



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

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

CallSheet #: 75947
Proposal #: 50955



LONG STRING 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) 657-1187



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1 Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36		0	1037	0
Open Hole	Outer		8.75			1000	7688	45
Casing	Inner	4.5	4	11.6		0	7682.37	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Silo	Silo #25			
Bulk Trailer	CTF-263	TRB-190	Richey, Steven	56
Cement Pump	CPF-011	TRH-957	Gonzales, Ivan	56
Light Duty Pickups	LDV-5429		Castillo, Francisco	56

Timing

Event	Date/Time
Call Out	1/24/2021 16:00
Depart Facility	1/24/2021 17:15
On Location	1/24/2021 18:30
Rig Up Iron	1/24/2021 19:00
Job Started	1/24/2021 20:53
Job Completed	1/24/2021 22:06
Rig Down Iron	1/24/2021 22:30
Depart Location	1/24/2021 23:30

General Job Information

Metrics	Value
Well Fluid Density	10.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	119 bbls
Actual Displacement	119 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	N/A

Well Fluid Details

Metrics	Value
Plastic Viscosity	15
Yield Point	13
10 sec. SGS	5
10 min. SGS	11
30 min. SGS	26
Filtrate	8.8
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	10.5 lb/gal
Well Fluid Density Out of Well	10.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	170 °F
BHST	230 °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 (sks)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.34			42.00		10.00	3763
1	2	Mud Flush	Flush	8.45			40.86		20.00	3889
1	3	Water	Flush	8.34			42.00		10.00	4141
1	4	Lead Cement	Lead	12.50	2.16	12.18		229.00	88.14	4267
1	5	Tail Cement	Tail	13.00	1.99	10.08		487.00	172.96	5374
1	6	Displacement	DisplacementFinal	8.34			42.00		119.00	0

Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
1	2	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
1	4	Lead	Lead Cement	ASTM TYPE III	Cement	100.00	%
1	4	Lead	Lead Cement	BA-90	BondEnhancer	5.00	lb/sk
1	4	Lead	Lead Cement	FL-66	FluidLoss	0.30	%BWOB
1	4	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
1	4	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
1	4	Lead	Lead Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	4	Lead	Lead Cement	R-3	Retarder	0.60	%BWOB
1	5	Tail	Tail Cement	CLASS G	Cement	50.00	%
1	5	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	50.00	%
1	5	Tail	Tail Cement	BA-90	BondEnhancer	3.00	lb/sk
1	5	Tail	Tail Cement	BENTONITE	Viscosifier	6.00	%BWOB
1	5	Tail	Tail Cement	FL-66	FluidLoss	0.40	%BWOB
1	5	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
1	5	Tail	Tail Cement	GW-86	Viscosifier	0.10	%BWOB
1	5	Tail	Tail Cement	IntegraSeal POLI	LostCirculation	0.25	lb/sk
1	5	Tail	Tail Cement	R-3	Retarder	0.10	%BWOB
1	5	Tail	Tail Cement	S-8	StrengthRetrogression	20.00	%BWOB

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	1/24/2021	16:00					ON LOCATION 19:00 HRS, CREW TEMPS, JAVI-97.1, IVAN-95.5, STEVE-96.4
2	LEAVE YARD	1/24/2021	17:15					CREW LEAVE THE YARD
3	ON LOCATION	1/24/2021	18:30					ON LOCATION, RIG RUNNING CASING
4	RIG UP	1/24/2021	19:00					RIG UP MEETING, RIG UP
5	SAFETY MEETING	1/24/2021	20:15					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	1/24/2021	20:51				5600	PRESSURE TEST LINES
7	PUMP SPACER	1/24/2021	20:53	8.34	7	10	1027	WATER SPACER
8	PUMP SPACER	1/24/2021	20:54	8.4	7	20	1167	MUD FLUSH SPACER
9	PUMP SPACER	1/24/2021	20:57	8.34	5.7	10	927	WATER SPACER
10	LEAD CEMENT	1/24/2021	20:59	12.5	7	88	1209	229 SKS / 88 BBL AT 12.5 PPG
11	TAIL CEMENT	1/24/2021	21:14	13	8	50	1011	487 SKS / 173 BBLS AT 13 PPG
12	TAIL CEMENT	1/24/2021	21:20	13	8	50	1087	100 BBLS TAIL CEMENT PUMPED
13	TAIL CEMENT	1/24/2021	21:26	13	8	73	1171	173 BBLS TAIL CEMENT PUMPED
14	SHUTDOWN	1/24/2021	21:42					SHUTDOWN, WASH LINES, DROP PLUG
15	DISPLACEMENT	1/24/2021	21:52	8.4	9.5	50	1681	DISPLACEMENT KCL WATER
16	DISPLACEMENT	1/24/2021	21:57	8.4	9.5	59	2485	109 BBLS DISPLACEMENT PUMPED
17	DISPLACEMENT	1/24/2021	22:04	8.4	4	10	1787	SLOW RATE
18	LAND PLUG	1/24/2021	22:06				2919	LAND PLUG, FULL RETURNS
19	CHECK FLOATS	1/24/2021	22:09					FLOATS HELD, 1 BBL FLOW BACK
20	RIG DOWN	1/24/2021	22:30					RIG DOWN MEETING, RIG DOWN
21	LEAVE LOCATION	1/24/2021	23:30					CREW LEAVE LOCATION

3 Water Analysis

Metrics	Value	Recommended
Water Source	None	
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: 75947
Customer: TERRA
Well Name: GM 443-19

