



---

# **Terra Energy Partners, LLC**

## **SURFACE POST JOB REPORT**

**CHEVRON GM 443-19 05-045-24350**  
**S:20 T:6S R:96W Garfield CO**

CallSheet #: 75637  
Proposal #: 50955



**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 ..... 4

3 Water Analysis ..... 5

4 Pump Diagrams ..... 5

## 1 Job Details & Summary

### Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer		13.5			0	500	16
Open Hole	Outer		13.5			500	1047	16
Casing	Inner	9.625	8.921	36		0	1040.85	0

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Bulk Trailer	CTF-555	TRB-112	Rivas, Saul	56
Cement Pump	CPF-011	TRH-957	Gonzales, Ivan	56
Light Duty Pickups	LDV-5429		Castillo, Francisco	56

### Timing

Event	Date/Time
Call Out	12/12/2020 23:30
Depart Facility	12/13/2020 00:30
On Location	12/13/2020 01:30
Rig Up Iron	12/13/2020 01:45
Job Started	12/13/2020 05:34
Job Completed	12/13/2020 06:19
Rig Down Iron	12/13/2020 06:30
Depart Location	12/13/2020 07:30

### General Job Information

Metrics	Value
Well Fluid Density	9.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	75 bbls
Actual Displacement	75 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	20 bbls
Well Topped Out	No

### Well Fluid Details

Metrics	Value
Plastic Viscosity	11
Yield Point	9
10 sec. SGS	8
10 min. SGS	16
30 min. SGS	34
Filtrate	0
Flow Line Temp.	0

### 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	9.5 lb/gal
Well Fluid Density Out of Well	9.5 lb/gal

### Job Details (cont.)

Metrics	Value
BHCT	80 °F
BHST	97 °F

### Circulation

Lost Circulation Experienced
No

## Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /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		146.00	53.99	500
1	4	Water	DisplacementFinal	8.34			42.00		74.00	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	12/12/2020	23:30					ON LOCATION AT 02:30 HRS, BODY TEMPS F.CASTILLO-98.3, I. GONZALES-98.1, S. RIVAS-97.8
2	LEAVE YARD	12/13/2020	00:30					LEAVE THE YARD
3	ON LOCATION	12/13/2020	01:30					ON LOCATION, RIG RUNNING CASING
4	RIG UP	12/13/2020	01:45					RIG UP MEETING, RIG UP
5	SAFETY MEETING	12/13/2020	05:15					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	12/13/2020	05:29				4400	PRESSURE TEST LINES
7	PUMP SPACER	12/13/2020	05:34	8.34	7	20	377	WATER SPACER
8	LEAD CEMENT	12/13/2020	05:44	12.3	8	51	537	122 SKS / 51 BBLs AT 12.3 PPG
9	TAIL CEMENT	12/13/2020	05:51	12.8	8	54	573	146 SKS / 54 BBLs AT 12.8 PPG
10	SHUTDOWN	12/13/2020	06:00					SHUTDOWN, DROP PLUG
11	DISPLACEMENT	12/13/2020	06:08	8.34	9.5	65	819	DISPLACEMENT
12	DISPLACEMENT	12/13/2020	06:15	8.34	3	10	341	SLOW RATE
13	LAND PLUG	12/13/2020	06:19				878	LAND PLUG, 20 BBLs CMT TO SURFACE
14	CHECK FLOATS	12/13/2020	06:21					FLOATS HELD, 0.5 BBL FLOW BACK
15	RIG DOWN	12/13/2020	06:30					RIG DOWN MEETING, RIG DOWN
16	LEAVE LOCATION	12/13/2020	07:30					CREW LEAVE LOCATION

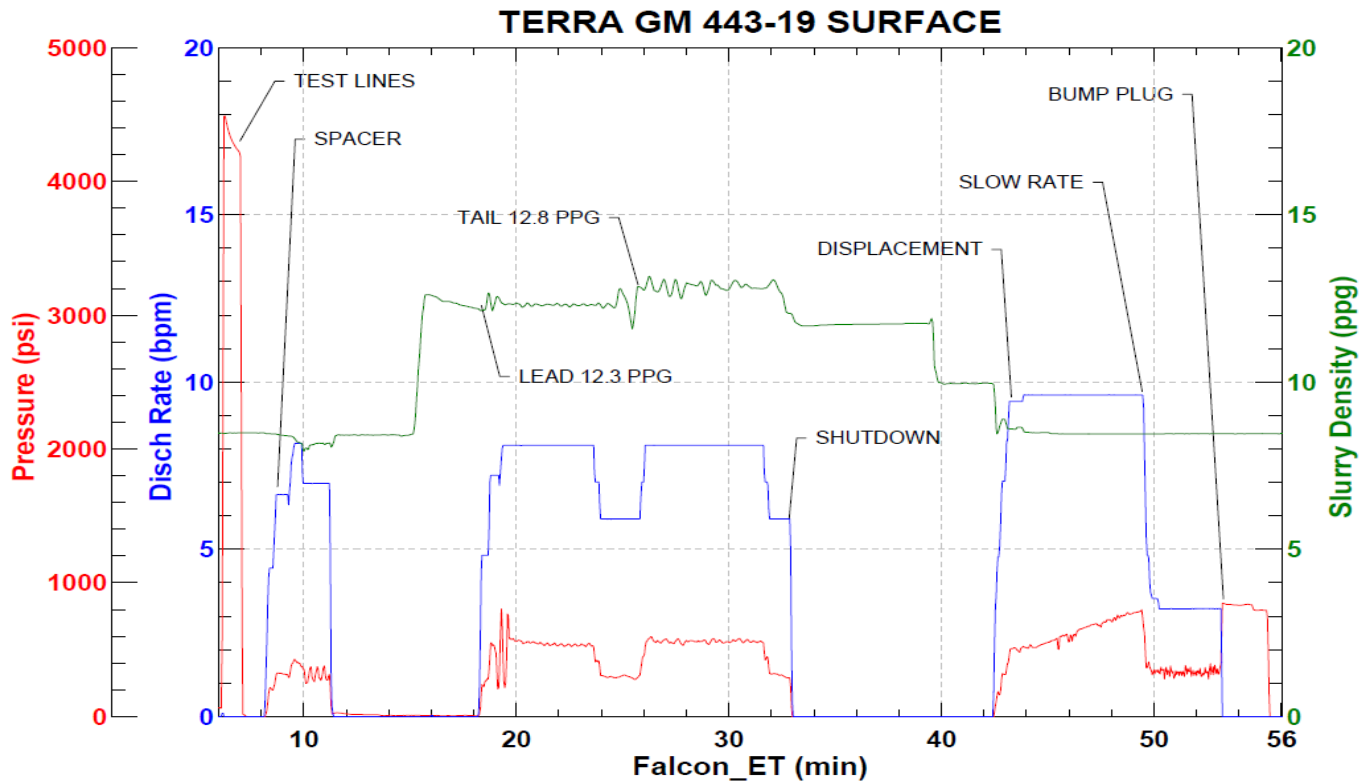
### 3 Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	80 °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 5.01C1  
Job Number: 75637  
Customer: TERRA  
Well Name: GM 443-19



BJ Services

Job Start: Sunday, December 13, 2020