

EXXONMOBIL CORPORATION

HOUSTON, Texas

NPU 196-19B1

215

Post Job Summary

Cement Intermediate Casing

Prepared for: George McNary
Date Prepared: October 11, 2010
Version: 1

Service Supervisor: DEARING, KEN

Submitted by: Joshua Anglin

HALLIBURTON

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Wellbore Geometry

Job Tubulars					MD		TVD		Excess	Shoe Joint Length
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft	%	ft
Casing	Surface Casing	10.75	9.950	45.50	0.00	5,045.00	0.00	4,947.00		80.00
Open Hole Section	Intermediate Open Hole		9.875		5,045.00	11,171.98	4,947.00	11,041.98	100.00	
Casing	Intermediate Casing	7.00	6.276	26.00	0.00	11,164.48	0.00	11,034.48		89.41

Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	TUNED SPACER III	10.00	6.00	80.0 bbl	80.0 bbl
1	2	Cement Slurry	New Vernal Tuned Light	11.00	6.00	1538.0 sacks	1538.0 sacks
1	3	Spacer	Drilling Fluid	9.60	8.00	423.0 bbl	423.0 bbl

Fluids Pumped

HALLIBURTON

Stage/Plug # 1 Fluid 1: TUNED SPACER III
TUNED SPACER III - SBM (483826)
59.8 lbm/bbl Barite

Fluid Density: 10.00 lbm/gal
Fluid Volume: 80.00 bbl
Pump Rate: 6.00 bbl/min

Stage/Plug # 1 Fluid 2: New Vernal Tuned
Light
TUNED LIGHT (TM) SYSTEM
0.75 lbm HR-601

Fluid Weight: 11.00 lbm/gal
Slurry Yield: 2.25 ft³/sack
Total Mixing Fluid: 10.04 Gal
Surface Volume: 1538.0 sacks
Sacks: 1538.0 sacks
Calculated Fill: 6,336.00 ft
Calculated Top of Fluid: 4,528.00 ft
Estimated Top of Fluid:
Pump Rate: 6.00 bbl/min

Stage/Plug # 1 Fluid 3: Drilling Fluid
Mud

Fluid Density: 9.60 lbm/gal
Fluid Volume: 423.00 bbl
Pump Rate: 8.00 bbl/min

Job Summary

Job Information

Job Start Date	10/7/2010 8:30:00 AM
Job MD	11,164.0 ft
Job TVD	11,164.0 ft
Height of Plug Container/Swage Above Rig Floor	3.0 ft
Surface Temperature at Time of Job	55 degF
Mud Type	Water Based Mud
Name of Mud Company	BAROID
Actual Mud Density	9.6 lbm/gal
PV/YP	13/11
10s/10m/30m	5/12/21
Pipe Movement During Hole Circulation	Reciprocated
Rate at which well was Circulated	3 bbl/min
Time From End Mud Circ. to Job Start	15.00 minute
Mud Loss Volume During Cementing	300 bbl
Pipe Movement During Cementing	Reciprocated
Calculated Displacement	423.30 bbl
Job Displaced by (rig/halco)	Cement Unit HP Pumps
Annular flow Before Job? (Water/Gas)	Unknown
Annular flow After Job? (Water/Gas)	Unknown
Length of Rat Hole	7.50 ft

Cementing Equipment

Number of Centralizers Used	59
Pipe Centralization	Through Entire Cement Column
Brand of Float Equipment Used	Weatherford
Did Float Equipment Hold?	Yes
Plug set used?	Yes
Brand of Plug set used?	Weatherford
Did Plugs Bump?	Yes
Calculated Pressure to Bump Plugs	450.0 psig

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
10/05/2010 21:00		Call Out						
10/05/2010 22:00		Pre-Convoy Safety Meeting						DISCUSS SAFETY AND HAZARDS OF TRAVEL.
10/05/2010 22:15		Other						LOAD EQUIPMENT FOR JOB.
10/05/2010 22:50		Depart Yard Safety Meeting						DISCUSS SAFETY AND HAZARDS OF TRAVEL.
10/05/2010 23:00		Crew Leave Yard						
10/06/2010 05:00		Arrive At Loc						
10/06/2010 05:05		Assessment Of Location Safety Meeting						SIGN IN AT SAFETY SHACK, GET WORK PERMIT SIGNED, WALK LOCATION, DISCUSS SPOTTING OF EQUIPMENT AND RIG UP, DISCUSS SAFETY AND HAZARDS.
10/06/2010 05:10		Safety Meeting						MEET WITH CO.MAN, DISCUSS WELL CONDITIONS, GET WELL INFORMATION, DISCUSS SAFETY AND HAZARDS, CASING @ 6635.0'.
10/06/2010 05:15		Safety Huddle						DISCUSS SAFETY AND HAZARDS.
10/06/2010 05:20		Other						SPOT EQUIPMENT.
10/06/2010 05:40		Safety Meeting - Pre Rig-Up						DISCUSS SAFETY AND HAZARDS.
10/06/2010 05:45		Rig-Up Equipment						RIG UP IRON AND SUCTION HOSE, TEST H2O.
10/06/2010 07:45		Prime Pumps						GET EQUIPMENT READY FOR JOB, PREFORM WATER AND PRESSURE TEST ON RCM.
10/06/2010 08:15		Other						WAIT ON RIG AND CASING CREW TO RUN CASING, CASING @ 6790.0'.

HALLIBURTON

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
10/06/2010 09:45		Safety Meeting						MEET WITH CO.MAN, DISCUSS JOB PROCEDURE, DISCUSS PRESSURE TEST AND MAX PRESSURE, DISCUSS CONTINGENCIES, DISCUSS SAFETY AND HAZARDS.
10/06/2010 10:00		Other						WAIT ON RIG AND CASING CREW TO RUN CASING, CASING @ 6995.0'.
10/06/2010 19:00		Other						WAIT ON RIG AND CASING CREW TO RUN CASING, CASING @ 10585.0'.
10/06/2010 21:30		Other						CODY AND CREW ARRIVE ON LOCATION, HAVE SAFETY MEETING AND INTERFACE BETWEEN CREWS, CASING @ 11085.0'.
10/06/2010 23:55		Casing on Bottom						
10/06/2010 23:59		Circulate Well						
10/07/2010 07:30		Safety Meeting - Pre Rig-Up						DISCUSS SAFETY AND HAZARDS.
10/07/2010 07:35		Rig-Up Equipment						RIG UP IRON ONTO RIG FLOOR.
10/07/2010 08:30		Safety Meeting - Pre Job						SAFETY MEETING WITH RIG CREW AND CO.MAN, DISCUSS JOB PROCEDURES, DISCUSS SAFETY AND HAZARDS OF JOB.
10/07/2010 08:45		Safety Meeting - Pre Rig-Up						DISCUSS SAFETY AND HAZARDS.
10/07/2010 08:50		Rig-Up Equipment						RIG UP CEMENT HEAD AND IRON ONTO CASING.
10/07/2010 09:05		Pump Water						PUMP H2O TO FILL LINES.
10/07/2010 09:08		Pressure Test					250.0	LOW PRESSURE TEST.
10/07/2010 09:14		Pressure Test					5000.0	HIGH PRESSURE TEST.
10/07/2010 09:23		Pump Spacer	4				339.0	START 10.0# TUNED SPACER III.
10/07/2010 09:40		Shutdown						
10/07/2010 09:43		Other						SAFETY HUDDLE-DROP BOTTOM PLUG.

HALLIBURTON

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
10/07/2010 09:48		Pump Cement	6				350.0	START PUMPING 11.0# TUNED LIGHT CEMENT, 616.3bbls, 1538sk, 2.25cf/ft, 10.04gal/sk.
10/07/2010 11:30		Shutdown						END CEMENT-SHUT DOWN.
10/07/2010 11:34		Drop Top Plug						SAFETY HUDDLE-DROP TOP PLUG.
10/07/2010 11:35		Pump Displacement	8				307.0	START H2O DISPLACEMENT, WASHING ON TOP OF PLUG AS PER CO.MAN.
10/07/2010 12:26		Slow Rate	3				630.0	390BBLS GONE
10/07/2010 12:28		Pump Water	3				632.0	LAST 20BBLS H2O
10/07/2010 12:34		Bump Plug	3				640.0	TOTAL DISPLACEMENT 423.3BBLS PRESSURE OVER TO 1200PSI
10/07/2010 12:39		Check Floats						2BBLS BACK
10/07/2010 12:45		Safety Meeting - Pre Rig-Down						PINCH POINTS RED ZONES LINE OF FIRE
10/07/2010 13:00		Rig-Down Equipment						
10/07/2010 15:00		Rig-Down Completed						
10/07/2010 15:15		Safety Meeting - Departing Location						JOURNEY MANAGMENT
10/07/2010 15:30		Depart Location for Service Center or Other Site						THANKS FOR USING HALLIBURTON

The Road to Excellence Starts with Safety

Sold To #: 331699	Ship To #: 2803950	Quote #:	Sales Order #: 7648714
Customer: EXXONMOBIL CORPORATION		Customer Rep: ARENBURG, SCOTT	
Well Name: NPU	Well #: 196-19B1	API/UWI #: 05-103-11081-00	
Field:	City (SAP): MEEKER	County/Parish: Rio Blanco	State: Colorado
Legal Description: Section 36 Township 1S Range 97W			
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: TURNER, JAMIE		Srvc Supervisor: DEARING, KEN	MBU ID Emp #: 239372

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANGLIN, JOSHUA	34.5	462343	ARIZOLA, EDWARD Alan	15.5	468545	BROWN, DALLAS S.G.	19	479707
DAVIS, CODY R	15.5	446891	DEAN, MARK Christophe	19	454214	DEARING, KEN A	19	239372
ESTEP, KENNETH	0	121420	GAMBLES, BRAYDEN Kade	15.5	469413	GOODRICH, BENJAMIN Franklin	19	481342
SHIFLETT, JESSE Amos	19	469551	SPENCER, WESTON Chad	3.5	391271	TEICHERT, RONDO Chad	19	476071
WILLIAMS, CAMERON Kent	15.5	438405						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10572545	45 mile	10822555	45 mile	10872435	45 mile	10897817	45 mile
10948686	45 mile	11056349	45 mile	11071474	45 mile	11259880	45 mile
11263211	45 mile	11263212	45 mile	11307422	45 mile	11338217	45 mile
11398321	45 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10/6/2010	19	0	10/7/2010	15.5	3.5			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To	Called Out	Date	Time	Time Zone
				BHST	11164. ft	11164. ft						05 - Oct - 2010	21:00	MST
											On Location	06 - Oct - 2010	05:00	MST
											Job Started	07 - Oct - 2010	08:30	MST
											Job Completed	07 - Oct - 2010	12:30	MST
											Departed Loc	07 - Oct - 2010	15:30	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Intermediate Open Hole				9.875				5045.	11172.	4947.	11042.
Intermediate Casing	New		7.	6.276	26.	HYDRIL - SERIES 500 TYPE 513	P-110	.	11164.5	.	11034.5
Surface Casing	Unknown		10.75	9.95	45.5	BTC	J-55	.	5045.	.	4947.

Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			
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 /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		
1	TUNED SPACER III	TUNED SPACER III - SBM (483826)			80.00	bbl	10.	.0	.0	6.0			
	38.32 gal/bbl	FRESH WATER											
	59.8 lbm/bbl	BARITE, 100 LB SK (100003680)											
2	New Vernal Tuned Light	TUNED LIGHT (TM) SYSTEM (452984)			1538.0	sacks	11.	2.21	10.04	6.0	10.04		
	0.75 lbm	HR-601, 50 LB BAG (101328348)											
	10.035 Gal	FRESH WATER											
3	Drilling Fluid				423.00	bbl	9.6	.0	.0	.0			
Calculated Values		Pressures			Volumes								
Displacement	423	Shut In: Instant			Lost Returns		300	Cement Slurry		605	Pad		
Top Of Cement	4554	5 Min			Cement Returns		0	Actual Displacement		423	Treatment		
Frac Gradient		15 Min			Spacers		80	Load and Breakdown			Total Job		
Rates													
Circulating	3	Mixing			6	Displacement		8	Avg. Job				
Cement Left In Pipe	Amount	89.41 ft	Reason	Shoe Joint									
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID						
The Information Stated Herein Is Correct					Customer Representative Signature								

Lab Data

HALLIBURTON

Cementing Rockies, Vernal

LAB RESULTS - Primary

Job Information

Request/Slurry	98656/1	Rig Name	H&P 215	Date	September 8th 2010
Submitted By	Joshua Anglin	Job Type	Intermediate Casing	Bulk Plant	Vernal
Customer	ExxonMobil	Location	Rio Blanco	Well	NPU 196-19B1

Well Information

Casing/Liner Size	7"	Depth MD	10864 ft	BHST	260 F
Hole Size	9 7/8"	Depth TVD	10734 ft	BHCT	199 F

Drilling Fluid Information

Mud Company	Type	Density	9,3 PPG	PV/YP
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Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties		
		Tuned Light				Slurry Density	10.999	PPG
						Slurry Yield	2.21	FT3
						Water Requirement	9.67	GPS
100.00	% BWOC	Cement Blend						
36.88	%	> Boral Craig Pozmix	Bulk	Sep 20, 2010				
11	%	> HGS 6000 dry blended	Bulk	Sep 20, 2010				
53.19	%	> Holcim Type V	Bulk	Sep 20, 2010				
13	%	> Silicalite - Compacted	Bulk	Sep 20, 2010				
0.75	lb/sk	HR-601	Bulk	Sep 20, 2010	HR05X-1452JB	Water Source	Fresh Water	
0.50	lb/sk	D-Air 3000	Bulk	Sep 20, 2010	2010183 AC	Water Chloride	N/A	ppm
0.20	lb/sk	FWCA	Bulk	Sep 20, 2010	37234			
80.70	L/100kg	Fresh Water	Lab	Jul 07, 2010	07/07/2010			

Operation Test Results Request ID 98656/1

UCA Comp. Strength, Request Test ID:1044635, Historical Data

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
200	3,000	10:33	12:50	220	1,469	1,533	1,622	72

Thickening Time, Request Test ID:1041402, Historical Data

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
170	5,186	60	11	04:46	05:00	05:06	05:24

Marsh Funnel, Request Test ID:1041407, Historical Data

Volume [ml]	Time [Sec]	Foam Quality
250	32	0

HALLIBURTON

Free Water, Request Test ID:1041404, Historical Data

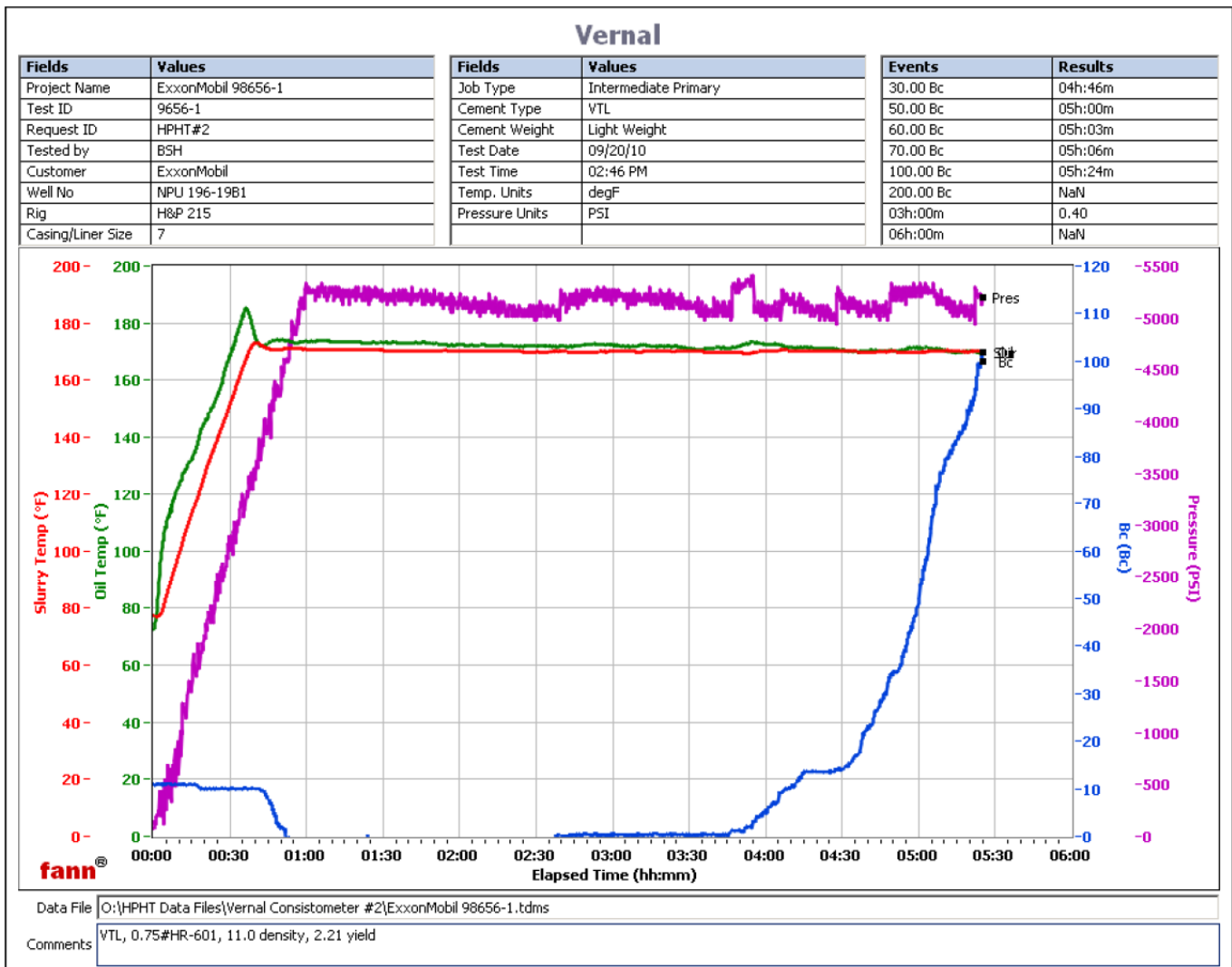
Test Temp (°F)	% FW 45 Inc
170	0

API Rheology, Request Test ID:1041403, Historical Data

Temp (°F)	600	300	200	100	60	30	6	3	Cond Time (min)	PV/YP
80	228	133	98	60	44	32	22	20	20	113.8 / 22

API Fluid Loss, Request Test ID:1041405, Historical Data

Test Temp (°F)	Test Pressure (psi)	Test Time (min)	Meas. Vol (< 30 min, cc)	Extr. ISO FL (cc/30 min)
170	1,000	2.4	36	255



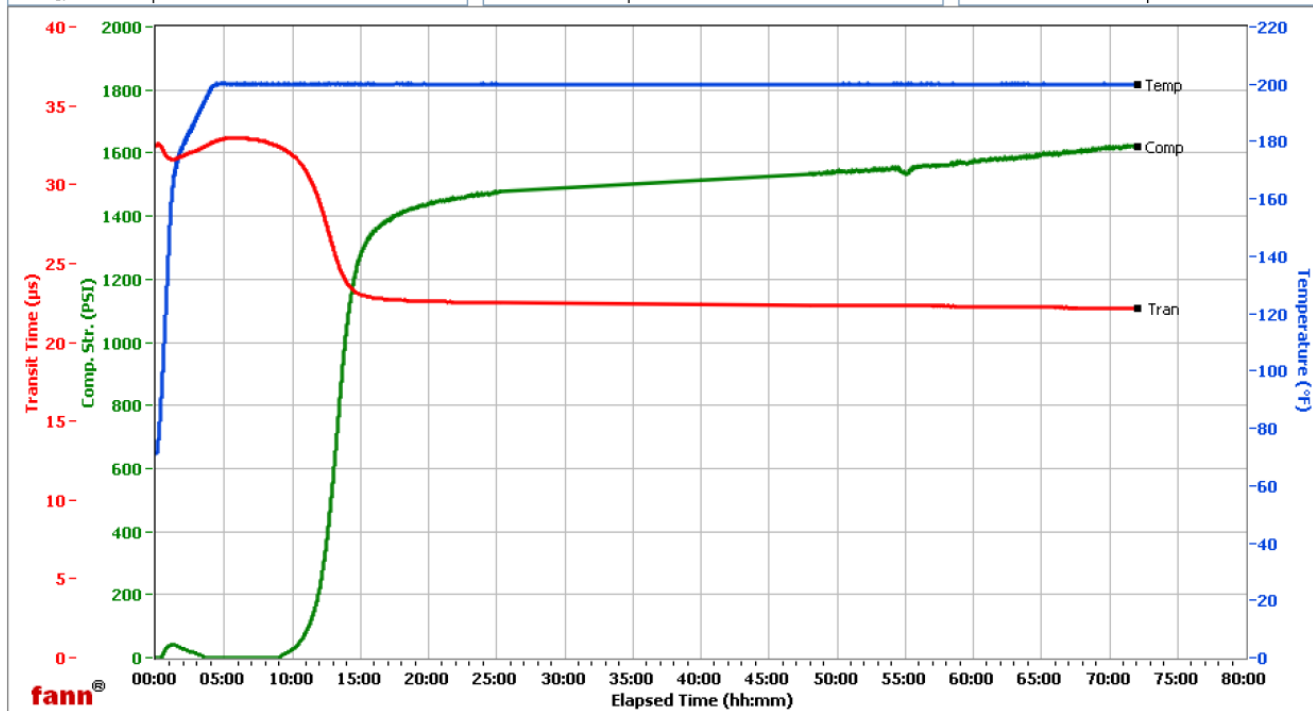
HALLIBURTON

Vernal

Fields	Values
Project Name	ExxonMobil 98656-1
Test ID	98656-1
Request ID	UCA #3
Tested by	BSH
Customer	ExxonMobil
Well No	NPU 196-19B1
Rig	H&P 215
Casing/Liner Size	7

Fields	Values
Job Type	Intermediate Primary
Cement Type	VTL
Cement Weight	Light Weight
Test Date	9/20/2010
Test Time	8:10 AM
Temp. Units	degF
Pressure Units	PSI

Events	Results
50.00 PSI	10h:33m
100.00 PSI	11h:12m
500.00 PSI	12h:50m
1000.00 PSI	13h:52m
12h:00m	219.87
24h:00m	1468.87
48h:00m	1533.04
72h:00m	1622.15



Data File C:\Data Files\98656-1.tdms

Comments VTL, 0.75#HR-601, 11.0 density, 2.21 yield

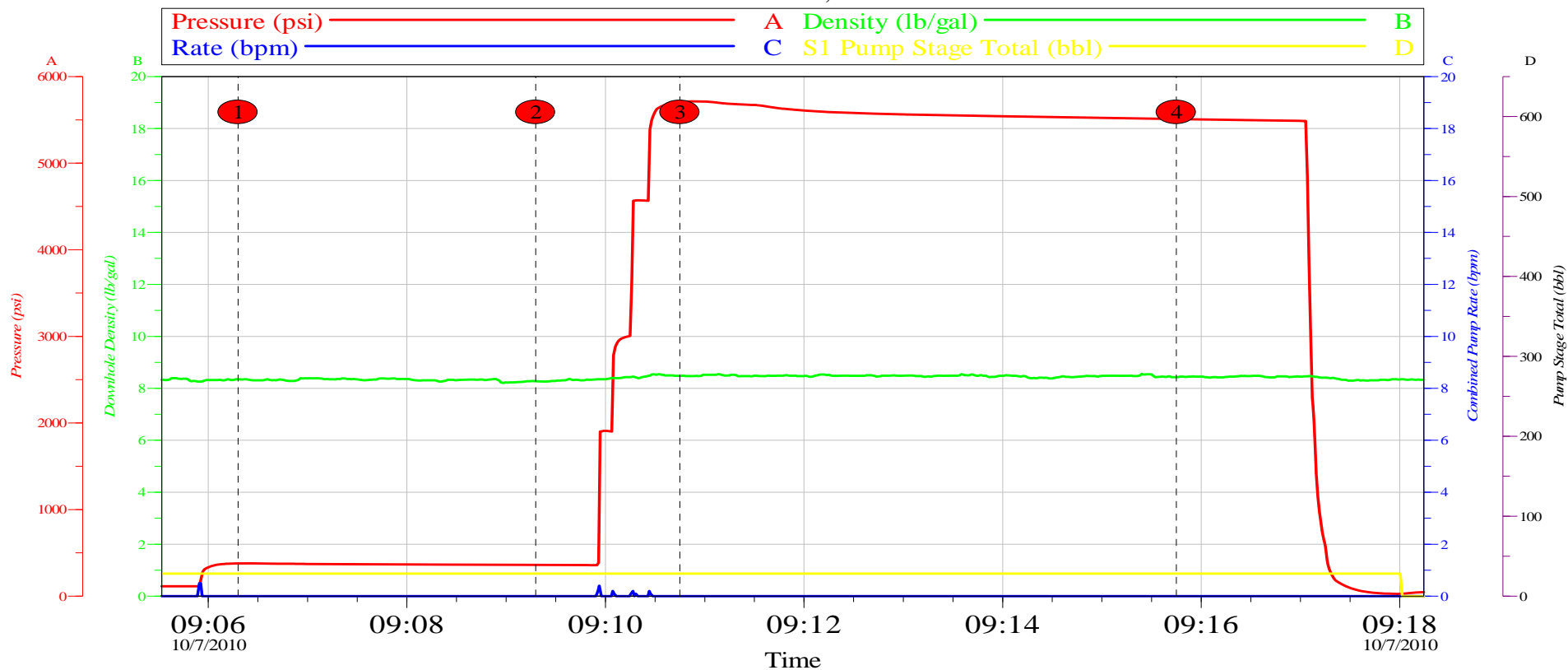
HALLIBURTON

Data Acquisition

ExxonMobil NPU 196-19B1

7 in Intermediate

October 7th, 2010



Event Log					
		psi		psi	
1	Start Low Pressure Test	09:06:18	378.0	2	End Low Pressure Test 09:09:18 360.0
3	Start High Pressure Test	09:10:45	5707	4	End High Pressure Test 09:15:45 5510

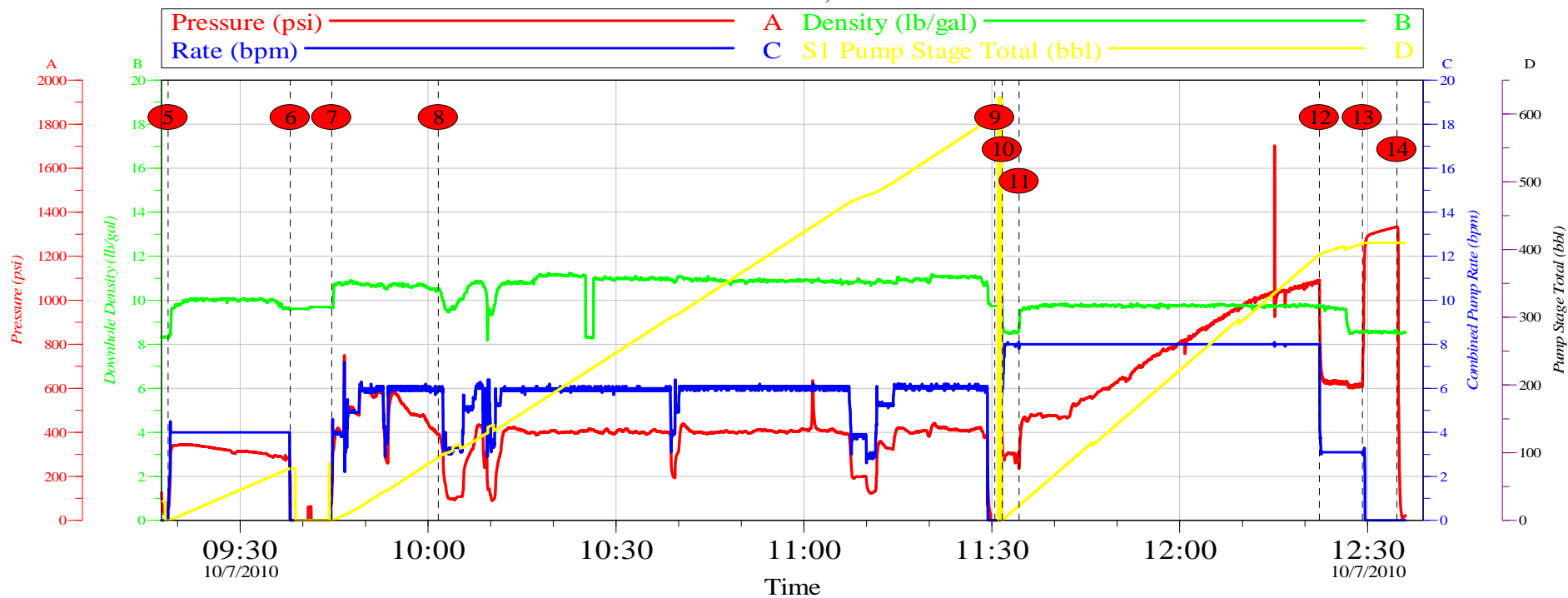
Customer:	EXXONMOBIL	Job Date:	07-Oct-2010	Sales Order #:	7648714
Well Description:	NPU 196-19B1	UWI:	05-103-11081	Elite #	10872435
Svc. Supervisor	Cody Dvis	Svc. Leader	Wes Spencer	Engineer	Josh Anglin

OptiCem v6.4.9
07-Oct-10 12:38

ExxonMobil NPU 196-19B1

7 in Intermediate

October 7th, 2010



Event Log							
			psi				psi
5	Pump Spacer	09:18:29	51.00	6	Drop Bottom Plug	09:37:59	189.7
7	Pump Cement	09:44:37	91.35	8	Bulk Delivery Issue	10:01:39	392.0
9	Drop Top Plug	11:30:28	0.000	10	Pump Displacement	11:31:40	376.9
11	Caught Cement	11:34:22	248.9	12	Slowed Rate to Land Plug	12:22:17	1091
13	Bump Plug	12:29:10	609.0	14	Check Floats	12:34:39	1334

Customer:	EXXONMOBIL	Job Date:	07-Oct-2010	Sales Order #:	7648714
Well Description:	NPU 196-19B1	UWI:	05-103-11081	Elite #	10872435
Svc. Supervisor	Cody Dvis	Svc. Leader	Wes Spencer	Engineer	Josh Anglin

OptiCem v6.4.9
07-Oct-10 12:39