



Job Summary

Ticket Number	Ticket Date
TN# FL1708	5/2/2017

COUNTY	COMPANY	API Number
Weld	PDC Energy, Inc.	05-123-14481
WELL NAME	RIG	JOB TYPE
Culbreath 23-21	Ensign 356	Annular Fill
SURFACE WELL LOCATION	O-TEX Field Supervisor	CUSTOMER REP
NWSW 21 6N 64W	Cheal, Sam	Bud Holman

EMPLOYEES		
	Watkins, Robert	
McFarland, James		
	Clark, John	

WELL PROFILE			
Max Treating Pressure (psi):	2000	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)
	12	324	1143	324	1143
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 5/8	24	J-55	0	324	0	324

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	4 1/2	11.6	P-110	0	7040	0	7040

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	1 1/4	3.02		0	1143	0	1143

CEMENT DATA

Stage 1:	From Depth (ft):	0	To Depth (ft):	1100
Type: Ann Fill	Volume (sacks):	530	Volume (bbls):	108.5

Cement & Additives:	Density (ppg)	Yield (ft ³ /sk)	Water Req.
100% Class G	15.8	1.15	5.00

SUMMARY

Preflushes:	10 bbls of SAPP	Calculated Displacement (bbl):	Stage 1	Stage 2
	10 bbls of Fresh Water	Actual Displacement (bbl):		
	_____ bbls of _____	Plug Bump (Y/N):	N/A	Bump Pressure (psi): N/A
Total Preflush/Spacer Volume (bbl):	20	Lost Returns (Y/N):	No	(if Y, when)
Total Slurry Volume (bbl):	108.5			
Total Fluid Pumped	128.5			
Returns to Surface:	Cement	1 bbls		

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

Cement to surface + top off. Job went as per program/customers request, job went well.

Thank You For Using
O - TEX Pumping

Customer Representative Signature: _____



CEMENTING JOB LOG

Project Number	FL1708	Job Date	5/2/2017
State	CO	County	Weld
Customer Representative	Bud Holman	Phone	970-301-3897
API Number	05-123-14481		

O-Tex Location	Brighton, Colorado 303-857-7948	Customer	PDC Energy, Inc.
Lease Name	Culbreath 23-21	O-Tex Field Supervisor	Cheal, Sam
Well No.		Man Hours	22

USE THIS FORM TO NOTE ANY ISSUES ENCOUNTERED WITH THE PERFORMANCE OF THIS JOB.
THIS MAY INCLUDE TIME AT THE SHOP, ON THE ROAD OR DELAYS WITH DRILLING CONTRACTOR.

DATE	TIME	VOLUME	RATE	PRESS		JOB PROCEDURES
				CSG	Tbg.	
5/2/2017	11:30					Leave previous location
	12:30					Arrive at location (requested @12:30am)
	12:40					Tailgate meeting
	13:20					Rig in
	14:10					Safety meeting
	14:24	1	bbbl	1.00	700	Fill line
	14:26				3000	Pressure test
	14:28	10	bbbl	2.00	700	Pump pre-flush (SAPP)
	14:32	10	bbbl	2.00	900	Pump fresh water
	14:37	107.5	bbbl	2.00	1500	Mix/pump cement @14.6ppg
	15:44				1600	Cement to surface
	15:45				0	Shutdown
	15:48					Wait on rig to pull 1 1/4 tubing
	16:10	1	bbbl	0.50	20	Top off well
	16:15				0	Shutdown
	16:18					Wash pump unit
	16:40					Rig out
	16:55					AAR
	17:00					Leave location

JOB CALCULATIONS

Cement to surface + top off (Annular fill)
 8 5/8 24# 0 - 324ft
 4 1/2 11.6# 0 - 7040ft
 1 1/4 3.02# 0 - 1143ft

CASING DATA

Surface 8 5/8 24# (4 1/2 ann. 0.0440)
 Production 4 1/2 11.6# (12" OH ann. 0.1202)
 Tubing 1 1/4 3.02#

ANNULAR DATA

1 1/4 tubing inside surface casing to 324ft then 12" OH 324ft down to 1143ft

PLEASE NOTE ANY CONTRACTOR ISSUES OR COMMENTS BELOW



Client: PDC Energy, inc
 Ticket No.: 1708
 Location: NWSW 21 6N 64W
 Comments: See job log for details
 Client Rep: Bud Holman
 Well Name: Culbreath 23-21
 Job Type: Miscellaneous Pumping
 Supervisor: Sam Cheal
 Unit No.: 445046
 Service District: Brighton, CO
 Job Date: 05/02/2017

