



ENSIGN WELL SERVICES

020 Weld County Road 46, LaSalle, Colorado 80645
Telephone (970) 284-6006



RIG/UNIT #: 354
TOUR: Day Shift

DAILY WORK RECORD

Ticket No: 4268324-SO1

DATE: 01-Nov-17, 06:00

Page: 1 of 1

COMPANY		
PDC ENERGY, INC	LOCATION: DILLARD 32-20 (CO, Station: Lasalle)	PO: AFE:
ATTENTION: ACCOUNTS PAYABLE		
BRIDGEPORT, West Virginia, USA 26330		

CHARGES & EXPENDABLES			
NAME	QTY	UNIT PRICE	EXT. PRICE
Rig Hours	9.00	406.50	3,658.50
Crew Travel	3.00	220.00	660.00
Labor - Floor	12.00	55.00	660.00
Bird Bath Rental	1.00	35.00	35.00
Tubing Wiper Rubber	1.00	48.00	48.00
CHARGES & EXPENDABLES SUB-TOTAL			5,061.50
FIELD ESTIMATE (TAX NOT INCLUDED)			\$ 5,061.50

CUSTOMER STAMP

ROD & TUBING DETAILS			
PULLED	SIZE:	PLAIN:	SCRAPERS: PONY:
RAN	SIZE:	PLAIN:	SCRAPERS: PONY:
NOTES:			
TUBING DETAILS			
PULLED	SIZE:	JOINTS:	TALLY:
RAN	SIZE:	JOINTS:	TALLY:
LANDED AT:		NIPPLE AT:	
NOTES:			
PUMP DETAILS			
SIZE:	TYPE:	SERIAL #:	

PRESSURE TESTS						
FUNCTION BOP	TIME TO OPERATE (s)	LOW (psi)	TIME (min)	HIGH (psi)	TIME (min)	TEST DATE & TIME
INITIAL ACCUM. PRESSURE:	FINAL ACCUM. PRESSURE:	RECHARGE TIME:				
DAILY WALK AROUND: Not run	RAM SAVER: NO	EMERGENCY HORN TEST: Not run				
LEL TEST: Not run	CROWN SAVER: Not run	EMERGENCY ENGINE KILLS: Not run				
DETAILED INSPECTION DATE:			SCBA DRILL DATE:			
MAN DOWN DRILL DATE:			RIG RESCUE DRILL DATE:			
BOP DRILL DATE:			BOP DRILL DURATION:			
IADC DETAILED INSPECTION DATE:						
WEATHER: Sunny	WIND: Calm	TEMP: 0 °F	H2S (%): 0.0			

DETAILS OF OPERATIONS				
FROM	TO	DURATION (hrs)	ACTIVITY	DETAILS
01-Nov-17, 06:00	01-Nov-17, 18:00	12.00	Rig - Pick Up/Lay Down Tubular	CREW TRAVEL TO LOC .HELD SAFETY METING .FUCTION TEST BOP .CHECKED PRESS . 100/150 0/SURF CNG .BLEED OFF PRESS .CIRCU WELL CLEAN .N/D WELL TREE MASTER VALVE AND 5K WELL HEAD TOP FLANGE .N/U BOP .R/U W/FLOOR TBG EQUIP UNLAND TBG .STAND BACK 22 JTS .L/D 205 JTS S/N N/C AND 10' SUB .R/U WIRE LINE .RUN GAUGE RING .RIH W/1ST CIBP .SET BP AT 7085' .TOP BAIL 2 SKS OF CEMENT .RIH W/2ND CIBP .SET BP AT 6768' .TOP BAIL W/2 SKS OF CEMENT .PRESS TEST 4 1/2 CNG @ 1000 PSI .TEST OK .BLEED OFF PRESS .LOG FROM 800 TO SURF .RIH WITH CNG CUTTER .CUT CNG AT 650' .R/D WIRE LINE .R/D W/FLOOR TBG EQUIP .N/D BOP AND 5K WELL HEAD UNLAND CNG .N/U SPOOL AND BOP .R/U W/FLOOR .CHANGE TBG EQUIP TO 4 1/2 .SHUT WELL .DRAIN PUMP LINES .CLEAN LOC .CREW TRAVEL HOME .
TOTAL TIME: 12.00 hours				

CREW DETAILS									
ROLE	NAME	START TIME	DURATION (hrs)	TRAVEL TIME (hrs)	PERS. VEH.	TRAVEL DIST (mi)	SUB.	DIST FROM RES (mi)	INJURY FREE
Relief Operator	Oscar Ruiz Jr	01-Nov-17, 06:00	12.00	0.00	No	0.00		0.00	Yes
Service Rig Manager	Omar Munoz	01-Nov-17, 06:00	12.00	0.00	No	0.00		0.00	Yes
Operator	Ever Valverde	01-Nov-17, 06:00	12.00	0.00	No	0.00		0.00	Yes
Floorhand	Jeffrey Garcia	01-Nov-17, 06:00	12.00	0.00	No	0.00		0.00	Yes
Derrickhand	Jose Luna Morales	01-Nov-17, 06:00	12.00	0.00	No	0.00		0.00	Yes

SIGNATURES	
RIG MANAGER/SUPERVISOR'S SIGNATURE: 	The customer agrees that the contractor ("Ensign") will perform the work and supply the materials ("the work") as described within and in accordance with the conditions set out in the IADC contract and in accordance with all exhibits, specifications, schedules and/or parts (if any) attached hereto. OPERATOR'S REP. SIGNATURE: RYAN BEAM 970-405-8585

CASEDHOLE SOLUTIONS


Casedhole Solutions

 ORDER P.O. NUMBER: **Rev.121316 A** SERVICE ORDER: **F1** 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: **11/1/2017**

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

CUSTOMER	COMPANY	PDC Energy, Inc.		
FURNISHED	LEASE	Dillard	WELL NUMBER	32-20
LEASE/WELL	LEGAL & LOCATION	05-123-23607		
INFORMATION	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, Inc.**

INVOICE MAILING ADDRESS: _____ CITY: _____ STATE: _____ ZIP CODE: _____

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE: _____

Thank you for using Casedhole Solutions!! Total runs, all pages: **7**

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

UNIT NUMBER: **92-3856** OPERATION TYPE: **DAYLIGHT** WELL TYPE: **WORKOVER** ROUND TRIP MILEAGE: _____
 TRIP: **FIRST** HOISTING TYPE: **WORKOVER RIG** MAX. WELLHEAD PRESSURE: _____ PSI BOTTOM HOLE PRESSURE: _____ PSI

Desc. NO.	PERF. INTERVAL	PLUG DEPTH	OPERATION	ITEM	QUAN.	UNIT PRICE	DISC. PRICE	AMOUNT	SERVICE	FIRST READING	LAST READING	FOOTAGE DEL.
1			P - Packoff	each	1	340		340	Plug			
2	7100' No Tag		P - Gauge Ring or Depth Determination	per run	1	680		680	Perf			
3		7085'	P - Plug or Retainer - setting (3rd party)	each	1	1700		1700				
4		7085'	P - Dump Baller w/ 2sx Cement	per run	1	765		765				
5		6768'	P - Plug or Retainer - setting (3rd party)	each	1	1700		1700				
6		6768'	P - Dump Baller w/ 2sx Cement	per run	1	765		765				
7	CBL 1000'-0'		P - Cement Bond Log (2000' - Surface)	each	1	1000		1000				
8	Cut 650'		P - Jet Cutters (all)	each	1	2720		2720				

STANDARD PRICING	
TOTAL OF BOOK PRICE	0
TOTAL DISCOUNT	0
TOTAL DISCOUNT PERCENTAGE	0

ESTIMATED TOTAL CHARGE PAGE 1

THE SERVICE(S) AND/OR EQUIPMENT COVERED BY THIS SERVICE ORDER HAVE BEEN PERFORMED OR RECEIVED AS SET FORTH ABOVE

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE: **X** _____ **Beam** LOGS RECEIVED AT WELL: _____ CUST. INITIALS: _____ SIGNATURE OF CASEDHOLE SOLUTIONS ENGINEER: **John A. Meisner** **Meisner, Jacob**

SIZE	WEIGHT	CASING/TUBING RECORD TYPE	FROM	TO	PERM. DEPTH DATUM	GROUND LEVEL	ELEV.	ELEV. K.B.
		0						
		0						
		0						
		0						
		0						

LOGS MEAS. FROM _____ WHICH IS _____ ABOVE PERM DATUM D.F. G.L.			
Fluid Type	Fluid Weight	Fluid Level	REMARKS
	lbs/gal	feet	District doing job: Fort Lupton, CO
Bottom Hole Temperature		Degrees F	Line of Business: Workover
			Type of Job:
CASEDHOLE ENGINEER NAMES: Meisner, Jacob Crew 1 Crew 2 Crew 3 Crew 4 Crew 5 Crew 6		WORK WITNESSED BY NAME: Beam Class: Vert. Domestic District job is in: Fort Lupton, CO	
		AFE#:	
		Engineer:	Meisner, Jacob
		MSA#:	

O-Tex *Pumping, LLC*

PDC

Prepared For
Chad Sailors

API Number: 05-123-23607

Dillard 32-20

Stub Plug Cement

Located in

Weld County, Colorado

SWNE 20-7N-64W

Prepared by

Paul Novotny

on

Monday, October 30, 2017

Serviced from the Brighton, Colorado facility
For Customer Service Call
720-408-9201



PDC
Dillard 32-20
Stub Plug
10/30/2017

Rig: RIG



Job Data

Job Type	Stub Plug
Round Trip Mileage	100
Previous Casing	8.625" 24# to 543' 4.5" 10.5# to 720'
Hole Size	14" to 650'
MD	720
Directions	CR 53 and CR 80, South 5/10, W 5/10, North into

Volumes

	Length (ft)	OD (in)	ID (in)	Excess (%)	CF/FT	Vol. (cf)	Vol. (bbl)
Stub Plug	543	8.097	0.000	0%	0.3576	194.2	34.6
Stub Plug	107	14.000	0.000	0%	1.0690	114.4	20.4
Stub Plug	70	4.052	0.000	0%	0.0895	6.3	1.1

Fluid Requirements

<u>Spacer</u> 5 bbls Fresh Water	
-------------------------------------	--

Stub Plug

100% Class G

Volume (sx)	325
Weight (ppg)	15.80
Yield (cf/sx)	1.15
Water (gps)	5.00
Top of Cement (ft)	0
Excess (%)	0%

PDC
 Dillard 32-20
 Stub Plug
 10/30/2017

Rig: RIG



REF. #	DESCRIPTION	QUANTITY	UNIT PRICE	DISCOUNT	GROSS	NET TOTAL
CM006	O-Tex Ultra Premium Cement (94lbs/ft3)	325				
CT001	Pump Charge 0-1000'	1				
JM001	Data Acquisition System	1				
AE014	Environmental Fee*	1				
ML001	Pickup Mileage	50				
ML002	Pump Truck/Heavy Vehicle Mileage	50				
ML003	Bulk Cement Delivery/Return	764				
MX001	Bulk Material Mixing Service Charge	325				
If Needed Items -Not included						
CC015	Pump Charge Additional Hours	1				
AE012	Bulk Unit Additional Hours	1				
CP031	Sugar	100				
CP009	CF-41 (Foam Preventer)	1				



Service Location: Brighton, Colorado 303-857-7948
 Service Address: 821 County Road 27, Brighton, CO 80603

FIELD RECEIPT

TN # FL2538

Service Date: 11/2/2017
 Customer: PDC Energy, Inc.
 Address: PO Box 26
 Attn: Accounts Payable
 City: Bridgeport
 St: WV 26330
 Customer Rep: Ryan Beam

Well Name: Dillard 32-20
 County: Weld
 State: Colorado
 API #: 05-123-23607
 AFE #

Job Type: Stub Plug
 Service Supervisor: Klosterman, Austin
 Pump #1: 445070
 Pump #2:

REF #	Description	unit of measure	unit price	quan
CM006	O-Tex Ultra Premium Cement (94lbs/ft ³)	94SACK	\$ 38.20	251
CT001	Pump Charge 0-1000'	4-HRS	\$ 2,090.88	1
JM001	Data Acquisition System	JOB	\$ 1,437.48	1
AE014	Environmental Fee*	JOB	\$ 228.69	1
ML001	Pickup Mileage	UNTMIL	\$ 4.26	50
ML002	Pump Truck/Heavy Vehicle Mileage	UNTMIL	\$ 7.32	50
ML003	Bulk Cement Delivery/Return	MILE	\$ 2.95	764
MX001	Bulk Material Mixing Service Charge	SCF	\$ 3.27	325
CP009	CF-41 (Foam Preventer)	GAL	\$ 86.06	3

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMERS AGENT.

Customer Authorized Agent: _____



SERVICE ORDER CONTRACT

Customer: **PDC Energy, Inc.**

Ticket Number: **FL2538**

Lease & Well Number: **Dillard 32-20**

Date: **11/2/2017**

As consideration, The Above Named customer Agrees:

O-TEX Pumping L.L.C. shall not be responsible for and customer shall secure O-*Tex* pumping against any liability for damage to property of customer and of the well owner (if different from customer), unless caused by the willful misconduct or gross negligence of O-*Tex* pumping, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.

O-*Tex* makes no guarantee to the effectiveness of the products, supplies, or materials, nor of the results of any treatment or services. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, except where due to O-*Tex* gross negligence or willful misconduct in the preparation or furnishing it.

O-*Tex* personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others except where due to O-*Tex* gross negligence or willful misconduct in the preparation or furnishing it.

Invoices payable NET 30 days following the date on the invoice.

Upon customers default in payment of the customers account by the last day of the month following the month in which the invoice is dated. Customer agrees to pay interest thereon after at the highest lawful contract rate applicable but never to exceed 18% per annum in the event it becomes necessary to employ an attorney to enforce collection of said account. Customer agrees to pay all collection costs and attorney fees in the amount of 25% of the unpaid account.

Service order: I authorize work to begin per service instructions in accordance with terms and conditions printed on this form and represent that I have authority to accept and sign this order.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMERS AGENT.

Customer Authorized Agent: _____



Job Summary

Ticket Number	Treat Date
TN# FL2538	11/2/2017

COUNTY	COMPANY	API Number
Weld	PDC Energy, Inc.	05-123-23607
WELL NAME	RIG	JOB TYPE
Dillard 32-20	Ensign 354	Stub Plug
SURFACE WELL LOCATION	O-TEX Field Supervisor	CUSTOMER REP
SWNE 20-7N-64W	Klosterman, Austin	Ryan Beam

EMPLOYEES		
Collin, Justin		
Coral-Flores, Francisco		
	Peterson, Roger	

WELL PROFILE			
Max Treating Pressure (psi):	1000	Bottom Hole Static Temperature (°F):	0
Bottom Hole Circulating Temperature (°F):		Well Type:	Oil

Open Hole					
1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	14	650	543		
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	J-55	543	0		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	4.5	10.5	P-110	725	650		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2.375	4.7		725	0		

CEMENT DATA				
Stage 1:	From Depth (ft):	725	To Depth (ft):	0
Type: Stub Plug	Volume (sacks):	251	Volume (bbls):	51.5
Cement & Additives:		Density (ppg)	Yield (ft ³ /sk)	Water Req.
100% Class G		15.8	1.15	5.00

SUMMARY				
Preflushes:	5 bbls of Fresh Water	Calculated Displacement (bbl):	Stage 1	Stage 2
		Actual Displacement (bbl):		
Total Preflush/Spacer Volume (bbl):	5	Plug Bump (Y/N):	n/a	Bump Pressure (psi): n/a
Total Slurry Volume (bbl):	51.5	Lost Returns (Y/N):	N	(if Y, when)
Total Fluid Pumped	56.5			
Returns to Surface:	Cement	2 bbls		
Job Notes (fluids pumped / procedures / tools / etc.):	Job went according to program and customer's request. Job went well.			

Customer Representative Signature: _____

Thank You For Using
O - TEX Pumping



Client PDC
 Ticket No. 2538
 Location Sec20:T7N:R64W
 Comments See job log.

Client Rep Ryan Beam
 Well Name Dillard 32-20
 Job Type Abandonment Plugs

Supervisor A. Klosterman
 Unit No. 745047
 Service District Brighton, CO
 Job Date 10/02/2017



