



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

WMC 333-19-793 05-045-24541
S:19 T:7S R:93W Garfield CO

CallSheet #: 86190
Proposal #: 67695



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) 657-1187

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	80	0
Open Hole	Outer	n/a	13.5	n/a	n/a	80	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1143	16
Casing	Inner	9.625	8.921	36	n/a	0	1143	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Cement Trailer Float	CTF-340	TRC-244	Lujan, James	Bonin, Matthew
Cement Pump Float	CPF-053	TRH-964	Kirchenwitz, Jacob	
Light Duty Vehicles	LDV-082		Kelsey, John	

Timing

Event	Date/Time
ERTS	00/13/2023 12:00
Call Out	3/13/2023 06:00
Depart Facility	3/13/2023 09:00
On Location	3/13/2023 10:00
Rig Up Iron	3/13/2023 10:30
Job Started	3/13/2023 13:08
Job Completed	3/13/2023 14:10
Rig Down Iron	3/13/2023 14:30
Depart Location	3/13/2023 15:00

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	200 bbls
Rig Circulation Time	1 hours
Calculated Displacement	85 bbls
Actual Displacement	85 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	40 bbls
Well Topped Out	N/A

Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	- units
Flare During Job	No
Flare During Job	- units
Flare at End of Job	No
Flare at End of Job	- 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	81 °F
BHST	99 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	60 °F	50-80 °F
pH Level	5	5.5-8.5
Chlorides	30 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	400 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

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		193.00	67.55	415
4	Water	DisplacementFinal	8.34			42.00		85.00	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	3/13/2023	06:00					CREW CALLED TO PREPARE FOR A SURFACE CEMENT JOB. RTS IS 12:00
2	SAFETY MEETING	3/13/2023	08:45					JOURNEY MANAGEMENT MEETING
3	DEPART YARD	3/13/2023	09:00					CREW DEPARTS RIFLE, CO YARD FOR LOCATION
4	ARRIVE ON LOCATION	3/13/2023	10:00					ARRIVE ON LOCATION, VERIFY JOB PROCEDURES WITH CUSTOMER
5	SAFETY MEETING	3/13/2023	10:10					RIG UP MEETING
6	SPOT UNITS	3/13/2023	10:20					SPOT ALL EQUIPMENT FOR RIG UP
7	RIG UP	3/13/2023	10:30					RIG UP ALL EQUIPMENT
8	STANDBY	3/13/2023	11:00					CREW ON STANDBY WHILE RIG RUNS CASING
9	SAFETY MEETING	3/13/2023	14:45					PRE JOB MEETING WITH ALL CREWS INVOLVED
10	LOAD LINES	3/13/2023	13:08	8.34	2	5	37	LOAD LINES FOR PSI TEST
11	PRESSURE TEST	3/13/2023	13:11	8.34	1	1	3619	PSI TEST PUMP AND LINES TO CEMENT HEAD
12	FRESH FLUSH	3/13/2023	13:14	8.34	5	20	210	20 BBLS FRESH FLUSH
13	LEAD CEMENT	3/13/2023	13:18	12.3	5	10	300	65 BBLS Lead CMT – 12.3 # 2.21 Y 12.7 MW 165 sks 10 BBLS AWAY
14	LEAD CEMENT	3/13/2023	13:22	12.3	5	10	300	20 BBLS AWAY
15	LEAD CEMENT	3/13/2023	13:27	12.3	5	20	298	40 BBLS AWAY
16	LEAD CEMENT	3/13/2023	13:33	12.3	5	25	301	65 BBLS AWAY SWAP TO TAIL CEMENT
17	TAIL CEMENT	3/13/2023	13:34	12.8	5	10	310	67 BBLS Tail CMT – 12.8 # 1.97 Y 10.9 MW 193 sks 10 BBLS AWAY
18	TAIL CEMENT	3/13/2023	13:38	12.8	5	10	320	20 BBLS AWAY
19	TAIL CEMENT	3/13/2023	13:43	12.8	5	20	330	40 BBLS AWAY
20	TAIL CEMENT	3/13/2023	13:49	12.8	3.5		230	65 BBLS AWAY SHUTDOWN FOR WASHUP
21	WASHUP	3/13/2023	13:50					WASHUP THEN DROP PLUG
22	DISPLACEMENT	3/13/2023	13:51	8.34	5	10	180	SEND PLUG AND BEGIN DISPLACEMENT 10 BBLS AWAY
23	DISPLACEMENT	3/13/2023	13:56	8.34	7	10	386	20 BBLS AWAY
24	DISPLACEMENT	3/13/2023	13:59	8.34	7	20	483	40 BBLS AWAY
25	DISPLACEMENT	3/13/2023	14:02	8.34	7	20	543	60 BBLS AWAY
26	LAND PLUG	3/13/2023	14:07	8.34	3.5	25	374	85 BBLS AWAY LAND PLUG UP TO 1040 PSI ESTIMATED 40 BBLS CEMENT TO SURFACE
27	CHECK FLOATS	3/13/2023	14:10					CHECK FLOATS, FLOATS HELD WITH .5 BBLS BACK
28	SAFETY MEETING	3/13/2023	14:20					RIG DOWN MEETING
29	RIG DOWN	3/13/2023	14:30					RIG DOWN ALL EQUIPMENT
30	SAFETY MEETING	3/13/2023	14:50					JOURNEY MANAGEMENT MEETING
31	DEPART LOCATION	3/13/2023	15:00					CREW DEPARTS LOCATION

Pump Diagrams

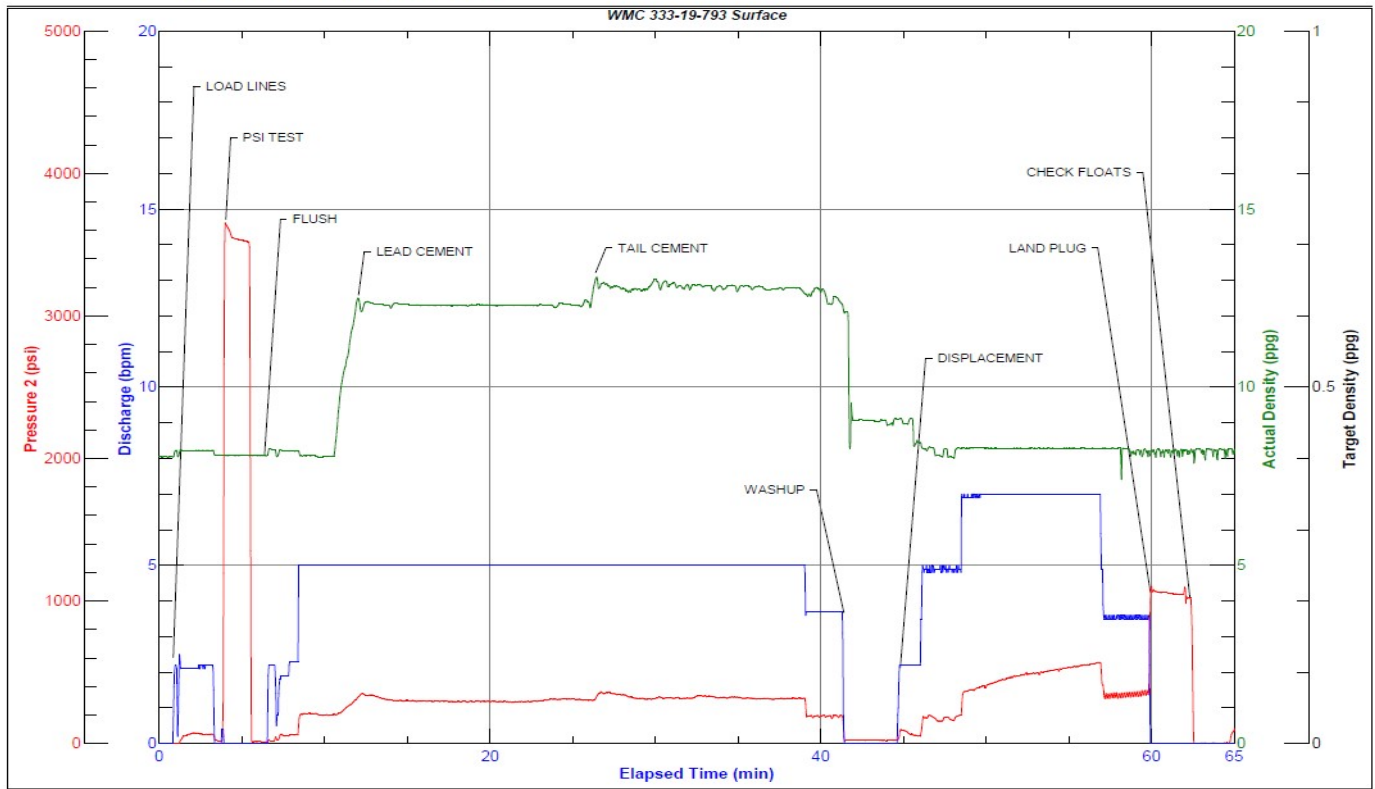


JobMaster Program Version 5.01C1

Job Number: 86190

Customer: Terra

Well Name: WMC 333-19-793



Job Start: Monday, March 13, 2023