



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL NR 32-4 05-045-24481
S:3 T:6S R:94W Garfield CO

CallSheet #: 82896
Proposal #: 62301



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	19.124	94	n/a	0	87	0
Open Hole	Outer	n/a	13.5	n/a	n/a	117	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1133	16
Casing	Inner	9.625	8.921	36	n/a	0	1133	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-555	TRB-421	Richey, Steven
Cement Pump Float	CPF-012	TRH-964	Gonzales, Ivan
Light Duty Vehicles	LDV-083		Putnam, Gage

Timing

Event	Date/Time
Call Out	8/16/2022 02:30
Depart Facility	8/16/2022 07:30
On Location	8/16/2022 08:00
Rig Up Iron	8/16/2022 08:15
Job Started	8/16/2022 12:36
Job Completed	8/16/2022 13:18
Rig Down Iron	8/16/2022 13:30
Depart Location	8/16/2022 14:00

General Job Information

Metrics	Value
Well Fluid Density	9.15 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	220 bbls
Rig Circulation Time	1 hours
Calculated Displacement	84.4 bbls
Actual Displacement	84.4 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	30 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	9.15 lb/gal
Well Fluid Density Out of Well	9.15 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	98 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	79 °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		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		84.40	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

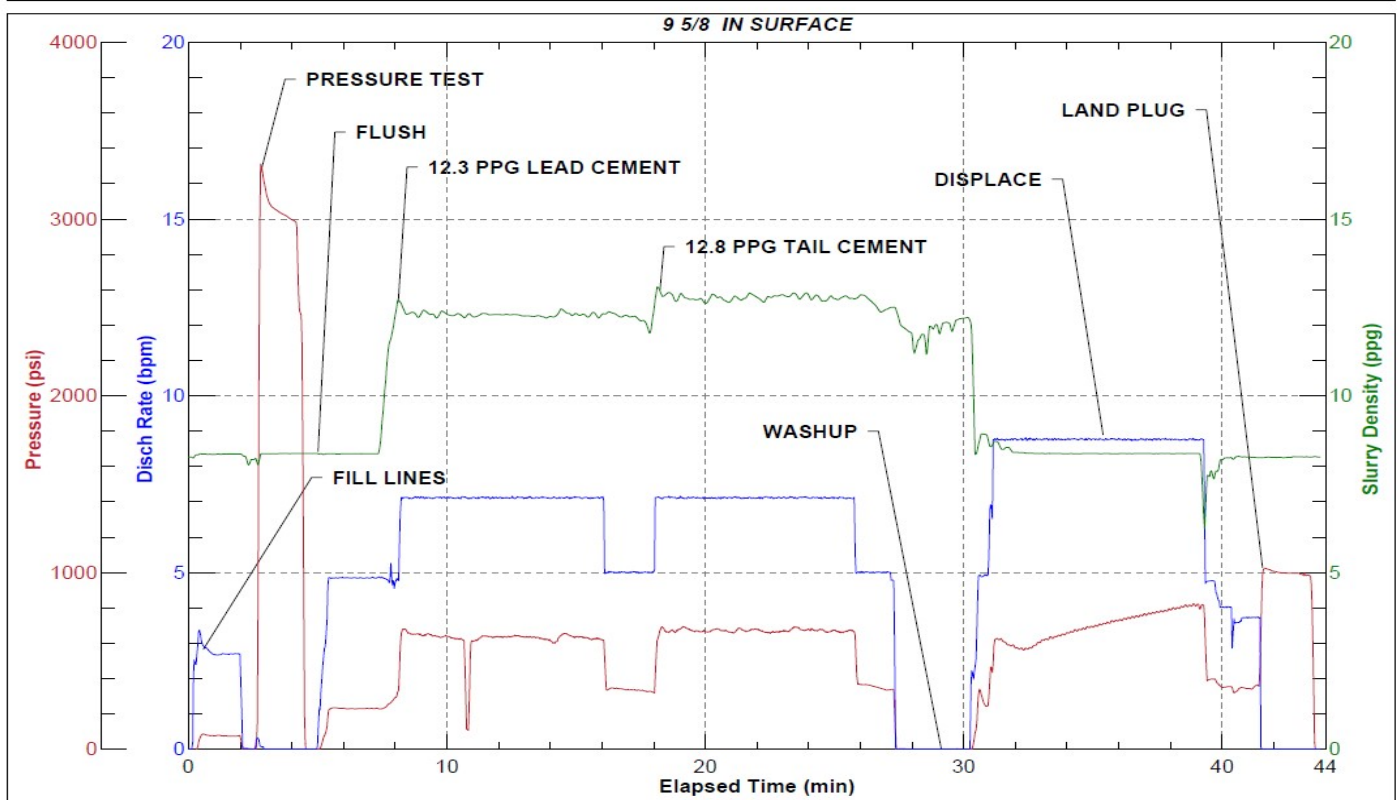
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	8/16/2022	02:30					CREW CALLED OUT FOR ON LOCATION TIME OF 9:00 8/16/22
2	Depart Location	8/16/2022	07:30					CREW DEPARTS RCO YARD FOR RIG LOCATION
3	Arrive On Location	8/16/2022	08:00					CREW ARRIVES ON LOCATION
4	Rig Up Iron	8/16/2022	08:15					RIG UP IRON AND HOSES
5	Waiting	8/16/2022	09:00					WAITING FOR RIG TO RUN CASING
6	Safety Meeting	8/16/2022	12:28					JSA SAFETY MEETING WITH AC, RIG CREW, AND CUSTOMER REP
7	Fill Lines	8/16/2022	12:36	8.34	2	5	102	FILL LINES WITH 5 BBLS FRESH WATER
8	Pressure Test Lines	8/16/2022	12:39				3300	PRESSURE TEST PUMP AND LINES TO 3000 PSI
9	Other	8/16/2022	12:42	8.34	5	15	245	PUMP 15 BBLS FRESH WATER FLUSH
10	Pump Lead Cement	8/16/2022	12:44	12.3	5	0	289	BEGIN PUMPING 12.3 PPG LEAD CEMENT, DENSITY VERIFIED BY MUD SCALE.
11	Pump Lead Cement	8/16/2022	12:54	12.3	7	70.6	640	PUMPED 70.6 BBLS LEAD CEMENT
12	Pump Tail Cement	8/16/2022	12:54	12.8	7	0	693	BEGIN PUMPING 12.8 PPG TAIL CEMENT, DENSITY VERIFIED BY MUD SCALE
13	Pump Tail Cement	8/16/2022	13:02	12.8	7	64.1	686	PUMPED 64.1 BBLS TAIL CEMENT

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
14	Clean Pumps and Lines	8/16/2022	13:02					WASH UP PUMP, WASHED UP ON PLUG
15	Drop Top Plug	8/16/2022	13:07	8.34	5	0	289	DROP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
16	Pump Displacement	8/16/2022	13:13	8.34	8.8	50	746	50 BBLS FRESH WATER DISPLACEMENT PUMPED
17	Cement Back to Surface	8/16/2022	13:14	8.34	8.8	4	780	CEMENT TO SURFACE AT 54 BBLS FRESH WATER DISPLACEMENT PUMPED. 30 BBLS CEMENT TO SURFACE
18	Pump Displacement	8/16/2022	13:18	8.34	3.7	30.4	359	84.4 BBLS FRESH WATER DISPLACEMENT PUMPED. SLOWED RATE TO 4 BPM LAST 10 BBLS TO LAND PLUG
19	Land Plug	8/16/2022	13:18				994	PLUG LANDED. FCP - 359 PSI, BUMPED TO 994 PSI
20	Check Floats	8/16/2022	13:20					CHECK FLOATS, FLOATS HELD, 0.5 BBLS BACK
21	Rig Down Iron	8/16/2022	13:30					RIG DOWN IRON AND HOSES
22	Depart Location	8/16/2022	14:00					AC CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 82896
Customer: Terra
Well Name: Federal NR 32.4



Job Start: Tuesday, August 16, 2022