

## Assessment of P&A Wells Within 1/4 Mile of Proposed CBM Well

October 2, 2015

**Operator:** BP America Production Company

**Proposed Well(s):** Arthur Jones A 3 (API Pending)

**Location:** Sec 26, T33N, R07W

Based on a review of COGCC records, the following wells were identified as plugged and abandoned within 1/4 mile of our proposed well.

**Well Name:** A H Jones 1 (API 05-067-05300)

**Location:** SWNW Sec 26, T33N, R07W

**Drilled By:** Tex-Star Oil and Gas Corp

**Operator Name:** XTO Energy, Inc.

**Date Plugged:** August 3, 2015

The subject well was completed in April 1963 in the Mesaverde formation with a TD of 5740'. The well was perforated from 5,450' to 5,658' and hydraulically fractured. The well was completed with the equipment summarized in the table below. Note that only the number of sacks used to cement the casing was reflected in the records. As a result, TOC for the surface and intermediate strings was calculated assuming a hole size consistent with each casing string, Class G neat cement with a yield of 1.15 cu. ft./sk, and a gauge hole.

Casing String	Hole Size (in)	Casing Type	Top (ft)	Bottom (ft)	TOC (ft)	TOC Depth Method	Install Date	Removal Date
Surface	12-1/4"*	9-5/8" 32.3# H-40	0	237'	Surf	Calc. (125 sx)	1963	-
Intermediate	8-3/4"*	7" 20# H-40	0	3,254'	1,150'	Calc. (275 sx)	1963	-
Production	6-1/4"*	4-1/2" 9.5# & 10.5# J-55	0	5,739'	3,777'	Calc. (175 sx)	1963	-
Tubing	-	1-1/4"	0	5,682'	-	-	1963	Unknown
Tubing	-	2-3/8"	0	5414'	-	-	Unknown	2015

\* hole size assumed based on casing size

Based on the wellbore diagram filed by XTO with their "Notice of Intent" to abandon the subject well, it appears that repairs were made in 1994 to the 4-1/2" casing string. The repairs involved cutting and pulling the 4-1/2" casing at 3066'. A casing patch was run and an additional 250 sx of cement was circulated to surface. 50 sx of cement was also pumped into the bradenhead.

The well was plugged and abandoned in August 2015. The 2-3/8" tubing was pulled. A cement retainer was set at 5,418' and a 20 sack plug was set to cover the Mesaverde perforations from 5,418' to 5,230'. A 48 sack balanced cement plug was set from 4,885' to 4,264' to cover the Mesaverde and Chacra tops. The 4-1/2" casing was perforated at

3,304' and attempted to pump in. A 36 sack cement plug was set from 3,369' to 2,924' across the 7" casing shoe. The top of the cement plug was tagged at 2,998'. A 48 sack balanced cement plug was set inside the 4-1/2" casing from 2,845' to 2,224' to cover the PC and Fruitland tops. A 28 sack balanced cement plug was set inside the 4-1/2" casing from 1,831' to 1,469' to cover the Kirtland and Ojo Alamo tops. A 30 sack surface plug was set from 295' to surface and the 9-5/8" and 7" casings were topped off with cement.

A visual inspection of the XTO Energy Inc. A H Jones 1 PA location was conducted by BP personnel on October 1, 2015 (Figure 1). The PA is located on an existing well pad. There were no signs of dead vegetation and there were no odors or soil discoloration.



Figure 1 – A H Jones 1 Location

Based on our review of available records and the assumptions stated above along with the inspection of the location, it appears the subject well has been abandoned in a manner which provides sufficient isolation of the Fruitland formation.

**Well Name:** Jones Gas Unit B 1 (API 05-067-05296)

**Location:** SWNWSec 26, T33N, R07W

**Drilled By:** Stanolind Oil and Gas Company

**Operator Name:** Stanolind Oil and Gas Company

**Date Plugged:** January 18, 1956

The subject well was completed in October 1953 in the Fruitland formation with a TD of 2,628'. The well was completed with the equipment summarized in the table below. Note that only the number of sacks used to cement the casing was reflected in the records. As a result, TOC for the surface and intermediate strings was calculated assuming a hole size consistent with each casing string, Class G neat cement with a yield of 1.15 cu. ft./sk, and a gauge hole.

Casing String	Hole Size (in)	Casing Type	Top (ft)	Bottom (ft)	TOC (ft)	TOC Depth Method	Install Date	Removal Date
Surface	12-1/4"*	10 3/4" 40.5 #	0	280'	Surf	Calc. (190 sx)	1953	-
Production	9-5/8"*	7-5/8" 24#	0	2,500'	1,980'	Calc. (85 sx)	1953	Cut and pulled at 1225' (1956)
Open-hole	?	-	2500'	2628'	-	-	-	-

\* hole size assumed based on casing size

It appears that the well was not capable of commercial production and it was eventually plugged and abandoned in January 1956. 75 sacks of cement were squeezed below a cement retainer set at 2,460' to isolate the open-hole portion of the well. The 7-5/8" casing was cut and pulled from 1,225' and 25 sack plug was set across the 7-5/8" stub from 1,225' to 1,175'. A 25 sack cement plug was set at the base of the surface casing from 275' to 225'. A 10 sack surface plug was set from 20' to surface and a P&A marker was installed.

A visual inspection of the Stanolind Jones Gas Unit B 1 PA location was conducted by BP personnel on October 1, 2015 (Figure 2). The PA is located on an existing well pad. There were no signs of dead vegetation and there were no odors or soil discoloration.



**Figure 2 – Jones Gas Unit B 1 Location**

Based on our review of available records and the assumptions stated above along with the inspection of the location, it appears the subject well has been abandoned in a manner which provides sufficient isolation of the Fruitland formation.