



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL WMC 12-20 05-045-24494
S:17 T:7S R:93W Garfield CO

CallSheet #: 83736
Proposal #: 63698



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) 657-1157

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	1162	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1163	8880	60
Open Hole	Outer	n/a	8.75	n/a	n/a	8880	11167	50
Casing	Inner	4.5	4	11.6	n/a	0	11177	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer Float	CTF-108	TRC-244	Balint, Daniel	
AS Cement Trailer Float	CTF-9299	TRH-769	Hansen, James	
AS Cement Trailer Float	CTF-7145	TRC-115	Martinez, Matthew	Wall, Lynn
Field Storage Silo	FSS-470			
Field Storage Silo	FSS-438			
Light Duty Vehicles	LDV-083		Putnam, Gage	
Cement Pump Float	CPF-058	TRH-959	Gonzales, Ivan	

Timing

Event	Date/Time
Call Out	9/30/2022 08:00
Depart Facility	9/30/2022 11:15
On Location	9/30/2022 13:00
Rig Up Iron	9/30/2022 13:05
Job Started	9/30/2022 16:31
Job Completed	9/30/2022 18:25
Rig Down Iron	9/30/2022 18:40
Depart Location	9/30/2022 19:15

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	120 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	172.4 bbls
Actual Displacement	172.4 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 lb/gal
Well Fluid Density Out of Well	9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	206 °F
BHST	270 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	62 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	72 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	80 mg/L	0-500 mg/L
Carbonates	NA mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced
No

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	6107
2	Mud Flush	Flush	8.45			40.86		20.00	6221
3	Water	Flush	8.34			42.00		10.00	6450
4	Lead Cement	Lead	12.70	2.00	10.99		569.00	202.92	6564
5	Tail Cement	Tail	13.50	1.85	8.97		589.00	193.58	8880
6	Displacement	DisplacementFinal	8.34			42.00		172.40	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 Cement	ASTM TYPE I/II	Cement	100.00	%
4	Lead	Lead Cement	BA-90	BondEnhancer	3.00	lb/sk
4	Lead	Lead Cement	FL-66	FluidLoss	0.50	%BWOB
4	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
4	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
4	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	Lead Cement	R-3	Retarder	0.45	%BWOB
4	Lead	Lead Cement	STATIC FREE	Other	0.01	lb/sk
5	Tail	Tail Cement	BA-90	BondEnhancer	10.00	%
5	Tail	Tail Cement	CLASS G	Cement	70.00	%
5	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	20.00	%
5	Tail	Tail Cement	BENTONITE	Viscosifier	6.00	%BWOB
5	Tail	Tail Cement	FL-24	FluidLoss	0.40	%BWOB
5	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
5	Tail	Tail Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
5	Tail	Tail Cement	R-3	Retarder	0.30	%BWOB
5	Tail	Tail Cement	S-8	StrengthRetrogression	25.00	%BWOB

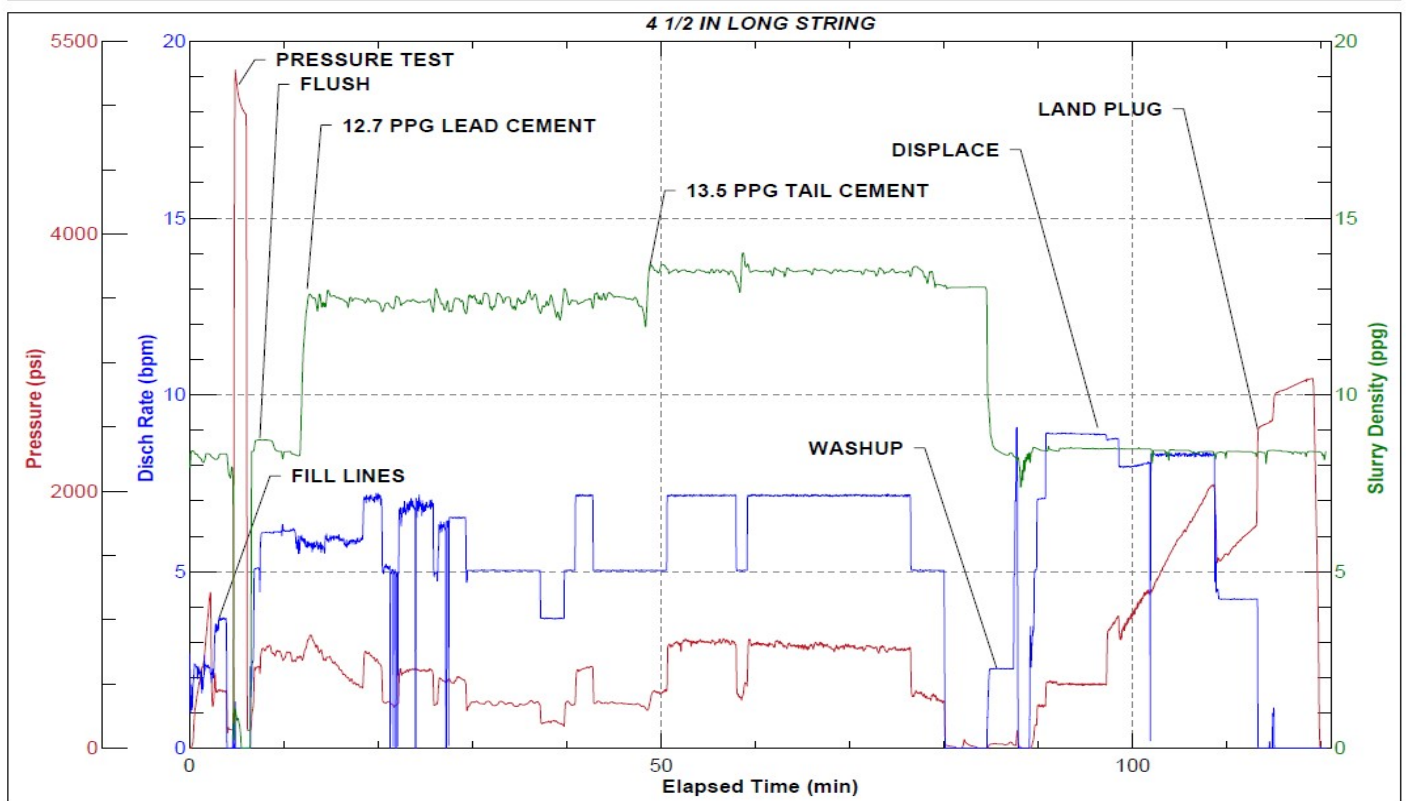
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	9/30/2022	08:00					CREW CALLED OUT FOR ON LOCATION TIME OF 13:00 9/30/22
2	Depart Location	9/30/2022	11:15					DEPART RCO YARD FOR LOCATION
3	Arrive On Location	9/30/2022	01:00					ARRIVE ON CUSTOMER SITE
4	Rig Up Iron	9/30/2022	01:05					RIG UP IRON AND HOSES
5	Waiting	9/30/2022	01:30					WAITING ON RIG TO RUN CASING
6	Safety Meeting	9/30/2022	16:00					JSA SAFETY MEETING WITH AC CREW, RIG HANDS, AND CUSTOMER REP
7	Fill Lines	9/30/2022	16:31	8.34	4	10	1100	FILL LINES WITH FRESH WATER
8	Pressure Test Lines	9/30/2022	16:36	8.34			5100	PRESSURE TEST PUMP AND LINES TO 5000 PSI
9	Other	9/30/2022	16:38	8.45	6	20	602	PUMP MUD FLUSH + SURFACTANT
10	Other	9/30/2022	16:41	8.34	6	10	678	PUMP FRESH WATER FLUSH
11	Pump Lead Cement	9/30/2022	16:44	12.7	6	0	860	BEGIN PUMPING 12.7 PPG LEAD CEMENT. DENSITY VERIFIED WITH MUD SCALE
12	Pump Lead Cement	9/30/2022	16:51	12.7	5.2	50	359	50 BBLS LEAD CEMENT PUMPED
13	Pump Lead Cement	9/30/2022	16:59	12.7	6.5	50	557	100 BBLS LEAD CEMENT PUMPED
14	Pump Lead Cement	9/30/2022	17:09	12.7	3.7	50	215	150 BBLS LEAD CEMENT PUMPED
15	Pump Lead Cement	9/30/2022	17:19	12.7	5	52.9	341	202.9 BBLS LEAD CEMENT PUMPED
16	Pump Tail Cement	9/30/2022	17:19	13.5	5	0	307	BEGIN PUMPING 13.5 PPG TAIL CEMENT. DENSITY VERIFIED WITH MUD SCALE
17	Pump Tail Cement	9/30/2022	17:28	13.5	7	50	822	50 BBLS TAIL CEMENT PUMPED
18	Pump Tail Cement	9/30/2022	17:35	13.5	7	50	769	100 BBLS TAIL CEMENT PUMPED
19	Pump Tail Cement	9/30/2022	17:42	13.5	7	50	791	150 BBLS TAIL CEMENT PUMPED
20	Pump Tail Cement	9/30/2022	17:52	13.5	7	43.6	775	193.6 BBLS TAIL CEMENT PUMPED
21	Clean Pumps and Lines	9/30/2022	17:52					BLOW DOWN STANDPIPE, WASH UP PUMP, AND LINES
22	Drop Top Plug	9/30/2022	18:00	8.34	5	0	175	DROP PLUG, VERIFIED BY CUSTOMER REP. BEGIN KCL DISPLACEMENT
23	Pump Displacement	9/30/2022	18:07	8.34	9	50	500	50 BBLS KCL DISPLACEMENT PUMPED
24	Pump Displacement	9/30/2022	18:13	8.34	8	50	1220	100 BBLS KCL DISPLACEMENT PUMPED
25	Pump Displacement	9/30/2022	18:20	8.34	8	50	2037	150 BBLS KCL DISPLACEMENT PUMPED
26	Pump Displacement	9/30/2022	18:25	8.34	4.2	22.4	1717	172.4 BBLS KCL DISPLACEMENT PUMPED
27	Land Plug	9/30/2022	18:25				2777	LAND PLUG. FCP - 1717 PSI, BUMPED TO 2777 PSI
28	Check Floats	9/30/2022	18:31					CHECK FLOATS, FLOATS HELD, 2 BBLS BACK
29	Rig Down Iron	9/30/2022	18:40					RIG DOWN IRON AND HOSES
30	Depart Location	9/30/2022	19:15					DEPART LOCATION FOR RCO YARD

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 83736
Customer: Terra
Well Name: WMC 12-20



Job Start: Friday, September 30, 2022