

TICKET	BCO-1911-0012		
DATE	11/4/2019		
CREW INFORMATION			
SUPERVISOR	Derek Scott		
PUMP UNIT	44-5051		
NUMBERS			
ARRIVAL (D&T)	11/4/19 9:50		
DEPARTURE (D&T)	11/4/19 15:35		

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Date Signed _____

Job Summary

Ticket Number
TN# BCO-1911-0012

Ticket Date
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		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	4.5	10.5		2550	2650		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2.375	4.7		0	2650		

CEMENT DATA

Stage 1:	From Depth (ft):	2371	To Depth (ft):	2650
Type: Stub Plug	Volume (sacks):	80	Volume (bbls):	18.9
Cement & Additives:				
Type 3 Neat				
	Density (ppg)	14.8	Yield (ft³/sk)	1.33
	Water Req.	6.32		

Stage 2:	From Depth (ft):	1059	To Depth (ft):	1584
Type: OH Balanced Plug	Volume (sacks):	215	Volume (bbls):	50.9
Cement & Additives:				
Type 3 Neat				
	Density (ppg)	14.8	Yield (ft³/sk)	1.33
	Water Req.	6.32		

Stage 3:	From Depth (ft):	0	To Depth (ft):	0
Type: Surface Plug	Volume (sacks):	233	Volume (bbls):	55
Cement & Additives:				
Type 3 Neat				
	Density (ppg)	14.8	Yield (ft³/sk)	1.33
	Water Req.	6.32		

Stage 4:	From Depth (ft):	0	To Depth (ft):	0
Type: Top off	Volume (sacks):	7	Volume (bbls):	1.7
Cement & Additives:				
Type 3 Neat				
	Density (ppg)	14.8	Yield (ft³/sk)	1.33
	Water Req.	6.32		

SUMMARY


Preflushes:	bbls of	Fresh Water	Calculated Displacement (bbl):	Stage 1	Stage 2
	bbls of		Actual Displacement (bbl):	9	4
	bbls of			8.8	3.5
Total Preflush/Spacer Volume (bbl):	0		Plug Bump (Y/N):	N/A	Bump Pressure (psi):
Total Slurry Volume (bbl):	126.5		Lost Returns (Y/N):	N	(if Y, when)
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		WELL INFORMATION		WELL DATA		TUBULAR DATA	
Customer Name	PDC ENERGY	API #:	05-123-20140	Casing Size	8.625	Size	Grade
Customer #:	1000700	Field Name:	Wattenberg	Depth	413	2 3/8	Weight
AFE #:		Well Name:	Olson - 29-12	TVD			4.7
Cust Rep on Loc:	Bud Holman			MD		Casing	
Cust Phone #:	970-301-3897	Well Type:	Old	OH	14	CEMENTING PLUG	
Order Placed By:	Bud Holman	Formation:	Surface	OH Depth	660	Qty	Size
Phone #:		Rig Contractor:	Ensign	BHST	97°F		Type
Proposed Job Amt:	\$14,636.68	Rig Name/Num.:	Ensign 354	BHCT	97°F		Material
JOB INFORMATION		Rig Phone:		Est. BHST/BHCT		97°F / 97°F (API) (2.00°F/100ft)	
Ticket #:	BCO-1911-0012	County:	Weld	MD / TVD	1,584 ft / 1,584 ft		TOP CONNECTION
PO #:		State:	CO	Mud Weight & Type		Size	Type
Order Taken By:	Laeger	Latitude:	40.2855	Open Hole	14 in. O.H. (413 to 660 ft)	2 3/8	Swage
Order Date:	11/1/2019	Longitude:	-105	10 in. O.H. (660 to 1,450 ft)		JOB TYPE	
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)	CM-P2A-PERM.
CJES Acct. Manager:	Michael Salyers	Township:	SWNW 29 4N67W				
CJES Engineer	Michael Salyers	Quote Number:	1-BCO_191031134043				

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

[illegible]

C&J ENERGY SERVICES

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11/4/2019

Cement Job Log



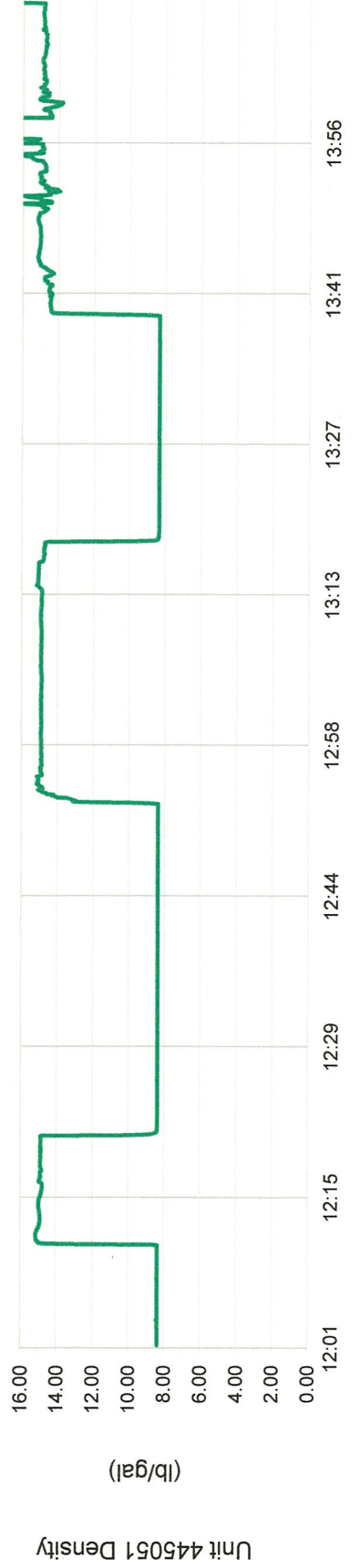
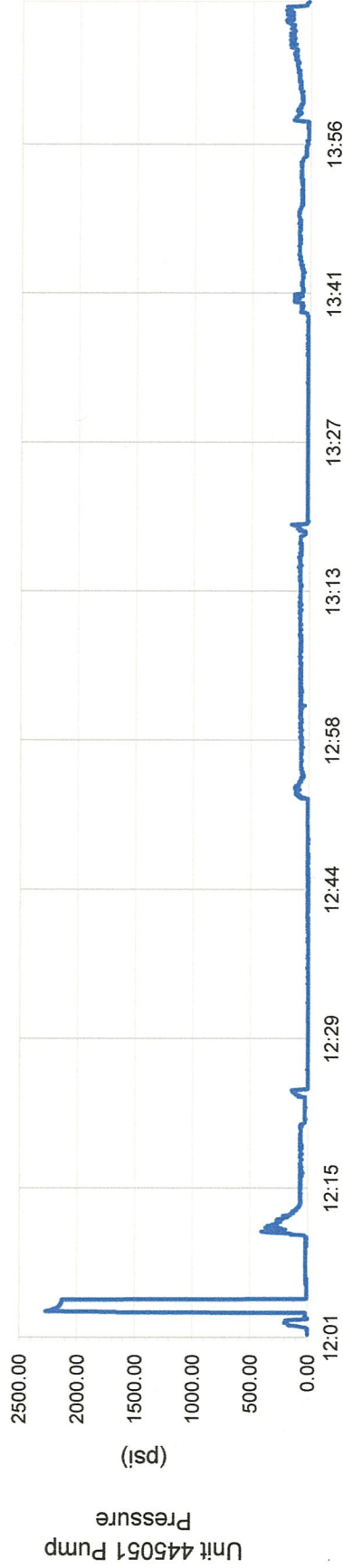
Customer:	PDC ENERGY				Date:	11/4/2019		Serv. Supervisor:	Derek Scott		
Cust. Rep.:	Bud Holman				Ticket #:	BCO-1911-0012		Serv. Center	Brighton - 3021		
Lease:	Olson - 29-12				API Well #:	05-123-20140		County:	Weld	State:	CO
Well Type:	Oil				Rig:	Ensign 354		Type of Job:	CM-P2A-PERM.		

Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Num.	Stage Details			
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 11/4/2019				



CASEDHOLE SOLUTIONS



Rev.042519 A

CUSTOMER P. O. NUMBER

Ticket No. (SO)

F-6725

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* 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 FURNISHED LEASE/WELL INFORMATION	COMPANY	PDC ENERGY				
	LEASE	OLSON	WELL NUMBER	29-12		
	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		
INVOICE MAILING ADDRESS	CITY	STATE	ZIP CODE

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

X

Thank you for using
Casedhole Solutions!!

Total runs, all pages

6

THE ESTIMATED CHARGES AND DATA SHOWN ARE SUBJECT TO CORRECTION BY CASEDHOLE SOLUTIONS, INC. ACCOUNTING

UNIT NUMBER	OPERATION TYPE: DAYLIGHT	WELL TYPE: WORKOVER	ROUND TRIP MILEAGE
200032	TRIP: FIRST	HOISTING TYPE: WORKOVER RIG	

WIRELINE DEPTH	MAX. WELLHEAD PRESSURE	PSI	BOTTOM HOLE PRESSURE:	PSI
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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													

STANDARD PRICING

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

ESTIMATED TOTAL C

Was catering provided by
Casedhole Solutions?

NO

THE SERVICE(S) AND/OR EQUIPMENT COVERED BY THIS SERVICE ORDER HAVE BEEN

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

LOGS
RECEIVED
AT WELL

CUST. INITIALS

SIGNATURE OF CASEDHOLE SOLUTIONS ENGINEER

X

Bud Holman

Scott Travis

Erb, Scott Travis