HALLIBURTON

iCem® Service

VERDAD RESOURCES LLC-EBUS

Ft. Lupton District, co

For: Ashley Belvin

Date: Saturday, June 29, 2024

SPEED GOAT FED

Weld / New Raymer

Precision 464 - Speed Goat Fed 3432-07H Production

Job Date: Saturday, June 29, 2024

Sincerely,

Georgii Kamenskii

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Speed Goat Fed 3432-07H – 5.5" Production.** 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.

- **Quality of circulation – Prejob 100% , While pumping Cement 100%, While Pumping Displacement 100%**
- **Final Circulating Pressure and Pump Rate 2000 PSI @ 4 BPM**
- **Returns to Surface 50 CMT**

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 Rockies Cement Team

1.2 Job Overview

Job Details	
API #:	**05-123-52506-00**
City, County:	**NEW RAYMER, WELD**
SO#:	**0909429380**

Job Times		
	DAY	TIME
Requested Time On Location:	6/29/24	15:30
Called Out Time:	6/29/24	09:00
Arrived On Location:	6/29/24	16:00
Job Started:	6/29/24	18:40
Job Completed:	6/29/24	22:30
Departed Location:	6/29/24	11:30

	Description	Units	Value
1	Surface temperature at the time of the job	degree F	82
2	Mud type (OBM, WBM, Synthetic, Water, Brine)	-	OBM
3	Mud density	Ppg	9.7
4	Casing set depth (shoe)	Ft	20266.8
5	TVD	Ft	5780
6	Float collar depth	Ft	20218.8
7	Length of rate hole	Ft	37.23
8	Previous casing shoe depth	Ft	1580
9	Pre-job mud circulation time	hh:mm	01:45

10	Pre-job mud circulation rate	bpm	9.5
11	Pre-job mud circulation volume	bbls	998
12	Mud circulation pressure at start of cement	psi	1070
13	Annual flow before the start of job	Y/N	Yes
14	Pipe movement during cement job	Y/N	Yes
15	Calculated displacement	bbls	448.86
16	Job displaced by	Rig/HES	Hes
17	Estimated returns % during job	%	100
18	Fluid returns to surface	Spacer/Cement, bbls	60
19	Final circulation pressure, rate prior to plug bump	psi @ bpm	2000 @ 4
20	Number of Centralizers	-	209
21	Number of bottom plugs	-	1
22	Number of trucks used preparing/during job	-	4
23	Add hours? If Yes, put #	Y/N and hours	N
24	NPT? If Yes, put #	Y/N and hours	N

1.1 Water Field Test

	Recorded Value	Unit	Acceptable Limit	Potential Problems if Values Exceed the Limit
pH	7		6.0 - 8.0	Chemicals in water can cause severe retardation
Temperature	75	F	60 - 80 F	Can can pre-mature setting of cement
Chlorides	<300	ppm	3000 ppm	Can shorten thickening time

1.2 Actual Pump Schedule

Stage 1

	Density (ppg)	Volume (bbls)	Yield (ft3/sk)	Water Requirement (gal/sk)	Bulk Sacks (sks)	Total Water (gals)
Spacer Fluid	11.5	100	2.57	16.2	218.48	3539
Cap Cement						
Lead Cement	13.2	332.74	1.57	7.78	1190	9258
Tail Cement	13.2	570.49	1.82	8.81	1760	15506
Top Plug						
Displacement Fluid	8.33	448.86				18,852.12

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq. No.	Activity	Graph Label	Date	Time	Comments
1	Call Out	Call Out	6/29/2024	09:00:00	Verdad - Precision 464 - Speed Goat Fed 3432-07H Production 5.5" CASING JOB - On location 6/29/24 @ 15:30 PM
2	Safety Meeting - Service Center or other Site	Safety Meeting - Service Center or other Site	6/29/2024	11:50:00	Review Journey Management And Route With Crew Members
3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/29/2024	12:00:00	Depart From Yard
4	Arrive At Loc	Arrive At Loc	6/29/2024	16:00:00	Talk To Company Man (Joe Madson) : TD = 20304', TP = 20266.8', ST = 48', OH = 8.5", CSG = 5.5" 20#, Previous Casing 9&5/8" 36# Set @ 1580', WF = OBM @ 9.7#, Test Water = pH – 7, Chlorides - < 290 ppm, 55 F.
5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	6/29/2024	16:10:00	Spot Equipment
6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/29/2024	16:20:00	Review JSA With Crew Members
7	Rig-Up Equipment	Rig-Up Equipment	6/29/2024	16:30:00	Rigged Up All Iron And Hoses Needed For CMT Job With No Issues Or Incidents.
8	Rig-Up Completed	Rig-Up Completed	6/29/2024	17:30:00	Rigged Up All Iron And Hoses Needed For CMT Job With No Issues Or Incidents.
9	Rig-Up Completed	Rig-Up Plug Container	6/29/2024	17:40:00	Rig Up Plug Container And Rig Floor To Circulate With Rig Pumps. Rig Circulated From 1700 To 18:45 At 400 GPM (9.5 BPM) With 1070 psi, Good Returns.

10	Safety Meeting - Pre Job	Safety Meeting - Pre Job	6/29/2024	17:45:00	Review Job Procedure And JSA With Rig Hands, Co. Man, And HES Members
11	Start Job	Start Job	6/29/2024	18:40:11	Started Recording Data
12	Test Lines	Test Lines	6/29/2024	18:44:11	Pressure Tested Lines To 5900
13	Pump Spacer	Pump Spacer	6/29/2024	18:51:42	Pumped Tuned Prime Spacer @ 6 BPM With Avg 350 PSI 11.5 PPG 100 BBLS 2.57 Y 16.2 WR 218.48 SKS 3539 Mix Gallons
14	Check Weight	Check Weight	6/29/2024	18:58:20	Verified Weight With Pressurized Scale
15	Drop Bottom Plug	Drop Bottom Plug	6/29/2024	19:09:23	Verified Plug Dropped With Company Rep
16	Pump Lead Cement	Pump Lead Cement	6/29/2024	19:11:45	Pumped ElastiCem Lead At 8 BPM With 330 PSI Avg 13.2 PPG 332.74 BBLS 1.57 Y 7.78 WR 1190 SKS 9258 Mix Gallons
17	Pump Tail Cement	Pump Tail Cement	6/29/2024	19:56:37	Pumped NeoCem Tail At 8 BPM With 500 PSI Avg 13.2 PPG 570.49 BBLS 1.82 Y 8.81 WR 1760 SKS 15506 Mix Gallons Top Of Cmt Set At 6310.18"
18	Check Weight	Check Weight	6/29/2024	20:27:29	Verified Weight With Pressurized Scale
19	Check Weight	Check Weight	6/29/2024	20:52:28	Verified Weight With Pressurized Scale
20	Clean Lines	Clean Lines	6/29/2024	21:25:27	Washed Up Cmt Unit Into Open Top
21	Drop Top Plug	Drop Top Plug	6/29/2024	21:35:22	Verified Plug Dropped With Company Rep
22	Pump Displacement	Pump Displacement	6/29/2024	21:35:58	Pumped Displacement At 9 BPM Avg With 2500 Psi Avg First 40 BBls With MMCR Followed By Displacement Chems Throughout. Saw Spacer At 300 To Bring 50 BBLs Of Lead CMT To Surface. Total Displacement 448.8
23	Bump Plug	Bump Plug	6/29/2024	22:25:04	Bumped Plug At 4 BPM Final Circulating Pressure 2000 Brought Pressure To 2600
24	Bleed Casing	Bleed Casing	6/29/2024	22:30:31	Bled Pressure Back To Zero And Got 4 bbls Back
25	Check Floats	Check Floats	6/29/2024	22:30:55	Floats Held Good.
26	End Job	End Job	6/29/2024	22:32:30	Stopped Recording Data

27	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/29/2024	22:40:05	Review JSA With HES Crew Members
28	Rig-Down Equipment	Rig-Down Equipment	6/29/2024	22:45:09	Rig Down Iron, Plug Container, And Hoses Used On Job
29	Rig-Down Completed	Rig-Down Completed	6/29/2024	23:10:00	All Equipment Rigged Down With No Issues Or Incidents
30	Safety Meeting - Departing Location	Safety Meeting - Departing Location	6/29/2024	23:20:00	Review Journey Management And Route With Crew Members
31	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	6/29/2024	23:30:00	Depart location

3.0 Attachments

3.1 Real Time Graphs