



Weatherford®

30-015-38556

Evaluation, Drilling & Intervention

10000 West County Rd. 116

P.O. Box 61028

Midland, TX USA 79711

Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
20 North Broadway
Oklahoma City, OK, 73102

Date: October 21, 2011

Attention: Mark Cooper

Re: Devon Energy
Well: Cotton Draw Unit #137H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Ward	137H	4353' MD	10/1/2011	Measurement
MWD Supervisor		16221' MD	10/20/2011	While Drilling

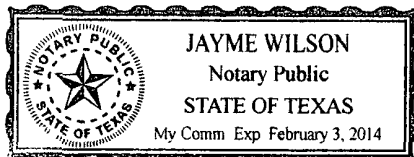
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

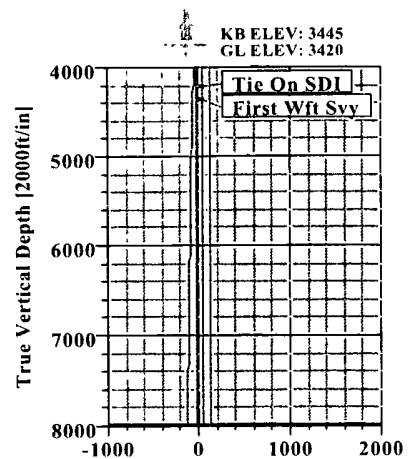
Jesse Aguilar
Area Manager

On this, the 25th day of October, 2011, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public





SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8090.00	0.46	97.23	8088.55	43.98	85.24	0.00	0.00	50.25	
2	8175.48	0.46	97.23	8174.03	43.89	85.92	0.00	0.00	50.21	
3	9073.51	90.00	32.55	8745.00	524.62	397.69	10.00	295.32	552.96	
4	9724.44	90.00	0.00	8745.00	1141.10	577.68	5.00	-90.00	1181.20	
5	16271.52	90.00	0.00	8745.00	7688.17	578.08	0.00	0.00	7709.87	Pbhl

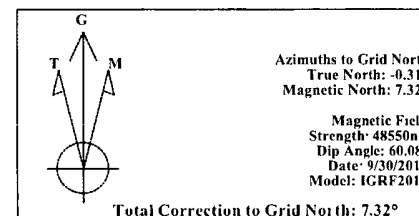
WELL DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CDU #137H	0.00	0.00	419794.65	721328.13	32°09'09.919N	103°45'06.260W

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
Pbhl	8745.00	7688.17	578.08	427482.82	721906.21	32°10'25.967N

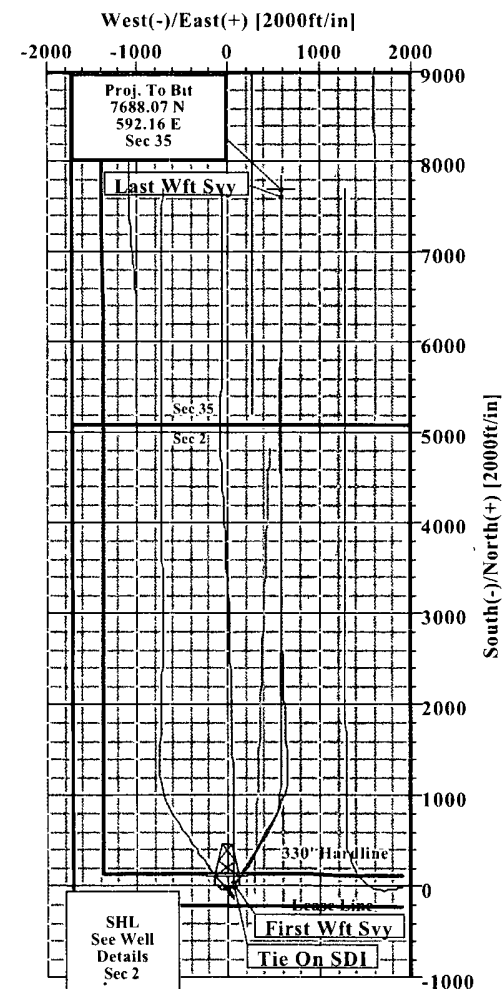
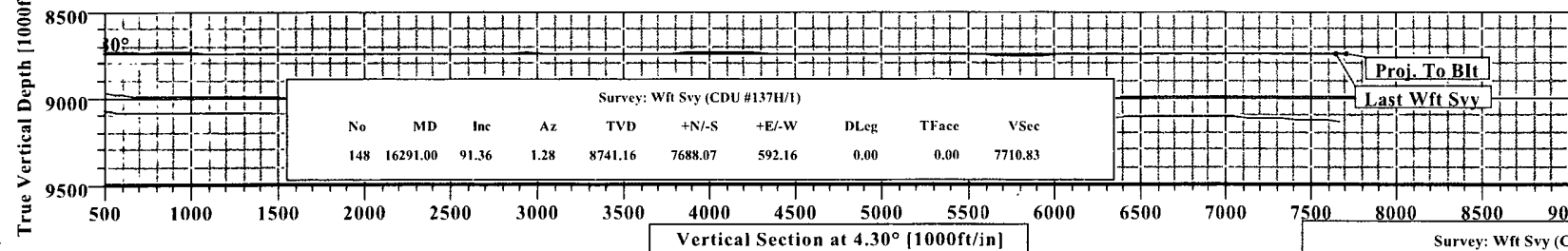
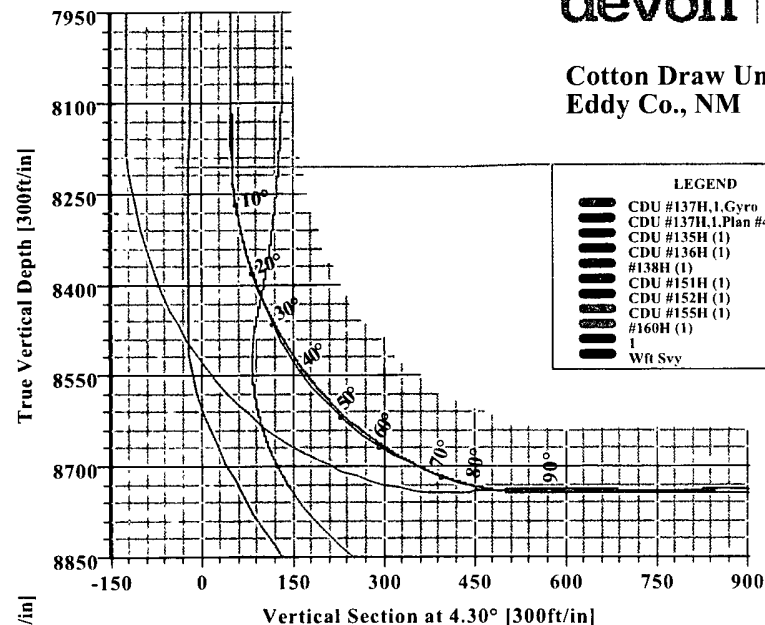


Cotton Draw Unit #137H
Eddy Co., NM

SITE DETAILS	
Cotton Draw Unit #137H	
Site Centre Northing:	419794.65
Easting:	721328.13
Ground Level:	3420.00
Positional Uncertainty:	0.00
Convergence:	0.31



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



Survey: Wft Svy (CDU #137H/1)
Created By: Russell W. Joyner
Date: 10/20/2011



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy	Date: 10/20/2011	Time: 05:32:49	Page: 1
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well, CDU #137H, Grid North		
Site: Cotton Draw Unit #137H	Vertical (TVD) Reference: SITE 3445 0		
Well: CDU #137H	Section (VS) Reference: Well (0.00N,0.00E,4 30Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 10/3/2011
Company: Weatherford International Ltd.	Engineer: Russell W. Joyner
Tool: MWD,MWD - Standard	Tied-to: User Defined

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 #137H

Site Position:	Northing: 419794.65 ft	Latitude: 32 9 9.919 N
From: Map	Easting: 721328.13 ft	Longitude: 103 45 6 260 W
Position Uncertainty: 0 00 ft		North Reference: Grid
Ground Level: 3420.00 ft		Grid Convergence: 0.31 deg

Well: CDU #137H	Slot Name:	
Well Position: +N/-S 0 00 ft	Northing: 419794 65 ft	Latitude: 32 9 9.919 N
+E/-W 0.00 ft	Easting : 721328 13 ft	Longitude: 103 45 6 260 W
Position Uncertainty: 0 00 ft		

Wellpath: 1	Drilled From: Surface		
Current Datum: SITE	Tie-on Depth: 0 00 ft		
Magnetic Data: 9/30/2011	Above System Datum: Mean Sea Level		
Field Strength: 48550 nT	Declination: 7 63 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60 08 deg		
ft	+N/-S	+E/-W	Direction
	ft	ft	deg
0 00	0 00	0 00	4.30

Survey

MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	
4215 00	1 38	153.23	4213.76	36.08	53.98	0 00	40.03	419830 73	721382.11	Tie On SDI First Wft Svy
4353 00	0 60	116.29	4351 74	34.28	55 38	0 70	38.33	419828 93	721383 51	
4448 00	0 61	120.03	4446.73	33 80	56 26	0 04	37.93	419828.45	721384 39	
4542 00	0 52	115 67	4540.73	33 37	57 08	0 11	37 55	419828 02	721385 21	
4637.00	0 64	102 54	4635 72	33 07	57 98	0 19	37.32	419827 72	721386 11	
4732 00	0 58	97 13	4730.72	32 89	58.98	0.09	37 22	419827 54	721387.11	
4826 00	0 74	92.09	4824 71	32 81	60.06	0.18	37 22	419827 46	721388 19	
4921 00	0 77	84 12	4919.70	32 85	61 31	0 11	37 36	419827.50	721389 44	
5016 00	0 69	71 61	5014.70	33 10	62 48	0 19	37 69	419827.75	721390 61	
5110 00	0 69	78 71	5108 69	33 39	63 58	0 09	38.06	419828.04	721391 71	
5205 00	0 89	71 42	5203 68	33.74	64 84	0.24	38.50	419828.39	721392 97	
5299 00	0 71	63 77	5297 67	34 23	66 05	0 22	39.08	419828 88	721394 18	
5394.00	0.74	74 38	5392 66	34.65	67 17	0 14	39.59	419829.30	721395 30	
5490 00	0 74	61 35	5488 66	35.11	68 31	0 17	40 14	419829.76	721396 44	
5584 00	0.71	67.08	5582 65	35.63	69.38	0.08	40.73	419830 28	721397.51	
5679 00	0.80	58 41	5677 64	36.21	70 49	0 15	41 39	419830.86	721398.62	
5774 00	0.88	74 60	5772 63	36 75	71 75	0 26	42 03	419831 40	721399 88	
5869 00	0 86	66.88	5867.62	37.22	73 11	0.13	42 60	419831.87	721401.24	
5963.00	0.55	96.98	5961 61	37.45	74.21	0.50	42.90	419832.10	721402 34	
6058 00	0 60	67.29	6056 61	37 58	75.12	0 31	43 11	419832.23	721403 25	
6152.00	0.55	58.44	6150 60	38.01	75.96	0.11	43 60	419832.66	721404.09	
6247 00	0 58	77 40	6245 60	38 35	76 82	0.20	44 00	419833 00	721404.95	
6341 00	0.47	71.24	6339.59	38 58	77.65	0 13	44 29	419833 23	721405 78	
6436 00	0 40	68 36	6434.59	38.83	78.32	0 08	44.59	419833 48	721406.45	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #137H
Well: CDU #137H
Wellpath: 1

Date: 10/20/2011 Time: 05:32:49 Page: 2
Co-ordinate(NE) Reference: Well: CDU #137H, Grid North
Vertical (TVD) Reference: SITE 3445.0
Section (VS) Reference: Well (0.00N,0.00E,4.30Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
6530.00	0.25	113.70	6528.59	38.87	78.82	0.30	44.67	419833.52	721406.95	
6625.00	0.25	128.26	6623.59	38.65	79.17	0.07	44.48	419833.30	721407.30	
6720.00	0.33	98.41	6718.59	38.49	79.60	0.18	44.35	419833.14	721407.73	
6815.00	0.20	34.08	6813.59	38.58	79.97	0.32	44.47	419833.23	721408.10	
6910.00	0.15	2.54	6908.59	38.85	80.07	0.11	44.74	419833.50	721408.20	
7004.00	0.11	18.54	7002.59	39.05	80.10	0.06	44.95	419833.70	721408.23	
7098.00	0.32	332.26	7096.59	39.37	80.01	0.27	45.26	419834.02	721408.14	
7193.00	0.30	356.78	7191.58	39.85	79.87	0.14	45.73	419834.50	721408.00	
7287.00	0.45	0.59	7285.58	40.47	79.86	0.16	46.34	419835.12	721407.99	
7381.00	0.40	33.45	7379.58	41.11	80.04	0.26	47.00	419835.76	721408.17	
7476.00	0.53	55.67	7474.58	41.64	80.59	0.23	47.56	419836.29	721408.72	
7571.00	0.74	59.88	7569.57	42.19	81.48	0.23	48.18	419836.84	721409.61	
7665.00	0.60	73.56	7663.56	42.64	82.48	0.23	48.70	419837.29	721410.61	
7760.00	0.42	52.50	7758.56	42.99	83.23	0.27	49.11	419837.64	721411.36	
7855.00	0.47	69.15	7853.56	43.34	83.87	0.15	49.51	419837.99	721412.00	
7950.00	0.54	86.16	7948.55	43.51	84.68	0.17	49.74	419838.16	721412.81	
8044.00	0.33	78.09	8042.55	43.59	85.39	0.23	49.87	419838.24	721413.52	
8090.00	0.46	97.23	8088.55	43.60	85.70	0.40	49.90	419838.25	721413.83	
8198.00	3.25	66.12	8196.48	44.78	88.93	2.65	51.33	419839.43	721417.06	
8230.00	5.53	49.12	8228.39	46.16	90.93	8.13	52.85	419840.81	721419.06	
8261.00	8.75	42.10	8259.15	48.89	93.64	10.74	55.77	419843.54	721421.77	
8293.00	13.01	42.64	8290.56	53.35	97.71	13.32	60.52	419848.00	721425.84	
8324.00	16.96	44.79	8320.50	59.12	103.26	12.87	66.70	419853.77	721431.39	
8355.00	19.00	44.21	8349.99	65.95	109.97	6.61	74.01	419860.60	721438.10	
8387.00	19.94	38.26	8380.16	73.97	116.98	6.85	82.53	419868.62	721445.11	
8419.00	23.11	34.69	8409.93	83.42	123.94	10.71	92.48	419878.07	721452.07	
8450.00	26.81	36.05	8438.03	94.08	131.52	12.08	103.67	419888.73	721459.65	
8482.00	30.15	36.63	8466.15	106.37	140.56	10.47	116.61	419901.02	721468.69	
8513.00	32.44	34.35	8492.64	119.48	149.90	8.32	130.38	419914.13	721478.03	
8544.00	35.24	33.93	8518.38	133.77	159.58	9.06	145.36	419928.42	721487.71	
8576.00	39.85	34.50	8543.75	149.89	170.55	14.45	162.25	419944.54	721498.68	
8608.00	44.96	34.76	8567.37	167.64	182.81	15.98	180.87	419962.29	721510.94	
8640.00	48.07	35.53	8589.39	186.62	196.18	9.87	200.80	419981.27	721524.31	
8671.00	49.46	35.61	8609.82	205.58	209.74	4.49	220.72	420000.23	721537.87	
8703.00	50.79	33.23	8630.34	225.84	223.61	7.06	241.97	420020.49	721551.74	
8734.00	54.26	29.96	8649.20	246.79	236.48	13.98	263.83	420041.44	721564.61	
8766.00	59.36	27.72	8666.71	270.25	249.38	16.98	288.18	420064.90	721577.51	
8797.00	64.44	25.88	8681.31	294.65	261.70	17.20	313.44	420089.30	721589.83	
8829.00	67.34	24.69	8694.38	321.06	274.17	9.68	340.71	420115.71	721602.30	
8860.00	68.09	25.64	8706.14	347.02	286.37	3.73	367.51	420141.67	721614.50	
8892.00	69.91	26.03	8717.61	373.91	299.39	5.80	395.30	420168.56	721627.52	
8923.00	72.79	26.51	8727.52	400.24	312.39	9.41	422.54	420194.89	721640.52	
8954.00	78.41	26.89	8735.22	427.06	325.87	18.17	450.29	420221.71	721654.00	
8985.00	84.64	27.73	8739.79	454.28	339.93	20.27	478.49	420248.93	721668.06	
9017.00	89.20	28.14	8741.51	482.51	354.90	14.31	507.76	420277.16	721683.03	
9109.00	90.10	29.26	8742.07	563.20	399.08	1.56	591.54	420357.85	721727.21	
9158.00	90.17	29.99	8741.96	605.80	423.30	1.50	635.83	420400.45	721751.43	
9252.00	90.66	28.86	8741.28	687.67	469.48	1.31	720.93	420482.32	721797.61	
9346.00	91.50	26.40	8739.50	770.92	513.06	2.76	807.22	420565.57	721841.19	
9440.00	89.90	23.38	8738.35	856.17	552.61	3.64	895.20	420650.82	721880.74	
9534.00	89.20	20.64	8739.09	943.31	587.84	3.01	984.73	420737.96	721915.97	
9628.00	87.65	17.02	8741.68	1032.23	618.16	4.19	1075.67	420826.88	721946.29	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #137H
Well: CDU #137H
Wellpath: 1

Date: 10/20/2011 Time: 05:32:49 Page: 3
Co-ordinate(NE) Reference: Well: CDU #137H, Grid North
Vertical (TVD) Reference: SITE 3445 0'
Section (VS) Reference: Well (0.00N, 0.00E, 4.30Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	
9722.00	88.78	10.68	8744.61	1123.40	640.64	6.85	1168.28	420918.05	721968.77	
9816.00	91.08	2.12	8744.72	1216.73	651.11	9.43	1262.12	421011.38	721979.24	
9909.00	89.89	356.79	8743.94	1309.68	650.22	5.87	1354.75	421104.33	721978.35	
10003.00	89.76	356.70	8744.22	1403.53	644.88	0.17	1447.93	421198.18	721973.01	
10097.00	90.45	356.48	8744.05	1497.36	639.29	0.77	1541.08	421292.01	721967.42	
10191.00	90.45	356.61	8743.31	1591.19	633.63	0.14	1634.22	421385.84	721961.76	
10285.00	91.15	356.78	8742.00	1685.02	628.21	0.77	1727.38	421479.67	721956.34	
10379.00	89.62	357.33	8741.37	1778.89	623.38	1.73	1820.63	421573.54	721951.51	
10473.00	89.55	357.43	8742.05	1872.79	619.08	0.13	1913.94	421667.44	721947.21	
10566.00	90.52	357.59	8741.99	1965.70	615.04	1.06	2006.29	421760.35	721943.17	
10660.00	90.80	358.27	8740.91	2059.64	611.65	0.78	2099.70	421854.29	721939.78	
10754.00	89.41	358.38	8740.74	2153.59	608.90	1.48	2193.19	421948.24	721937.03	
10848.00	88.85	357.70	8742.16	2247.53	605.69	0.94	2286.61	422042.18	721933.82	
10942.00	89.27	357.49	8743.71	2341.43	601.74	0.50	2379.96	422136.08	721929.87	
11035.00	89.90	357.40	8744.38	2434.34	597.60	0.68	2472.29	422228.99	721925.73	
11129.00	90.66	358.23	8743.92	2528.26	594.01	1.20	2565.69	422322.91	721922.14	
11223.00	91.01	358.40	8742.55	2622.21	591.25	0.41	2659.16	422416.86	721919.38	
11317.00	90.73	359.12	8741.12	2716.18	589.22	0.82	2752.71	422510.83	721917.35	
11411.00	90.94	358.42	8739.75	2810.15	587.20	0.78	2846.27	422604.80	721915.33	
11505.00	89.41	357.68	8739.47	2904.09	584.00	1.81	2939.70	422698.74	721912.13	
11599.00	88.92	357.46	8740.84	2998.00	580.01	0.57	3033.05	422792.65	721908.14	
11693.00	89.41	358.00	8742.21	3091.91	576.29	0.78	3126.42	422886.56	721904.42	
11787.00	89.76	359.89	8742.89	3185.89	574.56	2.04	3220.00	422980.54	721902.69	
11881.00	89.55	1.04	8743.45	3279.88	575.32	1.24	3313.79	423074.53	721903.45	
11975.00	89.90	1.19	8743.90	3373.86	577.15	0.41	3407.64	423168.51	721905.28	
12069.00	90.45	1.15	8743.62	3467.84	579.07	0.59	3501.50	423262.49	721907.20	
12163.00	90.45	0.91	8742.88	3561.82	580.76	0.26	3595.34	423356.47	721908.89	
12257.00	90.94	0.78	8741.74	3655.81	582.15	0.54	3689.16	423450.46	721910.28	
12351.00	91.36	0.80	8739.85	3749.78	583.44	0.45	3782.97	423544.43	721911.57	
12445.00	90.52	0.03	8738.31	3843.76	584.12	1.21	3876.74	423638.41	721912.25	
12539.00	89.41	358.92	8738.37	3937.75	583.26	1.67	3970.40	423732.40	721911.39	
12633.00	90.04	359.15	8738.82	4031.74	581.68	0.71	4064.00	423826.39	721909.81	
12726.00	90.52	359.47	8738.36	4124.73	580.56	0.62	4156.65	423919.38	721908.69	
12820.00	89.48	358.68	8738.36	4218.72	579.04	1.39	4250.26	424013.37	721907.17	
12914.00	88.15	359.05	8740.31	4312.68	577.18	1.47	4343.81	424107.33	721905.31	
13008.00	88.63	358.99	8742.95	4406.63	575.57	0.51	4437.38	424201.28	721903.70	
13102.00	88.85	358.91	8745.02	4500.59	573.85	0.25	4530.95	424295.24	721901.98	
13196.00	89.13	358.80	8746.67	4594.55	571.97	0.32	4624.51	424389.20	721900.10	
13290.00	89.55	358.91	8747.76	4688.53	570.10	0.46	4718.08	424483.18	721898.23	
13384.00	89.97	358.94	8748.15	4782.51	568.33	0.45	4811.66	424577.16	721896.46	
13478.00	90.73	358.92	8747.58	4876.49	566.58	0.81	4905.25	424671.14	721894.71	
13572.00	91.85	359.02	8745.46	4970.45	564.89	1.20	4998.81	424765.10	721893.02	
13666.00	91.85	359.19	8742.42	5064.39	563.42	0.18	5092.38	424859.04	721891.55	
13760.00	90.45	358.33	8740.54	5158.35	561.39	1.75	5185.92	424953.00	721889.52	
13855.00	89.20	358.93	8740.83	5253.32	559.11	1.46	5280.45	425047.97	721887.24	
13949.00	88.22	0.04	8742.94	5347.29	558.27	1.57	5374.09	425141.94	721886.40	
14042.00	87.80	2.05	8746.17	5440.21	559.96	2.21	5466.88	425234.86	721888.09	
14137.00	88.01	2.35	8749.65	5535.08	563.61	0.39	5561.75	425329.73	721891.74	
14231.00	88.29	2.12	8752.68	5628.96	567.27	0.39	5655.64	425423.61	721895.40	
14325.00	89.76	1.31	8754.28	5722.90	570.09	1.79	5749.53	425517.55	721898.22	
14512.00	92.62	1.41	8750.40	5909.78	574.52	1.53	5936.23	425704.43	721902.65	
14606.00	92.06	1.24	8746.56	6003.68	576.69	0.62	6030.02	425798.33	721904.82	
14630.00	91.78	1.20	8745.76	6027.66	577.20	1.18	6053.97	425822.31	721905.33	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy	Date: 10/20/2011	Time: 05:32:49	Page: 4
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: CDU #137H, Grid North		
Site: Cotton Draw Unit #137H	Vertical (TVD) Reference: SITE 3445 0		
Well: CDU #137H	Section (VS) Reference: Well (0.00N,0.00E,4 30Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
14700.00	92.48	1.02	8743.15	6097.60	578.56	1.03	6123.82	425892.25	721906.69	
14794.00	89.62	0.02	8741.43	6191.57	579.41	3.22	6217.58	425986.22	721907.54	
14888.00	89.97	359.95	8741.77	6285.57	579.39	0.38	6311.32	426080.22	721907.52	
14982.00	90.38	359.90	8741.48	6379.57	579.26	0.44	6405.04	426174.22	721907.39	
15076.00	90.80	0.07	8740.51	6473.56	579.24	0.48	6498.77	426268.21	721907.37	
15170.00	88.78	359.07	8740.86	6567.55	578.53	2.40	6592.44	426362.20	721906.66	
15264.00	88.71	358.85	8742.92	6661.51	576.83	0.25	6686.01	426456.16	721904.96	
15358.00	88.54	358.96	8745.17	6755.47	575.03	0.22	6779.57	426550.12	721903.16	
15452.00	88.92	359.40	8747.26	6849.44	573.69	0.62	6873.17	426644.09	721901.82	
15546.00	89.76	359.95	8748.34	6943.43	573.16	1.07	6966.86	426738.08	721901.29	
15640.00	90.03	1.23	8748.51	7037.42	574.12	1.39	7060.66	426832.07	721902.25	
15734.00	90.24	2.17	8748.29	7131.38	576.91	1.02	7154.56	426926.03	721905.04	
15828.00	90.60	3.28	8747.60	7225.27	581.38	1.24	7248.52	427019.92	721909.51	
15922.00	90.17	1.04	8746.97	7319.19	584.92	2.43	7342.45	427113.84	721913.05	
16016.00	90.80	1.01	8746.17	7413.17	586.60	0.67	7436.29	427207.82	721914.73	
16110.00	90.80	1.07	8744.86	7507.15	588.31	0.06	7530.13	427301.80	721916.44	
16204.00	91.22	1.26	8743.20	7601.11	590.22	0.49	7623.97	427395.76	721918.35	
16221.00	91.36	1.28	8742.82	7618.11	590.60	0.83	7640.94	427412.76	721918.73	Last Wft Svy
16291.00	91.36	1.28	8741.16	7688.07	592.16	0.00	7710.83	427482.72	721920.29	Proj. To Blt

Annotation

MD ft	TVD ft	
4215.00	4213.76	Tie On SDI
4353.00	4351.74	First Wft Svy
16221.00	8742.82	Last Wft Svy
16291.00	8741.16	Proj. To Blt

DEVON ENERGY

Paduca
Eddy County, NM
Cotton Draw Unit #137H
VH - Job #32K1011943

Survey: Actual

SDI Standard Survey Report

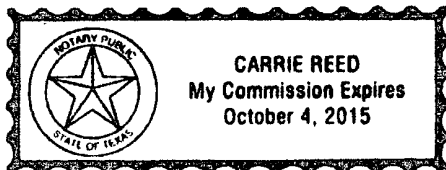
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 15th of November, 2011.

[Signature]

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.

SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Cotton Draw Unit #137H
Project:	Paduca	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	Cotton Draw Unit #137H	North Reference:	Grid
Wellbore:	VH - Job #32K1011943	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1011943	Database:	EDM-Regulatory

Project		Paduca	
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Eddy County, NM			
Site Position:		Northing:	419,864 24 usft	Latitude:	32° 9' 10 800 N
From:	Lat/Long	Easting:	717,841 09 usft	Longitude:	103° 45' 46 800 W
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0 30 °

Well	Cotton Draw Unit #137H, Directional (Weatherford)					
Well Position	+N/-S	0 0 usft	Northing:	419,794 67 usft	Latitude:	32° 9' 9 927 N
	+E/-W	0 0 usft	Easting:	721,328 10 usft	Longitude:	103° 45' 6 243 W
Position Uncertainty		0 0 usft	Wellhead Elevation:	usft	Ground Level:	0 0 usft

Wellbore	VH - Job #32K1011943				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/1/2011	7 63	60.08	48,549

Design		VH - Job #32K1011943			
Audit Notes:					
Version:		1 0	Phase:		ACTUAL
			Tie On Depth:		0 0
Vertical Section:		Depth From (TVD)		+N/-S	+E/-W
		(usft)		(usft)	(usft)
					Direction
		(°)			
		0 0		0 0	0 0
					4 30

Survey Program		Date	11/14/2011		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	4,215 0	Actual (VH - Job #32K1011943)	Keeper	Keeper Gyro	

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 0
100 0	0 67	56 64	100 0	0 3	0 5	56 64	0 6
200 0	0 60	58 65	200 0	0 9	1 4	57 26	1 7
300 0	1 13	48 29	300 0	1 8	2 6	54 73	3 2
400 0	1 30	35 73	400 0	3 4	4 0	49 50	5 3
500 0	1 74	5 73	499 9	5 9	4 8	39 47	7 6
600 0	1 94	359.19	599 9	9 1	4 9	28 65	10 3
700 0	2 15	357 20	699.8	12 6	4 8	20 95	13 5
800 0	1 80	358 67	799 7	16 1	4 7	16 32	16 7
900 0	1 08	355 43	899 7	18 6	4 6	13 89	19 1
1,000 0	0 63	354 81	999 7	20 1	4 5	12 55	20 6
1,100 0	0 62	6 29	1,099 7	21 1	4 5	11 95	21 6

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Cotton Draw Unit #137H
Project:	Paduca	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Cotton Draw Unit #137H	North Reference:	Grid
Wellbore:	VH - Job #32K1011943	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1011943	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
1,200.0	0.91	29.22	1,199.7	22.4	4.9	12.41	22.9	
1,300.0	1.11	34.24	1,299.7	23.9	5.9	13.78	24.6	
1,400.0	1.26	43.99	1,399.7	25.5	7.2	15.72	26.5	
1,500.0	1.39	45.75	1,499.6	27.1	8.8	17.98	28.5	
1,600.0	1.39	43.61	1,599.6	28.8	10.5	20.02	30.7	
1,700.0	1.74	43.89	1,699.6	30.8	12.4	21.92	33.2	
1,800.0	2.02	54.71	1,799.5	32.9	14.9	24.33	36.1	
1,900.0	2.12	60.51	1,899.4	34.8	17.9	27.24	39.2	
2,000.0	1.77	64.46	1,999.4	36.4	20.9	29.89	42.0	
2,100.0	1.68	64.14	2,099.3	37.7	23.6	32.08	44.5	
2,200.0	1.42	70.47	2,199.3	38.8	26.1	33.98	46.8	
2,300.0	1.37	71.48	2,299.3	39.6	28.4	35.70	48.7	
2,400.0	1.31	82.77	2,399.2	40.1	30.7	37.45	50.5	
2,500.0	0.96	89.21	2,499.2	40.2	32.7	39.07	51.8	
2,600.0	0.72	89.83	2,599.2	40.3	34.1	40.30	52.8	
2,700.0	0.36	79.89	2,699.2	40.3	35.1	41.03	53.4	
2,800.0	0.38	72.97	2,799.2	40.5	35.7	41.42	54.0	
2,900.0	0.23	219.10	2,899.2	40.4	35.9	41.61	54.1	
3,000.0	0.66	207.29	2,999.2	39.7	35.5	41.78	53.3	
3,100.0	0.55	247.36	3,099.2	39.0	34.8	41.71	52.3	
3,200.0	0.81	55.52	3,199.2	39.3	34.9	41.66	52.6	
3,300.0	0.82	32.33	3,299.2	40.3	35.9	41.72	53.9	
3,400.0	0.92	17.96	3,399.2	41.6	36.5	41.27	55.4	
3,500.0	0.75	4.66	3,499.2	43.1	36.8	40.55	56.7	
3,600.0	0.74	13.01	3,599.2	44.3	37.0	39.87	57.8	
3,700.0	1.75	87.05	3,699.1	45.0	38.7	40.67	59.4	
3,800.0	1.56	79.60	3,799.1	45.4	41.6	42.50	61.5	
3,900.0	1.95	103.72	3,899.0	45.2	44.6	44.59	63.5	
4,000.0	3.13	136.17	3,999.0	42.8	48.1	48.32	64.4	
4,100.0	2.50	139.62	4,098.8	39.2	51.4	52.67	64.6	
4,200.0	1.70	139.96	4,198.8	36.4	53.8	55.90	64.9	
4,215.0	1.38	153.23	4,213.8	36.1	54.0	56.25	64.9	



Scientific Drilling
Directional Drilling Operations

Project: Paduca
Eddy County, NM
Well: Cotton Draw Unit #137H
Wellbore: VH - Job #32K1011943
Design: VH - Job #32K1011943

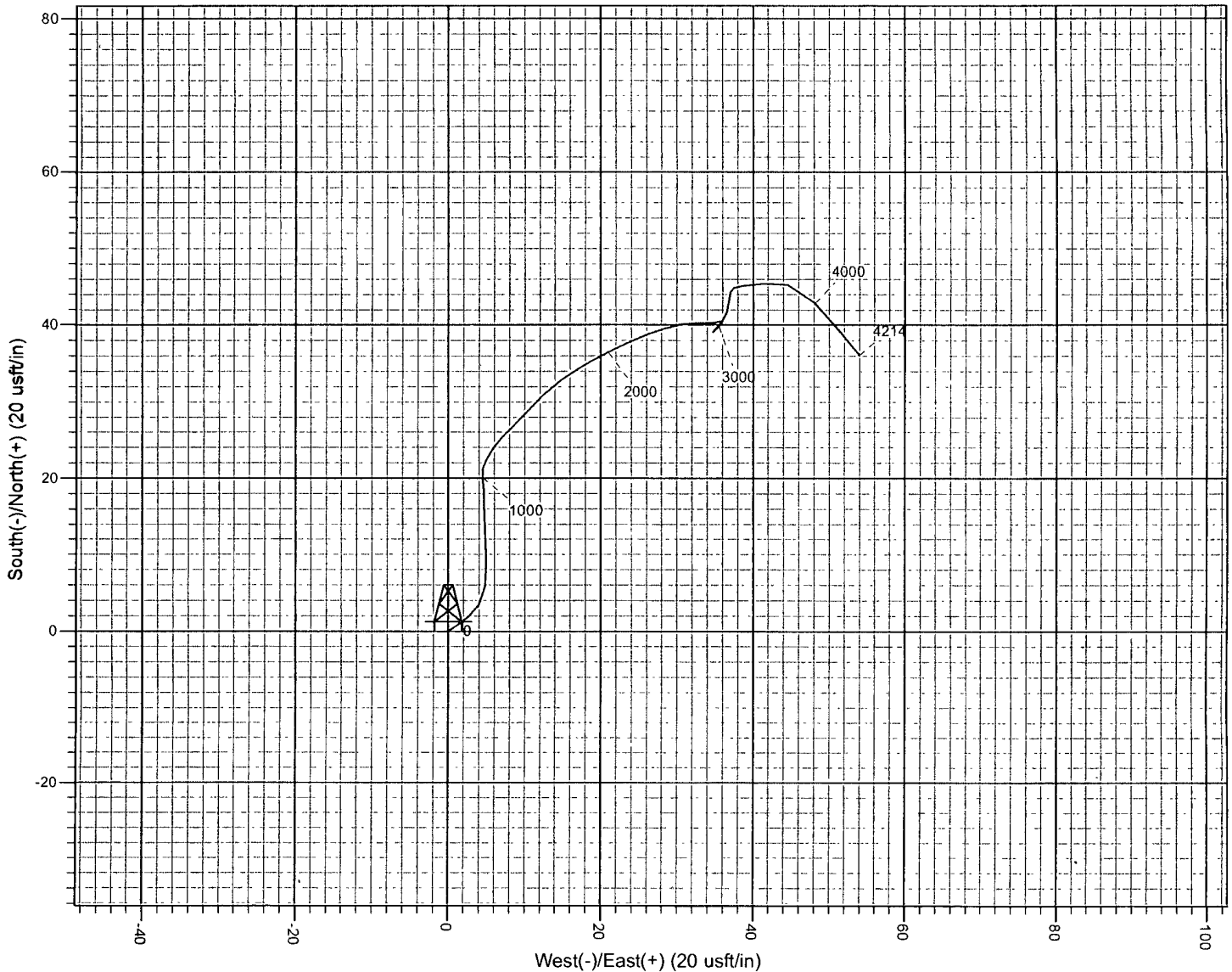


Azimuths to Grid North
True North: -0 31°
Magnetic North: 7.32°

Magnetic Field
Strength: 48549.5 nT
Dip Angle: 60.08°
Date: 10/1/2011
Model: IGRF2010

WELL DETAILS: Cotton Draw Unit #137H
WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	419794.67	721328.10	32° 9' 9.927 N	103° 45' 6.243 W	



PROJECT DETAILS: Paduca
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 9' 10.800 N
Longitude: 103° 45' 46.800 W
Positional Uncertainty: 0.0
Convergence: 0.30
Local North: Grid