



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 31-9 05-045-24398
S:9 T:6S R:94W Garfield CO

CallSheet #: 79487
Proposal #: 56791



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 (%)
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	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-579	TRC(TRB)-202	Hansen, James
Cement Pump	CPF-136	TRH-959	Gonzales, Ivan
Light Duty Vehicles	LDV-5429		Lancaster, Stephen

Timing

Event	Date/Time
Call Out	12/14/2021 08:51
Depart Facility	12/14/2021 13:30
On Location	12/14/2021 15:10
Rig Up Iron	12/14/2021 17:30
Job Started	12/14/2021 19:00
Job Completed	12/14/2021 20:12
Rig Down Iron	12/14/2021 20:14
Depart Location	12/14/2021 21:13

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	84 bbls
Rig Circulation Time	0.4 hours
Calculated Displacement	82.7 bbls
Actual Displacement	82 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	15 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	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	0 °F	50-80 °F
pH Level	0	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	0	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	0 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		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	12/14/2021	08:51					Callout for the job
2	Depart yard	12/14/2021	13:30					Cabbed up down hill and wait
3	Arrive On Location	12/14/2021	16:25					Starting to tow us up to location
4	Arrive On Location	12/14/2021	17:10					All trucks up the hill
5	Rig Up Iron	12/14/2021	17:20					Starting rig up iron
5	Rig Up Iron	12/14/2021	17:30					Finish rigging up iron/ Rig running csg
6	Safety Meeting	12/14/2021	19:00					Held safety meeting with rig crew
8	Pressure Test Lines	12/14/2021	19:25					Test lines to 3000
9	Pump Water	12/14/2021	19:33					20 bbls water
10	Pump Lead Cement	12/14/2021	19:44	12.3	5		290	Start lead cement
11	Pump Lead Cement	12/14/2021	19:46	12.3	6	30	457	30 bbls pumped
12	Pump Lead Cement	12/14/2021	19:47	12.3	6	51	450	51 Lead swap to tail
13	Pump Tail Cement	12/14/2021	19:48	12.8	6	30	420	30 bbls pumped
14	Pump Tail Cement	12/14/2021	19:50	12.8	6	41	438	41 pumped
15	Pump Tail Cement	12/14/2021	19:54	12.8	6	64	420	End tail cement
16	Drop Top Plug	12/14/2021	20:00					Drop Top Plug
17	Pump Displacement	12/14/2021	20:02	8.34	8		480	Good returns to the cellar
18	Pump Displacement	12/14/2021	20:04		8	50	520	Good returns to the cellar
19	Pump Displacement	12/14/2021	20:08		8	68	640	Good cement to surface at 68 bbls pumped
20	Land Plug	12/14/2021	20:12		3	83.5	390	Bumped plug at 82.7 bbls pumped
21	Check Floats	12/14/2021	20:13				995	Bleed press , floats holding .5 bbls back
22	Rig Down Iron	12/14/2021	20:14					Rig down head and iron
23	Depart Location	12/30/1899	21:13					Depart location

Pump Diagrams

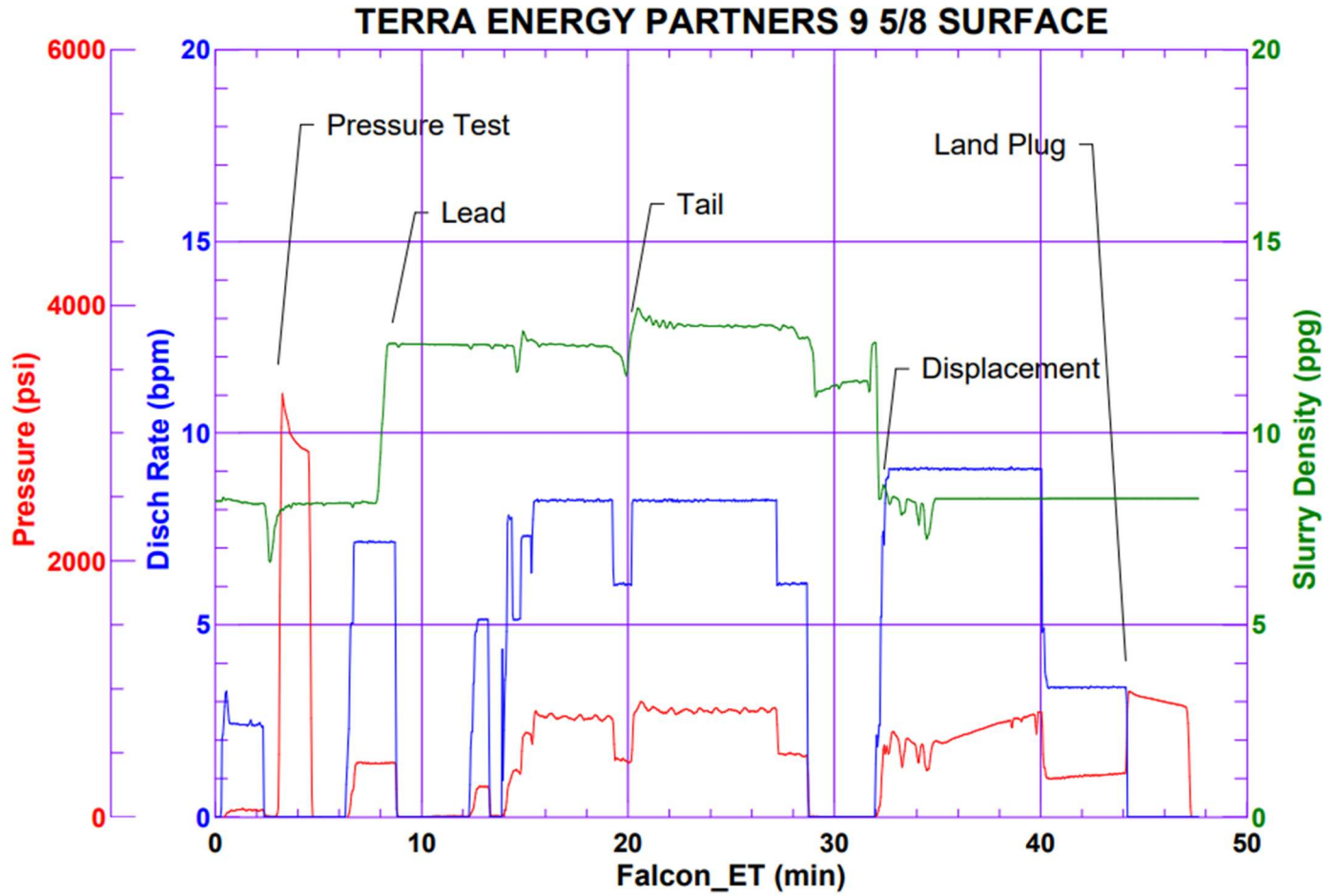


JobMaster Program Version 5.01C1

Job Number: 79487

Customer: TERRA ENERGY

Well Name: FEDERAL RWF 31-9



BJ Services

Job Start: Tuesday, December 14, 2021