

# HALLIBURTON

iCem® Service

**NICKEL ROAD OPERATING LLC**

**For: Hanns Carrey**

**Date: Tuesday, September 08, 2020**

**Surface casing**

**Dehaan 3X-HNB-16-07-65**

**So#906693924**

**Job Date: Tuesday, September 08, 2020**

**Sincerely,**

**Vaughn Oteri and crew**

The Road to Excellence Starts with Safety

Sold To #: 382767	Ship To #: 3936792	Quote #: 0022758264	Sales Order #: 0906693924
Customer: NICKEL ROAD OPERATING LLC		Customer Rep: Hans Carrey	
Well Name: DEHAAN	Well #: 3X-HNB-16-07-65	API/UWI #: 05-123-49440-00	
Field: WATTENBERG	City (SAP): AULT	County/Parish: WELD	State: COLORADO
Legal Description: NW NW-17-7N-65W-1244FNL-944FWL			
Contractor:		Rig/Platform Name/Num: Cartel 15	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX41066		Srcv Supervisor: Vaughn Oteri	
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1650ft
Water Depth	Job Depth TVD
Perforation Depth (MD)	Wk Ht Above Floor
	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		16	15.376	55			0	80		
Casing		9.625	8.921	36	LTC	J-55	0	1547		
Open Hole Section			13.5				80	1547		

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	9.625				Top Plug	9.625	1		
Float Shoe	9.625			1547	Bottom Plug	9.625			
Float Collar	9.625			1507	SSR plug set	9.625			
Insert Float	9.625				Plug Container	9.625			
Stage Tool	9.625				Centralizers	9.625			

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	Fresh Water	Fresh Water With red dye	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	600	sack	13.5	1.74		6	9.17	

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pump A Pressure (psi)	Dwihole Density (ppg)	Cmb Stg Total (bbbl)	Cmb Pump Rate (gpm)	Comments
Event	1	Call Out	Call Out	9/7/2020	09:00:00	USER					Call out from ARC hub.
Event	2	Crew Notified Date/Time	Crew Notified Date/Time	9/7/2020	12:30:00	USER					Advised From ARC hub that rig was having issues and on location was pushed back.
Event	3	Arrive At Loc	Arrive At Loc	9/7/2020	18:00:00	USER					Arrived on location met with company rep to discuss job process and concerns. Advised that rig is having some issues and they had about 800 feet to drill.
Event	4	Crew Leave Yard	Crew Leave Yard	9/7/2020	19:00:00	USER					Called for crew to leave yard.
Event	5	Start Job	Start Job	9/8/2020	06:03:01	NONE	-4.42	8.46	10.07	0.0	Held pre-job safety meeting with all hands on location to discuss job process and hazards.
Event	6	Test Lines	Test Lines	9/8/2020	06:06:53	NONE	17.23	8.54	0.00	0.0	Pressure tested pumps and lines found no leaks and pressure held good. 3650psi
Event	7	Other	Other	9/8/2020	06:09:46	NONE	6.00	8.52	0.05	0.0	Pumped fresh water to break circulation. 10bbbl at 3.0bpm 120psi
Event	8	Pump Spacer 1	Pump Spacer 1	9/8/2020	06:13:05	NONE	139.17	8.62	0.03	128.1	Mixed and pumped 10bbbl of fresh water at 5.0bpm 250psi
Event	9	Pump Cement	Pump Cement	9/8/2020	06:19:08	NONE	196.63	8.72	0.04	212.0	Mixed and pumped 6000sk or 185bbbl of 13.5ppg Y-1.74 G/sk-9.17 Swiftcem at 8.0bpm 250psi

# HALLIBURTON

Customer: NICKEL ROAD OPERATING LLC  
 Job: Nickel Road Dehaan 3X-HNB-16-07-65 Surface  
 Case: Case 1

Event	10	Check Weight	Check Weight	9/8/2020	06:21:40	NONE	188.35	14.27	11.65	171.2	Confirmed weight on scales
Event	11	Shutdown	Shutdown	9/8/2020	06:47:02	NONE	35.64	16.18	201.11	0.0	
Event	12	Drop Top Plug	Drop Top Plug	9/8/2020	06:47:46	NONE	6.47	15.92	201.11	0.0	Released plug witnessed by company rep.
Event	13	Pump Displacement	Pump Displacement	9/8/2020	06:48:12	NONE	2.86	15.95	0.00	0.0	Pumped 116.5bbl of fresh water to displace cement.
Event	14	Bump Plug	Bump Plug	9/8/2020	07:08:18	NONE	816.75	7.82	113.91	0.0	Bumped plug 500psi over final pump pressure. 3.0bblpm 610psi
Event	15	End Job	End Job	9/8/2020	07:10:49	NONE	4.97	7.76	113.91	0.0	50bbl of cement back to surface