



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 322-8 05-045-24319
S:8 T:6S R:94W Garfield CO

CallSheet #: 75228
Proposal #: 50457



SURFACE Post Job Report

Attention: Mr. Lynn Cass | (970) 263-2716 | lcass@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Lynn Cass,

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

Field Engineer | (307) 757-7178 | zen.keith@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 305-4888

Table of Contents

1 Job Details & Summary	3
Geometry.....	3
Equipment / People	3
Timing	3
General Job Information.....	3
Job Details.....	3
Job Details (cont.)	3
Circulation.....	3
Job Execution Information.....	4
Job Fluid Details	4
2 Job Logs	5
3 Water Analysis	6
4 Pump Diagrams	6

1 Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer		13.5		0	500	16
Open Hole	Outer		13.5		500	1000	16
Casing	Inner	9.625	8.921	36	0	1000	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-340	TRB-424	Kirchenwitz, Jacob	39
Cement Pump	CPF-058	TRH-1140	Brennecke, Dirk	39
Light Duty Pickups	LDV-3104		Linn, Paul	39

Timing

Event	Date/Time
Call Out	10/25/2020 01:20
Depart Facility	10/25/2020 05:10
On Location	10/25/2020 05:48
Rig Up Iron	10/25/2020 06:04
Job Started	10/25/2020 08:52
Job Completed	10/25/2020 09:26
Rig Down Iron	10/25/2020 09:55
Depart Location	10/25/2020 10:51

General Job Information

Metrics	Value
Well Fluid Density	9.3 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	100 bbls
Rig Circulation Time	1 hours
Calculated Displacement	77.13 bbls
Actual Displacement	77 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	17 bbls
Well Topped Out	No

Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.3 lb/gal
Well Fluid Density Out of Well	9.3 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Circulation

Lost Circulation Experienced
No

Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sk)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		20.00	0
1	2	Lead Cement	Lead	12.30	2.34	13.42		122.00	50.82	0
1	3	Tail Cement	Tail	12.80	2.08	11.46		146.00	53.99	500
1	4	Water	DisplacementFinal	8.34			42.00		74.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	2	Lead	Lead Cement	A-10	Accelerator	5.00	%BWOB
1	2	Lead	Lead Cement	A-2	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	A-7P	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	2	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	3	Tail	Tail Cement	ASTM TYPE III	Cement	100.00	%
1	3	Tail	Tail Cement	A-10	Accelerator	5.00	%BWOB
1	3	Tail	Tail Cement	A-2	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	A-7P	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	3	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk

2 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	10/25/2020	01:20					Callout on location time of 07:00 10/25/2020
2	Safety Meeting	10/25/2020	04:57					Pre-Convoy Safety meeting
3	Depart Location	10/25/2020	05:10					Depart from Rifle yard for H&P 318
4	Arrive On Location	10/25/2020	05:48					Arrive on location, rig was pulling drill pipe
5	Safety Meeting	10/25/2020	05:56					Pre-Rig Up safety meeting with American Cementing crew
6	Rig Up Iron	10/25/2020	06:04					Rig up all equipment
7	Safety Meeting	10/25/2020	08:22					Pre-Job Safety meeting with company man, rig crew, and all American Cementing
8	Rig Up Iron	10/25/2020	08:31					Load plug in plug container (verified by company man), stab plug container, hook up lines
9	Fill Lines	10/25/2020	08:44	8.4	2	5	48	Fill lines with 5 bbls of fresh water
10	Pressure Test Lines	10/25/2020	08:46				3445	Pressure test to 3445 psi
11	Pump Spacer	10/25/2020	08:48	8.4	5	20	208	Pump Water Spacer
12	Pump Lead Cement	10/25/2020	08:52	12.3	8	5	708	Pump Lead Cement @ 12.3 ppg
13	Pump Lead Cement	10/25/2020	08:57	12.3	8	40	681	Pump Lead Cement
14	Pump Lead Cement	10/25/2020	08:59	12.3	4.5	50	256	Finished pumping Lead Cement with 50 bbls away
15	Pump Tail Cement	10/25/2020	09:00	12.8	8	5	767	Pump Tail Cement @ 12.8 ppg
16	Pump Tail Cement	10/25/2020	09:05	12.8	8	40	681	Pump Tail Cement
17	Pump Tail Cement	10/25/2020	09:08	12.8	4.5	55	249	Pump Tail Cement
18	Shutdown	10/25/2020	09:09					Shutdown with 55 bbls of Tail cement away
19	Drop Top Plug	10/25/2020	09:10					Drop plug verified by company man
20	Pump Displacement	10/25/2020	09:12	8.4	10	10	634	Pump Fresh water displacement
21	Pump Displacement	10/25/2020	09:18	8.4	10	50	797	Pump Fresh water displacement
22	Pump Displacement	10/25/2020	09:19	8.4	10	67	897	Pump Fresh water displacement
23	Cement Back to Surface	10/25/2020	09:19					17 bbls of cement to surface
24	Pump Displacement	10/25/2020	09:24	8.4	2.5	77	288	Pump Fresh water displacement
25	Land Plug	10/25/2020	09:24				1220	Land the plug @ 288 psi took to 1220 psi
26	Check Floats	10/25/2020	09:26					Check floats, floats held 1/2 bbl back
27	Safety Meeting	10/25/2020	09:29					Pre-Rig Down Safety meeting with rig crew
28	Rig Down Iron	10/25/2020	09:33					Rig Down rig floor
29	Safety Meeting	10/25/2020	09:41					Pre-Rig Down Safety meeting with American Cementing crew
30	Rig Down Iron	10/25/2020	09:55					Rig Down all equipment
31	Safety Meeting	10/25/2020	10:36					Pre-Convoy Safety meeting
32	Depart Location	10/25/2020	10:51					Depart from location for Rifle yard. Thank you for using American Cementing, Andrew Linn, and crew

3 Water Analysis

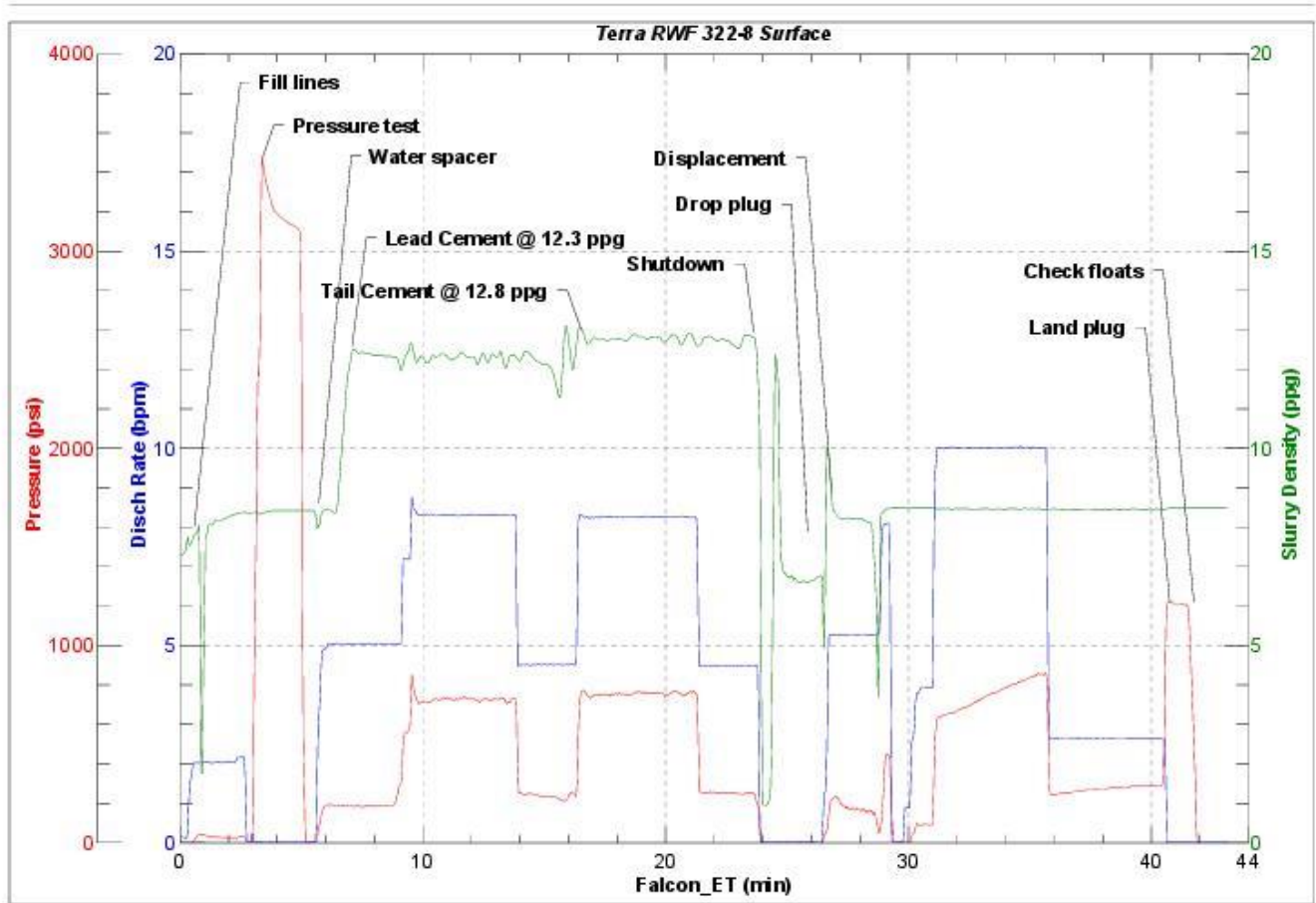
Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	68.8 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	200 mg/L	0-3000 mg/L
Total Alkalinity	125	0-1000
Total Hardness	>375 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	400 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams



JobMaster Program Version 5.01C 1

Job Number:
Customer:
Well Name:



BJ Services

Job Start: Sunday, October 25, 2020