



# Laramie Energy

## End of Well Cement Report

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Nichols 0994-24-18W 05-077-10391

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

Quote #: 10686/10718

I Execution #: 06094/06202

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## Laramie Energy

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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,

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

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# Cementing Treatment



<b>Start Date</b>	4/24/2018	<b>Well</b>	Nichols 0994-24-18W
<b>End Date</b>	4/25/2018	<b>County</b>	MESA
<b>Client</b>	LARAMIE ENERGY	<b>State/Province</b>	CO
<b>Client Field Rep</b>	Roger Foster	<b>API</b>	05-077-10391
<b>Service Supervisor</b>	Wendell Youngberg	<b>Formation</b>	-
<b>Field Ticket No.</b>	Surface	<b>Rig</b>	H&P 290
<b>District</b>	Rifle, CO	<b>Type of Job</b>	Surface

## 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			1,554.00	75.00		
Casing	8.02	8.63	28.00	1,544.00		J-55	ST&C
Open Hole	11.00			1,030.00	48.00		

**Shoe Length (ft):** 43

## HARDWARE

<b>Bottom Plug Used?</b>	No	<b>Tool Type</b>	Float Collar
<b>Bottom Plug Provided By</b>	-	<b>Tool Depth (ft)</b>	1,501.00
<b>Bottom Plug Size</b>	-	<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>	3,144.00
<b>Top Plug Size</b>	8.625	<b>Max Casing Pressure - Operated (psi)</b>	2,000.00
<b>Centralizers Used</b>	Yes	<b>Pipe Movement</b>	None
<b>Centralizers Quantity</b>	4.00	<b>Job Pumped Through</b>	No Manifold
<b>Centralizers Type</b>	Bow	<b>Top Connection Thread</b>	8 round
<b>Landing Collar Depth (ft)</b>	1,544	<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	5.00
Circulation Time (min)	30.00	10 min SGS	10.00
Circulation Rate (bpm)	10.00	30 min SGS	22.00
Circulation Volume (bbls)	300.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.80	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	17		
PV Mud Out	-		
YP Mud In	10		
YP Mud Out	-		

## TEMPERATURE

Ambient Temperature (°F)	29.00	Slurry Cement Temperature (°F)	57.00
Mix Water Temperature (°F)	42.00	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	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	170	417.00	74.20
Tail Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	1,030.00	500.00	107	237.00	42.10
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, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
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,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
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	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB

## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
4/25/2018 5:36 AM	Fresh Water	6.00	40.00	359.00
4/25/2018 5:47 AM	BJCem S100.3.01D	3.00	74.20	265.00
4/25/2018 6:03 AM	BJCem S100.3.01D	4.00	42.10	423.00
4/25/2018 6:20 AM	Water	6.00	93.00	250.00

	Min	Max	Avg
Pressure (psi)	250.00	423.00	324.25
Rate (bpm)	3.00	6.00	4.75

# Cementing Treatment



## DISPLACEMENT AND END OF JOB SUMMARY

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Displaced By	BJ	Amount of Cement Returned/Reversed	30.00
Calculated Displacement Volume (bbls)	91.30	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	91.30	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	0.05
Bump Plug Pressure (psi)	510.00	Total Volume Pumped (bbls)	91.30
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

# EVENT LOG

**Service Line** Cementing  
**Client** LARAMIE ENERGY  
**District** Rifle, CO



**Well:** Nichols 0994-24-18W      **Quotes:** QUO-10686-D9V1M6  
**Job Type:** Surface      **Plans:** ORD-06094-K2Z5N4  
**Supervisor:** Wendell Youngberg      **Executions:** EXC-06094-K2Z5N402  
**Engineer:** Gage Putnam

Seq.	Start Dt./Time	End Dt./Time	Duration	Category	Event	Equipment	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	04/24/2018 12:30	04/24/2018 13:30	1.00	Mobilization	Callout						CALLOUT. RTS 22:00 4/24/18
2	04/24/2018 13:30	04/24/2018 16:00	2.50	Mobilization	Leave Location						LEAVE BJ RIFLE YARD
3	04/24/2018 16:00	04/25/2018 4:00	12.00	Mobilization	Arrive on Location						ARRIVE ON LOCATION
4	04/25/2018 4:00	04/25/2018 4:15	0.25	Operational	Safety Meeting						RIG UP STEACS
5	04/25/2018 4:15	04/25/2018 4:40	0.42	Operational	Rig Up						RIG UP IRON, BULK AND WATER
6	04/25/2018 4:40	04/25/2018 4:45	0.08	Operational	Prime Up						PRIME UP PUMP
7	04/25/2018 4:45	04/25/2018 5:15	0.50	Operational	Safety Meeting						SAFTY MEETING BJ AND RIG CREW
8	04/25/2018 5:15	04/25/2018 5:31	0.27	Operational	Rig Up						RIG UP HEAD AND LOAD BOTTOM PLUG

# EVENT LOG

**Service Line** Cementing  
**Client** LARAMIE ENERGY  
**District** Rifle, CO



9	04/25/2018 5:31	04/25/2018 5:34	0.05	Operational	Pump Spacer						5BBLS FW A HEAD FILL LINES
10	04/25/2018 5:34	04/25/2018 5:36	0.03	Operational	Pressure Test						PRESSURE TEST LINES TO 3000
11	04/25/2018 5:36	04/25/2018 5:45	0.15	Operational	Start Pumping			6.00	35.00	359.00	35 BBLS FW SPACER A HEAD
12	04/25/2018 5:45	04/25/2018 5:47	0.03	Operational	Pump Lead Cement				76.00		BATCH UP LEAD 12#
13	04/25/2018 5:47	04/25/2018 5:56	0.15	Operational	Pump Lead Cement			3.00		265.00	DOWN HOLE WITH LEAD CEMENT
14	04/25/2018 5:56	04/25/2018 6:03	0.12	Operational	Pump Lead Cement			6.00		417.00	50 BBLS GONE LEAD CEMENT
15	04/25/2018 6:03	04/25/2018 6:08	0.08	Operational	Pump Tail Cement			4.00	42.00	423.00	START IN TO TAIL CEMENT
16	04/25/2018 6:08	04/25/2018 6:16	0.13	Operational	Pump Tail Cement			3.00		116.00	30 BBLS GONE TAIL CEMENT
17	04/25/2018 6:16	04/25/2018 6:20	0.07	Operational	Drop Top Plug				91.30		DROP TOP PLUG START DISP.
18	04/25/2018 6:20	04/25/2018 6:27	0.12	Operational	Pump Displacement			8.00		962.00	50 BBLS GONE DISPLACEMENT
19	04/25/2018 6:27	04/25/2018 6:36	0.15	Operational	Pump Displacement			2.00		510.00	91 BBLS GONE DISPLACEMENT
20	04/25/2018 6:36	04/25/2018 6:37	0.02	Operational	Land Plug					510.00	LAND PLUG FSP 510
21	04/25/2018 6:37	04/25/2018 6:47	0.17	Operational	Pressure Test					1,600.00	CHECK CASING FOR 10 MIN.
22	04/25/2018 6:47	04/25/2018 6:48	0.02	Operational	Check Floats						bled off floats good 1/2 BBL BACK



# EVENT LOG

**Service Line**      Cementing  
**Client**                LARAMIE ENERGY  
**District**              Rifle, CO



23	04/25/2018 6:48	04/25/2018 6:55	0.12	Operational	Safety Meeting						RIG DOWN STEACS
24	04/25/2018 6:55	04/25/2018 7:35	0.67	Operational	Rig Down						RIG DOWN EQUIPMENT
25	04/25/2018 7:35	04/25/2018 7:45	0.17	Operational	Safety Meeting						TRAVEL STEACS
26	04/25/2018 7:45	04/25/2018 8:00	0.25	Mobilization	Leave Location						LEAVE LOCATION

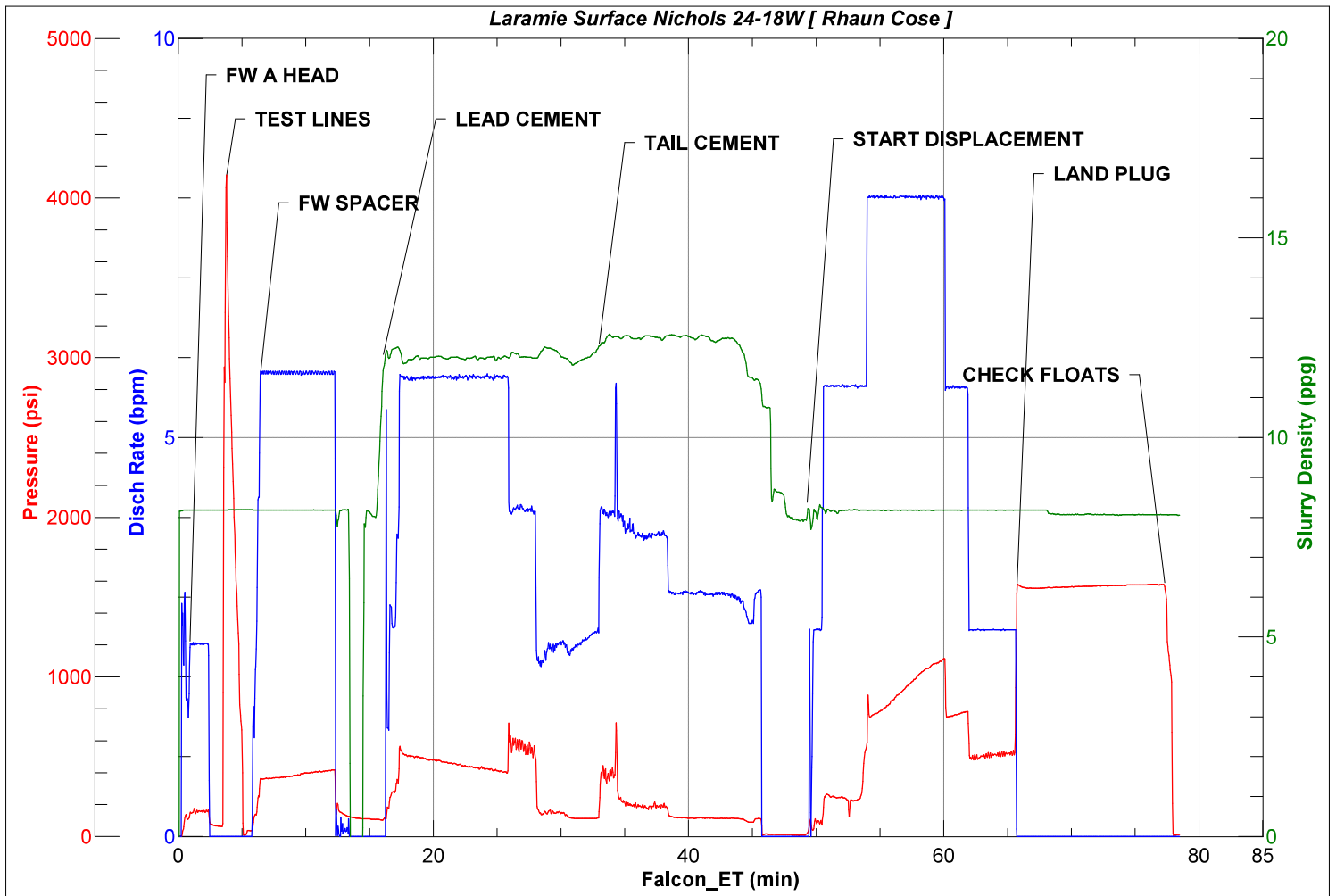


JobMaster Program Version 4.02C1

Job Number: 4903

Customer: Laramie

Well Name: Nichols 24-17W



# Cementing Treatment



<b>Start Date</b>	4/28/2018	<b>Well</b>	Nichols 0994-24-18W
<b>End Date</b>	4/28/2018	<b>County</b>	MESA
<b>Client</b>	LARAMIE ENERGY	<b>State/Province</b>	CO
<b>Client Field Rep</b>	Roger Foster	<b>API</b>	05-077-10391
<b>Service Supervisor</b>	Jerod Dent	<b>Formation</b>	-
<b>Field Ticket No.</b>	Production	<b>Rig</b>	H&P 290
<b>District</b>	Rifle, CO	<b>Type of Job</b>	Long String

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Open Hole	8.88			7,890.00	10.00		
Casing	4.00	4.50	11.60	7,865.00		L-80	LT&C
Open Hole	8.88			5,840.00	3.50		
Previous Casing	8.02	8.63	28.00	1,530.00		J-55	ST&C

**Shoe Length (ft):** 80

## 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>	7,779.00
<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>	7,560.00
<b>Top Plug Size</b>	4.500	<b>Max Casing Pressure - Operated (psi)</b>	6,048.00
<b>Centralizers Used</b>	Yes	<b>Pipe Movement</b>	None
<b>Centralizers Quantity</b>	113.00	<b>Job Pumped Through</b>	Manifold
<b>Centralizers Type</b>	Bow	<b>Top Connection Thread</b>	8RD
<b>Landing Collar Depth (ft)</b>	7,810	<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	16.00
Circulation Time (min)	60.00	10 min SGS	18.00
Circulation Rate (bpm)	10.00	30 min SGS	22.00
Circulation Volume (bbls)	600.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	Yes
Mud Density In (ppg)	9.80	Gas Units	2970
Mud Density Out (ppg)	-		
PV Mud In	7		
PV Mud Out	-		
YP Mud In	20		
YP Mud Out	-		

## TEMPERATURE

Ambient Temperature (°F)	66.00	Slurry Cement Temperature (°F)	68.00
Mix Water Temperature (°F)	64.00	Flow Line Temperature (°F)	110.00

## 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	IntegraGuard EZ Spacer	11.00			0.00				60.00
Lead Slurry	BJCem P100.3.01R	12.70	1.9849	11.10	1,030.00	4,810.00	767	1,544.00	274.90
Tail Slurry	BJCem P70.6.01R	13.50	1.8561	9.31	5,840.00	2,050.00	392	727.00	129.40
Displacement Final	Water, ResCare, Biocide	8.33			0.00			0.00	121.40

# Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, R-7C	0.3000	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	EXTENDER, BENTONITE	10.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	RETARDER, R-3	1.4000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.8000	PPB
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	DISPERSANT, CD-31	0.1000	BWOB
Lead Slurry	BJCem P100.3.01R	IntegraSeal CELLO	0.2500	LBS/SK
Lead Slurry	BJCem P100.3.01R	RETARDER, R-3	0.5000	BWOB
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	Foam Preventer, FP-25	0.3000	BWOB
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	EXTENDER, BENTONITE	6.0000	BWOB
Tail Slurry	BJCem P70.6.01R	FLUID LOSS, FL-24	0.4000	BWOB
Tail Slurry	BJCem P70.6.01R	BONDING AGENT, BA-90	10.0000	PCT
Tail Slurry	BJCem P70.6.01R	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	BJCem P70.6.01R	IntegraSeal PHENO	0.5000	LBS/SK
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	RETARDER, R-3	0.2000	BWOB
Displacement Final	Water + ResCare +Biocide	CLAY STABILIZER ResCare CS	0.0800	GPB

# Cementing Treatment



## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
4/28/2018 5:05 PM	IntegraGuard EZ Spacer	5.00	50.00	375.00
4/28/2018 5:26 PM	BJCem P100.3.01R	5.00	271.10	324.00
4/28/2018 6:20 PM	BJCem P70.6.01R	5.00	129.40	289.00
4/28/2018 6:52 PM	Water + ResCare +Biocide	10.00	121.40	2,399.00

	Min	Max	Avg
Pressure (psi)	333.00	2,399.00	430.00
Rate (bpm)	0.50	10.00	5.00

## DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	120.60	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	120.20	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	1.25
Bump Plug Pressure (psi)	2,250.00	Total Volume Pumped (bbls)	576.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

# EVENT LOG

**Service Line** Cementing  
**Client** LARAMIE ENERGY  
**District** Rifle, CO



**Well:** Nichols 0994-24-18W      **Quotes:** QUO-10718-F6P1V7  
**Job type:** Long String      **Plans:** ORD-06202-Q5Y3B7  
**Supervisor:** Jerod Dent      **Executions:** EXC-06202-Q5Y3B702  
**Engineer:** Gage Putnam

Seq.	Start Dt./Time	End Dt./Time	Duration	Category	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	04/28/2018 07:00	04/28/2018 07:01	0.02	Mobilization	Callout					BJ crew called to Laramie 24-18W Production. Requested on location at 14:00
2	04/28/2018 08:30	04/28/2018 08:30	0.00	Mobilization	Leave Location					BJ crew depart facility for Laramie location
3	04/28/2018 10:30	04/28/2018 10:31	0.02	Mobilization	Arrive on Location					BJ crew arrive at Laramie 24-18W Production
4	04/28/2018 10:35	04/28/2018 10:40	0.08	Operational	Safety Meeting					BJ crew discuss spotting in equipment and hazards on location
5	04/28/2018 10:41	04/28/2018 11:00	0.32	Operational	Spot Units					BJ crew spot in equipment
6	04/28/2018 11:01	04/28/2018 11:55	0.90	Operational	Rig Up					BJ crew rig up all ground fittings and equipment
7	04/28/2018 11:56	04/28/2018 16:00	4.07	Operational	Other (See comment)					Wait on rig to finish running casing
8	04/28/2018 16:01	04/28/2018 16:30	0.48	Operational	Rig Up					BJ crew rig up all floor fittings
9	04/28/2018 16:31	04/28/2018 16:32	0.02	Operational	Drop Bottom Plug					Load bottom plug and stab plug container

# EVENT LOG

**Service Line** Cementing  
**Client** LARAMIE ENERGY  
**District** Rifle, CO



10	04/28/2018 16:35	04/28/2018 16:55	0.33	Operational	Safety Meeting					BJ crew, customer representative and rig crew discuss job procedures and safety concerns such as muster point, fire ext, first aid, pinch points, red zones, trapped pressure etc.
11	04/28/2018 17:05	04/28/2018 17:08	0.05	Operational	Start Pumping	8.3300	2.00	5.00		Fill lines with 5 bbls water ahead, bottom plug away.
12	04/28/2018 17:08	04/28/2018 17:12	0.07	Operational	Pressure Test					Pressure test lines to 5,000 psi
13	04/28/2018 17:12	04/28/2018 17:26	0.23	Operational	Pump Spacer	11.5000	5.00	50.00	375.00	Mix and pump 50 bbls of Integra Guard EZ spacer at 11.5 ppg
14	04/28/2018 17:27	04/28/2018 17:36	0.15	Operational	Pump Lead Cement	12.7000	5.00	50.00	324.00	Mix and pump 767 sks of BJ Cem P100 Lead cement at 12.7 ppg, 1.98 yld, 11.1 gal/sk. ( Total of 271 bbls cement slurry )
15	04/28/2018 17:36	04/28/2018 17:48	0.20	Operational	Pump Lead Cement	12.7000	5.50	100.00	293.00	50 bbls Lead away
16	04/28/2018 17:48	04/28/2018 17:58	0.17	Operational	Pump Lead Cement	12.7000	5.50	150.00	284.00	100 bbls Lead away
17	04/28/2018 17:58	04/28/2018 18:06	0.13	Operational	Pump Lead Cement	12.7000	5.50	200.00	256.00	150 bbls Lead away
18	04/28/2018 18:06	04/28/2018 18:15	0.15	Operational	Pump Lead Cement	12.7000	5.50	250.00	245.00	200 bbls Lead away
19	04/28/2018 18:15	04/28/2018 18:21	0.10	Operational	Pump Lead Cement	12.7000	3.50	271.00	105.00	250 bbls Lead away
20	04/28/2018 18:21	04/28/2018 18:30	0.15	Operational	Pump Tail Cement	13.5000	5.50	50.00	285.00	Mix and pump 392 sks of BJ Cem P70 Tail cement at 13.5 ppg, 1.85 yld, 9.31 gal/sk. ( Total of 129.6 bbls cement slurry ) ,271 bbls Lead away
21	04/28/2018 18:30	04/28/2018 18:21	(0.15)	Operational	Pump Tail Cement	13.5000	5.50	100.00	285.00	50 bbls Tail away
22	04/28/2018 18:40	04/28/2018 18:47	0.12	Operational	Pump Tail Cement	13.5000	5.50	129.60	285.00	100 bbls Tail away
23	04/28/2018 18:47	04/28/2018 18:48	0.02	Operational	Other (See comment)				264.00	Shutdown. 129.6 bbls Tail away.
24	04/28/2018 18:48	04/28/2018 18:52	0.07	Operational	Clean Pumps and Lines					Swap over to wash pumps and lines



# EVENT LOG

**Service Line** Cementing  
**Client** LARAMIE ENERGY  
**District** Rifle, CO



25	04/28/2018 18:52	04/28/2018 18:53	0.02	Operational	Drop Top Plug					Drop top plug
26	04/28/2018 18:53	04/28/2018 18:58	0.08	Operational	Pump Displacement	8.3300	10.00	50.00	1,475.00	Pump 100 bbls fresh water displacement with ResCare and Biocide.
27	04/28/2018 18:58	04/28/2018 19:03	0.08	Operational	Pump Displacement	8.3300	10.00	100.00	1,740.00	50 bbls displacement away
28	04/28/2018 19:03	04/28/2018 19:07	0.07	Operational	Pump Displacement	8.3300	4.00	120.60	1,899.00	100 bbls displacement away
29	04/28/2018 19:07	04/28/2018 19:12	0.08	Operational	Pump Displacement	8.3300	4.00	120.60	1,899.00	120.6 bbls displacement away
30	04/28/2018 19:12	04/28/2018 19:12	0.00	Operational	Land Plug				2,240.00	Land plug, final circulating pressure was 2240
31	04/28/2018 19:12	04/28/2018 19:22	0.17	Operational	Pressure Test					10 minute casing test at 3,000 psi per customer request.
32	04/28/2018 19:22	04/28/2018 19:23	0.02	Operational	Check Floats	8.3300	4.00	120.60	1,899.00	Check floats, floats held with 1.25 bbls back to truck
33	04/28/2018 19:23	04/28/2018 20:30	1.12	Operational	Rig Down					BJ crew rig down all floor and ground fittings
34	04/28/2018 20:30	04/28/2018 20:31	0.02	Mobilization	Leave Location					BJ crew depart location for facility
35	04/28/2018 20:31	04/28/2018 20:31	0.00	Mobilization	Leave Location					BJ crew depart location for facility
36	04/28/2018 20:31		0.00	Operational	Other (See comment)					Received 40 bbls spacer to surface, plug landed at 2240 psi, floats held with 1.25 bbls back to pump after 10 minute casing test with 3,000 psi.



JobMaster Program Version 4.02C1  
Job Number: 5040  
Customer: Laramie  
Well Name: Nichols 0994-24-18W

