



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL NR 533-4 05-045-24483
S:3 T:6S R:94W Garfield CO

CallSheet #: 81358
Proposal #: 59403



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,

Zen Keith

SME | (307) 757-7178 | zen.keith@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	19.124	94	n/a	0	89	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	1118	16
Casing	Inner	9.625	8.921	36	n/a	0	1118	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-254	TRC(TRB)-188	Kirchenwitz, Jacob
Cement Pump Float	CPF-012	TRH-964	Gonzales, Ivan
Light Duty Vehicles	LDV-062		Lancaster, Stephen

Timing

Event	Date/Time
Call Out	5/9/2022 23:49
Depart Facility	5/10/2022 05:00
On Location	5/10/2022 06:26
Rig Up Iron	5/10/2022 06:27
Job Started	5/10/2022 11:29
Job Completed	5/10/2022 12:23
Rig Down Iron	5/10/2022 12:25
Depart Location	5/10/2022 12:56

General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	236 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	83 bbls
Actual Displacement	83 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	28 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	9 lb/gal
Well Fluid Density Out of Well	9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	65 °F	50-80 °F
pH Level	8	5.5-8.5
Chlorides	73 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	90 mg/L	0-500 mg/L
Carbonates	0 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		179.00	70.56	0
3	Tail	Tail	12.80	1.97	10.87		183.00	64.05	500
4	Water	DisplacementFinal	8.34			42.00		82.00	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	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
2	Lead	Lead	XCem-1101	Thixotropic	1.00	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	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
3	Tail	Tail	XCem-1101	Thixotropic	1.00	lb/sk

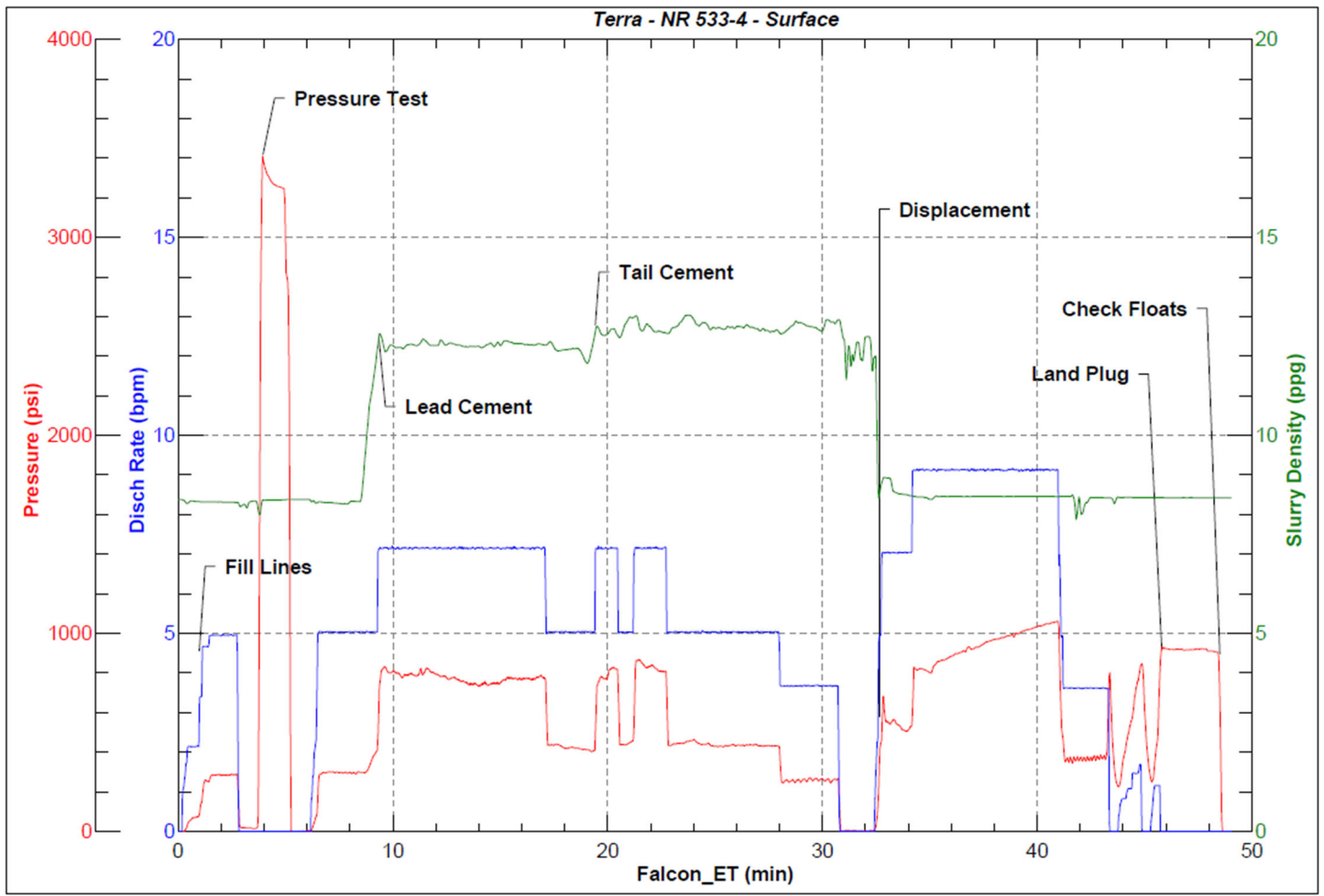
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	5/9/2022	23:49					CREW CALLED OUT FOR ON LOCATION TIME OF 07:00 5 /10/22
2	Depart Location	5/10/2022	05:00					CREW DEPARTS RCO YARD FOR RIG LOCATION
3	Arrive On Location	5/10/2022	06:26					CREW ARRIVES ON LOCATION
4	Rig Up Iron	5/10/2022	06:27					RIG UP IRON AND HOSES
5	Safety Meeting	5/10/2022	11:29					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
6	Fill Lines	5/10/2022	11:32	8.34	2.5	5	30	FILL LINES WITH 5 BBLS FRESH WATER
7	Pressure Test Lines	5/10/2022	11:39				3300	PRESSURE TEST PUMP AND LINES TO 3000 PSI
8	Other	5/10/2022	11:45	8.34	4.8	15	200	PUMP REMAINING 15 BBLS FRESH WATER FLUSH
9	Pump Lead Cement	5/10/2022	11:47	12.3	5	10	435	BEGIN PUMPING 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE.
10	Pump Lead Cement	5/10/2022	11:51	12.3	5	50	467	50 BBLS PUMPED
11	Pump Lead Cement	5/10/2022	11:54	12.3	5	60	548	60 BBLS PUMPED
12	Pump Tail Cement	5/10/2022	11:59	12.8	5	64.1	543	PUMPED 64.1 BBLS TAIL CEMENT
13	Clean Pumps and Lines	5/10/2022	12:04					WASH UP PUMP, WASHED UP ON PLUG
14	Drop Top Plug	5/10/2022	12:10	8.34	6	0	358	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
15	Pump Displacement	5/10/2022	12:16	8.34	9	50	450	50 BBLS FRESH WATER DISPLACEMENT PUMPED
16	Cement Back to Surface	5/10/2022	12:17	8.34	6	55	482	CEMENT TO SURFACE AT 55 BBLS FRESH WATER DISPLACEMENT PUMPED. 28 BBLS CEMENT TO SURFACE
17	Pump Displacement	5/10/2022	12:22	8.34	3.6	83	347	83 BBLS FRESH WATER DISPLACEMENT PUMPED. SLOWED RATE LAST 10 BBLS TO LAND PLUG
18	Land Plug	5/10/2022	12:23				982	PLUG LANDED. FCP - 347 PSI, BUMPED TO 982 PSI
19	Check Floats	5/10/2022	12:26					CHECK FLOATS, FLOATS HELD, 0.5 BBLS BACK
20	Rig Down Iron	5/10/2022	12:25					RIG DOWN IRON AND HOSES
21	Depart Location	5/10/2022	12:56					AC CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 81358
Customer: TERRA
Well Name: FEDERAL NR 533-4



Job Start: Tuesday, May 10, 2022