

# HALLIBURTON

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## **VERDAD OIL & GAS CORP**

**For: Jason Hansen**

Date: Tuesday, July 18, 2017

Truck Operator 11826999 Elite Spencer Torrey

Job Date: Tuesday, July 18, 2017

Sincerely,

**Steve Markovich**

## Legal Notice

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## 1.0 Real-Time Job Summary

### 1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	DS Pump Press <i>(psi)</i>	Comb Pump Rate <i>(bbl/min)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Start Job	Start Job	7/18/2017	03:16:29	COM4	8.35	2.00	0.00	15.80	TD 14815' TP 14805' FC 14721.92' 5 1/2 20# csg 8 1/2 openhole 9 5/8 surcsg 1744'. Water test. PH 7 Hardness >70 Iron 0 Sulfates >200 Chlorides 0
Event	2	Test Lines	Test Lines	7/18/2017	03:22:50	COM4	8.41	61.00	0.00	18.90	Perform 500psi kick out test. Kick outs work. Bring pressure up to 5000psi and hold.
Event	3	Check Weight	Check Weight	7/18/2017	03:57:19	COM4	8.35	3.00	0.00	3.40	Weight verified by pressurized scales
Event	4	Pump Spacer 1	Pump Spacer 1	7/18/2017	04:00:14	COM4	8.11	11.00	1.30	3.50	Pump 40bbls of 11.5ppg 3.82 yield Tuned Spacer. Added 30 gallons of Dual surf B and Musol A on the fly, Pumped at 2.5 bbl/min 55psi.
Event	5	Check Weight	Check Weight	7/18/2017	04:02:07	COM4	11.88	131.00	2.50	3.10	Weight verified by pressurized scales
Event	6	Drop Bottom Plug	Drop Bottom Plug	7/18/2017	04:17:37	COM4	11.62	27.00	0.00	37.20	Plug loaded into HES head and verified when plug was dropped.
Event	7	Pump Cement	Pump Cement	7/18/2017	04:20:10	COM4	12.32	29.00	2.10	0.00	Pump 311.2bbls (1113sks) of 13.2ppg 1.57yield Lead Cement. Pumped at 8bbl/min 471psi.

Event	8	Check Weight	Check Weight	7/18/2017	04:22:49	COM4	13.26	149.00	4.00	8.10	Weight verified by pressurized scales.
Event	9	Check Weight	Check Weight	7/18/2017	04:30:00	COM4	13.31	493.00	8.00	57.50	Weight verified by pressurized scales.
Event	10	Pump Tail Cement	Pump Tail Cement	7/18/2017	05:06:28	COM4	13.40	543.00	8.10	344.90	Pump 331.35bbbls (912sks) of 13.2ppg 2.04yield Tail Cement. Pumped at 8bbl/min 633psi.
Event	11	Check Weight	Check Weight	7/18/2017	05:08:41	COM4	13.12	635.00	8.00	17.70	Weight verified by pressurized scales.
Event	12	Shutdown	Shutdown	7/18/2017	05:55:36	COM4	13.18	140.00	0.00	351.50	Shutdown to clean pumps and lines and have rig blow down lines.
Event	13	Drop Top Plug	Drop Top Plug	7/18/2017	06:14:34	COM4	8.22	-4.00	0.00	362.60	Plug loaded into HES head and drop was verified by company rep.
Event	14	Pump Displacement	Pump Displacement	7/18/2017	06:14:40	COM4	8.22	-4.00	0.00	362.60	Pump 325bbbls of H2O. First 20bbbls with MMCR and the next 305 with biocide added. Pumped at 8bbbls/min. At 140 away slowed down to 6bbbls/min. Spacer to surface at 220 away. Cement to surface at 260 away bringing 65bbbls of cement to surface.
Event	15	Bump Plug	Bump Plug	7/18/2017	07:21:21	COM4	8.31	2529.00	3.00	334.50	Final lift pressure was 2529psi. Took 500psi over and re set kick outs to shift sleeve.
Event	16	Pressure Up Well	Pressure Up	7/18/2017	07:22:13	USER	8.32	2909.00	0.00	334.90	Pressure up to shift sleeve. Sleeve shifted at 4825psi. Pumped 5bbl wet shoe at 4bbl/min and 2500psi.
Event	17	Check Floats	Check Floats	7/18/2017	07:26:50	USER	8.30	2204.00	0.00	342.40	Opened release line to check floats. After 2bbbls of

water back to the truck the  
floats held.

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Event	18	End Job	End Job	7/18/2017	07:29:14	COM4
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Thank you Steve Markovich  
and Crew

## 2.0 Attachments

### 2.1 Truck Operator 11826999 Elite Spencer Torrey-Custom Results.png



3.0 Custom Graphs

3.1 Custom Graph

