

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised July 10, 2010

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

Submit one copy to appropriate
District Office

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

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

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

"AS DRILLED PLAT"

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34856	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 7339	⁵ Property Name MURPHY D	⁶ Well Number 100 S
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 5995'

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	30N	11W	12	1732'	SOUTH	815'	WEST	SAN JUAN

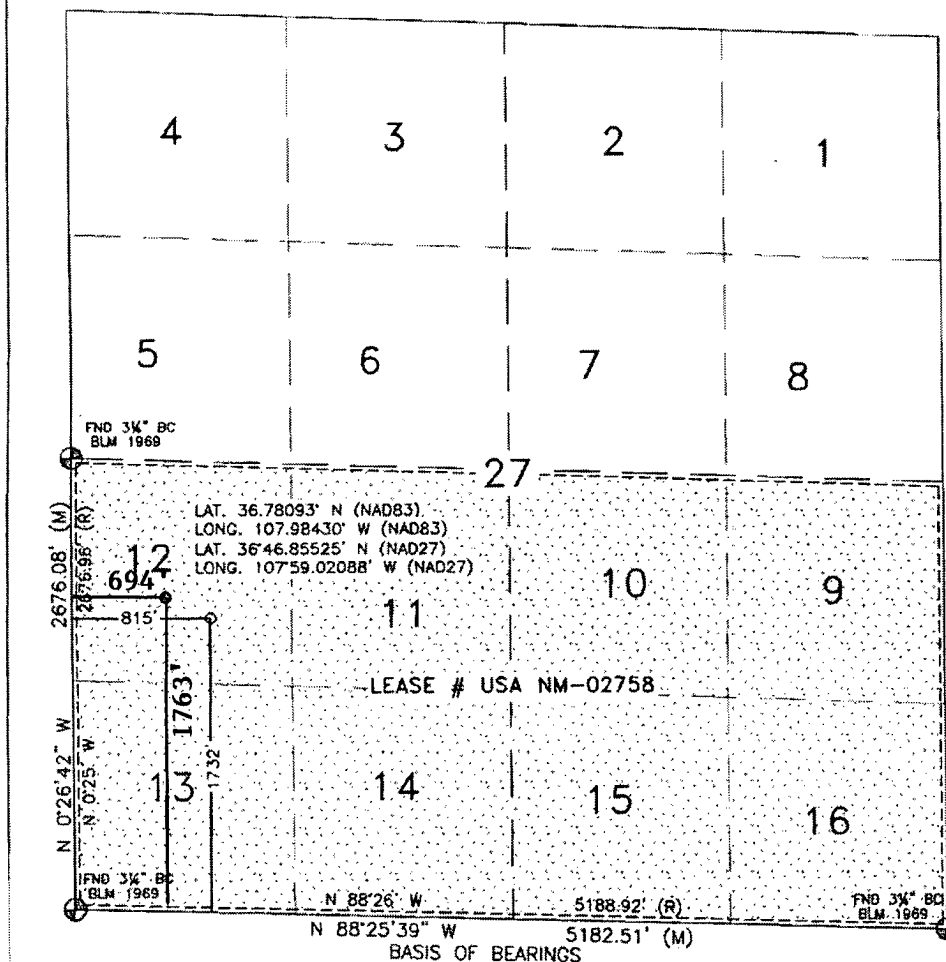
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	30N	11W	12	1763'	SOUTH	694'	WEST	SAN JUAN

¹² Dedicated Acres 317.76 ACRES - S/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. OIL CONS. DIV. RCVD APR 5 '11
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



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.

Crystal Tafoya 4/4/11
Signature Date

Crystal Tafoya 4/4/2011
Printed Name

Staff Regulatory Tech
E-mail Address

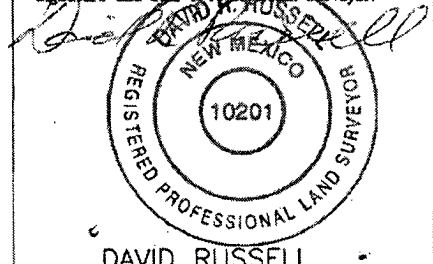
¹⁸ SURVEYOR CERTIFICATION

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.

OCTOBER 20, 2010

Date of Survey

Signature and Seal of Professional Surveyor:



DAVID RUSSELL

Certificate Number

10201

Handwritten signature

Handwritten initials

Legal WellName : MURPHY D #100S	API / UWI: 3004534856
Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP	Surf Loc: 027-030N-011W-L
St/Prov: NEW MEXICO	N/S Dist (ft): 1,732.00 - FSL
County: SAN JUAN	E/W Dist (ft): 815.00 - FWL

Wellbore Name : Original Hole					
Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)	
INCLINATION SURVEY	04/17/2009	.00	.00	.00	
Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
04/17/2009	75.00	.75	.00	Incl	Mo-Te Drilling Inc.
04/17/2009	135.00	.75	.00	Incl	Mo-Te Drilling Inc.
Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)	
MWD SURVEY	01/20/2011	.00	.00	.00	
Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
01/20/2011	.00	.00	.00	IncAzi-MWD	Scientific Drilling
01/20/2011	154.00	.43	307.77	IncAzi-MWD	Scientific Drilling
01/21/2011	217.00	.77	282.11	IncAzi-MWD	Scientific Drilling
01/21/2011	278.00	1.61	282.25	IncAzi-MWD	Scientific Drilling
01/21/2011	339.00	2.52	272.50	IncAzi-MWD	Scientific Drilling
01/21/2011	400.00	3.40	271.92	IncAzi-MWD	Scientific Drilling
01/21/2011	462.00	4.00	275.76	IncAzi-MWD	Scientific Drilling
01/21/2011	524.00	4.43	287.77	IncAzi-MWD	Scientific Drilling
01/21/2011	585.00	4.67	292.24	IncAzi-MWD	Scientific Drilling
01/21/2011	647.00	4.72	292.37	IncAzi-MWD	Scientific Drilling
01/21/2011	710.00	4.83	295.02	IncAzi-MWD	Scientific Drilling
01/21/2011	774.00	4.15	289.85	IncAzi-MWD	Scientific Drilling
01/21/2011	838.00	4.11	290.43	IncAzi-MWD	Scientific Drilling
01/21/2011	902.00	4.23	288.13	IncAzi-MWD	Scientific Drilling
01/21/2011	966.00	4.37	286.03	IncAzi-MWD	Scientific Drilling
01/21/2011	1,033.00	4.41	281.48	IncAzi-MWD	Scientific Drilling
01/21/2011	1,096.00	4.03	275.96	IncAzi-MWD	Scientific Drilling
01/21/2011	1,160.00	4.11	273.89	IncAzi-MWD	Scientific Drilling
01/21/2011	1,223.00	3.84	274.48	IncAzi-MWD	Scientific Drilling
01/21/2011	1,287.00	3.62	291.89	IncAzi-MWD	Scientific Drilling
01/21/2011	1,351.00	5.39	298.41	IncAzi-MWD	Scientific Drilling
01/22/2011	1,414.00	5.22	299.20	IncAzi-MWD	Scientific Drilling
01/22/2011	1,476.00	3.95	296.58	IncAzi-MWD	Scientific Drilling
01/22/2011	1,540.00	4.05	287.65	IncAzi-MWD	Scientific Drilling
01/22/2011	1,603.00	4.16	282.05	IncAzi-MWD	Scientific Drilling
01/22/2011	1,667.00	4.20	283.48	IncAzi-MWD	Scientific Drilling
01/22/2011	1,731.00	4.04	281.47	IncAzi-MWD	Scientific Drilling

01/22/2011	1,795.00	3.77	279.24	IncAzi-MWD	Scientific Drilling
01/23/2011	1,857.00	3.60	279.60	IncAzi-MWD	Scientific Drilling
01/23/2011	1,921.00	3.65	280.77	IncAzi-MWD	Scientific Drilling
01/23/2011	1,984.00	2.18	294.59	IncAzi-MWD	Scientific Drilling
01/23/2011	2,047.00	1.69	305.24	IncAzi-MWD	Scientific Drilling
01/23/2011	2,111.00	1.65	303.91	IncAzi-MWD	Scientific Drilling
01/23/2011	2,174.00	1.59	296.69	IncAzi-MWD	Scientific Drilling
01/23/2011	2,238.00	1.24	273.18	IncAzi-MWD	Scientific Drilling
01/23/2011	2,301.00	.55	179.32	IncAzi-MWD	Scientific Drilling
01/23/2011	2,365.00	1.72	148.89	IncAzi-MWD	Scientific Drilling
01/23/2011	2,429.00	1.72	151.40	IncAzi-MWD	Scientific Drilling
01/23/2011	2,490.00	1.68	148.66	IncAzi-MWD	Scientific Drilling
01/23/2011	2,550.00	1.64	145.96	IncAzi-MWD	Scientific Drilling

Description	Date	MD Tie In (ft)	Inclination Tie In (°)	Azimuth Tie In (°)
FINAL BH SURVEY	01/27/2011	.00	.00	.00

Date	MD (ft)	Incl (°)	Azm (°)	Method	Survey Company
01/27/2011	2,455.00	2.00	.00	Inc-WL	Phoenix Services LLC

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.

Tommy DeLuna

Subscribed and sworn to me this 4TH day of April 2011

Patricia J. Busse

Notary Public in and for San Juan County, New Mexico

My Commission expires August 16, 2014



ConocoPhillips

SJB (NM West)

SEC 27-T30N-R11W

Murphy D #100S

AP# 30.04S.34856

Original Hole

Survey: Actual

DIST. 3

OIL CONS. DIV.

RCVD APR 5 '11

Standard Survey Report

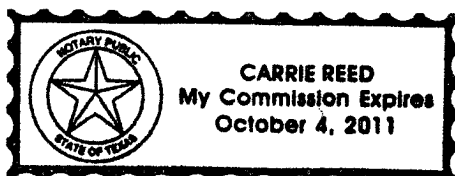
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 21st of February, 2011.

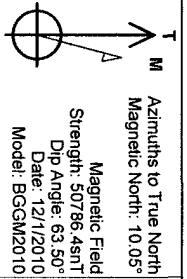
[Signature]

Notary Signature
County of Midland
State of Texas



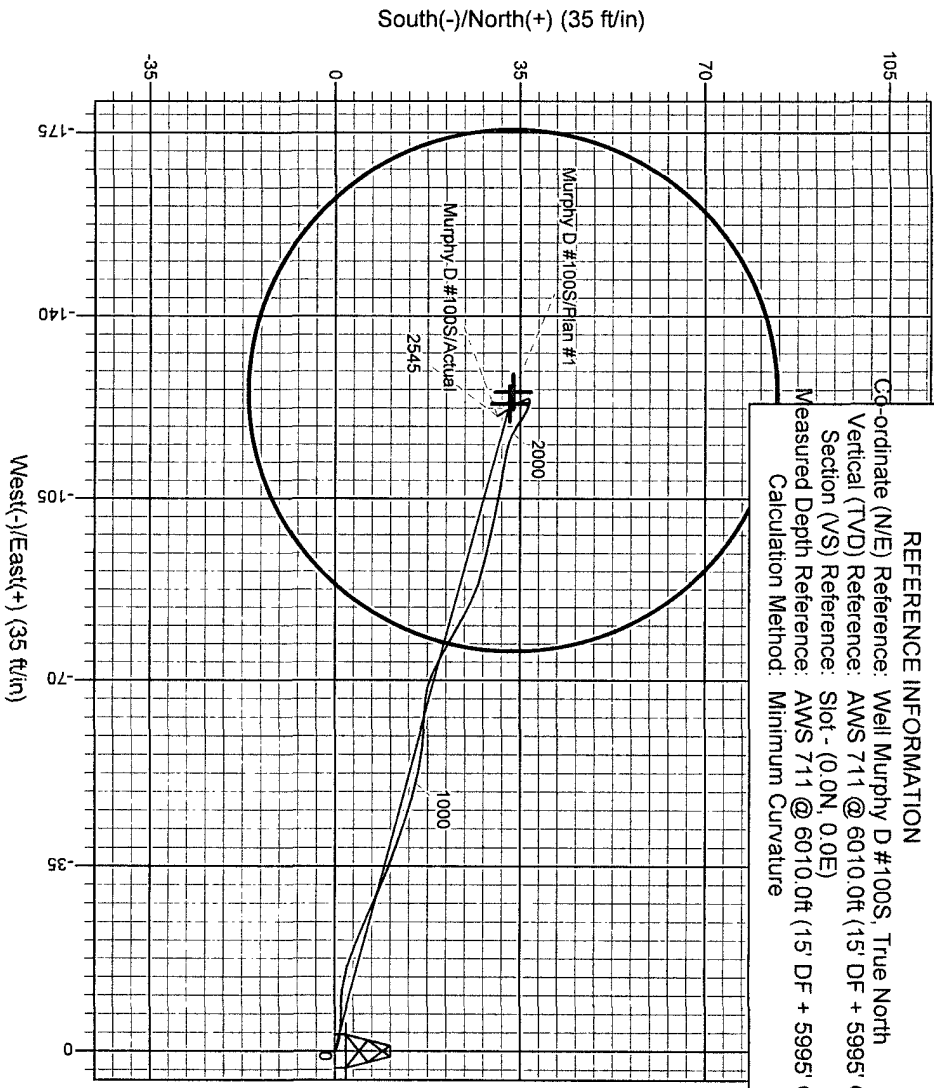
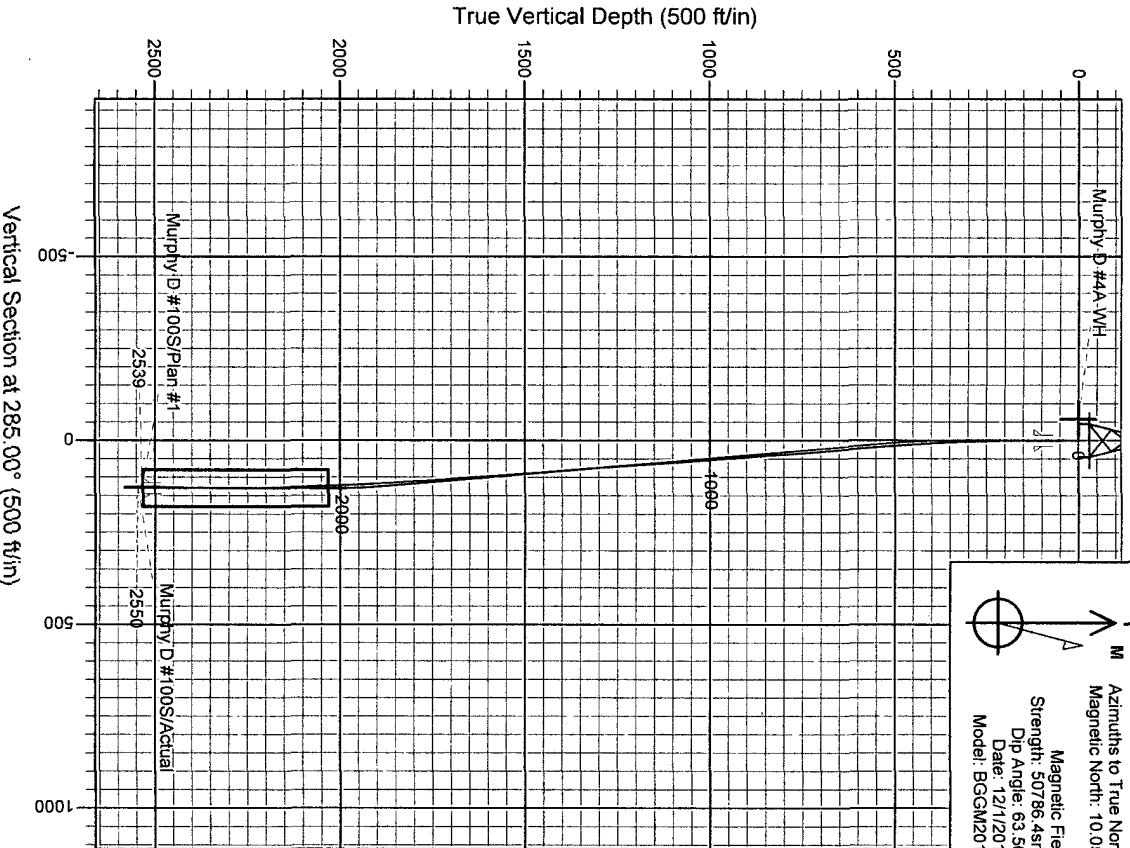
Scientific Drilling
Directional Drilling Operations

Project: SJB (NM West)
Site: SEC 27-T30N-R11W
Well: Murphy D #100S
Wellbore: Original Hole
Design: Plan #1



+N-S 0.0
+E-W 0.0
Northing 2103547.73

WELL DETAILS: Murphy D #100S
AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Ground Level: 5995.0
Easting 455970.45
Latitude 36° 46' 51.315 N
Longitude 107° 59' 1.253 W
Slot



REFERENCE INFORMATION
Co-ordinate (N/E) Reference: Well Murphy D #100S, True North
Vertical (TVD) Reference: AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Calculation Method: Minimum Curvature

COMPANY DETAILS: ConocoPhillips
Calculation Method: Minimum Curvature
Error System: ISCWSA
Scan Method: Closest Approach 3D
Error Surface: Combined Covariances
Warning Method: Risk Ratio

PROJECT DETAILS: SJB (NM West)
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

SITE DETAILS: SEC 27-T30N-R11W
San Juan County NM
Site Centre Latitude: 36° 46' 51.315 N
Longitude: 107° 59' 1.253 W
Positional Uncertainty: 7.5
Convergence: -0.09
Local North: True

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well Murphy D #100S
Project:	SJB (NM West)	TVD Reference:	AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Site:	SEC 27-T30N-R11W	MD Reference:	AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Well:	Murphy D #100S	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

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 27-T30N-R11W		
Site Position:		Northing:	2,103,547.73 ft
From:	Lat/Long	Easting:	455,970.45 ft
Position Uncertainty:	15.0 ft	Slot Radius:	4-3/8"
		Grid Convergence:	-0.09 °

Well	Murphy D #100S, FC S-type Well		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Ground Level:	5,995.0 ft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2010	12/1/2010	10.05
			Dip Angle (°)
			63.50
			Field Strength (nT)
			50,786

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)
	0.0	0.0	0.0
			Direction (°)
			284.23

Survey Program	Date 2/20/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
154.0	2,550.0	Actual (Original Hole)	MWD SDI
			Description
			MWD - Standard ver 1.0.1

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
154.0	0.43	307.77	154.0	0.4	-0.5	0.5	0.28	0.28	0.00
217.0	0.77	282.11	217.0	0.6	-1.1	1.2	0.68	0.54	-40.73
278.0	1.61	282.25	278.0	0.9	-2.3	2.4	1.38	1.38	0.23
339.0	2.52	272.50	338.9	1.1	-4.5	4.6	1.59	1.49	-15.98
400.0	3.40	271.92	399.9	1.2	-7.6	7.7	1.44	1.44	-0.95
462.0	4.00	275.76	461.7	1.5	-11.6	11.6	1.05	0.97	6.19
524.0	4.43	287.77	523.6	2.4	-16.0	16.1	1.58	0.69	19.37
585.0	4.67	292.24	584.4	4.1	-20.6	21.0	0.70	0.39	7.33
647.0	4.72	292.37	646.2	6.0	-25.3	26.0	0.08	0.08	0.21
710.0	4.83	295.02	708.9	8.1	-30.1	31.2	0.39	0.17	4.21
774.0	4.15	289.85	772.7	10.1	-34.7	36.1	1.24	-1.06	-8.08
838.0	4.11	290.43	836.6	11.6	-39.0	40.7	0.09	-0.06	0.91

Company:	ConocoPhillips	Local Co-ordinate Reference:	Well Murphy D #100S
Project:	SJB (NM West)	TVD Reference:	AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Site:	SEC 27-T30N-R11W	MD Reference:	AWS 711 @ 6010.0ft (15' DF + 5995' GL)
Well:	Murphy D #100S	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	edmCOP

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)
902.0	4.23	288.13	900.4	13.2	-43.4	45.3	0.32	0.19	-3.59
966.0	4.37	286.03	964.2	14.6	-48.0	50.1	0.33	0.22	-3.28
1,033.0	4.41	281.48	1,031.0	15.8	-53.0	55.2	0.52	0.06	-6.79
1,096.0	4.03	275.96	1,093.9	16.5	-57.6	59.9	0.88	-0.60	-8.76
1,160.0	4.11	273.89	1,157.7	16.9	-62.1	64.3	0.26	0.13	-3.23
1,223.0	3.84	274.48	1,220.6	17.2	-66.4	68.6	0.43	-0.43	0.94
1,287.0	3.62	291.89	1,284.4	18.1	-70.5	72.7	1.80	-0.34	27.20
1,351.0	5.39	298.41	1,348.2	20.3	-75.0	77.7	2.87	2.77	10.19
1,414.0	5.22	299.20	1,410.9	23.1	-80.1	83.3	0.29	-0.27	1.25
1,476.0	3.95	296.58	1,472.7	25.5	-84.4	88.1	2.08	-2.05	-4.23
1,540.0	4.05	287.65	1,536.6	27.1	-88.6	92.5	0.98	0.16	-13.95
1,603.0	4.16	282.05	1,599.4	28.3	-92.9	97.0	0.66	0.17	-8.89
1,667.0	4.20	283.48	1,663.3	29.3	-97.5	101.7	0.17	0.06	2.23
1,731.0	4.04	281.47	1,727.1	30.3	-102.0	106.3	0.34	-0.25	-3.14
1,795.0	3.77	279.24	1,790.9	31.1	-106.2	110.6	0.48	-0.42	-3.48
1,857.0	3.60	279.60	1,852.8	31.8	-110.2	114.6	0.28	-0.27	0.58
1,921.0	3.65	280.77	1,916.7	32.5	-114.2	118.6	0.14	0.08	1.83
1,984.0	2.18	294.59	1,979.6	33.3	-117.2	121.8	2.57	-2.33	21.94
2,047.0	1.69	305.24	2,042.6	34.4	-119.1	123.9	0.96	-0.78	16.90
2,111.0	1.65	303.91	2,106.5	35.4	-120.6	125.6	0.09	-0.06	-2.08
2,174.0	1.59	296.69	2,169.5	36.3	-122.1	127.3	0.34	-0.10	-11.46
2,238.0	1.24	273.18	2,233.5	36.8	-123.6	128.9	1.05	-0.55	-36.73
2,301.0	0.55	179.32	2,296.5	36.5	-124.3	129.5	2.21	-1.10	-148.98
2,365.0	1.72	148.89	2,360.5	35.4	-123.8	128.7	1.99	1.83	-47.55
2,429.0	1.72	151.40	2,424.5	33.7	-122.8	127.4	0.12	0.00	3.92
2,490.0	1.68	148.66	2,485.4	32.1	-121.9	126.1	0.15	-0.07	-4.49
2,550.0	1.64	145.96	2,545.4	30.7	-121.0	124.8	0.15	-0.07	-4.50