

HALLIBURTON

iCem® Service

EXTRACTION OIL & GAS-EBUS

United States of America, COLORADO

For: Sean Macentire

Date: Thursday, August 09, 2018

Rinn Valley East N17-20-3N

WELD, Rinn Valley East N17-20-3N

Extraction Rinn Valley East N17-20-3N

Job Date: Thursday, August 09, 2018

Sincerely,

Nick Peterson

Legal Notice

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Table of Contents

1.0 Real-Time Job Summary 7

 1.1 Job Event Log7

2.0 Attachments..... 11

 2.1 Extraction Rinn Valley East N17-20-3N-Custom Results.png.....11

| | | | |
|---|-----------------------|-----------------------------------|----------------------------|
| Sold To #: 369404 | Ship To #: 3892499 | Quote #: | Sales Order #: 0905049725 |
| Customer: EXTRACTION OIL & GAS - | | Customer Rep: Sean Macentire | |
| Well Name: RINN VALLEY EAST | | Well #: N17-20-3N | API/UWI #: 05-123-47318-00 |
| Field: WATTENBERG | City (SAP): FIRESTONE | County/Parish: WELD | State: COLORADO |
| Legal Description: SW SE-17-2N-68W-898FSL-1771FEL | | | |
| Contractor: | | Rig/Platform Name/Num: Cartell 11 | |
| Job BOM: 7521 7521 | | | |
| Well Type: HORIZONTAL OIL | | | |
| Sales Person: HALAMERICA\HX38199 | | Srcv Supervisor: Prince Perez | |

Job

| | | | |
|------------------------|--------|-------------------|--------|
| Formation Name | | | |
| Formation Depth (MD) | Top | | Bottom |
| Form Type | BHST | | |
| Job depth MD | 1,653' | Job Depth TVD | 1,653' |
| Water Depth | | Wk Ht Above Floor | 6, |
| Perforation Depth (MD) | From | | To |

Well Data

| Description | New / Used | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|-------------------|------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| Casing | 0 | 9.625 | 8.921 | 36 | 8 RD | J-55 | 0 | 1653 | 0 | 1653 |
| Open Hole Section | | | 13.5 | | | | 0 | 1653 | 0 | 1653 |

Tools and Accessories

| Type | Size in | Qty | Make | Depth ft | Type | Size in | Qty | Make |
|------------|---------|-----|-------|----------|----------------|---------|-----|------|
| Guide Shoe | 9.625 | 1 | Weath | 1,653 | Top Plug | 9.625 | 1 | HES |
| Float Shoe | 9.625 | 1 | Weath | 1,608 | | | | |
| | | | | | Plug Container | 9.625 | 1 | HES |

Fluid Data

Stage/Plug #: 1

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal |
|---------|----------------|----------------|-----|---------|------------------------|-----------------------------|---------------|--------------|---------------------|
| 1 | Red Dye Spacer | Red Dye Spacer | 20 | bbl | 8.33 | | | 4 | |

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal |
|---------|------------|----------------------|-----|---------|------------------------|-----------------------------|---------------|--------------|---------------------|
| 2 | Cement | SWIFTCEM (TM) SYSTEM | 550 | sack | 13.5 | 1.74 | 9.2 | 8 | 5,060 |

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
|---|--------------|---------------|---------------------------------------|---------|---------------------------|--------------------------------------|------------------|-------------------|---------------------------|--|
| 3 | Displacement | Fresh Water | 124 | bbl | 8.33 | | | 8 | | |
| | | | | | | | | | | |
| Cement Left In Pipe | | Amount | 43 ft | | Reason | | | Shoe Joint | | |
| Mix Water: | | pH 7.0 | Mix Water Chloride: 0 ppm | | | Mix Water Temperature: 73 °F | | | | |
| Cement Temperature: | | ## °F | Plug Displaced by: 8.33 lb/gal | | | Disp. Temperature: 73 °F | | | | |
| Plug Bumped? | | Yes | Bump Pressure: 579 psi | | | Floats Held? Yes | | | | |
| Cement Returns: | | 22 bbls | Returns Density: 13.5 lb/gal | | | Returns Temperature: ## °F °C | | | | |
| Comment: Pumped 20 bbls Red dye spacer, 170 bbls Cement, 124 bbls displacement. Cement to surface @ 102 into displacement 22 bbls back to surface. | | | | | | | | | | |

1.0 Real-Time Job Summary

1.1 Job Event Log

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | DH Density <i>(ppg)</i> | Comb Pump Rate <i>(bbl/min)</i> | PS Pump Press <i>(psi)</i> | Pump Stg Tot <i>(bbl)</i> | Comments |
|-------|----------|--|---------------------------|----------|----------|--------|----------------------------|------------------------------------|-------------------------------|------------------------------|--|
| Event | 1 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 8/8/2018 | 18:00:00 | USER | | | | | DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW. |
| Event | 2 | Crew Leave Yard | Crew Leave Yard | 8/8/2018 | 18:30:00 | USER | | | | | STARTED JOURNEY MANAGEMENT. |
| Event | 3 | Arrive at Location from Service Center | Arrive at Location | 8/8/2018 | 19:00:00 | USER | | | | | ON LOCATION FROM PREVIOUS JOB. MEET WITH CO. MAN TO DISCUSS JOB; CASING- 9.625" 36 LB/FT @ 1,653.21', 13.5" HOLE 1,653.21", SHOE 45', FRESH WATER DISPLACEMENT, HALLIBURTON TOP PLUG. CASING LANDED @ 04:45 08/09/2018. RIG CIRCULATED BOTTOMS UP. |
| Event | 4 | Call Out | Call Out | 8/8/2018 | 21:00:00 | USER | | | | | CREW CALLED OUT AT 21:00, REQUESTED ON LOCATION 03:00. CREW PICKED UP CEMENT, TOP PLUG, 100 LBS OF SUGAR, 2 LBS RED DYE, FROM FT. LUPTON, CO. BULK TRUCKS 10867096, 10991603, AND ELITE 11189145. |

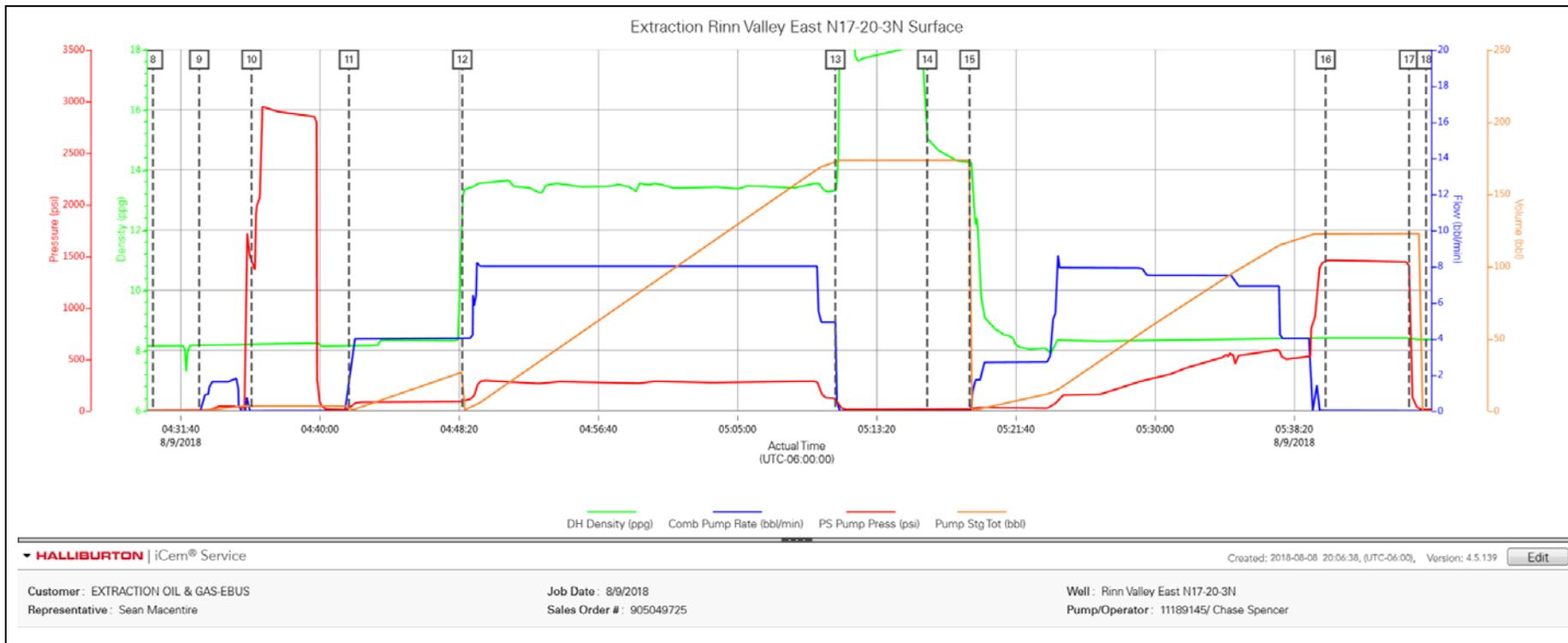
| | | | | | | | | | | | |
|-------|----|---------------------------|---------------------------|----------|----------|------|------|-------|--------|-------|--|
| Event | 5 | Pre-Rig Up Safety Meeting | Pre-Rig Up Safety Meeting | 8/9/2018 | 03:00:00 | USER | | | | | HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER. |
| Event | 6 | Rig-Up Equipment | Rig-Up Equipment | 8/9/2018 | 03:30:00 | USER | | | | | CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB. |
| Event | 7 | Safety Meeting - Pre Job | Safety Meeting - Pre Job | 8/9/2018 | 04:15:00 | USER | 8.16 | 10.50 | 414.00 | 17.30 | MEETING WITH HALLIBURTON RIG PERSONNEL WERE NOT INVOLVED IN PRE JOB METING. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS. |
| Event | 8 | Rig-Up Completed | Rig-Down Completed | 8/9/2018 | 04:30:00 | USER | | | | | |
| Event | 9 | Start Job | Start Job | 8/9/2018 | 04:32:46 | COM5 | | | | | BEGIN RECORDING JOB DATA. |
| Event | 10 | Test Lines | Test Lines | 8/9/2018 | 04:35:54 | COM5 | | | | | PRESSURE TESTED IRON TO 3,000 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 970 PSI, 5TH GEAR STALL OUT @ 2,013 PSI. |
| Event | 11 | Pump Spacer 1 | Pump Spacer 1 | 8/9/2018 | 04:41:44 | COM5 | 8.35 | 3.70 | 85.00 | 20.00 | PUMP 20 BBLS OF FRESH WATER WITH RED DYE. PUMP RATE 4 BBLS/MIN @ 84 PSI. |

| | | | | | | | | | | | |
|-------|----|-------------------|-------------------|----------|----------|------|-------|------|---------|--------|--|
| Event | 12 | Pump Cement | Pump Cement | 8/9/2018 | 04:48:31 | COM5 | 13.50 | 8.00 | 297.00 | 170.44 | PUMP 550 SKS OF SWIFTCEM @ 13.5 LB/GAL, 1.74 FT3/SK, 9.2 GAL/SK 170.44 BBLS. HOT CALCULATED @ 1,653.21' TOT @ SURFACE. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 284 PSI. |
| Event | 13 | Shutdown | Shutdown | 8/9/2018 | 05:10:51 | USER | | | | | SHUTDOWN TO REMOVE SWAGE SO PLUG COULD BE LOADED. |
| Event | 14 | Drop Top Plug | Drop Top Plug | 8/9/2018 | 05:16:21 | COM5 | | | | | REMOVED SWAGE TO DROP TOP PLUG, VERIFIED BY COMPANY REP. |
| Event | 15 | Pump Displacement | Pump Displacement | 8/9/2018 | 05:18:53 | COM5 | 8.36 | 8.00 | 361.00 | 124.00 | BEGIN CALCULATED DISPLACEMENT OF 124 BBLS WITH FRESH WATER. CEMENT TO SURFACE @ 102 BBLS INTO DISPLACEMENT 22 BBLS CEMENT TO SURFACE. |
| Event | 16 | Bump Plug | Bump Plug | 8/9/2018 | 05:40:12 | COM5 | 8.41 | 0.00 | 1454.00 | 122.60 | PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED UP TO 1,500 PSI FOR 5 MIN CASING PRESSURE TEST. |
| Event | 17 | Check Floats | Check Floats | 8/9/2018 | 05:45:12 | USER | | | | | RELEASED PRESSURE, FLOATS HELD, .75 BBLS BACK. |
| Event | 18 | End Job | End Job | 8/9/2018 | 05:46:13 | COM5 | | | | | STOP RECORDING JOB DATA. |

| | | | | | | | |
|-------|----|-----------------------------|-----------------------------|----------|----------|------|---|
| Event | 19 | Pre-Rig Down Safety Meeting | Pre-Rig Down Safety Meeting | 8/9/2018 | 09:00:00 | USER | DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES. |
| Event | 20 | Rig-Down Equipment | Rig-Down Equipment | 8/9/2018 | 09:15:00 | USER | RIG DOWN BULK AND MIXING EQUIPMENT. |
| Event | 21 | Rig-Down Completed | Rig-Down Completed | 8/9/2018 | 09:30:00 | USER | ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN. |
| Event | 22 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 8/9/2018 | 09:45:00 | USER | DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW. |
| Event | 23 | Depart Location | Depart Location | 8/9/2018 | 10:00:00 | USER | THANK YOU FOR USING HALLIBURTON - NICK PETERSON AND CREW. |

2.0 Attachments

2.1 Extraction Rinn Valley East N17-20-3N-Custom Results.png



3.0