



Well History

Well Name: Avery 13-10

API 05123202380000	Surface Legal Location NWSW 10 6N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,750.00	Original KB Elevation (ft) 4,760.00	KB-Ground Distance (ft) 10.00	Spud Date 3/2/2001 14:00	Rig Release Date
On Production Date 4/10/2001				

Job
Drilling - original, 3/2/2001 00:00

Job Category Drilling	Primary Job Type Drilling - original	Start Date 3/2/2001	End Date 3/18/2001	Objective Explore Codell for production
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Daily Operations

Start Date	Summary	End Date
3/1/2001	Mid-Continental Rig #1: Moving on and rigging up.	
3/2/2001	Mid-Continental Rig #1: Spud 12 1/4" hole @ 2PM.	
3/3/2001	Mid-Continental Rig #1: TD 12 1/4' hole @ 414'. Ran 424' of new, 24# 8 5/8" csg (set @ 404'). Cemented with 285 sx of Class "G." Plug down @ 2:30 Am on 03/03.	
3/4/2001	Mid-Continental Rig #1: Drilling 7 7/8' hole @ 2150'.	
3/5/2001	Mid-Continental Rig #1: Drilling 7 7/8' hole @ 3310'. Currently down due to faulty mud motor.	
3/6/2001	Mid-Continental Rig #1: Drilling 7 7/8" hole @ 5063'.	
3/7/2001	Mid-Continental Rig #1: Drilling 7 7/8" hole @ 7106'.	
3/8/2001	Mid-Continent Rig #1: TD 7 7/8" hole @ 7361' KB. MIRU PSI and ran GR/Comp Density/Neutron/Dual Induction log. LTD 7333' KB. RU Kimzey Casing Service and ran 14' shoe joint, 14' pup joint, 173 joints of 10.5 #/ft, M-65, 4 1/2" casing and 1 joint of 11.6 #/ft, N-80 on top of string to 7320' KB. Insert @ 7306' KB. MIRU BJ Services and pump 10 bbl Claytreat, 10 bbl SAPP, 156 bbl BJ Lite (220 sx) and 41 bbl Class G + additives (150 sx). Displaced cement with 116 bbl treated water. Plug down OK @ 6:45 pm. Released rig @ 8:00 pm.	
3/13/2001	Nuex Wireline ran GR/VDL/CBL finding a PBSD @ 7299' and a cement top of 3100'. Perforated the Codell from 7120' to 7130 with 30, .34 diameter holes, 120 deg phase.	
3/16/2001	MIRU BJ Services and frac the Codell with 2880 bbl Vistar 20/18 and 225600# 20/40 mesh sand. Break down @ 2710 psig; ATP - 3410 psig; AIR - 15.5 bpm; 4 ppa sand; ISIP - 3381 psig; 5 min - 3171 psig; Flushed with 112 bbl. Shut down pumps @ 11:15 am. Open well on 12/64 choke to tank.	
3/18/2001	Flowing well to tank thru 12/64" Choke to clean up. FL Casing pressure 500#. LR 159. TLR 712. 70% Oil cut, fair gas.	

Workover, 2/18/2002 00:00

Job Category Completion/Workover	Primary Job Type Workover	Start Date 2/18/2002	End Date 2/23/2002	Objective MIRU completion rig to run 2 3/8 tubing string. Kill well with 2% KCL. NU BOPs & RIH with tbg. Tag sand fill @ 7117. (Codell 7120-30.) Circ & clean out to 7299. Roll hole clean 1 hr. Land with 226 jts @ 7117. NU wellhead and swab well. IFL 600'. FFL 600'. LR 10. SDFN. Swab well. Made 1 run, LR 10. RDMO completion rig. MIRU swab rig. IFL 2000'. FCP 300. FFL 5300'. LR 80. SDFN. ICP 1075. ITP 250. IFL 2700'. Flowed tubing to tank. Swab well. Csg pressure 750#, Tbg pressure 650#. FCP 500#. FTP 500#. FFL 3600'. LR 45. TLR 125. SDFN.
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Daily Operations

Start Date	Summary	End Date
2/18/2002	MIRU completion rig to run 2 3/8 tubing string. Kill well with 2% KCL. NU BOPs & RIH with tbg. Tag sand fill @ 7117. (Codell 7120-30.) Circ & clean out to 7299. Roll hole clean 1 hr. Land with 226 jts @ 7117. NU wellhead and swab well. IFL 600'. FFL 600'. LR 10. SDFN.	2/18/2002
2/19/2002	Swab well. Made 1 run, LR 10. RDMO completion rig.	2/19/2002
2/22/2002	MIRU swab rig. IFL 2000'. FCP 300. FFL 5300'. LR 80. SDFN.	2/22/2002
2/23/2002	ICP 1075. ITP 250. IFL 2700'. Flowed tubing to tank. Swab well. Csg pressure 750#, Tbg pressure 650#. FCP 500#. FTP 500#. FFL 3600'. LR 45. TLR 125. SDFN.	2/23/2002



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Ground Elevation (ft) 4,750.00	Original KB Elevation (ft) 4,760.00	KB-Ground Distance (ft) 10.00	Spud Date 3/2/2001 14:00	Rig Release Date
				On Production Date 4/10/2001

Job

Workover, 1/31/2006 00:00

Job Category Completion/Workover	Primary Job Type Workover	Start Date 1/31/2006	End Date 2/14/2006	Objective MIRU SOS well service. NU BOP's, PU 4 tag joints. Didn't tag fill. TOH with 20 stands, tubing is plugged up with mud and pulling wet. Wind started to blow very hard. Shut down due to high winds. Finished TOH with tubing. The bottom joint was filled with dehydrated mud. PU Nabors 4 ½ casing scraper, 3 7/8 blade bit and top sub. Pressure tested the tubing to 6000# with H-S testers. Tested to just above the Codell. Scraper wouldn't go any further. RD H-S. RU JU head to clean out the well. Circulated past the Codell to 7250'. Rolled the hole. TOH with tubing. We will hunt for holes tomorrow. SDFN TIH with Nabors 4 ½ WLTC bridge plug and 195 joints. Set the plug @ 6150'. Spotted sand and displaced water. TOH with retrieving head. TIH with Nabors 32A packer. Pinpointed the hole to be between 2844-2876'. TOH with tubing. RU Nuex wireline to cut the casing @ 3012'. Pulled on the casing and it was free. We will lay down and pick up casing in the am. SDFN Laid down 4 ½ casing. Cut corroded sections out of the pipe to have a chemist recommend way to eliminate our casing problems. Re-ran 47 joints of casing. PU 14 joints (575') of used 4 ½ 10.5# casing that was pulled from the Ehrlich #3. Circulated down to the fish. Latched onto the fish. Pressure tested the casing to 1500# for 10 minutes. NU BOP's. TIH to 3400'. Rolled the hole and tested the patch to 1500'. TOH with tubing. SDFN RU BJ Services to annular fill the casing from 3130' to surface. We pumped 20 barrels of clean water followed by 50 sacks of 'G' cement @15.8 1.15 yield (10.23 barrels) of slurry. Pulled the pipe to 2931'. Pumped 195 sacks of 11# 3.31 Premium Lite cement (110 barrels). Got cement returns to surface. Laid down the 1 ¼ work string. RD BJ and set the casing slips. TIH with retrieving head to release the bridge plug. Well, not to be out done by sheep or burning dashes, this rig crew managed to plug up the tubing. That took some ti
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Daily Operations

Start Date	Summary	End Date
1/31/2006	MIRU SOS well service. NU BOP's, PU 4 tag joints. Didn't tag fill. TOH with 20 stands, tubing is plugged up with mud and pulling wet. Wind started to blow very hard. Shut down due to high winds.	1/31/2006
2/1/2006	Finished TOH with tubing. The bottom joint was filled with dehydrated mud. PU Nabors 4 ½ casing scraper, 3 7/8 blade bit and top sub. Pressure tested the tubing to 6000# with H-S testers. Tested to just above the Codell. Scraper wouldn't go any further. RD H-S. RU JU head to clean out the well. Circulated past the Codell to 7250'. Rolled the hole. TOH with tubing. We will hunt for holes tomorrow. SDFN	2/1/2006
2/2/2006	TIH with Nabors 4 ½ WLTC bridge plug and 195 joints. Set the plug @ 6150'. Spotted sand and displaced water. TOH with retrieving head. TIH with Nabors 32A packer. Pinpointed the hole to be between 2844-2876'. TOH with tubing. RU Nuex wireline to cut the casing @ 3012'. Pulled on the casing and it was free. We will lay down and pick up casing in the am. SDFN	2/2/2006
2/3/2006	Laid down 4 ½ casing. Cut corroded sections out of the pipe to have a chemist recommend way to eliminate our casing problems. Re-ran 47 joints of casing. PU 14 joints (575') of used 4 ½ 10.5# casing that was pulled from the Ehrlich #3. Circulated down to the fish. Latched onto the fish. Pressure tested the casing to 1500# for 10 minutes. NU BOP's. TIH to 3400'. Rolled the hole and tested the patch to 1500'. TOH with tubing. SDFN	2/3/2006
2/7/2006	RU BJ Services to annular fill the casing from 3130' to surface. We pumped 20 barrels of clean water followed by 50 sacks of 'G' cement @15.8 1.15 yield (10.23 barrels) of slurry. Pulled the pipe to 2931'. Pumped 195 sacks of 11# 3.31 Premium Lite cement (110 barrels). Got cement returns to surface. Laid down the 1 ¼ work string. RD BJ and set the casing slips. TIH with retrieving head to release the bridge plug. Well, not to be out done by sheep or burning dashes, this rig crew managed to plug up the tubing. That took some time to unplug but we managed to struggle through and we did get the plug released before dark. Laid down 3 joints. SDFN	2/7/2006
2/8/2006	Finished coming out of the hole with the bridge plug. TIH with production string. Cleaned out to 7220'. Landed the well with 226 joints of 2 3/8 J-55 4.7# tubing @ 7117. RD move to the Avery 12-10.	2/8/2006
2/11/2006	Clark Well Services: MIRU.	2/11/2006



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Daily Operations		
Start Date	Summary	End Date
2/13/2006	Clark Well Services: MIRU. Checked pressure @ vac/vac. Swab runs made 15. Shut well in for night. Final Pressure @ o/blow. Initial fluid level @ 100'. Final fluid level @ 6800'. Recovered 96bbbls.	2/13/2006
2/14/2006	Clark Well Services: MIRU. Checked pressure @ 260/60. Swab runs made 3. RDMO. Final Pressure @ blow/40. Initial fluid level @ 6000'. Final fluid level @ 6800'. Recovered 8bbbls.	2/14/2006

Wellbore Integrity, 10/31/2014 06:00				
Job Category Completion/Workover	Primary Job Type Wellbore Integrity	Start Date 10/31/2014	End Date 3/11/2015	Objective Pull tubing, install RBP, install 5k wellhead Test tubing, set RBP, test casing and Install 5K well head.

Daily Operations		
Start Date	Summary	End Date
10/31/2014	ITP 100 psi, ICP 100 psi, ISCP 0 psi, well was on blow down through production equipment, MIRU Ensign Rig 354, blow down well to work tank, control well with 60 bbl of clay treat/biocide water, ND master valve and tree, NU BOP, function test BOP, PU tag jts, tag at 7252.60 with 230 jts 122 ft below perfs, LD tag jts, POOH 2 3/8 production pipe to derrick, tally out, tubing was landed at 7126.60 KB with 226 jts and NC/SN, MIRU Pick testers, PU STS's 3 7/8 blade bit and 4 1/2 scraper dressed for 10.5 casing, test in the hole with production pipe, RD tester, all pipe tested good, ran scraper down to 7117 with 226 jts, LD 11 jts, SI and secure well with 215 jts in the hole at 6760.17, drain pump and lines, SD.	10/31/2014
11/3/2014	ITP-100, ICP-100, ISCP-0. Held safety meeting. Open up well and blew down to RT. POOH 215 jts. to the derrick. LD tools. PU WLTC RBP for 4 1/2" casing. TIH from the derrick and set RBP @ 6,767.67' w/10' out on jt. #215. LD 1 jt. and RU circulation equipment. Broke circulation and rolled the hole clean of oil and gas. Pressured up to 1,000 psi. (only 1,000 because of casing patch) for 15 min. to test RBP and casing. Good test. Released pressure. LD 4 jts. and dropped 2 sacks of sand, and chased w/15 bbbls. of 2% claytreat/biocide water. LD 5 more jts. and landed tubing, leaving 205 jts. in the hole and 21 jts. on the ground. The 21 jts. will be FMT'd to PDC good inventory. ND BOP. Stripped off 3K well head and stripped on a new 5K flange style well head w/new 5K balon valves and 2" xx heavy nipples from WB Supply. RDMOL	11/3/2014
3/10/2015	STP-0, SCP-0, ISCP-0. held safety meeting, MIRU Ensign 314. held safety meeting, RU rig and all equipment, pressure tested hard lines, opened well to rig tank, function tested BOP's, ND WH, NU BOP's, held safety meeting, ATP delivered out 20 jts of 2 3/8" 4.7# J-55 from PDC inventory, PU 10 jts. and tagged sand @ 6,752.67'. RU circ. equip., TIW valve and tubing swivel. Broke circ. and washed down latching onto RBP @ 6,767.67' w/ 215 jts. RD circ. equip. and released RBP. check for trapped pressure, no pressure, TOOH standing back w/ tubing, LD RBP and tools, MIRU Pick Testers, held safety meeting, PU NC/SN, TIH w/production tbg from derrick testing each jt and connection to 6000 psi, all jts tested good, RD and released tester, PU tag jts, TIH w/ tag jts tagged at 7,235.84' KB (16.16' above PBTD , 105.84' of rat hole) and tools w/230 jts, LD tag jts, ND BOP, land tbg in WH 7,105.91' KB (14.09' above the Codell) w/225 jts plus 1-8' & 1-10' subs, NU WH, did not dropped new PCS full port standing valve and broached to seatnipple w/1.901" broach, isolate well, drained lines and pump, prepared for next day operations, SDFN <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Tbg detail:</div> <div style="width: 30%;">8.0' adj KB</div> <div style="width: 30%;">8.0'</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">225 jts 2 3/8" 4.7# J-55 EUE 8rd</div> <div style="width: 30%;">7078.31'</div> <div style="width: 30%;">7086.31'</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">1-8' 2 3/8" 4.7# J-55 EUE 8 rd sub</div> <div style="width: 30%;">8.00'</div> <div style="width: 30%;">7094.31'</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">1-10' 2 3/8" 4.7# J-55 EUE 8 rd sub</div> <div style="width: 30%;">10.00'</div> <div style="width: 30%;">7104.31'</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Seatnipple/notched collar</div> <div style="width: 30%;">1.60'</div> <div style="width: 30%;">7105.91' EOT</div> </div>	3/10/2015
3/11/2015	SCP 0 psi, STP 0 psi, SSCP 0 psi, held safety meeting, opened well to rig tank, well blow down, held safety meeting, RU swab equipment. <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">ITP-0 psi</div> <div style="width: 30%;">ICP-0 psi</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">IFL-1000'</div> <div style="width: 30%;">FFL-6600'</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Swabed back 60 bbbls water</div> <div style="width: 30%;">FCP-50 psi</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">FTP-flowing</div> <div style="width: 30%;">FCP-50 psi</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">Made 20 swab runs</div> <div style="width: 30%;">FCP-50 psi</div> </div> RDMOL.	3/11/2015

Wireline, 4/4/2016 08:00				
Job Category Other	Primary Job Type Wireline	Start Date 4/4/2016	End Date 4/4/2016	Objective Fish Plunger

Daily Operations		
Start Date	Summary	End Date
4/6/2016	Core Tech RIH w/ 2" JUC and fished plunger @ 7114' Dropped new slide and sleeve bypass plunger. RIH W/ 2" JDC and set new 2 stage @ 4272'. Dropped new TWNG and fished plunger. RDMO	4/6/2016

Wireline, 6/13/2017 12:00				
Job Category Other	Primary Job Type Wireline	Start Date 6/13/2017	End Date 6/13/2017	Objective REBUILD STAGE TOOL



Well History

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Ground Elevation (ft) 4,750.00	Original KB Elevation (ft) 4,760.00	KB-Ground Distance (ft) 10.00	Spud Date 3/2/2001 14:00	Rig Release Date On Production Date 4/10/2001

Daily Operations

Start Date	Summary	End Date
6/13/2017	Coretech RU, RIH w/ 2" JDC to fish plgr @ 4264', TWNG @ 4265', 2 stage @ 4267', bypass plgr @ 7097'. Dropped new bypass plgr. Rebuilt and reset 2 stage @ 4232'. Dropped new TWNG and plgr. RDMO	6/13/2017

Abandon Well LOE, 10/2/2018 06:00

Job Category Abandon	Primary Job Type Abandon Well LOE	Start Date 10/2/2018	End Date 10/3/2018	Objective PLUG AND ABANDON WELL.
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Daily Operations

Start Date	Summary	End Date
10/2/2018	ITP 200 PSI, ICP 200 PSI, ISCP 0 PSI, WELL WAS SHUT IN, MIRU ENSIGN RIG 354, BLEW DOWN WELL TO RIG TANK, FUNCTION TESTED BOP, CIRCULATED OIL AND GAS OUT, ND PRODUCTION TREE AND 5K TOP FLANGE, NU BOP, PULLED 100 JTS OF 2 3/8 J-55 TO DERRICK, LD 125 JTS COME OUT LOADING THE HOLE, MIRU C&J WIRE LINE, MADE A GAUGE RING RUN DOWN TO 7100', PU 4 1/2 10K CIBP, SET CIBP AT 7070' CORRELATED WITH LOGS, SPOTTED 2 SACKS OF CEMENT ON TOP OF THE PLUG, SET SECOND CIBP AT 6721' CORRELATED WITH LOGS, SPOTTED 2 SACKS OF CEMENT ON TOP OF THE PLUG, PICKED UP LOGGING TOOL, LOGGED FROM 3200' UP TO SURFACE, RD WIRE LINE, LOADED THE HOLE, PRESSURE TESTED CASING AND PLUG UP TO 1000 PSI, HELD GOOD FOR 15 MINUTES, ND BOP AND SHUT IN AND SECURE WELL FOR THE NIGHT, SD.	10/2/2018
10/3/2018	NO PRESSURES, OPENED WELL, ND BOP AND 5K WELL HEAD, UNLANDED CASING WITH STS'S SPEAR PULLING 90K, WORKED CASING AND GOT FREE CASING DOWN TO 633', NU BOP, PICKED UP 2 3/8 MULE SHOE, RIH WITH 2 3/8 PIPE DOWN TO 3178' WITH 101 JTS, BROKE CIRCULATION WITH WATER, MIRU C&J CEMENT TRUCKS, HELD SAFETY MEETING, PRESSURE TESTED LINES UP TO 1500 PSI, NO LEAKS, ESTABLISHED CIRCULATION WITH WATER, PUMPED 30 SACKS OF 15.8 CLASS G CEMENT DOWN TUBING, BALANCED CEMENT WITH 10.8 BBL OF WATER, EST TOC AT 2693', LD 47 JTS ON ATP'S TRAILER, PUMPED 74 SACKS OF 14.8 TYPE III CEMENT DOWN TUBING, BALANCED CEMENT WITH 2.3 BBL OF WATER, EST TOC AT 600', LD 38 JTS, PULLED 16 JTS TO DERRICK, MIRU C&J WIRE LINE, PICKED JET CUTTER, CUT CASING AT 480', RD WIRE LINE, RU CIRCULATING EQUIPMENT, CONDITIONED THE HOLE FOR 30 MINUTES, GOT WATER ON RETURNS, ND BOP, UNLANDED CASING, NU BOP, LD 13 JTS OF 4 1/2 CASING ON ATP'S TRAILER, CHANGED EQUIPMENT FROM 4 1/2 TO 2 3/8, RAN 17 JTS OF 2 3/8 WITH MULE SHOE DOWN TO 536', ESTABLISHED CIRCULATION WITH WATER, OPENED WELL FOR 5 MINUTES, NO FLOW OR GAS MIGRATION, PUMPED 148 SACKS (35 BBL) OF 14.8 TYPE III CEMENT AND GOT CEMENT ON RETURNS, LD THE 17 JTS, TOP OFF WITH 2 BBL OF CEMENT, CLEANED UP EQUIPMENT FROM CEMENT, ND BOP, RACK PUMP AND TANK, RDMOL. PUMPED TOTAL OF 30 SACKS OF 15.8 CLASS G AND 230 SACKS OF 14.8 TYPE III CEMENT. MOVE IN ATP'S CUT AND CAP CREW, DUG DOWN 6' CUT OFF WELL HEAD, WELDED CAP ONTO SURFACE, INSTALLED MARKER PLATE ON CAP, BACKFILLED, SHUT DOWN. FINAL REPORT. 225 JTS OF 2 3/8 J-55 4.7 AND 13 JTS OF 4 1/2 11.6# CASING SOLD TO KARST.	10/3/2018



Job Summary

Ticket Number
TN# **BCO-1810-0015**Ticket Date
10/3/2018

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-20238
WELL NAME	RIG	JOB TYPE
Avery 13-10	Ensign 354	Plug to Abandon
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.49869 -104.65756	Jeff Kopp	Eduardo Chavez

EMPLOYEES		
<i>Justin C</i>		
<i>James M</i>		
<i>Francisco</i>		

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	480	404		
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)
Tubing	2 3/8	4.7		3178	0	1700	0
Production	4 1/2	10.5		3178	0	1700	0
Surface	8 5/8	24		404	0		

CEMENT DATA

Stage 1:	From Depth (ft):	3178	To Depth (ft):	2795
Type:	Volume (sacks):	30	Volume (bbbls):	6.1
Cement & Additives:		Density (ppg)	Yield (ft ³ /sk)	Water Req.
100% G cement		15.8	1.15	5.00

Stage 2:	From Depth (ft):	1700	To Depth (ft):	600
Type:	Volume (sacks):	74	Volume (bbbls):	17.5
Cement & Additives:		Density (ppg)	Yield (ft ³ /sk)	Water Req.
100% Type III		14.8	1.33	6.32

Stage 3:	From Depth (ft):	530	To Depth (ft):	0
Type:	Volume (sacks):	156	Volume (bbbls):	37
Cement & Additives:		Density (ppg)	Yield (ft ³ /sk)	Water Req.
100 Type III		14.8	1.33	6.32

Stage 4:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbbls):	
Cement & Additives:		Density (ppg)	Yield (ft ³ /sk)	Water Req.

SUMMARY

Preflushes:	15 bbls of Fresh Water	Calculated Displacement (bbl):	Stage 1: 10.8	Stage 2: 2.3
		Actual Displacement (bbl):	10.8	2.3
Total Preflush/Spacer Volume (bbl):	15	Plug Bump (Y/N):	N/A	Bump Pressure (psi): N/A
Total Slurry Volume (bbl):	65.3	Lost Returns (Y/N):	N	(if Y, when)
Total Fluid Pumped	81.3			
Returns to Surface:	Cement 1 bbls			

Job Notes (fluids pumped / procedures / tools / etc.): Job pumped per customers request. Job went well. 2 3/8 tubing on surface plug @530ft. 4 1/2 production casing on surface plug @480ft to 530ft.

Thank You For Using
CJES O-TEX Cementing

Customer Representative Signature: _____

Cement Job Log

C&J ENERGY SERVICES		Date: 10/3/2018		Serv. Supervisor: Jeff Kopp						
Customer: PDC ENERGY		Ticket #: BCO-1810-0015		Serv. Center Brighton - 3021						
Cust. Rep.: Eduardo Chavez		API Well #: 05-123-20238		County: Weld State: CO						
Lease: Avery 13-10		Rig: Ensign 354		Type of Job: Plug to Abandon						
Well Type: Oil		Materials Furnished by C&J ENERGY SERVICES								
Plugs		Casing Hardware		Physical Slurry Properties						
		Sacks of Cement	Fluid Dens (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbbls)	Mix Water (bbbls)		
5 bbls water										
Plug 1		+100 % CJ914	30	15.8	1.15	5.00	6.13	4		
Plug 2		100 % CJ922	400	14.8	1.33	6.32	94.42	60		
0										
Displacement Chemicals:										
OPEN HOLE DATA		TUBULAR DATA								
10in OH (480ft to 404ft)		SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)		
		2 3/8 4.7#		3178FT						
		2 3/8 4.7#		1700FT, 530FT						
PREVIOUS CASING DATA		PERFORATED INTERVAL DATA			CASING EQUIPMENT DEPTHS					
4.5 in. 10.5# (0 to 3,178 ft)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP	
WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbbl)		
TYPE	DENSITY	VOLUME	TYPE	DENSITY						
							1000	100		
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details			
7:55 AM							0 ARRIVE ON LOCATION			
8:00 AM							0 PRE JOB SAFETY MEETING			
8:05 AM							0 SPOT EQUIPMENT			
8:20 AM							0 RIG UP IRON AND HOSES			
8:46 AM							0 SAFETY MEETING			
8:58 AM	1.5		26			1	1 FILL LINES			
9:00 AM			2800			1	1 PRESSURE TEST			
9:10 AM	0.7		26			6	7 EST. CIRCULATION			
9:16 AM	1.5		113		6.1	13.1	MIX AND PUMP 30SXS @15.8PPG 1.15Y 5.0WR			
9:21 AM	1.5		17		10.8	23.9	DISPLACE			
9:27 AM						23.9	SHUT DOWN			
9:30 AM						23.9	WAIT ON RIG TO PULL TUBING TO 1700FT			
9:55 AM	2		150			7	30.9 EST. CIRCULATION			
10:01 AM	2		35		17.5	48.4	MIX AND PUMP 74SXS @14.8PPG 1.33Y 6.32WR			
10:11 AM	2		26		2.3	50.7	DISPLACE			
10:14 AM						50.7	SHUT DOWN			
10:19 AM						50.7	WAIT ON WIRELINE TO CUT CASING AND RIG TO PULL OUT			
12:13 PM	1		20		2	52.7	EST. CIRCULATION			
12:24 PM	1.8		70		35	87.7	MIX AND PUMP 148sxs @14.8PPG 1.33Y 6.32WR			
12:42 PM						87.7	SHUT DOWN			
12:44 PM						87.7	WAIT ON RIG TO NIPPLE DOWN			
12:58 PM	.5		0		2	89.7	TOP OFF WELL WITH 8SXS			
1:30 PM						89.7	WASH UP PUMPS AND LINES/ RIG OUT			
2:00 PM						89.7	LEAVE LOCATION			
Left Yard	10/3/18 7:00 AM		Left Loc.			Start Pump	10/3/18 8:58 AM			
Arrived Loc.	10/3/18 7:55 AM		Returned Yd.			End Pump				
Bumped Plug (psi)	Final Differential (psi)	Floater Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Top of Cement (ft)	Full Circ. During Job (Y/N)	Max Pump Pressure (psi)	Casing Rotation	Standby Charged(hrs)	Casing Reciprocation
			0	1	2795/600/0	Yes	1000		2	
							JF Kopp			
							Service Supervisor		Date	



PDC ENERGY

YARD CALL 10/3/2018
RTS DATE 10/3/2018
YARD RTN 10/3/2018

DISTRICT

Avery 13-10

Brighton

CUSTOMER INFORMATION

1.07b

CUSTOMER INFORMATION		WELL INFORMATION		WELL DATA		TUBULAR DATA			
Customer Name	PDC ENERGY	API #:	05-123-20238	Casing Size	4.5	Size	Grade	Weight	Depth
Customer #:	1000700	Field Name:	Wattenberg	Depth	3178	2 3/8		4.7	3178
AFE #:		Well Name:	Avery 13-10	TVD	3,178 ft	Casing			
Cust Rep on Loc:	Eduardo Chavez			MD	3,178 ft	CEMENTING PLUG			
Cust Phone #:	9703970599	Well Type:	Oil	OH	10in	Qty	Size	Type	Material
Order Placed By:		Formation:		OH Depth	480ft to 404ft				
Phone #:		Rig Contractor:	Ensign	BHST	60°F				
Proposed Job Amt:	\$6,009.67	Rig Name/Num.:	Ensign 354	BHCT	0°F				
JOB INFORMATION		Rig Phone:		Est. BHST/BHCT	60°F / 0°F (API) (0.00°F/100ft)				
Ticket #:	BCO-1810-0015	County:	Weld	MD / TVD	3,178 ft / 3,178 ft		TOP CONNECTION		
PO #:		State:	CO	Mud Weight & Type		Size	Type	Thread	
Order Taken By:	Milo	Latitude:	40.49869	Open Hole	10in OH (480ft to 404ft)				
Order Date:		Longitude:	-105	Previous Casing	4.5 in. 10.5# (0 to 3,178 ft)		JOB TYPE		
CJES Acct. Manager:	Adam DeSaules	Township:	NWSW 10 6N65W 6 PM						Plug to Abandon
CJES Engineer	0	Quote Number:	1-BCO_181001194948						

COMMENTS

SPECIAL JOB INSTRUCTIONS

100# sugar

DIRECTIONS TO WELL

CR 43 & CR 70, N .2, E into

Emergency Contacts

Nearest Hospital	Greeley, Co.	Phone Number:	
Police Department		Phone Number:	
Fire Department		Phone Number:	
Designated Emergency Vehicle	201386	Vehicle Location:	
MSDS on Dash of Emergency Vehicle? (y/n)	Y		
Muster Area #1	Lease entrance		
Muster Area #2	Wind depending		
Cell Phone Service on location? (y/n)	Y		
If not, nearest working phone			

Iron Tracking

Iron Type	Taken Out			Returned		
	Taken By	Date Out	Time Out	Returned By	Date In	Time In



Field Ticket #
22928

No 22928

Date
10/3/2018

Office 970-356-4644 Fax 970-356-0185

Sater Tools and Services LLC, 2424 6th Ave, Greeley Co 80631

Bill To Customer:	P D C	PO#	Lease Name:	Avery	Well #:	13-10
Address:	3801 Carson Ave	Field:	County:	CO	Invoice Ref. #:	
City:	Evans	Legal Description:	Job Type:		OCSG #:	
State:	CO	Zip:	Casing Sz & Wt:	4-1/2 11.6#		
Ordered By:	Eduardo Chavez		Service Man:	MERCED TERRAZAS		

NO.	RENTALS/SALES	QTY	PRICE	DSC	TOTAL
1					
2					
3					
4	Rental of 4-1/2 TIW valve	1			
5	Rental of 2-3/8 TIW valve	1			
6					
7					
8	Rental of 9487 casing spear	1			
9	Rental of 9487 3.941 spear grapple	1			
10	Rental of 2-3/8 reg pin x 2-3/8 IF box, 2-3/8 IF spear extension and lifting sub	3			
11	Rental of 8-5/8 adppter BOP flange	1			
12	Rental of 4-1/2 elevators	1			
13	Rental of 4-1/2 air slips	1			
14	Rental of 4-1/2 sub	1			
			Subtotal Taxable Charges		
SERVICE MANS TIME					
	Service mans time	1			
	Inspection charges	9			
			Subtotal Non-Taxable Charges		
MILEAGE					
	Mileage	35			
			Subtotal Non-Taxable Charges		

Terms: Net 30 Days

Authorized Agent: Eduardo Chavez Date: _____

WALTER CORPORATION

Walter Corporation, LLC 33250 CR 53 Gill, CO 80624

Office: 970.301.2028

Fax: 970.284.6682

Field Ticket #
22927

Date
10/3/2018

No. 22927

Bill To Customer:	P D C	PO#	Lease Name:	Avery	Well #	13-10
Address:	3801 Carson Ave	Field:	County:	Weld	St:	CO
City:	Evans	Legal Description:	Job Type:		OCSG #:	
State:	CO	Zip:	Casing Sz & Wt:			
Ordered By:	Eduardo Chavez		Service Man			

NO.	RENTALS/SALES	QTY	PRICE	DSC	TOTAL
1	Sale of 4-1/2 D & H CIBP	2			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
			Subtotal Taxable Charges		
			SERVICE MANS TIME		
			Subtotal Non-Taxable Charges		
			MILEAGE		
			Subtotal Non-Taxable Charges		
			Terms: Net 30 Days		



Authorized Agent: Eduardo Chavez Date: _____