



Weatherford®

Drilling Services

Proposal



devon

COOTER 16 STATE #5H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

APRIL 26, 2010

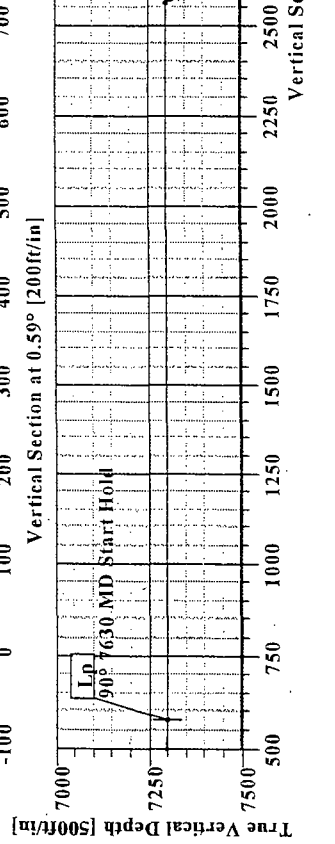
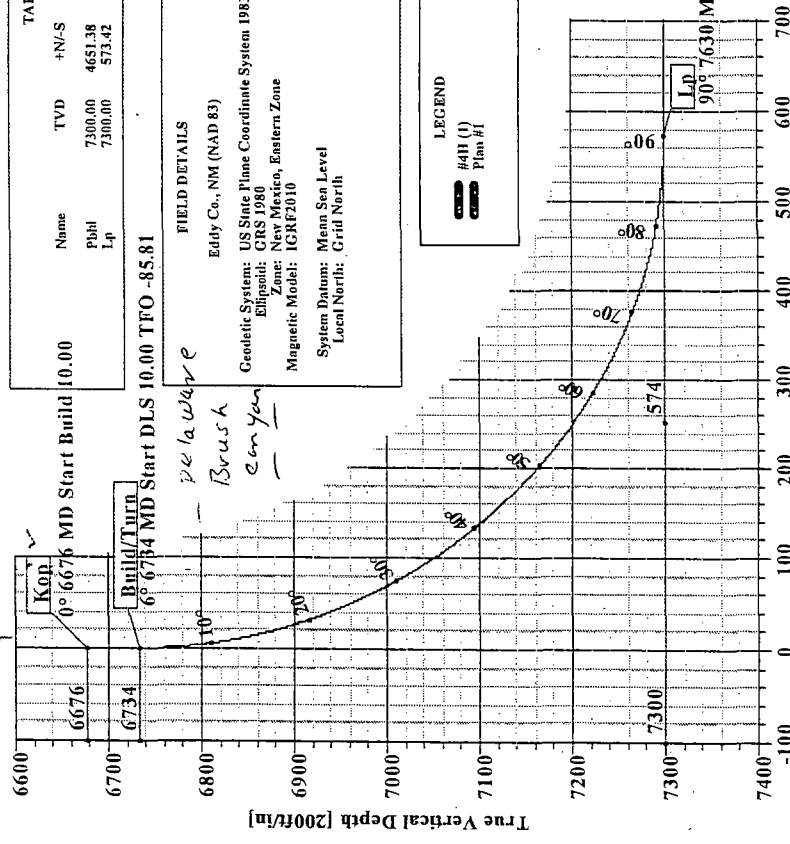
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COOTER 16 STATE #5H
EDDY CO., NEW MEXICO

KB ELEV: 3023
GL ELEV: 2998



SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	D-Log	T-Face	V-Sec Target
1	0.00	0.00	85.63	0.00	0.00	0.00	0.00	0.00	0.00
2	6676.39	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

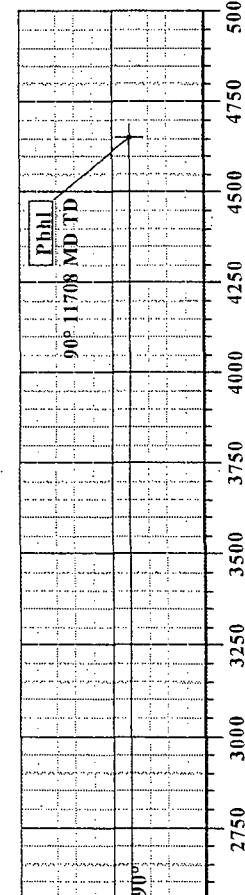
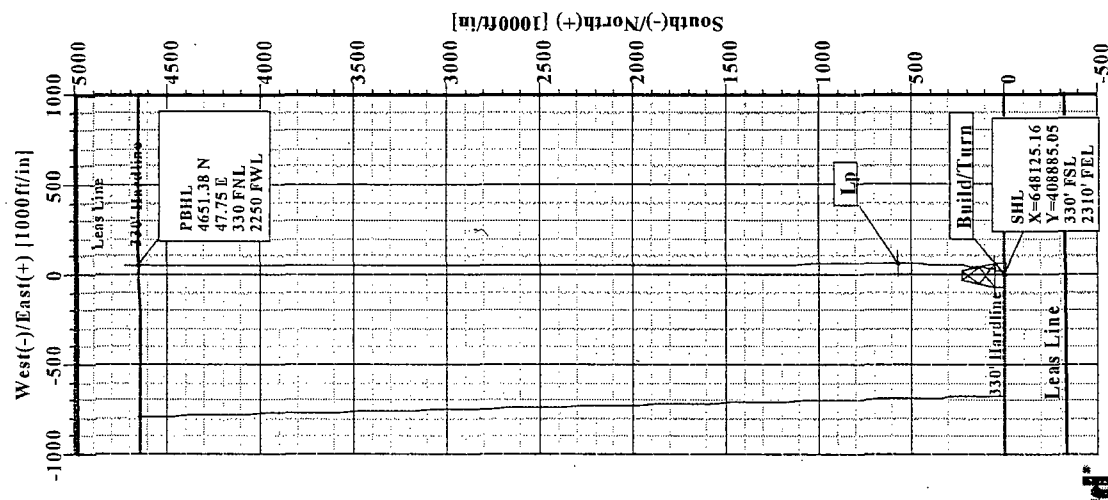
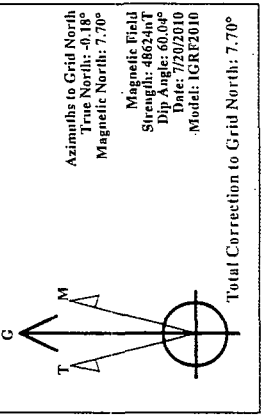
WELL DETAILS				
Name	+N/-S	+E/-W	Eastings	Northings
#5H	0.00	0.00	408885.05	648125.16
			103°59'18.187W	N/A

TARGET DETAILS				
Name	+N/-S	+E/-W	Eastings	Northings
Pbh			47.75	413536.43
Lp			58.70	409458.47

FIELD DETAILS
Eddy Co., NM (NAD 83)
Geocentric 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
Center 16 State #5H
Site Centre Northings: 408885.05
Eastings: 648125.16
Ground Level: 2998.00
Positional Uncertainty: 0.00
Convergence: 0.18

LEGEND
#4H (1)
Plan #1





Weatherford International Ltd.

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 LevelMap 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

Current Datum:	SITE	Height	3023.00 ft	Drilled From:	Surface
Magnetic Data:	7/20/2010			Tie-on Depth:	0.00 ft
Field Strength:	48624 nT			Above System Datum:	Mean Sea Level
Vertical Section:	Depth From (TVD)	+N/-S		Declination:	7.88 deg
	ft	ft		Mag Dip Angle:	60.04 deg
				+E/-W	Direction
				ft	deg
	0.00	0.00		0.00	0.59

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	



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WFT Plan Report - X & Y's

**Weatherford**

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

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: _____



Weatherford®

Drilling Services

Proposal



devon

COOTER 16 STATE #6H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

APRIL 26, 2010

Weatherford International, Ltd.

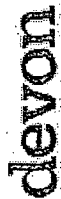
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Midland, TX 79711 USA

+1.432.561.8892 Main

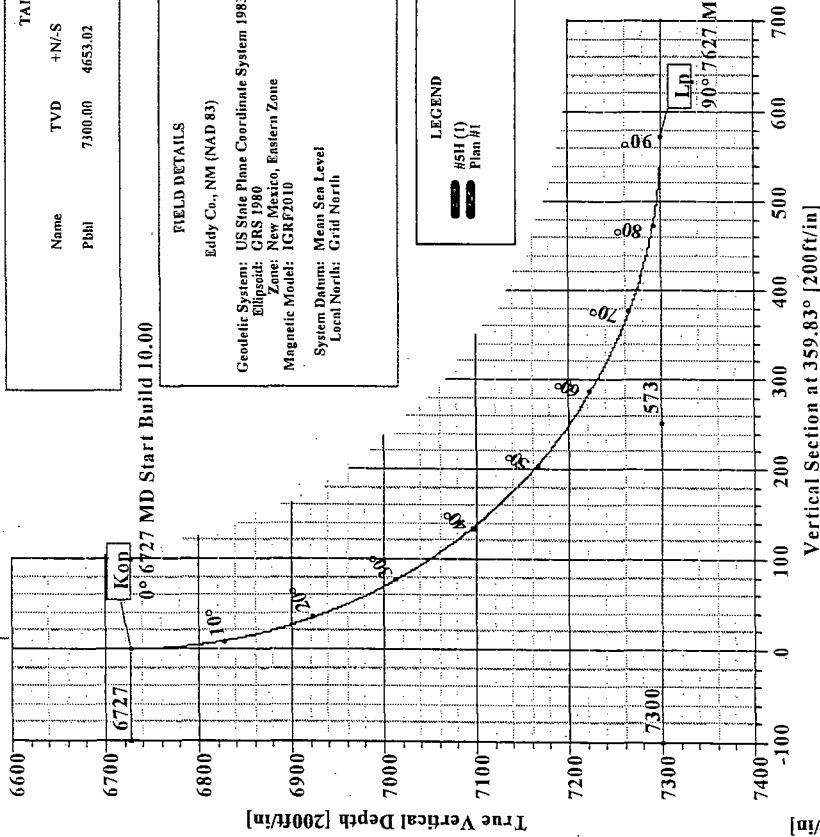
+1.432.561.8895 Fax

www.weatherford.com



COOTER 16 STATE #6H EDDY CO., NEW MEXICO

KB ELEV: 2999
GLELEV: 2974



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dlog	TFace	VSec	Target
1	0.00	0.00	359.83	0.00	0.00	0.00	0.00	0.00	0.00	
2	6727.04	0.00	359.83	6727.04	0.00	0.00	0.00	0.00	0.00	
3	7627.04	90.00	359.83	7300.00	-572.96	-1.69	10.00	359.83	572.96	Pbhl
4	11707.12	90.00	359.83	7300.00	4653.02	-13.73	0.00	0.00	4653.04	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Cooter 16 State #6H	0.00	0.00	408886.93	648785.41	32°07'25.072N	103°59'10.500W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	7300.00	4653.02	-13.73	413539.94	648771.69	Point

FIELD DETAILS

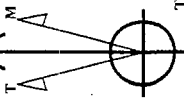
Eddy Co., NM (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Datum: GRS 1980
Zone: NAD 83, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Cooter 16 State #6H
Site Centre Northing: 408886.93
Easting: 648785.41
Ground Level: 2974.00
Positional Uncertainty: 0.00
Convergence: 0.18

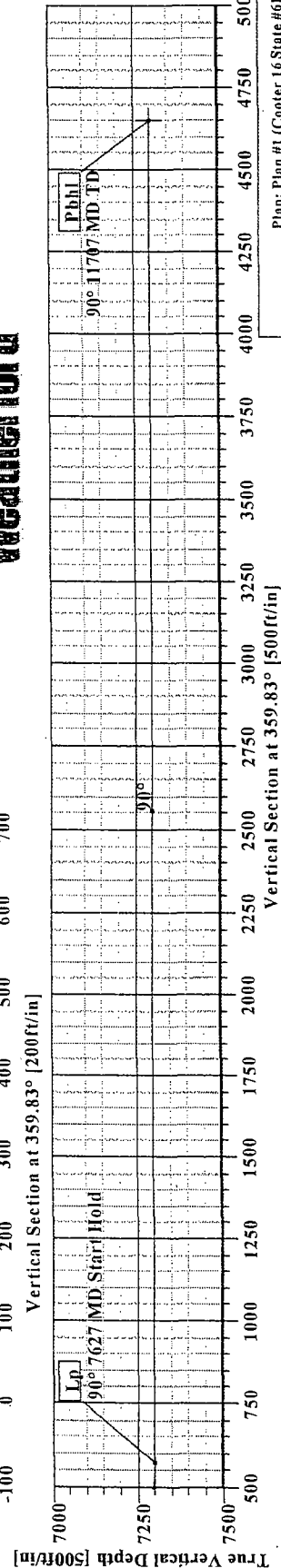
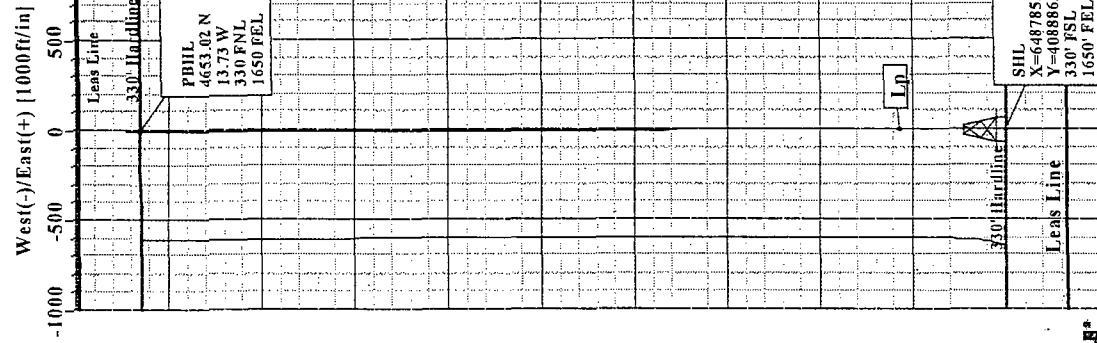
LEGEND

#SH (1)
Plan #1



Azimuth to Grid North
True North: 0.18°
Magnetic North: 7.69°
Magnetic Field
Strength: 48619nT
Dip Angle: 60.04°
Date: 9/10/2010
Model: IGRF2010

Total Correction to Grid North: 7.69°





Company: Devon Energy	Date: 4/26/2010	Time: 12:47:38	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Cooter 16 State #6H, Grid North		
Site: Cooter 16 State #6H	Vertical (TVD) Reference: SITE 2999.0		
Well: Cooter 16 State #6H	Section (VS) Reference: Well (0.00N;0.00E;359.83Azi)		
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 #6H

Site Position:	Northing: 408886.93 ft	Latitude: 32 7 25.072 N
From: Map	Easting: 648785.41 ft	Longitude: 103 59 10.509 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 2974.00 ft		Grid Convergence: 0.18 deg

Well: Cooter 16 State #6H

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 408886.93 ft	Latitude: 32 7 25.072 N
+E/-W 0.00 ft	Easting: 648785.41 ft	Longitude: 103 59 10.509 W
Position Uncertainty: 0.00 ft		

Wellpath: 1

Current Datum: SITE	Height 2999.00 ft	Drilled From: Surface
Magnetic Data: 8/10/2010		Tie-on Depth: 0.00 ft
Field Strength: 48619 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)		Declination: 7.87 deg
ft	+N/-S ft	Mag Dip Angle: 60.04 deg
		+E/-W ft
		Direction deg
0.00	0.00	0.00 359.83

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	359.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6727.04	0.00	359.83	6727.04	0.00	0.00	0.00	0.00	0.00	0.00	
7627.04	90.00	359.83	7300.00	572.96	-1.69	10.00	10.00	0.00	359.83	
11707.12	90.00	359.83	7300.00	4653.02	-13.73	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
6700.00	0.00	359.83	6700.00	0.00	0.00	0.00	0.00	408886.93	648785.41	Kop
6727.04	0.00	359.83	6727.04	0.00	0.00	0.00	0.00	408886.93	648785.41	
6800.00	7.30	359.83	6799.80	4.64	-0.01	4.64	10.00	408891.56	648785.40	
6900.00	17.30	359.83	6897.39	25.91	-0.08	25.91	10.00	408912.83	648785.34	
7000.00	27.30	359.83	6989.79	63.80	-0.19	63.80	10.00	408950.72	648785.22	
7100.00	37.30	359.83	7074.21	117.16	-0.35	117.16	10.00	409004.09	648785.07	Lp
7200.00	47.30	359.83	7148.09	184.37	-0.54	184.37	10.00	409071.30	648784.87	
7300.00	57.30	359.83	7209.17	263.39	-0.78	263.39	10.00	409150.31	648784.64	
7400.00	67.30	359.83	7255.60	351.81	-1.04	351.81	10.00	409238.74	648784.38	
7500.00	77.30	359.83	7285.97	446.95	-1.32	446.95	10.00	409333.88	648784.09	
7600.00	87.30	359.83	7299.36	545.92	-1.61	545.93	10.00	409432.85	648783.80	
7627.04	90.00	359.83	7300.00	572.96	-1.69	572.96	10.00	409459.88	648783.72	
7700.00	90.00	359.83	7300.00	645.91	-1.91	645.92	0.00	409532.84	648783.51	
7800.00	90.00	359.83	7300.00	745.91	-2.20	745.92	0.00	409632.84	648783.21	
7900.00	90.00	359.83	7300.00	845.91	-2.50	845.92	0.00	409732.84	648782.92	
8000.00	90.00	359.83	7300.00	945.91	-2.79	945.92	0.00	409832.84	648782.62	
8100.00	90.00	359.83	7300.00	1045.91	-3.09	1045.92	0.00	409932.84	648782.33	
8200.00	90.00	359.83	7300.00	1145.91	-3.38	1145.92	0.00	410032.84	648782.03	
8300.00	90.00	359.83	7300.00	1245.91	-3.68	1245.92	0.00	410132.84	648781.74	
8400.00	90.00	359.83	7300.00	1345.91	-3.97	1345.92	0.00	410232.84	648781.44	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy	Date: 4/26/2010	Time: 12:47:38	Page: 2
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Cooter 16 State #6H, Grid North		
Site: Cooter 16 State #6H	Vertical (TVD) Reference: SITE 2999.0		
Well: Cooter 16 State #6H	Section (VS) Reference: Well (0.00N,0.00E,359.83Azi)		
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
8500.00	90.00	359.83	7300.00	1445.91	-4.27	1445.92	0.00	410332.84	648781.15	
8600.00	90.00	359.83	7300.00	1545.91	-4.56	1545.92	0.00	410432.83	648780.85	
8700.00	90.00	359.83	7300.00	1645.91	-4.86	1645.92	0.00	410532.83	648780.56	
8800.00	90.00	359.83	7300.00	1745.91	-5.15	1745.92	0.00	410632.83	648780.26	
8900.00	90.00	359.83	7300.00	1845.91	-5.45	1845.92	0.00	410732.83	648779.97	
9000.00	90.00	359.83	7300.00	1945.91	-5.74	1945.92	0.00	410832.83	648779.67	
9100.00	90.00	359.83	7300.00	2045.91	-6.04	2045.92	0.00	410932.83	648779.38	
9200.00	90.00	359.83	7300.00	2145.91	-6.33	2145.92	0.00	411032.83	648779.08	
9300.00	90.00	359.83	7300.00	2245.91	-6.63	2245.92	0.00	411132.83	648778.79	
9400.00	90.00	359.83	7300.00	2345.91	-6.92	2345.92	0.00	411232.83	648778.49	
9500.00	90.00	359.83	7300.00	2445.90	-7.22	2445.92	0.00	411332.83	648778.20	
9600.00	90.00	359.83	7300.00	2545.90	-7.51	2545.92	0.00	411432.83	648777.90	
9700.00	90.00	359.83	7300.00	2645.90	-7.81	2645.92	0.00	411532.83	648777.61	
9800.00	90.00	359.83	7300.00	2745.90	-8.10	2745.92	0.00	411632.83	648777.31	
9900.00	90.00	359.83	7300.00	2845.90	-8.40	2845.92	0.00	411732.83	648777.02	
10000.00	90.00	359.83	7300.00	2945.90	-8.69	2945.92	0.00	411832.83	648776.72	
10100.00	90.00	359.83	7300.00	3045.90	-8.99	3045.92	0.00	411932.83	648776.43	
10200.00	90.00	359.83	7300.00	3145.90	-9.28	3145.92	0.00	412032.83	648776.13	
10300.00	90.00	359.83	7300.00	3245.90	-9.58	3245.92	0.00	412132.83	648775.84	
10400.00	90.00	359.83	7300.00	3345.90	-9.87	3345.92	0.00	412232.83	648775.54	
10500.00	90.00	359.83	7300.00	3445.90	-10.17	3445.92	0.00	412332.83	648775.25	
10600.00	90.00	359.83	7300.00	3545.90	-10.46	3545.92	0.00	412432.83	648774.95	
10700.00	90.00	359.83	7300.00	3645.90	-10.76	3645.92	0.00	412532.83	648774.66	
10800.00	90.00	359.83	7300.00	3745.90	-11.05	3745.92	0.00	412632.83	648774.36	
10900.00	90.00	359.83	7300.00	3845.90	-11.35	3845.92	0.00	412732.82	648774.07	
11000.00	90.00	359.83	7300.00	3945.90	-11.64	3945.92	0.00	412832.82	648773.77	
11100.00	90.00	359.83	7300.00	4045.90	-11.94	4045.92	0.00	412932.82	648773.48	
11200.00	90.00	359.83	7300.00	4145.90	-12.23	4145.92	0.00	413032.82	648773.18	
11300.00	90.00	359.83	7300.00	4245.90	-12.53	4245.92	0.00	413132.82	648772.89	
11400.00	90.00	359.83	7300.00	4345.90	-12.82	4345.92	0.00	413232.82	648772.59	
11500.00	90.00	359.83	7300.00	4445.90	-13.12	4445.92	0.00	413332.82	648772.30	
11600.00	90.00	359.83	7300.00	4545.90	-13.41	4545.92	0.00	413432.82	648772.00	
11700.00	90.00	359.83	7300.00	4645.90	-13.71	4645.92	0.00	413532.82	648771.71	
11707.12	90.00	359.83	7300.00	4653.02	-13.73	4653.04	0.00	413539.94	648771.69	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	4653.02	-13.73	413539.94	648771.69	32 8 11.119 N	103 59 10.494 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6727.04	6727.04	Kop
7627.04	7300.00	Lp
11707.12	7300.00	Pbhl



Company:	Devon Energy	Date:	4/26/2010	Time:	12:47:38	Page:	3
Field:	Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well: Cooter 16 State #6H, Grid North				
Site:	Cooter 16 State #6H	Vertical (TVD) Reference:	SITE 2999.0				
Well:	Cooter 16 State #6H	Section (VS) Reference:	Well: (0.00N;0.00E;359.83Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature				Db: Sybase

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 #6H
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 408886.930 USFT	Latitude 32.1236335 DEG
East/West 648785.410 USFT	Longitude -103.9862482 DEG
Grid Convergence: .18°	
Total Correction: +7.69°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.12363° N	32° 7 min 25.080 sec
Longitude =	103.98625° W	103° 59 min 10.494 sec

Magnetic Declination =	7.87°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6608
Local Field Strength =	48615 nT	Magnetic Vector X = 24049 nT
Magnetic Dip =	60.04°	Magnetic Vector Y = 3325 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42119 nT
Spud Date =	Aug 10, 2010	Magnetic Vector H = 24277 nT

Signed: _____

Date: _____



Weatherford®

Drilling Services

Proposal



devon

COOTER 16 STATE #7H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

APRIL 26, 2010

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX 79711 USA

+1.432.561.8892 Main

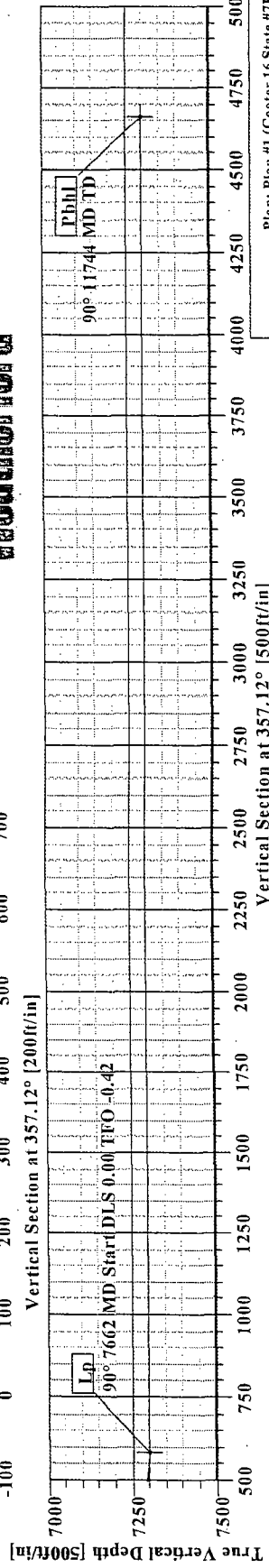
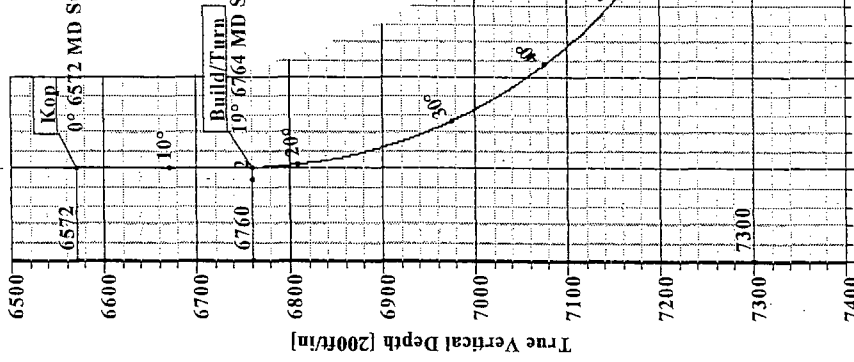
+1.432.561.8895 Fax

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COOTER 16 STATE #7H EDDY CO., NEW MEXICO

KB ELEV: 3045
GL ELEV: 3020



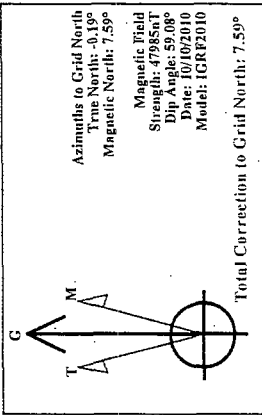
SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	6571.83	0.00	0.00	6571.83	0.00	0.00	0.00	0.00	0.00
3	6763.76	19.19	270.25	6760.19	0.14	-31.85	10.00	270.25	1.74
4	7662.33	90.00	359.82	7300.00	572.47	-221.50	10.00	89.60	582.87 Lp
5	11743.70	90.00	359.82	7300.00	4653.82	-234.08	0.00	-0.42	4659.71 Pbh

WELL DETAILS					
Name	+N/-S	+E/-W	Northing	Easting	Latitude
Cooter 16 State #7H	0.00	0.00	408887.89	649665.76	32°07'25.054N
					103°59'00.271W
					N/A

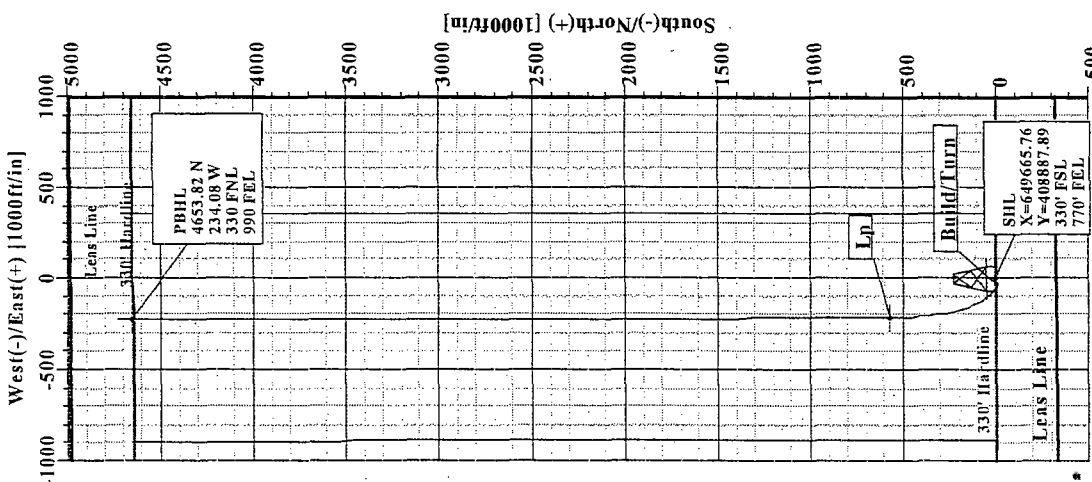
TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
Pbh	7300.00	4653.82	-234.08	413541.72	649431.68
Lp	7300.00	572.47	-221.50	409460.36	649444.26

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 #7H
Site Centre Northing: 408887.89
Easting: 649665.76
Ground Level: 3020.00
Positional Uncertainty: 0.00
Convergence: 0.19



Weatherford



devon

Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cooter 16 State #7H
Well: Cooter 16 State #7H
Wellpath: 1

Date: 4/26/2010
Co-ordinate(NE) Reference: Well: Cooter 16 State #7H, Grid North
Vertical (TVD) Reference: SITE 3045.0
Section (VS) Reference: Well (0.00N, 0.00E, 357.12Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Page: 1

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 #7H

Site Position:
From: Map
Position Uncertainty: 0.00 ft
Ground Level: 3020.00 ft

Northing: 408887.89 ft
Easting: 649665.76 ft

Latitude: 32 7 25.054 N
Longitude: 103 59 0.271 W
North Reference: Grid
Grid Convergence: 0.19 deg

Well: Cooter 16 State #7H

Slot Name:

Well Position: +N/-S 0.00 ft **Northing:** 408887.89 ft **Latitude:** 32 7 25.054 N
 +E/-W 0.00 ft **Easting:** 649665.76 ft **Longitude:** 103 59 0.271 W
Position Uncertainty: 0.00 ft

Wellpath: 1

Current Datum: SITE **Height** 3045.00 ft
Magnetic Data: 10/10/2010
Field Strength: 47985 nT
Vertical Section: Depth From (TVD) ft **+N/-S** ft **+E/-W** ft **Direction** deg

0.00 0.00 0.00 357.12

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6571.83	0.00	0.00	6571.83	0.00	0.00	0.00	0.00	0.00	0.00	
6763.76	19.19	270.25	6760.19	0.14	-31.85	10.00	10.00	0.00	270.25	
7662.33	90.00	359.82	7300.00	572.47	-221.50	10.00	7.88	9.97	89.60	Lp
11743.70	90.00	359.82	7300.00	4653.82	-234.08	0.00	0.00	0.00	-0.42	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
6500.00	0.00	0.00	6500.00	0.00	0.00	0.00	0.00	408887.89	649665.76	
6571.83	0.00	0.00	6571.83	0.00	0.00	0.00	0.00	408887.89	649665.76	Kop
6600.00	2.82	270.25	6599.99	0.00	-0.69	0.04	10.00	408887.90	649665.07	
6700.00	12.82	270.25	6698.93	0.06	-14.28	0.78	10.00	408887.96	649651.48	
6763.76	19.19	270.25	6760.19	0.14	-31.85	1.74	10.00	408888.03	649633.91	Build/Turn
6800.00	19.54	281.14	6794.39	1.33	-43.76	3.53	10.00	408889.23	649622.01	
6900.00	23.46	306.51	6887.61	16.45	-76.25	20.26	10.00	408904.34	649589.51	
7000.00	30.19	323.08	6976.92	48.48	-107.44	53.81	10.00	408936.37	649558.32	
7100.00	38.27	333.64	7059.61	96.45	-136.37	103.17	10.00	408984.34	649529.39	
7200.00	46.99	340.88	7133.15	158.90	-162.16	166.84	10.00	409046.79	649503.60	
7300.00	56.06	346.28	7195.33	233.93	-184.03	242.88	10.00	409121.83	649481.73	
7400.00	65.32	350.62	7244.25	319.27	-201.32	328.98	10.00	409207.17	649464.44	
7500.00	74.69	354.36	7278.41	412.33	-213.50	422.53	10.00	409300.22	649452.26	
7600.00	84.11	357.77	7296.80	510.26	-220.19	520.68	10.00	409398.16	649445.57	
7662.33	90.00	359.82	7300.00	572.47	-221.50	582.87	10.00	409460.36	649444.26	Lp
7700.00	90.00	359.82	7300.00	610.14	-221.62	620.50	0.00	409498.03	649444.14	
7800.00	90.00	359.82	7300.01	710.14	-221.92	720.39	0.00	409598.03	649443.84	
7900.00	90.00	359.82	7300.02	810.14	-222.23	820.28	0.00	409698.03	649443.53	
8000.00	90.00	359.82	7300.03	910.14	-222.54	920.17	0.00	409798.03	649443.22	
8100.00	90.00	359.82	7300.03	1010.14	-222.85	1020.05	0.00	409898.03	649442.91	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy	Date: 4/26/2010	Time: 13:27:29	Page: 2
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Cooter 16 State #7H, Grid North		
Site: Cooter 16 State #7H	Vertical (TVD) Reference: SITE 3045.0		
Well: Cooter 16 State #7H	Section (VS) Reference: Well (0.00N,0.00E,357.12Azi)		
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
8200.00	90.00	359.82	7300.04	1110.13	-223.16	1119.94	0.00	409998.03	649442.60	
8300.00	90.00	359.82	7300.05	1210.13	-223.47	1219.83	0.00	410098.03	649442.30	
8400.00	90.00	359.82	7300.05	1310.13	-223.77	1319.72	0.00	410198.03	649441.99	
8500.00	90.00	359.82	7300.06	1410.13	-224.08	1419.61	0.00	410298.03	649441.68	
8600.00	90.00	359.82	7300.06	1510.13	-224.39	1519.50	0.00	410398.03	649441.37	
8700.00	90.00	359.82	7300.07	1610.13	-224.70	1619.39	0.00	410498.03	649441.06	
8800.00	90.00	359.82	7300.07	1710.13	-225.01	1719.28	0.00	410598.03	649440.75	
8900.00	90.00	359.82	7300.07	1810.13	-225.31	1819.16	0.00	410698.03	649440.45	
9000.00	90.00	359.82	7300.08	1910.13	-225.62	1919.05	0.00	410798.02	649440.14	
9100.00	90.00	359.82	7300.08	2010.13	-225.93	2018.94	0.00	410898.02	649439.83	
9200.00	90.00	359.82	7300.08	2110.13	-226.24	2118.83	0.00	410998.02	649439.52	
9300.00	90.00	359.82	7300.08	2210.13	-226.55	2218.72	0.00	411098.02	649439.21	
9400.00	90.00	359.82	7300.08	2310.13	-226.86	2318.61	0.00	411198.02	649438.91	
9500.00	90.00	359.82	7300.09	2410.13	-227.16	2418.50	0.00	411298.02	649438.60	
9600.00	90.00	359.82	7300.09	2510.13	-227.47	2518.39	0.00	411398.02	649438.29	
9700.00	90.00	359.82	7300.09	2610.13	-227.78	2618.27	0.00	411498.02	649437.98	
9800.00	90.00	359.82	7300.09	2710.13	-228.09	2718.16	0.00	411598.02	649437.67	
9900.00	90.00	359.82	7300.09	2810.13	-228.40	2818.05	0.00	411698.02	649437.36	
10000.00	90.00	359.82	7300.08	2910.13	-228.71	2917.94	0.00	411798.02	649437.06	
10100.00	90.00	359.82	7300.08	3010.13	-229.01	3017.83	0.00	411898.02	649436.75	
10200.00	90.00	359.82	7300.08	3110.13	-229.32	3117.72	0.00	411998.02	649436.44	
10300.00	90.00	359.82	7300.08	3210.12	-229.63	3217.61	0.00	412098.02	649436.13	
10400.00	90.00	359.82	7300.08	3310.12	-229.94	3317.50	0.00	412198.02	649435.82	
10500.00	90.00	359.82	7300.07	3410.12	-230.25	3417.38	0.00	412298.02	649435.51	
10600.00	90.00	359.82	7300.07	3510.12	-230.55	3517.27	0.00	412398.02	649435.21	
10700.00	90.00	359.82	7300.07	3610.12	-230.86	3617.16	0.00	412498.02	649434.90	
10800.00	90.00	359.82	7300.06	3710.12	-231.17	3717.05	0.00	412598.02	649434.59	
10900.00	90.00	359.82	7300.06	3810.12	-231.48	3816.94	0.00	412698.02	649434.28	
11000.00	90.00	359.82	7300.05	3910.12	-231.79	3916.83	0.00	412798.02	649433.97	
11100.00	90.00	359.82	7300.05	4010.12	-232.10	4016.72	0.00	412898.02	649433.66	
11200.00	90.00	359.82	7300.04	4110.12	-232.40	4116.61	0.00	412998.01	649433.36	
11300.00	90.00	359.82	7300.03	4210.12	-232.71	4216.49	0.00	413098.01	649433.05	
11400.00	90.00	359.82	7300.03	4310.12	-233.02	4316.38	0.00	413198.01	649432.74	
11500.00	90.00	359.82	7300.02	4410.12	-233.33	4416.27	0.00	413298.01	649432.43	
11600.00	90.00	359.82	7300.01	4510.12	-233.64	4516.16	0.00	413398.01	649432.12	
11700.00	90.00	359.82	7300.00	4610.12	-233.95	4616.05	0.00	413498.01	649431.81	
11743.70	90.00	359.82	7300.00	4653.82	-234.08	4659.71	0.00	413541.72	649431.68	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	4653.82	-234.08	413541.72	649431.68	32	8	11.116 N	103	59	2.818 W
Lp			7300.00	572.47	-221.50	409460.36	649444.26	32	7	30.726 N	103	59	2.825 W



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WFT Plan Report - X & Y's



Weatherford

Company:	Devon Energy	Date:	4/26/2010	Time:	13:27:29	Page:	3
Field:	Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference:	Well: Cooter 16 State #7H, Grid North				
Site:	Cooter 16 State #7H	Vertical (TVD) Reference:	SITE 3045.0				
Well:	Cooter 16 State #7H	Section (VS) Reference:	Well (0:00N,0:00E,357:12Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature	Db:	Sybase		

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6571.83	6571.83	Kop
6763.76	6760.19	Build/Turn
7662.33	7300.00	Lp
11743.70	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 #7H
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 408887.890 USFT	Latitude 32.1236283 DEG
East/West 649665.760 USFT	Longitude -103.9834045 DEG
Grid Convergence: .19°	
Total Correction: +7.67°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.12363° N	32° 7 min 25.062 sec
Longitude =	103.98340° W	103° 59 min .256 sec

Magnetic Declination =	7.86°	[True North Offset]	
Local Gravity =	.9988 g	Checksum =	6594
Local Field Strength =	48607 nT	Magnetic Vector X =	24046 nT
Magnetic Dip =	60.04°	Magnetic Vector Y =	3320 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z =	42111 nT
Spud Date =	Sep 10, 2010	Magnetic Vector H =	24274 nT

Signed: _____

Date: _____



Weatherford®

Drilling Services

Proposal



devon

COOTER 16 STATE #8H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

APRIL 20, 2010

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX 79711 USA

+1.432.561.8892 Main

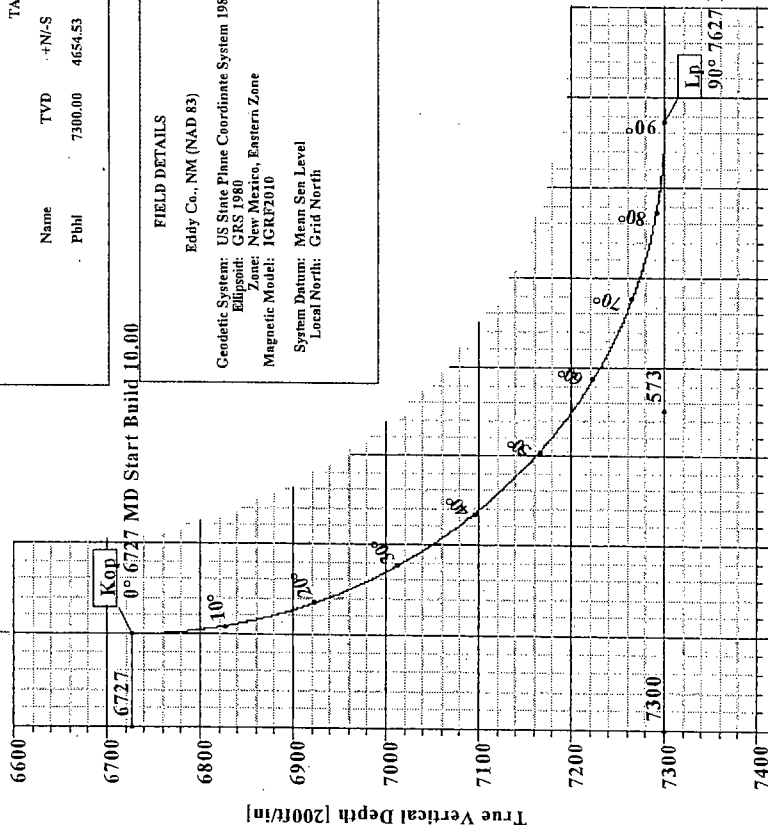
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www.weatherford.com



COOTER 16 STATE #8H
EDDY CO., NEW MEXICO

KP ELEV: 3061
GL ELEV: 3036



True Vertical Depth [500ft/in]

Vertical Section at 0.10° [200ft/in]

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	6727.04	0.00	0.10	6727.04	0.00	0.00	0.00	0.00	0.00	0.00
3	7627.04	90.00	0.10	7300.00	572.96	0.95	10.00	0.10	572.96	Phl
4	11708.62	90.00	0.10	7300.00	4654.53	7.73	0.00	0.00	4654.54	Phl

WELL DETAILS

Name	Cooter 16 State #8H	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
		0.00	0.00	408889.66	650015.16	32°07'25.060N	103°58'56.208W	N/A

TARGET DETAILS

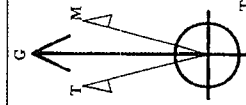
Name	TV	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	7300.00	4654.53	7.73	413544.20	650022.89	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Datum: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Cooter 16 State #8H
Site Centre Northing: 408889.66
Easting: 650015.16
Ground Level: 3036.00
Positional Uncertainty: 0.00
Convergence: 0.19



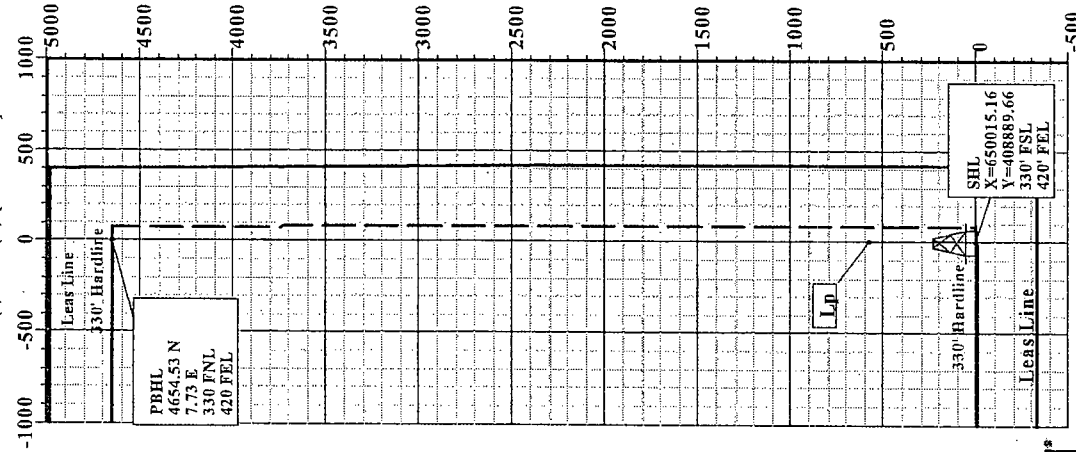
Azimuths to Grid North
True North: -0.19°
Magnetic North: 7.68°
Magnetic Field
Strength: 48613nT
Dip Angle: 60.04°
Date: 9/12/2010
Model: IGRF2010

Total Correction to Grid North: 7.68°



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West(-)/East(+) [1000ft/in]



90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

90° 7627 MD Start Hold

Vertical Section at 0.10° [500ft/in]

Plan: Plan #1 (Cooter 16 State #8H/1)

Created By: Russell W Joyner

Date: 4/20/2010



Company: Devon Energy	Date: 4/20/2010	Time: 15:42:33	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Cooter 16 State #8H, Grid North		
Site: Cooter 16 State #8H	Vertical (TVD) Reference: SITE 3061.0		
Well: Cooter 16 State #8H	Section (VS) Reference: Well (0.00N,0.00E,0.10Azi)		
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 #8H

Site Position:	From: Map	Northing: 408889.66 ft	Latitude: 32 7 25.060 N
Position Uncertainty: 0.00 ft		Easting: 650015.16 ft	Longitude: 103 58 56.208 W
Ground Level: 3036.00 ft		North Reference: Grid	Grid Convergence: 0.19 deg

Well: Cooter 16 State #8H

Slot Name:

Well Position:	+N/-S 0.00 ft	Northing: 408889.66 ft	Latitude: 32 7 25.060 N
	+E/-W 0.00 ft	Easting: 650015.16 ft	Longitude: 103 58 56.208 W
Position Uncertainty: 0.00 ft			

Wellpath: 1

Current Datum: SITE	Height 3061.00 ft	Drilled From: Surface
Magnetic Data: 9/1/2010		Tie-on Depth: 0.00 ft
Field Strength: 48613 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S ft	Declination: 7.86 deg
		Mag Dip Angle: 60.04 deg
		+E/-W ft
		Direction deg
7300.00	0.00	0.00 0.10

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	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6727.04	0.00	0.10	6727.04	0.00	0.00	0.00	0.00	0.00	0.00	
7627.04	90.00	0.10	7300.00	572.96	0.95	10.00	10.00	0.00	0.10	
11708.62	90.00	0.10	7300.00	4654.53	7.73	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
6700.00	0.00	0.10	6700.00	0.00	0.00	0.00	0.00	408889.66	650015.16	
6727.04	0.00	0.10	6727.04	0.00	0.00	0.00	0.00	408889.66	650015.16	
6800.00	7.30	0.10	6799.80	4.64	0.01	4.64	10.00	408894.30	650015.17	
6900.00	17.30	0.10	6897.39	25.91	0.04	25.91	10.00	408915.57	650015.21	
7000.00	27.30	0.10	6989.79	63.80	0.11	63.80	10.00	408953.46	650015.27	
7100.00	37.30	0.10	7074.21	117.16	0.19	117.16	10.00	409006.82	650015.36	
7200.00	47.30	0.10	7148.09	184.37	0.31	184.37	10.00	409074.03	650015.47	
7300.00	57.30	0.10	7209.17	263.39	0.44	263.39	10.00	409153.05	650015.60	
7400.00	67.30	0.10	7255.60	351.81	0.58	351.81	10.00	409241.48	650015.75	
7500.00	77.30	0.10	7285.97	446.95	0.74	446.95	10.00	409336.62	650015.91	
7600.00	87.30	0.10	7299.36	545.92	0.91	545.93	10.00	409435.59	650016.07	
7627.04	90.00	0.10	7300.00	572.96	0.95	572.96	10.00	409462.62	650016.12	
7700.00	90.00	0.10	7300.00	645.91	1.07	645.92	0.00	409535.58	650016.24	
7800.00	90.00	0.10	7300.00	745.91	1.24	745.92	0.00	409635.58	650016.40	
7900.00	90.00	0.10	7300.00	845.91	1.40	845.92	0.00	409735.58	650016.57	
8000.00	90.00	0.10	7300.00	945.91	1.57	945.92	0.00	409835.58	650016.73	
8100.00	90.00	0.10	7300.00	1045.91	1.74	1045.92	0.00	409935.58	650016.90	
8200.00	90.00	0.10	7300.00	1145.91	1.90	1145.92	0.00	410035.58	650017.07	
8300.00	90.00	0.10	7300.00	1245.91	2.07	1245.92	0.00	410135.58	650017.23	
8400.00	90.00	0.10	7300.00	1345.91	2.23	1345.92	0.00	410235.58	650017.40	



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WFT Plan Report - X & Y's

**Weatherford**

Company:	Devon Energy	Date:	4/20/2010	Time:	15:42:33	Page:	2
Field:	Eddy Co. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: Cooter 16 State #8H, Grid North				
Site:	Cooter 16 State #8H	Vertical (TVD) Reference:	SITE 3061.0				
Well:	Cooter 16 State #8H	Section (VS) Reference:	Well (0.00N,0.00E,0.10Azi)				
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
8500.00	90.00	0.10	7300.00	1445.91	2.40	1445.92	0.00	410335.58	650017.56	
8600.00	90.00	0.10	7300.00	1545.91	2.57	1545.92	0.00	410435.58	650017.73	
8700.00	90.00	0.10	7300.00	1645.91	2.73	1645.92	0.00	410535.58	650017.90	
8800.00	90.00	0.10	7300.00	1745.91	2.90	1745.92	0.00	410635.58	650018.06	
8900.00	90.00	0.10	7300.00	1845.91	3.07	1845.92	0.00	410735.58	650018.23	
9000.00	90.00	0.10	7300.00	1945.91	3.23	1945.92	0.00	410835.58	650018.40	
9100.00	90.00	0.10	7300.00	2045.91	3.40	2045.92	0.00	410935.58	650018.56	
9200.00	90.00	0.10	7300.00	2145.91	3.56	2145.92	0.00	411035.58	650018.73	
9300.00	90.00	0.10	7300.00	2245.91	3.73	2245.92	0.00	411135.58	650018.89	
9400.00	90.00	0.10	7300.00	2345.91	3.90	2345.92	0.00	411235.58	650019.06	
9500.00	90.00	0.10	7300.00	2445.91	4.06	2445.92	0.00	411335.58	650019.23	
9600.00	90.00	0.10	7300.00	2545.91	4.23	2545.92	0.00	411435.58	650019.39	
9700.00	90.00	0.10	7300.00	2645.91	4.39	2645.92	0.00	411535.58	650019.56	
9800.00	90.00	0.10	7300.00	2745.91	4.56	2745.92	0.00	411635.58	650019.72	
9900.00	90.00	0.10	7300.00	2845.91	4.73	2845.92	0.00	411735.58	650019.89	
10000.00	90.00	0.10	7300.00	2945.91	4.89	2945.92	0.00	411835.58	650020.06	
10100.00	90.00	0.10	7300.00	3045.91	5.06	3045.92	0.00	411935.58	650020.22	
10200.00	90.00	0.10	7300.00	3145.91	5.22	3145.92	0.00	412035.58	650020.39	
10300.00	90.00	0.10	7300.00	3245.91	5.39	3245.92	0.00	412135.58	650020.55	
10400.00	90.00	0.10	7300.00	3345.91	5.56	3345.92	0.00	412235.58	650020.72	
10500.00	90.00	0.10	7300.00	3445.91	5.72	3445.92	0.00	412335.58	650020.89	
10600.00	90.00	0.10	7300.00	3545.91	5.89	3545.92	0.00	412435.58	650021.05	
10700.00	90.00	0.10	7300.00	3645.91	6.05	3645.92	0.00	412535.58	650021.22	
10800.00	90.00	0.10	7300.00	3745.91	6.22	3745.92	0.00	412635.58	650021.38	
10900.00	90.00	0.10	7300.00	3845.91	6.39	3845.92	0.00	412735.58	650021.55	
11000.00	90.00	0.10	7300.00	3945.91	6.55	3945.92	0.00	412835.58	650021.72	
11100.00	90.00	0.10	7300.00	4045.91	6.72	4045.92	0.00	412935.58	650021.88	
11200.00	90.00	0.10	7300.00	4145.91	6.88	4145.92	0.00	413035.57	650022.05	
11300.00	90.00	0.10	7300.00	4245.91	7.05	4245.92	0.00	413135.57	650022.21	
11400.00	90.00	0.10	7300.00	4345.91	7.22	4345.92	0.00	413235.57	650022.38	
11500.00	90.00	0.10	7300.00	4445.91	7.38	4445.92	0.00	413335.57	650022.55	
11600.00	90.00	0.10	7300.00	4545.91	7.55	4545.92	0.00	413435.57	650022.71	
11700.00	90.00	0.10	7300.00	4645.91	7.71	4645.92	0.00	413535.57	650022.88	
11708.62	90.00	0.10	7300.00	4654.53	7.73	4654.54	0.00	413544.20	650022.89	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	4654.53	7.73	413544.20	650022.89	32 8 11.121 N	103 58 55.942 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
6727.04	6727.04	Kop
7627.04	7300.00	Lp
11708.62	7300.00	Pbhl


devon

Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy	Date: 4/20/2010	Time: 15:42:33	Page: 3
Field: Eddy Co. NM (NAD 83)	Co-ordinate(NE) Reference:	Well: Cooter 16 State #8H, Grid North	
Site: Cooter 16 State #8H	Vertical (TVD) Reference:	SITE 3061.0	
Well: Cooter 16 State #8H	Section (VS) Reference:	Well (0.00N,0.00E,0.10Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

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

GeoDec v5.03

Report Date: April 20, 2010
Job Number: _____
Customer: Devon Energy
Well Name: Cooter 16 State #8H
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 408889.660 USFT	Latitude 32.1236300 DEG
East/West 650015.160 USFT	Longitude -103.9822758 DEG
Grid Convergence: .19°	
Total Correction: +7.67°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.12363° N	32° 7 min 25.068 sec
Longitude =	103.98228° W	103° 58 min 56.193 sec

Magnetic Declination =	7.86°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6604
Local Field Strength =	48609 nT	Magnetic Vector X = 24047 nT
Magnetic Dip =	60.04°	Magnetic Vector Y = 3321 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42114 nT
Spud Date =	Sep 01, 2010	Magnetic Vector H = 24275 nT

Signed: _____

Date: _____