

Ryan Energy Technologies

Deviation Report



30-045-33050

Company: ConocoPhillips	Date: 8/16/2006	Time: 16:23:39	Page: 1
Field: San Juan County, NM	Coordinate(NE) Reference:	Site: San Juan 32-8 Unit 258A, Grid North	
Site: San Juan 32-8 Unit 258A	Vertical (TVD) Reference:	SITE 0.0	
Well: Well #258A	Section (VS) Reference:	Well (0.00N,0.00E,142.11Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature Db: Sybase	

Well: Well #258A

Well Position: +N-S 0.00 ft Northing: ft Latitude: ft
 +E-W 0.00 ft Easting: ft Longitude: ft

Position Uncertainty: 0.00 ft

Slot Name:

Surface 291/5 127/E Sec 9-32N8W
 Bit 867/N 760/W Sec 16
 Md 4351
 Tvd 4030

Survey Program for Definitive Wellpath

Date: 8/16/2006 Validated: No

Actual From To Survey

Version: 0

Toolcode

Tool Name

254.00 4241.00 Survey #1 (254.00-4241.00)

4351.00 4351.00 Survey #2 (4351.00-4351.00)

MWD

Standard MWD

Survey

AHD ft	Inclination deg	Azimuth deg	TVD BDF ft	X Wellhead ft	Y Wellhead ft	V.Section ft	TVD NAP ft	D.L.S. deg/100ft	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
254.00	0.50	248.40	254.00	-1.03	-0.41	-0.31	254.00	0.20	MWD
347.00	2.70	164.70	346.96	-0.83	-2.67	1.60	346.96	2.89	MWD
442.00	6.70	152.90	441.62	2.29	-9.77	9.11	441.62	4.31	MWD
533.00	9.60	145.40	531.70	9.02	-20.74	21.90	531.70	3.39	MWD
624.00	11.80	140.10	621.11	19.29	-34.13	38.78	621.11	2.65	MWD
715.00	14.25	142.91	709.76	32.02	-50.20	59.28	709.76	2.78	MWD
807.00	17.23	143.61	798.31	46.93	-70.21	84.23	798.31	3.25	MWD
899.00	19.35	142.61	885.65	64.28	-93.29	113.10	885.65	2.33	MWD
992.00	21.28	142.91	972.86	83.81	-118.99	145.38	972.86	2.08	MWD
1085.00	23.30	143.61	1058.91	104.90	-147.26	180.64	1058.91	2.19	MWD
1178.00	25.06	142.56	1143.75	127.79	-177.71	218.73	1143.75	1.95	MWD
1272.00	26.82	140.10	1228.28	153.50	-209.79	259.83	1228.28	2.19	MWD
1363.00	29.55	140.80	1308.48	180.85	-242.93	302.79	1308.48	3.02	MWD
1456.00	29.63	140.10	1389.35	210.10	-278.34	348.69	1389.35	0.38	MWD
1551.00	29.55	139.04	1471.96	240.52	-314.05	395.56	1471.96	0.56	MWD
1645.00	29.50	139.70	1553.75	270.68	-349.21	441.83	1553.75	0.35	MWD
1739.00	29.40	139.00	1635.61	300.79	-384.27	487.99	1635.61	0.38	MWD
1833.00	29.00	140.10	1717.66	330.54	-419.16	533.80	1717.66	0.71	MWD
1926.00	28.60	139.00	1799.16	359.60	-453.26	578.56	1799.16	0.71	MWD
2020.00	27.90	139.70	1881.96	388.59	-487.01	623.00	1881.96	0.82	MWD
2115.00	27.90	143.60	1965.93	416.16	-521.86	667.43	1965.93	1.92	MWD
2209.00	27.50	144.00	2049.16	441.96	-557.12	711.10	2049.16	0.47	MWD
2302.00	27.50	143.60	2131.65	467.33	-591.77	754.03	2131.65	0.20	MWD
2395.00	27.20	144.30	2214.25	492.47	-626.31	796.73	2214.25	0.47	MWD
2489.00	28.10	144.30	2297.52	517.93	-661.74	840.32	2297.52	0.96	MWD
2581.00	28.49	142.91	2378.52	543.80	-696.83	883.91	2378.52	0.83	MWD
2674.00	27.87	143.26	2460.50	570.18	-731.95	927.82	2460.50	0.69	MWD
2765.00	28.40	142.91	2540.75	595.96	-766.26	970.73	2540.75	0.61	MWD
2859.00	27.90	141.90	2623.63	623.01	-801.39	1015.07	2623.63	0.73	MWD
2953.00	27.96	142.91	2706.68	649.87	-836.28	1059.10	2706.68	0.51	MWD
3047.00	27.80	143.60	2789.77	676.17	-871.50	1103.05	2789.77	0.38	MWD
3141.00	27.79	143.26	2872.92	702.28	-906.70	1146.87	2872.92	0.17	MWD
3234.00	27.60	143.60	2955.27	728.03	-941.42	1190.08	2955.27	0.27	MWD
3265.00	27.30	142.90	2982.78	736.58	-952.87	1204.37	2982.78	1.42	MWD
3359.00	24.90	145.40	3067.19	760.83	-986.36	1245.68	3067.19	2.81	MWD
3454.00	21.80	144.00	3154.40	782.56	-1017.10	1283.29	3154.40	3.31	MWD
3548.00	18.73	142.91	3242.57	801.92	-1043.26	1315.83	3242.57	3.29	MWD
3643.00	16.62	143.96	3333.08	819.12	-1066.42	1344.67	3333.08	2.25	MWD
3747.00	15.21	143.75	3433.09	835.94	-1089.45	1373.17	3433.09	1.36	MWD
3865.00	10.10	141.10	3548.19	851.60	-1110.00	1399.01	3548.19	4.36	MWD
3957.00	9.10	141.90	3638.90	861.15	-1122.00	1414.35	3638.90	1.10	MWD

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Ryan Energy Technologies

Deviation Report



Company: ConocoPhillips Field: San Juan County, NM Site: San Juan 32-8 Unit 258A Well: Well #258A Wellpath: Original Hole	Date: 8/16/2006 Time: 16:23:39 Page: 2 Co-ordinate(NE) Reference: Site: San Juan 32-8 Unit 258A, Grid Nort Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,142.11Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey

AHD ft	Inclination deg	Azimuth deg	TVD BDF ft	X Wellhead ft	Y Wellhead ft	V.Section ft	TVD NAP ft	D.L.S. deg/100ft	Tool
4052.00	8.62	145.02	3732.77	869.87	-1133.75	1428.97	3732.77	0.71	MWD
4146.00	6.77	144.67	3825.92	877.11	-1144.04	1441.54	3825.92	1.97	MWD
4241.00	4.22	146.07	3920.47	882.30	-1151.51	1450.62	3920.47	2.69	MWD
4351.00	4.22	146.07	4030.17	886.82	-1158.22	1458.70	4030.17	0.00	

ConocoPhillips

ConocoPhillips

Field: San Juan County, NM
 Site: San Juan 32-8 Unit 258A
 Well: Well #258A
 Wellpath: Original Hole
 Plan: Plan #3
 Plan vs Actual



SITE DETAILS

San Juan 32-8 Unit 258A
 Sec. 9, T32N, R8W
 San Juan County, NM

Water Depth: 0.00
 Positional Uncertainty: 0.00
 Convergence: 0.00

FIELD DETAILS

San Juan County, NM
 New Mexico
 USA

Geodetic System: US State Plane Coordinate System 1927
 Ellipsoid: NAD27 (Clarke 1866)
 Zone: New Mexico, Western Zone
 Magnetic Model: igr2005

System Datum: Mean Sea Level
 Local North: Grid North

WELLPATH DETAILS

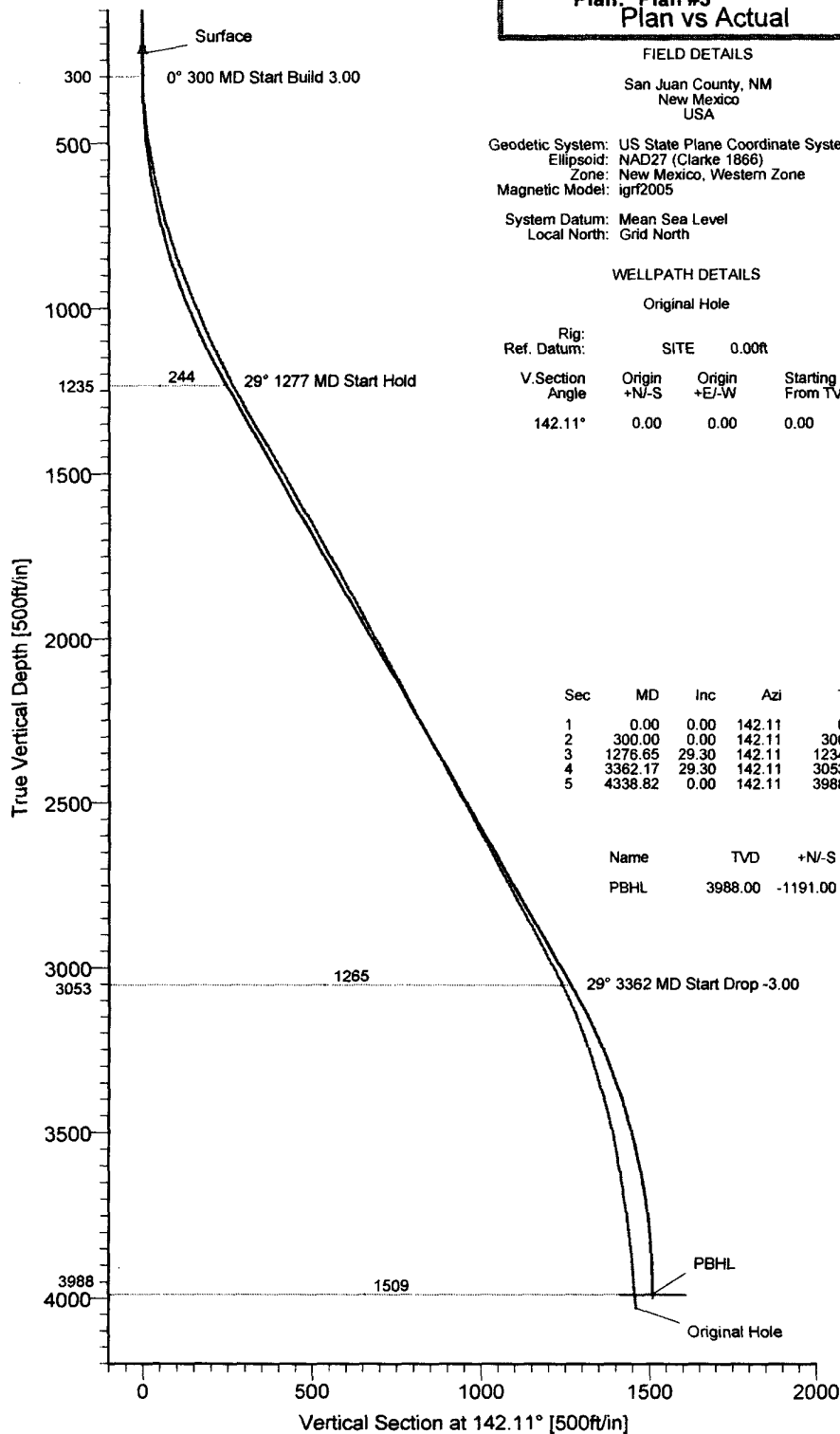
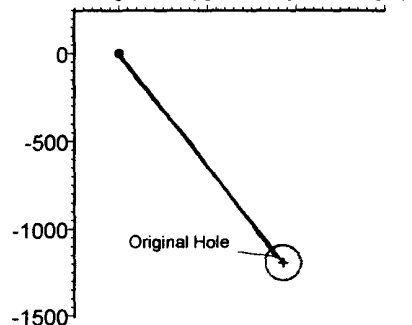
Original Hole

Rig: SITE 0.00ft
 Ref. Datum: V.Section Angle
 142.11°
 Origin +N/-S 0.00
 Origin +E/-W 0.00
 Starting From TVD 0.00

West(-)/East(+) [1000ft/in]

0 500 1000 1500

South(-)/North(+) [1000ft/in]



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	142.11	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	142.11	300.00	0.00	0.00	0.00	142.11	0.00	
3	1276.65	29.30	142.11	1234.64	-192.80	150.07	3.00	142.11	244.32	
4	3362.17	29.30	142.11	3053.36	-998.20	776.93	0.00	0.00	1264.92	
5	4338.82	0.00	142.11	3988.00	-1191.00	927.00	3.00	180.00	1509.24	PBHL

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	3988.00	-1191.00	927.00	0.00	0.00	Circle (Radius: 100)

CASING DETAILS

No.	TVD	MD	Name	Size
1	230.00	230.00	Surface	9.625