



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

WMC 411-19-793 05-045-24538
S:19 T:7S R:93W Garfield CO

CallSheet #: 86171
Proposal #: 67529



LONG STRING Post Job Report

Attention: Mr. Dustin Childers | (936) 524-8828 | dchilders@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Dustin Childers,

Thank you for the opportunity to provide cementing services on this well. American Cementing strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact American Cementing at any time.

Sincerely,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1187

Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36	n/a	0	1141	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1141	7490	85
Open Hole	Outer	n/a	8.75	n/a	n/a	7490	10703	50
Casing	Inner	4.5	4	11.6	n/a	0	10703	0

Timing

Event	Date/Time
ERTS	
Call Out	3/12/2023 03:00
Depart Facility	3/12/2023 05:50
On Location	3/12/2023 07:00
Rig Up Iron	3/12/2023 07:15
Job Started	3/12/2023 10:05
Job Completed	3/12/2023 12:04
Rig Down Iron	3/12/2023 12:30
Depart Location	3/12/2023 13:30

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-438		
Cement Trailer Float	CTF-286	TRC-054	Hutchinson, Michael
Cement Pump Float	CPF-053	TRH-964	Gonzales, Ivan
Light Duty Vehicles	LDV-063		Castillo, Francisco

General Job Information

Metrics	Value
Well Fluid Density	9.2 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	166 bbls
Actual Displacement	166 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	N/A

Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	0 units
Flare During Job	No
Flare During Job	0 units
Flare at End of Job	No
Flare at End of Job	0 units
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.2 lb/gal
Well Fluid Density Out of Well	9.2 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	178 °F
BHST	236 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	70 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	240	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
Yes	N/A	N/A	N/A

Circulation Details

NO RETURNS THROUGH OUT THE ENTIRE JOB

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			42.00		10.00	5816
2	Mud Flush	Flush	8.45			40.86		20.00	5915
3	Water	Flush	8.34			42.00		10.00	6113
4	Lead	Lead	12.50	2.26	12.59		322.00	129.42	6212
5	Tail	Tail	13.00	2.05	10.26		784.00	285.96	7490
6	Displacement	DisplacementFinal	8.34			42.00		166.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
2	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
4	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
4	Lead	Lead	ATHX-1102	Thixotropic	0.10	%BWOB
4	Lead	Lead	FL-66	FluidLoss	0.30	%BWOB
4	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	Lead	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
4	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	Lead	R-7C	Retarder	0.10	%BWOB
4	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
4	Lead	Lead	XCem-1009	Extender	10.00	lb/sk
4	Lead	Lead	XCem-916	Retarder	0.45	%BWOB
5	Tail	Tail	CLASS G	Cement	50.00	%
5	Tail	Tail	FLY ASH (POZZOLAN)	Extender	50.00	%
5	Tail	Tail	BENTONITE	Viscosifier	6.00	%BWOB
5	Tail	Tail	FL-66	FluidLoss	0.40	%BWOB
5	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
5	Tail	Tail	GW-86	Viscosifier	0.10	%BWOB
5	Tail	Tail	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
5	Tail	Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
5	Tail	Tail	S-8	StrengthRetroggression	20.00	%BWOB
5	Tail	Tail	XCem-1009	Extender	6.00	lb/sk
5	Tail	Tail	XCem-916	Retarder	0.40	%BWOB

Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	3/12/2023	03:00					ON LOCATION AT 09:00 HRS
2	LEAVE THE YARD	3/12/2023	05:50					CREW LEAVE THE YARD
3	ON LOCATION	3/12/2023	07:00					CREW ON LOCATION
4	RIG UP	3/12/2023	07:15					RIG UP MEETING, RIG UP
5	SAFETY MEETING	3/12/2023	09:27					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	3/12/2023	10:02				5430	PRESSURE TEST LINES
7	WATER SPACER	3/12/2023	10:05	8.34	5	10	443	WATER SPACER
8	MUD FLUSH	3/12/2023	10:07	9	5	20	485	MUD FLUSH SPACER
9	WATER SPACER	3/12/2023	10:11	8.34	5	10	487	WATER SPACER
10	LEAD CEMENT	3/12/2023	10:14	12.5	7	65	571	LEAD 322 SKS/130 BBLS AT 12.5 PPG
11	LEAD CEMENT	3/12/2023	10:24	12.5	7	65	587	130 BBLS LEAD CEMENT PUMPED
12	TAIL CEMENT	3/12/2023	10:33	13	6	50	637	TAIL 784 SKS/286 BBLS AT 13 PPG
13	TAIL CEMENT	3/12/2023	10:42	13	5	50	455	100 BBLS TAIL CEMENT PUMPED
14	TAIL CEMENT	3/12/2023	10:52	13	5	50	467	150 BBLS TAIL CEMENT PUMPED
15	TAIL CEMENT	3/12/2023	11:02	13	3.5	50	261	200 BBLS TAIL CEMENT PUMPED
16	TAIL CEMENT	3/12/2023	11:13	13	5	86	477	286 BBLS TAIL CEMENT PUMPED
17	SHUTDOWN	3/12/2023	11:33					WASH PUMP AND LINES, DROP PLUG
18	DISPLACEMENT	3/12/2023	11:43	8.5	9	50	1243	DISPLACEMENT KCL WATER
19	DISPLACEMENT	3/12/2023	11:49	8.5	9	50	1909	100 BBLS DISPLACEMENT PUMPED
20	DISPLACEMENT	3/12/2023	11:54	8.5	9	56	2383	156 BBLS DISPLACEMENT PUMPED
21	SLOW RATE	3/12/2023	12:00	8.5	3.7	10	1849	SLOW RATE
22	LAND PLUG	3/12/2023	12:04				2751	LAND PLUG, NO RETURNS
23	CHECK FLOATS	3/12/2023	12:10					FLOATS HELD, 1.5 BBLS FLOW BACK
24	RIG DOWN	3/12/2023	12:30					RIG DOWN MEETING, RIG DOWN
25	LEAVE LOCATION	3/12/2023	13:30					CREW LEAVE LOCATION

Pump Diagrams

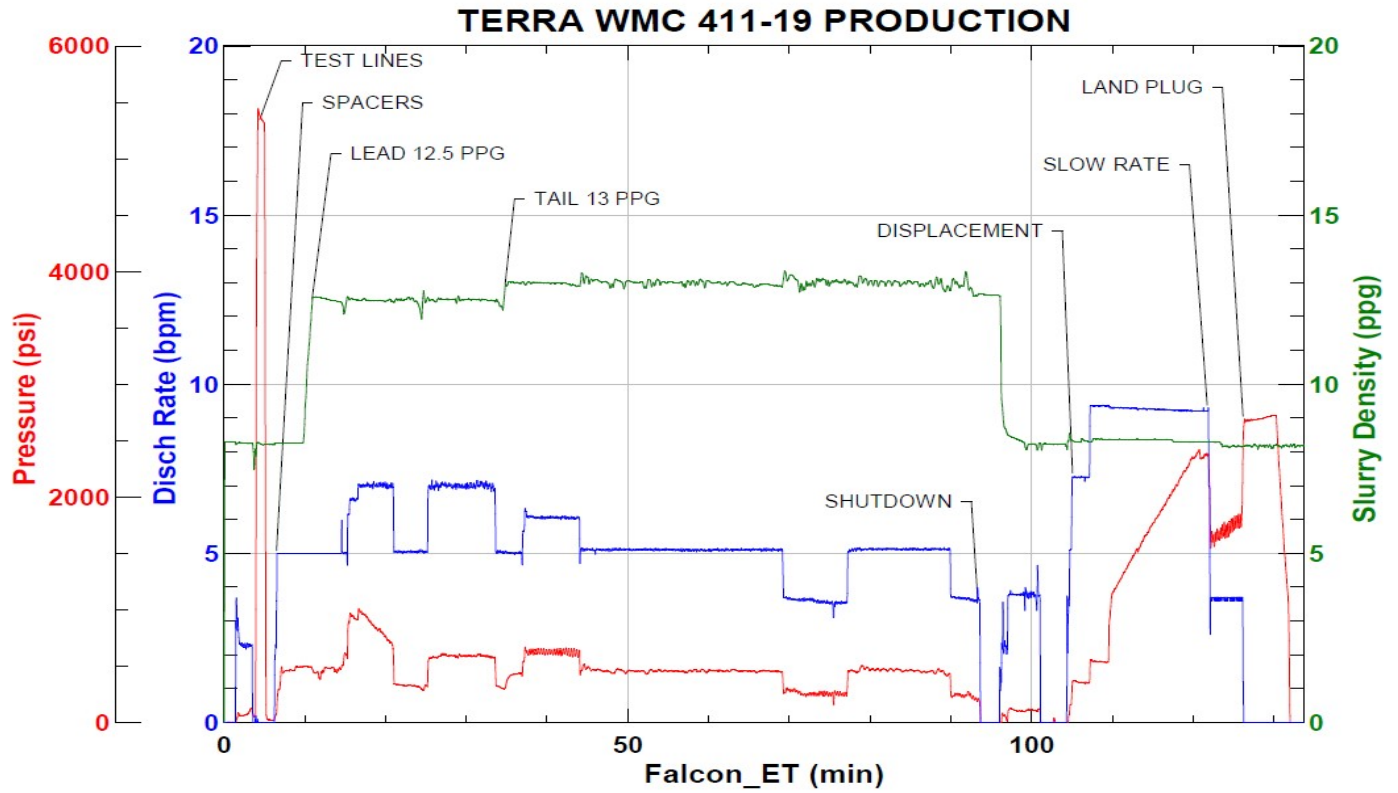


JobMaster Program Version 5.01C1

Job Number: 86171

Customer: TERRA

Well Name: WMC 411-19



Job Start: Sunday, March 12, 2023