



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 521-8 05-045-24317
S:8 T:6S R:94W Garfield CO

CallSheet #: 75317
Proposal #: 50550



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

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1 Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	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-263	TRB-190	Rivas, Saul	64
Cement Pump	CPF-058	TRH-1140	Brennecke, Dirk	64
Light Duty Pickups	LDV-3104		Linn, Paul	64

Timing

Event	Date/Time
Call Out	11/4/2020 11:42
Depart Facility	11/4/2020 15:03
On Location	11/4/2020 15:22
Rig Up Iron	11/4/2020 15:44
Job Started	11/4/2020 20:06
Job Completed	11/4/2020 20:50
Rig Down Iron	11/4/2020 21:13
Depart Location	11/4/2020 22:00

General Job Information

Metrics	Value
Well Fluid Density	9.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	400 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	76.99 bbls
Actual Displacement	77 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	20 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	9.4 lb/gal
Well Fluid Density Out of Well	9.4 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	11/4/2020	11:42					Callout, on location time of 18:00
2	Safety Meeting	11/4/2020	14:51					Pre-Convoy Safety meeting
3	Depart Location	11/4/2020	15:03					Depart from Rifle yard for H&P 318
4	Arrive On Location	11/4/2020	15:22					Arrive on location rig was pulling drill pipe
5	Safety Meeting	11/4/2020	15:36					Pre-Rig Up Safety meeting
6	Rig Up Iron	11/4/2020	15:44					Rig up all ground equipment
7	Safety Meeting	11/4/2020	19:38					Pre-Job Safety meeting with company man, rig crew, and all American Cementing crew
8	Rig Up Iron	11/4/2020	19:54					Load plug in plug container (verified by company man), stab plug container, hook up lines
9	Fill Lines	11/4/2020	20:06	8.4	2	5	58	Fill lines with 5 bbls Fresh water
10	Pressure Test Lines	11/4/2020	20:09				3325	Pressure test to 3325 psi
11	Pump Spacer	11/4/2020	20:11	8.4	5	20	206	Pump Water Spacer
12	Pump Lead Cement	11/4/2020	20:15	12.3	7.5	5	568	Pump Lead Cement @ 12.3 ppg
13	Pump Lead Cement	11/4/2020	20:20	12.3	7.5	40	578	Pump Lead Cement
14	Pump Lead Cement	11/4/2020	20:23	12.3	4	51	202	Finished pumping Lead Cement with 51 bbls away
15	Pump Tail Cement	11/4/2020	20:24	12.8	7.5	5	673	Pump Tail Cement @ 12.8 ppg
16	Pump Tail Cement	11/4/2020	20:29	12.8	7.5	40	649	Pump Tail Cement
17	Pump Tail Cement	11/4/2020	20:32	12.8	4	55	192	Pump Tail Cement
18	Shutdown	11/4/2020	20:32					Shutdown with 55 bbls of Tail Cement away
19	Drop Top Plug	11/4/2020	20:35					Drop plug (verified by company man)
20	Pump Displacement	11/4/2020	20:37	8.4	10	10	608	Pump Fresh Water Displacement
21	Pump Displacement	11/4/2020	20:42	8.4	10	50	753	Pump Fresh Water Displacement
22	Pump Displacement	11/4/2020	20:43	8.4	10	66	808	Pump Fresh Water Displacement
23	Pump Displacement	11/4/2020	20:48	8.4	2	77	268	Pump Fresh Water Displacement
24	Cement Back to Surface	11/4/2020	20:48					20 bbls of cement to surface
25	Land Plug	11/4/2020	20:48				815	Landed the plug @ 268 psi took to 815 psi
26	Check Floats	11/4/2020	20:50					Check floats, floats held 1/2 bbl back
27	Safety Meeting	11/4/2020	20:55					Pre-Rig Down Safety meeting with rig crew
28	Rig Down Iron	11/4/2020	20:59					Rig Down rig floor
29	Safety Meeting	11/4/2020	21:06					Pre-Rig Down Safety meeting with all American Cementing crew
30	Rig Down Iron	11/4/2020	21:13					Rig Down all equipment
31	Safety Meeting	11/4/2020	21:55					Pre-Convoy Safety meeting
32	Depart Location	11/4/2020	22:00					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	5.5-8.5
Chlorides	280 mg/L	0-3000 mg/L
Total Alkalinity	0	0-1000
Total Hardness	100 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	450 mg/L	0-1500 mg/L
Potassium	150 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

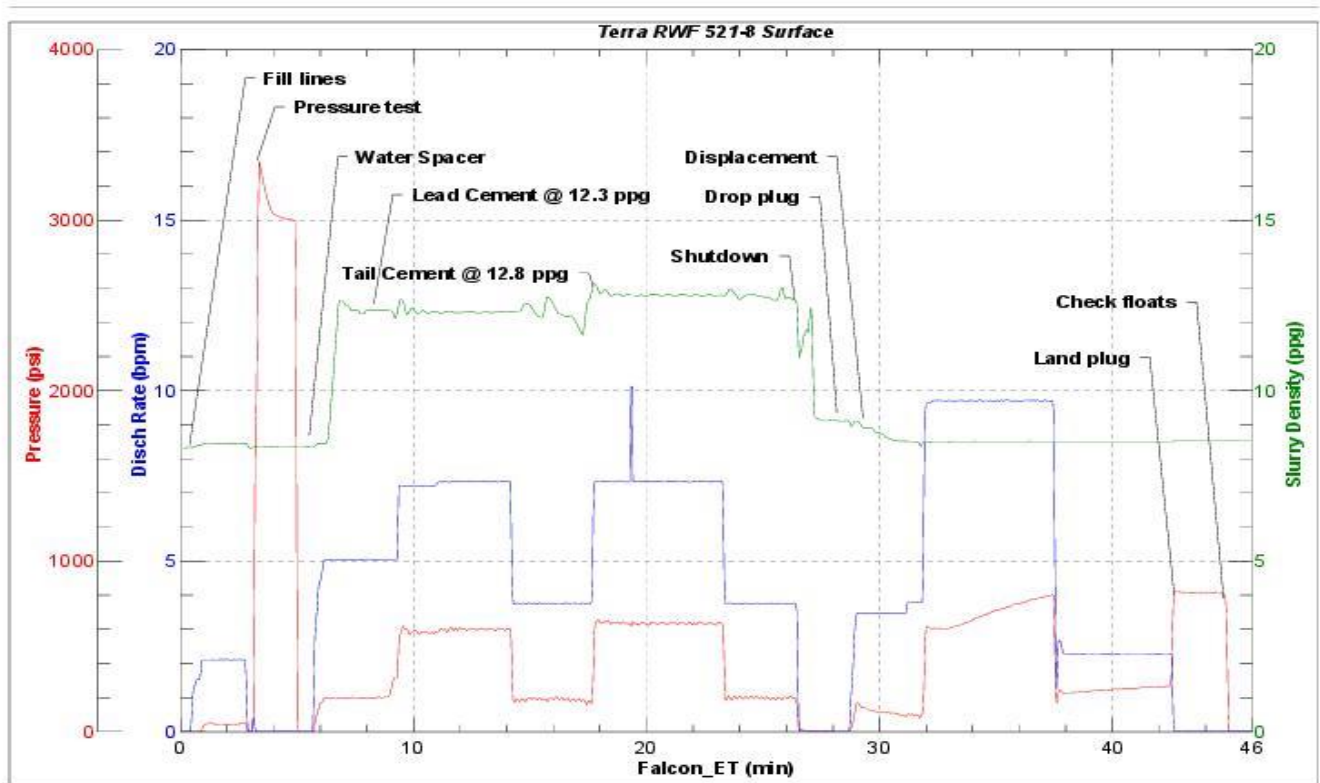


JobMaster Program Version 5.01C 1

Job Number:

Customer:

Well Name:



BJ Services

Job Start: Wednesday, November 04, 2020