



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

Fed PA 314-23 05-045-24302
S:1 T:1N R:1W Garfield CO

CallSheet #: 75017
Proposal #: 50028



SURFACE Post Job Report

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

Dear 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

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1 Job Details & Summary

1.1 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	1132	16
Casing	Inner	9.625	8.921	36	0	1128.39	0

1.2 Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-161	TRB-425	Mcneal, Lawrence	36
Cement Pump	CPF-011	TRH-957	Gonzales, Ivan	36
Light Duty Pickups	LDV-5263		Castillo, Francisco	36

1.3 Timing

Event	Date/Time
Call Out	9/20/2020 15:00
Depart Facility	9/20/2020 15:45
On Location	9/20/2020 16:00
Rig Up Iron	9/20/2020 17:00
Job Started	9/20/2020 18:16
Job Completed	9/20/2020 18:50
Rig Down Iron	9/20/2020 19:00
Depart Location	9/20/2020 19:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	9.3 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	1 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
Top Out Volume	0 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	14
Yield Point	10
10 sec. SGS	4
10 min. SGS	13
30 min. SGS	29
Filtrate	0
Flow Line Temp.	0

1.6 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	9.3 lb/gal
Well Fluid Density Out of Well	9.3 lb/gal

1.7 Job Details (cont.)

Metrics	Value
BHCT	81 °F
BHST	98 °F

1.8 Circulation

Lost Circulation Experienced
No

1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		20.00	0
1	2	Lead Cement	Lead	12.30	2.34	13.43		122.00	50.83	0
1	3	Tail Cement	Tail	12.80	2.08	11.47		173.00	63.99	500
1	4	Water	DisplacementFinal	8.34			42.00		84.00	0

1.10 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-25	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-25	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	9/20/2020	15:00					On location at 18:00 HRS
2	Depart for location	9/20/2020	15:45					Leave the yard
3	Arrive on location	9/20/2020	16:00					On location, rig running casing
4	Rig up	9/20/2020	17:00					Rig up meeting, rig up
5	Safety meeting	9/20/2020	18:00					Pre-job safety meeting
6	Pressure test	9/20/2020	18:14				3000	Pressure test lines
7	Pump Spacer	9/20/2020	18:16	8.34	6	20	203	Water spacer
8	Lead Cement	9/20/2020	18:23	12.3	8	50.5	593	Lead 122 sks/50.5 bbls at 12.3 ppg
9	Tail Cement	9/20/2020	18:29	12.8	8	64	643	Tail 173 sks/64 bbls at 12.8 ppg
10	Shutdown	9/20/2020	18:37					Shutdown, drop plug
11	Displacement	9/20/2020	18:39	8.34	10	74	749	Pump displacement
12	Slow Rate	9/20/2020	18:47	8.34	3	10	289	Slow Rate
13	Land Plug	9/20/2020	18:50				909	Land plug, 24 bbls cement to surface
14	Check Floats	9/20/2020	18:51					Floats held, 0.5 bbl flow back
15	Rig Down	9/20/2020	19:00					Rig down meeting, rig down
16	Leave Location	9/20/2020	19:30					Leave location

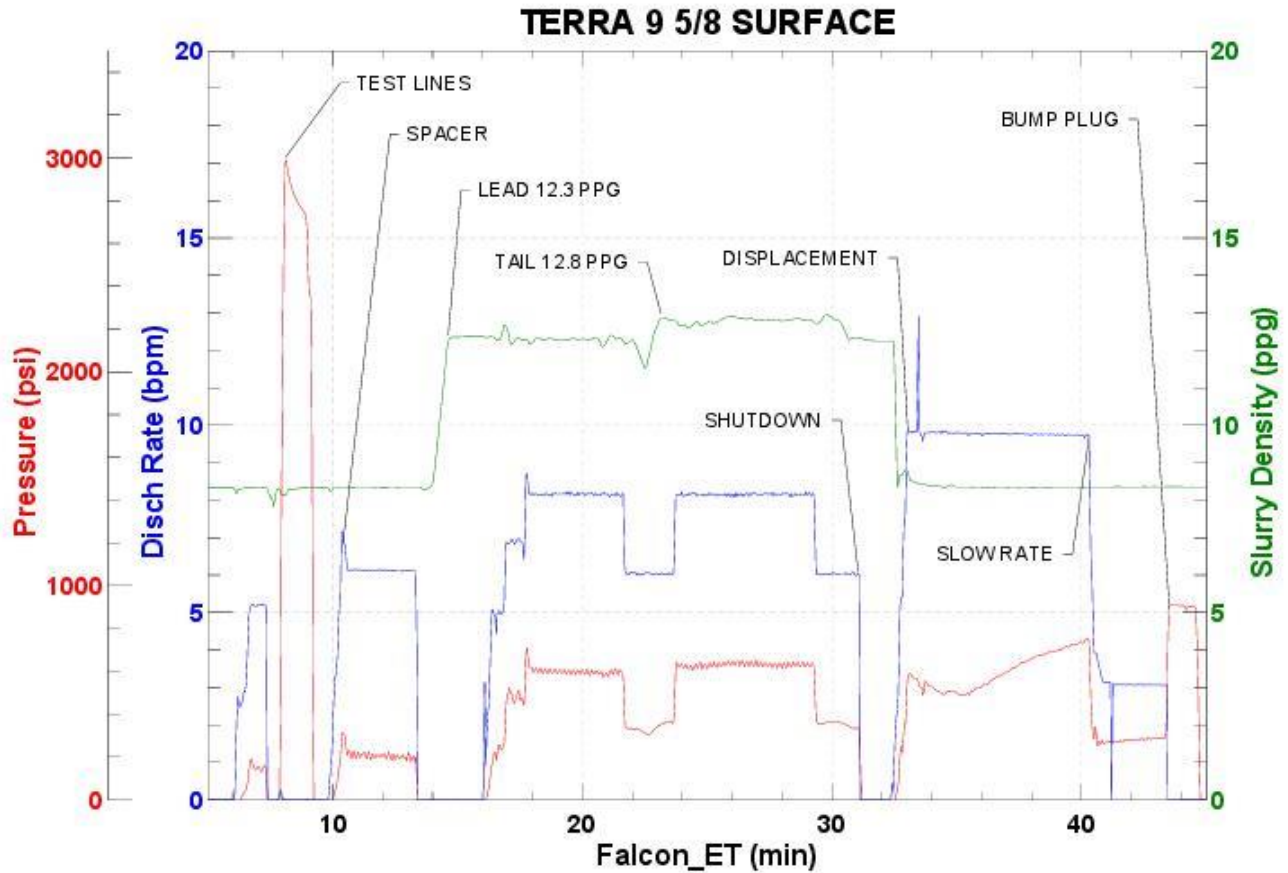
3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	67 °F	50-80 °F
pH Level	6	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 5.00C 1
Job Number: 75017
Customer: TERRA
Well Name: PA 314-23



BJ Services

Job Start: Sunday, September 20, 2020