



Service Order #: 73228

Date: 28-Nov-18

| Well Name | Location | County | St | API# | | |
|----------------|------------|-----------------|-----------|--------|------|-----|
| FEDERAL WELD 1 | | WELD | CO | | | |
| Formation | Cement Via | Type Of Service | Well Type | Age | AFE# | PO# |
| | TUBING | PLUG | | REWORK | | |

Customer:

BISON

Remarks:

TEST H2O, PH 8.9, PPM 994, TEMP 48*
SAFETY MEETING
50 SKS, 10.2 BBLs
TOC IN OH 5564'-5394'
60 SKS, 12.2 BBLs
TOC IN OH 4459'-4255'

Customer Rep: GARY

PH:

WELLBORE DATA

| Type | Size | Weight | Depth | Volume |
|--------------------|-------|--------|---------|--------|
| Surface Casing: | | | | |
| Production Casing: | | | | |
| Intermediate: | | | | |
| Drill Pipe: | | | | |
| Tubing: | 2.875 | 6.5 | 5,564.0 | |

| Type | Size | Depth (Top) | Depth (Bot) | Volume |
|------------|-------|-------------|-------------|--------|
| Liner: | | | | |
| Open Hole: | 7.875 | 302.0 | 5,564.0 | |

OTHER DATA

| BHT | Max PSI | Total Depth |
|-----|---------|-------------|
| | | |

Packer or RetainerType / Depth:

| Perf Depths: | # | Total |
|--------------|---|-------|
| | 0 | 0 |
| | 0 | |
| | 0 | |

| TIME | PUMP RATES | | DENSITY | PRESS | STG TOT | TOTAL | REMARKS |
|-------|-------------|------------|----------|-------|---------|--------|---|
| | WATER (gpm) | PUMP (bpm) | (lb/gal) | (psi) | (bbls) | (bbls) | |
| 15:53 | 0 | 0.0 | 3.83 | 2,023 | 0.0 | 0.0 | PSI TEST 1800 PSI KICKOUT |
| 15:54 | 0 | 0.0 | 3.83 | 2,451 | 0.2 | 0.2 | PSI TEST 2500 PSI KICKOUT |
| 15:56 | 16 | 0.0 | 3.83 | 175 | 0.0 | 0.0 | MUD SPACER |
| 16:06 | 0 | 1.4 | 3.83 | 58 | 35.5 | 35.5 | END MUD SPACER / START H2O SPACER |
| 16:11 | 0 | 2.0 | 3.83 | 423 | 8.5 | 44.9 | END H2O SPACER / START CMT |
| 16:16 | 0 | 2.5 | 3.83 | 84 | 10.2 | 55.1 | END CMT / START H2O SPACER |
| 16:17 | 3 | 2.5 | 3.83 | 0 | 1.1 | 56.5 | END H2O SPACER / START MUD DISPLACEMENT |
| 16:25 | 0 | 0.0 | 3.83 | 139 | 30.9 | 87.5 | OFF LINE |
| 17:19 | 0 | 0.0 | 3.83 | 0 | 0.0 | 0.0 | H2O SPACER |
| 17:24 | 0 | 3.2 | 3.83 | 548 | 10.0 | 10.0 | END SPACER / START CMT |
| 17:28 | 0 | 3.4 | 3.83 | 203 | 12.2 | 22.3 | END CMT START H2O SPACER |
| 17:30 | 14 | 2.5 | 3.83 | 4 | 1.1 | 25.9 | END SPACER / START MUD DISPLACEMENT |
| 17:36 | 0 | 0.3 | 3.83 | 6 | 25.1 | 51.1 | OFF LINE |

Summary

| | | | |
|--------------|--------------|---------|---------|
| Max Fl. Rate | Avg Fl. Rate | Max Psi | Avg Psi |
| 3.4 | 1.7 | 2,451 | 470 |

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory
☐ Unsatisfactory

Cementer:

S. BOHLEN

PRODUCTS USED

CLASS G CMT
1.15 YEILD, 15.8 LBS/GAL