



MEAN GREEN 26 FEB 14

WEST UNRESTRICTED

Directional Survey

FEB 19 2015

District DELAWARE BASIN	County LEA	Field Name RATTLESNAKE (NM)	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location Sec. 26 T26S R34E	API/UWI 3002541246	Latitude (°) 32° 1' 17.545" N	Longitude (°) 103° 25' 59.582" W	Ground Elev... 3,222.90
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,247.90
				Tubing Head Elevation (ft)

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

Deviation Survey					
Date 9/15/2014	Description EXTREME SURVEY				
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EWTie In (ft)

Survey Data										
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
9/15/2014	145.00	1.01	26.41	144.99	-1.14	1.14	0.57	0.70	EM	EXTREME ENGINEERING
9/15/2014	175.00	0.88	35.11	174.99	-1.57	1.57	0.82	0.64	EM	EXTREME ENGINEERING
9/15/2014	235.00	1.19	35.60	234.98	-2.45	2.45	1.45	0.52	EM	EXTREME ENGINEERING
9/15/2014	295.00	1.19	42.10	294.97	-3.41	3.42	2.23	0.22	EM	EXTREME ENGINEERING
9/15/2014	356.00	1.10	40.92	355.95	-4.32	4.33	3.03	0.15	EM	EXTREME ENGINEERING
9/15/2014	415.00	0.79	46.50	414.95	-5.03	5.04	3.70	0.55	EM	EXTREME ENGINEERING
9/15/2014	476.00	0.88	33.31	475.94	-5.71	5.72	4.26	0.35	EM	EXTREME ENGINEERING
9/15/2014	537.00	0.62	37.40	536.93	-6.36	6.38	4.72	0.43	EM	EXTREME ENGINEERING
9/15/2014	596.00	0.70	33.58	595.93	-6.91	6.93	5.11	0.15	EM	EXTREME ENGINEERING
9/15/2014	660.00	0.40	37.18	659.93	-7.41	7.43	5.47	0.47	EM	EXTREME ENGINEERING
9/15/2014	721.00	0.40	351.30	720.93	-7.79	7.81	5.56	0.51	EM	EXTREME ENGINEERING
9/15/2014	814.00	0.22	312.01	813.92	-8.23	8.26	5.38	0.29	EM	EXTREME ENGINEERING
9/15/2014	907.00	0.22	308.28	906.92	-8.47	8.49	5.11	0.02	EM	EXTREME ENGINEERING
9/15/2014	989.00	0.31	323.79	988.92	-8.74	8.76	4.85	0.14	EM	EXTREME ENGINEERING
9/18/2014	1,075.00	0.31	130.92	1,074.92	-8.78	8.80	4.89	0.72	EM	EXTREME ENGINEERING
9/18/2014	1,165.00	0.22	9.49	1,164.92	-8.79	8.81	5.10	0.52	EM	EXTREME ENGINEERING
9/18/2014	1,258.00	0.22	246.80	1,257.92	-8.90	8.91	4.97	0.42	EM	EXTREME ENGINEERING
9/18/2014	1,350.00	0.22	55.29	1,349.92	-8.93	8.94	4.95	0.48	EM	EXTREME ENGINEERING
9/18/2014	1,444.00	0.22	310.92	1,443.92	-9.15	9.17	4.96	0.37	EM	EXTREME ENGINEERING
9/18/2014	1,536.00	0.09	105.30	1,535.92	-9.24	9.26	4.90	0.33	EM	EXTREME ENGINEERING
9/18/2014	1,629.00	0.09	337.28	1,628.92	-9.29	9.31	4.94	0.17	EM	EXTREME ENGINEERING
9/18/2014	1,719.00	0.22	284.50	1,718.92	-9.40	9.42	4.75	0.20	EM	EXTREME ENGINEERING
9/18/2014	1,811.00	0.22	137.81	1,810.92	-9.31	9.33	4.69	0.46	EM	EXTREME ENGINEERING
9/18/2014	1,906.00	0.22	170.77	1,905.92	-9.00	9.02	4.85	0.13	EM	EXTREME ENGINEERING
9/18/2014	2,000.00	0.62	143.40	1,999.92	-8.41	8.43	5.18	0.46	EM	EXTREME ENGINEERING
9/18/2014	2,095.00	0.48	143.70	2,094.91	-7.68	7.70	5.72	0.15	EM	EXTREME ENGINEERING
9/18/2014	2,189.00	0.70	130.78	2,188.91	-6.98	7.01	6.39	0.27	EM	EXTREME ENGINEERING
9/18/2014	2,284.00	1.01	109.60	2,283.90	-6.32	6.35	7.62	0.46	EM	EXTREME ENGINEERING
9/19/2014	2,476.00	1.32	103.41	2,475.86	-5.22	5.26	11.36	0.17	EM	EXTREME ENGINEERING
9/19/2014	2,567.00	1.58	103.42	2,566.83	-4.68	4.73	13.60	0.29	EM	EXTREME ENGINEERING
9/19/2014	2,661.00	1.58	93.61	2,660.79	-4.29	4.35	16.16	0.29	EM	EXTREME ENGINEERING
9/19/2014	2,756.00	1.80	86.79	2,755.75	-4.28	4.35	18.95	0.31	EM	EXTREME ENGINEERING
9/19/2014	2,851.00	2.00	87.89	2,850.70	-4.41	4.49	22.10	0.21	EM	EXTREME ENGINEERING
9/19/2014	2,946.00	2.02	74.89	2,945.64	-4.90	4.99	25.37	0.48	EM	EXTREME ENGINEERING
9/19/2014	3,041.00	2.50	71.68	3,040.57	-5.97	6.08	28.96	0.52	EM	EXTREME ENGINEERING
9/19/2014	3,126.00	2.68	72.38	3,125.48	-7.14	7.26	32.61	0.22	EM	EXTREME ENGINEERING
9/19/2014	3,228.00	3.12	65.48	3,227.35	-9.00	9.14	37.41	0.55	EM	EXTREME ENGINEERING
9/19/2014	3,324.00	3.30	61.88	3,323.20	-11.36	11.52	42.22	0.28	EM	EXTREME ENGINEERING
9/19/2014	3,419.00	3.38	64.91	3,418.04	-13.82	14.00	47.17	0.20	EM	EXTREME ENGINEERING
9/20/2014	3,514.00	3.52	235.52	3,512.98	-13.36	13.54	47.30	7.24	EM	EXTREME ENGINEERING
9/20/2014	3,606.00	3.30	65.30	3,604.92	-12.86	13.04	47.38	7.39	EM	EXTREME ENGINEERING
9/20/2014	3,703.00	3.12	57.70	3,701.77	-15.42	15.62	52.15	0.48	EM	EXTREME ENGINEERING
9/20/2014	3,797.00	2.81	59.50	3,795.65	-17.94	18.16	56.29	0.34	EM	EXTREME ENGINEERING
9/20/2014	3,891.00	2.50	55.81	3,889.54	-20.25	20.48	59.98	0.38	EM	EXTREME ENGINEERING
9/22/2014	3,983.00	2.20	58.98	3,981.47	-22.28	22.52	63.15	0.36	EM	EXTREME ENGINEERING
9/23/2014	4,081.00	2.29	55.29	4,079.39	-24.35	24.60	66.37	0.17	EM	EXTREME ENGINEERING
9/23/2014	4,175.00	2.29	49.57	4,173.32	-26.62	26.89	69.34	0.24	EM	EXTREME ENGINEERING

MAR 02 2015



Directional Survey

District DELAWARE BASIN	County LEA	Field Name RATTLESNAKE (NM)	Project Group DELAWARE BASIN REG	State/Province NM			
Surface Legal Location Sec. 26 T26S R34E	API/UWI 3002541246	Latitude (°) 32° 1' 17.545" N	Longitude (°) 103° 25' 59.582" W	Ground Elev... 3,222.90	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,247.90	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
9/23/2014	4,272.00	2.02	51.37	4,270.25	-28.94	29.21	72.15	0.29	EM	EXTREME ENGINEERING
9/23/2014	4,363.00	1.71	47.99	4,361.20	-30.84	31.12	74.42	0.36	EM	EXTREME ENGINEERING
9/23/2014	4,459.00	1.49	48.47	4,457.16	-32.62	32.91	76.41	0.23	EM	EXTREME ENGINEERING
9/23/2014	4,554.00	1.71	71.50	4,552.13	-33.88	34.18	78.68	0.71	EM	EXTREME ENGINEERING
9/23/2014	4,648.00	2.20	68.38	4,646.07	-34.98	35.29	81.69	0.53	EM	EXTREME ENGINEERING
9/23/2014	4,743.00	2.42	70.89	4,740.99	-36.29	36.61	85.28	0.25	EM	EXTREME ENGINEERING
9/23/2014	4,838.00	2.29	72.20	4,835.91	-37.51	37.85	88.98	0.15	EM	EXTREME ENGINEERING
9/23/2014	4,933.00	2.90	78.18	4,930.82	-38.57	38.92	93.14	0.70	EM	EXTREME ENGINEERING
9/23/2014	5,028.00	3.30	81.78	5,025.68	-39.43	39.81	98.20	0.47	EM	EXTREME ENGINEERING
9/23/2014	5,113.00	2.68	81.87	5,110.56	-40.05	40.44	102.59	0.73	EM	EXTREME ENGINEERING
9/23/2014	5,122.00	2.90	84.38	5,119.55	-40.10	40.49	103.02	2.80	EM	EXTREME ENGINEERING
9/23/2014	5,397.00	2.33	79.67	5,394.26	-41.74	42.17	115.45	0.22	EM	WEATHERFORD
9/23/2014	5,480.00	1.07	82.91	5,477.23	-42.12	42.57	117.88	1.52	EM	WEATHERFORD
9/23/2014	5,575.00	1.40	270.31	5,572.22	-42.24	42.69	117.60	2.59	EM	WEATHERFORD
9/23/2014	5,670.00	3.16	263.74	5,667.14	-41.98	42.41	113.83	1.87	EM	WEATHERFORD
9/23/2014	5,765.00	3.39	263.31	5,761.98	-41.38	41.79	108.44	0.24	EM	WEATHERFORD
9/23/2014	5,859.00	3.43	260.86	5,855.82	-40.63	41.02	102.90	0.16	EM	WEATHERFORD
9/23/2014	5,953.00	3.50	264.72	5,949.65	-39.94	40.31	97.27	0.26	EM	WEATHERFORD
9/23/2014	6,048.00	3.57	264.57	6,044.46	-39.42	39.77	91.44	0.07	EM	WEATHERFORD
9/23/2014	6,143.00	3.51	262.70	6,139.28	-38.79	39.12	85.61	0.14	EM	WEATHERFORD
9/23/2014	6,237.00	2.90	243.35	6,233.14	-37.38	37.69	80.63	1.31	EM	WEATHERFORD
9/23/2014	6,331.00	2.98	238.75	6,327.02	-35.06	35.35	76.42	0.26	EM	WEATHERFORD
9/23/2014	6,426.00	2.67	240.75	6,421.90	-32.71	32.99	72.37	0.34	EM	WEATHERFORD
9/23/2014	6,520.00	2.80	241.45	6,515.79	-30.56	30.82	68.45	0.14	EM	WEATHERFORD
9/23/2014	6,615.00	2.80	237.97	6,610.68	-28.24	28.48	64.44	0.18	EM	WEATHERFORD
9/23/2014	6,710.00	2.78	240.30	6,705.57	-25.88	26.11	60.47	0.12	EM	WEATHERFORD
9/23/2014	6,804.00	3.01	239.95	6,799.45	-23.53	23.74	56.36	0.25	EM	WEATHERFORD
9/23/2014	6,899.00	2.04	226.17	6,894.35	-21.12	21.32	52.98	1.20	EM	WEATHERFORD
9/23/2014	6,994.00	1.44	223.23	6,989.31	-19.09	19.28	50.94	0.64	EM	WEATHERFORD
9/23/2014	7,088.00	1.51	226.09	7,083.28	-17.38	17.56	49.24	0.11	EM	WEATHERFORD
9/23/2014	7,183.00	1.63	223.90	7,178.24	-15.54	15.72	47.40	0.14	EM	WEATHERFORD
9/23/2014	7,278.00	1.77	217.51	7,273.20	-13.41	13.59	45.57	0.25	EM	WEATHERFORD
9/23/2014	7,372.00	1.75	221.12	7,367.16	-11.19	11.35	43.74	0.12	EM	WEATHERFORD
9/23/2014	7,467.00	1.57	213.35	7,462.12	-9.01	9.17	42.07	0.30	EM	WEATHERFORD
9/23/2014	7,561.00	1.61	212.88	7,556.08	-6.83	6.99	40.65	0.04	EM	WEATHERFORD
9/23/2014	7,656.00	1.62	208.19	7,651.04	-4.53	4.68	39.29	0.14	EM	WEATHERFORD
9/23/2014	7,751.00	1.82	213.27	7,746.00	-2.10	2.24	37.83	0.26	EM	WEATHERFORD
9/23/2014	7,845.00	2.04	208.73	7,839.95	0.61	-0.48	36.20	0.28	EM	WEATHERFORD
9/23/2014	7,940.00	0.28	201.19	7,934.92	2.31	-2.18	35.31	1.86	EM	WEATHERFORD
9/23/2014	8,035.00	0.36	148.34	8,029.92	2.78	-2.65	35.38	0.31	EM	WEATHERFORD
9/23/2014	8,129.00	0.82	127.48	8,123.92	3.44	-3.31	36.07	0.53	EM	WEATHERFORD
9/23/2014	8,224.00	1.11	128.01	8,218.90	4.43	-4.29	37.33	0.31	EM	WEATHERFORD
9/23/2014	8,319.00	1.29	130.35	8,313.88	5.69	-5.55	38.87	0.20	EM	WEATHERFORD
9/23/2014	8,413.00	1.44	121.57	8,407.86	7.00	-6.85	40.69	0.27	EM	WEATHERFORD
9/23/2014	8,508.00	1.36	119.32	8,502.83	8.19	-8.03	42.69	0.10	EM	WEATHERFORD
9/23/2014	8,521.00	1.35	129.88	8,515.82	8.36	-8.20	42.94	1.92	EM	WEATHERFORD
9/23/2014	8,553.00	1.65	146.36	8,547.81	8.99	-8.83	43.48	1.63	EM	WEATHERFORD
9/23/2014	8,585.00	2.83	174.78	8,579.79	10.16	-10.00	43.81	4.96	EM	WEATHERFORD
9/23/2014	8,616.00	4.99	183.09	8,610.72	12.27	-12.10	43.81	7.19	EM	WEATHERFORD
9/23/2014	8,648.00	7.96	188.76	8,642.51	15.85	-15.68	43.39	9.48	EM	WEATHERFORD
9/23/2014	8,679.00	11.05	190.31	8,673.08	20.89	-20.73	42.54	10.00	EM	WEATHERFORD
9/23/2014	8,711.00	14.06	189.71	8,704.31	27.74	-27.58	41.33	9.41	EM	WEATHERFORD
9/23/2014	8,742.00	17.26	189.96	8,734.16	35.97	-35.82	39.90	10.32	EM	WEATHERFORD
9/23/2014	8,774.00	20.32	188.81	8,764.45	46.14	-45.99	38.23	9.63	EM	WEATHERFORD
9/23/2014	8,805.00	23.24	188.85	8,793.23	57.49	-57.36	36.46	9.42	EM	WEATHERFORD



Directional Survey

District DELAWARE BASIN	County LEA	Field Name RATTLESNAKE (NM)	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location Sec. 26 T26S R34E	API/UWI 3002541246	Latitude (°) 32° 1' 17.545" N	Longitude (°) 103° 25' 59.582" W	Ground Elev... 3,222.90
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,247.90
				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
9/23/2014	8,837.00	26.54	188.97	8,822.25	70.79	-70.66	34.37	10.31	EM	WEATHERFORD
9/23/2014	8,868.00	30.25	189.68	8,849.52	85.32	-85.20	31.98	12.02	EM	WEATHERFORD
9/23/2014	8,900.00	33.82	190.22	8,876.64	102.03	-101.92	29.04	11.19	EM	WEATHERFORD
9/23/2014	8,932.00	37.52	190.18	8,902.64	120.38	-120.28	25.74	11.56	EM	WEATHERFORD
9/23/2014	8,963.00	41.06	190.22	8,926.62	139.68	-139.60	22.27	11.42	EM	WEATHERFORD
9/23/2014	8,995.00	43.91	189.43	8,950.22	160.96	-160.89	18.58	9.06	EM	WEATHERFORD
9/23/2014	9,026.00	47.37	189.30	8,971.89	182.81	-182.76	14.98	11.17	EM	WEATHERFORD
9/23/2014	9,058.00	50.88	189.04	8,992.83	206.68	-206.64	11.12	10.99	EM	WEATHERFORD
9/23/2014	9,089.00	54.15	188.68	9,011.69	230.97	-230.94	7.34	10.59	EM	WEATHERFORD
9/23/2014	9,121.00	57.39	187.93	9,029.69	257.13	-257.12	3.52	10.31	EM	WEATHERFORD
9/23/2014	9,153.00	60.28	185.49	9,046.25	284.31	-284.31	0.33	11.14	EM	WEATHERFORD
9/23/2014	9,184.00	63.02	183.56	9,060.97	311.49	-311.50	-1.82	10.40	EM	WEATHERFORD
9/23/2014	9,216.00	66.31	181.04	9,074.66	340.38	-340.39	-2.97	12.50	EM	WEATHERFORD
9/23/2014	9,247.00	69.12	180.72	9,086.42	369.06	-369.07	-3.41	9.11	EM	WEATHERFORD
9/23/2014	9,279.00	72.30	180.24	9,096.99	399.25	-399.27	-3.66	10.04	EM	WEATHERFORD
9/23/2014	9,311.00	74.84	180.16	9,106.04	429.94	-429.96	-3.77	7.94	EM	WEATHERFORD
9/23/2014	9,342.00	76.88	180.13	9,113.61	460.00	-460.02	-3.84	6.58	EM	WEATHERFORD
9/23/2014	9,374.00	78.53	180.46	9,120.42	491.27	-491.28	-4.01	5.25	EM	WEATHERFORD
9/23/2014	9,405.00	79.73	180.43	9,126.27	521.71	-521.73	-4.24	3.87	EM	WEATHERFORD
9/23/2014	9,437.00	82.78	180.90	9,131.13	553.33	-553.35	-4.61	9.64	EM	WEATHERFORD
9/23/2014	9,469.00	85.03	180.82	9,134.53	585.14	-585.16	-5.09	7.04	EM	WEATHERFORD
9/23/2014	9,500.00	87.20	181.04	9,136.63	616.06	-616.09	-5.59	7.04	EM	WEATHERFORD
9/23/2014	9,521.00	88.04	181.80	9,137.50	637.03	-637.06	-6.11	5.39	EM	WEATHERFORD
9/23/2014	9,553.00	88.53	182.17	9,138.46	668.99	-669.03	-7.22	1.92	EM	WEATHERFORD
9/23/2014	9,584.00	88.46	182.05	9,139.28	699.96	-700.00	-8.36	0.45	EM	WEATHERFORD
9/23/2014	9,616.00	89.30	181.78	9,139.90	731.93	-731.97	-9.43	2.76	EM	WEATHERFORD
9/23/2014	9,679.00	92.52	181.91	9,138.90	794.87	-794.92	-11.45	5.12	EM	WEATHERFORD
9/23/2014	9,774.00	92.38	181.77	9,134.84	889.72	-889.79	-14.50	0.21	EM	WEATHERFORD
9/23/2014	9,868.00	91.61	181.10	9,131.57	983.63	-983.70	-16.85	1.09	EM	WEATHERFORD
9/23/2014	9,963.00	89.86	180.14	9,130.35	1,078.60	-1,078.68	-17.88	2.10	EM	WEATHERFORD
9/23/2014	10,057.00	88.04	179.57	9,132.07	1,172.58	-1,172.66	-17.64	2.03	EM	WEATHERFORD
9/23/2014	10,152.00	87.90	179.59	9,135.44	1,267.52	-1,267.60	-16.95	0.15	EM	WEATHERFORD
9/23/2014	10,246.00	87.76	179.43	9,139.00	1,361.46	-1,361.53	-16.15	0.23	EM	WEATHERFORD
9/23/2014	10,341.00	88.95	179.49	9,141.72	1,456.41	-1,456.48	-15.25	1.25	EM	WEATHERFORD
9/23/2014	10,435.00	90.63	178.93	9,142.07	1,550.40	-1,550.47	-13.95	1.88	EM	WEATHERFORD
9/23/2014	10,530.00	90.42	178.28	9,141.20	1,645.38	-1,645.44	-11.64	0.72	EM	WEATHERFORD
9/23/2014	10,625.00	90.28	177.89	9,140.62	1,740.34	-1,740.38	-8.47	0.44	EM	WEATHERFORD
9/23/2014	10,719.00	90.42	177.99	9,140.04	1,834.29	-1,834.32	-5.09	0.18	EM	WEATHERFORD
9/23/2014	10,813.00	90.56	177.66	9,139.24	1,928.23	-1,928.25	-1.52	0.38	EM	WEATHERFORD
9/23/2014	10,908.00	90.56	177.53	9,138.31	2,023.15	-2,023.16	2.47	0.14	EM	WEATHERFORD
9/23/2014	11,003.00	90.77	177.45	9,137.21	2,118.07	-2,118.06	6.63	0.24	EM	WEATHERFORD
9/23/2014	11,097.00	90.21	177.18	9,136.40	2,211.98	-2,211.95	11.03	0.66	EM	WEATHERFORD
9/23/2014	11,192.00	92.38	177.97	9,134.26	2,306.88	-2,306.84	15.05	2.43	EM	WEATHERFORD
9/23/2014	11,287.00	92.59	177.88	9,130.14	2,401.74	-2,401.69	18.48	0.24	EM	WEATHERFORD
9/23/2014	11,381.00	92.10	178.20	9,126.29	2,495.62	-2,495.55	21.70	0.62	EM	WEATHERFORD
9/23/2014	11,476.00	92.17	179.57	9,122.75	2,590.54	-2,590.47	23.54	1.44	EM	WEATHERFORD
9/23/2014	11,570.00	91.96	179.94	9,119.37	2,684.48	-2,684.40	23.95	0.45	EM	WEATHERFORD
9/23/2014	11,665.00	91.33	179.74	9,116.64	2,779.44	-2,779.36	24.21	0.70	EM	WEATHERFORD
9/23/2014	11,760.00	91.96	179.78	9,113.91	2,874.40	-2,874.32	24.61	0.66	EM	WEATHERFORD
9/23/2014	11,854.00	92.24	180.56	9,110.47	2,968.33	-2,968.26	24.33	0.88	EM	WEATHERFORD
9/23/2014	11,949.00	91.82	180.69	9,107.10	3,063.26	-3,063.19	23.29	0.46	EM	WEATHERFORD
9/23/2014	12,044.00	91.40	180.46	9,104.43	3,158.21	-3,158.15	22.34	0.50	EM	WEATHERFORD
9/23/2014	12,138.00	90.91	180.36	9,102.54	3,252.19	-3,252.13	21.67	0.53	EM	WEATHERFORD
9/23/2014	12,233.00	90.49	181.14	9,101.38	3,347.17	-3,347.11	20.42	0.93	EM	WEATHERFORD
9/23/2014	12,328.00	89.30	180.68	9,101.55	3,442.15	-3,442.10	18.92	1.34	EM	WEATHERFORD



Directional Survey

District DELAWARE BASIN	County LEA	Field Name RATTLESNAKE (NM)	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location Sec. 26 T26S R34E	API/UWI 3002541246	Latitude (°) 32° 1' 17.545" N	Longitude (°) 103° 25' 59.582" W	Ground Elev... 3,222.90
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,247.90
				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
9/23/2014	12,422.00	88.74	181.58	9,103.16	3,536.11	-3,536.07	17.06	1.13	EM	WEATHERFORD
9/23/2014	12,517.00	89.51	181.34	9,104.61	3,631.05	-3,631.02	14.64	0.85	EM	WEATHERFORD
9/23/2014	12,611.00	90.56	181.49	9,104.55	3,725.01	-3,724.99	12.32	1.13	EM	WEATHERFORD
9/23/2014	12,706.00	89.86	182.28	9,104.20	3,819.95	-3,819.94	9.20	1.11	EM	WEATHERFORD
9/23/2014	12,801.00	90.14	181.71	9,104.20	3,914.88	-3,914.88	5.89	0.67	EM	WEATHERFORD
9/23/2014	12,895.00	90.14	180.75	9,103.97	4,008.84	-4,008.86	3.87	1.02	EM	WEATHERFORD
9/23/2014	12,990.00	89.65	178.06	9,104.15	4,103.83	-4,103.84	4.86	2.88	EM	WEATHERFORD
9/23/2014	13,085.00	90.49	178.01	9,104.03	4,198.79	-4,198.79	8.12	0.89	EM	WEATHERFORD
9/23/2014	13,179.00	90.00	178.29	9,103.63	4,292.75	-4,292.74	11.15	0.60	EM	WEATHERFORD
9/23/2014	13,274.00	89.23	178.62	9,104.27	4,387.72	-4,387.70	13.71	0.88	EM	WEATHERFORD
9/23/2014	13,368.00	90.35	179.31	9,104.61	4,481.71	-4,481.68	15.41	1.40	EM	WEATHERFORD
9/23/2014	13,463.00	90.00	179.05	9,104.32	4,576.70	-4,576.67	16.77	0.46	EM	WEATHERFORD
9/23/2014	13,558.00	89.44	179.13	9,104.79	4,671.69	-4,671.66	18.28	0.60	EM	WEATHERFORD