



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 344-9 05-045-24393
S:9 T:6S R:94W Garfield CO

CallSheet #: 80026
Proposal #: 57480



SURFACE Post Job Report

Attention: Dustin Childers | (936) 524-8828 | dchilders@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear 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	20	19.124	94	n/a	0	120	0
Open Hole	Outer	n/a	13.5	n/a	n/a	120	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1100	16
Casing	Inner	9.625	8.921	36	n/a	0	1100	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer	CTF-254	TRC(TRB)-090	Manuelito, Hamilton
Cement Pump	CPF-052	TRH-959	McNeal, Lawrence
Light Duty Vehicles	LDV-061		Aden, Mark

Timing

Event	Date/Time
Call Out	1/28/2022 14:00
Depart Facility	1/28/2022 17:30
On Location	1/28/2022 18:10
Rig Up Iron	1/28/2022 19:20
Job Started	1/29/2022 00:37
Job Completed	1/29/2022 01:35
Rig Down Iron	1/29/2022 01:50
Depart Location	1/29/2022 03:00

General Job Information

Metrics	Value
Well Fluid Density	8.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	660 bbls
Rig Circulation Time	1 hours
Calculated Displacement	84 bbls
Actual Displacement	84 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	16 bbls
Well Topped Out	No

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	8.9 lb/gal
Well Fluid Density Out of Well	8.9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	37.3 °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		20.00	0
2	Lead Cement	Lead	12.30	2.34	13.42		169.00	70.39	0
3	Tail Cement	Tail	12.80	2.08	11.46		174.00	64.35	500
4	Water	DisplacementFinal	8.34			42.00		82.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead Cement	ASTM TYPE I/II	Cement	100.00	%
2	Lead	Lead Cement	A-10	Accelerator	5.00	%BWOB
2	Lead	Lead Cement	A-2	Accelerator	2.00	lb/sk
2	Lead	Lead Cement	A-7P	Accelerator	2.00	lb/sk
2	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
2	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead Cement	STATIC FREE	Other	0.01	lb/sk
3	Tail	Tail Cement	ASTM TYPE I/II	Cement	100.00	%
3	Tail	Tail Cement	A-10	Accelerator	5.00	%BWOB
3	Tail	Tail Cement	A-2	Accelerator	2.00	lb/sk
3	Tail	Tail Cement	A-7P	Accelerator	2.00	lb/sk
3	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
3	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Tail Cement	STATIC FREE	Other	0.01	lb/sk

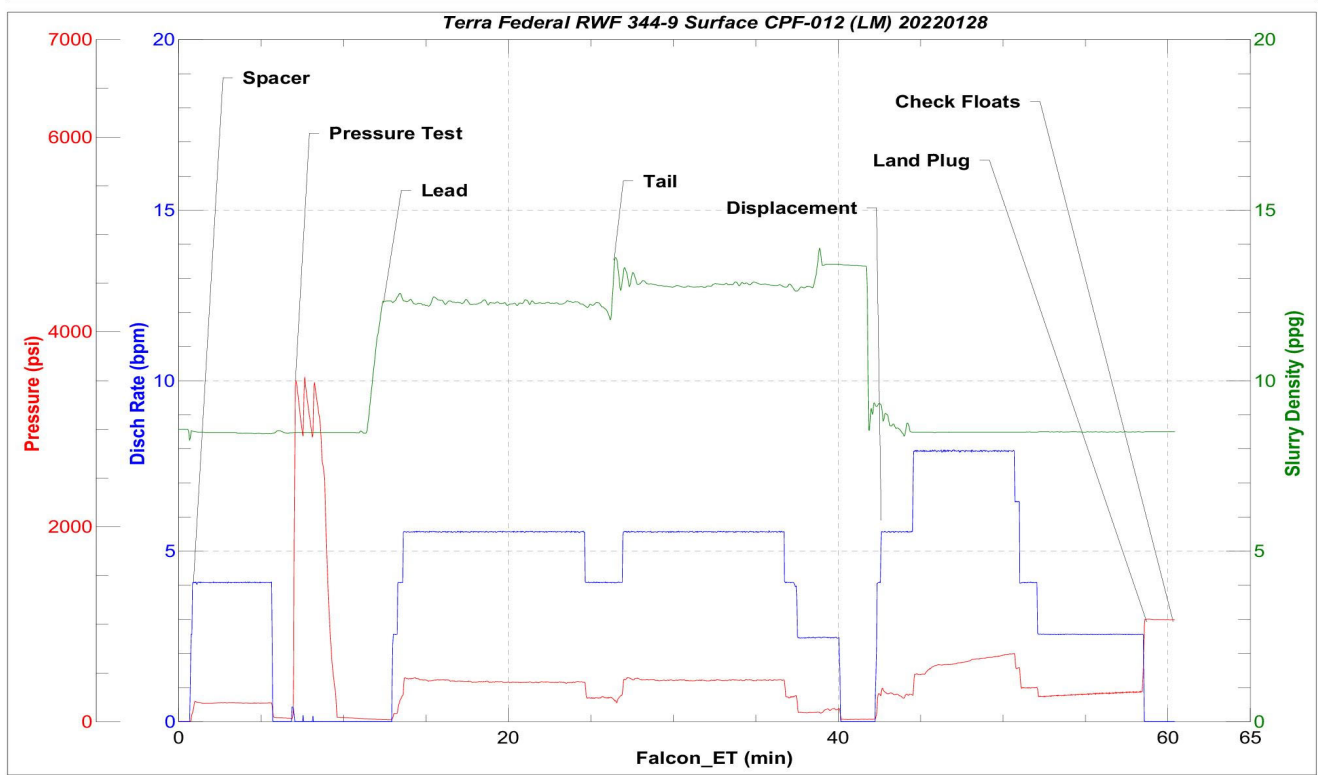
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	1/28/2022	14:00					Yard call 1700 on location 1800
2	Depart For Location	1/28/2022	17:30					Leave Rifle yard for location
3	Arrive On Location	1/28/2022	18:10					Arrive on location, rig pulling drill pipe
4	Spot Equipment	1/28/2022	19:10					Spot in all equipment
5	Rig Up Iron	1/28/2022	19:20					Pre rig up safety meeting, rig in all equipment and lines to the cellar
6	Safety Meeting	1/29/2022	00:02					Pre job safety meeting with company man
7	End Circulation	1/29/2022	00:15					Rig ended circulation, circulated 60 mins @11 BBLS/min total of 660 BBLS
8	Pump Spacer	1/29/2022	00:38	8.34	4	20	208	Pumping fresh water spacer, returns
9	Pressure Test Lines	1/29/2022	00:43				3000	Pressure test
10	Pump Lead Cement	1/29/2022	00:50	12.3	5.5	0	443	Pumping lead cement
11	Pump Lead Cement	1/29/2022	01:00	12.3	5.5	50	259	Pumping lead cement
12	Pump Lead Cement	1/29/2022	01:03	12.3	4	71	247	Pumping lead cement
13	Pump Tail Cement	1/29/2022	01:03	12.8	4	0	249	Pumping tail cement
14	Pump Tail Cement	1/29/2022	01:12	12.8	5.5	50	424	Pumping tail cement
15	Pump Tail Cement	1/29/2022	01:15	12.8	2.5	65	94	Pumping tail cement
16	Drop Top Plug	1/29/2022	01:18					Dropped top plug verified by company man
17	Pump Displacement	1/29/2022	01:19	8.34	4	0	307	Pumping fresh water displacement
18	Pump Displacement	1/29/2022	01:26	8.34	8	50	667	Pumping fresh water displacement
19	Cement Back to Surface	1/29/2022	01:29		2.5	68		Cement to surface @ 68 BBLS pumped. Total of 16 BBLS to surface
20	Pump Displacement	1/29/2022	01:35	8.34	2.5	84	334	Pumping fresh water displacement
21	Land Plug	1/29/2022	01:35					Land plug, FCP 334 PSI bumped to 1066 PSI
22	Check Floats	1/29/2022	01:39					Bled pressure, floats held .5 BBL bled back
23	Rig Down Iron	1/29/2022	01:50					Pre rig down safety meeting, rig down lines in the cellar
24	Depart Location	1/29/2022	03:00					Leave location for Rifle shop

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 80026
Customer: Terra
Well Name: Federal RWF 344-9



BJ Services

Job Start: Saturday, January 29, 2022