



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL PA 44-23 05-045-24310
S:26 T:6S R:95W Garfield CO

CallSheet #: 75122
Proposal #: 50220



SURFACE Post Job Report

Attention: Mr. Lynn Cass | (970) 263-2716 | lcass@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Lynn Cass,

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

Field Engineer | (307) 757-7178 | zen.keith@americancementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 305-4888

Table of Contents

1 Job Details & Summary	3
Geometry.....	3
Equipment / People	3
Timing	3
General Job Information.....	3
Well Fluid Details	3
Job Details.....	3
Job Details (cont.)	3
Circulation.....	3
Job Execution Information.....	4
Job Fluid Details	4
2 Job Logs	5
3 Water Analysis	5
4 Pump Diagrams	6

1 Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer		13.5		0	500	16
Open Hole	Outer		13.5		500	1134	16
Casing	Inner	9.625	8.921	36	0	1127.98	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-263	TRB-425	Richey, Steven	39
Cement Pump	CPF-058	TRH-1140	Mcneal, Lawrence	39
Light Duty Pickups	LDV-5429		Castillo, Francisco	39

Timing

Event	Date/Time
Call Out	10/6/2020 14:00
Depart Facility	10/6/2020 15:00
On Location	10/6/2020 15:20
Rig Up Iron	10/6/2020 18:00
Job Started	10/6/2020 20:20
Job Completed	10/6/2020 20:56
Rig Down Iron	10/6/2020 21:15
Depart Location	10/6/2020 22:00

General Job Information

Metrics	Value
Well Fluid Density	9.7 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	84 bbls
Actual Displacement	84 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	24 bbls
Well Topped Out	No

Well Fluid Details

Metrics	Value
Plastic Viscosity	17
Yield Point	15
10 sec. SGS	6
10 min. SGS	16
30 min. SGS	45

Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.7 lb/gal
Well Fluid Density Out of Well	9.7 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	81 °F
BHST	98 °F

Circulation

Lost Circulation Experienced
No

Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sk)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		20.00	0
1	2	Lead Cement	Lead	12.30	2.34	13.42		122.00	50.82	0
1	3	Tail Cement	Tail	12.80	2.08	11.46		173.00	63.98	500
1	4	Water	DisplacementFinal	8.34			42.00		84.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	2	Lead	Lead Cement	A-10	Accelerator	5.00	%BWOB
1	2	Lead	Lead Cement	A-2	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	A-7P	Accelerator	2.00	lb/sk
1	2	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	2	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	3	Tail	Tail Cement	ASTM TYPE III	Cement	100.00	%
1	3	Tail	Tail Cement	A-10	Accelerator	5.00	%BWOB
1	3	Tail	Tail Cement	A-2	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	A-7P	Accelerator	2.00	lb/sk
1	3	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	3	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk

2 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	10/6/2020	14:00					ON LOCATION AT 17:00
2	LEAVE YARD	10/6/2020	15:00					LEAVE THE YARD
3	ARRIVE ON LOCATION	10/6/2020	15:00					ON LOCATION, RIG PULLING DRILL PIPE
4	RIG UP	10/6/2020	18:00					RIG UP MEETING, RIG UP
5	SAFETY MEETING	10/6/2020	20:00					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	10/6/2020	20:18				3500	PRESSURE TEST LINES
7	PUMP SPACER	10/6/2020	20:20	8.34	7.5	20	341	WATER SPACER
8	LEAD CEMENT	10/6/2020	20:25	12.3	7.5	50.5	537	122 SKS / 50.5 BBLS CEMENT AT 12.3PPG
9	TAIL CEMENT	10/6/2020	20:33	12.8	7.5	64	603	173 SKS / 64 BBLS CEMENT AT 12.8 PPG
10	SHUTDOWN	10/6/2020	20:44					SHUTDOWN, DROP PLUG
11	DISPLACEMENT	10/6/2020	20:46	8.34	9.7	74	797	DISPLACEMENT
12	SLOW RATE	10/6/2020	20:54	8.34	3	10	317	SLOW RATE LAST 10 BBLS
13	LAND PLUG	10/6/2020	20:56				939	LAND PLUG, 24 BBLS CMT TO SURFACE
14	CHECK FLOATS	10/6/2020	20:59					FLOATS HELD, 0.5 BBL FLOW BACK
15	RIG DOWN	10/6/2020	21:15					RIG DOWN MEETING, RIG DOWN
16	LEAVE LOCATION	10/6/2020	22:00					JM MEETING, LEAVE LOCATION

3 Water Analysis

Metrics	Value	Recommended
Water Source		
Temperature	67 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	240	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

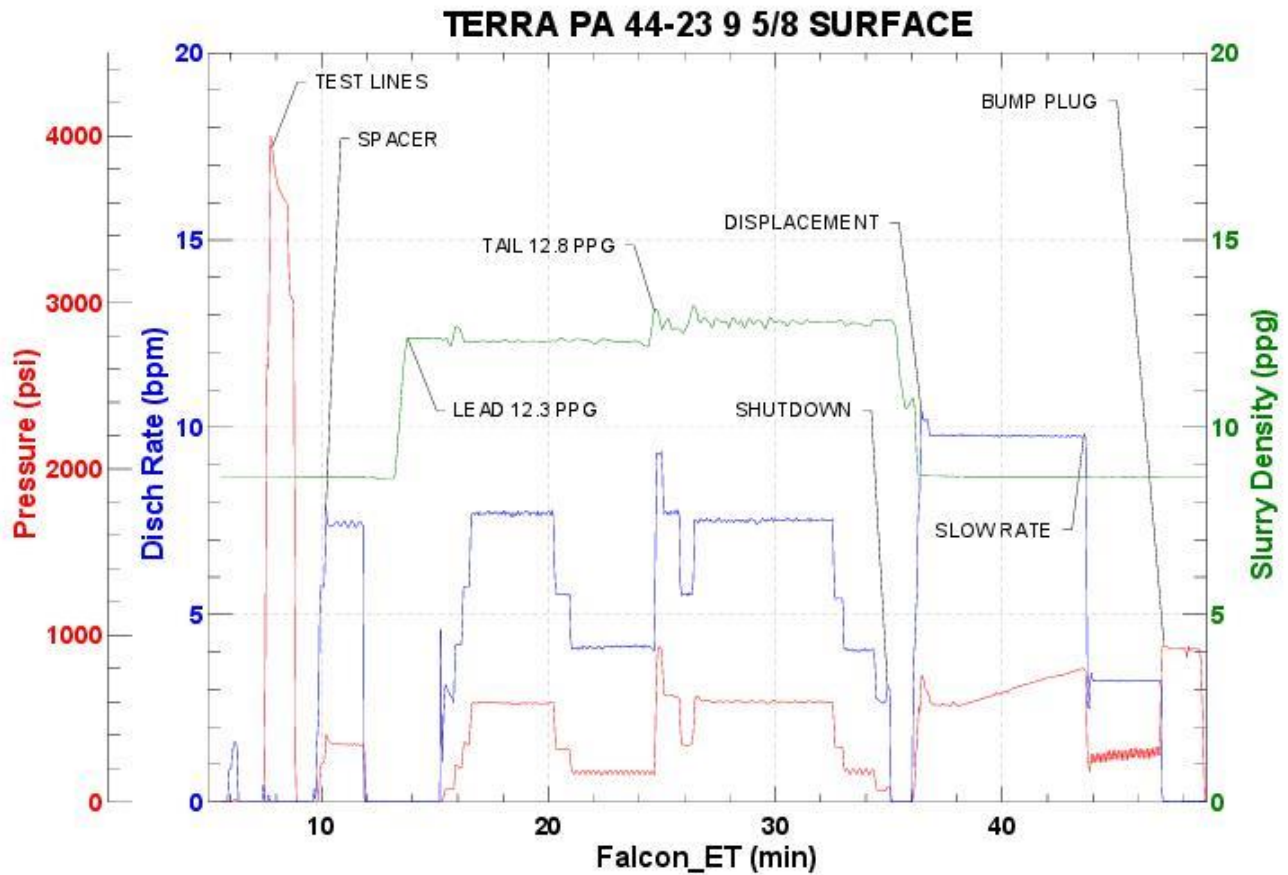


JobMaster Program Version 5.01C 1

Job Number: 75122

Customer: TERRA

Well Name: PA 44-23



BJ Services

Job Start: Tuesday, October 06, 2020