



October 16, 2017

**CERTIFIED MAIL NO. 7013 0600 0001 3322 4325**

Ray Kemble  
11081 State Route 3023  
Montrose, PA 18801-8152

Re: Sample Results  
Complaint ID 330009  
Dimock Township, Susquehanna County

Dear Mr. Kemble:

On September 21, 2017, the Department collected samples from your water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results.

The sample results showed several compounds elevated above Department standards. Turbidity was present at 1.64 nephelometric turbidity units (NTU) which exceeds the primary maximum contaminant level (MCL) of 1 NTU. Manganese was detected at 0.446 mg/L which exceeded the secondary MCL of 0.05 mg/L. Primary MCLs are intended to reflect potential dangers to human health, while secondary MCLs reflect the aesthetics of the water (i.e. taste, smell, etc.). Additionally, the sample results showed methane is present at 2.03 mg/L in your water supply.

Methane is the predominant component of natural gas. Federal water standard limitations have not been established for methane gas. The level of concern begins above 28 mg/L methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 7 mg/L, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

Ray Kemble

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October 16, 2017

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

Should you have any questions concerning this matter, please feel free to contact me at 570.346.5539.

Sincerely,



Frank Hoehle  
Water Quality Specialist  
Eastern Oil and Gas District

Enclosures: Laboratory Analytical Results

cc: Michael O'Donnell, Environmental Group Manager  
Complaint File #330009

**Analytical Report For  
Oil And Gas Mgmt**

Sample ID: 9538 114

Date Collected: 09/21/2017

Lab Sample ID: I2017025648

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method
00410 ALKALINITY AS CaCO3 @ pH 4.5	117.8 MG/L	09/22/2017 02:52 PM	MTUZINSKI	SM 2320B
01105A ALUMINUM, TOTAL (WATER & WASTE) BY ICP	<200 UG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	6.050 UG/L	09/25/2017 09:53 AM	JOWERNER	EPA 200.8
01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.218 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
71870 BROMIDE BY ION CHROMATOGRAPHY	<0.2 MG/L	09/22/2017 12:00 AM	FVODOPIVEC	EPA 300.0
00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	31.328 MG/L	10/03/2017 12:54 PM	CREITMEYER	EPA 200.7
00900 HARDNESS, TOTAL (CALCULATED)	100 MG/L	10/03/2017 12:54 PM	CREITMEYER	SM 2340 B
** Comment ** Accredited by NJ only - accreditation not available from PA				
01045M IRON, TOTAL IN MG/L (WATER & WASTE) BY ICP	0.280 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	27.000 UG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	5.349 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	0.446 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
00403 pH, Lab (Electrometric)	8.4 pH units	09/22/2017 02:52 PM	MTUZINSKI	SM 4500H-B
** Comment ** Holding Time Exceeded				
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	1.210 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<7 UG/L	09/25/2017 09:53 AM	JOWERNER	EPA 200.8
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	16.110 MG/L	10/03/2017 12:54 PM	CREITMEYER	EPA 200.7
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	249.00 umhos/cm	09/22/2017 02:19 PM	MTUZINSKI	SM 2510B
01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP *	0.581 MG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7
00403T Temperature at which pH is measured	18.37 C	09/22/2017 02:52 PM	MTUZINSKI	SM 4500H-B
00940 Total Chloride-Ion Chromatograph	3.88 MG/L	09/22/2017 12:29 PM	FVODOPIVEC	EPA 300.0
70300 TOTAL DISSOLVED SOLIDS @ 180C	142 MG/L	09/22/2017 09:27 AM	JOMCCARTHY	SM 2540 C
00945 Total Sulfate-Ion Chromatograph	7.90 MG/L	09/22/2017 12:29 PM	FVODOPIVEC	EPA 300.0
00530 TOTAL SUSPENDED SOLIDS	<5 MG/L	09/22/2017 12:56 PM	JOMCCARTHY	USGS I-3765
82079 TURBIDITY, NEPHELMETRIC	1.64 NTU	09/22/2017 11:31 AM	JANJOHN	EPA 180.1
01092A ZINC, TOTAL (WATER & WASTE) BY ICP	<10.0 UG/L	09/28/2017 12:54 PM	CREITMEYER	EPA 200.7

The results of the analyses provided in this laboratory report relate only to the sample(s) identified therein. Unless otherwise noted, the results presented on this laboratory report meet all requirements of the 2009 TNI standard. Sample was in acceptable condition when received by the Laboratory. Any exceptions are noted in the report.  
\* denotes tests that the laboratory is not accredited for

Taru Upadhyay, Technical Director, Bureau of Laboratories

Sample ID: 9538 115

Date Collected: 09/21/2017

Lab Sample ID: O2017006787

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method
74840 Ethane	24.6 UG/L	09/22/2017 02:00 AM	DACLEMENS	BOL BOL6019
74828 Methane	2030 UG/L	09/22/2017 02:00 AM	DACLEMENS	BOL BOL6019
74986 Propane	14.2 UG/L (U)	09/22/2017 02:00 AM	DACLEMENS	BOL BOL6019

The results of the analyses provided in this laboratory report relate only to the sample(s) identified therein. Unless otherwise noted, the results presented on this laboratory report meet all requirements of the 2009 TNI standard. Sample was in acceptable condition when received by the Laboratory. Any exceptions are noted in the report.  
\* denotes tests that the laboratory is not accredited for

Taru Upadhyay, Technical Director, Bureau of Laboratories

#### ORGANICS LABORATORY QUALIFIERS

U - Indicates analysis was performed for the compound but it was not detected. The sample quantitation limit is reported.

J - Indicates an estimated value, below the quantitation limit, but above the method detection limit.

N - Indicates presumptive evidence of a compound.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

P - This flag is used with a target analyte when there is greater than a 25% difference between the results obtained from the primary and confirmation columns for dual column analysis methods (e.g. pesticides, triazines, PCBs, etc)

Q - This flag identifies the average of multiple results from multiple analyses, or the average of the averages of dual column analysis methods.

X - Non-target analytes co-elute with compound. Identification unable to be confirmed.



Date of Issue: 09/27/2017 04:09:25

DEP Bureau of Laboratories - Harrisburg  
P.O. Box 1467  
2575 Interstate Drive  
Harrisburg, PA 17105-1467

Contact Phone Number: (717) 346-7200

NELAP - accredited by \_\_\_\_\_

NJ DEP - Laboratory Number: PA059  
PA DEP LAP - DEP Lab ID: 22-00223

Analytical Report For  
Oil And Gas Mgmt

Sample ID: 9538 115

Date Collected: 09/21/2017

Lab Sample ID: O2017006787

Status: Completed

Name of Sample Collector: Francis Hoehle

Date Received: 09/22/2017

County: Susquehanna

State:

Municipality: Dimock Twp

RAY KEMBLE

11081 PA-3023

MONTROSE PA. 18801

Sample Medium: Gas

Sample Medium Type: Air (Gas)

Location: NOT INDICATED

Reason: Routine Sampling

Project: NOT INDICATED

Suite: METH

Matrix: Water

Legal Seal: 1012842	Intact: Yes
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Stream Condition:

Appearance: water clear, no free gas, no effervescence, slight odor of s



Date of Issue: 10/05/2017 04:08:32

DEP Bureau of Laboratories - Harrisburg  
P.O. Box 1467  
2575 Interstate Drive  
Harrisburg, PA 17105-1467

Contact Phone Number: (717) 346-7200

NELAP - accredited by

NJ DEP - Laboratory Number: PA059  
PA DEP LAP - DEP Lab ID: 22-00223

Analytical Report For  
Oil And Gas Mgmt

Sample ID: 9538 114

Date Collected: 09/21/2017

Lab Sample ID: I2017025648

Status: Completed

Name of Sample Collector: Francis Hoehle

Date Received: 09/22/2017

County: Susquehanna

State:

Municipality: Dimock Twp

RAY KEMBLE

11081 PA-3023

MONTROSE PA. 18801

Sample Medium: Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Routine Sampling

Project: NOT INDICATED

Standard Analysis: 946

Matrix: Water

Legal Seal: I012840	Intact: Yes
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Legal Seal: I012841	Intact: Yes
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Stream Condition:

Appearance: Water clear, no effervescence, no free gas, slight odor like