



Weatherford™

Drilling Services

30-015-39517

Proposal



COTTON DRAW UNIT 113H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

OCTOBER 5, 2011

Weatherford International, Ltd.

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GeoDec v5.03

Report Date: October 04, 2011
Job Number: _____
Customer: Devon Energy
Well Name: Cotton Draw Unit #113H
API Number: _____
Rig Name: _____
Location: Eddy Co., NM
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 425101.570 USFT	Latitude 32.1672814 DEG
East/West 725560.960 USFT	Longitude -103.7379624 DEG
Grid Convergence: .32°	
Total Correction: +7.29°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.16728° N	32° 10 min 2.213 sec
Longitude =	103.73796° W	103° 44 min 16.665 sec

Magnetic Declination =	7.61°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6522
Local Field Strength =	48543 nT	Magnetic Vector X = 23989 nT
Magnetic Dip =	60.10°	Magnetic Vector Y = 3204 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42080 nT
Spud Date =	Nov 15, 2011	Magnetic Vector H = 24202 nT

Signed: _____

Date: _____



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WFT Plan Report - X & Y's



Company: Devon Energy	Date: 10/4/2011	Time: 14 28 31	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well CDU #113H, Grid North		
Site: Cotton Draw Unit #113H	Vertical (TVD) Reference: SITE 3498.0		
Well: CDU #113H	Section (VS) Reference: Well (0 00N,0 00E,7.50Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #1	Date Composed: 10/4/2011
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: Cotton Draw Unit #113H		
Site Position:	Northing: 425101.57 ft	Latitude: 32 10 2.205 N
From: Map	Easting: 725560.96 ft	Longitude: 103 44 16.682 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3472.00 ft		Grid Convergence: 0.32 deg

Well: CDU #113H	Slot Name:
Well Position: +N/-S 0.00 ft	Latitude: 32 10 2.205 N
+E/-W 0.00 ft	Longitude: 103 44 16.682 W
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 11/15/2011	Above System Datum: Mean Sea Level
Field Strength: 48547 nT	Declination: 7.61 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.10 deg
ft	+E/-W
	ft
0.00	0.00
0.00	0.00
0.00	7.50

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	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7667.05	0.00	7.50	7667.05	0.00	0.00	0.00	0.00	0.00	0.00	
8564.39	89.73	7.50	8240.00	565.41	74.46	10.00	10.00	0.00	7.50	
12871.02	89.73	7.50	8260.00	4835.13	636.78	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
7600.00	0.00	7.50	7600.00	0.00	0.00	0.00	0.00	425101.57	725560.96	
7667.05	0.00	7.50	7667.05	0.00	0.00	0.00	0.00	425101.57	725560.96	Kop
7700.00	3.30	7.50	7699.98	0.94	0.12	0.95	10.00	425102.51	725561.08	
7800.00	13.30	7.50	7798.81	15.22	2.01	15.36	10.00	425116.79	725562.97	
7900.00	23.30	7.50	7893.63	46.31	6.10	46.71	10.00	425147.88	725567.06	
8000.00	33.30	7.50	7981.58	93.24	12.28	94.05	10.00	425194.81	725573.24	
8100.00	43.30	7.50	8059.96	154.61	20.36	155.94	10.00	425256.18	725581.32	
8200.00	53.30	7.50	8126.40	228.53	30.10	230.50	10.00	425330.10	725591.06	
8300.00	63.30	7.50	8178.89	312.77	41.19	315.47	10.00	425414.34	725602.15	
8400.00	73.30	7.50	8215.83	404.77	53.31	408.26	10.00	425506.34	725614.27	
8500.00	83.30	7.50	8236.09	501.73	66.08	506.06	10.00	425603.30	725627.04	
8564.39	89.73	7.50	8240.00	565.41	74.46	570.30	10.00	425666.98	725635.42	Lp
8600.00	89.73	7.50	8240.17	600.72	79.11	605.91	0.00	425702.29	725640.07	
8700.00	89.73	7.50	8240.63	699.86	92.17	705.91	0.00	425801.43	725653.13	
8800.00	89.73	7.50	8241.10	799.01	105.23	805.91	0.00	425900.58	725666.19	
8900.00	89.73	7.50	8241.56	898.15	118.28	905.90	0.00	425999.72	725679.24	
9000.00	89.73	7.50	8242.02	997.29	131.34	1005.90	0.00	426098.86	725692.30	



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WFT Plan Report - X & Y's



Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #113H
Well: CDU #113H
Wellpath: 1

Date: 10/4/2011
Co-ordinate(NE) Reference: Well CDU #113H, Grd North
Vertical (TVD) Reference: SITE 3498.0
Section (VS) Reference: Well (0 00N,0.00E,7 50Azi)
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
9100.00	89.73	7 50	8242.49	1096 43	144 40	1105 90	0.00	426198.00	725705.36	
9200.00	89.73	7 50	8242.95	1195 58	157 46	1205 90	0.00	426297 15	725718.42	
9300.00	89.73	7 50	8243.42	1294 72	170 51	1305.90	0.00	426396 29	725731 47	
9400.00	89.73	7 50	8243.88	1393 86	183 57	1405.90	0.00	426495 43	725744 53	
9500.00	89.73	7 50	8244.35	1493 01	196 63	1505.90	0.00	426594.58	725757.59	
9600.00	89.73	7 50	8244.81	1592 15	209 68	1605.90	0.00	426693 72	725770.64	
9700.00	89.73	7.50	8245.27	1691.29	222.74	1705.90	0.00	426792 86	725783.70	
9800.00	89.73	7 50	8245.74	1790 43	235 80	1805.89	0.00	426892.00	725796.76	
9900.00	89.73	7.50	8246.20	1889.58	248 85	1905 89	0.00	426991 15	725809.81	
10000.00	89.73	7.50	8246.67	1988.72	261 91	2005 89	0.00	427090 29	725822.87	
10100.00	89.73	7 50	8247 13	2087.86	274 97	2105.89	0.00	427189.43	725835.93	
10200.00	89.73	7.50	8247 60	2187.01	288.03	2205 89	0.00	427288.58	725848 99	
10300.00	89.73	7.50	8248 06	2286.15	301 08	2305 89	0.00	427387.72	725862 04	
10400.00	89.73	7.50	8248.53	2385.29	314.14	2405 89	0.00	427486.86	725875 10	
10500.00	89.73	7.50	8248.99	2484.43	327.20	2505 89	0.00	427586.00	725888.16	
10600.00	89.73	7.50	8249 45	2583.58	340 25	2605 89	0.00	427685.15	725901.21	
10700.00	89.73	7 50	8249 92	2682 72	353.31	2705 88	0.00	427784.29	725914.27	
10800.00	89.73	7 50	8250 38	2781.86	366.37	2805.88	0.00	427883.43	725927 33	
10900.00	89.73	7.50	8250 85	2881 01	379.42	2905 88	0.00	427982.58	725940.38	
11000.00	89.73	7.50	8251.31	2980 15	392.48	3005 88	0.00	428081 72	725953 44	
11100.00	89.73	7 50	8251.78	3079 29	405.54	3105 88	0.00	428180 86	725966 50	
11200.00	89.73	7.50	8252 24	3178 43	418.60	3205 88	0.00	428280 00	725979 56	
11300.00	89.73	7.50	8252 70	3277 58	431 65	3305 88	0.00	428379 15	725992 61	
11400.00	89.73	7 50	8253 17	3376.72	444 71	3405.88	0.00	428478 29	726005 67	
11500.00	89.73	7.50	8253 63	3475.86	457 77	3505.88	0.00	428577 43	726018 73	
11600.00	89.73	7.50	8254 10	3575.00	470 82	3605.88	0.00	428676 57	726031 78	
11700.00	89.73	7 50	8254 56	3674 15	483 88	3705 87	0.00	428775 72	726044.84	
11800.00	89.73	7 50	8255 03	3773.29	496 94	3805 87	0.00	428874 86	726057 90	
11900.00	89.73	7 50	8255 49	3872 43	509.99	3905 87	0.00	428974 00	726070.95	
12000.00	89.73	7.50	8255 96	3971 58	523.05	4005 87	0.00	429073.15	726084 01	
12100.00	89.73	7.50	8256 42	4070 72	536 11	4105 87	0.00	429172.29	726097 07	
12200.00	89.73	7.50	8256.88	4169 86	549.17	4205 87	0.00	429271 43	726110 13	
12300.00	89.73	7.50	8257.35	4269 00	562 22	4305 87	0.00	429370.57	726123 18	
12400.00	89.73	7 50	8257.81	4368 15	575 28	4405.87	0.00	429469 72	726136 24	
12500.00	89.73	7 50	8258 28	4467.29	588 34	4505.87	0.00	429568 86	726149 30	
12600.00	89.73	7.50	8258 74	4566.43	601 39	4605.86	0.00	429668 00	726162 35	
12700.00	89.73	7.50	8259 21	4665.58	614 45	4705.86	0.00	429767 15	726175 41	
12800.00	89.73	7 50	8259 67	4764 72	627 51	4805.86	0.00	429866 29	726188.47	
12871 02	89.73	7 50	8260 00	4835 13	636.78	4876.88	0.00	429936 70	726197 74	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			8260.00	4835 13	636 78	429936.70	726197.74	32	10	50 016 N	103	44	8 961 W



Weatherford International Ltd.
WFT Plan Report - X & Y's



Company: Devon Energy	Date: 10/4/2011	Time: 14:28.31	Page: 3
Field: Eddy Co , NM (NAD 83)	Co-ordinate(NE) Reference:	Well: CDU #113H, Grid North	
Site: Cotton Draw Unit #113H	Vertical (TVD) Reference:	SITE 3498 0	
Well: CDU #113H	Section (VS) Reference:	Well (0 00N,0.00E,7.50Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
7667.05	7667.05	Kop
8564.39	8240.00	Lp
12871.01	8260.00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

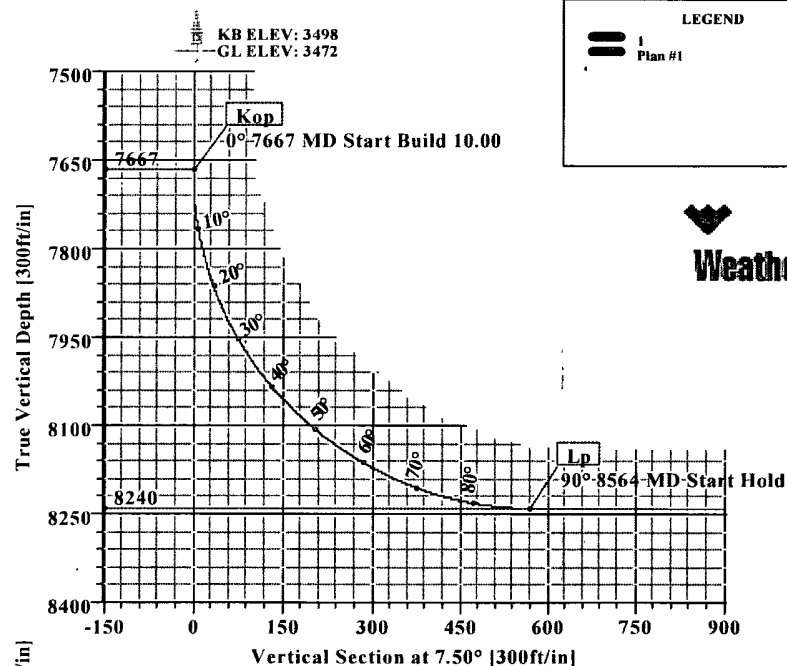


Cotton Draw Unit #113H
Eddy Co., NM

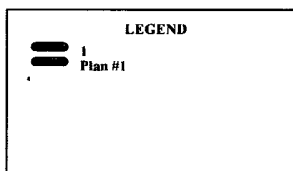
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	
2	7667.05	0.00	7.50	7667.05	0.00	0.00	0.00	0.00	0.00	
3	8564.39	89.73	7.50	8240.00	565.41	74.46	10.00	7.50	570.30	
4	12871.02	89.73	7.50	8260.00	4835.13	636.78	0.00	0.00	4876.88	Pbhl

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
CDU #113H	0.00	0.00	425101.57	725560.96	32°10'02.205N	103°44'16.682W	N/A

TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Pbhl	8260.00	4835.13	636.78	429936.70	726197.74	32°10'50.016N	103°44'08.961W	Point



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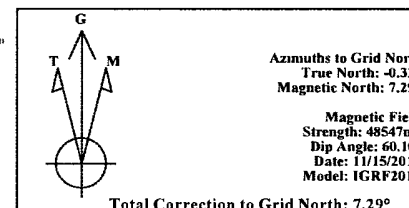


SITE DETAILS

Cotton Draw Unit #113H

Site Centre Northing: 425101.57
Easting: 725560.96

Ground Level: 3472.00
Positional Uncertainty: 0.00
Convergence: 0.32



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

