



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

FEDERAL NR 42-3 05-045-24477
S:3 T:6S R:94W Garfield CO

CallSheet #: 81092
Proposal #: 59032



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,

Michael Harold

Field Engineer II | (970) 773-3636 | michael.harold@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	1118	0
Open Hole	Outer	n/a	8.75	n/a	n/a	1118	8236	45
Open Hole	Outer	n/a	8.75	n/a	n/a	8236	10990	45
Casing	Inner	4.5	4	11.6	n/a	0	10990	0

Timing

Event	Date/Time
Call Out	4/22/2022 15:00
Depart Facility	4/22/2022 22:30
On Location	4/22/2022 22:55
Rig Up Iron	4/22/2022 23:55
Job Started	4/23/2022 02:08
Job Completed	4/23/2022 04:30
Rig Down Iron	4/23/2022 04:40
Depart Location	4/23/2022 05:50

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
AS Cement Trailer	CTF-901	TRC(TRB)-425	
AS Cement Trailer	CTF(FTF)-148	TRC(TRB)-424	
AS Cement Trailer	CTF-048	TRC(TRB)-195	
Cement Trailer	CTF-280	TRC(TRB)-202	Hansen, James
Field Storage Silo	FSS(CTS)-438		
Field Storage Silo	FSS(CTS)-470		
Cement Pump	CPF-012	TRH-964	Carrasco, Joel
Light Duty Vehicles	LDV-083		Aden, Mark

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1200 bbls
Rig Circulation Time	2 hours
Calculated Displacement	170 bbls
Actual Displacement	170 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	10.8 lb/gal
Well Fluid Density Out of Well	10.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	192 °F
BHST	253 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	52.4 °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	Losses into Spacer	Losses into Cement	Losses into Displacement
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	5662
2	Mud Flush	Flush	8.45			40.86		20.00	5788
3	Water	Flush	8.34			42.00		10.00	6040
4	12.7 Lead	Lead	12.70	2.00	10.99		461.00	164.40	6166
5	14.2 Tail	Tail	14.20	1.72	8.09		722.00	221.35	8236
6	Displacement	DisplacementFinal	8.34			42.00		171.00	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	StrengthRetgression	27.00	%BWOB

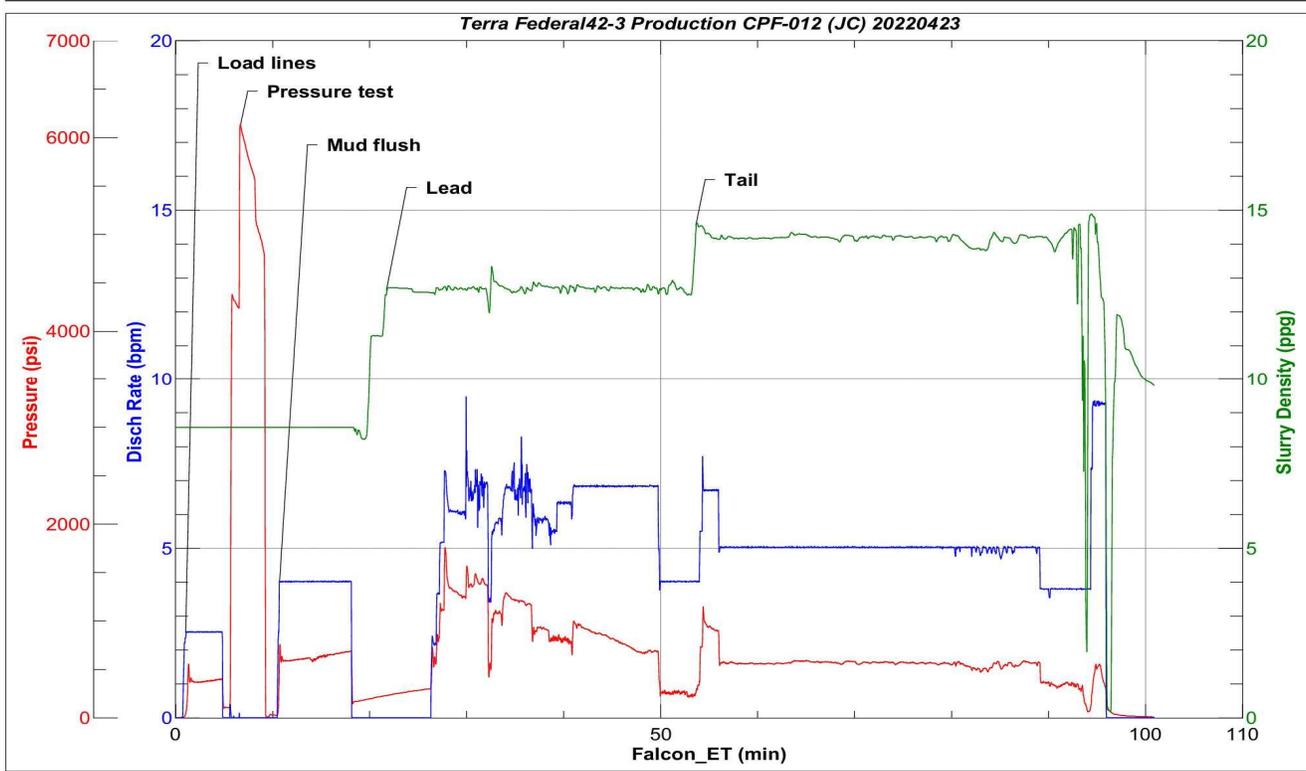
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	4/22/2022	15:00					Yard call 15:00 on location 23:00.
2	Depart For Location	4/22/2022	22:30					Leave Rifle yard for location
3	Arrive On Location	4/22/2022	22:55					Arrive on location rig running casing
4	Spot Equipment	4/22/2022	23:45					Spot in all Equipment
5	Rig Up Iron	4/22/2022	23:55					Pre rig up safety meeting, rig in all equipment and lines to stand pipes
6	End Circulation	4/23/2022	01:25					Rig ended circulation, Circulated for 2 Hour, total of 1200 BBLS
7	Rig Up Iron	4/23/2022	01:30					Rig up Cement head and lines on the floor
8	Safety Meeting	4/23/2022	01:45					Pre job safety meeting with company man and rig crew
9	Pump Spacer	4/23/2022	02:08	8.34	2.5	10	555	Pumping fresh water spacer to load lines
10	Pressure Test Lines	4/23/2022	02:13				5000	Pressure test
11	Pump Spacer	4/23/2022	02:19	8.45	4	20	587	Pumping mud flush spacer
12	Pump Spacer	4/23/2022	02:23	8.34	4	10	652	Pumping fresh water spacer
13	Pump Lead Cement	4/23/2022	02:35	12.7	6	0	1266	Pumping lead cement
14	Pump Lead Cement	4/23/2022	02:43	12.7	7	50	1210	Pumping lead cement
15	Pump Lead Cement	4/23/2022	02:50	12.7	7	100	888	Pumping lead cement
16	Pump Lead Cement	4/23/2022	02:57	12.7	4	150	273	Pumping lead cement
17	Pump Lead Cement	4/23/2022	03:02	12.7	4	164	313	Pumping lead cement
18	Pump Tail Cement	4/23/2022	03:03	14.2	7	0	898	Pumping tail cement
19	Pump Tail Cement	4/23/2022	03:10	14.2	5	50	567	Pumping tail cement
20	Pump Tail Cement	4/23/2022	03:20	14.2	5	100	577	Pumping tail cement
21	Pump Tail Cement	4/23/2022	03:31	14.2	5	150	568	Pumping tail cement
22	Pump Tail Cement	4/23/2022	03:41	14.2	5	200		Pumping tail cement
23	Pump Tail Cement	4/23/2022	03:43	14.2	5	207		Lost hydraulic on pump; Turned over to rig to displace.
24	Clean Pumps and Lines	4/23/2022	03:50					Clean pump and lines to pit
25	Drop Top Plug	4/23/2022	04:05					Drop top plug verified by company man
26	Pump Displacement	4/23/2022	04:05			0		Pumping KCL displacement
27	Pump Displacement	4/23/2022	04:30			171	2050	Pumping KCL displacement
28	Land Plug	4/23/2022	04:30				3070	Land plug. FCP 2050 PSI bumped to 3070 PSI
29	Check Floats	4/23/2022	04:35					Bled pressure, floats held. 2 BBL bled back.
30	Rig Down Iron	4/23/2022	04:40					Pre rig down safety meeting, rig down cement head and lines on the floor.
31	Depart Location	4/23/2022	05:50					Leave location for Rifle shop

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 81092
Customer: Terra
Well Name: Federal NR 42-3



BJ Services

Job Start: Saturday, April 23, 2022