

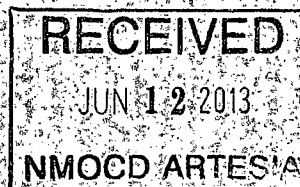
A GYRO TECHNOLOGIES INC. COMPANY

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

November 28, 2012

30-015-39730

Devon Energy Production Company
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010



Attn: Patti Riechers

Re: Cotton Draw Unit No. 162H

Please find enclosed a copy of the survey from 0' to 7,525.04' ran on the above referenced well.

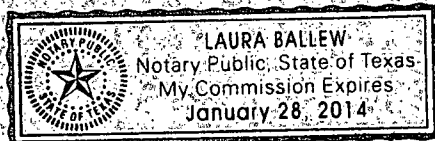
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

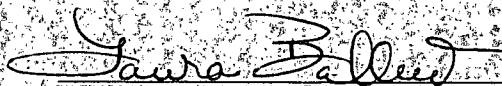
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 3rd day of December
A.D. 2012, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: Devon Energy Production Company
 Lease/Well: Cotton Draw Unit/No. 162H
 Location: S11 T25s R31e
 Rig Name: HP 214
 State/County: New Mexico/Eddy
 Latitude: 32.14, Longitude: -103.75
 GRID North is 0.31 Degrees East of True North
 VS-Azi: 0.00 Degrees



RKB : 25 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: ...raw unit #162h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 11/28/2012 / 14:40

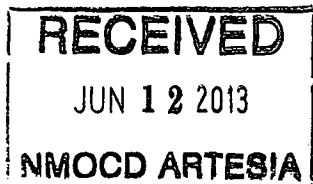
Vaughn Energy Services

(432) 563-5444

Gardendale, TX

Surveyor: Dustin Wedel

Cotton Draw Unit No. 162H / API 30-015-39730



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	****
79.94	0.12	197.56	79.94	-0.08	-0.03	-0.08	0.08	197.56	0.15
173.70	0.14	207.92	173.70	-0.28	-0.11	-0.28	0.30	201.59	0.03
267.46	0.16	208.28	267.46	-0.49	-0.23	-0.49	0.54	204.56	0.02
361.22	0.23	255.86	361.22	-0.66	-0.47	-0.66	0.81	215.63	0.18
454.98	0.30	303.43	454.98	-0.57	-0.86	-0.57	1.03	236.37	0.24
548.74	0.38	312.41	548.74	-0.22	-1.29	-0.22	1.31	260.17	0.11
642.50	0.47	321.39	642.49	0.29	-1.76	0.29	1.79	279.33	0.12
736.26	0.58	315.91	736.25	0.93	-2.34	0.93	2.52	291.79	0.13
830.02	0.70	316.43	830.00	1.69	-3.06	1.69	3.50	298.89	0.12
923.78	0.76	291.81	923.76	2.34	-4.04	2.34	4.66	300.06	0.34
1017.54	0.83	267.20	1017.51	2.53	-5.29	2.53	5.87	295.58	0.37
1111.30	0.96	274.91	1111.26	2.57	-6.76	2.57	7.23	290.81	0.19
1205.06	1.09	282.63	1205.00	2.83	-8.41	2.83	8.87	288.60	0.20
1298.82	1.38	266.56	1298.74	2.96	-10.40	2.96	10.81	285.87	0.48
1392.58	1.67	250.50	1392.47	2.43	-12.82	2.43	13.04	280.75	0.55
1486.34	1.35	261.79	1486.19	1.82	-15.19	1.82	15.30	276.83	0.46
1580.10	1.03	273.07	1579.93	1.71	-17.13	1.71	17.21	275.69	0.42
1673.86	1.01	296.22	1673.68	2.12	-18.71	2.12	18.83	276.45	0.44

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
1767.62	0.98	319.38	1767.43	3.09	-19.97	3.09	20.21	278.79	0.43
1861.38	0.84	285.32	1861.18	3.88	-21.15	3.88	21.50	280.39	0.59
1955.14	0.70	271.26	1954.93	4.07	-22.38	4.07	22.75	280.31	0.25
2048.90	0.66	233.48	2048.68	3.76	-23.39	3.76	23.69	279.14	0.47
2142.66	0.63	195.70	2142.43	2.94	-23.96	2.94	24.14	277.00	0.45
2236.42	0.62	139.57	2236.19	2.06	-23.77	2.06	23.86	274.95	0.63
2330.18	0.61	83.44	2329.95	1.73	-22.95	1.73	23.02	274.31	0.62
2423.94	0.69	117.30	2423.70	1.53	-21.96	1.53	22.01	273.99	0.41
2517.70	0.77	151.16	2517.45	0.72	-21.16	0.72	21.17	271.96	0.46
2611.46	0.98	194.77	2611.20	-0.60	-21.06	-0.60	21.07	268.36	0.73
2705.22	1.20	238.37	2704.95	-1.90	-22.10	-1.90	22.18	265.10	0.89
2798.98	1.29	208.60	2798.69	-3.34	-23.44	-3.34	23.68	261.90	0.69
2892.74	1.38	178.83	2892.42	-5.39	-23.92	-5.39	24.52	257.30	0.74
2986.50	1.32	189.23	2986.16	-7.58	-24.07	-7.58	25.24	252.51	0.27
3080.26	1.26	199.63	3079.89	-9.62	-24.59	-9.62	26.41	248.64	0.26
3174.02	1.05	189.32	3173.63	-11.43	-25.08	-11.43	27.56	245.49	0.31
3267.78	0.85	179.01	3267.38	-12.97	-25.20	-12.97	28.35	242.76	0.28
3361.54	0.96	126.55	3361.13	-14.13	-24.56	-14.13	28.34	240.08	0.86
3455.30	1.08	75.08	3454.88	-14.37	-23.08	-14.37	27.19	238.08	0.95
3549.06	0.80	131.44	3548.63	-14.58	-21.73	-14.58	26.17	236.14	0.98
3642.82	0.53	216.80	3642.38	-15.36	-21.50	-15.36	26.43	234.45	0.99
3736.58	1.06	169.82	3736.13	-16.57	-21.61	-16.57	27.23	232.52	0.85
3830.34	1.60	142.83	3829.87	-18.46	-20.66	-18.46	27.71	228.22	0.86
3924.10	1.35	143.49	3923.60	-20.39	-19.22	-20.39	28.02	223.30	0.26
4017.86	1.11	148.16	4017.34	-22.05	-18.08	-22.05	28.52	219.35	0.28
4111.62	1.13	140.93	4111.08	-23.54	-17.02	-23.54	29.05	215.87	0.15
4205.38	1.15	133.71	4204.82	-24.91	-15.76	-24.91	29.47	212.32	0.16
4299.14	1.11	149.61	4298.56	-26.34	-14.62	-26.34	30.12	209.02	0.34
4392.90	1.06	165.50	4392.31	-27.96	-13.94	-27.96	31.24	206.50	0.32
4486.66	0.99	166.59	4486.05	-29.59	-13.53	-29.59	32.54	204.58	0.08
4580.42	0.93	169.67	4579.80	-31.13	-13.21	-31.13	33.82	202.99	0.09
4674.18	0.85	160.30	4673.55	-32.53	-12.84	-32.53	34.97	201.54	0.17
4767.94	0.78	150.92	4767.30	-33.74	-12.30	-33.74	35.91	200.02	0.16
4861.70	0.58	145.17	4861.05	-34.69	-11.72	-34.69	36.61	198.66	0.22
4955.46	0.39	147.42	4954.81	-35.34	-11.27	-35.34	37.10	197.69	0.21
5049.22	0.51	144.09	5048.56	-35.95	-10.86	-35.95	37.55	196.80	0.13
5142.98	0.63	152.76	5142.32	-36.74	-10.38	-36.74	38.18	195.77	0.16
5236.74	0.64	160.74	5236.07	-37.69	-9.97	-37.69	38.99	194.82	0.09
5330.50	0.64	172.72	5329.83	-38.70	-9.73	-38.70	39.91	194.11	0.14



**DRILLING SERVICES
END OF WELL REPORT
FOR
John Logemann
Devon Energy
Cotton Draw Unit 162H
Eddy County, New Mexico**

Weatherford Drilling Services job start date : 11-22-2012

Weatherford Drilling Services job end date : 12-3-2012

Presented By:

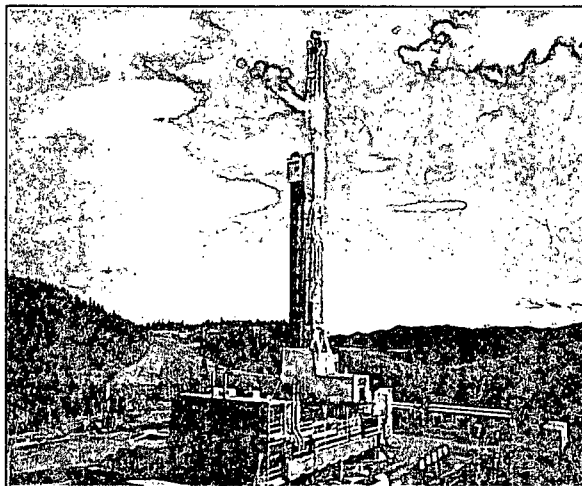
Damien Tarpley
Area Manager

Scott Dixon
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

H&P 214





Weatherford

10000 West County Road 116
P.O. Box 61028
Midland, Texas 79711
Phone (432) 561-8892

December 4, 2012

John Logemann

333 W. Sherridan Ave
Oklahoma City, OK 73102

Reference Well Name : Cotton Draw Unit 162H
Location : Eddy County, New Mexico
Wft Job # : 4028017
Rig : H&P 214

Dear Mr. Logemann

Thank you for allowing us the opportunity to provide our services on your Cotton Draw Unit 162H in Eddy County, New Mexico.

Please find the final End Of Well (EOW) report enclosed behind this coverletter.

The EOW report contains the following information :

Section 1 - Weatherford (Wft) Final Definitive Survey & 8.5" x 11".

- * Note: This survey contains the Directional Survey's obtained by Weatherford Drilling Services via Weatherford MWD Services, and any gyro survey needed for Tie On (if required).

Section 2- Days vs. Feet Drilled (24 hrs) and Days vs. Depth Graphs

Section 3- Wft Gamma Logs

Section 4 - Wft Final BHA reports (BHA Graphic Reports, BHA Detail Reports, Motor Evaluation Reports, and BHA Slide Reports).

Section 5 - Wft Final Daily Drilling reports.

Section 6 - Wft Personnel list with contact numbers.

We at *Weatherford Drilling Services*' understand the importance of this project to you and hope that you were satisfied with our Directional Drilling and MWD services provided.

Please feel free to contact me if you have any questions.

Sincerely,

Damien Tarpley
Area Manager
Weatherford Drilling Services
Midland, TX (432) 561-8892



Weatherford

Devon Energy
Cotton Draw Unit 162H
Eddy County, New Mexico

Section 1

Weatherford (Wft) Final Definitive

Plot & Survey



Cotton Draw Unit 162H
Eddy Co., New Mexico

KB ELEV: 3419
GL ELEV: 3494

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7525.04	0.73	159.89	7524.23	-53.41	4.81	0.00	0.00	-53.58	
2	7585.00	0.73	159.89	7584.18	-54.13	5.07	0.00	0.00	-54.31	
3	8528.64	89.89	357.11	8188.27	540.89	-22.68	9.60	-162.78	541.35	
4	12624.30	89.89	357.11	8196.00	4631.34	-229.16	0.00	0.00	4637.01	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
162H	0.00	0.00	414640.97	720519.00	32°08'18.963N	103°45'15.994W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Pbhl	8196.00	4631.34	-229.16	419272.31	720289.84	32°09'04.805N	103°45'18.370W	Point

FIELD DETAILS

Eddy Co., NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

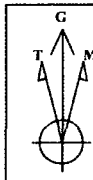
SITE DETAILS

Cotton Draw Unit 162H

Site Centre Northing: 414640.97
Easting: 720519.00
Ground Level: 3394.00
Positional Uncertainty: 0.00
Convergence: 0.31



Weatherford



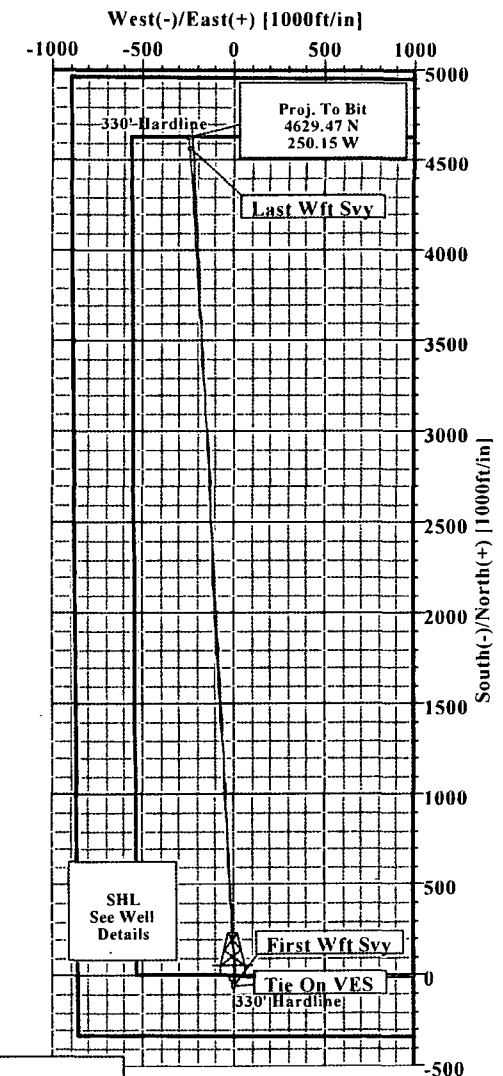
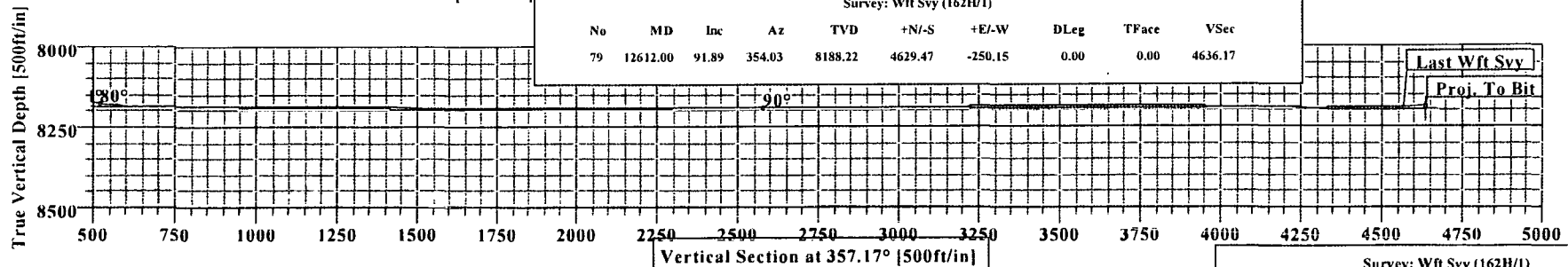
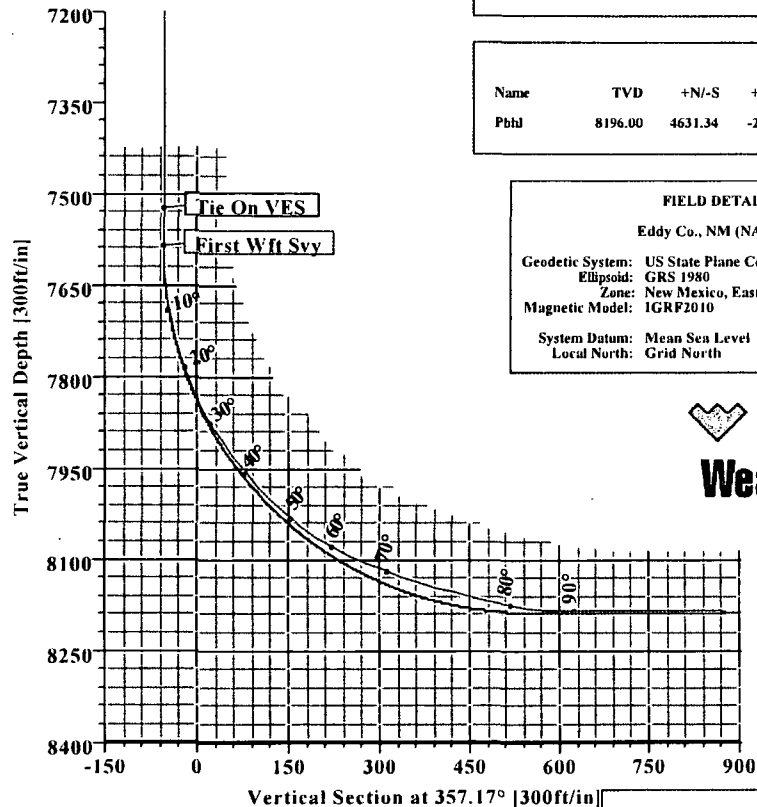
Azimuths to Grid North
True North: -0.31°
Magnetic North: 7.18°

Magnetic Field
Strength: 48426nT
Dip Angle: 60.04°
Date: 11/23/2012
Model: IGRF2010

Total Correction to Grid North: 7.18°

LEGEND

- 162H,1,Gyro
- 162H,1,Plan #2
- 1
- Wft Svy



Survey: Wft Svy (162H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
79	12612.00	91.89	354.03	8188.22	4629.47	-250.15	0.00	0.00	4636.17

Survey: Wft Svy (162H/1)

Created By: Russell W. Joyner

Date: 12/3/2012



Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy		Date: 12/3/2012	Time: 06:58:32	Page: 1						
Field: Eddy Co., NM (NAD 83)		Co-ordinate(NE) Reference: Well: 162H, Grid North								
Site: Cotton Draw Unit 162H		Vertical (TVD) Reference: SITE 3419.0								
Well: 162H		Section (VS) Reference: Well (0.00N,0.00E,357.17Azi)								
Wellpath: 1		Survey Calculation Method: Minimum Curvature	Db: Sybase							
Survey: Wft Svy		Start Date: 11/26/2012								
Company: Weatherford International Ltd.		Engineer: Russell 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 162H										
Site Position:		Northing: 414640.97 ft	Latitude: 32 8 18.963 N							
From: Map		Easting: 720519.00 ft	Longitude: 103 45 15.994 W							
Position Uncertainty: 0.00 ft		North Reference: Grid								
Ground Level: 3394.00 ft		Grid Convergence: 0.31 deg								
Well: 162H										
Well Position:		Northing: 414640.97 ft	Latitude: 32 8 18.963 N							
+N/-S 0.00 ft		Easting: 720519.00 ft	Longitude: 103 45 15.994 W							
+E/-W 0.00 ft		Position Uncertainty: 0.00 ft								
Wellpath: 1										
Current Datum: SITE		Height 3419.00 ft	Drilled From: Surface							
Magnetic Data: 11/23/2012			Tie-on Depth: 0.00 ft							
Field Strength: 48426 nT			Above System Datum: Mean Sea Level							
Vertical Section: Depth From (TVD)		+N/-S ft	Declination: 7.49 deg							
			Mag Dip Angle: 60.04 deg							
			+E/-W ft							
			Direction deg							
0.00		0.00	0.00	357.17						
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
7525.04	0.73	159.89	7524.23	-53.41	4.81	0.00	-53.58	414587.56	720523.81	Tie On VES First Wft Svy
7587.00	0.41	77.52	7586.19	-53.73	5.16	1.27	-53.92	414587.24	720524.16	
7618.00	2.53	18.08	7617.17	-53.06	5.48	7.57	-53.26	414587.91	720524.48	
7649.00	5.50	7.61	7648.10	-50.93	5.89	9.83	-51.16	414590.04	720524.89	
7680.00	8.79	5.67	7678.85	-47.10	6.32	10.64	-47.36	414593.87	720525.32	
7711.00	11.89	4.54	7709.34	-41.56	6.81	10.02	-41.85	414599.41	720525.81	
7742.00	15.04	1.73	7739.49	-34.36	7.18	10.38	-34.67	414606.61	720526.18	
7773.00	18.37	357.65	7769.18	-25.45	7.11	11.38	-25.77	414615.52	720526.11	
7804.00	21.18	357.70	7798.35	-14.97	6.68	9.06	-15.29	414626.00	720525.68	
7836.00	24.40	0.23	7827.84	-2.58	6.47	10.52	-2.90	414638.39	720525.47	
7867.00	27.60	1.73	7855.70	11.00	6.72	10.54	10.65	414651.97	720525.72	
7898.00	30.82	1.09	7882.76	26.12	7.09	10.44	25.74	414667.09	720526.09	
7929.00	34.56	1.12	7908.84	42.86	7.41	12.06	42.44	414683.83	720526.41	
7960.00	37.44	359.62	7933.92	61.08	7.52	9.72	60.63	414702.05	720526.52	
7992.00	40.15	358.77	7958.86	81.12	7.23	8.63	80.66	414722.09	720526.23	
8023.00	42.59	358.50	7982.12	101.60	6.74	7.89	101.15	414742.57	720525.74	
8054.00	45.91	357.55	8004.32	123.22	5.99	10.92	122.77	414764.19	720524.99	
8085.00	48.89	356.90	8025.30	146.01	4.88	9.74	145.59	414786.98	720523.88	
8116.00	52.32	356.56	8044.98	169.92	3.52	11.10	169.54	414810.89	720522.52	
8147.00	56.31	356.23	8063.06	195.04	1.93	12.90	194.71	414836.01	720520.93	
8178.00	59.80	356.10	8079.46	221.29	0.17	11.26	221.01	414862.26	720519.17	
8210.00	64.19	355.51	8094.48	249.46	-1.90	13.81	249.25	414890.43	720517.10	
8241.00	67.58	356.00	8107.14	277.67	-3.99	11.03	277.53	414918.64	720515.01	
8272.00	69.58	356.48	8118.46	306.46	-5.88	6.61	306.38	414947.43	720513.12	



Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit 162H
Well: 162H
Wellpath: 1

Date: 12/3/2012 Time: 06:58:32 Page: 2
Co-ordinate(NE) Reference: Well: 162H, Grid North
Vertical (TVD) Reference: SITE 3419.0
Section (VS) Reference: Well (0.00N,0.00E,357.17Azi)
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
8303.00	71.30	357.00	8128.84	335.63	-7.54	5.77	335.59	414976.60	720511.46	
8334.00	72.20	358.14	8138.55	365.04	-8.79	4.54	365.03	415006.01	720510.21	
8365.00	73.71	358.64	8147.64	394.67	-9.62	5.11	394.66	415035.64	720509.38	
8397.00	75.63	356.98	8156.10	425.50	-10.80	7.81	425.52	415066.47	720508.20	
8428.00	76.26	356.63	8163.62	455.53	-12.48	2.31	455.59	415096.50	720506.52	
8459.00	77.12	356.02	8170.76	485.63	-14.41	3.37	485.75	415126.60	720504.59	
8490.00	79.70	355.47	8176.99	515.91	-16.67	8.50	516.11	415156.88	720502.33	
8521.00	82.68	356.40	8181.74	546.47	-18.84	10.06	546.73	415187.44	720500.16	
8551.00	86.35	356.81	8184.60	576.27	-20.60	12.31	576.59	415217.24	720498.40	
8576.00	88.67	357.29	8185.69	601.21	-21.89	9.48	601.56	415242.18	720497.11	
8607.00	90.35	357.90	8185.95	632.18	-23.19	5.77	632.56	415273.15	720495.81	
8638.00	90.84	358.09	8185.63	663.16	-24.28	1.70	663.55	415304.13	720494.72	
8731.00	89.86	356.45	8185.06	756.05	-28.70	2.05	756.55	415397.02	720490.30	
8824.00	88.32	356.11	8186.54	848.84	-34.74	1.70	849.52	415489.81	720484.26	
8917.00	87.55	355.70	8189.89	941.54	-41.37	0.94	942.44	415582.51	720477.63	
9011.00	89.44	357.29	8192.36	1035.33	-47.12	2.63	1036.39	415676.30	720471.88	
9104.00	90.14	357.50	8192.70	1128.23	-51.34	0.79	1129.39	415769.20	720467.66	
9198.00	90.28	356.38	8192.36	1222.09	-56.36	1.20	1223.39	415863.06	720462.64	
9291.00	89.09	356.34	8192.87	1314.90	-62.27	1.28	1316.37	415955.87	720456.73	
9384.00	88.04	356.09	8195.20	1407.67	-68.40	1.16	1409.33	416048.64	720450.60	
9477.00	88.88	356.53	8197.70	1500.44	-74.39	1.02	1502.28	416141.41	720444.61	
9571.00	91.68	356.56	8197.24	1594.26	-80.05	2.98	1596.27	416235.23	720438.95	
9664.00	89.16	356.15	8196.56	1687.06	-85.96	2.75	1689.25	416328.03	720433.04	
9759.00	89.51	355.97	8197.66	1781.83	-92.49	0.41	1784.22	416422.80	720426.51	
9853.00	90.42	356.82	8197.72	1875.64	-98.40	1.32	1878.21	416516.61	720420.60	
9948.00	89.93	356.82	8197.43	1970.50	-103.67	0.52	1973.21	416611.47	720415.33	
10043.00	90.35	358.41	8197.19	2065.41	-107.62	1.73	2068.21	416706.38	720411.38	
10137.00	89.51	358.84	8197.31	2159.38	-109.88	1.00	2162.17	416800.35	720409.12	
10232.00	91.54	358.23	8196.44	2254.34	-112.31	2.23	2257.14	416895.31	720406.69	
10327.00	92.25	358.54	8193.30	2349.25	-114.98	0.82	2352.06	416990.22	720404.02	
10422.00	90.77	358.12	8190.79	2444.18	-117.75	1.62	2447.01	417085.15	720401.25	
10516.00	89.65	358.01	8190.45	2538.12	-120.93	1.20	2540.99	417179.09	720398.07	
10611.00	90.21	358.32	8190.56	2633.07	-123.97	0.67	2635.98	417274.04	720395.03	
10706.00	88.39	357.48	8191.73	2727.99	-127.45	2.11	2730.96	417368.96	720391.55	
10800.00	90.70	356.65	8192.47	2821.86	-132.26	2.61	2824.95	417462.83	720386.74	
10894.00	90.21	355.30	8191.73	2915.62	-138.86	1.53	2918.92	417556.59	720380.14	
10988.00	90.14	354.50	8191.44	3009.25	-147.21	0.85	3012.85	417650.22	720371.79	
11083.00	89.93	356.15	8191.38	3103.93	-154.96	1.75	3107.80	417744.90	720364.04	
11177.00	91.19	356.23	8190.46	3197.72	-161.20	1.34	3201.78	417838.69	720357.80	
11272.00	89.86	355.93	8189.59	3292.49	-167.70	1.44	3296.75	417933.46	720351.30	
11366.00	90.49	357.37	8189.30	3386.32	-173.19	1.67	3390.75	418027.29	720345.81	
11461.00	91.19	357.60	8187.91	3481.22	-177.36	0.78	3485.73	418122.19	720341.64	
11555.00	90.28	357.07	8186.71	3575.11	-181.73	1.12	3579.72	418216.08	720337.27	
11650.00	90.84	357.35	8185.78	3669.99	-186.35	0.66	3674.72	418310.96	720332.65	
11745.00	88.67	357.26	8186.18	3764.88	-190.82	2.29	3769.71	418405.85	720328.18	
11838.00	88.67	357.19	8188.34	3857.75	-195.32	0.08	3862.69	418498.72	720323.68	
11933.00	89.02	356.46	8190.26	3952.58	-200.58	0.85	3957.66	418593.55	720318.42	
12026.00	89.16	356.52	8191.73	4045.40	-206.27	0.16	4050.65	418686.37	720312.73	
12120.00	88.60	356.40	8193.57	4139.20	-212.08	0.61	4144.62	418780.17	720306.92	
12215.00	89.44	357.22	8195.20	4234.04	-217.36	1.24	4239.60	418875.01	720301.64	
12310.00	90.49	356.69	8195.25	4328.90	-222.41	1.24	4334.60	418969.87	720296.59	
12404.00	91.54	355.82	8193.59	4422.68	-228.55	1.45	4428.57	419063.65	720290.45	



Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit 162H
Well: 162H
Wellpath: 1

Date: 12/3/2012 Time: 06:58:32 Page: 3
Co-ordinate(NE) Reference: Well: 162H, Grid North
Vertical (TVD) Reference: SITE 3419.0
Section (VS) Reference: Well (0.00N,0.00E,357.17Azi)
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
12499.00	90.91	352.84	8191.56	4517.18	-237.93	3.21	4523.42	419158.15	720281.07	
12545.00	91.89	354.03	8190.43	4562.87	-243.19	3.35	4569.31	419203.84	720275.81	Last Wft Svy
12612.00	91.89	354.03	8188.22	4629.47	-250.15	0.00	4636.17	419270.44	720268.85	Proj. To Bit

Annotation

MD ft	TVD ft	
7525.04	7524.23	Tie On VES
7587.00	7586.19	First Wft Svy
12545.00	8190.43	Last Wft Svy
12612.00	8188.22	Proj. To Bit