



COGCC doc # 2597489

Caerus

Surface Post Job Report

Puckett 15B-26-697 05-045-23409

S:26 T:6S R:97W Garfield CO

Quote #:

I Execution #:



Caerus

Attention: Mr. Steve Schmitz | (720) 880-6412 | sschmitz@caerusoilandgas.com

Caerus | 1001 17th Street, Suite 1600 | Denver, CO 80202

Dear Mr. Schmitz,

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,

Zen Keith
Field Engineer III | (307) 757-7178 | Zen.Keith@BJServices.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 632-2412

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

Cementing Treatment



| | | | |
|--------------------|-----------------------|----------------|--------------------|
| Start Date | 4/7/2018 | Well | Puckett 15B-26-697 |
| End Date | 4/8/2018 | County | GARFIELD |
| Client | CAERUS OPERATING, LLC | State/Province | CO |
| Client Field Rep | | API | 05-045-23409 |
| Service Supervisor | | Formation | |
| Field Ticket No. | Surface | Rig | H&P 330 |
| District | Rifle, CO | Type of Job | Surface |

WELL GEOMETRY

| Type | ID (in) | OD (in) | Wt. (lb/ft) | MD (ft) | TVD (ft) | Excess(%) | Grade | Thread |
|-----------------|---------|---------|-------------|----------|----------|-----------|-------|--------|
| Previous Casing | 19.50 | 20.00 | 52.73 | 100.00 | 100.00 | | | |
| Open Hole | 14.75 | | | 2,000.00 | 2,000.00 | 25.00 | | |
| Open Hole | 14.75 | | | 2,540.00 | 2,500.00 | 0.00 | | |
| Casing | 8.92 | 9.63 | 36.00 | 2,520.00 | 2,500.00 | | | |

Shoe Length (ft): 40

HARDWARE

| | | | |
|---------------------------|--------|--------------------------------------|--------------|
| Bottom Plug Used? | No | Tool Type | Float Collar |
| Top Plug Used? | Yes | Tool Depth (ft) | 2,476.00 |
| Top Plug Provided By | Non BJ | Max Casing Pressure - Rated (psi) | 2,816.00 |
| Top Plug Size | 9.625 | Max Casing Pressure - Operated (psi) | 2,000.00 |
| Centralizers Used | No | Pipe Movement | None |
| Landing Collar Depth (ft) | 2,460 | Job Pumped Through | Manifold |
| | | Top Connection Thread | butress |
| | | Top Connection Size | 9.625 |

Cementing Treatment



CIRCULATION PRIOR TO JOB

| | | | |
|--------------------------------------|--------|--------------------------------------|-------|
| Well Circulated By | Rig | Solids Present at End of Circulation | No |
| Circulation Prior to Job | Yes | 10 sec SGS | 5.00 |
| Circulation Time (min) | 60.00 | 10 min SGS | 11.00 |
| Circulation Rate (bpm) | 5.00 | 30 min SGS | 18.00 |
| Circulation Volume (bbls) | 200.00 | Flare Prior to/during the Cement Job | No |
| Lost Circulation Prior to Cement Job | No | Gas Present | No |
| Mud Density In (ppg) | 9.00 | Gas Units | 0 |
| PV Mud In | 17 | | |
| YP Mud In | 11 | | |

TEMPERATURE

| | | | |
|----------------------------|-------|--------------------------------|-------|
| Ambient Temperature (°F) | 42.00 | Slurry Cement Temperature (°F) | 66.00 |
| Mix Water Temperature (°F) | 55.00 | Flow Line Temperature (°F) | 98.00 |

BJ FLUID DETAILS

| Fluid Type | Fluid Name | Density (ppg) | Yield (Cu Ft/sk) | H2O Req. (gals/sk) | Planned Top of Fluid (Ft) | Length (Ft) | Vol (sk) | Vol (Cu Ft) | Vol (bbls) |
|----------------------------|------------------|---------------|------------------|--------------------|---------------------------|-------------|----------|-------------|------------|
| Spacer / Pre Flush / Flush | Water 1 | 8.3300 | | | 0.00 | | | | 20.0000 |
| Spacer / Pre Flush / Flush | Sodium Silicate | 10.0000 | | | 0.00 | | | | 20.0000 |
| Spacer / Pre Flush / Flush | Water 2 | 8.3300 | | | 0.00 | | | | 20.0000 |
| Lead Slurry | BJCem S100.3.01D | 12.0000 | 2.5329 | 14.89 | 0.00 | | 704 | 1,774.0000 | 315.9000 |
| Tail Slurry | BJCem S100.3.01D | 12.5000 | 2.2282 | 12.62 | 2,000.00 | | 162 | 358.0000 | 63.7000 |
| Displacement Final | Displacement | 8.3300 | | | 0.00 | | | 0.0000 | 190.2000 |
| Top Out Slurry | BJCem S100.3.01D | 12.5000 | 2.2282 | 12.62 | 2,000.00 | | 15 | 33.3000 | 5.9000 |

Cementing Treatment



| Fluid Type | Fluid Name | Component | Concentration | UOM |
|----------------------------|------------------|---|---------------|--------|
| Spacer / Pre Flush / Flush | Sodium Silicate | SILICATE, SODIUM, A-3L | 21.0000 | GPB |
| Lead Slurry | BJCem S100.3.01D | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | 2.0000 | LBS/SK |
| Lead Slurry | BJCem S100.3.01D | CEMENT EXTENDER, GYPSUM, A-10 | 5.0000 | BWOB |
| Lead Slurry | BJCem S100.3.01D | CEMENT, ASTM TYPE III | 100.0000 | PCT |
| Lead Slurry | BJCem S100.3.01D | CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS | 2.0000 | LBS/SK |
| Lead Slurry | BJCem S100.3.01D | IntegraSeal CELLO | 0.1300 | LBS/SK |
| Lead Slurry | BJCem S100.3.01D | Foam Preventer, FP-25 | 0.3000 | BWOB |
| Tail Slurry | BJCem S100.3.01D | CEMENT, ASTM TYPE III | 100.0000 | PCT |
| Tail Slurry | BJCem S100.3.01D | IntegraSeal CELLO | 0.1300 | LBS/SK |
| Tail Slurry | BJCem S100.3.01D | Foam Preventer, FP-25 | 0.3000 | BWOB |
| Tail Slurry | BJCem S100.3.01D | CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS | 2.0000 | LBS/SK |
| Tail Slurry | BJCem S100.3.01D | CEMENT EXTENDER, GYPSUM, A-10 | 5.0000 | BWOB |
| Tail Slurry | BJCem S100.3.01D | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | 2.0000 | LBS/SK |
| Top Out Slurry | BJCem S100.3.01D | CEMENT, ASTM TYPE III | 100.0000 | PCT |
| Top Out Slurry | BJCem S100.3.01D | IntegraSeal CELLO | 0.1300 | LBS/SK |
| Top Out Slurry | BJCem S100.3.01D | Foam Preventer, FP-25 | 0.3000 | BWOB |
| Top Out Slurry | BJCem S100.3.01D | CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS | 2.0000 | LBS/SK |
| Top Out Slurry | BJCem S100.3.01D | CEMENT EXTENDER, GYPSUM, A-10 | 5.0000 | BWOB |
| Top Out Slurry | BJCem S100.3.01D | ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS | 2.0000 | LBS/SK |

Cementing Treatment



TREATMENT SUMMARY

| Time | Fluid | Rate (bpm) | Fluid Vol. (bbls) | Pipe Pressure (psi) | Annulus Pressure (psi) | Comments |
|------------------|------------------|------------|-------------------|---------------------|------------------------|----------------|
| 04/08/2018 07:48 | Water 1 | 4.00 | 20.00 | 75.00 | | |
| 04/08/2018 07:55 | Sodium Silicate | 4.00 | 20.00 | 123.00 | | |
| 04/08/2018 07:59 | Water 2 | 4.00 | 20.00 | 123.00 | | |
| 04/08/2018 08:05 | BJCem S100.3.01D | 5.50 | 317.00 | 153.00 | | |
| 04/08/2018 09:04 | BJCem S100.3.01D | 5.50 | 64.00 | 267.00 | | |
| 04/08/2018 09:24 | Displacement | 5.50 | 191.40 | 316.00 | | |
| 04/08/2018 15:02 | BJCem S100.3.01D | 2.00 | 5.90 | 105.00 | | Top Out Slurry |

| | Min | Max | Avg |
|----------------|-------|----------|--------|
| Pressure (psi) | 75.00 | 1,006.00 | 258.00 |
| Rate (bpm) | 0.50 | 5.50 | 5.00 |

DISPLACEMENT AND END OF JOB SUMMARY

| | | | |
|---------------------------------------|--------|------------------------------------|--------|
| Displaced By | BJ | Amount of Cement Returned/Reversed | 0.00 |
| Calculated Displacement Volume (bbls) | 191.40 | Method Used to Verify Returns | Visual |
| Actual Displacement Volume (bbls) | 187.00 | Amount of Spacer to Surface | 20.00 |
| Did Float Hold? | Yes | Pressure Left on Casing (psi) | 0.00 |
| Bump Plug | Yes | Amount Bled Back After Job | 1.00 |
| Bump Plug Pressure (psi) | 502.00 | Total Volume Pumped (bbls) | 633.00 |
| Were Returns Planned at Surface | Yes | Top Out Cement Spotted | Yes |
| Cement returns During Job | None | Lost Circulation During Cement Job | Yes |



Customer Name CAERUS
Well Name PUCKETT 15B-26
Job Type Surface

District Rifle
Supervisor WENDELL YOUNGBERG
Engineer GAGE PUTNAM

| Seq No. | Start Date | Start Time | Category | Event | Equipment | Event ID | Density (lb/gal) | Pump Rate (bpm) | Pump Vol (bbls) | Pipe Pressure (psi) | Comments |
|---------|------------|------------|--------------|------------------------|-----------|----------|------------------|-----------------|-----------------|---------------------|--|
| 1 | 4/7/2018 | 19:00 | Mobilization | Callout | | 1 | | | | | BJ CREW CALLED OUT WITH A RTS OF 02:00 AM 4/8/18 |
| 2 | 4/7/2018 | 19:30 | Mobilization | | | | | | | | JOURNEY MANAGEMENT WITH BJ CREW |
| 3 | 4/7/2018 | 19:45 | Mobilization | Leave Location | | 74 | | | | | LEAVE DISTRICT |
| 4 | 4/7/2018 | 20:30 | Mobilization | Arrive on Location | | 48 | | | | | ARRIVE ON LOCATION |
| 5 | 4/7/2018 | 20:40 | Operational | | | | | | | | STEACS BREIFING WITH BJ CREW |
| 6 | 4/7/2018 | 20:50 | Operational | Spot Units | | 49 | | | | | SPOT TRUCKS |
| 7 | 4/7/2018 | 21:00 | Operational | Rig Up | | 50 | | | | | RIG UP ALL EQUIPMENT |
| 9 | 4/8/2018 | 5:30 | Operational | Prime Up | | 52 | | | | | PIPE ON BOTTOM, RIG TO CIRCULATE |
| 10 | 4/8/2018 | 7:00 | Operational | Safety Meeting | | 53 | | | | | SAFTEY MEETING WITH BJ CREW, COMPANY, AND RIG CREW |
| 11 | 4/8/2018 | 7:35 | Operational | Rig Up | | 50 | | | | | RIG UP CEMENT HEAD TO CASING |
| 12 | 4/8/2018 | 7:45 | Operational | Start Pumping | | 55 | 8.34 | 2 | 5 | 75 | BREAK CIRCULATION |
| 13 | 4/8/2018 | 7:48 | Operational | Pressure Test | | 54 | | | | | TEST LINES 3000 |
| 14 | 4/8/2018 | 7:50 | Operational | Pump Spacer | | 56 | 8.34 | 4 | 15 | 123 | FRESH WATER SPACER |
| 15 | 4/8/2018 | 7:55 | Operational | Pump Spacer | | 56 | 10 | 4 | 20 | 125 | SODIUM SILICATE SPACER |
| 16 | 4/8/2018 | 7:59 | Operational | Pump Spacer | | 56 | 8.34 | 4 | 20 | 123 | FRESH WATER SPACER |
| 17 | 4/8/2018 | 8:05 | Operational | Pump Lead Cement | | 58 | 12 | | | | BATCH UP LEAD CEMENT @ 12.0 PPG (704 SXS Y- 2.53 MW- 14.89) |
| 18 | 4/8/2018 | 8:07 | Operational | Pump Lead Cement | | 58 | 12 | 5 | 317 | 168 | LEAD CEMENT @ 12.0 PPG DOWNHOLE |
| 19 | 4/8/2018 | 8:17 | Operational | Pump Lead Cement | | 58 | 12 | 5.5 | | 150 | 50 BBLS GONE LEAD SLURRY |
| 20 | 4/8/2018 | 8:26 | Operational | Pump Lead Cement | | 58 | 12 | 5.5 | | 148 | 100 BBLS GONE LEAD SLURRY |
| 21 | 4/8/2018 | 8:35 | Operational | Pump Lead Cement | | 58 | 12 | 5.5 | | 153 | 150 BBLS GONE LEAD SLURRY |
| 22 | 4/8/2018 | 8:44 | Operational | Pump Lead Cement | | 58 | 12 | 5.5 | | 153 | 200 BBLS GONE LEAD SLURRY |
| 23 | 4/8/2018 | 8:54 | Operational | Pump Lead Cement | | 58 | 12 | 4.5 | | 86 | 250 BBLS GONE LEAD SLURRY |
| 24 | 4/8/2018 | 9:02 | Operational | Pump Lead Cement | | 58 | 12 | 3 | | 82 | 300 BBLS GONE LEAD SLURRY |
| 25 | 4/8/2018 | 9:04 | Operational | Pump Tail Cement | | 60 | 12.5 | | | | BATCH UP TAIL SLURRY @ 12.5 PPG (162 SXS Y- 2.22 MW-12.62) |
| 26 | 4/8/2018 | 9:10 | Operational | Pump Tail Cement | | 60 | 12.5 | 5 | 60 | 427 | TAIL CEMENT @ 12.5 PPG DOWN HOLE |
| 27 | 4/8/2018 | 9:16 | Operational | Pump Tail Cement | | 60 | 12.5 | 5 | | 169 | 50 BBLS GONE TAIL SLURRY |
| 28 | 4/8/2018 | 9:24 | Operational | Pump Displacement | | 64 | | | 189 | | DROP TOP PLUG START DISPLACEMENT |
| 29 | 4/8/2018 | 9:25 | Operational | Pump Displacement | | 64 | 12.5 | 5 | 4 | 195 | 4 BBLS @ 12.5 PPG ON TOP OF PLUG |
| 30 | 4/8/2018 | 9:30 | Operational | Pump Displacement | | 64 | 8.34 | 5.5 | | 172 | 50 BBLS GONE DISPLACEMENT |
| 31 | 4/8/2018 | 9:39 | Operational | Pump Displacement | | 64 | 8.34 | 5.5 | | 220 | 100 BBLS GONE DISPLACEMENT |
| 32 | 4/8/2018 | 9:48 | Operational | Pump Displacement | | 64 | 8.34 | 5.5 | | 506 | 150 BBLS GONE DISPLACEMENT |
| 33 | 4/8/2018 | 9:54 | Operational | Pump Displacement | | 64 | 8.34 | 2 | 10 | 465 | SLOW RATE TO BUMP PLUG |
| 34 | 4/8/2018 | 9:59 | Operational | Land Plug | | 67 | | | | 1006 | BUMP PLUG 1464 PSI |
| 35 | 4/8/2018 | 10:06 | Operational | Check Floats | | 68 | | | | | BLEED PRESSURE, CHECK FLOATS 1 BBLS BACK |
| 36 | 4/8/2018 | 10:09 | | | | | | | | | RIG UP TO PUMP PARASITE LINE |
| 37 | 4/8/2018 | 10:18 | Operational | Start Pumping | | 55 | 8.34 | 1 | 10 | 277 | PUMP 10 BBLS SUGAR WATER |
| 43 | 4/8/2018 | 10:30 | StandBy | Customer | | 85 | | | | | BJ ON STANDBY, WAIT 4 HOURS TO DO TOP OUT JOB |
| 44 | 4/8/2018 | 14:15 | Operational | Rig Up | | 50 | | | | | BJ RIG UP TO DO TOPOUT JOB |
| 45 | 4/8/2018 | 14:52 | Operational | Pump Spacer | | 56 | 8.6 | 2.5 | 3 | 50 | PUMP CACL WATER AHEAD |
| 46 | 4/8/2018 | 15:00 | Operational | | | | | | | | START INJECTING SODIUM SILICATE |
| 47 | 4/8/2018 | 15:02 | Operational | Pumping Cement | | 61 | 12.5 | | | | BATCH UP CEMENT @ 12.5 PPG |
| 48 | 4/8/2018 | 15:03 | Operational | Pumping Cement | | 61 | 12.5 | 0.5 | 5 | 52 | PUMP CEMENT @ 12.5 PPG down back side |
| | 4/8/2018 | 15:10 | Operational | Cement Back to Surface | | | | | | | CEMENT TO SURFACE |
| 49 | 4/8/2018 | 15:15 | Operational | Pumping Cement | | 61 | 12.5 | 0.5 | 2 | 25 | Pumped 2 BBls cement @12.5 previous wells parasite line per customer |
| 53 | 4/8/2018 | 15:20 | Operational | End Pumping | | 69 | | | | | SHUT DOWN BLEED PRESSURE |



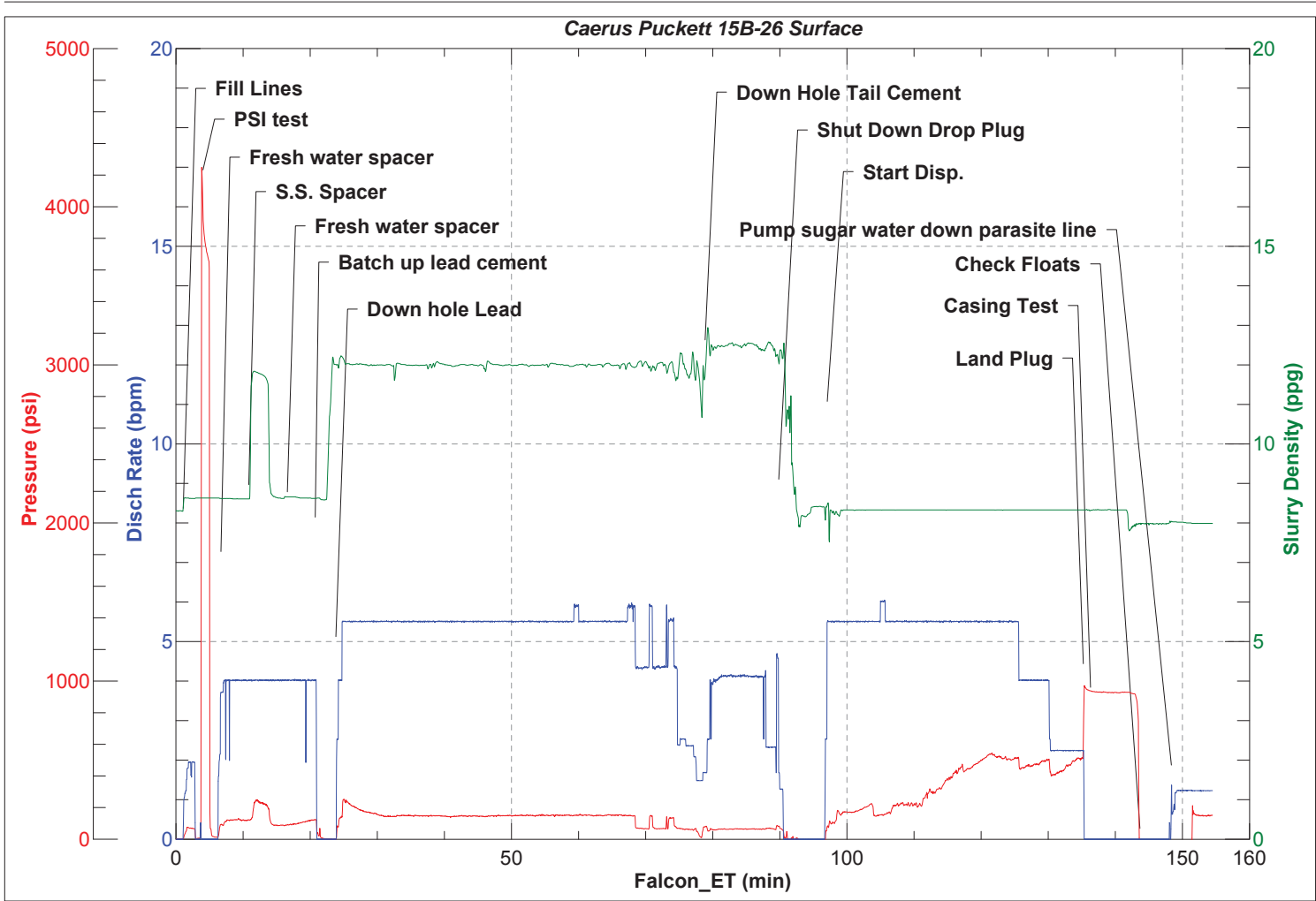
Customer Name CAERUS
Well Name PUCKETT 15B-26
Job Type Surface

District Rifle
Supervisor WENDELL YOUNGBERG
Engineer GAGE PUTNAM

| Seq No. | Start Date | Start Time | Category | Event | Equipment | Event ID | Density (lb/gal) | Pump Rate (bpm) | Pump Vol (bbls) | Pipe Pressure (psi) | Comments |
|---------|------------|------------|--------------|-----------------------|-----------|----------|---------------------|-----------------------|--------------------|------------------------|---|
| 54 | 4/8/2018 | 15:35 | Operational | Safety Meeting | | 53 | | | | | RIG DOWN MEETING WITH BJ CREW |
| 55 | 4/8/2018 | 15:45 | Operational | Clean Pumps and Lines | | 62 | | | | | START WASH UP OF PUMP AND RIG DOWN EQUIPMENT |
| 56 | 4/8/2018 | 16:30 | Operational | Safety Meeting | | 53 | | | | | JOURNEY MANAGEMENT WITH BJ CREW |
| 57 | 4/8/2018 | 17:00 | Mobilization | Leave Location | | 74 | | | | | LEAVE LOCATION |
| 58 | | | | | | | | | | | |
| 59 | | | | | | | | | | | FCP-502 PSI, BUMP PLUG- 1006 PSI, BLEED PRESSURE FLOATS HOLDING- 1 BBL BACK |
| 60 | | | | | | | | | | | |
| 61 | | | | | | | | | | | CALCULATED CEMENT TOPS- LEAD - 0' TAIL- 2017' |
| 62 | | | | | | | | | | | |
| 63 | | | | | | | | | | | TOPOUT- 15SXS Y-2.22 MW-12.62 (5 BBLs) 1 BBL TO SURFACE |



JobMaster Program Version 4.02C1
Job Number: 4490
Customer: Caerus
Well Name: Puckett 15B-26





JobMaster Program Version 4.02C1
Job Number: 4490
Customer: caerus
Well Name: puckett 15B-26

