

HALLIBURTON

iCem® Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Sunday, June 22, 2014

ANADARKO DUGITE 13N-35HZ SURFACE

ANADARKO DUGITE 13N-35HZ SURFACE

Sincerely,

Derek Trier

Table of Contents

1.1	Executive Summary	3
1.2	Cementing Job Summary	4
1.3	Planned Pumping Schedule	6
1.4	Job Overview	6
1.5	Job Event Log	7
2.0	Custom Graphs	8
2.1	Custom Graph	8
3.0	Appendix	10

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Dugite 13N-35HZ cement Surface** 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.

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 [Brighton]

Job Times

	Date	Time	Time Zone
Requested Time On Location	5/19	1230	MST
On Location	5/19	1700	
Job Started	5/19	1813	
Job Completed	5/19	2005	
Departed Location	5/19	2100	

1.2 Cementing Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3472320		Quote #:		Sales Order #: 0901352000				
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep:						
Well Name: DUGITE		Well #: 13N-35HZ		API/UWI #: 05-123-39329-00						
Field: WATTENBERG		City (SAP): ION		County/Parish: WELD		State: COLORADO				
Legal Description: SW SW-23-2N-67W-1020FSL-590FVL										
Contractor:				Rig/Platform Name/Num: Majors 42						
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX46524				Srvc Supervisor: Joseph Fantasia						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1320ft		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	8.921	36		J-55	0	1320		0
Open Hole Section			13.5				0	1330		
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			1320		Top Plug	9.625		HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625					SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625		HES	
Stage Tool	9.625					Centralizers	9.625		HES	
Miscellaneous Materials										
Gelling Agt	Conc		Surfactant	Conc		Acid Type	Qty	Conc		
Treatment Fld	Conc		Inhibitor	Conc		Sand Type	Size	Qty		
Fluid Data										
Stage/Plug #: 1										
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	
1	Mud Flush III (Powder)	Mud Flush III	12	bbl	8.4			5		
42 gal/bbl		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	

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Cementing Job Summary

2	Lead Cement	SWIFTCEM (TM) SYSTEM	476	sack	14.2	1.54		6	7.64
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	Displacement	Displacement	102	bbl	8.33			5	
Cement Left in Pipe		Amount	40 ft		Reason		Shoe Joint		
Comment									

1.3 Planned Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water	8.33	3.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.40	3.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh Water	8.33	3.00	10.0 bbl	10.0 bbl
1	4	Cement Slurry	SwiftCem	14.20	5.00	476.0 sacks	476.0 sacks

1.4 Job Overview

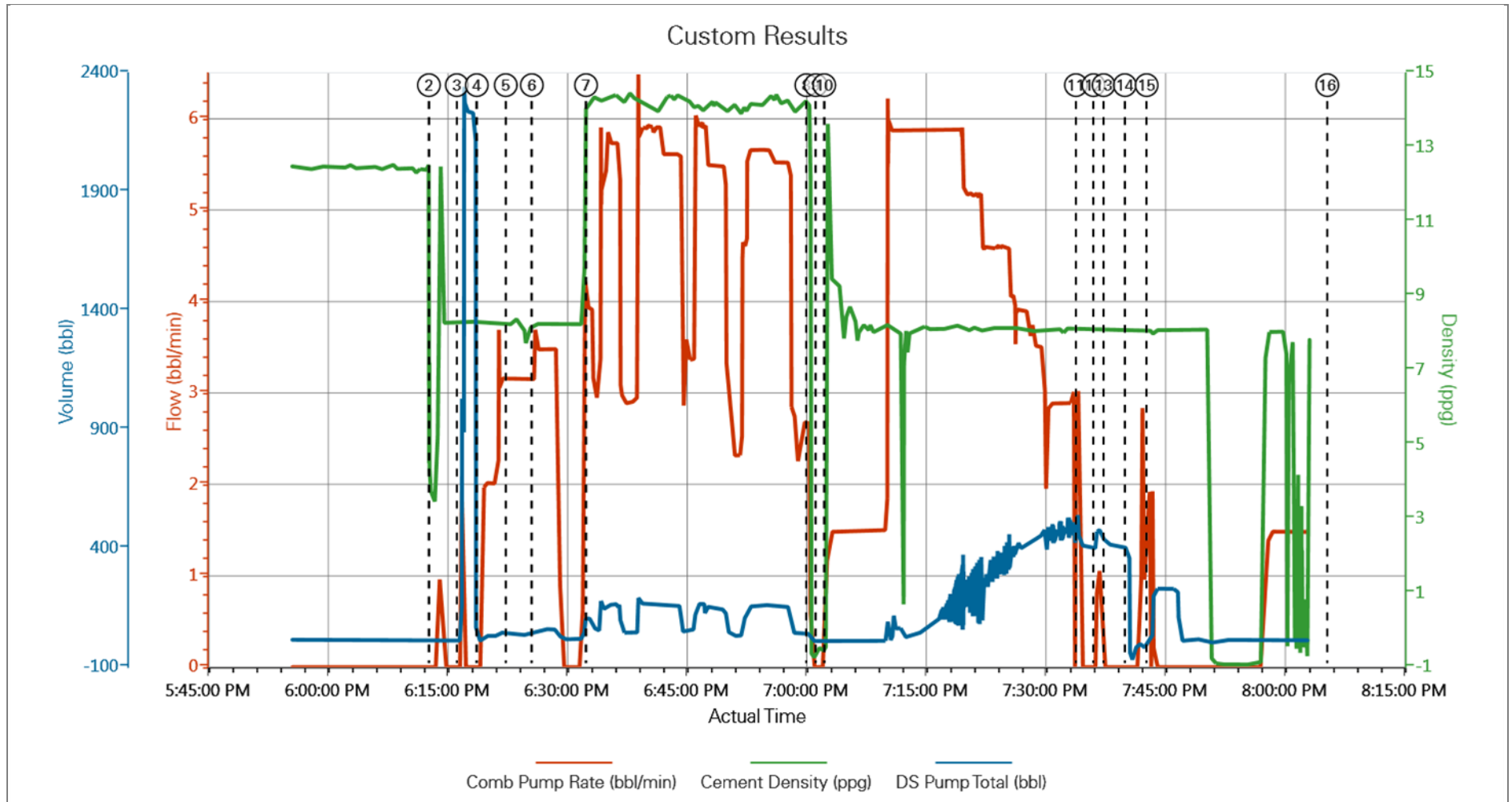
		Units	Description
1	Surface temperature at time of job	°F	
2	Mud type (OBM, WBM, SBM, Water, Brine)	-	WBM
3	Actual mud density	lb/gal	
4	Actual mud Plastic Viscosity (PV)	cP	
5	Actual mud Yield Point (YP)	lb _f /100ft ²	
6	Actual mud 30 min Gel Strength	lb _f /100ft ²	
7	Time circulated before job	HH:MM	
8	Mud volume circulated	Bbls	
9	Rate at which well was circulated	Bpm	
10	Pipe movement during hole circulation	Y/N	N
11	Rig pressure while circulating	Psi	
12	Time from end mud circulation to start of job	HH:MM	
13	Pipe movement during cementing	Y/N	N
14	Calculated displacement	Bbls	102
15	Job displaced by	Rig/HES	HES
16	Annular flow before job	Y/N	N
17	Annular flow after job	Y/N	N
18	Length of rat hole	Ft	
19	Units of gas detected while circulating	Units	
20	Was lost circulation experienced at any time?	Y/N	N

1.5 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Combined Pump Rate (bbl/min)	Density (ppg)	Driv-Side Pump Total (bbl)	Comment
Event	1	Arrive At Loc	Arrive At Loc	5/19/2014	17:00:00	USER				HES REQUESTED ON LOCATION AT 1230. ARRIVED FROM ANOTHER PREVIOUS JOB AT 1700. RIG WAITING ON HES 4:30 HRS. PERFORM SITE ASSESSMENT.
Event	2	Start Job	Start Job	5/19/2014	18:13:07	COM5	0.00	3.54	7.8	PERFORM PRE JOB SAFETY MEETING WITH ALL PRESENT PERSONELL PRIOR TO JOB.
Event	3	Test Lines	Test Lines	5/19/2014	18:16:37	COM5	0.00	8.27	11.7	PRESSURE TEST LINES TO 2000 PSI.
Event	4	Pump Spacer 1	Pump Spacer 1	5/19/2014	18:19:07	COM5	0.00	8.32	8.8	PUMP 10 BBLS WATER
Event	5	Pump Spacer 2	Pump Spacer 2	5/19/2014	18:22:45	COM5	3.16	8.21	48.9	PUMP 12 BBLS MUDFLUSH
Event	6	Pump Spacer 1	Pump Spacer 1	5/19/2014	18:26:01	COM5	3.43	8.20	57.6	PUMP 10 BBLS WATER
Event	7	Pump Cement	Pump Cement	5/19/2014	18:32:49	COM5	3.90	14.28	103.6	PUMP 130 BBLS (476 SKS) SWIFTCEM MIXED AT 14.2 PPG USING SUPPLIED WATER,.
Event	8	Shutdown	Shutdown	5/19/2014	19:00:26	USER	2.58	14.13	40.1	
Event	9	Drop Top Plug	Drop Top Plug	5/19/2014	19:01:37	COM5	0.00	-0.46	10.7	TOP PLUG PRELOADED
Event	10	Pump Displacement	Pump Displacement	5/19/2014	19:02:41	COM5	1.27	13.14	20.5	GOOD RETURNS THROUGHOUT. CEMENT TO SURFACE AT 97 BBLS OUT OF 102 BBLS TOTAL DIPLACEMENT PUMPED. APPROX 5 BBLS CEMENT TO SURFACE.
Event	11	Shutdown	Shutdown	5/19/2014	19:34:14	USER	0.00	8.11	419.2	SHUTDOWN AFTER 1.5 BBLS OVER CALCULATED DISPLACEMENT.
Event	12	Pump Displacement	Pump Displacement	5/19/2014	19:36:26	USER	0.79	8.13	473.9	PUMP .5 BBL MORE.
Event	13	Shutdown	Shutdown	5/19/2014	19:37:42	USER	0.00	8.08	423.1	SHUTDOWN. DID NOT BUMP PLUG.
Event	14	Check Floats	Check Floats	5/19/2014	19:40:22	USER	0.00	8.10	403.5	FLOATS HELD .5 BBL BACK
Event	15	Shut In Well	Shut In Well	5/19/2014	19:43:06	USER	0.42	8.07	9.8	PRESSURE UP TO 200 PSI AND SHUT IN WELL PER CUSTOMER REQUEST.
Event	16	End Job	End Job	5/19/2014	20:05:45	USER				PERFORM PRE RIG DOWN SAFETY MEETING WITH CREW.

2.0 Custom Graphs

2.1 Custom Graph



3.0 Appendix
