



Job Summary

Ticket Number	Ticket Date
TN# BCO-1911-0012	11/4/2019

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-20140
WELL NAME	RIG	JOB TYPE
Olson - 29-12	Ensign 354	CM-P2A-PERM.
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.2855 -104.92089	Derek Scott	Bud Holman

EMPLOYEES		

WELL PROFILE			
Max Treating Pressure (psi):	1000	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	413	2550		
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	413		
Production	4.5	10.5		2550	2650		
Tubing	2.375	4.7		0	2650		

CEMENT DATA

Stage 1:
Type: **Stub Plug**

From Depth (ft): **2371** To Depth (ft): **2650**
Volume (sacks): **80** Volume (bbls): **18.9**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type 3 Neat	14.8	1.33	6.32

Stage 2:
Type: **OH Balanced Plug**

From Depth (ft): **1059** To Depth (ft): **1584**
Volume (sacks): **215** Volume (bbls): **50.9**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type 3 Neat	14.8	1.33	6.32

Stage 3:
Type: **Surface Plug**

From Depth (ft): **0** To Depth (ft): **0**
Volume (sacks): **233** Volume (bbls): **55**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type 3 Neat	14.8	1.33	6.32

Stage 4:
Type: **Top off**

From Depth (ft): **0** To Depth (ft): **0**
Volume (sacks): **7** Volume (bbls): **1.7**

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
Type 3 Neat	14.8	1.33	6.32

SUMMARY

Preflushes:	bbls of Fresh Water	Calculated Displacement (bbl):	9	Stage 1	Stage 2
	bbls of	Actual Displacement (bbl):	8.8		4
	bbls of	Plug Bump (Y/N):	N/A	Bump Pressure (psi):	N/A
Total Preflush/Spacer Volume (bbl):	0	Lost Returns (Y/N):	N (if Y, when		
Total Slurry Volume (bbl):	126.5				
Total Fluid Pumped	138.8				
Returns to Surface:	Cement 1 bbls				

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

Customer Representative Signature: _____ **Thank You For Using CJES O-TEX Cementing**

	PDC ENERGY		YARD CALL	11/4/2019	6:00	DISTRICT		
	Olson - 29-12		RTS DATE	11/4/2019	10:00 AM	Brighton		
			YARD RTN	11/4/2019				
CUSTOMER INFORMATION			2.51c					
Customer Name	PDC ENERGY		WELL INFORMATION		WELL DATA		TUBULAR DATA	
Customer #:	1000700		API #:	05-123-20140		Casing Size	8.625	
AFE #:			Field Name:	Wattenberg		Depth	413	
Cust Rep on Loc:	Bud Holman		Well Name:	Olson - 29-12		TVD		
Cust Phone #:	970-301-3897		Well Type:	Old		MD		
Order Placed By:	Bud Holman		Formation:	Surface		OH	14	
Phone #:			Rig Contractor:	Ensign		OH Depth	660	
Proposed Job Amt:	\$14,636.68		Rig Name/Num.:	Ensign 354		BHST	97°F	
JOB INFORMATION			Rig Phone:			BHCT	97°F	
Ticket #:	BCO-1911-0012		County:	Weld		Est. BHST/BHCT	97°F / 97°F (API) (2.00°F/100ft)	
PO #:			State:	CO		MD / TVD	1,584 ft / 1,584 ft	
Order Taken By:	Laeger		Latitude:	40.2855		Mud Weight & Type		
Order Date:	11/1/2019		Longitude:	-105		Open Hole	14 in. O.H. (413 to 660 ft) 10 in. O.H. (660 to 1,450 ft)	
Head Count:	3		CJES Rep.:	Michael Salyers		Previous Casing	8.625 in. 24# (0 to 413 ft) 4.5 in. 10.5# (1,450 to 1,584 ft)	
CJES Acct. Manager:	Michael Salyers		Township:	SWNW 29 4N67W		TOP CONNECTION		
CJES Engineer	Michael Salyers		Quote Number:	1-BCO_191031134043		Size	Type	Thread
COMMENTS								
SPECIAL JOB INSTRUCTIONS								
100# Sapp , 100# Sugar								
DIRECTIONS TO WELL								
Directions to well with program								
Emergency Contacts								
Nearest Hospital:			Greeley, CO			Phone Number: 911		
Police Department:			Greeley, CO			Phone Number: 911		
Fire Department:			Greeley, CO			Phone Number: 911		
Designated Emergency Vehicle:			131151			Vehicle Location: On location		
MSDS on Dash of Emergency Vehicle? (y/n):			Yes, on coputer					
Muster Area #1		Lease Entrance						
Muster Area #2		Wind depending						
Cell Phone Service on location? (y/n)			Yes					
If not, nearest working phone								
Iron Tracking								
Taken Out				Returned				
Iron Type	Taken By	Date Out	Time Out	Returned By	Date In	Time In		

Cement Job Log



Customer: PDC ENERGY	Date: 11/4/2019	Serv. Supervisor: Derek Scott
Cust. Rep.: Bud Holman	Ticket #: BCO-1911-0012	Serv. Center Brighton - 3021
Lease: Olson - 29-12	API Well #: 05-123-20140	County: Weld State: CO
Well Type: Oil	Rig: Ensign 354	Type of Job: CM-P2A-PERM.

Time	Rate	Csg. Press.	Tbg. Press	Ann. Press.	Stg. Vol.	Cum. Vol.	Stage Num.	Stage Details
	(bbl/min)	(psi)	(psi)	(psi)	(bbl)	(bbl)	Stage	
9:05 AM							1	Leave yard
9:40 AM							1	Arrive near location
9:42 AM							1	Chain up pump and bulk truck
10:20 AM							1	Enter location have tailgate meeting
10:30 AM							1	Spot trucks and rig in
11:50 AM							1	Safety meeting
12:02 PM	1.6		180		1.0 bbl	1.0 bbl	1	Fill lines
12:03 PM			2200				1	Pressure test
12:05 PM							1	Batch up cement
12:10 PM	2		60		18.9 bbl	19.9 bbl	1	Pump 80sx Neat Type 3 @14.8ppg
12:21 PM	2		160		8.8 bbl	28.7 bbl	1	Displace with fresh
12:25 PM							1	Stop and wait for next plug
12:49 PM							1	Hook up and batch up cement
12:52 PM	2		80		50.9 bbl	79.6 bbl	1	Pump 215sx Neat Type 3 @14.8ppg
1:18 PM	2		130		3.5 bbl	83.1 bbl	1	Displace with fresh
1:20 PM							1	Stop and wait for next plug
1:34 PM							1	Hook up and batch up cement
1:39 PM	2		200		55.0 bbl	138.1 bbl	1	Pump 233sx Neat Type 3 @14.8ppg to surface
2:10 PM							1	Stop and wait for top off
2:25 PM	.5		10		1.7 bbl	139.8 bbl	1	Top off well with 7sx Neat Type 3
2:30 PM							1	Wash up
3:00 PM							1	Rig down
3:30 PM							1	Pre-departure meeting
3:35 PM					139.8 bbl		1	Leave location

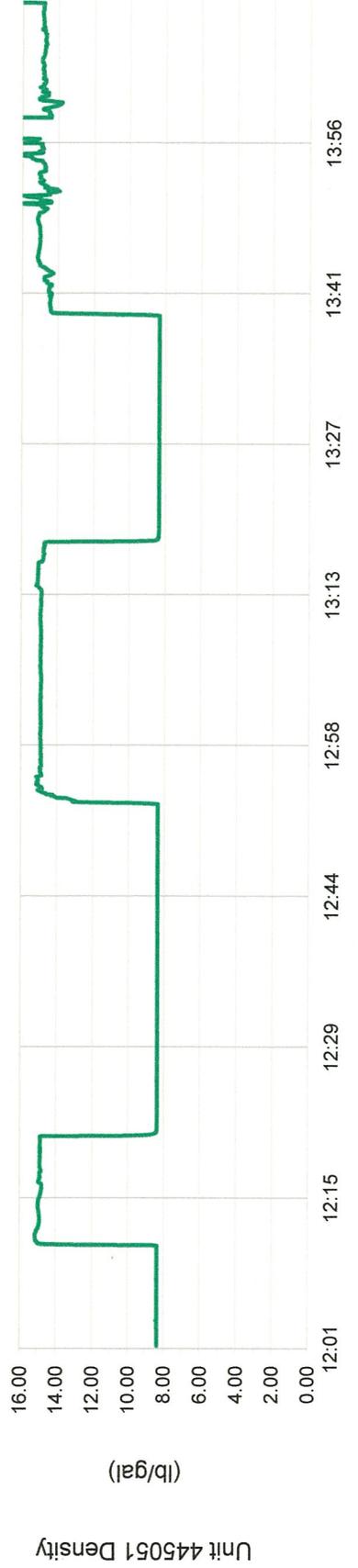
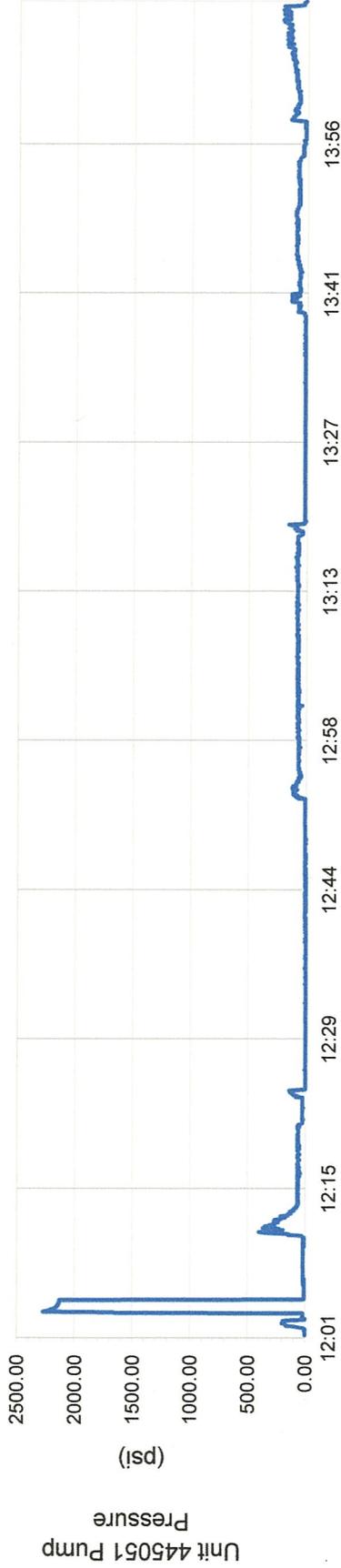
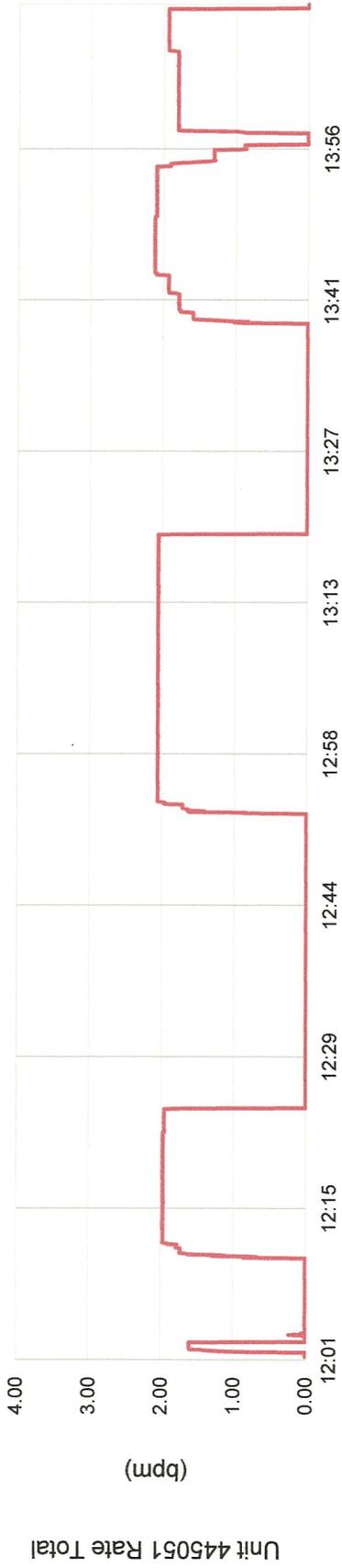
Left Yard	11/4/19 9:05 AM	Left Loc.	11/4/19 3:35 PM	Start Pump	11/4/19 12:02 PM
Arrived Loc.	11/4/19 9:50 AM	Returned Yd.	11/4/19 4:10 PM	End Pump	11/4/19 2:27 PM

Bumped Plug (psi)	Final Differential (psi)	Floats Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Top of Cement (ft)	Full Circ. During Job (Y/N)	Max Pump Pressur	Casing Rotation	Standby Charged(hrs)	Casing Reciprocation	Wireline Co.
			0	1	0	Yes	200		0		0

Derek Scott							11/4/2019				
Service Supervisor							Date				



Client	PDC Energy	Client Rep	Bud Holman	Supervisor	Derek Scott
Ticket No.	19110012	Well Name	Olson 29-12	Unit No.	445051
Location	SWNW 29-4N-67W	Job Type	Abandonment Plugs	Service District	Brighton, CO
Comments	100sx Thix Mix G @ 15.0ppg 1.36yield Job Date 11/4/2019				



CASEDHOLE SOLUTIONS



Rev.042519 A	CUSTOMER P. O. NUMBER	Ticket No. (SO) F-6725	PAGE 1 of 1
* Service charges include a daily per diem of \$30.00/employee and a daily catering charge (when provided by Casedhole Solutions) of \$25.00/employee.			DATE 11/01/2019
To CASEDHOLE SOLUTIONS, INC You are hereby requested to perform or attempt to perform the following service(s) or furnish the following equipment:			

SERVICE(S) AND/OR EQUIPMENT REQUESTED

API # 05-123-20140

CUSTOMER	COMPANY	PDC ENERGY		
FURNISHED	LEASE	OLSON	WELL NUMBER	29-12
LEASE/WELL INFORMATION	LEGAL & LOCATION	SWNW S29 T4N R67W		
	FIELD	Wattenberg	PARISH/COUNTY	Weld
			STATE	CO

THE UNDERSIGNED, HEREINAFTER REFERRED TO AS CUSTOMER AGREES TO PAY YOU FOR THE ABOVE SPECIFIED SERVICE(S) (INCLUDING LEASED EQUIPMENT) AND ANY ADDITIONAL SERVICE(S) REQUESTED, AT THE FIELD OFFICE OF CASEDHOLE SOLUTIONS, INC. IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF YOUR CURRENT PRICE SCHEDULE.

IN CONSIDERATION OF THE PRICES AS ARE SET OUT IN YOUR CURRENT APPLICABLE PRICE SCHEDULE WE CHOOSE TO BE BOUND BY THE TERMS AND CONDITIONS SET OUT IN THE CURRENT PRICE SCHEDULE (ALSO PRINTED ON THE REVERSE SIDE HEREOF), INCLUDING THE ASSUMPTION BY US OF THE LIABILITIES AND RESPONSIBILITIES CONTAINED IN THE RESPONSIBILITIES HEREIN ASSUMED BY US.

WHEN SIGNED BY AN AGENT ON BEHALF OF CUSTOMER, SAID AGENT REPRESENTS THAT HE HAS FULL AUTHORITY FROM HIS PRINCIPAL TO EXECUTE SAME, IN THE ABSENCE OF AUTHORITY, THE SIGNER AGREES THAT HE SHALL BE OBLIGATED HEREUNDER AS CUSTOMER.

CUSTOMER NAME PDC ENERGY	CITY	STATE	ZIP CODE
INVOICE MAILING ADDRESS			

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE X	Thank you for using Casedhole Solutions!!	Total runs, all pages	6
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THE ESTIMATED CHARGES AND DATA SHOWN ARE SUBJECT TO CORRECTION BY CASEDHOLE SOLUTIONS, INC. ACCOUNTING

UNIT NUMBER 200032	OPERATION TYPE: DAYLIGHT	WELL TYPE: WORKOVER	ROUND TRIP MILEAGE
	TRIP: FIRST	HOISTING TYPE: WORKOVER RIG	
WIRESLINE DEPTH	MAX. WELLHEAD PRESSURE	PSI	BOTTOM HOLE PRESSURE: PSI

Desc. NO.	PERF. INTERVAL	PLUG DEPTH	OPERATION	ITEM	QUAN.	UNIT PRICE	DISC.	DISC. PRICE	AMOUNT	SERVICE	FIRST READING	LAST READING	FOOTAGE DEL.
1			P - Packoff	each	1					Plug			
2	To 7290'		P - Gauge Ring or Depth Determination	per run	1					Perf			
3		7257'	P - Plug or Retainer - setting (3rd party)	each	1								
4			P - Dump Bailer(2 SXs Cement)	per run	1								
5			P - Plug or Retainer - setting (3rd party)	each	1								
6		6951'	P - Dump Bailer(2 SXs Cement)	per run	1								
7	Cut @ 2550'		P - Jet Cutters (all)	each	1								
8													
9													
10													
11													
12													
13													
14													
15													

Runs for this job 6	JCGR 3.625" to 7290', 3rd Party CIBP in 4 1/2 @ 7257', 2 sx on BP, 3rd Party CIBP @ 6951', 2 sx on BP, Cut @ 2550'	TOTAL D	STANDARD PRICING ESTIMATED TOTAL C
Was catering provided by Casedhole Solutions? NO			

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE X Bud Holman	LOGS RECEIVED AT WELL	CUST. INITIALS	SIGNATURE OF CASEDHOLE SOLUTIONS ENGINEER <i>Scott Travis</i> Erb, Scott Travis
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