HALLIBURTON

XTO ENERGY INC EBUSINESS
DO NOT MAIL - 382 ROAD 3100
AZTEC, New Mexico

PCU T78X-12G13

H&P 215 970-942-7060

Post Job Summary
Cement Multiple Stages

Prepared for:
Date Prepared: 02/06/2012
Version: 1

Service Supervisor: FUCHS, BENJAMIN

Submitted by: M.C Dube

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Wellbore Geometry

Job Tubulars					MD		Excess	Shoe Joint Length
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	%	ft
Open Hole Section	Surface Open Hole		14.750		0.00	1,362.00	75.00	0.00
Open Hole Section	Surface Open Hole		14.750		1,363.00	3,989.00	25.00	0.00
Casing	Surface Casing	10.75	9.950	45.50	0.00	3,898.00	0.00	80.00
Cement Stage Tool	Multiple Stage Cementer		.000		1,362.00	1,363.00	0.00	0.00

Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume
1	Spacer	FreshWater Ahead	8.33	6.00	50.0 bbl
2	Cement Slurry	First Stage Lead Cement	12.70	6.00	755.0 sacks
3	Cement Slurry	First Stage Tail Cement	15.80	6.00	345.0 sacks
4	Spacer	Drilling Fluid / Mud	8.90	6.00	370.0 bbl
1	Spacer	Freshwater Ahead	8.33	6.00	50.0 bbl
2	Cement Slurry	Second Stage Lead Cement	12.70	6.00	710.0 sacks
3	Spacer	Drilling Fluid / Mud	8.90	6.00	134.0 bbl
4	Cement Slurry	Top Out	15.80	2.00	

Fluids Pumped

Stage/Plug # 1 **Fluid 1:** FreshWater Ahead

SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal
Fluid Volume: 50.00 bbl
Pump Rate: 6.00 bbl/min

Stage/Plug # 1 **Fluid 2:** First Stage Lead Cement

	5 lbm	Cal-Seal 60
	0.8 %	Econolite
ECONOCEM (TM) SYSTEM	0.82 %	HR-7

0.25 lbm	Poly-E-Flake	Total Mixing Fluid:	10.01 Gal
3 lbm	Silicalite Compacted	Surface Volume:	755.0 sacks
		Sacks:	755.0 sacks
		Calculated Fill:	2,351.00 ft
		Calculated Top of Fluid:	1,704.00 ft
		Estimated Top of Fluid:	
Fluid Weight:	12.70 lbm/gal	Pump Rate:	6.00 bbl/min
Slurry Yield:	1.88 ft3/sack		

Stage/Plug # 1 **Fluid 3:** First Stage Tail Cement

HALCEM (TM) SYSTEM

0.1 %	HR-800	Fluid Weight:	15.80 lbm/gal
0.25 lbm	Poly-E-Flake	Slurry Yield:	1.15 ft3/sack
		Total Mixing Fluid:	5.00 Gal
		Surface Volume:	345.0 sacks
		Sacks:	345.0 sacks
		Calculated Fill:	500.00 ft
		Calculated Top of Fluid:	4,055.00 ft
		Estimated Top of Fluid:	
		Pump Rate:	6.00 bbl/min

Stage/Plug # 1 **Fluid 4:** Drilling Fluid / Mud

SPACER SBC MATERIAL

Fluid Density:	8.90 lbm/gal
Fluid Volume:	370.00 bbl
Pump Rate:	6.00 bbl/min

Stage/Plug # 2 **Fluid 1:** Freshwater Ahead

SPACER SBC MATERIAL

Fluid Density:	8.33 lbm/gal
Fluid Volume:	50.00 bbl
Pump Rate:	6.00 bbl/min

Stage/Plug # 2 **Fluid 2:** Second Stage Lead Cement

ECONOCEM (TM) SYSTEM

0.25 lbm	Poly-E-Flake	Fluid Weight:	12.70 lbm/gal
0.3 %	Versaset	Slurry Yield:	1.88 ft3/sack
		Total Mixing Fluid:	10.09 Gal
		Surface Volume:	710.0 sacks
		Sacks:	710.0 sacks
		Calculated Fill:	1,704.00 ft
		Calculated Top of Fluid:	0.00 ft
		Estimated Top of Fluid:	
		Pump Rate:	6.00 bbl/min

Stage/Plug # 2 **Fluid 3:** Drilling Fluid / Mud

SPACER SBC MATERIAL

Fluid Density:	8.90 lbm/gal
Fluid Volume:	134.00 bbl
Pump Rate:	6.00 bbl/min

Stage/Plug # 2 **Fluid 4:** Top Out

Top Out

94 lbm	Premium Cement
2 %	Calcium Chloride

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Fluid Weight:	15.80 lbm/gal	Estimated Top of Fluid:	
Slurry Yield:	1.17 ft3/sack	Pump Rate:	2.00 bbl/min
Total Mixing Fluid:	5.02 Gal		

Job Summary

Job Information

Job Start Date	1/9/2012 10:42:00 AM
Job MD	3,919.0 ft
Job TVD	3,934.0 ft
Height of Plug Container/Swage Above Rig Floor	5.0 ft
Surface Temperature at Time of Job	26 degF
Mud Type	Water Based Mud
Actual Mud Density	9 lbm/gal
Time Circulated before job	7.00 hour(s)
Rate at Which Well was Circulated	5.000 bbl/min
Pipe Movement During Hole Circulation	None
Time From End Mud Circ. to Job Start	30.00 minute
Pipe Movement During Cementing	Reciprocated
Amount of Cement Returns	182.00 bbl
Job Displaced by (rig/halco)	Cement Unit HP Pumps
Annular flow Before Job? (Water/Gas)	No
Annular flow After Job? (Water/Gas)	No
Length of Rat Hole	15.00 ft

Cementing Equipment

Number of Centralizers Used	25
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
Brand of Stage Cementing Tools Used	Weatherford
Did Stage Cementing Tool Open Properly?	Yes

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
01/08/2012 17:30		Call Out				Crew called out for job
01/08/2012 19:45		Safety Meeting - Departing Location				Discuss all travel related safety issues with crew
01/08/2012 20:00		Crew Leave Yard				Convoy to location for safety
01/09/2012 00:00		Arrive at Location from Service Center				Rig crew running casing upon arrival
01/09/2012 00:00		Waiting - Arrived Early to Location - Start Time				Take a nap while waiting to get on location
01/09/2012 05:00		Safety Meeting - Assessment of Location				Identify and discuss all jobsite related hazards and equipment layout with crew
01/09/2012 05:30		Other				Spot equipment using spotter(s)
01/09/2012 06:00		Safety Meeting - Pre Rig-Up				Discuss all rig up related safety issues with crew and rig crew
01/09/2012 06:30		Rig-Up Equipment				Be careful, no one gets hurt
01/09/2012 10:00		Safety Meeting - Pre Job				Discuss all job related safety issues and pump schedule with crew and rig crew
01/09/2012 10:42	1	Start Job				Everyone get equipment ready for job
01/09/2012 10:47	2	Pump Water	1.2	5	.0	Fill lines with 5 bbls fresh water for pressure test
01/09/2012 15:43	3	Pressure Test			250.0	Low pressure test, check for leaks and establish good test
01/09/2012 15:43	4	Pressure Test			5000.0	High pressure test, check for leaks and establish good test
01/09/2012 15:43	5	Pump Water	4	50	.0	Pump 50 bbls fresh water spacer ahead of cement
01/09/2012 15:43	6	Pump Lead Cement	5	252	59.0	Pump 252 bbls 1st stage lead cement mixed @ 12.7 ppg 1.88 yield 10.01 gal/sk (755 sks)
01/09/2012 15:43	7	Pump Tail Cement	5	70	363.0	Pump 70 bbls 1st stage tail cement mixed @ 15.8 ppg 1.15 yield 5.0 gal/sk (345 sks)
01/09/2012 15:43	8	Shutdown				Cement away

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
01/09/2012 15:43	9	Drop Plug				Verify that plug is in casing when loading
01/09/2012 15:43	10	Pump Displacement	6.4	130	25.0	Pump 370 bbls mud displacement total
01/09/2012 15:43	11	Slow Rate	4	10	166.0	Slow rate for 10 bbls to pump dart plug through DV tool
01/09/2012 15:43	12	Other	6.4	220	270.0	Resume previous rate
01/09/2012 15:43	13	Bump Plug			998.0	Land plug @ 560 psi + drag (go 500 psi over)
01/09/2012 15:43	14	Check Floats			1629.0	Floats held, got 2.5 bbls back on truck when we checked them
01/09/2012 15:43	15	Drop Opening Device For Multiple Stage Cementer				Drop opening tool for 2nd stage wait 10 min for plug to travel through casing
01/09/2012 15:43	16	Pressure Up	1.3		687.0	Pressure up on plug to open tool 700-1000 psi
01/09/2012 15:43	17	Circulate Well	4	10	78.0	Circulate 10 bbls mud through ports on DV tool to verify they are clear
01/09/2012 15:43	18	End Job				Turn well over to rig crew to circulate while we wait on cement
01/09/2012 15:43		Wait on Orders - Start Time				Wait on cement samples to set before we start 2nd stage
01/09/2012 19:30		Safety Meeting - Pre Job				Discuss all job related safety issues and pump schedule with crew and rig crew
01/09/2012 20:03	19	Start Job				Everyone get equipment ready - We had a frozen air line to the silo and had a slight delay starting the job while thawing out the line. We started pumping water ahead and just went slow while we resolved our air lne issue.
01/09/2012 20:08	20	Pump Water	2	50	25.0	Pump 50 bbls fresh water spacer ahead of cement
01/09/2012 20:38	21	Pump Lead Cement	4.5	189	40.0	Pump 237 bbls 2nd stage lead cement mixed @ 12.7 ppg 1.88 yield 10.09 gal/sk (710 sks)
01/09/2012 21:29	22	Cement Returns to Surface	4.5	48	250.0	Cement returns to surface with 189 bbls lead pumped 182 bbls cement to surface total
01/09/2012 21:37	23	Shutdown				Cement away
01/09/2012 21:46	24	Drop Plug				Verify that plug is in casing when loading

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Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
01/09/2012 21:47	25	Pump Displacement	6	124	250.0	Pump 134 bbls mud displacement total - use fresh water for the last 20 bbls to clean pumps and lines
01/09/2012 22:10	26	Slow Rate	4	10	498.0	Slow rate with the last 10 bbls to land the plug
01/09/2012 22:14	27	Bump Plug			550.0	Land plug @ 270 psi + drag (go 1500 psi over)
01/09/2012 22:18	28	Close Multiple Stage Cementer			2400.0	Re pressure up on plug to make sure DV tool is closed
01/09/2012 22:24	29	Check Floats			980.0	Floats held, got 1.5 bbls back on truck when we checked them
01/09/2012 22:25	30	End Job				Job complete
01/09/2012 22:45		Safety Meeting - Pre Rig-Down				Discuss all rig down related hazards with crew and rig crew
01/09/2012 23:00		Rig-Down Equipment				Be careful, no one gets hurt
01/10/2012 00:45		Safety Meeting - Departing Location				Discuss all travel related safety issues with crew
01/10/2012 01:00		Crew Leave Location				Convoy to yard for safety

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 353810	**Ship To #:** 2900878	**Quote #:**	**Sales Order #:** 9192568
Customer: XTO ENERGY INC EBUSINESS		**Customer Rep:** McGourty, Alex	
Well Name: PCU	**Well #:** T78X-12G13		**API/UWI #:**
Field:	**City (SAP):** MEEKER	**County/Parish:** Tarrant	**State:** Texas
Contractor: H&P	**Rig/Platform Name/Num:** 215 970-942-7060		
Job Purpose: Cement Multiple Stages			
Well Type: Development Well	**Job Type:** Cement Multiple Stages		
Sales Person: MCNARY, GEORGE	**Srvc Supervisor:** FUCHS, BENJAMIN	**MBU ID Emp #:** 470584	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ESTEP, KENNETH	20.0	121420	FUCHS, ANDREW Peter	20.0	489821	FUCHS, BENJAMIN Reinhard	20.0	470584
PETERSON, JIMMY J	20.0	458945	VOORHIS, WALTER T	20.0	472268			

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10572545	45 mile	10867527	45 mile	10948685	45 mile	10948686	45 mile
10973575	45 mile	11338217	45 mile	11360879	45 mile	11512092	45 mile
6441	45 mile						

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
TOTAL		*Total is the sum of each column separately*						

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	3919. ft	**Job Depth TVD**	3934. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	*From*		**To**		

Job Times

	Date	Time	Time Zone
Called Out	08 - Jan - 2012	17:30	MST
On Location	09 - Jan - 2012	00:00	MST
Job Started	09 - Jan - 2012	10:42	MST
Job Completed	09 - Jan - 2012	00:00	MST
Departed Loc	09 - Jan - 2012	00:00	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
Multiple Stage Cementer	Used			.				1362.	1363.		
Surface Open Hole				14.75				.	1362.		
Surface Open Hole				14.75				1363.	3989.		
Surface Casing	Unknown		10.75	9.95	45.5	BTC	J-55	.	3898.		

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**			

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Cementing Job Summary

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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	**FreshWater Ahead**		**50.00**	**bbl**	**8.33**	**.0**	**.0**	**6.0**	
2	**First Stage Lead Cement**	**ECONOCEM (TM) SYSTEM (452992)**	**755.0**	**sacks**	**12.7**	**1.88**	**10.01**	**6.0**	**10.01**
	5 lbm	CAL-SEAL 60, 100 LB BAG (100005051)							
	0.8 %	ECONOLITE (100001580)							
	0.82 %	HR-7 (100005055)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	3 lbm	SILICALITE - COMPACTED, 50 LB SK (100012223)							
	10.01 Gal	FRESH WATER							
3	**First Stage Tail Cement**	**HALCEM (TM) SYSTEM (452986)**	**345.0**	**sacks**	**15.8**	**1.15**	**5.0**	**6.0**	**5.0**
	0.1 %	HR-800, 50 LB SACK (101619742)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	5 Gal	FRESH WATER							
4	**Drilling Fluid / Mud**		**370.00**	**bbl**	**8.9**	**.0**	**.0**	**6.0**	

Stage/Plug #: 2

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density uom	Yield uom	Mix Fluid uom	Rate uom	Total Mix Fluid uom
1	**Freshwater Ahead**		**50.00**	**bbl**	**8.33**	**.0**	**.0**	**6.0**	
2	**Second Stage Lead Cement**	**ECONOCEM (TM) SYSTEM (452992)**	**710.0**	**sacks**	**12.7**	**1.88**	**10.09**	**6.0**	**10.09**
	0.25 lbm	POLY-E-FLAKE (101216940)							
	0.3 %	VERSASET, 55 LB SK (101376573)							
	10.09 Gal	FRESH WATER							
3	**Drilling Fluid / Mud**		**134.00**	**bbl**	**8.9**	**.0**	**.0**	**6.0**	
4	**Top Out**	**CMT - PREMIUM - CLASS G, 94 LB SK (100003685)**		**sacks**	**15.8**	**1.17**	**5.02**	**2.0**	**5.02**
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	2 %	CALCIUM CHLORIDE - HI TEST PELLET (100005053)							
	5.02 Gal	FRESH WATER							

Calculated Values		Pressures		Volumes					
Displacement		**Shut In: Instant**		**Lost Returns**		*Cement Slurry*		**Pad**	
Top Of Cement		**5 Min**		**Cement Returns**		**Actual Displacement**		**Treatment**	
Frac Gradient		**15 Min**		**Spacers**		**Load and Breakdown**		**Total Job**	

Rates													
Circulating		*Mixing*			*Displacement*		**Avg. Job**						
Cement Left In Pipe	**Amount**	***80 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***

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Lab Data

Job Information

Request/Slurry	204177/1	**Rig Name**	H&P 215	**Date**	07/JAN/2012
Submitted By	Charli Brown	**Job Type**	Surface Casing	**Bulk Plant**	Meeker
Customer	XTO	**Location**	Rio Blanco	**Well**	T78X-12G13

Well Information

Casing/Liner Size	10 3/4"	**Depth MD**	3898 ft	**BHST**	132 F
Hole Size	14 3/4"	**Depth TVD**	0 ft	**BHCT**	92 F

Cement Information - Lead Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.
35	%	> Boral Craig Pozmix	Bulk	Jan 08, 2012	
65	%	> Holcim Type II/V	Bulk	Jan 08, 2012	
100.00	% BWOC	Cement Blend	Bulk	Jan 08, 2012	
5.000	lb/sk	Cal-Seal 60	Bulk	Jan 08, 2012	
3.000	lb/sk	Silicalite - Compacted	Bulk	Jan 08, 2012	
0.800	% BWOC	Econolite (Powder - PB)	Bulk	Jan 08, 2012	
0.820	% BWOC	HR-7	Bulk	Jan 08, 2012	
0.250	lb/sk	Pol-E-Flake	Bulk	Jan 08, 2012	
10.01	gal/sack	Field (Fresh) Water	Lab	Dec 09, 2011	

Cement Properties

Slurry Density	12.70	PPG
Slurry Yield	1.88	ft3/sk
Water Requirement	10.01	GPS
Total Mix Fluid	10.01	GPS

Operation Test Results Request ID 204177/1

Thickening Time - ON-OFF-ON, Request Test ID:2061849

Test Temp (°F)	Reached in (min)	Pressure (psi)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
92	60	2,244	05:45	05:45	05:45	05:45	6	180	30	70

Pump for 3hr SD for 30 min,, SD again at 5hr for 45 min pump off
1st sd 6bc to 9bc 2nd sd 9bc to 70.3bc shearing pin

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2061848

Mixability rating (0 - 5)
5

API Rheology, Request Test ID:2061847

Temp (°F)	600	300	200	100	60	30	6	3	Cond Time (min)	Foam Quality	PV/YP
80	26	16	14	10	10	8	8	7	0	0	8.8 / 7.9

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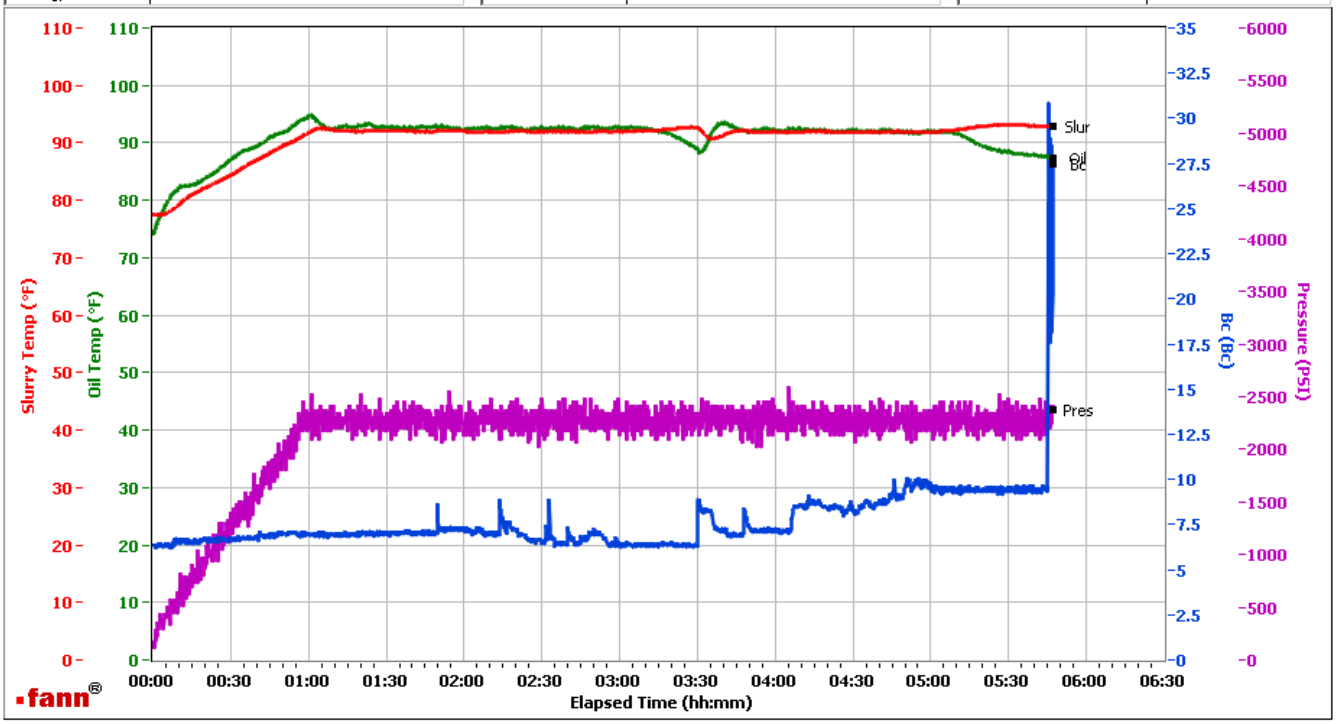
MEEKER

Fields	Values
Project Name	XTO 204177-1
Test ID	204177-1
Request ID	2
Tested by	RR
Customer	XTO
Well No	T78X-12G13
Rig	H&P 215
Casing/Liner Size	

Fields	Values
Job Type	LEAD 1ST
Cement Type	HOLOCIM II\V
Cement Weight	Light Weight
Test Date	01/08/12
Test Time	04:28 PM
Temp. Units	degF
Pressure Units	PSI

Events	Results
30.00 Bc	05h:45m
40.00 Bc	05h:45m
50.00 Bc	05h:45m
70.00 Bc	05h:45m
100.00 Bc	05h:45m
200.00 Bc	NaN
03h:00m	6.52
06h:00m	NaN



Data File: O:\HPHT Data Files WRCR\WRCR Consistometer #2\XTO 204177-1.tdms

Comments: HOLCIM II\V, HR-7 .820%, DENSITY 12.7, YIELD 1.88 YARD

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Job Information

Request/Slurry	204178/1	**Rig Name**	H&P 215	**Date**	07/JAN/2012
Submitted By	Charli Brown	**Job Type**	Surface Casing	**Bulk Plant**	Vernal
Customer	XTO	**Location**	Rio Blanco	**Well**	T78X-12G13

Well Information

Casing/Liner Size	10 3/4"	**Depth MD**	3898 ft	**BHST**	133 F
Hole Size	14 3/4"	**Depth TVD**	0 ft	**BHCT**	91 F

Cement Information - Tail Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties		
100.00	% BWOC	Mountain G	Bulk	Jan 08, 2012	286 10-18-2011	Slurry Density	15.80	PPG
						Slurry Yield	1.15	ft3/sk
0.100	% BWOC	HR-800	Bulk	Jan 08, 2012	2 241 001	Water Requirement	4.98	GPS
4.98	gal/sack	Field (Fresh) Water	Lab	Oct 17, 2011	10/17/11	Total Mix Fluid	4.98	GPS
0.250	lb/sk	Pol-E-Flake	Bulk	Jan 08, 2012	40869			

Operation Test Results Request ID 204178/1

Thickening Time, Request Test ID:2061851

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)
91	2,248	60	12	02:42	03:10	03:45	04:28

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2061853

Mixability rating (0 - 5)
4

API Rheology, Request Test ID:2061852

Temp (°F)	600	300	200	100	60	30	6	3	Cond Time (min)	Foam Quality	PV/YP
80	64	43	34	26	22	19	14	9	0	0	30.7 / 14.3

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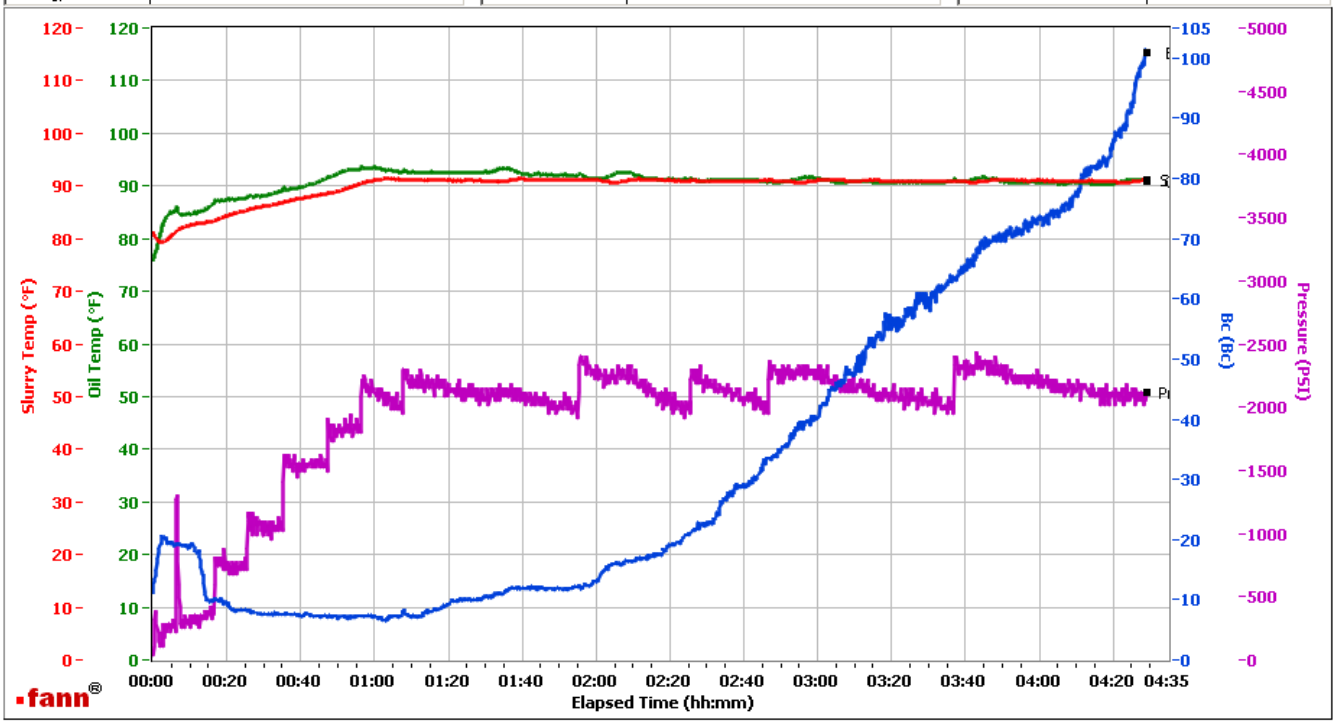
Vernal

Fields	Values
Project Name	XTO
Test ID	204178-1
Request ID	hpht2
Tested by	Amanda
Customer	XTO
Well No	t78x-12g13
Rig	H&P 215
Casing/Liner Size	10.75

Fields	Values
Job Type	Surface Tail
Cement Type	G
Cement Weight	Standard
Test Date	01/08/12
Test Time	07:47 PM
Temp. Units	degF
Pressure Units	PSI

Events	Results
30.00 Bc	02h:42m
50.00 Bc	03h:10m
60.00 Bc	03h:26m
70.00 Bc	03h:45m
100.00 Bc	04h:28m
200.00 Bc	NaN
03h:00m	40.01
06h:00m	NaN



Data File: Z:\HPHT Data Files\Vernal Consistometer #2\XTO 204178-1.tdms

Comments: 15.798 den, 1.15 yd

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Job Information

Request/Slurry	204180/1	**Rig Name**	H&P 215	**Date**	07/JAN/2012
Submitted By	Charli Brown	**Job Type**	Surface Casing	**Bulk Plant**	Meeker
Customer	XTO	**Location**	Rio Blanco	**Well**	T78X-12G13

Well Information

Casing/Liner Size	10 3/4"	**Depth MD**	1362 ft	**BHST**	91 F
Hole Size	14 3/4"	**Depth TVD**	0 ft	**BHCT**	73 F

Cement Information - Primary Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.
35	%	> Boral Craig Pozmix	Bulk	Jan 08, 2012	
65	%	> Holcim Type II/V	Bulk	Jan 08, 2012	
100.00	% BWOC	Cement Blend	Bulk	Jan 08, 2012	
5.000	lb/sk	Cal-Seal 60	Bulk	Jan 08, 2012	
3.000	lb/sk	Silicalite - Compacted	Bulk	Jan 08, 2012	
1.000	% BWOC	Econolite (Powder - PB)	Bulk	Jan 08, 2012	
0.300	% BWOC	VERSASET (PB)	Bulk	Jan 08, 2012	
10.08	gal/sack	Field (Fresh) Water	Lab	Dec 09, 2011	
0.250	lb/sk	Pol-E-Flake	Bulk	Jan 08, 2012	

Cement Properties

Slurry Density	12.70	PPG
Slurry Yield	1.89	ft3/sk
Water Requirement	10.08	GPS
Total Mix Fluid	10.08	GPS

Operation Test Results Request ID 204180/1

Thickening Time - ON-OFF-ON, Request Test ID:2061890

Test Temp (°F)	Reached in (min)	Pressure (psi)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	100 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Peak reading (BC)
73	22	885	03:15	03:15	03:15	03:15	7	150	45	81

Pump for 2hr 30min SD for 45min pump off
1st sd 8 bc to 81 bc shearing pin

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2061889

Mixability rating (0 - 5)
5

API Rheology, Request Test ID:2061888

Temp (°F)	600	300	200	100	60	30	6	3	Cond Time (min)	Foam Quality	PV/YP
80	55	39	36	31	30	28	22	15	0	0	19.1 / 23.5

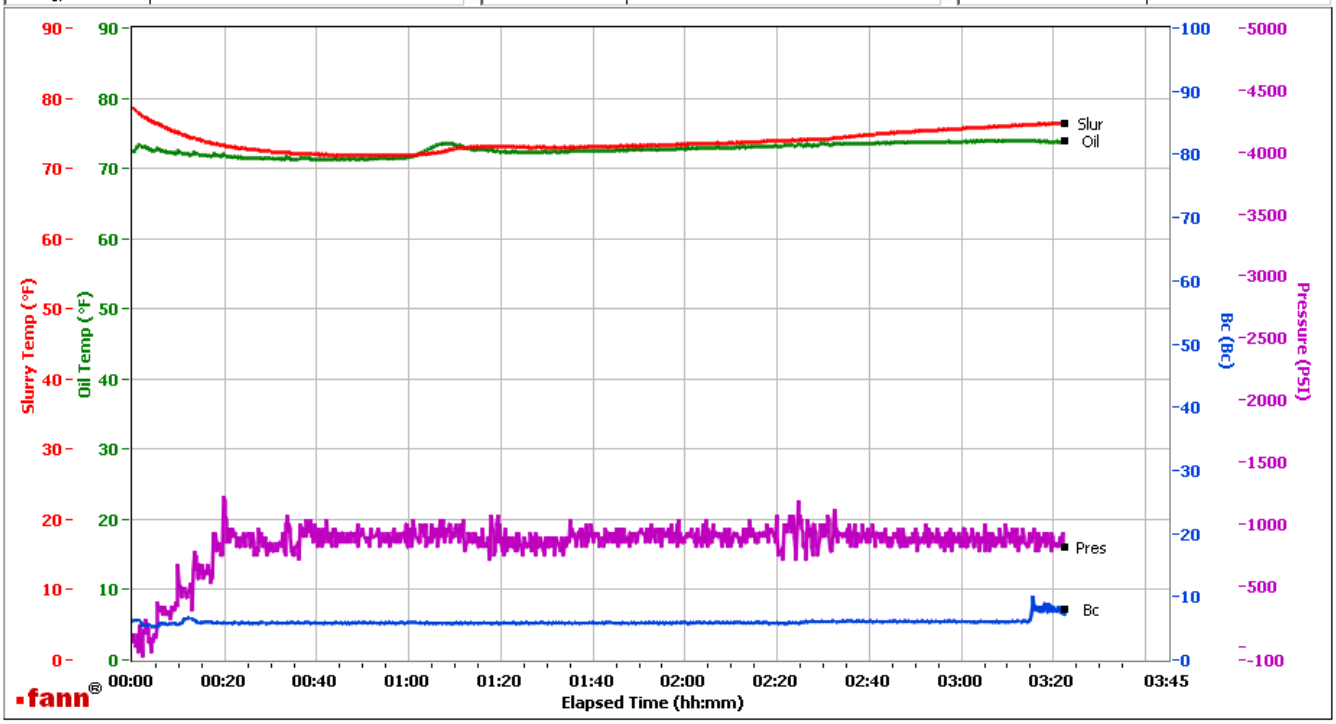
HALLIBURTON

MEEKER

Fields	Values
Project Name	XTO 204180-1
Test ID	204180-1
Request ID	1
Tested by	RR
Customer	XTO
Well No	T78X-12G13
Rig	H&P 215
Casing/Liner Size	

Fields	Values
Job Type	LEAD 2ND
Cement Type	HOLCIM II/V
Cement Weight	Light Weight
Test Date	01/09/12
Test Time	05:40 PM
Temp. Units	degF
Pressure Units	PSI

Events	Results
30.00 Bc	03h:15m
40.00 Bc	03h:15m
50.00 Bc	03h:15m
70.00 Bc	03h:15m
100.00 Bc	03h:15m
200.00 Bc	NaN
03h:00m	6.16
06h:00m	NaN

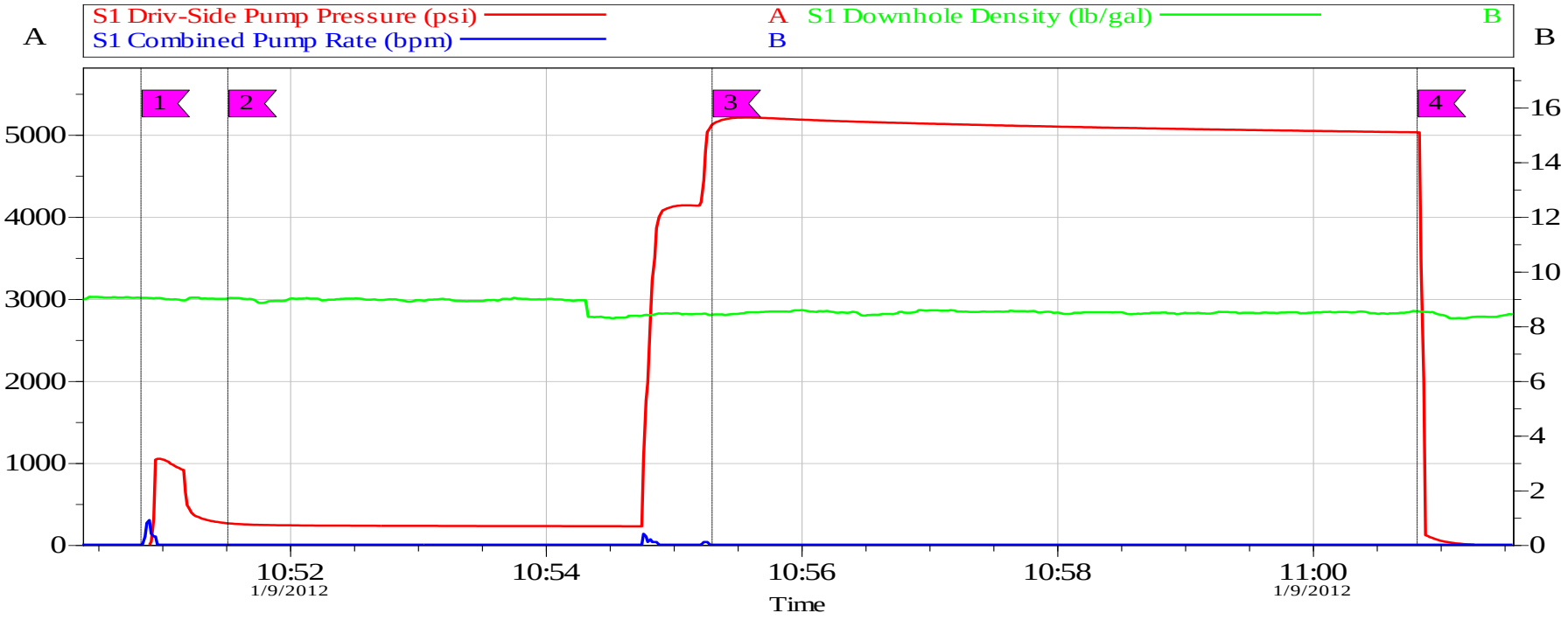


Data File: O:\HPHT Data Files WRCR\WRCR Consistometer #1\XTO 204180-1.tdms

Comments: HOLCIM II\V, DENSITY 12.7, YIELD 1.89 YARD

XTO PCU T78X-12G13 1st Stage

Pressure Test



Local Event Log

	Intersection		SDPP		Intersection		SDPP
1	Start Pressure Test	10:50:50	-14.00	2	Low Pressure Test	10:51:31	261.4
3	High Pressure Test	10:55:18	5118	4	End Pressure Test	11:00:49	5026

Customer:	XTO	Job Date:	09-Jan-2012	Sales Order #:	9192570
Job Description:	2 Stage Surface	API#:	051031172300	Elite #:	11512092
Service Supervisor:	B. Fuchs	Service Operator:	W. Voorhis	Service Leader:	K. Estep

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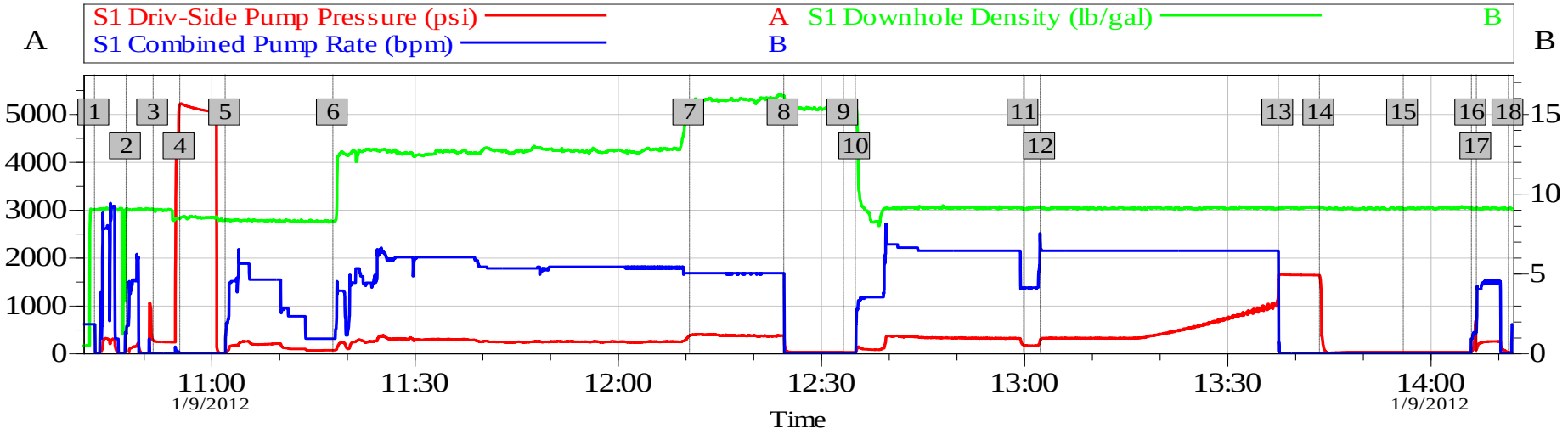
XTO PCU T78X-12G13 1st Stage

Job Summary Chart



Global Event Log

1	Start Job	10:42:49	2	Fill Lines	10:47:29
3	Test Lines Low PSI	10:51:30	4	Test Lines High PSI	10:55:25
5	Pump Fresh Water	11:02:07	6	Pump Lead Cement	11:18:01
7	Pump Tail Cement	12:10:40	8	Shutdown	12:24:35
9	Drop Plug	12:33:23	10	Pump Displacement	12:35:09
11	Slow Rate For Plug To Go Through DV Tool	13:00:00	12	Resume Previous Rate	13:02:27
13	Bump Plug	13:37:37	14	Check Floats	13:43:40
15	Drop Opening Device For Multiple Stage Cementer	13:56:03	16	Pressure Up on Opening Device	14:06:07
17	Circulate Well To Clean DV Tool	14:06:51	18	End Job	14:11:36

Customer:	XTO	Job Date:	09-Jan-2012	Sales Order #:	9192570
Job Description:	2 Stage Surface	API#:	051031172300	Elite #:	11512092
Service Supervisor:	B. Fuchs	Service Operator:	W. Voorhis	Service Leader:	K. Estep

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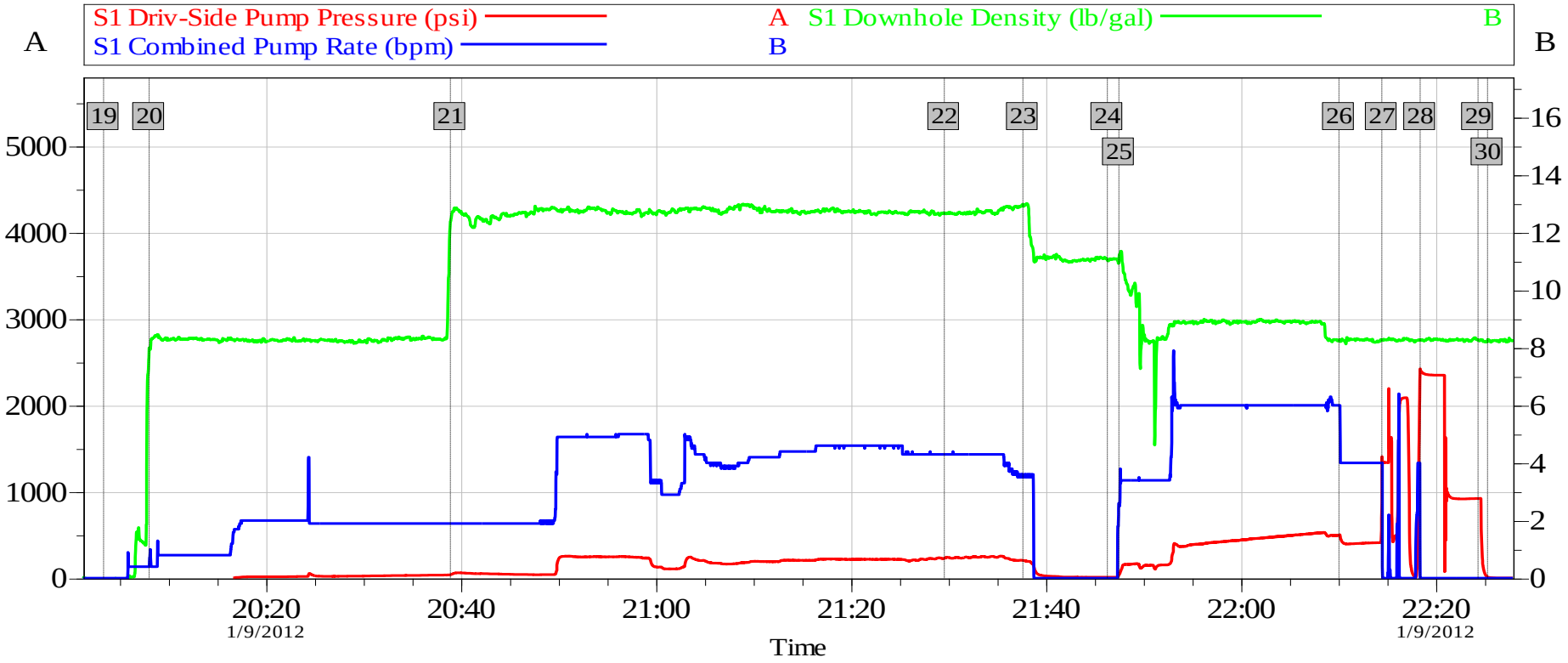
HALLIBURTON

XTO PCU T78X-12G13 2nd Stage

Job Summary Chart



Global Event Log

19	Start Job	20:03:23	20	Pump Fresh Water	20:08:03	21	Pump Lead Cement	20:38:57
22	Cement Returns to Surface	21:29:36	23	Shutdown	21:37:40	24	Drop Plug	21:46:20
25	Pump Displacement	21:47:31	26	Slow Rate	22:10:05	27	Bump Plug	22:14:29
28	Close Multiple Stage Cementer	22:18:25	29	Check Floats	22:24:21	30	End Job	22:25:19

Customer: XTO	Job Date: 09-Jan-2012	Sales Order #: 9192570
Job Description: 2 Stage Surface	API#: 051031172300	Elite #: 11512092
Service Supervisor: B. Fuchs	Service Operator: W. Voorhis	Service Leader: K. Estep

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