



A GYRO TECHNOLOGIES INC. COMPANY

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

June 19, 2013

3001537926

Devon Energy Production Co., L.P.
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

Attn: Patti Riechers



Re: Cotton Draw Unit No. 116H

Please find enclosed a copy of the survey from 0.00' to 7644.00' 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

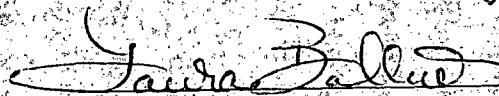
Sincerely,


Keith Havelka
Operations

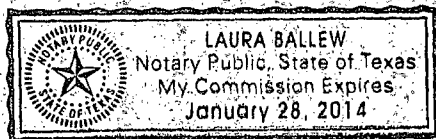
STATE OF TEXAS §

§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 19th day of June, A.D., 2013, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas





Company: Devon Energy Production Co., LP
Lease/Well: Cotton Draw Unit /No.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: 0.00 Degrees



Depth Reference : RKB 25 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: cotton draw unit #116-de_01.ut

Minimum Curvature Method

Report Date/Time: 6/19/2013 / 13:51

Vaughn Energy Services

West, Texas

432-563-5444

Surveyor: Chris Bankson

Cotton Draw Unit No. 116H / API 30-015-37926



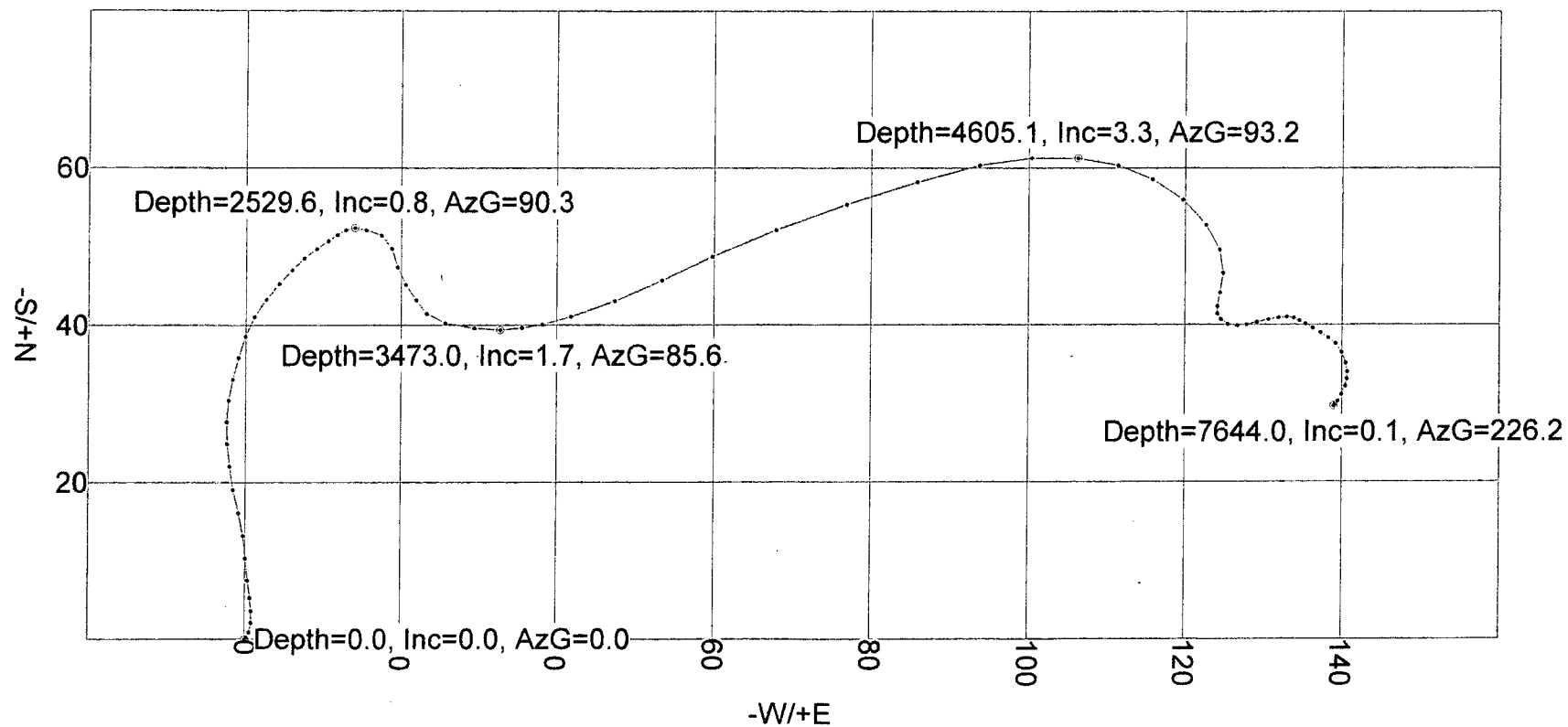
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
76.80	0.32	33.45	76.80	0.18	0.12	0.18	0.22	33.45	0.42
171.14	0.66	22.76	171.14	0.91	0.48	0.91	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	3.63	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	7.58	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	16.13	16.16	356.56	0.45
925.86	1.87	351.74	925.61	19.09	-1.68	19.09	19.17	354.98	0.36
1020.20	1.79	351.14	1019.90	22.08	-2.13	22.08	22.18	354.50	0.09
1114.54	1.73	356.13	1114.20	24.96	-2.45	24.96	25.07	354.40	0.18
1208.88	1.63	0.52	1208.50	27.72	-2.53	27.72	27.83	354.78	0.17
1303.22	1.69	9.40	1302.80	30.43	-2.29	30.43	30.52	355.69	0.28
1397.56	1.63	13.91	1397.10	33.11	-1.74	33.11	33.15	356.99	0.15
1491.90	1.79	16.00	1491.40	35.83	-1.01	35.83	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	41.07	41.08	1.43	0.31

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
1774.92	1.60	39.04	1774.29	43.31	2.55	43.31	43.38	3.38	0.30
1869.26	1.53	41.00	1868.60	45.28	4.21	45.28	45.47	5.31	0.10
1963.60	1.40	45.53	1962.91	47.03	5.86	47.03	47.40	7.10	0.18
2057.94	1.23	48.20	2057.22	48.52	7.43	48.52	49.08	8.71	0.20
2152.28	1.15	56.80	2151.54	49.71	8.98	49.71	50.51	10.24	0.21
2246.62	1.02	55.01	2245.86	50.70	10.45	50.70	51.77	11.65	0.14
2340.96	0.76	58.10	2340.19	51.52	11.67	51.52	52.82	12.77	0.28
2435.30	0.73	62.81	2434.53	52.12	12.74	52.12	53.66	13.74	0.07
2529.64	0.75	90.28	2528.86	52.40	13.90	52.40	54.21	14.86	0.37
2623.98	1.11	107.70	2623.19	52.12	15.39	52.12	54.34	16.45	0.48
2718.32	1.42	109.81	2717.50	51.44	17.36	51.44	54.29	18.65	0.33
2812.66	1.56	169.59	2811.82	49.78	18.70	49.78	53.18	20.58	1.58
2907.00	1.52	156.26	2906.12	47.38	19.43	47.38	51.21	22.30	0.38
3001.34	1.47	148.76	3000.43	45.20	20.56	45.20	49.66	24.46	0.21
3095.68	1.47	141.14	3094.74	43.22	21.95	43.22	48.47	26.93	0.21
3190.02	1.24	141.97	3189.05	41.47	23.34	41.47	47.59	29.37	0.25
3284.36	2.25	102.00	3283.35	40.28	25.78	40.28	47.83	32.62	1.62
3378.70	2.32	99.49	3377.62	39.58	29.48	39.58	49.35	36.68	0.13
3473.04	1.72	85.62	3471.90	39.37	32.77	39.37	51.23	39.77	0.82
3567.38	1.67	82.75	3566.20	39.65	35.54	39.65	53.25	41.87	0.11
3661.72	1.55	78.32	3660.50	40.09	38.16	40.09	55.34	43.59	0.18
3756.06	3.04	72.27	3754.76	41.11	41.79	41.11	58.62	45.47	1.59
3850.40	4.14	68.84	3848.91	43.10	47.35	43.10	64.03	47.69	1.19
3944.74	3.77	63.30	3943.03	45.72	53.31	45.72	70.23	49.38	0.56
4039.08	4.86	65.99	4037.10	48.75	59.73	48.75	77.09	50.78	1.17
4133.42	5.85	68.02	4131.03	52.17	67.83	52.17	85.57	52.44	1.07
4227.76	5.76	72.43	4224.88	55.40	76.80	55.40	94.69	54.20	0.48
4322.10	5.61	72.23	4318.76	58.23	85.71	58.23	103.62	55.81	0.16
4416.44	4.40	77.94	4412.74	60.40	93.64	60.40	111.42	57.18	1.39
4510.78	3.85	87.36	4506.84	61.30	100.34	61.30	117.58	58.58	0.92
4605.12	3.34	93.15	4600.99	61.29	106.24	61.29	122.65	60.02	0.66
4699.46	3.01	107.57	4695.19	60.39	111.35	60.39	126.67	61.53	0.91
4793.80	2.83	117.14	4789.40	58.58	115.78	58.58	129.76	63.16	0.55
4888.14	2.88	130.30	4883.63	55.99	119.67	55.99	132.12	64.93	0.70
4982.48	2.43	144.36	4977.87	52.82	122.64	52.82	133.54	66.70	0.84
5076.82	2.04	160.69	5072.14	49.62	124.36	49.62	133.90	68.25	0.79
5171.16	1.68	184.64	5166.43	46.66	124.81	46.66	133.24	69.50	0.90
5265.50	1.43	192.58	5260.73	44.13	124.44	44.13	132.03	70.47	0.35
5359.84	0.76	186.17	5355.06	42.36	124.11	42.36	131.14	71.16	0.72

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
5454.18	0.36	165.08	5449.39	41.45	124.12	41.45	130.86	71.54	0.47
5548.52	0.69	142.17	5543.73	40.71	124.55	40.71	131.03	71.90	0.41
5642.86	0.70	106.93	5638.06	40.09	125.45	40.09	131.70	72.28	0.45
5737.20	0.77	90.22	5732.39	39.92	126.64	39.92	132.79	72.51	0.24
5831.54	0.67	76.62	5826.73	40.04	127.82	40.04	133.94	72.61	0.21
5925.88	0.98	77.42	5921.06	40.35	129.14	40.35	135.30	72.65	0.33
6020.22	0.82	76.66	6015.38	40.68	130.59	40.68	136.78	72.70	0.17
6114.56	0.74	83.07	6109.72	40.91	131.86	40.91	138.06	72.76	0.13
6208.90	0.58	86.71	6204.05	41.01	132.95	41.01	139.13	72.86	0.17
6303.24	0.51	112.00	6298.38	40.88	133.82	40.88	139.92	73.01	0.27
6397.58	0.48	117.06	6392.72	40.54	134.56	40.54	140.53	73.23	0.05
6491.92	0.59	119.92	6487.06	40.12	135.33	40.12	141.15	73.49	0.12
6586.26	0.71	120.35	6581.39	39.59	136.25	39.59	141.88	73.80	0.13
6680.60	0.68	121.69	6675.72	39.00	137.23	39.00	142.66	74.14	0.03
6774.94	0.73	126.46	6770.06	38.35	138.19	38.35	143.41	74.49	0.08
6869.28	0.72	129.01	6864.39	37.61	139.14	37.61	144.13	74.87	0.04
6963.62	0.98	156.52	6958.72	36.50	139.92	36.50	144.61	75.38	0.50
7057.96	0.80	164.25	7053.05	35.13	140.42	35.13	144.75	75.95	0.23
7152.30	0.58	176.14	7147.38	34.02	140.63	34.02	144.69	76.40	0.27
7246.64	0.55	189.37	7241.72	33.09	140.59	33.09	144.43	76.76	0.14
7340.98	0.59	198.67	7336.05	32.17	140.36	32.17	144.00	77.09	0.11
7435.32	0.76	207.92	7430.39	31.16	139.91	31.16	143.34	77.45	0.21
7529.66	0.49	214.88	7524.72	30.27	139.39	30.27	142.64	77.75	0.30
7624.00	0.34	218.71	7619.06	29.72	138.98	29.72	142.12	77.93	0.16
7644.00	0.14	226.23	7639.06	29.66	138.92	29.66	142.06	77.95	0.99



Vaughn Energy Services
West, Texas
432-563-5444
Surveyor: Chris Bankson
Cotton Draw Unit No. 116H / API 30-015-37926





**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:

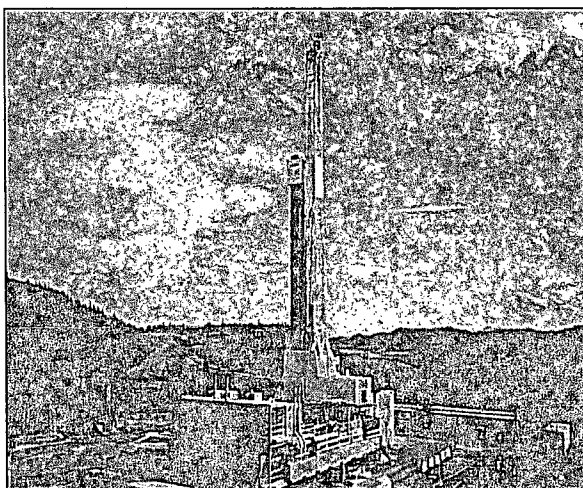
Damien Tarpley
Area Manager

Scott Dixon
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

H&P 214





Weatherford®

Devon Energy
Cotton Draw Unit 116H
Eddy County, New Mexico

Section 1

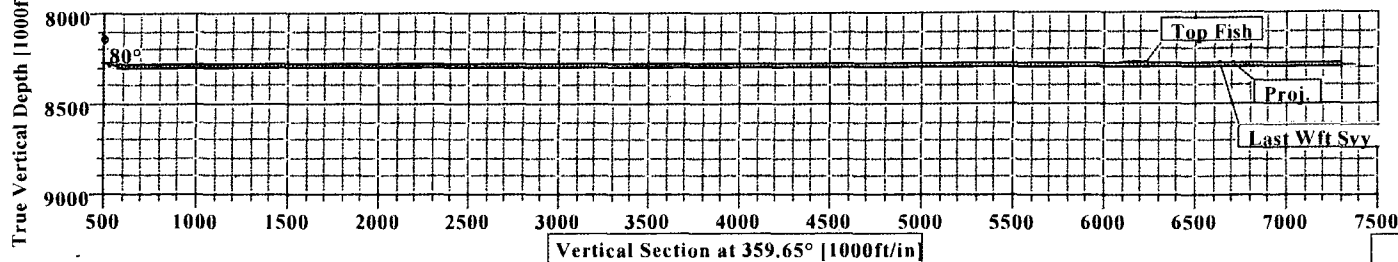
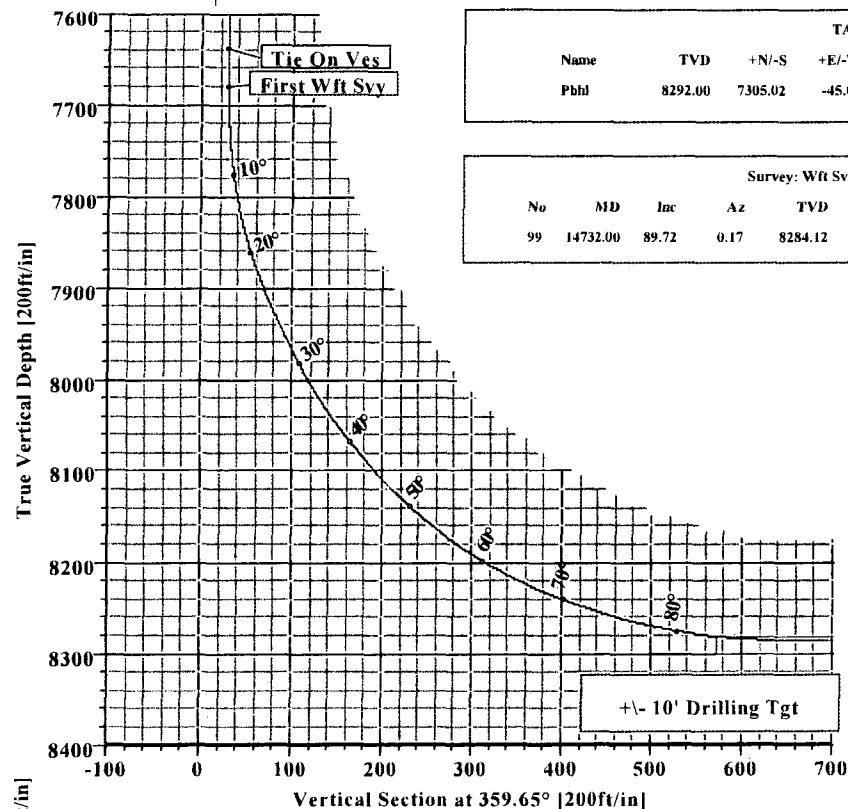
Weatherford (Wft) Final Definitive

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

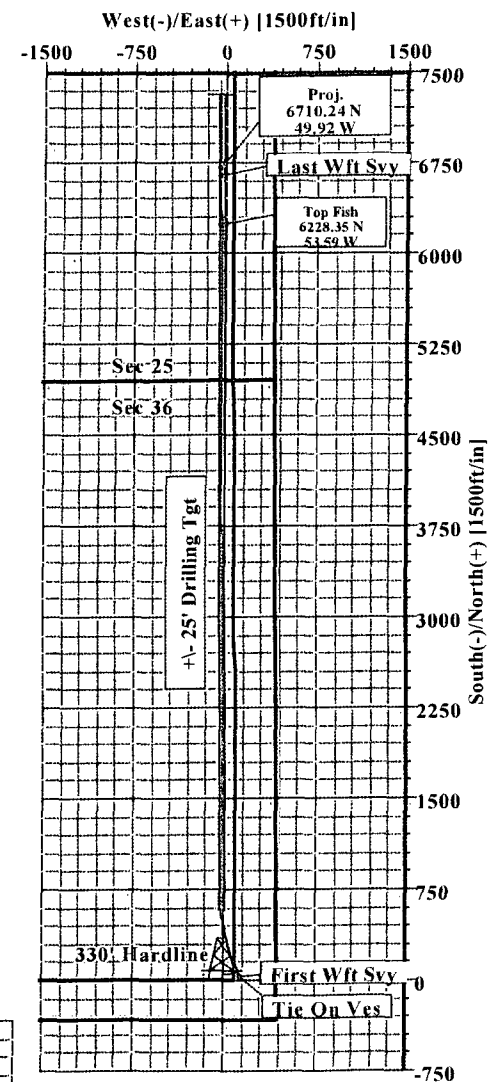
Cotton Draw Unit #116H
Site Centre Northing: 425202.73
Easting: 729773.73
Ground Level: 3482.00
Positional Uncertainty: 0.00
Convergence: 0.32

LEGEND

- Cotton Draw Unit #116H, 1, Gyro
- Cotton Draw Unit #116H, 1, Plan #4
- 1
- Wft Svy



Weatherford





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	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)	Mag Dip Angle: 60.13 deg
ft	+N/-S
	ft
	+E/-W
	ft
	Direction
	deg
0.00	0.00
0.00	0.00
0.00	359.65

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	
7644.00	0.14	226.23	7639.06	29.66	138.92	0.00	28.80	425232.39	729912.65	Tie On Ves
7685.00	0.74	306.77	7680.06	29.78	138.67	1.78	28.93	425232.51	729912.40	First Wft Svy
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	Date: 7/9/2013	Time: 15:51:04	Page: 2
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

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	Date: 7/9/2013	Time: 15:51:04	Page: 3
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

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.

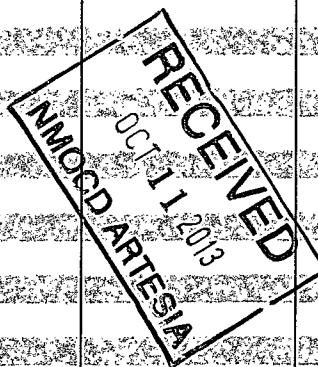


COTTON DRAW UNIT 116H

WEST UNRESTRICTED

Perforation Summary

District PERMIAN BASIN		County EDDY		Field Name PADUCA		Project Group DELAWARE BASIN				State/Province NM					
Surface Legal Location SEC36 T24S R31E		API/UWI 3001537926		Latitude (°) 32° 10' 2.981" N		Longitude (°) 103° 43' 27.647" W		Ground Elev MSL (ft) 3,482.40		KB - Ground Level (ft) 25.00		Orig KB Elevation (ft) 3,507.40		Tubing Head Elevation (ft)	
Date	Zone	Top (ftKB)	Top (TVD) (ftKB)	Bot (ftKB)	Bot (TVD) (ftKB)	Current Status	Carrier Des	Gun Size (in)	Charge Type	Chg Sz (g)	Shot Dens (shots/ft)	Phasing (%)	Conveyance Method		
7/28/2013	DELAWARE, OH	8,480.0	8,261.0	8,482.0	8,261.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,560.0	8,277.9	8,562.0	8,278.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,640.0	8,285.5	8,642.0	8,285.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,720.0	8,286.6	8,722.0	8,286.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,800.0	8,286.8	8,802.0	8,286.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,880.0	8,286.9	8,882.0	8,286.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	8,960.0	8,287.7	8,962.0	8,287.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,040.0	8,290.1	9,042.0	8,290.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,120.0	8,293.8	9,122.0	8,293.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,200.0	8,297.2	9,202.0	8,297.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,280.0	8,299.6	9,282.0	8,299.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,360.0	8,301.2	9,362.0	8,301.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,440.0	8,301.0	9,442.0	8,301.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,520.0	8,298.3	9,522.0	8,298.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,600.0	8,295.8	9,602.0	8,295.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/28/2013	DELAWARE, OH	9,680.0	8,294.5	9,682.0	8,294.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	9,760.0	8,295.0	9,762.0	8,295.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	9,840.0	8,295.9	9,842.0	8,295.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	9,920.0	8,296.2	9,922.0	8,296.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,000.0	8,295.9	10,002.0	8,295.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,080.0	8,295.1	10,082.0	8,295.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,160.0	8,295.1	10,162.0	8,295.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,240.0	8,294.7	10,242.0	8,294.7			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,320.0	8,293.9	10,322.0	8,293.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,400.0	8,292.1	10,402.0	8,292.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,480.0	8,288.7	10,482.0	8,288.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,560.0	8,285.0	10,562.0	8,284.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/27/2013	DELAWARE, OH	10,640.0	8,281.3	10,642.0	8,281.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	10,720.0	8,278.0	10,722.0	8,277.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	10,800.0	8,276.7	10,802.0	8,276.7			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	10,880.0	8,276.5	10,882.0	8,276.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	10,960.0	8,276.4	10,962.0	8,276.4			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,040.0	8,277.1	11,042.0	8,277.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,120.0	8,278.8	11,122.0	8,278.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,200.0	8,282.2	11,202.0	8,282.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,280.0	8,286.5	11,282.0	8,286.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,360.0	8,290.7	11,362.0	8,290.8			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,440.0	8,293.5	11,442.0	8,293.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,520.0	8,293.9	11,522.0	8,293.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/24/2013	DELAWARE, OH	11,600.0	8,292.7	11,602.0	8,292.7			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		





COTTON DRAW UNIT 116H

WEST UNRESTRICTED

Perforation Summary

District		County		Field Name		Project Group		State/Province							
PERMIAN BASIN		EDDY		PADUCA		DELAWARE BASIN		NM							
Surface Legal Location		API/UWI		Latitude (°)		Longitude (°)		Ground Elev MSL (ft)		KB - Ground Level (ft)		Orig KB Elevation (ft)		Tubing Head Elevation (ft)	
SEC36 T24S R31E		3001537926		32° 10' 2.981" N		103° 43' 27.647" W		3,482.40		25.00		3,507.40			
Date	Zone	Top (ftKB)	Top (TVD) (ftKB)	Btm (ftKB)	Btm (TVD) (ftKB)	Current Status	Carrier Des	Gun Size (in)	Charge Type	Chg Sz (g)	Shot Dens (shots/ft)	Phasing (%)	Conveyance Method		
7/23/2013	DELAWARE, OH	11,680.0	8,291.2	11,682.0	8,291.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	11,760.0	8,288.5	11,762.0	8,288.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	11,840.0	8,287.3	11,842.0	8,287.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	11,920.0	8,286.6	11,922.0	8,286.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,000.0	8,286.2	12,002.0	8,286.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,080.0	8,286.2	12,082.0	8,286.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,160.0	8,284.4	12,162.0	8,284.4			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,240.0	8,284.0	12,242.0	8,284.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,320.0	8,284.7	12,322.0	8,284.7			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,400.0	8,286.0	12,402.0	8,286.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,480.0	8,286.2	12,482.0	8,286.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,560.0	8,285.0	12,562.0	8,285.0			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,640.0	8,284.3	12,642.0	8,284.3			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,720.0	8,284.2	12,722.0	8,284.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,800.0	8,285.1	12,802.0	8,285.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,880.0	8,285.2	12,882.0	8,285.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	12,960.0	8,284.4	12,962.0	8,284.4			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	13,040.0	8,283.7	13,042.0	8,283.7			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	13,120.0	8,283.4	13,122.0	8,283.4			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/23/2013	DELAWARE, OH	13,200.0	8,284.0	13,202.0	8,284.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,280.0	8,285.6	13,282.0	8,285.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,360.0	8,285.7	13,362.0	8,285.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,440.0	8,284.7	13,442.0	8,284.6			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,520.0	8,283.2	13,522.0	8,283.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,600.0	8,281.5	13,602.0	8,281.5			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,680.0	8,280.2	13,682.0	8,280.2			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,760.0	8,279.1	13,762.0	8,279.1			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/22/2013	DELAWARE, OH	13,840.0	8,278.9	13,842.0	8,278.9			3 1/8	SHAPED	23.0	6.0	60	WIRELINE		
7/19/2013	DELAWARE, OH	13,920.0	8,278.8	13,922.0	8,278.8			3 1/8	SHAPED	23.0	6.0	60	TUBING		
7/19/2013	DELAWARE, OH	14,000.0	8,278.3	14,002.0	8,278.3			3 1/8	SHAPED	23.0	6.0	60	TUBING		
7/19/2013	DELAWARE, OH	14,080.0	8,277.2	14,082.0	8,277.2			3 1/8	SHAPED	23.0	6.0	60	TUBING		
7/19/2013	DELAWARE, OH	14,160.0	8,276.0	14,162.0	8,276.0			3 1/8	SHAPED	23.0	6.0	60	TUBING		