



# Daily Completion Operations

Date: 6/29/2017

Report #: 6.0

Well Name: Sauer 33-31D

Well Name Sauer 33-31D	Operator PDC Energy Inc.	API 05123205110000	Well Number 105.001245	Last Mod By bholman	
District Evans	Field Name Wattenberg	County Weld	State CO		
Well Type Development	Surface Legal Location NESE 31 5N 67W	Spud Date 7/17/2001	Original KB Elevation (ft) 4,842.00	Ground Elevation (ft) 4,830.00	KB-Ground Distance (ft) 12.00

**Daily Operation: 6/29/2017 06:00 - 6/29/2017 11:00**

AFE Number WBIEXTRACTI ON	Job Category Completion/Workover	Objective TEST TBNG, INSTALL 5K WELLHEAD AND RBP AHEAD OF HORIZONTAL FRACS ANNULAR FILL	Start Date 6/22/2017	End Date 6/29/2017	Primary Job Type Wellbore Integrity	Secondary Job Type Remedial Cementing
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**Rigs**

Contractor Ensign	Rig Number 356
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**Daily Operations**

Report Start Date 6/29/2017	Report End Date 6/29/2017	Daily Field Est Total (Cost) 16,418.28	Cum Field Est To Date (Cost) 83,162.54
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Status at Reporting Time

**Operations Summary**

CREW TO LOCATION. HELD SAFETY MEETING. 0 PRESSURES ON WELL. MIRU CASED HOLE WIRELINE. RAN CBL, GR, VDL AND CCL FROM 650' TO SURFACE. RDMO GOOD CEMENT BOND FROM 648' TO SURFACE. RDMO WIRELINE. RIH WITH RETRIEVING HEAD, SEAT NIPPLE AND 219 JNTS OF 2-3/8" 4.7# J-55 8RD EUE TBNG. BROACHED TBNG TO SN WITH 1.901" BROACH. POOH. LAND TBNG IN WELLHEAD AT 6914.19' KB. ND BOPS. NU 5K TOP FLANGE. INSTALLED 2 NEW 5K CASING VALVES. SECURED WELL. RDMO

- 12.00' kb
- 6898.09' w/219 jnts
- 1.10' seat nipple
- 3.00' retrieving head/RMOR
- 6914.19' kb

Operations Next Report Period

FINAL REPORT

Weather	Temperature (°F)	Hole Condition	Road Condition
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**Time Log**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Code Des	Com
06:00	06:30	0.50	0.50	TRAV	Travel - To Location	
06:30	06:45	0.25	0.75	SMTG	Safety Meeting	
06:45	07:45	1.00	1.75	EWLL	Logging	
07:45	08:45	1.00	2.75	RUTB	Run Tubing	RAN CBL
08:45	09:45	1.00	3.75	ROTH	Other Rig Work	RAN RETRIEVING HEAD
09:45	10:15	0.50	4.25	BOPR	Remove BOP's	BROACHED TO SN
10:15	10:30	0.25	4.50	LOCL	Lock Wellhead & Secure	ND BOPS, NU 5K TOP FLANGE
10:30	11:00	0.50	5.00	SRIG	Rig Up/Down	



# Daily Completion Operations

Date: 6/28/2017  
Report #: 5.0

Well Name: Sauer 33-31D

Well Name Sauer 33-31D	Operator PDC Energy Inc.	API 05123205110000	Well Number 105.001245	Last Mod By BHolman	
District Evans	Field Name Wattenberg	County Weld	State CO		
Well Type Development	Surface Legal Location NESE 31 5N 67W	Spud Date 7/17/2001	Original KB Elevation (ft) 4,842.00	Ground Elevation (ft) 4,830.00	KB-Ground Distance (ft) 12.00

**Daily Operation: 6/28/2017 06:00 - 6/28/2017 17:00**

AFE Number WBIEXTRACTI ON	Job Category Completion/Workover	Objective TEST TBNG, INSTALL 5K WELLHEAD AND RBP AHEAD OF HORIZONTAL FRACS ANNULAR FILL	Start Date 6/22/2017	End Date	Primary Job Type Wellbore Integrity	Secondary Job Type Remedial Cementing
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**Rigs**

Contractor Ensign	Rig Number 356
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**Daily Operations**

Report Start Date 6/28/2017	Report End Date 6/28/2017	Daily Field Est Total (Cost) 14,272.09	Cum Field Est To Date (Cost) 66,744.26
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Status at Reporting Time

**Operations Summary**

CREW TO LOCATION. HELD SAFETY MEETING. 0 PRESSURES ON WELL. MIRU CASED HOLE WIRELINE. RAN CBL, GR, VDL AND CCL FROM 6550' to 470'. GOOD CEMENT COVERAGE FROM 5186' TO 1920'. RDMO WIRELINE. PU AND RIH WITH MULE SHOE AND 19 JNTS OF 1-1/4" 3.02# CS-HYDRIL TBNG TO 617'. CONDITIONED HOLE. MIRU O-TEX PUMPING. HELD SAFETY MEETING. TEST PUMP AND LINES TO 3200 PSI. ESTABLISHED CIRCULATION WITH 20 BBLs OF WATER. MIXED AND PUMPED 170 SK OF CLASS G 15.8# CEMENT IN A 34.9 BBL SLURRY TO SURFACE. 3 BBLs RETURNED TO TANK. LD TBNG. TOPPED OFF SURFACE PLUG WITH 20 SKS. (190 TOTAL SKS PUMPED) WASHED UP PUMP AND LINES. RDMO O-TEX. ND DUAL STRING FLANGES. RELAND CASING WITH 30K PULLED. NU 5K WELLHEAD AND BOPS. CHANGED TOOLS OVER TO 2-3/8". CLEANED LOCATION. SECURED WELL. SDFD. CREW TO YARD.

**Operations Next Report Period**

RUN CBL, RUN RETRIEVING HEAD

Weather	Temperature (°F)	Hole Condition	Road Condition
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**Time Log**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Code Des	Com
06:00	07:00	1.00	1.00	TRAV	Travel - To Location	
07:00	07:30	0.50	1.50	SMTG	Safety Meeting	
07:30	09:30	2.00	3.50	EWLL	Logging	RAN CBL
09:30	10:00	0.50	4.00	RUTB	Run Tubing	RUN 1-1/4" TBNG TO 617'
10:00	11:00	1.00	5.00	CIRC	Circulating	CONDITIONED HOLE
11:00	15:00	4.00	9.00	CEMT	Cement Squeeze	PUMPED 190 SK SURFACE PLUG
15:00	15:30	0.50	9.50	PULT	Pull Tubing	LD TBNG
15:30	16:00	0.50	10.00	WHRP	Well Head Work	ND DUAL STRING FLANGES, RELAND CASING, NU 5K WELLHEAD
16:00	16:30	0.50	10.50	BOPI	Install BOP's	
16:30	17:00	0.50	11.00	LOCL	Lock Wellhead & Secure	
17:00	18:00	1.00	12.00	TRAV	Travel - From Location	



# Daily Completion Operations

Date: 6/27/2017  
Report #: 4.0

Well Name: Sauer 33-31D

Well Name Sauer 33-31D	Operator PDC Energy Inc.	API 05123205110000	Well Number 105.001245	Last Mod By bholman
District Evans	Field Name Wattenberg	County Weld	State CO	
Well Type Development	Surface Legal Location NESE 31 5N 67W	Spud Date 7/17/2001	Original KB Elevation (ft) 4,842.00	Ground Elevation (ft) 4,830.00
KB-Ground Distance (ft) 12.00				

**Daily Operation: 6/27/2017 06:00 - 6/27/2017 17:00**

AFE Number WBIEXTRACTI ON	Job Category Completion/Workover	Objective TEST TBNG, INSTALL 5K WELLHEAD AND RBP AHEAD OF HORIZONTAL FRACS ANNULAR FILL	Start Date 6/22/2017	End Date	Primary Job Type Wellbore Integrity	Secondary Job Type Remedial Cementing
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**Rigs**

Contractor Ensign	Rig Number 356
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**Daily Operations**

Report Start Date 6/27/2017	Report End Date 6/27/2017	Daily Field Est Total (Cost) 31,118.46	Cum Field Est To Date (Cost) 52,472.17
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Status at Reporting Time

**Operations Summary**

DAY CREW TO LOCATION. HELD SAFETY MEETING. WELL CIRCULATING THIN MUD SMOOTHLY WITH NO GAS NOTED. SHUT DOWN PUMP FOR BRADENHEAD SAMPLE/TESTING. CONTINUED TO CIRCULATE HOLE WHILE MIRU HALLIBURTON CEMENTERS. HELD SAFETY MEETING. TEST PUMP AND LINES TO 3000 PSI. ESTABLISHED CIRCULATION WITH 5 BBLs FRESH WATER. MIXED AND PUMPED 560 SKS OF FRACCEM 13.5# 1.42 CUFT/SK YIELD CEMENT IN A 141.6 BBL SLURRY FROM 5186' TO APPROXIMATELY 1920' 1.5 BPM AT 1800 PSI. DISPLACED 5 BBLs FRESH WATER. WELL BALANCED OUT WITH LESS THAN 1/4 BBL. WASHED UP PUMP AND LINES. LAY DOWN 1-1/4" TBNG ON TRAILER. SECURED WELL. CLEANED UP LOCATION. SDFD. CREW TO YARD.

**Operations Next Report Period**

RUN CBL, PUMP ANNULAR FILL IN SURFACE CASING

Weather	Temperature (°F)	Hole Condition	Road Condition
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**Time Log**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Code Des	Com
06:00	07:00	1.00	1.00	TRAV	Travel - To Location	
07:00	07:30	0.50	1.50	SMTG	Safety Meeting	
07:30	09:30	2.00	3.50	CIRC	Circulating	CONDITION HOLE WHILE RU CEMENTERS PUMP 560 SKS ANNULAR FILL LD TBNG
09:30	13:30	4.00	7.50	CEMT	Cement Squeeze	
13:30	15:30	2.00	9.50	PULT	Pull Tubing	
15:30	16:00	0.50	10.00	LOCL	Lock Wellhead & Secure	
16:00	17:00	1.00	11.00	TRAV	Travel - From Location	



# Daily Completion Operations

Date: 6/27/2017  
Report #: 3.0

Well Name: Sauer 33-31D

Well Name Sauer 33-31D	Operator PDC Energy Inc.	API 05123205110000	Well Number 105.001245	Last Mod By bholman	
District Evans	Field Name Wattenberg	County Weld	State CO		
Well Type Development	Surface Legal Location NESE 31 5N 67W	Spud Date 7/17/2001	Original KB Elevation (ft) 4,842.00	Ground Elevation (ft) 4,830.00	KB-Ground Distance (ft) 12.00

**Daily Operation: 6/26/2017 06:00 - 6/27/2017 06:00**

AFE Number WBIEXTRACTI ON	Job Category Completion/Workover	Objective TEST TBNG, INSTALL 5K WELLHEAD AND RBP AHEAD OF HORIZONTAL FRACS ANNULAR FILL	Start Date 6/22/2017	End Date	Primary Job Type Wellbore Integrity	Secondary Job Type Remedial Cementing
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**Rigs**

Contractor Ensign	Rig Number 356
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**Daily Operations**

Report Start Date 6/26/2017	Report End Date 6/27/2017	Daily Field Est Total (Cost) 11,253.00	Cum Field Est To Date (Cost) 21,353.71
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Status at Reporting Time

**Operations Summary**

CREW TO LOCATION. HELD SAFETY MEETING. TP: 0 PSI CP: 0 PSI SCP: 60 PSI OPENED SURFACE CASING TO RIG TANK. STARTED MAKING OIL. PUMPED 65 BBLs OF WATER DOWN SURFACE CASING TO CONTROL WELL. HOOKED VAC TRUCK TO SURFACE CASING. INSTALLED 2ND CASING VALVE. TIED BACK DRILL LINE. UNPACKED SURFACE HEAD. UNLAND CASING WITH SPEAR. WORKED CASING, FREE TO TOC. NU DUAL STRING FLANGES AND WASHINGTON HEAD. PU AND RIH WITH 20' MULE SHOE AND 1-1/4" 3.02# N-80 CS-HYDRIL TO 1700' WITH 54 JNTS. CONDITIONED HOLE. CONTINUED TO PU WORKSTRING AND RIH TO 3440'. PUMPED 5 BBL SAPP SWEEP AND CONDITIONED HOLE FOR 1 HOUR. CONTINUED IN HOLE TO 5186' KB WITH 166 JOINTS. PUMPED 5 BBL SAPP SWEEP AND CONDITIONED HOLE PUMPING 1 BPM AT 800 PSI. NIGHT CREW CONDITIONED HOLE THROUGHOUT THE NIGHT RECIPRICATING TBNG EVERY HOUR. CREW CHANGE AT 0600.

**Operations Next Report Period**

PUMP ANNULAR FILL

Weather	Temperature (°F)	Hole Condition	Road Condition
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**Time Log**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Code Des	Com
06:00	07:00	1.00	1.00	TRAV	Travel - To Location	
07:00	07:30	0.50	1.50	SMTG	Safety Meeting	
07:30	09:30	2.00	3.50	WKLL	Kill Well	PUMPED 65 BBLs WATER DOWN SURFACE CASING TO KILL
09:30	10:00	0.50	4.00	BOPR	Remove BOP's	ND BOPS AND TBNG HEAD
10:00	11:00	1.00	5.00	WHRP	Well Head Work	UNLAND CASING, NU DUAL STRING FLANGES
11:00	15:00	4.00	9.00	RUTB	Run Tubing	RUN 1-1/4" TBNG TO 5186'
15:00	06:00	15.00	24.00	CIRC	Circulating	CONDITIONED HOLE
		0				