KOLAR Document ID: 1408148

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 32446
Name: Merit Energy Company, LLC
Address 1: 13727 NOEL ROAD, SUITE 1200
Address 2:
City: DALLAS State: TX Zip: 75240 + ____
Contact Person: IDANIA MEDINA
Phone: (620) 629-4228
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Merit Energy Geologist
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

1/3/2018	1/7/2018	1/17/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-055-22475-01-00
Spot Description:
SE - NE - NE - NW Sec. 10 Twp. 25 S. R. 33 ☐ East ☑ West
397 Feet from ☑ North / ☐ South Line of Section
2340 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Finney
Lease Name: MAE Well #: 2-10
Field Name: Wildcat
Producing Formation: Morrow
Elevation: Ground: 2902 Kelly Bushing: 2914
Total Vertical Depth: 5130 Plug Back Total Depth: 5199
Amount of Surface Pipe Set and Cemented at: 1789 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 1100 ppm Fluid volume: 763 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
☐ **Confidentiality Requested**
Date: 05/03/2018
☐ **Confidential Release Date:** 05/02/2020
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 05/07/2018

Operator Name: Merit Energy Company, LLC Lease Name: MAE Well #: 2-10

Sec. 10 Twp. 25 S. R. 33 ☐ East ☑ West County: Finney

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1789	Class A	660	See Attached
Production	7.875	5.5	17	5243	Class A	210	See Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection: 1/19/2018

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	48				

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom
4871	4883

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	4871	4883			

TUBING RECORD: Size: 2.8750 Set At: 4958 Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	MAE 2-10
Doc ID	1408148

All Electric Logs Run

ANULAR HOLE VOLUME LOG 5 CASING
ARRAY COMPENSATED TRUE RESISTIVITY LOG 1
ARRAY COMPENSATED TRUE RESISTIVITY LOG 2
ARRAY COMPENSATED TRUE RESISTIVITY LOG 5
ARRAY RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON SONIC QUAD COMBO LOG
BOREHOLE COMPENSATED SONIC ARRAY LOG
MICROLOG
SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	MAE 2-10
Doc ID	1408148

Tops

Name	Top	Datum
STONE CORRAL	1844	
HUTCHINSON SALT	2323	
CHASE	2544	
COUNCIL GROVE	2828	
HEEBNER	3910	
TORONTO	3927	
LANSING	3958	
LANSING F	4148	
LANSING G	4199	
SWOPE	4346	
HERTHA	4380	
MARMATON GROUP	4502	
ALTAMONT	4522	
PAWNEE	4583	
CHEROKEE	4630	
ATOKA	4741	
MORROW	4837	
CHESTER	4919	
ST GENEVIEVE	5029	
SPERGEN	5237	

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Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1789	Class A	660	See Attached
Production	7.875	5.5	17	5243	Class A	210	See Attached

Company: **MERIT ENERGY CO.**
Field: **1st run**
County:
Well Name: **Mae 2-10**
Rig: **DUKE RIG # 9**

Job Number: --------------------
Magnetic Decl: --------------------
Grid Corr: --------------------
Total Survey Corr: --------------------
Date Printed:

Proposed Azimuth: **360.000**
Target Inclination: **0.00**
TVD:
BRN From Survey: **#VALUE!**
BRN From Bit: **#DIV/0!**

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
0	TIE-ON	0	0	0	N 0.00 E		0.00	0.00	0.00	0.00					
1	INC	378	0.9	304.8	N 55.20 W	378	377.98	1.69	1.69 N	2.44 W	2.97	304.80	0.24	0.24	-14.60
2	INC	774	0.7	320.8	N 39.20 W	396	773.95	5.34	5.34 N	6.52 W	8.43	309.34	0.08	-0.05	4.04
3	MWD	977	0.5	359	N 1.00 W	203	976.94	7.19	7.19 N	7.32 W	10.26	314.49	0.21	-0.10	18.82
4	MWD	1044	1.1	133.8	S 46.20 E	67	1043.93	7.04	7.04 N	6.86 W	9.83	315.73	2.23	0.90	-336.12
5	MWD	1200	0.8	280.8	N 79.20 W	156	1199.92	6.21	6.21 N	6.85 W	9.24	312.17	1.17	-0.19	94.23
6	MWD	1358	0.7	282.8	N 77.20 W	158	1357.91	6.63	6.63 N	8.87 W	11.07	306.75	0.07	-0.06	1.27
7	MWD	1548	1.8	134.8	S 45.20 E	190	1547.88	4.78	4.78 N	7.89 W	9.22	301.21	1.27	0.58	-77.89
8	MWD	1706	1.1	289.8	N 70.20 W	158	1705.86	3.54	3.54 N	7.55 W	8.34	295.14	1.79	-0.44	98.10
9	MWD	1849	1.8	271.04	N 88.96 W	143	1848.82	4.05	4.05 N	11.09 W	11.81	290.06	0.59	0.49	-13.12
10	MWD	1913	1.4	264.4	S 84.40 W	64	1912.79	3.99	3.99 N	12.87 W	13.48	287.23	0.69	-0.63	-10.38
11	MWD	1977	2.1	267.1	S 87.10 W	64	1976.76	3.86	3.86 N	14.82 W	15.32	284.58	1.10	1.09	4.22
12	MWD	2040	3.7	269.8	S 89.80 W	63	2039.68	3.79	3.79 N	18.01 W	18.40	281.89	2.55	2.54	4.29
13	MWD	2102	4.6	271.9	N 88.10 W	62	2101.52	3.87	3.87 N	22.50 W	22.82	279.75	1.47	1.45	3.39
14	MWD	2164	5.8	273.3	N 86.70 W	62	2163.26	4.13	4.13 N	28.11 W	28.41	278.36	1.95	1.94	2.26
15	MWD	2227	6	264.8	S 84.80 W	63	2225.93	4.01	4.01 N	34.56 W	34.80	276.62	1.42	0.32	-13.49
16	MWD	2290	5.5	254.1	S 74.10 W	63	2288.61	2.89	2.89 N	40.75 W	40.85	274.06	1.87	-0.79	-16.98
17	MWD	2354	5.7	245.1	S 65.10 W	64	2352.31	0.71	0.71 N	46.58 W	46.59	270.87	1.41	0.31	-14.06
18	MWD	2416	5.2	250.5	S 70.50 W	62	2414.03	-1.52	1.52 S	52.02 W	52.04	268.32	1.15	-0.81	8.71
19	MWD	2480	5.5	252.7	S 72.70 W	64	2477.75	-3.40	3.40 S	57.68 W	57.78	266.62	0.57	0.47	3.44
20	MWD	2543	6.8	257.1	S 77.10 W	63	2540.38	-5.13	5.13 S	64.20 W	64.41	265.43	2.19	2.06	6.98
21	MWD	2607	8.6	253	S 73.00 W	64	2603.81	-7.38	7.38 S	72.47 W	72.85	264.19	2.94	2.81	-6.41
22	MWD	2668	9.7	253.5	S 73.50 W	61	2664.03	-10.17	10.17 S	81.76 W	82.39	262.91	1.81	1.80	0.82
23	MWD	2731	11.6	255.4	S 75.40 W	63	2725.94	-13.28	13.28 S	92.98 W	93.92	261.87	3.07	3.02	3.02
24	MWD	2824	13.4	257.4	S 77.40 W	93	2816.73	-17.99	17.99 S	112.55 W	113.98	260.92	1.99	1.94	2.15
25	MWD	2918	12.9	256.7	S 76.70 W	94	2908.27	-22.78	22.78 S	133.39 W	135.32	260.31	0.56	-0.53	-0.74
26	MWD	3012	12.3	257.4	S 77.40 W	94	3000.00	-27.37	27.37 S	153.37 W	155.80	259.88	0.66	-0.64	0.74
27	MWD	3104	12.8	260.64	S 80.64 W	92	3089.81	-31.17	31.17 S	172.99 W	175.78	259.79	0.94	0.54	3.52
28	MWD	3198	12.3	262.2	S 82.20 W	94	3181.56	-34.22	34.22 S	193.19 W	196.19	259.95	0.64	-0.53	1.66
29	MWD	3292	12.8	260.1	S 80.10 W	94	3273.31	-37.37	37.37 S	213.36 W	216.61	260.07	0.72	0.53	-2.23
30	MWD	3385	12	260.6	S 80.60 W	93	3364.14	-40.72	40.72 S	233.05 W	236.58	260.09	0.87	-0.86	0.54
31	MWD	3480	12.7	260.9	S 80.90 W	95	3456.95	-43.98	43.98 S	253.10 W	256.90	260.14	0.74	0.74	0.32
32	MWD	3575	11.5	256.8	S 76.80 W	95	3549.83	-47.80	47.80 S	272.64 W	276.80	260.06	1.55	-1.26	-4.32
33	MWD	3637	11.3	255.8	S 75.80 W	62	3610.61	-50.70	50.70 S	284.54 W	289.02	259.90	0.45	-0.32	-1.61
34	MWD	3700	10.7	257.8	S 77.80 W	63	3672.45	-53.45	53.45 S	296.24 W	301.03	259.77	1.13	-0.95	3.17
35	MWD	3764	9.2	259.7	S 79.70 W	64	3735.49	-55.62	55.62 S	307.08 W	312.08	259.73	2.40	-2.34	2.97
36	MWD	3826	8	258.8	S 78.80 W	62	3796.79	-57.35	57.35 S	316.19 W	321.35	259.72	1.95	-1.94	-1.45

Company: **MERIT ENERGY CO.**
Field: **1st run**
County:
Well Name: **Mae 2-10**
Rig: **DUKE RIG # 9**

Job Number:
Magnetic Decl:
Grid Corr:
Total Survey Corr:
Date Printed:

Proposed Azimuth: **360.000**
Target Inclination: **0.00**
TVD:
BRN From Survey: **#VALUE!**
BRN From Bit: **#DIV/0!**

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
37	MWD	3888	7.7	258.6	S 78.60 W	62	3858.21	-59.00	59.00 S	324.50 W	329.82	259.69	0.49	-0.48	-0.32
38	MWD	3951	6.9	258.6	S 78.60 W	63	3920.70	-60.59	60.59 S	332.34 W	337.82	259.67	1.27	-1.27	0.00
39	MWD	4015	6.3	260.2	S 80.20 W	64	3984.27	-61.94	61.94 S	339.57 W	345.18	259.66	0.98	-0.94	2.50
40	MWD	4077	4.7	261.5	S 81.50 W	62	4045.99	-62.90	62.90 S	345.44 W	351.12	259.68	2.59	-2.58	2.10
41	MWD	4140	3.3	256.4	S 76.40 W	63	4108.83	-63.71	63.71 S	349.75 W	355.51	259.68	2.29	-2.22	-8.10
42	MWD	4202	2.3	237	S 57.00 W	62	4170.76	-64.80	64.80 S	352.53 W	358.44	259.58	2.20	-1.61	-31.29
43	MWD	4266	2.4	222.1	S 42.10 W	64	4234.71	-66.50	66.50 S	354.51 W	360.69	259.38	0.96	0.16	-23.28
44	MWD	4360	2.3	226.4	S 46.40 W	94	4328.63	-69.26	69.26 S	357.19 W	363.84	259.03	0.22	-0.11	4.57
45	MWD	4455	1.2	222.6	S 42.60 W	95	4423.58	-71.31	71.31 S	359.25 W	366.25	258.77	1.16	-1.16	-4.00
46	MWD	4550	1.2	231.64	S 51.64 W	95	4518.56	-72.66	72.66 S	360.70 W	367.94	258.61	0.20	0.00	9.52
47	MWD	4643	1.2	227.74	S 47.74 W	93	4611.54	-73.91	73.91 S	362.18 W	369.65	258.47	0.09	0.00	-4.19
48	MWD	4738	1.1	218.7	S 38.70 W	95	4706.52	-75.29	75.29 S	363.49 W	371.21	258.30	0.22	-0.11	-9.52
49	MWD	4853	1	239.9	S 59.90 W	115	4821.50	-76.66	76.66 S	365.05 W	373.01	258.14	0.35	-0.09	18.43
50	MWD	4926	1	228.84	S 48.84 W	73	4894.49	-77.40	77.40 S	366.08 W	374.17	258.06	0.26	0.00	-15.15
51	MWD	5020	0.9	277.5	N 82.50 W	94	4988.48	-77.84	77.84 S	367.43 W	375.58	258.04	0.84	-0.11	51.77
52	MWD	5114	0.8	281.5	N 78.50 W	94	5082.47	-77.61	77.61 S	368.80 W	376.88	258.12	0.12	-0.11	4.26
53	MWD	5196	0.3	254.2	S 74.20 W	82	5164.47	-77.56	77.56 S	369.57 W	377.62	258.15	0.67	-0.61	-33.29
54	MWD														
55	MWD														
56	MWD														
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58	MWD														
59	MWD														
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67	MWD														
68	MWD														
69	MWD														
70	MWD														
71	MWD														
72	MWD				##										

Company: **MERIT ENERGY CO.**
Field: **1st run**
County:
Well Name: **Mae 2-10**
Rig: **DUKE RIG # 9**

Job Number:
Magnetic Decl:
Grid Corr:
Total Survey Corr:
Date Printed:

Proposed Azimuth: **360.000**
Target Inclination: **0.00**
TVD:
BRN From Survey: **#VALUE!**
BRN From Bit: **#DIV/0!**

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
73	MWD														
74	MWD														
75	MWD														
76	MWD														
77	MWD														
78	MWD														
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102	MWD														
103	MWD														
104	MWD														
105	MWD														
106	MWD														

Company:	MERIT ENERGY CO.	Job Number:		Proposed Azimuth:	360.000
Field:	1st run	Magnetic Decl:		Target Inclination:	0.00
County:		Grid Corr:		TVD:	
Well Name:	Mae 2-10	Total Survey Corr:		BRN From Survey:	#VALUE!
Rig:	DUKE RIG # 9	Date Printed:		BRN From Bit:	#DIV/0!

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
107	MWD														
108	MWD														
109	MWD														
110	MWD														
111	MWD														
112	MWD														
113	MWD														
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131	MWD														
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134	MWD														
135	MWD														
136	MWD														
137	MWD														
138	MWD														
139	MWD														
140	MWD														

Company:	MERIT ENERGY CO.	Job Number:		Proposed Azimuth:	360.000
Field:	1st run	Magnetic Decl:		Target Inclination:	0.00
County:		Grid Corr:		TVD:	
Well Name:	Mae 2-10	Total Survey Corr:		BRN From Survey:	#VALUE!
Rig:	DUKE RIG # 9	Date Printed:		BRN From Bit:	#DIV/0!

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
141	MWD														
142	MWD														
143	MWD														
144	MWD														
145	MWD														
146	MWD														
147	MWD														
148	MWD														
149	MWD														
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161	MWD														
162	MWD														
163															
164															
165															
166															
167															
168															
169															
170															
171															
172															
173															
174															

Company: **MERIT ENERGY CO.**
Field: **1st run**
County:
Well Name: **Mae 2-10**
Rig: **DUKE RIG # 9**

Job Number:
Magnetic Decl:
Grid Corr:
Total Survey Corr:
Date Printed:

Proposed Azimuth: **360.000**
Target Inclination: **0.00**
TVD:
BRN From Survey: **#VALUE!**
BRN From Bit: **#DIV/0!**

No.	Tool Type	Survey Depth (ft)	Incl (°)	Azimuth (°)	Quadrant	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Dist (ft)	Closure Ang (°)	DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
432															
433															
434															
435															
436															
437															
438															
439															
440															
441															
442															
443															
444															
445															
446															
447															
448															
449															
450		3000	55.00	0.00	N 0.00 E	3000	#VALUE!	1255.11	1255.11 N	369.57 W	1308.39	343.59	1.83	1.83	0.00
451		3330	90.00	20.00	N 20.00 E	330	#VALUE!	1557.50	1557.50 N	310.77 W	1588.20	348.72	12.02	10.61	6.06
452															
453															
454															
455															
456															
457															
458															
459															
460															
461															
462															
463															

TARGET

TVD	
VS	**0.00**
N/S	**0.00 N**
E/W	**0.00 E**

Inc. Needed	Direction Needed	Dist To Target
-0.45	124.8	2.97
-0.62	129.3	8.43
-0.60	134.5	10.26
-0.54	135.7	9.83
-0.44	132.2	9.24
-0.47	126.7	11.07
-0.34	121.2	9.22
-0.28	115.1	8.34
-0.37	110.1	11.81
-0.40	107.2	13.48
-0.44	104.6	15.32
-0.52	101.9	18.40
-0.62	99.8	22.82
-0.75	98.4	28.41
-0.90	96.6	34.80
-1.02	94.1	40.85
-1.13	90.9	46.59
-1.24	88.3	52.04
-1.34	86.6	57.78
-1.45	85.4	64.41
-1.60	84.2	72.85
-1.77	82.9	82.39
-1.97	81.9	93.92
-2.32	80.9	113.98
-2.66	80.3	135.32
-2.97	79.9	155.80
-3.26	79.8	175.78
-3.53	80.0	196.19
-3.79	80.1	216.61
-4.02	80.1	236.58
-4.25	80.1	256.90
-4.46	80.1	276.80
-4.58	79.9	289.02
-4.69	79.8	301.03
-4.78	79.7	312.08
-4.84	79.7	321.35

TARGET

TVD	
VS	**0.00**
N/S	**0.00 N**
E/W	**0.00 E**

Inc. Needed	Direction Needed	Dist To Target
-4.89	79.7	329.82
-4.92	79.7	337.82
-4.95	79.7	345.18
-4.96	79.7	351.12
-4.95	79.7	355.51
-4.91	79.6	358.44
-4.87	79.4	360.69
-4.80	79.0	363.84
-4.73	78.8	366.25
-4.66	78.6	367.94
-4.58	78.5	369.65
-4.51	78.3	371.21
-4.42	78.1	373.01
-4.37	78.1	374.17
-4.31	78.0	375.58
-4.24	78.1	376.88
-4.18	78.1	377.62

FIELD TICKET

Client	MERIT ENERGY COMPANY
Well	Mae 2-10
Job Description	Surface
Date	January 05, 2018

Field Ticket # FT-02441-R3R9Y50202-63382

MATERIALS

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L488168	CEMENT, ASTM TYPE I	SK	660.0000	$44.11	$29,112.60	76.00	$6,987.03
L100404	SALT,SODIUM CHLORIDE, A-5	LB	1,190.0000	$1.04	$1,237.60	76.00	$297.03
L015399	Float collars with poppet valve, 8-5/8 in.	EA	1.0000	$0.00	$0.00	76.00	$0.00
L100120	EXTENDER, BENTONITE	LB	1,824.0000	$2.08	$3,793.92	76.00	$910.55
L100318	CEMENT EXTENDER, GYPSUM, A-10	LB	912.0000	$0.72	$656.64	76.00	$157.60
L100275	CEMENT EXTENDER, SODIUM METASILICATE, A-2	LB	912.0000	$3.28	$2,991.36	76.00	$717.93
L100112	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	LB	1,697.0000	$2.40	$4,072.80	76.00	$977.48
L100295	IntegraSeal CELLO	LB	330.0000	$5.76	$1,900.80	76.00	$456.20
L013156	Cement Nose, 8-5/8 in.	EA	1.0000	$460.00	$460.00	76.00	$110.40
L017068	CENTRALIZER,8-5/8"NON-WELD	EA	10.0000	$246.40	$2,464.00	76.00	$591.36
L016033	Float Collars with aluminum flapper, 8-5/8 in.	EA	1.0000	$1,214.00	$1,214.00	76.00	$291.36
L86718	PLUG,CEMENT 8.6 TOP BJPL	EA	1.0000	$287.04	$287.04	76.00	$68.89
L499632	RETARDER, SUGAR, GRANULAR	LB	50.0000	$4.16	$208.00	76.00	$49.92
				Product Material Subtotal:	**$48,398.76**		**$11,615.75**

SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
S-100004	Cement Crew Mobilization-Demobilizaton Fee	EA	1.00	$10,880.00	$10,880.000	91.00	$979.200
S-100475	Cement head	EA	1.00	$2,656.00	$2,656.000	91.00	$239.040
S-100049	Cement pump charge, 1,001-2,000 feet/ 301-600 m	4/HR	1.00	$4,680.00	$4,680.000	91.00	$421.200

Cementing Treatment

Well Circulated By	Rig	**Solids Present at End of Circulation**	No
Circulation Prior to Job	Yes	**10 sec SGS**	
Circulation Time (min)		**10 min SGS**	
Circulation Rate (bpm)		**30 min SGS**	
Circulation Volume (bbls)		**Flare Prior to/during the Cement Job**	No
Lost Circulation Prior to Cement Job	No	**Gas Present**	No
Mud Density In (ppg)		**Gas Units**	
Mud Density Out (ppg)			
PV Mud In			
PV Mud Out			
YP Mud In			
YP Mud Out			

TEMPERATURE

Ambient Temperature (°F)	20.00	**Slurry Cement Temperature (°F)**	70.00
Mix Water Temperature (°F)	50.00	**Flow Line Temperature (°F)**	

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Lead Slurry	Multi Density Cement	12.1000	2.5410	14.71	485	1,224.0000	217.8000
Tail Slurry	Class A Cement	15.2000	1.2692	5.74	175	222.0000	39.4000
Displacement Final	Displacement	8.3400				0.0000	111.3000

Fluid Type	Fluid Name	Component	Concentration	UOM
Lead Slurry	Multi Density Cement	EXTENDER, BENTONITE	4.00	BWOB

Lead Slurry	Multi Density Cement	CEMENT EXTENDER, SODIUM METASILICATE, A-2	2.00	BWOB
Lead Slurry	Multi Density Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	3.00	BWOB
Lead Slurry	Multi Density Cement	CEMENT, ASTM TYPE I	100.00	PCT
Lead Slurry	Multi Density Cement	CEMENT EXTENDER, GYPSUM, A-10	2.00	BWOB
Lead Slurry	Multi Density Cement	SALT,SODIUM CHLORIDE, A-5	2.00	BWOW
Lead Slurry	Multi Density Cement	IntegraSeal CELLO	0.50	LBS/SK
Tail Slurry	Class A Cement	CEMENT, ASTM TYPE I	100.00	PCT
Tail Slurry	Class A Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.00	BWOB
Tail Slurry	Class A Cement	IntegraSeal CELLO	0.50	LBS/SK

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
	Multi Density Cement	5.00	217.80			
	Class A Cement	5.00	39.40			
	Displacement	5.00	111.30			

	Min	Max	Avg
Pressure (psi)	0.00	1,500.00	200.00
Rate (bpm)	3.00	7.00	6.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	**Amount of Cement Returned/Reversed**	50.00
Calculated Displacement Volume (bbls)	111.00	**Method Used to Verify Returns**	Visual
Actual Displacement Volume (bbls)	111.00	**Amount of Spacer to Surface**	

Cementing Treatment

Did Float Hold?	Yes	**Pressure Left on Casing (psi)**	0.00
Bump Plug	Yes	**Amount Bled Back After Job**	0.50
Bump Plug Pressure (psi)	900.00	**Total Volume Pumped (bbls)**	379.00
Were Returns Planned at Surface	Yes	**Top Out Cement Spotted**	Yes
Cement returns During Job	Full	**Lost Circulation During Cement Job**	No

CEMENT PLUG

Bottom of Cement Plug?	No	**Wiper Balls Used?**	No
Wiper Ball Quantity		**Plug Catcher**	No
Number of Plugs			

SQUEEZE

Injection Rate (bpm)	**Fluid Density (ppg)**
Injection Pressure (psi)	**ISIP (psi)**
Type of Squeeze	**FSIP (psi)**
Operators Max SQ Pressure (psi)	

COMMENTS

Treatment Report

10bbls of water spacer
219bbls of lead cement
39bbls of tail cement
111bbls of water displacement

Job Summary

Drive to location, spot trucks, rig up to rig
safety meeting, pressure test lines to 1500psi
pump 10bbls of water spacer
pump 219bbls of lead cement from 485sacks @12.1lbs
pump 39bbls of tail cement from 175sacks @15.2lbs
Drop plug/wash pump on top of plug
Displacement of 111bbls of water
Bump plug/check if float holds

Surface Cement Set @1789'

FIELD TICKET

Client MERIT ENERGY COMPANY

Well Mae 2-10

Job Description Long String

Date January 11, 2018 **Field Ticket #** FT-02566-W0D9C50203-65374

MATERIALS

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L100120	EXTENDER, BENTONITE	LB	489.0000	$2.08	$1,017.12	78.00	$223.77
20000018	CFL-210	LB	123.0000	$22.72	$2,794.56	78.00	$614.80
L100295	IntegraSeal CELLO	LB	65.0000	$5.76	$374.40	78.00	$82.37
L100318	CEMENT EXTENDER, GYPSUM, A-10	LB	1,467.0000	$0.72	$1,056.24	78.00	$232.37
L101196	Foam Preventer, FP-25	LB	49.0000	$14.52	$711.48	78.00	$156.53
L415082	IntegraSeal KOL	LB	1,300.0000	$1.20	$1,560.00	78.00	$343.20
L488168	CEMENT, ASTM TYPE I	SK	260.0000	$44.11	$11,468.60	78.00	$2,523.09
L100404	SALT,SODIUM CHLORIDE, A-5	LB	2,067.0000	$1.04	$2,149.68	78.00	$472.93
L013152	Cement Nose, 5-1/2 in.	EA	1.0000	$561.00	$561.00	78.00	$123.42
L017064	CENTRALIZER,5-1/2"NON-WELD	EA	20.0000	$193.05	$3,861.00	78.00	$849.42
L015395	FLOAT COLLAR,CEM,5-1/2"K55	EA	1.0000	$1,243.00	$1,243.00	78.00	$273.46
L488735	IntegraGuard BOND IIA Concentrate	GAL	5.0000	$159.60	$798.00	78.00	$175.56
L86710	PLUG,CEMENT 5.5 TOP BJPL	EA	1.0000	$1,026.48	$1,026.48	78.00	$225.83
			Product Material Subtotal:		**$28,621.56**		**$6,296.75**

SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
S-100004	Cement Crew Mobilization-Demobilizaton Fee	EA	1.00	$10,880.00	$10,880.000	92.00	$870.400
S-100475	Cement head	EA	1.00	$2,656.00	$2,656.000	92.00	$212.480
S-100052	Cement pump charge, 4,001-5,000 feet/1,201 - 1,500 m	6/HR	1.00	$6,192.00	$6,192.000	92.00	$495.360
S-100001	Mileage - vehicle heavy weight	MI	50.00	$18.96	$948.000	92.00	$75.840
S-100002	Mileage - vehicle light	MI	50.00	$10.72	$536.000	92.00	$42.880

Cementing Treatment

Well Circulated By	Rig	**Solids Present at End of Circulation**	No
Circulation Prior to Job	Yes	**10 sec SGS**	
Circulation Time (min)	30.00	**10 min SGS**	
Circulation Rate (bpm)	6.00	**30 min SGS**	
Circulation Volume (bbls)		**Flare Prior to/during the Cement Job**	No
Lost Circulation Prior to Cement Job	No	**Gas Present**	No
Mud Density In (ppg)		**Gas Units**	
Mud Density Out (ppg)			
PV Mud In			
PV Mud Out			
YP Mud In			
YP Mud Out			

TEMPERATURE

Ambient Temperature (°F)	50.00	**Slurry Cement Temperature (°F)**	61.00
Mix Water Temperature (°F)	60.00	**Flow Line Temperature (°F)**	62.00

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	UltraFlush	8.4000					12.0000
Displacement Final	Displacement	8.3400				0.0000	119.9000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	UltraFlush	IntegraGuard ULTRA II	100.00	PCT

TREATMENT SUMMARY

Cementing Treatment

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
	UltraFlush	0.00	12.00			
	Displacement	0.00	119.90			

	Min	Max	Avg
Pressure (psi)	0.00	2,100.00	500.00
Rate (bpm)	2.00	7.50	6.50

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	**Amount of Cement Returned/Reversed**	0.00
Calculated Displacement Volume (bbls)	120.66	**Method Used to Verify Returns**	Visual
Actual Displacement Volume (bbls)	120.66	**Amount of Spacer to Surface**	0.00
Did Float Hold?	Yes	**Pressure Left on Casing (psi)**	0.00
Bump Plug	Yes	**Amount Bled Back After Job**	0.50
Bump Plug Pressure (psi)	1,700.00	**Total Volume Pumped (bbls)**	221.00
Were Returns Planned at Surface	No	**Top Out Cement Spotted**	No
Cement returns During Job	None	**Lost Circulation During Cement Job**	No

CEMENT PLUG

Bottom of Cement Plug?	No	**Wiper Balls Used?**	No
Wiper Ball Quantity		**Plug Catcher**	No
Number of Plugs			

SQUEEZE

Injection Rate (bpm)	**Fluid Density (ppg)**
Injection Pressure (psi)	**ISIP (psi)**
Type of Squeeze	**FSIP (psi)**

Cementing Treatment

Operators Max SQ Pressure (psi)

COMMENTS

Treatment Report

Job Summary

pressure test lines to 2100PSI
plug RAT/MOUSE hole
12bbl HIVIS SWEEP
72bbl Tail cement @ 13.60#
shut down
wash up to the pit
drop plug
120bbl displacement with KCL water
landed plug @ 1700PSI with final circulation pressure @ 1200PSI
Set @ 5243'
RH cement - 50sx