

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Date: Thursday, November 16, 2017

Jesser 3E-10-14C Surface

Job Date: Monday, November 06, 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 **Jesser 3E-10-14C** 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.

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 #: 369404		Ship To #: 3830598		Quote #:		Sales Order #: 0904416735				
Customer: EXTRACTION OIL & GAS -				Customer Rep: Larry Siegel						
Well Name: JESSER			Well #: 3E-10-14C		API/UWI #: 05-123-45667-00					
Field: WATTENBERG		City (SAP): BERTHOUD		County/Parish: WELD		State: COLORADO				
Legal Description: NW SW-3-4N-68W-2314FSL-616FWL										
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 341						
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Steven Markovich						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1556ft		Job Depth TVD						
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	1598	0	0
Open Hole Section			13.5				0	1615	0	1615
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			1598		Top Plug	9.625		HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625					SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625		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	Red Dye Spacer	Red Dye Spacer		10	bbl	8.33				
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	SwiftCem	SWIFTCM (TM) SYSTEM		550	sack	13.5	1.74		5	9.2
9.20 Gal		FRESH WATER								

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
3	Fresh Water	Fresh Water	120	bbl	8.33				
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint	
Mix Water:		pH ##	Mix Water Chloride:## ppm			Mix Water Temperature:## °F °C			
Cement Temperature:## °F °C		Plug Displaced by:## lb/gal kg/m3 XXXX			Disp. Temperature:## °F °C				
Plug Bumped?		Yes/No	Bump Pressure:#### psi MPa			Floats Held?		Yes/No	
Cement Returns:## bbl m3		Returns Density:## lb/gal kg/m3			Returns Temperature:## °F °C				
Comment Cement to surface at 90bbls away bringing 30bbls of cement to surface.									

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	11/5/2017	20:30:00	USER	Job called out with and on location time of 03:30
Event	2	Arrive At Loc	Arrive At Loc	11/6/2017	02:00:00	USER	Arrived on location, rig still drilling.
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	11/6/2017	02:30:00	USER	JSA and hazard hunt with HES crew.
Event	4	Rig-Up Equipment	Rig-Up Equipment	11/6/2017	04:30:00	USER	Rigged up HES lines and equipment
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/6/2017	05:45:00	USER	JSA with HES and rig crew on job procedure.
Event	6	Start Job	Start Job	11/6/2017	06:03:39	COM4	TD 1615' TP 1598' FC 1556' 9 5/8" 36# surface casing, 13 1/2" open hole.
Event	7	Other	Other	11/6/2017	06:04:46	COM4	Fill lines.
Event	8	Test Lines	Test Lines	11/6/2017	06:07:12	COM4	Set kick outs to 500 psi for kick out test.
Event	9	Test Lines	Test Lines	11/6/2017	06:08:31	COM4	Bring pressure up to 3000psi and hold.
Event	10	Check Weight	Check weight	11/6/2017	06:10:20	COM4	Weight verified by pressurized scales.
Event	11	Pump Spacer 1	Pump Spacer 1	11/6/2017	06:11:52	COM4	Break circulation. After 17bbls we achieved circulation.
Event	12	Pump Spacer 2	Pump Spacer 2	11/6/2017	06:17:39	COM4	Pump 10bbls of Red Dye.
Event	13	Pump Cement	Pump Cement	11/6/2017	06:20:47	COM4	Pump 170bbls (550sks) of 13.5ppg 1.74yield cement. Pumped at 6bbl/min 340psi.
Event	14	Check Weight	Check weight	11/6/2017	06:22:39	COM4	Weight verified by pressurized scales.
Event	15	Check Weight	Check weight	11/6/2017	06:23:22	COM4	Weight verified by pressurized scales.
Event	16	Shutdown	Shutdown	11/6/2017	06:51:02	COM4	Shutdown.
Event	17	Drop Top Plug	Drop Top Plug	11/6/2017	06:54:59	COM4	Plug pre loaded into HES head. Plug loaded and dropped in front of company rep.

Event	18	Pump Displacement	Pump Displacement	11/6/2017	06:55:14	COM4	Pump 120bbls of H2O. Pumped at 8bbl/min and slowed rate with pressure increase. Red dye to surface at 70bbls away, cement to surface at 90bbls away bringing 30bbls of cement to surface.
Event	19	Bump Plug	Bump Plug	11/6/2017	07:15:43	COM4	Bumped plug at 120bbls away, final lifting pressure was 548psi. Took pressure 500psi over and held.
Event	20	Check Floats	Check Floats	11/6/2017	07:16:07	USER	Opened release line and after .5bbl back floats held.
Event	21	End Job	End Job	11/6/2017	07:17:37	COM4	Thank you Steve Markovich and crew.

3.0 Attachments

3.1 Job Chart



