

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS-EBUS

Ft. Lupton District, COLORADO

Vic West 20W-20-02 Production

Job Date: Tuesday, January 11, 2022

Sincerely,

Meghan Van Zyl

Legal Notice

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Table of Contents

Cementing Job Summary 4

 Executive Summary 4

Real-Time Job Summary 7

 Job Event Log..... 7

Attachments..... 10

 Real Time iCem Job Chart 10

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Vic West 20W-20-02** 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.

Approximately 52 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

Sold To #: 369404		Ship To #: 3913468		Quote #:		Sales Order #: 0907614517				
Customer: EXTRACTION OIL & GAS-EBUS						Customer Rep: Danny				
Well Name: VIC WEST				Well #: 20W-20-2		API/UWI #: 05-123-48280-00				
Field: WATTENBERG		City (SAP): SEVERANCE		County/Parish: WELD		State: COLORADO				
Legal Description: SE NE-20-7N-67W-2288FNL-274FEL										
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 140						
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Kyle Bath						
Job										
Formation Name										
Formation Depth (MD)		Top				Bottom				
Form Type				BHST						
Job depth MD		16662ft		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		9.625	8.835	40			0	1655	0	1655
Casing		5.5	4.892	17			0	16649	0	7337
Open Hole Section			8.5				1655	16662	1655	7337
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5			16649		Top Plug	5.5		HES	
Float Shoe	5.5					Bottom Plug	5.5		HES	
Float Collar	5.5					SSR plug set	5.5		HES	
Insert Float	5.5					Plug Container	5.5		HES	
Stage Tool	5.5					Centralizers	5.5		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	Tuned Prime	TUNED PRIME CEMENT SPACER SYS	50	bbl	11.5	3.73				
Fluid Data										
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	Cap	SBM CEM ELASTICEM™ SYS	550	sack	13	1.66		8	8.3	

0.35 %		SCR-100, 1200 LB BAG - (1126328)								
8.30 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	FDP-C1371 SYS	SBM CEM FDP-C1371 SYS	630	sack	13	1.55		6	7.21	
7.21 Gal		FRESH WATER								
5 %		CHANNELFIX, 44 LB BAG - (1107429)								
0.27 %		SCR-100, 1200 LB BAG - (1126328)								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	ElastiCem	SBM CEM ELASTICEM™ SYS	1435	sack	13.2	1.59		8	7.76	
0.65 %		HR-5, 50 LB SK (100005050)								
7.76 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
5	Displacement	Displacement	386	bbl	8.33			8		
Cement Left In Pipe										
Cement Left In Pipe		Amount	5 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/m ³ XXXX			Disp. Temperature: ## °F °C					
Plug Bumped?		Yes/No	Bump Pressure: ##### psi MPa			Floats Held? Yes/No				
Cement Returns: ## bbl m ³		Returns Density: ## lb/gal kg/m ³			Returns Temperature: ## °F °C					
Comment										

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq No.	Activity	Graph Label	Date	Time	Dwnhole Density (ppg)	Cmb Pump Rate (bbl/min)	Pump A Pressure (psi)	Cmb Stg Total (bbl)	Comments
1	Call Out	Call Out	1/10/2022	16:00:00					CREW CALLED OUT, REQUESTED ON LOCATION 02:00
2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	1/10/2022	21:15:00					PRE CONVOY SAFETY MEETING WITH ALL HES EE
3	Crew Leave Yard	Crew Leave Yard	1/10/2022	21:30:00					CREW DEPART YARD FOR LOCATION
4	Arrive At Loc	Arrive At Loc	1/10/2022	23:00:00					ARRIVE ON LOCATION, RECIEVED NUMBERS FROM CO REP, TD 16662, TP 16649, SJ 5, CSG 5.5 17#, PREV CSG 9 5/8, HOLE 8.5, MUD 10.1, TVD 6852, 264 CENTALIZERS, WATER TEST, TEMP 75, CHLORIDES 0, PH 7
5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	1/10/2022	23:30:00					SAFETY MEETING WITH ALL HES EE TO ASSESS ALL HAZARDS
6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	1/10/2022	23:45:00					PRE RIG UP SAFETY MEETING WITH ALL HES EE
7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	1/11/2022	04:45:00	0.00	0.00	11.17	0.30	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
8	Start Job	Start Job	1/11/2022	05:20:08	7.56	0.00	9.52	0.00	START RECORDING DATA
9	Drop Bottom Plug	Drop Bottom Plug	1/11/2022	05:25:31	8.57	0.00	22.91	0.00	LAUNCH BOTTOM PLUG

10	Test Lines	Test Lines	1/11/2022	05:27:40	9.27	0.00	4904.64	1.26	TEST LINES TO 4950 PSI
11	Pump Spacer 1	Pump Spacer 1	1/11/2022	05:29:29	8.95	0.00	44.18	0.00	PUMP 50 BBLS TUNED PRIME SPACER 11.5 PPG, 4.5 BPM, 250 PSI
12	Pump Cap Cement	Pump Cap Cement	1/11/2022	05:44:17	12.46	3.67	180.19	0.06	MIX AND PUMP 550 SKS 163 BBLS CAP CEMENT 13 PPG, 1.66 FT3/SK, 8.3 GAL/SK, 8.5 BPM 950 PSI, CALCULATED TOCC SURFACE
13	Pump Lead Cement	Pump Lead Cement	1/11/2022	06:03:55	13.01	8.71	795.58	0.07	MIX AND PUMP 630 SKS 174 BBLS LEAD CEMENT 13 PPG, 1.55 FT3/SK, 7.21 GAL/SK, 8.5 BPM 1000 PSI, CALULATED TOLC 2425
14	Pump Tail Cement	Pump Tail Cement	1/11/2022	06:23:30	12.85	8.57	869.16	0.14	MIX AND PUMP 1435 SKS 406 BBLS TAIL CEMENT 13.2 PPG, 1.59 FT3/SK, 7.76 GAL/SK 8.5 BPM 900 PSI, CALCULATED TOTC 6690
15	Shutdown	Shutdown	1/11/2022	07:10:59	-0.15	0.00	60.99	397.26	SHUTDOWN, WASH PUMPS AND LINES TO PIT
16	Drop Top Plug	Drop Top Plug	1/11/2022	07:20:36	7.46	0.00	8.66	13.72	LAUNCH TOP PLUG
17	Pump Displacement	Pump Displacement	1/11/2022	07:20:40	7.46	0.00	8.71	0.00	PUMP 386 BBLS MMCR DISPLACEMENT 10 BPM 2950 PSI, RECIEVED 50 BBLS SPACER AND 52 BBLS CEMENT TO SURFACE
18	Bump Plug	Bump Plug	1/11/2022	08:09:03	8.74	4.02	2524.41	375.16	BUMPED PLUG AT 2500 PSI TOOK TO 3000 PSI
19	Check Floats	Check Floats	1/11/2022	08:11:41	8.71	0.00	3020.69	375.89	FLOATS HELD TOOK 4 BBLS BACK
20	End Job	End Job	1/11/2022	08:13:29	8.35	0.00	-4.71	0.00	STOP RECORDING DATA
21	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	1/11/2022	08:16:00					PRE RIG DOWN SAFETY MEETING WITH ALL HES EE
22	Depart Location Safety Meeting	Depart Location Safety Meeting	1/11/2022	09:45:00					PRE DEPARTURE SAFETY MEETING WITH ALL HES EE

23	Crew Leave Location	Crew Leave Location	1/11/2022	10:15:00	THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW
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3.0 Attachments

3.1 Real Time iCem Job Chart

