



July 24, 2014

30-015-41619

RECEIVED

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

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 24 2014

Attn: David Cook

RECEIVED

Re: Helios 6 Federal Com No. 003H

Please find enclosed a copy of the survey from 0.00' to 3910.16' 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,

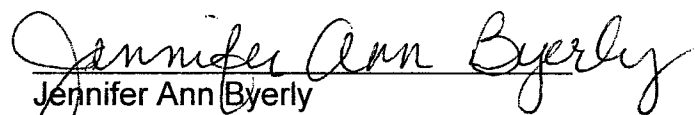

Keith Havelka
Operations

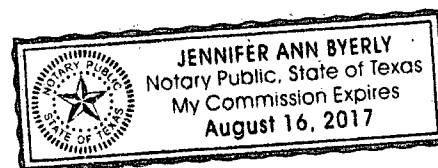
STATE OF TEXAS §

§

COUNTY OF NUECES §

This instrument was acknowledged before me on the 24 day of July,
A.D., 2014, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: Devon Energy
Lease/Well: Helios 6 Federal Com/No. 003H
Location: S6 T19S R31E
Rig Name: Scan Texas
State/County: New Mexico/Eddy
Latitude: 32.68, Longitude: -103.90
GRID North is 0.23 Degrees East of True North
VS-Azi: 0.31 Degrees



NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 24 2014
RECEIVED

Depth Reference : R.K.B. = 26 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 7/25/2014 / 11:48

VES Survey International
Midland, TX
432-563-5444

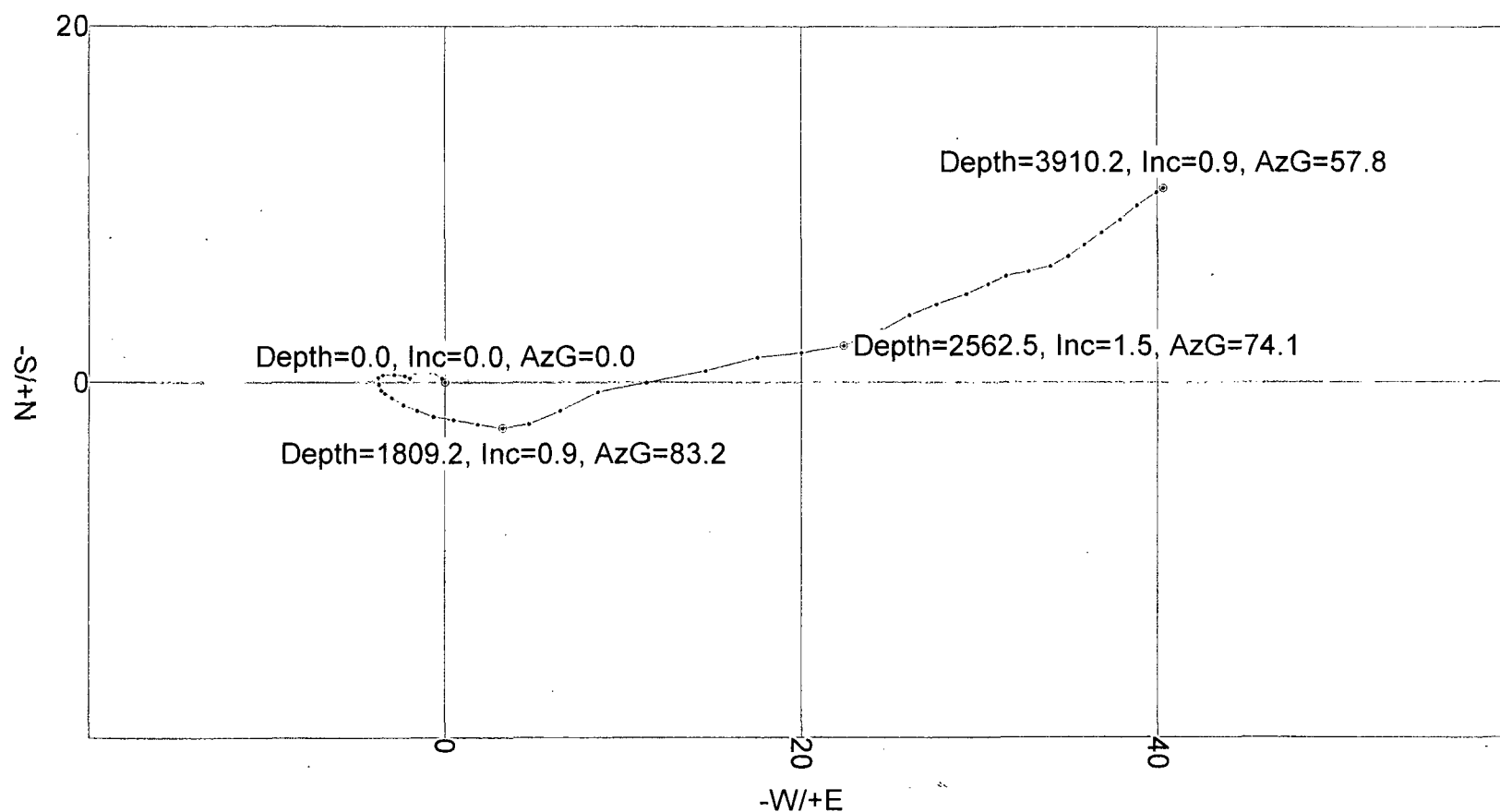
Surveyor: Andrew Askew
Helios 6 Federal Com No. 003H / API 30-0158-41619

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	****
114.32	0.28	321.44	114.32	0.22	-0.18	0.22	0.28	321.44	0.25
208.48	0.66	292.62	208.48	0.61	-0.82	0.61	1.02	306.71	0.46
302.64	0.08	294.59	302.63	0.85	-1.38	0.84	1.62	301.55	0.61
396.80	0.50	216.94	396.79	0.55	-1.69	0.54	1.77	288.06	0.52
490.96	0.09	295.37	490.95	0.26	-2.00	0.24	2.01	277.29	0.52
585.12	0.29	289.20	585.11	0.36	-2.29	0.35	2.31	279.05	0.21
679.28	0.47	266.47	679.27	0.42	-2.90	0.40	2.93	278.21	0.25
773.44	0.31	277.17	773.43	0.43	-3.53	0.41	3.56	276.87	0.19
867.60	0.22	185.45	867.59	0.28	-3.80	0.26	3.81	274.18	0.41
961.76	0.28	164.74	961.75	-0.12	-3.76	-0.14	3.76	268.11	0.11
1055.92	0.16	144.46	1055.90	-0.45	-3.62	-0.47	3.65	262.85	0.15
1150.08	0.19	114.53	1150.06	-0.63	-3.41	-0.64	3.46	259.60	0.10
1244.24	0.37	125.70	1244.22	-0.87	-3.02	-0.88	3.14	253.97	0.21
1338.40	0.55	117.63	1338.38	-1.25	-2.37	-1.27	2.68	242.12	0.20
1432.56	0.51	105.80	1432.54	-1.58	-1.57	-1.59	2.23	224.88	0.12
1526.72	0.69	113.47	1526.69	-1.92	-0.65	-1.92	2.02	198.71	0.21
1620.88	0.80	86.54	1620.84	-2.10	0.53	-2.10	2.17	165.91	0.39
1715.04	0.90	112.92	1714.99	-2.35	1.87	-2.34	3.00	141.56	0.42

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
1809.20	0.89	83.21	1809.14	-2.55	3.27	-2.53	4.15	127.92	0.49
1903.36	0.95	79.28	1903.29	-2.32	4.77	-2.29	5.30	115.94	0.09
1997.52	1.42	59.35	1997.43	-1.58	6.53	-1.55	6.72	103.61	0.66
2091.68	1.45	68.39	2091.56	-0.55	8.64	-0.50	8.66	93.64	0.24
2185.84	1.98	86.33	2185.68	-0.01	11.36	0.05	11.36	90.04	0.79
2280.00	2.14	71.67	2279.78	0.65	14.65	0.73	14.67	87.46	0.58
2374.16	1.50	80.63	2373.89	1.40	17.54	1.50	17.59	85.42	0.75
2468.32	1.51	86.96	2468.02	1.67	19.99	1.78	20.06	85.23	0.18
2562.48	1.46	74.15	2562.15	2.06	22.38	2.18	22.48	84.74	0.36
2656.64	1.37	60.87	2656.28	2.94	24.52	3.07	24.69	83.17	0.36
2750.80	0.79	60.89	2750.42	3.80	26.07	3.94	26.35	81.70	0.61
2844.96	1.19	72.45	2844.57	4.41	27.57	4.56	27.92	80.90	0.46
2939.12	0.99	69.31	2938.71	4.99	29.26	5.15	29.68	80.31	0.22
3033.28	0.65	60.00	3032.86	5.55	30.48	5.71	30.98	79.68	0.38
3127.44	0.69	69.53	3127.01	6.01	31.48	6.18	32.05	79.18	0.13
3221.60	0.91	87.01	3221.17	6.25	32.76	6.43	33.35	79.19	0.34
3315.76	0.67	61.62	3315.32	6.55	33.98	6.73	34.61	79.09	0.44
3409.92	0.71	59.34	3409.47	7.11	34.96	7.30	35.68	78.51	0.05
3504.08	0.66	47.47	3503.62	7.77	35.86	7.96	36.69	77.78	0.16
3598.24	0.83	62.29	3597.78	8.45	36.86	8.65	37.82	77.09	0.27
3692.40	0.73	46.71	3691.93	9.18	37.91	9.39	39.00	76.38	0.25
3786.56	0.77	53.39	3786.08	9.98	38.86	10.19	40.12	75.60	0.10
3880.72	0.85	58.68	3880.23	10.72	39.96	10.93	41.38	74.99	0.11
3910.16	0.89	57.77	3909.67	10.95	40.34	11.17	41.80	74.81	0.16



VES Survey International
Midland, TX
432-563-5444
Surveyor: Andrew Askew
Helios 6 Federal Com No. 003H / API 30-0158-41619





Directional Survey

District DELAWARE BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN REG	State/Province NM			
Surface Legal Location Sec. 6 T19S R31E	API/UWI 3001541619	Latitude (°) 32° 40' 57.246" N	Longitude (°) 103° 54' 2.106" W	Ground Elev... 3,507.70	KB - GL (ft) 26.00	Orig KB Elev (ft) 3,533.70	Tubing Head Elevation (ft)

Wellbore Name OH	Parent Wellbore	SAP Well ID 36015	Kick Off Depth (ftKB)	Vertical Section Direction (°) 0.31
Actual Deviation Survey GYRO, Proposed? No	Definitive? Yes	Proposed? No	Proposed Deviation Survey	

Deviation Survey					
Date 7/13/2014		Description GYRO			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	EW (ft)	DLS (°/100ft)	Survey Tool	Survey Company
7/19/2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	GYRO	WEATHERFORD MWD
7/13/2014	114.32	0.28	321.44	114.32	0.22	0.22	-0.17	0.24	GYRO	VAUHG ENERGY SERVICES
7/13/2014	208.48	0.66	292.62	208.48	0.60	0.61	-0.82	0.46	GYRO	VAUHG ENERGY SERVICES
7/13/2014	302.64	0.08	294.59	302.63	0.84	0.84	-1.38	0.62	GYRO	VAUHG ENERGY SERVICES
7/13/2014	396.80	0.50	216.94	396.79	0.53	0.54	-1.69	0.52	GYRO	VAUHG ENERGY SERVICES
7/13/2014	490.96	0.09	295.37	490.95	0.23	0.25	-2.00	0.52	GYRO	VAUHG ENERGY SERVICES
7/13/2014	585.12	0.29	289.20	585.11	0.34	0.36	-2.29	0.21	GYRO	VAUHG ENERGY SERVICES
7/13/2014	679.28	0.47	266.47	679.27	0.39	0.41	-2.90	0.25	GYRO	VAUHG ENERGY SERVICES
7/13/2014	773.44	0.31	277.17	773.43	0.40	0.42	-3.54	0.19	GYRO	VAUHG ENERGY SERVICES
7/13/2014	867.60	0.22	185.45	867.59	0.25	0.27	-3.81	0.41	GYRO	VAUHG ENERGY SERVICES
7/13/2014	961.76	0.28	164.74	961.75	-0.15	-0.13	-3.77	0.11	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,055.92	0.16	144.46	1,055.90	-0.48	-0.46	-3.63	0.15	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,150.08	0.19	114.53	1,150.06	-0.65	-0.63	-3.41	0.10	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,244.24	0.37	125.70	1,244.22	-0.89	-0.88	-3.02	0.20	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,338.40	0.55	117.63	1,338.38	-1.28	-1.26	-2.37	0.20	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,432.56	0.51	105.80	1,432.54	-1.59	-1.59	-1.57	0.12	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,526.72	0.69	113.47	1,526.69	-1.93	-1.93	-0.65	0.21	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,620.88	0.80	86.54	1,620.84	-2.11	-2.11	0.53	0.39	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,715.04	0.90	112.92	1,714.99	-2.35	-2.36	1.87	0.42	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,809.20	0.89	83.21	1,809.14	-2.54	-2.56	3.27	0.49	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,903.36	0.95	79.28	1,903.29	-2.30	-2.33	4.77	0.09	GYRO	VAUHG ENERGY SERVICES
7/13/2014	1,997.52	1.42	59.35	1,997.43	-1.55	-1.59	6.54	0.66	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,091.68	1.45	68.39	2,091.56	-0.51	-0.56	8.65	0.24	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,185.84	1.98	86.33	2,185.68	0.05	-0.01	11.38	0.79	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,280.00	2.14	71.67	2,279.78	0.72	0.64	14.67	0.58	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,374.16	1.50	80.63	2,373.89	1.49	1.40	17.56	0.74	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,468.32	1.51	86.96	2,468.02	1.77	1.66	20.01	0.18	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,562.48	1.46	74.15	2,562.15	2.18	2.06	22.40	0.36	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,656.64	1.37	60.87	2,656.28	3.06	2.93	24.54	0.36	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,750.80	0.79	60.89	2,750.42	3.94	3.80	26.09	0.62	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,844.96	1.19	72.45	2,844.57	4.56	4.41	27.59	0.47	GYRO	VAUHG ENERGY SERVICES
7/13/2014	2,939.12	0.99	69.31	2,938.71	5.15	4.99	29.28	0.22	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,033.28	0.65	60.00	3,032.86	5.71	5.54	30.51	0.39	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,127.44	0.69	69.53	3,127.01	6.18	6.01	31.50	0.13	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,221.60	0.91	87.01	3,221.16	6.42	6.25	32.78	0.35	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,315.76	0.67	61.62	3,315.32	6.73	6.55	34.01	0.44	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,409.92	0.71	59.34	3,409.47	7.29	7.11	35.00	0.05	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,504.08	0.66	47.47	3,503.62	7.96	7.77	35.90	0.16	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,598.24	0.83	62.29	3,597.77	8.65	8.45	36.90	0.27	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,692.40	0.73	46.71	3,691.93	9.39	9.18	37.94	0.25	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,786.56	0.77	53.39	3,786.08	10.18	9.97	38.89	0.10	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,880.72	0.85	58.68	3,880.23	10.93	10.71	39.99	0.12	GYRO	VAUHG ENERGY SERVICES
7/13/2014	3,910.16	0.89	57.77	3,909.66	11.16	10.95	40.37	0.14	GYRO	VAUHG ENERGY SERVICES
7/15/2014	4,087.00	1.09	55.23	4,086.48	12.87	12.64	42.91	0.12	GYRO	WEATHERFORD MWD
7/15/2014	4,182.00	1.20	109.57	4,181.46	13.06	12.82	44.59	1.11	GYRO	WEATHERFORD MWD
7/15/2014	4,276.00	1.73	151.42	4,275.43	11.49	11.24	46.20	1.23	GYRO	WEATHERFORD MWD
7/15/2014	4,370.00	2.20	191.30	4,369.38	8.48	8.23	46.53	1.50	GYRO	WEATHERFORD MWD



HELIOS 6 FED COM 3H

WEST UNRESTRICTED

Directional Survey

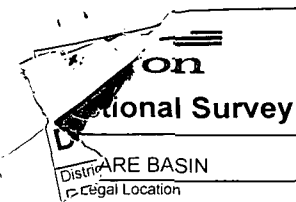
District DELAWARE BASIN	County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location Sec. 6 T19S R31E	API/UWI 3001541619	Latitude (°) 32° 40' 57.246" N	Longitude (°) 103° 54' 2.106" W	Ground Elev. (ft) 3,507.70
				KB - GL (ft) 26.00
				Orig KB Elev (ft) 3,533.70
				Tubing Head Elevation (ft)

Survey Data

Date	MD (ft/KB)	Incl (°)	Azm (°)	TVD (ft/KB)	VS (ft)	N/S (ft)	EW (ft)	DLS (7/100ft)	Survey Tool	Survey Company
7/15/2014	4,465.00	2.82	209.52	4,464.29	4.65	4.41	45.02	1.06	GYRO	WEATHERFORD MWD
7/17/2014	4,559.00	3.85	217.51	4,558.13	0.12	-0.11	41.96	1.20	GYRO	WEATHERFORD MWD
7/17/2014	4,652.00	4.89	217.39	4,650.86	-5.53	-5.73	37.65	1.12	GYRO	WEATHERFORD MWD
7/17/2014	4,747.00	5.02	226.77	4,745.51	-11.62	-11.80	32.16	0.86	GYRO	WEATHERFORD MWD
7/17/2014	4,841.00	4.56	225.53	4,839.18	-17.09	-17.23	26.50	0.50	GYRO	WEATHERFORD MWD
7/17/2014	4,935.00	5.46	220.93	4,932.82	-23.12	-23.23	20.90	1.05	GYRO	WEATHERFORD MWD
7/17/2014	5,029.00	5.31	218.68	5,026.40	-29.92	-30.00	15.25	0.28	GYRO	WEATHERFORD MWD
7/17/2014	5,124.00	4.51	216.74	5,121.05	-36.37	-36.43	10.27	0.86	GYRO	WEATHERFORD MWD
7/17/2014	5,218.00	4.32	219.95	5,214.78	-42.07	-42.10	5.79	0.33	GYRO	WEATHERFORD MWD
7/17/2014	5,312.00	4.75	222.46	5,308.48	-47.68	-47.69	0.89	0.50	GYRO	WEATHERFORD MWD
7/17/2014	5,407.00	6.01	225.03	5,403.06	-54.13	-54.11	-5.29	1.35	GYRO	WEATHERFORD MWD
7/17/2014	5,501.00	6.10	227.29	5,496.54	-61.04	-60.97	-12.44	0.27	GYRO	WEATHERFORD MWD
7/17/2014	5,595.00	5.74	228.19	5,590.04	-67.60	-67.49	-19.61	0.40	GYRO	WEATHERFORD MWD
7/17/2014	5,689.00	5.34	229.74	5,683.60	-73.60	-73.45	-26.45	0.45	GYRO	WEATHERFORD MWD
7/17/2014	5,783.00	5.32	227.25	5,777.19	-79.42	-79.24	-32.99	0.25	GYRO	WEATHERFORD MWD
7/17/2014	5,878.00	4.89	229.01	5,871.81	-85.10	-84.88	-39.28	0.48	GYRO	WEATHERFORD MWD
7/17/2014	5,972.00	4.92	223.46	5,965.47	-90.68	-90.44	-45.08	0.51	GYRO	WEATHERFORD MWD
7/17/2014	6,066.00	4.70	224.51	6,059.14	-96.38	-96.11	-50.55	0.25	GYRO	WEATHERFORD MWD
7/17/2014	6,160.00	4.39	227.54	6,152.84	-101.59	-101.29	-55.91	0.42	GYRO	WEATHERFORD MWD
7/17/2014	6,254.00	5.54	227.29	6,246.49	-107.13	-106.79	-61.89	1.22	GYRO	WEATHERFORD MWD
7/17/2014	6,348.00	5.87	231.36	6,340.02	-113.24	-112.87	-68.98	0.56	GYRO	WEATHERFORD MWD
7/18/2014	6,442.00	5.52	235.12	6,433.56	-118.87	-118.46	-76.45	0.54	GYRO	WEATHERFORD MWD
7/18/2014	6,537.00	6.55	216.40	6,528.04	-125.88	-125.43	-83.41	2.32	GYRO	WEATHERFORD MWD
7/18/2014	6,631.00	5.85	217.01	6,621.49	-134.06	-133.57	-89.48	0.75	GYRO	WEATHERFORD MWD
7/18/2014	6,726.00	5.61	215.46	6,716.02	-141.73	-141.22	-95.08	0.30	GYRO	WEATHERFORD MWD
7/18/2014	6,820.00	4.82	213.39	6,809.63	-148.80	-148.26	-99.92	0.86	GYRO	WEATHERFORD MWD
7/18/2014	6,914.00	4.90	225.06	6,903.29	-154.96	-154.40	-104.94	1.05	GYRO	WEATHERFORD MWD
7/18/2014	7,007.00	4.36	222.03	6,995.99	-160.42	-159.83	-110.12	0.64	GYRO	WEATHERFORD MWD
7/18/2014	7,102.00	5.99	225.83	7,090.60	-166.59	-165.96	-116.09	1.75	GYRO	WEATHERFORD MWD
7/18/2014	7,196.00	6.06	224.15	7,184.08	-173.60	-172.94	-123.06	0.20	GYRO	WEATHERFORD MWD
7/18/2014	7,294.00	5.62	223.94	7,281.57	-180.81	-180.11	-130.00	0.45	GYRO	WEATHERFORD MWD
7/19/2014	7,350.00	5.15	242.41	7,337.33	-183.97	-183.25	-134.13	3.19	GYRO	WEATHERFORD MWD
7/19/2014	7,381.00	5.79	281.01	7,368.19	-184.33	-183.59	-136.90	11.81	GYRO	WEATHERFORD MWD
7/19/2014	7,412.00	8.30	299.12	7,398.96	-182.96	-182.20	-140.39	10.72	GYRO	WEATHERFORD MWD
7/19/2014	7,444.00	11.76	301.53	7,430.47	-180.16	-179.37	-145.19	10.89	GYRO	WEATHERFORD MWD
7/19/2014	7,475.00	15.01	308.15	7,460.62	-176.06	-175.24	-151.04	11.57	GYRO	WEATHERFORD MWD
7/19/2014	7,506.00	17.89	318.45	7,490.36	-170.04	-169.20	-157.36	13.19	GYRO	WEATHERFORD MWD
7/19/2014	7,538.00	20.06	329.53	7,520.63	-161.67	-160.78	-163.40	13.11	GYRO	WEATHERFORD MWD
7/19/2014	7,569.00	21.98	338.28	7,549.57	-151.72	-150.81	-168.25	11.85	GYRO	WEATHERFORD MWD
7/19/2014	7,600.00	25.05	345.36	7,578.00	-139.99	-139.06	-172.05	13.44	GYRO	WEATHERFORD MWD
7/19/2014	7,632.00	27.97	350.48	7,606.63	-126.05	-125.10	-175.01	11.58	GYRO	WEATHERFORD MWD
7/19/2014	7,663.00	31.35	354.05	7,633.57	-110.86	-109.91	-177.05	12.30	GYRO	WEATHERFORD MWD
7/19/2014	7,695.00	36.12	355.85	7,660.17	-93.18	-92.21	-178.59	15.23	GYRO	WEATHERFORD MWD
7/19/2014	7,726.00	40.66	357.63	7,684.47	-73.97	-73.00	-179.67	15.07	GYRO	WEATHERFORD MWD
7/19/2014	7,758.00	44.19	0.10	7,708.09	-52.39	-51.42	-180.08	12.20	GYRO	WEATHERFORD MWD
7/19/2014	7,790.00	48.85	2.67	7,730.10	-29.19	-28.22	-179.50	15.68	GYRO	WEATHERFORD MWD
7/19/2014	7,821.00	52.96	5.95	7,749.65	-5.20	-4.24	-177.68	15.59	GYRO	WEATHERFORD MWD
7/19/2014	7,852.00	56.86	6.23	7,767.47	20.03	20.98	-174.98	12.60	GYRO	WEATHERFORD MWD
7/19/2014	7,884.00	59.73	4.92	7,784.28	47.14	48.07	-172.34	9.62	GYRO	WEATHERFORD MWD
7/19/2014	7,915.00	61.80	3.30	7,799.42	74.13	75.05	-170.41	8.09	GYRO	WEATHERFORD MWD
7/19/2014	7,946.00	64.45	3.30	7,813.43	101.74	102.65	-168.82	8.55	GYRO	WEATHERFORD MWD
7/19/2014	7,978.00	67.15	3.89	7,826.55	130.88	131.78	-166.99	8.60	GYRO	WEATHERFORD MWD
7/19/2014	8,009.00	69.85	3.87	7,837.91	159.66	160.56	-165.03	8.71	GYRO	WEATHERFORD MWD
7/19/2014	8,040.00	72.60	3.42	7,847.89	188.96	189.84	-163.17	8.98	GYRO	WEATHERFORD MWD
7/19/2014	8,071.00	75.43	2.70	7,856.42	218.72	219.60	-161.58	9.40	GYRO	WEATHERFORD MWD

HELIOS 6 FED COM 3H

WEST UNRESTRICTED



County EDDY	Field Name HACKBERRY	Project Group DELAWARE BASIN REG	State/Province NM
District ARE BASIN	Legal Location Sec. 6 T19S R31E	API/UWI 3001541619	Latitude (°) 32° 40' 57.246" N
		Longitude (°) 103° 54' 2.106" W	Ground Elev... 3,507.70
		KB - GL (ft) 26.00	Orig KB Elev (ft) 3,533.70
			Tubing Head Elevation (ft)

Survey Data										
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
7/19/2014	8,103.00	78.25	2.63	7,863.71	249.85	250.72	-160.13	8.82	GYRO	WEATHERFORD MWD
7/19/2014	8,134.00	81.02	2.72	7,869.29	280.32	281.18	-158.71	8.94	GYRO	WEATHERFORD MWD
7/19/2014	8,166.00	84.82	2.66	7,873.23	312.04	312.90	-157.22	11.88	GYRO	WEATHERFORD MWD
7/19/2014	8,230.00	88.95	1.17	7,876.71	375.91	376.75	-155.09	6.86	GYRO	WEATHERFORD MWD
7/19/2014	8,324.00	89.16	0.56	7,878.26	469.89	470.73	-153.67	0.69	GYRO	WEATHERFORD MWD
7/19/2014	8,419.00	89.23	0.94	7,879.59	564.87	565.71	-152.42	0.41	GYRO	WEATHERFORD MWD
7/19/2014	8,513.00	90.63	0.71	7,879.71	658.87	659.70	-151.07	1.51	GYRO	WEATHERFORD MWD
7/19/2014	8,607.00	92.03	0.76	7,877.53	752.84	753.66	-149.86	1.49	GYRO	WEATHERFORD MWD
7/19/2014	8,701.00	92.17	1.43	7,874.08	846.77	847.58	-148.07	0.73	GYRO	WEATHERFORD MWD
7/19/2014	8,795.00	92.59	1.60	7,870.18	940.66	941.47	-145.59	0.48	GYRO	WEATHERFORD MWD
7/19/2014	8,890.00	92.59	1.96	7,865.88	1,035.54	1,036.32	-142.64	0.38	GYRO	WEATHERFORD MWD
7/19/2014	8,984.00	92.31	1.52	7,861.87	1,129.42	1,130.19	-139.79	0.55	GYRO	WEATHERFORD MWD
7/19/2014	9,078.00	92.80	1.36	7,857.68	1,223.31	1,224.07	-137.43	0.55	GYRO	WEATHERFORD MWD
7/19/2014	9,173.00	91.47	359.73	7,854.14	1,318.24	1,318.99	-136.52	2.21	GYRO	WEATHERFORD MWD
7/19/2014	9,267.00	91.05	359.28	7,852.07	1,412.20	1,412.97	-137.34	0.65	GYRO	WEATHERFORD MWD
7/19/2014	9,361.00	92.24	0.77	7,849.37	1,506.16	1,506.92	-137.30	2.03	GYRO	WEATHERFORD MWD
7/20/2014	9,455.00	90.63	359.86	7,847.02	1,600.13	1,600.89	-136.78	1.97	GYRO	WEATHERFORD MWD
7/22/2014	9,549.00	90.07	359.65	7,846.44	1,694.12	1,694.89	-137.18	0.64	GYRO	WEATHERFORD MWD
7/22/2014	9,644.00	89.93	359.43	7,846.44	1,789.11	1,789.88	-137.94	0.27	GYRO	WEATHERFORD MWD
7/22/2014	9,738.00	91.40	359.94	7,845.35	1,883.10	1,883.87	-138.46	1.66	GYRO	WEATHERFORD MWD
7/22/2014	9,832.00	91.54	359.33	7,842.94	1,977.06	1,977.84	-139.06	0.67	GYRO	WEATHERFORD MWD
7/22/2014	9,927.00	91.61	359.12	7,840.33	2,072.00	2,072.79	-140.34	0.23	GYRO	WEATHERFORD MWD
7/22/2014	10,021.00	91.54	359.31	7,837.75	2,165.95	2,166.75	-141.63	0.22	GYRO	WEATHERFORD MWD
7/22/2014	10,115.00	92.73	359.64	7,834.24	2,259.87	2,260.68	-142.49	1.31	GYRO	WEATHERFORD MWD
7/22/2014	10,210.00	93.22	359.20	7,829.31	2,354.73	2,355.55	-143.45	0.69	GYRO	WEATHERFORD MWD
7/22/2014	10,304.00	92.38	358.89	7,824.72	2,448.60	2,449.42	-145.02	0.95	GYRO	WEATHERFORD MWD
7/22/2014	10,399.00	92.87	359.27	7,820.37	2,543.48	2,544.31	-146.54	0.65	GYRO	WEATHERFORD MWD
7/22/2014	10,492.00	91.33	359.14	7,816.96	2,636.39	2,637.23	-147.83	1.66	GYRO	WEATHERFORD MWD
7/22/2014	10,587.00	91.26	359.76	7,814.82	2,731.36	2,732.20	-148.74	0.66	GYRO	WEATHERFORD MWD
7/22/2014	10,681.00	91.61	359.83	7,812.46	2,825.33	2,826.17	-149.08	0.38	GYRO	WEATHERFORD MWD
7/22/2014	10,776.00	91.75	0.02	7,809.68	2,920.28	2,921.13	-149.20	0.25	GYRO	WEATHERFORD MWD
7/22/2014	10,870.00	92.66	0.17	7,806.06	3,014.21	3,015.06	-149.05	0.98	GYRO	WEATHERFORD MWD
7/22/2014	10,964.00	91.19	359.50	7,802.90	3,108.15	3,109.00	-149.32	1.72	GYRO	WEATHERFORD MWD
7/22/2014	11,059.00	91.82	359.44	7,800.41	3,203.11	3,203.97	-150.20	0.67	GYRO	WEATHERFORD MWD
7/22/2014	11,153.00	92.38	0.42	7,796.96	3,297.04	3,297.90	-150.31	1.20	GYRO	WEATHERFORD MWD
7/22/2014	11,248.00	90.91	0.27	7,794.24	3,392.00	3,392.86	-149.74	1.56	GYRO	WEATHERFORD MWD
7/22/2014	11,342.00	91.12	359.91	7,792.57	3,485.98	3,486.84	-149.59	0.44	GYRO	WEATHERFORD MWD
7/22/2014	11,436.00	91.68	0.45	7,790.27	3,579.95	3,580.82	-149.30	0.83	GYRO	WEATHERFORD MWD
7/22/2014	11,530.00	91.68	0.80	7,787.52	3,673.91	3,674.77	-148.27	0.37	GYRO	WEATHERFORD MWD
7/22/2014	11,624.00	91.40	359.81	7,784.99	3,767.88	3,768.73	-147.77	1.09	GYRO	WEATHERFORD MWD
7/22/2014	11,719.00	91.33	359.90	7,782.73	3,862.85	3,863.71	-148.01	0.12	GYRO	WEATHERFORD MWD
7/22/2014	11,813.00	91.68	359.98	7,780.26	3,956.81	3,957.67	-148.11	0.38	GYRO	WEATHERFORD MWD
7/22/2014	11,907.00	91.89	0.07	7,777.33	4,050.77	4,051.63	-148.07	0.24	GYRO	WEATHERFORD MWD
7/22/2014	12,001.00	90.35	359.18	7,775.49	4,144.74	4,145.60	-148.68	1.89	GYRO	WEATHERFORD MWD
7/22/2014	12,096.00	90.28	359.43	7,774.97	4,239.72	4,240.59	-149.84	0.27	GYRO	WEATHERFORD MWD
7/22/2014	12,190.00	90.49	359.71	7,774.34	4,333.71	4,334.59	-150.54	0.37	GYRO	WEATHERFORD MWD
7/22/2014	12,285.00	90.98	0.08	7,773.12	4,428.70	4,429.58	-150.72	0.65	GYRO	WEATHERFORD MWD
7/22/2014	12,379.00	91.47	0.31	7,771.11	4,522.68	4,523.56	-150.40	0.58	GYRO	WEATHERFORD MWD
7/22/2014	12,474.00	91.33	0.19	7,768.79	4,617.65	4,618.53	-149.98	0.19	GYRO	WEATHERFORD MWD
7/22/2014	12,522.00	91.40	0.17	7,767.65	4,665.64	4,666.52	-149.83	0.15	GYRO	WEATHERFORD MWD
7/22/2014	12,587.00	91.40	0.17	7,766.06	4,730.62	4,731.50	-149.64	0.00	BIT	WEATHERFORD MWD