

HALLIBURTON

iCem[®] Service

VERDAD OIL & GAS

Date: Friday, July 05, 2019

TIMBRO 9-59 8B-9-9 Production

Job Date: Wednesday, June 26, 2019

Sincerely,

Bryce Hinsch

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Timbro 9-59 8B-9-9** 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.

Trace spacer was 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

The Road to Excellence Starts with Safety

Sold To #: 380688		Ship To #: 3899018		Quote #:		Sales Order #: 0905784223					
Customer: VERDAD RESOURCES LLC						Customer Rep: TIM ALANIZ					
Well Name: TIMBRO 9-59			Well #: 8B-9-9			API/UWI #: 05-123-47578-00					
Field: WILDCAT		City (SAP): KEOTA		County/Parish: WELD		State: COLORADO					
Legal Description: SW SW-8-9N-59W-1219FSL-600FWL											
Contractor: H & P DRLG					Rig/Platform Name/Num: H & P 290						
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HX38199					Srv Supervisor: Vitali Neverdasov						
Job											
Formation Name											
Formation Depth (MD)		Top				Bottom					
Form Type				BHST							
Job depth MD		15330ft		Job Depth TVD		6444					
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			0	1894	0	1894	
Casing	0	5.5	4.778	20			0	15330	0	6444	
Open Hole Section			8.5				1894	15363	1894	6444	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	HES		
Float Shoe	5.5	1	NA	15330		Bottom Plug	5.5	1	HES		
Float Collar	5.5	1	NA	15282		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5	NA			
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	FDP-C1337-18	SBM FDP-C1337-18 CEMENT SPACER SYS			50	bbl	12.5	2.79		5	

201.15 lbm/bbl		BARITE, BULK (100003681)							
0.1250 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)							
6 lbm/bbl		SEM-94P, 35 LB SACK - (1023987)							
6 lbm/bbl		SEM-93P, 35 LB SACK - (1023977)							
1 lbm/bbl		FE-2 (100001615)							
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	FDP-C1337-18	SBM FDP-C1337-18 CEMENT SPACER SYS	50	bbl	12.5	2.71		5	
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							
0.70 gal/bbl		MUSOL(R) A, 5 GAL PAIL (100064220)							
206.83 lbm/bbl		BARITE, BULK (100003681)							
1 lbm/bbl		FE-2 (100001615)							
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	ElastiCem	ELASTICEM (TM) SYSTEM	610	sack	13.2	1.57		8	7.55
0.30 %		SCR-100 (100003749)							
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
4	NeoCem	NeoCem TM	1059	sack	13.2	2.04		8	9.75
9.75 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
5	MMCR Displacement	MMCR Displacement	20	bbl	8.34			8	
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
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
6	Displacement		317	bbl	8.34			8	
Cement Left In Pipe		Amount	0 ft		Reason			WET SHOE	

Comment : CUSTOMER CUT VOLUME OF TAIL SHORT DUE TO REDUCED MESURED DEPTH. NEW VOLUMES WHERE COMMUNICATED WITH HALLIBURTON ENGINEER ON LOCATION AND CUSTOMER. ESTIMATED TOP OF LEAD @ 1768'. TOP OF TAIL @ 5930'

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Other	SPOT TRUCKS	6/11/2019	22:50:00	USER					SPOT TRUCKS
Event	2	Call Out	Call Out	6/25/2019	16:00:00	USER					ON LOCATION @ 23:00
Event	3	Depart Yard Safety Meeting	Depart Yard Safety Meeting	6/25/2019	18:45:00	USER					HELD JSA PRIOR LEAVING THE YARD
Event	4	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/25/2019	19:00:00	USER					
Event	5	Arrive at Location from Service Center	Arrive at Location from Service Center	6/25/2019	22:30:00	USER					95 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING.
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/25/2019	22:45:00	USER					JSA PRIOR SPOTTING EQUIPMENT AND RIGGING UP
Event	7	Other	RIG UP	6/25/2019	23:00:00	USER					RIG UP ALL SURFACE LINES TO THE BUFFER ZONE
Event	8	Casing on Bottom	Casing on Bottom	6/25/2019	23:30:00	USER					CASING LANDED
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/26/2019	01:50:00	USER					DISCUSS HAZARDS AND JOB PROCEDURE WITH ALL PERSONAL INVOLVED
Event	10	Start Job	Start Job	6/26/2019	02:11:32	COM4					
Event	11	Check Weight	Check Weight	6/26/2019	02:20:42	COM4					
Event	12	Pressure Test	Pressure Test	6/26/2019	02:28:52	USER	29.00	8.52	0.00	2.90	LOAD LINE AND TEST TO 4740 PSI
Event	13	Pump Spacer	Pump Spacer	6/26/2019	02:35:00	USER	135.00	8.52	3.40	0.40	BATCH/ WEIGHT/ PUMP 100 BBLS OF FDP SPACER @

											12.5 PPG FIRST 50 BBLS WITH DRY SURFACTANS LAST 50 WITH LIQUID SURFACTANS.
Event	14	Drop Bottom Plug	Drop Bottom Plug	6/26/2019	02:55:00	USER	92.00	12.40	4.90	94.10	DROP BOTTOM PLUG
Event	15	Pump Lead Cement	Pump Lead Cement	6/26/2019	02:56:00	USER	87.00	12.45	4.90	99.00	WEIGHT/ PUMP 610 SKS (170.6 BBLS) OF ELASTICEM @ 13.2 PPG.
Event	16	Check Weight	Check Weight	6/26/2019	02:57:48	COM4	252.00	13.15	7.00	8.40	
Event	17	Pump Tail Cement	Pump Tail Cement	6/26/2019	03:21:00	USER	213.00	13.34	6.00	5.30	WEIGHT/ PUMP 1059 SKS (385 BBLS) OF NEOCEM @ 13.2 PPG. CUSTOMER CUT VOLUME OF TAIL SHORT DUE TO REDUCED MESURED DEPTH. NEW VOLUMES WHERE COMMUNICATED WITH HALLIBURTON ENGINEER ON LOCATION AND CUSTOMER.
Event	18	Check Weight	Check Weight	6/26/2019	03:34:13	COM4	294.00	13.20	6.00	44.00	
Event	19	Shutdown	Shutdown	6/26/2019	04:39:00	USER	83.00	13.30	3.50	403.30	FINISHED PUMPING CEMENT
Event	20	Clean Lines	Clean Lines	6/26/2019	04:42:00	USER	7.00	13.72	0.00	405.90	BLOW DOWN AND WASH PUMPS AND LINES.
Event	21	Drop Top Plug	Drop Top Plug	6/26/2019	04:50:00	USER	38.00	7.99	4.00	421.90	DROP TOP PLUG.
Event	22	Pump Displacement	Pump Displacement	6/26/2019	04:52:00	USER	1.00	8.08	0.00	426.60	337 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BBLS WIRH MMCR, REMAINING WITH BIOCIDIE. LAST 50 BBLS FRESH WATER.
Event	23	Bump Plug	Bump Plug	6/26/2019	05:40:00	USER	2178.00	8.14	2.90	350.20	BUMP PLUG @ 2407 PSI 500 OVER FINAL LIFT PRESSURE.

Event	24	Other	Other	6/26/2019	05:43:00	USER	2992.00	8.15	0.80	351.10	PRESSURE UP/ BURST DISC @ 3300 PSI AND PUMP 4 BBLs WET SHOE.
Event	25	Shutdown	Shutdown	6/26/2019	05:44:00	USER	1985.00	8.14	2.80	353.10	
Event	26	Check Floats	Check Floats	6/26/2019	05:45:00	USER	1901.00	8.13	0.00	355.70	FLOATS HELD. 2.5 BBLs BACK
Event	27	End Job	End Job	6/26/2019	05:47:48	COM4	5.00	8.10	0.00	0.00	
Event	28	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/26/2019	05:50:00	USER					HELD JSA PRIOR TO RIG DOWN

3.0 Attachments

3.1 Verdad Timbro 9-59 8B-9-9 Production Chart

