



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL WMC 532-20 05-045-24489
S:17 T:7S R:93W Garfield CO

CallSheet #: 84294
Proposal #: 64616



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,

Holly Mbugua

Field Engineer II | (720) 505-1300 | holly.mbugua@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	90	0
Open Hole	Outer	n/a	13.5	n/a	n/a	120	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-254	TRC-201	Bonin, Ryan	Bradbrook, Jeremy
Light Duty Vehicles	LDV-082		Kelsey, John	
Cement Pump Float	CPF-091	TRH-082	Carrasco, Joel	

Timing

Event	Date/Time
Call Out	11/6/2022 05:00
Depart Facility	11/6/2022 05:20
On Location	11/6/2022 06:30
Rig Up Iron	11/6/2022 07:00
Job Started	11/6/2022 12:26
Job Completed	11/6/2022 13:21
Rig Down Iron	11/6/2022 13:30
Depart Location	11/6/2022 14:30

General Job Information

Metrics	Value
Well Fluid Density	8.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	200 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	84.5 bbls
Actual Displacement	84.5 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	44 bbls
Well Topped Out	N/A

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	8.9 lb/gal
Well Fluid Density Out of Well	8.9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	98 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	55 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	80	0-1000
Total Hardness	450 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		185.00	64.75	500
4	Water	DisplacementFinal	8.34			42.00		84.50	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

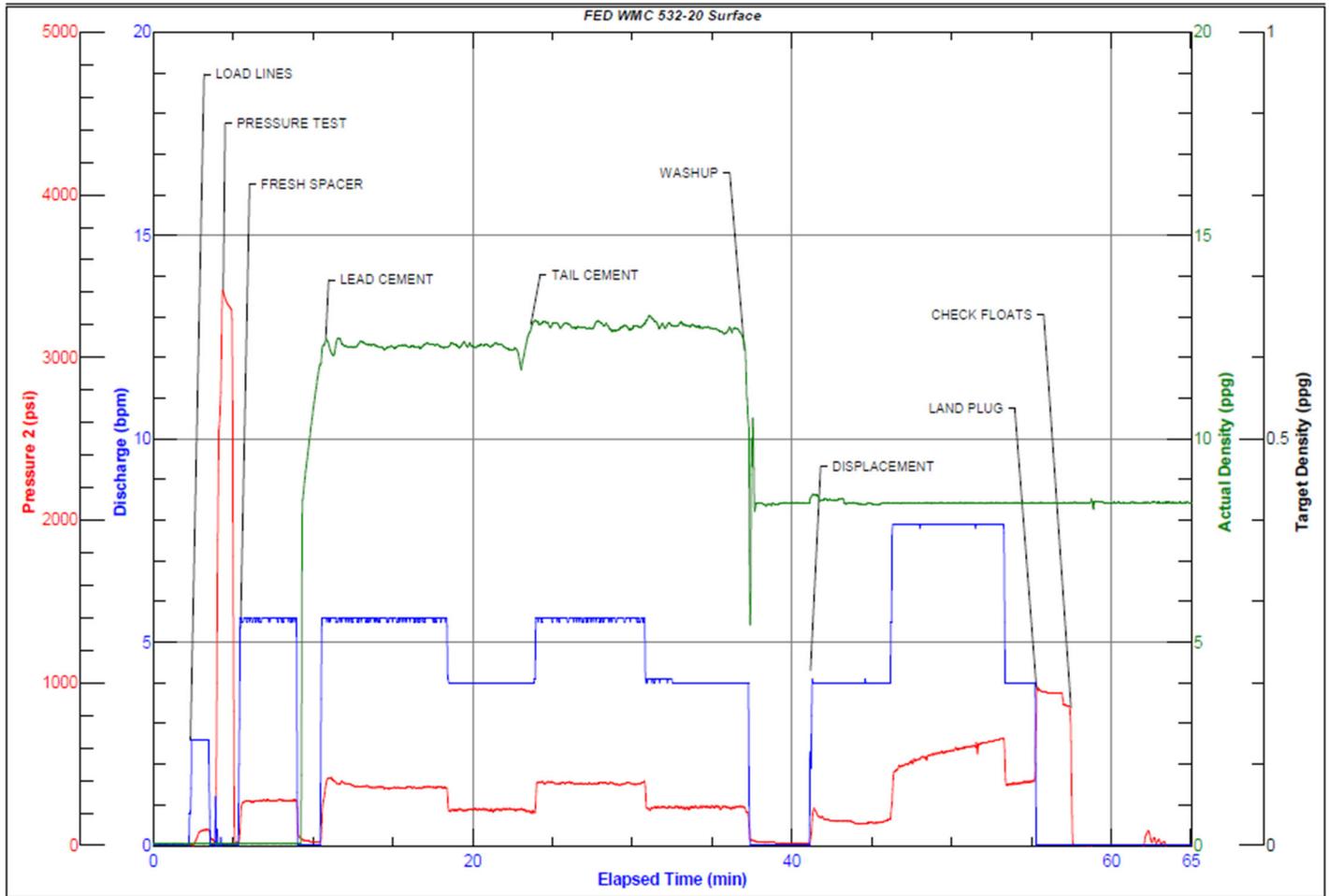
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	11/6/2022	05:00					CREW CALLED TO PREPARE FOR A SURFACE CEMENT JOB. RTS IS 09:00
2	SAFETY MEETING	11/6/2022	05:10					JOURNEY MANAGEMENT MEETING
3	DEPART YARD	11/6/2022	05:20					CREW DEPARTS RIFLE, CO YARD FOR LOCATION
4	ARRIVE ON LOCATION	11/6/2022	06:30					ARRIVE ON LOCATION AND VERIFY ALL PROPER EQUIPMENT, PRODUCTS AND JOB PROCEDURES WITH CUSTOMER
5	SAFETY MEETING	11/6/2022	06:40					RIG UP MEETING
6	SPOT UNITS	11/6/2022	06:50					SPOT ALL EQUIPMENT FOR RIG UP
7	RIG UP	11/6/2022	07:00					RIG UP ALL EQUIPMENT
8	STANDBY	11/6/2022	09:00					CREW ON STANDBY WHILE RIG RUNS CASING AND CIRCULATES THE WELL
9	SAFETY MEETING	11/6/2022	12:00					PRE JOB-MEETING WITH ALL CREWS INVOLVED
10	LOAD LINES	11/6/2022	12:26	8.34	2.5	3	5	LOAD LINES FOR A PSI TEST
11	PRESSURE TEST	11/6/2022	12:27	8.34	1	1	3463	PSI TEST PUMP AND LINES TO CEMENT HEAD
12	FRESH SPACER	11/6/2022	12:29	8.34	5.6	20	283	20 BBLS FRESH WATER SPACER
13	LEAD CEMENT	11/6/2022	12:35	12.3	5.6	10	404	65 BBLS Lead CMT – 12.3 # 2.21 Y 12.7 MW 165 sks 10 BBLS AWAY
14	LEAD CEMENT	11/6/2022	12:39	12.3	5.6	20	380	30 BBLS AWAY
15	LEAD CEMENT	11/6/2022	13:42	12.3	4	35	350	65 BBLS AWAY SWAP TO TAIL CEMENT
16	TAIL CEMENT	11/6/2022	13:47	12.8	5.6	10	390	64 BBLS Tail CMT – 12.8 # 1.97 Y 10.9 MW 185 sks 10 BBLS AWAY
17	TAIL CEMENT	11/6/2022	13:51	12.8		20		30 BBLS AWAY
18	TAIL CEMENT	11/6/2022	13:01	12.8		34		64 BBLS AWAY SHUTDOWN
19	WASHUP	11/6/2022	13:02					WASHUP PUMP
20	DISPLACEMENT	11/6/2022	13:05	8.34	4	10	174	DROP PLUG AND BEGIN DISPLACEMENT 10 BBLS AWAY
21	DISPLACEMENT	11/6/2022	13:10	8.34	8	10	490	20 BBLS AWAY
22	DISPLACEMENT	11/6/2022	13:13	8.34	8	20	595	40 BBLS AWAY
23	DISPLACEMENT	11/6/2022	13:15	8.34	8	20	640	60 BBLS AWAY
24	LAND PLUG	11/6/2022	13:19	8.34	4	24.5	405	84.5 BBLS AWAY LAND PLUG UP TO 962 PSI, ESTIMATED 44 BBLS CEMENT TO SURFACE
25	CHECK FLOATS	11/6/2022	13:21					FLOATS CHECKED AND HELD WITH .5 BBLS BACK
26	SAFETY MEETING	11/6/2022	13:25					RIG DOWN MEETING
27	RIG DOWN	11/6/2022	13:30					DRIG DOWN ALL EQUIPMENT
28	SAFETY MEETING	11/6/2022	14:20					JOURNEY MANAGEMENT MEETING
29	DEPART LOCATION	11/6/2022	14:30					CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 84294
Customer: Cearus
Well Name: FED WMC 532-20



Job Start: Sunday, November 06, 2022