



Great Western Operating Company, LLC

Schneider HD 11-142HN

API # 05-123-46418

Surface

September 06, 2019

Quote #: QUO-35940-R1V8P3

Execution #: EXC-21008-R5G8P502



Great Western Operating Company, LLC

Great Western Operating Company, LLC | 1801 Broadway, Suite 500 | Denver, CO 80202

Dear Great Western Operating Company, LLC,

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 | (307) 638-5585

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

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Gregory Black	RIG	Ikon 12
DISTRICT	Cheyenne, WY	COUNTY	WELD
SERVICE	Cementing	STATE / PROVINCE	CO

WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lbs/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Open Hole	13.50	0.00	0.00	1,598.00	1,598.00	30.00		
Casing	8.92	9.63	36.00	1,598.00	1,598.00		J-55	LTC

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,551.15
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3,512.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2,012.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	16.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	LTC
Landing Collar Depth (ft)	1,551.15	Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	8.50
Circulation Prior to Job	Yes	Mud Density Out (ppg)	8.50
Circulation Time (min)	30.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	10.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	300.00	Gas Present	No
Lost Circulation Prior to Cement Job	No		

TEMPERATURE

Ambient Temperature (°F)	75.00	Slurry Cement Temperature (°F)	80.00
Mix Water Temperature (°F)	70.00		

Client: Great Western Operating Company, LLC

Well: SCHNEIDER HD 11-142HN

Well API: 05-123-46418

Start Date: 9/6/2019

End Date: 9/6/2019

Field Ticket #: FT-21008-R5G8P50201-566875778



FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ O REQ. (gals/sk)	PLN TOP FLD (ft)	LENGTH (ft)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	Water	8.3300			0.00				20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	0.00	1,550.00	720	1,001.0000	178.3000
Displacement 1	Water	8.3300			0.00			0.0000	118.8000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	BJCem S100.3.XC	CEMENT, ASTM TYPE III	100.0000	PCT

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	36.0
Calculated Displacement Vol (bbls)	118.80	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	118.80	Amt of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	0.50
Bump Plug Pressure (psi)	1,343.00	Total Volume Pumped (bbls)	316.80
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Yes	Lost Circulation During Cement Job	No

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BJ Cementing Event Log

Surface - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	09/06/2019 06:00	Callout					Crew called out for 12:00 location time, crew arrived at yard and got ready to depart
2	09/06/2019 10:00	Depart for Location					Crew departs for location
3	09/06/2019 11:00	Arrive on Location					Crew arrive on location
4	09/06/2019 11:05	STEACS Briefing					Pre rig up safety meeting
5	09/06/2019 11:10	Rig Up					Rig up
6	09/06/2019 12:00	STEACS Briefing					Safety meeting on casing test previous well
7	09/06/2019 12:15	Pressure Test	8.3400	0.00	0.00	0.00	Pressure test previous casing would not pass due to bad valves
8	09/06/2019 13:15	STEACS Briefing					Pre job safety meeting and job procedure with rig crew and company man
9	09/06/2019 13:34	Other (See comment)	8.3400	0.00	2.00	0.00	Pumped 2 bbls of fresh water to fill pumps and lines
10	09/06/2019 13:35	Pressure Test	8.3400	0.00	0.00	0.00	Pressure test
11	09/06/2019 14:07	Equipment Issue					Bad valves could not hold pressure test, had to wait for new valves and install the check them.
12	09/06/2019 17:43	Pump Spacer	8.3400	2.20	20.00	225.00	Pumped 20 bbls of dyed water spacer
13	09/06/2019 17:55	Pump Tail Cement	14.5000	3.90	178.00	638.00	Pumped 720 sks(178 bbls) of cement @ 14.5ppg(Mix water:6.81)
14	09/06/2019 18:46	Other (See comment)					Shutdown to start washing up and get ready to drop plug and displace
15	09/06/2019 18:47	Drop Top Plug					Dropped top plug with company man present
16	09/06/2019 18:47	Pump Displacement	8.3400	3.50	20.00	117.00	
17	09/06/2019 18:54	Pump Displacement	8.3400	5.40	20.00	480.00	
18	09/06/2019 19:02	Pump Displacement	8.3400	5.70	20.00	590.00	

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Well Name / API : SCHNEIDER HD 11-142HN / 05-123-46418

Well MD: 1,583.00

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19	09/06/2019 19:08	Pump Displacement	8.3400	3.00	20.00	513.00	Slowed rate to 3 bpm last 20 bbls to land plug
20	09/06/2019 19:08	Land Plug					Final circulation:580 bumped pressure to:1843
21	09/06/2019 19:15	Pressure Test	8.3400	0.00	0.00	1333.00	15 minute casing test. start 1320 psi, end 1350 psi
22	09/06/2019 19:31	Check Floats					.5 bbls back floats held
23	09/06/2019 19:32	Spacer Back-to-Surface					20 bbls back to surface
24	09/06/2019 19:32	Cement Back-to-Surface					36.0 bbls back to surface

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JobMaster Program Version 4.02C1
Job Number: 20984-KOT2W302
Customer: Great Western
Well Name: Schneider HD 11-142HN

