

HALLIBURTON

iCem[®] Service

SYNERGY RESOURCES CORPORATION

Date: Tuesday, October 10, 2017

Ag 31N-31B-L Production

Job Date: Monday, September 18, 2017

Sincerely,

Justin Lansdale

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Ag 31N-31B-L** cement **Production** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton [Fort Lupton]

The Road to Excellence Starts with Safety

Sold To #: 359915	Ship To #: 3801249	Quote #:	Sales Order #: 0904298898
Customer: SYNERGY RESOURCES CORPORATION		Customer Rep: Lovel Young	
Well Name: AG	Well #: 31N-31B-L	API/UWI #: 05-123-44875-00	
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: WELD	State: COLORADO
Legal Description: NE NE-32-6N-66W-979FNL-545FEL			
Contractor: Synergy		Rig/Platform Name/Num: Precision 462	
Job BOM: 7523 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB41307		Srvc Supervisor: Luke Kosakewich	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	18440 ft	Job Depth TVD	6,848ft
Water Depth		Wk Ht Above Floor	
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		9.625	8.921	36	LTC	J-55	0	1759	0	1759
Casing		5.5	4.778	20		P-110	0	18440	0	6848
Open Hole Section			8.5				1759	18454	1759	6848

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	5.5	1	Weatherford
Float Shoe	5.5	1		18440	Bottom Plug	5.5	1	Weatherford
Float Collar	5.5	1		18327	SSR plug set			
Insert Float					Plug Container	5.5	1	HES
Stage Tool					Centralizers			

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	40	bbl	11.5	3.8		4		

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal								
2	ElastiCem Lead	ELASTICEM (TM) SYSTEM	935	sack	13.2	1.57		7	7.52								
3	NeoCem Tail	NeoCem TM	1375	sack	13.2	2.09		8	10.08								
4	MMCR Displacement	MMCR Displacement	10	bbl	8.34			8									
5	Cla Web Displacement	Cla Web Displacement	396	bbl	8.33			10									
<table border="1"> <thead> <tr> <th>Cement Left In Pipe</th> <th>Amount</th> <th>Reason</th> <th>Wet Shoe</th> </tr> </thead> <tbody> <tr> <td></td> <td>0 ft</td> <td></td> <td></td> </tr> </tbody> </table>										Cement Left In Pipe	Amount	Reason	Wet Shoe		0 ft		
Cement Left In Pipe	Amount	Reason	Wet Shoe														
	0 ft																
<p>Comment Comment Full returns throughout the job. Got 60 bbls. of lead cement back to surface. Estimated top of tail cement is at 4,631.2'. Floats held. Got 2. bbls. of fluid back to the truck. Pumped a 6 bbl wet shoe.</p>																	

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	9/17/2017	20:30:00	USER	Crew was called out at 20:30 for an on location time of 00:30.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	9/17/2017	23:05:00	USER	Held a pre journey safety meeting and JSA with the crew.
Event	3	Depart Shop for Location	Depart Shop for Location	9/17/2017	23:15:00	USER	Started journey management with dispatch and left the yard.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	9/18/2017	00:00:03	USER	Crew performed a site assessment and hazard hunt on location. Checked in with the customer and discussed the job procedures, rig up and well bore schematics to calculate the job. The rig was running casing.
Event	5	Other	Other	9/18/2017	00:00:05	USER	W
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	9/18/2017	00:00:15	USER	Held a pre rig up safety meeting and JSA with the crew.
Event	7	Rig-Up Equipment	Rig-Up Equipment	9/18/2017	00:00:20	USER	The crew rigged up all lines, hoses and equipment for the job.
Event	8	Safety Meeting	Safety Meeting	9/18/2017	02:00:00	USER	Held a pre job safety meeting and JSA with all personnel on location.
Event	9	Start Job	Start Job	9/18/2017	03:12:25	COM4	Pumped 3 bbls. of fresh water to fill lines.
Event	10	Test Lines	Test Lines	9/18/2017	03:16:18	COM4	Pressure tested lines to 4,900 psi. with a 500 psi. electronic kick out test.
Event	11	Pump Spacer 1	Pump Spacer 1	9/18/2017	03:20:30	COM4	Pumped 40 bbls. of Tuned Spacer w/surfactants mixed at 11.5 ppg. Yield 3.8 ft3/sks, 23.8 gal/sks. Density was verified pressurized scales.
Event	12	Drop Bottom Plug	Drop Bottom Plug	9/18/2017	03:22:36	COM4	Dropped the bottom plug on the fly witnessed by the customer.

Event	13	Pump Lead Cement	Pump Lead Cement	9/18/2017	03:30:26	COM4	Pumped 261 bbls. (935 sks) of Elasticm mixed at 13.2 ppg. Yield 1.57 ft3/sks, 7.52 gal/sks. Density was verified by pressurized scales.
Event	14	Pump Tail Cement	Pump Tail Cement	9/18/2017	04:22:16	COM4	Pumped 511 bbls. (1375 sks) of Neocem mixed at 13.2 ppg. Yield 2.09 ft3/sks. 10.08 gal/sks. Density was verified by pressurized scales.
Event	15	Shutdown	Shutdown	9/18/2017	05:32:35	COM4	
Event	16	Clean Lines	Clean Lines	9/18/2017	05:32:43	COM4	Washed up pumps and lines until clean.
Event	17	Drop Top Plug	Drop Top Plug	9/18/2017	05:40:34	COM4	Dropped the top plug witnessed by the customer
Event	18	Pump Displacement	Pump Displacement	9/18/2017	05:40:40	COM4	Pumped 406 bbls. of fresh water with MMCR in the first 10 bbls., Clayweb and Bio cide throughout the rest of displacement.
Event	19	Bump Plug	Bump Plug	9/18/2017	06:38:09	USER	Bumped the plug 500 psi. over 2,250 psi. at 3 bpm. Final pressure was 2,750 psi.
Event	20	Other	Other	9/18/2017	06:38:10	USER	Got 60 bbls. of cement to surface. Estimated top of tail is at 4,631.2'.
Event	21	Other	Other	9/18/2017	06:38:11	COM4	Pressured up the well to 4,880 psi. to burst the plug. Pumped 6 bbls. of fresh water for a wet shoe.
Event	22	Check Floats	Check Floats	9/18/2017	06:42:05	USER	Bled off pressure to check floats. Got 2 bbls. of fluid back to the truck.
Event	23	Safety Meeting	Safety Meeting	9/18/2017	08:19:27	USER	Held a pre rig down safety meeting and JSA.
Event	24	Rig-Down Equipment	Rig-Down Equipment	9/18/2017	08:19:43	USER	Rigged down all lines, hoses and equipment.
Event	25	Depart Location Safety Meeting	Depart Location Safety Meeting	9/18/2017	08:19:55	USER	Held a pre journey safety meeting with the crew.
Event	26	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	9/18/2017	08:20:09	USER	Started journey management with dispatch and left location.

3.0 Attachments

3.1 Job Chart



