

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Monday, January 29, 2018

Hergert South 35W-15-5N Surface

Job Date: Sunday, January 28, 2018

Sincerely,

Bryce Hinsch

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Hergert South 35W-15-5N** cement **surface** 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.

Approximately 6 bbls of cement were returned to surface.

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]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404		Ship To #: 3840276		Quote #:		Sales Order #: 0904588225				
Customer: EXTRACTION OIL & GAS -				Customer Rep: Shawn McIntyre						
Well Name: HERGERT SOUTH		Well #: 35W-15-5N		API/UWI #: 05-123-45901-00						
Field: WATTENBERG		City (SAP): SEVERANCE		County/Parish: WELD		State: COLORADO				
Legal Description: NE SE-35-7N-67W-2272FSL-647FEL										
Contractor: Cartell 44				Rig/Platform Name/Num: Cartel 41						
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA/HX38199				Srv Supervisor: Bradley Hinkle						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1550ft		Job Depth TVD		1550ft				
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	0	9.625	8.921	36	8 RD	J-55	0	1550	0	1550
Open Hole Section			13.5				0	1570	0	1570
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625					Top Plug	9.625	1	HES	
Float Shoe	9.625	1		1550		Bottom Plug	9.625		HES	
Float Collar	9.625	1		1505		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625		HES	
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	Spacer	Fresh Water	10	bbl	8.33			4.5		
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	Spacer	Red Dye Water	10	bbl	8.33			4.5		

last updated on 1/28/2018 8:43:05 PM

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Cement	SWIFCEM	525	sack	13.5	1.74		6	9.2
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	Displacement	Fresh Water	117	bbl	8.33			6	
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Mix Water:		pH 6	Mix Water		0 ppm		Mix Water Temperature:		67 °F
			Chloride:						
Cement Temperature:## °F °C		Plug Displaced by:## lb/gal kg/m3 XXXX				Disp. Temperature:## °F °C			
Plug Bumped?Yes		Bump Pressure:506 psi				Floats Held?Yes			
Cement Returns:5 bbl		Returns Density:## lb/gal kg/m3				Returns Temperature:## °F °C			
Comment 6 bbls cement to surface.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	1/23/2018	06:00:00	USER				Crew called for an on location of 1200. Crew was Bradley Hinkle, Mitchell Camper, Peter Ginsberg, Todd Reeve and Brian Jackson.
Event	2	Depart Shop for Location	Depart Shop for Location	1/23/2018	07:00:00	USER				Pre-journey safety meeting.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	1/23/2018	08:00:00	USER				Perform a site assessment and pre-rig up safety meeting.
Event	4	Safety Meeting	Safety Meeting	1/24/2018	03:00:00	USER	2.00	0.00	0.00	Pre-job safety meeting. Rid crew did not participate.
Event	5	Other	Job Numbers	1/24/2018	03:30:00	USER	-3.00	0.00	0.00	TD: 1570. TP: 1550. FC: 1505. 9.625" 36# casing inside a 13.5" OH. Mud weight at 8.4 ppg.
Event	6	Start Job	Start Job	1/24/2018	03:35:43	COM4	30.00	8.48	0.00	
Event	7	Test Lines	Test Lines	1/24/2018	03:38:36	COM4	1005.00	9.01	0.00	Pressure test lines with a 500 psi electronic kick-out test.
Event	8	Pump Spacer 1	Pump Spacer 1	1/24/2018	03:42:06	COM4	48.00	8.77	0.00	Pump 10 bbls fresh water.
Event	9	Pump Spacer 2	Pump Spacer 2	1/24/2018	03:44:52	COM4	225.00	9.05	5.50	Pump 10 bbls red dye water.
Event	10	Pump Cement	Pump Cement	1/24/2018	03:51:58	COM4	64.00	8.97	1.60	Pump 162 bbls (525 sacks, 1.74 yield, 9.2 gal/sk) SwiftCem mixed at 13.5 ppg. Density verified by

										pressurized scales.
Event	11	Check Weight	Check weight	1/24/2018	03:54:05	COM4	239.00	13.56	6.10	Cement weighed at 13.5 ppg.
Event	12	Shutdown	Shutdown	1/24/2018	04:21:01	COM4	22.00	0.14	0.00	
Event	13	Drop Top Plug	Drop Top Plug	1/24/2018	04:23:11	COM4	29.00	13.73	0.00	Top plug preloaded. Witnessed by customer.
Event	14	Pump Displacement	Pump Displacement	1/24/2018	04:23:19	COM4	31.00	13.76	0.00	Pump 117 bbls fresh water. Good returns throughout. Returns coming up through conductor and mouse hole. Displacement rate slowed to minimize washout. 6 bbls cement to surface.
Event	15	Bump Plug	Bump Plug	1/24/2018	04:49:18	COM4	764.00	7.78	0.20	Bump plug at 506 psi and increased 500 psi over.
Event	16	Pressure Up Well	Pressure Up Well	1/24/2018	04:51:21	COM4	1489.00	7.78	0.00	Increase pressure to 1500 psi for a 5 minute casing test.
Event	17	Check Floats	Check Floats	1/24/2018	04:56:36	USER	102.00	7.63	0.00	Floats held. 1 bbl back.
Event	18	End Job	End Job	1/24/2018	04:57:10	COM4	23.00	7.62	0.00	
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/24/2018	05:00:00	USER	14.00	7.58	0.00	Pre-rig down safety meeting.
Event	20	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	1/24/2018	06:00:00	USER				Pre-journey safety meeting.

3.0 Attachments

3.1 CUSTOM RESULTS – JOB CHART WITH EVENTS

