



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 44-9 05-045-24392
S:9 T:6S R:94W Garfield CO

CallSheet #: 79966
Proposal #: 57297



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-242	TRC(TRB)-425	Manuelito, Hamilton
Cement Pump	CPF-058	TRH-855	Aden, Mark
Light Duty Vehicles	LDV-061		Putnam, Gage

Timing

Event	Date/Time
Call Out	1/22/2022 08:30
Depart Facility	1/22/2022 11:00
On Location	1/22/2022 11:35
Rig Up Iron	1/22/2022 15:30
Job Started	1/22/2022 19:17
Job Completed	1/22/2022 20:29
Rig Down Iron	1/22/2022 21:00
Depart Location	1/22/2022 22:30

General Job Information

Metrics	Value
Well Fluid Density	9.15 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	0.75 hours
Calculated Displacement	83.4 bbls
Actual Displacement	83.4 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	No
Well Fluid Density Into Well	9.15 lb/gal
Well Fluid Density Out of Well	9.15 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	71 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	80 mg/L	0-500 mg/L
Carbonates	NA mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	450 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	50.81	0
3	Tail Cement	Tail	12.80	2.08	11.46		174.00	64.35	500
4	Water	DisplacementFinal	8.34			42.00		83.40	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	1/22/2022	08:30					CREW CALLED OUT FOR ON LOCATION TIME OF 14:30 1/22/22
2	Depart Location	1/22/2022	11:00					CREW DEPARTS RCO YARD FOR RIG LOCATION
3	Arrive On Location	1/22/2022	11:35					CREW ARRIVES AT STAGING LOCATION
4	Rig Up Iron	1/22/2022	15:30					RIG UP IRON AND HOSES
5	Waiting	1/22/2022	16:10					WAITING ON CASING RUN
6	Safety Meeting	1/22/2022	19:00					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
7	Fill Lines	1/22/2022	19:17	8.34	2	5	143	FILL LINES WITH 5 BBLS FRESH WATER
8	Pressure Test Lines	1/22/2022	19:22				3833	PRESSURE TEST PUMP AND LINES TO 3000 PSI
9	Other	1/22/2022	19:25	8.34	4	15	286	PUMP REMAINING 15 BBLS FRESH WATER FLUSH
10	Shutdown	1/22/2022	19:27					WHILE BATCHING UP CEMENT MICROMOTION DENSITY FAILED. WEIGHED CEMENT WITH PRESSURIZED MUD SCALE TO VERIFY DENSITY BEFORE PROCEEDING
11	Pump Lead Cement	1/22/2022	19:28	12.3	3	51	321	PUMPED 51 BBLS 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE WHILE PUMPING
12	Pump Tail Cement	1/22/2022	19:54	12.8	5	64	328	PUMPED 64 BBLS 12.8 PPG TAIL CEMENT, DENSITY VERIFIED BY MUD SCALE WHILE PUMPING
13	Clean Pumps and Lines	1/22/2022	20:10					WASH UP PUMP
14	Drop Top Plug	1/22/2022	20:15		4		329	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
15	Pump Displacement	1/22/2022	20:24	8.34	8	50	710	50 BBLS FRESH WATER DISPLACEMENT PUMPED
16	Cement Back to Surface	1/22/2022	20:26	8.34	8	18	764	CEMENT TO SURFACE AT 68 BBLS FRESH WATER DISPLACEMENT PUMPED. 15 BBLS CEMENT TO SURFACE
17	Pump Displacement	1/22/2022	20:29	8.34	4	15	445	83.4 BBLS FRESH WATER DISPLACEMENT PUMPED. SLOWED RATE LAST 10 BBLS TO LAND PLUG
18	Land Plug	1/22/2022	20:29				1175	PLUG LANDED. FCP - 445 PSI, BUMPED TO 1175 PSI
19	Check Floats	1/22/2022	20:34					CHECK FLOATS, FLOATS HELD, 0.5 BBLS BACK
20	Rig Down Iron	1/22/2022	20:40					RIG DOWN IRON AND HOSES
21	Depart Location	1/22/2022	22:30					AC CREW DEPARTS LOCATION

Pump Diagrams

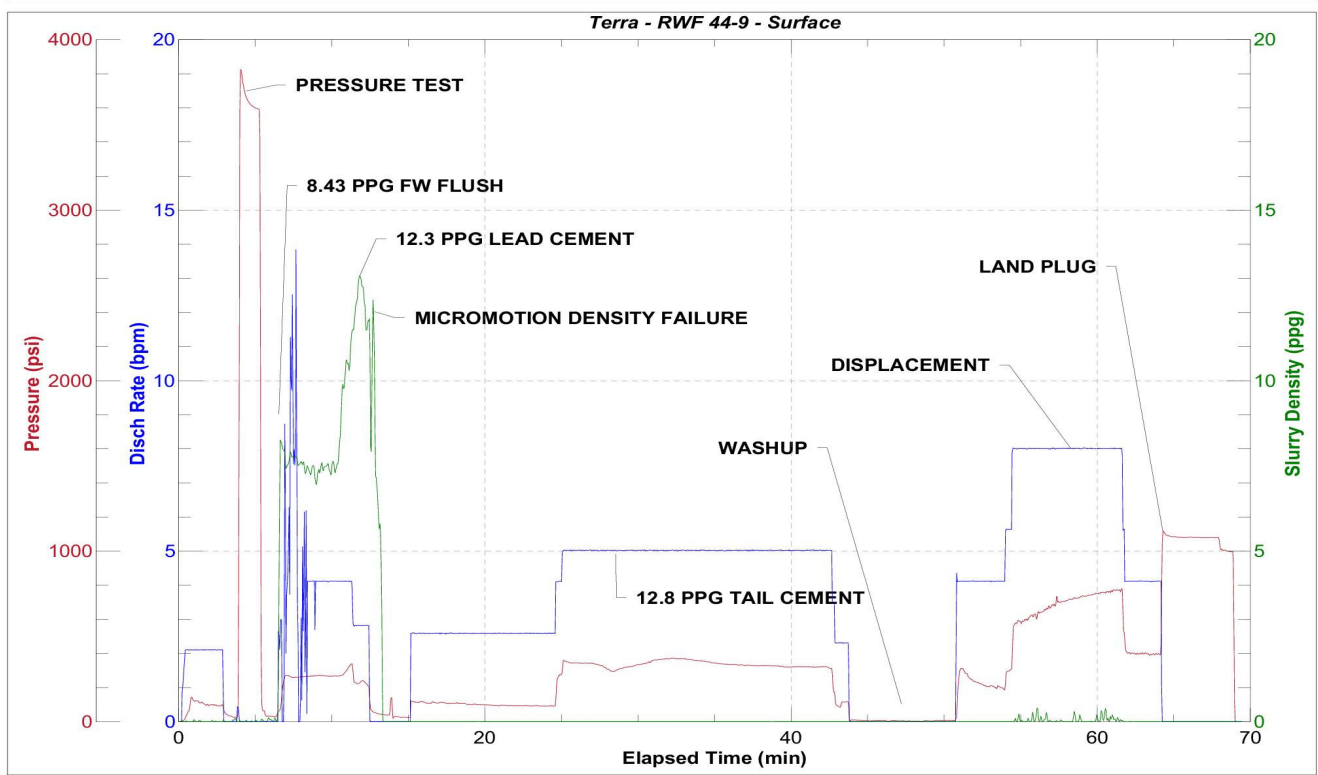


JobMaster Program Version 5.01C1

Job Number: 79966

Customer: Terra

Well Name: RWF 44-9



BJ Services

Job Start: Saturday, January 22, 2022