



HOBBS OCD

JAN 21 2020

Directional Survey

DELAWARE BASIN UNRESTRICTED

Well Name: FLAGLER 8 FED COM 36H

Sub-Division DELAWARE BASIN	Region EDDY COUNTY CORE	Field Name COTTON DRAW SOUTH - CD	County LEA	State/Province NM		
Surface Legal Location 8-25S-33E	API/UWI 3002544998	Latitude (°) 32° 8' 19.867" N	Longitude (°) 103° 36' 3.371" W	Orig KB Elevation (ft) 3,496.60	Ground Elev MSL (ft) 3,466.60	KB - GL (ft) 30.00

Wellbores			
Wellbore Name OH	Parent Wellbore	SAP Well ID	Vertical Section Direction (°) 359.62

Kick Offs & Key Depths			
Date 8/28/2019	Type CURVE	Top Depth (ftKB) 9,117.6	
Date 8/30/2019	Type CURVE	Top Depth (ftKB) 1,784.0	

Actual Deviation Survey COMPOSITE OH, Proposed? No	Definitive? No	Proposed? No	Proposed Deviation Survey COMPOSITE WELL PLAN - OH, Proposed? Yes
---	-------------------	-----------------	--

Deviation Survey					
Date 8/28/2019	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	EW Tie In (ft) 0.00

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
8/28/2019	166.00	0.84	319.32	165.99	0.93	0.92	-0.79	0.51	MWD	WELLBENDERS DIRECTIO...
8/28/2019	266.00	0.79	322.93	265.98	2.04	2.03	-1.69	0.07	MWD	WELLBENDERS DIRECTIO...
8/28/2019	358.00	0.62	316.16	357.98	2.91	2.89	-2.41	0.21	MWD	WELLBENDERS DIRECTIO...
8/28/2019	450.00	0.70	320.64	449.97	3.71	3.69	-3.11	0.10	MWD	WELLBENDERS DIRECTIO...
8/28/2019	543.00	0.75	322.31	542.96	4.63	4.61	-3.85	0.06	MWD	WELLBENDERS DIRECTIO...
8/28/2019	635.00	0.66	317.12	634.96	5.50	5.47	-4.58	0.12	MWD	WELLBENDERS DIRECTIO...
8/28/2019	727.00	0.53	334.97	726.95	6.28	6.25	-5.12	0.24	MWD	WELLBENDERS DIRECTIO...
8/28/2019	819.00	0.57	334.61	818.95	7.08	7.05	-5.49	0.04	MWD	WELLBENDERS DIRECTIO...
8/28/2019	911.00	0.57	326.00	910.94	7.88	7.84	-5.94	0.09	MWD	WELLBENDERS DIRECTIO...
8/28/2019	1,005.00	0.57	323.10	1,004.94	8.64	8.60	-6.49	0.03	MWD	WELLBENDERS DIRECTIO...
8/29/2019	1,055.00	0.44	312.29	1,054.94	8.97	8.93	-6.78	0.32	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,245.00	0.35	317.56	1,244.93	9.90	9.85	-7.71	0.05	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,337.00	0.48	316.16	1,336.93	10.39	10.33	-8.17	0.14	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,429.00	0.48	275.46	1,428.93	10.71	10.65	-8.82	0.36	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,521.00	0.48	272.39	1,520.92	10.76	10.70	-9.59	0.03	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,613.00	0.31	286.54	1,612.92	10.85	10.79	-10.21	0.21	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,803.00	1.19	140.46	1,802.91	9.47	9.41	-9.45	0.77	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,897.00	2.02	142.31	1,896.87	7.40	7.35	-7.81	0.88	MWD	WELLBENDERS DIRECTIO...
8/30/2019	1,992.00	2.81	140.02	1,991.79	4.27	4.24	-5.29	0.84	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,086.00	3.38	141.78	2,085.65	0.31	0.30	-2.10	0.61	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,181.00	3.34	142.31	2,180.49	-4.10	-4.09	1.33	0.05	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,275.00	3.38	160.50	2,274.33	-8.90	-8.87	3.93	1.13	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,370.00	3.25	167.18	2,369.17	-14.17	-14.14	5.46	0.43	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,464.00	3.21	161.21	2,463.02	-19.27	-19.23	6.90	0.36	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,559.00	2.99	160.33	2,557.88	-24.14	-24.08	8.59	0.24	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,653.00	3.38	162.00	2,651.73	-29.09	-29.02	10.27	0.43	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,748.00	3.52	164.11	2,746.56	-34.57	-34.49	11.93	0.20	MWD	WELLBENDERS DIRECTIO...
8/30/2019	2,844.00	3.16	161.65	2,842.40	-39.93	-39.84	13.57	0.40	MWD	WELLBENDERS DIRECTIO...
8/31/2019	2,939.00	3.08	164.63	2,937.26	-44.88	-44.78	15.08	0.19	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,033.00	3.03	158.57	3,031.13	-49.64	-49.53	16.65	0.35	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,128.00	2.68	156.20	3,126.01	-54.02	-53.90	18.47	0.39	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,223.00	3.65	151.54	3,220.86	-58.73	-58.59	20.80	1.06	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,318.00	4.18	152.68	3,315.64	-64.48	-64.33	23.83	0.56	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,412.00	3.82	155.41	3,409.41	-70.39	-70.22	26.71	0.43	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,507.00	4.04	162.79	3,504.19	-76.48	-76.29	29.02	0.58	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,601.00	4.13	169.03	3,597.95	-82.98	-82.78	30.64	0.48	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,696.00	3.43	174.21	3,692.74	-89.17	-88.96	31.58	0.82	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,791.00	2.90	171.49	3,787.60	-94.38	-94.17	32.22	0.58	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,884.00	2.86	156.28	3,880.48	-98.84	-98.62	33.50	0.82	MWD	WELLBENDERS DIRECTIO...
8/31/2019	3,979.00	2.42	163.40	3,975.38	-102.94	-102.71	35.03	0.58	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,074.00	2.68	153.21	4,070.29	-106.86	-106.62	36.60	0.55	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,168.00	3.12	152.68	4,164.17	-111.10	-110.85	38.77	0.47	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,263.00	2.64	146.79	4,259.05	-115.25	-114.98	41.15	0.59	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,358.00	3.96	158.75	4,353.89	-120.15	-119.87	43.54	1.56	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,452.00	4.31	165.43	4,447.64	-126.61	-126.31	45.60	0.63	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,546.00	4.00	158.92	4,541.40	-133.10	-132.79	47.67	0.60	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,641.00	4.44	170.08	4,636.14	-139.83	-139.50	49.50	0.98	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,736.00	4.75	176.41	4,730.84	-147.38	-147.05	50.38	0.63	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,830.00	2.86	199.61	4,824.63	-153.47	-153.14	49.83	2.55	MWD	WELLBENDERS DIRECTIO...
8/31/2019	4,955.00	2.02	202.95	4,949.51	-158.42	-158.11	47.93	0.68	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,111.00	2.15	212.71	5,105.41	-163.40	-163.10	45.27	0.24	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,205.00	2.20	213.94	5,199.34	-166.37	-166.08	43.31	0.07	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,300.00	2.20	210.69	5,294.27	-169.44	-169.16	41.36	0.13	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,395.00	2.02	208.93	5,389.21	-172.46	-172.20	39.62	0.20	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,489.00	0.62	238.99	5,483.18	-174.16	-173.91	38.39	1.61	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,583.00	0.48	295.68	5,577.18	-174.25	-174.00	37.60	0.57	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,678.00	0.35	300.34	5,672.18	-173.92	-173.68	36.99	0.14	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,773.00	0.26	252.00	5,767.18	-173.84	-173.60	36.53	0.28	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,867.00	0.35	262.28	5,861.17	-173.94	-173.71	36.04	0.11	MWD	WELLBENDERS DIRECTIO...
9/2/2019	5,962.00	0.40	264.92	5,956.17	-174.01	-173.78	35.43	0.06	MWD	WELLBENDERS DIRECTIO...
9/2/2019	6,057.00	0.48	273.00	6,051.17	-174.01	-173.78	34.70	0.11	MWD	WELLBENDERS DIRECTIO...



Directional Survey

DELAWARE BASIN UNRESTRICTED

Well Name: FLAGLER 8 FED COM 36H

Sub-Division DELAWARE BASIN		Region EDDY COUNTY CORE		Field Name COTTON DRAW SOUTH - CD		County LEA		State/Province NM	
Surface Legal Location 8-25S-33E		API/UWI 3002544998		Latitude (°) 32° 8' 19.867" N	Longitude (°) 103° 36' 3.371" W	Orig KB Elevation (ft) 3,496.60		Ground Elev MSL (ft) 3,466.60	KB - GL (ft) 30.00

Survey Data											
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company	
9/2/2019	6,151.00	0.48	290.23	6,145.17	-173.85	-173.63	33.94	0.15	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,246.00	0.35	297.88	6,240.16	-173.57	-173.35	33.31	0.15	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,341.00	0.40	283.90	6,335.16	-173.35	-173.14	32.73	0.11	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,435.00	0.40	275.82	6,429.16	-173.24	-173.03	32.08	0.06	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,530.00	0.53	266.59	6,524.16	-173.22	-173.02	31.31	0.16	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,625.00	0.40	275.02	6,619.15	-173.22	-173.02	30.55	0.15	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,720.00	0.40	286.01	6,714.15	-173.09	-172.90	29.90	0.08	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,815.00	0.57	275.73	6,809.15	-172.95	-172.76	29.11	0.20	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	6,909.00	0.53	263.51	6,903.14	-172.94	-172.76	28.21	0.13	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,004.00	0.62	277.40	6,998.14	-172.92	-172.74	27.26	0.17	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,098.00	0.53	269.75	7,092.13	-172.85	-172.68	26.32	0.13	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,193.00	0.48	281.70	7,187.13	-172.77	-172.60	25.50	0.12	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,287.00	0.57	269.22	7,281.13	-172.69	-172.53	24.64	0.15	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,382.00	0.70	252.96	7,376.12	-172.86	-172.70	23.62	0.23	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,477.00	0.75	260.96	7,471.11	-173.12	-172.97	22.45	0.12	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,571.00	0.79	244.26	7,565.10	-173.49	-173.35	21.26	0.24	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,666.00	0.70	226.60	7,660.10	-174.16	-174.03	20.24	0.26	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,761.00	1.01	232.57	7,755.09	-175.06	-174.94	19.16	0.34	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,856.00	0.79	233.10	7,850.07	-175.96	-175.84	17.97	0.23	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	7,950.00	0.79	236.79	7,944.07	-176.69	-176.59	16.91	0.05	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	8,045.00	0.88	224.75	8,039.05	-177.56	-177.46	15.85	0.21	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	8,140.00	0.97	226.33	8,134.04	-178.63	-178.54	14.75	0.10	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	8,234.00	1.14	234.51	8,228.03	-179.71	-179.63	13.41	0.24	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	8,329.00	0.13	295.68	8,323.02	-180.21	-180.13	12.55	1.14	MWD	WELLBENDERS	DIRECTIO...
9/2/2019	8,424.00	0.22	125.35	8,418.02	-180.27	-180.19	12.60	0.37	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,518.00	0.53	123.59	8,512.02	-180.62	-180.53	13.11	0.33	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,613.00	0.53	128.42	8,607.01	-181.14	-181.05	13.82	0.05	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,708.00	0.70	148.37	8,702.01	-181.91	-181.82	14.47	0.29	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,802.00	0.62	164.90	8,796.00	-182.89	-182.80	14.90	0.22	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,896.00	0.79	174.30	8,889.99	-184.03	-183.93	15.10	0.22	MWD	WELLBENDERS	DIRECTIO...
9/3/2019	8,991.00	0.84	188.63	8,984.99	-185.37	-185.27	15.06	0.22	MWD	WELLBENDERS	DIRECTIO...
9/4/2019	9,117.00	4.00	359.31	9,110.90	-181.89	-181.79	14.87	3.83	MWD	WELLBENDERS	DIRECTIO...
9/4/2019	9,211.00	10.46	349.64	9,204.11	-170.19	-170.11	13.29	6.97	MWD	WELLBENDERS	DIRECTIO...
9/4/2019	9,306.00	17.67	353.60	9,296.20	-147.33	-147.26	10.13	7.65	MWD	WELLBENDERS	DIRECTIO...
9/4/2019	9,401.00	25.14	349.64	9,384.59	-113.07	-113.04	4.89	8.00	MWD	WELLBENDERS	DIRECTIO...
9/4/2019	9,432.00	28.40	350.52	9,412.26	-99.30	-99.28	2.49	10.59	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,465.00	31.12	351.05	9,440.91	-83.11	-83.11	-0.13	8.28	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,560.00	41.01	351.23	9,517.61	-27.86	-27.92	-8.73	10.41	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,655.00	53.45	350.96	9,581.99	40.97	40.84	-19.52	13.10	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,749.00	64.26	352.98	9,630.54	120.59	120.39	-30.66	11.65	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,844.00	78.11	352.10	9,661.10	209.60	209.33	-42.33	14.61	MWD	WELLBENDERS	DIRECTIO...
9/5/2019	9,885.00	84.92	351.40	9,667.15	249.75	249.43	-48.15	16.70	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	9,967.00	94.15	351.14	9,667.81	330.79	330.39	-60.58	11.26	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,062.00	94.51	351.05	9,660.64	424.47	423.98	-75.25	0.39	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,156.00	96.26	351.49	9,651.82	517.06	516.48	-89.45	1.92	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,251.00	97.01	351.58	9,640.84	610.48	609.81	-103.34	0.80	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,346.00	96.97	351.23	9,629.28	703.81	703.05	-117.43	0.37	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,440.00	97.71	351.49	9,617.27	796.07	795.22	-131.44	0.83	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,535.00	94.81	350.70	9,606.91	889.45	888.50	-146.06	3.16	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,630.00	92.75	351.67	9,600.65	983.21	982.17	-160.58	2.40	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,725.00	91.12	351.58	9,597.44	1,077.23	1,076.10	-174.41	1.72	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,819.00	90.99	352.02	9,595.71	1,170.34	1,169.12	-187.81	0.49	MWD	WELLBENDERS	DIRECTIO...
9/6/2019	10,913.00	91.60	354.04	9,593.59	1,263.69	1,262.40	-199.22	2.24	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,008.00	91.74	355.01	9,590.82	1,358.28	1,356.93	-208.28	1.03	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,103.00	91.65	355.36	9,588.01	1,452.95	1,451.55	-216.25	0.38	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,197.00	91.08	356.50	9,585.77	1,546.73	1,545.28	-222.92	1.36	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,291.00	90.51	358.87	9,584.47	1,640.66	1,639.19	-226.71	2.59	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,386.00	90.42	359.49	9,583.70	1,735.65	1,734.18	-228.07	0.66	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,480.00	90.77	358.61	9,582.72	1,829.64	1,828.16	-229.63	1.01	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,574.00	91.25	358.70	9,581.06	1,923.61	1,922.12	-231.84	0.52	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,669.00	90.07	359.66	9,579.97	2,018.60	2,017.10	-233.20	1.60	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,764.00	89.58	0.01	9,580.26	2,113.60	2,112.10	-233.47	0.63	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,859.00	89.98	0.10	9,580.62	2,208.59	2,207.10	-233.38	0.43	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	11,954.00	90.02	0.10	9,580.62	2,303.59	2,302.10	-233.21	0.04	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,048.00	90.33	0.37	9,580.34	2,397.59	2,396.09	-232.83	0.44	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,143.00	91.25	0.10	9,579.03	2,492.57	2,491.08	-232.44	1.01	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,237.00	88.88	0.37	9,578.92	2,586.56	2,585.08	-232.05	2.54	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,332.00	89.54	0.63	9,580.23	2,681.54	2,680.06	-231.22	0.75	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,426.00	89.14	0.89	9,581.31	2,775.51	2,774.05	-229.98	0.51	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,521.00	89.10	0.98	9,582.77	2,870.48	2,869.02	-228.43	0.10	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,616.00	88.75	0.89	9,584.55	2,965.43	2,963.99	-226.88	0.38	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,710.00	90.15	0.01	9,585.46	3,059.42	3,057.98	-226.14	1.76	MWD	WELLBENDERS	DIRECTIO...
9/7/2019	12,805.00	89.98	358.70	9,585.35	3,154.41	3,152.98	-227.21	1.39	MWD	WELLBENDERS	DIRECTIO...



Well Name: FLAGLER 8 FED COM 36H

Sub-Division	Region	Field Name	County	State/Province		
DELAWARE BASIN	EDDY COUNTY CORE	COTTON DRAW SOUTH - CD	LEA	NM		
Surface Legal Location	API/UWI	Latitude (°)	Longitude (°)	Orig KB Elevation (ft)	Ground Elev MSL (ft)	KB - GL (ft)
8-25S-33E	3002544998	32° 8' 19.867" N	103° 36' 3.371" W	3,496.60	3,466.60	30.00

Survey Data										
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
9/7/2019	12,900.00	92.22	359.66	9,583.52	3,249.39	3,247.94	-228.57	2.57	MWD	WELLBENDERS DIRECTIO...
9/7/2019	12,995.00	93.63	0.37	9,578.68	3,344.26	3,342.81	-228.54	1.66	MWD	WELLBENDERS DIRECTIO...
9/7/2019	13,089.00	91.56	359.49	9,574.42	3,438.15	3,436.71	-228.66	2.39	MWD	WELLBENDERS DIRECTIO...
9/7/2019	13,183.00	91.25	359.66	9,572.12	3,532.12	3,530.68	-229.36	0.38	MWD	WELLBENDERS DIRECTIO...
9/7/2019	13,278.00	91.47	359.84	9,569.86	3,627.10	3,625.65	-229.77	0.30	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,372.00	91.38	359.66	9,567.52	3,721.07	3,719.62	-230.18	0.21	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,467.00	92.00	359.75	9,564.72	3,816.03	3,814.58	-230.67	0.66	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,562.00	89.54	358.78	9,563.45	3,911.01	3,909.55	-231.89	2.78	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,656.00	89.27	358.61	9,564.42	4,004.99	4,003.53	-234.03	0.34	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,751.00	88.88	358.52	9,565.96	4,099.96	4,098.48	-236.41	0.42	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,845.00	87.74	358.78	9,568.73	4,193.90	4,192.41	-238.62	1.24	MWD	WELLBENDERS DIRECTIO...
9/8/2019	13,941.00	88.31	358.78	9,572.04	4,289.84	4,288.34	-240.66	0.59	MWD	WELLBENDERS DIRECTIO...
9/8/2019	14,036.00	88.48	358.96	9,574.70	4,384.79	4,383.28	-242.54	0.26	MWD	WELLBENDERS DIRECTIO...
9/8/2019	14,130.00	88.92	0.10	9,576.83	4,478.77	4,477.25	-243.31	1.30	MWD	WELLBENDERS DIRECTIO...
9/8/2019	14,225.00	89.80	0.37	9,577.89	4,573.75	4,572.24	-242.92	0.97	MWD	WELLBENDERS DIRECTIO...
9/8/2019	14,319.00	90.42	0.89	9,577.71	4,667.74	4,666.24	-241.88	0.86	MWD	WELLBENDERS DIRECTIO...
9/8/2019	14,397.00	91.25	0.89	9,576.57	4,745.71	4,744.22	-240.67	1.06	MWD	WELLBENDERS DIRECTIO...
10/16/2...	14,463.00	91.25	0.89	9,575.13	4,811.68	4,810.19	-239.65	0.00	BIT	