



Well Name: JAYHAWK 7-6 FED FEE COM 8H

Sub-Division DELAWARE BASIN		Region LEA COUNTY CORE		Field Name RATTLESNAKE DBBU		County LEA		State/Province NM					
Surface Legal Location 7-26S-34E		API/UWI 3002545539		Latitude (°) 32° 3' 8.487" N		Longitude (°) 103° 30' 26.214" W		Orig KB Elevation (ft) 3,398.20		Ground Elev MSL (ft) 3,373.20		KB - GL (ft) 25.00	
Wellbores													
Wellbore Name OH		Parent Wellbore				SAP Well ID				Vertical Section Direction (°) 2.17			
Kick Offs & Key Depths													
Date 4/2/2019				Type CURVE				Top Depth (ftKB) 12,288.0					
Date 4/4/2019				Type CURVE				Top Depth (ftKB) 12,239.0					
Actual Deviation Survey COMPOSITE OH, Proposed? No				Definitive? No		Proposed? No		Proposed Deviation Survey COMPOSITE WELL PLAN - OH, Proposed? Yes					
Deviation Survey													
Date 2/14/2019		Description COMPOSITE OH											
MD Tie In (ftKB) 0.00		TVD Tie In (ftKB) 0.00		Inclination Tie In (°) 0.00		Azimuth Tie In (°) 0.00		NSTie In (ft) 0.00		EWTie In (ft) 0.00			
Survey Data													
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company			
2/14/2019	124.00	0.40	59.30	124.00	0.23	0.22	0.37	0.32	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	216.00	0.50	77.60	216.00	0.51	0.47	1.04	0.19	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	307.00	0.50	86.10	306.99	0.65	0.58	1.82	0.08	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	399.00	0.60	83.20	398.99	0.77	0.67	2.70	0.11	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	490.00	0.70	85.50	489.98	0.91	0.77	3.73	0.11	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	582.00	0.70	111.60	581.98	0.79	0.60	4.81	0.34	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	674.00	0.90	112.70	673.97	0.35	0.12	6.00	0.22	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	765.00	1.00	115.60	764.95	-0.22	-0.50	7.38	0.12	MWD	TOTAL DIRECTIONAL SERV...			
2/14/2019	838.00	1.00	111.00	837.94	-0.68	-1.00	8.55	0.11	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	968.00	0.70	114.50	967.93	-1.35	-1.74	10.33	0.23	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,059.00	0.60	109.10	1,058.92	-1.70	-2.13	11.28	0.13	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,150.00	0.70	100.50	1,149.92	-1.92	-2.38	12.28	0.15	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,241.00	0.60	91.40	1,240.91	-1.99	-2.50	13.30	0.16	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,333.00	0.40	78.90	1,332.91	-1.91	-2.45	14.10	0.25	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,425.00	0.30	86.70	1,424.91	-1.81	-2.37	14.66	0.12	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,517.00	1.50	153.80	1,516.89	-2.85	-3.44	15.43	1.53	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,609.00	2.70	157.50	1,608.83	-5.88	-6.52	16.79	1.31	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,701.00	4.90	158.40	1,700.62	-11.44	-12.17	19.07	2.39	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,795.00	6.50	158.10	1,794.16	-19.98	-20.84	22.53	1.70	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,889.00	7.10	156.40	1,887.49	-30.07	-31.10	26.84	0.67	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	1,983.00	6.90	155.10	1,980.79	-40.33	-41.55	31.54	0.27	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,078.00	6.90	155.30	2,075.10	-50.50	-51.91	36.33	0.03	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,172.00	6.70	154.60	2,168.44	-60.40	-61.99	41.04	0.23	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,265.00	7.80	145.10	2,260.70	-70.24	-72.07	46.98	1.75	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,360.00	8.70	141.50	2,354.72	-80.83	-82.98	55.14	1.09	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,455.00	9.10	139.60	2,448.57	-91.82	-94.33	64.48	0.52	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,549.00	9.40	139.40	2,541.35	-102.93	-105.81	74.29	0.32	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,643.00	9.90	137.90	2,634.02	-114.35	-117.64	84.71	0.60	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,737.00	9.50	138.00	2,726.68	-125.70	-129.40	95.32	0.43	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,832.00	8.90	137.90	2,820.46	-136.58	-140.68	105.49	0.63	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	2,926.00	9.20	137.90	2,913.29	-147.17	-151.65	115.40	0.32	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,021.00	8.70	139.30	3,007.13	-157.87	-162.73	125.18	0.57	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,115.00	7.60	142.10	3,100.18	-167.84	-173.03	133.63	1.24	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,209.00	8.50	142.30	3,193.25	-177.93	-183.43	141.70	0.96	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,303.00	7.70	144.10	3,286.31	-188.22	-194.03	149.64	0.89	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,397.00	7.60	147.90	3,379.48	-198.31	-204.39	156.64	0.55	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,491.00	7.80	147.70	3,472.63	-208.71	-215.05	163.35	0.21	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,585.00	7.20	149.80	3,565.82	-218.94	-225.53	169.72	0.70	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,679.00	7.30	152.00	3,659.07	-229.08	-235.90	175.49	0.31	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,773.00	7.60	149.80	3,752.28	-239.50	-246.54	181.42	0.44	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,867.00	6.70	139.30	3,845.55	-248.77	-256.07	188.12	1.68	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	3,961.00	7.50	132.10	3,938.83	-256.72	-264.34	196.25	1.27	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,055.00	7.30	132.50	4,032.05	-264.53	-272.49	205.20	0.22	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,149.00	7.00	125.70	4,125.32	-271.55	-279.87	214.26	0.95	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,243.00	7.30	125.80	4,218.59	-278.03	-286.70	223.75	0.32	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,337.00	7.40	127.50	4,311.82	-284.83	-293.88	233.40	0.25	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,431.00	7.60	126.80	4,405.01	-291.87	-301.29	243.18	0.23	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,525.00	7.40	131.70	4,498.21	-299.25	-309.04	252.68	0.71	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,620.00	8.60	126.70	4,592.28	-307.17	-317.36	262.94	1.46	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,714.00	8.00	139.90	4,685.31	-316.00	-326.56	272.79	2.12	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,808.00	6.60	142.70	4,778.54	-325.01	-335.86	280.28	1.54	MWD	TOTAL DIRECTIONAL SERV...			
3/24/2019	4,901.00	6.80	138.00	4,870.91	-333.08	-344.21	287.20	0.63	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	4,995.00	7.30	141.50	4,964.20	-341.61	-353.01	294.64	0.70	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,089.00	7.80	146.30	5,057.38	-351.30	-363.00	301.90	0.86	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,183.00	6.90	151.30	5,150.61	-361.32	-373.26	308.15	1.17	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,277.00	6.00	153.50	5,244.02	-370.48	-382.60	313.05	0.99	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,371.00	5.20	159.80	5,337.57	-378.73	-391.00	316.72	1.07	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,466.00	5.20	160.00	5,432.18	-386.69	-399.09	319.67	0.02	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,560.00	6.60	152.80	5,525.68	-395.35	-407.89	323.60	1.68	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,654.00	7.60	149.70	5,618.96	-405.30	-418.06	329.21	1.14	MWD	TOTAL DIRECTIONAL SERV...			
3/25/2019	5,748.00	8.50	146.80	5,712.03	-416.21	-429.25	336.15	1.05	MWD	TOTAL DIRECTIONAL SERV...			
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Report Printed: 12/20/2019													



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			Ground Elev MSL (ft) 3,373.20	KB - GL (ft) 25.00

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
3/25/2019	5,842.00	8.40	146.20	5,805.01	-427.43	-440.76	343.77	0.14	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	5,936.00	7.80	146.20	5,898.07	-438.15	-451.77	351.14	0.64	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,030.00	7.50	146.70	5,991.23	-448.31	-462.20	358.05	0.33	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,124.00	7.30	147.00	6,084.45	-458.19	-472.33	364.68	0.22	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,218.00	7.20	148.30	6,177.70	-467.96	-482.35	371.02	0.20	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,312.00	6.40	146.80	6,271.04	-477.12	-491.75	376.99	0.87	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,406.00	5.90	147.20	6,364.50	-485.35	-500.19	382.47	0.53	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,500.00	5.40	147.40	6,458.04	-492.95	-507.98	387.47	0.53	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,594.00	5.10	149.10	6,551.64	-500.08	-515.29	392.00	0.36	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,688.00	4.90	148.30	6,645.29	-506.92	-522.29	396.26	0.23	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,782.00	4.80	147.90	6,738.95	-513.50	-529.04	400.46	0.11	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,876.00	4.70	149.90	6,832.63	-520.01	-535.70	404.48	0.21	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	6,970.00	4.60	150.80	6,926.32	-526.48	-542.33	408.25	0.13	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,065.00	4.40	152.40	7,021.03	-532.90	-548.88	411.80	0.25	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,159.00	4.30	148.00	7,114.75	-538.94	-555.07	415.33	0.37	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,253.00	4.30	143.80	7,208.49	-544.62	-560.90	419.28	0.33	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,347.00	4.20	141.60	7,302.23	-550.00	-566.44	423.50	0.20	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,441.00	3.00	132.10	7,396.05	-554.19	-570.79	427.46	1.42	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,535.00	2.50	127.10	7,489.94	-556.94	-573.67	430.92	0.59	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,629.00	2.50	128.10	7,583.85	-559.32	-576.17	434.17	0.05	MWD	TOTAL DIRECTIONAL SERV...
3/25/2019	7,724.00	2.20	121.60	7,678.77	-561.43	-578.41	437.36	0.42	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	7,818.00	2.20	115.80	7,772.70	-563.04	-580.14	440.52	0.24	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	7,912.00	2.20	113.40	7,866.63	-564.42	-581.64	443.80	0.10	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,006.00	1.00	103.40	7,960.59	-565.23	-582.55	446.25	1.31	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,100.00	0.70	110.70	8,054.58	-565.57	-582.94	447.59	0.34	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,194.00	0.80	131.20	8,148.57	-566.17	-583.58	448.62	0.30	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,289.00	0.90	144.70	8,243.56	-567.18	-584.62	449.55	0.23	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,383.00	1.00	156.70	8,337.55	-568.51	-585.98	450.30	0.24	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,477.00	0.80	150.30	8,431.54	-569.80	-587.30	450.95	0.24	MWD	TOTAL DIRECTIONAL SERV...
3/26/2019	8,571.00	0.80	145.30	8,525.53	-570.89	-588.41	451.65	0.07	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	8,666.00	0.30	62.20	8,620.53	-571.29	-588.84	452.24	0.86	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	8,760.00	0.20	83.30	8,714.52	-571.14	-588.71	452.63	0.14	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	8,854.00	0.30	110.30	8,808.52	-571.20	-588.77	453.02	0.16	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	8,948.00	0.30	114.90	8,902.52	-571.37	-588.96	453.47	0.03	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,042.00	0.40	73.80	8,996.52	-571.36	-588.97	454.01	0.28	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,136.00	0.50	81.60	9,090.52	-571.18	-588.82	454.73	0.12	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,230.00	0.50	99.90	9,184.51	-571.16	-588.83	455.54	0.17	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,324.00	0.20	93.50	9,278.51	-571.22	-588.91	456.11	0.32	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,418.00	0.80	305.90	9,372.51	-570.86	-588.54	455.74	1.04	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,512.00	0.80	298.80	9,466.50	-570.20	-587.84	454.64	0.11	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,607.00	0.60	294.90	9,561.49	-569.71	-587.31	453.60	0.22	MWD	TOTAL DIRECTIONAL SERV...
3/27/2019	9,702.00	0.30	283.90	9,656.49	-569.47	-587.04	452.91	0.33	MWD	TOTAL DIRECTIONAL SERV...
3/28/2019	9,796.00	0.10	286.00	9,750.49	-569.40	-586.96	452.59	0.21	MWD	TOTAL DIRECTIONAL SERV...
3/28/2019	9,890.00	0.20	20.10	9,844.49	-569.22	-586.78	452.57	0.24	MWD	TOTAL DIRECTIONAL SERV...
3/28/2019	9,984.00	0.40	36.30	9,938.49	-568.79	-586.36	452.82	0.23	MWD	TOTAL DIRECTIONAL SERV...
3/28/2019	10,078.00	0.50	50.20	10,032.49	-568.25	-585.83	453.33	0.16	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,172.00	1.00	89.20	10,126.48	-567.93	-585.56	454.47	0.73	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,266.00	1.00	100.20	10,220.46	-568.00	-585.69	456.09	0.20	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,360.00	1.90	105.80	10,314.43	-568.49	-586.26	458.40	0.97	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,454.00	2.40	105.70	10,408.37	-569.31	-587.22	461.79	0.53	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,548.00	2.60	98.90	10,502.28	-570.02	-588.08	465.80	0.38	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,641.00	1.60	87.00	10,595.21	-570.15	-588.34	469.18	1.17	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,735.00	1.30	19.20	10,689.19	-569.02	-587.27	470.84	1.74	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,829.00	1.50	3.20	10,783.16	-566.77	-585.03	471.26	0.46	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	10,923.00	1.20	20.30	10,877.14	-564.60	-582.88	471.67	0.53	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,017.00	1.00	326.60	10,971.12	-563.00	-581.27	471.56	1.07	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,111.00	0.70	277.10	11,065.11	-562.28	-580.51	470.54	0.81	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,205.00	1.00	257.80	11,159.10	-562.44	-580.62	469.16	0.44	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,299.00	1.20	257.20	11,253.08	-562.89	-581.01	467.40	0.21	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,393.00	1.00	273.50	11,347.07	-563.13	-581.18	465.62	0.39	MWD	TOTAL DIRECTIONAL SERV...
3/29/2019	11,487.00	1.70	268.70	11,441.04	-563.19	-581.16	463.41	0.75	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	11,582.00	1.70	275.20	11,536.00	-563.21	-581.06	460.60	0.20	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	11,675.00	1.60	277.70	11,628.96	-563.01	-580.76	457.94	0.13	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	11,769.00	2.20	259.10	11,722.91	-563.29	-580.93	454.87	0.91	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	11,864.00	2.60	265.30	11,817.82	-563.96	-581.45	450.93	0.50	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	11,958.00	2.80	281.30	11,911.72	-563.85	-581.18	446.55	0.83	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	12,052.00	2.80	282.50	12,005.61	-563.07	-580.23	442.06	0.06	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	12,146.00	2.90	275.90	12,099.49	-562.51	-579.49	437.45	0.36	MWD	TOTAL DIRECTIONAL SERV...
3/30/2019	12,180.00	2.70	271.70	12,133.45	-562.46	-579.37	435.80	0.84	MWD	TOTAL DIRECTIONAL SERV...
4/2/2019	12,239.00	2.50	267.70	12,192.39	-562.57	-579.39	433.12	0.46	MWD	TOTAL DIRECTIONAL SERV...
4/2/2019	12,334.00	5.20	315.80	12,287.19	-559.76	-576.38	428.05	4.20	MWD	TOTAL DIRECTIONAL SERV...
4/2/2019	12,427.00	17.30	327.70	12,378.24	-545.40	-561.61	417.68	13.18	MWD	TOTAL DIRECTIONAL SERV...
4/2/2019	12,522.00	28.70	334.70	12,465.56	-513.40	-528.94	400.32	12.32	MWD	TOTAL DIRECTIONAL SERV...



Well Name: JAYHAWK 7-6 FED FEE COM 8H

Sub-Division DELAWARE BASIN		Region LEA COUNTY CORE		Field Name RATTLESNAKE DBBU		County LEA		State/Province NM		
Surface Legal Location 7-26S-34E		API/UWI 3002545539	Latitude (°) 32° 3' 8.487" N	Longitude (°) 103° 30' 26.214" W		Orig KB Elevation (ft) 3,398.20		Ground Elev MSL (ft) 3,373.20		KB - GL (ft) 25.00
Summary Data										

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS ("/100ft)	Survey Tool	Survey Company
4/2/2019	12,615.00	39.40	344.20	12,542.56	-465.34	-480.17	382.68	12.82	MWD	TOTAL DIRECTIONAL SERV...
4/2/2019	12,709.00	48.70	357.20	12,610.19	-401.52	-415.93	372.79	13.76	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	12,803.00	60.80	3.10	12,664.37	-324.99	-339.36	373.29	13.85	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	12,897.00	71.10	5.40	12,702.63	-239.33	-253.89	379.71	11.18	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	12,992.00	79.10	6.20	12,727.04	-147.78	-162.63	388.99	8.46	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,086.00	89.00	5.60	12,736.77	-54.60	-69.75	398.58	10.55	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,180.00	89.30	4.40	12,738.16	39.27	23.88	406.78	1.32	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,274.00	90.90	4.40	12,738.00	133.19	117.60	413.99	1.70	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,368.00	90.70	4.50	12,736.69	227.11	211.31	421.28	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,462.00	89.50	3.40	12,736.52	321.06	305.08	427.76	1.73	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,556.00	91.20	3.30	12,735.95	415.04	398.92	433.25	1.81	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,650.00	90.60	3.30	12,734.47	509.01	492.75	438.66	0.64	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,744.00	89.40	3.00	12,734.47	602.99	586.61	443.82	1.32	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,838.00	91.00	2.60	12,734.14	696.98	680.49	448.42	1.75	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	13,932.00	90.90	2.40	12,732.59	790.97	774.39	452.51	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	14,026.00	90.70	1.50	12,731.27	884.96	868.32	455.71	0.98	MWD	TOTAL DIRECTIONAL SERV...
4/3/2019	14,120.00	90.90	1.60	12,729.96	978.94	962.28	458.26	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,214.00	91.10	1.00	12,728.32	1,072.92	1,056.24	460.39	0.67	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,308.00	91.30	1.20	12,726.35	1,166.88	1,150.20	462.19	0.30	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,402.00	89.40	358.80	12,725.78	1,260.80	1,244.19	462.19	3.26	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,496.00	89.50	358.60	12,726.68	1,354.62	1,338.16	460.06	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,590.00	89.80	358.40	12,727.25	1,448.43	1,432.13	457.60	0.38	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,684.00	89.40	357.30	12,727.91	1,542.16	1,526.06	454.07	1.25	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,778.00	88.60	357.10	12,729.55	1,635.79	1,619.93	449.48	0.88	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,872.00	90.10	359.20	12,730.62	1,729.54	1,713.87	446.45	2.75	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	14,966.00	88.90	359.50	12,731.44	1,823.42	1,807.86	445.38	1.32	MWD	TOTAL DIRECTIONAL SERV...
4/4/2019	15,061.00	89.30	358.90	12,732.93	1,918.28	1,902.83	444.05	0.76	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,179.00	89.40	359.50	12,734.27	2,036.12	2,020.81	442.41	0.52	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,273.00	89.20	0.90	12,735.42	2,130.05	2,114.80	442.74	1.50	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,367.00	87.70	0.90	12,737.96	2,223.99	2,208.76	444.21	1.60	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,461.00	87.60	359.90	12,741.81	2,317.87	2,302.67	444.87	1.07	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,555.00	90.60	0.10	12,743.29	2,411.78	2,396.65	444.87	3.20	MWD	TOTAL DIRECTIONAL SERV...
4/5/2019	15,649.00	91.60	359.60	12,741.49	2,505.68	2,490.63	444.62	1.19	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	15,743.00	91.10	0.40	12,739.27	2,599.59	2,584.60	444.62	1.00	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	15,837.00	89.30	359.60	12,738.94	2,693.51	2,678.60	444.62	2.10	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	15,931.00	90.30	0.60	12,739.27	2,787.45	2,772.60	444.79	1.50	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,025.00	88.70	358.20	12,740.09	2,881.33	2,866.58	443.80	3.07	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,120.00	89.00	359.00	12,742.00	2,976.12	2,961.53	441.48	0.90	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,213.00	89.90	0.10	12,742.89	3,069.02	3,054.52	440.75	1.53	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,308.00	90.00	0.70	12,742.97	3,163.97	3,149.52	441.41	0.64	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,402.00	89.20	1.40	12,743.63	3,257.95	3,243.50	443.14	1.13	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,496.00	90.90	2.00	12,743.55	3,351.94	3,337.45	445.92	1.92	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,590.00	88.70	0.50	12,743.88	3,445.92	3,431.42	447.98	2.83	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,684.00	90.00	0.90	12,744.94	3,539.88	3,525.41	449.12	1.45	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,778.00	90.60	0.30	12,744.45	3,633.85	3,619.40	450.11	0.90	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,872.00	89.40	357.10	12,744.45	3,727.66	3,713.36	447.98	3.64	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	16,966.00	89.30	358.20	12,745.52	3,821.36	3,807.27	444.12	1.17	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	17,061.00	89.40	357.30	12,746.59	3,916.07	3,902.19	440.39	0.95	MWD	TOTAL DIRECTIONAL SERV...
4/6/2019	17,155.00	88.20	356.30	12,748.56	4,009.63	3,996.02	435.15	1.66	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,249.00	88.90	356.40	12,750.94	4,103.12	4,089.80	429.16	0.75	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,343.00	89.60	357.20	12,752.17	4,196.70	4,183.65	423.92	1.13	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,437.00	90.40	357.70	12,752.17	4,290.38	4,277.55	419.74	1.00	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,531.00	91.10	358.60	12,750.94	4,384.14	4,371.49	416.70	1.21	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,625.00	89.90	359.40	12,750.12	4,477.99	4,465.47	415.06	1.53	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,719.00	89.70	359.40	12,750.45	4,571.88	4,559.47	414.08	0.21	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,813.00	90.30	359.60	12,750.45	4,665.77	4,653.46	413.26	0.67	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	17,907.00	92.00	358.70	12,748.56	4,759.62	4,747.43	411.86	2.05	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,001.00	88.20	356.30	12,748.40	4,853.28	4,841.32	407.76	4.78	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,095.00	89.80	357.80	12,750.04	4,946.89	4,935.17	402.93	2.33	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,189.00	91.70	359.10	12,748.81	5,040.68	5,029.12	400.38	2.45	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,283.00	91.90	359.40	12,745.86	5,134.51	5,123.07	399.15	0.38	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,378.00	92.10	360.00	12,742.54	5,229.36	5,218.01	398.66	0.67	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,472.00	92.00	0.20	12,739.18	5,323.24	5,311.95	398.82	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,566.00	92.60	359.80	12,735.41	5,417.10	5,405.87	398.82	0.77	MWD	TOTAL DIRECTIONAL SERV...
4/7/2019	18,660.00	92.30	359.60	12,731.39	5,510.92	5,499.78	398.33	0.38	MWD	TOTAL DIRECTIONAL SERV...
4/8/2019	18,754.00	92.00	0.90	12,727.86	5,604.80	5,593.71	398.74	1.42	MWD	TOTAL DIRECTIONAL SERV...
4/8/2019	18,848.00	90.00	0.30	12,726.22	5,698.75	5,687.69	399.72	2.22	MWD	TOTAL DIRECTIONAL SERV...
4/8/2019	18,942.00	88.90	359.30	12,727.12	5,792.66	5,781.68	399.40	1.58	MWD	TOTAL DIRECTIONAL SERV...
4/8/2019	19,036.00	88.80	358.50	12,729.01	5,886.49	5,875.65	397.59	0.86	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,130.00	90.10	358.20	12,729.91	5,980.27	5,969.60	394.88	1.42	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,225.00	91.10	0.10	12,728.92	6,075.13	6,064.58	393.48	2.26	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,319.00	90.60	359.90	12,727.52	6,169.05	6,158.57	393.48	0.57	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,412.00	90.60	1.40	12,726.55	6,262.01	6,251.55	394.53	1.61	MWD	TOTAL DIRECTIONAL SERV...



Well Name: JAYHAWK 7-6 FED FEE COM 8H

Sub-Division DELAWARE BASIN	Region LEA COUNTY CORE	Field Name RATTLESNAKE DBBU	County LEA	State/Province NM
Surface Legal Location 7-26S-34E	API/UWI 3002545539	Latitude (°) 32° 3' 8.487" N	Longitude (°) 103° 30' 26.214" W	Orig KB Elevation (ft) 3,398.20
			Ground Elev MSL (ft) 3,373.20	KB - GL (ft) 25.00

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
4/9/2019	19,507.00	89.50	1.40	12,726.47	6,357.00	6,346.52	396.85	1.16	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,600.00	90.90	1.30	12,726.14	6,449.99	6,439.50	399.04	1.51	MWD	TOTAL DIRECTIONAL SERV...
4/9/2019	19,694.00	90.40	1.50	12,725.07	6,543.97	6,533.46	401.34	0.57	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	19,788.00	90.10	359.80	12,724.66	6,637.93	6,627.45	402.40	1.84	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	19,883.00	89.20	0.20	12,725.24	6,732.86	6,722.45	402.40	1.04	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	19,977.00	90.70	0.20	12,725.33	6,826.81	6,816.44	402.73	1.60	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,070.00	91.00	0.40	12,723.95	6,919.75	6,909.43	403.22	0.39	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,164.00	90.90	0.80	12,722.39	7,013.70	7,003.41	404.20	0.44	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,258.00	89.70	0.50	12,721.90	7,107.66	7,097.41	405.27	1.32	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,352.00	90.70	0.30	12,721.57	7,201.61	7,191.40	405.93	1.08	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,446.00	90.30	1.00	12,720.75	7,295.58	7,285.39	406.99	0.86	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,541.00	90.00	1.30	12,720.50	7,390.56	7,380.37	408.90	0.45	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,635.00	90.60	0.20	12,720.01	7,484.53	7,474.36	410.13	1.33	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,729.00	90.00	360.00	12,719.51	7,578.47	7,568.36	410.29	0.67	MWD	TOTAL DIRECTIONAL SERV...
4/10/2019	20,823.00	90.80	359.30	12,718.86	7,672.37	7,662.35	409.72	1.13	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	20,918.00	90.80	359.40	12,717.53	7,767.25	7,757.34	408.64	0.11	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,011.00	90.40	359.80	12,716.56	7,860.15	7,850.33	407.99	0.61	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,104.00	90.60	358.80	12,715.75	7,953.03	7,943.32	406.86	1.10	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,198.00	90.20	358.60	12,715.09	8,046.85	8,037.29	404.72	0.48	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,293.00	91.90	359.30	12,713.35	8,141.68	8,132.25	402.98	1.94	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,387.00	89.30	358.30	12,712.37	8,235.50	8,226.22	401.02	2.96	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,481.00	89.40	358.80	12,713.43	8,329.31	8,320.18	398.64	0.54	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,575.00	90.70	359.40	12,713.35	8,423.17	8,414.17	397.16	1.52	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,669.00	92.50	360.00	12,710.73	8,517.05	8,508.13	396.67	2.02	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,763.00	90.20	358.80	12,708.51	8,610.90	8,602.09	395.68	2.76	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,857.00	90.70	359.10	12,707.77	8,704.75	8,696.07	393.96	0.62	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	21,951.00	89.40	357.90	12,707.69	8,798.55	8,790.03	391.50	1.88	MWD	TOTAL DIRECTIONAL SERV...
4/11/2019	22,045.00	89.50	358.10	12,708.59	8,892.30	8,883.97	388.22	0.24	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,139.00	91.70	359.00	12,707.61	8,986.10	8,977.93	385.84	2.53	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,233.00	90.90	359.10	12,705.48	9,079.94	9,071.89	384.28	0.86	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,327.00	89.90	358.30	12,704.82	9,173.76	9,165.86	382.15	1.36	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,421.00	89.80	357.10	12,705.07	9,267.47	9,259.78	378.38	1.28	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,515.00	90.50	356.10	12,704.82	9,361.03	9,353.62	372.80	1.30	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,610.00	89.70	356.50	12,704.65	9,455.53	9,448.42	366.67	0.94	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,704.00	89.00	355.30	12,705.72	9,548.96	9,542.17	359.95	1.48	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,798.00	89.30	355.20	12,707.11	9,642.26	9,635.84	352.17	0.34	MWD	TOTAL DIRECTIONAL SERV...
4/12/2019	22,892.00	91.20	355.00	12,706.70	9,735.54	9,729.49	344.14	2.03	MWD	TOTAL DIRECTIONAL SERV...
4/13/2019	22,987.00	92.00	354.70	12,704.05	9,829.73	9,824.07	335.62	0.90	MWD	TOTAL DIRECTIONAL SERV...
4/13/2019	23,043.00	91.50	354.90	12,702.34	9,885.24	9,879.81	330.54	0.96	MWD	TOTAL DIRECTIONAL SERV...
4/13/2019	23,093.00	91.50	354.90	12,701.03	9,934.82	9,929.59	326.10	0.00	BIT	