



Ryan Energy Directional Drilling Report

Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Prepared For:

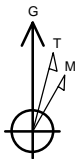
El Paso E&P Company, L.P.



Ryan Energy Technology

19510 Oil Center Blvd
Houston, TX 77073
Ph: 281-443-1414
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www.ryanenergy.com

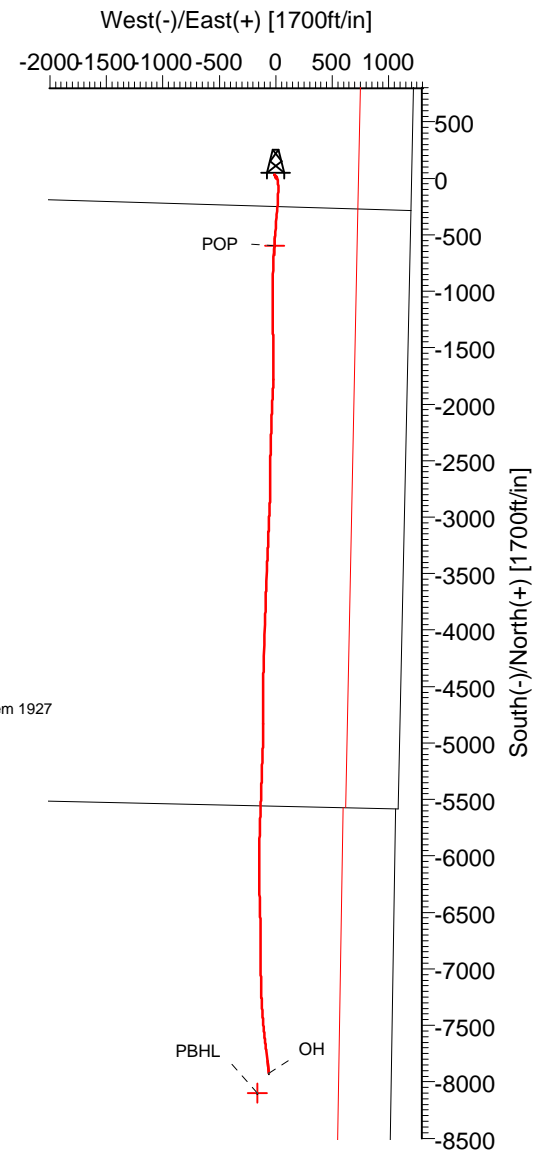


Azimuths to Grid North
True North: 0.68°
Magnetic North: 7.29°

Magnetic Field
Strength: 48206nT
Dip Angle: 59.54°
Date: 6/29/2011
Model: IGRF2010

El Paso E&P Company, L.P.

Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH
Survey: Survey #3



SITE DETAILS

University 8-12 #3H
Reagan Co., Tx
Site Centre Northing: 555338.00
Easting: 1586175.00
Ground Level: 2845.00
Positional Uncertainty: 2.00
Convergence: -0.68

WELLPATH DETAILS

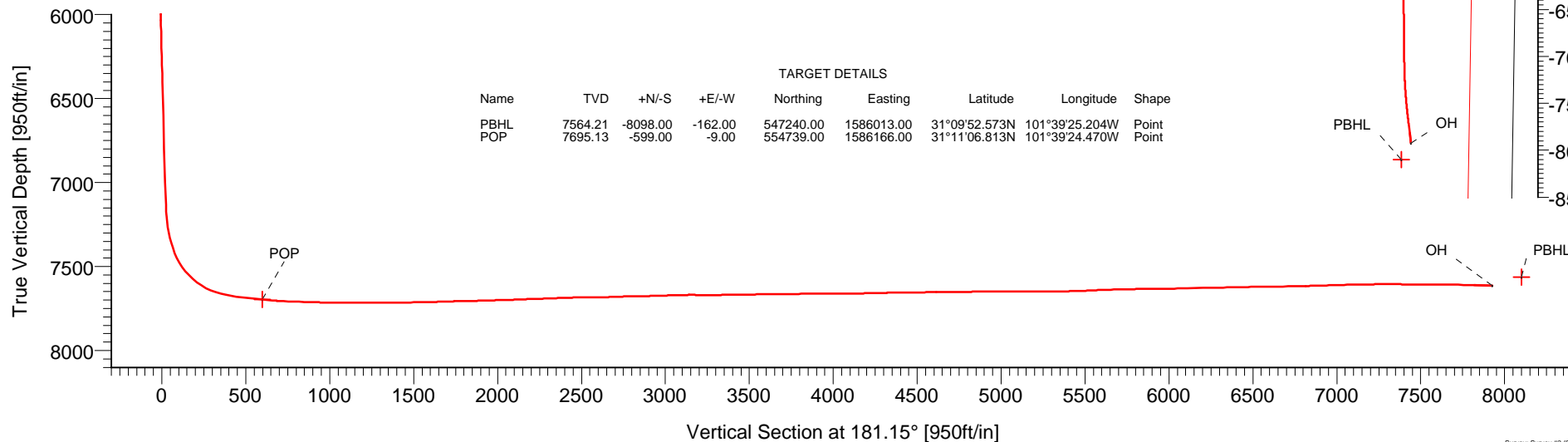
Rig: Ref. Datum:	OH		
	Origin +N/-S	Origin +E/-W	Starting From TVD
181.15°	0.00	0.00	0.00

FIELD DETAILS

Reagan Co, TX
Texas
U.S.A.
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: Texas, Central Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7564.21	-8098.00	-162.00	547240.00	1586013.00	31°09'52.573N	101°39'25.204W	Point
POP	7695.13	-599.00	-9.00	554739.00	1586166.00	31°11'06.813N	101°39'24.470W	Point





Ryan Energy Technologies Survey Report



Company: El Paso E&P Company, L.P.	Date: 8/21/2011	Time: 07:44:31	Page: 1
Field: Reagan Co, TX	Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North		
Site: University 8-12 #3H	Vertical (TVD) Reference: SITE 2867.0		
Well: 8-12 #3H	Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)		
Wellpath: OH	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: Reagan Co, TX Texas U.S.A.	Map Zone: Texas, Central Zone
Map System: US State Plane Coordinate System 1927	Coordinate System: Site Centre
Geo Datum: NAD27 (Clarke 1866)	Geomagnetic Model: IGRF2010
Sys Datum: Mean Sea Level	

Site: University 8-12 #3H Reagan Co., Tx	
Site Position:	Northing: 555338.00 ft
From: Map	Easting: 1586175.00 ft
Position Uncertainty: 2.00 ft	Latitude: 31 11 12.742 N
Ground Level: 2845.00 ft	Longitude: 101 39 24.448 W
	North Reference: Grid
	Grid Convergence: -0.68 deg

Well: 8-12 #3H	Slot Name:
Well Position: +N/-S 0.00 ft	Northing: 555338.00 ft
+E/-W 0.00 ft	Easting : 1586175.00 ft
Position Uncertainty: 0.00 ft	Latitude: 31 11 12.742 N
	Longitude: 101 39 24.448 W

Wellpath: OH	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 6/29/2011	Above System Datum: Mean Sea Level
Field Strength: 48206 nT	Declination: 6.61 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 59.54 deg
ft	+N/-S
	+E/-W
	Direction
	deg
0.00	0.00
0.00	0.00
0.00	181.15

Survey Program for Definitive Wellpath			
Date: 8/21/2011	Validated: No	Version: 2	
Actual From	To	Survey	Toolcode
ft	ft		Tool Name
0.00	7132.00	Survey #1 (0.00-7132.00)	Gyro
7132.00	15285.00	Survey #2 (7132.00-15285.00)	Ryan MWD
15285.00	15395.00	Survey #3 (15285.00-15395.00)	Projected to TD

Survey

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	TIE LINE
200.00	0.30	47.19	200.00	0.36	0.38	-0.36	0.15	0.15	0.00	Gyro
400.00	0.47	15.20	399.99	1.50	0.98	-1.52	0.13	0.08	-15.99	Gyro
600.00	0.47	340.19	599.99	3.07	0.92	-3.08	0.14	0.00	-17.51	Gyro
800.00	0.49	32.93	799.98	4.56	1.11	-4.58	0.21	0.01	26.37	Gyro
1000.00	0.52	320.48	999.98	5.97	0.99	-5.99	0.30	0.01	-36.23	Gyro
1200.00	0.76	330.18	1199.96	7.82	-0.24	-7.82	0.13	0.12	4.85	Gyro
1400.00	0.93	338.37	1399.94	10.48	-1.50	-10.45	0.10	0.08	4.09	Gyro
1600.00	0.94	343.81	1599.92	13.57	-2.56	-13.51	0.04	0.00	2.72	Gyro
1800.00	0.79	334.15	1799.89	16.39	-3.61	-16.31	0.10	-0.07	-4.83	Gyro
2000.00	0.93	316.79	1999.87	18.81	-5.33	-18.70	0.15	0.07	-8.68	Gyro
2200.00	0.92	340.88	2199.85	21.51	-6.96	-21.36	0.19	0.00	12.04	Gyro
2400.00	0.89	0.71	2399.82	24.58	-7.47	-24.42	0.16	-0.01	9.92	Gyro
2600.00	1.05	319.78	2599.79	27.53	-8.64	-27.35	0.35	0.08	-20.47	Gyro
2800.00	0.20	309.52	2799.78	29.15	-10.09	-28.94	0.43	-0.42	-5.13	Gyro
3000.00	0.06	190.34	2999.78	29.27	-10.38	-29.06	0.12	-0.07	-59.59	Gyro
3200.00	0.04	152.02	3199.78	29.11	-10.36	-28.89	0.02	-0.01	-19.16	Gyro
3400.00	0.18	153.65	3399.78	28.76	-10.19	-28.55	0.07	0.07	0.81	Gyro
3600.00	0.21	161.84	3599.78	28.13	-9.94	-27.93	0.02	0.01	4.09	Gyro
3800.00	0.33	105.33	3799.78	27.63	-9.27	-27.44	0.14	0.06	-28.25	Gyro
4000.00	0.43	122.22	3999.77	27.08	-8.08	-26.91	0.07	0.05	8.44	Gyro



Ryan Energy Technologies

Survey Report



Company: El Paso E&P Company, L.P.	Date: 8/21/2011	Time: 07:44:31	Page: 2
Field: Reagan Co, TX	Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North		
Site: University 8-12 #3H	Vertical (TVD) Reference: SITE 2867.0		
Well: 8-12 #3H	Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)		
Wellpath: OH	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

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
4200.00	0.27	142.39	4199.77	26.31	-7.15	-26.16	0.10	-0.08	10.08	Gyro
4400.00	0.37	113.82	4399.77	25.67	-6.27	-25.54	0.09	0.05	-14.28	Gyro
4600.00	0.56	142.65	4599.76	24.64	-5.09	-24.53	0.15	0.09	14.41	Gyro
4800.00	0.66	153.44	4799.75	22.83	-3.98	-22.74	0.08	0.05	5.39	Gyro
5000.00	0.77	160.16	4999.73	20.53	-3.01	-20.47	0.07	0.05	3.36	Gyro
5200.00	0.92	125.13	5199.71	18.35	-1.24	-18.32	0.26	0.07	-17.51	Gyro
5400.00	1.07	125.64	5399.68	16.33	1.59	-16.36	0.08	0.07	0.25	Gyro
5600.00	1.19	147.37	5599.64	13.50	4.23	-13.58	0.22	0.06	10.86	Gyro
5800.00	1.31	151.48	5799.60	9.74	6.44	-9.87	0.07	0.06	2.05	Gyro
6000.00	1.13	143.13	5999.55	6.15	8.71	-6.33	0.13	-0.09	-4.17	Gyro
6200.00	1.47	163.22	6199.50	2.12	10.64	-2.33	0.28	0.17	10.04	Gyro
6400.00	1.77	168.72	6399.42	-3.37	11.98	3.12	0.17	0.15	2.75	Gyro
6600.00	1.81	141.10	6599.33	-8.85	14.57	8.56	0.43	0.02	-13.81	Gyro
6800.00	1.73	175.28	6799.24	-14.32	16.80	13.98	0.52	-0.04	17.09	Gyro
7000.00	1.70	167.02	6999.15	-20.22	17.71	19.86	0.12	-0.01	-4.13	Gyro
7132.00	1.68	173.88	7131.09	-24.05	18.36	23.68	0.15	-0.02	5.20	Gyro
7172.00	2.60	169.90	7171.06	-25.53	18.58	25.15	2.33	2.30	-9.95	Ryan MWD
7174.00	2.73	170.15	7173.06	-25.62	18.60	25.24	6.53	6.50	12.50	Ryan MWD
7204.00	4.70	172.20	7202.99	-27.54	18.89	27.16	6.58	6.57	6.83	Ryan MWD
7236.00	6.60	174.60	7234.84	-30.67	19.24	30.28	5.98	5.94	7.50	Ryan MWD
7268.00	8.90	177.00	7266.54	-34.97	19.54	34.58	7.26	7.19	7.50	Ryan MWD
7300.00	11.30	176.00	7298.05	-40.57	19.89	40.17	7.52	7.50	-3.12	Ryan MWD
7332.00	14.20	175.30	7329.25	-47.62	20.43	47.20	9.08	9.06	-2.19	Ryan MWD
7363.00	16.80	176.20	7359.12	-55.88	21.04	55.44	8.42	8.39	2.90	Ryan MWD
7395.00	19.60	177.80	7389.52	-65.86	21.55	65.41	8.89	8.75	5.00	Ryan MWD
7427.00	22.40	178.90	7419.39	-77.32	21.87	76.86	8.84	8.75	3.44	Ryan MWD
7458.00	25.50	180.30	7447.72	-89.90	21.95	89.44	10.17	10.00	4.52	Ryan MWD
7490.00	30.10	181.10	7476.02	-104.82	21.76	104.36	14.42	14.37	2.50	Ryan MWD
7521.00	35.00	181.00	7502.14	-121.49	21.46	121.03	15.81	15.81	-0.32	Ryan MWD
7553.00	39.60	181.40	7527.59	-140.87	21.05	140.42	14.39	14.37	1.25	Ryan MWD
7585.00	43.40	181.90	7551.55	-162.06	20.43	161.62	11.92	11.87	1.56	Ryan MWD
7617.00	48.00	181.30	7573.89	-184.95	19.80	184.51	14.44	14.37	-1.87	Ryan MWD
7648.00	52.80	181.20	7593.65	-208.82	19.28	208.39	15.49	15.48	-0.32	Ryan MWD
7680.00	57.00	184.60	7612.05	-234.96	17.94	234.55	15.74	13.12	10.62	Ryan MWD
7712.00	62.20	186.70	7628.24	-262.41	15.21	262.05	17.21	16.25	6.56	Ryan MWD
7744.00	67.10	186.50	7641.93	-291.13	11.88	290.83	15.32	15.31	-0.62	Ryan MWD
7776.00	71.50	185.70	7653.24	-320.89	8.71	320.65	13.95	13.75	-2.50	Ryan MWD
7807.00	75.40	185.40	7662.07	-350.46	5.83	350.27	12.61	12.58	-0.97	Ryan MWD
7838.00	78.80	184.30	7668.99	-380.56	3.28	380.42	11.50	10.97	-3.55	Ryan MWD
7870.00	81.40	183.90	7674.49	-412.00	1.03	411.90	8.22	8.12	-1.25	Ryan MWD
7901.00	81.80	184.10	7679.02	-442.59	-1.11	442.53	1.44	1.29	0.65	Ryan MWD
7933.00	82.30	183.90	7683.45	-474.21	-3.32	474.18	1.68	1.56	-0.62	Ryan MWD
7965.00	83.50	184.00	7687.40	-505.89	-5.51	505.90	3.76	3.75	0.31	Ryan MWD
7996.00	83.90	184.30	7690.80	-536.62	-7.74	536.67	1.61	1.29	0.97	Ryan MWD
8028.00	84.40	184.40	7694.07	-568.36	-10.15	568.45	1.59	1.56	0.31	Ryan MWD
8058.00	84.50	184.40	7696.97	-598.13	-12.44	598.26	0.33	0.33	0.00	Ryan MWD
8088.00	84.80	184.60	7699.76	-627.91	-14.79	628.08	1.20	1.00	0.67	Ryan MWD
8120.00	86.00	184.00	7702.33	-659.72	-17.18	659.93	4.19	3.75	-1.87	Ryan MWD
8152.00	86.90	183.00	7704.31	-691.59	-19.13	691.84	4.20	2.81	-3.12	Ryan MWD
8184.00	87.30	182.70	7705.93	-723.51	-20.72	723.78	1.56	1.25	-0.94	Ryan MWD
8215.00	87.60	182.60	7707.31	-754.45	-22.15	754.74	1.02	0.97	-0.32	Ryan MWD
8247.00	87.50	181.60	7708.68	-786.40	-23.32	786.71	3.14	-0.31	-3.12	Ryan MWD
8278.00	87.70	181.40	7709.98	-817.36	-24.13	817.68	0.91	0.65	-0.65	Ryan MWD
8310.00	88.00	181.80	7711.18	-849.33	-25.02	849.66	1.56	0.94	1.25	Ryan MWD



Ryan Energy Technologies Survey Report



Company: El Paso E&P Company, L.P.
Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Date: 8/21/2011
Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North
Vertical (TVD) Reference: SITE 2867.0
Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

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Survey

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
8341.00	88.70	181.80	7712.07	-880.30	-26.00	880.64	2.26	2.26	0.00	Ryan MWD
8374.00	88.60	181.10	7712.85	-913.28	-26.83	913.63	2.14	-0.30	-2.12	Ryan MWD
8464.10	89.35	179.88	7714.46	-1003.36	-27.60	1003.71	1.59	0.83	-1.35	Ryan MWD
8470.00	89.40	179.80	7714.52	-1009.26	-27.59	1009.61	1.60	0.85	-1.36	Ryan MWD
8565.00	90.80	179.70	7714.36	-1104.25	-27.17	1104.58	1.48	1.47	-0.11	Ryan MWD
8597.70	90.12	179.63	7714.09	-1136.95	-26.98	1137.26	2.09	-2.08	-0.21	Ryan MWD
8661.00	88.80	179.50	7714.69	-1200.25	-26.50	1200.54	2.10	-2.09	-0.21	Ryan MWD
8753.00	89.20	179.10	7716.30	-1292.22	-25.38	1292.47	0.61	0.43	-0.43	Ryan MWD
8849.00	91.60	179.40	7715.63	-1388.21	-24.12	1388.41	2.52	2.50	0.31	Ryan MWD
8943.00	90.90	179.00	7713.58	-1482.17	-22.81	1482.33	0.86	-0.74	-0.43	Ryan MWD
9037.00	91.20	178.60	7711.85	-1576.14	-20.84	1576.24	0.53	0.32	-0.43	Ryan MWD
9131.00	92.00	180.10	7709.23	-1670.09	-19.77	1670.15	1.81	0.85	1.60	Ryan MWD
9225.00	91.60	181.30	7706.28	-1764.04	-20.92	1764.10	1.35	-0.43	1.28	Ryan MWD
9320.00	90.80	182.70	7704.29	-1858.95	-24.24	1859.07	1.70	-0.84	1.47	Ryan MWD
9414.00	92.20	183.20	7701.83	-1952.80	-29.07	1952.99	1.58	1.49	0.53	Ryan MWD
9508.00	91.20	182.50	7699.04	-2046.64	-33.74	2046.90	1.30	-1.06	-0.74	Ryan MWD
9603.00	92.80	181.80	7695.72	-2141.51	-37.30	2141.82	1.84	1.68	-0.74	Ryan MWD
9698.00	91.40	181.80	7692.24	-2236.39	-40.29	2236.75	1.47	-1.47	0.00	Ryan MWD
9793.00	92.50	181.50	7689.01	-2331.30	-43.02	2331.69	1.20	1.16	-0.32	Ryan MWD
9888.00	91.70	182.00	7685.53	-2426.19	-45.92	2426.62	0.99	-0.84	0.53	Ryan MWD
9984.00	90.10	180.90	7684.02	-2522.14	-48.35	2522.60	2.02	-1.67	-1.15	Ryan MWD
10079.00	91.20	180.80	7682.94	-2617.12	-49.76	2617.60	1.16	1.16	-0.11	Ryan MWD
10175.00	92.40	180.10	7679.93	-2713.07	-50.51	2713.54	1.45	1.25	-0.73	Ryan MWD
10271.00	91.00	180.60	7677.08	-2809.02	-51.10	2809.48	1.55	-1.46	0.52	Ryan MWD
10366.00	91.00	182.80	7675.42	-2903.96	-53.92	2904.46	2.32	0.00	2.32	Ryan MWD
10462.00	92.30	182.70	7672.66	-2999.81	-58.52	3000.38	1.36	1.35	-0.10	Ryan MWD
10556.00	91.30	182.10	7669.70	-3093.68	-62.45	3094.31	1.24	-1.06	-0.64	Ryan MWD
10651.00	89.30	182.20	7669.21	-3188.61	-66.02	3189.29	2.11	-2.11	0.11	Ryan MWD
10746.00	90.20	182.50	7669.62	-3283.53	-69.91	3284.27	1.00	0.95	0.32	Ryan MWD
10842.00	91.60	183.10	7668.11	-3379.40	-74.60	3380.21	1.59	1.46	0.62	Ryan MWD
10936.00	90.20	182.40	7666.64	-3473.27	-79.11	3474.16	1.67	-1.49	-0.74	Ryan MWD
11031.00	91.60	182.40	7665.14	-3568.18	-83.09	3569.12	1.47	1.47	0.00	Ryan MWD
11127.00	89.90	181.80	7663.89	-3664.10	-86.61	3665.10	1.88	-1.77	-0.62	Ryan MWD
11222.00	90.70	181.80	7663.39	-3759.05	-89.59	3760.09	0.84	0.84	0.00	Ryan MWD
11318.00	91.10	181.40	7661.88	-3855.00	-92.27	3856.08	0.59	0.42	-0.42	Ryan MWD
11413.00	89.50	182.10	7661.38	-3949.95	-95.17	3951.07	1.84	-1.68	0.74	Ryan MWD
11505.00	90.30	182.10	7661.54	-4041.89	-98.54	4043.05	0.87	0.87	0.00	Ryan MWD
11598.00	90.90	182.20	7660.57	-4134.82	-102.03	4136.03	0.65	0.65	0.11	Ryan MWD
11691.00	92.00	182.20	7658.22	-4227.72	-105.60	4228.99	1.18	1.18	0.00	Ryan MWD
11785.00	90.20	181.10	7656.41	-4321.66	-108.31	4322.96	2.24	-1.91	-1.17	Ryan MWD
11879.00	90.70	180.60	7655.67	-4415.64	-109.70	4416.95	0.75	0.53	-0.53	Ryan MWD
11956.00	91.40	179.80	7654.26	-4492.63	-109.97	4493.93	1.38	0.91	-1.04	Ryan MWD
12051.00	90.20	179.60	7652.94	-4587.62	-109.47	4588.89	1.28	-1.26	-0.21	Ryan MWD
12146.00	91.50	180.20	7651.53	-4682.60	-109.30	4683.85	1.51	1.37	0.63	Ryan MWD
12238.00	90.00	180.00	7650.32	-4774.59	-109.47	4775.83	1.64	-1.63	-0.22	Ryan MWD
12331.00	91.10	180.80	7649.43	-4867.58	-110.11	4868.81	1.46	1.18	0.86	Ryan MWD
12424.00	90.20	181.60	7648.38	-4960.55	-112.06	4961.80	1.29	-0.97	0.86	Ryan MWD
12527.00	90.60	182.40	7647.66	-5063.49	-115.66	5064.79	0.87	0.39	0.78	Ryan MWD
12621.00	89.90	182.20	7647.25	-5157.41	-119.43	5158.77	0.77	-0.74	-0.21	Ryan MWD
12715.00	89.60	181.90	7647.66	-5251.35	-122.79	5252.76	0.45	-0.32	-0.32	Ryan MWD
12810.00	90.40	181.70	7647.66	-5346.30	-125.78	5347.75	0.87	0.84	-0.21	Ryan MWD
12906.00	91.70	182.20	7645.90	-5442.23	-129.04	5443.72	1.45	1.35	0.52	Ryan MWD
13001.00	92.70	182.40	7642.25	-5537.08	-132.85	5538.63	1.07	1.05	0.21	Ryan MWD



Ryan Energy Technologies Survey Report



Company: El Paso E&P Company, L.P.
Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Date: 8/21/2011
Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North
Vertical (TVD) Reference: SITE 2867.0
Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Page: 4

Survey

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
13096.00	91.80	182.10	7638.52	-5631.93	-136.58	5633.54	1.00	-0.95	-0.32	Ryan MWD
13191.00	91.60	181.70	7635.70	-5726.84	-139.73	5728.49	0.47	-0.21	-0.42	Ryan MWD
13286.00	90.60	181.70	7633.88	-5821.78	-142.54	5823.47	1.05	-1.05	0.00	Ryan MWD
13382.00	90.60	181.30	7632.87	-5917.74	-145.06	5919.46	0.42	0.00	-0.42	Ryan MWD
13476.00	90.90	180.10	7631.64	-6011.72	-146.20	6013.45	1.32	0.32	-1.28	Ryan MWD
13571.00	91.30	179.90	7629.82	-6106.71	-146.20	6108.41	0.47	0.42	-0.21	Ryan MWD
13667.00	91.30	179.60	7627.64	-6202.68	-145.79	6204.36	0.31	0.00	-0.31	Ryan MWD
13762.00	91.10	178.70	7625.65	-6297.65	-144.38	6299.28	0.97	-0.21	-0.95	Ryan MWD
13856.00	91.40	178.50	7623.60	-6391.60	-142.08	6393.16	0.38	0.32	-0.21	Ryan MWD
13952.00	91.20	178.10	7621.42	-6487.53	-139.23	6489.02	0.47	-0.21	-0.42	Ryan MWD
14047.00	90.60	178.70	7619.93	-6582.48	-136.58	6583.90	0.89	-0.63	0.63	Ryan MWD
14143.00	91.00	179.60	7618.59	-6678.46	-135.16	6679.83	1.03	0.42	0.94	Ryan MWD
14238.00	91.10	179.40	7616.85	-6773.44	-134.33	6774.77	0.24	0.11	-0.21	Ryan MWD
14334.00	91.90	180.00	7614.34	-6869.40	-133.83	6870.71	1.04	0.83	0.62	Ryan MWD
14430.00	91.60	179.40	7611.41	-6965.36	-133.32	6966.63	0.70	-0.31	-0.62	Ryan MWD
14524.00	91.50	179.00	7608.86	-7059.31	-132.01	7060.54	0.44	-0.11	-0.43	Ryan MWD
14619.00	91.10	178.40	7606.71	-7154.26	-129.86	7155.43	0.76	-0.42	-0.63	Ryan MWD
14714.00	90.30	177.60	7605.55	-7249.20	-126.54	7250.28	1.19	-0.84	-0.84	Ryan MWD
14810.00	89.70	176.40	7605.55	-7345.06	-121.52	7346.02	1.40	-0.62	-1.25	Ryan MWD
14905.00	89.80	175.40	7605.96	-7439.82	-114.73	7440.62	1.06	0.11	-1.05	Ryan MWD
15001.00	89.90	174.40	7606.21	-7535.44	-106.19	7536.05	1.05	0.10	-1.04	Ryan MWD
15096.00	89.40	173.60	7606.79	-7629.91	-96.26	7630.31	0.99	-0.53	-0.84	Ryan MWD
15190.00	88.70	172.60	7608.35	-7723.22	-84.97	7723.37	1.30	-0.74	-1.06	Ryan MWD
15285.00	88.40	172.60	7610.76	-7817.40	-72.74	7817.28	0.32	-0.32	0.00	Ryan MWD
15395.00	88.40	172.60	7613.83	-7926.44	-58.58	7926.02	0.00	0.00	0.00	Projection



Ryan Energy Technologies Completion Report



Company: El Paso E&P Company, L.P.	Date: 8/21/2011	Time: 07:45:09	Page: 1
Field: Reagan Co, TX	Co-ordinate(NE) Reference:	Site: University 8-12 #3H, Grid North	
Site: University 8-12 #3H	Vertical (TVD) Reference:	SITE 2867.0	
Well: 8-12 #3H	Section (VS) Reference:	Well (0.00N,0.00E,181.15Azi)	
Wellpath: OH	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Field: Reagan Co, TX Texas U.S.A.	Map Zone: Texas, Central Zone
Map System: US State Plane Coordinate System 1927	Coordinate System: Site Centre
Geo Datum: NAD27 (Clarke 1866)	Geomagnetic Model: IGRF2010
Sys Datum: Mean Sea Level	

Site: University 8-12 #3H
Reagan Co., Tx

Site Position:	Northing: 555338.00 ft	Latitude: 31 11 12.742 N
From: Map	Easting: 1586175.00 ft	Longitude: 101 39 24.448 W
Position Uncertainty: 2.00 ft		North Reference: Grid
Ground Level: 2845.00 ft		Grid Convergence: -0.68 deg

Well: 8-12 #3H **Slot Name:**

Well Position: +N/-S 0.00 ft	Northing: 555338.00 ft	Latitude: 31 11 12.742 N
+E/-W 0.00 ft	Easting : 1586175.00 ft	Longitude: 101 39 24.448 W
Position Uncertainty: 0.00 ft		

Wellpath: OH

Current Datum: SITE	Height 2867.00 ft	Drilled From: Surface
Magnetic Data: 6/29/2011		Tie-on Depth: 0.00 ft
Field Strength: 48206 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S	Declination: 6.61 deg
ft	ft	Mag Dip Angle: 59.54 deg
		+E/-W
		Direction
		deg
0.00	0.00	181.15

Survey Program for Definitive Wellpath

Date: 8/21/2011	Validated: No	Version: 2
Actual From ft	To ft	Toolcode
		Tool Name
0.00	7132.00	Survey #1 (0.00-7132.00)
7132.00	15285.00	Survey #2 (7132.00-15285.00)
15285.00	15395.00	Survey #3 (15285.00-15395.00)
		Gyro
		Ryan MWD
		Projection
		Gyro
		Ryan MWD
		Projected to TD

Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
200.00	0.30	200.00	-0.36	47.19	0.36	0.38	0.52	47.19	0.15	Gyro
400.00	0.47	399.99	-1.52	15.20	1.50	0.98	1.80	33.19	0.13	Gyro
600.00	0.47	599.99	-3.08	340.19	3.07	0.92	3.20	16.71	0.14	Gyro
800.00	0.49	799.98	-4.58	32.93	4.56	1.11	4.69	13.66	0.21	Gyro
1000.00	0.52	999.98	-5.99	320.48	5.97	0.99	6.06	9.45	0.30	Gyro
1200.00	0.76	1199.96	-7.82	330.18	7.82	-0.24	7.83	358.23	0.13	Gyro
1400.00	0.93	1399.94	-10.45	338.37	10.48	-1.50	10.59	351.86	0.10	Gyro
1600.00	0.94	1599.92	-13.51	343.81	13.57	-2.56	13.81	349.33	0.04	Gyro
1800.00	0.79	1799.89	-16.31	334.15	16.39	-3.61	16.78	347.56	0.10	Gyro
2000.00	0.93	1999.87	-18.70	316.79	18.81	-5.33	19.55	344.19	0.15	Gyro
2200.00	0.92	2199.85	-21.36	340.88	21.51	-6.96	22.61	342.06	0.19	Gyro
2400.00	0.89	2399.82	-24.42	0.71	24.58	-7.47	25.69	343.09	0.16	Gyro
2600.00	1.05	2599.79	-27.35	319.78	27.53	-8.64	28.85	342.59	0.35	Gyro
2800.00	0.20	2799.78	-28.94	309.52	29.15	-10.09	30.85	340.91	0.43	Gyro
3000.00	0.06	2999.78	-29.06	190.34	29.27	-10.38	31.06	340.48	0.12	Gyro
3200.00	0.04	3199.78	-28.89	152.02	29.11	-10.36	30.90	340.41	0.02	Gyro
3400.00	0.18	3399.78	-28.55	153.65	28.76	-10.19	30.52	340.49	0.07	Gyro
3600.00	0.21	3599.78	-27.93	161.84	28.13	-9.94	29.84	340.55	0.02	Gyro
3800.00	0.33	3799.78	-27.44	105.33	27.63	-9.27	29.15	341.46	0.14	Gyro
4000.00	0.43	3999.77	-26.91	122.22	27.08	-8.08	28.26	343.40	0.07	Gyro



Ryan Energy Technologies Completion Report



Company: El Paso E&P Company, L.P.
Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Date: 8/21/2011
Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North
Vertical (TVD) Reference: SITE 2867.0
Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Page: 2

Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft	Tool
4200.00	0.27	4199.77	-26.16	142.39	26.31	-7.15	27.26	344.79	0.10	Gyro
4400.00	0.37	4399.77	-25.54	113.82	25.67	-6.27	26.43	346.27	0.09	Gyro
4600.00	0.56	4599.76	-24.53	142.65	24.64	-5.09	25.16	348.32	0.15	Gyro
4800.00	0.66	4799.75	-22.74	153.44	22.83	-3.98	23.17	350.10	0.08	Gyro
5000.00	0.77	4999.73	-20.47	160.16	20.53	-3.01	20.75	351.66	0.07	Gyro
5200.00	0.92	5199.71	-18.32	125.13	18.35	-1.24	18.39	356.12	0.26	Gyro
5400.00	1.07	5399.68	-16.36	125.64	16.33	1.59	16.41	5.55	0.08	Gyro
5600.00	1.19	5599.64	-13.58	147.37	13.50	4.23	14.14	17.38	0.22	Gyro
5800.00	1.31	5799.60	-9.87	151.48	9.74	6.44	11.67	33.46	0.07	Gyro
6000.00	1.13	5999.55	-6.33	143.13	6.15	8.71	10.67	54.77	0.13	Gyro
6200.00	1.47	6199.50	-2.33	163.22	2.12	10.64	10.84	78.73	0.28	Gyro
6400.00	1.77	6399.42	3.12	168.72	-3.37	11.98	12.44	105.69	0.17	Gyro
6600.00	1.81	6599.33	8.56	141.10	-8.85	14.57	17.05	121.29	0.43	Gyro
6800.00	1.73	6799.24	13.98	175.28	-14.32	16.80	22.08	130.44	0.52	Gyro
7000.00	1.70	6999.15	19.86	167.02	-20.22	17.71	26.88	138.78	0.12	Gyro
7132.00	1.68	7131.09	23.68	173.88	-24.05	18.36	30.26	142.64	0.15	Gyro
7172.00	2.60	7171.06	25.15	169.90	-25.53	18.58	31.57	143.95	2.33	Ryan MWD
7174.00	2.73	7173.06	25.24	170.15	-25.62	18.60	31.66	144.02	6.53	Ryan MWD
7204.00	4.70	7202.99	27.16	172.20	-27.54	18.89	33.40	145.56	6.58	Ryan MWD
7236.00	6.60	7234.84	30.28	174.60	-30.67	19.24	36.21	147.90	5.98	Ryan MWD
7268.00	8.90	7266.54	34.58	177.00	-34.97	19.54	40.06	150.81	7.26	Ryan MWD
7300.00	11.30	7298.05	40.17	176.00	-40.57	19.89	45.19	153.89	7.52	Ryan MWD
7332.00	14.20	7329.25	47.20	175.30	-47.62	20.43	51.81	156.78	9.08	Ryan MWD
7363.00	16.80	7359.12	55.44	176.20	-55.88	21.04	59.71	159.37	8.42	Ryan MWD
7395.00	19.60	7389.52	65.41	177.80	-65.86	21.55	69.29	161.88	8.89	Ryan MWD
7427.00	22.40	7419.39	76.86	178.90	-77.32	21.87	80.35	164.20	8.84	Ryan MWD
7458.00	25.50	7447.72	89.44	180.30	-89.90	21.95	92.54	166.28	10.17	Ryan MWD
7490.00	30.10	7476.02	104.36	181.10	-104.82	21.76	107.05	168.27	14.42	Ryan MWD
7521.00	35.00	7502.14	121.03	181.00	-121.49	21.46	123.37	169.98	15.81	Ryan MWD
7553.00	39.60	7527.59	140.42	181.40	-140.87	21.05	142.44	171.50	14.39	Ryan MWD
7585.00	43.40	7551.55	161.62	181.90	-162.06	20.43	163.35	172.81	11.92	Ryan MWD
7617.00	48.00	7573.89	184.51	181.30	-184.95	19.80	186.01	173.89	14.44	Ryan MWD
7648.00	52.80	7593.65	208.39	181.20	-208.82	19.28	209.71	174.73	15.49	Ryan MWD
7680.00	57.00	7612.05	234.55	184.60	-234.96	17.94	235.64	175.63	15.74	Ryan MWD
7712.00	62.20	7628.24	262.05	186.70	-262.41	15.21	262.85	176.68	17.21	Ryan MWD
7744.00	67.10	7641.93	290.83	186.50	-291.13	11.88	291.37	177.66	15.32	Ryan MWD
7776.00	71.50	7653.24	320.65	185.70	-320.89	8.71	321.00	178.45	13.95	Ryan MWD
7807.00	75.40	7662.07	350.27	185.40	-350.46	5.83	350.51	179.05	12.61	Ryan MWD
7838.00	78.80	7668.99	380.42	184.30	-380.56	3.28	380.58	179.51	11.50	Ryan MWD
7870.00	81.40	7674.49	411.90	183.90	-412.00	1.03	412.00	179.86	8.22	Ryan MWD
7901.00	81.80	7679.02	442.53	184.10	-442.59	-1.11	442.60	180.14	1.44	Ryan MWD
7933.00	82.30	7683.45	474.18	183.90	-474.21	-3.32	474.22	180.40	1.68	Ryan MWD
7965.00	83.50	7687.40	505.90	184.00	-505.89	-5.51	505.92	180.62	3.76	Ryan MWD
7996.00	83.90	7690.80	536.67	184.30	-536.62	-7.74	536.68	180.83	1.61	Ryan MWD
8028.00	84.40	7694.07	568.45	184.40	-568.36	-10.15	568.45	181.02	1.59	Ryan MWD
8058.00	84.50	7696.97	598.26	184.40	-598.13	-12.44	598.26	181.19	0.33	Ryan MWD
8088.00	84.80	7699.76	628.08	184.60	-627.91	-14.79	628.08	181.35	1.20	Ryan MWD
8120.00	86.00	7702.33	659.93	184.00	-659.72	-17.18	659.94	181.49	4.19	Ryan MWD
8152.00	86.90	7704.31	691.84	183.00	-691.59	-19.13	691.86	181.58	4.20	Ryan MWD
8184.00	87.30	7705.93	723.78	182.70	-723.51	-20.72	723.81	181.64	1.56	Ryan MWD
8215.00	87.60	7707.31	754.74	182.60	-754.45	-22.15	754.78	181.68	1.02	Ryan MWD
8247.00	87.50	7708.68	786.71	181.60	-786.40	-23.32	786.74	181.70	3.14	Ryan MWD
8278.00	87.70	7709.98	817.68	181.40	-817.36	-24.13	817.72	181.69	0.91	Ryan MWD



Ryan Energy Technologies Completion Report



Company: El Paso E&P Company, L.P.
Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Date: 8/21/2011
Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North
Vertical (TVD) Reference: SITE 2867.0
Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

Page: 3

Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft	Tool
8310.00	88.00	7711.18	849.66	181.80	-849.33	-25.02	849.69	181.69	1.56	Ryan MWD
8341.00	88.70	7712.07	880.64	181.80	-880.30	-26.00	880.68	181.69	2.26	Ryan MWD
8374.00	88.60	7712.85	913.63	181.10	-913.28	-26.83	913.67	181.68	2.14	Ryan MWD
8464.10	89.35	7714.46	1003.71	179.88	-1003.36	-27.60	1003.74	181.58	1.59	Ryan MWD
8470.00	89.40	7714.52	1009.61	179.80	-1009.26	-27.59	1009.63	181.57	1.60	Ryan MWD
8565.00	90.80	7714.36	1104.58	179.70	-1104.25	-27.17	1104.59	181.41	1.48	Ryan MWD
8597.70	90.12	7714.09	1137.26	179.63	-1136.95	-26.98	1137.27	181.36	2.09	Ryan MWD
8661.00	88.80	7714.69	1200.54	179.50	-1200.25	-26.50	1200.54	181.26	2.10	Ryan MWD
8753.00	89.20	7716.30	1292.47	179.10	-1292.22	-25.38	1292.47	181.12	0.61	Ryan MWD
8849.00	91.60	7715.63	1388.41	179.40	-1388.21	-24.12	1388.42	181.00	2.52	Ryan MWD
8943.00	90.90	7713.58	1482.33	179.00	-1482.17	-22.81	1482.35	180.88	0.86	Ryan MWD
9037.00	91.20	7711.85	1576.24	178.60	-1576.14	-20.84	1576.28	180.76	0.53	Ryan MWD
9131.00	92.00	7709.23	1670.15	180.10	-1670.09	-19.77	1670.21	180.68	1.81	Ryan MWD
9225.00	91.60	7706.28	1764.10	181.30	-1764.04	-20.92	1764.16	180.68	1.35	Ryan MWD
9320.00	90.80	7704.29	1859.07	182.70	-1858.95	-24.24	1859.11	180.75	1.70	Ryan MWD
9414.00	92.20	7701.83	1952.99	183.20	-1952.80	-29.07	1953.01	180.85	1.58	Ryan MWD
9508.00	91.20	7699.04	2046.90	182.50	-2046.64	-33.74	2046.91	180.94	1.30	Ryan MWD
9603.00	92.80	7695.72	2141.82	181.80	-2141.51	-37.30	2141.83	181.00	1.84	Ryan MWD
9698.00	91.40	7692.24	2236.75	181.80	-2236.39	-40.29	2236.76	181.03	1.47	Ryan MWD
9793.00	92.50	7689.01	2331.69	181.50	-2331.30	-43.02	2331.70	181.06	1.20	Ryan MWD
9888.00	91.70	7685.53	2426.62	182.00	-2426.19	-45.92	2426.62	181.08	0.99	Ryan MWD
9984.00	90.10	7684.02	2522.60	180.90	-2522.14	-48.35	2522.61	181.10	2.02	Ryan MWD
10079.00	91.20	7682.94	2617.60	180.80	-2617.12	-49.76	2617.60	181.09	1.16	Ryan MWD
10175.00	92.40	7679.93	2713.54	180.10	-2713.07	-50.51	2713.54	181.07	1.45	Ryan MWD
10271.00	91.00	7677.08	2809.48	180.60	-2809.02	-51.10	2809.49	181.04	1.55	Ryan MWD
10366.00	91.00	7675.42	2904.46	182.80	-2903.96	-53.92	2904.46	181.06	2.32	Ryan MWD
10462.00	92.30	7672.66	3000.38	182.70	-2999.81	-58.52	3000.38	181.12	1.36	Ryan MWD
10556.00	91.30	7669.70	3094.31	182.10	-3093.68	-62.45	3094.31	181.16	1.24	Ryan MWD
10651.00	89.30	7669.21	3189.29	182.20	-3188.61	-66.02	3189.29	181.19	2.11	Ryan MWD
10746.00	90.20	7669.62	3284.27	182.50	-3283.53	-69.91	3284.27	181.22	1.00	Ryan MWD
10842.00	91.60	7668.11	3380.21	183.10	-3379.40	-74.60	3380.22	181.26	1.59	Ryan MWD
10936.00	90.20	7666.64	3474.16	182.40	-3473.27	-79.11	3474.17	181.30	1.67	Ryan MWD
11031.00	91.60	7665.14	3569.12	182.40	-3568.18	-83.09	3569.14	181.33	1.47	Ryan MWD
11127.00	89.90	7663.89	3665.10	181.80	-3664.10	-86.61	3665.12	181.35	1.88	Ryan MWD
11222.00	90.70	7663.39	3760.09	181.80	-3759.05	-89.59	3760.12	181.37	0.84	Ryan MWD
11318.00	91.10	7661.88	3856.08	181.40	-3855.00	-92.27	3856.10	181.37	0.59	Ryan MWD
11413.00	89.50	7661.38	3951.07	182.10	-3949.95	-95.17	3951.10	181.38	1.84	Ryan MWD
11505.00	90.30	7661.54	4043.05	182.10	-4041.89	-98.54	4043.09	181.40	0.87	Ryan MWD
11598.00	90.90	7660.57	4136.03	182.20	-4134.82	-102.03	4136.08	181.41	0.65	Ryan MWD
11691.00	92.00	7658.22	4228.99	182.20	-4227.72	-105.60	4229.04	181.43	1.18	Ryan MWD
11785.00	90.20	7656.41	4322.96	181.10	-4321.66	-108.31	4323.01	181.44	2.24	Ryan MWD
11879.00	90.70	7655.67	4416.95	180.60	-4415.64	-109.70	4417.00	181.42	0.75	Ryan MWD
11956.00	91.40	7654.26	4493.93	179.80	-4492.63	-109.97	4493.97	181.40	1.38	Ryan MWD
12051.00	90.20	7652.94	4588.89	179.60	-4587.62	-109.47	4588.92	181.37	1.28	Ryan MWD
12146.00	91.50	7651.53	4683.85	180.20	-4682.60	-109.30	4683.88	181.34	1.51	Ryan MWD
12238.00	90.00	7650.32	4775.83	180.00	-4774.59	-109.47	4775.85	181.31	1.64	Ryan MWD
12331.00	91.10	7649.43	4868.81	180.80	-4867.58	-110.11	4868.83	181.30	1.46	Ryan MWD
12424.00	90.20	7648.38	4961.80	181.60	-4960.55	-112.06	4961.82	181.29	1.29	Ryan MWD
12527.00	90.60	7647.66	5064.79	182.40	-5063.49	-115.66	5064.81	181.31	0.87	Ryan MWD
12621.00	89.90	7647.25	5158.77	182.20	-5157.41	-119.43	5158.79	181.33	0.77	Ryan MWD
12715.00	89.60	7647.66	5252.76	181.90	-5251.35	-122.79	5252.79	181.34	0.45	Ryan MWD
12810.00	90.40	7647.66	5347.75	181.70	-5346.30	-125.78	5347.78	181.35	0.87	Ryan MWD



Ryan Energy Technologies Completion Report



Company: El Paso E&P Company, L.P.
Field: Reagan Co, TX
Site: University 8-12 #3H
Well: 8-12 #3H
Wellpath: OH

Date: 8/21/2011
Co-ordinate(NE) Reference: Site: University 8-12 #3H, Grid North
Vertical (TVD) Reference: SITE 2867.0
Section (VS) Reference: Well (0.00N,0.00E,181.15Azi)
Survey Calculation Method: Minimum Curvature
Db: Sybase

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Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft	Tool
12906.00	91.70	7645.90	5443.72	182.20	-5442.23	-129.04	5443.76	181.36	1.45	Ryan MWD
13001.00	92.70	7642.25	5538.63	182.40	-5537.08	-132.85	5538.67	181.37	1.07	Ryan MWD
13096.00	91.80	7638.52	5633.54	182.10	-5631.93	-136.58	5633.59	181.39	1.00	Ryan MWD
13191.00	91.60	7635.70	5728.49	181.70	-5726.84	-139.73	5728.54	181.40	0.47	Ryan MWD
13286.00	90.60	7633.88	5823.47	181.70	-5821.78	-142.54	5823.52	181.40	1.05	Ryan MWD
13382.00	90.60	7632.87	5919.46	181.30	-5917.74	-145.06	5919.52	181.40	0.42	Ryan MWD
13476.00	90.90	7631.64	6013.45	180.10	-6011.72	-146.20	6013.50	181.39	1.32	Ryan MWD
13571.00	91.30	7629.82	6108.41	179.90	-6106.71	-146.20	6108.46	181.37	0.47	Ryan MWD
13667.00	91.30	7627.64	6204.36	179.60	-6202.68	-145.79	6204.39	181.35	0.31	Ryan MWD
13762.00	91.10	7625.65	6299.28	178.70	-6297.65	-144.38	6299.30	181.31	0.97	Ryan MWD
13856.00	91.40	7623.60	6393.16	178.50	-6391.60	-142.08	6393.18	181.27	0.38	Ryan MWD
13952.00	91.20	7621.42	6489.02	178.10	-6487.53	-139.23	6489.02	181.23	0.47	Ryan MWD
14047.00	90.60	7619.93	6583.90	178.70	-6582.48	-136.58	6583.90	181.19	0.89	Ryan MWD
14143.00	91.00	7618.59	6679.83	179.60	-6678.46	-135.16	6679.83	181.16	1.03	Ryan MWD
14238.00	91.10	7616.85	6774.77	179.40	-6773.44	-134.33	6774.77	181.14	0.24	Ryan MWD
14334.00	91.90	7614.34	6870.71	180.00	-6869.40	-133.83	6870.71	181.12	1.04	Ryan MWD
14430.00	91.60	7611.41	6966.63	179.40	-6965.36	-133.32	6966.63	181.10	0.70	Ryan MWD
14524.00	91.50	7608.86	7060.54	179.00	-7059.31	-132.01	7060.55	181.07	0.44	Ryan MWD
14619.00	91.10	7606.71	7155.43	178.40	-7154.26	-129.86	7155.44	181.04	0.76	Ryan MWD
14714.00	90.30	7605.55	7250.28	177.60	-7249.20	-126.54	7250.30	181.00	1.19	Ryan MWD
14810.00	89.70	7605.55	7346.02	176.40	-7345.06	-121.52	7346.07	180.95	1.40	Ryan MWD
14905.00	89.80	7605.96	7440.62	175.40	-7439.82	-114.73	7440.70	180.88	1.06	Ryan MWD
15001.00	89.90	7606.21	7536.05	174.40	-7535.44	-106.19	7536.18	180.81	1.05	Ryan MWD
15096.00	89.40	7606.79	7630.31	173.60	-7629.91	-96.26	7630.52	180.72	0.99	Ryan MWD
15190.00	88.70	7608.35	7723.37	172.60	-7723.22	-84.97	7723.69	180.63	1.30	Ryan MWD
15285.00	88.40	7610.76	7817.28	172.60	-7817.40	-72.74	7817.73	180.53	0.32	Ryan MWD
15395.00	88.40	7613.83	7926.02	172.60	-7926.44	-58.58	7926.65	180.42	0.00	Projection