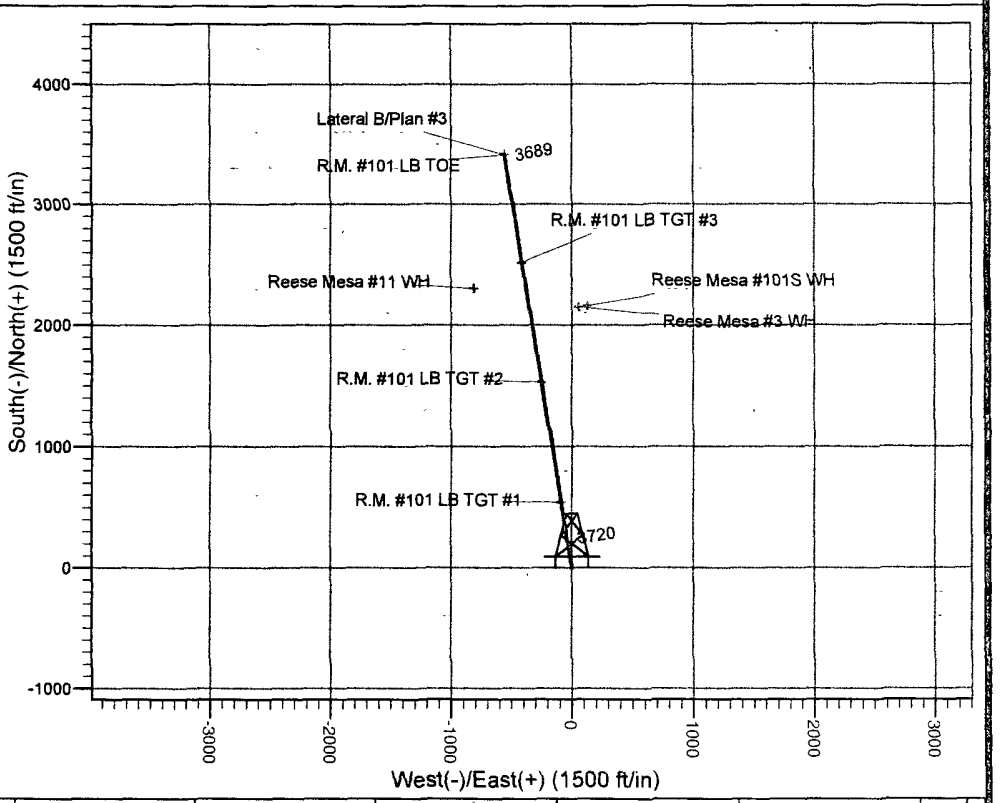
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	2175338.06	562080.38	36° 58' 40.883 N	107° 37' 14.886 W

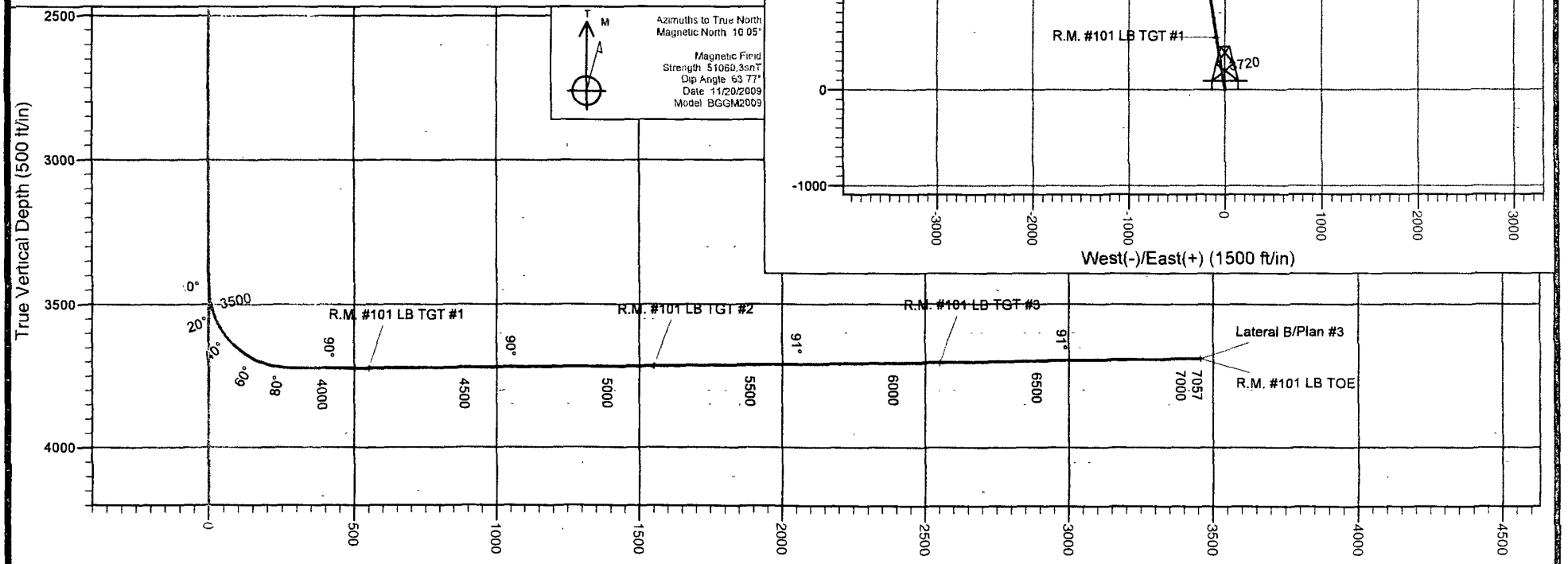
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	3436.1	0.00	0.00	3436.1	0.0	0.0	0.00	0.00	0.0	
2	3886.8	90.13	350.68	3722.6	283.3	-46.5	20.00	350.68	287.1	
3	3887.1	90.13	350.67	3722.6	283.7	-46.6	2.00	-120.89	287.5	
4	4150.1	90.13	350.67	3722.0	543.2	-89.2	0.00	0.00	550.5	R.M. #101 LB TGT #1
5	4163.0	90.37	350.74	3721.9	555.9	-91.3	2.00	15.36	563.3	
6	5149.6	90.37	350.74	3715.5	1529.6	-250.0	0.00	0.00	1549.9	R.M. #101 LB TGT #2
7	5164.1	90.66	350.69	3715.4	1544.0	-252.3	2.00	-9.51	1564.4	
8	6150.2	90.66	350.69	3704.0	2517.1	-411.8	0.00	0.00	2550.5	R.M. #101 LB TGT #3
9	6164.8	90.95	350.73	3703.8	2531.5	-414.2	2.00	7.40	2565.1	
10	7057.3	90.95	350.73	3689.0	3412.2	-557.9	0.00	0.00	3457.5	R.M. #101 LB TOE

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Reese Mesa #101S WH	0.0	2159.7	129.0	2177497.88	562204.56	Circle (Radius 5.0)
Reese Mesa #11 WH	0.0	2307.2	-811.6	2177643.24	561263.75	Circle (Radius 5.0)
Reese Mesa #3 WH	0.0	2150.6	56.0	2177488.62	562131.56	Circle (Radius 5.0)
R.M. #101 LB TOE	3689.0	3412.2	-557.9	2178748.72	561514.93	Point
R.M. #101 LB TGT #3	3704.0	2517.1	-411.8	2177854.00	561663.00	Point
R.M. #101 LB TGT #2	3715.5	1529.6	-250.0	2176867.00	561827.00	Point
R.M. #101 LB TGT #1	3722.0	543.2	-89.2	2175881.00	561990.00	Point





Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral B		
Design:	Plan #3		

Project SJB (NM West), 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 West 3003		Using geodetic scale factor

Site SEC 13-T32N-R8W

Site Position:		**Northing:**	2,175,338.06 ft	**Latitude:**	36° 58' 40.883 N
From:	Lat/Long	**Easting:**	562,080.38 ft	**Longitude:**	107° 37' 14.886 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	6-1/8"	**Grid Convergence:**	0.13 °

Well Reese Mesa #101, Re-entry CBM HZ

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,175,338.06 ft	**Latitude:**	36° 58' 40.883 N
	+E/-W	0.0 ft	**Easting:**	562,080.38 ft	**Longitude:**	107° 37' 14.886 W
Position Uncertainty		3.5 ft	**Wellhead Elevation:**	ft	**Ground Level:**	7,033.0 ft

Wellbore Lateral B

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	11/20/2009	10.05	63.77	51,060

Design Plan #3

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	3,436.1

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	350.71

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
3,436.1	0.00	0.00	3,436.1	0.0	0.0	0.00	0.00	0.00	0.00	
3,886.8	90.13	350.68	3,722.6	283.3	-46.5	20.00	20.00	0.00	350.68	
3,887.1	90.13	350.67	3,722.6	283.7	-46.6	2.00	-1.03	-1.72	-120.89	
4,150.1	90.13	350.67	3,722.0	543.2	-89.2	0.00	0.00	0.00	0.00	R.M. #101 LB TGT
4,163.0	90.37	350.74	3,721.9	555.9	-91.3	2.00	1.93	0.53	15.36	
5,149.6	90.37	350.74	3,715.5	1,529.6	-250.0	0.00	0.00	0.00	0.00	R.M. #101 LB TGT
5,164.1	90.66	350.69	3,715.4	1,544.0	-252.3	2.00	1.97	-0.33	-9.51	
6,150.2	90.66	350.69	3,704.0	2,517.1	-411.8	0.00	0.00	0.00	0.00	R.M. #101 LB TGT
6,164.8	90.95	350.73	3,703.8	2,531.5	-414.2	2.00	1.98	0.26	7.40	
7,057.3	90.95	350.73	3,689.0	3,412.2	-557.9	0.00	0.00	0.00	0.00	R.M. #101 LB TOE

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral B		
Design:	Plan #3		

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
3,436.1	0.00	0.00	3,436.1	0.0	0.0	0.0	0.00	0.00	0.00
3,450.0	2.78	350.68	3,450.0	0.3	-0.1	0.3	20.00	20.00	0.00
3,475.0	7.78	350.68	3,474.9	2.6	-0.4	2.6	20.00	20.00	0.00
3,500.0	12.78	350.68	3,499.5	7.0	-1.1	7.1	20.00	20.00	0.00
3,525.0	17.78	350.68	3,523.6	13.5	-2.2	13.7	20.00	20.00	0.00
3,550.0	22.78	350.68	3,547.0	22.1	-3.6	22.3	20.00	20.00	0.00
3,575.0	27.78	350.68	3,569.6	32.6	-5.3	33.0	20.00	20.00	0.00
3,600.0	32.78	350.68	3,591.2	45.0	-7 4	45.6	20.00	20.00	0.00
3,625.0	37.78	350.68	3,611.6	59.3	-9.7	60.1	20.00	20.00	0.00
3,650.0	42.78	350.68	3,630.7	75.2	-12.3	76.2	20.00	20.00	0.00
3,675.0	47.78	350.68	3,648.3	92.7	-15.2	94.0	20.00	20.00	0.00
3,700.0	52.78	350.68	3,664.2	111.7	-18.3	113.2	20.00	20.00	0.00
3,725.0	57.78	350.68	3,678.5	132.0	-21.7	133.7	20.00	20.00	0.00
3,750.0	62.78	350.68	3,690.9	153.4	-25.2	155.4	20.00	20.00	0.00
3,775.0	67.78	350.68	3,701.3	175.8	-28.8	178.1	20.00	20.00	0.00
3,800.0	72.78	350.68	3,709.7	199.0	-32.7	201.7	20.00	20.00	0.00
3,825.0	77.78	350.68	3,716.1	222.9	-36.6	225.8	20.00	20.00	0.00
3,850.0	82.78	350.68	3,720.3	247.2	-40.6	250.5	20.00	20.00	0.00
3,875.0	87.78	350.68	3,722.4	271.7	-44.6	275.4	20.00	20.00	0.00
3,886.8	90.13	350.68	3,722.6	283.3	-46.5	287.1	20.00	20.00	0.00
3,887.1	90.13	350.67	3,722.6	283.7	-46.6	287.5	2.00	-1.03	-1.72
3,900.0	90.13	350.67	3,722.5	296.4	-48.6	300.4	0.00	0.00	0.00
4,000.0	90.13	350.67	3,722.3	395.1	-64.9	400.4	0.00	0.00	0.00
4,100.0	90.13	350.67	3,722.1	493.8	-81.1	500.4	0.00	0.00	0.00
4,150.1	90.13	350.67	3,722.0	543.2	-89.2	550.5	0.00	0.00	0.00
4,163.0	90.37	350.74	3,721.9	555.9	-91.3	563.3	2.00	1.93	0.53
4,200.0	90.37	350.74	3,721.7	592.5	-97.2	600.4	0.00	0.00	0.00
4,300.0	90.37	350.74	3,721.0	691.1	-113.3	700.4	0.00	0.00	0.00
4,400.0	90.37	350.74	3,720.4	789.8	-129.4	800.4	0.00	0.00	0.00
4,500.0	90.37	350.74	3,719.7	888.5	-145.5	900.4	0.00	0.00	0.00
4,600.0	90.37	350.74	3,719.1	987.2	-161.6	1,000.4	0.00	0.00	0.00
4,700.0	90.37	350.74	3,718.4	1,085.9	-177.7	1,100.4	0.00	0.00	0.00
4,800.0	90.37	350.74	3,717.8	1,184.6	-193.7	1,200.4	0.00	0.00	0 00
4,900.0	90.37	350.74	3,717.1	1,283.3	-209.8	1,300.4	0.00	0 00	0.00
5,000.0	90.37	350.74	3,716.5	1,382.0	-225.9	1,400.4	0.00	0.00	0.00
5,100.0	90.37	350.74	3,715.8	1,480.7	-242.0	1,500.4	0.00	0.00	0.00
5,149.6	90.37	350.74	3,715.5	1,529.6	-250.0	1,549.9	0.00	0.00	0.00
5,164.1	90.66	350.69	3,715.4	1,544.0	-252.3	1,564.4	2.00	1.97	-0.33
5,200.0	90.66	350.69	3,715.0	1,579.4	-258.1	1,600.4	0.00	0.00	0.00
5,300.0	90.66	350.69	3,713.8	1,678.1	-274.3	1,700.3	0.00	0.00	0.00
5,400.0	90.66	350.69	3,712.6	1,776.8	-290.5	1,800.3	0.00	0.00	0.00
5,500.0	90.66	350.69	3,711.5	1,875.4	-306.7	1,900 3	0.00	0.00	0 00
5,600.0	90.66	350.69	3.710 3	1,974.1	-322 8	2 000.3	0 00	0.00	0.00
5,700.0	90 66	350 69	3.709.2	2,072.8	-339.0	2.100.3	0.00	0.00	0 00
5,800.0	90.66	350.69	3,708.0	2,171.5	-355.2	2,200.3	0.00	0.00	0.00
5,900 0	90.66	350.69	3.706.9	2 270.1	-371.3	2 300.3	0 00	0.00	0.00
6.000.0	90.66	350.69	3.705.7	2.368.8	-387.5	2 400 3	0 00	0 00	0 00
6,100 0	90 66	350.69	3.704.6	2.467 5	-403 7	2.500.3	0 00	0 00	0.00
6,150 2	90.66	350.69	3,704.0	2.517.1	-411.8	2,550 5	0.00	0 00	0 00
6,164.8	90.95	350.73	3,703.8	2.531.5	-414.2	2,565.1	2.00	1.98	0.26
6,200.0	90.95	350.73	3,703.2	2,566.2	-419.8	2,600.3	0.00	0.00	0.00
6,300.0	90.95	350.73	3,701.6	2,664.9	-435 9	2,700.3	0.00	0.00	0.00
6,400.0	90.95	350.73	3,699.9	2,763.5	-452.0	2,800.3	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Reese Mesa #101
Company:	ConocoPhillips	**TVD Reference:**	DFE @ 7048.0ft (AWS 730)
Project:	SJB (NM West)	**MD Reference:**	DFE @ 7048.0ft (AWS 730)
Site:	SEC 13-T32N-R8W	**North Reference:**	True
Well:	Reese Mesa #101	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral B		
Design:	Plan #3		

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)
6,500.0	90.95	350.73	3,698.2	2,862.2	-468.1	2,900.2	0.00	0.00	0.00
6,600.0	90 95	350.73	3,696.6	2,960.9	-484.2	3,000.2	0.00	0.00	0.00
6,700.0	90.95	350.73	3,694.9	3,059.6	-500.3	3,100.2	0.00	0.00	0.00
6,800.0	90.95	350.73	3,693.3	3,158.3	-516.4	3,200.2	0.00	0.00	0.00
6,900.0	90.95	350.73	3,691.6	3,256.9	-532.6	3,300.2	0.00	0.00	0.00
7,000 0	90.95	350.73	3,690.0	3,355.6	-548.7	3,400.2	0.00	0.00	0.00
7,057 3	90.95	350.73	3,689.0	3,412.2	-557.9	3,457.5	0.00	0.00	0.00

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
Reese Mesa #11 WH - plan misses target center by 2445.8ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 5.0)	0.00	0.00	0.0	2,307.2	-811.6	2,177,643.24	561,263.75	36° 59' 3.696 N	107° 37' 24.888 W
Reese Mesa #101S W - plan misses target center by 2163.6ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 5.0)	0.00	0 00	0.0	2,159.7	129.0	2,177,497.88	562,204.56	36° 59' 2 238 N	107° 37' 13.296 W
Reese Mesa #3 WH - plan misses target center by 2151.3ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 5.0)	0.00	0.00	0.0	2,150.6	56.0	2,177,488.62	562,131.56	36° 59' 2.148 N	107° 37' 14.196 W
R.M. #101 LB TOE - plan hits target center - Point	0.00	0.00	3,689.0	3,412.2	-557.9	2,178,748.72	561,514.93	36° 59' 14.622 N	107° 37' 21.762 W
R.M. #101 LB TGT #3 - plan hits target center - Point	0.00	0.00	3,704.0	2,517.1	-411.8	2,177,854.00	561,663.00	36° 59' 5.771 N	107° 37' 19.961 W
R.M. #101 LB TGT #2 - plan hits target center - Point	0.00	0.00	3,715.5	1,529.6	-250.0	2,176,867.00	561,827.00	36° 58' 56.008 N	107° 37' 17.967 W
R.M. #101 LB TGT #1 - plan hits target center - Point	0.00	0.00	3,722.0	543.2	-89.2	2,175,881.00	561,990.00	36° 58' 46.254 N	107° 37' 15.985 W