



# HighPoint Operating Corporation

Fox Creek #33-0362D

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API # 05-123-48706

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## Surface

July 28, 2019

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Quote #: QUO-34526-T4G5N2

Execution #: EXC-19908-N1R8S102



# HighPoint Operating Corporation

Attention: Mr. Tim Brown | (303) 312-8756 | tibrown@hpres.com

HighPoint Operating Corporation | 555 17th Street, Suite 3700 | Denver, CO. 80202

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Dear Mr. Tim Brown,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,

Jason Creel  
Field Engineer I | (307) 256-0306 | jason.creel@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007  
Phone: (307) 222-3975

Sales Office 999 18th St. Suite 1200 Denver, CO 80202  
Phone: (281) 408-2361

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# BJ Cementing Treatment Report

|                           |              |                         |      |
|---------------------------|--------------|-------------------------|------|
| <b>SERVICE SUPERVISOR</b> | John Kelsey  | <b>COUNTY</b>           | WELD |
| <b>DISTRICT</b>           | Cheyenne, WY | <b>STATE / PROVINCE</b> | CO   |
| <b>SERVICE</b>            | Cementing    |                         |      |

## WELL GEOMETRY

| TYPE            | ID (in) | OD (in) | WEIGHT (lb/ft) | MD (ft)  | TVD (ft) | EXCESS (%) | GRADE | THREAD |
|-----------------|---------|---------|----------------|----------|----------|------------|-------|--------|
| Open Hole       | 13.50   | 0.00    | 0.00           | 1,637.00 | 1,637.00 | 15.00      |       |        |
| Casing          | 8.92    | 9.63    | 36.00          | 1,637.00 | 1,637.00 |            |       | LTC    |
| Previous Casing | 15.50   | 16.00   | 42.05          | 40.00    | 40.00    |            |       |        |

## HARDWARE

|                                  |              |   |             |
|----------------------------------|--------------|---|-------------|
| <b>Bottom Plug Used?</b>         | No           | <b>Tool Depth (ft)</b>                      | 1,595.50    |
| <b>Top Plug Used?</b>            | Yes          | <b>Max Casing Pressure - Rated (psi)</b>    | 3950.00     |
| <b>Top Plug Provided By</b>      | Non BJ       | <b>Max Casing Pressure - Operated (psi)</b> | 2500.00     |
| <b>Top Plug Size</b>             | 9.625        | <b>Pipe Movement</b>                        | None        |
| <b>Centralizers Used</b>         | No           | <b>Job Pumped Through</b>                   | No Manifold |
| <b>Landing Collar Depth (ft)</b> | 1,608        | <b>Top Connection Thread</b>                | LTC         |
| <b>Tool Type</b>                 | Float Collar | <b>Top Connection Size</b>                  | 9.625       |

## CIRCULATION PRIOR TO JOB

|                                  |        |   |    |
|----------------------------------|--------|---|----|
| <b>Well Circulated By</b>        | Rig    | <b>Lost Circulation Prior to Cement Job</b>   | No |
| <b>Circulation Prior to Job</b>  | Yes    | <b>Solids Present at End of Circulation</b>   | No |
| <b>Circulation Time (min)</b>    | 60.00  | <b>Flare Prior to / during the Cement Job</b> | No |
| <b>Circulation Rate (bpm)</b>    | 5.00   | <b>Gas Present</b>                            | No |
| <b>Circulation Volume (bbls)</b> | 300.00 |   |    |

## TEMPERATURE

|                                   |       |                                       |       |
|-----------------------------------|-------|---------------------------------------|-------|
| <b>Ambient Temperature (°F)</b>   | 63.00 | <b>Slurry Cement Temperature (°F)</b> | 67.00 |
| <b>Mix Water Temperature (°F)</b> | 60.00 | <b>Flow Line Temperature (°F)</b>     | 70.00 |

Client: HighPoint Operating Corporation

Well: FOX CREEK #33-0362D

Well API: 05-123-48706

Start Date: 7/28/2019

End Date: 7/28/2019



## FLUID DETAILS

| FLUID TYPE                 | FLUID NAME       | DENSITY (ppg) | YIELD (Cu Ft/sk) | H <sub>2</sub> O REQ (gals/sk) | PLN TOP FLD (ft) | LENGTH (ft) | VOL (sk) | VOL (Cu Ft) | VOL (bbls) |
|----------------------------|------------------|---------------|------------------|--------------------------------|------------------|-------------|----------|-------------|------------|
| Spacer / Pre Flush / Flush | Water            | 8.3337        |                  |                                | 0.00             |             |          |             | 20.0000    |
| Lead Slurry                | BJCem S100.03.1C | 12.0000       | 2.5298           | 14.86                          | 0.00             | 1,150.00    | 260      | 656.0000    | 116.7000   |
| Tail Slurry                | BJCem S100.03.1C | 12.5000       | 2.2255           | 12.59                          | 1,042.00         | 500.00      | 135      | 299.0000    | 53.2000    |
| Displacement Final         | Water            | 8.3337        |                  |                                | 0.00             |             |          | 0.0000      | 123.3000   |

| FLUID TYPE                 | FLUID NAME       | COMPONENT   | CONCENTRATION | UOM    |
|----------------------------|------------------|---|---------------|--------|
| Spacer / Pre Flush / Flush | Water            | Fresh Water   | 100.0000      | PCT    |
| Lead Slurry                | BJCem S100.03.1C | CEMENT, ASTM TYPE III                               | 100.0000      | PCT    |
| Lead Slurry                | BJCem S100.03.1C | FOAM PREVENTER, FP-25                               | 0.3000        | BWOB   |
| Lead Slurry                | BJCem S100.03.1C | CEMENT EXTENDER, GYPSUM, A-10                       | 5.0000        | BWOB   |
| Lead Slurry                | BJCem S100.03.1C | IntegraSeal POLI                                    | 0.1300        | LBS/SK |
| Lead Slurry                | BJCem S100.03.1C | Cement Additive, Sodium Metasilicate A-2            | 2.0000        | LBS/SK |
| Lead Slurry                | BJCem S100.03.1C | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | 2.0000        | LBS/SK |
| Tail Slurry                | BJCem S100.03.1C | Cement Additive, Sodium Metasilicate A-2            | 2.0000        | LBS/SK |
| Tail Slurry                | BJCem S100.03.1C | CEMENT, ASTM TYPE III                               | 100.0000      | PCT    |
| Tail Slurry                | BJCem S100.03.1C | IntegraSeal POLI                                    | 0.1300        | LBS/SK |
| Tail Slurry                | BJCem S100.03.1C | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | 2.0000        | LBS/SK |
| Tail Slurry                | BJCem S100.03.1C | FOAM PREVENTER, FP-25                               | 0.3000        | BWOB   |
| Tail Slurry                | BJCem S100.03.1C | CEMENT EXTENDER, GYPSUM, A-10                       | 5.0000        | BWOB   |
| Displacement Final         | Water            | Fresh Water   | 100.0000      | PCT    |

## DISPLACEMENT AND END OF JOB SUMMARY

|   |         |   |        |
|---|---------|---|--------|
| <b>Displaced By</b>                       | BJ      | <b>Amt of Cement Returned / Reversed</b>  | 24.00  |
| <b>Calculated Displacement Vol (bbls)</b> | 123.30  | <b>Method Used to Verify Returns</b>      | Visual |
| <b>Actual Displacement Vol (bbls)</b>     | 123.30  | <b>Amt of Spacer to Surface</b>           | 20.00  |
| <b>Did Float Hold?</b>                    | Yes     | <b>Pressure Left on Casing (psi)</b>      | 0.00   |
| <b>Bump Plug</b>                          | Yes     | <b>Amt Bled Back After Job</b>            | 0.50   |
| <b>Bump Plug Pressure (psi)</b>           | 1129.00 | <b>Total Volume Pumped (bbls)</b>         | 404.00 |
| <b>Were Returns Planned at Surface</b>    | Yes     | <b>Top Out Cement Spotted</b>             | No     |
| <b>Cement Returns During Job</b>          | Full    | <b>Lost Circulation During Cement Job</b> | No     |

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Well: FOX CREEK #33-0362D

Well API: 05-123-48706

Start Date: 7/28/2019

End Date: 7/28/2019



# BJ Cementing Event Log

Surface - Cheyenne, WY - John Kelsey

| SEQ | START DATE / TIME | EVENT                | DENSITY (ppg) | PUMP RATE (bpm) | PUMP VOL (bbls) | PIPE PRESSURE (psi) | COMMENTS  |
|-----|-------------------|----------------------|---------------|-----------------|-----------------|---------------------|---|
| 1   | 07/27/2019 20:00  | Callout              |               |                 |                 |                     | BJ crew called to prepare for surface cement job. RTS is 23:00. All times in MST. |
| 2   | 07/27/2019 22:00  | Arrive on Location   |               |                 |                 |                     | Talk to company man   |
| 3   | 07/27/2019 22:10  | STEACS Briefing      |               |                 |                 |                     | Rig in meeting  |
| 4   | 07/27/2019 22:15  | Spot Units           |               |                 |                 |                     | Spot BJ equipment   |
| 5   | 07/27/2019 22:20  | Rig Up               |               |                 |                 |                     | Rig in BJ equipment   |
| 6   | 07/27/2019 23:00  | Rig                  |               |                 |                 |                     | Rig is running casing   |
| 7   | 07/28/2019 06:15  | STEACS Briefing      |               |                 |                 |                     | Pre job meeting   |
| 8   | 07/28/2019 06:30  | Prime Up             | 8.3400        | 5.20            | 2.00            | 91.00               | Load lines for psi test   |
| 9   | 07/28/2019 06:32  | Pressure Test        | 8.3400        | 1.00            | 1.00            | 3500.00             | Psi test pump and lines to well   |
| 10  | 07/28/2019 06:36  | Pump Spacer          | 8.3400        | 7.40            | 20.00           | 188.00              | Fresh flush with dye  |
| 11  | 07/28/2019 06:38  | Pump Lead Cement     | 12.0000       | 7.30            | 116.70          | 289.00              | Sks-260, y-2.5298, mw-14.86   |
| 12  | 07/28/2019 06:53  | Pump Tail Cement     | 12.5000       | 7.30            | 53.20           | 220.00              | Sks-135, y-2.2255, mw-12.59   |
| 13  | 07/28/2019 07:02  | Wash Pumps and Lines |               |                 |                 |                     | Wash mix system   |
| 14  | 07/28/2019 07:10  | Drop Top Plug        | 8.3400        | 7.50            | 10.00           | 204.00              | Drop plug, start displacement, 10 away  |
| 15  | 07/28/2019 07:18  | Pump Displacement    | 8.3400        | 7.40            | 40.00           | 273.00              | 50 away   |
| 16  | 07/28/2019 07:25  | Pump Displacement    | 8.3400        | 7.40            | 50.00           | 273.00              | 100 away slow rate to 4.8   |
| 17  | 07/28/2019 07:28  | Pump Displacement    | 8.3400        | 3.50            | 13.30           | 457.00              | 123.3 away  |
| 18  | 07/28/2019 07:31  | Land Plug            |               |                 |                 | 1129.00             | Bump  |
| 19  | 07/28/2019 07:34  | Check Floats         |               |                 |                 |                     | .5 bbls back, floats held   |
| 20  | 07/28/2019 07:35  | STEACS Briefing      |               |                 |                 |                     | Rig down meeting  |
| 21  | 07/28/2019 07:40  | Rig Down             |               |                 |                 |                     | Rig down BJ equipment   |
| 22  | 07/28/2019 08:00  | Leave Location       |               |                 |                 |                     | Ticket signed, BJ leaves location   |





JobMaster Program Version 4.02C1

Job Number:

Customer: HighPoint

Well Name: Fox Creek #33-0362D

