



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 32-4 05-045-24481
S:3 T:6S R:94W Garfield CO

CallSheet #: 83020
Proposal #: 62301



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	1133	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1133	8292	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8292	11097	45
Casing	Inner	4.5	4	11.6	n/a	0	11097	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS(CTS)-470		
Field Storage Silo	FSS(CTS)-438		
Cement Trailer Float	CTF-242	TRC(TRB)-059	Schweitzer, Casey
AS Cement Trailer Float	CTF-019	TRC(TRB)-059	
AS Cement Trailer Float	CTF-7145	TRC(TRB)-059	
AS Cement Trailer Float	CTF-138	TRC(TRB)-115	
Cement Pump Float	CPF-136	TRH-1140	Woronovitch, Collin
Light Duty Vehicles	LDV-061		Aden, Mark
Cement Utility Float	CUF(FIF)-164	LDV-088	Burton, Devin

Timing

Event	Date/Time
Call Out	8/22/2022 12:00
Depart Facility	8/22/2022 18:20
On Location	8/22/2022 18:52
Rig Up Iron	8/22/2022 19:25
Job Started	8/22/2022 22:48
Job Completed	8/23/2022 00:48
Rig Down Iron	8/23/2022 00:56
Depart Location	8/23/2022 04:00

General Job Information

Metrics	Value
Well Fluid Density	10.7 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	880 bbls
Rig Circulation Time	1.46 hours
Calculated Displacement	172 bbls
Actual Displacement	172 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	10.7 lb/gal
Well Fluid Density Out of Well	10.7 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	183 °F
BHST	253 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	62.1 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	425 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	0 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	5959
2	Mud Flush	Flush	8.45			40.86		20.00	6085
3	Water	Flush	8.34			42.00		10.00	6337
4	12.7 Lead	Lead	12.70	2.00	10.99		407.00	145.15	6463
5	14.2 Tail	Tail	14.20	1.72	8.09		741.00	227.17	8292
6	Displacement	DisplacementFinal	8.34			42.00		173.00	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	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

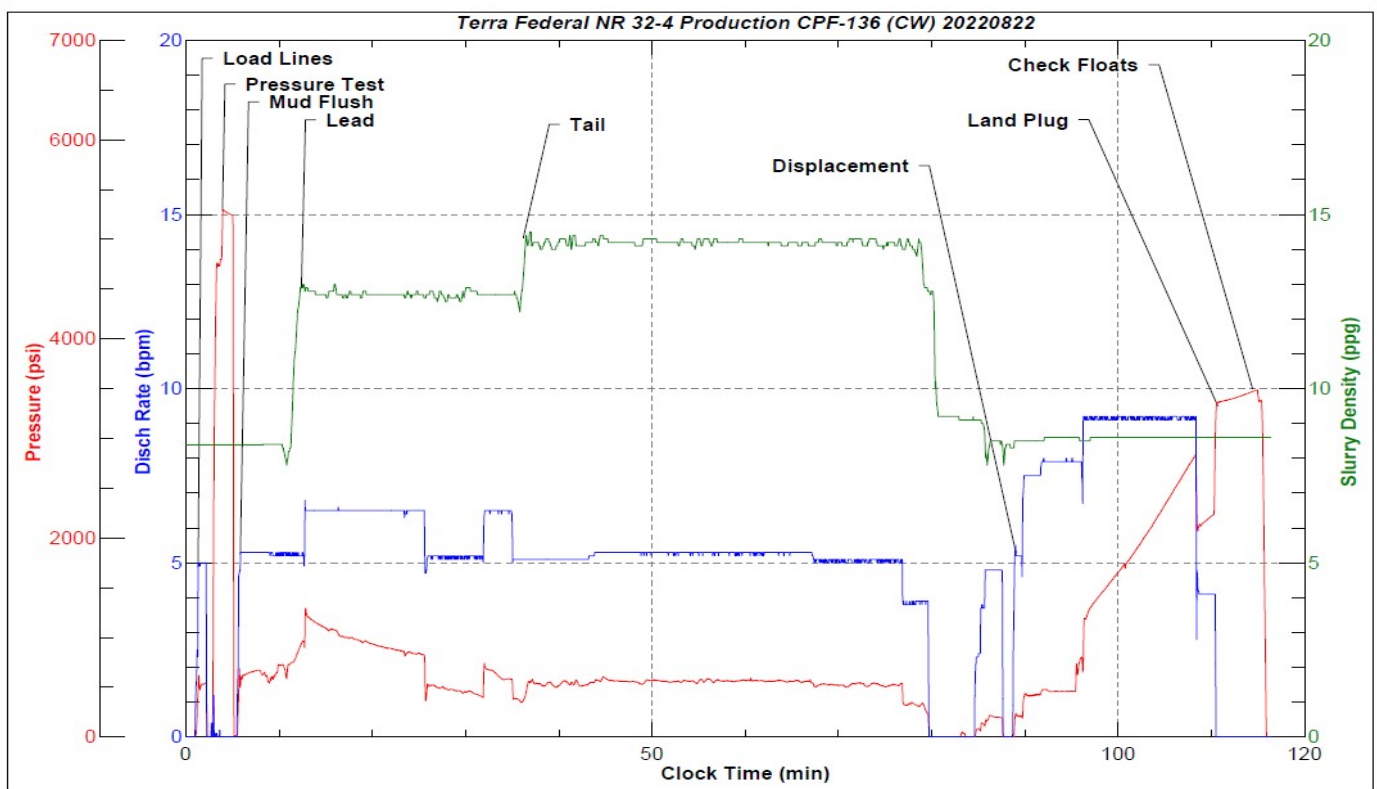
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	8/22/2022	12:00					Yard call 18:00 on location 19:00
2	Depart For Location	8/22/2022	18:20					Leave Rifle yard for location
3	Arrive On Location	8/22/2022	18:52					Arrive on location, Rig running casing.
4	Spot Equipment	8/22/2022	19:10					Spot in all Equipment
5	Rig Up Iron	8/22/2022	19:25					Pre rig up safety meeting, rig in all equipment and lines to standpipes
6	Safety Meeting	8/22/2022	22:15					Pre job safety meeting with company man and rig crew
7	End Circulation	8/22/2022	22:30					Rig ended circulation, circulated for 1.46 hours, total of 880 BBLS
8	Rig Up Iron	8/22/2022	22:35					Rig up Cement head and lines on the floor
9	Pump Spacer	8/22/2022	22:48	8.34	5	10	446	Pumping freshwater spacer to load lines
10	Pressure Test Lines	8/22/2022	22:54				5000	Pressure test
11	Pump Spacer	8/22/2022	22:57	8.45	5	20	640	Pumping mud flush spacer
12	Pump Spacer	8/22/2022	23:01	8.34	5	10	623	Pumping freshwater spacer
13	Pump Lead Cement	8/22/2022	23:04	12.7		0	936	Pumping lead cement, returns
14	Pump Lead Cement	8/22/2022	23:12	12.7	6.5	50	955	Pumping lead cement
15	Pump Lead Cement	8/22/2022	23:20	12.7	5	100	508	Pumping lead cement
16	Pump Lead Cement	8/22/2022	23:28	12.7	5	145	440	Pumping lead cement
17	Pump Tail Cement	8/22/2022	23:28	14.2	5	0	570	Pumping tail cement, returns
18	Pump Tail Cement	8/22/2022	23:38	14.2	5.5	50	589	Pumping tail cement
19	Pump Tail Cement	8/22/2022	23:48	14.2	5.5	100	603	Pumping tail cement
20	Pump Tail Cement	8/22/2022	23:57	14.2	5.5	150	590	Pumping tail cement
21	Pump Tail Cement	8/23/2022	00:07	14.2	5	200	552	Pumping tail cement
22	Pump Tail Cement	8/23/2022	00:11	14.2	4	227	351	Pumping tail cement
23	Clean Pumps and Lines	8/23/2022	00:13					Clean pump and lines to pit
24	Drop Top Plug	8/23/2022	00:20					Drop top plug, verified by company man
25	Pump Displacement	8/23/2022	00:21	8.34	5.5	0	231	Pumping KCL displacement, returns
26	Pump Displacement	8/23/2022	00:28	8.34	8	50	506	Pumping KCL displacement
27	Pump Displacement	8/23/2022	00:33	8.34	9	100	1851	Pumping KCL displacement
28	Pump Displacement	8/23/2022	00:39	8.34	9	150	2689	Pumping KCL displacement
29	Pump Displacement	8/23/2022	00:42	8.34	4	172	2785	Pumping KCL displacement
30	Land Plug	8/23/2022	00:42				3408	Land plug, FCP 2785 PSI bumped to 3408 PSI
31	Check Floats	8/23/2022	00:48					Bled pressure, floats held. 2 BBLS bled back.
32	Rig Down Iron	8/23/2022	00:56					Pre rig down safety meeting, rig down cement head and lines on the floor.
33	Depart Location	8/23/2022	04:00					Leave location for Rifle shop

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 83020
Customer: Terra
Well Name: Federal NR 32-4



Job Start: Wednesday, August 24, 2022