

1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30724	² Pool Code 71599 / 72319	³ Pool Name BASIN DAKOTA / BLANCO MESAVERDE
⁴ Property Code 7469	⁵ Property Name SAN JUAN 30-6 UNIT	⁶ Well Number 48M
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6438

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	27	30-N	6-W		1865	SOUTH	50	WEST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	27	30-N	6-W		1039	SOUTH	1203	WEST	RIO ARRIBA

12	13	14	15
Dedicated Acres 820.00 (W/2)	Joint or Infill	Consolidation Code	Order No.

RCVD OCT 16 '09
OIL CONS. DIV.

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

1991

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Crystal Talavera 10/14/09

Crystal Tafoya

Printed Name _____

Regulatory Technician

Title and E-mail Address

October 14, 2009

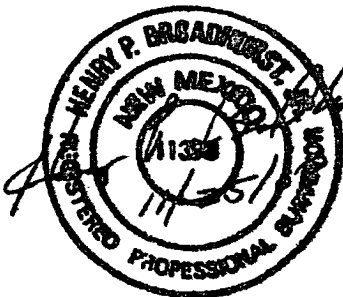
Date _____

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.

Date of Survey: 10/28/08

Signature and Seal of Professional Surveyor:



Certificate Number: NM 11393

10/19

Legal WellName : SAN JUAN 30-6 UNIT #48M	API / UWI: 3003930724
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP	Surf Loc: 027-030N-006W-L
St/Prov: NEW MEXICO	N/S Dist (ft): 1,865.00 - FSL
County: RIO ARriba	E/W Dist (ft): 50.00 - FWL

Wellbore Name : Original Hole

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
DEVIATION SURVEYS	06/05/2009	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
06/05/2009	120.00	.75	.00	DEVIATION	MOTE
06/05/2009	230.00	.50	.00	DEVIATION	MOTE
06/12/2009	316.00	.36	85.45	WEATHERFOR	WEATHERFOR
06/12/2009	347.00	.76	102.38	WEATHERFOR	WEATHERFOR
06/12/2009	377.00	1.22	119.34	WEATHERFOR	WEATHERFOR
06/12/2009	407.00	1.64	121.25	WEATHERFOR	WEATHERFOR
06/12/2009	438.00	1.81	126.97	WEATHERFOR	WEATHERFOR
06/12/2009	469.00	2.29	121.10	WEATHERFOR	WEATHERFOR
06/12/2009	500.00	2.98	123.22	WEATHERFOR	WEATHERFOR
06/12/2009	530.00	3.72	117.43	WEATHERFOR	WEATHERFOR
06/12/2009	561.00	4.51	116.43	WEATHERFOR	WEATHERFOR
06/12/2009	592.00	5.38	118.21	WEATHERFOR	WEATHERFOR
06/12/2009	622.00	6.29	117.83	WEATHERFOR	WEATHERFOR
06/12/2009	656.00	7.17	116.75	WEATHERFOR	WEATHERFOR
06/12/2009	701.00	9.01	118.83	WEATHERFOR	WEATHERFOR
06/12/2009	745.00	10.13	120.74	WEATHERFOR	WEATHERFOR
06/12/2009	791.00	11.29	122.04	WEATHERFOR	WEATHERFOR
06/12/2009	836.00	12.48	123.94	WEATHERFOR	WEATHERFOR
06/12/2009	881.00	13.76	125.88	WEATHERFOR	WEATHERFOR
06/12/2009	925.00	14.58	128.03	WEATHERFOR	WEATHERFOR
06/12/2009	970.00	16.66	129.88	WEATHERFOR	WEATHERFOR
06/12/2009	1,015.00	16.52	131.29	WEATHERFOR	WEATHERFOR
06/12/2009	1,060.00	17.54	132.33	WEATHERFOR	WEATHERFOR
06/12/2009	1,105.00	19.25	130.82	WEATHERFOR	WEATHERFOR
06/12/2009	1,195.00	20.04	129.30	WEATHERFOR	WEATHERFOR
06/12/2009	1,240.00	20.94	128.40	WEATHERFOR	WEATHERFOR
06/12/2009	1,285.00	21.18	126.99	WEATHERFOR	WEATHERFOR
06/13/2009	1,330.00	21.84	126.77	WEATHERFOR	WEATHERFOR
06/13/2009	1,375.00	22.27	126.42	WEATHERFOR	WEATHERFOR
06/13/2009	1,420.00	22.03	126.44	WEATHERFOR	WEATHERFOR
06/13/2009	1,465.00	22.08	125.70	WEATHERFOR	WEATHERFOR
06/13/2009	1,510.00	22.08	124.81	WEATHERFOR	WEATHERFOR
06/13/2009	1,555.00	22.28	124.37	WEATHERFOR	WEATHERFOR

06/13/2009	1,645.00	22.47	124.00	WEATHERFOR	WEATHERFOR
06/13/2009	1,690.00	22.69	123.44	WEATHERFOR	WEATHERFOR
06/13/2009	1,735.00	22.89	124.39	WEATHERFOR	WEATHERFOR
06/13/2009	1,780.00	22.56	124.41	WEATHERFOR	WEATHERFOR
06/13/2009	1,825.00	22.32	124.34	WEATHERFOR	WEATHERFOR
06/13/2009	1,870.00	22.54	124.44	WEATHERFOR	WEATHERFOR
06/13/2009	1,915.00	22.69	124.27	WEATHERFOR	WEATHERFOR
06/13/2009	1,960.00	22.77	123.93	WEATHERFOR	WEATHERFOR
06/13/2009	2,005.00	22.93	124.59	WEATHERFOR	WEATHERFOR
06/13/2009	2,050.00	22.65	125.25	WEATHERFOR	WEATHERFOR
06/13/2009	2,095.00	22.79	125.51	WEATHERFOR	WEATHERFOR
06/13/2009	2,140.00	22.99	125.51	WEATHERFOR	WEATHERFOR
06/13/2009	2,184.00	23.15	125.60	WEATHERFOR	WEATHERFOR
06/13/2009	2,229.00	23.28	125.67	WEATHERFOR	WEATHERFOR
06/13/2009	2,274.00	23.22	125.20	WEATHERFOR	WEATHERFOR
06/13/2009	2,319.00	23.36	125.42	WEATHERFOR	WEATHERFOR
06/13/2009	2,364.00	23.57	125.07	WEATHERFOR	WEATHERFOR
06/13/2009	2,409.00	24.09	124.39	WEATHERFOR	WEATHERFOR
06/13/2009	2,453.00	23.96	124.68	WEATHERFOR	WEATHERFOR
06/13/2009	2,498.00	24.32	123.51	WEATHERFOR	WEATHERFOR
06/13/2009	2,543.00	24.78	122.58	WEATHERFOR	WEATHERFOR
06/13/2009	2,588.00	25.16	122.39	WEATHERFOR	WEATHERFOR
06/13/2009	2,633.00	25.73	123.28	WEATHERFOR	WEATHERFOR
06/13/2009	2,678.00	25.89	123.22	WEATHERFOR	WEATHERFOR
06/13/2009	2,723.00	26.07	124.27	WEATHERFOR	WEATHERFOR
06/13/2009	2,769.00	25.46	124.89	WEATHERFOR	WEATHERFOR
06/13/2009	2,814.00	25.24	124.90	WEATHERFOR	WEATHERFOR
06/13/2009	2,859.00	25.20	124.69	WEATHERFOR	WEATHERFOR
06/14/2009	2,904.00	25.45	124.62	WEATHERFOR	WEATHERFOR
06/14/2009	2,949.00	25.63	124.47	WEATHERFOR	WEATHERFOR
06/14/2009	2,994.00	25.54	124.87	WEATHERFOR	WEATHERFOR
06/14/2009	3,039.00	25.65	125.68	WEATHERFOR	WEATHERFOR
06/14/2009	3,084.00	25.26	126.18	WEATHERFOR	WEATHERFOR
06/14/2009	3,129.00	25.24	126.28	WEATHERFOR	WEATHERFOR
06/14/2009	3,173.00	24.90	126.59	WEATHERFOR	WEATHERFOR
06/14/2009	3,218.00	23.82	126.21	WEATHERFOR	WEATHERFOR
06/14/2009	3,263.00	23.43	126.63	WEATHERFOR	WEATHERFOR
06/14/2009	3,308.00	22.87	126.16	WEATHERFOR	WEATHERFOR
06/14/2009	3,353.00	22.60	125.86	WEATHERFOR	WEATHERFOR
06/14/2009	3,398.00	22.22	126.48	WEATHERFOR	WEATHERFOR

Wellbore Name : Sidetrack 1					
Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)	
SIDE TRACK 1 SURVEY	06/22/2009	656.00	7.17	116.75	
Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
06/22/2009	656.00	7.17	116.75	MWD	Weatherford Directional

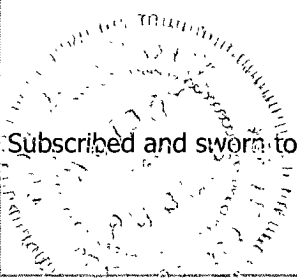
06/22/2009	795.00	12.19	121.70	MWD	Weatherford Directional
06/23/2009	840.00	14.15	122.65	MWD	Weatherford Directional
06/23/2009	885.00	16.14	122.45	MWD	Weatherford Directional
06/23/2009	930.00	17.75	122.83	MWD	Weatherford Directional
06/24/2009	975.00	18.68	121.65	MWD	Weatherford Directional
06/24/2009	1,020.00	20.02	121.99	MWD	Weatherford Directional
06/24/2009	1,065.00	21.07	122.55	MWD	Weatherford Directional
06/24/2009	1,110.00	22.28	123.22	MWD	Weatherford Directional
06/24/2009	1,153.00	23.48	123.89	MWD	Weatherford Directional
06/24/2009	1,198.00	24.66	124.24	MWD	Weatherford Directional
06/24/2009	1,243.00	25.47	124.11	MWD	Weatherford Directional
06/24/2009	1,288.00	25.70	123.13	MWD	Weatherford Directional
06/24/2009	1,333.00	25.76	123.72	MWD	Weatherford Directional
06/24/2009	1,378.00	25.94	125.43	MWD	Weatherford Directional
06/24/2009	1,423.00	25.93	126.04	MWD	Weatherford Directional
06/24/2009	1,468.00	25.85	127.28	MWD	Weatherford Directional
06/24/2009	1,513.00	26.02	126.88	MWD	Weatherford Directional
06/24/2009	1,558.00	26.44	126.34	MWD	Weatherford Directional
06/24/2009	1,603.00	26.68	125.27	MWD	Weatherford Directional
06/24/2009	1,648.00	26.93	125.63	MWD	Weatherford Directional
06/24/2009	1,693.00	26.30	127.32	MWD	Weatherford Directional
06/24/2009	1,738.00	25.21	126.81	MWD	Weatherford Directional
06/24/2009	1,783.00	25.05	125.58	MWD	Weatherford Directional
06/24/2009	1,828.00	25.35	125.17	MWD	Weatherford Directional
06/24/2009	1,873.00	25.52	126.62	MWD	Weatherford Directional
06/24/2009	1,917.00	26.39	126.41	MWD	Weatherford Directional
06/24/2009	1,962.00	26.59	127.14	MWD	Weatherford Directional
06/24/2009	2,007.00	25.78	128.18	MWD	Weatherford Directional
06/24/2009	2,052.00	25.75	128.56	MWD	Weatherford Directional
06/24/2009	2,097.00	25.38	128.35	MWD	Weatherford Directional
06/24/2009	2,142.00	25.78	128.92	MWD	Weatherford Directional
06/24/2009	2,187.00	25.95	128.26	MWD	Weatherford Directional
06/25/2009	2,232.00	25.70	126.91	MWD	Weatherford Directional
06/25/2009	2,277.00	26.14	126.85	MWD	Weatherford Directional
06/25/2009	2,322.00	26.16	127.40	MWD	Weatherford Directional
06/25/2009	2,367.00	25.05	126.58	MWD	Weatherford Directional
06/25/2009	2,412.00	24.52	124.80	MWD	Weatherford Directional
06/25/2009	2,457.00	24.52	124.71	MWD	Weatherford Directional
06/25/2009	2,547.00	24.18	124.90	MWD	Weatherford Directional
06/25/2009	2,592.00	24.50	124.42	MWD	Weatherford Directional
06/25/2009	2,637.00	24.96	124.12	MWD	Weatherford Directional
06/25/2009	2,682.00	25.42	124.60	MWD	Weatherford Directional
06/25/2009	2,727.00	25.70	125.51	MWD	Weatherford Directional
06/25/2009	2,772.00	25.72	126.05	MWD	Weatherford Directional
06/25/2009	2,817.00	24.64	125.06	MWD	Weatherford Directional
06/25/2009	2,862.00	24.62	125.76	MWD	Weatherford Directional
06/25/2009	2,907.00	24.74	125.73	MWD	Weatherford Directional
06/25/2009	2,997.00	25.00	125.82	MWD	Weatherford Directional
06/25/2009	3,041.00	25.11	125.38	MWD	Weatherford Directional

06/25/2009	3,086.00	25.19	125.38	MWD	Weatherford Directional
06/25/2009	3,131.00	25.28	125.63	MWD	Weatherford Directional
06/25/2009	3,176.00	24.92	125.87	MWD	Weatherford Directional
06/26/2009	3,221.00	23.81	125.20	MWD	Weatherford Directional
06/26/2009	3,266.00	22.72	124.72	MWD	Weatherford Directional
06/26/2009	3,311.00	21.53	123.39	MWD	Weatherford Directional
06/26/2009	3,356.00	21.20	124.68	MWD	Weatherford Directional
06/29/2009	3,402.00	21.20	126.22	MWD	Weatherford Directional
06/29/2009	3,447.00	20.20	129.12	MWD	Weatherford Directional
06/29/2009	3,492.00	17.92	131.82	MWD	Weatherford Directional
06/29/2009	3,537.00	13.96	131.93	MWD	Weatherford Directional
06/29/2009	3,582.00	12.78	137.10	MWD	Weatherford Directional
06/29/2009	3,672.00	13.43	136.73	MWD	Weatherford Directional
06/29/2009	3,717.00	16.34	130.98	MWD	Weatherford Directional
06/29/2009	3,762.00	17.29	128.09	MWD	Weatherford Directional
06/29/2009	3,807.00	17.78	126.44	MWD	Weatherford Directional
06/29/2009	3,852.00	17.53	124.11	MWD	Weatherford Directional
06/29/2009	3,897.00	17.49	123.29	MWD	Weatherford Directional
06/29/2009	3,942.00	16.90	123.18	MWD	Weatherford Directional
06/29/2009	3,987.00	16.32	124.06	MWD	Weatherford Directional
06/29/2009	4,032.00	16.05	122.99	MWD	Weatherford Directional
06/29/2009	4,077.00	16.44	123.33	MWD	Weatherford Directional
07/01/2009	4,122.00	16.54	123.52	MWD	Weatherford Directional
07/01/2009	4,212.00	15.09	123.61	MWD	Weatherford Directional
07/01/2009	4,256.00	14.25	123.09	MWD	Weatherford Directional
07/01/2009	4,301.00	13.52	123.77	MWD	Weatherford Directional
07/01/2009	4,346.00	12.89	127.43	MWD	Weatherford Directional
07/01/2009	4,391.00	11.08	130.42	MWD	Weatherford Directional
07/01/2009	4,481.00	9.11	130.24	MWD	Weatherford Directional
07/01/2009	4,526.00	7.76	128.89	MWD	Weatherford Directional
07/01/2009	4,571.00	5.86	126.41	MWD	Weatherford Directional
07/01/2009	4,616.00	3.92	123.24	MWD	Weatherford Directional
07/01/2009	4,661.00	3.05	115.64	MWD	Weatherford Directional
07/01/2009	4,714.00	3.05	115.64	MWD	Weatherford Directional
07/07/2009	8,141.00	.25	.00	FINAL BHS	PHOENIX

I, the undersigned, certify that I, acting in my capacity as Drilling Engineer for ConocoPhillips Company am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

Al GJB

Subscribed and sworn to me this Oct 15, 2009



Capital L. Tafaya

Notary Public in and for San Juan County, New Mexico

My Commission expires 10/12/2010

FILE COPY



Weatherford[®]

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

ConocoPhillips
San Juan Business Unit
3401 E. 30th Street
Farmington, NM 87402

Date: July 6, 2009

RCVD OCT 16 '09

OIL CONS. DIV.

Attention: Nestor Sanchez

DIST. 3

Re: ConocoPhillips Company
Well: San Juan 30-6 Unit 48 M
Rio Arriba County, New Mexico

API# 30-039-30724

Enclosed, please find the original and one copy of the survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

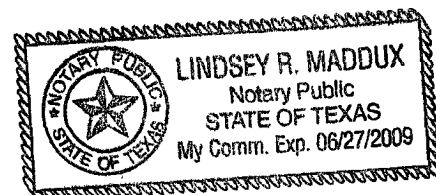
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jaime Rivera	48 M	347' MD	06/11/2009	Measurement
MWD Supervisor	New Drill	3443' MD	06/20/2009	While Drilling
Jaime Rivera	48 M	656' MD	06/22/2009	Measurement
MWD Supervisor	ST	4661' MD	07/01/2009	While Drilling

A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Luke Schnell
Area Manager

On this, the 6th day of July, 2009, before me a notary public, the undersigned officer, personally appeared LUKE SCHNELL, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public

ConocoPhillips

SJ 30-6 UNIT #48M
RIO ARRIBA CO., NEW MEXICO

SECTION DETAILS

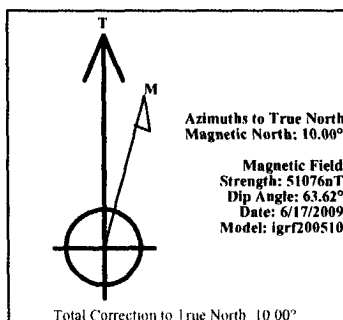
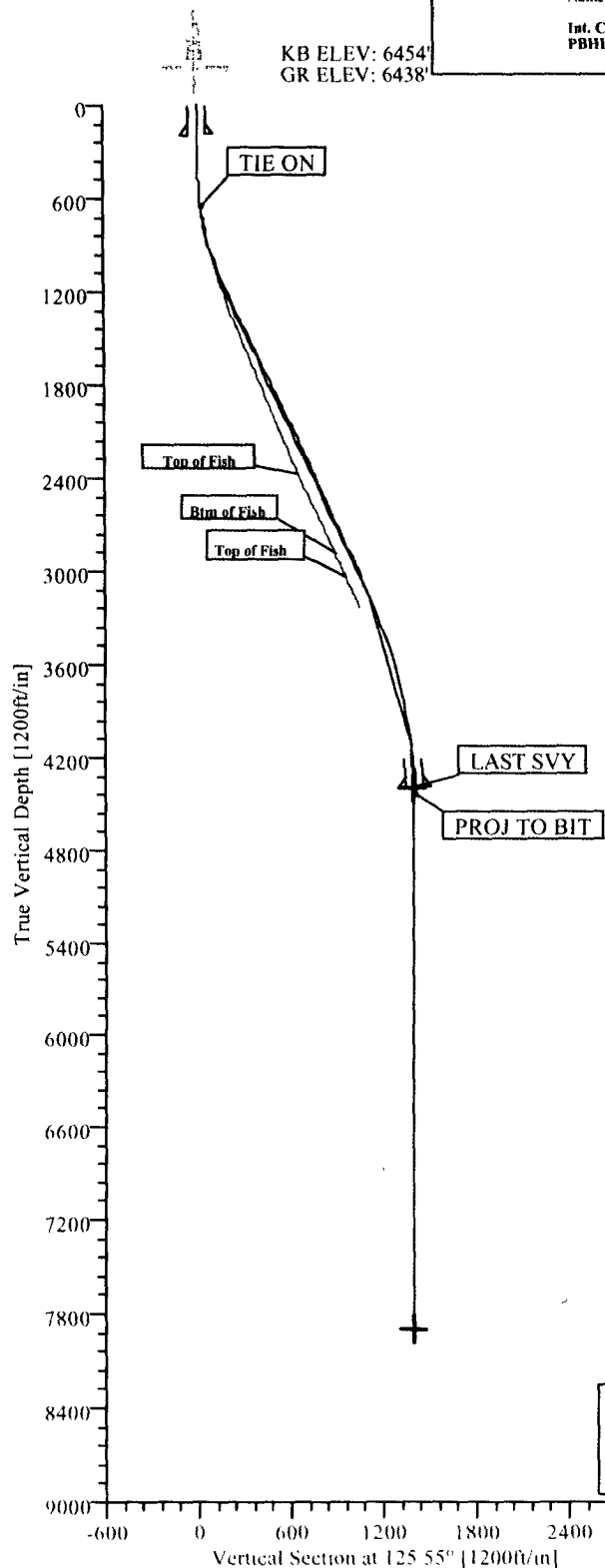
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DI.leg	IFace	VSec	Target
1	700.00	8.97	118.79	698.83	-12.32	23.76	0.00	0.00	26.50	
2	1254.63	25.50	125.93	1226.77	-103.86	159.29	3.00	10.77	189.98	
3	3404.91	25.50	125.93	3167.52	-647.18	908.94	0.00	0.00	1115.80	
4	4680.08	0.00	0.00	4401.00	-810.99	1134.97	2.00	180.00	1394.94	Int. Csg. Pt.
5	8185.08	0.00	0.00	7906.00	-810.99	1134.97	0.00	0.00	1394.94	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#48M	0.00	0.00	2105908.49	146103.64	36°46'53.249N	107°27'30.440W	N/A

TARGET DETAILS

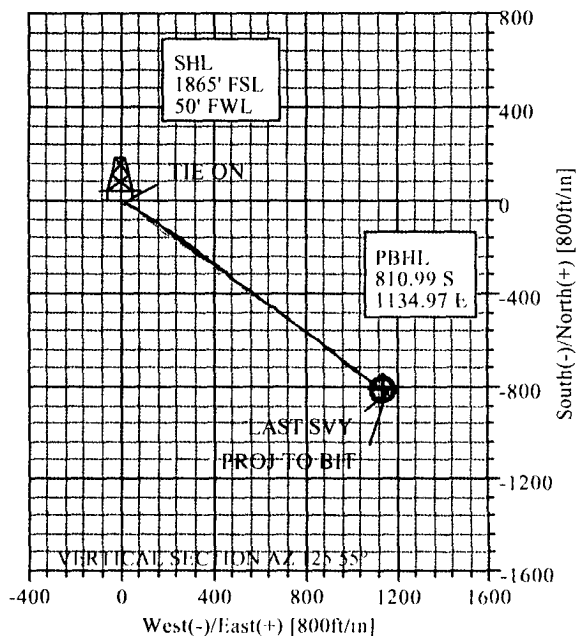
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Int. Csg. Pt.	4401.00	-810.99	1134.97	36°46'45.230N	107°27'16.490W	Point
PBHL	7906.00	-810.99	1134.97	36°46'45.230N	107°27'16.490W	Circle (Radius: 50)



LEGEND

- #48M, ST01, Plan #1
- #48M (1)
- ST01
- WFT ST01 SVY

RCVD OCT 16 '09
OIL CONS. DIV.
DIST. 3



Weatherford

Proj to Bit Survey: WFT ST01 SVY (#48M/ST01)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DI.leg	IFace	VSec
88	4714.00	3.05	115.64	4437.81	-826.42	1152.89	0.00	0.00	1418.49

Survey: WFT ST01 SVY (#48M/ST01)

Created By: Lindsey Maddux

Date: 7/6/2009



Company: ConocoPhillips **Date:** 7/6/2009 **Time:** 14:39:31 **Page:** 1
Field: Rio Arriba Co., NM **Co-ordinate(NE) Reference:** Well: #48M, True North
Site: SJ 30-6 #48M **Vertical (TVD) Reference:** SITE 6454.0
Well: #48M **Section (VS) Reference:** Well: (0.00N, 0.00E, 125.55Azi)
Wellpath: ST01 **Survey Calculation Method:** Minimum Curvature **Db:** Sybase

Field: Rio Arriba Co., NM

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Central Zone
Coordinate System: Well Centre
Geomagnetic Model: igrf200510

Site: SJ 30-6 #48M

1865' FSL 50' FWL of SEC 27 T30N R6W

Site Position: Northing: 2105908.49 ft **Latitude:** 36 46 53.249 N
From: Geographic **Easting:** 146103.64 ft **Longitude:** 107 27 30.440 W
Position Uncertainty: 0.00 ft **North Reference:** True
Ground Level: 6438.00 ft **Grid Convergence:** -0.72 deg

Well: #48M

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 2105908.49 ft **Latitude:** 36 46 53.249 N
+E/-W 0.00 ft **Easting:** 146103.64 ft **Longitude:** 107 27 30.440 W
Position Uncertainty: 0.00 ft

Wellpath: ST01

Current Datum: SITE **Height** 6454.00 ft **Drilled From:** 1
Magnetic Data: 6/17/2009 **Tie-on Depth:** 700.00 ft
Field Strength: 51076 nT **Above System Datum:** Mean Sea Level
Vertical Section: Depth From (TVD) +N/-S **Declination:** 10.00 deg
ft **ft** **Mag Dip Angle:** 63.62 deg
ft **Direction**
deg
 0.00 0.00 0.00 125.55

Survey: WFT ST01 SVY

Start Date: 6/24/2009

Company: Weatherford International, Inc
Tool: MWD;MWD - Standard

Engineer: Lindsey Maddux
Tied-to: From: Definitive Path

Survey: WFT ST01 SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
656.00	7.17	116.75	655.27	-9.43	18.31	20.38	0.00	0.00	0.00	TIE ON
795.00	12.19	121.70	792.25	-21.06	38.55	43.61	3.66	3.61	3.56	MWD
840.00	14.15	122.65	836.07	-26.52	47.23	53.84	4.38	4.36	2.11	MWD
885.00	16.14	122.45	879.50	-32.84	57.14	65.58	4.42	4.42	-0.44	MWD
930.00	17.75	122.83	922.55	-39.92	68.18	78.68	3.59	3.58	0.84	MWD
973.00	18.68	121.65	963.39	-47.09	79.55	92.10	2.33	2.16	-2.74	MWD
1018.00	20.02	121.99	1005.85	-54.95	92.22	106.98	2.99	2.98	0.76	MWD
1063.00	21.07	122.55	1047.98	-63.38	105.57	122.74	2.37	2.33	1.24	MWD
1108.00	22.28	123.22	1089.80	-72.41	119.52	139.34	2.74	2.69	1.49	MWD
1153.00	23.48	123.89	1131.26	-82.08	134.10	156.83	2.73	2.67	1.49	MWD
1198.00	24.66	124.24	1172.35	-92.36	149.31	175.18	2.64	2.62	0.78	MWD
1243.00	25.47	124.11	1213.11	-103.07	165.08	194.23	1.80	1.80	-0.29	MWD
1288.00	25.70	123.13	1253.70	-113.83	181.26	213.66	1.07	0.51	-2.18	MWD
1333.00	25.76	123.72	1294.24	-124.59	197.56	233.18	0.58	0.13	1.31	MWD
1378.00	25.94	125.43	1334.73	-135.72	213.72	252.79	1.70	0.40	3.80	MWD
1423.00	25.93	126.04	1375.20	-147.22	229.69	272.48	0.59	-0.02	1.36	MWD
1468.00	25.85	127.28	1415.68	-158.95	245.45	292.12	1.22	-0.18	2.76	MWD
1513.00	26.02	126.88	1456.15	-170.82	261.16	311.79	0.54	0.38	-0.89	MWD
1558.00	26.44	126.34	1496.52	-182.68	277.12	331.68	1.07	0.93	-1.20	MWD
1603.00	26.68	125.27	1536.77	-194.45	293.44	351.80	1.19	0.53	-2.38	MWD
1648.00	26.93	125.63	1576.93	-206.22	309.97	372.09	0.66	0.56	0.80	MWD
1693.00	26.30	127.32	1617.17	-218.20	326.18	392.25	2.19	-1.40	3.76	MWD
1738.00	25.21	126.81	1657.70	-229.98	341.78	411.79	2.47	-2.42	-1.13	MWD
1783.00	25.05	125.58	1698.44	-241.27	357.20	430.90	1.21	-0.36	-2.73	MWD

Weatherford International, Inc.

Survey Report



Weatherford

Company: ConocoPhillips Date: 7/6/2009 Time: 14:39:31 Page: 2
 Field: Rio Arriba Co, NM Co-ordinate(NE) Reference: Well: #48M, True North
 Site: SJ 30-6 #48M Vertical (TVD) Reference: SITE 6454.0
 Well: #48M Section (VS) Reference: Well (0.00N,0.00E,125.55Azi)
 Wellpath: ST01 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: WFT ST01 SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1828.00	25.35	125.17	1739.15	-252.36	372.83	450.06	0.77	0.67	-0.91	MWD
1873.00	25.52	126.62	1779.79	-263.69	388.48	469.39	1.43	0.38	3.22	MWD
1917.00	26.39	126.41	1819.35	-275.15	403.96	488.64	1.99	1.98	-0.48	MWD
1962.00	26.49	127.14	1859.65	-287.15	420.01	508.67	0.76	0.22	1.62	MWD
2007.00	25.78	128.18	1900.05	-299.25	435.70	528.48	1.88	-1.58	2.31	MWD
2052.00	25.75	128.56	1940.57	-311.40	451.04	548.02	0.37	-0.07	0.84	MWD
2097.00	25.38	128.35	1981.17	-323.47	466.24	567.41	0.85	-0.82	-0.47	MWD
2142.00	25.78	128.92	2021.76	-335.60	481.42	586.81	1.04	0.89	1.27	MWD
2187.00	25.95	128.46	2062.25	-347.88	496.74	606.41	0.58	0.38	-1.02	MWD
2232.00	25.70	126.91	2102.76	-359.86	512.25	626.00	1.60	-0.56	-3.44	MWD
2277.00	26.14	126.85	2143.23	-371.66	527.99	645.67	0.98	0.98	-0.13	MWD
2322.00	26.16	127.40	2183.62	-383.63	543.80	665.49	0.54	0.04	1.22	MWD
2367.00	25.05	126.58	2224.20	-395.34	559.33	684.93	2.59	-2.47	-1.82	MWD
2412.00	24.52	124.80	2265.06	-406.34	574.65	703.79	2.03	-1.18	-3.96	MWD
2457.00	24.52	124.71	2306.00	-416.99	589.99	722.47	0.08	0.00	-0.20	MWD
2502.00	24.52	125.10	2346.94	-427.68	605.31	741.14	0.36	0.00	0.87	MWD
2547.00	24.18	124.90	2387.94	-438.32	620.51	759.70	0.78	-0.76	-0.44	MWD
2592.00	24.50	124.42	2428.94	-448.87	635.76	778.24	0.84	0.71	-1.07	MWD
2637.00	24.96	124.12	2469.81	-459.47	651.32	797.06	1.06	1.02	-0.67	MWD
2682.00	25.42	124.60	2510.53	-470.28	667.13	816.21	1.12	1.02	1.07	MWD
2727.00	25.70	125.51	2551.13	-481.43	683.02	835.62	1.07	0.62	2.02	MWD
2772.00	25.72	126.05	2591.67	-492.84	698.86	855.14	0.52	0.04	1.20	MWD
2817.00	24.64	125.06	2632.40	-503.98	714.44	874.29	2.58	-2.40	-2.20	MWD
2862.00	24.62	125.76	2673.30	-514.84	729.72	893.04	0.65	-0.04	1.56	MWD
2907.00	24.74	125.73	2714.19	-525.82	744.97	911.83	0.27	0.27	-0.07	MWD
2997.00	25.00	125.82	2795.85	-547.95	775.68	949.68	0.29	0.29	0.10	MWD
3041.00	25.11	125.38	2835.71	-558.79	790.83	968.32	0.49	0.25	-1.00	MWD
3086.00	25.19	125.38	2876.44	-569.87	806.42	987.44	0.18	0.18	0.00	MWD
3131.00	25.28	125.63	2917.14	-581.01	822.04	1006.63	0.31	0.20	0.56	MWD
3176.00	24.92	125.87	2957.90	-592.16	837.53	1025.71	0.83	-0.80	0.53	MWD
3221.00	23.81	125.20	2998.89	-602.95	852.64	1044.28	2.54	-2.47	-1.49	MWD
3266.00	22.72	124.72	3040.23	-613.14	867.20	1062.05	2.46	-2.42	-1.07	MWD
3311.00	21.53	123.39	3081.91	-622.63	881.24	1079.99	2.87	-2.64	-2.96	MWD
3356.00	21.20	124.68	3123.82	-631.81	894.83	1095.38	1.28	-0.73	2.87	MWD
3402.00	21.20	126.22	3166.71	-641.45	908.38	1112.01	1.21	0.00	3.35	MWD
3447.00	20.20	129.12	3208.80	-651.16	920.97	1127.90	3.18	-2.22	6.44	MWD
3492.00	17.92	131.82	3251.33	-660.68	932.16	1142.54	5.43	-5.07	6.00	MWD
3537.00	13.96	131.93	3294.60	-668.93	941.36	1154.82	8.80	-8.80	0.24	MWD
3582.00	12.78	137.10	3338.38	-676.20	948.79	1165.09	3.73	-2.62	11.49	MWD
3627.00	13.43	136.73	3382.20	-683.66	955.76	1175.10	1.46	1.44	-0.82	MWD
3672.00	15.15	132.72	3425.81	-691.45	963.66	1186.06	4.41	3.82	-8.91	MWD
3717.00	16.34	130.98	3469.12	-699.59	972.76	1198.20	2.84	2.64	-3.87	MWD
3762.00	17.29	128.09	3512.20	-707.87	982.80	1211.18	2.81	2.11	-6.42	MWD
3807.00	17.78	126.44	3555.11	-716.07	993.59	1224.73	1.55	1.09	-3.67	MWD
3852.00	17.53	124.11	3597.99	-723.96	1004.73	1238.37	1.67	-0.56	-5.18	MWD
3897.00	17.49	123.29	3640.90	-731.47	1015.99	1251.91	0.56	-0.09	-1.82	MWD
3942.00	16.90	123.18	3683.89	-738.76	1027.12	1265.20	1.31	-1.31	-0.24	MWD
3987.00	16.32	124.06	3727.01	-745.88	1037.83	1278.05	1.40	-1.29	1.96	MWD
4032.00	16.05	122.99	3770.23	-752.81	1048.29	1290.59	0.89	-0.60	-2.38	MWD
4077.00	16.44	123.33	3813.43	-759.69	1058.83	1303.17	0.89	0.87	0.76	MWD
4122.00	16.54	123.52	3856.58	-766.73	1069.49	1315.93	0.25	0.22	0.42	MWD
4167.00	15.66	123.90	3899.82	-773.66	1079.87	1328.40	1.97	-1.96	0.84	MWD
4212.00	15.09	123.61	3943.21	-780.29	1089.79	1340.33	1.28	-1.27	-0.64	MWD



Company: ConocoPhillips	Date: 7/6/2009	Time: 14:39:31	Page: 3
Field: Rio Arriba Co., NM	Co-ordinate(NE) Reference:	Well: #48M, True North	
Site: SJ 30-6 #48M	Vertical (TVD) Reference:	SITE 6454.0	
Well: #48M	Section (VS) Reference:	Well (0.00N,0.00E,125.55Azi)	
Wellpath: ST01	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: WFT ST01 SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
4256.00	14.25	123.09	3985.77	-786.41	1099.09	1351.46	1.93	-1.91	-1.18	MWD
4301.00	13.52	123.77	4029.46	-792.36	1108.11	1362.25	1.66	-1.62	1.51	MWD
4346.00	12.89	127.43	4073.27	-798.33	1116.47	1372.53	2.33	-1.40	8.13	MWD
4391.00	11.08	130.03	4117.29	-804.17	1123.76	1381.86	4.20	-4.02	5.78	MWD
4436.00	9.67	130.42	4161.55	-809.40	1129.95	1389.93	3.14	-3.13	0.87	MWD
4481.00	9.11	130.24	4205.95	-814.15	1135.55	1397.25	1.25	-1.24	-0.40	MWD
4526.00	7.76	128.89	4250.46	-818.36	1140.63	1403.83	3.03	-3.00	-3.00	MWD
4571.00	5.86	126.41	4295.14	-821.63	1144.85	1409.16	4.27	-4.22	-5.51	MWD
4616.00	3.92	123.24	4339.97	-823.84	1147.98	1413.00	4.35	-4.31	-7.04	MWD
4661.00	3.05	115.64	4384.89	-825.20	1150.35	1415.72	2.18	-1.93	-16.89	LAST SVY
4714.00	3.05	115.64	4437.81	-826.42	1152.89	1418.49	0.00	0.00	0.00	PROJ TO BIT

Annotation

MD ft	TVD ft	
656.00	655.27	TIE ON
4661.00	4384.89	LAST SVY
4714.00	4437.81	PROJ TO BIT



Company: ConocoPhillips	Date: 7/6/2009	Time: 15:04:10	Page: 1
Field: Rio Arriba Co., NM	Co-ordinate(NE) Reference: Well: #48M, True North		
Site: SJ 30-6 #48M	Vertical (TVD) Reference: SITE: 6454.0		
Well: #48M	Section (VS) Reference: Well (0.00N, 0.00E, 125.55Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: Rio Arriba Co., NM

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Central Zone
Coordinate System: Well Centre
Geomagnetic Model: igr200510

Site: SJ 30-6 #48M

1865' FSL 50' FWL of SEC 27 T30N R6W

Site Position:	Northing: 2105908.49 ft	Latitude: 36 46 53.249 N
From: Geographic	Easting: 146103.64 ft	Longitude: 107 27 30.440 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 6438.00 ft		Grid Convergence: -0 72 deg

Well: #48M**Slot Name:**

Well Position:	+N/-S 0.00 ft	Northing: 2105908.49 ft	Latitude: 36 46 53.249 N
	+E/-W 0.00 ft	Easting: 146103.64 ft	Longitude: 107 27 30.440 W
Position Uncertainty: 0.00 ft			

Wellpath: 1

Current Datum: SITE	Height 6454.00 ft	Drilled From: Surface
Magnetic Data: 6/8/2009		Tie-on Depth: 0.00 ft
Field Strength: 51078 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S	Declination: 10.01 deg
ft	ft	Mag Dip Angle: 63.62 deg
		+E/-W
		ft
		Direction
		deg
0.00	0.00	0.00 125.55

Survey: WFT SVY**Start Date:** 6/16/2009

Company: Weatherford International, Inc
Tool: MWD;MWD - Standard

Engineer: Lindsey Maddux
Tied-to: From Surface

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
347.00	0.76	102.38	346.99	-0.49	2.25	2.12	0.22	0.22	0.00	MWD
377.00	1.22	129.36	376.99	-0.74	2.69	2.62	2.14	1.53	89.93	MWD
407.00	1.64	121.25	406.98	-1.16	3.30	3.36	1.55	1.40	-27.03	MWD
438.00	1.81	126.98	437.96	-1.69	4.07	4.30	0.78	0.55	18.48	MWD
469.00	2.29	121.11	468.94	-2.30	4.99	5.40	1.69	1.55	-18.94	MWD
500.00	2.98	123.23	499.91	-3.06	6.20	6.83	2.25	2.23	6.84	MWD
530.00	3.72	117.44	529.86	-3.94	7.72	8.57	2.71	2.47	-19.30	MWD
561.00	4.51	116.43	560.78	-4.95	9.70	10.77	2.56	2.55	-3.26	MWD
592.00	5.38	118.21	591.66	-6.18	12.07	13.41	2.85	2.81	5.74	MWD
622.00	6.29	117.83	621.51	-7.61	14.76	16.44	3.04	3.03	-1.27	MWD
656.00	7.17	116.75	655.27	-9.43	18.31	20.38	2.61	2.59	-3.18	MWD
701.00	9.01	118.83	699.82	-12.40	23.90	26.65	4.14	4.09	4.62	MWD
745.00	10.13	120.74	743.21	-16.04	30.25	33.93	2.65	2.55	4.34	MWD
791.00	11.29	122.04	788.41	-20.49	37.54	42.46	2.58	2.52	2.83	MWD
836.00	12.48	123.94	832.44	-25.54	45.31	51.71	2.78	2.64	4.22	MWD
881.00	13.76	125.88	876.27	-31.40	53.68	61.93	3.01	2.84	4.31	MWD
925.00	14.58	128.03	918.93	-37.87	62.28	72.69	2.21	1.86	4.89	MWD
970.00	15.66	129.88	962.37	-45.26	71.40	84.41	2.63	2.40	4.11	MWD
1015.00	16.52	131.29	1005.61	-53.37	80.87	96.83	2.10	1.91	3.13	MWD
1060.00	17.54	132.33	1048.63	-62.16	90.69	109.93	2.37	2.27	2.31	MWD
1105.00	18.31	132.21	1091.45	-71.48	100.94	123.68	1.71	1.71	-0.27	MWD
1150.00	19.25	130.82	1134.05	-81.08	111.79	138.09	2.31	2.09	-3.09	MWD
1195.00	20.04	129.30	1176.43	-90.81	123.37	153.17	2.09	1.76	-3.38	MWD

Weatherford International, Inc.

Survey Report



Weatherford

Company: ConocoPhillips
Field: Rio Arriba Co., NM
Site: SJ 30-6 #48M
Well: #48M
Wellpath: 1

Date: 7/6/2009
Co-ordinate(NE) Reference: Well: #48M, True North
Vertical (TVD) Reference: SITE 6454.0
Section (VS) Reference: Well (0.00N,0.00E,125.55Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Time: 15:04:10
Page: 2

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1240.00	20.94	128.40	1218.59	-100.69	135.64	168.90	2.12	2.00	-2.00	MWD
1285.00	21.18	126.99	1260.58	-110.57	148.43	185.06	1.25	0.53	-3.13	MWD
1330.00	21.84	126.77	1302.45	-120.48	161.63	201.55	1.48	1.47	-0.49	MWD
1375.00	22.27	126.42	1344.15	-130.55	175.20	218.45	1.00	0.96	-0.78	MWD
1420.00	22.03	126.44	1385.83	-140.62	188.85	235.41	0.53	-0.53	0.04	MWD
1465.00	22.08	125.70	1427.54	-150.57	202.51	252.31	0.63	0.11	-1.64	MWD
1510.00	22.08	124.81	1469.24	-160.34	216.32	269.22	0.74	0.00	-1.98	MWD
1555.00	22.28	124.37	1510.91	-169.98	230.31	286.21	0.58	0.44	-0.98	MWD
1600.00	22.26	124.40	1552.55	-179.61	244.38	303.26	0.05	-0.04	0.07	MWD
1645.00	22.47	124.00	1594.17	-189.23	258.54	320.38	0.58	0.47	-0.89	MWD
1690.00	22.69	123.44	1635.72	-198.83	272.91	337.64	0.68	0.49	-1.24	MWD
1735.00	22.89	124.39	1677.20	-208.55	287.38	355.07	0.93	0.44	2.11	MWD
1780.00	22.56	124.41	1718.71	-218.37	301.72	372.45	0.73	-0.73	0.04	MWD
1825.00	22.32	124.34	1760.30	-228.07	315.90	389.62	0.54	-0.53	-0.16	MWD
1870.00	22.54	124.44	1801.90	-237.77	330.07	406.79	0.50	0.49	0.22	MWD
1915.00	22.69	124.27	1843.44	-247.54	344.35	424.09	0.36	0.33	-0.38	MWD
1960.00	22.77	123.93	1884.94	-257.28	358.75	441.47	0.34	0.18	-0.76	MWD
2005.00	22.93	124.59	1926.41	-267.12	373.19	458.94	0.67	0.36	1.47	MWD
2050.00	22.65	125.25	1967.90	-277.10	387.49	476.37	0.84	-0.62	1.47	MWD
2095.00	22.79	125.51	2009.41	-287.16	401.66	493.75	0.38	0.31	0.58	MWD
2140.00	22.99	125.51	2050.86	-297.33	415.90	511.25	0.44	0.44	0.00	MWD
2184.00	23.15	125.60	2091.35	-307.35	429.93	528.50	0.37	0.36	0.20	MWD
2229.00	23.28	125.67	2132.70	-317.69	444.35	546.23	0.30	0.29	0.16	MWD
2274.00	23.22	125.20	2174.05	-327.99	458.82	564.00	0.43	-0.13	-1.04	MWD
2319.00	23.36	125.42	2215.38	-338.27	473.34	581.79	0.37	0.31	0.49	MWD
2364.00	23.57	125.07	2256.66	-348.61	487.97	599.71	0.56	0.47	-0.78	MWD
2409.00	23.75	124.77	2297.88	-358.95	502.78	617.76	0.48	0.40	-0.67	MWD
2453.00	23.96	124.68	2338.12	-369.09	517.41	635.56	0.48	0.48	-0.20	MWD
2498.00	24.32	123.51	2379.18	-379.40	532.65	653.95	1.33	0.80	-2.60	MWD
2543.00	24.78	122.58	2420.11	-389.59	548.32	672.63	1.33	1.02	-2.07	MWD
2588.00	25.16	122.39	2460.91	-399.80	564.34	691.60	0.86	0.84	-0.42	MWD
2633.00	25.73	123.28	2501.54	-410.28	580.59	710.91	1.53	1.27	1.98	MWD
2678.00	25.89	123.22	2542.05	-421.02	596.97	730.49	0.36	0.36	-0.13	MWD
2723.00	26.07	124.27	2582.51	-431.97	613.36	750.19	1.10	0.40	2.33	MWD
2769.00	25.46	124.89	2623.93	-443.32	629.83	770.18	1.45	-1.33	1.35	MWD
2814.00	25.24	124.90	2664.60	-454.34	645.63	789.45	0.49	-0.49	0.02	MWD
2859.00	25.20	124.69	2705.31	-465.28	661.37	808.62	0.22	-0.09	-0.47	MWD
2904.00	25.45	124.62	2745.99	-476.23	677.21	827.87	0.56	0.56	-0.16	MWD
2949.00	25.63	124.47	2786.59	-487.23	693.19	847.27	0.43	0.40	-0.33	MWD
2994.00	25.54	124.87	2827.18	-498.29	709.17	866.70	0.43	-0.20	0.89	MWD
3039.00	25.65	125.68	2867.76	-509.51	725.04	886.14	0.82	0.24	1.80	MWD
3084.00	25.26	126.18	2908.39	-520.86	740.70	905.48	0.99	-0.87	1.11	MWD
3129.00	25.24	126.28	2949.09	-532.21	756.19	924.67	0.10	-0.04	0.22	MWD
3173.00	24.90	126.59	2988.95	-543.28	771.19	943.31	0.83	-0.77	0.70	MWD
3218.00	23.82	126.21	3029.94	-554.29	786.13	961.87	2.43	-2.40	-0.84	MWD
3239.00	23.64	126.40	3049.17	-559.30	792.94	970.32	0.94	-0.87	0.93	TOP OF FISH
3263.00	23.43	126.63	3071.17	-565.00	800.64	979.90	0.94	-0.87	0.94	MWD
3308.00	22.87	126.16	3112.55	-575.50	814.88	997.59	1.31	-1.24	-1.04	MWD
3353.00	22.60	125.86	3154.05	-585.72	828.95	1014.98	0.65	-0.60	-0.67	MWD
3398.00	22.22	126.48	3195.65	-595.85	842.79	1032.14	0.99	-0.84	1.38	MWD
3443.00	21.77	126.82	3237.38	-605.91	856.32	1048.99	1.04	-1.00	0.76	BTM OF FISH



Company:	ConocoPhillips	Date:	7/6/2009	Time:	15:04:10	Page:	3
Field:	Rio Arriba Co., NM	Co-ordinate(NE) Reference:	Well: #48M, True North				
Site:	SJ 30-6 #48M	Vertical (TVD) Reference:	SITE 6454.0				
Well:	#48M	Section (VS) Reference:	Well (0.00N,0.00E,125.55Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature	Db:	Sybase		

Annotation

MD ft	TVD ft	
3239.00	3049.17	TOP OF FISH
3443.00	3237.38	BTM OF FISH