



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL WMC 432-20 05-045-24490
S:17 T:7S R:93W Garfield CO

CallSheet #: 84708
Proposal #: 65248



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	80	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1144	16
Casing	Inner	9.625	8.921	36	n/a	0	1134	0

Timing

Event	Date/Time
Call Out	12/1/2022 09:35
Depart Facility	12/1/2022 10:00
On Location	12/1/2022 14:00
Rig Up Iron	12/1/2022 14:15
Job Started	12/1/2022 23:20
Job Completed	12/2/2022 00:25
Rig Down Iron	12/2/2022 00:28
Depart Location	12/2/2022 01:17

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-522	TRC-059	Morales, Adrian
Light Duty Vehicles	LDV-062		Lancaster, Stephen
Cement Pump Float	CPF-052	TRH-957	Brady, Shawn

General Job Information

Metrics	Value
Well Fluid Density	8.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	462 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	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	No
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	81 °F
BHST	99 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	52 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 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		192.00	67.20	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

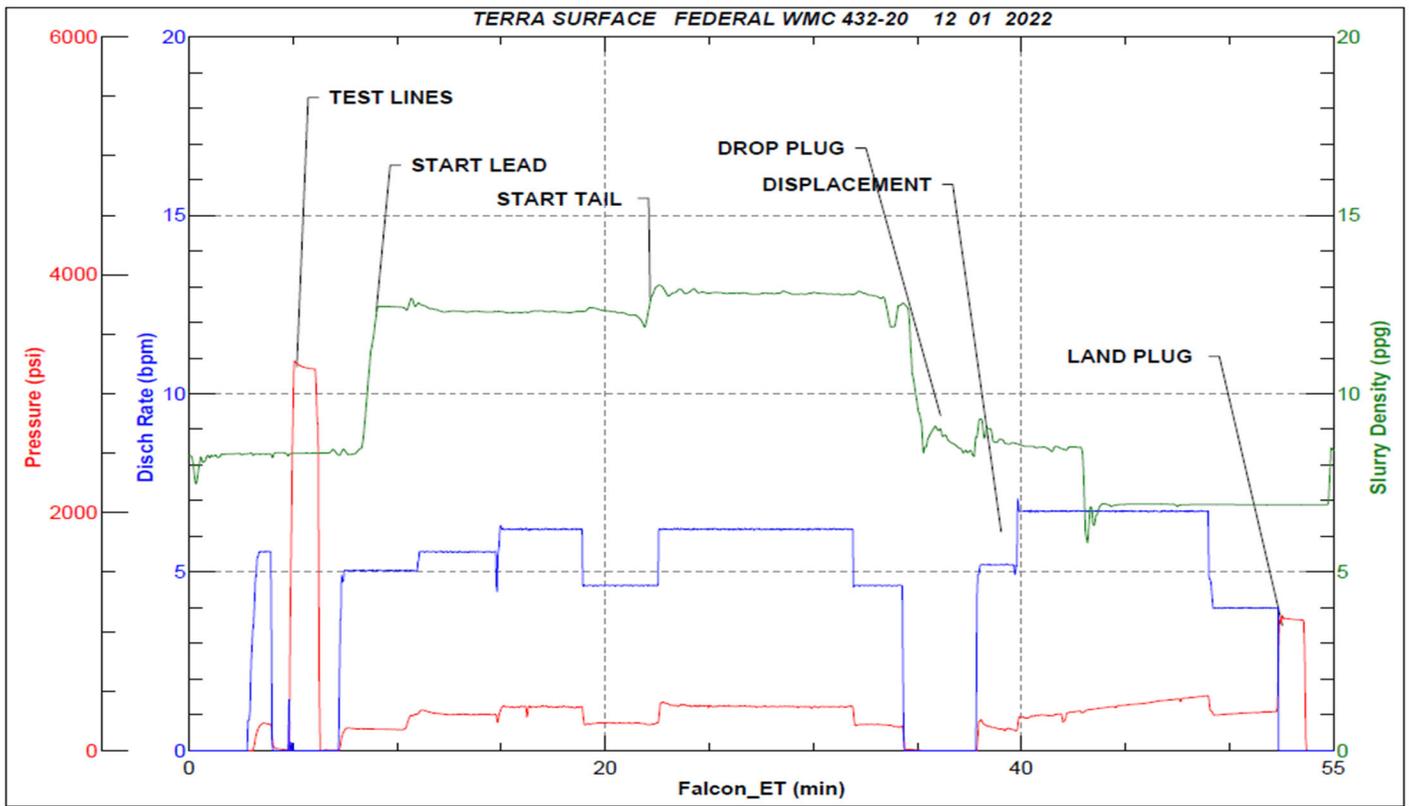
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	12/1/2022	09:35					CREW CALLED OUT FOR ON LOCATION TIME OF 14:00 ON 12/01/2022
2	Depart Location	12/1/2022	10:00					CREW DEPARTS FOR RIG LOCATION
3	Arrive On Location	12/1/2022	14:00					CREW ARRIVES ON LOCATION ,PUMP AND SUPERVISOR ON LOCATION 14:00 , BULK TRUCK ON LOCATION @ 22:45
4	Rig Up Iron	12/1/2022	14:15					RIG UP IRON AND HOSES
5	Safety Meeting	12/1/2022	23:20					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
6	Fill Lines	12/1/2022	23:36	8.34	4	5	207	FILL LINES WITH 5 BBLS FRESH WATER
7	Pressure Test Lines	12/1/2022	23:38				3200	PRESSURE TEST PUMP AND LINES TO 3000 PSI
8	Other	12/1/2022	23:40	8.34	5	15	282	PUMP 15 BBLS FRESH WATER FLUSH
9	Pump Lead Cement	12/1/2022	23:46	12.3	6.2	5	368	BEGIN PUMPING 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE.
10	Pump Lead Cement	12/1/2022	23:55	12.3	4	65	233	PUMPED 65 BBLS LEAD CEMENT
11	Pump Tail Cement	12/1/2022	23:56	12.8	5	5	417	BEGIN PUMPING 12.8 PPG TAIL CEMENT, DENSITY VERIFIED BY MUD SCALE
12	Pump Tail Cement	12/2/2022	00:08	12.8	6.2	67	362	PUMPED 67 BBLS TAIL CEMENT
13	Clean Pumps and Lines	12/2/2022	00:09					WASH UP PUMP, WASHED UP ON PLUG
14	Drop Top Plug	12/2/2022	00:11	8.34	4	5	198	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
15	Pump Displacement	12/2/2022	00:16	8.34	6.7	30	370	30 BBLS DISPLACEMENT PUMPED
16	Cement to Surface	12/2/2022	00:16	8.34	6.7	45	403	CEMENT TO SURFACE @ 45BBLS PUMPED, 40 BBLS CEMENT TO SURFACE
17	Land Plug	12/2/2022	00:25	8.34	4	85	1100	PLUG LANDED. FCP - 505 PSI, BUMPED TO 1100 PSI
18	Check Floats	12/2/2022	00:27					CHECK FLOATS, FLOATS HELD, 0.5 BBLS BACK
19	Rig Down Iron	12/2/2022	00:28					RIG DOWN IRON AND HOSES PICKLE PUMP, BLOW DOWN IRON
20	Depart Location	12/2/2022	01:17					DEPART LOCATION FOR RCO

Pump Diagrams



JobMaster Program Version 5.01C1
 Job Number: 84708
 Customer: TERRA
 Well Name: FEDERAL WMC 432-20



Job Start: Thursday, December 01, 2022