





**CEMENT TREATMENT REPORT**

|                                      |                                  |                        |
|--------------------------------------|----------------------------------|------------------------|
| Customer: <b>Murfin Drilling Co.</b> | Well: <b>Stahl A #1-30</b>       | Ticket: <b>ICT2185</b> |
| City, State: <b>Wichita, KS</b>      | County: <b>Rooks, KS</b>         | Date: <b>7/27/2019</b> |
| Field Rep: <b>Jason</b>              | S-T-R: <b>Sec30 - T9S - R19W</b> | Service: <b>Cement</b> |

**Downhole Information**

|                |          |
|----------------|----------|
| Hole Size:     | 7 7/8 In |
| Hole Depth:    | 3780 ft  |
| Casing Size:   | 8 5/8 In |
| Casing Depth:  | 304 ft   |
| Drill Pipe     | 4 1/2 In |
| Depth:         | 3652 ft  |
| Tool / Packer: |          |
| Depth:         | ft       |
| Displacement:  | bbbls    |

**Slurry**

|               |                           |
|---------------|---------------------------|
| Weight:       | 13.8 # / sx               |
| Water / Sx:   | 6.89 gal / sx             |
| Yield:        | 1.42 ft <sup>3</sup> / sx |
| Bbls / Ft.:   |                           |
| Depth:        | ft                        |
| Volume:       | bbbls                     |
| Excess:       | %                         |
| Total Slurry: | bbbls                     |
| Total Sacks:  | 315 sx                    |

**Cement Blend**

| Product      | %    | #             |
|--------------|------|---------------|
| Class A      | 60.0 | 17766         |
| Gel          | 4.0  | 1084          |
| CaCl         |      |               |
| Metso        |      |               |
| KolSeal      |      |               |
| Flo-Seal     |      |               |
| Salt         |      |               |
| Fly Ash      | 40.0 | 9324          |
| <b>Total</b> |      | <b>28,174</b> |

| TIME  | RATE | PSI   | BBLs | REMARKS                                | TIME  | RATE | PSI | BBLs | REMARKS                                      |
|-------|------|-------|------|--|-------|------|-----|------|--|
| 8:30  |      |       |      | Called for job                         | 17:16 | 2.5  | 110 | 1.90 | Displace w/ H2O                              |
| 12:00 |      |       |      | Depart Oakley yard                     | 17:17 |      |     |      | Rig POH to surface. Rig down kelly, rathole, |
| 13:40 |      |       |      | Arrive on locn. Rig RIH w/ DP to 3360' |       |      |     |      | mousehole & lay down same.                   |
| 13:45 |      |       |      | JSA, discuss moving, spotting & rig-up | 17:36 | 3.0  | 75  | 7.50 | Plug Rathole w/ 30sx slurry @ 13.8ppg        |
| 13:50 |      |       |      | Move on, spot & rig-up                 | 17:41 | 2.5  | 50  | 3.80 | Plug Mousehole w/ 15sx slurry @ 13.8ppg      |
| 14:15 |      |       |      | Rig-up complete                        | 17:45 | 3.0  | 75  | 2.50 | Pump 10sx @ 13.8ppg & plug surface           |
| 14:30 |      |       |      | DP @ 3652'                             |       |      |     |      | Y - 1.42cuft/sk, MW - 6.89g/sk               |
|       |      |       |      | Plug #1 3652' - 3442'                  | 17:47 |      |     |      | Shutdown                                     |
| 14:40 | 4.2  | 130.0 | 5.0  | Pump H2O ahead                         | 17:50 |      |     |      | Wash-up pumps & lines                        |
| 14:43 | 4.2  | 290.0 | 12.5 | Mix & pump 50sx slurry @ 13.8ppg       | 18:00 |      |     |      | JSA, discuss rigging down & rackup equip.    |
|       |      |       |      | Y - 1.42cuft/sk, MW - 6.89g/sk         | 18:05 |      |     |      | Rig down & rack-up equipment                 |
| 14:46 | 2.5  | 140.0 | 2.0  | Pump H2O behind                        | 18:30 |      |     |      | Rig down complete                            |
| 14:48 | 8.0  | 550.0 | 42.8 | Rig displace w/ mud                    | 18:35 |      |     |      | JSA, discuss journey management              |
| 14:55 |      |       |      | Rig POH to 1600'                       | 18:45 |      |     |      | Depart locn                                  |
|       |      |       |      | Plug #2 1600' - 1390'                  |       |      |     |      |  |
| 16:00 | 4.1  | 50.0  | 12.5 | Mix & pump 50sx slurry @ 13.8ppg       |       |      |     |      |  |
|       |      |       |      | Y - 1.42cuft/sk, MW - 6.89g/sk         |       |      |     |      |  |
| 16:04 | 3.5  | 150.0 | 19.5 | Displace w/ H2O                        |       |      |     |      |  |
| 16:14 |      |       |      | Rig POH to 920'                        |       |      |     |      |  |
|       |      |       |      | Plug #3 920' - 500'                    |       |      |     |      | Thanks for calling Hurricane Svcs Inc.       |
| 16:40 | 5.4  | 250.0 | 25.3 | Mix & pump 100sx slurry @ 13.8ppg      |       |      |     |      |  |
|       |      |       |      | Y - 1.42cuft/sk, MW - 6.89g/sk         |       |      |     |      |  |
| 16:47 | 2.6  | 70.0  | 6.6  | Displace w/ H2O                        |       |      |     |      |  |
| 16:50 |      |       |      | Rig POH to 350'                        |       |      |     |      |  |
|       |      |       |      | Plug #4 350' - 149'                    |       |      |     |      |  |
| 17:12 | 5.5  | 160.0 | 60.0 | Mix & pump 50sx slurry @ 13.8ppg       |       |      |     |      |  |
|       |      |       |      | Y - 1.42cuft/sk, MW - 6.89g/sk         |       |      |     |      |  |

| CREW           |                   | UNIT      | SUMMARY      |                  |              |
|----------------|-------------------|-----------|--------------|------------------|--------------|
| Cementer:      | Scott Green       | 74        | Average Rate | Average Pressure | Total Fluid  |
| Pump Operator: | Michael Rebarchek | 231       | 3.92308 bpm  | 161.64 psi       | 201.80 bbbls |
| Bulk #1:       | Alan Ryan         | 180 / 250 |              |                  |              |
| Bulk #2:       | Jesse Jones       |           |              |                  |              |