

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS MANAGEMENT

ANS	DEP USE ONLY	Manage .
Applic	ation Tracking #	
12	28504 1	
	RECEIVED	

Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well

AUG 2 2 2019

Well Operator		DEP ID#	Well Permit or Registration Number	DEPSWDO
Chevron Appalachia, LLC		279986	37-051-24716	OIL & GAS
Address	***************************************	1270000	Well Farm Name	=
700 Cherrington Parkway			Snapp Teslovich	
City	Sta	te Zip Code		rial #
Coraopolis	PA	15108	M15H 37	7-051-0949
Phone F	Fax	***)***********************************	County	/lunicipality
412-865-3140	412-854-2403		Fayette L	_uzerne
1. the proposed altern	Coordination A ication of coal detail using a nate method o	ct, 58 P.S. § operator(s). written desc r materials, a	513 and 25 PA Code §§78.75-; ription and / or diagram:	78.75a (relating to Alternate
Optional: Approval by Coal Ow Signature	mer or Operato	Date	Signature of Applicant / Well O	Date 8/19/19
Print or Type Signer's Name and Title			Print or Type Signer's Name and Title	
			<u>Branden Weimer, Senior Permitt</u>	ing Advisor
If optional approval is signe	ed by coal ow	ner or ope	rator, the 15-day objection p	period may be waived.

DEP I	JSE ONLY		
Approved by (DEP Manager)	Conditions		Date
		YES, See Attached NO	10/30/19

Proposed Alternate Method or Material for Casing, Plugging, Venting or Equipping a Well

Attachment A

Snapp Teslovich M15H

Well Permit Number: 37-051-24716

1. Problem:

According to 25 PA Code Section 78a.83(h) the maximum allowable hole drilled below the bottom of a mined out coal seam is 50 feet. In this area, 50 feet below the open mine is inadequate to collect the excess cavings encountered and run our coal mine protection string a minimum of 30 feet below the bottom of the mine (a DEP requirement). No gas zones are known to exist within 100 feet below the mine.

Recommendation:

Drill no more than 100 feet below the bottom of the mine; set the coal protection casing at least 30 feet (and perhaps more than 50 feet if the hole conditions dictate) below the bottom of the coal mine and cement to surface according to 25 PA Code Section 78.83(h)

2. Problem:

According to PA 25 Code Section 78a.85(c) After any casing cement is placed and cementing operations are complete, the casing may not be disturbed for a minimum of 8 hours by doing any of the following:

- (1) Releasing pressure on the cement head within 4 hours of cementing if casing equipment check valves did not hold or casing equipment was not equipped with check valves. After 4 hours, the pressure may be released at a continuous, gradual rate over the next 4 hours provided the floats are secure.
- (2) Nippling up on or in conjunction to the casing.
- (3) Slacking off by the rig supporting the casing in the cement sheath.
- (4) Running drill pipe or other mechanical devices into or out of the wellbore with the exception of a wireline used to determine the top of cement.

Recommendation:

The operator can perform BOP testing while waiting on the intermediate casing cement to cure for 8hrs. The following arguments are in support of the alternate method:

- The Well is a Marcellus well
- The casing equipment will be equipped with check valve(s). This alternate method applies only if the check valve(s) hold.
- The BOP would already be installed on the wellhead- Therefore there is no nipple up on or in conjunction to the casing
- The intermediate casing uses a hanger that lands in the wellhead- Therefore there is no slacking off by the rig supporting the casing in the cement sheath
- For 8 hrs. No drill pipe or other mechanical devices will be run into or out of the wellbore with the exception of wireline used to determine the top of the cement if need be.
- For 8 hrs. No pressure will be applied on the casing. A test plug will be landed inside the wellhead and casing valves open below the test plug during the entire test time.

3 Problem:

According to Chapter 78a. Unconventional Wells Section 78a.83(c) "The operator shall drill to approximately 50 feet below the deepest fresh groundwater or at least 50 feet into consolidated rock, whichever is deeper, and immediately set and permanently cement a string of surface casing to that depth." In this area, there is not adequate space between 50' below the deepest aquifer and the mined out Pittsburgh coal to meet this requirement with minimal rathole.

Recommendation:

The following is a proposed alternative plan for setting the 20" casing 40 feet below deepest fresh water groundwater. The alternative plan applies if the deepest freshwater is identified deeper than predicted and the Pittsburgh coal is identified at 90 feet or less from the deepest freshwater

Proposal:

Set surface casing a minimum of 40 feet below the deepest freshwater to allow 10 extra feet between the surface rathole and the mined out Pittsburgh Coal. As a result, surface cement jobs will have a higher likelihood of success by the displacement method and coal section will have adequate space to set cement basket for planned grout jobs following the shoe tack due to known void.