

HALLIBURTON

iCem[®] Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Sunday, May 25, 2014

Small Eye 14C-35HZ

Case 1

Sincerely,

Derek Trier

Table of Contents

1.1	Executive Summary	3
1.2	Cementing Job Summary	4
1.4	Planned Pumping Schedule	6
1.5	Job Overview	6
1.6	Job Event Log	7
2.0	Custom Graphs	8
2.1	Custom Graph	8
3.0	Appendix	9

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Small Eye 14C-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	05-25	1530	MT
Called Out	05-25	1030	MT
On Location	05-25	1500	MT
Job Started	05-25	1649	MT
Job Completed	05-25	1816	MT
Departed Location	05-25	1930	MT

1.2 Cementing Job Summary

Sold To #: 300466		Ship To #: 3473074		Quote #:		Sales Order #: 0901362714							
Customer: ANADARKO PETROLEUM CORP - EBUS						Customer Rep:							
Well Name: SMALL EYED				Well #: 14C-35HZ			API/UWI #: 05-123-39350-00						
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD			State: COLORADO						
Legal Description: SE SW-23-2N-67W-1020FSL-1955FWL													
Contractor:				Rig/Platform Name/Num: Majors 29									
Job BOM: 7521													
Well Type: HORIZONTAL GAS													
Sales Person: HALAMERICA\HB47901				Srvc Supervisor:									
Job													
Formation Name													
Formation Depth (MD)		Top		Bottom									
Form Type				BHST									
Job depth MD		1306ft		Job Depth TVD									
Water Depth				Wk Ht Above Floor									
Perforation Depth (MD)				To									
Well Data													
	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	850					
Open Hole Section			13.5				0	850					
Tools and Accessories													
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make				
Guide Shoe	9.625	1		850		Top Plug	9.625	1	HES				
Float Shoe	9.625	1				Bottom Plug	9.625	1	HES				
Float Collar	9.625	1				SSR plug set	9.625	1	HES				
Insert Float	9.625	1				Plug Container	9.625	1	HES				
	9.625	1				Centralizers	9.625	1	HES				
Miscellaneous Materials													
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty			
Treatment Fld		Conc				Conc		Sand Type					
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	Mud Flush III (Powder)	Mud Flush III	12	bbl	8.4				
42 gal/bbl									
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	Lead Cement	SWIFTCEM (TM) SYSTEM	486	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	97.5	bbl	8.33				
		Amount	42 ft						
Comment 7BBL OF CEMENT BACK TO SURFACE									

1.4 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	6.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.4	6.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh Water	8.33	6.00	10.0 bbl	10.0 bbl
1	4	Cement	SwiftCem	14.20	6.00	486 sacks	486 sacks

1.5 Job Overview

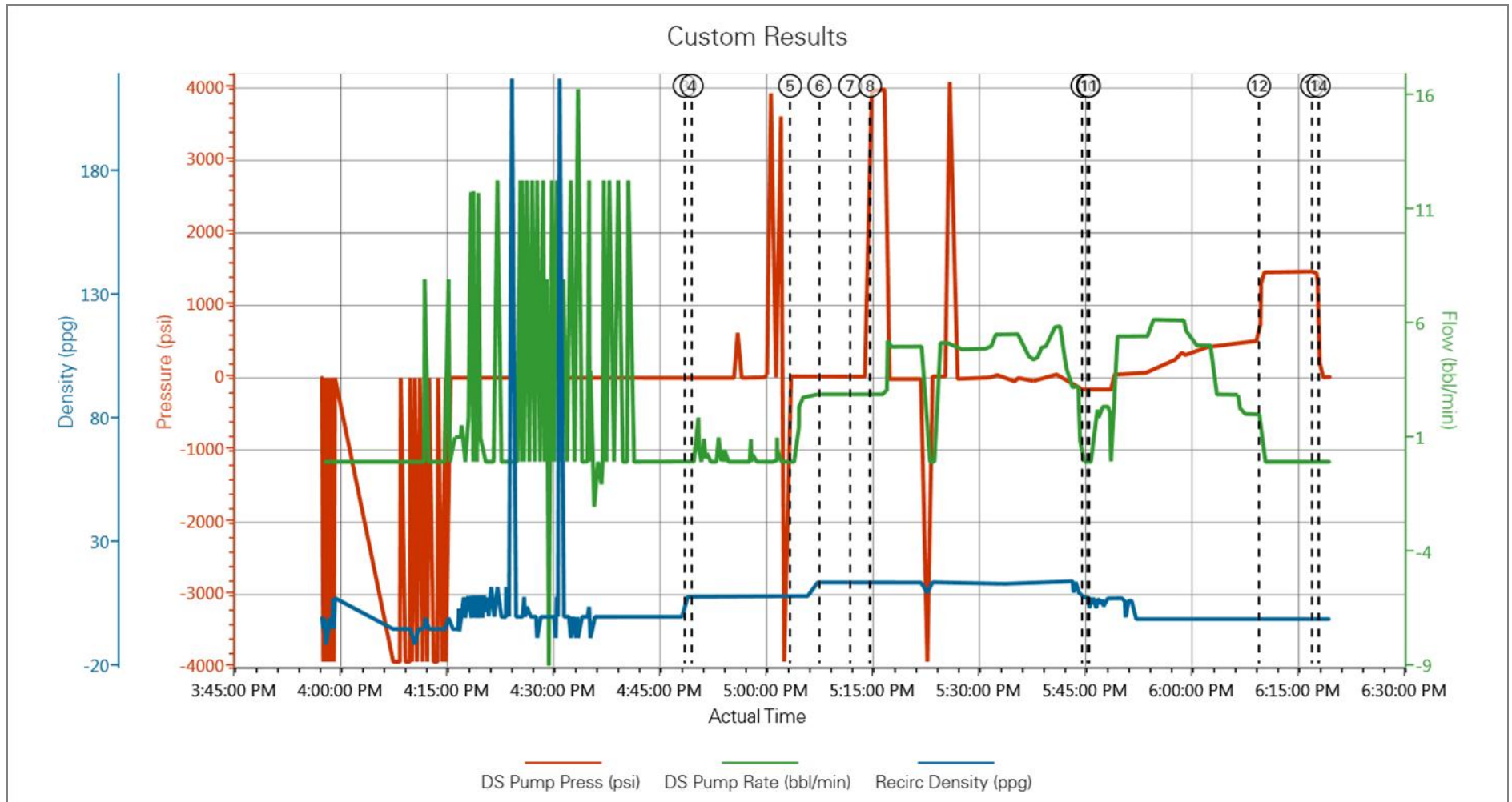
		Units	Description
1	Surface temperature at time of job	°F	65
2	Mud type (OBM, WBM, SBM, Water, Brine)	-	WBM
3	Actual mud density	lb/gal	9.0
4	Actual mud Plastic Viscosity (PV)	cP	
5	Actual mud Yield Point (YP)	lb _r /100ft ²	
6	Actual mud 30 min Gel Strength	lb _r /100ft ²	
7	Time circulated before job	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	00:20
13	Pipe movement during cementing	Y/N	N
14	Calculated displacement	Bbls	97.5
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	9
19	Units of gas detected while circulating	Units	
20	Was lost circulation experienced at any time?	Y/N	N

1.6 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Driv-Side Pump Rate (bbl/min)	Recirc Density (ppg)	Driv-Side Pump Total (bbl)	Comment
Event	1	Call Out	Call Out	5/25/2014	10:30:00	USER					CALL OUT FROM ARS OFFICE
Event	2	Arrive At Loc	Arrive At Loc	5/25/2014	15:00:00	USER					ARRIVE ON LOCATION MET WITH COMPANY REP TO DISCUSS JOB PROCESS AND CONCERNS
Event	3	Start Job	Start Job	5/25/2014	16:49:00	COM6	-1.97	0.00	8.06	12.3	PRELOADED PLUG INTO HEAD WITNESSED BY COMPANY REP ,HELD SAFTY MEETING IN DOG HOUSE WITH ALL HANDS ON LOCATION
Event	4	Test Lines	Test Lines	5/25/2014	16:50:00	COM6	-1.97	1.44	8.52	12.5	PRESSURE TESTED PUMPS AND LINES FOUND NO LEAKS AND PRESSURE HELD GOOD
Event	5	Pump Spacer 1	Pump Spacer 1	5/25/2014	17:03:53	COM6					PUMPED 10BBL OF FRESH WATER AT 3BPM 11PSI
Event	6	Pump Spacer 1	Pump Spacer 1	5/25/2014	17:08:00	COM6					MIXED 12BBL OF MUD FLUSH AT 3BPM 11PSI
Event	7	Pump Spacer 1	Pump Spacer 1	5/25/2014	17:12:20	COM6					PUMPED 10BBL OF FRESH WATER AT 3BPM 12PSI
Event	8	Other	PUMP CEMENT	5/25/2014	17:15:08	COM6					MIXED 133BBL OF 14.2PPG SWIFTCEM AT 6BPM 54PSI
Event	9	Other	SHUT DOWN	5/25/2014	17:45:03	COM6					
Event	10	Drop Plug	Drop Plug	5/25/2014	17:45:50	USER	-162.27	0.00	8.82	102.0	RELEASED PLUG WITNESSED BY COMPANY REP
Event	11	Pump Displacement	PUMP DISPLACEMENT	5/25/2014	17:46:00	USER	-158.32	0.00	8.80	102.0	PUMPED 97.5BBL OF FRESH WATER TO DISPLACE CEMENT
Event	12	Bump Plug	Bump Plug	5/25/2014	18:09:59	COM6					BUMPED PLUG 1000PSI OVER FINAL PUMP PRESSURE
Event	13	Other	CHECK FLOATS	5/25/2014	18:17:27	COM6					RELEASED PRESSURE BACK TO PUMP TRUCK TO CHECK FLOATS , FLOATS HELD GOOD
Event	14	End Job	End Job	5/25/2014	18:18:23	COM6					7BBL OF CEMENT BACK TO SURFACE

2.0 Custom Graphs

2.1 Custom Graph



3.0 Appendix

Insert additional information regarding the job here (i.e. bulk and pilot testing, pre-job modeling, etc....)