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# **Terra Energy Partners, LLC**

## **SURFACE POST JOB REPORT**

**FEDERAL RWF 332-9 05-045-24401**  
**S:9 T:6S R:94W Garfield CO**

CallSheet #: 79204  
Proposal #: 56326



**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

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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 (%)
Open Hole	Outer	n/a	13.5	n/a	n/a	0	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1128	16
Casing	Inner	9.625	8.921	36	n/a	0	1118	0

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer	CTF-246		Hansen, James	
Light Duty Vehicles	LDV-5429		Lancaster, Stephen	Linn, Paul
Cement Pump	CPF-053	TRH-964	Putnam, Gage	

### Timing

Event	Date/Time
Call Out	11/21/2021 15:44
Depart Facility	11/21/2021 22:15
On Location	11/21/2021 22:33
Rig Up Iron	11/21/2021 22:52
Job Started	11/22/2021 04:28
Job Completed	11/22/2021 05:50
Rig Down Iron	11/22/2021 06:02
Depart Location	11/22/2021 07:03

### General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	250 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	83.09 bbls
Actual Displacement	83 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	18 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	9 lb/gal
Well Fluid Density Out of Well	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	52.3 °F	50-80 °F
pH Level	7.5	5.5-8.5
Chlorides	650 mg/L	0-3000 mg/L
Total Alkalinity	200	0-1000
Total Hardness	120 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	365 mg/L	0-1500 mg/L
Potassium	255 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 <sup>3</sup> /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		122.00	50.82	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 III	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
3	Tail	Tail Cement	ASTM TYPE III	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

## 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	11/21/2021	15:44					callout, on location of midnight
2	Safety Meeting	11/21/2021	22:00					Pre-convoy safety meeting
3	Depart Location	11/21/2021	22:15					Depart Rifle yard for H&P 329
4	Arrive On Location	11/21/2021	22:33					Arrive on location, rig was pulling drill pipe
5	Safety Meeting	11/21/2021	22:41					Pre-Rig up safety meeting
6	Rig Up Iron	11/21/2021	22:52					Rig up all equipment
7	Safety Meeting	11/22/2021	04:00					Pre-Job safety meeting with rig crew, company man, and American Cementing crew
8	Rig Up Iron	11/22/2021	04:18					Load plug in plug container (verified by company man), Stab head, and hook up lines
9	Fill Lines	11/22/2021	04:28	8.4	2	5	68	Fill lines
10	Pressure Test Lines	11/22/2021	04:31				3528	Pressure test
11	Pump Spacer	11/22/2021	04:36	8.4	5	20	256	Pump water spacer
12	Shutdown	11/22/2021	04:38					Had to shutdown due to cellar pump not working, rig fixed started pumping again
13	Pump Lead Cement	11/22/2021	05:11	12.3	5.5	5	429	Pump Lead Cement @ 12.3 ppg
14	Pump Lead Cement	11/22/2021	05:18	12.3	3	50	142	Pump Lead Cement
15	Pump Tail Cement	11/22/2021	05:19	12.8	7	5	637	Pump Tail Cement
16	Pump Tail Cement	11/22/2021	05:26	12.8	7	50	634	Pump Tail Cement
17	Pump Tail Cement	11/22/2021	05:30	12.8	2	64	88	Pump Tail Cement
18	Shutdown	11/22/2021	05:30					Shutdown with
19	Drop Top Plug	11/22/2021	05:34					Drop plug, verified by company man
20	Pump Displacement	11/22/2021	05:35	8.4	5.5	10	275	Pump Displacement
21	Pump Displacement	11/22/2021	05:42	8.4	8	50	773	Pump Displacement
22	Cement Back to Surface	11/22/2021	05:43					18 bbls of cement to surface
23	Pump Displacement	11/22/2021	05:44	8.4	8	72	873	Pump Displacement
24	Pump Displacement	11/22/2021	05:48	8.4	3.5	83	393	Pump Displacement
25	Land Plug	11/22/2021	05:48				980	Landed the plug @ 393 psi took to 980 psi
26	Check Floats	11/22/2021	05:50					Check floats, floats held 1/2 bbl back
27	Safety Meeting	11/22/2021	05:57					Pre-Rig down safety meeting
28	Rig Down Iron	11/22/2021	06:02					Rig down all equipment
29	Safety Meeting	11/22/2021	06:55					Pre-convoy safety meeting
30	Depart Location	11/22/2021	07:03					Thank you for using American Cementing, Andrew Linn, and crew

## Pump Diagrams

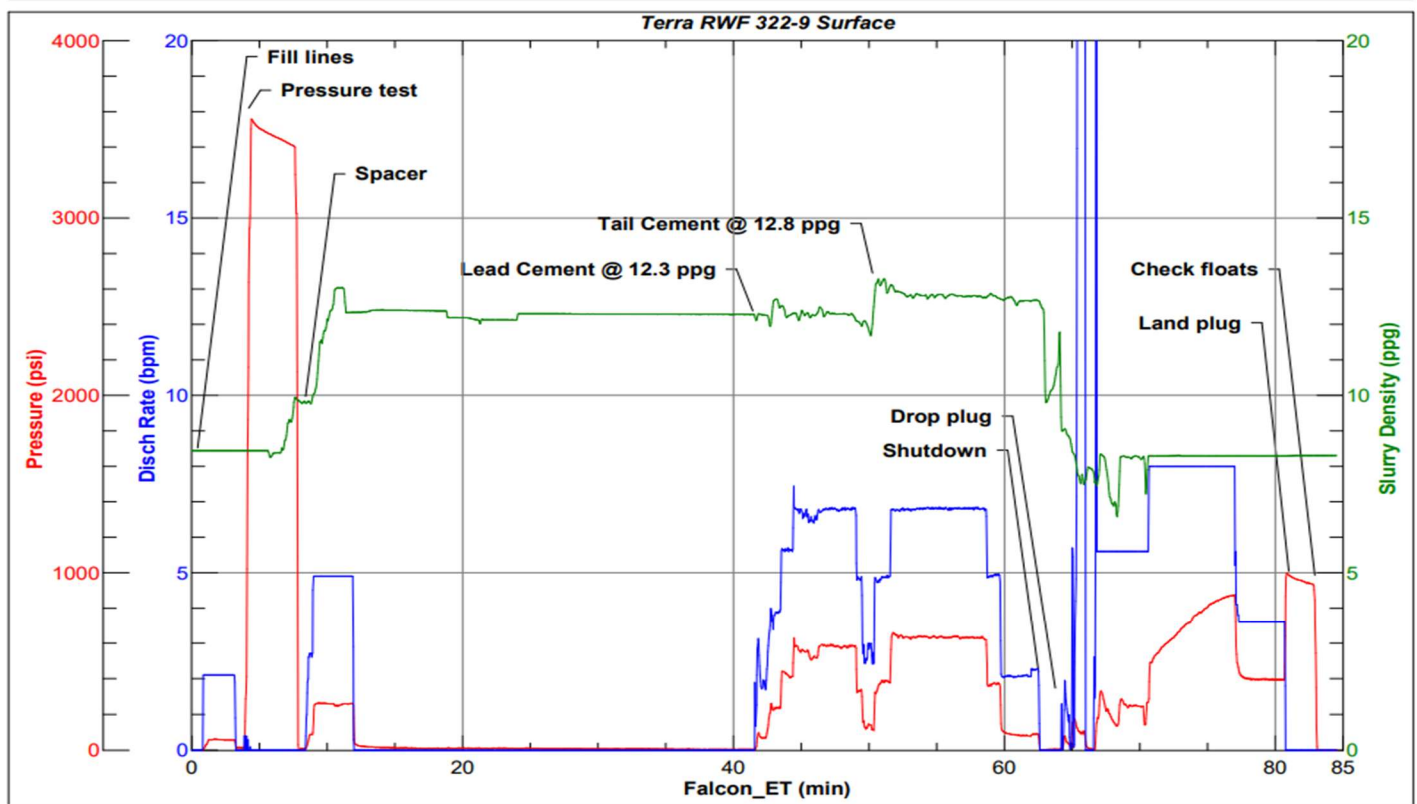


JobMaster Program Version 5.01C1

Job Number: 79204

Customer: Terra

Well Name: RWF 322-9 Surface



BJ Services

Job Start: Monday, November 22, 2021