

30-015-40587



Weatherford®

Drilling Services

Proposal



devon

EMERALD PWU 20 #7H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

JULY 2, 2012

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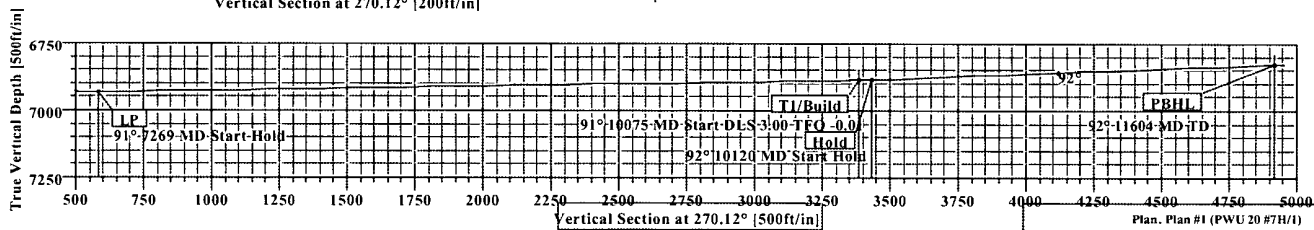
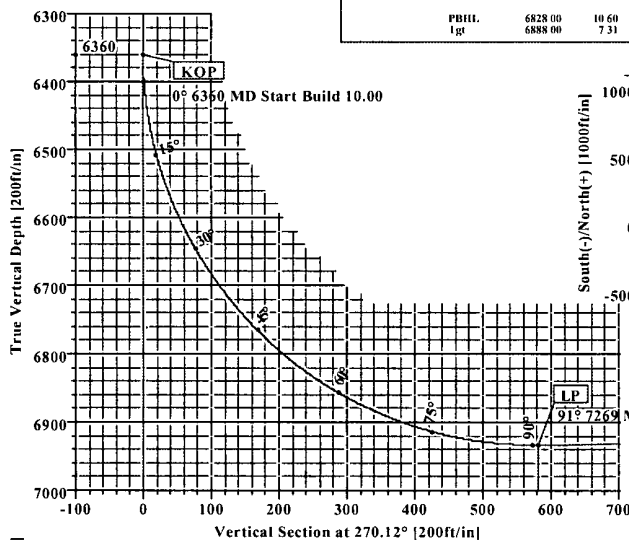
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Emerald PWU 20 #7H
Eddy Co, NM



KB ELEV: 3443
GL ELEV: 3324



SECTION DETAILS

Sec	MD	Inc	Az	FVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	270.12	0.00	0.00	0.00	0.00	0.00	0.00	
2	6360.12	0.00	270.12	6360.12	0.00	0.00	0.00	0.00	0.00	
3	7269.31	90.92	270.12	6933.00	1.26	-582.15	10.00	270.12	582.15	
4	10075.31	90.92	270.12	6888.00	7.31	-3387.78	0.00	0.00	3387.79	Igt
5	10120.31	92.27	270.12	6886.75	7.41	-3432.76	3.00	-0.01	3432.77	
6	11604.18	92.27	270.12	6828.00	10.60	-4915.46	0.00	0.00	4915.47	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
PWU 20 #7H	0.00	0.00	598011.04	616680.22	32°38'37.459N	104°05'18.822W	N/A

TARGET DETAILS

Name	FVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	6828.00	10.60	-4915.46	598021.64	611764.76	Point
Igt	6888.00	7.31	-3387.78	598018.35	613292.44	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)

Coordinate System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Emerald PWU 20 #7H

Site Centre Northing: 598011.04
Easting: 616680.22

Ground Level: 3324.00
Positional Uncertainty: 0.00
Convergence: 0.13



LEGEND
20 #3H (1)
Exist. Parkway 13 (1)
1
Plan #1



Azimuths to Grid North
True North: -0.13°
Magnetic North: 7.55°

Magnetic Field
Strength: 48695nT
Dip Angle: 60.45°
Date: 11/15/2012
Model: IGRF2010

Total Correction to Grid North: 7.55°

Created By: Russell W. Joyner

Date: 7/2/2012



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WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy Date: 7/2/2012 Time: 07:58:04 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well PWU 20 #7H, Grid North
Site: Emerald PWU 20 #7H Vertical (TVD) Reference: SITE 3343 0
Well: PWU 20 #7H Section (VS) Reference: Well (0.00N,0.00E,270.12Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Plan: Plan #1 Date Composed: 7/2/2012
Principal: Yes Version: 1
Tied-to: From Surface

Field: Eddy Co., NM (NAD 83)

Map System: JS State Plane Coordinate System 1983 Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980 Coordinate System: Well Centre
Sys Datum: Mean Sea Level Geomagnetic Model: IGRF2010

Site: Emerald PWU 20 #7H

Site Position: Northing: 598011.04 ft Latitude: 32 38 37 459 N
From: Map Easting: 616680.22 ft Longitude: 104 5 18.822 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3324.00 ft Grid Convergence: 0.13 deg

Well: PWU 20 #7H Slot Name:

Well Position: +N/-S 0.00 ft Northing: 598011.04 ft Latitude: 32 38 37 459 N
+E/-W 0.00 ft Easting: 616680.22 ft Longitude: 104 5 18.822 W
Position Uncertainty: 0.00 ft

Wellpath: 1

Current Datum: SITE Height 3343.00 ft
Magnetic Data: 11/15/2012
Field Strength: 48695 nT
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 270.12

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	270.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6360.12	0.00	270.12	6360.12	0.00	0.00	0.00	0.00	0.00	0.00	
7269.31	90.92	270.12	6933.00	1.26	-582.15	10.00	10.00	0.00	270.12	
10075.31	90.92	270.12	6888.00	7.31	-3387.78	0.00	0.00	0.00	0.00	Tgt
10120.31	92.27	270.12	6886.75	7.41	-3432.76	3.00	3.00	0.00	-0.01	
11604.18	92.27	270.12	6828.00	10.60	-4915.46	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comments
6300.00	0.00	270.12	6300.00	0.00	0.00	0.00	0.00	598011.04	616680.22	
6360.12	0.00	270.12	6360.12	0.00	0.00	0.00	0.00	598011.04	616680.22	KOP
6400.00	3.99	270.12	6399.97	0.00	-1.39	1.39	10.00	598011.04	616678.83	
6450.00	8.99	270.12	6449.63	0.02	-7.04	7.04	10.00	598011.06	616673.18	
6500.00	13.99	270.12	6498.61	0.04	-16.99	16.99	10.00	598011.08	616663.23	
6550.00	18.99	270.12	6546.54	0.07	-31.18	31.18	10.00	598011.11	616649.04	
6600.00	23.99	270.12	6593.05	0.11	-49.49	49.49	10.00	598011.15	616630.73	
6650.00	28.99	270.12	6637.79	0.15	-71.78	71.78	10.00	598011.19	616608.44	
6700.00	33.99	270.12	6680.41	0.21	-97.89	97.89	10.00	598011.25	616582.33	
6750.00	38.99	270.12	6720.60	0.28	-127.61	127.61	10.00	598011.32	616552.61	
6800.00	43.99	270.12	6758.04	0.35	-160.72	160.72	10.00	598011.39	616519.50	
6850.00	48.99	270.12	6792.46	0.43	-196.97	196.97	10.00	598011.47	616483.25	
6900.00	53.99	270.12	6823.58	0.51	-236.08	236.08	10.00	598011.55	616444.14	
6950.00	58.99	270.12	6851.18	0.60	-277.76	277.76	10.00	598011.64	616402.46	
7000.00	63.99	270.12	6875.04	0.69	-321.68	321.68	10.00	598011.73	616358.54	



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WFT Plan Report - X & Y's



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Emerald PWU 20 #7H
Well: PWU 20 #7H
Wellpath: 1

Date: 7/2/2012 Time: 07:58.04 Page: 2
Co-ordinate(NE) Reference: Well: PWU 20 #7H, Gnd North
Vertical (TVD) Reference: SITE 3343 0
Section (VS) Reference: Well (0 00N,0 00E,270.12Azi)
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	MapN ft	MapE ft	Comments
7050.00	68.99	270.12	6894.98	0.79	-367.52	367.52	10.00	598011.83	616312.70	
7100.00	73.99	270.12	6910.85	0.90	-414.91	414.91	10.00	598011.94	616265.31	
7150.00	78.99	270.12	6922.53	1.00	-463.51	463.51	10.00	598012.04	616216.71	
7200.00	83.99	270.12	6929.93	1.11	-512.95	512.95	10.00	598012.15	616167.27	
7250.00	88.99	270.12	6932.99	1.21	-562.84	562.84	10.00	598012.25	616117.38	
7269.31	90.92	270.12	6933.00	1.26	-582.15	582.15	10.00	598012.30	616098.07	LP
7300.00	90.92	270.12	6932.51	1.32	-612.83	612.83	0.00	598012.36	616067.39	
7400.00	90.92	270.12	6930.91	1.54	-712.82	712.82	0.00	598012.58	615967.40	
7500.00	90.92	270.12	6929.30	1.75	-812.81	812.81	0.00	598012.79	615867.41	
7600.00	90.92	270.12	6927.70	1.97	-912.79	912.79	0.00	598013.01	615767.43	
7700.00	90.92	270.12	6926.10	2.19	-1012.78	1012.78	0.00	598013.23	615667.44	
7800.00	90.92	270.12	6924.49	2.40	-1112.77	1112.77	0.00	598013.44	615567.45	
7900.00	90.92	270.12	6922.89	2.62	-1212.75	1212.76	0.00	598013.66	615467.47	
8000.00	90.92	270.12	6921.28	2.83	-1312.74	1312.74	0.00	598013.87	615367.48	
8100.00	90.92	270.12	6919.68	3.05	-1412.73	1412.73	0.00	598014.09	615267.49	
8200.00	90.92	270.12	6918.08	3.26	-1512.71	1512.72	0.00	598014.30	615167.51	
8300.00	90.92	270.12	6916.47	3.48	-1612.70	1612.70	0.00	598014.52	615067.52	
8400.00	90.92	270.12	6914.87	3.70	-1712.69	1712.69	0.00	598014.74	614967.53	
8500.00	90.92	270.12	6913.27	3.91	-1812.67	1812.68	0.00	598014.95	614867.55	
8600.00	90.92	270.12	6911.66	4.13	-1912.66	1912.67	0.00	598015.17	614767.56	
8700.00	90.92	270.12	6910.06	4.34	-2012.65	2012.65	0.00	598015.38	614667.57	
8800.00	90.92	270.12	6908.45	4.56	-2112.64	2112.64	0.00	598015.60	614567.58	
8900.00	90.92	270.12	6906.85	4.77	-2212.62	2212.63	0.00	598015.81	614467.60	
9000.00	90.92	270.12	6905.25	4.99	-2312.61	2312.61	0.00	598016.03	614367.61	
9100.00	90.92	270.12	6903.64	5.21	-2412.60	2412.60	0.00	598016.25	614267.62	
9200.00	90.92	270.12	6902.04	5.42	-2512.58	2512.59	0.00	598016.46	614167.64	
9300.00	90.92	270.12	6900.43	5.64	-2612.57	2612.58	0.00	598016.68	614067.65	
9400.00	90.92	270.12	6898.83	5.85	-2712.56	2712.56	0.00	598016.89	613967.66	
9500.00	90.92	270.12	6897.23	6.07	-2812.54	2812.55	0.00	598017.11	613867.68	
9600.00	90.92	270.12	6895.62	6.28	-2912.53	2912.54	0.00	598017.32	613767.69	
9700.00	90.92	270.12	6894.02	6.50	-3012.52	3012.52	0.00	598017.54	613667.70	
9800.00	90.92	270.12	6892.42	6.72	-3112.50	3112.51	0.00	598017.76	613567.72	
9900.00	90.92	270.12	6890.81	6.93	-3212.49	3212.50	0.00	598017.97	613467.73	
10000.00	90.92	270.12	6889.21	7.15	-3312.48	3312.49	0.00	598018.19	613367.74	
10075.31	90.92	270.12	6888.00	7.31	-3387.78	3387.79	0.00	598018.35	613292.44	Tgt
10100.00	91.66	270.12	6887.44	7.36	-3412.46	3412.47	3.00	598018.40	613267.76	
10120.31	92.27	270.12	6886.75	7.41	-3432.76	3432.77	3.00	598018.45	613247.46	Hold
10200.00	92.27	270.12	6883.59	7.58	-3512.39	3512.40	0.00	598018.62	613167.83	
10300.00	92.27	270.12	6879.63	7.79	-3612.31	3612.32	0.00	598018.83	613067.91	
10400.00	92.27	270.12	6875.68	8.01	-3712.23	3712.24	0.00	598019.05	612967.99	
10500.00	92.27	270.12	6871.72	8.22	-3812.15	3812.16	0.00	598019.26	612868.07	
10600.00	92.27	270.12	6867.76	8.44	-3912.07	3912.08	0.00	598019.48	612768.15	
10700.00	92.27	270.12	6863.80	8.65	-4011.99	4012.00	0.00	598019.69	612668.23	
10800.00	92.27	270.12	6859.84	8.87	-4111.92	4111.93	0.00	598019.91	612568.30	
10900.00	92.27	270.12	6855.88	9.08	-4211.84	4211.85	0.00	598020.12	612468.38	
11000.00	92.27	270.12	6851.92	9.30	-4311.76	4311.77	0.00	598020.34	612368.46	
11100.00	92.27	270.12	6847.96	9.52	-4411.68	4411.69	0.00	598020.56	612268.54	
11200.00	92.27	270.12	6844.00	9.73	-4511.60	4511.61	0.00	598020.77	612168.62	
11300.00	92.27	270.12	6840.04	9.95	-4611.52	4611.53	0.00	598020.99	612068.70	
11400.00	92.27	270.12	6836.08	10.16	-4711.44	4711.45	0.00	598021.20	611968.78	
11500.00	92.27	270.12	6832.12	10.38	-4811.37	4811.38	0.00	598021.42	611868.85	
11604.18	92.27	270.12	6828.00	10.60	-4915.46	4915.47	0.00	598021.64	611764.76	PBHL



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WFT Plan Report - X & Y's



Company: Devon Energy	Date: 7/2/2012	Time: 07:58:04	Page: 3
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well. PWU 20 #7H, Grnd North		
Site: Emerald PWU 20 #7H	Vertical (TVD) Reference: SITE 3343.0		
Well: PWU 20 #7H	Section (VS) Reference: Well (0 00N,0.00E,270 12Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature		Db: Sybase

Targets

Name	Description	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<---- Longitude ---->				
								Deg	Min	Sec	Deg	Min	Sec		
PBHL			6828.00	10.60	-4915.46	598021.64	611764.76	32	38	37.672	N	104	6	16.311	W
Tgt			6888.00	7.31	-3387.78	598018.35	613292.44	32	38	37.607	N	104	5	58.444	W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6360.12	6360.12	KOP
7269.31	6933.00	LP
10075.31	6888.00	T1/Build
10120.31	6886.75	Hold
11604.17	6828.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction



Weatherford Anticollision Report



Company: Devon Energy Date: 7/2/2012 Time: 07 57 00 Page: 1
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H Co-ordinate(NE) Reference: Well. PWU 20 #7H, Grid North
Reference Well: PWU 20 #7H Vertical (TVD) Reference: SITE 3343 0
Reference Wellpath: Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria

Interpolation Method MD Interval: 100.00 ft
Depth Range: 0.00 to 11604.18 ft
Maximum Radius 40000.00 ft

Reference: Plan Plan #1
Error Model: ISCWSA Ellipse
Scan Method: Closest Approach 3D
Error Surface: Ellipse

Plan: Plan #1

Date Composed: 7/2/2012
Version: 1
Tied-to: From Surface

Principal: Yes

Summary

Site	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Edge Distance ft	Separation Distance ft	Factor	Warning
Emerald PWU 20 #3H	20 #3H	1 VO	11604.18	6855.05	514.24	366.40	3.48	
Exist Parkway 13	Exist. Parkway 13	1 VO	0.00	179996.09	855.21	661.70	4.42	

Site: Emerald PWU 20 #3H
Well: 20 #3H
Wellpath: 1 VO

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset MD ft	TVD ft	Semi-Major Axis Ref ft	Offset TFO-IIS deg	Offset Location North ft	East ft	Ctr-Ctr Edge Distance ft	Separation Distance ft	Factor	Warning
0.00	0.00	7.29	7.29	0.00	0.01	275.27	453.26	-4916.41	4937.26		No Data
100.00	100.00	106.20	106.20	0.09	0.13	275.28	454.11	-4916.32	4937.25	4937.03	22301.36
200.00	200.00	202.62	202.60	0.32	0.39	275.30	455.76	-4916.27	4937.36	4936.66	7033.13
300.00	300.00	325.49	325.42	0.54	0.71	275.34	459.10	-4915.83	4937.25	4936.00	3940.83
400.00	400.00	431.32	431.19	0.77	0.99	275.38	462.53	-4915.01	4936.79	4935.03	2806.37
500.00	500.00	552.27	552.09	0.99	1.31	275.42	466.07	-4913.85	4936.11	4933.81	2143.38
600.00	600.00	716.41	716.16	1.21	1.73	275.47	470.05	-4911.10	4934.75	4931.80	1675.55
700.00	700.00	825.80	825.48	1.44	2.00	275.50	472.39	-4908.34	4932.43	4929.00	1434.96
800.00	800.00	923.76	923.39	1.66	2.24	275.52	474.39	-4905.77	4930.02	4926.12	1262.64
900.00	900.00	1008.09	1007.68	1.89	2.45	275.55	476.07	-4903.75	4927.83	4923.48	1134.98
1000.00	1000.00	1092.29	1091.85	2.11	2.67	275.57	477.63	-4902.01	4925.95	4921.16	1030.00
1100.00	1100.00	1174.45	1173.99	2.34	2.88	275.58	478.97	-4900.61	4924.41	4919.19	943.28
1200.00	1200.00	1264.62	1264.13	2.56	3.12	275.60	480.23	-4899.36	4923.17	4917.49	866.72
1300.00	1300.00	1350.27	1349.78	2.79	3.34	275.61	481.24	-4898.38	4922.14	4916.01	803.03
1400.00	1400.00	1444.60	1444.09	3.01	3.59	275.62	482.26	-4897.55	4921.37	4914.77	745.39
1500.00	1500.00	1548.62	1548.11	3.24	3.86	275.63	483.04	-4896.66	4920.59	4913.50	693.51
1600.00	1600.00	1641.86	1641.35	3.46	4.10	275.64	483.57	-4895.86	4919.81	4912.25	650.89
1700.00	1700.00	1741.94	1741.42	3.69	4.36	275.65	484.23	-4895.13	4919.14	4911.09	611.54
1800.00	1800.00	1836.50	1835.98	3.91	4.61	275.66	484.88	-4894.44	4918.48	4909.96	577.49
1900.00	1900.00	1939.11	1938.58	4.14	4.88	275.67	485.59	-4893.76	4917.89	4908.88	545.74
2000.00	2000.00	2040.49	2039.96	4.36	5.14	275.67	486.18	-4893.03	4917.23	4907.73	517.55
2100.00	2100.00	2129.49	2128.95	4.59	5.38	275.68	486.78	-4892.47	4916.67	4906.71	493.65
2200.00	2200.00	2229.22	2228.67	4.81	5.64	275.69	487.48	-4891.97	4916.25	4905.80	470.51
2300.00	2300.00	2331.88	2331.33	5.04	5.91	275.70	488.16	-4891.42	4915.78	4904.84	449.10
2400.00	2400.00	2430.09	2429.54	5.26	6.17	275.71	488.95	-4890.89	4915.32	4903.89	430.01
2500.00	2500.00	2538.00	2537.44	5.49	6.46	275.72	489.68	-4890.21	4914.76	4902.82	411.66
2600.00	2600.00	2636.08	2635.52	5.71	6.71	275.73	490.20	-4889.57	4914.17	4901.75	395.65
2700.00	2700.00	2734.47	2733.91	5.93	6.97	275.73	490.70	-4888.97	4913.61	4900.71	380.81
2800.00	2800.00	2834.81	2834.24	6.16	7.23	275.74	491.19	-4888.38	4913.07	4899.68	366.89
2900.00	2900.00	2937.61	2937.04	6.38	7.50	275.74	491.73	-4887.73	4912.49	4898.60	353.77
3000.00	3000.00	12303.00	7841.86	6.61	122.08	334.86	595.02	-279.18	4879.13	4836.62	114.79
3100.00	3100.00	12303.00	7841.86	6.83	122.08	334.86	595.02	-279.18	4780.06	4737.21	111.56
3200.00	3200.00	12303.00	7841.86	7.06	122.08	334.86	595.02	-279.18	4681.03	4637.83	108.36
3300.00	3300.00	12303.00	7841.86	7.28	122.08	334.86	595.02	-279.18	4582.04	4538.48	105.19
3400.00	3400.00	12303.00	7841.86	7.51	122.08	334.86	595.02	-279.18	4483.10	4439.17	102.06
3500.00	3500.00	12303.00	7841.86	7.73	122.08	334.86	595.02	-279.18	4384.20	4339.90	98.96



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H
Reference Well: PWU 20 #7H
Reference Wellpath:

Date: 7/2/2012 Time: 07:57.00
Co-ordinate(NE) Reference: Well. PWU 20 #7H, Grid North
Vertical (TVD) Reference: SITE 3343 0

Page: 2

Db: Sybase

Site: Emerald PWU 20 #3H
Well: 20 #3H
Wellpath: 1 V0

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3600.00	3600.00	12303.00	7841.86	7.96	122.08	334.86	595.02	-279.18	4285.36	4240.67	95.89	
3700.00	3700.00	12303.00	7841.86	8.18	122.08	334.86	595.02	-279.18	4186.57	4141.48	92.86	
3800.00	3800.00	12303.00	7841.86	8.41	122.08	334.86	595.02	-279.18	4087.84	4042.34	89.85	
3900.00	3900.00	12303.00	7841.86	8.63	122.08	334.86	595.02	-279.18	3989.17	3943.26	86.88	
4000.00	4000.00	12303.00	7841.86	8.86	122.08	334.86	595.02	-279.18	3890.57	3844.22	83.93	
4100.00	4100.00	12303.00	7841.86	9.08	122.08	334.86	595.02	-279.18	3792.05	3745.24	81.02	
4200.00	4200.00	12303.00	7841.86	9.31	122.08	334.86	595.02	-279.18	3693.60	3646.33	78.13	
4300.00	4300.00	12303.00	7841.86	9.53	122.08	334.86	595.02	-279.18	3595.24	3547.48	75.27	
4400.00	4400.00	12303.00	7841.86	9.76	122.08	334.86	595.02	-279.18	3496.98	3448.71	72.45	
4500.00	4500.00	12303.00	7841.86	9.98	122.08	334.86	595.02	-279.18	3398.81	3350.01	69.65	
4600.00	4600.00	12303.00	7841.86	10.21	122.08	334.86	595.02	-279.18	3300.76	3251.40	66.88	
4700.00	4700.00	12303.00	7841.86	10.43	122.08	334.86	595.02	-279.18	3202.82	3152.88	64.14	
4800.00	4800.00	12303.00	7841.86	10.66	122.08	334.86	595.02	-279.18	3105.02	3054.46	61.42	
4900.00	4900.00	12303.00	7841.86	10.88	122.08	334.86	595.02	-279.18	3007.36	2956.16	58.74	
5000.00	5000.00	12303.00	7841.86	11.10	122.08	334.86	595.02	-279.18	2909.86	2857.97	56.08	
5100.00	5100.00	12303.00	7841.86	11.33	122.08	334.86	595.02	-279.18	2812.53	2759.92	53.46	
5200.00	5200.00	12303.00	7841.86	11.55	122.08	334.86	595.02	-279.18	2715.40	2662.01	50.86	
5300.00	5300.00	12303.00	7841.86	11.78	122.08	334.86	595.02	-279.18	2618.49	2564.26	48.29	
5400.00	5400.00	12303.00	7841.86	12.00	122.08	334.86	595.02	-279.18	2521.81	2466.70	45.76	
5500.00	5500.00	12303.00	7841.86	12.23	122.08	334.86	595.02	-279.18	2425.41	2369.34	43.25	
5600.00	5600.00	12303.00	7841.86	12.45	122.08	334.86	595.02	-279.18	2329.31	2272.20	40.79	
5700.00	5700.00	12303.00	7841.86	12.68	122.08	334.86	595.02	-279.18	2233.55	2175.31	38.35	
5800.00	5800.00	12303.00	7841.86	12.90	122.08	334.86	595.02	-279.18	2138.18	2078.71	35.96	
5900.00	5900.00	12303.00	7841.86	13.13	122.08	334.86	595.02	-279.18	2043.25	1982.44	33.60	
6000.00	6000.00	12303.00	7841.86	13.35	122.08	334.86	595.02	-279.18	1948.83	1886.54	31.29	
6100.00	6100.00	12303.00	7841.86	13.58	122.08	334.86	595.02	-279.18	1855.00	1791.07	29.02	
6200.00	6200.00	12303.00	7841.86	13.80	122.08	334.86	595.02	-279.18	1761.84	1696.10	26.80	
6300.00	6300.00	12303.00	7841.86	14.03	122.08	334.86	595.02	-279.18	1669.48	1601.72	24.64	
6400.00	6399.97	12303.00	7841.86	14.25	122.08	73.27	595.02	-279.18	1577.83	1507.81	22.54	
6500.00	6498.61	12303.00	7841.86	14.48	122.08	96.46	595.02	-279.18	1485.85	1413.34	20.49	
6600.00	6593.05	12303.00	7841.86	14.72	122.08	116.30	595.02	-279.18	1395.80	1320.78	18.61	
6700.00	6680.41	12303.00	7841.86	15.02	122.08	129.72	595.02	-279.18	1311.08	1233.82	16.97	
6800.00	6758.04	12303.00	7841.86	15.44	122.08	138.06	595.02	-279.18	1235.62	1156.42	15.60	
6900.00	6823.58	12303.00	7841.86	16.07	122.08	143.10	595.02	-279.18	1173.70	1092.84	14.52	
7000.00	6875.04	12267.44	7842.23	16.99	121.11	145.52	594.83	-314.74	1128.99	1047.21	13.81	
7100.00	6910.85	12170.86	7843.22	18.25	118.48	146.31	594.24	-411.31	1099.09	1017.51	13.47	
7200.00	6929.93	12070.88	7844.20	19.81	115.76	146.73	593.01	-511.27	1083.11	1002.08	13.37	
7300.00	6932.51	11975.71	7845.68	21.60	113.17	146.92	591.29	-606.42	1081.15	1000.91	13.47	
7400.00	6930.91	11876.30	7848.00	23.58	110.46	147.14	589.02	-705.77	1083.10	1003.73	13.65	
7500.00	6929.30	11762.87	7850.29	25.70	107.37	147.42	585.76	-819.14	1084.49	1006.18	13.85	
7600.00	6927.70	11656.36	7851.77	27.93	104.47	147.71	581.57	-925.55	1084.79	1007.39	14.02	
7700.00	6926.10	11558.56	7852.86	30.24	101.83	147.95	577.99	-1023.28	1085.02	1008.27	14.14	
7800.00	6924.49	11452.86	7853.19	32.63	98.96	148.16	574.81	-1128.93	1084.92	1008.84	14.26	
7900.00	6922.89	11353.99	7852.54	35.07	96.27	148.26	573.27	-1227.79	1084.80	1009.07	14.33	
8000.00	6921.28	11254.01	7851.71	37.55	93.56	148.36	571.81	-1327.75	1084.57	1009.18	14.39	
8100.00	6919.68	11151.00	7851.20	40.07	90.77	148.48	570.05	-1430.75	1084.52	1009.51	14.46	
8200.00	6918.08	11046.37	7850.35	42.62	87.94	148.64	567.33	-1535.34	1083.72	1009.15	14.53	
8300.00	6916.47	10943.90	7849.41	45.19	85.16	148.79	564.68	-1637.77	1082.85	1008.67	14.60	
8400.00	6914.87	10859.72	7848.76	47.78	82.88	148.90	562.72	-1721.92	1082.29	1008.16	14.60	
8500.00	6913.27	10770.40	7848.90	50.39	80.46	148.97	562.33	-1811.24	1083.43	1009.33	14.62	
8600.00	6911.66	10665.72	7849.34	53.01	77.64	149.07	561.63	-1915.92	1084.71	1010.90	14.69	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H
Reference Well: PWU 20 #7H
Reference Wellpath#:

Date: 7/2/2012 Time: 07:57 00 Page: 3
Co-ordinate(NE) Reference: Well PWU 20 #7H, Grid North
Vertical (TVD) Reference: SITE 3343 0
Db: Sybase

Site: Emerald PWU 20 #3H
Well: 20 #3H
Wellpath: 1 V0

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
8700 00	6910 06	10556 20	7849 28	55 65	74 69	149 19	560.18	-2025.43	1085 26	1011 82	14.78	
8800 00	6908 45	10453.50	7848 49	58 30	71 92	149 29	558 82	-2128 11	1085 19	1011 99	14 82	
8900 00	6906.85	10362.00	7847 94	60 95	69.47	149 37	557 70	-2219 61	1085 32	1012.17	14 84	
9000.00	6905.25	10287 19	7848.76	63 62	67.45	149 47	556 92	-2294 41	1087 03	1013.70	14 82	
9100 00	6903 64	10169 45	7851.38	66 29	64.31	149 67	555 38	-2412 10	1089.63	1016.88	14 98	
9200 00	6902 04	10064 77	7852.61	68 97	61.52	149.87	553.00	-2516 75	1090 79	1018 42	15 07	
9300.00	6900 43	9953 48	7852.94	71.66	58.55	150.05	550.34	-2628 00	1091 12	1019 21	15.17	
9400 00	6898 83	9859 79	7852 56	74.35	56 07	150.19	548.12	-2721 67	1090 90	1019 11	15.20	
9500 00	6897 23	9786.02	7853 48	77.04	54.11	150.30	547 12	-2795 42	1092 58	1020.57	15 17	
9600 00	6895.62	9705.94	7856.07	79.74	52.00	150 43	546 57	-2875.46	1096.34	1024.24	15 21	
9700 00	6894 02	9587.94	7860 31	82 44	48 91	150 65	545 50	-2993.38	1100.33	1028.79	15 38	
9800 00	6892 42	9462 93	7862 50	85.15	45.65	150 87	543.41	-3118.34	1102.37	1031.45	15.54	
9900 00	6890 81	9358 32	7862.35	87.85	42 94	151 02	541.08	-3222.93	1102.44	1031.77	15 60	
10000.00	6889 21	9251.04	7862 23	90 57	40 19	151 15	539.28	-3330.19	1102 86	1032 41	15 65	
10100.00	6887 44	9154 84	7861 18	93.28	37.75	151 24	537.79	-3426.38	1102 60	1032 14	15 65	
10200 00	6883.59	9056 62	7860.38	95 99	35.28	151 38	536.60	-3524 59	1104.58	1034.20	15 69	
10300.00	6879 63	8969 67	7860 79	98 71	33 12	151 51	536.00	-3611 53	1107 97	1037.48	15 72	
10400.00	6875 68	8879 38	7861 65	101 43	30 93	151 66	535.37	-3701.82	1111 85	1041 29	15 76	
10500 00	6871.72	8814.73	7863 80	104 15	29 39	151 80	534.95	-3766 42	1117 83	1046 82	15 74	
10600.00	6867 76	8753.81	7867 84	106 87	27 96	151.98	534.48	-3827 20	1126 83	1055.38	15 77	
10700 00	6863.80	8673.12	7871 18	109 59	13 71	94 14	523 10	-4944.18	1064 72	941 70	8.66	
10800 00	6859.84	8671.12	7869 18	112 32	13 71	93 92	523.17	-4944.14	978 32	852 56	7.78	
10900 00	6855 88	8669.12	7867.18	115.04	13.70	93 70	523 24	-4944 11	894 76	766 25	6 96	
11000 00	6851.92	8667.12	7865 18	117 77	13 70	93 48	523.31	-4944 07	814 90	683.65	6 21	
11100.00	6847 96	8665.12	7863.18	120 50	13 70	93 25	523 38	-4944.03	739 95	605 95	5.52	
11200 00	6844 00	8663 12	7861 19	123 23	13.70	93 03	523.46	-4943 99	671 54	534.80	4 91	
11300 00	6840 04	8661.12	7859 19	125 96	13 70	92 81	523.53	-4943 95	611 90	472.41	4.39	
11400 00	6836 08	8659.12	7857 20	128 69	13 70	92 58	523 60	-4943 91	563 78	421 55	3.96	
11500 00	6832.12	8657 13	7855 21	131 42	13.70	92 36	523.67	-4943 87	530 36	385 38	3 66	
11600 00	6828 17	8655 14	7853.21	134 15	13.70	92 14	523 74	-4943 83	514.49	366 76	3 48	
11604 18	6828 00	8655.05	7853 13	134 27	13 70	92 13	523.74	-4943 83	514 24	366.40	3.48	

Site: Exist Parkway 13
Well: Exist Parkway 13
Wellpath: 1 V0

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
0 00	0.00	179996 09	-3.91	0.00	193.51	289 19	281 17	-807 67	855 21	661 70	4.42	
100.00	100 00	93.83	93.83	0.09	0 10	289 19	281 12	-807 81	855 33	855.14	4457.00	
200.00	200.00	193 81	193.81	0.32	0 35	289 16	280 85	-808 19	855 60	854 93	1281.94	
300.00	300 00	293 57	293.57	0.54	0 61	289 13	280.42	-808 62	855 87	854.71	741.75	
400.00	400 00	396 49	396.49	0.77	0 87	289 08	279.84	-808 96	855 99	854.35	522.76	
500 00	500.00	498 19	498 18	0.99	1 09	289 05	279 27	-808 98	855 83	853.75	411.55	
600 00	600.00	597 07	597 06	1.21	1 30	289.03	279.02	-808 87	855 64	853 13	340 85	
700 00	700.00	700 31	700 30	1 44	1.47	289 03	278 87	-808 58	855.33	852 42	293.73	
800 00	800.00	805 79	805 78	1 66	1.59	289 06	279 07	-807 59	854.50	851 25	262 56	
900 00	900 00	908 10	908 08	1.89	1 72	289 12	279 51	-806.04	853.21	849 61	236 68	
1000 00	1000.00	1008 45	1008.41	2.11	1.87	289.20	280.09	-804 29	851 75	847.77	214.01	
1100 00	1100 00	1104 10	1104.05	2.34	2.02	289.28	280.83	-802.82	850 56	846.20	195 20	
1200 00	1200.00	1202 91	1202.83	2 56	2.18	289.37	281.81	-801 55	849 68	844.93	179 05	
1300.00	1300 00	1298 80	1298 71	2 79	2 34	289 48	283.09	-800 53	849 12	843.99	165 54	



Weatherford Anticollision Report



Company: Devon Energy Date: 7/2/2012 Time: 07 57 00 Page: 4
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H Co-ordinate(NE) Reference: Well: PWU 20 #7H, Grd North
Reference Well: PWU 20 #7H Vertical (TVD) Reference: SITE 3343 0
Reference Wellpath: Db: Sybase

Site: Exist Parkway 13
Well: Exist Parkway 13
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference MD	Reference TVD	Offset MD	Offset TVD	Semi-Major Axis Ref	Offset	TFO-HS	Offset Location North	Offset Location East	Ctr-Ctr Distance	Edge Distance	Separation Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
1400.00	1400.00	1400.94	1400.84	3.01	2.52	289.59	284.60	-799.51	848.67	843.14	153.35	
1500.00	1500.00	1497.10	1496.98	3.24	2.70	289.71	286.08	-798.63	848.33	842.39	142.85	
1600.00	1600.00	1595.79	1595.65	3.46	2.89	289.83	287.82	-797.98	848.30	841.95	133.61	
1700.00	1700.00	1691.16	1691.01	3.69	3.07	289.96	289.67	-797.62	848.60	841.85	125.67	
1800.00	1800.00	1792.29	1792.12	3.91	3.26	290.08	291.57	-797.52	849.16	841.99	118.43	
1900.00	1900.00	1890.99	1890.80	4.14	3.46	290.20	293.38	-797.40	849.68	842.09	111.91	
2000.00	2000.00	1991.30	1991.09	4.36	3.66	290.33	295.34	-797.33	850.28	842.26	105.95	
2100.00	2100.00	2092.15	2091.92	4.59	3.88	290.45	297.23	-797.20	850.81	842.35	100.48	
2200.00	2200.00	2192.79	2192.55	4.81	4.11	290.56	298.90	-797.05	851.25	842.34	95.47	
2300.00	2300.00	2295.02	2294.77	5.04	4.34	290.65	300.29	-796.83	851.54	842.16	90.81	
2400.00	2400.00	2397.76	2397.50	5.26	4.59	290.72	301.34	-796.42	851.52	841.67	86.45	
2500.00	2500.00	2498.68	2498.42	5.49	4.84	290.80	302.25	-795.82	851.29	840.96	82.45	
2600.00	2600.00	2598.59	2598.32	5.71	5.09	290.86	303.08	-795.21	851.01	840.21	78.81	
2700.00	2700.00	2700.99	2700.72	5.93	5.34	290.92	303.66	-794.53	850.60	839.32	75.43	
2800.00	2800.00	2801.10	2800.82	6.16	5.59	290.96	304.08	-793.77	850.03	838.29	72.37	
2900.00	2900.00	2900.54	2900.27	6.38	5.83	291.02	304.65	-792.98	849.50	837.28	69.53	
3000.00	3000.00	3000.50	3000.22	6.61	6.09	291.07	305.29	-792.20	849.00	836.30	66.88	
3100.00	3100.00	3100.42	3100.13	6.83	6.34	291.13	305.81	-791.47	848.51	835.34	64.42	
3200.00	3200.00	3197.59	3197.30	7.06	6.58	291.18	306.39	-790.91	848.19	834.54	62.17	
3300.00	3300.00	3296.50	3296.21	7.28	6.83	291.23	307.06	-790.56	848.10	833.98	60.07	
3400.00	3400.00	3396.50	3396.21	7.51	7.09	291.28	307.74	-790.27	848.08	833.48	58.11	
3500.00	3500.00	3494.74	3494.44	7.73	7.33	291.34	308.58	-790.03	848.15	833.09	56.31	
3600.00	3600.00	3595.02	3594.71	7.96	7.58	291.42	309.78	-789.74	848.33	832.79	54.61	
3700.00	3700.00	3695.37	3695.05	8.18	7.83	291.51	311.04	-789.39	848.46	832.45	52.99	
3800.00	3800.00	3796.47	3796.14	8.41	8.08	291.61	312.43	-788.90	848.51	832.02	51.45	
3900.00	3900.00	3895.55	3895.20	8.63	8.34	291.72	314.06	-788.29	848.54	831.58	50.01	
4000.00	4000.00	3997.19	3996.83	8.86	8.60	291.84	315.73	-787.62	848.55	831.10	48.62	
4100.00	4100.00	4096.71	4096.34	9.08	8.85	291.96	317.29	-786.92	848.48	830.54	47.31	
4200.00	4200.00	4196.97	4196.58	9.31	9.11	292.07	318.84	-786.24	848.42	830.00	46.06	
4300.00	4300.00	4299.48	4299.08	9.53	9.38	292.20	320.42	-785.36	848.21	829.30	44.85	
4400.00	4400.00	4401.49	4401.07	9.76	9.64	292.31	321.85	-784.24	847.73	828.33	43.70	
4500.00	4500.00	4500.03	4499.59	9.98	9.90	292.43	323.31	-783.09	847.22	827.34	42.61	
4600.00	4600.00	4599.42	4598.96	10.21	10.16	292.56	324.89	-782.02	846.83	826.46	41.58	
4700.00	4700.00	4697.88	4697.41	10.43	10.42	292.69	326.52	-781.07	846.57	825.72	40.60	
4800.00	4800.00	4795.02	4794.53	10.66	10.67	292.82	328.27	-780.34	846.57	825.25	39.70	
4900.00	4900.00	4888.48	4887.97	10.88	10.90	292.93	330.07	-780.13	847.12	825.35	38.90	
5000.00	5000.00	4994.56	4994.03	11.10	11.16	293.07	332.27	-779.98	847.81	825.54	38.08	
5100.00	5100.00	5097.44	5096.89	11.33	11.43	293.22	334.27	-779.18	847.86	825.10	37.26	
5200.00	5200.00	5203.79	5203.20	11.55	11.71	293.39	336.39	-777.74	847.40	824.14	36.43	
5300.00	5300.00	5315.56	5314.92	11.78	11.99	293.59	338.30	-774.86	845.70	821.94	35.59	
5400.00	5400.00	5411.39	5410.69	12.00	12.23	293.77	340.00	-772.06	843.74	819.51	34.82	
5500.00	5500.00	5510.92	5510.17	12.23	12.48	293.97	342.04	-769.29	842.02	817.32	34.08	
5600.00	5600.00	5610.05	5609.23	12.45	12.74	294.18	344.13	-766.56	840.36	815.18	33.36	
5700.00	5700.00	5703.91	5703.04	12.68	12.98	294.37	346.19	-764.37	839.14	813.49	32.71	
5800.00	5800.00	5793.09	5792.20	12.90	13.21	294.53	348.32	-763.22	838.95	812.84	32.13	
5900.00	5900.00	5882.72	5881.79	13.13	13.42	294.67	350.60	-763.23	840.03	813.48	31.65	
6000.00	6000.00	5975.72	5974.75	13.35	13.60	294.79	353.04	-764.31	842.17	815.22	31.24	
6100.00	6100.00	6067.80	6066.78	13.58	13.77	294.89	355.54	-766.16	845.14	817.79	30.91	
6200.00	6200.00	6167.42	6166.32	13.80	13.94	294.99	358.41	-768.83	848.78	821.04	30.60	
6300.00	6300.00	6267.74	6266.58	14.03	14.10	295.07	360.82	-771.47	852.19	824.06	30.30	
6400.00	6399.97	6368.63	6367.41	14.25	14.25	25.02	362.82	-774.37	854.37	825.90	30.00	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H
Reference Well: PWU 20 #7H
Reference Wellpath:

Date: 7/2/2012 Time: 07:57 00 Page: 5
Co-ordinate(NE) Reference: Well PWU 20 #7H, Grd North
Vertical (TVD) Reference: SITE 3343 0
Db: Sybase

Site: Exist. Parkway 13
Well: Exist. Parkway 13
Wellpath: 1 V0

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
6500.00	6498.61	6469.23	6467.96	14.48	14.39	25.97	364.48	-777.19	843.47	814.87	29.49	
6600.00	6593.05	6563.70	6562.37	14.72	14.53	28.22	365.98	-779.79	817.27	788.79	28.70	
6700.00	6680.41	6651.60	6650.22	15.02	14.65	32.10	367.33	-782.40	777.19	748.94	27.51	
6800.00	6758.04	6730.47	6729.05	15.44	14.76	38.14	368.40	-784.87	725.01	696.83	25.72	
6900.00	6823.58	6797.40	6795.94	16.07	14.85	46.93	369.25	-787.11	663.44	634.69	23.07	
7000.00	6875.04	6851.08	6849.58	16.99	14.92	58.61	369.87	-789.04	595.97	565.67	19.67	
7100.00	6910.85	6890.07	6888.53	18.25	14.96	71.76	370.25	-790.55	527.13	494.61	16.21	
7200.00	6929.93	6913.23	6911.68	19.81	14.99	83.28	370.45	-791.48	462.82	428.12	13.34	
7300.00	6932.51	6919.90	6918.35	21.60	15.00	88.87	370.50	-791.75	410.38	373.78	11.21	
7400.00	6930.91	6922.31	6920.75	23.58	15.00	89.24	370.52	-791.85	377.40	338.82	9.78	
7500.00	6929.30	6924.70	6923.14	25.70	15.01	89.61	370.54	-791.94	369.38	328.69	9.08	
7600.00	6927.70	6927.07	6925.51	27.93	15.01	89.98	370.56	-792.04	387.87	344.94	9.04	
7700.00	6926.10	6929.43	6927.86	30.24	15.01	90.35	370.58	-792.13	429.46	384.21	9.49	
7800.00	6924.49	6931.77	6930.21	32.63	15.01	90.71	370.60	-792.22	488.28	440.65	10.25	
7900.00	6922.89	6934.10	6932.53	35.07	15.02	91.07	370.62	-792.31	558.91	508.84	11.16	
8000.00	6921.28	6936.42	6934.85	37.55	15.02	91.43	370.64	-792.40	637.45	584.90	12.13	
8100.00	6919.68	6938.72	6937.15	40.07	15.02	91.79	370.65	-792.49	721.31	666.25	13.10	
8200.00	6918.08	6941.00	6939.43	42.62	15.03	92.14	370.67	-792.58	808.84	751.24	14.04	
8300.00	6916.47	6943.28	6941.70	45.19	15.03	92.50	370.69	-792.67	898.97	838.80	14.94	
8400.00	6914.87	6945.53	6943.96	47.78	15.03	92.85	370.71	-792.76	990.99	928.24	15.79	
8500.00	6913.27	6947.78	6946.20	50.39	15.03	93.19	370.72	-792.85	1084.42	1019.08	16.60	
8600.00	6911.66	6950.01	6948.43	53.01	15.04	93.54	370.74	-792.94	1178.92	1110.98	17.35	
8700.00	6910.06	6952.22	6950.64	55.65	15.04	93.88	370.76	-793.02	1274.26	1203.70	18.06	
8800.00	6908.45	6954.43	6952.84	58.30	15.04	94.22	370.77	-793.11	1370.26	1297.08	18.72	
8900.00	6906.85	6956.62	6955.03	60.95	15.04	94.56	370.79	-793.19	1466.79	1390.99	19.35	
9000.00	6905.25	6958.79	6957.20	63.62	15.05	94.89	370.81	-793.28	1563.75	1485.32	19.94	
9100.00	6903.64	6960.96	6959.37	66.29	15.05	95.23	370.82	-793.36	1661.08	1580.01	20.49	
9200.00	6902.04	6963.10	6961.51	68.97	15.05	95.56	370.84	-793.44	1758.69	1674.99	21.01	
9300.00	6900.43	6965.24	6963.65	71.66	15.05	95.88	370.85	-793.52	1856.56	1770.22	21.50	
9400.00	6898.83	6967.37	6965.77	74.35	15.06	96.21	370.87	-793.61	1954.65	1865.67	21.97	
9500.00	6897.23	6969.48	6967.88	77.04	15.06	96.53	370.88	-793.69	2052.91	1961.30	22.41	
9600.00	6895.62	6971.58	6969.98	79.74	15.06	96.85	370.90	-793.77	2151.34	2057.08	22.83	
9700.00	6894.02	6973.66	6972.06	82.44	15.06	97.17	370.91	-793.85	2249.90	2153.01	23.22	
9800.00	6892.42	6975.74	6974.14	85.15	15.07	97.49	370.93	-793.93	2348.58	2249.06	23.60	
9900.00	6890.81	6977.80	6976.20	87.85	15.07	97.80	370.94	-794.00	2447.36	2345.21	23.96	
10000.00	6889.21	6979.85	6978.24	90.57	15.07	98.11	370.96	-794.08	2546.24	2441.47	24.30	
10100.00	6887.44	6981.74	6980.13	93.28	15.07	98.23	370.97	-794.15	2645.20	2537.00	24.45	
10200.00	6883.59	6981.68	6980.07	95.99	15.07	98.89	370.97	-794.15	2744.26	2633.21	24.71	
10300.00	6879.63	6981.52	6979.92	98.71	15.07	98.86	370.97	-794.14	2843.38	2729.62	24.99	
10400.00	6875.68	6981.36	6979.76	101.43	15.07	98.84	370.97	-794.14	2942.56	2826.08	25.26	
10500.00	6871.72	6981.21	6979.60	104.15	15.07	98.81	370.97	-794.13	3041.80	2922.60	25.52	
10600.00	6867.76	6981.05	6979.45	106.87	15.07	98.79	370.97	-794.13	3141.08	3019.16	25.76	
10700.00	6863.80	6980.90	6979.29	109.59	15.07	98.76	370.97	-794.12	3240.41	3115.77	26.00	
10800.00	6859.84	6980.74	6979.14	112.32	15.07	98.74	370.96	-794.12	3339.78	3212.42	26.22	
10900.00	6855.88	6980.59	6978.99	115.04	15.07	98.72	370.96	-794.11	3439.18	3309.10	26.44	
11000.00	6851.92	6980.44	6978.84	117.77	15.07	98.69	370.96	-794.10	3538.62	3405.81	26.64	
11100.00	6847.96	6980.29	6978.68	120.50	15.07	98.67	370.96	-794.10	3638.09	3502.55	26.84	
11200.00	6844.00	6980.14	6978.53	123.23	15.07	98.65	370.96	-794.09	3737.59	3599.32	27.03	
11300.00	6840.04	6979.99	6978.39	125.96	15.07	98.62	370.96	-794.09	3837.11	3696.12	27.21	
11400.00	6836.08	6979.84	6978.24	128.69	15.07	98.60	370.96	-794.08	3936.66	3792.94	27.39	



Weatherford Anticollision Report



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Reference Site: Emerald PWU 20 #7H
Reference Well: PWU 20 #7H
Reference Wellpath:

Date: 7/2/2012 Time: 07:57 00 Page: 6
Co-ordinate(NE) Reference: Well: PWU 20 #7H, Grid North
Vertical (TVD) Reference: SITE 3343.0
Db: Sybase

Site: Exist Parkway 13
Well: Exist Parkway 13
Wellpath: 1 V0

Inter-Site Error: 0 00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
11500 00	6832 12	6979.69	6978.09	131 42	15 07	88 58	370.96	-794 08	4036 23	3889.78	27.56	
11600 00	6828.17	6979.55	6977.94	134 15	15.07	88 55	370.96	-794 07	4135.82	3986.63	27 72	
11604.18	6828 00	6979.54	6977.94	134 27	15 07	88 55	370.96	-794 07	4139 98	3990 68	27.73	

**Weatherford®****Weatherford Drilling Services**

GeoDec v5.03

Report Date: July 02, 2012
Job Number: _____
Customer: Devon Energy
Well Name: Emerald PWU 20 #7H
API Number: _____
Rig Name: _____
Location: Eddy Co., NM (NAD 83)
Block: _____
Engineer: RWJ

US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 598011.040 USFT	Latitude 32.6437419 DEG
East/West 616680.220 USFT	Longitude -104.0885576 DEG
Grid Convergence: .13°	
Total Correction: +7.55°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.64374° N	32° 38 min 37.471 sec
Longitude =	104.08856° W	104° 5 min 18.808 sec

Magnetic Declination =	7.68°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6647
Local Field Strength =	48691 nT	Magnetic Vector X = 23797 nT
Magnetic Dip =	60.45°	Magnetic Vector Y = 3210 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42358 nT
Spud Date =	Nov 15, 2012	Magnetic Vector H = 24013 nT

Signed: _____

Date: _____