

TICKET	BCO--1903-0024
DATE	3/11/2019
CREW INFORMATION	
SUPERVISOR	Rich Devine
PUMP UNIT	445051
NUMBERS	
ARRIVAL (D&T)	3/10/19 9:00 AM
DEPARTURE (D&T)	3/11/19: 19:00

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Customer Name Printed _____

Customer Signature _____

Date Signed _____



Job Summary

Ticket Number: **BCO--1903-0024** Ticket Date: **3/11/2019**

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-07253
WELL NAME	RIG	JOB TYPE
Lyla F Carpenter 1	Ensign 122	Plug to Abandon
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.365653 -104.587307	Rich Devine	Tom Majors

WELL PROFILE		
Max Treating Pressure (psi):	1500	Bottom Hole Static Temperature (°F):
Bottom Hole Circulating Temperature (°F):	180	Well Type:

Open Hole					
1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (ft)	TVD to (ft)
	10	500	6777	500	6777
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (ft)	TVD to (ft)
	12	205	500	205	500

Casing/Tubing/Drill Pipe							
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (ft)	TVD to (ft)
Surface	8 5/8	24	J-55	0	205	0	205
Type	Size (in)	Weight (lb/ft)		TMD From (ft)	TMD to (ft)	TVD From (ft)	TVD to (ft)
Drill Pipe	4	15.7		0	6777	0	6777

CEMENT DATA

Stage 1:	From Depth (ft):	6551	To Depth (ft):	6777
Type: Balance Plug	Volume (sacks):	60	Volume (bbls):	16.2

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
NIO Plug #1	15.8	1.52	6.63

Stage 2:	From Depth (ft):	4653	To Depth (ft):	5000
Type: Balance Plug	Volume (sacks):	80	Volume (bbls):	21.6

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
NIO Plug #1	15.8	1.52	6.63

Stage 3:	From Depth (ft):	2597	To Depth (ft):	2937
Type: Balance Plug	Volume (sacks):	140	Volume (bbls):	33.1

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type III	14.8	1.33	6.32

Stage 4:	From Depth (ft):	1302	To Depth (ft):	1642
Type: Balance Plug	Volume (sacks):	140	Volume (bbls):	33.1

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type III	14.8	1.33	6.32

Stage 5:	From Depth (ft):	0	To Depth (ft):	516
Type: Balance Plug	Volume (sacks):	165	Volume (bbls):	39.1

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type III	14.8	1.33	6.32

SUMMARY

Preflushes:	20 bbls of Weighted Spacer	Calculated Displacement (bbl):	Stage 1	Stage 2	
	20 bbls of Weighted Spacer	Actual Displacement (bbl):	60	47.1	
	50 bbls of Fresh Water		55	42	
Total Preflush/Spacer Volume (bbl):	90	Plug Bump (Y/N):	N/A	Bump Pressure (psi):	N/A
Total Slurry Volume (bbl):	143.1	Lost Returns (Y/N):	No	(if Y, when)	
Total Fluid Pumped	360.1				
Returns to Surface:	Cement				

Job Notes (fluids pumped / procedures / tools / etc.):

Balance Plug 1: Pumped 5 bbls of fresh water. Mix and pumped 22 bbls of weighted spacer @12.5 ppg. Pumped 5 bbls of fresh water spacer. Mix and pumped 16.2 bbls of cement at 15.8 ppg. Displaced with 55 bbls of mud. Shutdown, balanced, and washed up. Cement coverage from **6551' - 6777' for 226'**. **Balance Plug 2:** Pumped 5 bbls of fresh water. Mix and pumped 20 bbls of weighted spacer @12.5 ppg. Pumped 5 bbls of fresh water spacer. Mix and pumped 21.6 bbls of cement at 15.8 ppg. Displaced with 42 bbls of mud. Shutdown, balanced, and washed up. Cement coverage from **4,653' - 5000' for 347'**. **Balance Plug 3:** Pumped 5 bbls of fresh water spacer. Mix and pumped 33.1 bbls of cement @14.8 ppg. Displaced with 20 bbls of 10.2 ppg of mud. Shut down, balanced and washed up. Cement coverage from **2597' - 2937' for 340'**. **Balance Plug 4:** Pumped 5 bbls of fresh water spacer. Mix and pumped 33.1 bbls of cement @14.8 ppg. Displaced with 10.1 bbls of mud @10.2 ppg. Shut down, balanced and washed up. Cement coverage from **1302' - 1642' for 340'**. **Balance Plug 4:** Pumped 5 bbls of fresh water spacer. Mix and pumped 39.1 bbls of cement @14.8 ppg. to surface. Shut down, wait on rig crew. Cement coverage from **0' - 516'**.

Thank You For Using
CJES O-TEX Cementing

Customer Representative Signature: _____



Cement Job Log

Customer: PDC ENERGY				Date: 3/11/2019				Serv. Supervisor: Rich Devine			
Cust. Rep.: Tom Majors				Ticket #: BCO-1903-0024				Serv. Center Brighton - 3021			
Lease: Lyla F Carpenter 1				API Well #: 05-123-07253				County: Weld		State: CO	
Well Type: Oil				Rig: Ensign 122				Type of Job: Plug to Abandon			
OPEN HOLE DATA				TUBULAR DATA							
12 in. O.H. (205 to 500 ft) 10 in. O.H. (500 to 6,777 ft)				SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)	
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS			
8.625 in. 24# (0 to 205 ft)				TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP
WELL FLUID		DISPLACEMENT FLUID		DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbl)				
TYPE	DENSITY	VOLUME	TYPE								DENSITY
MUD	11.1 ppg										
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details				
9:00 AM	2.5		140		202.2	202.2	Mix and Pump 21 6 bbls of Cement @15.8				
9:08 AM	3		80		43	245.2	Displace with 10.1 ppg MUD				
9:17 AM						245.2	Shutdown / Wait on standby				
11:54 AM	.1		120		1	246.2	Fill Lines				
11:56 AM			3000			246.2	Pressure Test				
11:59 AM	2		200		5	251.2	Fresh Water Spacer				
12:04 PM	2.2		100		33.1	284.3	Mix and Pump Cement @14.8 ppg				
12:17 PM	3		110		20	304.3	Displaced with 10.1 ppg MUD				
12:24 PM						304.3	Shutdown / Wait on standby				
1:51 PM	1		130		1	305.3	Fill Lines				
1:54 PM			2700			305.3	Pressure Test				
1:57 PM	1.5		170		5	310.3	Fresh Water Spacer				
2:03 PM	2		125		33.1	343.4	Mix and Pump Cement @14.8 ppg				
2:21 PM	3		100		10	353.4	Displaced with 10.1 ppg MUD				
2:25 PM						353.4	Shutdown / Wait on standby				
4:03 PM	1		150		1	354.4	Fill Lines				
4:05 PM			2450			354.4	Pressure Test				
4:08 PM	2		120		5	359.4	Fresh Water Spacer				
4:16 PM	3		140		39.1	398.5	Mix and Pump Cement @14.8 ppg				
4:30 PM						398.5	Shutdown				
6:00 PM						398.5	Wash Up				
6:30 PM						398.5	Rig Out				
7:00 PM						398.5	Depart Location				
						398.5					
Left Yard	3/10/19 4:00 AM		Left Loc.	3/10/19 7:00 PM		Start Pump	3/10/19 11:50 AM				
Arrived Loc.	3/10/19 9:00 AM		Returned Yd.	TBD		End Pump	3/11/2019 18:00:00 PM				
					Full Circ. During Job (Y/N)	Max Pump Pressure (psi)		Standby Charged (hrs)			
					Yes			27			
						<div>Rich Devine</div> <div>3/11/2019</div> <div>Service Supervisor</div> <div>Date</div>					



Cement Job Log

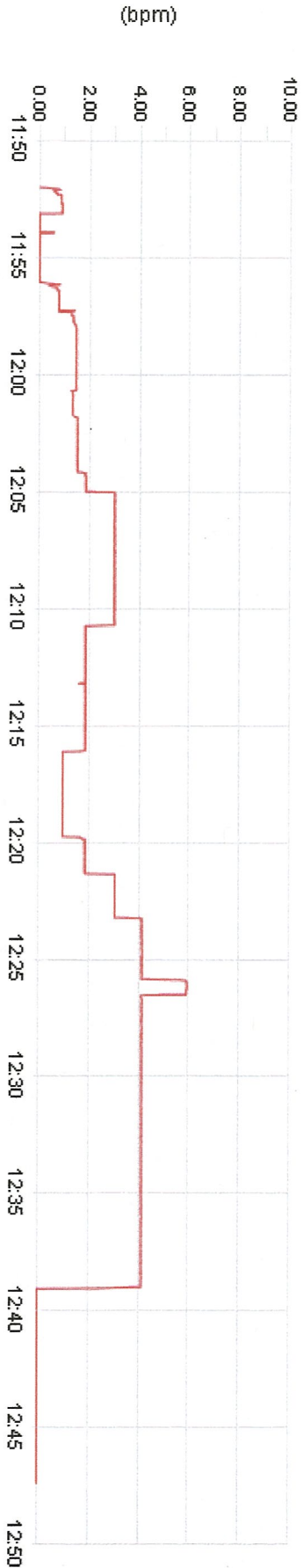
Customer: PDC ENERGY				Date: 3/11/2019				Serv. Supervisor: Rich Devine				
Cust. Rep.: Tom Majors				Ticket #: BCO--1903-0024				Serv. Center Brighton - 3021				
Lease: Lyla F Carpenter 1				API Well #: 05-123-07253				County: Weld		State: CO		
Well Type: Oil				Rig: Ensign 122				Type of Job: Plug to Abandon				
OPEN HOLE DATA				TUBULAR DATA								
12 in. O.H. (205 to 500 ft) 10 in. O.H. (500 to 6,777 ft)				SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)		
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS				
8.625 in. 24# (0 to 205 ft)				TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP	
WELL FLUID		DISPLACEMENT FLUID		DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbl)					
TYPE	DENSITY	VOLUME	TYPE	DENSITY								
MUD	11.1 ppg											
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details					
4:00 AM						0	Depart C&J Yard					
9:00 AM						0	Arrive Location					
10:30 AM						0	Spot Vehicles					
10:52 AM						0	Rig In					
11:40 AM						0	Safety Brief					
11:50 AM	.8		450			1	1 Fill Lines					
11:52 AM			3000				1 Pressure Test					
11:54 AM	1.5		350			2	3 Fresh Water Spacer					
11:58 AM	2		400			22	25 Mix and Pump Cement @13.5ppg					
12:10 PM	4		550			55	80 Displaced with 11.1ppg MUD					
12:40 PM						80	Shutdown / Wait on stanby					
4:43 AM	3		300			1	81 Fill Lines					
4:45 AM			3000				81 Pressure Test					
4:48 AM	3		400			5	86 Fresh Water Spacer					
4:52 AM	3		225			22	108 Mix and Pump Weighted Spacer 12.5					
5:02 AM	2		200			5	113 Fresh Water Spacer					
5:10 AM	3		200			16.2	129.2 Mix and Pump Cement @15.8					
5:21 AM	3		175			42	171.2 Displace with 10.1ppf MUD					
5:37 AM						171.2	Shutdown / Wait on stanby					
8:34 AM	1.5		130			1	172.2 Fill Lines					
8:36 AM			3000				172.2 Pressure Test					
8:39 AM	2		150			5	177.2 Fresh Water Spacer					
8:44 AM	2		170			20	197.2 Mix and Pump Weighted Spacer 12.5					
8:55 AM	2		130			5	202.2 Fresh Water Spacer					
Left Yard	3/10/19 4:00 AM			Left Loc.		Start Pump		3/10/19 11:50 AM				
Arrived Loc.	3/10/19 9:00 AM			Returned Yd.		End Pump						
						Full Circ. During Job (Y/N)	Max Pump Pressure (psi)		Standby Charged (hrs)			
						Yes						
							<div>Rich Devine</div> <div>Service Supervisor</div>					
							<div>Date</div>					

C&J ENERGY SERVICES									Cement Job Log			
Customer: PDC ENERGY			Date: 3/11/2019			Serv. Supervisor: Rich Devine						
Cust. Rep.: Tom Majors			Ticket #: BCO--1903-0024			Serv. Center Brighton - 3021						
Lease: Lyla F Carpenter 1			API Well #: 05-123-07253			County: Weld		State: CO				
Well Type: Oil			Rig: Ensign 122			Type of Job: Plug to Abandon						
Materials Furnished by C&J ENERGY SERVICES												
Plugs		Casing Hardware		Physical Slurry Properties								
				Sacks of Cement	Fluid Dens (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbbls)	Mix Water (bbbls)		
Spacer - 5bbbls Water									5.00			
Balance Plug #1 - 13.5ppg 50:50:2 (POZ:0		50 % CJ914+50 % CJ010-74 +2.0 % CJ020+20.0 % CJ766+0.4 % CJ522R+0.4 % CJ415+0.1 % CJ030		75	13.5		1.65	7.77	21.98	14		
Balance Plug #2 - 13.5ppg 50:50:2 (POZ:0		50 % CJ914+50 % CJ010-74 +2.0 % CJ020+20.0 % CJ766+0.4 % CJ522R+0.4 % CJ415+0.1 % CJ030		110	13.5		1.65	7.77	32.24	20		
Balance Plug #3 - 14.8 Type III		+100 % CJ922		140	14.8		1.33	6.32	33.05	21		
Balance Plug #4 - 14.8 Type III		+100 % CJ922		140	14.8		1.33	6.32	33.05	21		
Balance Plug #5 - 14.8ppg Type III		+100 % CJ922		195	14.8		1.33	6.32	46.03	29		
Surface Plug - 14.8ppg Type III		+100 % CJ922		65	14.8		1.33	6.32	15.34	10		
Top Out - 14.8 ppg Type III		+100 % CJ922		50	14.8		1.33	6.32	11.80	8		
+100 % CJ922												
Displacement Chemicals:												

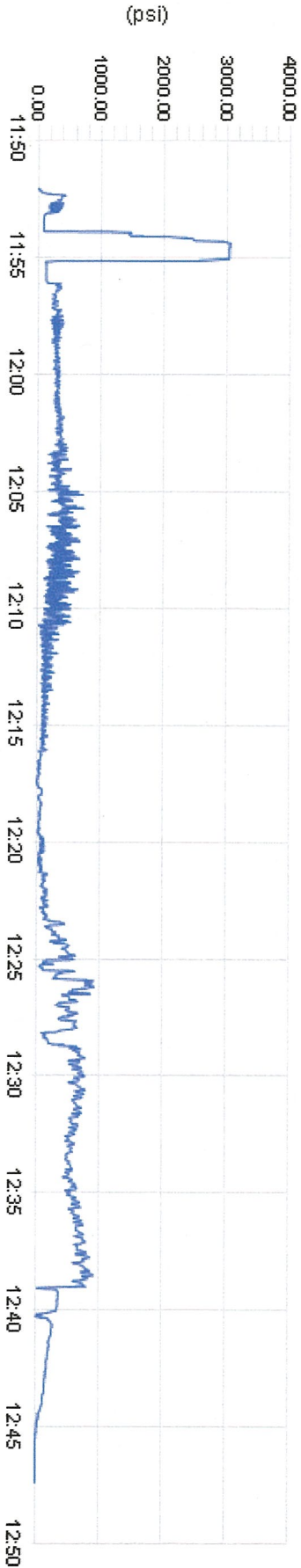


Client	PDC Energy	Client Rep	Tom Majors	Supervisor	Rich Devine
Ticket No.	1903-0024	Well Name	Lyla F Carpenter 1	Unit No.	445052
Location	SESE 30 5N64W	Job Type	Balance Plug #1	Service District	Brighton
Comments	See job log for details			Job Date	03/10/2019

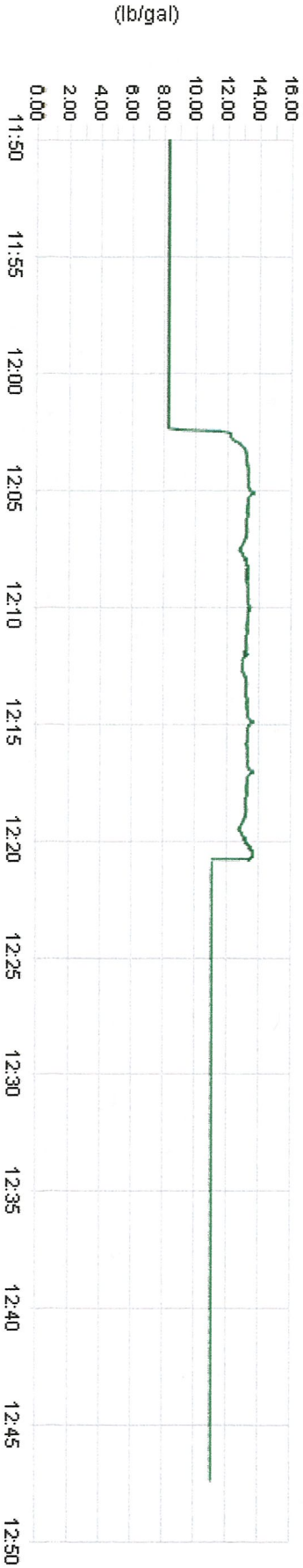
Unit 445052 Rate Total



Unit 445052 Pump Pressure

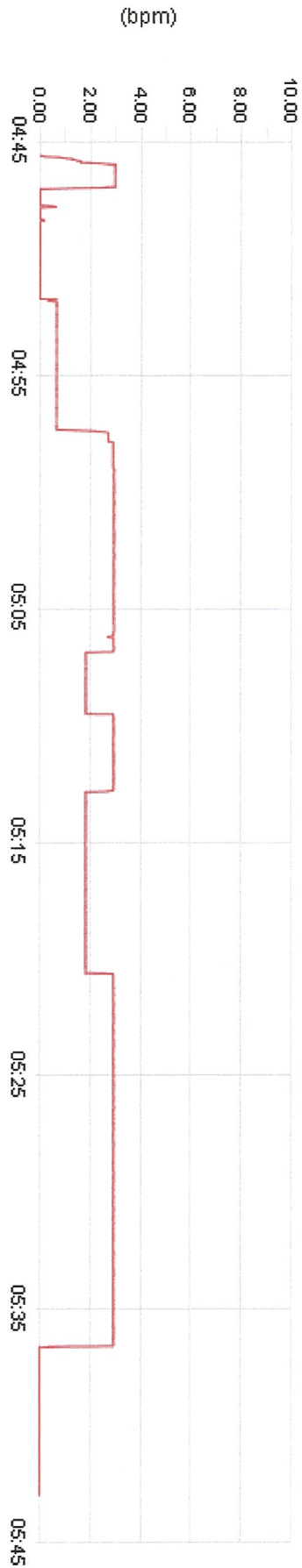


Unit 445052 Density

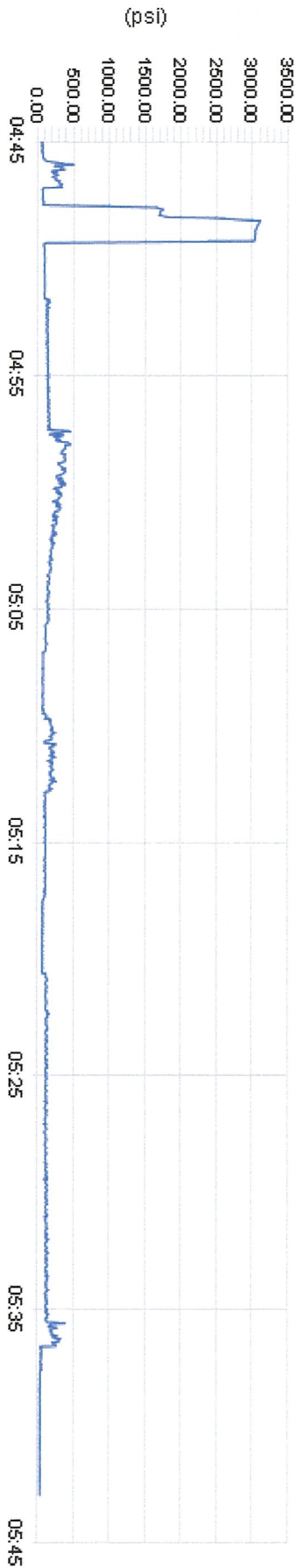


Client	PDC ENERGY	Client Rep	Tom Majors	Supervisor	Rich Devine
Ticket No.	1903-0024	Well Name	LYLA F CARPENTER 1	Unit No.	445051
Location	SESV 30 5N64W	Job Type	Balance Plug Stage 1	Service District	Brighton, CO
Comments	See Job Log for Details			Job Date	03/11/2019

Unit 445052 Rate Total



Unit 445052 Pump Pressure



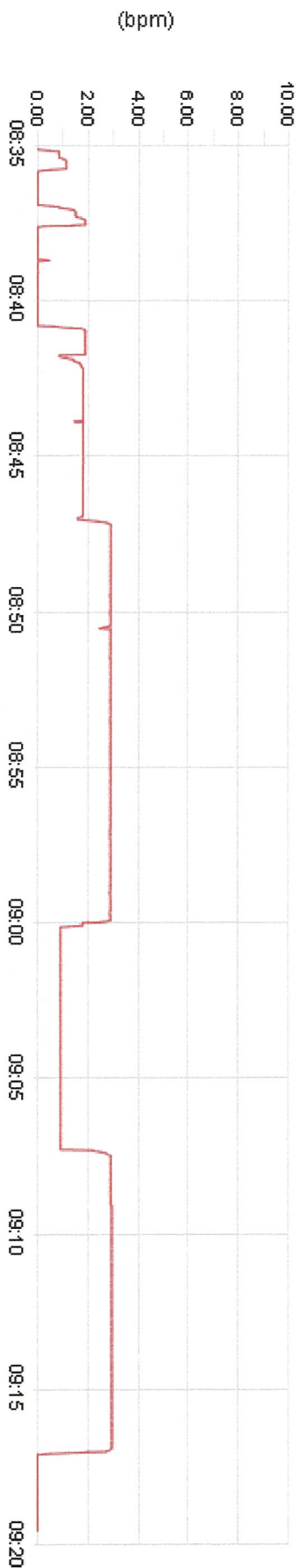
Unit 445052 Density



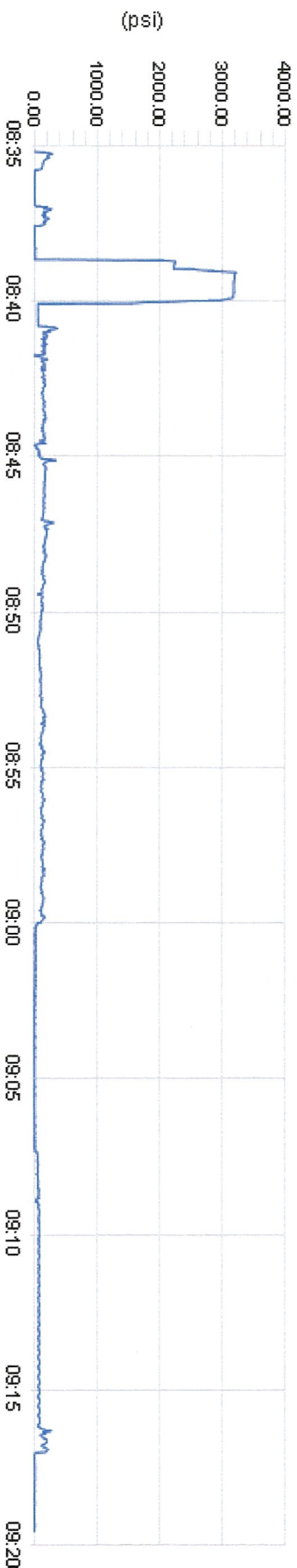


Client	PDC ENERGY	Client Rep	Tom MAJORS	Supervisor	RICH DEVINE
Ticket No.	1900024	Well Name	LYLA F CARPENTER 1	Unit No.	445051
Location	SESW 30 5N64W	Job Type	Balance Plug Stage 2	Service District	BRIGHTON
Comments	See Job Log for Details			Job Date	03/11/2019

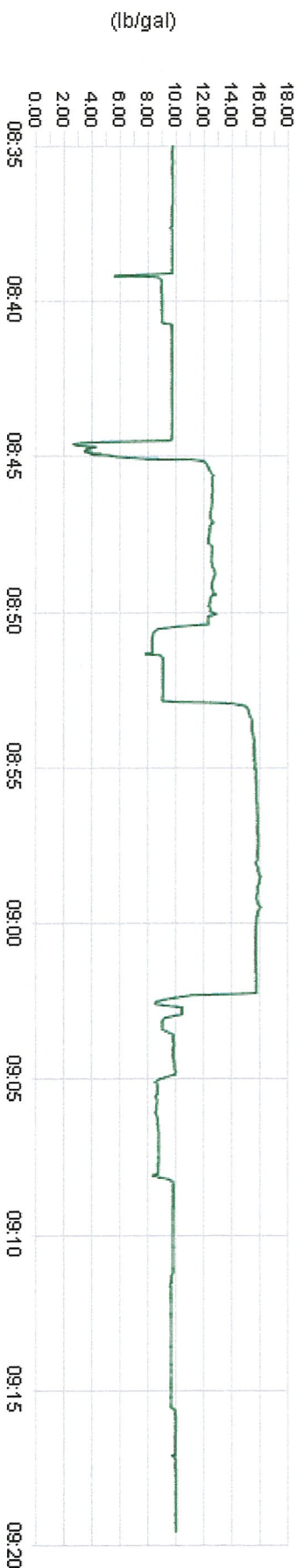
Unit 445052 Rate Total



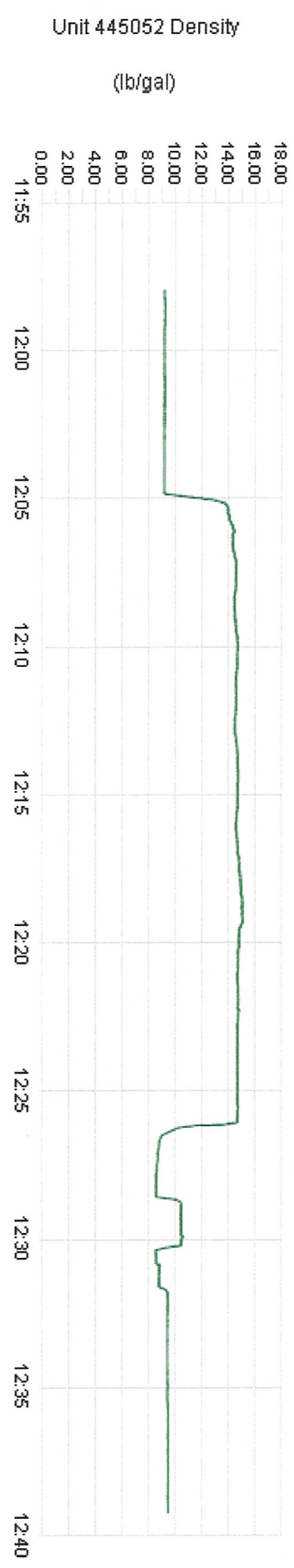
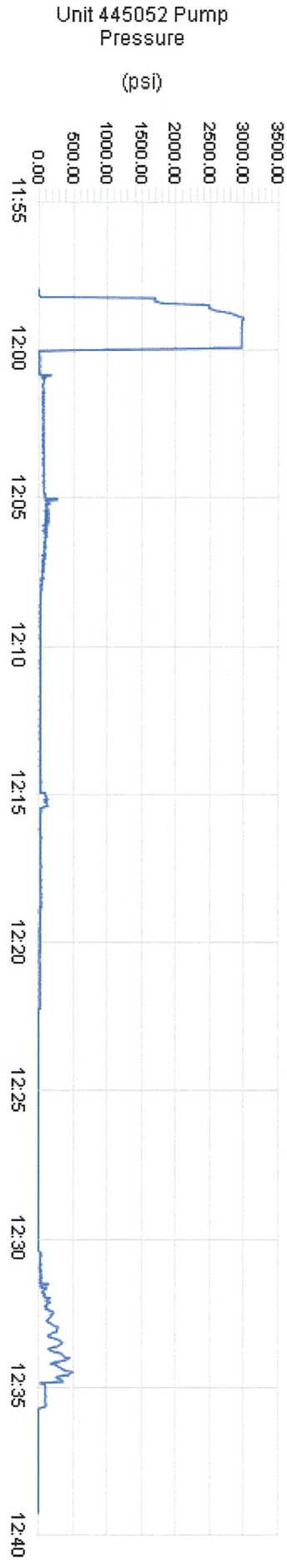
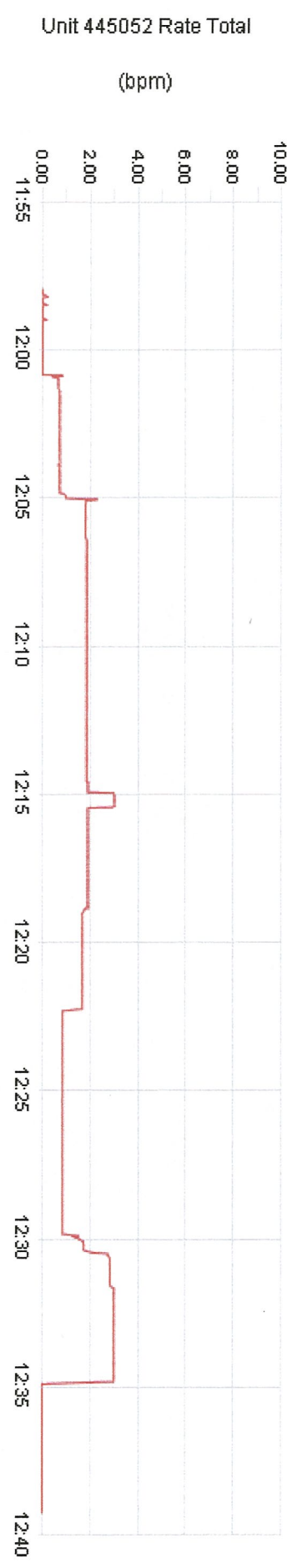
Unit 445052 Pump Pressure



Unit 445052 Density



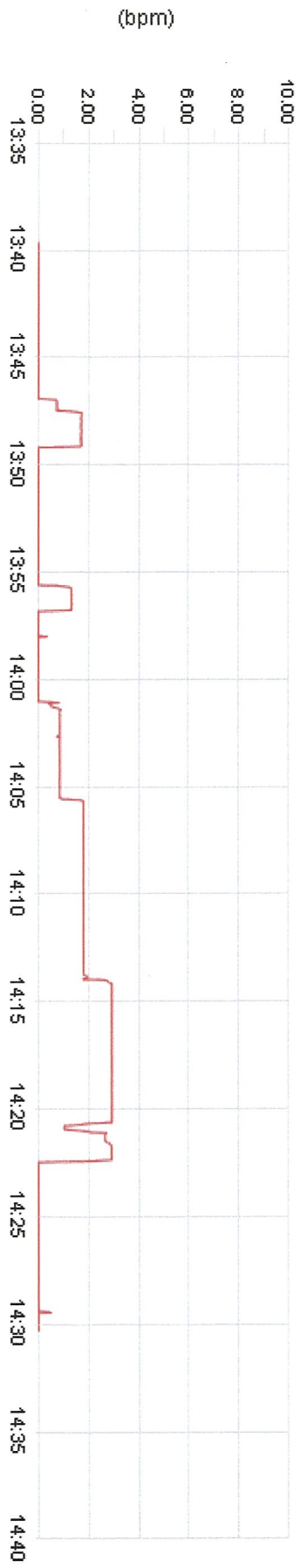
Client	PDC ENERGY	Client Rep	JOHN MAJORS	Supervisor	RICH DEVINE
Ticket No.	1900024	Well Name	LYLA F CARPENTER 1	Unit No.	445051
Location	SESW 30 5N64W	Job Type	Abandonment Plugs	Service District	BRIGHTON
Comments	See Job Log for Details				
				Job Date	03/11/2019



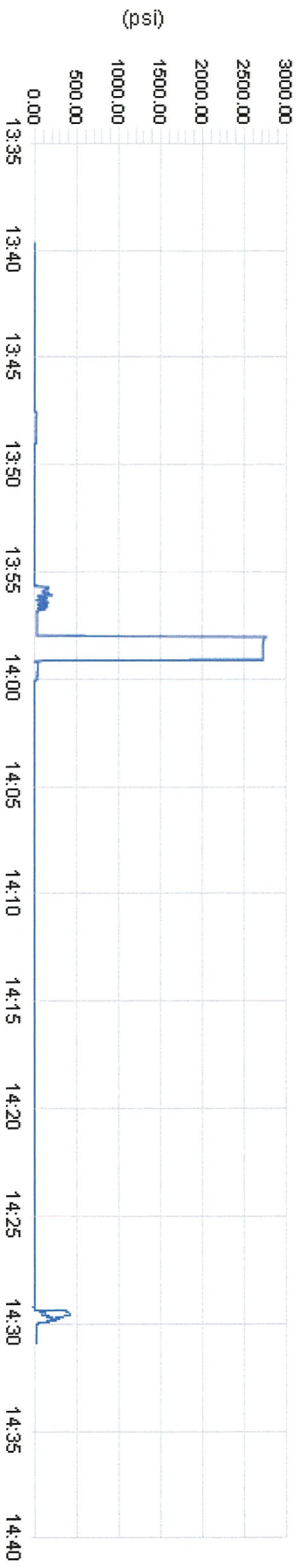


Client	PDC ENERGY	Client Rep	JOHN MAJORS	Supervisor	RICH DEVINE
Ticket No.	1903-0024	Well Name	LYLA F CARPENTER 1	Unit No.	445052
Location	SESW 30 5N64W	Job Type	Balance Plug S4	Service District	BRIGHTON
Comments				Job Date	03/11/2019

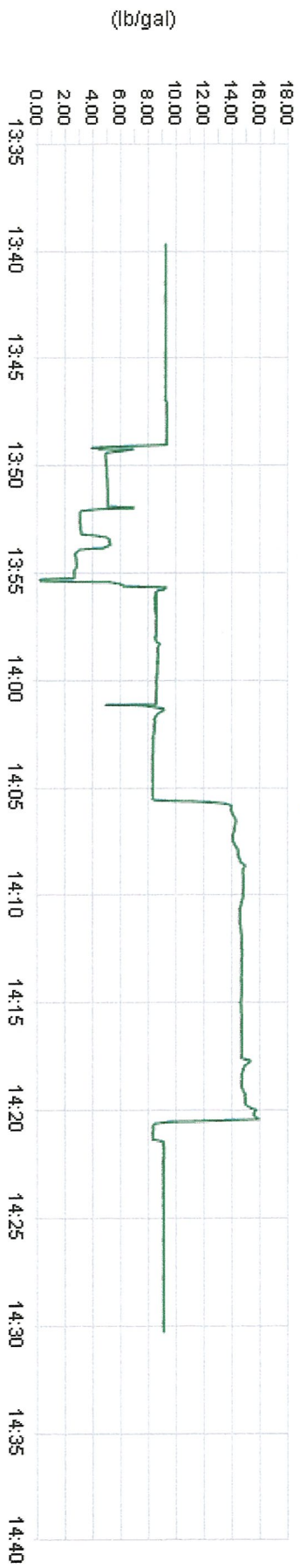
Unit 445052 Rate Total



Unit 445052 Pump Pressure



Unit 445052 Density





Client	PDC ENERGY	Client Rep	JOHN MAJORS	Supervisor	RICH DEVINE
Ticket No.	1903-0024	Well Name	LYLA F CARPENTER 1	Unit No.	445051
Location	SESW 30 5N64W	Job Type	Balance Plug S5	Service District	BRIGHTON
Comments				Job Date	03/11/2019

