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Drilling Services

Proposal



devon

ONYX PWU 29 #3H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

AUGUST 19, 2011

Weatherford International, Ltd.

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Onyx PWU 29 #3H
Eddy Co, NM

SECTION DETAILS

Sec	MD	Inc	A/i	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	90.07	0.00	0.00	0.00	0.00	0.00	0.00	
2	7247.25	0.00	90.07	7247.25	0.00	0.00	0.00	0.00	0.00	
3	8131.78	88.45	90.07	7820.00	-0.68	557.49	10.00	90.07	557.49	
4	12205.59	88.45	90.07	7930.00	-5.61	4629.81	0.00	0.00	4629.81	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
29 #3H	0.00	0.00	593176.81	611778.63	32°37'49.731N	104°06'16.271W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	7930.00	-5.61	4629.81	593171.20	616408.44	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)

Geodetic 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

Onyx PWU 29 #3H

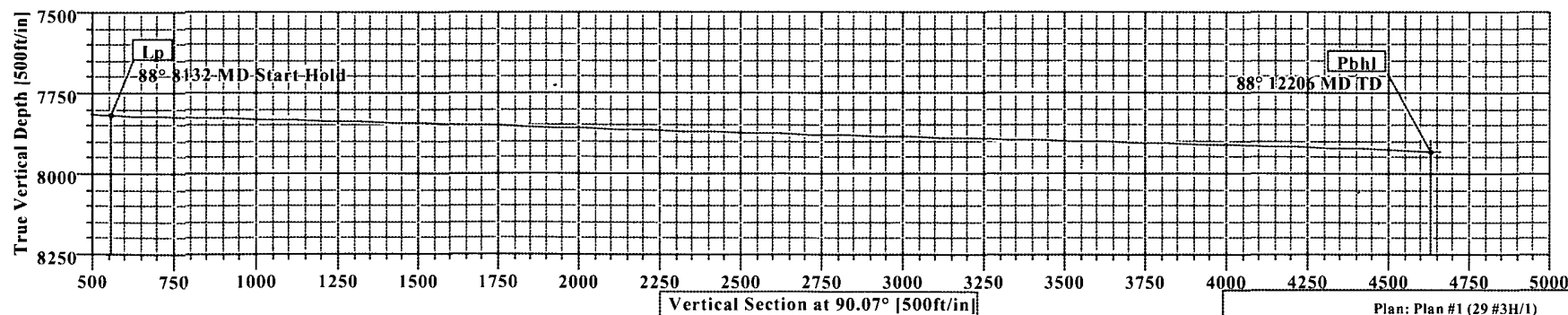
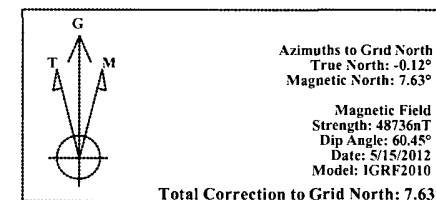
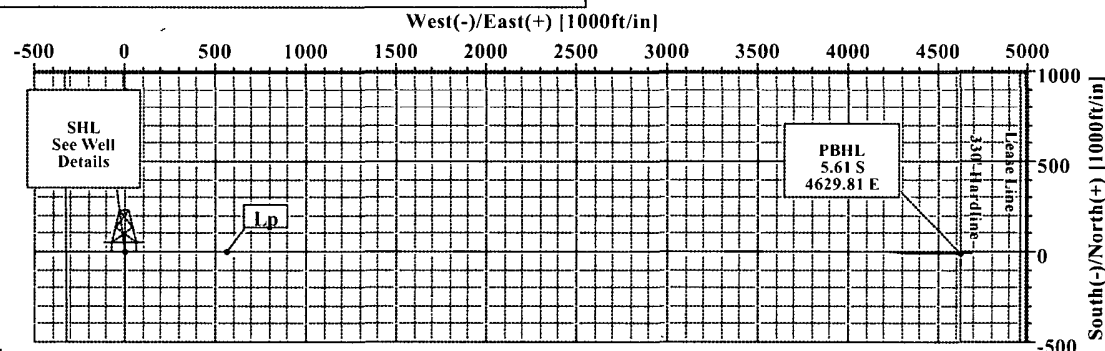
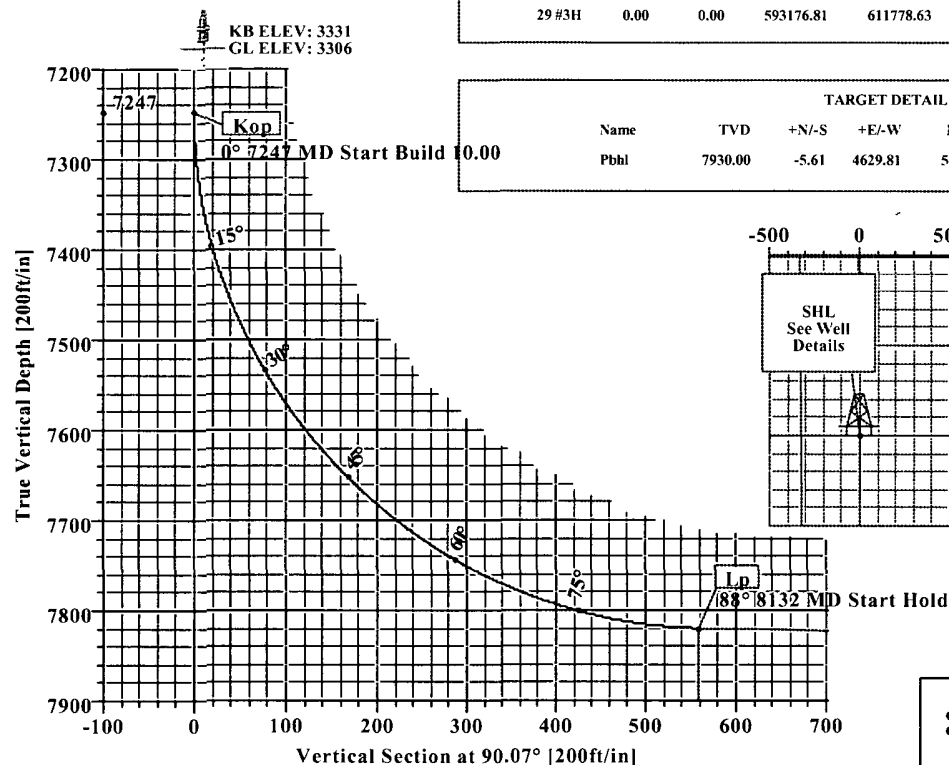
Site Centre Northing: 593176.81

Easting: 611778.63

Ground Level: 3306.00

Positional Uncertainty: 0.00

Convergence: 0.12



Plan: Plan #1 (29 #3H/1)

Created By: Russell W. Joyner

Date: 8/19/2011



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WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy		Date: 8/19/2011	Time: 14 17 55	Page: 1						
Field: Eddy Co., NM (NAD 83)		Co-ordinate(NE) Reference: Well 29 #3H, Grd North								
Site: Onyx PWU 29 #3H		Vertical (TVD) Reference: SITE 3331.0								
Well: 29 #3H		Section (VS) Reference: Well (0 00N,0.00E,90 07Azi)								
Wellpath: 1		Survey Calculation Method: Minimum Curvature Db: Sybase								
Plan: Plan #1		Date Composed: 8/19/2011								
Principal: Yes		Version: 1								
		Tied-to: From Surface								
Field: Eddy Co., NM (NAD 83)										
Map System: US 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: Onyx PWU 29 #3H										
Site Position:		Northing: 593176 81 ft	Latitude: 32 37 49 731 N							
From: Map		Easting: 611778 63 ft	Longitude: 104 6 16 271 W							
Position Uncertainty: 0 00 ft			North Reference: Grid							
Ground Level: 3306 00 ft			Grid Convergence: 0.12 deg							
Well: 29 #3H Slot Name:										
Well Position: +N/-S 0.00 ft		Northing: 593176.81 ft	Latitude: 32 37 49 731 N							
+E/-W 0.00 ft		Easting : 611778 63 ft	Longitude: 104 6 16 271 W							
Position Uncertainty: 0 00 ft										
Wellpath: 1										
Current Datum: SITE		Height 3331 00 ft	Drilled From: Surface							
Magnetic Data: 5/15/2012			Tie-on Depth: 0 00 ft							
Field Strength: 48736 nT			Above System Datum: Mean Sea Level							
Vertical Section: Depth From (TVD)			Declination: 7 75 deg							
ft		+N/-S ft	Mag Dip Angle: 60 45 deg							
0 00		0 00	+E/-W ft							
			Direction deg							
			90 07							
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	90 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
7247 25	0.00	90 07	7247 25	0 00	0 00	0 00	0.00	0.00	0 00	
8131.78	88.45	90.07	7820 00	-0 68	557 49	10 00	10.00	0.00	90 07	
12205.59	88 45	90 07	7930 00	-5 61	4629 81	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	Comment
7200.00	0 00	90.07	7200.00	0 00	0.00	0 00	0.00	593176.81	611778 63	
7247 25	0 00	90 07	7247.25	0.00	0.00	0 00	0 00	593176.81	611778.63	Kop
7300 00	5 28	90 07	7299 93	0 00	2.43	2.43	10 00	593176 81	611781 06	
7400 00	15 28	90 07	7398 20	-0 02	20.24	20 24	10 00	593176 79	611798 87	
7500.00	25.28	90 07	7491 88	-0 07	54.85	54.85	10.00	593176 74	611833 48	
7600.00	35 28	90.07	7578 13	-0 13	105.20	105.20	10 00	593176 68	611883 83	
7700.00	45.28	90 07	7654 33	-0 21	169 76	169 76	10 00	593176 60	611948 39	
7800 00	55 28	90.07	7718 16	-0 30	246 58	246.58	10.00	593176 51	612025 21	
7900 00	65 28	90.07	7767 68	-0 40	333 31	333 31	10 00	593176 41	612111 94	
8000 00	75 28	90.07	7801 39	-0.52	427 32	427 32	10 00	593176.29	612205.95	
8100 00	85.28	90 07	7818 26	-0.64	525 76	525 76	10 00	593176.17	612304 39	
8131 78	88 45	90.07	7820 00	-0.68	557 49	557.49	10.00	593176.13	612336 12	Lp
8200.00	88 45	90 07	7821 84	-0.76	625 68	625.68	0 00	593176.05	612404 31	
8300 00	88 45	90 07	7824 54	-0.88	725 65	725.65	0 00	593175 93	612504 28	
8400.00	88 45	90 07	7827 24	-1 00	825 61	825.61	0 00	593175 81	612604 24	
8500 00	88 45	90 07	7829.94	-1 12	925 57	925 58	0 00	593175 69	612704 20	
8600.00	88 45	90 07	7832 64	-1 24	1025 54	1025 54	0 00	593175 57	612804 17	



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WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Onyx PWU 29 #3H
Well: 29 #3H
Wellpath: 1
Date: 8/19/2011
Co-ordinate(NE) Reference: Well 29 #3H, Grd North
Vertical (TVD) Reference: SITE 3331 0
Section (VS) Reference: Well (0 00N,0 00E,90 07Azi)
Survey Calculation Method: Minimum Curvature
Page: 2
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	Comment
8700.00	88.45	90.07	7835.34	-1.36	1125.50	1125.50	0.00	593175.45	612904.13	
8800.00	88.45	90.07	7838.04	-1.48	1225.47	1225.47	0.00	593175.33	613004.10	
8900.00	88.45	90.07	7840.74	-1.61	1325.43	1325.43	0.00	593175.20	613104.06	
9000.00	88.45	90.07	7843.44	-1.73	1425.39	1425.39	0.00	593175.08	613204.02	
9100.00	88.45	90.07	7846.14	-1.85	1525.36	1525.36	0.00	593174.96	613303.99	
9200.00	88.45	90.07	7848.84	-1.97	1625.32	1625.32	0.00	593174.84	613403.95	
9300.00	88.45	90.07	7851.54	-2.09	1725.28	1725.28	0.00	593174.72	613503.91	
9400.00	88.45	90.07	7854.24	-2.21	1825.25	1825.25	0.00	593174.60	613603.88	
9500.00	88.45	90.07	7856.94	-2.33	1925.21	1925.21	0.00	593174.48	613703.84	
9600.00	88.45	90.07	7859.64	-2.45	2025.17	2025.17	0.00	593174.36	613803.80	
9700.00	88.45	90.07	7862.34	-2.58	2125.14	2125.14	0.00	593174.23	613903.77	
9800.00	88.45	90.07	7865.04	-2.70	2225.10	2225.10	0.00	593174.11	614003.73	
9900.00	88.45	90.07	7867.74	-2.82	2325.06	2325.06	0.00	593173.99	614103.69	
10000.00	88.45	90.07	7870.44	-2.94	2425.03	2425.03	0.00	593173.87	614203.66	
10100.00	88.45	90.07	7873.14	-3.06	2524.99	2524.99	0.00	593173.75	614303.62	
10200.00	88.45	90.07	7875.85	-3.18	2624.95	2624.96	0.00	593173.63	614403.58	
10300.00	88.45	90.07	7878.55	-3.30	2724.92	2724.92	0.00	593173.51	614503.55	
10400.00	88.45	90.07	7881.25	-3.42	2824.88	2824.88	0.00	593173.39	614603.51	
10500.00	88.45	90.07	7883.95	-3.54	2924.84	2924.85	0.00	593173.27	614703.47	
10600.00	88.45	90.07	7886.65	-3.67	3024.81	3024.81	0.00	593173.14	614803.44	
10700.00	88.45	90.07	7889.35	-3.79	3124.77	3124.77	0.00	593173.02	614903.40	
10800.00	88.45	90.07	7892.05	-3.91	3224.73	3224.74	0.00	593172.90	615003.36	
10900.00	88.45	90.07	7894.75	-4.03	3324.70	3324.70	0.00	593172.78	615103.33	
11000.00	88.45	90.07	7897.45	-4.15	3424.66	3424.66	0.00	593172.66	615203.29	
11100.00	88.45	90.07	7900.15	-4.27	3524.62	3524.63	0.00	593172.54	615303.25	
11200.00	88.45	90.07	7902.85	-4.39	3624.59	3624.59	0.00	593172.42	615403.22	
11300.00	88.45	90.07	7905.55	-4.51	3724.55	3724.55	0.00	593172.30	615503.18	
11400.00	88.45	90.07	7908.25	-4.63	3824.52	3824.52	0.00	593172.18	615603.15	
11500.00	88.45	90.07	7910.95	-4.76	3924.48	3924.48	0.00	593172.05	615703.11	
11600.00	88.45	90.07	7913.65	-4.88	4024.44	4024.45	0.00	593171.93	615803.07	
11700.00	88.45	90.07	7916.35	-5.00	4124.41	4124.41	0.00	593171.81	615903.04	
11800.00	88.45	90.07	7919.05	-5.12	4224.37	4224.37	0.00	593171.69	616003.00	
11900.00	88.45	90.07	7921.75	-5.24	4324.33	4324.34	0.00	593171.57	616102.96	
12000.00	88.45	90.07	7924.45	-5.36	4424.30	4424.30	0.00	593171.45	616202.93	
12100.00	88.45	90.07	7927.15	-5.48	4524.26	4524.26	0.00	593171.33	616302.89	
12200.00	88.45	90.07	7929.85	-5.60	4624.22	4624.23	0.00	593171.21	616402.85	
12205.59	88.45	90.07	7930.00	-5.61	4629.81	4629.81	0.00	593171.20	616408.44	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
Pbhl			7930.00	-5.61	4629.81	593171.20	616408.44	32 37 49.574 N	104 5 22.131 W

Casing Points

MD	TVD	Diameter	Hole Size	Name



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WFT Plan Report - X & Y's



Company:	Devon Energy	Date:	8/19/2011	Time:	14:17.55	Page:	3
Field:	Eddy Co , NM (NAD 83)	Co-ordinate(NE) Reference:	Well 29 #3H, Gnd North				
Site:	Onyx PWU 29 #3H	Vertical (TVD) Reference:	SITE 3331.0				
Well:	29 #3H	Section (VS) Reference:	Well (0 00N,0 00E,90 07Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature				Db: Sybase

Annotation

MD ft	TVD ft	
7247.25	7247.25	Kop
8131.78	7820.00	Lp
12205.58	7930.00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

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

GeoDec v5.03

Report Date: August 19, 2011
Job Number: _____
Customer: Devon Energy
Well Name: Onyx PWU 29 #3H
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 593176.810 USFT	Latitude 32.6304841 DEG
East/West 611778.630 USFT	Longitude -104.1045158 DEG
Grid Convergence: .12°	
Total Correction: +7.63°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.63048° N	32° 37 min 49.743 sec
Longitude =	104.10452° W	104° 6 min 16.257 sec

Magnetic Declination =	7.75°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6620
Local Field Strength =	48732 nT	Magnetic Vector X = 23815 nT
Magnetic Dip =	60.45°	Magnetic Vector Y = 3242 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42392 nT
Spud Date =	May 15, 2012	Magnetic Vector H = 24035 nT

Signed: _____

Date: _____