



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL RWF 422-8 05-045-24316
S:8 T:6S R:94W Garfield CO

CallSheet #: 75196
Proposal #: 50408



SURFACE Post Job Report

Attention: Mr. Lynn Cass | (970) 263-2716 | lcass@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Lynn Cass,

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,

Zen Keith

Field Engineer | (307) 757-7178 | zen.keith@americancementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 305-4888

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1 Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)	New	Burst	Collapse
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	1051	16			
Casing	Inner	9.625	8.921	36	n/a	0	996.44	0			

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-263	TRB-421	Richey, Steven	28
Cement Pump	CPF-058	TRH-1140	Mcneal, Lawrence	28
Light Duty Pickups	LDV-5429		Castillo, Francisco	28

Timing

Event	Date/Time
Call Out	10/21/2020 01:30
Depart Facility	10/21/2020 02:30
On Location	10/21/2020 03:00
Rig Up Iron	10/21/2020 03:20
Job Started	10/21/2020 05:05
Job Completed	10/21/2020 05:37
Rig Down Iron	10/21/2020 05:45
Depart Location	10/21/2020 07:00

General Job Information

Metrics	Value
Well Fluid Density	9.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	77 bbls
Actual Displacement	77 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	15 bbls
Well Topped Out	No

Well Fluid Details

Metrics	Value
Plastic Viscosity	10
Yield Point	5
10 sec. SGS	2
10 min. SGS	3
30 min. SGS	5
Filtrate	0
Flow Line Temp.	0

Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.4 lb/gal
Well Fluid Density Out of Well	9.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Circulation

Lost Circulation Experienced
No

Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		20.00	0
1	2	Lead Cement	Lead	12.30	2.34	13.42		122.00	50.82	0
1	3	Tail Cement	Tail	12.80	2.08	11.46		146.00	53.99	500
1	4	Water	DisplacementFinal	8.34			42.00		77.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	2	Lead	Lead Cement	A-10	Accelerator	5.00	%BWOB
1	2	Lead	Lead Cement	A-2	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	A-7P	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	2	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	3	Tail	Tail Cement	ASTM TYPE III	Cement	100.00	%
1	3	Tail	Tail Cement	A-10	Accelerator	5.00	%BWOB
1	3	Tail	Tail Cement	A-2	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	A-7P	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	3	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk

2 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	CALL OUT	10/21/2020	01:30					ON LOCATION 03:30 HRS
2	LEAVE YARD	10/21/2020	02:30					CREW LEAVE THE YARD
3	ON LOCATION	10/21/2020	03:00					ON LOCATION, RIG RUNNING CASING
4	RIG UP	10/21/2020	03:20					RIG UP MEETING, RIG UP
5	SAFETY MEETING	10/21/2020	04:45					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	10/21/2020	05:03				4000	PRESSURE TEST LINES
7	SPACER	10/21/2020	05:05	8.34	6	20	261	WATER SPACER
8	LEAD CEMENT	10/21/2020	05:11	12.3	8	50.5	637	122 SKS / 50.5 BBLS AT 12.3 PPG
9	TAIL CEMENT	10/21/2020	05:17	12.8	8	54	691	146 SKS / 54 BBLS AT 12.8 PPG
10	SHUTDOWN	10/21/2020	05:25					SHUTDOWN, DROP PLUG
11	DISPLACEMENT	10/21/2020	05:26	8.34	10	67	826	DISPLACEMENT
12	DISPLACEMENT	10/21/2020	05:34	8.34	3	10	291	SLOW RATE LAST 10 BBLS
13	LAND PLUG	10/21/2020	05:37				939	LAND PLUG, 15 BBLS CMT TO SURFACE
14	CHECK FLOATS	10/21/2020	05:39					FLOATS HELD, 0.5 BBL FLOW BACK
15	RIG DOWN	10/21/2020	05:45					RIG DOWN MEETING, RIG DOWN
16	LEAVE LOCATION	10/21/2020	07:00					CREW LEAVE LOCATION

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	63 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	240	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

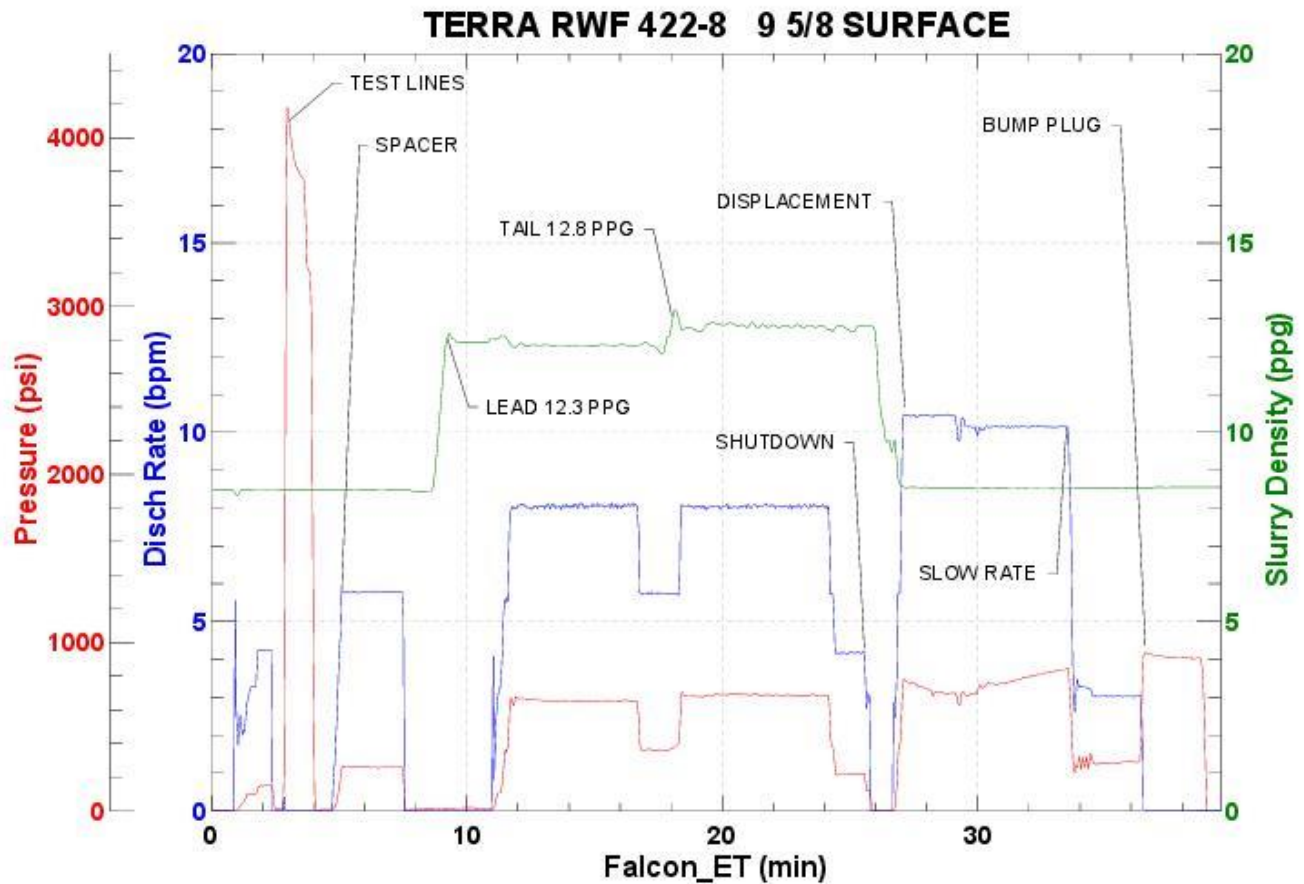


JobMaster Program Version 5.01C 1

Job Number: 75196

Customer: TERRA

Well Name: RWF 422-8



BJ Services

Job Start: Wednesday, October 21, 2020