



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 43-9 05-045-24397
S:9 T:6S R:94W Garfield CO

CallSheet #: 80351
Proposal #: 57816



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-007	TRC(TRB)-195	Fletcher, Daniel
Light Duty Vehicles	LDV-082		Kelsey, John
Cement Pump	CPF-058	TRH-959	Hale, Jason

Timing

Event	Date/Time
Call Out	2/23/2022 14:00
Depart Facility	2/23/2022 20:00
On Location	2/23/2022 21:00
Rig Up Iron	2/23/2022 22:30
Job Started	2/24/2022 04:39
Job Completed	2/24/2022 05:37
Rig Down Iron	2/24/2022 05:45
Depart Location	2/24/2022 06:30

General Job Information

Metrics	Value
Well Fluid Density	9.3 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	1 hours
Calculated Displacement	83 bbls
Actual Displacement	83 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	83 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	9.3 lb/gal
Well Fluid Density Out of Well	9.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	70 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	80	0-1000
Total Hardness	>450 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	Additional Lead	Lead	12.30	2.34	13.42		50.00	20.83	0
3	Lead Cement	Lead	12.30	2.34	13.42		169.00	70.39	0
4	Tail Cement	Tail	12.80	2.08	11.46		174.00	64.35	500
5	Water	DisplacementFinal	8.34			42.00		82.00	0

Job Fluid Details

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

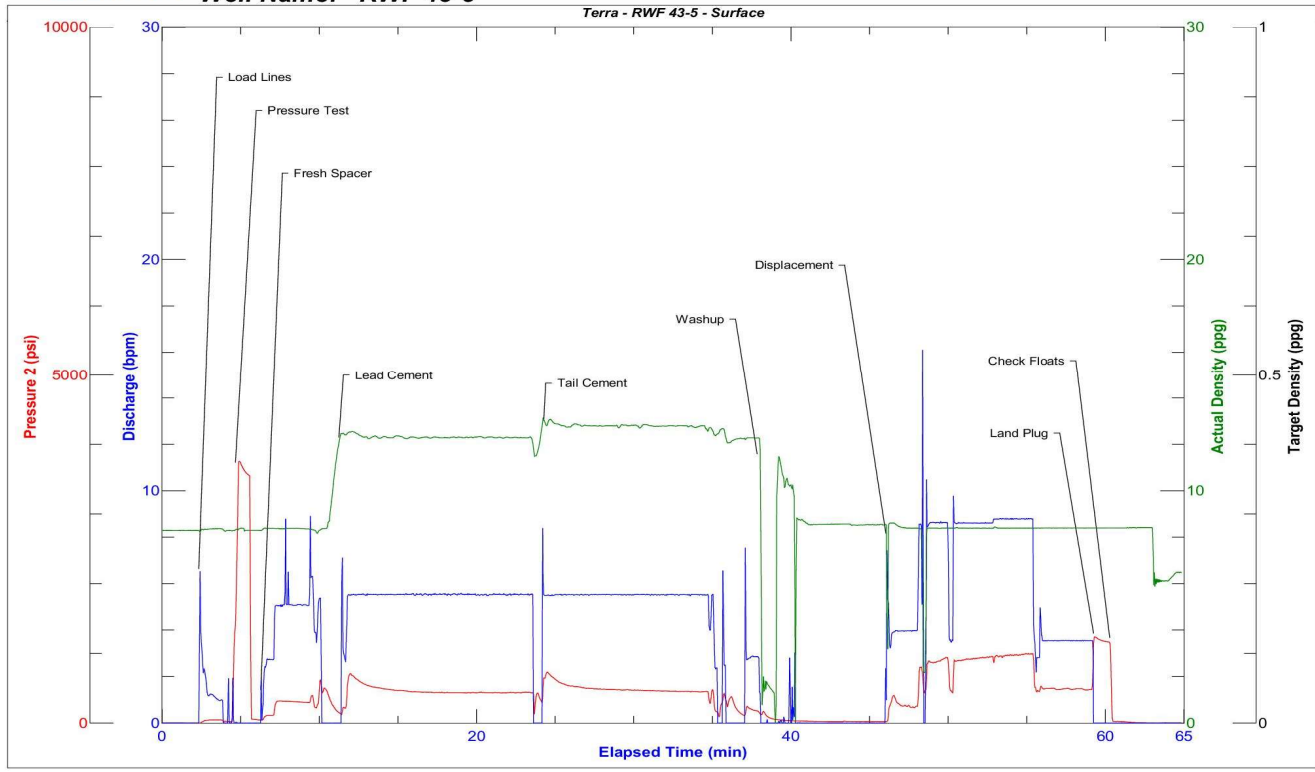
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	2/23/2022	14:00					Crew Called to prepare for surface cement job. Rts is 22:00.
2	Safety Meeting	2/23/2022	19:30					Journey management meeting
3	Depart Yard	2/23/2022	20:00					Leave Rifle Co yard for location
4	Arrive on Location	2/23/2022	21:00					Arrive on location verify all products and equipment on location, verify job procedure with customer
5	Safety Meeting	2/23/2022	22:00					Rig up meeting
6	Spot Units	2/23/2022	22:15					Spot equipment for rig up
7	Rig up	2/23/2022	22:30					Rig up all equipment
8	Standby	2/23/2022	23:00					Crew on standby while rig runs casing
9	Safety Meeting	2/24/2022	04:00					Pre job meeting with all crews involved
10	Load lines	2/24/2022	04:39	8.34	2	2	50	Load lines for psi test
11	Pressure Test	2/24/2022	04:40	8.34	1	1	3700	Pressure test pump and lines to cement head
12	Spacer	2/24/2022	04:45	8.34	5	20	311	20 bbls fresh spacer
13	Lead Cement	2/24/2022	04:47	12.3	5.5	10	476	70 BBLS Lead CMT – 12.3 # 2.34 Y 13.4 MW 169 sks 10 bbls away
14	Lead Cement	2/24/2022	04:58	12.3	5.5	40	450	50 bbls away
15	Lead Cement	2/24/2022	05:00	12.3	5.5	20	640	70 bbls away swap to tail cement
16	Tail Cement	2/24/2022	05:01	12.8	5.5	10	516	64 BBLS Tail CMT – 12.8 # 2.08 Y 11.5 MW 174 sks 10 bbls away
17	Tail Cement	2/24/2022	05:07	12.8	5.5	20	475	30 bbls away
18	Tail Cement	2/24/2022	05:16	12.8	5.5	34	450	64 bbls away
19	Washup	2/24/2022	05:17					Washup pump mix system and drop plug
20	Displacement	2/24/2022	05:23	8.34	4	10	550	Send plug and begin displacement 10 bbls away
21	Displacement	2/24/2022	05:30	8.34	8.5	30	550	40 bbls away
22	Land Plug	2/24/2022	05:37	8.34	3.5	43	580	83 bbls away land plug
23	Check Floats	2/24/2022	05:39					Check floats floats held .5 bbls back
24	Safety Meeting	2/24/2022	05:42					rig down meeting
25	Rig Down	2/24/2022	05:45					Rig down equipment
26	Safety Meeting	2/24/2022	06:15					Journey management meeting
27	Depart Location	2/24/2022	06:30					Crew departs location. Estimated 83 bbls cement to surface, estimated Top of tail @ 418

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 80351
Customer: Terra
Well Name: RWF 43-5



BJ Services

Job Start: Thursday, February 24, 2022