

HALLIBURTON

iCem[®] Service

PICEANCE ENERGY LLC

For: Matt Settles

Date: Saturday, November 07, 2015

Fed 28-13E

API/UWI #: 05-077-10249-00

FED 28-13E

Case 1

Job Date: Saturday, November 07, 2015

Sincerely,
Ed Deussen

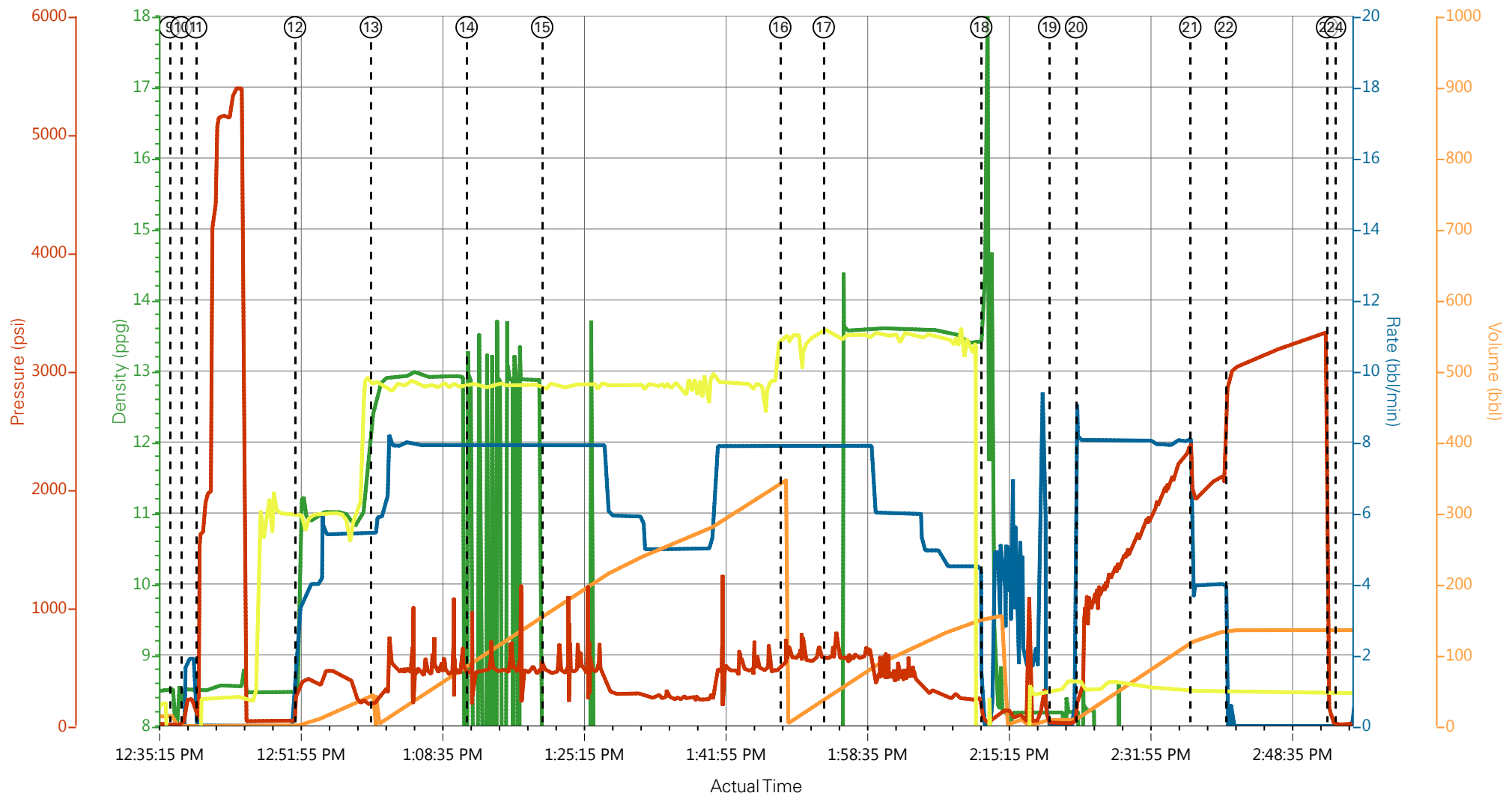
1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Recirc Density (ppg)	Comments
Event	1	Call Out	11/7/2015	03:00:00	USER						O/L time 0900
Event	2	Pre-Convoy Safety Meeting	11/7/2015	05:15:00	USER						
Event	3	Crew Leave Yard	11/7/2015	05:30:00	USER						1 Elite, 1 660, 1 bodyload, 1 pickup
Event	4	Arrive At Loc	11/7/2015	07:30:00	USER						Rig still running casing
Event	5	Assessment Of Location Safety Meeting	11/7/2015	07:45:00	USER						JSA completed - customer offered/received SDS - water test ph 7.5, Cl 0, temp 67 degrees
Event	6	Pre-Rig Up Safety Meeting	11/7/2015	09:00:00	USER						
Event	7	Rig-Up Equipment	11/7/2015	09:15:00	USER						Hard line to standpipe, manifold on ground, wash up line to cellar, water hoses to upright and day tank, bulk hoses to silos, 660, and bodyload
Event	8	Pre-Job Safety Meeting	11/7/2015	12:15:00	USER						All HES personnel, rig crew, and company rep - JSA completed
Event	9	Start Job	11/7/2015	12:36:54	USER						TD 8403', TP 8393', SJ 86.38', Mud 9.5 ppg, 7 7/8" OH, 4 1/2" 11.6# I-80 csg, 8 5/8" surf csg @ 1594'
Event	10	Prime Lines	11/7/2015	12:38:14	COM5	257	8.33	2.0	2.0		Fresh water
Event	11	Test Lines	11/7/2015	12:40:00	USER	5411					Pressure held well
Event	12	Pump Tuned Spacer	11/7/2015	12:51:38	COM5	460	11.0	6.0	40.0		11.0 ppg, 4.55 yield, 30.0 gal/sk
Event	13	Pump Lead Cement	11/7/2015	13:00:34	COM5	580	12.8	8.0	312.4	12.8	1063 sks, 12.8 ppg, 1.65 yield, 7.95 gal/sk, EconoCem GJ1
Event	14	Check weight	11/7/2015	13:11:50	COM5					12.8	Downhole densometer not functioning properly - weight checked with scales
Event	15	Check weight	11/7/2015	13:20:43	COM5					12.8	Weighed again on mud scales

Event	16	Pump Tail Cement	11/7/2015	13:48:44	COM5	596	13.5	8.0	143.7	13.5	461 sks, 13.5 ppg, 1.75 yield, 7.97 gal/sk, ThermaCem GJ2
Event	17	Check weight	11/7/2015	13:53:51	COM5					13.5	Weighed again on mud scales
Event	18	Shutdown/Wash up	11/7/2015	14:12:23	USER						Wash up to cellar
Event	19	Drop Top Plug	11/7/2015	14:20:22	COM5						Plug launched
Event	20	Pump Displacement	11/7/2015	14:23:33	COM5	2343	8.33	8.0	128.8	8.33	1 gal MMCR, 5 gal Cla-Web
Event	21	Slow Rate	11/7/2015	14:36:59	USER	1910	8.33	4.0	10.0	8.33	Good returns throughout job
Event	22	Bump Plug	11/7/2015	14:41:09	COM5	2110					Approx 40 bbls Tuned Spacer to surface – Casing test to 3000 psi
Event	23	Check Floats	11/7/2015	14:53:05	USER	3249					Floats held – 1 bbl flowback
Event	24	End Job	11/7/2015	14:54:02	USER						No sugar used, no add hours
Event	25	Pre-Rig Down Safety Meeting	11/7/2015	15:00:00	USER						
Event	26	Rig-Down Equipment	11/7/2015	15:15:00	USER						
Event	27	Pre-Convoy Safety Meeting	11/7/2015	16:15:00	USER						
Event	28	Crew Leave Location	11/7/2015	16:30:00	USER						Thank you for using Halliburton - Ed Deussen and crew

PICEANCE - FED 28-13E - 4 1/2" PRODUCTION



— DH Density (ppg)
 — Comb Pump Rate (bbl/min)
 — PS Pump Press (psi)
 — Pump Stg Tot (bbl)
 — Recirc Density (ppg)

- | | | | | |
|---|--------------------------|--------------------|----------------------|--------------------------------|
| ① Call Out | ⑦ Rig-Up Equipment | ⑬ Pump Lead Cement | ⑰ Drop Top Plug | 25 Pre-Rig Down Safety Meeting |
| ② Pre-Convoy Safety Meeting | ⑧ Pre-Job Safety Meeting | ⑭ Check weight | 20 Pump Displacement | 26 Rig-Down Equipment |
| ③ Crew Leave Yard | ⑨ Start Job | ⑮ Check weight | 21 Slow Rate | 27 Pre-Convoy Safety Meeting |
| ④ Arrive At Loc | ⑩ Prime Lines | ⑯ Pump Tail Cement | 22 Bump Plug | 28 Crew Leave Location |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑰ Check weight | 23 Check Floats | |
| ⑥ Pre-Rig Up Safety Meeting | ⑫ Pump Tuned Spacer | ⑱ Sh | 24 End Job | |

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Created: 2015-11-07 08:14:08, Version: 4.2.393

Edit

Customer : PICEANCE ENERGY LLC

Job Date : 11/7/2015 10:10:19 AM

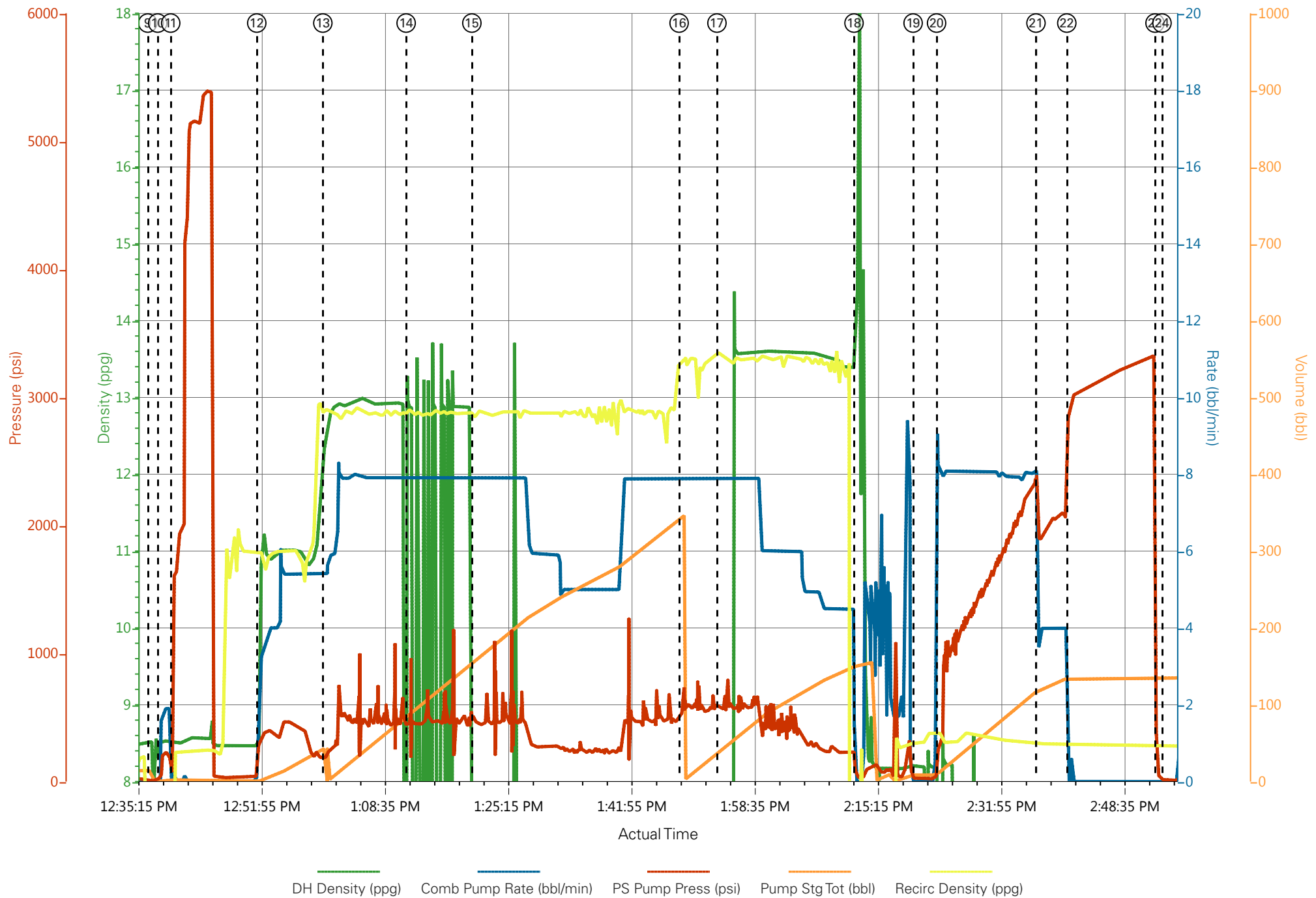
Well : Fed 28-13E

Representative : Matt Settles

Sales Order # : 902889167

Elite #1 : Ed Deussen / John Keane

PICEANCE - FED 28-13E - 4 1/2" PRODUCTION



Job Information

Request/Slurry	2283226/1	Rig Name	Patterson #306	Date	04/NOV/2015
Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Piceance Energy LLC	Location	Mesa	Well	Piceance Federal 28-13E

Well Information

Casing/Liner Size	4.5 in / 114.3 mm	Depth MD	2560 m / 8400 ft	BHST	119°C / 246°F
Hole Size	7.875 in / 200.025 mm	Depth TVD	2446 m / 8026 ft	BHCT	76°C / 168°F
Pressure	339 bar / 4920 psi				

Drilling Fluid Information

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



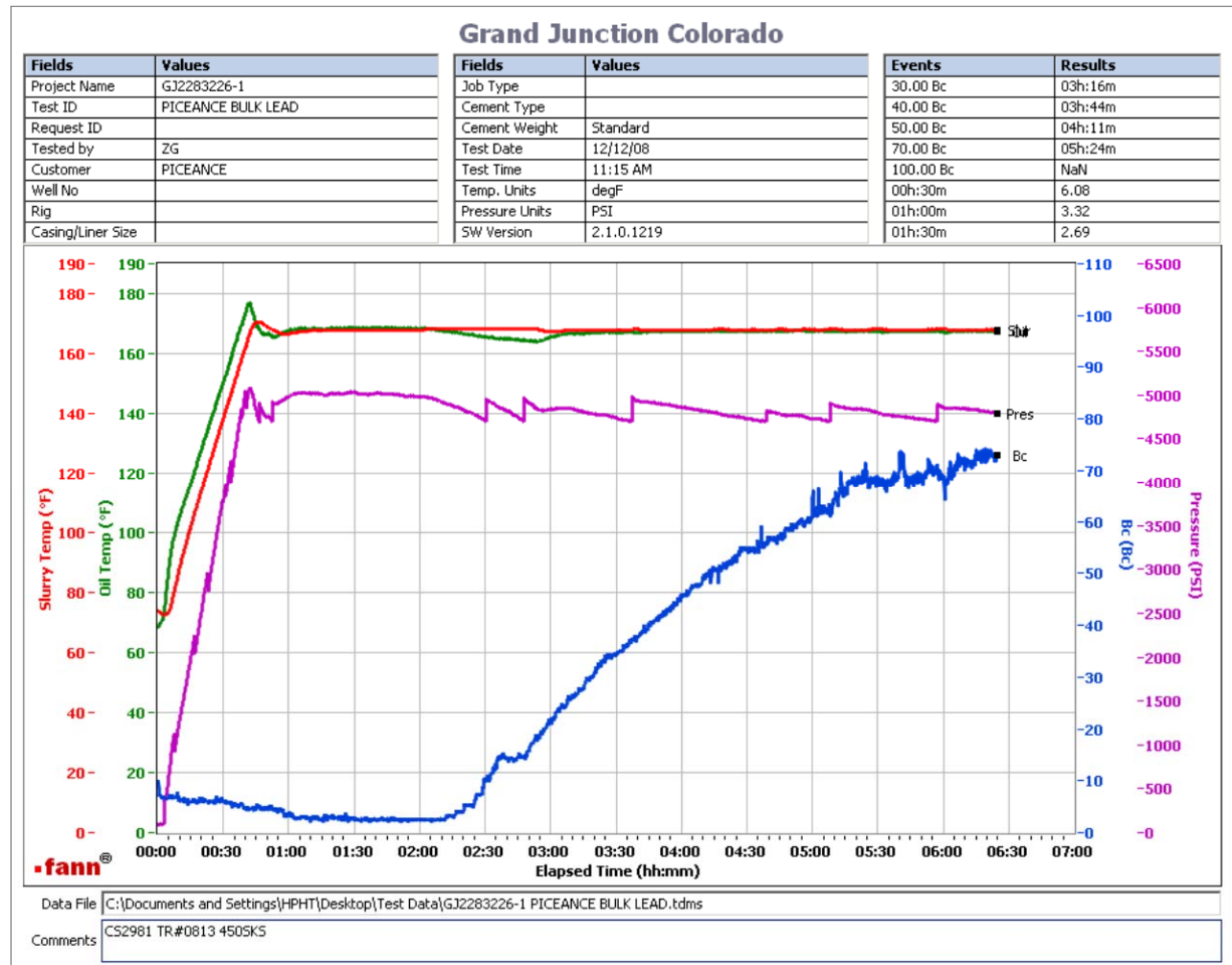
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		> Mountain G	Bulk Blend	05.11.15	Tank 29	Slurry Density	12.7	lbm/gal
		> San Juan	Bulk Blend	05.11.15	Tank 16	Slurry Yield	1.6449	ft3/sack
		Cement Blend				Water Requirement	7.9376	gal/sack
		Fresh Water	Lab	12.03.13		Total Mix Fluid	7.94	gal/sack
		HALAD-344 (PB)	Bulk Blend	05.11.15	15052640			
		SA-1015 (PB)	Bulk Blend	05.11.15	5A0001W			
		Kol-Seal	Bulk Blend	05.11.15	Tank 1	Water Source	Fresh Water	
		Pol-E-Flake	Bulk Blend	05.11.15		Water Chloride		
		HR-601	Bulk Blend	05.11.15	64			

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Thickening Time

05/NOV/2015

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	Termination Time	Termination BC
168	4920	41	10	3:16	3:44	4:11	5:24	6:24	73



CS2981 TR#0813 450SKS

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Operation Test Results Request ID 2283226/2

Thickening Time

06/NOV/2015

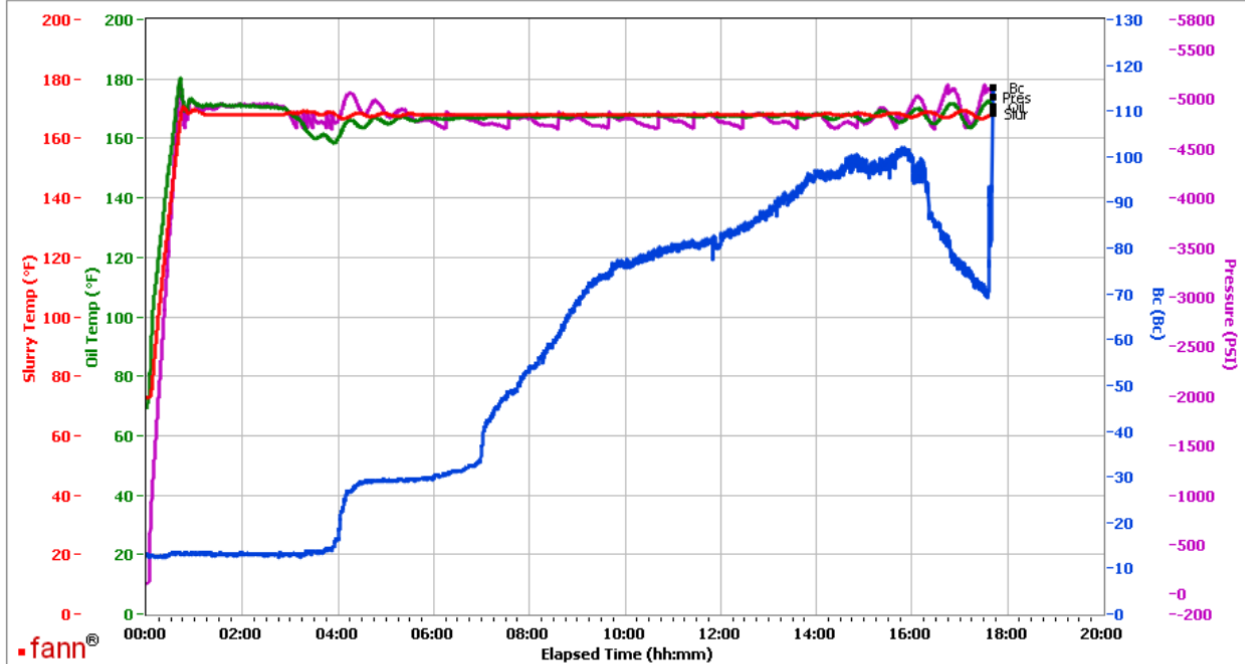
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168	4920	41	13	5:55	7:02	7:45	9:07	14:40

Grand Junction Colorado

Fields	Values
Project Name	GJ2283226-2
Test ID	PICEANCE BULK LEAD
Request ID	
Tested by	ZG
Customer	PICEANCE
Well No	
Rig	
Casing/Liner Size	

Fields	Values
Job Type	
Cement Type	
Cement Weight	Standard
Test Date	11/05/15
Test Time	02:07 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	05h:55m
40.00 Bc	07h:02m
50.00 Bc	07h:45m
70.00 Bc	09h:07m
100.00 Bc	14h:40m
00h:30m	29.70
01h:00m	29.70
01h:30m	29.70



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Comments CS2982 TR#1513 450SKS

CS2982 TR#1513 450SKS

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Operation Test Results Request ID 2283226/3

Thickening Time

06/NOV/2015

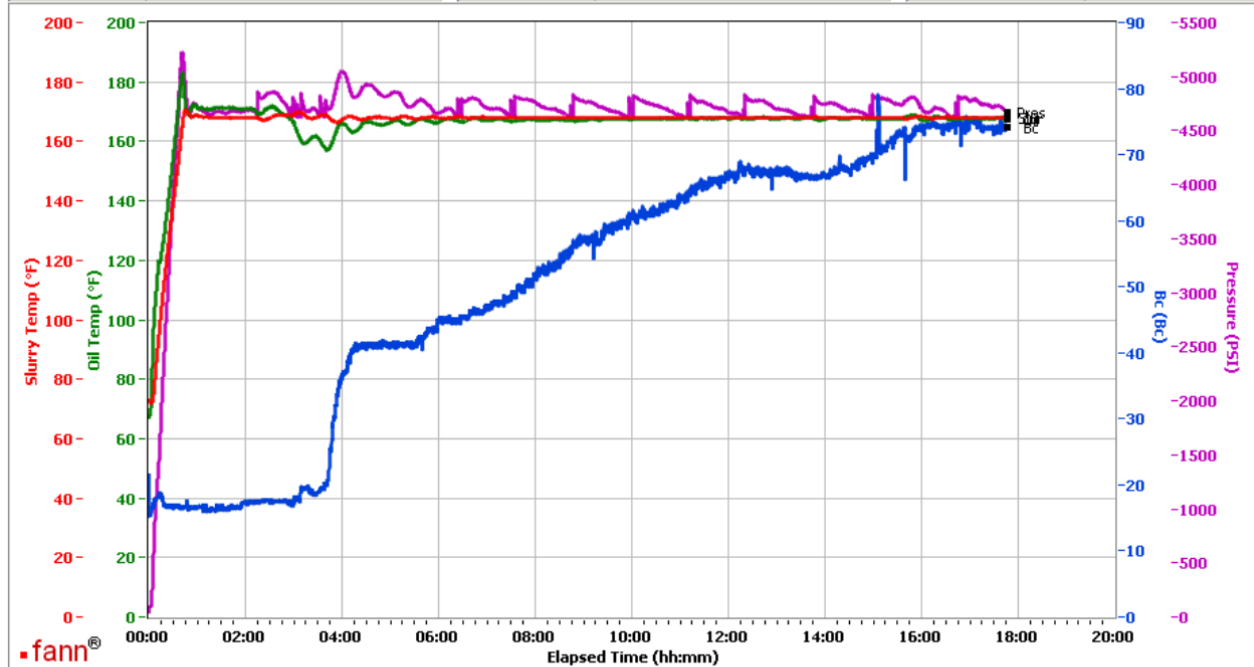
Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	Termination Time	Termination BC
168	4920	41	43	5:47	5:47	7:37	14:57	17:45	75

Grand Junction Colorado

Fields	Values
Project Name	BULK TAIL
Test ID	GJ2283226-3
Request ID	
Tested by	CT
Customer	PICEANCE
Well No	PICEANCE FEDERAL 28-13E
Rig	
Casing/Liner Size	

Fields	Values
Job Type	
Cement Type	
Cement Weight	Standard
Test Date	11/05/15
Test Time	11:40 PM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	05h:47m
40.00 Bc	05h:47m
50.00 Bc	07h:37m
70.00 Bc	14h:57m
100.00 Bc	NaN
00h:30m	43.08
01h:00m	43.08
01h:30m	43.08



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Comments CS2983 TRAILER 4080 163 SKS

Total sks=1063
CS2983 TR 4080 163 SKS

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Job Information

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Submitted By	Aaron Katz	Job Type	Production Casing	Bulk Plant	Grand Junction
Customer	Piceance Energy LLC	Location	Mesa	Well	Piceance Federal 28-13E

Well Information

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Hole Size	7.875 in / 200.025 mm	Depth TVD	2446 m / 8026 ft	BHCT	76°C / 168°F
Pressure	339 bar / 4920 psi				

Drilling Fluid Information

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



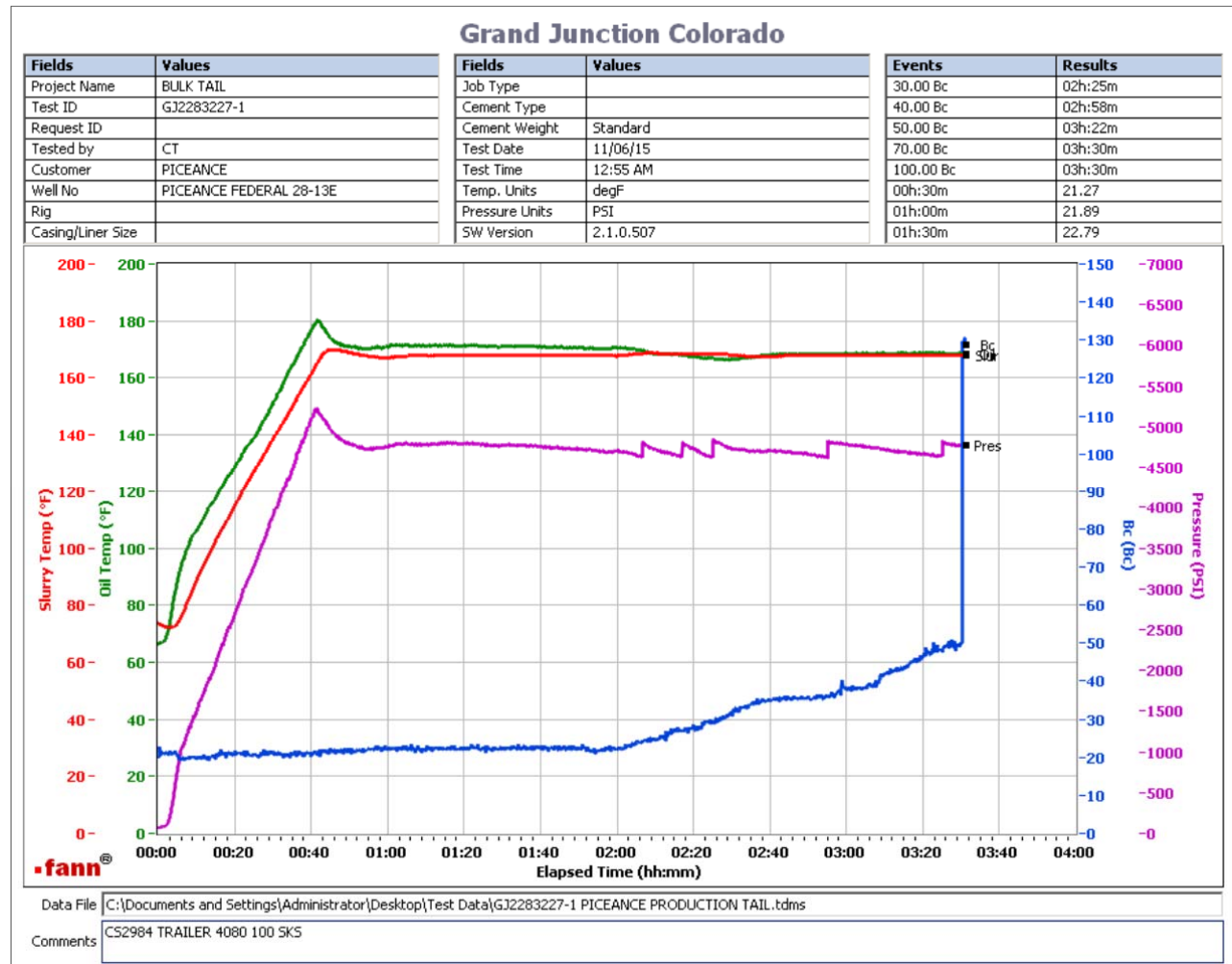
<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Sample Type</u>	<u>Sample Date</u>	<u>Lot No.</u>	Cement Properties		
		> Mountain G	Bulk Blend	05.11.15	Tank 29	Slurry Density	13.5	lbm/gal
		> San Juan	Bulk Blend	05.11.15	Tank 16	Slurry Yield	1.7488	ft3/sack
		Cement Blend				Water Requirement	7.9691	gal/sack
		Fresh Water	Lab	12.03.13	N/A	Total Mix Fluid	7.97	gal/sack
		SA-1015 (PB)	Bulk Blend	05.11.15	5A0001W			
		SS-200 silica flour	Bulk Blend	05.11.15	Tank 6			
		HALAD-344 (PB)	Bulk Blend	05.11.15	15052640	Water Source	Fresh Water	
		SUPER CBL	Bulk Blend	05.11.15	15L0045	Water Chloride		
		Kol-Seal	Bulk Blend	05.11.15	Tank 1			
		Pol-E-Flake	Bulk Blend	05.11.15	NA			
		HR-601	Bulk Blend	05.11.15	64			

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Thickening Time

05/NOV/2015

Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
168	4920	41	20	2:25	2:58	3:22	3:30	3:30



Total sks=461

CS2984 TR 4080 100 SKS

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Operation Test Results Request ID 2283227/2

Thickening Time

05/NOV/2015

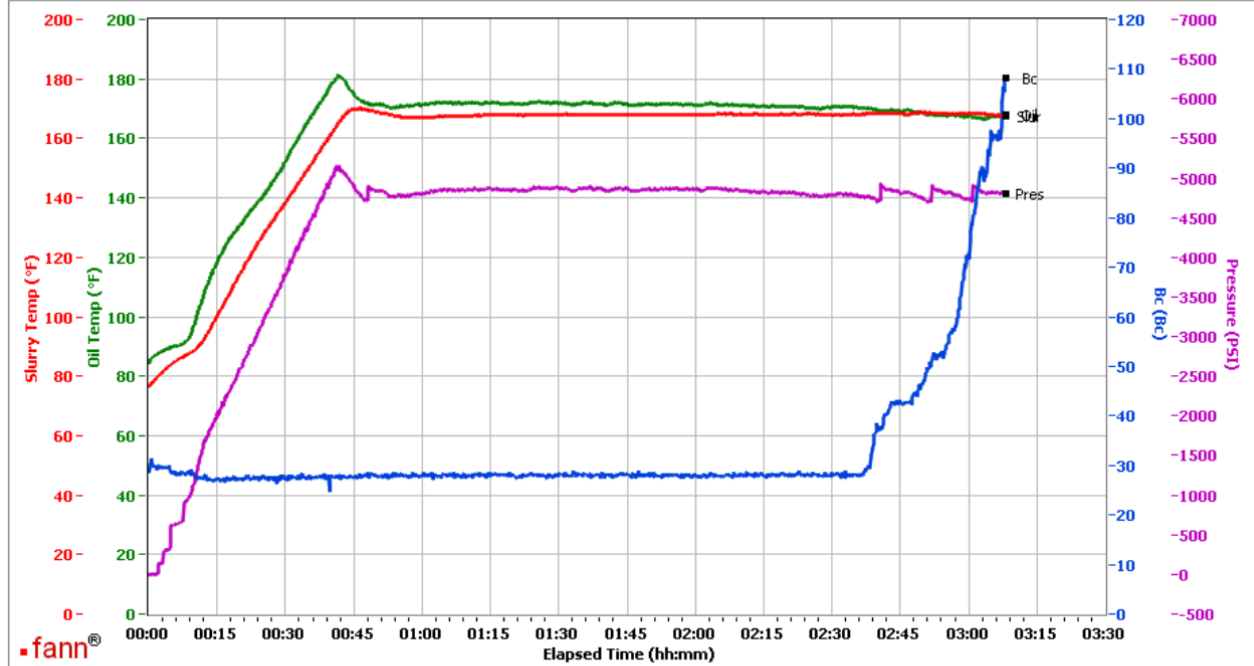
Temp (°F)	Pressure (psi)	Reached in (min)	Start BC	30 Bc (hh:mm)	40 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	100 Bc (hh:mm)
168	4920	41	28	0:00	2:41	2:51	2:59	3:07

Grand Junction, Colorado

Fields	Values
Project Name	GJ2283227-2 PICEANCE PRODUCTION BULK
Test ID	GJ2283227-2 PICEANCE
Request ID	
Tested by	JASON
Customer	PICEANCE ENERGY
Well No	PICEANCE FEDERAL 28-13E
Rig	PATTERSON 306
Casing/Liner Size	4.5

Fields	Values
Job Type	PRODUCTION
Cement Type	THERMACEM
Cement Weight	Light Weight
Test Date	11/06/15
Test Time	01:30 AM
Temp. Units	degF
Pressure Units	PSI
SW Version	2.1.0.507

Events	Results
30.00 Bc	00h:00m
40.00 Bc	02h:41m
50.00 Bc	02h:51m
70.00 Bc	02h:59m
100.00 Bc	03h:07m
00h:30m	27.10
01h:00m	27.80
01h:30m	28.16



Data File C:\Documents and Settings\M290\Local Settings\Temporary Internet Files\Content.IE5\0HU9OBIZ\GJ2283227-2 PICEANCE BULK TAIL[1].tdms

Comments CS2986 TR 2878 361 SKS

Total sks=461

CS2986 TR 2878 361 SKS

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