

Plug Report

API Well Number:

34-111-2-4534-00-00

Record of Casing, Cementing, Mudding, and Plugging

Well Owner:	ANTERO RESOURCES CORPORATION		Permit Issued:	10/14/2015	
Lease Name:	KURTZ UNIT	Well No.	1H	Date Commenced:	11/28/2014
County:	MONROE	Township:	SENECA	Date Completed:	
Driller:	PATTERSON DRILLING	Status	DR	Plug_Start:	9/29/2015
Plugging Company	PATTERSON DRILLING	LTD	18890	Plug_End:	9/29/2015
Logging Company		DTD	18890	DNR Notified?:	Yes
Cement Manufacturer		Tool	RTAF	Reason for Plugging:	Plug-Back
Cement Contractor		Class	POOL	PlugDescription:	CMT
Clay Company		Lat:	0.000000	Clay/Cement Tickets Rec:	Yes
		Long	0.000000		

Comment: On site inspection to witness the 8.75" production borehole plug back due to hole conditions. The well bore was drilled to 9,929' at 91.67 ° Inclination and 332° Azimuth with a borehole defect encountered at 7,510' and the company not being able to get past that spot at 7,510'. Halliburton pumped a 205 sack 16.8# 1.02 yield plug was set through the drill string setting at 7,494' with 50 barrels of 13.2# Tuned spacer ran ahead. The company will deviate around the borehole and continue drilling on the same original directional plan.

Strings

FLD

CND*

CONDITION

New

Bot 100 Diam 26 Top 0 LENGTH Set Dt 11/29/2014

String Comments Casing Condition, Weight and Cement Basket

108# 26" casing weld connections.

Cement

BOC 100 TOC 0 DT_CM Duration 2 ☒ WITNESSED

CMT_CON EXPRESS ENERGY SERVICES INSPECTOR WILLIAM STOLARIK

CLASS_CMT: Class A Cement SACKS 330 WEIGHT 15.6 YIELD 1.18

Cement1 100% open hole excess ran, displaced with 67 barrels of fresh water.

CLASS_CMT2: SACKS2 WEIGHT YIELD

Cement2

Strings

FLD

HL1*

CONDITION

New

Bot 100 Diam 32 Top 0 LENGTH Set Dt 11/28/2014

String Comments Casing
Condition, Weight and
Cement Basket

Conductor borehole-(NOTE-HOLE DRILLED DRY NO FRESHWATER HIT)
pad finish grade elevation 1219'.

Cement

BOC 0 TOC 0 DT_CM Duration ☐ ☒ WITNESSED

CMT_CON INSPECTOR WILLIAM STOLARIK

CLASS_CMT: SACKS WEIGHT YIELD

Cement1

CLASS_CMT2: SACKS2 WEIGHT YIELD

Cement2

Strings

FLD

HL2*

CONDITION

Bot 0 Diam 24 Top 0 LENGTH Set Dt

String Comments Casing
Condition, Weight and
Cement Basket

Cement

BOC 0 TOC 0 DT_CM Duration ☐ ☐ WITNESSED

CMT_CON INSPECTOR ERIC CONRAD

CLASS_CMT: SACKS WEIGHT YIELD

Cement1

CLASS_CMT2: SACKS2 WEIGHT YIELD

Cement2

Strings

FLD

HL5*

CONDITION

New

Bot 18890 Diam 8.5 Top 0 LENGTH Set Dt 10/15/2015

String Comments Casing
Condition, Weight and
Cement Basket

production borehole.

Cement

BOC 0 TOC 0 DT_CM Duration 3 ☒ WITNESSED

CMT_CON INSPECTOR WILLIAM STOLARIK

CLASS_CMT: SACKS WEIGHT YIELD

Cement1

CLASS_CMT2: SACKS2 WEIGHT YIELD

Cement2

Strings

FLD

PRD*

CONDITION

New

Bot 18890 Diam 5.5 Top 0 LENGTH Set Dt 10/19/2015

String Comments Casing
Condition, Weight and
Cement Basket

23# P-110 casing-casing shoe and float collar ran, trigger toe sub set at 18,797'.

Cement

BOC 18890 TOC 0 DT_CM Duration ☐ WITNESSED

CMT_CON HALLIBURTON ENERGY SERVICE INSPECTOR WILLIAM STOLARIK

CLASS_CMT: Light/Standard Cement (50/50 C) SACKS 355 WEIGHT 13.5 YIELD 1.41

Cement1 Varicem™

CLASS_CMT2: Class A Cement SACKS2 1610 WEIGHT 15 YIELD 1.19

Cement2 Fracem System™

Strings

FLD

SRF*

CONDITION

New

Bot 393 Diam 18.625 Top 0 LENGTH Set Dt 12/16/2014

String Comments Casing
Condition, Weight and
Cement Basket

87.5 pound casing no basket. Casing was centralized with four bow spring
centralizers.

Cement

BOC 393 TOC 0 DT_CM Duration 9 ☒ WITNESSED

CMT_CON ALLIED OIL & GAS SERVICES INSPECTOR ERIC CONRAD

CLASS_CMT: Class A Cement SACKS 777 WEIGHT 15.6 YIELD 1.18

Cement1 Good cement returns to surface. Casing pressure test passed.

CLASS_CMT2: SACKS2 WEIGHT YIELD

Cement2

Plug Details

PLUG 1 TYP Cement Density Tons Cla GEL_VIS

INTERVAL_BOT 8360 INTERVAL_TOP 6998 Weight 15.6 Stat

CLASS_CMT Class G Cement Cemntd Dt 9/29/2015 Bot 7510 Top 7310 Sack 205

FMTN_C QUEENSTON FORMATION CMT_CON

Inspector WILLIAM STOLARIK Duration Failed ☐ Wit ☒ Notification ☐

Spacer Type VISCOSITY SPACER_WEIGHT: CIRCULATION

DISPLACEMENT_VO CEMENT_ADDITIVES:

Cement Contractor

CMMNT

Total Duration _____

The inspector's signature below attests that he/she accurately recorded information pertaining to the plugging operation actually witnessed, and by the information provided on the dates and times listed above. The inspector's signature does not imply that the owner/operator has successfully plugged the well bore in compliance with the objectives stated in Section 1501:9-11-03 or 4101:10-1-02 of the Ohio Administrative Code, or that plugging materials for untested plug(s) actually remained across the intervals that they were intended to seal.

(Signature of Inspector)

_____/_____/_____
Date Plugging Completed

OWNER AFFIDAVIT

By signing this affidavit, you are swearing or affirming that the information it contains is true and accurate.

I, _____, after being first duly cautioned and sworn, state that I have personal knowledge of all the facts contained in this Affidavit, that I am competent to testify to the matters stated herein, and that the following are true to the best of my knowledge and belief:

1. That I am the owner or operator agent who placed plugging material in the well referenced in this plugging report;
2. That the attached clay or cement tickets, affidavits, and/or bill of lading are the actual records for such materials used to plug the well referenced in this report; and
3. That I have read this plugging report, and the plugging materials were properly placed at the depths indicated on this plugging report in accordance with Chapter 1509 of Ohio Revised Code, Section 4101:10 et seq. of the Ohio Administrative Code and/or 1501:9-11-01 et seq. of the Ohio Administrative Code;

Further Affiant sayeth naught.

In testimony whereof, I have herewith subscribed my name this _____ day of _____, 19____.

_____/_____/_____
Date Plugging Completed

Signature of Owner or Operator Agent

The foregoing instrument was sworn to, subscribed and acknowledged before me this _____ day of _____, 19____

Notary Public Signature

This report shall be submitted to the ODNR Division of Oil and Gas Resources Management within 30 days after the date the surface hole is plugged.