



Company: Devon
Lease/Well: Cotton Draw Unit #116H
Location: Sec 36 T24S R31E
Rig Name: H&P 214
State/County: New Mexico/Eddy
Latitude: 32.17, Longitude: -103.72
GRID North is 0.32 Degrees East of True North
VS-Azi: 359.65 Degrees



3001537926

FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : RKB 25 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: cotton draw unit #116-de_01.ut

Minimum Curvature Method

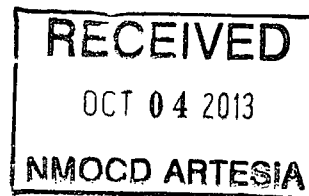
Report Date/Time: 6/15/2013 / 20:57

Vaughn Energy Services

West Texas

Chris Bankson

432-563-5444



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	****
76.80	0.32	33.45	76.80	0.18	0.12	0.18	0.22	33.45	0.42
171.14	0.66	22.76	171.14	0.91	0.48	0.90	1.03	27.78	0.37
265.48	0.85	4.50	265.47	2.10	0.74	2.10	2.23	19.46	0.32
359.82	1.00	357.35	359.80	3.63	0.76	3.62	3.70	11.84	0.21
454.16	1.06	351.18	454.12	5.31	0.59	5.31	5.35	6.31	0.13
548.50	1.71	352.67	548.43	7.58	0.27	7.57	7.58	2.07	0.69
642.84	1.71	353.89	642.73	10.38	-0.06	10.38	10.38	359.69	0.04
737.18	1.78	354.53	737.03	13.24	-0.35	13.24	13.24	358.51	0.07
831.52	1.84	341.34	831.32	16.13	-0.97	16.14	16.16	356.56	0.45
925.86	1.87	351.74	925.61	19.09	-1.68	19.10	19.17	354.98	0.36
1020.20	1.79	351.14	1019.90	22.08	-2.13	22.09	22.18	354.50	0.09
1114.54	1.73	356.13	1114.20	24.96	-2.45	24.97	25.07	354.40	0.18
1208.88	1.63	0.52	1208.50	27.72	-2.53	27.73	27.83	354.78	0.17
1303.22	1.69	9.40	1302.80	30.43	-2.29	30.44	30.52	355.69	0.28
1397.56	1.63	13.91	1397.10	33.11	-1.74	33.12	33.15	356.99	0.15
1491.90	1.79	16.00	1491.40	35.83	-1.01	35.84	35.84	358.38	0.18
1586.24	1.68	19.80	1585.69	38.55	-0.14	38.55	38.55	359.80	0.17
1680.58	1.70	29.83	1679.99	41.07	1.03	41.06	41.08	1.43	0.31
1774.92	1.60	39.04	1774.29	43.31	2.55	43.29	43.38	3.38	0.30
1869.26	1.53	41.00	1868.60	45.28	4.21	45.25	45.47	5.31	0.10
1963.60	1.40	45.53	1962.91	47.03	5.86	47.00	47.40	7.10	0.18
2057.94	1.23	48.20	2057.22	48.52	7.43	48.47	49.08	8.71	0.20
2152.28	1.15	56.80	2151.54	49.71	8.98	49.65	50.51	10.24	0.21
2246.62	1.02	55.01	2245.86	50.70	10.45	50.64	51.77	11.65	0.14
2340.96	0.76	58.10	2340.19	51.52	11.67	51.45	52.82	12.77	0.28
2435.30	0.73	62.81	2434.53	52.12	12.74	52.05	53.66	13.74	0.07
2529.64	0.75	90.28	2528.86	52.40	13.90	52.31	54.21	14.86	0.37
2623.98	1.11	107.70	2623.19	52.12	15.39	52.02	54.34	16.45	0.48
2718.32	1.42	109.81	2717.50	51.44	17.36	51.34	54.29	18.65	0.33
2812.66	1.56	169.59	2811.82	49.78	18.70	49.67	53.18	20.58	1.58
2907.00	1.52	156.26	2906.12	47.38	19.43	47.26	51.21	22.30	0.38
3001.34	1.47	148.76	3000.43	45.20	20.56	45.07	49.66	24.46	0.21
3095.68	1.47	141.14	3094.74	43.22	21.95	43.08	48.47	26.93	0.21
3190.02	1.24	141.97	3189.05	41.47	23.34	41.33	47.59	29.37	0.25

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
3284.36	2.25	102.00	3283.35	40.28	25.78	40.12	47.83	32.62	1.62
3378.70	2.32	99.49	3377.62	39.58	29.48	39.40	49.35	36.68	0.13
3473.04	1.72	85.62	3471.90	39.37	32.77	39.17	51.23	39.77	0.82
3567.38	1.67	82.75	3566.20	39.65	35.54	39.44	53.25	41.87	0.11
3661.72	1.55	78.32	3660.50	40.09	38.16	39.85	55.34	43.59	0.18
3756.06	3.04	72.27	3754.76	41.11	41.79	40.85	58.62	45.47	1.59
3850.40	4.14	68.84	3848.91	43.10	47.35	42.81	64.03	47.69	1.19
3944.74	3.77	63.30	3943.03	45.72	53.31	45.40	70.23	49.38	0.56
4039.08	4.86	65.99	4037.10	48.75	59.73	48.38	77.09	50.78	1.17
4133.42	5.85	68.02	4131.03	52.17	67.83	51.75	85.57	52.44	1.07
4227.76	5.76	72.43	4224.88	55.40	76.80	54.93	94.69	54.20	0.48
4322.10	5.61	72.23	4318.76	58.23	85.71	57.71	103.62	55.81	0.16
4416.44	4.40	77.94	4412.74	60.40	93.64	59.82	111.42	57.18	1.39
4510.78	3.85	87.36	4506.84	61.30	100.34	60.68	117.58	58.58	0.92
4605.12	3.34	93.15	4600.99	61.29	106.24	60.64	122.65	60.02	0.66
4699.46	3.01	107.57	4695.19	60.39	111.35	59.71	126.67	61.53	0.91
4793.80	2.83	117.14	4789.40	58.58	115.78	57.87	129.76	63.16	0.55
4888.14	2.88	130.30	4883.63	55.99	119.67	55.25	132.12	64.93	0.70
4982.48	2.43	144.36	4977.87	52.82	122.64	52.07	133.54	66.70	0.84
5076.82	2.04	160.69	5072.14	49.62	124.36	48.86	133.90	68.25	0.79
5171.16	1.68	184.64	5166.43	46.66	124.81	45.89	133.24	69.50	0.90
5265.50	1.43	192.58	5260.73	44.13	124.44	43.37	132.03	70.47	0.35
5359.84	0.76	186.17	5355.06	42.36	124.11	41.60	131.14	71.16	0.72
5454.18	0.36	165.08	5449.39	41.45	124.12	40.69	130.86	71.54	0.47
5548.52	0.69	142.17	5543.73	40.71	124.55	39.95	131.03	71.90	0.41
5642.86	0.70	106.93	5638.06	40.09	125.45	39.32	131.70	72.28	0.45
5737.20	0.77	90.22	5732.39	39.92	126.64	39.14	132.79	72.51	0.24
5831.54	0.67	76.62	5826.73	40.04	127.82	39.26	133.94	72.61	0.21
5925.88	0.98	77.42	5921.06	40.35	129.14	39.56	135.30	72.65	0.33
6020.22	0.82	76.66	6015.38	40.68	130.59	39.88	136.78	72.70	0.17
6114.56	0.74	83.07	6109.72	40.91	131.86	40.10	138.06	72.76	0.13
6208.90	0.58	86.71	6204.05	41.01	132.95	40.20	139.13	72.86	0.17
6303.24	0.51	112.00	6298.38	40.88	133.82	40.06	139.92	73.01	0.27
6397.58	0.48	117.06	6392.72	40.54	134.56	39.72	140.53	73.23	0.05
6491.92	0.59	119.92	6487.06	40.12	135.33	39.30	141.15	73.49	0.12
6586.26	0.71	120.35	6581.39	39.59	136.25	38.76	141.88	73.80	0.13
6680.60	0.68	121.69	6675.72	39.00	137.23	38.16	142.66	74.14	0.03
6774.94	0.73	126.46	6770.06	38.35	138.19	37.50	143.41	74.49	0.08
6869.28	0.72	129.01	6864.39	37.61	139.14	36.76	144.13	74.87	0.04
6963.62	0.98	156.52	6958.72	36.50	139.92	35.65	144.61	75.38	0.50
7057.96	0.80	164.25	7053.05	35.13	140.42	34.27	144.75	75.95	0.23
7152.30	0.58	176.14	7147.38	34.02	140.63	33.16	144.69	76.40	0.27
7246.64	0.55	189.37	7241.72	33.09	140.59	32.23	144.43	76.76	0.14
7340.98	0.59	198.67	7336.05	32.17	140.36	31.32	144.00	77.09	0.11
7435.32	0.76	207.92	7430.39	31.16	139.91	30.30	143.34	77.45	0.21
7529.66	0.49	214.88	7524.72	30.27	139.39	29.42	142.64	77.75	0.30
7624.00	0.34	218.71	7619.06	29.72	138.98	28.87	142.12	77.93	0.16
7644.00	0.14	226.23	7639.06	29.66	138.92	28.81	142.06	77.95	0.99

HORIZONTAL DISPLACEMENT IS
142.06 FEET AT 77.95 DEGREES



**DRILLING SERVICES
END OF WELL REPORT
FOR
Ryan Clark
Devon Energy
Cotton Draw Unit 116H
Eddy County, New Mexico**

Weatherford Drilling Services job start date : 6-13-2013

Weatherford Drilling Services job end date : 7-3-2013

Presented By:

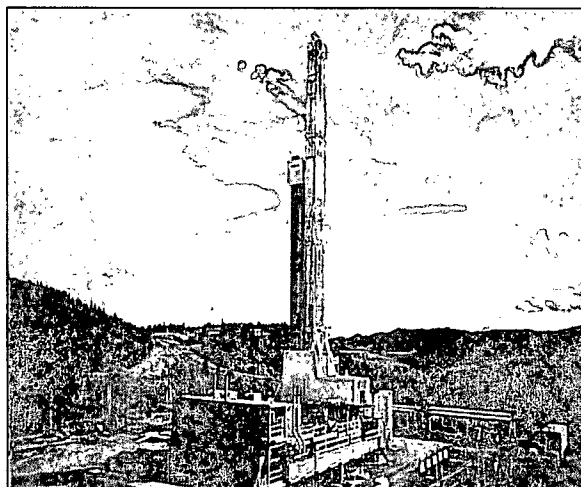
Damien Tarpley
Area Manager

Scott Dixon
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

H&P 214





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

July 9, 2013

Ryan Clark
333 W. Sherridan Ave
Oklahoma City, OK 73102

Reference Well Name : Cotton Draw Unit 116H
Location : Eddy County, New Mexico
Wft Job # : 4029718
Rig : H&P 214

Dear Mr. Clark

Thank you for allowing us the opportunity to provide our services on your Cotton Draw Unit 116H 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 116H
Eddy County, New Mexico

Section 1

Weatherford (Wft) Final Definitive

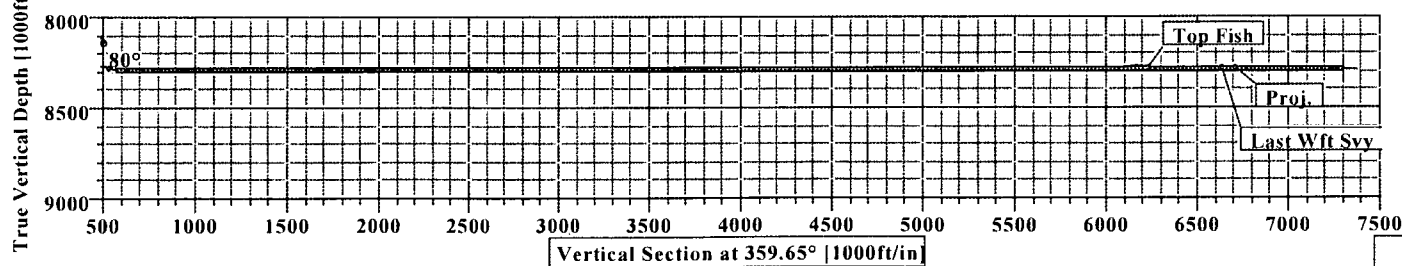
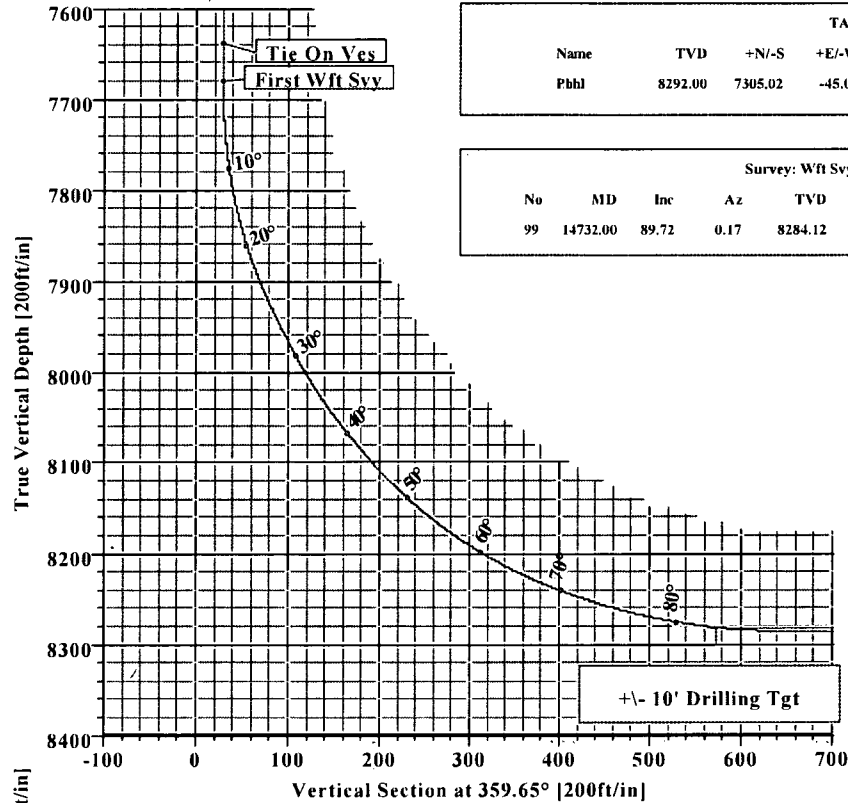
Plot & Survey



Cotton Draw Unit #116H
Eddy Co., NM



KB ELEV: 3507
GL ELEV: 3482



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7644.00	0.14	226.23	7639.06	29.66	138.92	0.00	0.00	28.80	
2	7690.00	0.14	226.23	7685.06	29.58	138.84	0.00	0.00	28.73	
3	8176.13	47.20	338.00	8118.10	204.56	67.51	9.72	111.89	204.14	
4	8658.99	90.00	359.65	8292.00	634.62	-4.40	9.73	30.29	634.64	
5	15329.51	90.00	359.65	8292.00	7305.02	-45.07	0.00	0.00	7305.16	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Cotton Draw Unit #116H	0.00	0.00	425202.73	729773.73	32°10'02.973N	103°43'27.664W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8292.00	7305.02	-45.07	432507.75	729728.66	Rectangle (6733x50)

Survey: Wft Svy (Cotton Draw Unit #116H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
99	14732.00	89.72	0.17	8284.12	6710.24	-49.92	0.00	0.00	6710.42

SITE DETAILS

Cotton Draw Unit #116H
Site Centre Northing: 425202.73
Easting: 729773.73
Ground Level: 3482.00
Positional Uncertainty: 0.00
Convergence: 0.32

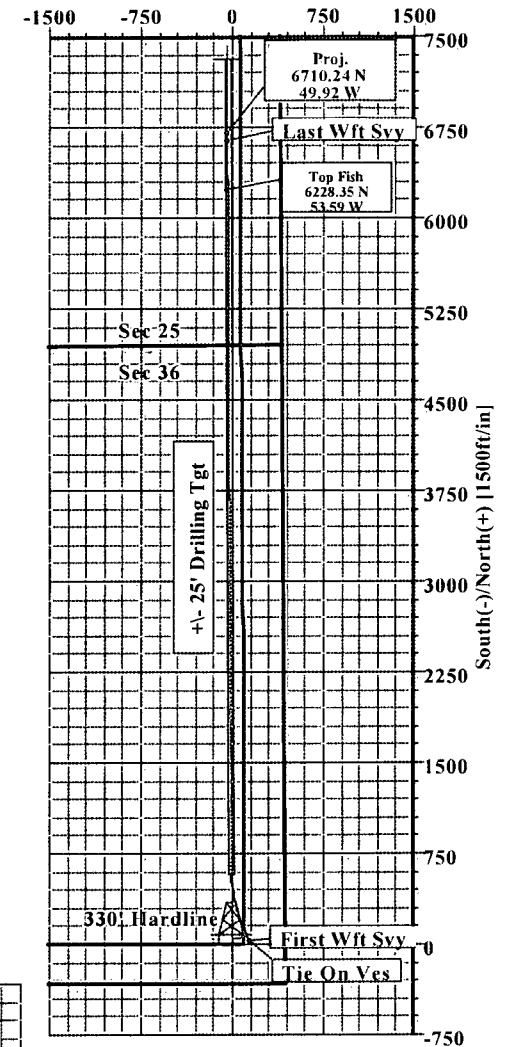
LEGEND

○ Cotton Draw Unit #116H, 1, Gyro
□ Cotton Draw Unit #116H, 1, Plan #4
| Wft Svy



Weatherford

West(-)/East(+) [1500ft/in]



Survey: Wft Svy (Cotton Draw Unit #116H/1)

Created By: Russell W. Joyner

Date: 7/9/2013



Weatherford

Wft Survey Report X Y's.

**Weatherford**

Company: Devon Energy Date: 7/9/2013 Time: 15:51:04 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: Cotton Draw Unit #116H, Grid North
Site: Cotton Draw Unit #116H Vertical (TVD) Reference: SITE 3507.0
Well: Cotton Draw Unit #116H Section (VS) Reference: Well (0.00N,0.00E,359.65Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 6/17/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Cotton Draw Unit #116H

Site Position: Northing: 425202.73 ft Latitude: 32 10 2.973 N
From: Map Easting: 729773.73 ft Longitude: 103 43 27.664 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3482.00 ft Grid Convergence: 0.32 deg

Well: Cotton Draw Unit #116H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 425202.73 ft Latitude: 32 10 2.973 N
+E/-W 0.00 ft Easting: 729773.73 ft Longitude: 103 43 27.664 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height 3507.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 10/1/2010 Above System Datum: Mean Sea Level
Field Strength: 48661 nT Declination: 7.74 deg
Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.13 deg
ft ft ft deg
0.00 0.00 0.00 359.65

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
7644.00	0.14	226.23	7639.06	29.66	138.92	0.00	28.80	425232.39	729912.65	Tie On Ves First Wft Svy
7685.00	0.74	306.77	7680.06	29.78	138.67	1.78	28.93	425232.51	729912.40	
7716.00	3.26	310.52	7711.04	30.48	137.84	8.14	29.63	425233.21	729911.57	
7748.00	6.76	318.60	7742.91	32.48	135.90	11.13	31.64	425235.21	729909.63	
7779.00	9.68	323.98	7773.59	35.96	133.16	9.73	35.14	425238.69	729906.89	
7810.00	13.04	326.80	7803.98	40.99	129.71	10.98	40.19	425243.72	729903.44	
7842.00	16.31	329.30	7834.93	47.88	125.44	10.41	47.11	425250.61	729899.17	
7873.00	20.27	330.59	7864.36	56.30	120.58	12.84	55.56	425259.03	729894.31	
7905.00	24.01	332.49	7893.99	66.91	114.85	11.90	66.20	425269.64	729888.58	
7936.00	26.93	334.87	7921.98	78.86	108.95	9.98	78.19	425281.59	729882.68	
7967.00	27.88	337.24	7949.50	91.90	103.17	4.67	91.27	425294.63	729876.90	
7998.00	29.43	339.25	7976.70	105.71	97.67	5.89	105.11	425308.44	729871.40	
8030.00	32.03	341.55	8004.21	121.12	92.19	8.92	120.54	425323.85	729865.92	
8061.00	35.34	342.21	8030.00	137.45	86.85	10.74	136.92	425340.18	729860.58	
8093.00	38.58	341.50	8055.57	155.73	80.86	10.21	155.23	425358.46	729854.59	
8124.00	41.32	340.59	8079.33	174.56	74.39	9.04	174.09	425377.29	729848.12	
8156.00	44.68	338.88	8102.73	195.02	66.82	11.11	194.61	425397.75	729840.55	
8187.00	47.71	337.65	8124.18	215.80	58.53	10.18	215.43	425418.53	729832.26	
8219.00	50.89	337.36	8145.05	238.21	49.25	9.96	237.90	425440.94	729822.98	
8250.00	53.80	339.75	8163.99	261.05	40.29	11.20	260.80	425463.78	729814.02	
8281.00	57.23	342.23	8181.54	285.21	31.98	12.88	285.00	425487.94	729805.71	
8313.00	59.73	343.97	8198.27	311.31	24.05	9.08	311.15	425514.04	729797.78	
8344.00	63.24	346.55	8213.07	337.64	17.13	13.48	337.53	425540.37	729790.86	
8376.00	66.13	349.01	8226.75	365.91	11.02	11.39	365.84	425568.64	729784.75	
8407.00	69.51	350.92	8238.45	394.17	6.02	12.31	394.13	425596.90	729779.75	
8438.00	71.19	351.42	8248.88	423.02	1.54	5.63	423.00	425625.75	729775.27	
8470.00	74.41	353.39	8258.34	453.32	-2.49	11.65	453.32	425656.05	729771.24	
8501.00	76.27	354.26	8266.18	483.13	-5.72	6.59	483.16	425685.86	729768.01	
8533.00	78.74	355.13	8273.11	514.24	-8.60	8.16	514.28	425716.97	729765.13	
8564.00	81.16	355.95	8278.52	544.67	-10.98	8.23	544.72	425747.40	729762.75	



Weatherford

Wft Survey Report X Y's.



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Cotton Draw Unit #116H
Well: Cotton Draw Unit #116H
Wellpath: 1

Date: 7/9/2013 Time: 15:51:04 Page: 2
Co-ordinate(NE) Reference: Well: Cotton Draw Unit #116H, Grid North
Vertical (TVD) Reference: SITE 3507.0
Section (VS) Reference: Well (0.00N,0.00E,359.65Azi)
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
8596.00	84.18	357.00	8282.60	576.34	-12.93	9.98	576.41	425779.07	729760.80	
8627.00	87.13	357.29	8284.95	607.21	-14.47	9.56	607.29	425809.94	729759.26	
8658.00	88.88	358.46	8286.03	638.17	-15.61	6.79	638.25	425840.90	729758.12	
8689.00	89.58	359.23	8286.44	669.16	-16.24	3.36	669.25	425871.89	729757.49	
8738.00	89.79	359.46	8286.71	718.16	-16.80	0.64	718.25	425920.89	729756.93	
8832.00	90.07	0.09	8286.83	812.15	-17.17	0.73	812.24	426014.88	729756.56	
8926.00	89.44	359.82	8287.23	906.15	-17.24	0.73	906.24	426108.88	729756.49	
9021.00	87.97	359.62	8289.38	1001.12	-17.71	1.56	1001.21	426203.85	729756.02	
9115.00	86.99	359.93	8293.51	1095.03	-18.07	1.09	1095.12	426297.76	729755.66	
9209.00	88.18	0.26	8297.47	1188.95	-17.92	1.31	1189.03	426391.68	729755.81	
9284.00	88.46	0.38	8299.67	1263.91	-17.50	0.41	1264.00	426466.64	729756.23	
9378.00	89.44	359.81	8301.39	1357.90	-17.34	1.21	1357.98	426560.63	729756.39	
9473.00	92.17	359.83	8300.06	1452.88	-17.64	2.87	1452.96	426655.61	729756.09	
9567.00	91.82	359.45	8296.78	1546.82	-18.23	0.55	1546.90	426749.55	729755.50	
9661.00	90.70	359.02	8294.72	1640.78	-19.49	1.28	1640.87	426843.51	729754.24	
9756.00	89.09	358.99	8294.89	1735.77	-21.14	1.70	1735.86	426938.50	729752.59	
9850.00	89.65	359.01	8295.92	1829.75	-22.78	0.60	1829.85	427032.48	729750.95	
9944.00	90.07	359.09	8296.15	1923.73	-24.34	0.45	1923.85	427126.46	729749.39	
10038.00	90.77	359.91	8295.46	2017.73	-25.16	1.15	2017.84	427220.46	729748.57	
10132.00	89.72	359.69	8295.06	2111.72	-25.48	1.14	2111.84	427314.45	729748.25	
10227.00	90.56	0.27	8294.83	2206.72	-25.52	1.07	2206.84	427409.45	729748.21	
10320.00	90.56	0.56	8293.92	2299.71	-24.84	0.31	2299.82	427502.44	729748.89	
10415.00	92.38	358.89	8291.48	2394.67	-25.30	2.60	2394.78	427597.40	729748.43	
10509.00	92.66	358.56	8287.35	2488.56	-27.39	0.46	2488.68	427691.29	729746.34	
10603.00	92.66	358.38	8282.99	2582.43	-29.90	0.19	2582.56	427785.16	729743.83	
10698.00	92.38	358.40	8278.81	2677.30	-32.56	0.30	2677.45	427880.03	729741.17	
10792.00	90.14	358.91	8276.75	2771.24	-34.77	2.44	2771.40	427973.97	729738.96	
10886.00	90.21	358.91	8276.46	2865.22	-36.56	0.07	2865.39	428067.95	729737.17	
10981.00	89.72	359.57	8276.52	2960.21	-37.82	0.87	2960.39	428162.94	729735.91	
11075.00	88.88	0.90	8277.66	3054.20	-37.43	1.67	3054.38	428256.93	729736.30	
11170.00	87.41	1.28	8280.74	3149.13	-35.63	1.60	3149.29	428351.86	729738.10	
11264.00	86.71	0.38	8285.56	3243.00	-34.26	1.21	3243.15	428445.73	729739.47	
11358.00	87.13	359.91	8290.61	3336.86	-34.03	0.67	3337.01	428539.59	729739.70	
11452.00	89.16	0.14	8293.65	3430.81	-33.99	2.17	3430.95	428633.54	729739.74	
11547.00	90.91	0.56	8293.60	3525.80	-33.41	1.89	3525.94	428728.53	729740.32	
11641.00	90.98	0.77	8292.05	3619.78	-32.32	0.24	3619.91	428822.51	729741.41	
11736.00	92.24	0.20	8289.38	3714.74	-31.51	1.46	3714.86	428917.47	729742.22	
11830.00	90.28	358.53	8287.31	3808.70	-32.55	2.74	3808.83	429011.43	729741.18	
11925.00	90.70	358.55	8286.50	3903.67	-34.97	0.44	3903.81	429106.40	729738.76	
12019.00	89.44	358.66	8286.38	3997.64	-37.26	1.35	3997.79	429200.37	729736.47	
12114.00	91.68	358.97	8285.45	4092.61	-39.23	2.38	4092.77	429295.34	729734.50	
12208.00	90.07	358.94	8284.02	4186.58	-40.94	1.71	4186.75	429389.31	729732.79	
12302.00	89.37	359.19	8284.48	4280.56	-42.47	0.79	4280.74	429483.29	729731.26	
12396.00	88.88	358.97	8285.91	4374.54	-43.98	0.57	4374.73	429577.27	729729.75	
12494.00	90.98	359.60	8286.03	4472.53	-45.21	2.24	4472.72	429675.26	729728.52	
12589.00	90.63	359.50	8284.70	4567.51	-45.95	0.38	4567.71	429770.24	729727.78	
12683.00	90.07	359.69	8284.12	4661.51	-46.62	0.63	4661.71	429864.24	729727.11	
12778.00	89.09	359.16	8284.82	4756.50	-47.57	1.17	4756.70	429959.23	729726.16	
12872.00	90.42	0.09	8285.22	4850.49	-48.19	1.73	4850.70	430053.22	729725.54	
12966.00	90.63	0.36	8284.36	4944.49	-47.82	0.36	4944.69	430147.22	729725.91	
13060.00	90.35	359.79	8283.56	5038.49	-47.69	0.68	5038.68	430241.22	729726.04	
13155.00	89.65	359.16	8283.56	5133.48	-48.56	0.99	5133.68	430336.21	729725.17	



Weatherford

Wft Survey Report X Y's.

**Weatherford****Company:** Devon Energy**Field:** Eddy Co., NM (NAD 83)**Site:** Cotton Draw Unit #116H**Well:** Cotton Draw Unit #116H**Wellpath:** 1**Date:** 7/9/2013**Time:** 15:51:04**Page:** 3**Co-ordinate(NE) Reference:** Well: Cotton Draw Unit #116H, Grid North**Vertical (TVD) Reference:** SITE 3507.0**Section (VS) Reference:** Well (0.00N,0.00E,359.65Azi)**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
13249.00	88.60	358.69	8284.99	5227.45	-50.33	1.22	5227.66	430430.18	729723.40	
13343.00	90.42	359.64	8285.80	5321.43	-51.70	2.18	5321.65	430524.16	729722.03	
13438.00	90.91	359.89	8284.69	5416.43	-52.09	0.58	5416.64	430619.16	729721.64	
13532.00	91.26	0.17	8282.91	5510.41	-52.04	0.48	5510.63	430713.14	729721.69	
13627.00	90.98	0.12	8281.06	5605.39	-51.80	0.30	5605.60	430808.12	729721.93	
13721.00	90.84	359.99	8279.56	5699.38	-51.71	0.20	5699.59	430902.11	729722.02	
13815.00	90.00	0.02	8278.88	5793.38	-51.70	0.89	5793.58	430996.11	729722.03	
13910.00	90.07	359.82	8278.82	5888.37	-51.83	0.22	5888.58	431091.10	729721.90	
14004.00	90.56	359.58	8278.30	5982.37	-52.32	0.58	5982.58	431185.10	729721.41	
14099.00	91.19	359.41	8276.85	6077.36	-53.16	0.69	6077.57	431280.09	729720.57	
14193.00	89.86	359.90	8275.99	6171.35	-53.73	1.51	6171.56	431374.08	729720.00	
14250.00	89.23	0.37	8276.44	6228.35	-53.59	1.38	6228.56	431431.08	729720.14	Top Fish
14288.00	88.81	0.69	8277.09	6266.34	-53.24	1.38	6266.55	431469.07	729720.49	
14382.00	89.65	1.36	8278.35	6360.31	-51.56	1.14	6360.51	431563.04	729722.17	
14476.00	88.39	0.00	8279.96	6454.29	-50.44	1.97	6454.48	431657.02	729723.29	
14570.00	88.60	0.11	8282.43	6548.26	-50.35	0.25	6548.44	431750.99	729723.38	
14662.00	89.72	0.17	8283.78	6640.25	-50.13	1.22	6640.43	431842.98	729723.60	Last Wft Svy
14732.00	89.72	0.17	8284.12	6710.24	-49.92	0.00	6710.42	431912.97	729723.81	Proj.

Annotation

MD ft	TVD ft	
7644.00	7639.06	Tie On Ves
7685.00	7680.06	First Wft Svy
14250.00	8276.44	Top Fish
14662.00	8283.78	Last Wft Svy
14732.00	8284.12	Proj.