



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

**WELL PERMIT
DRILL DEEPER**

DEP USE ONLY	
Permittee's eFACTS ID 313418	Auth ID 1157655
Watershed Name Kaiser Hollow	Quality EV

Permittee INFLECTION ENERGY (PA) LLC		OGO.# OGO-68657	Permit Number 37-081-21314-01-01	Date Issued 03/09/2017
Address 49 EAST 4TH ST		Farm Name & Well Number ALLEGHENY RIDGE WEST HILLEGAS 1H		Well Serial #
STE 101		Municipality Upper Fairfield Twp		County Lycoming
WILLIAMSPORT, PA 17701		7½' Quadrangle Name Huntersville		Map Section # 4
Phone (303) 531-2300	Project #		Latitude 41-19-34.1000	Longitude -76-52-27.3700
Surf Elev at Site 948 feet	Anticipated Maximum TVD 8902 feet	Well Type GS	Offset distances referenced to NE corner of map section. South 2621 feet West 11243 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:

Vertical: 081-21314-00-00

Prior to setting casing/tubing in or producing from the Target Formation 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.

Horizontal: 081-21314-01-00

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 well may be drilled in accordance with the procedures and conditions set forth in the Operator's plan of action as described in the Request For Waiver From Distance Requirement From Springs, Streams, Body of Water or Wetland Form OG-0057 submitted with the well permit application.

This approval does not authorize the obstruction or encroachment of any of the Waters of the Commonwealth as regulated under Chapter 105.

The clear and distinct boundaries of all wetlands must be clearly marked in some way during the phases of the activity, including construction. Operators must use high visibility fencing to clearly identify these resources.

Floodway limits must be marked in some way, either by staking, flagging, or some other method to avoid accidental encroachment during construction, BMP installation, or maintenance.

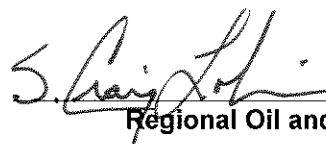
No tophole water may be discharged directly to any stream, wetland, or other body of water. Only indirect discharges of clean tophole water are permitted and must comply with 78.60. Additionally, in order to comply with 78.60(5), the undisturbed, vegetated area must be free from snow/ice and the ground cannot be frozen or saturated in order for that area to be capable of absorbing water as the regulation requires.

Adequate secondary containment measure must be utilized for any area on site that may contain a pollutional substance(s). This includes but is not limited to chemical storage areas and containers, tanks, flow lines, waste containers, etc.

A copy of the approved waiver and these conditions of approval must be kept on site during all stages of earth disturbance activity.

A current PPC Plan, including a Control & Disposal Plan must be located at the well pad location during site operations.

This permit expires 03/09/2018 unless drilling is commenced on or before that date and prosecuted with due diligence.



Regional Oil and Gas Program Manager

REBECCA RENNER

208 WEST THIRD STREET SUITE 101
WILLIAMSPORT, PA 17701

570-321-6516



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

PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL

Notes NC		DEP USE ONLY	
OGO No. <u>68657</u>	Client ID <u>313418</u>	Objection Date - Do not issue before: <u>10/24/16</u>	API #s37- <u>081-21314-01-01</u>
Bond No. <u>13934</u>	C: <u>10/10/16</u> G: <u>SGP 11/10/16</u>	Date Approved: <u>1/20/17</u>	and - - - - - Watershed Name: Designation: ☐ HQ ☒ EV <u>KAISER HOLLOW</u>
INV:	Special Cond. <u>DEV SURVEY, NEED ESCGP</u>	Site ID <u>775481</u>	PF ID <u>7168222</u> SF ID <u>1220689</u>
APS No. <u>26541</u>	Auth ID <u>1157655</u>		

Please read instructions before you begin filling in this form.

WELL INFORMATION

Well Operator Inflection Energy (PA) LLC	DEP ID# 313418	Well API No. (if available) 37-081-21314-00-00	Well Farm Name Hillegas	Well # 1
Address 49 East 4th Street, Suite 101	LAT <u>41°19' 34.10"</u> LONG <u>76°52' 27.37"</u>	NAD 83	Project Number N/A	Serial # N/A
City Williamsport	State PA	Zip Code 17701	Municipality Name/ City, Borough, Township Upper Fairfield Township	County Lycoming
Phone No. (303) 531-2300	Fax No. (303) 531-2301	Email donald.stevenson@inflectionenergy.co	USGS 7.5 min. quadrangle map Huntersville PA	Section 4
☐ Check if this is a new address	24/7 Emergency Phone Contact No.: (800)641-1664	911 address of well site (if available) 2098 Kaiser Hollow Rd, Montoursville	ESGP Permit No.: ESG13-081-0049	
Freshwater Impoundment Name/ Identification N/A	Centralized Impoundment Name/ Identification N/A	Well Pad (cluster) Name/Identification Hillegas Well Site	Borrow Area Name/Identification N/A	
Surface Elev 948.0'	Deepest Formation to be penetrated: Marcellus	Anticipated TVD 8,902.26	PERMIT TYPE Check applicable. Application is to: ☐ Drill a new well ☒ Re-permit expired permit ☒ Deepen well ☐ Redrill wellbore ☐ Alter well ☐ Other (specify)	TYPE OF WELL Check applicable. ☒ Gas ☐ Oil ☐ Comb. (gas & oil/condensate) ☐ Other (specify)
Target Formation(s) proposed for production Marcellus	Anticipated Target Top/Bottom TVD 8,300 - 9,000 8,300 - 8,500			APPLICATION FEE Check applicable. ☒ Unconventional ☐ Vertical ☐ Nonvertical Total Application Fee \$ 5,250 \$5,250
Number of wellbore laterals proposed under this application 1			Configuration ☐ Vertical ☒ Horizontal ☐ Deviated ☐ Multiple laterals	
Total feet of wellbore to be drilled under this application 12900 Ft.			Bond Agreement Id SUR001477	
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)				
PNDI Attached: ☒ Any threatened or endangered "hit" must include a copy of the clearance letter from the applicable agency(ies).				
Application submitted as: Coal well: ☐ Attach Coal Module CBM well ☐ Attach Coal Module Non coal well ☒ Attach justification.				

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 the disturbed area 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 7½' topographic quadrangle map or wetland greater than one acre in size or in a wetland?	☒	☐
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.	☐	☒
If yes, are the following attached: a site-specific E&S control plan (unless an ESCGP has been submitted), Pollution Prevention Control Plan, Portions of the Well Site Emergency Response Plan, and Site Containment Plan?	☒	☐

RECEIVED

OCT 07 2016

Environmental Protection
Northwest Regional Office

WELL
SPUD
10/30/13

12/20/16

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>Loyalsock Creek (EV) KAISER HOLLOW</u> <i>BP initial</i>		
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. ESG13-081-0049	☒	☐
9. Is waste, including drill cuttings, from the drilling of this well to be disposed of on this well site?	☐	☒
10. Is the well to be located within a H ₂ S area pursuant to §78.77a?	☐	☒
11. Attach a current Ownership & Control form 8000-FM-OOGM0118		
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: THOMAS D. GILLESPIE
		Title: Director of Regulatory & HS&E
		Date 9-20-2016
Application Preparer/Contact: DONALD STEVENSON		Phone: 303-531-2300



pennsylvania

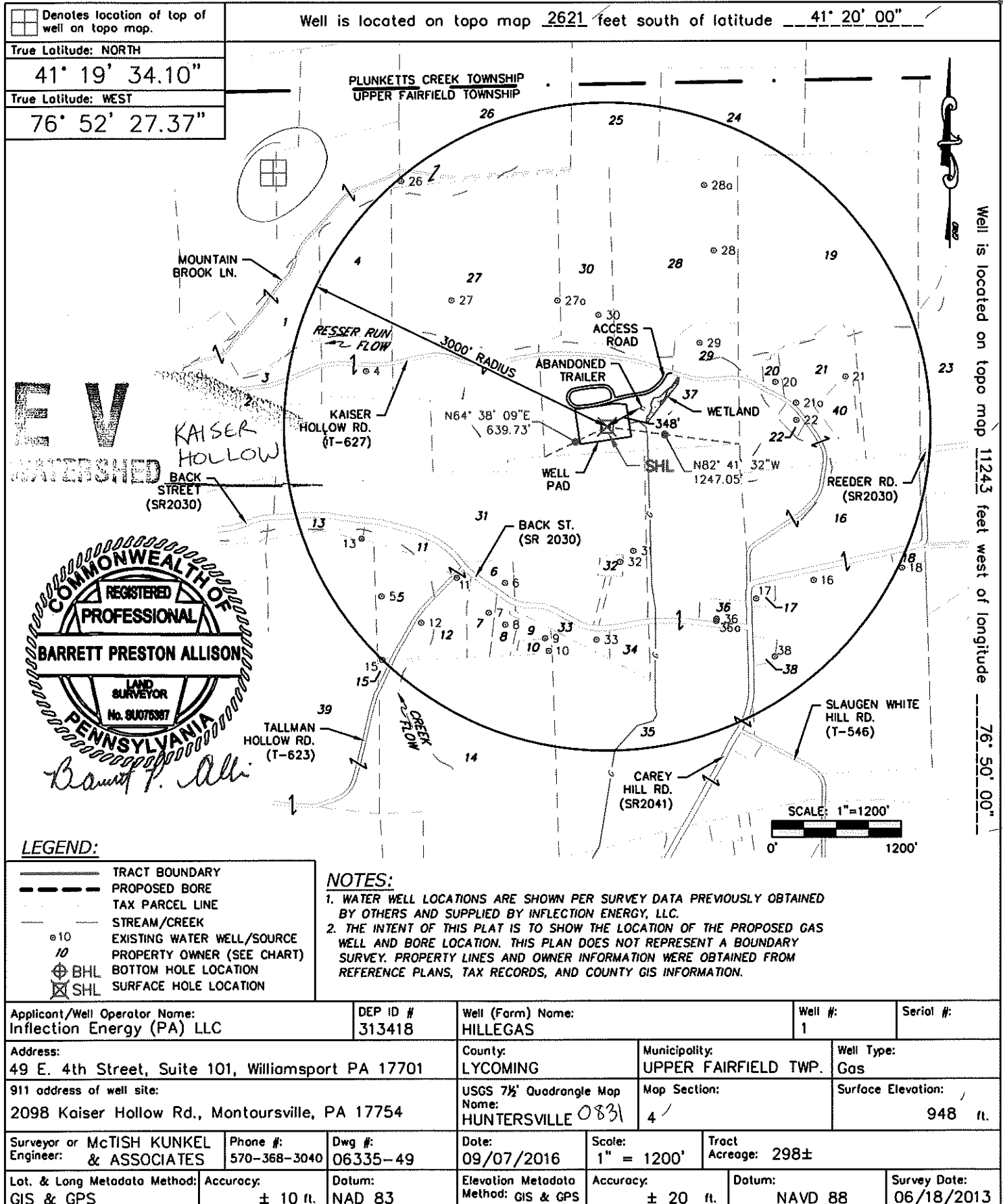
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

WELL LOCATION PLAT

PAGE 1 Surface Location

DEP	Auth ID #:	111416 G: SGP
USE	Permit #: 081-21314	C:
ONLY	Project #:	



DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAGE 1 Surface Location

DEP	Auth ID #:	G: C:
USE	Permit #:	
ONLY	Project #:	

PROPERTY OWNER/TAX ID CHART

NO.	NAME	TAX ID
1	DAVIDSON	56-291-110
2	JACOBS	56-291-110.B
3	MUMMA	56-291-110.C
4	GORTNER	56-291-111
5	HORNING	56-291-112
6	REEDER	56-291-112.B
7	GOOD	56-291-112.C
8	RAKESTRAW	56-291-112.D
9	WILDE	56-291-112.E
10	BREASETTE	56-291-112.F
11	REEDER	56-291-112.H
12	WORTHINGTON	56-291-112.J
13	WINTER	56-291-112.X
14	DAVIS	56-291-113.A
15	YEAGLE	56-291-113.B
16	REEDER	56-292-122
17	REEDER	56-292-122.A
18	CASE	56-292-122.B
19	IFFLAND FARMS LLC	56-292-123
20	BOYER	56-292-123.A
21	HAUSER	56-292-123.B
22	SHADDAY	56-292-123.C
23	BOSCH	56-292-124
24	FLOOK	56-292-128
25	HEPBURN	56-292-129
26	HEPBURN LIVING TRUST	56-292-130
27	HILLEGAS IRREV RES & INC TRUST	56-292-131
28	MULL	56-292-132
29	LUNT	56-292-132.A
30	CLARK	56-292-132.B
31	DINGES	56-292-133
32	DINGES	56-292-133.A
33	DINGES	56-292-133.B
34	DINGES	56-292-133.C
35	HANNA	56-292-134
36	HANNA	56-292-134.A
37	HILLEGAS IRREV RES & INC TRUST	56-292-136
38	YOURISH	56-292-140
39	DAVIS REVOCABLE TRUST	56-311-100
40	HAUSER	56-292-123.D

NO.	NAME	TAX ID
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Applicant/Well Operator Name: Inflection Energy (PA) LLC		DEP ID # 313418	Well (Farm) Name: HILLEGAS		Well #: 1	Serial #:
Address: 49 E. 4th Street, Suite 101, Williamsport PA 17701			County: LYCOMING	Municipality: UPPER FAIRFIELD TWP.	Well Type: Gas	
911 address of well site: 2098 Kaiser Hollow Rd., Montoursville, PA 17754			USGS 7½' Quadrangle Map Name: HUNTERSVILLE	Map Section: 4	Surface Elevation: 948	
Surveyor or Engineer: McTISH KUNKEL & ASSOCIATES	Phone #: 570-368-3040	Dwg #: 06335-49	Date: 09/07/2016	Scale: N/A	Tract Acreage: 298±	
Lat. & Long Metadata Method: GIS & GPS	Accuracy: ± 10 ft.	Datum: NAD 83	Elevation Metadata Method: GIS & GPS	Accuracy: ± 20 ft.	Datum: NAVD 88	Survey Date: 06/18/2013

WELL LOCATION PLAT

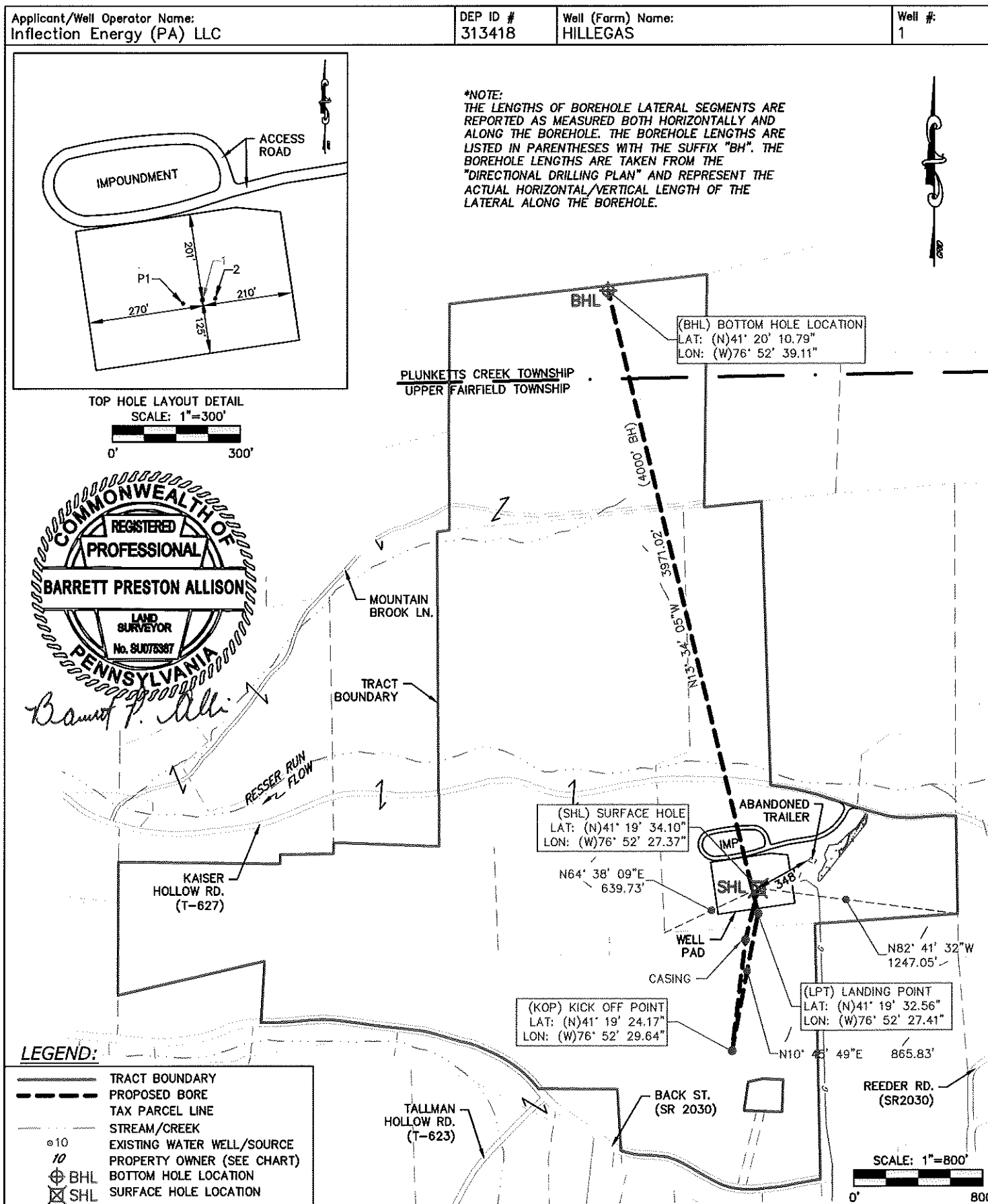
PAGE 2 Notifications

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: Inflection Energy (PA) LLC		DEP ID # 313418	Well (Form) Name: HILLEGAS		Well #: 1
Surface Landowner/Lessor: HILLEGAS IRREV RES & INC TRUST		Angle & Course of Deviation (Drilling) N10° 45' 49"E 865.83' KOP TO LPT N13° 34' 05"W 3971.02' LPT TO BHL		Anticipated True Vertical Depth (TVD) 8902.26 (BHL)	Anticipated Total Measured Depth (TMD) 12900 (BHL)
Target Formation(s): MARCELLUS		Deepest Formation to be Penetrated: MARCELLUS		Number of Laterals: 1	Total footage to be drilled all laterals: 12900
Surface Owner/Water Purveyor w/Water Supply within 3000'		Latitude/Longitude of Water Supply			
GORTNER, NORMA J & ELAINE G CLARK		N 41°19'39.46" W 76°52'56.58" (SPRING #4)			
HORNING, SCOTT A & CHERYL E LANTZ		N 41°19'18.85" W 76°52'54.96" (WELL #5)			
REEDER, TIMOTHY J & LAURA BOWER		N 41°19'19.96" W 76°52'39.94" (WELL #6)			
GOOD, LESTER E JR & JANE D		N 41°19'17.24" W 76°52'41.95" (WELL #7)			
RAKESTRAW, DAVID R & KIMBERLY A		N 41°19'16.14" W 76°52'39.99" (WELL #8)			
WLDE, AMBER G		N 41°19'14.85" W 76°52'35.16" (WELL #9)			
BREASETTE, ARLETTA S & DAVID A		N 41°19'13.71" W 76°52'34.73" (WELL #10)			
REEDER, JAMES B ET AL		N 41°19'20.47" W 76°52'45.79" (WELL #11)			
WORTHINGTON, HARRY B & ELLEN M		N 41°19'16.40" W 76°52'50.16" (WELL #12)			
WINTER, GAIL L		N 41°19'24.13" W 76°52'57.31" (WELL #13)			
YEAGLE, ELWOOD H & CONNIE J		N 41°19'13.03" W 76°52'54.94" (WELL #15)			
REEDER, MAX A ET AL		N 41°19'19.89" W 76°52'02.36" (WELL #16)			
REEDER, MARCIA A		N 41°19'18.25" W 76°52'09.38" (WELL #17)			
CASE, MARTIN D & LORRAINE E		N 41°19'20.94" W 76°51'51.65" (WELL #18)			
BOYER, KENNETH E & RACHELLE		N 41°19'38.04" W 76°52'06.79" (WELL #20)			
HAUSER, RAYMOND L		N 41°19'38.46" W 76°51'58.23" (WELL #21)			
HAUSER, RAYMOND L		N 41°19'36.12" W 76°52'04.26" (WELL #21a)			
SHADDAY, E RAY		N 41°19'34.54" W 76°52'04.25" (WELL #22)			
HEPBURN LIVING TRUST		N 41°19'56.79" W 76°52'52.08" (WELL #26)			
HILLEGAS IRREV RES & INC TRUST		N 41°19'45.85" W 76°52'46.11" (SPRING #27)			
HILLEGAS IRREV RES & INC TRUST		N 41°19'45.71" W 76°52'33.23" (SPRING #27a)			
MULL, DAVID L & GLORIA R		N 41°19'50.12" W 76°52'14.09" (WELL #28)			
MULL, DAVID L & GLORIA R		N 41°19'56.10" W 76°52'15.20" (SPRING #28a)			
LUNT, LUTHER E & JUDITH A		N 41°19'41.70" W 76°52'15.94" (SPRING #29)			
CLARK, ARTHUR H III		N 41°19'44.34" W 76°52'28.25" (WELL #30)			
DINGES, IVAN K & ANN		N 41°19'22.76" W 76°52'24.28" (WELL #31)			
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			
UPPER FAIRFIELD TOWNSHIP	MUNCY TOWNSHIP				
PLUNKETTS CREEK TOWNSHIP	MILL CREEK TOWNSHIP				
ELDRED TOWNSHIP	LYCOMING COUNTY	Coal Related Parties			
FAIRFIELD TOWNSHIP		NONE			
LOYALSOCK TOWNSHIP					

WELL LOCATION PLAT

PAGE 3 Plan View of Deviated Well Bore



WELL LOCATION PLAT

PAGE 4 Cross Section

Applicant/Well Operator Name: Inflection Energy (PA) LLC	DEP ID # 313418	Well (Farm) Name: HILLEGAS	Well #: 1
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DEP	Auth ID #:	G:
USE	Permit #:	C:
ONLY	Project #:	

Operator name : Inflection Energy (PA) LLCWell / Farm name : HILLEGAS

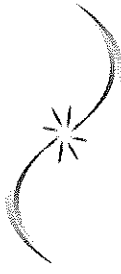
			Latitude	Longitude	
Kick Off Point :	TVD : <u>6308.69</u>	TMD : <u>6441</u>	<u>41° 19' 24.17"</u>	<u>76° 52' 29.64"</u>	Notes :
Landing Point :	TVD : <u>8414.79</u>	TMD : <u>8900</u>	<u>41° 19' 32.56"</u>	<u>76° 52' 27.41"</u>	

SEE
ATTACHED
VERTICAL
SECTION

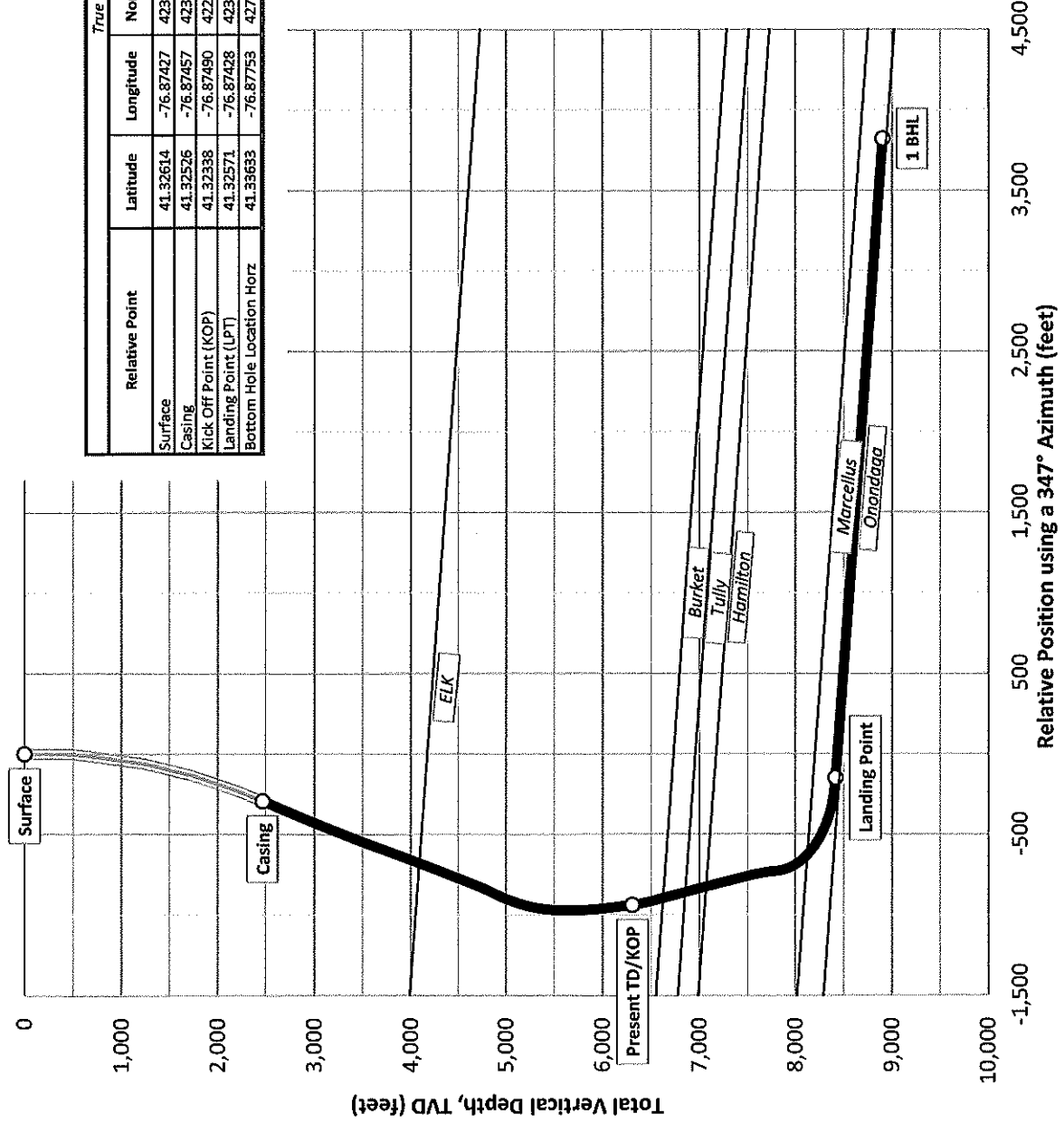
Directional Drilling Plan

Hillegas 1

Marcellus Horizontal



INFLECTION
ENERGY, LLC



RECEIVED
NOV 23 2016
Environmental Protection
Northwest Regional Office

Surface Casing
Production Casing

True North NAD83 - Pennsylvania North										
Relative Point	Latitude	Longitude	Northing	Easting	MD (ft)	TVD (ft)	Inclination (deg)	Azimuth (deg)	N/S (ft)	E/W (ft)
Surface	41.32614	-76.87427	423668.40	2209021.20	0	0	0	0	0.00	0.00
Casing	41.32526	-76.87457	423346.90	2208942.00	2500	2468.97	15.51	190.82	-319.72	-81.62
Kick Off Point (KOP)	41.32338	-76.87490	422661.10	2208858.30	6441	6308.69	7.4	42.6	-1003.79	-172.12
Landing Point (LPT)	41.32571	-76.87428	423511.70	2209020.00	8900	8414.79	83	347	-154.83	-1.18
Bottom Hole Location Horiz	41.33633	-76.87753	427371.90	2208088.40	12900	8902.26	83	347	3713.60	-894.28

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

Farm Name - Well No. Hillegas 1		DEP ID 313418
Applicant Name Inflection Energy (PA) LLC		
DEP USE ONLY	APS No.	

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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <300'	Municipalities	Notification			
						Note the means and attach proof.		Written Consent	
						Certified Mail Dates	Return Receipt		Address Affidavit
Print Name: FLOOK, MICHAEL W	Address: 195 E RT 973 HWY COGAN STATION PA 17728						9/21/2016	9/26/2016	
Signature									
Print Name: HANNA, WILLIAM L & NANCY L	Address: 2185 BACK ST MONTTOURSVILLE PA 17754						9/21/2016	9/26/2016	
Signature									
Print Name: JACOBS, MELINDA	Address: 163 GREEN HOLLOW RD MONTTOURSVILLE PA 17754						9/21/2016	9/28/2016	
Signature									
Print Name: WELTMER, TODD M & PAMELA A	Address: 65 JERRY LN MONTTOURSVILLE PA 17754						9/21/2016	9/28/2016	
Signature									
Print Name: WINTER, GAIL L	Address: 1506 BACK ST MONTTOURSVILLE PA 17754						9/21/2016	9/28/2016	
Signature									

RECEIVED
 NOV 23 2016
 Environmental Protection
 Northwest Regional Office

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:	☐ ☐

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

Farm Name - Well No. Hillegas 1		DEP ID
Applicant Name No.		313418
Infection Energy (PA) LLC		
DEP USE ONLY	APS No.	

		Notification							
		Note the means and attach proof.		Certified Mail Dates					
		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <300'	Municipalities	Sent	Return Receipt	Address Affidavit	Written Consent
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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification									
Print Name: HEPBURN, ANDREW	Address: 271 FINK DR MONTGOMERYVILLE PA 17754					9/21/2016	9/26/2016		
Signature									
Print Name: MUMMA, EVAN & LORI A	Address: 65 MOUNTAIN BROOK LN MONTGOMERYVILLE PA 17754					9/21/2016	9/29/2016		
Signature									
Print Name: DINGES, MATTHEW R & ALLISON	Address: 1974 BACK ST MONTGOMERYVILLE PA 17754			X		9/21/2016	9/26/2016		
Signature									
Print Name: MULL, DAVID L & GLORIA R	Address: 1901 KAISER HOLLOW RD MONTGOMERYVILLE PA 17754			X		9/21/2016	9/26/2016		
Signature									
Print Name: BREASETTE, ARLETTA S & DAVID A	Address: 1834 BACK ST MONTGOMERYVILLE PA 17754			X		9/21/2016	9/29/2016		
Signature									

RECEIVED
NOV 29 2016
Environmental Protection
Northwest Regional Office

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
Print and Sign Name:	Address:	Date	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 No. Hillegas 1		DEP ID
Applicant Name No.		313418
Infection Energy (PA) LLC		
DEP USE	APS No.	
ONLY		

		Notification				Note the means and attach proof.
		Certified Mail Dates	Return Receipt	Address Affidavit	Written Consent	
List the following: surface landowner, surface landowners 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 with water supplies <3000'	Municipalities	Sent
Print Name: GORTNER, NORMA J & ELAINE G CLARK	Address: 147 SHICK RD MONTTOURSVILLE PA 17754			X		9/21/2016
Signature						
Print Name: HILLEGAS IRREV RES & INC TRUST	Address: 1673 KAISER HOLLOW RD MONTTOURSVILLE PA 17754	X				9/21/2016
Signature						
Print Name: LUNT, LUTHER E & JUDITH A	Address: 2099 KAISER HOLLOW RD MONTTOURSVILLE PA 17754			X		9/21/2016
Signature						
Print Name: REEDER, JAMES B ET AL	Address: C/O JAMES REEDER 1642 BACK ST MONTTOURSVILLE PA 17754			X		9/21/2016
Signature						
Print Name: WORTHINGTON, HARRY B & ELLEN M	Address: 2264 TALLMAN HOLLOW RD MONTTOURSVILLE PA 17754			X		9/21/2016
Signature						

RECEIVED
NOV 23 2016
Environmental Protection
Northwest Regional Office

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	
		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:	

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

Farm Name - Well No. Hillegas 1	
Applicant Name No.	DEP ID 313418
Inflection Energy (PA) LLC	
DEP USE ONLY	APS No.

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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <3000'	Municipalities	Notification Note the means and attach proof.		
					Certified Mail Dates	Address Affidavit	Written Consent
					Sent	Return Receipt	
Print Name: HEPBURN LIVING TRUST Signature	Address: 2010 FAIRVIEW RD MONTOURSVILLE PA 17754		X		9/21/2016	9/26/2016	
Print Name: HILLEGAS IRREV RES & INC TRUST Signature	Address: 1673 KAISER HOLLOW RD MONTOURSVILLE PA 17754		X		9/21/2016	9/26/2016	
Print Name: DINGES, MICHAEL A & CHRISTINA L Signature	Address: 1975 BACK ST MONTOURSVILLE PA 17754		X		9/21/2016	9/26/2016	
Print Name: RAKESTRAW, DAVID R & KIMBERLY A Signature	Address: 3116 REEDER RD MONTOURSVILLE PA 17754		X		9/21/2016	9/29/2016	
Print Name: WILDE, AMBER G Signature	Address: 1830 BACK ST MONTOURSVILLE PA 17754		X		9/21/2016	10/03/2016	

RECEIVED
NOV 29 2016
Environmental Protection
Northwest Regional Office

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: ☐	☐

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

Farm Name - Well No. Hillegas 1		DEP ID 313418
Applicant Name No. Inflection Energy (PA) LLC		
DEP USE ONLY	APS No.	

List the following: surface landowner, surface landowners 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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors < 3000'	Municipalities	Notification			
						Note the means and attach proof.		Written Consent	
Print Name: BOYER, KENNETH E & RACHELLE	Address: 2267 KAISER HOLLOW RD MONTGOMERYVILLE PA 17754			X			Certified Mail Dates		Return Receipt
Signature							Sent	9/29/2016	
Print Name: REEDER, TIMOTHY J & LAURA BOWER	Address: 1789 BACK ST MONTGOMERYVILLE PA 17754			X				9/21/2016	X
Signature									
Print Name: GOOD, LESTER E JR & JANED	Address: 1778 BACK ST MONTGOMERYVILLE PA 17754			X				9/21/2016	
Signature									
Print Name: DAVIS REVOCABLE TRUST, CARL H & NEVA M	Address: 1925 TALLMAN HOLLOW RD MONTGOMERYVILLE PA 17754							9/21/2016	
Signature									
Print Name: BOSCH, PAUL D JOANNE L & STAHL	Address: C/O JOANNE BOSCH 1900 RAVINE RS A 316 WILLIAMSPORT PA 17701							9/21/2016	
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.

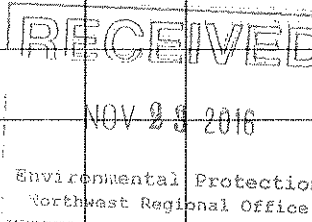
		Check applicable box	
		Surface Owner	Water Well within 500 feet
Print and Sign Name:	Address:	☐	☐
Print and Sign Name:	Address:	☐	☐
Print and Sign Name:	Address:	☐	☐
Print and Sign Name:	Address:	☐	☐
Print and Sign Name:	Address:	☐	☐



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

Farm Name - Well No. Hillegas 1	
Applicant Name No.	DEP ID 313418
Infection Energy (PA) LLC	
DEP USE ONLY	APS No.

List the following: 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		
					Note the means and attach proof.		Written Consent
					Certified Mail Dates	Return Receipt	
Print Name: HAUSER, RAYMOND L Signature	Address: 2313 KAISER HOLLOW RD MONTGOMERYVILLE PA 17754		X		Sent 9/21/2016	9/29/2016	
Print Name: REEDER, MAX A ET AL Signature	Address: 118 GREEN ST MUNCY PA 17756		X		Sent 9/21/2016	9/28/2016	
Print Name: SHADDAY, E RAY Signature	Address: 1638 W SOUTHERN AVE SOUTH WILLIAMSPORT PA 17702		X		Sent 9/21/2016	9/26/2016	
Print Name: YOURISH, MICHAEL J & JANET F Signature	Address: 2780 CAREY HILL RD MONTGOMERYVILLE PA 17754		X		Sent 9/21/2016	9/26/2016	
Print Name: HORNING, SCOTT A & CHERYL E LANTZ Signature	Address: 2247 TALLMAN HOLLOW RD MONTGOMERYVILLE PA 17754		X		Sent 9/21/2016	9/26/2016	



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.

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

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

Farm Name - Well No. Hillegas 1		DEP ID 313418
Applicant Name No. Inflection Energy (PA) LLC		
DEP USE ONLY	APS No.	

		Notification				
		Note the means and attach proof.		Address Affidavit	Written Consent	
		Certified Mail Dates	Return Receipt			
Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <3000'	Municipalities	Sent	9/21/2016	9/29/2016
List the following: surface landowner, surface landowners 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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification						
Print Name: DAVIS, JILL M	Address: 300 CAREY HILL RD MONTGOMERYVILLE PA 17754					
Signature						
Print Name: YEAGLE, ELWOOD H & CONNIE J	Address: 876 YEAGLE RD MONTGOMERYVILLE PA 17754	X				
Signature						
Print Name: HANNA, WILLIAM L & NANCY L	Address: 2185 BACK ST MONTGOMERYVILLE PA 17754	X				
Signature						
Print Name: REEDER, MARCIA A	Address: 52 REEDER RD MONTGOMERYVILLE PA 17754	X				
Signature						
Print Name: CASE, MARTIN D & LORRAINE E	Address: 324 REEDER RD MONTGOMERYVILLE PA 17754	X				
Signature						

Record of Written Consent

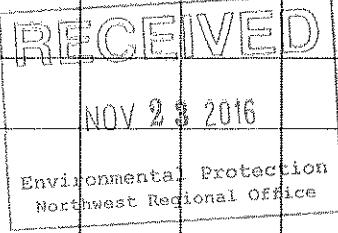
Written Consent: Signature below indicates the party's approval of the well location, or indicates written consent and waives the 15-day objection period where applicable.

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENTPERMIT APPLICATION TO DRILL AND OPERATE
AN UNCONVENTIONAL WELL
Record of Notification

Farm Name - Well No. Hillegas 1		DEP ID 313418
Applicant Name No.		
Infection Energy (PA) LLC		
DEP USE ONLY	APS No.	

List the following: surface landowner, surface landowners 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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification	Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <3000'	Municipalities	Notification Note the means and attach proof.			
					Certified Mail Dates	Return Receipt	Address Affidavit	
Print Name: DAVIDSON, MARK N & PATRICIA A Signature	Address: 315 MOUNTAIN BROOK LN MONTGOMERYVILLE PA 17754					9/21/2016	9/26/2016	
Print Name: CLARK, ARTHUR H & ELAINE G III Signature	Address: 1891 KAISER HOLLOW RD MONTGOMERYVILLE PA 17754	X				9/21/2016	9/29/2016	
Print Name: IFFLAND FARMS LLC Signature	Address: 5188 PEBBLE BEACH BLVD WINTER HAVEN FL 33884					9/21/2016	10/03/2016	
Print Name: DINGES, IVAN K & ANN Signature	Address: 54 TIMBERSTONE DR MONTGOMERYVILLE PA 17754	X				9/21/2016	9/26/2016	
Print Name: DINGES, IVAN K & ANN Signature	Address: 54 TIMBERSTONE DR MONTGOMERYVILLE PA 17754					9/21/2016	9/26/2016	



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:	☐ ☐ ☐

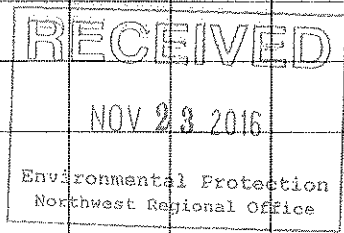


COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT

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

Farm Name - Well No. Hillegas 1		DEP ID 31341
Applicant Name No. Infection Energy (PA) LLC		
8	APS No.	
DEP USE ONLY		

		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors with water supplies <300'	Municipalities	Notification			
						Certified Mail Dates	Note the means and attach proof.	Written Consent	
List the following: surface landowner, surface landowners 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.									
Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification									
Print Name: HAUSER, RAYMOND L	Address: 2315 KAISER HOLLOW RD MONTGOMERYVILLE PA 17754			X			9/21/2016	9/29/2016	
Signature									
Print Name: ELDRED TOWNSHIP	Address: C/O TAMMY KOSER 5558 WARRENSVILLE RD MONTGOMERYVILLE PA 17754				X		9/21/2016	9/29/2016	
Signature									
Print Name: FAIRFIELD TOWNSHIP	Address: C/O RONALD E SPRINGMAN 834 FAIRFIELD CHURCH RD MONTGOMERYVILLE PA 17754				X		9/21/2016	9/26/2016	
Signature									
Print Name: PLUNKETS CREEK TOWNSHIP	Address: C/O RAY LEWIS 10751 RT 87 HWY WILLIAMSPORT PA 17701				X		9/21/2016		X
Signature									
Print Name: UPPER FAIRFIELD TOWNSHIP	Address: C/O PENNY RUGGIERI 4090 ROUTE 87 HIGHWAY MONTGOMERYVILLE PA 17754				X		9/21/2016	9/29/2016	
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.

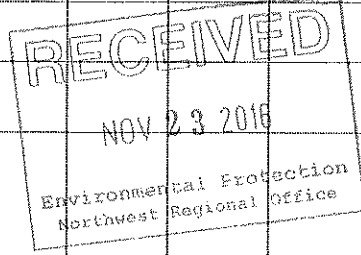
		Surface Owner		Check applicable box	
				Water Well within 500 feet	Building within 500 feet
Print and Sign Name:	Address:		Date:	☐	☐
Print and Sign Name:	Address:		Date:	☐	☐
Print and Sign Name:	Address:		Date:	☐	☐
Print and Sign Name:	Address:		Date:	☐	☐
Print and Sign Name:	Address:		Date:	☐	☐



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

Farm Name - Well No. Hillegas 1		DEP ID 313418
Applicant Name No.		
Infection Energy (PA) LLC		
DEP USE ONLY	AFS No.	

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. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification		Surface Landowner	Gas Storage Operator	Surface Landowners & Water Purveyors within 3,000'	Municipalities	Notification Note the means and attach proof. Certified Mail Dates		
						Sent	Return Receipt	Address Affidavit
Print Name: LOYALSOCK TOWNSHIP	Address: C/O SARAH HUGHES 25011 E 3RD ST WILLIAMSPORT PA 17701				X	9/21/2016	9/28/2016	
Signature								
Print Name: MUNCY TOWNSHIP	Address: C/O GWEN PIDCOE 1922 POND RD PENNSDALE PA 17756				X	9/21/2016	9/28/2016	
Signature								
Print Name: MILL CREEK TOWNSHIP	Address: C/O NORMA J ZEISLOFT 383 HIGHVIEW TERRACE MUNCY PA 17756				X	9/21/2016	10/03/2016	
Signature								
Print Name: LYCOMING COUNTY	Address: C/O KURT HAUSAMMANN 48 W 3RD ST WILLIAMSPORT PA 17701				X	9/21/2016	9/26/2016	
Signature								
Print Name:	Address:							
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	Water Well within 500 feet	Building within 500 feet
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐
☐	☐	☐	☐