



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

WELL PERMIT

DEP USE ONLY	
Permittee's eFACTS ID 72933	Auth ID 1020079
Watershed Name SINNEMAHOING CREEK	Quality EV

Permittee SENECA RESOURCES CORPORATION		OGO.# OGO-15547	Permit Number 37-023-20172-00-00	Date Issued 04/16/2014
Address 51 ZENTS BLVD		Farm Name & Well Number SRC WT 5040 41H 51284		Well Serial #
		Municipality Shippen Twp	County Cameron	
BROOKVILLE, PA 15825-2701		7½' Quadrangle Name Rich Valley		Map Section # 1
Phone (814) 849-4555	Project #		Latitude 41-36-2.6600	Longitude -78-20-14.4700
Surf Elev at Site 1860 feet	Anticipated Maximum TVD 5803 feet	Well Type GS	Offset distances referenced to NE corner of map section. South 8839 feet West 1099 feet	

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, for well drilling and fracing activities unless the permittee does so in accordance with a Water Management Plan approved by the Department.

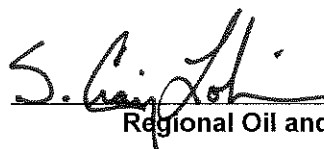
Permittee shall obtain a permit or Environmental Assessment approval from the Department prior to the construction of any dam, reservoir, water obstruction, and/or encroachment for which a permit or Environmental Assessment approval is required by 25 Pa. Code Chapter 105. Any dam embankment including centralized dam embankments utilized to impound freshwater or frac water associated with well fracing not requiring a permit pursuant to 25 Pa. Code Chapter 105 will be constructed in accordance with requirements of 25 Pa. Code §§ 78.56-78.63 and Department guidelines 5500-PM-OG0085 entitled, Design, construction and maintenance standards for dam embankments associated with impoundments for oil and gas wells.

Prior to fracturing the well, as part of its Preparedness, Prevention and Contingency Plan the permittee shall implement a Control and Disposal Plan for the control and disposal of fluids and residual wastes in accordance with 25 Pa. Code § 78.55. The Control and Disposal Plan shall identify the control and disposal methods and practices utilized to prevent pollutants from directly or indirectly reaching waters of the Commonwealth during the impoundment, production, processing and transportation of pollutants, including identification of the permitted processing or disposal facilities where residual wastes will be processed or disposed, in accordance with 25 Pa. Code §§ 78.55 and 91.34.

Prior to transport of the residual wastewater off site, chemical analysis and characterization of the waste shall be conducted and provided to the processing or disposal facility intended for acceptance of the waste in accordance with 25 Pa. Code § 287.54.

The operator shall run a complete angular deviation survey of the intentionally deviated well. The deviation survey is to be obtained by a responsible well surveying company and shall be filed with the Department within thirty (30) days after drilling is completed along with other regularly required reports. The deviation report shall include a well location plat and vertical section of the borehole as drilled.

This permit expires 04/16/2015 unless drilling is commenced on or before that date and prosecuted with due diligence.



Regional Oil and Gas Program Manager

JEFFREY A LITTLE

186 ENTERPRISE DRIVE
PHILIPSBURG, PA 16866

814-342-8104

Oil & Gas Inspector

Address

Phone Number



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

PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL

Notes: 5-00		DEP USE ONLY	
OGO #	15547	Objection Date - Do not issue before:	3/15/14
Client Id	72933	Date Approved:	4/10/14
Bond #	5133	Special Cond.	E
C: 4/11/14	G: 4/8/14	Site Id	780211
INV:	APS # 839154	Auth Id	102007A
API #s 37-	023-20172	PF Id	774901
and -	-	SF Id	1131877
Watershed Name:	SINNAMONHONIA CREEK	Designation:	☐ HQ ☒ EV

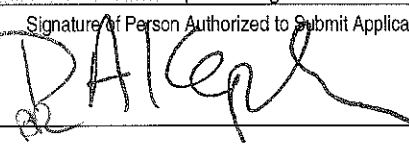
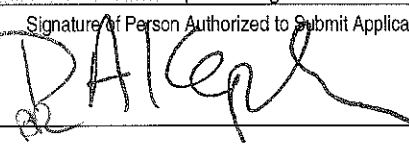
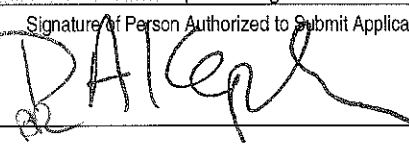
Please read instructions before you begin filling in this form.

WELL INFORMATION					
Well Operator	Seneca Resources Corp.	DEP ID#	72933	Well API # (if available)	37- - -
Well Farm Name	SRC WT 5040 41H	Well #	51284		
Address	51 Zents Blvd.	LAT	41°36' 2.66	NAD	83
		LONG	78°20' 14.47	Project Number	
City	Brookville	State	PA	Zip	15825
		Municipality Name/ City, Borough, Township	Shippen Township	County	Cameron
Phone	814-849-4555	Fax	814-849-4795	Email	keplerd@srcx.com
		USGS 7.5 min. quadrangle map	Rich Valley, PA	Section	1
☐ Check if this is a new address		24/7 Emergency Phone contact number		911 address of well site (if available)	
		800-526-2608-mention SRC		893 Six Mile Hollow Lane, Emporium,	
Freshwater Impoundment Name/ Identification	Rich Valley Pad	Centralized Impoundment Name/ Identification	None	Well Pad (cluster) Name/Identification	Rich Valley Pad G
				Borrow Area Name/Identification	NA
Surface Elev	1860	Deepest Formation to be penetrated:	Marcellus	Anticipated TVD	5803
Target Formation(s) proposed for production	Marcellus	Anticipated Target Top/Bottom TVD	5776 5828	PERMIT TYPE	Check applicable.
Number of wellbore laterals proposed under this application	1	Total feet of wellbore to be drilled under this application	13541 Ft.	Application is to:	☒ Gas
If applying for a permit to rework an existing well not registered or permitted, check this box ☐ and enter date drilled, if known: (see instructions)				☒ Drill a new well	☐ Oil
				☐ Re-permit expired permit	☐ Comb. (gas & oil/condensate)
				☐ Deepen well	☐ Other (specify)
				☐ Redrill wellbore	
				☐ Alter well	
				☐ Other (specify)	
PNDI Attached: ☒ Any threatened or endangered "hit" must include a copy of the clearance letter from the applicable agency(ies).			Configuration		
Application submitted as: Coal well: ☐ Attach Coal Module			☐ Vertical		
CBM well: ☐ Attach Coal Module			☒ Horizontal		
Non coal well: ☒ Attach justification.			☐ Deviated		
			☐ Multiple laterals		
COORDINATION WITH REGULATIONS AND OTHER PERMITS			Bond Agreement Id		
			5133		

COORDINATION WITH REGULATIONS AND OTHER PERMITS

	Yes	No
1. Will the well be subject to the Oil and Gas Conservation Law? If "No," go to 2).	☐	☒
a. If "Yes" to #1, is the well at least 330 feet from outside lease or unit boundary?	☐	☐
b. Does the location fall within an area covered by a spacing order?	☐	☐
c. If the well will be multilateral, identify the wellbores on the sketch on page 3 of the plat that will be completed as conservation and non-conservation.		
2. Will either the edge of the disturbed area of any portion of the well site of the unconventional well be within 100 feet, or the vertical well bore be within 300 feet, from the edge of any solid blue lined stream, spring or body of water identified on the most current 7 1/2' topographic quadrangle map or wetland greater than one acre in size or in a wetland?	☐	☒
If yes, is a waiver request (form 5500-FM-OG0057) and site-specific E&S control plan attached?	☐	☐

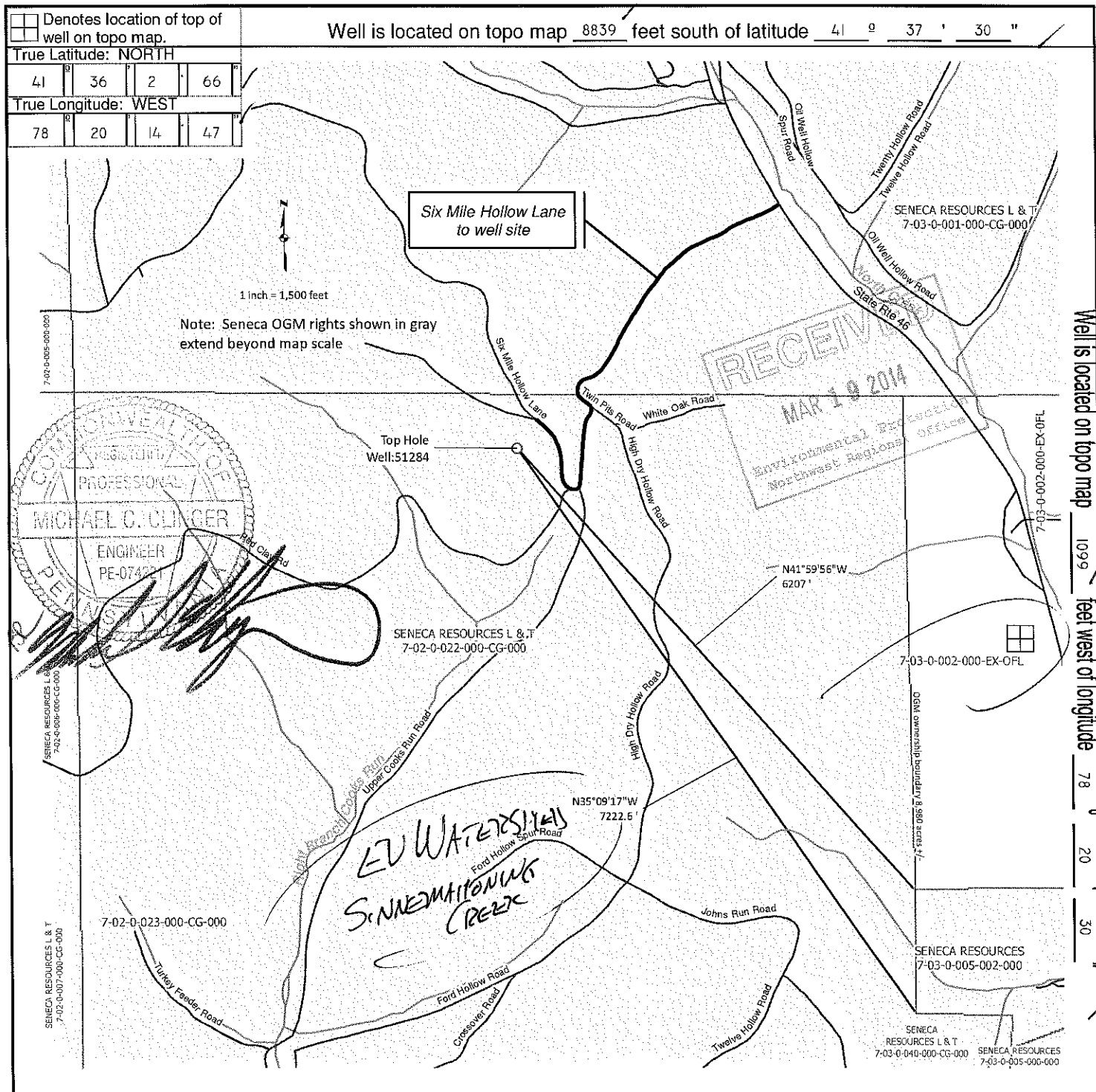
5/15/14

3. Will the vertical wellbore penetrate or be within 3,000 feet of an active gas storage reservoir boundary?	☐	☒												
a. If Yes, print the names of: Storage Field: Operator:														
4. Is the proposed well location within the permitted area of a landfill ?	☐	☒												
5. Will the vertical wellbore of the unconventional well be drilled within 500 feet from any existing building or an existing water supply?	☐	☒												
a. If "Yes," is written consent from the owner attached?	☐	☐												
b. If written consent is not attached, is a variance request (form 8000-FM-OOGM0058) attached?	☐	☐												
5.1. Will the vertical wellbore of the unconventional well be drilled within 1,000 feet from any existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor?	☐	☒												
a. If "Yes," is written consent from the owner attached?	☐	☐												
b. If written consent is not attached, is a variance request (form 8000-FM-OOGM0058) attached?	☐	☐												
6. Will the well be located where it may impact a public resource as outlined in the "Coordination of a Well Location with Public Resources" form 5500-PM-OG0076? If yes, attach a completed copy of the form and clearance letters from applicable agencies.	☐	☒												
7. Will any portion of the well site be in a Special Protection High Quality ☐ (HQ) or Exceptional Value ☒ (EV) watershed?	☒	☐												
Provide name of special protection watershed <u>Rt. Branch Cooks Run</u>														
8. Is this well part of a development which requires an Earth Disturbance Permit for Oil and Gas Activities disturbing more than 5 acres? If yes, list the number of the ESCGP approval if the permit has been issued. Pending	☒	☐												
<u>ESG 29023410001</u>														
9. Is waste, including drill cuttings, from the drilling of this well to be disposed of on this well site?	☐	☒												
10. Will the well or well site be located within a defined 100 year floodplain or where the floodplain is undefined, within 100 feet of the top of the bank of a perennial stream or within 50 feet of the top of the bank of an intermittent stream.	☐	☒												
a. If yes, is a waiver request attached that will protect the Waters of the Commonwealth?	☐	☐												
11. Is the well to be located within a H ₂ S area pursuant to §78.77a?	☐	☒												
12. Attach a current Ownership & Control form 8000-FM-OOGM0118														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Signature of Applicant</td> <td colspan="2">The person signing this form attests that they have the authority to submit this application on behalf of the applicant, and that the information, including all related submissions, is true and accurate to the best of their knowledge.</td> </tr> <tr> <td>Signature of Person Authorized to Submit Application </td> <td style="width: 10%;">(Print or Type)</td> <td>Name of Signer: DOUG A. KEPLER</td> </tr> <tr> <td></td> <td>Title:</td> <td>Vice President Environmental Engineering</td> </tr> <tr> <td colspan="2"></td> <td>Date 3/10/2014</td> </tr> </table>			Signature of Applicant	The person signing this form attests that they have the authority to submit this application on behalf of the applicant, and that the information, including all related submissions, is true and accurate to the best of their knowledge.		Signature of Person Authorized to Submit Application 	(Print or Type)	Name of Signer: DOUG A. KEPLER		Title:	Vice President Environmental Engineering			Date 3/10/2014
Signature of Applicant	The person signing this form attests that they have the authority to submit this application on behalf of the applicant, and that the information, including all related submissions, is true and accurate to the best of their knowledge.													
Signature of Person Authorized to Submit Application 	(Print or Type)	Name of Signer: DOUG A. KEPLER												
	Title:	Vice President Environmental Engineering												
		Date 3/10/2014												
Application Preparer/Contact: BARB REINARD		Phone: 814-220-1511												



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT
WELL LOCATION PLAT

DEP	Auth ID #:	G: <i>MT 4/4/14</i> C:
USE	Permit #: <i>023-20172</i>	
ONLY	Project #:	

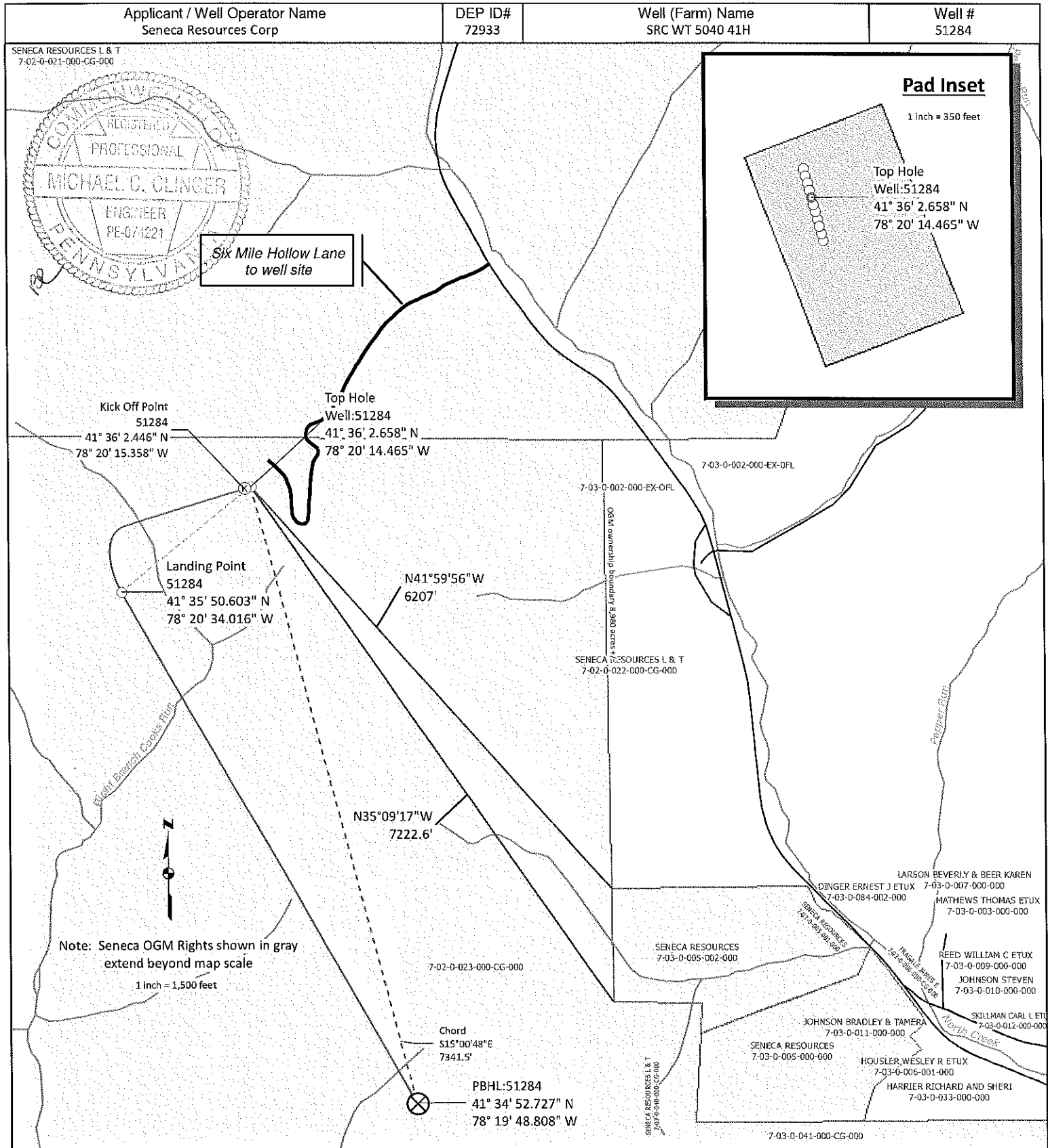


Applicant / Well Operator Name: Seneca Resources Corp		DEP ID #: 72933	Well (Farm) Name: SRC WT 5040 41H		Well #: 51284	Serial #:
Address: 51 Zents Blvd Brookville, PA 15825			County: Cameron	Municipality: Shippen Twp.	Well Type: Gas	
911 address of well site: 893 Six Mile Hollow Lane Emporium, PA 15834			USGS 7 1/2 Quadrangle Map Name: Rich Valley, PA	Map Section: 1	Surface Elevation: 1,860 ft.	
Surveyor or Engineer: Michael C. Clinger	Phone #: 814-849-4555	Dwg #: 51284_Page1_030614.mxd	Date: 3/7/2014	Scale: 1 inch = 1,500 feet	Tract Acreage: 8,980 +/-	
Lat. & Long Metadata Method: GPSDF	Accuracy: ±3 ft.	Datum: NAD-83	Elevation Metadata Method: Topo	Accuracy: ±10 ft.	Datum: NGVD-29	Survey Date: 1/3/2012

WELL LOCATION PLAT

Page 3 Plan View of Deviated Well Bore

If well has a lateral other than vertical show the bottom hole location on the plat drawing as  and include the Coordinates in the provided section at the bottom of the drawing area. The top hole and bottom hole locations are to be connected by a bolded line this is to depict the proposed courses of the actual wellbore to be drilled.



WELL LOCATION PLAT
Page 4 Cross Section

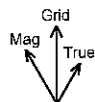
Applicant / Well Operator Name Seneca Resources Corp	DEP ID# 72933	Well (Farm) Name SRC WT 5040 41H	Well # 51284
** See Attached Page **			

Seneca

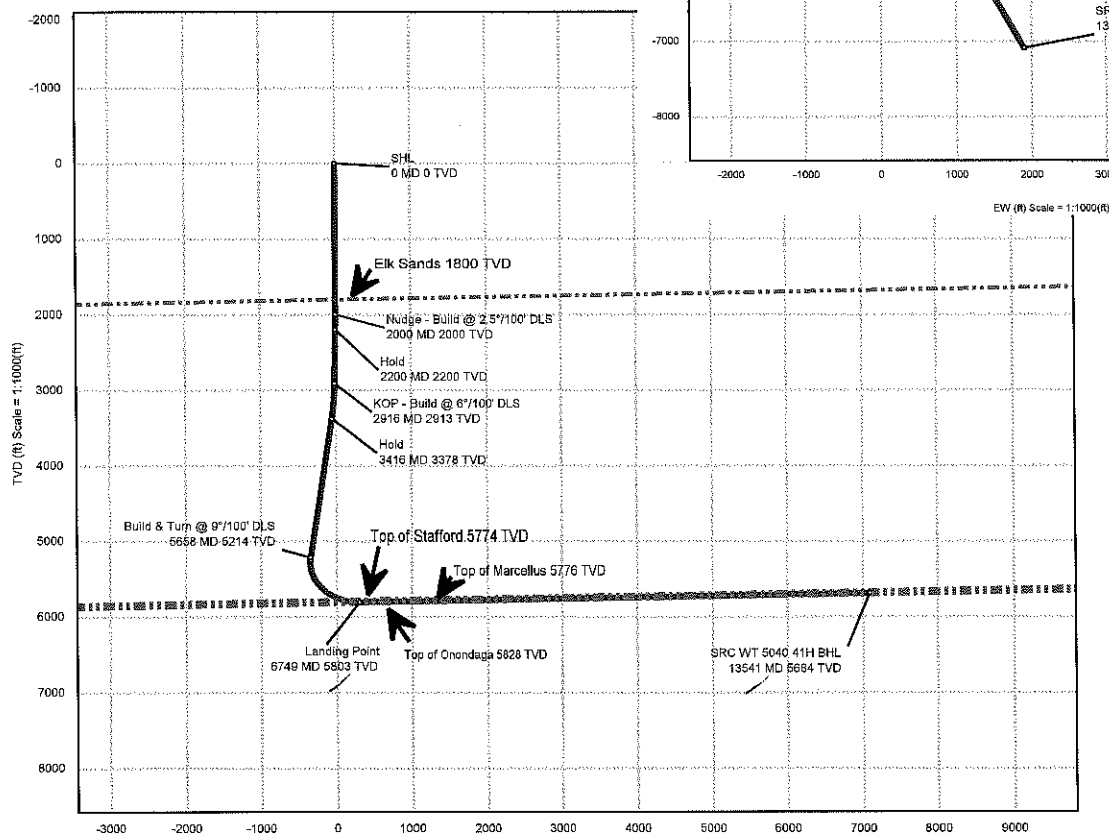
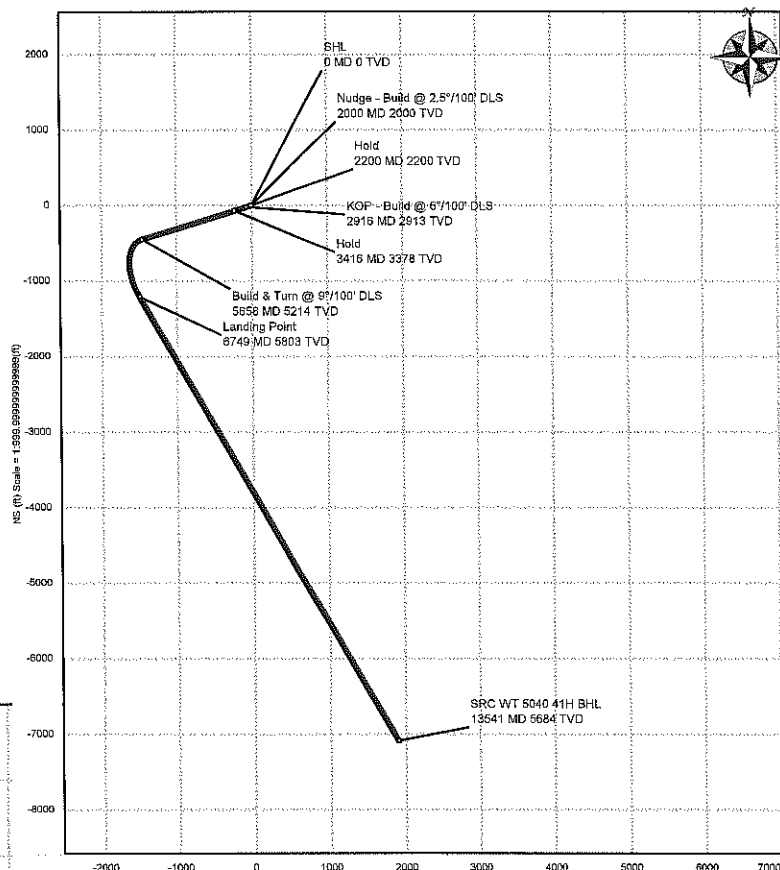
Well	Field	Structure
SRC WT 5040 41H	PA Cameron County (NAD 83)	Rich Valley Pad G

Comments	Survey MD(ft)	TVD(ft)	Latitude(deg)	Longitude(deg)
SHL	0.00	0.00	N 41 36 2.658 W 78 20 14.465	
KOP - Build @ 6°/100' DLS	2915.98	2913.00	N 41 36 2.446 W 78 20 15.358	
Landing Point	6748.56	5802.74	N 41 35 50.603 W 78 20 34.016	

NAD83 PA North



Grid North
Tot Corr (M->G -10.128°)
Mag Dec (-10.517°)
Grid Conv (-0.369°)



Vertical Section (ft) Azim = 150° Scale = 1:1000(ft) Origin = ON/S, OE/W

**PERMIT APPLICATION TO DRILL AND OPERATE
AN UNCONVENTIONAL WELL
Record of Notification**

Farm Name - Well #	SRC WT 5040 41H 51284	DEP ID#	72933
Applicant Name	Seneca Resources Corp	DEP USE	ONLY
APS #			

List the following: surface landowner; surface landowners and water purveyors with water supplies within 3,000 feet; municipality where the well will be drilled; adjacent municipality; municipalities within 3,000 feet of the vertical well bore; gas storage operator if within 3,000 feet. Mark the boxes, "X," which show the parties' interests. Use additional forms if you need more space. You are required to notify each of these parties.	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors <3000'	Municipalities	Notification		
					Certified Mail Dates	Note the means and attach proof.	Written Consent
Print Name: Seneca Resources Corp Signature: <i>[Signature]</i>	Address: 51 Zents Blvd. Brookville, PA 15825	X					
Print Name: Shippen Township Signature: <i>[Signature]</i>	Address: PO Box 349 Emporium, PA 15834			X	3-10-14	3-10-14	
Print Name: Emporium Borough Signature: <i>[Signature]</i>	Address: 421 North Broad Street Emporium, PA 15834			X	3-10-14	3-10-14	
Print Name: Portage Township Signature: <i>[Signature]</i>	Address: PO Box 96 Emporium, PA 15834			X	3-10-14	3-10-14	
Print Name: Lumber Township Signature: <i>[Signature]</i>	Address: 213 Rocky Road Emporium, PA 15834			X	3-10-14	3-10-14	

Record of Written Consent

Written Consent: Signature below indicates the party's approval of the well location, or indicates written consent and waives the 15-day objection period where applicable.

Check applicable box

Surface Owner		Water Well within 500 feet	Building within 500 feet
Print and Sign Name:	Address:	Date:	☐
Print and Sign Name:	Address:	Date:	☐
Print and Sign Name:	Address:	Date:	☐
Print and Sign Name:	Address:	Date:	☐

**PERMIT APPLICATION TO DRILL AND OPERATE
AN UNCONVENTIONAL WELL
Record of Notification**

Farm Name - Well # SRC WT 5040 41H 51284	
Applicant Name Seneca Resources Corp	DEP ID# 72933
DEP USE ONLY APS #	

		Notification									
		Note the means and attach proof.			Certified Mail Dates						
		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <3000'	Municipalities	Sent	Return Receipt	Address Affidavit	Written Consent		
Print Name: Gibson Township	Address: PO Box 7										
Signature											
Print Name: Benezette Township	Address: Driftwood, PA 15832										
Signature	Address: PO Box 10										
Print Name: City of St. Marys	Address: Benezette, PA 15821										
Signature	Address: 11 Lafayette Street PO Box 1994 St. Marys, PA 15857										
Print Name: Jones Township	Address: 320 Faries Street										
Signature	Address: Wilcox, PA 15870										
Print Name: Sergeant Township	Address: % Allen Walker RD 1										
Signature	Address: Wilcox, PA 15870										

Record of Written Consent

Written Consent: Signature below indicates the party's approval of the well location, or indicates written consent and waives the 15-day objection period where applicable.
Check applicable box

Surface Owner		Water Well within 500 feet	Building within 500 feet
Print and Sign Name:	Address: ☐ Date:	☐	☐
Print and Sign Name:	Address: ☐ Date:	☐	☐
Print and Sign Name:	Address: ☐ Date:	☐	☐
Print and Sign Name:	Address: ☐ Date:	☐	☐

**PERMIT APPLICATION TO DRILL AND OPERATE
AN UNCONVENTIONAL WELL
Record of Notification**

Farm Name - Well # SRC WT 5040 41H 51284		DEP ID# 72933
Applicant Name Seneca Resources Corp		
DEP USE ONLY	APS #	

		Notification					
		Note the means and attach proof.			Address Affidavit	Written Consent	
		Certified Mail Dates	Return Receipt				
List the following: surface landowner, surface landowners with water purveyors within 3,000 feet; municipality where the well will be drilled; adjacent municipality; municipalities within 3,000 feet of the vertical well bore; gas storage operator if within 3,000 feet. Mark the boxes, "X," which show the parties' interests. Use additional forms if you need more space. You are required to notify each of these parties.		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors <3000'	Municipalities	Sent	
Print Name: Norwich Township	Address: 3853 W. Valley Road				X	3-10-14	
Signature							
Print Name: Portage Township	Address: Smethport, PA 16749-3153				X	3-10-14	
Signature	Address: PO Box 392						
Print Name:	Address: Austin, PA 16720						
Signature							
Print Name:							
Signature							
Print Name:							
Signature							

Record of Written Consent

Written Consent: Signature below indicates the party's approval of the well location, or indicates written consent and waives the 15-day objection period where applicable.

Check applicable box

		Surface Owner		Water Well within 500 feet		Building within 500 feet	
Print and Sign Name:	Address:	Date:	☐	☐	☐	☐	☐
Print and Sign Name:	Address:	Date:	☐	☐	☐	☐	☐
Print and Sign Name:	Address:	Date:	☐	☐	☐	☐	☐
Print and Sign Name:	Address:	Date:	☐	☐	☐	☐	☐
Print and Sign Name:	Address:	Date:	☐	☐	☐	☐	☐