

[illegible][illegible]

Customer Name Printed _____

Customer Signature _____

Date Signed _____

Job Summary

Ticket Number
TN# BCO-1910-0115

Ticket Date
10/30/2019

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-21675
WELL NAME	RIG	JOB TYPE
State 8461 - 12-16	Ensign 318	CM-P2A-PERM.
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.48761 -104.56208	Larry Laslie	Justin Cleveland

EMPLOYEES
<i>Tony Yates</i>
<i>Jared Cross</i>

WELL PROFILE			
Max Treating Pressure (psi):	500	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)
	14	850	950		
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	10	950	1735		

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	850		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Casing	4.5	11.7		1735	1840		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2 3/8	4.6		0	1840		

CEMENT DATA

Stage 1: From Depth (ft): **1535** To Depth (ft): **1835**
Type: **Shoe Plugs**
Volume (sacks): **90** Volume (bbls): **21.3**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
CJ922	14.8	1.33	6.32

Stage 2: From Depth (ft): **0** To Depth (ft): **950**
Type: **Surface Plug**
Volume (sacks): **275** Volume (bbls): **65**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
CJ922	14.8	1.33	6.32

Stage 3: From Depth (ft): **0** To Depth (ft): **60**
Type: **Top Off**
Volume (sacks): **9** Volume (bbls): **2**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
CJ922	14.8	1.33	6.32

Stage 4: From Depth (ft): To Depth (ft):
Type:
Volume (sacks): Volume (bbls):

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.

SUMMARY

Preflushes:	5 bbls of Fresh Water	Calculated Displacement (bbl):	Stage 1	Stage 2
	5 bbls of Fresh Water	Actual Displacement (bbl):	5.9	
Total Preflush/Spacer Volume (bbl):	10	Plug Bump (Y/N):	n/a	Bump Pressure (psi): n/a
Total Slurry Volume (bbl):	88.3	Lost Returns (Y/N):	n	(if Y, when)
Total Fluid Pumped	98.3			
Returns to Surface:	2 bbls			

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

Job notes go here!

Customer Representative Signature:

Thank You For Using
CJES O-TEX Cementing

C&J ENERGY SERVICES

2 of 2
10/30/2019

C&J ENERGY SERVICES

Materials Furnished by C&J ENERGY SERVICES	
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Displacement Chemicals:			
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PREVIOUS CASING DATA		PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS			
8.625 in. 24# (0 to 850 ft) 4.5 in. 11.6# (1,735 to 1,835 ft)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP



Client PDC Energy
Ticket No. 19100115
Location SWNW 16 6N64W
Comments Pump Per Customer Request

Client Rep Justin Cleveland
Well Name State 8461-12-16
Job Type Abandonment Plugs

Supervisor Larry Laslie
Unit No. 445046
Service District Brighton
Job Date 10/30/2019



Field Cementing Water Analysis

Company: PDC Energy
Well: State 8461 -12-16

Test Date: 10/30/2019
Ticket Number: 1910-0115

Ion	Sample Volume	Titer	Factor	Concentration	Units	Limit
pH				6		6 - 8
Calcium	50		0.801	✓	mg/l	<300
Total Hardness				250	mg/l	<600
Chlorides				213	mg/l	<500
Alkalinity				80	mg/l CaCO ³	<600
Slurry Temperature				40°	°F	50-80°F

Water Analysis Limits

	Limits	Potential Impact of Excess
pH	6 - 8	Accelerate or Retard Set Time, Short & Long Term Stability Issues
Calcium	<300	Accelerate Set Times and Higher Mixing Viscosities
Total Hardness	<600	Accelerate or Retard Set Time and Higher Mixing Viscosities
Chlorides	<500	Accelerate Set Time, Higher Mixing Visc, Interfere with fluid loss chemical
Alkalinity	<600	Accelerate or Retard Set Time, Lower Compressive Strength, Higher Visc
Slurry Temperature	50-80°F	Blend will not perform as designed

O-Tex Supervisor Signature: Larry Laslie

Company Supervisor Signature: _____

CASEDHOLE SOLUTIONS																																																																																																																																																																																																																																															
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To CASEDHOLE SOLUTIONS, INC. You are hereby requested to perform or attempt to perform the following service(s) or furnish the following equipment:										10/29/2019																																																																																																																																																																																																																																					
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