



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 544-36 05-045-24463
S:3 T:6S R:94W Garfield CO

CallSheet #: 82169
Proposal #: 60936



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,

Zen Keith

SME | (307) 757-7178 | zen.keith@americancementing.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	1117	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1117	8268	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8268	11198	45
Casing	Inner	4.5	4	11.6	n/a	0	11198	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
AS Cement Trailer Float	CTF-9898	TRC(TRB)-090		
AS Cement Trailer Float	CTF-558	TRC(TRB)-053		
AS Cement Trailer Float	CTF-019	TRB-421		
Cement Trailer Float	CTF-161	TRC(TRB)-195	Balint, Daniel	Schweitzer, Casey
Field Storage Silo	FSS(CTS)-438			
Field Storage Silo	FSS(CTS)-470			
Light Duty Vehicles	LDV-083		Putnam, Gage	
Cement Pump Float	CPF-053	TRH-1140	Kirchenwitz, Jacob	

Timing

Event	Date/Time
Call Out	6/30/2022 08:50
Depart Facility	6/30/2022 16:30
On Location	6/30/2022 17:30
Rig Up Iron	6/30/2022 17:45
Job Started	6/30/2022 23:09
Job Completed	7/1/2022 01:39
Rig Down Iron	7/1/2022 01:50
Depart Location	7/1/2022 03:00

General Job Information

Metrics	Value
Well Fluid Density	11.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1040 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	172.8 bbls
Actual Displacement	172.8 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	Yes
Flare Prior to Job	1100 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	11.4 lb/gal
Well Fluid Density Out of Well	11.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	192 °F
BHST	253 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	64 °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	5867
2	Mud Flush	Flush	8.45			40.86		20.00	5993
3	Water	Flush	8.34			42.00		10.00	6245
4	12.7 Lead	Lead	12.70	2.00	10.99		422.00	150.50	6371
5	14.2 Tail	Tail	14.20	1.72	8.09		761.00	233.30	8268
6	Displacement	DisplacementFinal	8.34			42.00		172.80	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	12.7 Lead	ASTM TYPE I/II	Cement	100.00	%
4	Lead	12.7 Lead	BA-90	BondEnhancer	3.00	lb/sk
4	Lead	12.7 Lead	FL-66	FluidLoss	0.50	%BWOB
4	Lead	12.7 Lead	FP-24	Defoamer	0.30	%BWOB
4	Lead	12.7 Lead	GW-86	Viscosifier	0.10	%BWOB
4	Lead	12.7 Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
4	Lead	12.7 Lead	R-3	Retarder	0.45	%BWOB
4	Lead	12.7 Lead	STATIC FREE	Other	0.01	lb/sk
5	Tail	14.2 Tail	CLASS G	Cement	80.00	%
5	Tail	14.2 Tail	FLY ASH (POZZOLAN)	Extender	20.00	%
5	Tail	14.2 Tail	FL-66	FluidLoss	0.40	%BWOB
5	Tail	14.2 Tail	FP-24	Defoamer	0.30	%BWOB
5	Tail	14.2 Tail	GW-86	Viscosifier	0.10	%BWOB
5	Tail	14.2 Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
5	Tail	14.2 Tail	R-3	Retarder	0.15	%BWOB
5	Tail	14.2 Tail	S-8	StrengthRetrogression	27.00	%BWOB

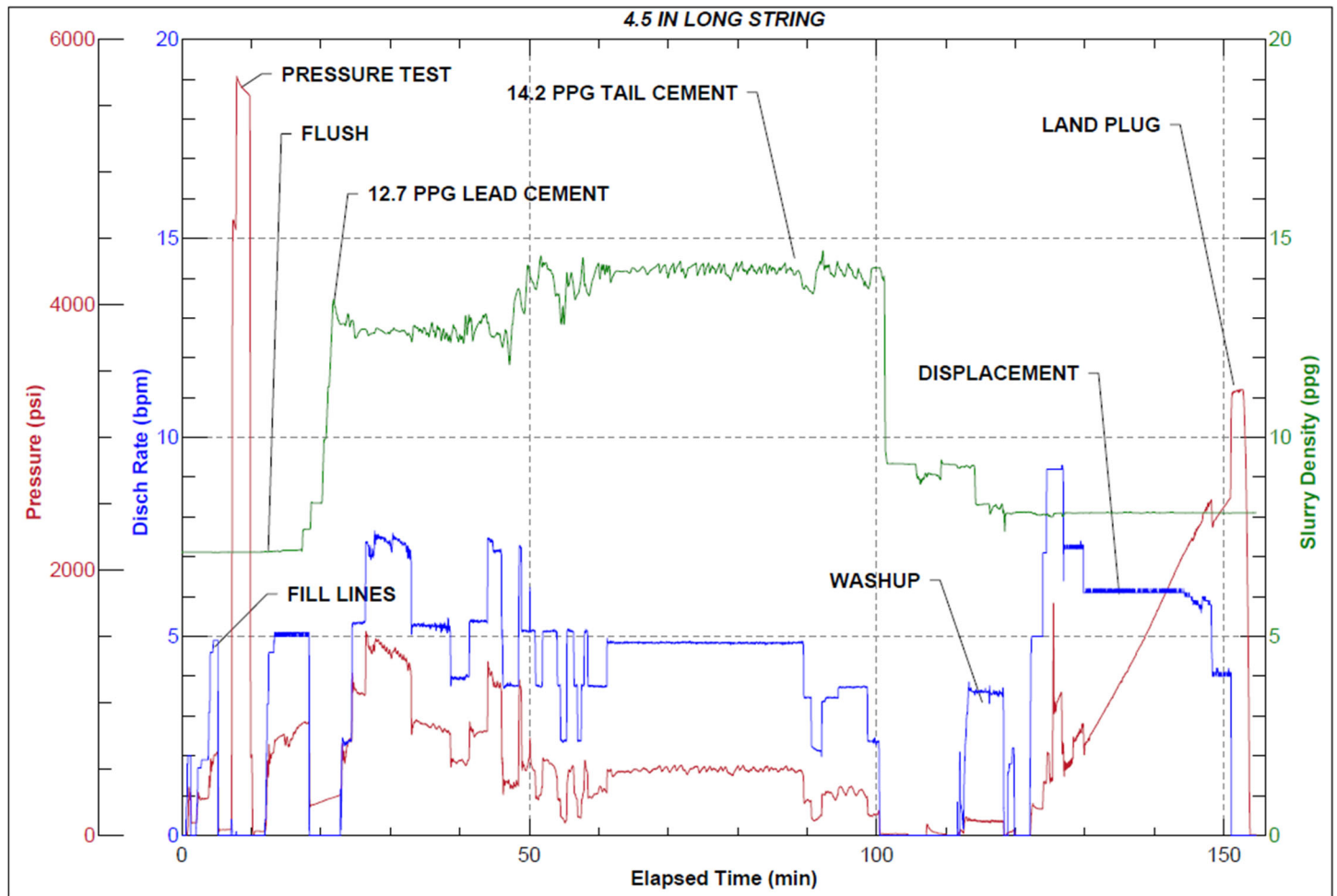
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	6/30/2022	08:50					CREW CALLED OUT FOR ON LOCATION TIME OF 19:00 6/30/22
2	Depart Location	6/30/2022	16:30					DEPART RCO YARD FOR LOCATION
3	Arrive On Location	6/30/2022	17:30					ARRIVE ON CUSTOMER SITE
4	Rig Up Iron	6/30/2022	17:45					RIG UP IRON AND HOSES
5	Waiting	6/30/2022	19:00					WAITING ON RIG TO RUN CASING
6	Safety Meeting	6/30/2022	22:30					JSA SAFETY MEETING WITH AC CREW, RIG HANDS, AND CUSTOMER REP
7	Fill Lines	6/30/2022	23:09	8.34	5	10	320	FILL LINES WITH FRESH WATER
8	Pressure Test Lines	6/30/2022	23:16	8.34			5700	PRESSURE TEST PUMP AND LINES TO 5000 PSI
9	Other	6/30/2022	23:20	8.45	5	20	770	PUMP MUD FLUSH + SURFACTANT
10	Other	6/30/2022	23:25	8.34	5	10	820	PUMP FRESH WATER FLUSH
11	Pump Lead Cement	6/30/2022	23:32	12.7	5.3	0	1144	BEGIN PUMPING LEAD CEMENT. DENSITY VERIFIED WITH MUD SCALE
12	Pump Lead Cement	6/30/2022	23:38	12.7	7.5	50	1388	50 BBLS LEAD CEMENT PUMPED
13	Pump Lead Cement	6/30/2022	23:41	12.7	5.4	50	805	100 BBLS LEAD CEMENT PUMPED
14	Pump Lead Cement	6/30/2022	23:55	12.7	3.8	50.5	321	150.5 BBLS LEAD CEMENT PUMPED
15	Pump Tail Cement	6/30/2022	23:56	14.2	5	0	551	BEGIN PUMPING TAIL CEMENT. DENSITY VERIFIED WITH MUD SCALE
16	Pump Tail Cement	7/1/2022	00:07	14.2	3.8	50	323	50 BBLS TAIL CEMENT PUMPED
17	Pump Tail Cement	7/1/2022	00:18	14.2	4.8	50	520	100 BBLS TAIL CEMENT PUMPED
18	Pump Tail Cement	7/1/2022	00:28	14.2	4.8	50	517	150 BBLS TAIL CEMENT PUMPED
19	Pump Tail Cement	7/1/2022	00:40	14.2	3.5	50	323	200 BBLS TAIL CEMENT PUMPED
20	Pump Tail Cement	7/1/2022	00:49	14.2	3.5	33.3	330	233.3 BBLS TAIL CEMENT PUMPED
21	Clean Pumps and Lines	7/1/2022	00:49					SHUT DOWN, WASH UP PUMP AND LINES, BLOW DOWN LINES
22	Drop Top Plug	7/1/2022	01:10	8.34	5	0	211	DROP PLUG, VERIFIED BY CUSTOMER REP. BEGIN KCL DISPLACEMENT
23	Pump Displacement	7/1/2022	01:17	8.34	7	50	675	50 BBLS KCL DISPLACEMENT PUMPED
24	Pump Displacement	7/1/2022	01:25	8.34	6	50	1477	100 BBLS KCL DISPLACEMENT PUMPED
25	Pump Displacement	7/1/2022	01:34	8.34	6	50	2330	150 BBLS KCL DISPLACEMENT PUMPED
26	Pump Displacement	7/1/2022	01:39	8.34	6	22.8	2570	172.8 BBLS KCL DISPLACEMENT PUMPED, SLOWED RATE LAST 10 BBLS TO 4 BPM
27	Land Plug	7/1/2022	01:39				3370	LAND PLUG. FCP - 2570 PSI, BUMPED TO 3370 PSI
28	Check Floats	7/1/2022	01:40					CHECK FLOATS. FLOATS HELD, 2 BBLS BACK
29	Rig Down Iron	7/1/2022	01:50					RIG DOWN IRON AND HOSES
30	Depart Location	7/1/2022	03:00					DEPART LOCATION FOR RCO YARD

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 82169
Customer: Terra
Well Name: FED NR 544-36



Job Start: Thursday, June 30, 2022