



A GYRO TECHNOLOGIES INC. COMPANY

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

30-015-41818

March 13, 2014

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

Attn: David Cook

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 10 2014

Re: **Cotton Draw Unit No 204H**

RECEIVED

Please find enclosed a copy of the survey from 0' to 4,286' 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.

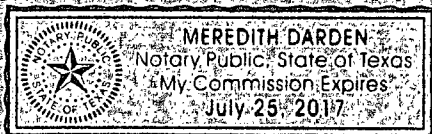
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 13th day of March,
A.D. 2014, by Keith Havelka

Meredith Darden
Notary Public, State of Texas





Company: Devon Energy
Lease/Well: Cotton Draw Unit/No 204H
Location: 150 Feet SLine/ 1360 Feet W Line
Rig Name: H&P 212
State/County: New Mexico/Eddy
Latitude: 32.18, Longitude: -103.75
GRID North is 0.31 Degrees East of True North
VS-Azi: 351.33 Degrees



NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 10 2014
RECEIVED

Depth Reference : 25.3 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 3/13/2014 / 12:42

Vaughn Energy Services
Fort Worth, Texas
(817) 908-3586

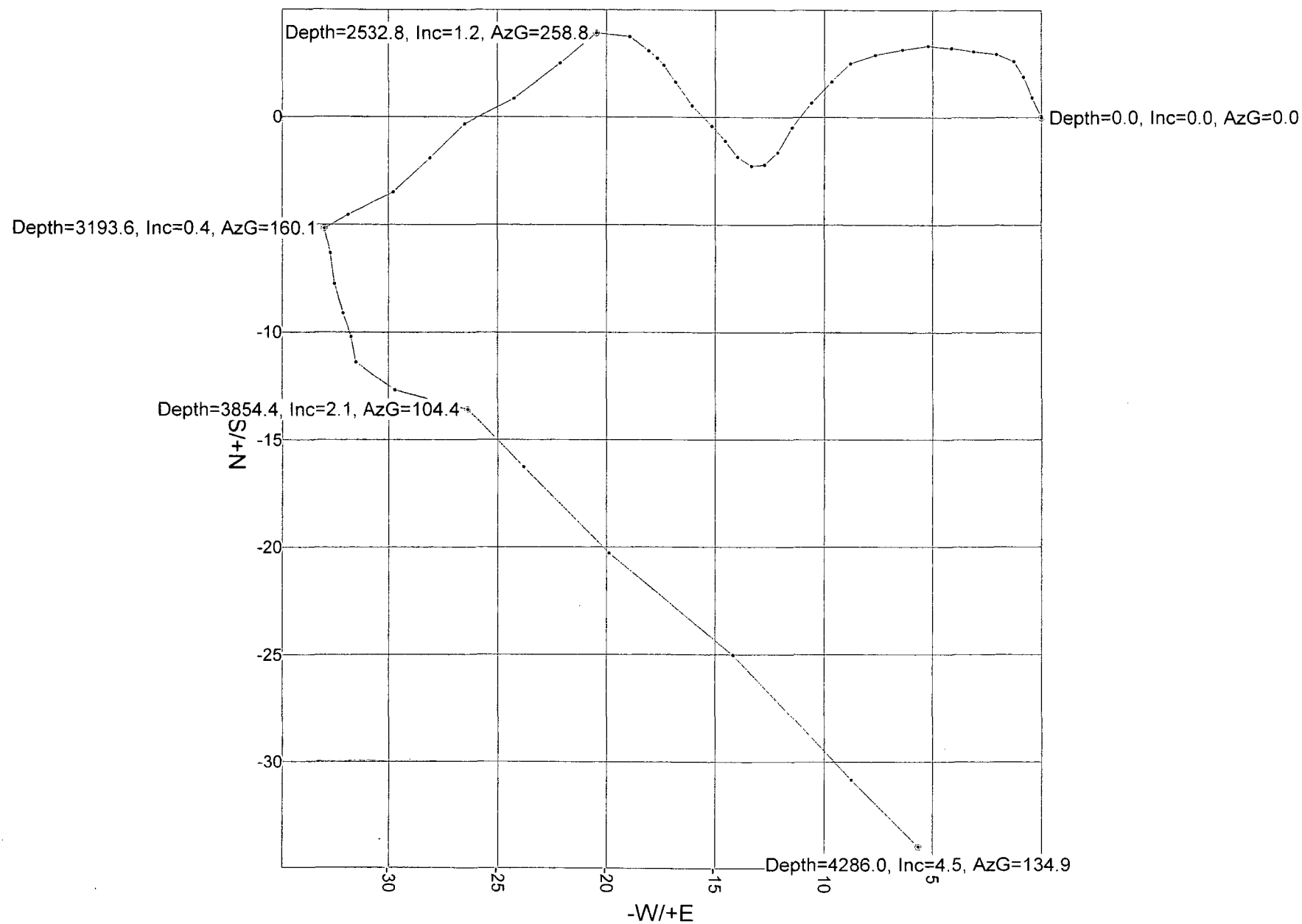
Surveyor: Jason Wilson
Cotton Draw Unit No 204H / API 30-015-41818

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	****
172.80	0.68	334.58	172.80	0.92	-0.44	0.98	1.02	334.58	0.39
267.20	0.58	343.80	267.19	1.89	-0.81	1.99	2.05	336.71	0.15
361.60	0.50	311.94	361.59	2.62	-1.25	2.78	2.90	334.49	0.32
456.00	0.61	276.70	455.98	2.95	-2.05	3.23	3.59	325.19	0.37
550.40	0.68	276.26	550.38	3.07	-3.10	3.50	4.36	314.69	0.07
644.80	0.58	280.76	644.77	3.22	-4.12	3.80	5.23	307.97	0.12
739.20	0.75	271.85	739.16	3.33	-5.21	4.08	6.18	302.57	0.21
833.60	0.71	250.62	833.56	3.15	-6.38	4.08	7.12	296.29	0.29
928.00	0.87	265.65	927.95	2.90	-7.65	4.02	8.18	290.80	0.27
1022.40	0.67	232.13	1022.34	2.51	-8.79	3.81	9.15	285.93	0.51
1116.80	0.82	221.31	1116.73	1.67	-9.68	3.10	9.82	279.76	0.21
1211.20	0.83	225.52	1211.12	0.68	-10.61	2.27	10.63	273.67	0.07
1305.60	0.96	209.94	1305.51	-0.48	-11.49	1.25	11.50	267.59	0.29
1400.00	0.66	209.95	1399.90	-1.64	-12.16	0.21	12.27	262.32	0.32
1494.40	0.42	252.31	1494.30	-2.21	-12.75	-0.27	12.94	260.15	0.48
1588.80	0.33	278.81	1588.70	-2.28	-13.35	-0.24	13.54	260.32	0.20
1683.20	0.64	316.12	1683.09	-1.86	-13.98	0.27	14.10	262.43	0.45
1777.60	0.52	330.52	1777.49	-1.10	-14.55	1.10	14.60	265.66	0.19

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
1872.00	0.63	308.02	1871.88	-0.41	-15.17	1.88	15.18	268.46	0.26
1966.40	0.98	321.89	1966.27	0.54	-16.08	2.96	16.09	271.94	0.42
2060.80	0.65	329.59	2060.66	1.64	-16.85	4.16	16.93	275.56	0.36
2155.20	0.48	321.40	2155.06	2.41	-17.36	5.00	17.53	277.90	0.20
2249.60	0.07	298.14	2249.46	2.74	-17.66	5.37	17.87	278.83	0.43
2344.00	0.56	312.18	2343.86	3.08	-18.05	5.76	18.31	279.68	0.52
2438.40	0.80	303.48	2438.25	3.75	-18.94	6.56	19.31	281.20	0.28
2532.80	1.22	258.78	2532.64	3.92	-20.48	6.96	20.85	280.83	0.91
2627.20	1.68	208.74	2627.01	2.51	-22.13	5.82	22.27	276.47	1.37
2721.60	1.86	253.59	2721.37	0.86	-24.27	4.51	24.28	272.04	1.44
2816.00	1.34	226.66	2815.73	-0.33	-26.54	3.68	26.54	269.29	0.95
2910.40	1.37	223.07	2910.11	-1.91	-28.11	2.35	28.18	266.11	0.10
3004.80	1.44	230.03	3004.48	-3.50	-29.80	1.03	30.00	263.31	0.19
3099.20	1.53	256.81	3098.85	-4.55	-31.93	0.32	32.25	261.90	0.73
3193.60	0.45	160.14	3193.24	-5.18	-33.03	-0.14	33.43	261.09	1.74
3288.00	0.99	170.90	3287.63	-6.33	-32.77	-1.32	33.38	259.07	0.59
3382.40	0.77	173.39	3382.02	-7.76	-32.57	-2.76	33.48	256.60	0.23
3476.80	0.96	155.30	3476.41	-9.11	-32.17	-4.16	33.43	254.19	0.35
3571.20	0.47	171.72	3570.80	-10.21	-31.78	-5.31	33.38	252.18	0.55
3665.60	0.99	168.34	3665.19	-11.40	-31.56	-6.51	33.56	250.14	0.55
3760.00	2.12	106.28	3759.56	-12.68	-29.72	-8.06	32.31	246.89	1.98
3854.40	2.07	104.38	3853.90	-13.60	-26.40	-9.46	29.69	242.75	0.09
3948.80	2.96	157.74	3948.22	-16.27	-23.82	-12.50	28.85	235.66	2.54
4043.20	4.23	120.28	4042.44	-20.29	-19.89	-17.06	28.41	224.44	2.76
4137.60	4.90	137.87	4136.55	-25.03	-14.18	-22.61	28.77	209.53	1.64
4232.00	4.78	135.81	4230.61	-30.84	-8.74	-29.17	32.06	195.81	0.23
4286.00	4.54	134.88	4284.43	-33.96	-5.65	-32.72	34.43	189.45	0.46



Vaughn Energy Services
Fort Worth, Texas
(817) 908-3586
Surveyor: Jason Wilson
Cotton Draw Unit No 204H / API 30-015-41818



VES Survey Date: 02/27/2014

Directional Survey

District PERMIAN BASIN	County EDDY	Field Name PADUCA	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC26 T24S R31E	API/UWI 3001541818	Latitude (°) 32° 10' 53.354" N	Longitude (°) 103° 45' 9.202" W	Ground Elev... 3,510.60
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,535.60
Tubing Head Elevation (ft)				

Wellbores				
Wellbore Name OH	Parent Wellbore	SAP Well ID 34610	Kick Off Depth (ftKB)	Vertical Section Direction (°) 6.39
Actual Deviation Survey GYRO/MWD, Proposed? No		Definitive? Yes	Proposed? No	Proposed Deviation Survey

Deviation Survey

Date 2/27/2014	Description GYRO/MWD
MD Tie In (ftKB)	TVD Tie In (ftKB)
Inclination Tie In (°)	Azimuth Tie In (°)
NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl. (°)	Azm. (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Survey Tool	Survey Company
3/1/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	GYRO	BAKER HUGHES INTEQ
2/27/2014	172.80	0.68	334.58	172.80	0.87	0.93	-0.44	0.39	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	267.20	0.58	343.80	267.19	1.79	1.89	-0.81	0.15	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	361.60	0.50	311.94	361.59	2.47	2.63	-1.25	0.32	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	456.00	0.61	276.70	455.98	2.71	2.96	-2.06	0.37	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	550.40	0.68	276.26	550.38	2.71	3.08	-3.11	0.07	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	644.80	0.58	280.76	644.77	2.75	3.23	-4.14	0.12	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	739.20	0.75	271.85	739.16	2.74	3.34	-5.23	0.21	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	833.60	0.71	250.62	833.56	2.43	3.16	-6.40	0.29	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	928.00	0.87	265.65	927.95	2.04	2.92	-7.66	0.28	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,022.40	0.67	232.13	1,022.34	1.53	2.52	-8.81	0.51	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,116.80	0.82	221.31	1,116.73	0.59	1.68	-9.70	0.22	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,211.20	0.83	225.52	1,211.12	-0.50	0.69	-10.63	0.07	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,305.60	0.96	209.94	1,305.51	-1.75	-0.47	-11.51	0.29	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,400.00	0.66	209.95	1,399.90	-2.98	-1.63	-12.18	0.32	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,494.40	0.42	252.31	1,494.30	-3.62	-2.21	-12.78	0.48	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,588.80	0.33	278.81	1,588.69	-3.75	-2.27	-13.38	0.20	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,683.20	0.64	316.12	1,683.09	-3.40	-1.85	-14.01	0.45	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,777.60	0.52	330.52	1,777.49	-2.71	-1.10	-14.59	0.20	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,872.00	0.63	308.02	1,871.88	-2.09	-0.40	-15.21	0.26	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	1,966.40	0.98	321.89	1,966.27	-1.25	0.55	-16.11	0.42	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,060.80	0.65	329.59	2,060.66	-0.24	1.65	-16.88	0.37	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,155.20	0.48	321.40	2,155.06	0.47	2.42	-17.40	0.20	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,249.60	0.07	298.14	2,249.46	0.77	2.76	-17.70	0.44	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,344.00	0.56	312.18	2,343.86	1.06	3.09	-18.09	0.52	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,438.40	0.80	303.48	2,438.25	1.63	3.77	-18.98	0.28	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,532.80	1.22	258.78	2,532.64	1.63	3.93	-20.52	0.91	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,627.20	1.68	208.74	2,627.01	0.04	2.52	-22.17	1.37	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,721.60	1.86	253.59	2,721.37	-1.83	0.88	-24.30	1.44	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,816.00	1.34	226.66	2,815.73	-3.27	-0.31	-26.58	0.95	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	2,910.40	1.37	223.07	2,910.11	-5.02	-1.89	-28.15	0.10	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,004.80	1.44	230.03	3,004.48	-6.78	-3.48	-29.83	0.20	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,099.20	1.53	256.81	3,098.85	-8.06	-4.53	-31.97	0.73	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,193.60	0.45	160.14	3,193.23	-8.81	-5.17	-33.07	1.74	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,288.00	0.99	170.90	3,287.63	-9.93	-6.32	-32.81	0.59	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,382.40	0.77	173.39	3,382.02	-11.34	-7.76	-32.61	0.24	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,476.80	0.96	155.30	3,476.41	-12.63	-9.10	-32.21	0.35	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,571.20	0.47	171.72	3,570.80	-13.68	-10.21	-31.82	0.56	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,665.60	0.99	168.34	3,665.19	-14.83	-11.39	-31.60	0.55	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,760.00	2.12	106.28	3,759.56	-15.91	-12.68	-29.76	1.98	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,854.40	2.07	104.38	3,853.90	-16.45	-13.59	-26.43	0.09	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	3,948.80	2.96	157.74	3,948.22	-18.82	-16.27	-23.86	2.54	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	4,043.20	4.23	120.28	4,042.44	-22.37	-20.28	-19.93	2.76	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	4,137.60	4.90	137.87	4,136.54	-26.45	-25.03	-14.21	1.64	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	4,232.00	4.78	135.81	4,230.61	-31.62	-30.84	-8.77	0.22	GYRO	VAUHG N ENERGY SERVICES
2/27/2014	4,286.00	4.54	134.88	4,284.43	-34.38	-33.96	-5.69	0.47	GYRO	VAUHG N ENERGY SERVICES
3/1/2014	4,434.00	3.15	147.13	4,432.10	-41.17	-41.51	0.67	1.09	MWD	BAKER HUGHES INTEQ



COTTON DRAW UNIT 204H

WEST UNRESTRICTED

Directional Survey

District		County		Field Name		Project Group			State/Province		
PERMIAN BASIN		EDDY		PADUCA		DELAWARE BASIN			NM		
Surface Legal Location		API/UWI		Latitude (°)		Longitude (°)		Ground Elev...	KB - GL (ft)	Orig KB Elev (ft)	Tubing Head Elevation (ft)
SEC26 T24S R31E		3001541818		32° 10' 53.354" N		103° 45' 9.202" W		3,510.60	25.00	3,535.60	
Survey Data											
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (ft/100ft)	Survey Tool	Survey Company	
3/1/2014	4,553.00	3.83	132.81	4,550.88	-46.06	-46.95	5.36	0.92	MWD	BAKER HUGHES INTEQ	
3/1/2014	4,647.00	4.80	119.65	4,644.61	-49.48	-51.03	11.08	1.47	MWD	BAKER HUGHES INTEQ	
3/1/2014	4,740.00	4.65	107.32	4,737.30	-51.73	-54.08	18.06	1.10	MWD	BAKER HUGHES INTEQ	
3/1/2014	4,835.00	5.08	90.85	4,831.96	-52.06	-55.29	25.95	1.53	MWD	BAKER HUGHES INTEQ	
3/1/2014	4,932.00	4.92	92.51	4,928.59	-51.36	-55.53	34.40	0.22	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,027.00	5.87	81.66	5,023.17	-49.85	-55.01	43.27	1.46	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,121.00	5.93	79.45	5,116.67	-47.21	-53.42	52.80	0.25	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,215.00	6.08	77.63	5,210.16	-44.20	-51.47	62.44	0.26	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,310.00	5.50	78.95	5,304.67	-41.22	-49.52	71.82	0.63	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,404.00	5.00	77.76	5,398.28	-38.56	-47.78	80.25	0.54	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,499.00	4.81	80.39	5,492.93	-36.14	-46.24	88.22	0.31	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,593.00	4.48	79.60	5,586.62	-33.99	-44.92	95.71	0.36	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,687.00	4.68	79.29	5,680.32	-31.80	-43.55	103.09	0.21	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,781.00	4.96	80.53	5,773.99	-29.56	-42.16	110.87	0.32	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,876.00	4.64	83.58	5,868.66	-27.59	-41.06	118.74	0.43	MWD	BAKER HUGHES INTEQ	
3/1/2014	5,970.00	4.45	83.33	5,962.36	-25.92	-40.21	126.14	0.20	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,064.00	4.03	87.59	6,056.10	-24.59	-39.65	133.06	0.56	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,158.00	4.31	92.06	6,149.85	-23.82	-39.64	139.89	0.46	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,253.00	4.18	91.66	6,244.59	-23.27	-39.86	146.92	0.14	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,347.00	3.80	93.20	6,338.37	-22.81	-40.14	153.45	0.42	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,441.00	3.94	95.16	6,432.15	-22.57	-40.60	159.78	0.20	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,535.00	3.87	91.64	6,525.93	-22.23	-40.98	166.17	0.27	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,629.00	3.66	93.56	6,619.73	-21.82	-41.26	172.33	0.26	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,724.00	3.70	94.11	6,714.53	-21.55	-41.67	178.42	0.06	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,818.00	3.55	98.35	6,808.35	-21.53	-42.31	184.32	0.33	MWD	BAKER HUGHES INTEQ	
3/1/2014	6,913.00	3.24	106.08	6,903.18	-22.08	-43.48	189.81	0.58	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,101.00	3.27	106.60	7,090.88	-23.93	-46.48	200.05	0.02	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,196.00	2.74	109.28	7,185.75	-24.92	-48.01	204.79	0.58	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,290.00	3.38	93.26	7,279.61	-25.27	-48.91	209.68	1.13	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,385.00	3.46	88.95	7,374.44	-24.74	-49.01	215.34	0.28	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,479.00	3.52	91.60	7,468.27	-24.13	-49.04	221.06	0.18	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,574.00	3.58	94.64	7,563.09	-23.80	-49.36	226.94	0.21	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,668.00	3.70	96.39	7,656.90	-23.71	-49.94	232.88	0.17	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,763.00	3.75	94.44	7,751.70	-23.60	-50.52	239.02	0.14	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,857.00	3.66	97.29	7,845.50	-23.55	-51.14	245.06	0.22	MWD	BAKER HUGHES INTEQ	
3/1/2014	7,951.00	3.39	98.78	7,939.32	-23.71	-51.94	250.78	0.30	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,046.00	3.50	102.29	8,034.15	-24.12	-52.99	256.39	0.25	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,140.00	3.43	103.41	8,127.98	-24.76	-54.25	261.93	0.10	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,235.00	3.10	101.07	8,222.82	-25.32	-55.40	267.22	0.37	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,329.00	3.05	101.53	8,316.69	-25.75	-56.39	272.16	0.06	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,424.00	2.61	98.78	8,411.57	-26.07	-57.23	276.77	0.48	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,516.00	2.83	92.26	8,503.47	-25.99	-57.64	281.11	0.41	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,611.00	3.44	95.10	8,598.33	-25.76	-57.98	286.30	0.66	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,705.00	4.59	92.23	8,692.10	-25.42	-58.38	292.86	1.24	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,799.00	4.25	96.52	8,785.82	-25.16	-58.92	300.08	0.50	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,894.00	3.64	97.64	8,880.59	-25.23	-59.72	306.57	0.65	MWD	BAKER HUGHES INTEQ	
3/1/2014	8,988.00	4.75	102.22	8,974.34	-25.69	-60.94	313.33	1.23	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,083.00	4.63	110.40	9,069.02	-27.02	-63.11	320.77	0.71	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,177.00	4.34	113.84	9,162.73	-29.00	-65.87	327.58	0.42	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,272.00	5.88	108.56	9,257.35	-31.11	-68.87	335.48	1.69	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,366.00	6.27	109.86	9,350.82	-33.32	-72.15	344.87	0.44	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,461.00	6.61	102.94	9,445.23	-35.15	-75.14	355.08	0.89	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,555.00	6.40	89.76	9,538.63	-35.16	-76.33	365.59	1.60	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,650.00	6.56	88.13	9,633.02	-33.77	-76.13	376.31	0.26	MWD	BAKER HUGHES INTEQ	
3/1/2014	9,744.00	6.29	86.06	9,726.43	-32.08	-75.60	386.82	0.38	MWD	BAKER HUGHES INTEQ	



COTTON DRAW UNIT 204H

WEST UNRESTRICTED

Directional Survey

District PERMIAN BASIN	County EDDY	Field Name PADUCA		Project Group DELAWARE BASIN		State/Province NM	
Surface Legal Location SEC26 T24S R31E	API/UWI 3001541818	Latitude (°) 32° 10' 53.354" N	Longitude (°) 103° 45' 9.202" W	Ground Elev... 3,510.60	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,535.60	Tubing Head Elevation (ft)

Survey Data										
Date	MD (ft)	Incl.(°)	Azm.(°)	TVD(ft)	VS(ft)	N/S (ft)	E/W (ft)	DLS (ft/100ft)	Survey Tool	Survey Company
3/1/2014	9,776.00	6.20	85.52	9,758.24	-31.44	-75.34	390.29	0.34	MWD	BAKER HUGHES INTEQ
3/1/2014	9,807.00	6.37	79.98	9,789.05	-30.64	-74.91	393.65	2.03	MWD	BAKER HUGHES INTEQ
3/1/2014	9,839.00	7.51	72.92	9,820.82	-29.30	-73.99	397.40	4.44	MWD	BAKER HUGHES INTEQ
3/1/2014	9,870.00	8.67	63.90	9,851.51	-27.24	-72.37	401.43	5.54	MWD	BAKER HUGHES INTEQ
3/1/2014	9,902.00	10.69	55.63	9,883.06	-24.01	-69.63	406.05	7.65	MWD	BAKER HUGHES INTEQ
3/1/2014	9,933.00	12.87	50.96	9,913.40	-19.67	-65.83	411.10	7.67	MWD	BAKER HUGHES INTEQ
3/1/2014	9,965.00	14.85	46.76	9,944.47	-14.00	-60.78	416.86	6.94	MWD	BAKER HUGHES INTEQ
3/1/2014	9,996.00	16.46	42.23	9,974.32	-7.42	-54.80	422.71	6.52	MWD	BAKER HUGHES INTEQ
3/1/2014	10,015.00	17.78	39.64	9,992.48	-2.81	-50.58	426.37	8.02	MWD	BAKER HUGHES INTEQ
3/1/2014	10,046.00	19.91	36.39	10,021.81	5.72	-42.68	432.52	7.66	MWD	BAKER HUGHES INTEQ
3/1/2014	10,078.00	22.97	32.67	10,051.60	16.04	-33.04	439.12	10.46	MWD	BAKER HUGHES INTEQ
3/1/2014	10,109.00	26.00	28.29	10,079.81	27.77	-21.96	445.61	11.39	MWD	BAKER HUGHES INTEQ
3/1/2014	10,141.00	28.85	24.80	10,108.21	41.61	-8.77	452.17	10.22	MWD	BAKER HUGHES INTEQ
3/1/2014	10,172.00	32.12	22.71	10,134.92	56.62	5.63	458.49	11.09	MWD	BAKER HUGHES INTEQ
3/1/2014	10,204.00	35.39	21.65	10,161.53	73.73	22.09	465.20	10.38	MWD	BAKER HUGHES INTEQ
3/1/2014	10,235.00	39.10	20.33	10,186.20	91.88	39.61	471.91	12.24	MWD	BAKER HUGHES INTEQ
3/1/2014	10,266.00	42.62	18.30	10,209.64	111.65	58.75	478.60	12.13	MWD	BAKER HUGHES INTEQ
3/1/2014	10,298.00	45.44	14.95	10,232.65	133.53	80.05	484.95	11.43	MWD	BAKER HUGHES INTEQ
3/1/2014	10,329.00	48.10	11.22	10,253.89	155.95	102.05	490.05	12.26	MWD	BAKER HUGHES INTEQ
3/1/2014	10,361.00	51.59	7.22	10,274.52	180.37	126.18	493.94	14.50	MWD	BAKER HUGHES INTEQ
3/1/2014	10,392.00	55.14	4.50	10,293.02	205.24	150.92	496.47	13.44	MWD	BAKER HUGHES INTEQ
3/1/2014	10,424.00	57.55	2.96	10,310.75	231.84	177.50	498.19	8.53	MWD	BAKER HUGHES INTEQ
3/1/2014	10,455.00	60.34	1.16	10,326.74	258.32	204.03	499.14	10.28	MWD	BAKER HUGHES INTEQ
3/1/2014	10,487.00	63.93	0.22	10,341.70	286.46	232.32	499.48	11.52	MWD	BAKER HUGHES INTEQ
3/1/2014	10,518.00	67.42	359.19	10,354.47	314.51	260.56	499.33	11.66	MWD	BAKER HUGHES INTEQ
3/1/2014	10,550.00	71.16	358.42	10,365.78	344.18	290.48	498.70	11.90	MWD	BAKER HUGHES INTEQ
3/1/2014	10,581.00	74.45	358.40	10,374.94	373.50	320.08	497.88	10.61	MWD	BAKER HUGHES INTEQ
3/1/2014	10,613.00	77.64	358.12	10,382.66	404.24	351.12	496.94	10.00	MWD	BAKER HUGHES INTEQ
3/1/2014	10,644.00	81.48	357.52	10,388.28	434.38	381.57	495.78	12.53	MWD	BAKER HUGHES INTEQ
3/1/2014	10,676.00	84.19	357.80	10,392.27	465.76	413.29	494.48	8.51	MWD	BAKER HUGHES INTEQ
3/1/2014	10,707.00	86.61	357.86	10,394.75	496.31	444.17	493.31	7.81	MWD	BAKER HUGHES INTEQ
3/1/2014	10,739.00	89.29	357.31	10,395.90	527.91	476.12	491.96	8.55	MWD	BAKER HUGHES INTEQ
3/1/2014	10,809.00	90.80	355.97	10,395.84	596.90	545.99	487.86	2.88	MWD	BAKER HUGHES INTEQ
3/1/2014	10,903.00	90.31	355.55	10,394.93	689.28	639.73	480.91	0.69	MWD	BAKER HUGHES INTEQ
3/1/2014	10,997.00	90.62	356.35	10,394.17	781.72	733.49	474.27	0.91	MWD	BAKER HUGHES INTEQ
3/1/2014	11,092.00	90.31	356.15	10,393.40	875.23	828.29	468.06	0.39	MWD	BAKER HUGHES INTEQ
3/1/2014	11,186.00	90.12	356.05	10,393.05	967.72	922.07	461.67	0.23	MWD	BAKER HUGHES INTEQ
3/1/2014	11,280.00	89.32	357.02	10,393.51	1,060.33	1,015.89	455.99	1.34	MWD	BAKER HUGHES INTEQ
3/1/2014	11,374.00	89.57	357.37	10,394.42	1,153.12	1,109.78	451.39	0.46	MWD	BAKER HUGHES INTEQ
3/1/2014	11,469.00	88.89	358.45	10,395.69	1,247.07	1,204.70	447.92	1.34	MWD	BAKER HUGHES INTEQ
3/1/2014	11,563.00	88.06	0.68	10,398.19	1,340.36	1,298.66	447.21	2.53	MWD	BAKER HUGHES INTEQ
3/1/2014	11,657.00	87.29	0.68	10,402.01	1,433.82	1,392.58	448.32	0.82	MWD	BAKER HUGHES INTEQ
3/1/2014	11,751.00	87.90	0.78	10,405.95	1,527.28	1,486.48	449.52	0.66	MWD	BAKER HUGHES INTEQ
3/1/2014	11,846.00	88.70	1.62	10,408.77	1,621.85	1,581.42	451.51	1.22	MWD	BAKER HUGHES INTEQ
3/1/2014	11,940.00	89.88	1.58	10,409.94	1,715.51	1,675.37	454.13	1.26	MWD	BAKER HUGHES INTEQ
3/1/2014	12,034.00	90.93	2.23	10,409.27	1,809.22	1,769.32	457.26	1.31	MWD	BAKER HUGHES INTEQ
3/1/2014	12,128.00	90.59	2.20	10,408.02	1,902.96	1,863.24	460.89	0.36	MWD	BAKER HUGHES INTEQ
3/1/2014	12,223.00	90.80	3.23	10,406.87	1,997.76	1,958.12	465.39	1.11	MWD	BAKER HUGHES INTEQ
3/1/2014	12,318.00	90.89	3.53	10,405.47	2,092.61	2,052.95	470.99	0.33	MWD	BAKER HUGHES INTEQ
3/1/2014	12,412.00	90.62	3.97	10,404.23	2,186.51	2,146.74	477.14	0.55	MWD	BAKER HUGHES INTEQ
3/1/2014	12,506.00	90.31	4.79	10,403.47	2,280.44	2,240.46	484.32	0.93	MWD	BAKER HUGHES INTEQ
3/1/2014	12,600.00	88.49	3.34	10,404.45	2,374.36	2,334.21	490.98	2.48	MWD	BAKER HUGHES INTEQ
3/1/2014	12,695.00	88.18	1.23	10,407.21	2,469.07	2,429.09	494.76	2.24	MWD	BAKER HUGHES INTEQ
3/1/2014	12,790.00	88.46	1.80	10,410.00	2,563.68	2,524.02	497.28	0.67	MWD	BAKER HUGHES INTEQ
3/1/2014	12,884.00	88.52	2.50	10,412.48	2,657.39	2,617.92	500.80	0.75	MWD	BAKER HUGHES INTEQ

Directional Survey

District PERMIAN BASIN	County EDDY	Field Name PADUCA	Project Group DELAWARE BASIN	State/Province NM
Surface Legal Location SEC26 T24S R31E	API/UWI 3001541818	Latitude (°) 32° 10' 53.354" N	Longitude (°) 103° 45' 9.202" W	Ground Elev... 3,510.60
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,535.60
				Tubing Head Elevation (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azmi (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
3/1/2014	12,978.00	89.75	1.91	10,413.90	2,751.13	2,711.84	504.42	1.45	MWD	BAKER HUGHES INTEQ
3/1/2014	13,073.00	91.51	1.59	10,412.85	2,845.81	2,806.78	507.32	1.88	MWD	BAKER HUGHES INTEQ
3/1/2014	13,167.00	92.22	1.78	10,409.79	2,939.44	2,900.69	510.08	0.78	MWD	BAKER HUGHES INTEQ
3/1/2014	13,262.00	91.08	1.96	10,407.06	3,034.10	2,995.60	513.18	1.21	MWD	BAKER HUGHES INTEQ
3/1/2014	13,356.00	92.28	2.28	10,404.30	3,127.80	3,089.49	516.65	1.32	MWD	BAKER HUGHES INTEQ
3/1/2014	13,451.00	90.71	2.47	10,401.82	3,222.53	3,184.38	520.59	1.66	MWD	BAKER HUGHES INTEQ
3/1/2014	13,545.00	89.63	2.11	10,401.54	3,316.29	3,278.30	524.35	1.21	MWD	BAKER HUGHES INTEQ
3/1/2014	13,639.00	89.94	2.40	10,401.90	3,410.04	3,372.22	528.04	0.45	MWD	BAKER HUGHES INTEQ
3/1/2014	13,734.00	89.82	3.32	10,402.09	3,504.86	3,467.11	532.78	0.98	MWD	BAKER HUGHES INTEQ
3/1/2014	13,828.00	89.91	1.37	10,402.32	3,598.62	3,561.02	536.63	2.08	MWD	BAKER HUGHES INTEQ
3/1/2014	13,923.00	90.37	0.26	10,402.08	3,693.17	3,656.01	537.98	1.26	MWD	BAKER HUGHES INTEQ
3/1/2014	14,017.00	89.26	0.15	10,402.39	3,786.62	3,750.01	538.32	1.19	MWD	BAKER HUGHES INTEQ
3/1/2014	14,112.00	88.64	0.32	10,404.13	3,881.06	3,844.99	538.71	0.68	MWD	BAKER HUGHES INTEQ
3/1/2014	14,207.00	89.32	1.10	10,405.82	3,975.58	3,939.97	539.88	1.09	MWD	BAKER HUGHES INTEQ
3/1/2014	14,301.00	90.92	2.70	10,405.62	4,069.28	4,033.91	543.00	2.41	MWD	BAKER HUGHES INTEQ
3/1/2014	14,396.00	91.05	2.88	10,403.99	4,164.08	4,128.78	547.62	0.23	MWD	BAKER HUGHES INTEQ
3/1/2014	14,490.00	91.10	1.07	10,402.23	4,257.78	4,222.71	550.86	1.93	MWD	BAKER HUGHES INTEQ
3/1/2014	14,585.00	91.23	0.47	10,400.29	4,352.30	4,317.68	552.14	0.65	MWD	BAKER HUGHES INTEQ
3/1/2014	14,679.00	91.08	0.42	10,398.40	4,445.78	4,411.65	552.87	0.17	MWD	BAKER HUGHES INTEQ
3/1/2014	14,774.00	90.77	0.37	10,396.87	4,540.25	4,506.64	553.52	0.33	MWD	BAKER HUGHES INTEQ
3/1/2014	14,868.00	90.55	0.81	10,395.78	4,633.76	4,600.63	554.49	0.52	MWD	BAKER HUGHES INTEQ
3/1/2014	15,008.00	89.41	0.94	10,395.83	4,773.11	4,740.61	556.63	0.82	MWD	BAKER HUGHES INTEQ
3/1/2014	15,066.00	89.41	0.94	10,396.43	4,830.84	4,798.60	557.58	0.00	BIT	BAKER HUGHES INTEQ