



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

WMC 33-19-793 05-045-24546
S:19 T:7S R:93W Garfield CO

CallSheet #: 86629
Proposal #: 68330



SURFACE 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,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@americacementing.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 | 20 | 19.5 | 53 | n/a | 0 | 80 | 0 |
| Open Hole | Outer | n/a | 13.5 | n/a | n/a | 80 | 500 | 16 |
| Open Hole | Outer | n/a | 13.5 | n/a | n/a | 500 | 1140 | 16 |
| Casing | Inner | 9.625 | 8.921 | 36 | n/a | 0 | 1140 | 0 |

Timing

| Event | Date/Time |
|-----------------|------------------|
| ERTS | 00/19/2023 00:00 |
| Call Out | 4/19/2023 04:40 |
| Depart Facility | 4/19/2023 09:00 |
| On Location | 4/19/2023 10:40 |
| Rig Up Iron | 4/19/2023 11:00 |
| Job Started | 4/19/2023 14:50 |
| Job Completed | 4/19/2023 16:14 |
| Rig Down Iron | 4/19/2023 16:20 |
| Depart Location | 4/19/2023 17:00 |

Equipment / People

| Unit Type | Unit | Power Unit | Employee #1 | Employee #2 |
|----------------------|---------|------------|---------------------|-----------------|
| Cement Trailer Float | CTF-385 | TRC-188 | Lujan, James | |
| Cement Pump Float | CPF-053 | TRH-959 | Gonzales, Ivan | |
| Light Duty Vehicles | LDV-061 | | Woronovitch, Collin | McClure, Gerron |

General Job Information

| Metrics | Value |
|-------------------------|------------|
| Well Fluid Density | 9.1 lb/gal |
| Well Fluid Type | WBM |
| Rig Circulation Vol | 320 bbls |
| Rig Circulation Time | 0.5 hours |
| Calculated Displacement | 85 bbls |
| Actual Displacement | 85 bbls |
| Total Spacer to Surface | 20 bbls |
| Total CMT to Surface | 35 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 | 9.1 lb/gal |
| Well Fluid Density Out of Well | 9.1 lb/gal |

Job Details (cont.)

| Metrics | Value |
|---------|-------|
| BHCT | 81 °F |
| BHST | 99 °F |

Water Analysis

| Metrics | Value | Recommended |
|------------------|------------------|-------------|
| Water Source | Upright Rig Tank | |
| Temperature | 70 °F | 50-80 °F |
| pH Level | 7 | 5.5-8.5 |
| Chlorides | 400 mg/L | 0-3000 mg/L |
| Total Alkalinity | 200 | 0-1000 |
| Total Hardness | 120 mg/L | 0-500 mg/L |
| Carbonates | NA mg/L | 0-100 mg/L |
| Sulfates | 240 mg/L | 0-1500 mg/L |
| Potassium | 260 mg/L | 0-3000 mg/L |
| Iron | 0 mg/L | 0-300 mg/L |

Circulation

Lost Circulation Experienced

No

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 | | 20.00 | 0 |
| 2 | Lead | Lead | 12.30 | 2.21 | 12.72 | | 165.00 | 65.04 | 0 |
| 3 | Tail | Tail | 12.80 | 1.97 | 10.87 | | 193.00 | 67.55 | 500 |
| 4 | Water | DisplacementFinal | 8.34 | | | 42.00 | | 85.00 | 0 |

Job Fluid Details

| Fluid | Type | Fluid | Product | Function | Conc. | Uom |
|-------|------|-------|------------------|-----------------|--------|-------|
| 2 | Lead | Lead | ASTM TYPE I/II | Cement | 100.00 | % |
| 2 | Lead | Lead | A-7P | Accelerator | 2.00 | lb/sk |
| 2 | Lead | Lead | ATHX-1102 | Thixotropic | 1.00 | lb/sk |
| 2 | Lead | Lead | FP-24 | Defoamer | 0.30 | %BWOB |
| 2 | Lead | Lead | IntegraSeal POLI | LostCirculation | 0.25 | lb/sk |
| 2 | Lead | Lead | STATIC FREE | Other | 0.01 | lb/sk |
| 3 | Tail | Tail | ASTM TYPE I/II | Cement | 100.00 | % |
| 3 | Tail | Tail | A-7P | Accelerator | 2.00 | lb/sk |
| 3 | Tail | Tail | ATHX-1102 | Thixotropic | 1.00 | lb/sk |
| 3 | Tail | Tail | FP-24 | Defoamer | 0.30 | %BWOB |
| 3 | Tail | Tail | IntegraSeal POLI | LostCirculation | 0.25 | lb/sk |
| 3 | Tail | Tail | STATIC FREE | Other | 0.01 | lb/sk |

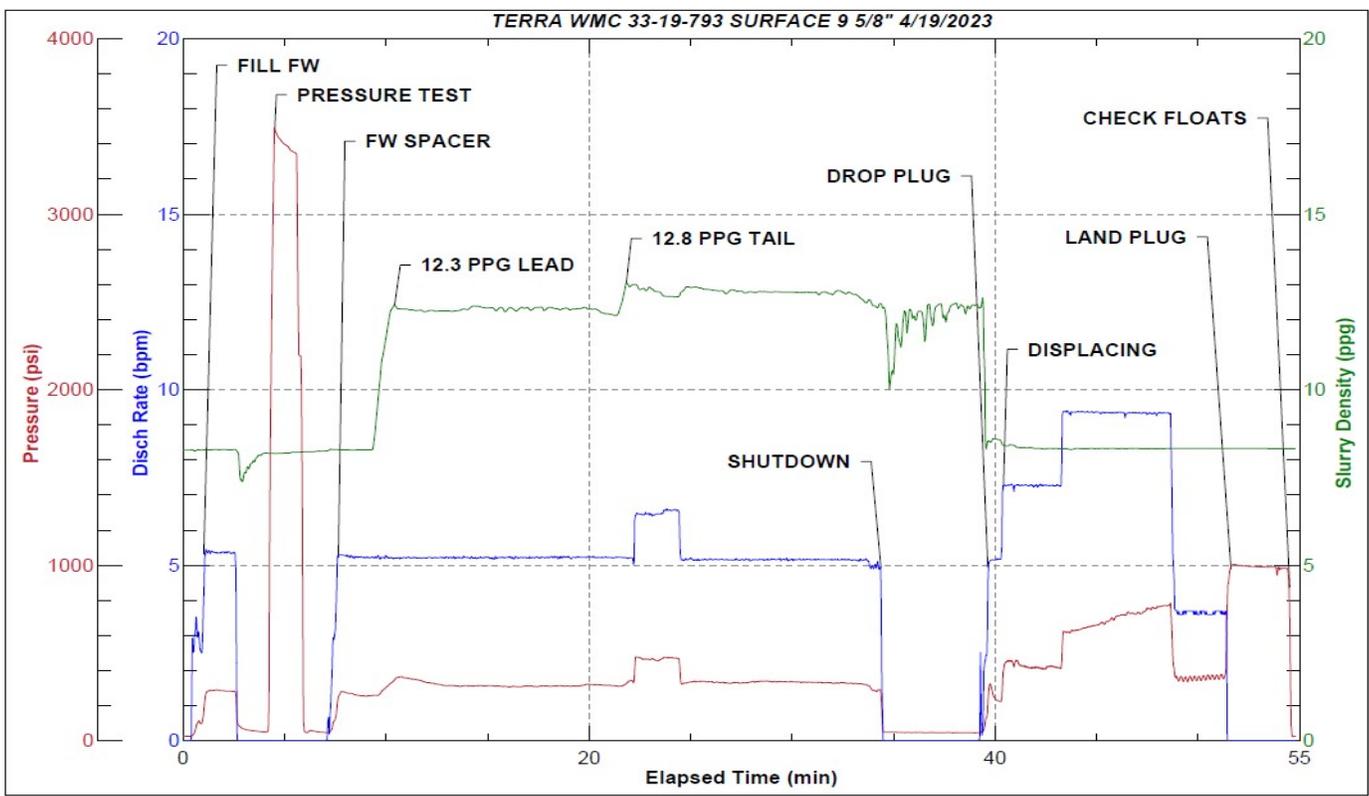
Job Logs

| Line | Event | Date (MM/DD/YY) | Time (HH:MM) | Density (lb/gal) | Pump Rate (bpm) | Pump Volume (bbls) | Pipe Pressure (psi) | Comment |
|------|---------------------|-----------------|--------------|------------------|-----------------|--------------------|---------------------|--|
| 1 | Callout | 4/19/2023 | 04:40 | | | | | CREW CALLED OUT FOR LOCATION TIME OF 11:00 |
| 2 | Depart Location | 4/19/2023 | 09:00 | | | | | CREW DEPARTS RCO YARD FOR RIG LOCATION |
| 3 | Arrive On Location | 4/19/2023 | 10:40 | | | | | CREW AND EQUIPMENT ARRIVED ON LOCATION. RIG IS RIGGING UP CASING CREW |
| 4 | Rig Up Iron | 4/19/2023 | 11:00 | | | | | PRE-RIG UP MEETING / RIG UP IRON HOSES AND EQUIPMENT. ON STANDBY WAITING FOR CASING TO FINISH BEING RAN. CASING LANDED @ 14:00 RIG CIRCULATED .5 HOUR 320 BBLS |
| 5 | Safety Meeting | 4/19/2023 | 14:50 | | | | | PRE JOB SAFTEY-MEETING WITH RIG CREW AND COMPANY MAN. FINISH RIGGING UP HEAD AND FLOOR AFTER SAFETY MEETING. |
| 6 | Fill Lines | 4/19/2023 | 15:21 | 8.34 | 5 | 10 | 282 | FILL LINES WITH 10 BBLS OF FRESH WATER |
| 7 | Pressure Test Lines | 4/19/2023 | 15:23 | 8.34 | | | 3440 | PRESSURE TEST PUMP AND LINES TO 3000 PSI |
| 8 | Other | 4/19/2023 | 15:27 | 8.34 | 5 | 10 | 256 | PUMP 10 BBLS FRESH WATER SPACER FULL RETURNS |
| 9 | Pump Lead Cement | 4/19/2023 | 15:29 | 12.3 | 5.2 | 0 | 301 | BEGIN PUMPING 12.3 PPG LEAD CEMENT, WEIGHT VERIFIED BY MUD SCALE |
| 10 | Pump Lead Cement | 4/19/2023 | 15:34 | 12.3 | 5.2 | 30 | 313 | 30 BBLS LEAD CEMENT PUMPED |
| 11 | Pump Lead Cement | 4/19/2023 | 15:41 | 12.3 | 5.2 | 35 | 311 | 65 BBLS (165 SKS) LEAD CEMENT PUMPED FULL RETURNS |
| 12 | Pump Tail Cement | 4/19/2023 | 15:41 | 12.8 | 5.2 | 0 | 322 | BEGIN PUMPING 12.8 PPG TAIL CEMENT, WEIGHT VERIFIED BY MUD SCALE |
| 13 | Pump Tail Cement | 4/19/2023 | 15:57 | 12.8 | 5.2 | 30 | 341 | 30 BBLS TAIL CEMENT PUMPED |
| 14 | Pump Tail Cement | 4/19/2023 | 15:54 | 12.8 | 5 | 38 | 358 | 68 BBLS (193 SKS) TAIL CEMENT PUMPED FULL RETURNS. |
| 15 | Drop Top Plug | 4/19/2023 | 15:58 | 8.34 | 5 | 0 | 326 | DROP PLUG, WITNESSED BY COMPANY MAN. BEGIN PUMPING FRESH WATER DISPLACEMENT, FULL RETURNS |
| 16 | Pump Displacement | 4/19/2023 | 16:02 | 8.34 | 7 | 20 | 550 | 20 BBLS DISPLACEMENT PUMPED, CAUGHT PLUG @ 10 BBLS DISPLACED. SPACER BACK @ 30 BBLS FULL RETURNS |
| 17 | Pump Displacement | 4/19/2023 | 16:05 | 8.34 | 9 | 30 | 750 | 50 BBLS DISPLACEMENT PUMPED. CEMENT TO SURFACE @ 50 BBLS PUMPED, 35 BBLS TOTAL CEMENT TO SURFACE. MAX LIFT-750 PSI @ 9 BPM |
| 18 | Pump Displacement | 4/19/2023 | 16:11 | 8.34 | 3.7 | 38 | 370 | 88 BBLS (CALCULATED) TOTAL DISPLACEMENT PUMPED |
| 19 | Land Plug | 4/19/2023 | 16:11 | 8.34 | | | 1005 | PLUG LANDED. FCP-370 PSI BUMP TO-1005 PSI |
| 20 | Check Floats | 4/19/2023 | 16:14 | | | | | BLEED OFF PRESSURE-CHECK FLOATS, FLOATS HELD .5 BBLS BACK |
| 21 | Rig Down Iron | 4/19/2023 | 16:20 | | | | | PRE-RIG DOWN SAFETY MEETING, PICKLE, BLOW DOWN IRON, RIG DOWN EQUIPMENT, IRON AND HOSES |
| 22 | Depart Location | 4/19/2023 | 17:00 | | | | | CREW DEPARTS LOCATION FOR RCO YARD |

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 86629
Customer: TERRA
Well Name: FEDERAL WMC 33-19-793



Job Start: Wednesday, April 19, 2023