



A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

30-015-38432

February 23, 2012

Devon Energy Production Company
20 North Broadway
Oklahoma City, OK 73102

Attn: Mark Cooper

Re: **Cotton Draw Unit 160H**

Please find enclosed a copy of the survey from 0' to 7,510' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 29th day of February
A.D., 2012, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas



Company: Devon Energy Production

Lease/Well: Cotton Draw Unit/160H

Rig Name: HP 214

State/County: New Mexico/Eddy

Latitude: 32.17

GRID North is 0.32 Degrees East of True North

VS-Azi: 181.95 Degrees



Depth Reference : RKB=26.2 Elevation=3463 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: cotton draw unit #160h_ed.ut

Minimum Curvature Method

Report Date/Time: 2/23/2012 / 12:11

Vaughn Energy Services

Midland, TX

432-563-5444

Surveyor: Zach Garcia

Cotton Draw Unit 160H / API 30-015-38432

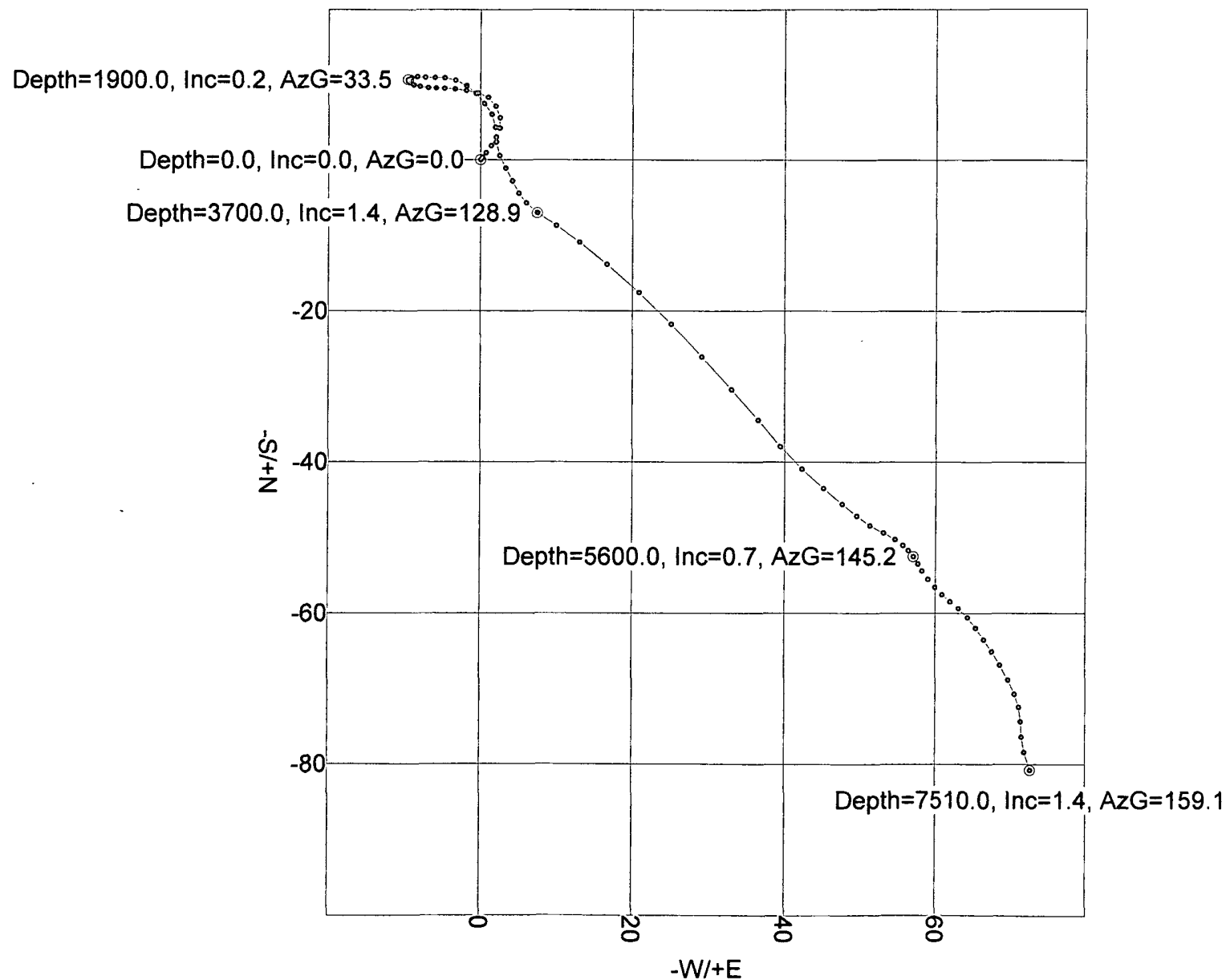
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.37	37.57	100.00	0.25	0.20	-0.26	0.32	37.57	0.37
200.00	0.59	38.34	200.00	0.91	0.71	-0.94	1.16	37.92	0.22
300.00	0.73	32.12	299.99	1.85	1.37	-1.90	2.31	36.42	0.15
400.00	0.73	27.86	399.98	2.96	2.00	-3.02	3.57	34.13	0.05
500.00	0.78	15.08	499.97	4.18	2.48	-4.26	4.86	30.69	0.17
600.00	0.85	347.52	599.96	5.56	2.50	-5.64	6.09	24.19	0.39
700.00	1.00	334.54	699.95	7.07	1.96	-7.13	7.33	15.50	0.26
800.00	0.81	304.63	799.94	8.26	1.00	-8.29	8.32	6.92	0.50
900.00	0.87	284.31	899.93	8.85	-0.32	-8.83	8.85	357.96	0.30
1000.00	0.93	279.83	999.91	9.17	-1.85	-9.11	9.36	348.58	0.09
1100.00	0.80	275.68	1099.90	9.38	-3.35	-9.26	9.96	340.34	0.14
1200.00	0.77	272.17	1199.89	9.48	-4.73	-9.31	10.59	333.50	0.06
1300.00	0.50	270.52	1299.89	9.51	-5.84	-9.30	11.16	328.44	0.27
1400.00	0.70	274.50	1399.88	9.56	-6.89	-9.32	11.78	324.23	0.20
1500.00	0.60	282.99	1499.88	9.72	-8.01	-9.45	12.60	320.54	0.14
1600.00	0.35	293.82	1599.87	9.97	-8.80	-9.66	13.29	318.57	0.26
1700.00	0.27	306.18	1699.87	10.23	-9.27	-9.91	13.80	317.82	0.11
1800.00	0.13	321.49	1799.87	10.46	-9.53	-10.13	14.14	317.66	0.14

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.16	33.50	1899.87	10.67	-9.52	-10.34	14.29	318.25	0.18
2000.00	0.40	67.34	1999.87	10.92	-9.11	-10.60	14.22	320.16	0.28
2100.00	0.51	94.60	2099.87	11.02	-8.35	-10.73	13.83	322.86	0.24
2200.00	0.70	92.15	2199.86	10.96	-7.29	-10.71	13.17	326.38	0.20
2300.00	0.76	90.45	2299.85	10.93	-6.01	-10.72	12.48	331.20	0.06
2400.00	0.75	95.07	2399.84	10.87	-4.70	-10.71	11.84	336.64	0.06
2500.00	0.93	108.77	2499.83	10.55	-3.28	-10.44	11.05	342.74	0.27
2600.00	0.93	124.04	2599.82	9.84	-1.84	-9.77	10.01	349.41	0.25
2700.00	0.94	136.36	2699.81	8.79	-0.60	-8.76	8.81	356.09	0.20
2800.00	1.05	145.79	2799.79	7.44	0.48	-7.45	7.46	369.00	0.19
2900.00	0.93	148.57	2899.78	5.99	1.42	-6.03	6.16	383.32	0.12
3000.00	1.18	176.39	2999.76	4.27	1.91	-4.33	4.67	424.11	0.56
3100.00	1.06	175.92	3099.74	2.31	2.04	-2.38	3.08	441.43	0.12
3200.00	1.08	157.18	3199.72	0.51	2.47	-0.60	2.53	478.30	0.35
3300.00	1.01	150.89	3299.71	-1.13	3.27	1.02	3.46	509.07	0.14
3400.00	1.17	154.65	3399.69	-2.83	4.14	2.68	5.01	524.34	0.18
3500.00	0.93	147.94	3499.67	-4.44	5.00	4.26	6.69	531.56	0.28
3600.00	0.94	136.79	3599.66	-5.72	5.99	5.51	8.28	533.66	0.18
3700.00	1.35	128.91	3699.64	-7.05	7.47	6.80	10.27	533.36	0.44
3800.00	2.02	122.01	3799.59	-8.73	9.88	8.39	13.18	531.46	0.69
3900.00	2.36	127.78	3899.52	-10.92	13.00	10.47	16.98	530.04	0.41
4000.00	2.99	129.76	3999.41	-13.85	16.63	13.28	21.64	529.79	0.63
4100.00	3.48	132.89	4099.25	-17.58	20.86	16.86	27.28	530.13	0.52
4200.00	3.38	136.60	4199.07	-21.79	25.11	20.92	33.24	530.96	0.24
4300.00	3.39	137.35	4298.90	-26.11	29.14	25.10	39.12	531.86	0.04
4400.00	3.29	138.00	4398.73	-30.41	33.06	29.27	44.92	532.61	0.11
4500.00	2.84	140.10	4498.59	-34.45	36.57	33.18	50.24	533.29	0.46
4600.00	2.39	141.19	4598.48	-37.97	39.46	36.61	54.77	533.90	0.46
4700.00	2.29	132.14	4698.40	-40.94	42.25	39.48	58.83	534.10	0.38
4800.00	2.13	130.79	4798.32	-43.49	45.14	41.93	62.68	533.94	0.17
4900.00	1.61	129.09	4898.27	-45.59	47.63	43.94	65.93	533.74	0.52
5000.00	1.25	128.94	4998.24	-47.16	49.57	45.45	68.42	533.57	0.36
5100.00	1.21	122.04	5098.22	-48.40	51.31	46.63	70.54	533.33	0.15
5200.00	1.12	114.34	5198.20	-49.37	53.10	47.53	72.50	532.92	0.18
5300.00	0.92	125.55	5298.18	-50.24	54.64	48.35	74.22	532.60	0.28
5400.00	0.57	130.56	5398.17	-51.03	55.67	49.10	75.52	532.51	0.36
5500.00	0.54	135.57	5498.17	-51.68	56.38	49.74	76.48	532.51	0.06
5600.00	0.69	145.25	5598.16	-52.51	57.05	50.54	77.53	532.63	0.18
5700.00	0.59	148.26	5698.16	-53.44	57.66	51.45	78.61	532.83	0.10

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.66	150.70	5798.15	-54.38	58.21	52.36	79.65	133.05	0.08
5900.00	0.88	140.27	5898.14	-55.47	58.98	53.43	80.97	133.24	0.26
6000.00	0.74	135.30	5998.13	-56.52	59.93	54.45	82.38	133.32	0.16
6100.00	0.90	133.04	6098.12	-57.52	60.96	55.41	83.81	133.34	0.17
6200.00	0.71	128.33	6198.11	-58.44	62.02	56.29	85.21	133.30	0.20
6300.00	0.97	128.95	6298.10	-59.35	63.16	57.17	86.67	133.22	0.26
6400.00	1.01	138.86	6398.08	-60.55	64.40	58.32	88.39	133.24	0.18
6500.00	1.01	144.85	6498.07	-61.94	65.49	59.67	90.14	133.40	0.11
6600.00	1.13	145.62	6598.05	-63.47	66.55	61.17	91.97	133.64	0.12
6700.00	1.07	146.48	6698.03	-65.07	67.63	62.73	93.85	133.90	0.06
6800.00	1.29	150.83	6798.01	-66.83	68.69	64.46	95.84	134.21	0.24
6900.00	1.25	152.27	6897.99	-68.79	69.75	66.38	97.97	134.60	0.05
7000.00	1.10	159.88	6997.97	-70.66	70.59	68.21	99.88	135.03	0.22
7100.00	1.00	162.99	7097.95	-72.39	71.18	69.93	101.52	135.48	0.12
7200.00	1.22	178.99	7197.93	-74.29	71.45	71.81	103.07	136.12	0.38
7300.00	1.13	174.15	7297.91	-76.34	71.57	73.86	104.64	136.85	0.13
7400.00	1.23	165.11	7397.89	-78.36	71.95	75.87	106.38	137.44	0.21
7510.00	1.39	159.07	7507.86	-80.75	72.73	78.23	108.67	137.99	0.19



Vaughn Energy Services
Midland, TX
432-563-5444
Surveyor: Zach Garcia
Cotton Draw Unit 160H / API 30-015-38432



VES Survey Date: 02/16/2012



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: March 5, 2012

Attention: Mark Cooper

Re: Devon Energy
Well: Cotton Draw Unit #160H
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:

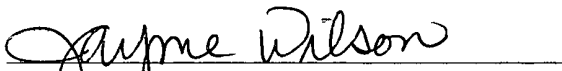
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Michael Lockhart MWD Supervisor	160H	7533' MD 12670' MD	2/14/2012 3/1/2012	Measurement While Drilling

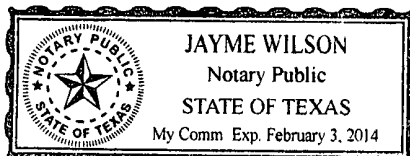
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jesse Aguilar
Area Manager

On this, the 5th day of March, 2012, 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.

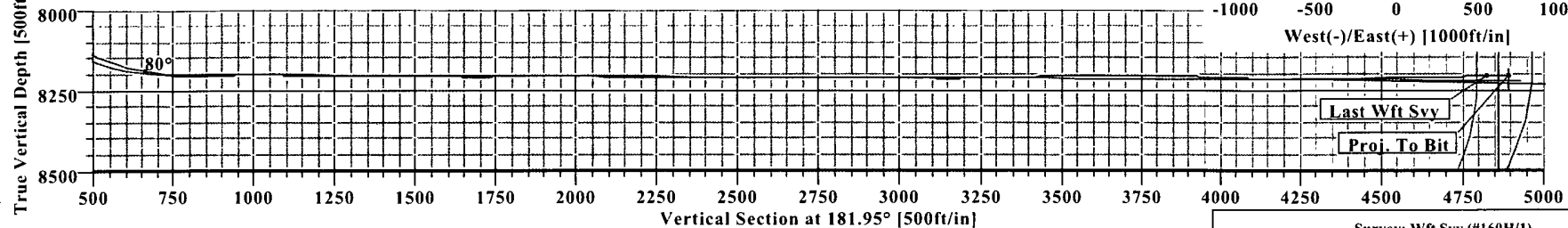
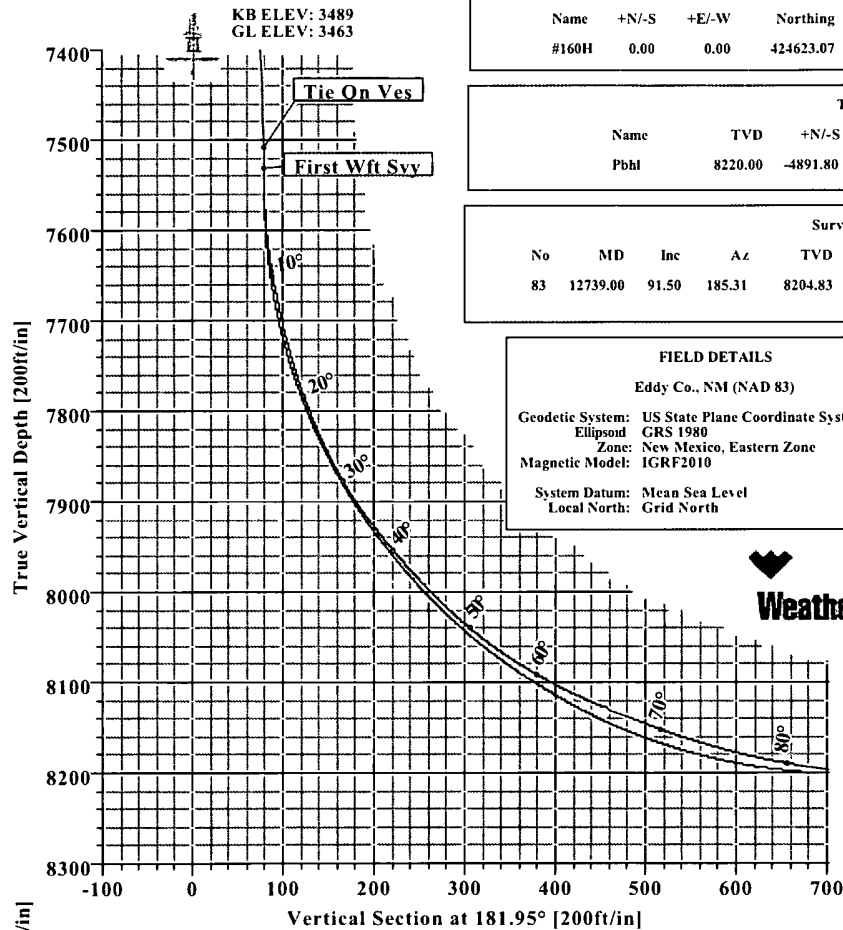
In witness hereof, I hereunto set my hand and official seal.


Notary Public





Cotton Draw #160H
Eddy Co., New Mexico



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7510.00	1.39	159.07	7507.86	-80.75	72.73	0.00	0.00	78.23	
2	7575.00	1.39	159.07	7572.84	-82.22	73.29	0.00	0.00	79.68	
3	8566.78	89.74	182.93	8200.88	-720.93	46.80	8.92	23.86	718.93	
4	12743.13	89.74	182.93	8220.00	-4891.80	-166.32	0.00	0.00	4894.63	Pbhl

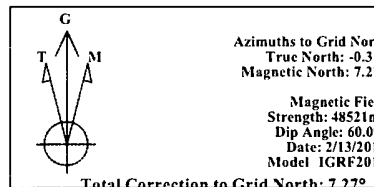
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#160H	0.00	0.00	424623.07	721783.07	32°09'57.674N	103°45'00.663W	N/A

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8220.00	-4891.80	-166.32	419731.27	721616.75	Point

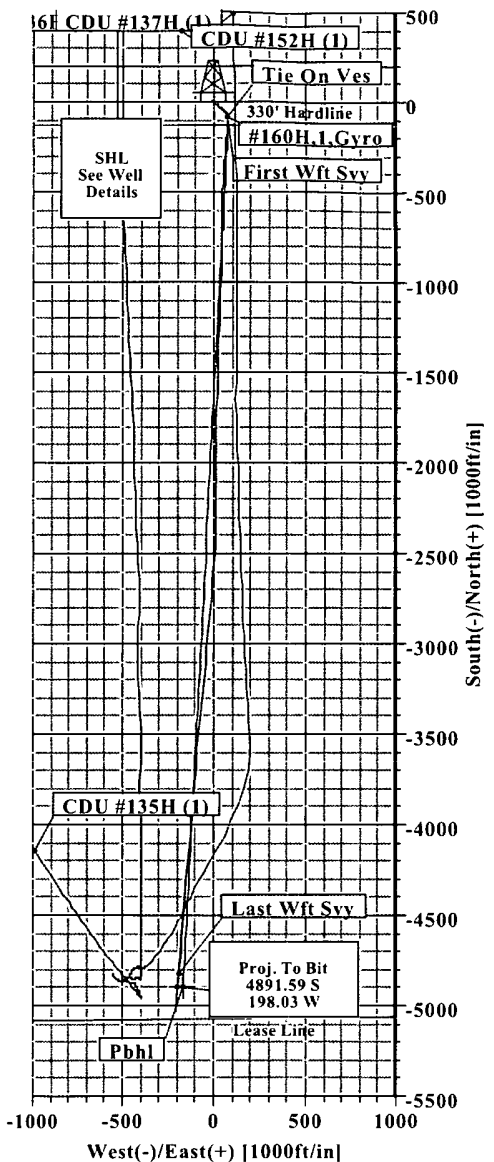
Survey: Wft Svy (#160H/1)										
No	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
83	12739.00	91.50	185.31	8204.83	-4891.59	-198.03	0.00	0.00	4895.49	

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
Cotton Draw Unit #160H
Site Centre Northing: 424623.07
Easting: 721783.07
Ground Level: 3463.00
Positional Uncertainty: 0.00
Convergence: 0.31



LEGEND	
	#160H.1, Plan #2
	#160H.1, Gyro
	CDU #135H (1)
	CDU #136H (1)
	CDU #137H (1)
	CDU #152H (1)
	1 Wft Svy



Survey: Wft Svy (#160H/1)
Created By: Russell W. Joyner
Date: 3/2/2012



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy		Date: 3/2/2012	Time: 05:18:18	Page: 1						
Field: Eddy Co , NM (NAD 83)		Co-ordinate(NE) Reference:	Well: #160H, Grid North							
Site: Cotton Draw Unit #160H		Vertical (TVD) Reference:	SITE 3489.0							
Well: #160H		Section (VS) Reference:	Well (0 00N,0.00E,181.95Azi)							
Wellpath: 1		Survey Calculation Method:	Minimum Curvature Db: Sybase							
Survey: Wft Svy		Start Date:	2/20/2012							
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 #160H										
Site Position:		Northing: 424623.07 ft	Latitude: 32 9 57.674 N							
From: Map		Easting: 721783.07 ft	Longitude: 103 45 0.663 W							
Position Uncertainty: 0.00 ft			North Reference: Grid							
Ground Level: 3463.00 ft			Grid Convergence: 0.31 deg							
Well: #160H Slot Name:										
Well Position: +N/-S 0.00 ft		Northing: 424623.07 ft	Latitude: 32 9 57.674 N							
+E/-W 0.00 ft		Easting: 721783.07 ft	Longitude: 103 45 0.663 W							
Position Uncertainty: 0.00 ft										
Wellpath: 1										
Current Datum: SITE		Height 3489.00 ft	Drilled From: Surface							
Magnetic Data: 2/13/2012			Tie-on Depth: 0.00 ft							
Field Strength: 48521 nT			Above System Datum: Mean Sea Level							
Vertical Section: Depth From (TVD)			Declination: 7.58 deg							
ft		+N/-S ft	Mag Dip Angle: 60.09 deg							
		+E/-W ft	Direction deg							
0.00		0.00	0.00	181.95						
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
7510.00	1.39	159.07	7507.86	-80.75	72.73	0.00	78.23	424542.32	721855.80	Tie On Ves
7533.00	1.50	155.74	7530.85	-81.29	72.95	0.60	78.76	424541.78	721856.02	First Wft Svy
7564.00	1.76	158.46	7561.84	-82.10	73.29	0.87	79.56	424540.97	721856.36	
7595.00	4.71	172.26	7592.79	-83.80	73.64	9.77	81.25	424539.27	721856.71	
7627.00	7.50	174.40	7624.60	-87.18	74.02	8.75	84.62	424535.89	721857.09	
7658.00	10.98	174.97	7655.20	-92.14	74.48	11.23	89.55	424530.93	721857.55	
7689.00	12.50	178.54	7685.55	-98.43	74.82	5.43	95.83	424524.64	721857.89	
7721.00	13.82	183.38	7716.71	-105.71	74.69	5.37	103.11	424517.36	721857.76	
7752.00	16.42	185.41	7746.63	-113.77	74.05	8.56	111.19	424509.30	721857.12	
7783.00	19.33	185.91	7776.13	-123.24	73.11	9.40	120.68	424499.83	721856.18	
7814.00	21.98	184.93	7805.14	-134.12	72.09	8.62	131.60	424488.95	721855.16	
7846.00	24.51	182.95	7834.54	-146.72	71.23	8.27	144.22	424476.35	721854.30	
7877.00	28.02	184.21	7862.33	-160.41	70.36	11.46	157.93	424462.66	721853.43	
7908.00	31.83	185.36	7889.19	-175.82	69.06	12.43	173.37	424447.25	721852.13	
7940.00	35.47	185.77	7915.83	-193.46	67.34	11.40	191.06	424429.61	721850.41	
7971.00	38.57	184.89	7940.58	-212.04	65.61	10.14	209.69	424411.03	721848.68	
8002.00	41.14	184.65	7964.37	-231.84	63.96	8.31	229.53	424391.23	721847.03	
8034.00	43.20	183.72	7988.09	-253.26	62.40	6.73	251.00	424369.81	721845.47	
8065.00	46.15	184.13	8010.13	-275.00	60.91	9.56	272.78	424348.07	721843.98	
8097.00	48.28	185.66	8031.87	-298.40	58.90	7.52	296.23	424324.67	721841.97	
8128.00	52.52	185.90	8051.62	-322.16	56.49	13.69	320.05	424300.91	721839.56	
8159.00	55.45	184.59	8069.85	-347.13	54.20	10.05	345.08	424275.94	721837.27	
8191.00	59.35	183.78	8087.09	-374.01	52.24	12.37	372.02	424249.06	721835.31	
8222.00	62.17	183.08	8102.23	-401.01	50.62	9.31	399.05	424222.06	721833.69	



Weatherford International Ltd.

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #160H
Well: #160H
Wellpath: 1

Date: 3/2/2012 Time: 05:18:18 Page: 2
Co-ordinate(NE) Reference: Well: #160H; Grid North
Vertical (TVD) Reference: SITE 3489.0
Section (VS) Reference: Well (0.00N,0.00E,181 95Azi)
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
8253.00	65 67	182 46	8115 85	-428.81	49.28	11 43	426.89	424194.26	721832.35	
8284.00	68 02	182 54	8128 04	-457 29	48.04	7 58	455 39	424165.78	721831 11	
8316.00	68.50	182.61	8139.89	-486.98	46.70	1.51	485 11	424136.09	721829 77	
8347 00	69 84	182 49	8150.92	-515 93	45.41	4 34	514 08	424107.14	721828 48	
8378.00	72.19	182.72	8161.00	-545 21	44 08	7 61	543 39	424077.86	721827 15	
8410.00	74 46	182 54	8170.18	-575.83	42.67	7 11	574.04	424047.24	721825.74	
8441.00	75.76	181.90	8178 15	-605 76	41 51	4 64	604 00	424017.31	721824.58	
8472 00	78.14	181.27	8185 15	-635 95	40.68	7 93	634.20	423987.12	721823.75	
8504 00	80.69	180 83	8191 03	-667.40	40.10	8 08	665.65	423955.67	721823.17	
8536 00	80.77	180.82	8196.18	-698 97	39.65	0.25	697.22	423924.10	721822 72	
8568 00	82.04	180.79	8200 96	-730.61	39 21	3.97	728.86	423892.46	721822 28	
8599 00	85 69	180 33	8204.28	-761.43	38 90	11.87	759.66	423861.64	721821.97	
8662 00	91.15	180 44	8206 01	-824.38	38.48	8.67	822 59	423798 69	721821 55	
8693 00	91 15	180 33	8205 39	-855.37	38.27	0.35	853 58	423767.70	721821.34	
8786 00	92 00	180.72	8202.83	-948.33	37.42	1.01	946 51	423674 74	721820 49	
8799.00	92 20	181.11	8202.36	-961 32	37 21	3 37	959 50	423661.75	721820.28	
8893 00	88.29	182 08	8201 96	-1055.26	34.60	4.29	1053 48	423567 81	721817 67	
8987 00	87.10	182.09	8205.74	-1149 12	31 18	1 27	1147.40	423473.95	721814.25	
9081.00	90.10	182.10	8208 03	-1243 02	27 75	3 19	1241.36	423380.05	721810 82	
9175 00	90.52	181 59	8207 52	-1336.97	24.72	0 70	1335.36	423286.10	721807 79	
9269.00	90.31	182.53	8206 84	-1430.91	21 34	1.02	1429.36	423192.16	721804.41	
9363.00	89.83	181.75	8206 73	-1524.84	17.83	0.97	1523.35	423098 23	721800 90	
9457.00	88 78	180.65	8207.87	-1618.81	15.86	1.62	1617 34	423004.26	721798 93	
9551.00	90 45	180.57	8208.50	-1712.80	14.86	1.78	1711 30	422910.27	721797.93	
9644 00	90.24	179.75	8207.94	-1805 80	14 60	0 91	1804 26	422817.27	721797.67	
9738 00	90 03	180.23	8207.72	-1899 80	14 62	0.56	1898 20	422723 27	721797.69	
9832.00	89 76	180.56	8207.89	-1993.79	13.97	0.45	1992.17	422629 28	721797.04	
9926 00	89.62	180 74	8208.40	-2087.79	12.90	0.24	2086 14	422535 28	721795.97	
10020 00	89.27	180 55	8209.31	-2181 77	11.85	0 42	2180.11	422441.30	721794.92	
10114 00	89.06	180 28	8210 68	-2275 76	11 16	0.36	2274.07	422347.31	721794 23	
10208 00	88 85	180 93	8212.39	-2369.74	10.17	0.73	2368.03	422253.33	721793.24	
10302.00	90 38	183.18	8213.03	-2463.67	6.80	2.89	2462 02	422159 40	721789.87	
10395.00	90 24	184.50	8212 52	-2556.46	0.57	1 43	2554 96	422066.61	721783 64	
10489.00	90.24	184.59	8212.13	-2650.16	-6 87	0 10	2648 86	421972.91	721776 20	
10583 00	90 03	184 35	8211.91	-2743.87	-14 20	0 34	2742.77	421879.20	721768 87	
10677.00	89.83	184 67	8212 02	-2837.58	-21.59	0.40	2836 68	421785.49	721761 48	
10771.00	89.69	184 46	8212.42	-2931 28	-29 07	0 27	2930.58	421691.79	721754.00	
10865.00	89.69	184.90	8212 92	-3024.97	-36 74	0 47	3024.47	421598.10	721746 33	
10959 00	89.41	185 43	8213 66	-3118.58	-45.20	0 64	3118 32	421504 49	721737 87	
11053.00	91.22	185 32	8213.15	-3212.17	-54 01	1.93	3212.15	421410 90	721729.06	
11147.00	91 22	185 29	8211.14	-3305 74	-62.70	0.03	3305 96	421317.33	721720.37	
11241 00	91 22	185 57	8209 14	-3399 30	-71.59	0.30	3399.77	421223.77	721711 48	
11335 00	91 64	185.38	8206 80	-3492.84	-80.56	0.49	3493 56	421130 23	721702.51	
11429.00	90.73	184 58	8204.85	-3586.46	-88 72	1 29	3587.41	421036 61	721694 35	
11523 00	89.34	184.54	8204 80	-3680.16	-96.19	1.48	3681 31	420942.91	721686 88	
11617.00	89 20	184 84	8205.99	-3773 84	-103.87	0 35	3775.19	420849.23	721679 20	
11711.00	89.27	184 99	8207.25	-3867 49	-111.93	0.18	3869.06	420755 58	721671.14	
11805 00	88 29	185 08	8209.25	-3961.10	-120.17	1.05	3962.90	420661.97	721662.90	
11898 00	87 94	185 34	8212.31	-4053.67	-128.62	0.47	4055 70	420569 40	721654.45	
11993 00	88 78	184 86	8215 03	-4148.25	-137 06	1 02	4150 51	420474.82	721646.01	
12087.00	89 06	184 51	8216 80	-4241.92	-144 73	0 48	4244 39	420381.15	721638 34	
12181.00	90.94	184 04	8216.80	-4335.65	-151 74	2.06	4338 31	420287.42	721631 33	



Weatherford International Ltd.

WFT Survey Report X & Y's



Company: Devon Energy Date: 3/2/2012 Time: 05:18:18 Page: 3
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: #160H, Grid North
Site: Cotton Draw Unit #160H Vertical (TVD) Reference: SITE 3489.0
Well: #160H Section (VS) Reference: Well (0 00N,0.00E,181.95Azi)
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
12275.00	91.22	184.54	8215.03	-4429.37	-158.77	0.61	4432.21	420193.70	721624.30	
12369.00	91.15	184.57	8213.08	-4523.06	-166.23	0.08	4526.09	420100.01	721616.84	
12463.00	91.15	184.36	8211.20	-4616.75	-173.55	0.22	4619.98	420006.32	721609.52	
12557.00	91.15	184.97	8209.31	-4710.42	-181.19	0.65	4713.86	419912.65	721601.88	
12651.00	91.50	185.59	8207.14	-4804.00	-189.84	0.76	4807.67	419819.07	721593.23	
12670.00	91.50	185.31	8206.64	-4822.91	-191.65	1.47	4826.63	419800.16	721591.42	Last Wft Svy
12739.00	91.50	185.31	8204.83	-4891.59	-198.03	0.00	4895.49	419731.48	721585.04	Proj. To Bit

Annotation

MD ft	TVD ft	
7510.00	7507.86	Tie On Ves
7533.00	7530.85	First Wft Svy
12670.00	8206.64	Last Wft Svy
12739.00	8204.83	Proj To Bit



COTTON DRAW UNIT 160H

WEST UNRESTRICTED

Perforation Summary

District PERMIAN BASIN		County EDDY		Field Name PADUCA		Project Group PB NEW MEXICO				State/Province NM					
Surface Legal Location SEC 2 T25S R31E		API/UWI 3001538432		Latitude (DMS) 32° 9' 58.277" N		Longitude (DMS) 103° 45' 0.745" W		Ground Elev MSL (ft) 3,463.10		KB - Ground Level (ft) 26.20		Orig KB Elevation (ft) 3,489.30		Tubing Head Elevation (ft)	
Date	Zone	Top (ftKB)	Top (TVD) (ftKB)	Btm (ftKB)	Btm (TVD) (ftKB)	Current Status	Carrier Desc	Gun Size (in)	Chg Typ	Chg Sz (g)	Shot Dens (shots/ft)	Phasing (°)	Conveyance Method		
4/3/2012	DELAWARE, OH	8,470.0	8,184.7	8,471.0	8,184.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/3/2012	DELAWARE, OH	8,716.0	8,204.8	8,718.0	8,204.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/3/2012	DELAWARE, OH	8,962.0	8,204.1	8,964.0	8,204.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/3/2012	DELAWARE, OH	9,209.0	8,207.3	9,210.0	8,207.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/3/2012	DELAWARE, OH	9,455.0	8,207.8	9,457.0	8,207.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/3/2012	DELAWARE, OH	9,702.0	8,207.8	9,704.0	8,207.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	9,948.0	8,208.6	9,949.0	8,208.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	10,194.0	8,212.1	10,196.0	8,212.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	10,441.0	8,212.4	10,443.0	8,212.4			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	10,687.0	8,212.0	10,688.0	8,212.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	10,934.0	8,213.4	10,936.0	8,213.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	11,180.0	8,210.1	11,182.0	8,210.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	11,425.0	8,204.9	11,426.0	8,204.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	11,684.0	8,207.0	11,686.0	8,207.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
4/2/2012	DELAWARE, OH	11,933.0	8,213.6	11,935.0	8,213.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
3/23/2012	DELAWARE, OH	12,202.0	8,216.4	12,203.0	8,216.4			3 1/8	SHAPED	23.0	6.0	60	TUBING		
3/23/2012	DELAWARE, OH	12,451.0	8,211.4	12,453.0	8,211.4			3 1/8	SHAPED	23.0	6.0	60	TUBING		
3/23/2012	DELAWARE, OH	12,700.0	8,205.9	12,702.0	8,205.8			3 1/8	SHAPED	23.0	6.0	60	TUBING		

COTTON DRAW UNIT 160H - Permian Basin Stimulation Summary - Page No. 1 - Date:

Stage #	Date	Type	Zone	Min Top Depth (ftKB)	Max Btm Depth (ftKB)	Proppant Fm (lb)	Proppant Design (lb)	V (pumped) (bbl)	Max Conc (lb/gal)	P (max) (psi)	Rate (max) (bbl/min)	Pst Trt S/I Prs (psi)
1	4/2/2012 09:04	HYDRAULIC FRAC	DELAWARE, OH	12,202.0	12,702.0	311,728.0	310,625.0	5823.80	3.50	6,110.0	80	470.0
2	4/2/2012 13:23	HYDRAULIC FRAC	DELAWARE, OH	11,456.0	11,956.0	292,662.0	310,625.0	5232.90	3.50	6,137.0	80	560.0
3	4/2/2012 17:03	HYDRAULIC FRAC	DELAWARE, OH	10,710.0	11,209.0	303,588.0	310,625.0	5286.40	3.50	5,452.0	80	640.0
4	4/3/2012 07:20	HYDRAULIC FRAC	DELAWARE, OH	9,963.0	10,463.0	359,147.0	310,625.0	5240.10	3.50	5,452.0	80	662.0
5	4/3/2012 10:41	HYDRAULIC FRAC	DELAWARE, OH	9,217.0	9,716.0	296,610.0	310,625.0	5215.10	3.50	5,809.0	80	616.0
6	4/3/2012 13:03	HYDRAULIC FRAC	DELAWARE, OH	8,470.0	8,970.0	325,318.0	310,625.0	5297.60	4.00	5,977.0	80	698.0