



CUSTOMER	PDC ENERGY
DISTRICT	3021
ADDRESS	821 WCR 27, Brighton, CO 80603
PHONE	303-857-7948

AFE #		PO:	
LEASE NAME / NUMBER		API WELL NUMBER	
CARLSON 41-18		0512321670	
SECTION	TOWNSHIP	RANGE	COUNTY, STATE
NENE 18	6N	64W	WELD, COLORADO
WELL PERMIT NUMBER			
JOB TYPE		CM-P2A-PERM.	
Vehicle Type		Single	

TICKET	BCO-2001-0046	
DATE	1/10/2020	
CREW INFORMATION		
SUPERVISOR	Tony Yates	
PUMP UNIT	44-5024	
NUMBERS		
ARRIVAL (D&T)	1/10/20 12:00 PM	
DEPARTURE (D&T)	1/10/20 3:30 PM	

Service & Equipment Charges

[illegible]

Materials & Products 13

[illegible]

Customer Stamp

Customer Name Printed

Customer Signature

Date Signed _____



Job Summary

Ticket Number
TN# **BCO-2001-0046**

Ticket Date
1/10/2020

COUNTY	COMPANY	API Number
WELD	PDC ENERGY	0512321670
WELL NAME	RIG	JOB TYPE
CARLSON 41-18	Ranger 3	CM-P2A-PERM.
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.492 -104.58667	Tony Yates	Ryan Beam

EMPLOYEES

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

Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	10	1580	1299		
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Casing	4 1/2	10.5		1647	1580		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2 3/8	4.7		1647	0		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

CEMENT DATA

Stage 1:	From Depth (ft):	1647	To Depth (ft):	1299	
Type: Stub Plug	Volume (sacks):	120	Volume (bbls):	28.4	
Cement & Additives:			Density (ppg)	Yield (ft ³ /sk)	Water Req
100% Type 3			14.8	1.33	6.32
Stage 2:	From Depth (ft):		To Depth (ft):		
Type:	Volume (sacks):		Volume (bbls):		
Cement & Additives:			Density (ppg)	Yield (ft ³ /sk)	Water Req
Stage 3:	From Depth (ft):		To Depth (ft):		
Type:	Volume (sacks):		Volume (bbls):		
Cement & Additives:			Density (ppg)	Yield (ft ³ /sk)	Water Req
Stage 4:	From Depth (ft):		To Depth (ft):		
Type:	Volume (sacks):		Volume (bbls):		
Cement & Additives:			Density (ppg)	Yield (ft ³ /sk)	Water Req

SUMMARY

Preflushes:	5 bbls of Fresh Water	Calculated Displacement (bbl):	5	Stage 1	Stage 2
	bbls of	Actual Displacement (bbl):	5		
	bbls of				
Total Preflush/Spacer Volume (bbl):	5	Plug Bump (Y/N):		Bump Pressure (psi):	
Total Slurry Volume (bbl):	28.4	Lost Returns (Y/N):		(if Y, when)	
Total Fluid Pumped	39.4				
Returns to Surface:					

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

Pumped 5 bbls water. Pumped 28.4 bbls cement at 14.8 ppg. Displaced 5 bbls water to balance. See job log for details.

Customer Representative Signature:

Thank You For Using
NexTier Completion Solutions

1/10/2020

NEXTIER

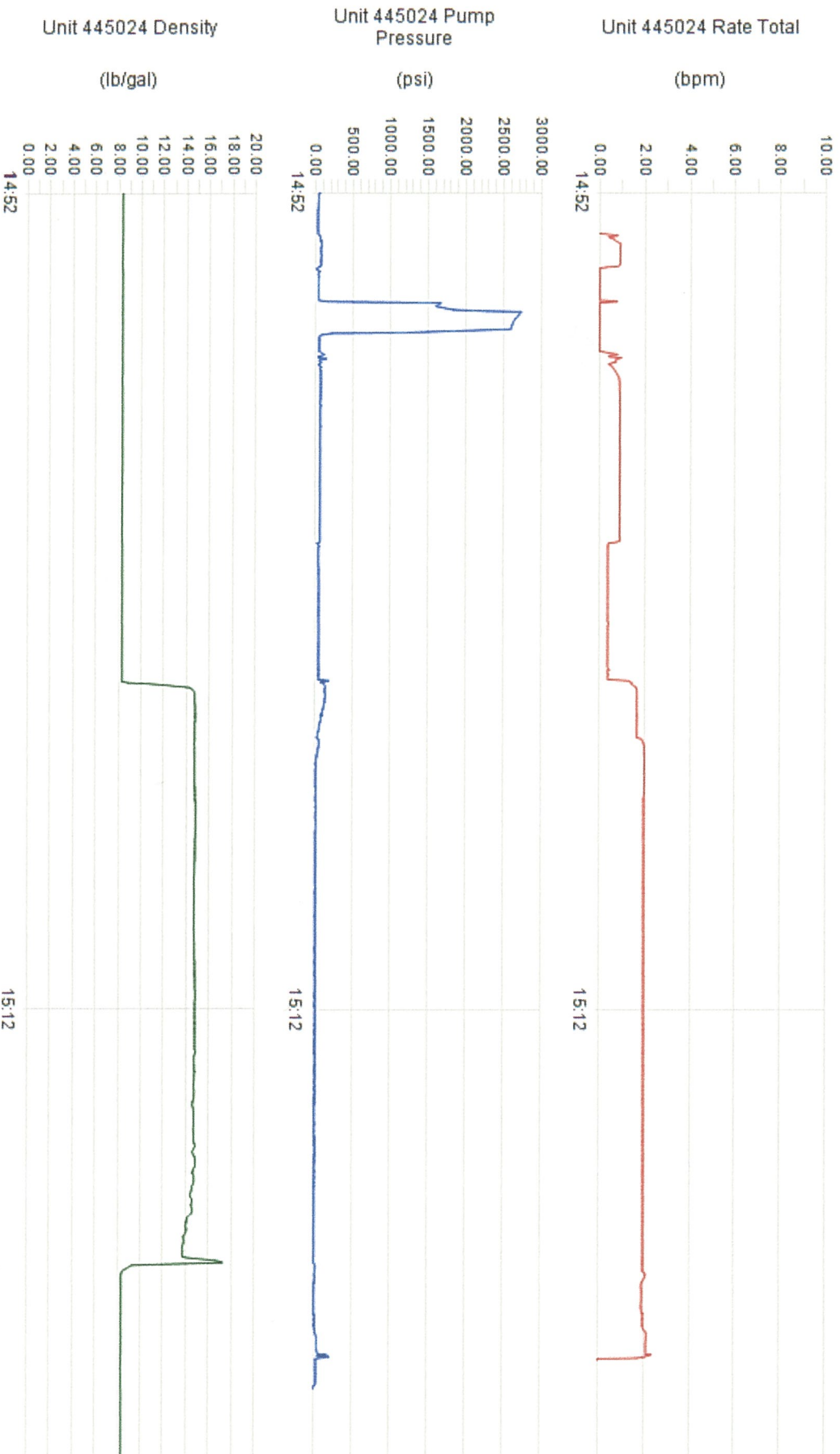
1/10/2020

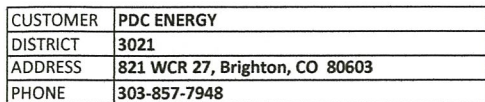


Client
Ticket No. BCO-2001-0046
Location 18-6N-64W
Comments See job log

Client Rep
Well Name
Job Type
Ryan Beam
Carlson 41-18
Stub Plug

Supervisor
Unit No.
Service District
Job Date
Tony Yates
445024
Brighton CO
01/10/2020





AFE #		PO:	
LEASE NAME / NUMBER		API WELL NUMBER	
CARLSON 41-18		0512321670	
SECTION	TOWNSHIP	RANGE	COUNTY, STATE
NENE 18	6N	64W	WELD, COLORADO
WELL PERMIT NUMBER			
JOB TYPE		CM-P2A-PERM.	
Vehicle Type		Single	

TICKET	BCO-2001-0050	
DATE	1/13/2020	
CREW INFORMATION		
SUPERVISOR	Israel Davila	
PUMP UNIT	44-5070	
NUMBERS		
ARRIVAL (D&T)	1/13/20 8:10 AM	
DEPARTURE (D&T)	1/13/20 11:00 AM	

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Customer Name Printed _____

Customer Signature _____

Date Signed _____

COUNTY	COMPANY	API Number
WELD	PDC ENERGY	0512321670
WELL NAME	RIG	JOB TYPE
CARLSON 41-18	Ranger 3	CM-P2A-PERM.
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.492 -104.58667	Israel Davila	Ryan Beam

EMPLOYEES

Garrick Williamson		
Kevin Piefer		

WELL PROFILE

Max Treating Pressure (psi):	1000	Bottom Hole Static Temperature (°F):	
Bottom Hole Circulating Temperature (°F):		Well Type:	old

Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	14"	397	613		
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Surface	8.625	24		0	397		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	4.7	4.7		0	613		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

CEMENT DATA

Stage 1:	From Depth (ft):	0	To Depth (ft):	613
Type: Surface Plug	Volume (sacks):	235	Volume (bbls):	55
Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.	
Type III	14.8	1.33	6.32	

Stage 2:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.	

Stage 3:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.	

Stage 4:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.	

SUMMARY

	Stage 1	Stage 2
Preflushes:	8 bbls of Fresh Water	
Calculated Displacement (bbl):		
Actual Displacement (bbl):		
Total Preflush/Spacer Volume (bbl):	8	
Plug Bump (Y/N):	N/A	Bump Pressure (psi): N/A
Total Slurry Volume (bbl):	55	Lost Returns (Y/N): N (if Y, when)
Total Fluid Pumped	63	
Returns to Surface:	Cement	1 bbls

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

Pump fresh ahead. Pump 135 sx @ 14.8, 1.33 yield from 613' to surface. Rig removes tubing. 20 sx left on pump for top off. No top off was needed, cement still at surface.

Thank You For Using

NexTier Completion Solutions

Customer Representative Signature:

NEXTIER

1/13/2020

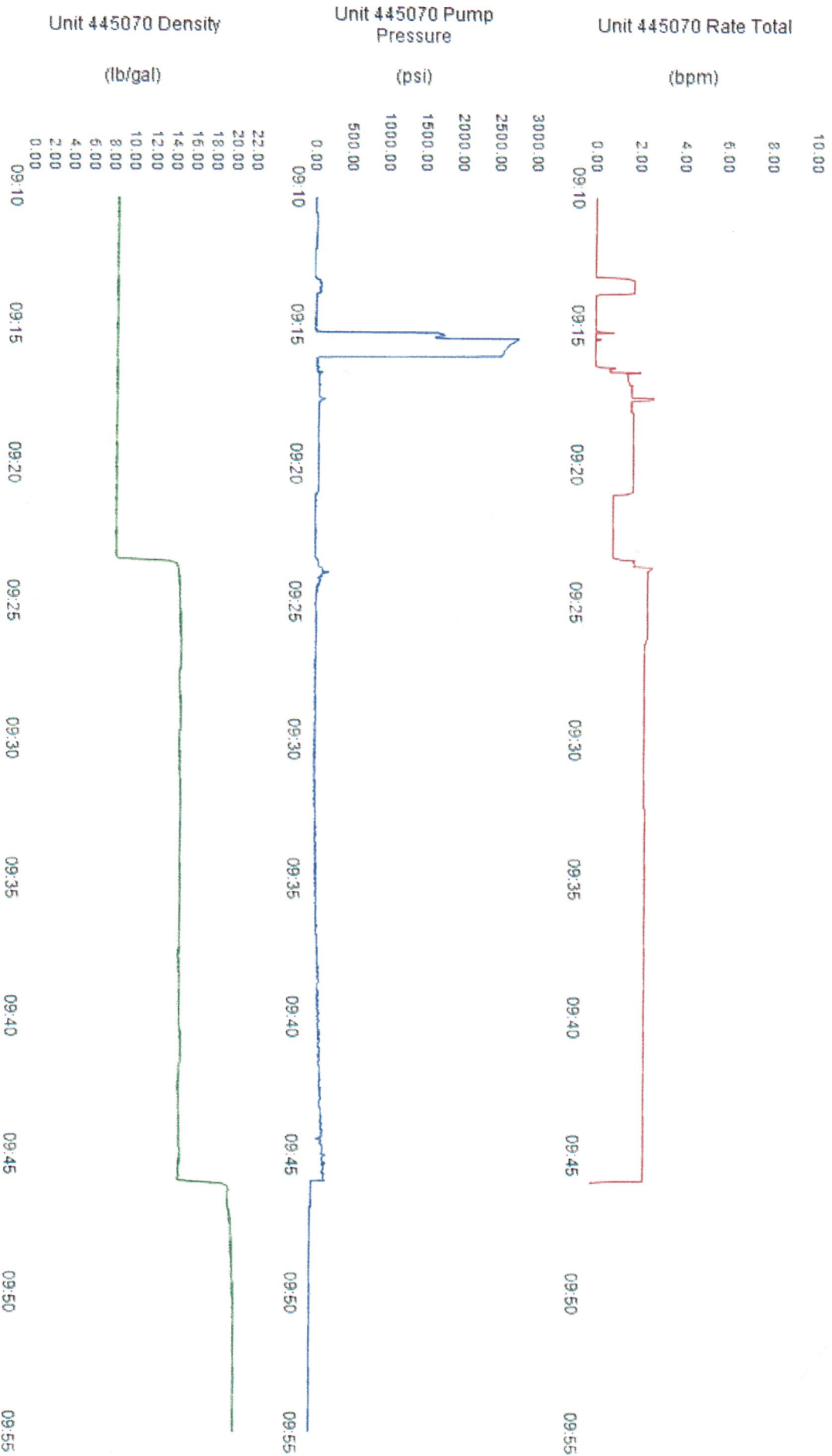
1/13/2020



Client PDC
Ticket No. 20010050
Location Sec 18-6N-64W
Comments see job log

Client Rep Ryan Beam
Well Name Carlson 41-18
Job Type Abandonment Plugs

Supervisor Izzy Davila
Unit No. 445070
Service District Brighton
Job Date 01/13/2020



RANGER ENERGY SERVICES, LLC

WIRELINE DIVISION

3333 Center Dr.

Milliken, CO.

80543



Company Name: PDC ENERGY, INC.		Company Address: 1775 SHERMAN STREET SUITE 3000 DENVER, CO 80203		Field Ticket Number: 30002005
Well Name: CARLSON 41-18	Field: WATTENBERG - 90750	County: WELD	State: COLORADO	Rig Name & Number: RANGER ENERGY SERVICES RIG# 5003
API #: 05-123-21670	AFE #:		Date: 1/9/2020	Wireline Unit # 233
SERVICE NOTES: (1) 3.625" Gauge Ring to 6950' (4) Set STS 4-1/2" 10K CIBP @ 6580' (7) Cut 4-1/2" Casing @ 1580'				Engineer: J. Johnson
(2) Set STS 4-1/2" 10K CIBP @ 6908' (5) Cement Dump Bail 2sx @ 6580'				Operator: T. Van Nest
(3) Cement Dump Bail 2sx @ 6908' (6) Radial Bond Log from 1700' - Surface				Operator:

RUN	CODE	DESCRIPTIONS	QTY	UNIT PRICE	DISCOUNT	AMOUNT
	1000-001	Set Up Charge Cased Hole Unit	1			
	3000-001	Packoff Operation Charge0#-1000#	1			
1	8000-009	Junk Catcher / Gauge Ring Depth Charge	6908			
	8000-010	Junk Catcher / Gauge Ring Operation Charge	1			
2	8000-001	Bridge Plug Depth Charge	6908			
	8000-015	Setting Tool Rental, per tool	1			
	8000-002	Bridge Plug Operation Charge	1			
	8000-014	Standard Set Power Charge	1			
3	7000-006	Dump Bailer Depth Charge	6580			
	7000-007	Dump Bailer Operation Charge	1			
4	8000-001	Bridge Plug Depth Charge	6580			
	8000-015	Setting Tool Rental, per tool	1			
	8000-002	Bridge Plug Operation Charge	1			
	8000-014	Standard Set Power Charge	1			
5	7000-006	Dump Bailer Depth Charge	6580			
	7000-007	Dump Bailer Operation Charge	1			
6	4000-019	Radial Cement Bond Log Depth Charge	1700			
	4000-020	Radial Cement Bond Log Operation Charge	1700			
	4000-009	Simultaneous Gamma Ray Log Depth Charge	1700			
	4000-010	Simultaneous Gamma Ray Log Operation Charge	1700			
	4000-013	Simultaneous CCL Log Depth Charge	1700			
	4000-014	Simultaneous CCL Log Operation Charge	1700			
7	5000-011	Jet Cutter Depth Charge	1580			
	5000-014	Jet Cutter Operation Charge for Casing	1			

Customer Signature:	Customer Name Printed:	Ranger Energy Services Representative Signature:	Ranger Energy Services Representative:
	MR. RYAN BEAM		JOE MICHAEL