



Weatherford®

Drilling Services

Proposal



devon

COOTER 16 STATE #5H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

APRIL 26, 2010

Weatherford International, Ltd.

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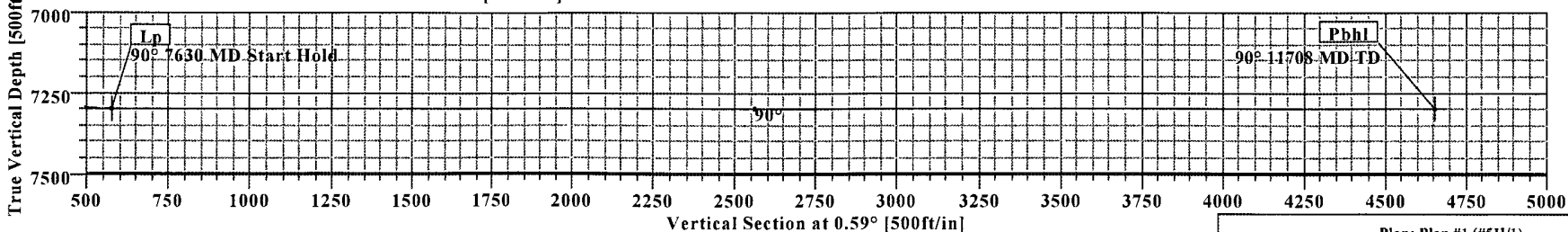
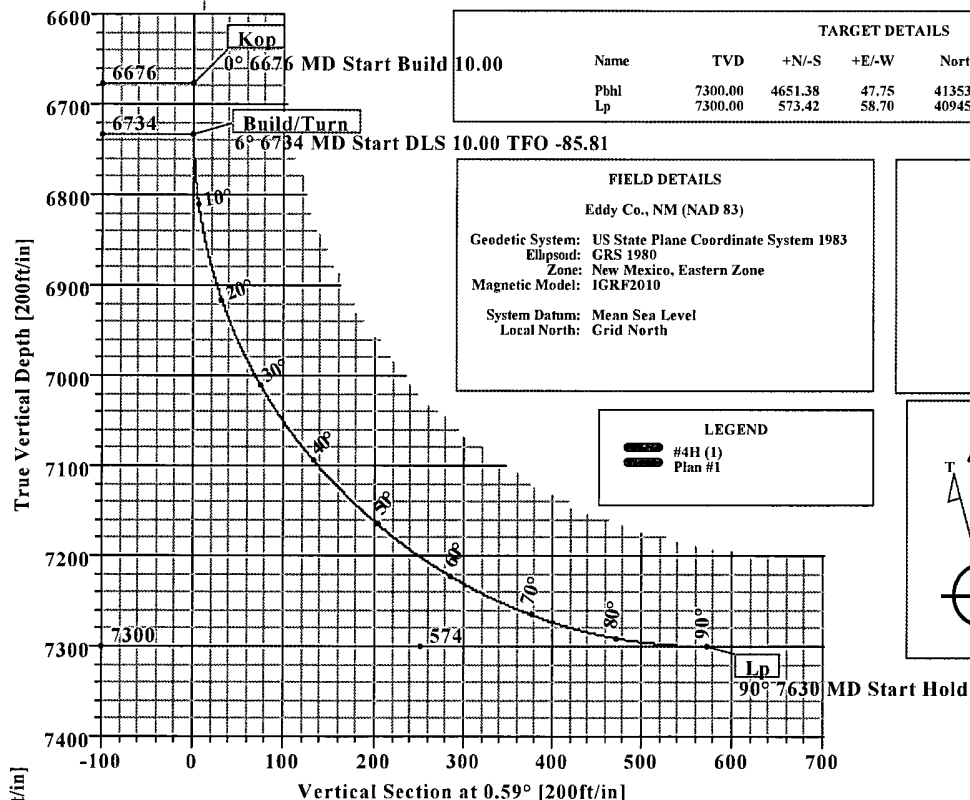
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COOTER 16 STATE #5H
EDDY CO., NEW MEXICO

KB ELEV: 3023
GL ELEV: 2998



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	85.63	0.00	0.00	0.00	0.00	0.00	0.00	
2	6676.29	0.00	85.63	6676.29	0.00	0.00	0.00	85.63	0.00	
3	6734.29	5.80	85.63	6734.20	0.22	2.92	10.00	85.63	0.25	
4	7630.04	90.00	359.85	7300.00	573.32	58.70	10.00	-85.81	573.89	
5	11708.12	90.00	359.85	7300.00	4651.38	47.75	0.00	0.00	4651.63	Pbh

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#5H	0.00	0.00	408885.05	648125.16	32°07'25.075N	103°59'18.187W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbh	7300.00	4651.38	47.75	413536.43	648172.91	Point
Lp	7300.00	573.42	58.70	409458.47	648183.86	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

Cooter 16 State #5H

Site Centre Northing: 408885.05
Easting: 648125.16

Ground Level: 2998.00
Positional Uncertainty: 0.00
Convergence: 0.18

LEGEND

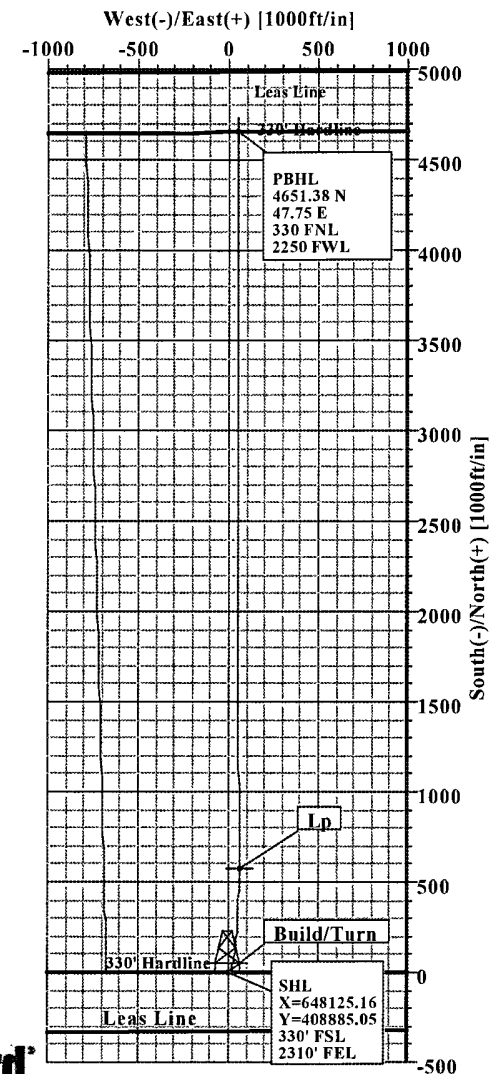
— #4H (1)
— Plan #1



Azimuths to Grid North
True North: -0.18°
Magnetic North: 7.70°

Magnetic Field
Strength: 48624nT
Dip Angle: 60.04°
Date: 7/20/2010
Model: IGRF2010

Total Correction to Grid North: 7.70°



Plan: Plan #1 (#5H/1)

Created By: Russell W Joyner

Date: 4/26/2010



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WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy	Date: 4/26/2010	Time: 11:31:38	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: #5H, Grid North		
Site: Cooter 16 State #5H	Vertical (TVD) Reference: SITE 3023.0		
Well: #5H	Section (VS) Reference: Well: (0.00N, 0.00E, 0.59Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Field: Eddy Co., NM (NAD 83)**Map System:** US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level**Map Zone:** New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: IGRF2010**Site:** Cooter 16 State #5H

Site Position:	Northing: 408885.05 ft	Latitude: 32 7 25.075 N
From: Map	Easting: 648125.16 ft	Longitude: 103 59 18.187 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 2998.00 ft		Grid Convergence: 0.18 deg

Well: #5H**Slot Name:**

Well Position:	+N/-S 0.00 ft	Northing: 408885.05 ft	Latitude: 32 7 25.075 N
	+E/-W 0.00 ft	Easting: 648125.16 ft	Longitude: 103 59 18.187 W
Position Uncertainty: 0.00 ft			

Wellpath: 1

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 7.88 deg
Mag Dip Angle: 60.04 deg
+E/-W ft
Direction deg

Current Datum: SITE	Height 3023.00 ft
Magnetic Data: 7/20/2010	
Field Strength: 48624 nT	
Vertical Section: Depth From (TVD)	+N/-S ft
	ft
0.00	0.00

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	85.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6676.29	0.00	85.63	6676.29	0.00	0.00	0.00	0.00	0.00	85.63	
6734.29	5.80	85.63	6734.20	0.22	2.92	10.00	10.00	0.00	85.63	
7630.04	90.00	359.85	7300.00	573.32	58.70	10.00	9.40	-9.58	-85.81	
11708.12	90.00	359.85	7300.00	4651.38	47.75	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
6600.00	0.00	85.63	6600.00	0.00	0.00	0.00	0.00	408885.05	648125.16	
6676.29	0.00	85.63	6676.29	0.00	0.00	0.00	0.00	408885.05	648125.16	Kop
6700.00	2.37	85.63	6699.99	0.04	0.49	0.04	10.00	408885.09	648125.65	
6734.29	5.80	85.63	6734.20	0.22	2.92	0.25	10.00	408885.27	648128.08	Build/Turn
6800.00	9.07	39.24	6799.39	4.49	9.52	4.59	10.00	408889.54	648134.68	
6900.00	17.93	18.10	6896.59	25.28	19.31	25.47	10.00	408910.32	648144.47	
7000.00	27.56	11.04	6988.72	62.71	28.54	63.00	10.00	408947.76	648153.70	
7100.00	37.38	7.47	7072.99	115.65	36.94	116.02	10.00	409000.70	648162.09	
7200.00	47.27	5.22	7146.84	182.49	44.24	182.94	10.00	409067.54	648169.39	
7300.00	57.19	3.59	7208.02	261.21	50.22	261.71	10.00	409146.25	648175.38	
7400.00	67.12	2.30	7254.67	349.40	54.71	349.94	10.00	409234.45	648179.87	
7500.00	77.06	1.18	7285.38	444.39	57.57	444.96	10.00	409329.44	648182.73	
7600.00	87.01	0.15	7299.22	543.29	58.70	543.87	10.00	409428.34	648183.86	
7630.04	90.00	359.85	7300.00	573.32	58.70	573.89	10.00	409458.37	648183.86	Lp
7700.00	90.00	359.85	7300.00	643.28	58.51	643.85	0.00	409528.33	648183.67	
7800.00	90.00	359.85	7300.00	743.28	58.25	743.84	0.00	409628.33	648183.40	
7900.00	90.00	359.85	7300.00	843.28	57.98	843.83	0.00	409728.33	648183.14	
8000.00	90.00	359.85	7300.00	943.28	57.71	943.82	0.00	409828.33	648182.87	
8100.00	90.00	359.85	7300.00	1043.28	57.44	1043.81	0.00	409928.33	648182.60	
8200.00	90.00	359.85	7300.00	1143.28	57.17	1143.80	0.00	410028.33	648182.33	



Weatherford International Ltd.

WFT Plan Report - X & Y's



Company:	Devon Energy	Date:	4/26/2010	Time:	11:31:38	Page:	2
Field:	Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #5H, Grid North				
Site:	Cooter 16 State #5H	Vertical (TVD) Reference:	SITE 3023.0				
Well:	#5H	Section (VS) Reference:	Well (0.00N,0.00E,0.59Azi)				
Wellpath:	1	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	Comment
8300.00	90.00	359.85	7300.00	1243.28	56.90	1243.80	0.00	410128.32	648182.06	
8400.00	90.00	359.85	7300.00	1343.28	56.64	1343.79	0.00	410228.32	648181.79	
8500.00	90.00	359.85	7300.00	1443.28	56.37	1443.78	0.00	410328.32	648181.52	
8600.00	90.00	359.85	7300.00	1543.28	56.10	1543.77	0.00	410428.32	648181.26	
8700.00	90.00	359.85	7300.00	1643.28	55.83	1643.76	0.00	410528.32	648180.99	
8800.00	90.00	359.85	7300.00	1743.27	55.56	1743.75	0.00	410628.32	648180.72	
8900.00	90.00	359.85	7300.00	1843.27	55.29	1843.75	0.00	410728.32	648180.45	
9000.00	90.00	359.85	7300.00	1943.27	55.02	1943.74	0.00	410828.32	648180.18	
9100.00	90.00	359.85	7300.00	2043.27	54.76	2043.73	0.00	410928.32	648179.91	
9200.00	90.00	359.85	7300.00	2143.27	54.49	2143.72	0.00	411028.32	648179.64	
9300.00	90.00	359.85	7300.00	2243.27	54.22	2243.71	0.00	411128.32	648179.38	
9400.00	90.00	359.85	7300.00	2343.27	53.95	2343.70	0.00	411228.32	648179.11	
9500.00	90.00	359.85	7300.00	2443.27	53.68	2443.69	0.00	411328.32	648178.84	
9600.00	90.00	359.85	7300.00	2543.27	53.41	2543.69	0.00	411428.32	648178.57	
9700.00	90.00	359.85	7300.00	2643.27	53.14	2643.68	0.00	411528.32	648178.30	
9800.00	90.00	359.85	7300.00	2743.27	52.88	2743.67	0.00	411628.32	648178.03	
9900.00	90.00	359.85	7300.00	2843.27	52.61	2843.66	0.00	411728.32	648177.77	
10000.00	90.00	359.85	7300.00	2943.27	52.34	2943.65	0.00	411828.32	648177.50	
10100.00	90.00	359.85	7300.00	3043.27	52.07	3043.64	0.00	411928.32	648177.23	
10200.00	90.00	359.85	7300.00	3143.27	51.80	3143.64	0.00	412028.32	648176.96	
10300.00	90.00	359.85	7300.00	3243.27	51.53	3243.63	0.00	412128.32	648176.69	
10400.00	90.00	359.85	7300.00	3343.27	51.26	3343.62	0.00	412228.32	648176.42	
10500.00	90.00	359.85	7300.00	3443.27	51.00	3443.61	0.00	412328.32	648176.15	
10600.00	90.00	359.85	7300.00	3543.27	50.73	3543.60	0.00	412428.32	648175.89	
10700.00	90.00	359.85	7300.00	3643.27	50.46	3643.59	0.00	412528.32	648175.62	
10800.00	90.00	359.85	7300.00	3743.27	50.19	3743.59	0.00	412628.32	648175.35	
10900.00	90.00	359.85	7300.00	3843.27	49.92	3843.58	0.00	412728.32	648175.08	
11000.00	90.00	359.85	7300.00	3943.27	49.65	3943.57	0.00	412828.32	648174.81	
11100.00	90.00	359.85	7300.00	4043.27	49.38	4043.56	0.00	412928.31	648174.54	
11200.00	90.00	359.85	7300.00	4143.27	49.12	4143.55	0.00	413028.31	648174.27	
11300.00	90.00	359.85	7300.00	4243.27	48.85	4243.54	0.00	413128.31	648174.01	
11400.00	90.00	359.85	7300.00	4343.27	48.58	4343.54	0.00	413228.31	648173.74	
11500.00	90.00	359.85	7300.00	4443.27	48.31	4443.53	0.00	413328.31	648173.47	
11600.00	90.00	359.85	7300.00	4543.26	48.04	4543.52	0.00	413428.31	648173.20	
11700.00	90.00	359.85	7300.00	4643.26	47.77	4643.51	0.00	413528.31	648172.93	
11708.12	90.00	359.85	7300.00	4651.38	47.75	4651.63	0.00	413536.43	648172.91	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			7300.00	4651.38	47.75	413536.43	648172.91	32 8 11.103 N	103 59 17.458 W
Lp			7300.00	573.42	58.70	409458.47	648183.86	32 7 30.747 N	103 59 17.483 W

Casing Points

MD	TVD	Diameter	Hole Size	Name



Weatherford International Ltd.

WFT Plan Report - X & Y's



Company:	Devon Energy	Date:	4/26/2010	Time:	11:31:38	Page:	3
Field:	Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well: #5H, Grid North				
Site:	Cooter 16 State #5H	Vertical (TVD) Reference:	SITE 3023.0				
Well:	#5H	Section (VS) Reference:	Well (0.00N,0.00E,0.59Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature			Db:	Sybase

Annotation

MD ft	TVD ft	
6676.29	6676.29	Kop
6734.29	6734.19	Build/Turn
7630.04	7300.00	Lp
11708.11	7300.00	Pbhl

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

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

GeoDec v5.03

Report Date: April 26, 2010

Job Number: _____

Customer: Devon Energy

Well Name: Cooter 16 State #5H

API Number: _____

Rig Name: _____

Location: Eddy Co, NM

Block: _____

Engineer: R Joyner

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 408885.050 USFT

Latitude 32.1236341 DEG

East/West 648125.160 USFT

Longitude -103.9883810 DEG

Grid Convergence: .18°

Total Correction: +7.70°

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 32.12363° N 32° 7 min 25.083 sec

Longitude = 103.98838° W 103° 59 min 18.172 sec

Magnetic Declination = 7.88° [True North Offset]

Local Gravity = .9988 g CheckSum = 6506

Local Field Strength = 48620 nT Magnetic Vector X = 24050 nT

Magnetic Dip = 60.04° Magnetic Vector Y = 3329 nT

Magnetic Model = IGRF-2010g11 Magnetic Vector Z = 42124 nT

Spud Date = Jul 20, 2010 Magnetic Vector H = 24279 nT

Signed: _____

Date: _____