



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OIL AND GAS MANAGEMENT PROGRAM**

**WELL PERMIT**

DEP USE ONLY	
Permittee's eFACTS ID <b>265476</b>	Auth ID <b>1208665</b>
Watershed Name <b>Little Mahoning Creek</b>	Quality <b>HQ</b>

Permittee <b>XTO ENERGY INC</b>		OGO.# <b>OGO-38958</b>	Permit Number <b>37-063-37524-00-00</b>	Date Issued <b>01/31/2018</b>
Address <b>190 THORN HILL ROAD</b>		Farm Name & Well Number <b>CM SMITH 1HU</b>		Well Serial #
		Municipality <b>North Mahoning Twp</b>	County <b>Indiana</b>	
<b>WARRENDALE, PA 15086</b>		7 1/2 ' Quadrangle Name <b>Valier</b>		Map Section # <b>7</b>
Phone <b>(724) 772-3500</b>	Project #		Latitude <b>40-53-0.3200</b>	Longitude <b>-79-5-59.8500</b>
Surf Elev at Site <b>1534 feet</b>	Anticipated Maximum TVD <b>13200 feet</b>	Well Type <b>GS</b>	Offset distances referenced to NE corner of map section. <b>South 12112 feet      West 4596 feet</b>	

This permit covering the well operator and well location shown above is evidence of permission granted to conduct activities in accordance with the Oil and Gas Act and the Oil and Gas Conservation Law, if the well is subject to that act and any rules and regulations promulgated thereunder, subject to the conditions contained herein and in accordance with the application submitted for this permit. This permit does not convey any property rights.

This permit and the permittee's authority to conduct the activities authorized by this permit are conditioned upon operator's compliance with applicable law and regulations.

Notification must be given to the district oil and gas inspector, the surface landowner and political subdivision of the date well drilling will begin at least 24 hours prior to commencement of drilling activities.

The permittee hereby authorizes and consents to allow, without delay, employees or agents of the Department to have access to and to inspect all areas upon presentation of appropriate credentials, without advance notice or a search warrant. This includes any property, facility, operation or activity governed by the Oil and Gas Act, the Oil and Gas Conservation Law, the Coal and Gas Resource Coordination Act and other statutes applicable to oil and gas activities administered by the Department. The authorization and consent shall include consent to the Department to collect samples of wastewaters or gases, to take photographs, to perform measurements, surveys, and other tests, to inspect any monitoring equipment, to inspect the methods of operation and disposal, and to inspect and copy documents required by the Department to be maintained. The authorization and consent includes consent to the Department to examine books, papers, and records pertinent to any matter under investigation pursuant to the Oil and Gas Act or pertinent to a determination of whether the operator is in compliance with the above referenced statutes. This condition in no way limits any other powers granted to the Department under the Oil and Gas Act and other statutes, rules and regulations applicable to these activities as administered by the Department.

This permit does not relieve the operator from the obligation to comply with the Clean Streams Law and all statutes, rules and regulations administered by the Department.

### Special Permit Conditions:

The permittee shall not withdraw or use water from water sources within the Commonwealth of Pennsylvania to hydraulically fracture an unconventional formation unless the permittee does so in accordance with a Water Management Plan approved by the Department.

Any dam embankment utilized to impound freshwater or other fluids approved by the Department associated with drilling and hydraulic fracturing not requiring a permit pursuant to 25 Pa. Code Chapter 105 will be constructed in accordance with Department guidelines 5500-PM-OG0085 entitled, Design, construction and maintenance standards for dam embankments associated with impoundments for oil and gas wells.

Prior to setting casing/tubing in or producing from the shale lateral, the vertical portion of the hole, if it extends below the Kick-Off Point (KOP), must be plugged back to the KOP according to the requirements of §§ 78.91 through 78.95. The procedure used to plug this section of the well will be submitted with or as part of the Well Record and Completion Report.

The Operator shall run a complete angular deviation survey of the intentionally deviated well and submit it to the Department with the other information required in the Well Record. The deviation survey is to be obtained by a responsible well surveying company and shall include a well location plat and vertical section of the borehole as drilled. One copy shall be submitted to the Department and one copy shall be submitted to the Bureau of Topographic and Geologic Survey (500 Waterfront Dr., Pittsburgh, PA 15222).

**NOTE: THIS WELL IS LOCATED WITHIN 3000' OF THE ABANDONED ALABRAN GAS STORAGE RESERVOIR.**

37-063-37524-00-00

This permit expires **01/31/2019** unless drilling is commenced on or before that date and prosecuted with due diligence.



Regional Oil and Gas Program Manager

JASON J BRANAN

131 BROADVIEW RD  
NEW STANTON, PA 15672

724-925-5429

Oil & Gas Inspector

Address

Phone Number



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

OOIL & GAS MANAGEMENT  
SOUTHWEST REGIONAL OFFICE

January 31, 2018

**RE: Special Protection Watershed**

Dear Well Operator:

This is to inform you that the location of the well on the enclosed well permit is in a Special Protection Watershed. Special Protection Watersheds are drainage areas to streams which are classified by the Environmental Quality Board as either High Quality or Exceptional Value due to their unique characteristics or sensitive use. Special Protection Watersheds are high priority areas for the Department's water pollution control activities.

The above information is being provided to remind you of the necessity to adequately control and dispose of waste fluids generated from your activities at this location. It is expected that you will conduct your activities with these concerns in mind.

Sincerely,

A handwritten signature in cursive script that reads "Thomas Donohue".

Thomas Donohue  
Professional Geologist Manager

TD/djs

cc: File

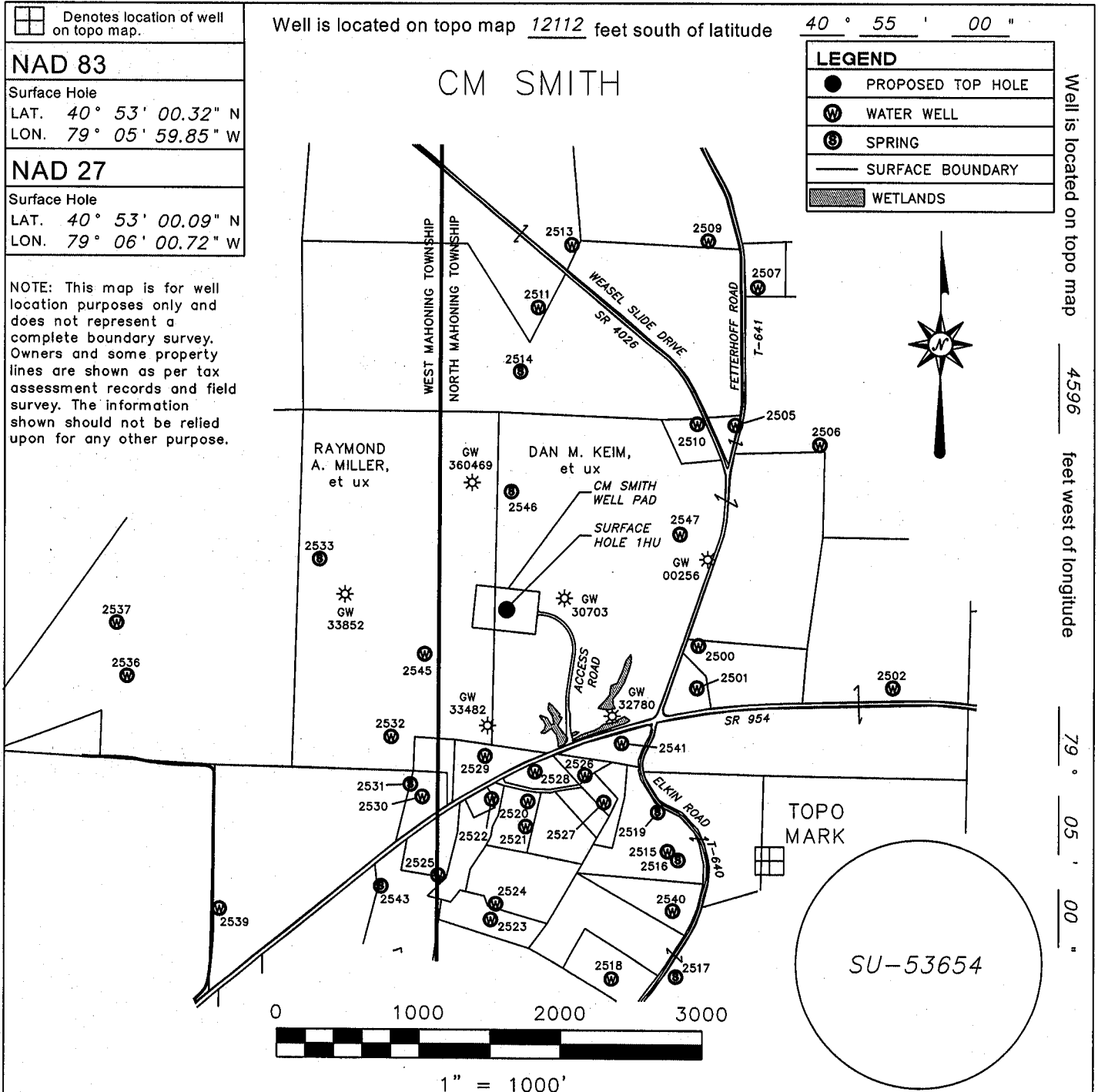


COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS MANAGEMENT

## WELL LOCATION PLAT

Page 1 Surface Location

Auth ID #:	37-063-	G:
Permit #	37524-	C:
Project #	00-00	



Applicant / Well Operator Name: <b>XTO ENERGY INC.</b>		DEP ID #: <b>265476</b>	Well (Farm) Name: <b>CM SMITH</b>		Well #: <b>1HU</b>	Serial #: <b>N/A</b>
Address: <b>190 THORN HILL ROAD, WARRENDALE, PA 15086</b>			County: <b>INDIANA</b>	Municipality: <b>NORTH MAHONING TWP</b>	Well Type: <b>GAS</b>	
911 address of well site: <b>647 NEW CASTLE ROAD, BUTLER, PA 16001</b>			USGS 7 1/2 Quadrangle Map Name: <b>VALIER</b>	Map Section: <b>7</b>	Surface Elevation: <b>1534 ft.</b>	
Surveyor or Engineer: <b>Jesse H. Hickman</b> <b>SU - 53654</b>	Phone #: <b>724-545-1148</b>	Dwg #: <b>X-CMS-1H</b>	Date: <b>11-14-17</b>	Scale: <b>1" = 1000</b>	Tract Acreage: <b>224 ac.</b>	
Lat. & Long Metadata Method: <b>GPS</b>	Accuracy: <b>+/- 5 ft.</b>	Datum: <b>NAD 1983</b>	Elevation Metadata Method: <b>GPS</b>	Accuracy: <b>+/- 5 ft.</b>	Datum: <b>NAVD 1988</b>	Survey Date: <b>10-14-17</b>

**Page 2 Notifications**

DEP Statewide toll-free phone number for reporting cases of water contamination which may be associated with development of oil and gas resources is **1-866-255-5158**.

Applicant / Well Operator Name XTO Energy, Inc.		DEP ID# 265476	Well (Farm) Name CM SMITH	Well # 1HU	Serial # N/A
Surface Landowner / Lessor:  Dan M Keim, et ux			Angle & Course of Deviation Drilling:  S 34°05'41" E	Anticipated True Vertical Depth Feet (TVD):  13200'	Anticipated Total Measured Depth Feet (TMD):  26866'
Target Formation(s):  Point Pleasant			Deepest Formation to be penetrated:  Point Pleasant	Number of laterals:  1	Total footage to be drilled all laterals:  26866'
2545)	RAYMOND A MILLER ET UX	658'	N40°52'57.147"	W79°06'07.322"	
2532)	RAYMOND A MILLER ET UX	1213'	N40°52'51.307"	W79°06'10.259"	
2533)	RAYMOND A MILLER ET UX	1363'	N40°53'03.623"	W79°06'17.062"	
2514)	RAYMOND A MILLER ET UX	1684'	N40°53'16.951"	W79°05'58.927"	
2546)	DAN M KEIM ET UX	836'	N40°53'08.581"	W79°05'59.600"	
2547)	DAN M KEIM ET UX	1338'	N40°53'05.800"	W79°05'43.992"	
2529)	TIMOTHY C BRADY ET UX	1046'	N40°52'50.079"	W79°06'01.607"	
2528)	CECIL A GEARHART	1185'	N40°52'48.872"	W79°05'56.673"	
2541)	TW PHILLIPS GAS & OIL CO	1246'	N40°52'51.154"	W79°05'49.025"	
2526)	RICHARD GOOD ET UX	1295'	N40°52'48.869"	W79°05'52.342"	
2522)	JAMES W BUSH JR ET UX	1343'	N40°52'47.075"	W79°06'00.922"	
2500)	LISA A ADAMSON ET AL	1379'	N40°52'58.079"	W79°05'42.140"	
2501)	LISA A ADAMSON ET AL	1454'	N40°52'55.120"	W79°05'42.203"	
2520)	DANNY E ORCUTT ET UX	1405'	N40°52'46.542"	W79°05'57.712"	
2521)	DANNY E ORCUTT ET UX	1538'	N40°52'45.215"	W79°05'57.733"	
2531)	CHRISTINA A MCANICH	1409'	N40°52'48.012"	W79°06'08.415"	
2530)	CHRISTINA A MCANICH	1451'	N40°52'47.154"	W79°06'07.307"	
2527)	BRIAN S GOOD ET UX	1526'	N40°52'46.997"	W79°05'50.565"	
2519)	WILLIAM H ALABRAN ET UX	1786'	N40°52'46.394"	W79°05'45.583"	
2515)	WILLIAM H ALABRAN ET UX	2051'	N40°52'43.673"	W79°05'44.632"	
2516)	WILLIAM H ALABRAN ET UX	2143'	N40°52'43.084"	W79°05'43.662"	
2518)	WILLIAM H ALABRAN ET UX	2708'	N40°52'34.721"	W79°05'49.590"	
2517)	WILLIAM H ALABRAN ET UX	2853'	N40°52'34.949"	W79°05'43.688"	
2510)	DONALD L HICKS ET UX	1885'	N40°53'13.561"	W79°05'42.580"	
2525)	JERRY W MILLER ET UX	1937'	N40°52'41.714"	W79°06'05.729"	
2524)	JOHN E FISHER ET UX	2077'	N40°52'39.802"	W79°06'00.388"	
2505)	ALLEN A MILLER JR ET UX	2079'	N40°53'13.526"	W79°05'39.112"	
2506)	ALLEN A MILLER JR ET UX	2498'	N40°53'12.255"	W79°05'31.377"	
2543)	DAVID D TROYER ET UX	2145'	N40°52'40.880"	W79°06'10.948"	
2511)	BRIAN G WILSON ET AL	2147'	N40°53'21.459"	W79°05'57.391"	

DEP Statewide toll-free phone number for reporting cases of water contamination which may be associated with development of oil and gas resources is **1-866-255-5158**.

[illegible]

\_\_\_\_\_

\_\_\_\_\_



Applicant/Well Operator Name	DEP ID#	Well (Farm) Name	Well #
XTO ENERGY, INC.	265476	C M SMITH	1HU

	KOP:	TVD:	TMD:	Latitude	Longitude
		12470'	12470'	40 53 00.32	79 05 59.85
Landing Point		13200'	13622'	40 53 00.28	79 05 54.34

DEP Use Only	Permit #

