

Weatherford

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

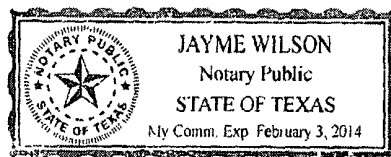
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

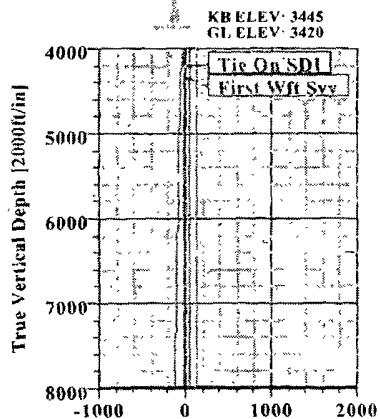
Jesse Aguilar
Area Manager

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	Ad	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
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
Slot						
N/A						

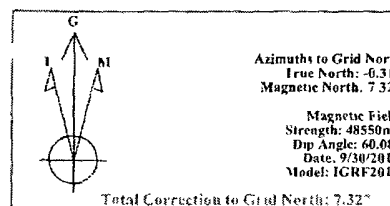
TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
Pbhl	8745.00	7688.17	578.08	427482.82	721906.21	32°10'25.967N
Longitude						
103°44'59.050W						
Point						

devon

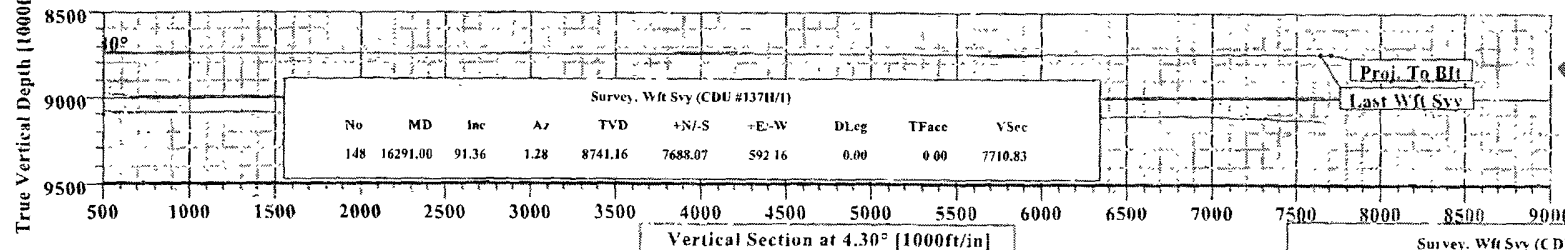
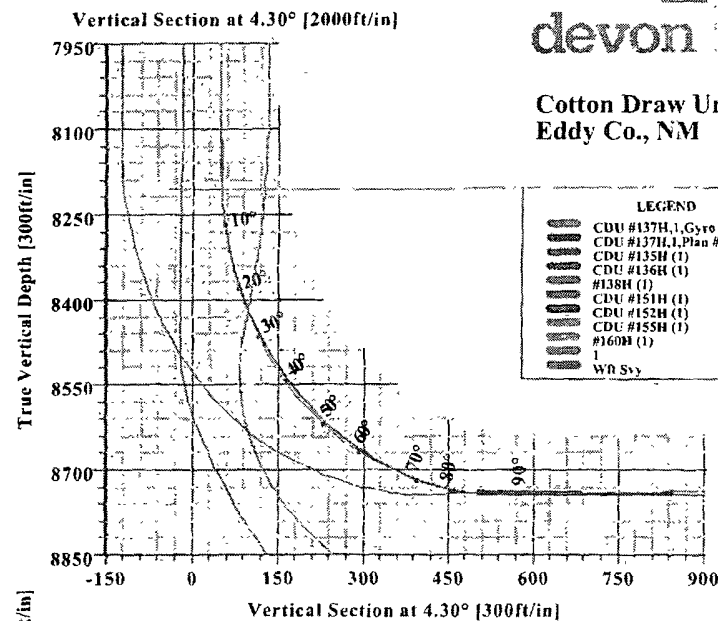
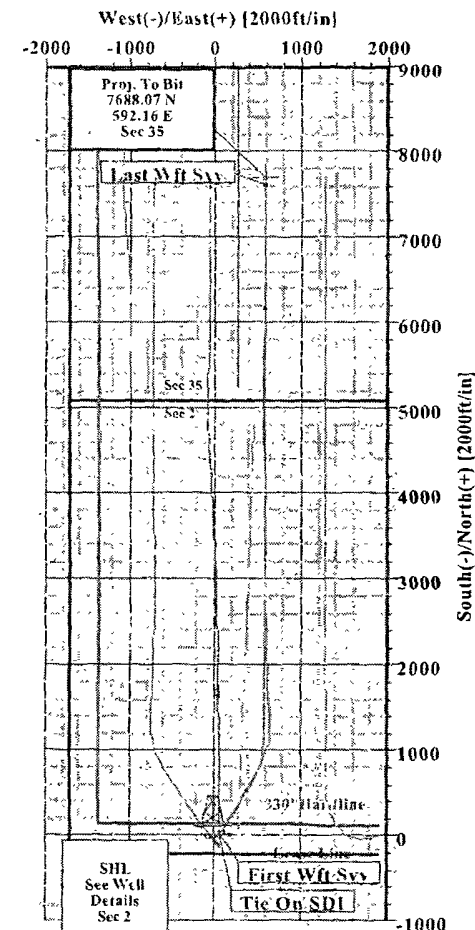
Cotton Draw Unit #137H
Eddy Co., NM

LEGEND	
	CDU #137H 1 Gryo
	CDU #137H 1 Plan #4
	CDU #135H (1)
	CDU #136H (1)
	#138H (1)
	CDU #151H (1)
	CDU #152H (1)
	CDU #155H (1)
	#160H (1)
	WR Svy

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)									
No	MD	Inc	Ad	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
148	16291.00	91.36	1.28	8741.16	7688.07	592.16	0.00	0.00	7710.83

Weatherford

Proj. To Bit
Last Wft Svy
First Wft Svy
Tie On SD1

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
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(NF) Reference: Well: CDU #137H, Grid North
Vertical (FVD) 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	Azin deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
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
 Field: Eddy Co., NM (NAD 83)
 Site: Cotton Draw Unit #137H
 Well: CDU #137H
 Wellpath: 1

Date: 10/20/2011
 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

Page: 4
 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

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
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
	+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	Direction
	(usft)	(usft)	(usft)	(°)
	0 0	0 0	0.0	4.30

Survey Program		Date - 11/14/2011		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100 0	4,215 0	Actual (VH - Job #32K1011943)	Keeper	Keeper Gyro

Survey									
Measured Depth	Inclination	Azimuth	True Vertical	North/South	East/West	Closure Azimuth	Closure Distance		
(usft)	(°)	(°)	Depth	(usft)	(usft)	(°)	(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	38.4	53.8	55.90	64.9	
4,215.0	1.38	153.23	4,213.8	36.1	54.0	56.25	64.9	



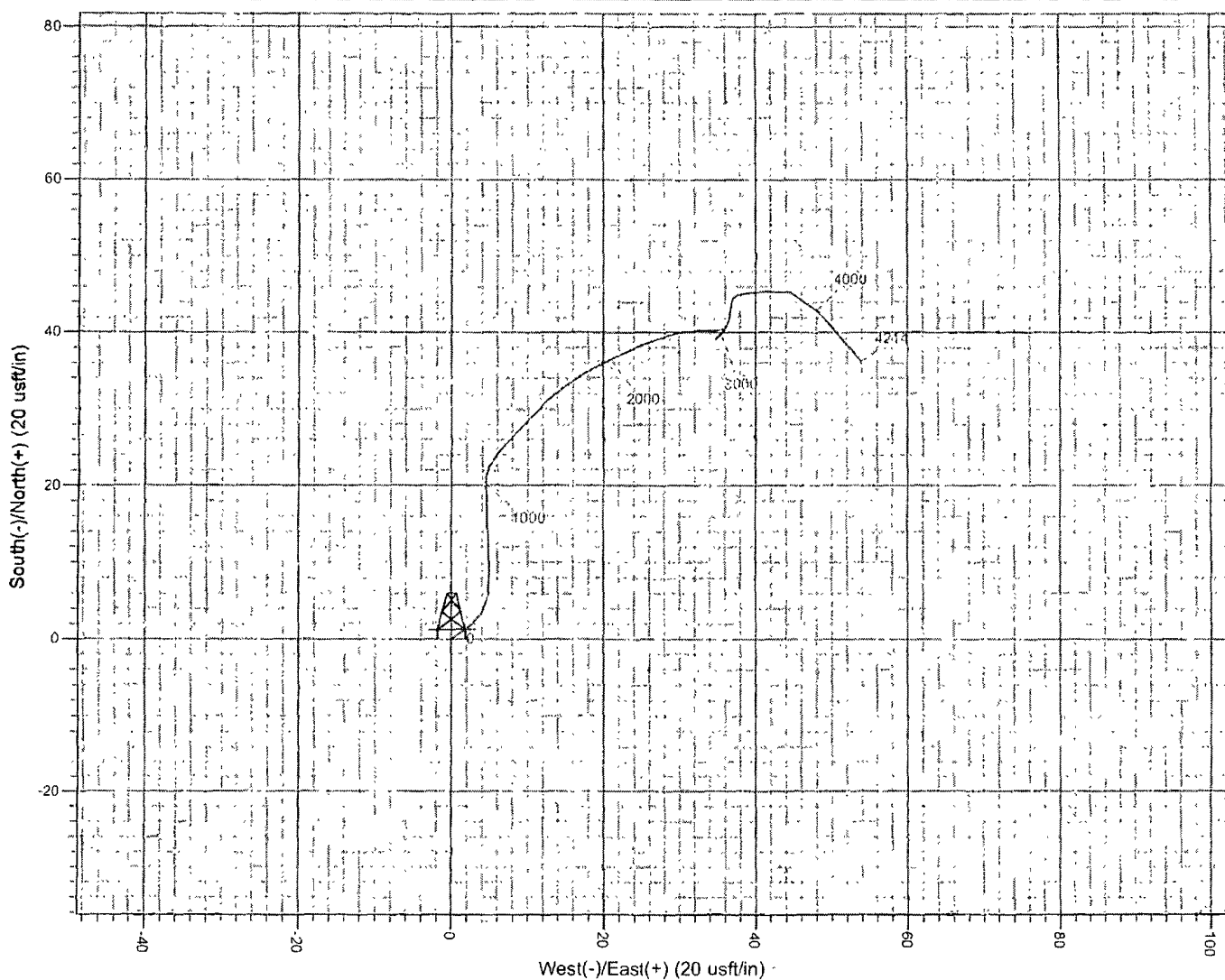
Project: Paduca
Eddy County, NM
Well: Cotton Draw Unit #137H
Wellbore: VH - Job #32K1011943
Design: VH - Job #32K1011943



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)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	419794.67	721328.10	$32^\circ 9' 9.927'' \text{ N}$	$103^\circ 45' 6.243'' \text{ W}$	



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: $32^\circ 9' 10.800'' \text{ N}$
Longitude: $103^\circ 45' 46.800'' \text{ W}$
Positional Uncertainty: 0.0
Convergence: 0.30
Local North: Grid