



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL WMC 412-20 05-045-24495
S:17 T:7S R:93W Garfield CO

CallSheet #: 84008
Proposal #: 64107



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	84	0
Open Hole	Outer	n/a	13.5	n/a	n/a	113	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1148	16
Casing	Inner	9.625	8.921	36	n/a	0	1138	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-246	TRC-424	Balint, Daniel
Light Duty Vehicles	LDV-088		Putnam, Gage
Cement Pump Float	CPF-136	TRH-1137	Gonzales, Ivan

Timing

Event	Date/Time
Call Out	10/14/2022 13:00
Depart Facility	10/14/2022 20:30
On Location	10/14/2022 21:00
Rig Up Iron	10/14/2022 21:45
Job Started	10/15/2022 00:12
Job Completed	10/15/2022 01:03
Rig Down Iron	10/15/2022 01:15
Depart Location	10/15/2022 01:45

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	400 bbls
Rig Circulation Time	0.75 hours
Calculated Displacement	84.3 bbls
Actual Displacement	84.3 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	36 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	98 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	53 °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		189.00	66.15	500
4	Water	DisplacementFinal	8.34			42.00		84.00	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

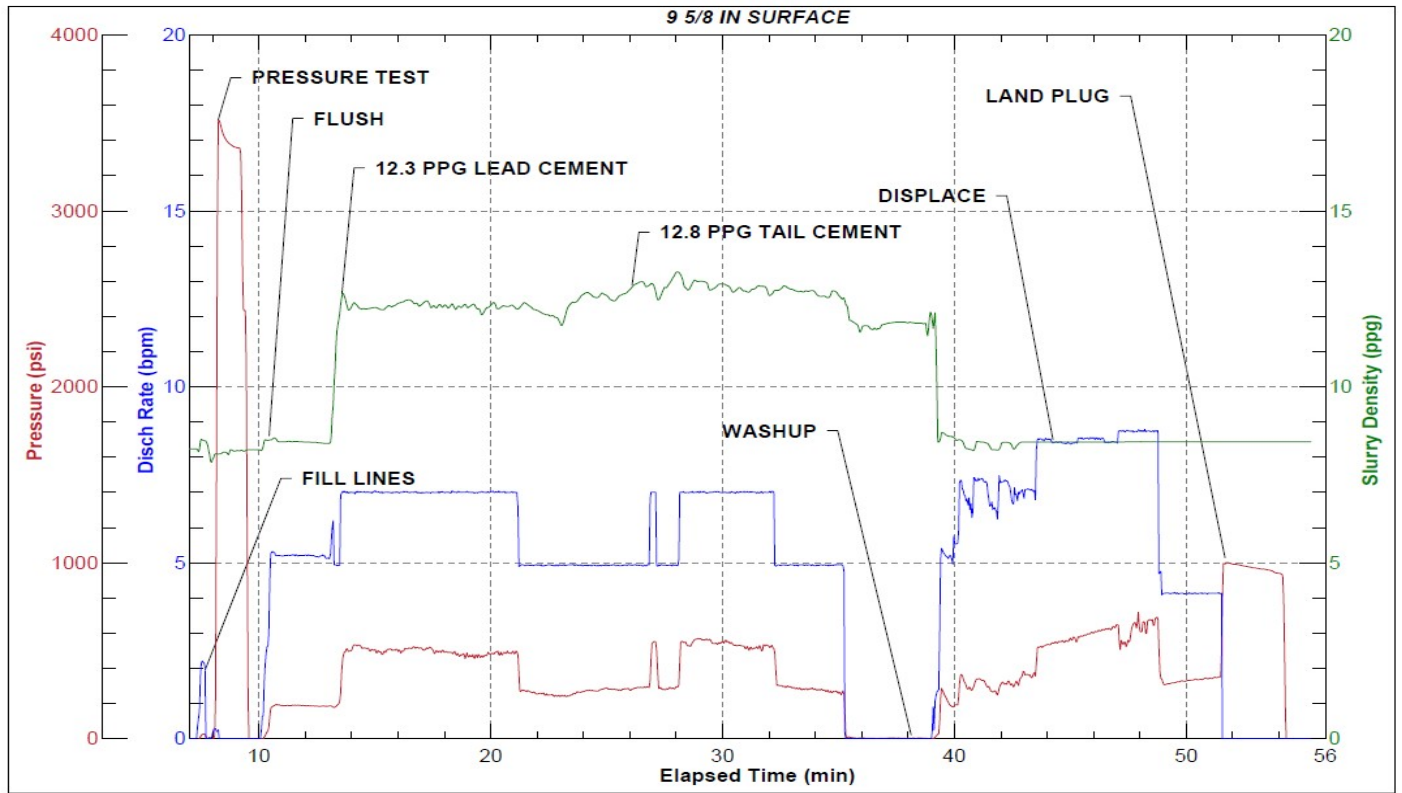
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	10/14/2022	13:00					CREW CALLED OUT FOR ON LOCATION TIME OF 21:30 10/14/22
2	Depart Location	10/14/2022	20:30					CREW DEPARTS FOR RIG LOCATION
3	Arrive On Location	10/14/2022	21:00					CREW ARRIVES ON LOCATION
4	Rig Up Iron	10/14/2022	21:45					RIG UP IRON AND HOSES
5	Safety Meeting	10/15/2022	00:00					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
6	Fill Lines	10/15/2022	00:12	8.34	4	5	130	FILL LINES WITH 5 BBLS FRESH WATER
7	Pressure Test Lines	10/15/2022	00:14				3400	PRESSURE TEST PUMP AND LINES TO 3000 PSI
8	Other	10/15/2022	00:21	8.34	5	15	211	PUMP 15 BBLS FRESH WATER FLUSH
9	Pump Lead Cement	10/15/2022	00:24	12.3	6	0	422	BEGIN PUMPING 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE.
10	Pump Lead Cement	10/15/2022	00:35	12.3	7	65	488	PUMPED 65 BBLS LEAD CEMENT
11	Pump Tail Cement	10/15/2022	00:35	12.8	5	0	290	BEGIN PUMPING 12.8 PPG TAIL CEMENT, DENSITY VERIFIED BY MUD SCALE
12	Pump Tail Cement	10/15/2022	00:47	12.8	7	66.2	555	PUMPED 66.2 BBLS TAIL CEMENT
13	Clean Pumps and Lines	10/15/2022	00:47					WASH UP PUMP, WASHED UP ON PLUG
14	Drop Top Plug	10/15/2022	00:51	8.34	5	0	311	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
15	Cement Back to Surface	10/15/2022	00:58	8.34	8.5	48.3	674	CEMENT TO SURFACE AT 48.3 BBLS FRESH WATER DISPLACEMENT PUMPED. 36 BBLS CEMENT TO SURFACE
16	Pump Displacement	10/15/2022	01:03	8.34	4	36	385	84.3 BBLS FRESH WATER DISPLACEMENT PUMPED
17	Land Plug	10/15/2022	01:03				1020	PLUG LANDED. FCP - 385 PSI, BUMPED TO 1020 PSI
18	Check Floats	10/15/2022	01:05					CHECK FLOATS, FLOATS HELD, 0.5 BBLS BACK
19	Other	10/15/2022	01:10					BLOW DOWN IRON
20	Rig Down Iron	10/15/2022	01:15					RIG DOWN IRON AND HOSES
21	Depart Location	10/15/2022	01:45					AC CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 84008
Customer: Terra
Well Name: WMC 412-20



Job Start: Saturday, October 15, 2022