



Terra Energy Partners, LLC

LONG STRING POST JOB REPORT

WMC 433-19-793 05-045-24547
S:19 T:7S R:93W Garfield CO

CallSheet #: 85989
Proposal #: 67249



LONG STRING 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,

Zen Keith

SME North | (307) 757-7178 | zen.keith@americancementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1187

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 | n/a | 0 | 1142 | 0 |
| Open Hole | Outer | n/a | 8.75 | n/a | n/a | 1142 | 7829 | 85 |
| Open Hole | Outer | n/a | 8.75 | n/a | n/a | 7829 | 11056 | 50 |
| Casing | Inner | 4.5 | 4 | 11.6 | n/a | 0 | 11056 | 0 |

Equipment / People

| Unit Type | Unit | Power Unit | Employee #1 | Employee #2 |
|----------------------|---------|------------|---------------------|-------------------|
| Field Storage Silo | FSS-438 | | | |
| Cement Trailer Float | CTF-522 | TRC-249 | Richey, Steven | |
| Cement Pump Float | CPF-052 | TRH-964 | Brady, Shawn | Bradbrook, Jeremy |
| Light Duty Vehicles | LDV-063 | | Castillo, Francisco | |

Timing

| Event | Date/Time |
|-----------------|------------------|
| ERTS | 00/02/2023 12:00 |
| Call Out | 3/2/2023 06:00 |
| Depart Facility | 3/2/2023 08:30 |
| On Location | 3/2/2023 09:47 |
| Rig Up Iron | 3/2/2023 10:00 |
| Job Started | 3/2/2023 13:24 |
| Job Completed | 3/2/2023 15:16 |
| Rig Down Iron | 3/2/2023 15:30 |
| Depart Location | 3/2/2023 17:00 |

General Job Information

| Metrics | Value |
|-------------------------|------------|
| Well Fluid Density | 9.2 lb/gal |
| Well Fluid Type | WBM |
| Rig Circulation Vol | 9.5 bbls |
| Rig Circulation Time | 570 hours |
| Calculated Displacement | 171 bbls |
| Actual Displacement | 171 bbls |
| Total Spacer to Surface | 0 bbls |
| Total CMT to Surface | 0 bbls |
| Well Topped Out | N/A |

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 | 9.2 lb/gal |
| Well Fluid Density Out of Well | 9.2 lb/gal |

Job Details (cont.)

| Metrics | Value |
|------------------|--------|
| BHCT | 178 °F |
| BHST | 236 °F |
| Initial ISIP | psi |
| Final ISIP | psi |
| Sks in Formation | sks |
| Injection #1 | bpm |
| Injection #1 | psi |
| Injection #2 | bpm |
| Injection #2 | psi |

Water Analysis

| Metrics | Value | Recommended |
|------------------|-----------|-------------|
| Water Source | Flat Tank | |
| Temperature | 72 °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 |

Circulation

| Lost Circulation Experienced | Losses into Spacer | Losses into Cement | Losses into Displacement |
|------------------------------|--------------------|--------------------|--------------------------|
| Yes | 0 | 0 | 0 |

Circulation Details

NO RETURNS THROUGH OUT THE ENTIRE JOB

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 | | 10.00 | 6152 |
| 2 | Mud Flush | Flush | 8.45 | | | 40.86 | | 20.00 | 6251 |
| 3 | Water | Flush | 8.34 | | | 42.00 | | 10.00 | 6449 |
| 4 | Lead | Lead | 12.50 | 2.26 | 12.59 | | 323.00 | 129.82 | 6548 |
| 5 | Tail | Tail | 13.00 | 2.05 | 10.26 | | 784.00 | 285.96 | 7829 |
| 6 | Displacement | DisplacementFinal | 8.34 | | | 42.00 | | 171.00 | 0 |

Job Fluid Details

| Fluid | Type | Fluid | Product | Function | Conc. | Uom |
|-------|-------|-----------|--------------------|-----------------------|--------|---------|
| 2 | Flush | Mud Flush | SAPP | Surfactant | 10.00 | lb/bbl |
| 2 | Flush | Mud Flush | SS-201 | Surfactant | 0.50 | gal/bbl |
| 4 | Lead | Lead | ASTM TYPE I/II | Cement | 100.00 | % |
| 4 | Lead | Lead | ATHX-1102 | Thixotropic | 0.10 | %BWOB |
| 4 | Lead | Lead | FL-66 | FluidLoss | 0.30 | %BWOB |
| 4 | Lead | Lead | FP-24 | Defoamer | 0.30 | %BWOB |
| 4 | Lead | Lead | GW-86 | Viscosifier | 0.10 | %BWOB |
| 4 | Lead | Lead | IntegraSeal PHENO | LostCirculation | 0.50 | lb/sk |
| 4 | Lead | Lead | IntegraSeal POLI | LostCirculation | 0.25 | lb/sk |
| 4 | Lead | Lead | R-7C | Retarder | 0.10 | %BWOB |
| 4 | Lead | Lead | STATIC FREE | Other | 0.01 | lb/sk |
| 4 | Lead | Lead | XCem-1009 | Extender | 10.00 | lb/sk |
| 4 | Lead | Lead | XCem-916 | Retarder | 0.45 | %BWOB |
| 5 | Tail | Tail | CLASS G | Cement | 50.00 | % |
| 5 | Tail | Tail | FLY ASH (POZZOLAN) | Extender | 50.00 | % |
| 5 | Tail | Tail | BENTONITE | Viscosifier | 6.00 | %BWOB |
| 5 | Tail | Tail | FL-66 | FluidLoss | 0.40 | %BWOB |
| 5 | Tail | Tail | FP-24 | Defoamer | 0.30 | %BWOB |
| 5 | Tail | Tail | GW-86 | Viscosifier | 0.10 | %BWOB |
| 5 | Tail | Tail | IntegraSeal PHENO | LostCirculation | 0.50 | lb/sk |
| 5 | Tail | Tail | IntegraSeal POLI | LostCirculation | 0.25 | lb/sk |
| 5 | Tail | Tail | S-8 | StrengthRetrogression | 20.00 | %BWOB |
| 5 | Tail | Tail | XCem-1009 | Extender | 6.00 | lb/sk |
| 5 | Tail | Tail | XCem-916 | Retarder | 0.40 | %BWOB |

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 | 3/2/2023 | 06:00 | | | | | ON LOCATION AT 12:00 HRS |
| 2 | LEAVE THE YARD | 3/2/2023 | 08:30 | | | | | CREW LEAVE THE YARD |
| 3 | ON LOCATION | 3/2/2023 | 09:47 | | | | | CREW ON LOCATION |
| 4 | RIG UP | 3/2/2023 | 10:00 | | | | | RIG UP MEETING, RIG UP |
| 5 | SAFETY MEETING | 3/2/2023 | 12:50 | | | | | PRE-JOB SAFETY MEETING |
| 6 | PRESSURE TEST | 3/2/2023 | 13:21 | | | | 5360 | PRESSURE TEST LINES |
| 7 | WATER SPACER | 3/2/2023 | 13:24 | 8.34 | 5 | 10 | 403 | WATER SPACER |
| 8 | MUD FLUSH | 3/2/2023 | 13:26 | 9 | 5 | 20 | 431 | MUD FLUSH SPACER |
| 9 | WATER SPACER | 3/2/2023 | 13:30 | 8.34 | 5 | 10 | 455 | WATER SPACER |
| 10 | LEAD CEMENT | 3/2/2023 | 13:33 | 12.5 | 7 | 65 | 637 | LEAD 323 SKS/130 BBLS AT 12.5 PPG |
| 11 | LEAD CEMENT | 3/2/2023 | 13:41 | 12.5 | 7 | 65 | 631 | 130 BBLS LEAD CEMENT PUMPED |
| 12 | TAIL CEMENT | 3/2/2023 | 13:53 | 13 | 5.7 | 50 | 621 | TAIL 784 SKS/286 BBLS AT 13 PPG |
| 13 | TAIL CEMENT | 3/2/2023 | 14:03 | 13 | 5.7 | 50 | 657 | 100 BBLS TAIL CEMENT PUMPED |
| 14 | TAIL CEMENT | 3/2/2023 | 14:12 | 13 | 5.7 | 50 | 631 | 150 BBLS TAIL CEMENT PUMPED |
| 15 | TAIL CEMENT | 3/2/2023 | 14:21 | 13 | 5.7 | 50 | 603 | 200 BBLS TAIL CEMENT PUMPED |
| 16 | TAIL CEMENT | 3/2/2023 | 14:30 | 13 | 5.7 | 86 | 607 | 286 BBLS TAIL CEMENT PUMPED |
| 17 | SHUTDOWN | 3/2/2023 | 14:47 | | | | | WASH PUMP AND LINES, DROP PLUG |
| 18 | DISPLACEMENT | 3/2/2023 | 14:56 | 8.4 | 9 | 50 | 1155 | DISPLACEMENT KCL WATER |
| 19 | DISPLACEMENT | 3/2/2023 | 15:02 | 8.4 | 9 | 50 | 1749 | 100 BBLS DISPLACEMENT PUMPED |
| 20 | DISPLACEMENT | 3/2/2023 | 15:08 | 8.4 | 9 | 61 | 2519 | 161 BBLS DISPLACEMENT PUMPED |
| 21 | SLOW RATE | 3/2/2023 | 15:15 | 8.4 | 4 | 4 | 1789 | SLOW RATE |
| 22 | LAND PLUG | 3/2/2023 | 15:16 | | | | 2987 | LAND PLUG, NO RETURNS |
| 23 | CHECK FLOATS | 3/2/2023 | 15:20 | | | | | FLOATS HELD, 2 BBLS FLOW BACK |
| 24 | RIG DOWN | 3/2/2023 | 15:30 | | | | | RIG DOWN MEETING, RIG DOWN |
| 25 | LEAVE LOCATION | 3/2/2023 | 17:00 | | | | | CREW LEAVE LOCATION |

Pump Diagrams

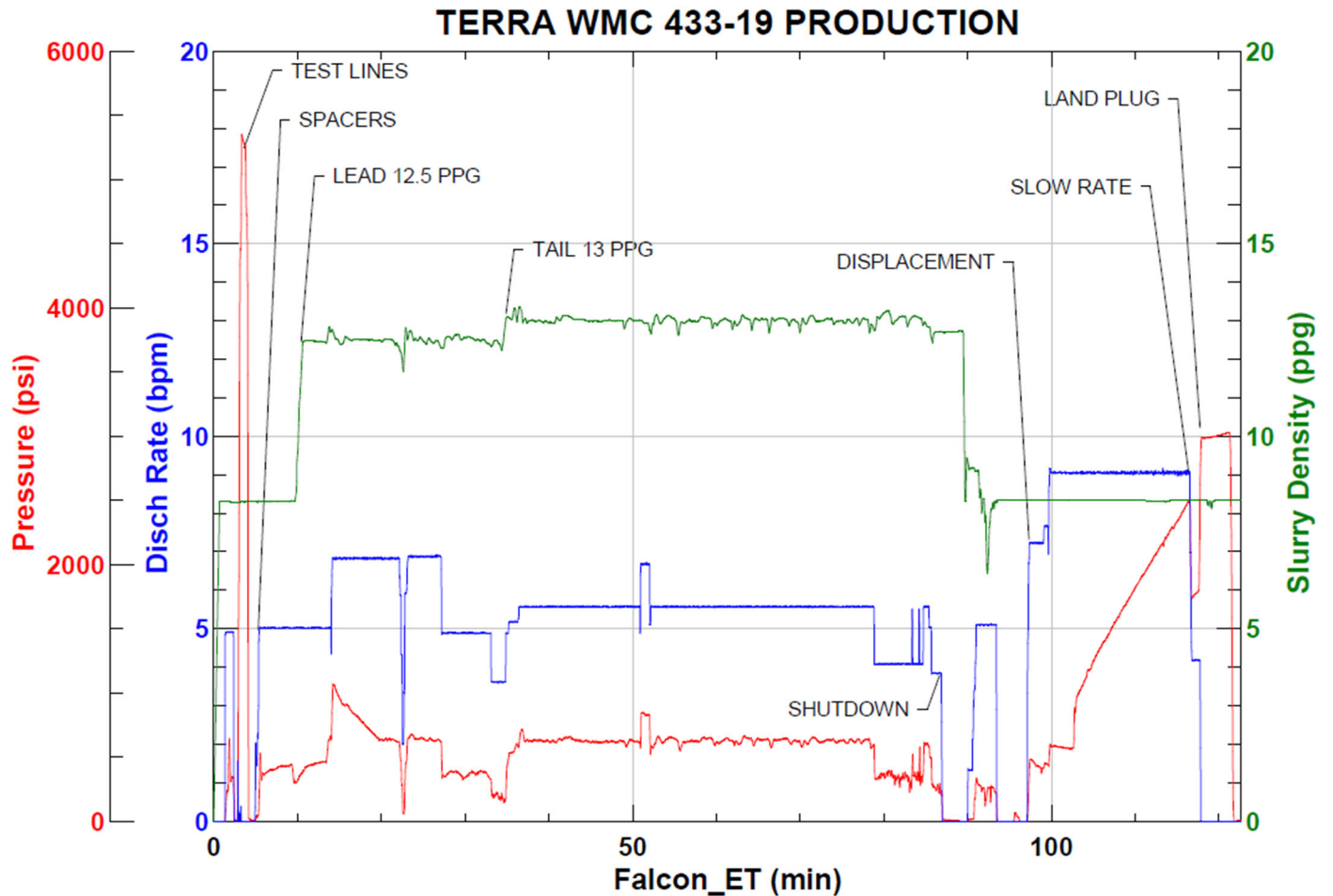


JobMaster Program Version 5.01C1

Job Number: 85989

Customer: TERRA

Well Name: WMC 433-19



Job Start: Thursday, March 02, 2023