



# Laramie Energy

## End of Well Cement Report

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Nichols 0994-24-21W 05-077-10399

S:24 T:9S R:94W Mesa CO

Quote #: 11788/11789

I Execution #: 07054/07178

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# Laramie Energy

Attention: Mr. Aaron Duncan | (303) 339-4913 | [aduncan@laramie-energy.com](mailto:aduncan@laramie-energy.com)

Laramie Energy | 1401 17th St, Suite 1400 | Denver, CO 80202

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Dear Mr. Duncan,

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,

Gage Putnam  
Field Engineer I | (307) 887-4243 | [Gage.Putnam@BJServices.com](mailto:Gage.Putnam@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

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# Cementing Treatment



<b>Start Date</b>	5/25/2018	<b>Field Ticket#</b>	FT-07054-Y1Z2V30202-16619
<b>End Date</b>	5/25/2018	<b>Well</b>	Nichols 0994-24-21W
<b>Client</b>	LARAMIE ENERGY	<b>API#</b>	05-077-10399
<b>Client Field Rep.</b>	Roger Foster	<b>Well Classification</b>	-
<b>Service Sup.</b>	Francisco Castillo	<b>County</b>	MESA
<b>District</b>	Rifle, CO	<b>State/Province</b>	CO
<b>Type of Job</b>	Surface	<b>Formation</b>	-
<b>Execution ID</b>	EXC-07054-Y1Z2V302	<b>Rig</b>	H&P 290
<b>Project ID</b>	PRJ1007064		

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	15.25	16.00	65.00	60.00	0.00		
Open Hole	11.00			1,571.00	40.00		
Casing	8.02	8.63	28.00	1,561.00		J-55	ST&C

**Shoe Length (ft):** 46

## HARDWARE

<b>Bottom Plug Used?</b>	Yes	<b>Tool Type</b>	Float Collar
<b>Bottom Plug Provided By</b>	Non BJ	<b>Tool Depth (ft)</b>	1,515.00
<b>Bottom Plug Size</b>	8.625	<b>Max Tubing Pressure - Rated (psi)</b>	-
<b>Top Plug Used?</b>	Yes	<b>Max Tubing Pressure - Operated (psi)</b>	-
<b>Top Plug Provided By</b>	Non BJ	<b>Max Casing Pressure - Rated (psi)</b>	3,930.00
<b>Top Plug Size</b>	8.625	<b>Max Casing Pressure - Operated (psi)</b>	3,144.00
<b>Centralizers Used</b>	Yes	<b>Pipe Movement</b>	None
<b>Centralizers Quantity</b>	24.00	<b>Job Pumped Through</b>	Manifold
<b>Centralizers Type</b>	Bow	<b>Top Connection Thread</b>	8RD
<b>Landing Collar Depth (ft)</b>	1,515	<b>Top Connection Size</b>	8.625

# 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	-
Circulation Time (min)	15.00	10 min SGS	-
Circulation Rate (bpm)	7.00	30 min SGS	-
Circulation Volume (bbls)	105.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.20	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	16		
PV Mud Out	-		
YP Mud In	10		
YP Mud Out	-		

## TEMPERATURE

Ambient Temperature (°F)	42.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	60.00	Flow Line Temperature (°F)	80.00

## 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	Fresh Water	8.33			0.00				40.00
Lead Slurry	BJCem S100.3.01D	12.00	2.5329	14.89	0.00	1,030.00	154	397.00	69.00
Tail Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	1,030.00	500.00	87	192.00	34.20
Displacement Final	Water	8.33			0.00			0.00	93.00

# Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
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	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	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	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
Tail Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB

## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Comments
5/25/2018 12:14 PM	Fresh Water	5.50	40.00	215.00	SPACER
5/25/2018 12:20 PM	BJCem S100.3.01D	5.50	69.00	243.00	LEAD CEMENT
5/25/2018 12:35 PM	BJCem S100.3.01D	4.00	34.00	157.00	TAIL CEMENT
5/25/2018 12:48 PM	Water	6.00	93.00	515.00	DISPLACEMENT

	Min	Max	Avg
Pressure (psi)	110.00	515.00	312.50
Rate (bpm)	4.00	6.00	5.00

# Cementing Treatment



## DISPLACEMENT AND END OF JOB SUMMARY

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Displaced By	BJ	Amount of Cement Returned/Reversed	15.00
Calculated Displacement Volume (bbls)	93.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	93.00	Amount of Spacer to Surface	40.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	0.75
Bump Plug Pressure (psi)	357.00	Total Volume Pumped (bbls)	236.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

Customer Name LARAMIE District RIFLE  
 Well Name NICHOLS 24-21W Supervisor JAVIER CASTILLO  
 Job Type SURFACE Engineer GAGE PUTNAM

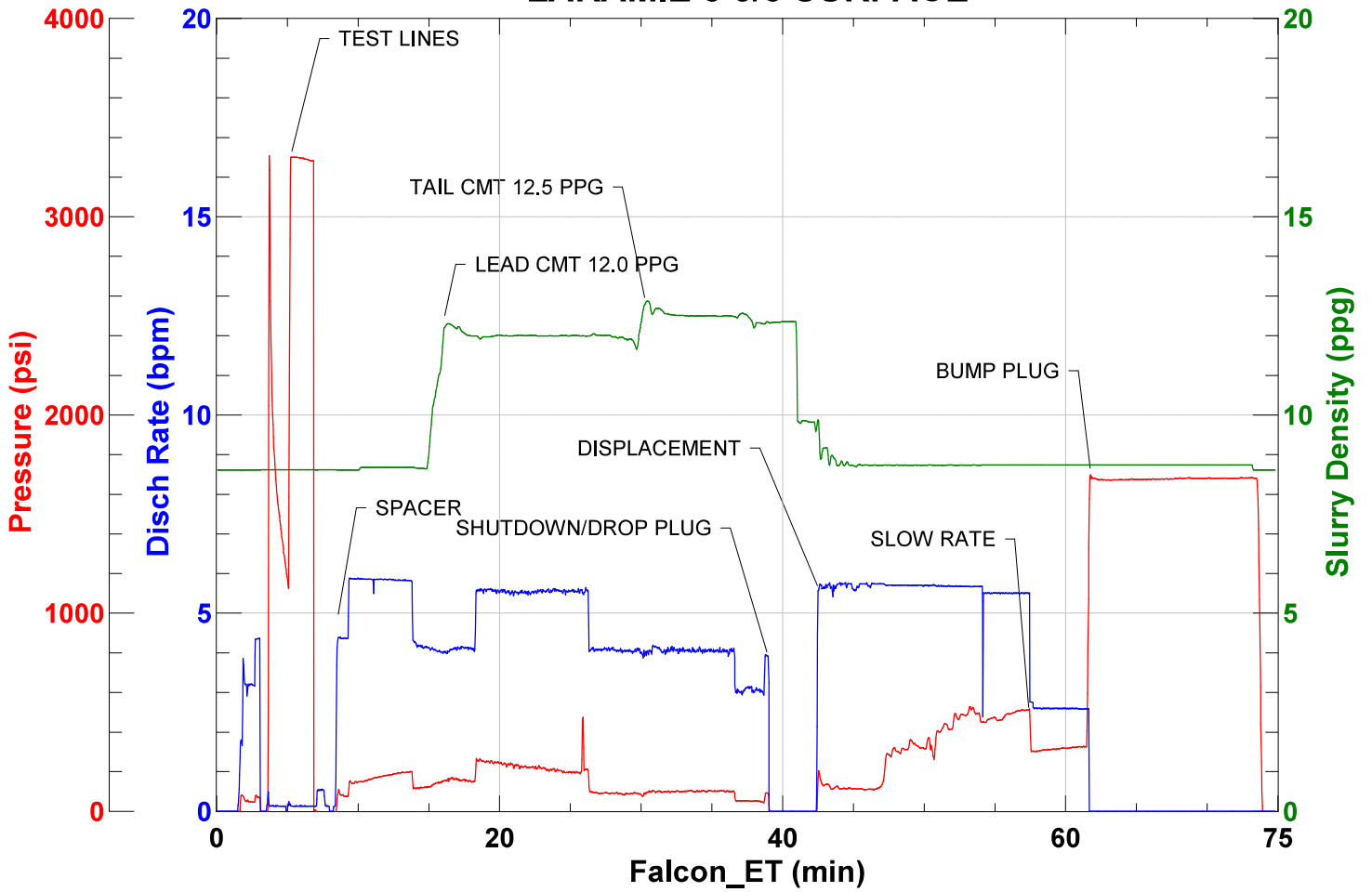


Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	5/25/2018	6:00	ON LOCATION					RIG RUNNING CASING
2	5/25/2018	11:35	LAND CASING					RIG LANDED CASING
3	5/25/2018	11:50	MEETING					PRE JOB SAFETY MEETING
4	5/25/2018	12:07	FILL LINES	8.34	2	5	110	DROP BOTTOM PLUG, FILL LINES
5	5/25/2018	12:09	TEST LINES				3300	PRESSURE TEST PUMPING LINES
6	5/25/2018	12:14	SPACER	8.34	5.5	35	215	FRESH WATER SPACER
7	5/25/2018	12:20	LEAD CEMENT	12	5.5	69	243	LEAD CEMENT, 154SKS/69BBLS AT 12.0PPG, 2.53YIELD, 14.89GAL/SK
8	5/25/2018	12:35	TAIL CEMENT	12.5	4	34	157	TAIL CEMENT, 87SKS/34BBLS AT 12.5PPG, 2.22YIELD, 12.62GAL/SK
9	5/25/2018	12:44	SHUTDOWN					DROP TOP PLUG
10	5/25/2018	12:48	DISPLACEMENT	8.34	6	80	515	FRESH WATER DISPLACEMENT
11	5/25/2018	13:03	SLOW RATE	8.34	2.5	13	357	SLOW RATE
12	5/25/2018	13:07	BUMP PLUG				1657	LAND TOP PLUG, BRING PSI UP TO 1600 PSI TO TEST CASING
13	5/25/2018	13:17	RELEASE PSI					RELEASE PSI, CHECK FLOATS, FLOATS HELD, 0.75BBLS FLOW BACK
14	5/25/2018	13:25	MEETING					RIG DOWN SAFETY MEETING
15	5/25/2018	13:30	RIG DOWN					RIG DOWN BJ EQUIPMENT
16	5/25/2018	14:00	COMPLETE					RIG DOWN COMPLETE
17	5/25/2018	14:10	MEETING					AAR JOURNEY MANAGEMENT MEETING
18	5/25/2018	14:20	LEAVE LOCATION					BJ CREW LEAVE LOCATION
19	5/25/2018	14:21						CALCULATED TOP OF TAIL 848 FT, 15 BBLS CEMENT TO SURFACE
20	5/25/2018	14:22						FULL RETURNS THROUGH OUT JOB
21	5/25/2018	14:23						THANK YOU FOR YOUR BUSINESS FROM JAVIER AND CREW



JobMaster Program Version 4.02C1  
Job Number: 5742  
Customer: LARAMIE  
Well Name: NICHOLS 24-21W

## LARAMIE 8 5/8 SURFACE



# Cementing Treatment



<b>Start Date</b>	5/29/2018	<b>Field Ticket#</b>	FT-07178-K9M9N50202-33115
<b>End Date</b>	5/29/2018	<b>Well</b>	Nichols 0994-24-21W
<b>Client</b>	LARAMIE ENERGY	<b>API#</b>	05-077-10399
<b>Client Field Rep.</b>	Roger Foster	<b>Well Classification</b>	-
<b>Service Sup.</b>	Paul Linn III	<b>County</b>	MESA
<b>District</b>	Rifle, CO	<b>State/Province</b>	CO
<b>Type of Job</b>	Long String	<b>Formation</b>	-
<b>Execution ID</b>	EXC-07178-K9M9N502	<b>Rig</b>	H&P 290
<b>Project ID</b>	PRJ1007172		

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	8.02	8.63	28.00	1,530.00		J-55	ST&C
Open Hole	7.88			6,071.00	30.00		
Open Hole	7.88			8,068.00	30.00		
Casing	4.00	4.50	11.60	8,058.00		L-80	LT&C

**Shoe Length (ft):** 86

## HARDWARE

<b>Bottom Plug Used?</b>	Yes	<b>Tool Type</b>	Float Collar
<b>Bottom Plug Provided By</b>	Non BJ	<b>Tool Depth (ft)</b>	7,972.00
<b>Bottom Plug Size</b>	4.500	<b>Max Tubing Pressure - Rated (psi)</b>	-
<b>Top Plug Used?</b>	Yes	<b>Max Tubing Pressure - Operated (psi)</b>	-
<b>Top Plug Provided By</b>	Non BJ	<b>Max Casing Pressure - Rated (psi)</b>	4,960.00
<b>Top Plug Size</b>	4.500	<b>Max Casing Pressure - Operated (psi)</b>	3,968.00
<b>Centralizers Used</b>	Yes	<b>Pipe Movement</b>	None
<b>Centralizers Quantity</b>	130.00	<b>Job Pumped Through</b>	Manifold
<b>Centralizers Type</b>	Bow	<b>Top Connection Thread</b>	8 RND.
<b>Landing Collar Depth (ft)</b>	7,973	<b>Top Connection Size</b>	4.5

# 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	8.00
Circulation Time (min)	180.00	10 min SGS	16.00
Circulation Rate (bpm)	10.00	30 min SGS	30.00
Circulation Volume (bbls)	1,800.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.10	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	22		
PV Mud Out	-		
YP Mud In	16		
YP Mud Out	-		

## TEMPERATURE

Ambient Temperature (°F)	50.00	Slurry Cement Temperature (°F)	70.80
Mix Water Temperature (°F)	57.20	Flow Line Temperature (°F)	-

## 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	IntegraGuard EZ Spacer	11.00			0.00				60.00
Lead Slurry	BJCem P100.3.01R	12.70	1.9849	11.10	1,030.00	5,041.00	741	1,465.00	260.90
Tail Slurry	BJCem P70.6.01R	13.50	1.8561	9.31	6,071.00	2,050.00	322	615.00	109.40
Displacement Final	Water + ResCare +Biocide	8.33			0.00			0.00	125.00

# Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, R-3	1.4000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	168.8967	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, R-7C	0.3000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.8000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	EXTENDER, BENTONITE	10.0000	PPB
Lead Slurry	BJCem P100.3.01R	RETARDER, R-3	0.5000	BWOB
Lead Slurry	BJCem P100.3.01R	IntegraSeal PHENO	0.5000	LBS/SK
Lead Slurry	BJCem P100.3.01R	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01R	BONDING AGENT, BA-60	0.3000	BWOB
Lead Slurry	BJCem P100.3.01R	GELLANT WATER, GW-86	0.1000	BWOB
Lead Slurry	BJCem P100.3.01R	DISPERSANT, CD-31	0.1000	BWOB
Lead Slurry	BJCem P100.3.01R	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01R	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	BJCem P70.6.01R	CEMENT, CLASS G	70.0000	PCT
Tail Slurry	BJCem P70.6.01R	SAND, S-8, Silica Flour, 200 Mesh	25.0000	BWOB
Tail Slurry	BJCem P70.6.01R	IntegraSeal PHENO	0.5000	LBS/SK
Tail Slurry	BJCem P70.6.01R	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem P70.6.01R	EXTENDER, BENTONITE	6.0000	BWOB
Tail Slurry	BJCem P70.6.01R	Flyash (Rockies)	20.0000	PCT
Tail Slurry	BJCem P70.6.01R	BONDING AGENT, BA-60	0.2000	BWOB
Tail Slurry	BJCem P70.6.01R	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P70.6.01R	BONDING AGENT, BA-90	10.0000	PCT
Tail Slurry	BJCem P70.6.01R	RETARDER, R-3	0.2000	BWOB
Tail Slurry	BJCem P70.6.01R	IntegraSeal CELLO	0.2500	LBS/SK
Displacement Final	Water + ResCare +Biocide	CLAY STABILIZER, ResCare CS-2	0.0800	GPB

# Cementing Treatment



## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
5/29/2018 7:56 AM	IntegraGuard EZ Spacer	4.00	60.00	378.00
5/29/2018 8:08 AM	BJCem P100.3.01R	5.50	261.30	405.00
5/29/2018 8:52 AM	BJCem P70.6.01R	5.50	106.67	502.00
5/29/2018 9:23 AM	Water + ResCare +Biocide	8.00	123.57	332.00

	Min	Max	Avg
Pressure (psi)	124.00	2,359.00	430.00
Rate (bpm)	1.00	10.50	5.50

## DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	123.57	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	123.00	Amount of Spacer to Surface	0.00
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)	1,777.00	Total Volume Pumped (bbls)	526.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Partial	Lost Circulation During Cement Job	No

Customer Name LARAMIE  
 Well Name NICHOLS 24-21W  
 Job Type Long String

District Rifle  
 Supervisor ANDREW LINN  
 Engineer GAGE PUTNAM



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	5/28/2018	21:30	CALL OUT					CALL OUT. ON LOCATION TIME OF 04:00
2	5/28/2018	23:29	STEACS					PRE CONVOY SAFETY MEETING
3	5/29/2018	0:30	DEPART RIFLE YARD					DEPART FROM RIFLE YARD FOR H&P 290
4	5/29/2018	2:45	ARRIVE ON LOCATION					ARRIVE ON LOCATION. RIG WAS RUNNING CASING
5	5/29/2018	2:50	SITE ASSESSMENT					CREW DID A SITE ASSESSMENT
6	5/29/2018	2:55	SPOT EQUIPMENT					SPOTTED IN EQUIPMENT
7	5/29/2018	3:12	STEACS					PRE RIG UP SAFETY MEETING WITH ALL BJ CEMENT CREW
8	5/29/2018	3:20	RIG UP					RIG UP ALL GROUND EQUIPMENT
9	5/29/2018	7:00	SAFETY MEETING					PRE JOB SAFETY MEETING WITH RIG CREW AND ALL BJ CEMENT CREW
10	5/29/2018	7:20	RIG UP					LOAD BOTH PLUGS IN PLUG CONTAINER, STAB PLUG CONTAINER, HOOK LINES TO PLUG CONTAINER.
11	5/29/2018	7:38	FILL LINES	8.33	2	5	250	FILL LINES WITH 5 BBLs. OF FRESH WATER
12	5/29/2018	7:46	PRESSURE TEST				4941	PRESSURE TEST TO 4941 PSI.
13	5/29/2018	7:54	DROP PLUG					DROP BOTTOM PLUG
14	5/29/2018	7:56	WEIGHTED SPACER	11	4	5	378	11 PPG. WEIGHTED SPACER.
15	5/29/2018	7:57	WEIGHTED SPACER	11	5.5	10	818	11 PPG. WEIGHTED SPACER.
16	5/29/2018	8:04	WEIGHTED SPACER	11	5.5	50	323	11 PPG WEIGHTED SPACER
17	5/29/2018	8:06	WEIGHTED SPACER	11	5.5	59.8	430	FINISHED PUMPING 11 PPG. WEIGHTED SPACER WITH 59.8 BBLs AWAY.
18	5/29/2018	8:08	LEAD CEMENT	12.7	5.5	10	405	LEAD CEMENT 12.7 PPG 741 SKS 1.98 CUFT/SK 11.1 GAL/SK FOR A TOTAL OF 261.3 BBLs OF LEAD CEMENT, REQUIRING 195.84 BBLs. OF WATER. WEIGHT VERIFIED WITH MUD SCALE. CALCULATED TOP OF LEAD IS 0 FT WITH A HEIGHT OF 5463.67 FT.
19	5/29/2018	8:14	LEAD CEMENT	12.7	5.5	50	352	PUMPED LEAD CEMENT
20	5/29/2018	8:20	LEAD CEMENT	12.7	5	65	278	PUMPED LEAD CEMENT
21	5/29/2018	8:24	LEAD CEMENT	12.7	5.5	100	363	PUMPED LEAD CEMENT
22	5/29/2018	8:33	LEAD CEMENT	12.7	5.5	150	378	PUMPED LEAD CEMENT
23	5/29/2018	8:42	LEAD CEMENT	12.7	4	200	220	PUMPED LEAD CEMENT
24	5/29/2018	8:48	LEAD CEMENT	12.7	2.5	225	124	PUMPED LEAD CEMENT
25	5/29/2018	8:51	LEAD CEMENT	12.7	2.5	235	130	FINISHED PUMPING LEAD CEMENT WITH 235 BBLs. AWAY.
26	5/29/2018	8:52	TAIL CEMENT	13.5	5.5	5	502	TAIL CEMENT 13.5 PPG. 322 SKS 1.86 CUFT/SK 9.31 GAL/SK FOR A TOTAL OF 106.67 BBLs OF TAIL CEMENT, REQUIRING 71.38 BBLs OF WATER. WEIGHT VERIFIED WITH MUD SCALE. CALCULATED TOP OF TAIL IS 5463.67 FT. WITH A HEIGHT OF 2594.33 FT.
27	5/29/2018	9:00	TAIL CEMENT	13.5	5.5	50	433	PUMPED TAIL CEMENT
28	5/29/2018	9:09	TAIL CEMENT	13.5	2.5	99	135	PUMPED TAIL CEMENT
29	5/29/2018	9:12	TAIL CEMENT	13.5	2.5	108	128	FINISHED PUMPING TAIL CEMENT WITH 108 BBLs. AWAY.
30	5/29/2018	9:12	SHUT DOWN					SHUT DOWN
31	5/29/2018	9:14	WASH PUMPS AND LINES					WASH PUMPS AND LINES TO CELLAR
32	5/29/2018	9:20	DROP PLUG					DROP TOP PLUG VERIFIED BY COMPANY MAN
33	5/29/2018	9:23	DISPLACEMENT	8.33	8	10	332	FRESH WATER DISPLACEMENT WITH 10 GALS OF RESCARE AND 5 GALS OF BIOCID

Customer Name LARAMIE  
 Well Name NICHOLS 24-21W  
 Job Type Long String

District Rifle  
 Supervisor ANDREW LINN  
 Engineer GAGE PUTNAM



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
34	5/29/2018	9:25	DISPLACEMENT	8.33	10.5	20	958	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
35	5/29/2018	9:28	DISPLACEMENT	8.33	10.5	50	2230	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
36	5/29/2018	9:30	RETURNS SLOWED					RETURNS SLOWED WITH 70 BBLS OF DISPLACEMENT AWAY. LOST RETURN WITH 80 BBLS OF DISPLACEMENT AWAY. REGAINED RETURNS WITH 106 BBLS OF DISPLACEMENT AWAY.
37	5/29/2018	9:32	DISPLACEMENT	8.33	8	90	2051	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
38	5/29/2018	9:33	DISPLACEMENT	8.33	3	94	1423	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE.
39	5/29/2018	9:34	DISPLACEMENT	8.33	1.5	98	1340	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
40	5/29/2018	9:39	DISPLACEMENT	8.33	2	103	1648	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
41	5/29/2018	9:48	DISPLACEMENT	8.33	2	123	2086	FRESH WATER DISPLACEMENT WITH 10 GALS. OF RESCARE
42	5/29/2018	9:48	LAND PLUG				2086	LANDED THE PLUG FINAL CIRCULATING PRESSURE WAS 2086 PSI. TOOK TO 2986 PSI.
43	5/29/2018	9:48	CASING TEST				2986	10 MIN CASING TEST AT 3220 PSI.
44	5/29/2018	9:59	CHECK FLOATS					CHECK FLOATS, FLOATS HELD 1 BBL BACK.
45	5/29/2018	10:05	SAFETY MEETING					PRE RIG DOWN SAFETY MEETING WITH RIG CREW
46	5/29/2018	10:12	RIG DOWN					RIG DOWN RIG FLOOR
47	5/29/2018	10:12	WASH PUMPS AND LINES					WASH PUMPS AND LINES TO CELLAR
48	5/29/2018	10:25	SAFETY MEETING					PRE RIG DOWN SAFETY MEETING WITH ALL BJ SERVICES CEMENT CREW
49	5/29/2018	10:32	RIG DOWN					RIG DOWN ALL EQUIPMENT.
50	5/29/2018	11:00	AAR					AFTER ACTION REVIEW
51	5/29/2018	11:05	STEACS					PRE CONVOY SAFETY MEETING
52	5/29/2018	11:15	DEPART FROM LOCATION					DEPART FROM LOCATION FOR RIFLE YARD. THANK YOU FOR USING BJ SERVICES, ANDREW LINN AND CREW.



JobMaster Program Version 4.02C1

Job Number: 5850

Customer: LARAMIE

Well Name: NICHOLS 24-21W

### NICHOLS 24-21W PRODUCTION

