



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

February 13, 2014

30-015-4847

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

Attn: David Cook

Re: Cotton Draw Unit No 203H

Please find enclosed a copy of the survey from 0' to 4,200' 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 §

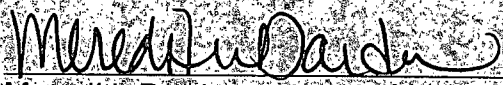
NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 13 2014

RECEIVED

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




Meredith Darden
Notary Public, State of Texas



Company: Devon Energy
Lease/Well: Cotton Draw Unit/No 203H

Rig Name: H & P 212
State/County: New Mexico/Eddy
Latitude: 31.18, Longitude: -103.75
GRID North is 0.30 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 25 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...draw unit 203h_gyro survey.ut

Minimum Curvature Method

Report Date/Time: 2/13/2014 / 09:44

Vaughn Energy Services

Midland, Texas

432-563-5444

Surveyor: Gene Heiss

Cotton Draw Unit No 203H / API 30-015-41847

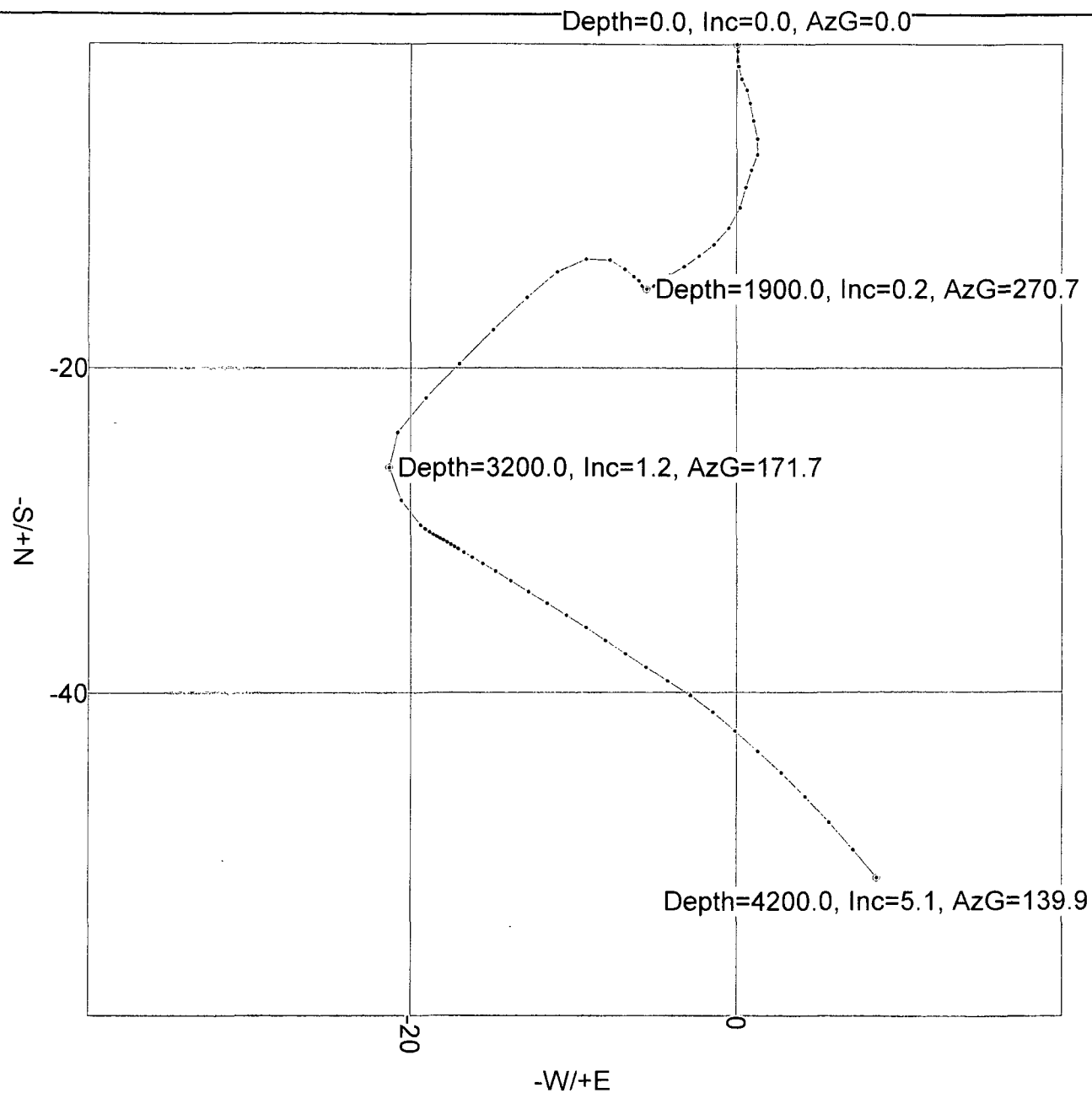
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.49	174.52	100.00	-0.42	0.04	-0.42	0.43	174.52	0.49
200.00	0.58	178.54	199.99	-1.35	0.09	-1.35	1.36	176.02	0.10
300.00	0.39	148.62	299.99	-2.15	0.28	-2.15	2.17	172.51	0.31
400.00	0.49	159.63	399.99	-2.83	0.61	-2.83	2.90	167.94	0.13
500.00	0.48	172.34	499.98	-3.65	0.81	-3.65	3.74	167.49	0.11
600.00	0.77	166.92	599.98	-4.72	1.02	-4.72	4.83	167.83	0.30
700.00	0.57	168.12	699.97	-5.86	1.27	-5.86	6.00	167.75	0.20
800.00	0.59	194.83	799.97	-6.84	1.24	-6.84	6.96	169.71	0.27
900.00	0.60	207.60	899.96	-7.80	0.87	-7.80	7.85	173.64	0.13
1000.00	0.69	189.39	999.96	-8.86	0.53	-8.86	8.87	176.57	0.22
1100.00	0.80	200.19	1099.95	-10.10	0.19	-10.10	10.11	178.91	0.18
1200.00	0.87	216.30	1199.94	-11.37	-0.50	-11.37	11.38	182.51	0.24
1300.00	0.70	228.45	1299.93	-12.39	-1.40	-12.39	12.46	186.46	0.24
1400.00	0.61	235.98	1399.92	-13.09	-2.30	-13.09	13.29	189.96	0.12
1500.00	0.67	232.98	1499.91	-13.74	-3.21	-13.74	14.11	193.15	0.07
1600.00	0.53	247.68	1599.91	-14.27	-4.11	-14.27	14.85	196.07	0.21
1700.00	0.25	226.29	1699.91	-14.59	-4.69	-14.59	15.33	197.83	0.32
1800.00	0.35	231.63	1799.90	-14.93	-5.09	-14.93	15.78	198.83	0.11

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.20	270.68	1899.90	-15.12	-5.51	-15.12	16.10	200.02	0.24
2000.00	0.25	327.65	1999.90	-14.94	-5.80	-14.94	16.03	201.22	0.22
2100.00	0.20	334.29	2099.90	-14.60	-5.99	-14.60	15.78	202.31	0.05
2200.00	0.28	292.89	2199.90	-14.35	-6.29	-14.35	15.67	203.68	0.18
2300.00	0.55	315.18	2299.90	-13.91	-6.86	-13.91	15.51	206.24	0.32
2400.00	0.71	291.07	2399.89	-13.34	-7.77	-13.34	15.44	210.22	0.30
2500.00	1.04	259.63	2499.88	-13.29	-9.24	-13.29	16.18	214.82	0.57
2600.00	1.24	234.60	2599.86	-14.08	-11.02	-14.08	17.88	218.05	0.53
2700.00	1.52	225.45	2699.83	-15.64	-12.85	-15.64	20.24	219.41	0.35
2800.00	1.79	227.82	2799.79	-17.62	-14.95	-17.62	23.11	220.32	0.28
2900.00	1.62	221.34	2899.75	-19.73	-17.04	-19.73	26.07	220.82	0.25
3000.00	1.71	226.55	2999.71	-21.82	-19.06	-21.82	28.97	221.14	0.17
3100.00	1.48	210.65	3099.67	-23.95	-20.80	-23.95	31.72	220.97	0.49
3200.00	1.19	171.71	3199.64	-26.09	-21.31	-26.09	33.69	219.24	0.93
3300.00	1.34	149.49	3299.62	-28.13	-20.57	-28.13	34.85	216.17	0.51
3400.00	0.88	130.73	3399.60	-29.63	-19.39	-29.63	35.42	213.20	0.58
3425.00	0.87	128.79	3424.60	-29.88	-19.10	-29.88	35.46	212.59	0.12
3450.00	0.65	126.20	3449.59	-30.08	-18.84	-30.08	35.49	212.05	0.88
3475.00	0.56	122.46	3474.59	-30.23	-18.62	-30.23	35.51	211.63	0.42
3500.00	0.50	120.32	3499.59	-30.35	-18.42	-30.35	35.51	211.26	0.25
3525.00	0.51	120.20	3524.59	-30.46	-18.23	-30.46	35.50	210.90	0.03
3550.00	0.56	119.66	3549.59	-30.58	-18.03	-30.58	35.50	210.53	0.22
3575.00	0.62	121.00	3574.59	-30.71	-17.81	-30.71	35.50	210.11	0.24
3600.00	0.61	120.68	3599.59	-30.85	-17.58	-30.85	35.50	209.68	0.06
3625.00	0.55	122.10	3624.59	-30.98	-17.36	-30.98	35.51	209.27	0.23
3650.00	0.72	122.75	3649.58	-31.13	-17.13	-31.13	35.53	208.82	0.70
3675.00	1.18	121.44	3674.58	-31.35	-16.78	-31.35	35.55	208.16	1.82
3700.00	1.52	120.07	3699.57	-31.65	-16.27	-31.65	35.58	207.21	1.36
3725.00	1.92	121.19	3724.56	-32.03	-15.63	-32.03	35.64	206.01	1.63
3750.00	2.34	122.01	3749.54	-32.52	-14.84	-32.52	35.74	204.52	1.68
3775.00	2.79	122.29	3774.52	-33.11	-13.89	-33.11	35.91	202.76	1.77
3800.00	3.09	120.65	3799.49	-33.78	-12.80	-33.78	36.12	200.75	1.25
3825.00	3.13	122.11	3824.45	-34.48	-11.64	-34.48	36.40	198.65	0.36
3850.00	3.26	121.94	3849.41	-35.22	-10.46	-35.22	36.74	196.54	0.50
3875.00	3.26	122.62	3874.37	-35.98	-9.26	-35.98	37.15	194.43	0.16
3900.00	3.34	124.47	3899.33	-36.78	-8.06	-36.78	37.65	192.36	0.53
3925.00	3.43	123.96	3924.29	-37.61	-6.84	-37.61	38.22	190.31	0.39
3950.00	3.50	122.12	3949.24	-38.43	-5.57	-38.43	38.83	188.25	0.54
3975.00	3.73	122.07	3974.19	-39.27	-4.24	-39.27	39.50	186.16	0.91

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
4000.00	3.88	124.23	3999.14	-40.18	-2.85	-40.18	40.28	184.05	0.82
4025.00	4.01	128.62	4024.08	-41.20	-1.47	-41.20	41.22	182.04	1.33
4050.00	4.22	133.37	4049.01	-42.37	-0.11	-42.37	42.37	180.15	1.60
4075.00	4.39	131.04	4073.94	-43.63	1.28	-43.63	43.65	178.32	0.96
4100.00	4.69	133.07	4098.86	-44.96	2.75	-44.96	45.05	176.51	1.39
4125.00	4.89	136.95	4123.78	-46.44	4.22	-46.44	46.63	174.81	1.51
4150.00	5.10	137.62	4148.68	-48.04	5.70	-48.04	48.37	173.24	0.89
4175.00	5.27	139.94	4173.58	-49.74	7.19	-49.74	50.25	171.78	1.08
4200.00	5.13	139.93	4198.47	-51.47	8.64	-51.47	52.19	170.47	0.56



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Gene Heiss
Cotton Draw Unit No 203H / API 30-015-41847



VES Survey Date: 01/21/2014



COTTON DRAW UNIT 203H

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 3001541847	Latitude (") 32° 10' 53.353" N	Longitude (") 103° 45' 9.793" W	Ground Elev... 3,510.20	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,535.20	Tubing Head Elevation (ft)

Wellbores				
Wellbore Name OH	Parent Wellbore	SAP Well ID 34389	Kick Off Depth (ftKB)	Vertical Section Direction (*)
Actual Deviation Survey MWD, Proposed? No	Definitive? Yes	Proposed? No	Proposed Deviation Survey	

Deviation Survey							
Date 1/24/2014	Description MWD						
MD Tie In (ftKB) 4,375.00	TVD Tie In (ftKB) 4,372.97	Inclination Tie In (") 3.53	Azimuth Tie In (") 145.69	NS Tie In (ft) -61.93	EW Tie In (ft) 16.74		

Survey Data

Date	MD (ftKB)	Incl. (")	Azm (")	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (7/100ft)	Survey Tool	Survey Company
1/24/2014	4,375.00	3.53	145.00	4,372.97	-63.72	-61.93	16.74	0.00	MWD	BAKER HUGHES INTEQ
1/24/2014	4,469.00	2.26	142.29	4,466.85	-67.94	-65.79	19.50	1.36	MWD	BAKER HUGHES INTEQ
1/24/2014	4,563.00	1.35	192.05	4,560.81	-70.60	-68.34	20.41	1.84	MWD	BAKER HUGHES INTEQ
1/24/2014	4,658.00	2.04	236.46	4,655.77	-72.36	-70.36	18.76	1.51	MWD	BAKER HUGHES INTEQ
1/24/2014	4,753.00	1.63	247.83	4,750.72	-73.40	-71.81	16.10	0.58	MWD	BAKER HUGHES INTEQ
1/24/2014	4,847.00	1.52	308.29	4,844.69	-72.81	-71.54	13.89	1.69	MWD	BAKER HUGHES INTEQ
1/24/2014	4,941.00	1.21	312.30	4,938.66	-71.13	-70.10	12.17	0.34	MWD	BAKER HUGHES INTEQ
1/24/2014	5,036.00	2.26	301.21	5,033.62	-69.16	-68.45	9.83	1.16	MWD	BAKER HUGHES INTEQ
1/24/2014	5,130.00	4.39	288.99	5,127.46	-66.31	-66.32	4.84	2.38	MWD	BAKER HUGHES INTEQ
1/24/2014	5,225.00	5.70	283.22	5,222.09	-62.89	-64.06	-3.19	1.48	MWD	BAKER HUGHES INTEQ
1/24/2014	5,320.00	5.72	281.22	5,316.61	-59.55	-62.06	-12.42	0.21	MWD	BAKER HUGHES INTEQ
1/24/2014	5,508.00	5.29	281.22	5,503.75	-53.47	-58.55	-30.12	0.23	MWD	BAKER HUGHES INTEQ
1/24/2014	5,697.00	5.13	282.95	5,691.97	-47.45	-54.96	-46.90	0.12	MWD	BAKER HUGHES INTEQ
1/24/2014	5,885.00	5.58	269.31	5,879.15	-43.14	-53.19	-64.23	0.72	MWD	BAKER HUGHES INTEQ
1/24/2014	6,074.00	5.22	265.37	6,067.31	-41.31	-53.99	-81.99	0.27	MWD	BAKER HUGHES INTEQ
1/24/2014	6,263.00	5.32	263.10	6,255.52	-40.50	-55.74	-99.25	0.12	MWD	BAKER HUGHES INTEQ
1/24/2014	6,451.00	5.63	264.45	6,442.66	-39.78	-57.68	-117.08	0.18	MWD	BAKER HUGHES INTEQ
1/24/2014	6,640.00	5.01	265.87	6,630.84	-38.68	-59.17	-134.54	0.34	MWD	BAKER HUGHES INTEQ
1/24/2014	6,828.00	4.48	263.31	6,818.20	-37.83	-60.62	-150.02	0.30	MWD	BAKER HUGHES INTEQ
1/24/2014	7,016.00	4.60	276.12	7,005.61	-35.70	-60.67	-164.81	0.54	MWD	BAKER HUGHES INTEQ
1/24/2014	7,204.00	4.44	273.23	7,193.03	-32.32	-59.46	-179.57	0.15	MWD	BAKER HUGHES INTEQ
1/24/2014	7,392.00	4.52	275.08	7,380.45	-29.11	-58.39	-194.22	0.09	MWD	BAKER HUGHES INTEQ
1/24/2014	7,580.00	4.34	276.12	7,567.89	-25.58	-56.97	-208.67	0.10	MWD	BAKER HUGHES INTEQ
1/24/2014	7,768.00	4.68	266.88	7,755.31	-23.07	-56.63	-223.40	0.43	MWD	BAKER HUGHES INTEQ
1/24/2014	7,957.00	4.60	267.35	7,943.69	-21.58	-57.40	-238.67	0.05	MWD	BAKER HUGHES INTEQ
1/24/2014	8,051.00	3.58	269.27	8,037.45	-20.80	-57.62	-245.37	1.09	MWD	BAKER HUGHES INTEQ
1/24/2014	8,145.00	1.61	275.46	8,131.35	-20.09	-57.53	-249.62	2.11	MWD	BAKER HUGHES INTEQ
1/24/2014	8,239.00	1.34	278.02	8,225.32	-19.46	-57.25	-252.02	0.30	MWD	BAKER HUGHES INTEQ
1/24/2014	8,334.00	1.08	262.65	8,320.30	-19.13	-57.21	-254.01	0.44	MWD	BAKER HUGHES INTEQ
1/24/2014	8,428.00	1.11	286.37	8,414.28	-18.73	-57.06	-255.76	0.48	MWD	BAKER HUGHES INTEQ
1/24/2014	8,522.00	1.22	271.94	8,508.26	-18.16	-56.77	-257.64	0.33	MWD	BAKER HUGHES INTEQ
1/24/2014	8,617.00	1.13	277.82	8,603.24	-17.72	-56.61	-259.58	0.16	MWD	BAKER HUGHES INTEQ
1/24/2014	8,711.00	1.05	305.27	8,697.23	-16.86	-55.99	-261.20	0.56	MWD	BAKER HUGHES INTEQ
1/24/2014	8,806.00	0.72	316.50	8,792.22	-15.77	-55.05	-262.32	0.39	MWD	BAKER HUGHES INTEQ
1/24/2014	8,900.00	0.82	32.87	8,886.21	-14.78	-54.06	-262.36	1.02	MWD	BAKER HUGHES INTEQ
1/24/2014	8,994.00	0.87	99.28	8,980.20	-14.49	-53.61	-261.29	0.99	MWD	BAKER HUGHES INTEQ
1/24/2014	9,089.00	0.87	103.64	9,075.19	-14.99	-53.90	-259.88	0.07	MWD	BAKER HUGHES INTEQ
1/24/2014	9,277.00	0.64	99.80	9,263.17	-15.85	-54.41	-257.46	0.13	MWD	BAKER HUGHES INTEQ
1/24/2014	9,467.00	0.85	94.37	9,453.16	-16.50	-54.70	-255.00	0.12	MWD	BAKER HUGHES INTEQ
1/24/2014	9,655.00	0.89	114.65	9,641.14	-17.61	-55.42	-252.29	0.16	MWD	BAKER HUGHES INTEQ
1/24/2014	9,750.00	0.28	128.92	9,736.13	-18.18	-55.87	-251.44	0.66	MWD	BAKER HUGHES INTEQ
1/24/2014	9,784.00	0.18	203.93	9,770.13	-18.29	-55.97	-251.39	0.86	MWD	BAKER HUGHES INTEQ
1/24/2014	9,838.00	1.53	308.51	9,824.12	-17.83	-55.60	-251.99	2.94	MWD	BAKER HUGHES INTEQ
1/24/2014	9,869.00	3.73	330.32	9,855.09	-16.59	-54.46	-252.82	7.67	MWD	BAKER HUGHES INTEQ
1/24/2014	9,901.00	7.74	332.46	9,886.92	-13.58	-51.65	-254.33	12.55	MWD	BAKER HUGHES INTEQ
1/24/2014	9,932.00	12.15	334.32	9,917.45	-8.49	-46.85	-256.71	14.26	MWD	BAKER HUGHES INTEQ
1/24/2014	9,964.00	16.35	330.67	9,948.46	-1.06	-39.89	-260.37	13.42	MWD	BAKER HUGHES INTEQ



COTTON DRAW UNIT 203H

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	3001541847	32° 10' 53.353" N	103° 45' 9.793" W	3,510.20	25.00	3,535.20	

Survey Data

Date	MD (ftKB)	Ind (")	Azm (")	TVD (ftKB)	VS (ft)	NS (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
1/24/2014	9,995.00	20.45	332.46	9,977.87	8.14	-31.28	-265.02	13.35	MWD	BAKER HUGHES INTEQ
1/24/2014	10,027.00	24.38	334.05	10,007.45	19.73	-20.38	-270.50	12.43	MWD	BAKER HUGHES INTEQ
1/24/2014	10,058.00	28.22	335.04	10,035.23	32.87	-7.98	-276.39	12.47	MWD	BAKER HUGHES INTEQ
1/24/2014	10,090.00	30.62	334.82	10,063.10	47.93	6.26	-283.05	7.51	MWD	BAKER HUGHES INTEQ
1/24/2014	10,121.00	30.50	338.17	10,089.80	63.15	20.71	-289.34	5.51	MWD	BAKER HUGHES INTEQ
1/24/2014	10,153.00	31.71	338.25	10,117.20	79.23	36.06	-295.47	3.78	MWD	BAKER HUGHES INTEQ
1/24/2014	10,184.00	31.45	334.73	10,143.61	94.91	50.94	-301.94	6.00	MWD	BAKER HUGHES INTEQ
1/24/2014	10,215.00	34.43	334.09	10,169.62	111.01	66.14	-309.23	9.68	MWD	BAKER HUGHES INTEQ
1/24/2014	10,247.00	36.39	331.65	10,195.70	128.58	82.63	-317.69	7.55	MWD	BAKER HUGHES INTEQ
1/24/2014	10,278.00	39.44	331.46	10,220.16	146.48	99.38	-326.76	9.85	MWD	BAKER HUGHES INTEQ
1/24/2014	10,310.00	41.86	331.05	10,244.43	166.03	117.65	-336.79	7.61	MWD	BAKER HUGHES INTEQ
1/24/2014	10,342.00	43.93	332.59	10,267.88	186.54	136.85	-347.07	7.25	MWD	BAKER HUGHES INTEQ
1/24/2014	10,373.00	45.38	332.37	10,289.93	207.13	156.17	-357.14	4.70	MWD	BAKER HUGHES INTEQ
1/24/2014	10,405.00	47.45	332.66	10,311.99	229.05	176.74	-367.83	6.50	MWD	BAKER HUGHES INTEQ
1/24/2014	10,436.00	50.81	333.28	10,332.27	251.27	197.62	-378.48	10.94	MWD	BAKER HUGHES INTEQ
1/24/2014	10,468.00	54.79	331.80	10,351.61	275.36	220.22	-390.24	12.97	MWD	BAKER HUGHES INTEQ
1/24/2014	10,499.00	58.87	331.38	10,368.57	299.75	243.04	-402.58	13.21	MWD	BAKER HUGHES INTEQ
1/24/2014	10,531.00	61.88	331.13	10,384.39	325.84	267.43	-415.96	9.43	MWD	BAKER HUGHES INTEQ
1/24/2014	10,562.00	65.26	331.41	10,398.18	351.88	291.77	-429.30	10.93	MWD	BAKER HUGHES INTEQ
1/24/2014	10,593.00	68.30	331.45	10,410.41	378.64	316.78	-442.92	9.81	MWD	BAKER HUGHES INTEQ
1/24/2014	10,625.00	70.69	332.40	10,421.61	406.87	343.23	-457.03	7.97	MWD	BAKER HUGHES INTEQ
1/24/2014	10,656.00	73.71	331.70	10,431.09	434.69	369.30	-470.86	9.98	MWD	BAKER HUGHES INTEQ
1/24/2014	10,688.00	77.41	332.24	10,439.07	463.89	396.65	-485.42	11.68	MWD	BAKER HUGHES INTEQ
1/24/2014	10,719.00	80.42	333.57	10,445.03	492.72	423.73	-499.27	10.58	MWD	BAKER HUGHES INTEQ
1/24/2014	10,751.00	84.25	332.68	10,449.30	522.81	452.01	-513.61	12.28	MWD	BAKER HUGHES INTEQ
1/24/2014	10,782.00	87.32	333.25	10,451.57	552.11	479.55	-527.66	10.07	MWD	BAKER HUGHES INTEQ
1/24/2014	10,810.00	90.03	333.94	10,452.22	578.74	504.61	-540.10	9.99	MWD	BAKER HUGHES INTEQ
1/24/2014	10,904.00	91.02	339.10	10,451.36	669.50	590.80	-577.54	5.59	MWD	BAKER HUGHES INTEQ
1/24/2014	10,997.00	91.04	343.54	10,449.69	761.00	678.86	-607.32	4.77	MWD	BAKER HUGHES INTEQ
1/24/2014	11,092.00	91.85	346.00	10,447.29	855.30	770.49	-632.26	2.73	MWD	BAKER HUGHES INTEQ
1/24/2014	11,186.00	92.16	347.48	10,444.00	948.91	861.92	-653.81	1.61	MWD	BAKER HUGHES INTEQ
1/24/2014	11,280.00	92.32	348.27	10,440.33	1,042.65	953.76	-673.54	0.86	MWD	BAKER HUGHES INTEQ
1/24/2014	11,374.00	93.03	349.87	10,435.94	1,136.46	1,045.95	-691.34	1.86	MWD	BAKER HUGHES INTEQ
1/24/2014	11,468.00	92.95	351.18	10,431.04	1,230.31	1,138.54	-706.80	1.39	MWD	BAKER HUGHES INTEQ
1/24/2014	11,562.00	93.79	351.61	10,425.51	1,324.15	1,231.32	-720.84	1.00	MWD	BAKER HUGHES INTEQ
1/24/2014	11,656.00	94.29	352.33	10,418.89	1,417.91	1,324.16	-733.93	0.93	MWD	BAKER HUGHES INTEQ
1/24/2014	11,751.00	93.14	355.09	10,412.73	1,512.63	1,418.38	-744.32	3.14	MWD	BAKER HUGHES INTEQ
1/24/2014	11,845.00	91.67	356.12	10,408.79	1,606.31	1,512.02	-751.51	1.91	MWD	BAKER HUGHES INTEQ
1/24/2014	11,938.00	91.69	356.51	10,406.06	1,698.94	1,604.79	-757.49	0.42	MWD	BAKER HUGHES INTEQ
1/24/2014	12,032.00	90.55	358.90	10,404.22	1,792.37	1,698.68	-761.25	2.82	MWD	BAKER HUGHES INTEQ
1/24/2014	12,127.00	90.34	357.88	10,403.49	1,886.68	1,793.64	-763.92	1.10	MWD	BAKER HUGHES INTEQ
1/24/2014	12,221.00	87.25	358.07	10,405.46	1,980.06	1,887.55	-767.24	3.29	MWD	BAKER HUGHES INTEQ
1/24/2014	12,315.00	87.37	0.85	10,409.87	2,073.04	1,981.43	-768.13	2.96	MWD	BAKER HUGHES INTEQ
1/24/2014	12,410.00	88.18	2.20	10,413.56	2,166.52	2,076.33	-765.60	1.66	MWD	BAKER HUGHES INTEQ
1/24/2014	12,504.00	89.63	2.85	10,415.36	2,258.78	2,170.21	-761.46	1.69	MWD	BAKER HUGHES INTEQ
1/24/2014	12,598.00	89.41	2.81	10,416.15	2,350.95	2,264.10	-756.82	0.24	MWD	BAKER HUGHES INTEQ
1/24/2014	12,692.00	90.22	2.73	10,416.45	2,443.14	2,357.99	-752.27	0.87	MWD	BAKER HUGHES INTEQ
1/24/2014	12,787.00	90.31	2.24	10,416.01	2,536.40	2,452.90	-748.16	0.52	MWD	BAKER HUGHES INTEQ
1/24/2014	12,881.00	90.96	3.60	10,414.97	2,628.54	2,546.76	-743.37	1.60	MWD	BAKER HUGHES INTEQ
1/24/2014	12,976.00	91.23	3.45	10,413.15	2,721.45	2,641.57	-737.53	0.33	MWD	BAKER HUGHES INTEQ
1/24/2014	13,070.00	91.39	4.00	10,411.00	2,813.30	2,735.34	-731.42	0.61	MWD	BAKER HUGHES INTEQ
1/24/2014	13,164.00	90.86	3.02	10,409.16	2,905.23	2,829.15	-725.67	1.19	MWD	BAKER HUGHES INTEQ
1/24/2014	13,259.00	89.01	1.66	10,409.27	2,998.53	2,924.06	-721.79	2.42	MWD	BAKER HUGHES INTEQ
1/24/2014	13,353.00	87.50	0.75	10,412.13	3,091.15	3,017.99	-719.81	1.88	MWD	BAKER HUGHES INTEQ
1/24/2014	13,447.00	88.89	0.85	10,415.09	3,183.87	3,111.94	-718.50	1.48	MWD	BAKER HUGHES INTEQ



COTTON DRAW UNIT 203H

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 3001541847	Latitude (°) 32° 10' 53.353" N	Longitude (°) 103° 45' 9.793" W	Ground Elev... 3,510.20	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,535.20	Tubing Head Elevation (ft)

Survey Data

Date	MD (RKB)	Incl (°)	Azm (°)	TVD (RKB)	VS (ft)	NS (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
1/24/2014	13,542.00	87.93	1.61	10,417.73	3,277.47	3,206.88	-716.46	1.29	MWD	BAKER HUGHES INTEQ
1/24/2014	13,565.00	87.72	1.66	10,418.60	3,300.10	3,229.85	-715.81	0.94	MWD	BAKER HUGHES INTEQ
1/24/2014	13,659.00	89.20	1.62	10,421.12	3,392.60	3,323.78	-713.12	1.58	MWD	BAKER HUGHES INTEQ
1/24/2014	13,754.00	90.12	1.27	10,421.69	3,486.17	3,418.74	-710.72	1.04	MWD	BAKER HUGHES INTEQ
1/24/2014	13,848.00	89.63	359.57	10,421.89	3,579.04	3,512.74	-710.03	1.88	MWD	BAKER HUGHES INTEQ
1/24/2014	13,943.00	91.85	359.98	10,420.67	3,673.04	3,607.72	-710.41	2.38	MWD	BAKER HUGHES INTEQ
1/24/2014	14,037.00	93.06	0.81	10,416.64	3,765.83	3,701.63	-709.76	1.56	MWD	BAKER HUGHES INTEQ
1/24/2014	14,131.00	92.84	1.22	10,411.80	3,858.41	3,795.49	-708.10	0.49	MWD	BAKER HUGHES INTEQ
1/24/2014	14,225.00	93.70	2.10	10,406.44	3,950.79	3,889.30	-705.38	1.31	MWD	BAKER HUGHES INTEQ
1/24/2014	14,319.00	93.36	1.29	10,400.65	4,043.14	3,983.08	-702.60	0.93	MWD	BAKER HUGHES INTEQ
1/24/2014	14,414.00	91.73	0.91	10,396.43	4,136.72	4,077.96	-700.78	1.76	MWD	BAKER HUGHES INTEQ
1/24/2014	14,508.00	90.49	0.55	10,394.61	4,229.49	4,171.93	-699.59	1.37	MWD	BAKER HUGHES INTEQ
1/24/2014	14,602.00	88.76	359.34	10,395.23	4,322.47	4,265.93	-699.68	2.25	MWD	BAKER HUGHES INTEQ
1/24/2014	14,697.00	88.43	359.06	10,397.56	4,416.58	4,360.89	-701.00	0.46	MWD	BAKER HUGHES INTEQ
1/24/2014	14,791.00	88.64	358.68	10,399.96	4,509.78	4,454.84	-702.85	0.46	MWD	BAKER HUGHES INTEQ
1/24/2014	14,886.00	88.73	358.83	10,402.14	4,604.00	4,549.79	-704.92	0.18	MWD	BAKER HUGHES INTEQ
1/24/2014	14,980.00	88.83	359.21	10,404.14	4,697.18	4,643.76	-706.53	0.42	MWD	BAKER HUGHES INTEQ
1/24/2014	15,078.00	89.41	359.52	10,405.65	4,794.25	4,741.74	-707.61	0.67	MWD	BAKER HUGHES INTEQ
1/24/2014	15,136.00	89.41	359.52	10,406.25	4,851.68	4,799.73	-708.10	0.00	BIT	BAKER HUGHES INTEQ