

Alter

PERMIT APPLICATION TO DRILL AND OPERATE A CONVENTIONAL WELL

Notes	OGO #	67515	Objection Date - Do not issue before:	2-24-14	API #'s 37-	121-44484-00-01	
	Client Id	279214	Date Approved:	6/2/14	and	- - - - -	
	Bond #	12448	Special Cond.		Watershed Name:		
	INV:	301214200 4/8/14 ACO	Site Id	715079	Designation:	<input type="checkbox"/> HQ <input type="checkbox"/> EV	
PNO 1	2-17-14	APS #	837386 1017164	PF Id	714116	SF Id	982295

Please read instructions before you begin filling in this form.

WELL INFORMATION

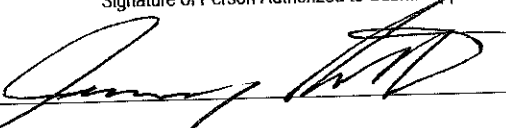
Well Operator	Stonehaven Energy LLC	DEP ID#	67545	Well API #	37-121-44484-00-	Well Farm Name	Latshaw	Well #	9
Address	1251 Waterfront Place, Suite 540		LAT	41°23' 16" 71"		NAD	83	Project Number	
City	Pittsburgh	State	PA	Zip	15222	Municipality Name/ City, Borough, Township	Cranberry Township	County	Venango
Phone	412-526-2919	Fax	412-391-7220	Email	jgraham@stonehavenenergy.co		USGS 7.5 min. quadrangle map	Oil City	Section 9
<input type="checkbox"/> Check if this is a new address				24/7 Emergency Phone contact number	412-526-2919		911 address of well site (if available)		
Freshwater Impoundment Name/ Identification N/A				Centralized Impoundment Name/ Identification N/A	Well Pad Name/Identification N/A		Borrow Area Name/Identification N/A		
Surface Elev	Deepest Formation to be penetrated:		Anticipated TVD		<b>PERMIT TYPE</b> Check applicable. Application is to: <input type="checkbox"/> Drill a new <input type="checkbox"/> Re-permit expired permit <input type="checkbox"/> Deepen well <input type="checkbox"/> Redrill wellbore <input checked="" type="checkbox"/> Alter well <input type="checkbox"/> Other (specify)	<b>TYPE OF WELL</b> Check applicable. <input type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Comb. (gas & oil/condensate) <input type="checkbox"/> Injection, recovery <input checked="" type="checkbox"/> Injection, disposal <input type="checkbox"/> Coalbed Methane <input type="checkbox"/> Gas Storage <input type="checkbox"/> Other (specify)	<b>APPLICATION FEE</b> Check applicable. <input checked="" type="checkbox"/> Conventional <input type="checkbox"/> \$200 (Home Use Well) Total Application Fee \$ 1001 #4913 Bond Agreement Id		
1476'	Drilled to Speechley 2206'								
Target Formation(s) proposed for production		Anticipated Target Top/Bottom TVD							
Number of wellbore laterals proposed under this application 0									
Total feet of wellbore to be drilled under this application 0 Ft.									
If applying for a permit to rework an existing well not registered or permitted, check this box <input type="checkbox"/> and enter date drilled, if known: (see instructions)									
PNDI Attached: <input checked="" type="checkbox"/> Any threatened or endangered "hit" must include a copy of the clearance letter from the applicable agency(ies).									
Application submitted as: Coal well: <input type="checkbox"/> Attach Coal Module CBM well <input type="checkbox"/> Attach Coal Module Non coal well <input checked="" type="checkbox"/> Attach justification.									

RECEIVED  
 MAR 04 2014  
 Environmental Protection  
 Regional Office

COORDINATION WITH REGULATIONS AND OTHER PERMITS

1. Will the well be subject to the Oil and Gas Conservation Law? If "No," go to 2).	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. If "Yes" to #1, is the well at least 330 feet from outside lease or unit boundary?	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the location fall within an area covered by a spacing order?	<input type="checkbox"/>	<input type="checkbox"/>
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 the edge of the disturbed area of any portion of the well site of a conventional well be within 100 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

3. Will the well penetrate or be within 2,000 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 well be drilled within 200 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?
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 stream \_\_\_\_\_
- 7.1 Will the well be drilled using enhanced drilling or completion technologies into a formation that typically produces gas or petroleum?
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.
- 8.1 Is the disturbed area of the well site between 1 to 5 acres and in a Special Protection Watershed
9. Is waste, including drill cuttings, from the drilling of this well is to be disposed of on this well site? Yes  No
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. Yes  No
- a. If yes, is a waiver request attached that will protect the Waters of the Commonwealth? Yes  No
11. Is the well to be located within a H<sub>2</sub>S area pursuant to §78.77a? Yes  No
12. Attach a current Ownership & Control form 8000-FM-OOGM0118.

<b>Signature of Applicant</b>		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: <u>Jeremy Graham</u>	Date <u>3/12/14</u>
Application Preparer/Contact: <u>JOE FOX</u>		Title: <u>Director of Operations</u>	Phone: 814 657 4361



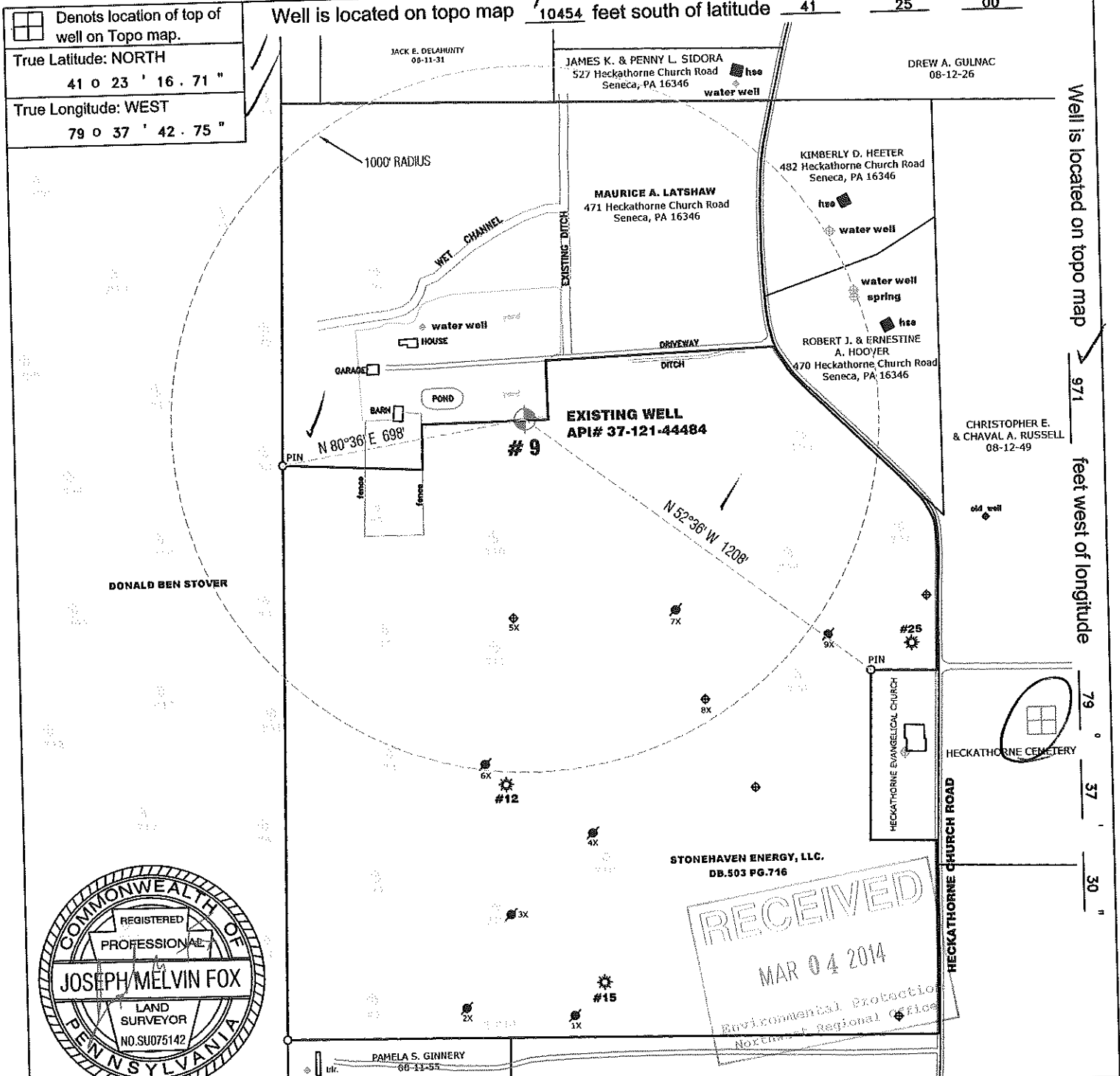
COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Oil and Gas Management Program  
**WELL LOCATION PLAT**  
PAGE 1 SURFACE LOCATION

DEP USE ONLY	DEP Application Tracking #	G: <i>100</i>
	Permit # <i>121 44484-00-01</i>	C: <i>4/15/14</i>
	Project #	C:

	Denots location of top of well on Topo map.
True Latitude: NORTH	
41 ° 23 ' 16 . 71 "	
True Longitude: WEST	
79 ° 37 ' 42 . 75 "	

Well is located on topo map 10454 feet south of latitude 41 ° 25 ' 00 "

Well is located on topo map 971 feet west of longitude 79 ° 37 ' 30 "



Applicant / Well Operator Name <b>STONEHAVEN ENERGY LLC</b>		DEP ID# <b>67515</b>	Well(Farm) Name <b>LATSHAW</b>		Well # <b>9</b>	Serial #
Address <b>1251 WATERFRONT PLACE, SUITE 540, PITTSBURGH, PA 15222</b>			County <b>VENANGO</b>	Municipality <b>CRANBERRY</b>	Well Type <b>INJ. DISPOSAL</b>	
911 Address of Site <b>471 HECKATHORNE CHURCH ROAD</b>			USGS 71/2 Quadrangle Map Name <b>OIL CITY</b>	Map Section <b>9</b>	Surface Elevation <b>1476'</b>	
Surveyor: <b>JOSEPH M. FOX</b>	Phone # <b>(814) 657 4361</b>	Dwg. # <b>LATSHAW #9</b>	Date <b>2/17/14</b>	Scale <b>1" = 400'</b>	Tract Acreage <b>26.8 ACRES</b>	
Lat. & Long Metadata Method <b>TRIMBLE GPS</b>	Accuracy <b>2-4 ft.</b>	Datum <b>NAD 83</b>	Elevation Metadata Method <b>PA LIDAR</b>	Accuracy <b>2-4 ft.</b>	Datum <b>NAVD 88</b>	Survey Date





**PERMIT APPLICATION TO DRILL AND OPERATE  
A CONVENTIONAL WELL  
Record of Notification**

Farm Name - Well # Latshaw # 9	DEP USE ONLY	Applicant Name Stonehaven Energy LLC	DEP USE ONLY
Farm Name - Well # Latshaw # 9		Applicant Name Stonehaven Energy LLC	
DEP USE ONLY		DEP USE ONLY	

List the following: surface landowners and water purveyors with water supplies within 1000 feet; municipality where the well will be drilled; adjacent municipality; gas storage operator if within 2000 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. <b>Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification</b>	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <1000'	Municipalities	Notification		Address Affidavit	Writer/Conser
					Certified Mail Dates	Note the means and attach proof.		
Print Name: Maurice A. Latshaw Signature	Address: 471 Heckathorne Church Road Seneca, PA 16346	X				2/18/14	2/20/14	
Print Name: Cranberry Township Signature	Address: P.O. Box 378 Seneca, PA 16346			X		2/18/14	2/19/14	
Print Name: Rockland Township Signature	Address: 1115 Rockland Twp. Road Kennerdell, PA 16374			X		2/18/14	2/20/14	
Print Name: Sandycreek Township Signature	Address: 878 Pone Lane Franklin, PA 16323			X		2/18/14	2/19/14	
Print Name: City of Franklin Signature	Address: 430 13th St. Franklin, Pa 16323			X		2/18/14	2/19/14	

**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 200 feet	Building within 200 feet
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>

**PERMIT APPLICATION TO DRILL AND OPERATE  
 A CONVENTIONAL WELL  
 Record of Notification**

Farm Name - Well # Latshaw # 9	DEP ID#
Applicant Name Stonehaven Energy LLC	
DEP USE ONLY	APS #

List the following: surface landowner, surface landowners and water purveyors with water supplies within 1000 feet; municipality where the well will be drilled; adjacent municipality; gas storage operator if within 2000 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. <b>Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification</b>	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <1000'	Municipalities	Notification			
					Certified Mail Dates	Note the means and attach proof.	Written Consent	
Print Name: Ashland Township Signature	Address: 328 Starr Road Knox, PA 16232			X	Sent	Return Receipt	Address Affidavit	
Print Name: Robert & Ernestine Hoover Signature	Address: 470 Heckathome Church Road Seneca, PA 16346		X		Sent	Return Receipt	Address Affidavit	
Print Name: Signature	Address:							
Print Name: Signature	Address:							
Print Name: Signature	Address:							

**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 200 feet	Building within 200 feet
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>

**PERMIT APPLICATION TO DRILL AND OPERATE  
 A CONVENTIONAL WELL  
 Record of Notification**

Farm Name - Well # Latshaw # 9	DEP ID#
Applicant Name Stonehaven Energy LLC	
DEP USE ONLY	APS #

	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <1000'	Municipalities	Notification				
					Certified Mail Dates	Return Receipt	Address Affidavit		
List the following: surface landowner; surface landowners and water purveyors with water supplies within 1000 feet; municipality where the well will be drilled; adjacent municipality; gas storage operator if within 2000 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. <b>Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification</b>									
Print Name: City of Oil City	Address: City Bldg. 21			X	Sent	2/18/14	2/19/14		
Signature	Seneca Street Oil City, PA 16301			X					
Print Name: Complinter Township	Address: 136 Petroleum Center Road Oil City, PA 16301			X					
Signature	Address: 139 Henry's Bend Road Oil City, PA 16301			X			2/24/14		
Print Name: Sugar Creek Township	Address: 212 Fox St. Franklin, PA 16323			X			2/19/14		
Signature	Address: 2758 S.R. 157. Venus, PA 16232			X			2/19/14		

**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 200 feet	Building within 200 feet
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>
Print and Sign Name:	Address:	Date:	<input type="checkbox"/>	<input type="checkbox"/>



## Pennsylvania Fish & Boat Commission

### Division of Environmental Services

Natural Gas Section  
450 Robinson Lane  
Bellefonte, PA 16823

April 15, 2014

**IN REPLY REFER TO**  
SIR# 42133

Jeremy Graham  
Director of Operations  
Stonehaven Energy, LLC  
1251 Waterfront Place, Suite 540  
Pittsburgh, PA, 15222

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species  
PNDI Search No. 20140217438552  
Stonehaven Energy Mgmt. LLC.  
Latshaw # 9 Injection Well.  
VENANGO County: Cranberry Township**

Dear Graham:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

Ken Anderson of my staff visited the site on April 10, 2014 and confirmed that wetlands on the site contain potential Eastern Massasauga (*Sistrurus catenatus catenatus*) habitat. However, since the proposed Brine Injection Disposal Well and the related monitoring wells will require no new earth disturbance and since precautionary measures will be in place to prevent accidental spills or releases of brine, I do not foresee the proposed project resulting in adverse impacts to the Eastern Massasauga (*Sistrurus catenatus catenatus*).

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

**Our Mission:**

[www.fish.state.pa.us](http://www.fish.state.pa.us)

*To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.*



**If you have any questions regarding this review, please contact Ken Anderson at 814-560-1201 and refer to the SIR # 42133.** Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Heather Smiles". The signature is written in a cursive, flowing style.

Heather A. Smiles, Chief  
Natural Gas Section

CC: Mr. Fox

HAS/KRA/dn



## Pennsylvania Fish & Boat Commission

**Division of Environmental Services**  
Natural Gas Section  
450 Robinson Lane  
Bellefonte, PA 16823

June 2, 2014

**IN REPLY REFER TO**  
SIR# 42133

FOX LAND SURVEYING  
Joe Fox  
9161 U.S. 322  
Cranberry, Pennsylvania 16319

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species**  
**PNDI Search No. 20140217438552**  
**Stonehaven Energy Mgmt. LLC.**  
**Latshaw # 9 Injection Well.**  
**VENANGO County: Cranberry Township**

Dear Joe Fox:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review following the submission of minor changes to facilities on the well pad at the Latshaw #9 Injection Well site. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

According to this submission and our records there have been no changes in the project footprint or on-site biological information; therefore, the Commission’s comments regarding potential impacts to rare, candidate, threatened, or endangered species under our jurisdiction, as detailed in our letter of April 15<sup>th</sup>, 2014 for SIR#42133 , remain unchanged.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

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Sincerely,

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Heather A. Smiles, Chief  
Natural Gas Section

HAS/KRA/dn



DEP USE ONLY	
APS #	Site #
Permit #	Auth ID #

### Coordination of a Well Location with Public Resources

Well Operator Stonehaven Energy LLC		DEP ID#	Well Farm Name and Number Latshaw # 9	
Address 1251 Waterfront Place Suite 540			Project Number (if previously assigned)	
City Pittsburgh	State PA	Zip Code 15222	County Venango	Municipality Cranberry
Phone 412-526-2919	Fax 412-391-7220	Latitude N 41° 23' 16.71"		Longitude W 79° 37' 42.75"

- Will the well be located in or within 200 feet of a publicly owned park, forest, gameland, designated wildlife area or Natural National Landmark?  Yes  No
- Will the well be located within the corridor of a state or national scenic river?  Yes  No

Portions of the Allegheny River and Clarion River are currently on the National Wild and Scenic Rivers list. Detailed descriptions are available on the National Scenic Rivers website: [www.nps.gov/rivers/wildriverslist.html#pa](http://www.nps.gov/rivers/wildriverslist.html#pa)

Portions of three other creeks and streams in oil and gas producing areas are currently listed as Pennsylvania Scenic Rivers. These are: Pine Creek in Tioga County, Lick Run in Clinton County, and Bear Creek in Fayette County. The streams corridor maps are available on DCNR's web site: [www.dcnr.state.pa.us/brc/rivers/scenicrivers/locationmap.htm](http://www.dcnr.state.pa.us/brc/rivers/scenicrivers/locationmap.htm)

- If answering "Yes" to questions 1 or 2, name the public resource(s):  
  
List the name, address and phone number of the person responsible for management of the public resource.  
  
Must the administrator of the public resource approve or otherwise authorize the proposed well, well site, access road, or gathering pipeline?  Yes  No  
Has the approval or authorization been received?  Yes  No

- Has the search of the proposed well location against the Pennsylvania Natural Diversity Inventory (PNDI), or any other evaluation, identified a potential conflict with a species of special concern?  Yes  No  
If yes, provide PNDI Search Number 20140217438552 or attach a copy of the PNDI Search Results.  
If a potential conflict with a species of concern was identified, give the name of the responsible agency.  
Pennsylvania Fish and Boat Commission  
Has the potential conflict been resolved?  Yes  No

- Will the well be located within 200 feet of any historical or archaeological sites listed as federal or state historic places?  Yes  No

*ARO 6/2/14*



Fox Land Surveying, 9161 U.S. 322 Cranberry, PA 16319  
Joseph M. Fox, P.L.S. (814) 657-4361

Feb. 25, 2014

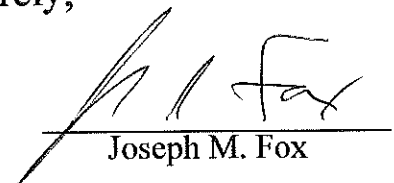
Department of Environmental Protection  
230 Chestnut Street  
Meadville, PA 16335

Re: Non Coal well

Dear Sir / Madam

I have examined the Atlas of Preliminary Quadrangle Maps of Pennsylvania and have attached a copy with the well or wells spotted on the attached maps. As shown on the attached map there is no deep mineable coal in the area of the proposed wells. The attached map (Oil City Quad 1979) shows the well is located in the Pottsville Group formation. A formation not known for deep mineable coal.

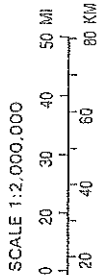
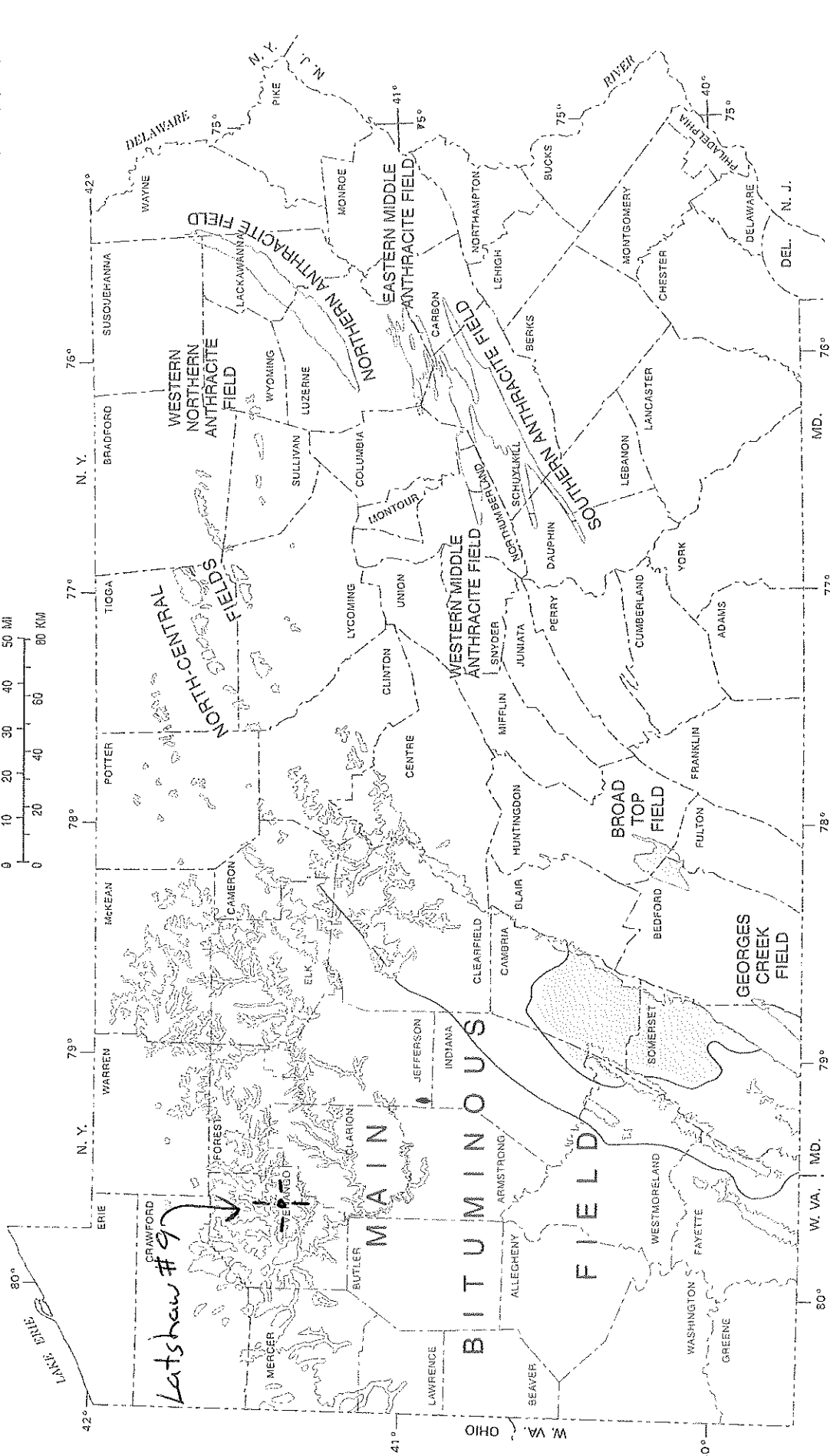
Sincerely,



Joseph M. Fox

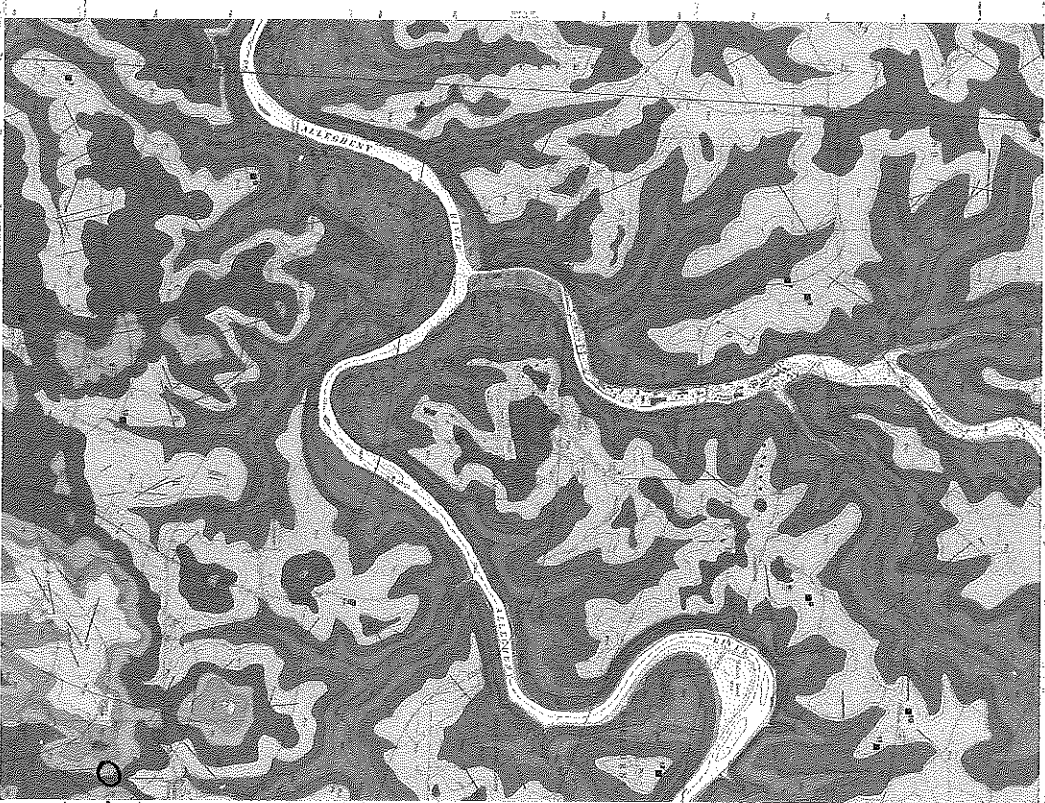
# DISTRIBUTION OF PENNSYLVANIA COALS

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF  
CONSERVATION AND NATURAL RESOURCES  
BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY  
www.dcnr.state.pa.us/topogeo



## EXPLANATION

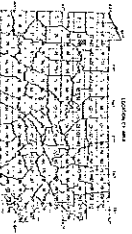
- High-volatile bituminous coal
- Medium-volatile bituminous coal
- Low-volatile bituminous coal
- ANTHRACITE FIELDS
- Anthracite
- Anthracite



**BEDROCK GEOLOGIC MAP OF THE OIL CITY QUADRANGLE, VENANGO COUNTY, PENNSYLVANIA**

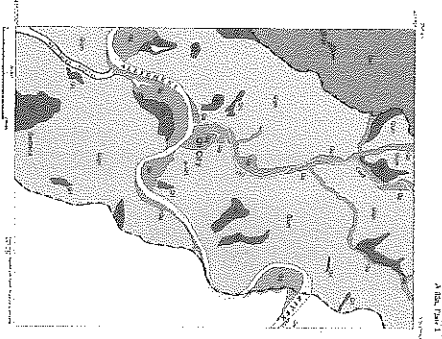
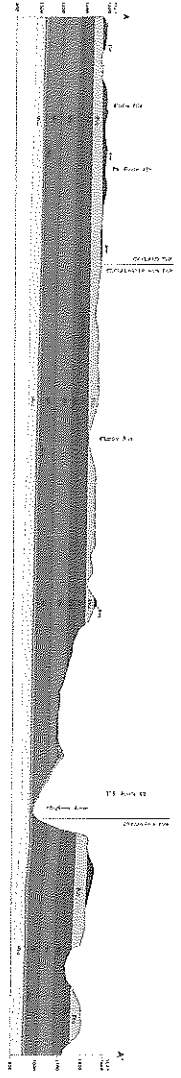
BY  
**ALBERT N. WARD, JR. AND MICHAEL T. LUKSHIT**  
State Geologist, Venango County  
1978

UNITS	UNLOGIC CHARACTERISTICS	EXPLANATION	GEOLOGIC DESCRIPTION
Allegheny Formation	Consists of alternating beds of sandstone and shale. The sandstone is typically medium to coarse grained and is often fossiliferous. The shale is typically silty and contains thin beds of limestone.	The Allegheny Formation is a sequence of sedimentary rocks deposited in a shallow marine environment. It is characterized by its alternating beds of sandstone and shale.	The Allegheny Formation is a sequence of sedimentary rocks deposited in a shallow marine environment. It is characterized by its alternating beds of sandstone and shale.
... (other units) ...	... (other characteristics) ...	... (other explanations) ...	... (other descriptions) ...



**CROSS SECTION**

Illustration of the map of the Oil City Quadrangle, Venango County, Pennsylvania.



**GLACIAL DEPOSITS OF THE OIL CITY QUADRANGLE**

State Geologist

UNITS	EXPLANATION	SYMBOLS ON BEDROCK MAP
... (glacial units) ...	... (explanations) ...	... (symbols) ...

**SYMBOLS ON BEDROCK MAP**

**SYMBOLS ON BEDROCK GEOLOGIC MAP**

- ... (list of symbols) ...
- ... (list of symbols) ...
- ... (list of symbols) ...

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Complanter Sup.  
136 Petroleum Center Rd.  
Oil City, PA 16301

2. Article Number  
(Transfer from service label)

7013 1090 0002 2032 9632

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

x Heather Rodgers

 Agent Addressee

B. Received by (Printed Name)

Heather Rodgers

C. Date of Delivery

2/19/14

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type

 Certified Mail  Express Mail Registered  Return Receipt for Merchandise Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

President Sup  
139 Henrys Bend Rd.  
Oil City, PA 16301

2. Article Number  
(Transfer from service label)

7013 1090 0002 2032 9342

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

x Thomas R Burchfield

 Agent Addressee

B. Received by (Printed Name)

THOMAS R BURCHFIELD

C. Date of Delivery

2-24-14

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type

 Certified Mail  Express Mail Registered  Return Receipt for Merchandise Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Keeney Sup.  
2758 S.R. 157  
Venues, PA 16364

2. Article Number  
(Transfer from service label)

7013 1090 0002 2032 9649

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

x Jane Whittling

 Agent Addressee

B. Received by (Printed Name)

JANE WHITTLING

C. Date of Delivery

2/19/14

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

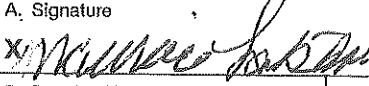
3. Service Type


 Certified Mail  Express Mail Registered  Return Receipt for Merchandise Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature   <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name)  MAURICE LATSHAW</p> <p>C. Date of Delivery  2-20-14</p>
<p>1. Article Addressed to:</p> <p>Maurice A. Latshaw  471 Hickathorne Church Rd.  Seneca, PA 16344</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  If YES, enter delivery address below: <input checked="" type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number  (Transfer from service label)</p>	<p>7013 1090 0002 2032 9663</p>
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature   <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name)  ROBERT J HOOPER</p> <p>C. Date of Delivery  19 FEB 14</p>
<p>1. Article Addressed to:</p> <p>Robert J. &amp; Ernestine A. Hoover  470 Hickathorne Church Rd.  Seneca, PA 16346</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number  (Transfer from service label)</p>	<p>7013 1090 0002 2032 9670</p>
<p>Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	



# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DISTRICT OIL AND GAS OPERATIONS

May 6, 2014

Mr. Jeremy Graham  
Stonehaven Energy LLC  
1251 Waterfront Place, Suite 540  
Pittsburgh, PA 15222

Re: Extension of Review Period  
Latshaw # 9  
API No. 121-44484-00-01, AUTH ID No. 1017164  
Cranberry Township, Venango County

Dear Mr. Graham:

The Pennsylvania Department of Environmental Protection (Department) is in the process of reviewing the Permit Application to Drill and Operate the above mentioned injection well. During the review it was necessary for the Department to request a Control and Disposal Plan, updates to map B3 (Map of Latshaw Lease Showing Proposed Injection Well # 9 and Wells # 12, # 15 and # 25 Penetrating Same Zone as Injection Well), and clarification of the location of brine storage tanks at the site. The Control and Disposal Plan and the updates to map B3 were received, but clarification of the location of brine storage tanks is still needed. Also, additional review time is needed due to the days allotted for the requested items to be submitted.

The Department must issue or deny the drilling permit within 45 days of submission of a permit application as required by Section 3211(e) of the 2012 Oil and Gas Act. In addition, the Department has the right to extend this period for 15 days for cause shown upon notification to the applicant of the reason for the extension. If you have any questions please contact Aaron O'Hara at the above telephone number.

Sincerely,

Brian Babb  
Permits Chief  
Bureau of District Oil and Gas Operations

cc: File

# Phone Contact Log

Date/Time: 4/8/14 Permit Number(s): 121-44484

Company: \_\_\_\_\_

Contact: Joe Fox

Phone: 814 657 4361

Deficiencies Addressed: \_\_\_\_\_

PNDI - Both wells

Course + Distance to Stover 8

Tanks off site?

Abandoned wells on B2 <sup>map</sup> not on B3 map

Inspector review well construction

78.18 Control and Disposal plan

Jeremy Granham 412 526 2919

- PPC plan
  - Project layout
  - extension letter
- } 5/5/14 phone call with Jeremy
- 5/6/14 sent / emailed

Denial Date: \_\_\_\_\_

## WELL LOCATION PLAT

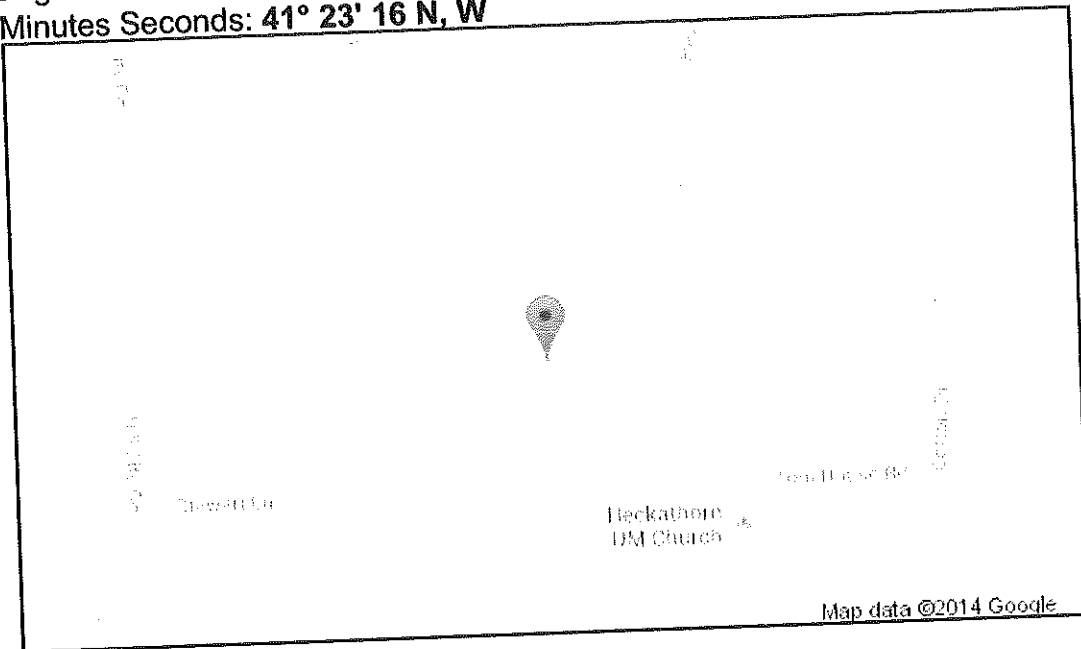
### Page 2 Notifications

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 <b>STONEHAVEN ENERGY LLC</b>	DEP ID#	Well (Farm) Name <b>LATSHAW</b>	Well # <b>9</b>	Serial #
Surface Landowner / Lessor: <b>MAURICE A. LATSHAW</b>		Angle & Course of Deviation (Drilling): <b>NONE</b>	Anticipated True Vertical Depth Feet (TVD): <b>Drilled to 2206'</b>	Anticipated Total Measured Depth Feet (TMD): <b>2206'</b>
Target Formation(s): <b>DRILLED TO SPEECHLEY FORMATION</b>		Deepest Formation to be penetrated: <b>SPEECHLEY</b>	Number of laterals: <b>0</b>	Total footage to be drilled all laterals: <b>N/A</b>
Surface Owner/Water Purveyor w/Water Supply within 1000'/3000'		Latitude Longitude of Water Supply		
<b>MAURICE A. LATSHAW</b>		<b>41 23 19.29</b>	<b>79 37 46.56</b>	
<b>ROBERT J. &amp; ERNESTINE A. HOOVER</b>		<b>41 23 20.10</b>	<b>79 37 30.55</b>	
<b>ROBERT J. &amp; ERNESTINE A. HOOVER</b>		<b>41 23 20.28</b>	<b>79 37 30.57</b>	
Municipality: where the well will be drilled, adjacent to the well, or within 3000 feet		Municipality: where the well will be drilled, adjacent to the well, or within 3000 feet		
<b>CRANBERRY TWP., VENANGO CO.</b>		<b>ASHLAND TWP., CLARION CO.</b>		
<b>ROCKLAND TWP., VENANGO CO.</b>				
<b>SANDYCREEK TWP., VENANGO CO.</b>				
<b>CITY OF FRANKLIN</b>		<b>Coal related parties</b>		
<b>SUGAR CREEK TWP., VENANGO CO.</b>				
<b>CITY OF OIL CITY</b>				
<b>CORNPLANTER TWP., VENANGO CO.</b>				
<b>PRESIDENT TWP., VENANGO CO.</b>				
<b>PINEGROVE TWP., VENANGO CO.</b>				

### 1. PROJECT INFORMATION

Project Name: Latshaw # 9  
 Date of review: 2/17/2014 3:59:38 PM  
 Project Category: Energy Storage, Production, and Transfer, Energy Production (generation), Oil or Gas - new wells, expansion of well field  
 Project Area: N/A  
 County: Venango Township/Municipality: Cranberry  
 Quadrangle Name: OIL CITY ~ ZIP Code: 16346  
 Decimal Degrees: 41.387975 N, -79.628541 W  
 Degrees Minutes Seconds: 41° 23' 16 N, W



### 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

#### PA Game Commission

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Department of Conservation and Natural Resources

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Fish and Boat Commission

**RESPONSE:** Further review of this project is necessary to resolve the potential impacts(s). Please send project information to this agency for review (see WHAT TO SEND).

**PFBC Species:** (Note: The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

**Scientific Name:** Sensitive Species\*\*

**Common Name:**

**Current Status:** Endangered

**Proposed Status:** Endangered

#### U.S. Fish and Wildlife Service

**RESPONSE:** No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

\* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

\*\* Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

## WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, send the following information to the agency(s) seeking this information (see AGENCY CONTACT INFORMATION).

### Check-list of *Minimum Materials to be submitted:*

- SIGNED** copy of this Project Environmental Review Receipt
- Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.
- Project location information (name of USGS Quadrangle, Township/Municipality, and County)
- USGS 7.5-minute Quadrangle with project boundary clearly indicated, and quad name on the map

### **The inclusion of the following information may expedite the review process.**

- A basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)
- Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)
- Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams

## 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <http://www.naturalheritage.state.pa.us>.

### 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page ([www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us)). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

### 6. AGENCY CONTACT INFORMATION

**PA Department of Conservation and Natural Resources**  
 Bureau of Forestry, Ecological Services Section  
 400 Market Street, PO Box 8552, Harrisburg, PA.  
 17105-8552  
 Fax:(717) 772-0271

**U.S. Fish and Wildlife Service**  
 Endangered Species Section  
 315 South Allen Street, Suite 322, State College, PA.  
 16801-4851  
 NO Faxes Please.

**PA Fish and Boat Commission**  
 Division of Environmental Services  
 450 Robinson Lane, Bellefonte, PA. 16823-7437  
 NO Faxes Please

**PA Game Commission**  
 Bureau of Wildlife Habitat Management  
 Division of Environmental Planning and Habitat Protection  
 2001 Elmerton Avenue, Harrisburg, PA. 17110-9797  
 Fax:(717) 787-6957

### 7. PROJECT CONTACT INFORMATION

Name: Jac Fox  
 Company/Business Name: Fox Land Surveying  
 Address: 9161 U.S. 322  
 City, State, Zip: Cranberry, PA 16819  
 Phone: (717) 657 4561 Fax: ( )  
 Email: Foxsurveying2@yahoo.com

### 8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Jac Fox 2-25-14  
 applicant/project proponent signature date

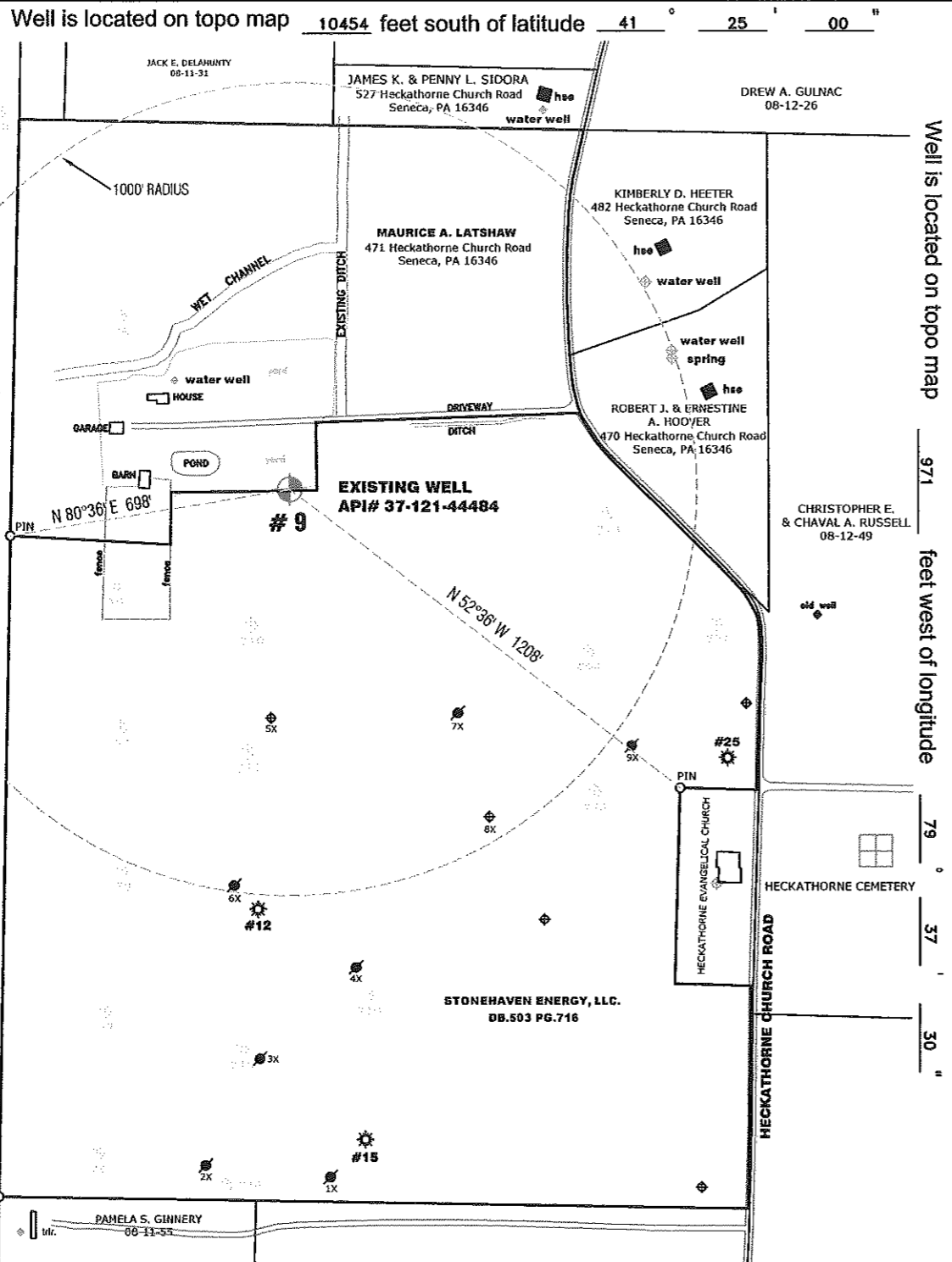


COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Oil and Gas Management Program  
**WELL LOCATION PLAT**  
PAGE 1 SURFACE LOCATION

DEP USE ONLY	DEP Application Tracking #	G:
	Permit #	C:
	Project #	



	Denots location of top of well on Topo map.
True Latitude: NORTH 41 ° 23 ' 16 . 71 "	
True Longitude: WEST 79 ° 37 ' 42 . 75 "	



Applicant / Well Operator Name <b>STONEHAVEN ENERGY LLC</b>		DEP ID# <b>67515</b>	Well(Farm) Name <b>LATSHAW</b>		Well # <b>9</b>	Serial #
Address <b>1251 WATERFRONT PLACE, SUITE 540, PITTSBURGH, PA 15222</b>			County <b>VENANGO</b>	Municipality <b>CRANBERRY</b>	Well Type <b>INJ. DISPOSAL</b>	
911 Address of Site <b>471 HECKATHORNE CHURCH ROAD</b>			USGS 7 1/2 Quadrangle Map Name <b>OIL CITY</b>	Map Section <b>9</b>	Surface Elevation <b>1476'</b>	
Surveyor: <b>JOSEPH M. FOX</b>	Phone # <b>(814) 657 4361</b>	Dwg. # <b>LATSHAW #9</b>	Date <b>2/17/14</b>	Scale <b>1" = 400'</b>	Tract Acreage <b>26.8 ACRES</b>	
Lat. & Long Metadata Method <b>TRIMBLE GPS</b>	Accuracy <b>2-4</b> ft.	Datum <b>NAD 83</b>	Elevation Metadata Method <b>PA LIDAR</b>	Accuracy <b>2-4</b> ft.	Datum <b>NAVD 88</b>	Survey Date