

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

PCU T78X-12G10

H&P 215

Post Job Summary **Cement Multiple Stages**

Prepared for:
Date Prepared: 04/15/2012
Version: 1

Service Supervisor: DEARING, KEN

Submitted by: M.C Dube

HALLIBURTON

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Wellbore Geometry

Job Tubulars					MD		TVD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft	
Open Hole Section	14 3/4" Open Hole		14.750		1,370.00	4,148.00	1,350.00	4,148.00	0.00
Casing	10 3/4" Surface Casing	10.75	9.950	45.50	0.00	4,133.00	0.00	3,826.00	92.36
Cement Stage Tool	Multiple Stage Cementer				1,389.86	1,392.14			
Open Hole Section	14 3/4" Open Hole		14.750		150.00	1,370.00	150.00	1,350.00	0.00
Casing	16" Conductor	16.00	15.250	65.00	0.00	150.00			

Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Surface Volume
1	Spacer	Fresh Water	8.34	50.0 bbl
2	Cement Slurry	First Stage Lead Cement	12.70	830.0 sacks
3	Cement Slurry	First Stage Tail Cement	15.80	365.0 sacks
4	Mud	Displacement Fluid	8.50	388.0 bbl
5	Cement Slurry	Top Out Cement	15.80	
1	Spacer	Fresh Water	8.34	50.0 bbl
2	Cement Slurry	Second Stage Lead Cement	12.70	595.0 sacks
3	Mud	Displacement Fluid	8.50	133.0 bbl

Fluids Pumped

Stage/Plug # 1 Fluid 1: Fresh Water
SPACER SBC MATERIAL

Fluid Density: 8.34 lbm/gal
Fluid Volume: 50.00 bbl
Pump Rate: 0.00 bbl/min

Stage/Plug # 1 Fluid 2: First Stage Lead Cement
ECONOCEM (TM) SYSTEM
5 lbm Cal-Seal 60
0.8 % Econolite
0.82 % HR-7

0.25 lbm Poly-E-Flake
3 lbm Silicalite Compacted

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Fluid Weight: 12.70 lbm/gal
Slurry Yield: 1.88 ft³/sack
Total Mixing Fluid: 10.01 Gal
Surface Volume: 830.0 sacks

Sacks: 830.0 sacks
Calculated Fill: 2,214.00 ft
Calculated Top of Fluid: 1,362.00 ft
Estimated Top of Fluid:

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

HALCEM (TM) SYSTEM
0.1 % HR-800
0.25 lbm Poly-E-Flake

Fluid Weight: 15.80 lbm/gal
Slurry Yield: 1.15 ft³/sack
Total Mixing Fluid: 4.98 Gal
Surface Volume: 365.0 sacks
Sacks: 365.0 sacks
Calculated Fill: 500.00 ft
Calculated Top of Fluid: 3,576.00 ft
Estimated Top of Fluid:

Stage/Plug # 1 Fluid 4: Displacement Fluid

Fluid Density: 8.50 lbm/gal
Fluid Volume: 388.00 bbl
Pump Rate: 0.00 bbl/min
Fluid Gels:
Mud PV/YP:

Stage/Plug # 1 Fluid 5: Top Out Cement

Top Out Cement
94 lbm Premium Cement

Fluid Weight: 15.80 lbm/gal
Slurry Yield: 1.17 ft³/sack
Total Mixing Fluid: 5.02 Gal
Estimated Top of Fluid:

Stage/Plug # 2 Fluid 1: Fresh Water SPACER SBC MATERIAL

Fluid Density: 8.34 lbm/gal
Fluid Volume: 50.00 bbl
Pump Rate: 0.00 bbl/min

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

ECONOCHEM (TM) SYSTEM
0.25 lbm Poly-E-Flake
0.3 % Versaset

Fluid Weight: 12.70 lbm/gal
Slurry Yield: 1.87 ft³/sack
Total Mixing Fluid: 9.96 Gal
Surface Volume: 595.0 sacks
Sacks: 595.0 sacks
Calculated Fill: 1,362.00 ft
Calculated Top of Fluid: 0.00 ft
Estimated Top of Fluid:

Stage/Plug # 2 Fluid 3: Displacement Fluid

Fluid Density: 8.50 lbm/gal
Fluid Volume: 133.00 bbl
Pump Rate: 0.00 bbl/min
Fluid Gels:
Mud PV/YP:

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Job Summary

Job Information

Job Start Date	4/5/2012 11:30:00 AM
Job MD	4,133.0 ft
Job TVD	4,133.0 ft
Height of Plug Container/Swage Above Rig Floor	3.0 ft
Surface Temperature at Time of Job	50 degF
Mud Type	Water Based Mud
Name of Mud Company	BAROID DRILLING FLUIDS
Actual Mud Density	9 lbm/gal
Time Circulated before job	3.25 hour(s)
Rate at Which Well was Circulated	8.500 bbl/min
Pipe Movement During Hole Circulation	Reciprocated
Time From End Mud Circ. to Job Start	12.00 minute
Pipe Movement During Cementing	Reciprocated
Calculated Displacement	133.60 bbl
Amount of Cement Returns	80.00 bbl
Job Displaced by (rig/halco)	Cement Unit HP Pumps
Length of Rat Hole	15.00 ft

Cementing Equipment

Number of Centralizers Used	16
Pipe Centralization	Through Entire Cement Column
Brand of Float Equipment Used	Weatherford GEMOCO
Did Float Equipment Hold?	Yes
Plug set used?	Yes
Brand of Plug set used?	Weatherford GEMOCO
Did Plugs Bump?	Yes
Calculated Pressure to Bump Plugs	250.0 psig
Brand of Stage Cementing Tools Used	Weatherford GEMOCO
Did Stage Cementing Tool Open Properly?	Yes

Service Supervisor Reports

Job Log

Date/Time	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
04/04/2012 23:00	Call Out				CALLED OUT TO XTO MULTIPLE STAGE SURFACE, PCU T78X-12G10.
04/04/2012 23:45	Pre-Convoy Safety Meeting				DISCUSS SAFETY AND HAZARDS OF PRE TRIP AND TRAVEL, NIGHT DRIVING.
04/04/2012 23:55	Other				PRE TRIP AND LOAD EQUIPMENT AND CHEMICALS FOR JOB, WAIT FOR JOB PACKET TO BE FINALIZED.
04/05/2012 01:20	Depart Yard Safety Meeting				DISCUSS SAFETY AND HAZARDS OF TRAVEL, NIGHT DRIVING.
04/05/2012 01:30	Crew Leave Yard				CALL IN JOURNEY MGT.
04/05/2012 04:00	Other				ARRIVE AT HES PICEANCE CREEK MAN CAMP TO PICK UP BULK TRUCKS.
04/05/2012 04:20	Pre-Convoy Safety Meeting				DISCUSS SAFETY AND HAZARDS OF PRE TRIP AND TRAVEL, NIGHT DRIVING.
04/05/2012 04:25	Other				LEAVE MAN CAMP.
04/05/2012 05:30	Arrive At Loc				CALL IN JOURNEY MGT.
04/05/2012 05:35	Assessment Of Location Safety Meeting				SIGN IN AT SAFETY SHACK, WALK LOCATION DISCUSS SAFETY AND HAZARDS OF SPOTTING AND RIG UP.
04/05/2012 05:40	Safety Meeting				MEET WITH CO.MAN, GET WELL INFORMATION, DISCUSS WELL CONDITIONS, DISCUSS SAFETY AND HAZARDS, GET WORK PERMIT AND WORK ORDER SIGNED.
04/05/2012 05:50	Safety Huddle				DISCUSS SAFETY AND HAZARDS OF SPOTTING EQUIPMENT.
04/05/2012 05:55	Other				SPOT EQUIPMENT.
04/05/2012 06:10	Safety Meeting - Pre Rig-Up				DISCUSS SAFETY AND HAZARDS OF RIGGING UP IRON AND SUCTION HOSE.
04/05/2012 06:15	Rig-Up Equipment				RIG UP IRON AND SUCTION HOSE, TEST H2O.

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Date/Time	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
04/05/2012 08:00	Safety Meeting				MEET WITH CO.MAN, GO OVER CALCULATIONS, DISCUSS JOB PROCEDURE, PRESSURES AND CONTINGENCIES, DISCUSS SAFETY AND HAZARDS OF JOB.
04/05/2012 08:00	Casing on Bottom				
04/05/2012 08:05	Circulate Well				RIG STARTS TO PUMP TO CIRCULATE AND CONDITION WELL.
04/05/2012 09:10	Rig-Up Equipment				SAFETY MEETING WITH RIG CREW, DISCUSS SAFETY AND HAZARDS OF RIGGING IRON ONTO RIG FLOOR AND RIGGING ON RIG FLOOR.
04/05/2012 09:15	Rig-Up Equipment				RIG IRON ONTO RIG FLOOR.
04/05/2012 09:30	Safety Meeting - Pre Rig-Up				DISCUSS SAFETY AND HAZARDS OF RIGGING IRON ON RIG FLOOR.
04/05/2012 09:40	Safety Meeting - Pre Rig-Up				RIG UP IRON ON RIG FLOOR.
04/05/2012 10:40	Prime Pumps				GET ALL EQUIPMENT READY FOR JOB.
04/05/2012 11:00	Safety Meeting - Pre Job				SAFETY MEETING WITH CO.MAN AND RIG CREW, DISCUSS JOB PROCEDURE, PRESSURES, AND CONTINGENCIES, DISCUSS SAFETY AND HAZARDS OF JOB,
04/05/2012 11:15	Safety Meeting				DISCUSS WITH CO.MAN ABOUT WHY WE DID NOT USE WHIP CHECKS- XTO NOT WANTING TO USE THEM ON JOB SO WE ARE NOT USING THEM AS PER XTO MGT.
04/05/2012 11:27	Pump Water	2	5	130.0	PUMP H2O TO FILL LINES.
04/05/2012 11:31	Pressure Test			500.0	LOW PRESSURE TEST LINES TO 500psi AS PER CO.MAN.
04/05/2012 11:34	Pressure Test			5000.0	HIGH PRESSURE TEST LINES TO 5000psi AS PER CO.MAN.
04/05/2012 11:40	Pump Spacer	4	50	185.0	PUMP 50bbls H2O SPACER AHEAD.
04/05/2012 11:53	Pump 1st Stage Lead Slurry	4	277.9	230.0	PUMP 277.9bbls OF 12.7# 1st LEAD ECONOCEM CEMENT, 830sk, 1.88ft3/sk, 10.01gal/sk
04/05/2012 12:10	Other	5		185.0	INCREASE RATE.
04/05/2012 12:46	Slow Rate	3.5		115.0	SLOW RATE TO KEEP DENSITY UP.
04/05/2012 12:50	Pump 1st Stage Tail Slurry	3.5	74.8	150.0	PUMP 74.8bbls OF 15.8# 1st STAGE TAIL HALCEM CEMENT, 365sk, 1.15ft3/sl, 4.98gal/sk.

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Date/Time	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
04/05/2012 12:51	Other	5		360.0	INCREASE RATE.
04/05/2012 12:54	Slow Rate	4		270.0	SLOW RATE TO KEEP DENSITY UP.
04/05/2012 13:07	Shutdown				END CEMENT-SHUT DOWN.
04/05/2012 13:08	Drop Plug				SAFETY HUDDLE-TAKE TOP CAP OFF OF CEMENT HEAD-DROP PLUG.
04/05/2012 13:16	Pump Displacement	6	388.8	65.0	START H2O DISPLACEMENT-1st 20bbls OF DISPLACEMENT H2O WASHING UP ON TOP OF PLUG, AS PER CO.MAN.
04/05/2012 13:19	Pump Displacement	6		185.0	START PUMPING MUD DISPLACEMENT.
04/05/2012 13:20	Other	8		310.0	INCREASE RATE AS PER CO.MAN.
04/05/2012 13:32	Slow Rate	3		130.0	SLOW RATE TO LET PLUG PASS THROUGH DV TOOL.
04/05/2012 13:39	Other	8		355.0	INCREASE RATE AFTER PLUG HAS PASSED THROUGH DV TOOL.
04/05/2012 13:50	Displ Reached Cmnt	8		400.0	SEE CEMENT LIFT PRESSURE.
04/05/2012 13:51	Slow Rate	7		380.0	SLOW RATE AS PER CO.MAN.
04/05/2012 13:52	Pump Displacement	7		335.0	START H2O DISPLACEMENT, 60bbls OF H2O ABOVE AND BELOW DV TOOL AS PER CO.MAN.
04/05/2012 13:59	Slow Rate	6		585.0	SLOW RATE AS PER CO.MAN.
04/05/2012 14:00	Pump Displacement	6		610.0	PUMP MUD DISPLACEMENT.
04/05/2012 14:03	Spacer Returns to Surface	6		775.0	SEE H2O SPACER RETURNS AT PIT.
04/05/2012 14:12	Slow Rate	4		935.0	SLOW RATE AS PER CO.MAN.
04/05/2012 14:15	Bump Plug	4		950.0	BUMP PLUG @ 950psi.
04/05/2012 14:15	Shutdown			1550.0	PRESSURE 600psi OVER TO 1550psi-SHUT DOWN.
04/05/2012 14:18	Check Floats				FLOATS HOLD-2.5bbls BACK.
04/05/2012 14:22	Drop Opening Device For Multiple Stage Cementer				SAFETY HUDDLE-TAKE TOP CAP OFF OF CEMENT HEAD-DROP OPENING TOOL, WAIT 20min AS PER CO.MAN.
04/05/2012 14:44	Other	1.5		10.0	PUMP MUD TO PRESSURE UP AND OPEN TOOL.

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Date/Time	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
04/05/2012 14:44	Other	1.5		620.0	TOOL OPENS @ 620psi.
04/05/2012 14:45	Other	6		365.0	INCREASE RATE AND PUMP 15bbls MUD THAT ARE IN TANKS ON RCM, AS PER CO.MAN.
04/05/2012 14:48	Shutdown				
04/05/2012 14:52	Other				SAFETY HUDDLE-SWAP LINES TO RIG, RIG STARTS CIRCULATING WELL, CIRCULATED LOTS OF GOOD CEMENT TO PIT
04/05/2012 14:55	Safety Huddle				DISCUSS SAFETY AND HAZARDS.
04/05/2012 15:00	Other				WASH UP RCM TO PIT AND BLOW OFF SILO AND GET BULK EQUIPMENT READYFOR NEXT STAGE.
04/05/2012 15:30	Other				WAIT ON CEMENT.
04/05/2012 16:45	Safety Meeting - Pre Job				SAFETY MEETING WITH RIG CREW, DISCUSS SAFETY AND HAZARDS OF RIGGING IRON ONTO RIG FLOOR AND RIGGING ON RIG FLOOR.
04/05/2012 17:00	Other				SAFETY HUDDLE-RIG SHUTS DOWN, SWAP LONES BACK TO HES LINES.
04/05/2012 17:07	Pump Spacer	6	80	145.0	PUMP 80bbls OF H2O SPACER AHEAD AS PER CO.MAN.
04/05/2012 17:22	Pump 2nd Stage Lead Slurry	6	199.2	350.0	PUMP 199.2bbls OF 12.7# 2nd STAGE LEAD ECONOCEM CEMENT, 595sk, 1.88ft3/sk, 10.08gal/sk
04/05/2012 17:42	Spacer Returns to Surface	6		275.0	SEE H2O SPACER RETURNS BACK AT PIT.
04/05/2012 17:44	Slow Rate	5		210.0	SLOW RATE TO KEEP DENSITY UP.
04/05/2012 17:45	Slow Rate	4		130.0	SLOW RATE TO KEEP DENSITY UP.
04/05/2012 17:58	Shutdown				END CEMENT-SHUT DOWN.
04/05/2012 17:59	Drop Plug				SAFETY HUDDLE-TAKE TOP CAP OFF OF CEMENT HEAD-DROP CLOSING TOOL PLUG.
04/05/2012 18:01	Pump Displacement	6	133.6	160.0	START H2O DISPLACEMENT-1st 20bbls OF DISPLACEMENT H2O WASHING UP ON TOP OF PLUG, AS PER CO.MAN.
04/05/2012 18:05	Pump Displacement	6		170.0	START PUMPING MUD DISPLACEMENT.
04/05/2012 18:10	Cement Returns to Surface	6		395.0	SEE GOOD CEMENT RETURNS TO PIT, 80bbls CEMENT BACK TO PIT.

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Date/Time	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
04/05/2012 18:14	Slow Rate	2		260.0	SLOW RATE AS PER CO.MAN.
04/05/2012 18:35	Other	3.5		330.0	INCREASE RATE AS PER WEATHERFORD TOOL HAND, WANTS TOOL CLOSED AT 3.56bpm.
04/05/2012 18:40	Bump Plug	3.5		420.0	BUMP PLUG @ 420psi.
04/05/2012 18:40	Shutdown			2045.0	PRESSURE 1625psi OVER TO 2045psi-TOOL CLOSES-SHUT DOWN.
04/05/2012 18:45	Other				CHECK TOOL-TOOL CLOSED, 1.5bbls BACK.
04/05/2012 18:50	Post-Job Safety Meeting (Pre Rig-Down)				DISCUSS SAFETY AND HAZARD OBSERVATIONS DURING JOB, DISCUSS SAFETY AND HAZARDS OF RIGGING DOWN IRON.
04/05/2012 19:20	Safety Meeting - Pre Rig-Down				SAFETY MEETING WITH RIG CREW, DISCUSS SAFETY AND HAZARDS OF RIGGING IRON OFF OF RIG FLOOR.
04/05/2012 19:30	Rig-Down Equipment				CEMENT GOOD AS PER CO.MAN, NO NEED FOR TOP OUT AS PER CO.MAN, RIG DOWN IRON OFF OF RIG FLOOR, EXEPT FOR CEMENT HEAD, LEAVING IT ON FOR 6 HOURS AS PER CO.MAN.
04/05/2012 19:40	Safety Huddle				DISCUSS SAFETY AND HAZARDS.
04/05/2012 19:45	Other				WASH UP RCM TO PIT, BLOW SILO OFF INTO BULK TRUCK.
04/05/2012 20:30	Safety Meeting - Pre Rig-Down				DISCUSS SAFETY AND HAZARDS OF RIGGING DOWN IRON AND SUCTION HOSE.
04/05/2012 20:35	Rig-Down Equipment				RIG DOWN AND RACK UP IRON AND SUCTION HOSE.
04/05/2012 21:20	Pre-Convoy Safety Meeting				DISCUSS SAFETY AND HAZARDS OF TRAVEL.
04/05/2012 22:00	Crew Leave Location				CALL IN JOURNEY MGT.
04/05/2012 22:00	Other				THANK YOU-KEN AND CREW.

The Road to Excellence Starts with Safety

Sold To #: 353810	Ship To #: 353810	Quote #:	Sales Order #: 9404059
Customer: XTO ENERGY INC EBUSINESS	Customer Rep: SADLER, MIKE		
Well Name: PCU	Well #: T78X-12G10	API/UWI #:	
Field:	City (SAP): FORT WORTH	County/Parish: Rio Blanco	State: Colorado
Contractor: H&P	Rig/Platform Name/Num: 215		
Job Purpose: Cement Multiple Stages			
Well Type: Water Supply Well	Job Type: Cement Multiple Stages		
Sales Person: FEUERBORN, JOHN	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 #
BROWN, CHRISTOPHER Paul	16.5	491062	DEARING, KEN A	16.5	239372	ELDER, DENNIS R	16.5	505202
JUTSUM, TIMOTHY	16.5	510127	VOORHIS, WALTER T	16.5	472268			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10897881	120 mile	11019277	120 mile	11023106	120 mile	11071581	120 mile
11127525	120 mile	11189139	120 mile	11263211	120 mile	11307422	120 mile
11410664	120 mile	11526494	120 mile	11618168	120 mile	6603	120 mile
D0417	120 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				Job Times			
Formation Name				Date	Time	Time Zone	
Formation Depth (MD)	Top		Bottom	Called Out	04 - Apr - 2012	23:00	MST
Form Type		BHST		On Location	05 - Apr - 2012	05:30	MST
Job depth MD	4133. ft	Job Depth TVD	4133. ft	Job Started	05 - Apr - 2012	11:30	MST
Water Depth		Wk Ht Above Floor	3. ft	Job Completed	05 - Apr - 2012	19:00	MST
Perforation Depth (MD)	From	To		Departed Loc	05 - Apr - 2012	22:00	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
14 3/4" Open Hole				14.75				150.	1370.	150.	1350.
14 3/4" Open Hole				14.75				1370.	4148.	1350.	4148.
Multiple Stage Cementer	Unknown							1389.9	1392.1		
10 3/4" Surface Casing	New		10.75	9.95	45.5	BTC	J-55	.	4133.	.	3826.
16" Conductor	Unknown		16.	15.25	65.			.	150.		

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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk					
1	Fresh Water				50.00	bbl	8.34	.0	.0	.0						
2	First Stage Lead Cement	ECONOCER (TM) SYSTEM (452992)			830.0	sacks	12.7	1.88	10.01		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)			365.0	sacks	15.8	1.15	4.98		4.98					
	0.1 %	HR-800, 50 LB SACK (101619742)														
	0.25 lbm	POLY-E-FLAKE (101216940)														
	4.98 Gal	FRESH WATER														
4	Displacement Fluid				388.00	bbl	8.5			.0						
5	Top Out Cement	CMT - CLASS G, 94 LB (100064007)				sacks	15.8	1.17	5.02		5.02					
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)														
	5.02 Gal	FRESH WATER														
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	Fresh Water				50.00	bbl	8.34	.0	.0	.0						
2	Second Stage Lead Cement	ECONOCER (TM) SYSTEM (452992)			595.0	sacks	12.7	1.87	9.96		9.96					
	0.25 lbm	POLY-E-FLAKE (101216940)														
	0.3 %	VERSASET, 55 LB SK (101376573)														
	9.96 Gal	FRESH WATER														
3	Displacement Fluid				133.00	bbl	8.5			.0						
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	92.36 ft	Reason	Shoe Joint							
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID				
The Information Stated Herein Is Correct				Customer Representative Signature							

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Lab Data

Job Information

Request/Slurry	226493/1	Rig Name	H&P 215	Date	01/APR/2012
Submitted By	Thomas Stumpf	Job Type	Surface Casing	Bulk Plant	Meeker
Customer	XTO	Location		Well	PCU T78X-12G10

Well Information

Casing/Liner Size	10 3/4"	Depth MD	4112 ft	BHST	131 F
Hole Size	14 3/4"	Depth TVD	3805 ft	BHCT	92 F

Cement Information - Lead Design

Conc	UOM	Cement/Additive	Sample Type	Sample Date	Lot No.	Cement Properties		
35	%	> Boral Craig Pozmix	Bulk	Apr 01, 2012		Slurry Density	12.70	PPG
65	%	> Holcim Type II/V	Bulk	Apr 01, 2012		Slurry Yield	1.88	ft3/sk
100.00	% BWOC	Cement Blend				Water Requirement	10.01	GPS
						Water Source	Field (Fresh) Water	
5.000	lb/sk	Cal-Seal 60	Bulk	Apr 01, 2012				
3.000	lb/sk	Silicalite - Compacted	Bulk	Apr 01, 2012				
0.800	% BWOC	Econolite (Powder - PB)	Bulk	Apr 01, 2012				
0.820	% BWOC	HR-7	Bulk	Apr 01, 2012				
0.250	lb/sk	Pol-E-Flake	Bulk	Apr 01, 2012				
10.01	gal/sack	Field (Fresh) Water	Lab	Feb 09, 2012				

Operation Test Results Request ID 226493/1

Thickening Time - ON-OFF-ON, Request Test ID:2346544

Test Temp (°F)	Pressure (psi)	Reached in (min)	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	1,779	60	05:20	05:20	05:20	05:20	5	185	30	71

1st sd 3 bc to 4 bc , 2nd sd 4 bc to 71 bc witnessed, did not shear the pin. gelled around the paddle.

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2344234

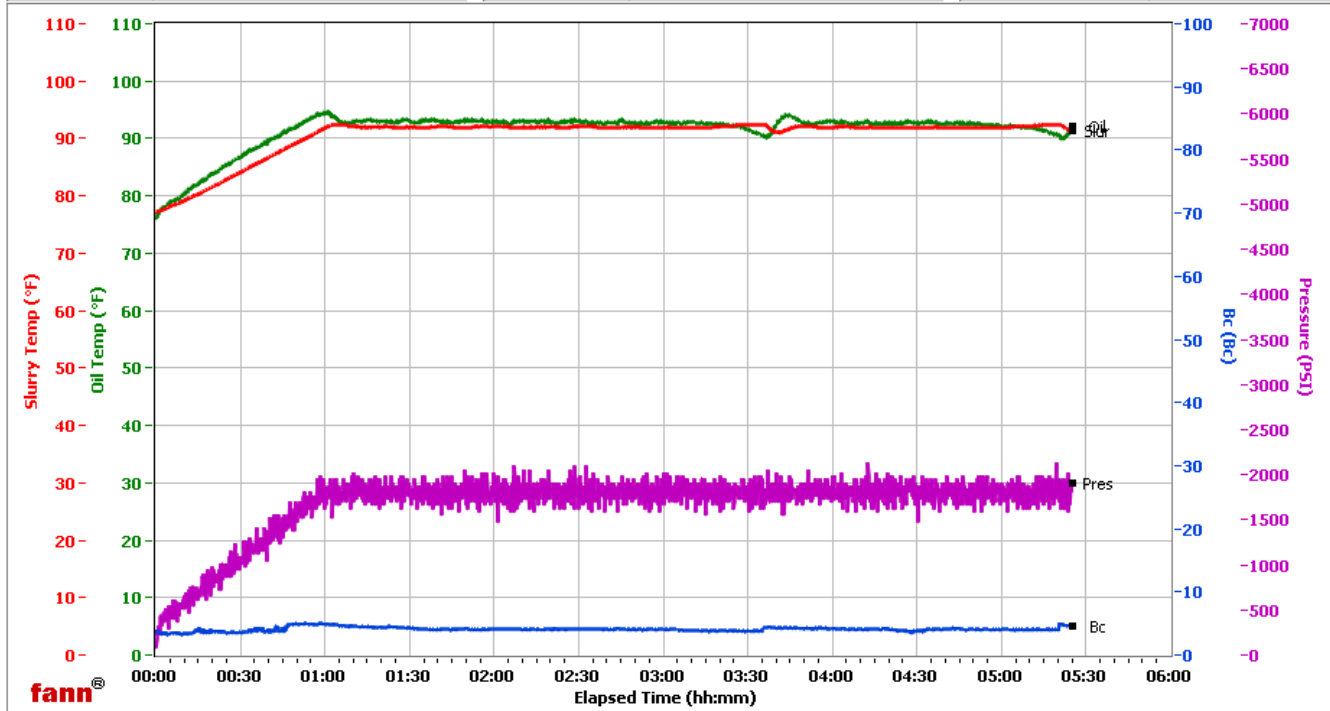
Mixability rating (0 - 5)

5

HALLIBURTON

MEEKER

Fields	Values	Fields	Values	Events	Results
Project Name	XTO 226493-1B	Job Type	LEAD	30.00 Bc	NaN
Test ID	226493-1B	Cement Type	HOLCIM II\V	50.00 Bc	NaN
Request ID	2	Cement Weight	Light Weight	60.00 Bc	NaN
Tested by	RR	Test Date	04/02/12	70.00 Bc	NaN
Customer	XTO	Test Time	10:10 AM	100.00 Bc	NaN
Well No	PCU T78X-12G10	Temp. Units	degF	200.00 Bc	NaN
Rig	H&P 215	Pressure Units	PSI	03h:00m	4.12
Casing/Liner Size				06h:00m	NaN



Data File O:\HPHT Data Files WRCR\WRCR Consistometer #2\XTO 226493-1B.tdms

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

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Job Information

Request/Slurry	226494/1	Rig Name	H&P 215	Date	01/APR/2012
Submitted By	Thomas Stumpf	Job Type	Surface Casing	Bulk Plant	Meeker
Customer	XTO	Location		Well	PCU T78X-12G10

Well Information

Casing/Liner Size	10 3/4"	Depth MD	4112 ft	BHST	131 F
Hole Size	14 3/4"	Depth TVD	3805 ft	BHCT	92 F

Drilling Fluid Information

Mud Supplier Name	Mud Trade Name	Density
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Cement Information - Tail Design

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
100.00	% BWOC	Mountain G	Bulk	Apr 01, 2012		Slurry Density	15.80	PPG
0.100	% BWOC	HR-800	Bulk	Apr 01, 2012		Slurry Yield	1.15	ft3/sk
0.250	% BWOC	Pol-E-Flake	Bulk	Apr 01, 2012	9/27/11	Water Requirement	4.98	GPS
4.98	gal/sack	Field (Fresh) Water	Lab	Feb 09, 2012		Water Source	Field (Fresh) Water	

Operation Test Results Request ID 226494/1

Thickening Time, Request Test ID:2344781

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)
92	1,779	60	6	03:08	03:18	03:24	04:02

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2344238

Mixability rating (0 - 5)

5

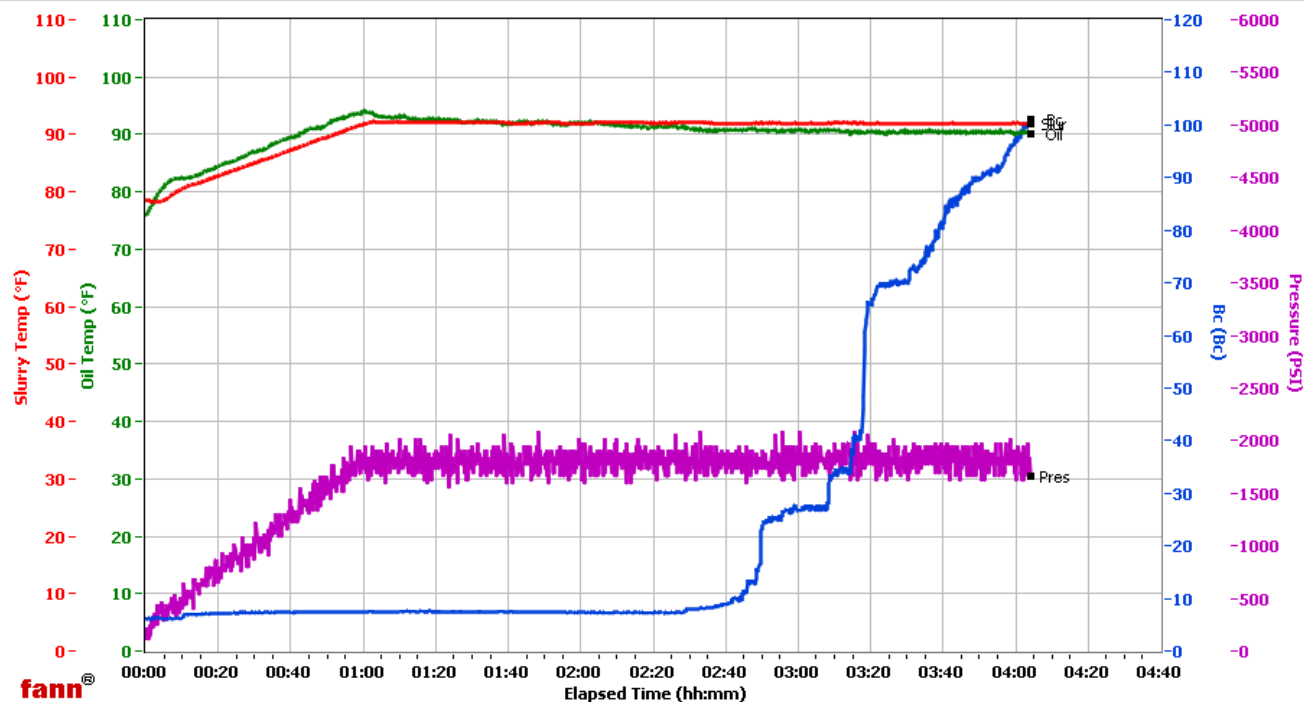
HALLIBURTON

MEEKER

Fields	Values
Project Name	XTO 226494-1A
Test ID	226494-1A
Request ID	2
Tested by	RR
Customer	XTO
Well No	PCU T78X-12G10
Rig	H&P 215
Casing/Liner Size	

Fields	Values
Job Type	TAIL
Cement Type	MOUNTAIN G
Cement Weight	Standard
Test Date	04/01/12
Test Time	09:25 PM
Temp. Units	degF
Pressure Units	PSI

Events	Results
30.00 Bc	03h:08m
50.00 Bc	03h:18m
60.00 Bc	03h:18m
70.00 Bc	03h:24m
100.00 Bc	04h:02m
200.00 Bc	NaN
03h:00m	26.52
06h:00m	NaN



Data File O:\HPHT Data Files\WRCR\WRCR Consistometer #2\XTO 226494-1A.tdms

Comments MOUNTAIN G, HR-800 .100%, DENSITY 15.7, YIELD 1.15

HALLIBURTON

Job Information

Request/Slurry	226495/1	Rig Name	H&P 215	Date	01/APR/2012
Submitted By	Thomas Stumpf	Job Type	Surface Casing	Bulk Plant	Meeker
Customer	XTO	Location		Well	PCU T78X-12G10

Well Information

Casing/Liner Size	10 3/4"	Depth MD	1370 ft	BHST	92 F
Hole Size	14 3/4"	Depth TVD	1350 ft	BHCT	73 F

Cement Information - Primary Design

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	<u>Cement Properties</u>		
35	%	> Boral Craig Pozmix	Bulk	Apr 01, 2012		Slurry Density	12.70	PPG
65	%	> Holcim Type II/V	Bulk	Apr 01, 2012		Slurry Yield	1.88	ft3/sk
100.00	% BWOC	Cement Blend	Bulk	Apr 01, 2012		Water Requirement	10.08	GPS
5.000	lb/sk	Cal-Seal 60	Bulk	Apr 01, 2012		Water Source	Field (Fresh)	Water
3.000	lb/sk	Silicalite - Compacted	Bulk	Apr 01, 2012				
1.000	% BWOC	Econolite (Powder - PB)	Bulk	Apr 01, 2012				
0.300	% BWOC	VERSASET (PB)	Bulk	Apr 01, 2012				
0.250	% BWOC	Pol-E-Flake	Bulk	Apr 01, 2012	9/217/11			
10.08	gal/sack	Field (Fresh) Water	Lab	Feb 09, 2012				

Operation Test Results Request ID 226495/1

Thickening Time - ON-OFF-ON, Request Test ID:2344241

Test Temp (°F)	Pressure (psi)	Reached in (min)	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	631	26	02:55	02:55	02:55	02:55	7	145	30	106

1st sd 6 bc to 105.7 bc

Mixability (0 - 5) - 0 is not mixable, Request Test ID:2344240

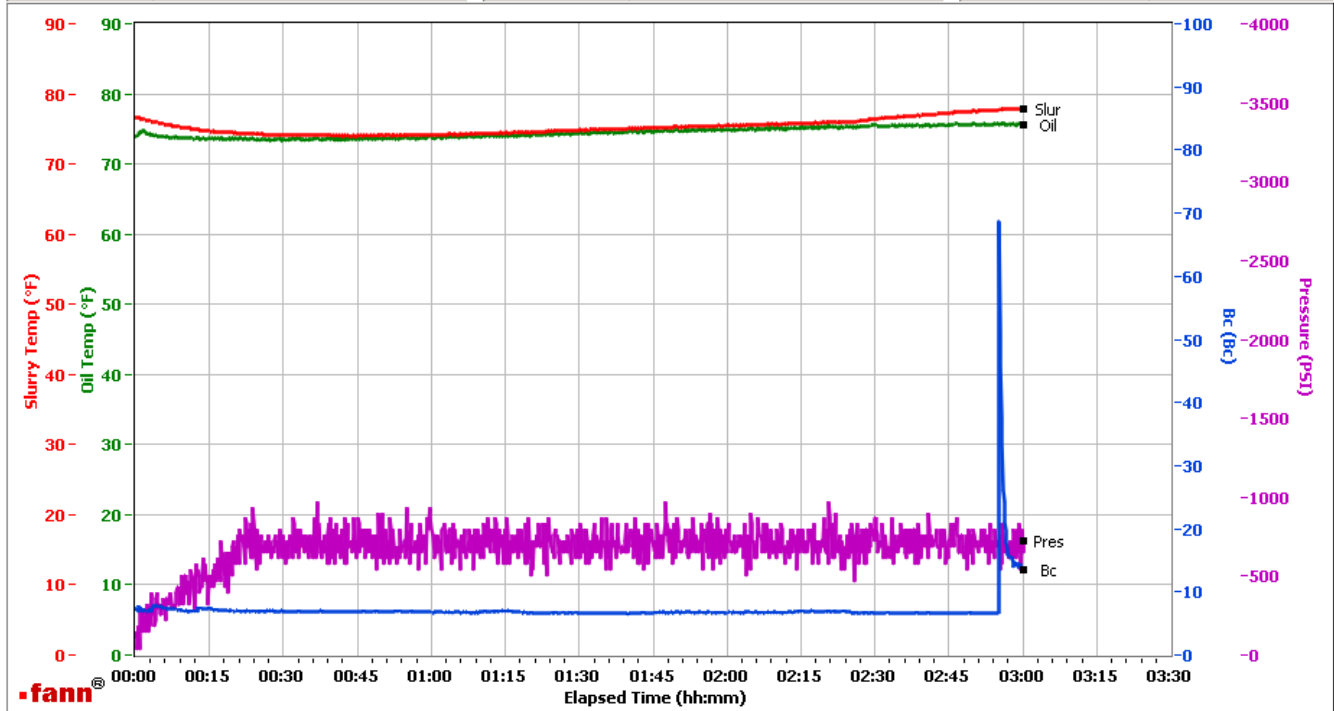
Mixability rating (0 - 5)

5

HALLIBURTON

MEEKER

Fields	Values	Fields	Values	Events	Results
Project Name	XTO 226495-1	Job Type	2ND LEAD	30.00 Bc	02h:55m
Test ID	226495-1	Cement Type	HOLCIM II/V	50.00 Bc	02h:55m
Request ID	2	Cement Weight	Light Weight	60.00 Bc	02h:55m
Tested by	RR	Test Date	04/01/12	70.00 Bc	02h:55m
Customer	XTO	Test Time	05:23 PM	100.00 Bc	02h:55m
Well No	PCU T78X-12G10	Temp. Units	degF	200.00 Bc	NaN
Rig	H&P 215	Pressure Units	PSI	03h:00m	14.03
Casing/Liner Size				06h:00m	NaN



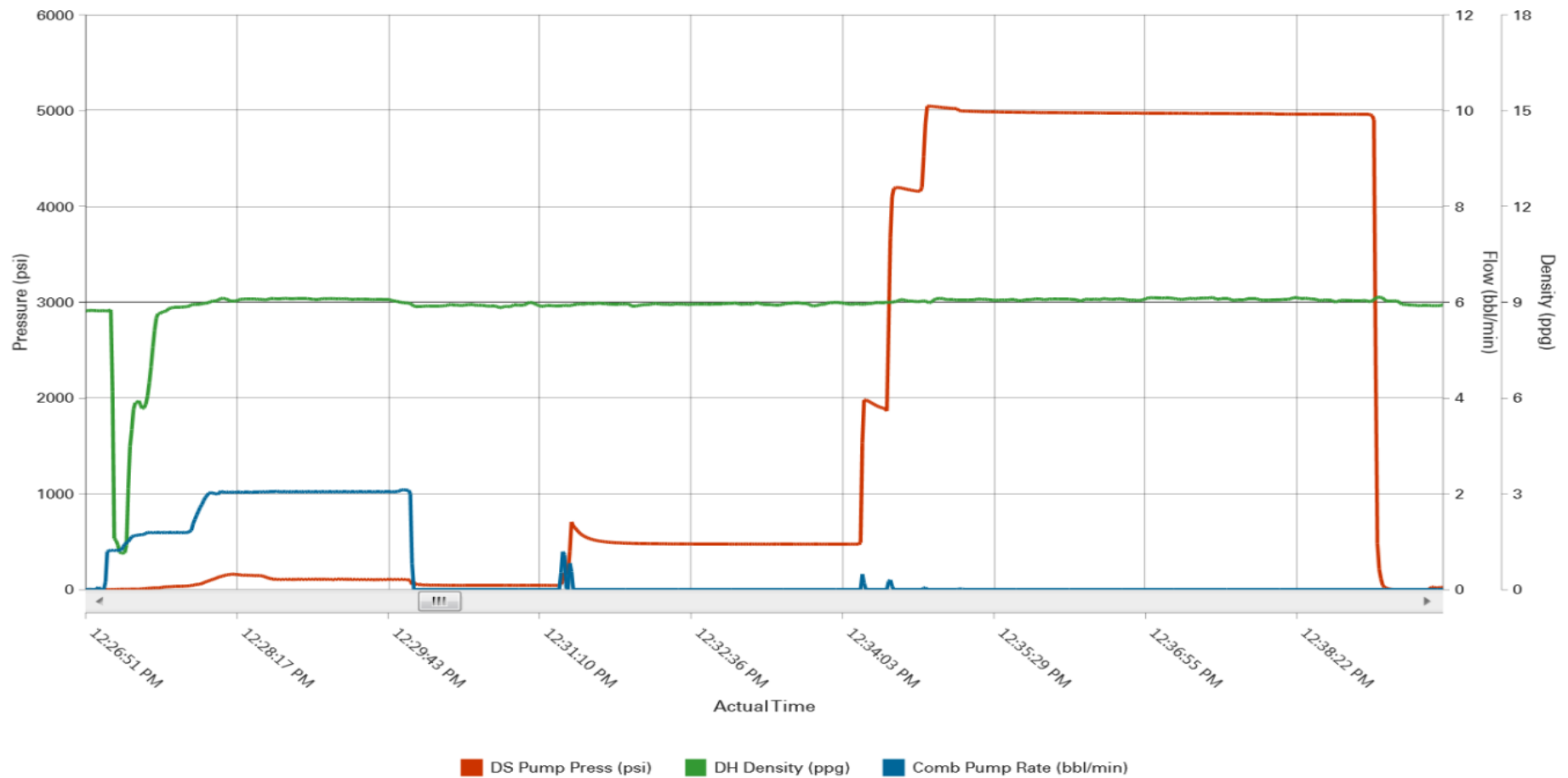
Data File O:\HPHT Data Files WRCR\WRCR Consistometer #2\XTO 226495-1.tdms

Comments HOLCIM II/V, DENSITY 12.7, YIELD 1.88 YARD

HALLIBURTON

Data Acquisition

XTO ENERGY, CEMENT MULTIPLE STAGES, PCUT78X-12G10, PRESSURE TEST



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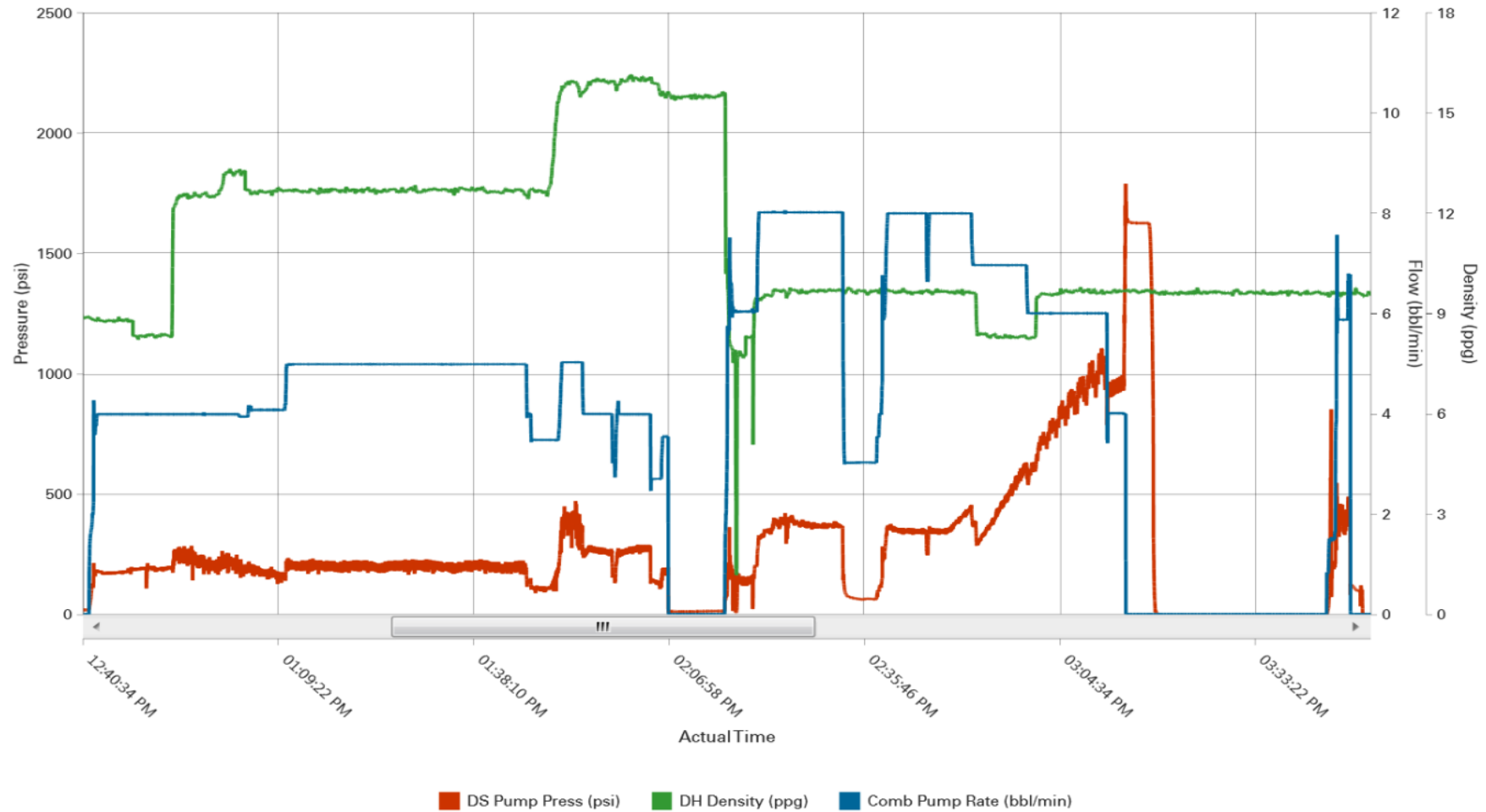
Created: 2012-04-06 02:23:03 , Version: 1.2.101

Customer : XTO ENERGY INC EBUSINESS
Supervisor : Ken Dearing

Job Date : 05-Apr-2012
Sales Order # : 9404059

Well : PCUT78X-12G10
ELITE : 11189139

XTO ENERGY, CEMENT MULTIPLE STAGES, PCU T78X-12G10, 1st STAGE



XTO ENERGY, CEMENT MULTIPLE STAGES, PCUT78X-12G10, 2nd STAGE

