NEXTIER

CUSTOMER	**PDC ENERGY**
DISTRICT	**Brighton**
ADDRESS	**, PO Box 26, Bridgeport, WV**
PHONE	

AFE #		**PO:**	
LEASE NAME / NUMBER		**API WELL NUMBER**	
Olson - 29-22		05-123-20197	
SECTION	**TOWNSHIP**	**RANGE**	**COUNTY, STATE**
	SENW 29 4N		Weld, CO
WELL PERMIT NUMBER			
JOB TYPE		CM-P2A-PERM.	
Vehicle Type		**Single**	

TICKET	BCO-1911-0056
DATE	11/12/2019
CREW INFORMATION	
SUPERVISOR	Rich Devine
PUMP UNIT NUMBERS	445024
ARRIVAL (D&T)	11/12/19 10:00
DEPARTURE (D&T)	11/12/19 16:00

_1-BCO_191108082209-JLPjob 1.xlsm]-Main-

Service & Equipment Charges

Price Code	Description	Unit	Quantity	Price	Gross Amount	Discount	Net Amount
50001303	BULK CEMENT DELIVERY (PER TON)	TON MILE	764				
50001312	Bulk Blending Service	FT3	650				
50001349	AccuDat Recording System	JOB	1				
50001296	MILEAGE; DOT UNITS	MILE	25				
50001297	MILEAGE; NON-DOT UNITS	MILE	25				
50001288	Environmental Surcharge	EA	1				
50001479	PUMP CHARGE 0-2000' (4 HRS)	ea	1				

Materials & Products 13

Price Code	Description	Unit	Quantity
10004393	CJ922 - CEMENT PORTLAND TYPE III CJ922	SK	480
10004358	CJ775L - ADDITIVE DEFOAMER ALPHA CJ775L	GAL	1
10004389	CJ890 - ADDITIVE DUST FLUSH CJ890	LB	**100**

Customer Stamp

Customer Name Printed _____

Customer Signature _____

Date Signed _____

NexTier Job Summary

Ticket Number	Ticket Date
TN# BCO-1911-0056	11/12/2019

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-20197
WELL NAME	**RIG**	**JOB TYPE**
Olson - 29-22	Ensign 354	CM-P2A-PERM.
SURFACE WELL LOCATION	**CJES Field Supervisor**	**CUSTOMER REP**
40.285396 -104.915854	Rich Devine	Mike Alvarado

EMPLOYEES

WELL PROFILE

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

Open Hole

	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
1	10	808	1470	808	1470
2	14	413	808	413	808

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 5/8	24		0	413	0	413
Production	4 1/2	11.6		1470	1595	1470	1595
Tubing	2 3/8	4.7		0	1595	0	1595

CEMENT DATA

Stage 1: Type: **Stub Plug**

From Depth (ft): 1076 To Depth (ft): 1595

Volume (sacks): 170 Volume (bbls): 40.2

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.
Type III	14.8	1.33	6.32

Stage 2: Type: **Surface Plug**

From Depth (ft): 32 To Depth (ft): 808

Volume (sacks): 276 Volume (bbls): 65.5

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.
Type III	14.8	1.33	6.32

Stage 3: Type: **Top Off**

From Depth (ft): 0 To Depth (ft): 32

Volume (sacks): 8.4 Volume (bbls): 2

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.
Type III	14.8	1.33	6.32

SUMMARY

Preflushes: 8 bbls of Fresh Water; 10 bbls of SAPP; bbls of

TotalPreflush/Spacer Volume (bbl): 18

Total Slurry Volume (bbl): 107.7

Total Fluid Pumped 129.8

Returns to Surface: Cement 0.5 bbls

	Stage 1	Stage 2
Calculated Displacement (bbl):	4.1	
Actual Displacement (bbl):		

Plug Bump (Y/N): N/A Bump Pressure (psi): N/A

Lost Returns (Y/N): N (if Y, when)

Job Notes (fluids pumped / procedures / tools / etc.): Stub Plug: Pumped 10 bbls of SAPP. Pumped 5 bbls of H2O. Mixes 40.2 bbls of cement @ 14.8 ppg. Displaced with 4.1 bbls of H2O. Shut Down. Cement Coverage from 1076' - 1595' for 519'. Surface Plug: Establish Circulation. Mix 65.5 bbls of cement @ 14.8 ppg to surface. Shut Down. Topped off with 2 bbls of cement @ 14.8 ppg. Cement Coverage from 0 - 808'. Pumped job as per program.

Customer Representative Signature:

Thank You For Using NexTier Completion Solutions

Cement Job Log

NEXTIER

Customer:	PDC ENERGY	Date:	11/8/2019	Serv. Supervisor:	Rich Devine
Cust. Rep.:	Mike Alvarado	Ticket #:	BCO-1911-0056	Serv. Center	Brighton - 3021
Lease:	Olson - 29-22	API Well #:	05-123-20197	County: Weld	State: CO
Well Type:	Oil	Rig:	Ensign 354	Type of Job:	CM-P2A-PERM.

Materials Furnished by C&J ENERGY SERVICES

Plugs	Casing Hardware	Sacks of Cement	Fluid Dens (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbls)	Mix Water (bbls)
0								
5 bbl Water							5.00	
Stub Plug	100 % CJ922	170	14.8		1.33	6.32	40.13	26
Surface Plug	100 % CJ922	480	14.8		1.33	6.32	113.31	72
Displacement Chemicals:								

OPEN HOLE DATA				
14 in. O.H. (413 to 808 ft) 10 in. O.H. (808 to 1,470 ft)				
Mix Cemt. Temperature °F	Lead Tmp.	Middle Temp.	Tail Temp.	

TUBULAR DATA

SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)

PREVIOUS CASING DATA	PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS			
8.625 in. 24# (0 to 413 ft) 4.5 in. 11.6# (1,470 to 1,595 ft)	TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP

WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	Total Number of Runs		WATER ON LOC (bbl)
TYPE	DENSITY	VOLUME	TYPE	DENSITY						

Cement Job Log

NEXTIER

Customer:	PDC ENERGY	Date:	11/8/2019	Serv. Supervisor:	Rich Devine
Cust. Rep.:	Mike Alvarado	Ticket #:	BCO-1911-0056	Serv. Center	Brighton - 3021
Lease:	Olson - 29-22	API Well #:	05-123-20197	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	Stage Details
10:00 AM							1	ARRIVE ON LOCATION
10:04 AM							1	SPOT EQUIPMENT
10:09 AM							1	RIG UP IRON AND HOSES
10:48 AM							1	PRE JOB SAFETY MEETING
10:58 AM	2		113		1.0 bbl	1.0 bbl	1	LOAD LINES TO TEST
11:00 AM			2450				1	PRESSURE TEST
11:02 AM	2		54		10.0 bbl	11.0 bbl	1	SAPP
11:08 AM	1		32		5.0 bbl	16.0 bbl	1	FRESH WATER SPACER
11:12 AM	2				40.2 bbl	56.2 bbl	1	MIX CEMENT @ 14.8 PPG
11:34 AM	2		39		4.1 bbl	60.3 bbl	1	DISPLACEMENT
11:35 AM							1	SJUT DOWN
11:36 AM							1	WAITING TIME
11:55 AM	1.8		113		2.0 bbl	62.3 bbl	1	ESTABLISH CIRCULATION
12:02 PM	1.7		132		65.5 bbl	127.8 bbl	1	MIX CEMENT @ 14.8 PPG TO SURFACE
12:37 PM							1	SHUT DOWN
12:59 PM	.5		10		2.0 bbl	129.8 bbl	1	TOP OFF
1:03 PM							1	SHUT DONW / WASH UP
1:30 PM							1	RIG OUT
2:00 PM							1	DEPART OCATION
	129.8 bbl							

Left Yard	11/12/19 9:20 AM	Left Loc.	11/12/19 2:00 PM	Start Pump	11/12/19 10:58 AM
Arrived Loc.	11/12/19 10:00 AM	Returned Yd.	11/12/19 3:00 PM	End Pump	11/12/19 2:03 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

Rich Daine — Service Supervisor

11/ 12/ 2019 — Date

Client	PDCENERGY	Client Rep	MIKEALVARADO	Supervisor	RICH DEVINE
Ticket No.	19110056	Well Name	OLON 29-22	Unit No.	445024
Location	SENW 29 4N67W	Job Type	Abandonment Plugs	Service District	BRIGHTON
Comments	See Job Log			Job Date	11/12/2019

Client	PDCENERGY	Client Rep	MIKEALVARADO	Supervisor	RICH DEVINE
Ticket No.	19110056	Well Name	OLON 29-22	Unit No.	445024
Location	SENW 29 4N67W	Job Type	Abandonment Plugs	Service District	BRIGHTON
Comments	See Job Log			Job Date	11/12/2019

CASEDHOLE SOLUTIONS

C&J ENERGY SERVICES

Rev.042519 A

CUSTOMER P. O. NUMBER

Ticket No. (SO): F- 3931

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: 11/08/2019

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

CUSTOMER FURNISHED LEASE/WELL INFORMATION	COMPANY	PDC ENERGY				
	LEASE	OLSON	WELL NUMBER	29-22		
	LEGAL & LOCATION	0				
	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 AURTHORIZED REPRESENATIVE

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: 200054

OPERATION TYPE: | WELL TYPE:

TRIP: | HOISTING TYPE:

ROUND TRIP MILEAGE

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

Desc. NO.	PERF. INTERVAL	PLUG DEPTH	OPERATION	ITEM	QUAN.	UNIT PRICE	DISC	DISC. PRICE	AMOUNT
1			P - Packoff	each	1				
			P - Plug or Retainer - setting (3rd party)	each	2				
			P - Dump Bailer	per run	2				
			P - Cement Bond Log (2000' - Surface)	each	1				
			P - Jet Cutters (all)	each	1				
	4 1/2 STS CIBP								
	Set @ 7265'								
	2 sx cem on CIBP								
	4 1/2 STS CIBP								
	Set @ 6960'								
	2 sx cem on CIBP								
	CBL (1500' - Sur.)								
	Jet Cut @ 1470'								

SERVICE	FIRST READING	LAST READING	FOOTAGE DEL.
Plug			
Perf			

Desc. NO.	NO. GUNS	SHOTS FIRED	TYPE CHRG.	SIZE

NO. DESC.	NO. SHOTS FIRED	NO. SEL. SWITCHES	SEL. SW. FAILURES
1	0	0	0

S. EQ. USE	% H2S/ACID	PHASE	SPF
10K		0	0

STANDARD PRICIN

TO

T

TOTAL D

ESTIMATED TOTAL C

Runs for this job - 6

Was catering provided by Casedhole Solutions?

NO

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

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENATIVE | LOGS RECEIVED | CUST. INITIALS | SIGNATURE OF CASEDHOLE SOLUTIONS ENGINEER