



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL WMC 511-20 05-045-24485
S:17 T:7S R:93W Garfield CO

CallSheet #: 83457
Proposal #: 63274



SURFACE Post Job Report

Attention: Mr. Dustin Childers | (936) 524-8828 | dchilders@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. 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,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@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	19.5	53	n/a	0	85	0
Open Hole	Outer	n/a	13.5	n/a	n/a	85	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1145	16
Casing	Inner	9.625	8.921	36	n/a	0	1135	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer Float	CTF-242	TRC-424	Wall, Lynn	
Cement Pump Float	CPF-012	TRH-1137	Gonzales, Ivan	
Light Duty Vehicles	LDV-083		Putnam, Gage	Bonin, Ryan

Timing

Event	Date/Time
Call Out	9/12/2022 14:45
Depart Facility	9/12/2022 18:10
On Location	9/12/2022 20:50
Rig Up Iron	9/12/2022 21:00
Job Started	9/12/2022 22:11
Job Completed	9/12/2022 22:54
Rig Down Iron	9/12/2022 23:00
Depart Location	9/12/2022 23:45

General Job Information

Metrics	Value
Well Fluid Density	8.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	475 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	84.1 bbls
Actual Displacement	84.1 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	24 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	8.8 lb/gal
Well Fluid Density Out of Well	8.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	98 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	61 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	72 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
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	Lead	12.30	2.21	12.72		165.00	65.04	0
3	Tail	Tail	12.80	1.97	10.87		188.00	65.80	500
4	Water	DisplacementFinal	8.34			42.00		84.10	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
2	Lead	Lead	A-7P	Accelerator	2.00	lb/sk
2	Lead	Lead	ATHX-1102	Thixotropic	1.00	lb/sk
2	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
2	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
3	Tail	Tail	ASTM TYPE I/II	Cement	100.00	%
3	Tail	Tail	A-7P	Accelerator	2.00	lb/sk
3	Tail	Tail	ATHX-1102	Thixotropic	1.00	lb/sk
3	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
3	Tail	Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Tail	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	9/12/2022	14:45					CREW CALLED OUT FOR ON LOCATION TIME OF 20:00 9/12/22
2	Depart Location	9/12/2022	18:10					CREW DEPARTS FOR RIG LOCATION
3	Arrive On Location	9/12/2022	20:50					CREW ARRIVES ON LOCATION
4	Rig Up Iron	9/12/2022	21:00					RIG UP IRON AND HOSES
5	Safety Meeting	9/12/2022	21:51					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
6	Fill Lines	9/12/2022	22:11	8.34	2	5	65	FILL LINES WITH 5 BBLS FRESH WATER
7	Pressure Test Lines	9/12/2022	22:13				3400	PRESSURE TEST PUMP AND LINES TO 3000 PSI
8	Other	9/12/2022	22:16	8.34	7	15	420	PUMP 15 BBLS FRESH WATER FLUSH
9	Pump Lead Cement	9/12/2022	22:20	12.3	5	0	275	BEGIN PUMPING 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE.
10	Pump Lead Cement	9/12/2022	22:29	12.3	7.4	65	653	PUMPED 65 BBLS LEAD CEMENT
11	Pump Tail Cement	9/12/2022	22:29	12.8	7.4	0	677	BEGIN PUMPING 12.8 PPG TAIL CEMENT, DENSITY VERIFIED BY MUD SCALE
12	Pump Tail Cement	9/12/2022	22:39	12.8	7.4	65.8	697	PUMPED 65.8 BBLS TAIL CEMENT
13	Clean Pumps and Lines	9/12/2022	22:39					WASH UP PUMP, WASHED UP ON PLUG
14	Drop Top Plug	9/12/2022	22:42	8.34	5	0	273	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
15	Pump Displacement	9/12/2022	22:48	8.34	9	50	727	50 BBLS FRESH WATER DISPLACEMENT PUMPED
16	Cement Back to Surface	9/12/2022	22:50	8.34	9	10	748	CEMENT TO SURFACE AT 60 BBLS FRESH WATER DISPLACEMENT PUMPED, 24 BBLS CEMENT TO SURFACE
17	Pump Displacement	9/12/2022	22:54	8.34	3.7	24.1	360	84.1 BBLS FRESH WATER DISPLACEMENT PUMPED. SLOWED RATE TO 4 BPM LAST 10 BBLS TO LAND PLUG
18	Land Plug	9/12/2022	22:54				960	PLUG LANDED. FCP - 360 PSI, BUMPED TO 960 PSI
19	Check Floats	9/12/2022	22:57					CHECK FLOATS, FLOATS HELD, 0.25 BBLS BACK
20	Rig Down Iron	9/12/2022	23:00					RIG DOWN IRON AND HOSES
21	Depart Location	9/12/2022	23:45					AC CREW DEPARTS LOCATION

Pump Diagrams

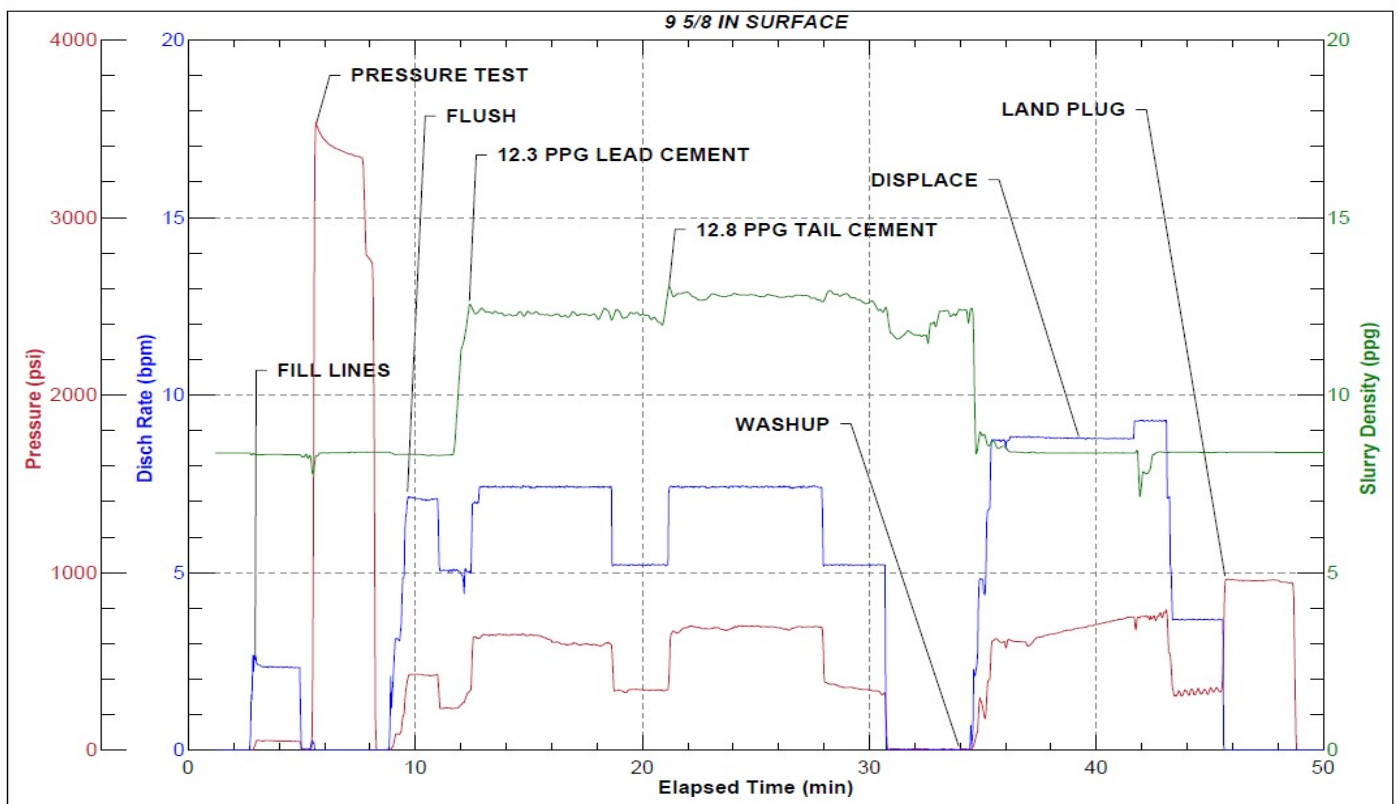


JobMaster Program Version 5.01C1

Job Number: 83457

Customer: Terra

Well Name: Federal WMC 511-20



Job Start: Monday, September 12, 2022