



December 8, 2015

**CERTIFIED MAIL NO. 7014 1820 0002 3638 3262**

[REDACTED]  
Coudersport, PA 16915

Re: Water Supply Request for Investigation 315537  
Determination -- 58 Pa. C.S § 3218  
Sweden Township, Potter County

Dear [REDACTED]

The Department has completed its investigation of your water supply located at the above referenced address ("Water Supply") in response to a complaint received on October 4, 2015 stating that cloudy water was noticed while filling a hot tub and that brown water was coming from the inside spigots around 09/27/2015.

Based on the sample results and other information obtained to date, the Department has determined that the Water Supply was not adversely affected by oil and gas activities, including but not limited to, the drilling, alteration, or operation of an oil or gas well. The information, upon which this determination is based, is summarized below.

On October 6, 2015 the Department visited the Water Supply to collect samples and gather information regarding the construction of the well and your observations. The well is located in a metal vault approximately 60 feet east of the house. Close examination of the well was impossible since there was no way to safely access the interior of the vault. There is no filter on the system. Department samples were collected from the outside spigot after purging the supply for 15 minutes; the water appeared clear and odorless at the time of sampling.

The samples results show no parameters exceeded Maximum Contaminant Levels (MCLs) in either the Department's samples collected on 10/6/15 or JKLM's samples collected on 10/4/15. Further, no Volatile Organic Compounds (VOCs) or Tentatively Identified Compounds (TICs) were detected in the VOA-DW sample.

Samples for semi-volatile organic analysis for drinking water (SVOA-DW) were also collected by the Department to identify potential sources of contamination, including those not associated with gas-drilling related activities that may have impacted the water supply. Bis(2-

CID - 315537

12/8/2015

Ethylhexylphthalate (0.00083 mg/L) was detected. This compound was also detected in the trip blank at 0.00062 mg/L.

Additionally, tentatively identified compounds (TICs) of ethyl 3-acetoxybutyrate, benzoic acid, octanoic acid, and substituted benzene were detected. The presence of TICs are not considered absolute or confirmed by the laboratory, but rather, indicates a spike of a compound for which the instrument was not calibrated. These compounds were also detected in the trip blank.

Please contact me at (570) 662-0845 or [mnuss@pa.gov](mailto:mnuss@pa.gov) if you have any questions about the Department's determination regarding the Water Supply.

Sincerely,



Matthew Nuss  
Water Quality Specialist Supervisor  
District Oil and Gas Operations

Enclosures:

Water Quality Sampling Results Tables  
Sample Results  
Fact Sheet – How to Interpret Sample Results

cc: Complaint ID - file 315537  
Sharon Steinbacher  
Chris Yeakel  
Dave Engle

#fileroom

OPEN-SOURCE V.1.1



**Table 1**  
**Reese Hollow Site**  
**Hartman Laboratory Analytical Results**

Results in mg/l unless otherwise noted.	JKLM sample 5J05010-01 10/4/2015	DEP Sample 0973-013, 014, 015, 016 10/6/2015	MCL (mg/l)  * Denotes Primary MCL
Strontium	0.0317	0.03	No Standard
Magnesium	5.47	4.816	No Standard
Manganese	<0.00230	<0.01	0.05
Barium	0.0802	0.079	*2
Calcium	13	11.7	No Standard
Iron	<0.0179	<0.02	0.3
TDS	70	106	500
TSS	5	<5	No Standard
Sodium	1.64	1.336	No Standard
Chloride	6.55	4.59	250
Hardness	55	49	No Standard
pH	6.41 pH units	6.3 pH units	6.5-8.5
Specific Cond.	138 umhos/cm	130.50 umhos/cm	No Standard
Alkalinity	<20	10.6	No Standard
Potassium	1.31	1.166	No Standard
Sulfate	12.9	12.04	250
Bromide	<0.116	<0.2	No Standard
Ethane	<0.0100	<0.0124	No Standard
Methane	<0.0250	<0.012	**7
Propane	<0.0150	<0.0142	No Standard
Turbidity	<1.00 NTU	<1 NTU	1 NTU
Lithium	<0.00354	<0.025	No Standard
Aluminum	<0.0459	<0.20	0.2
Arsenic	<0.00501	<0.003	*0.01
Selenium	<0.00449	<0.007	*0.05
Zinc	0.00819 <sup>J</sup>	0.016	5
Chromium	<0.00104	-	*0.1
Lead	<0.00338	-	***0.005
Nitrate as N	8.46	-	10
Nitrite as N	<0.12	-	1
MBAS	<0.0250	<0.20	0.5
Ethanol	-	<0.50	No Standard
Isopropanol	<0.0500	<0.50	No Standard
Methanol	-	<0.50	No Standard

- = Not analyzed

\*\* 7 mg/L represents the Department's unofficial action level for dissolved methane in groundwater.

<sup>J</sup> Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, result is an estimated value.

\*\*\*- The lead primary MCL is applicable only to bottled, vended, retail and bulk water hauling systems



**Table 2**  
**Reese Hollow Site**  
**Hartman Laboratory Analytical Results**

Results in ug/l unless otherwise noted.	JKLM Sample	DEP Sample	DEP Sample	MCL/MSCL (ug/l)
	5J05010-01 10/4/2015	0973-017 10/6/2015	0973-018 (Blank) 10/6/2015	
1,1,1,2-Tetrachloroethane	-	<0.250	<0.250	* Denotes Primary MCL
1,1,1-Trichloroethane	-	<0.250	<0.250	70
1,1,2,2-Tetrachloroethane	-	<0.250	<0.250	200*
1,1,2-Trichloroethane	-	<0.250	<0.250	0.84
1,1-Dichloroethane	-	<0.250	<0.250	5*
1,1-Dichloropropene	-	<0.250	<0.250	31
1,2,3-Trichlorobenzene	-	<0.250	<0.250	7*
1,2,3-Trichloropropane	-	<0.250	<0.250	No Standard
1,2,4-Trichlorobenzene	-	<0.250	<0.250	No Standard
1,2,4-Trimethylbenzene	-	<0.250	<0.250	No Standard
1,2-Dichlorobenzene	-	<0.250	<0.250	70*
1,2-Dichloroethane	-	<0.250	<0.250	15
1,2-Dichloropropane	-	<0.250	<0.250	600*
1,3,5-Trimethylbenzene	-	<0.250	<0.250	5*
1,3-Dichlorobenzene	-	<0.250	<0.250	5*
1,3-Dichloropropane	-	<0.250	<0.250	13
1,4-Dichlorobenzene	-	<0.250	<0.250	600
2,2-Dichloropropane	-	<0.250	<0.250	No Standard
2-Hexanone	-	<0.250	<0.250	75*
4-Isopropyltoluene	-	<1.25	<1.25	NS
Acetone	-	<0.250	<0.250	11
Benzene	<0.00500	<1.25	<1.25	No Standard
Bromobenzene	<0.000500	<0.250	<0.250	33,000
Bromochloromethane	-	<0.250	<0.250	5*
Bromodichloromethane	-	<0.250	<0.250	No Standard
Bromoform	-	<1.00	<1.00	90
Bromomethane	-	<1.00	<1.00	80
Carbon Tetrachloride	-	<0.250	<0.250	80
Chlorobenzene	-	<0.250	<0.250	10
Chloroethane	-	<0.250	<0.250	5*
Chloroethene (vinyl chloride)	-	<0.250	<0.250	100*
Chloroform	-	<0.250	<0.250	230
Chloromethane	-	<1.00	<1.00	2*
cis-1,2-Dichloroethene	-	<0.250	<0.250	80
cis-1,3-Dichloropropane	-	<0.250	<0.250	No Standard
Dibromochloromethane	-	<0.250	<0.250	70*
Dibromomethane	-	<1.00	<1.00	66 <sup>1</sup>
Dichlorodifluoromethane	-	<0.250	<0.250	80
Ethylbenzene	-	<0.250	<0.250	370
Hexachlorobutadiene	<0.000500	<0.250	<0.250	1,000
Isopropylbenzene	-	<0.250	<0.250	700*
m/p-Xylene	-	<0.250	<0.250	8.5
MEK	<0.000500	<0.500	<0.500	840
Methyl Tert-Butyl Ether	-	<1.25	<1.25	10,000* <sup>2</sup>
Methylene Chloride	-	<0.250	<0.250	4,000
MIBK	-	<0.250	<0.250	20
Naphthalene	-	<1.25	<1.25	5*
n-Butylbenzene	-	<0.250	<0.250	2,900
n-Propylbenzene	-	<0.250	<0.250	100
o-Chlorotoluene	-	<0.250	<0.250	1,500
o-Xylene	-	<0.250	<0.250	1,500
p-Chlorotoluene	<0.000500	<0.250	<0.250	100
Sec-Butylbenzene	-	<0.250	<0.250	10,000* <sup>2</sup>
Styrene	-	<0.250	<0.250	100
t-Butyl alcohol	-	<0.250	<0.250	1,500
Tert-Butylbenzene	-	<2.50	<2.50	100*
Tetrachloroethene	-	<0.250	<0.250	No Standard
Toluene	-	<0.250	<0.250	1,500
trans-1,2-Dichloroethene	<0.000500	<0.250	<0.250	5*
trans-1,3-Dichloropropane	-	<0.250	<0.250	1000*
Trichloroethene	-	<0.250	<0.250	100*
Trichlorofluoromethane	-	<0.250	<0.250	6.6**
Xylenes (total)	<0.00100	<0.250	<0.250	5*
				2,000
				10000*

<sup>1</sup> Not analyzed

\*\* 7 mg/L represents the Department's unofficial action level for dissolved methane in groundwater.

<sup>2</sup> VOCs were analyzed at a dilution due to the foamy nature of the sample.

<sup>3</sup> Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, result is an estimated value.

**Table 3**  
**Reese Hollow Site**  
**Hartman Laboratory Analytical Results**

Results in ug/l unless otherwise noted.	DEP Sample	DEP Sample	MCL/MSC
	0973-019	0973-020 (Blank)	(ug/l)
	10/6/2015	10/6/2015	* Denotes Primary MCL
2,2',3,3',4,4',6-Heptachlorobiphenyl	<0.21	<0.21	No Standard
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	<0.21	<0.21	No Standard
2,2',3,4,6-Pentachlorobiphenyl	<0.21	<0.21	No Standard
2,2',4,4',5,6'-Hexachlorobiphenyl	<0.21	<0.21	No Standard
2,2',4,4'-Tetrachlorobiphenyl	<0.21	<0.21	No Standard
2,3-Dichlorobiphenyl	<0.21	<0.21	No Standard
2,4,5-Trichlorobiphenyl	<0.21	<0.21	No Standard
2,4-Dinitrotoluene	<0.53	<0.54	2.1
2,6-Dinitrotoluene	<0.53	<0.54	37
2-Chlorobiphenyl	<0.21	<0.21	No Standard
Acenaphthylene	<0.21	<0.21	2,200
Alachlor	<0.21	<0.21	2*
Anthracene	<0.21	<0.21	66
Atrazine	<0.21	<0.21	3*
Benz(a)anthracene	<0.21	<0.21	0.29
Benzo(a)pyrene	<0.21	<0.21	0.2*
Benzo(b)fluoranthene	<0.21	<0.21	0.29
Benzo(g,h,i)perylene	<0.21	<0.21	0.26
Benzo(k)fluoranthene	<0.21	<0.21	0.55
bis(2-Ethylhexyl)adipate	<0.53	<0.54	400*
bis(2-Ethylhexyl)phthalate	<b>0.83<sup>B</sup></b>	<b>0.62<sup>B</sup></b>	6*
Bromacil	<0.53	<0.54	70
Butachlor	<0.21	<0.21	No Standard
Butylate	<0.21	<0.21	400
Butylbenzylphthalate	<0.21	<0.21	350
Chlorobenzilate	<0.21	<0.21	6
Chlorpropham	<0.21	<0.21	No Standard
Chrysene	<0.21	<0.21	1.9
cis-Permethrin	<0.63	<0.65	No Standard
Cycloate	<0.21	<0.21	No Standard
Dibenzo(a,h)anthracene	<0.53	<0.54	0.029
Dichlorvos	<0.21	<0.21	2.3
Diethylphthalate	<0.21	<0.21	29,000
Dimethylphthalate	<0.21	<0.21	5
Di-n-butylphthalate	<0.21	<0.21	3,700
Diphenamid	<0.21	<0.21	200
Dursban	<0.21	<0.21	2
EPTC	<0.21	<0.21	910
Ethoprop	<0.21	<0.21	No Standard
Fluorene	<0.21	<0.21	1,500
Hexachlorobenzene	<0.21	<0.21	1*
Hexachlorocyclopentadiene	<0.21	<0.21	50*
Hexazinone	<0.53	<0.54	400
Indeno-1,2,3-cd-pyrene	<0.53	<0.54	0.29
Isophorone	<0.21	<0.21	100
Methyl Paraoxon	<0.80	<0.82	No Standard
Metolachlor	<0.21	<0.21	700
Metribuzin	<0.21	<0.21	70
Mevinphos	<0.53	<0.54	5
MGK-264	<0.21	<0.21	No Standard
Molinate	<0.21	<0.21	No Standard
Napropamide	<0.21	<0.21	3,700
Norflurazon	<0.53	<0.54	No Standard
Pebulate	<0.21	<0.21	1,800
Pentachlorophenol	<0.86	<0.87	1*
Phenanthrene	<0.21	<0.21	1,100
Pronamide	<0.21	<0.21	2,700
Propachlor	<0.21	<0.21	NS
Propazine	<0.21	<0.21	10
Pyrene	<0.21	<0.21	130
Simazine	<0.21	<0.21	4*
Stirofos	<0.53	<0.54	No Standard
Terbacil	<0.21	<0.21	90
trans-Nonachlor	<0.21	<0.21	No Standard
trans-Permethrin	<0.63	<0.64	No Standard
Triadimefon	<0.21	<0.21	No Standard
Trifluralin	<0.53	<0.54	10
Vernolate	<0.21	<0.21	No Standard

- = Not analyzed

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

**Bold = Exceedance of Standard**





Date of Issue: 10/22/2015 04:06:22

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: 0973 013

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: I2015027265

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp



Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Standard Analysis: 946

Matrix: Water

Legal Seal:	I091181	Intact:	Yes
Legal Seal:	I091182	Intact:	Yes
Legal Seal:	I091183	Intact:	Yes

Stream Condition:

Appearance: clear, no odor



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 013

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: I2015027265

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
00410 ALKALINITY REPORTED @ pH 4.5	10.6 MG/L	10/07/2015 01:27 PM	TBEAR	SM 2320B
01105A ALUMINUM, TOTAL (WATER & WASTE) BY ICP	<200 UG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<3.0 UG/L	10/08/2015 02:10 PM	SCHOY	EPA 200.8
01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.079 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
71870 BROMIDE BY ION CHROMATOGRAPHY	<0.2 MG/L	10/07/2015 12:00 AM	FVODOPIVEC	EPA 300.0
00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	11.700 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
00900 HARDNESS, TOTAL (CALCULATED)	49 MG/L	10/08/2015 11:08 AM	MDEIGHAN	SM 2340 B
01045M IRON, TOTAL IN MG/L (WATER & WASTE) BY ICP	<0.02 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP *	<25 UG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	4.816 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	<0.01 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
00403 pH, Lab (Electrometric)	6.3 pH units	10/07/2015 01:27 PM	TBEAR	SM 4500H-B
** Comment ** Time Limit For Test Exceeded				
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	1.166 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<7 UG/L	10/08/2015 02:10 PM	SCHOY	EPA 200.8
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	1.336 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	130.50 umhos/cm	10/07/2015 01:51 PM	TBEAR	SM 2510B
01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP *	0.03 MG/L	10/08/2015 11:08 AM	MDEIGHAN	EPA 200.7
00940 Total Chloride-Ion Chromatograph	4.59 MG/L	10/07/2015 11:28 AM	FVODOPIVEC	EPA 300.0
70300 TOTAL DISSOLVED SOLIDS @ 180C	106 MG/L	10/07/2015 02:06 PM	JKAROL	SM 2540 C
** Comment ** Laboratory Blank out of Acceptance Range - Biased High				
00685 Total Inorganic Carbon	Cancelled	10/21/2015 11:38 AM	MAMCNULTY	SM 5310 C
** Comment ** No Separate Sample Received				
00945 Total Sulfate-Ion Chromatograph	12.04 MG/L	10/07/2015 11:28 AM	FVODOPIVEC	EPA 300.0
00530 TOTAL SUSPENDED SOLIDS	<5 MG/L	10/07/2015 12:16 PM	LWILKINSON	USGS I-3765
82079 TURBIDITY, NEPHELMETRIC	<1 NTU	10/07/2015 03:23 PM	TVOROBAYCH	EPA 180.1
01092A ZINC, TOTAL (WATER & WASTE) BY ICP	16.000 UG/L	10/08/2015 11:08 AM	MDEIGHAN	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

\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

Taru Upadhyay, Technical Director, Bureau of Laboratories



Sample ID: 0973 013

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: 12015027265

Status: Completed

Analytical Report For  
Oil And Gas Mgmt

#filler00om  
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Date of Issue: 10/09/2015 04:16:25

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: 0973 014

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: I2015027266

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

Municipality: Sweden Twp

State:

Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Standard Analysis: 200

Matrix: Water

Legal Seal: 1091184

Intact: Yes

Stream Condition:

Appearance: clear, no odor

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
38260 METHYLENE BLUE ACTIVE SUBSTANCE	<0.20 MG/L	10/07/2015 03:31 PM	MAMCNULTY	SM 5540 C
** Comment ** Continuing calibration recoveries high				



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 014

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: I2015027266

Status: Completed

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

\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

Taru Upadhyay, Technical Director, Bureau of Laboratories

#filler001  
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Date of Issue: 10/14/2015 04:09:46

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: 0973 016

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007652

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp



Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: WSOLA

Matrix: Water

Legal Seal:	1091188	Intact:	Yes
Legal Seal:	1091187	Intact:	Yes

Stream Condition:

Appearance: clear, no odor

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
64175 Ethanol	0.50 MG/L (U)	10/08/2015 02:00 AM	DACLEMENS	EPA 8015D

Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 016

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007652

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
67630 Isopropanol	0.50 MG/L (U)	10/08/2015 02:00 AM	DACLEMENS	EPA 8015D
67561 Methanol	0.50 MG/L (U)	10/08/2015 02:00 AM	DACLEMENS	EPA 8015D

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  
\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

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: 10/14/2015 04:06:51

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: 0973 015

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007648

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp

Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: METH

Matrix: Water

Legal Seal:	1091185	Intact:	Yes
Legal Seal:	1091186	Intact:	Yes

Stream Condition:

Appearance: clear, no odor

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
74840 Ethane	12.4 UG/L (U)	10/07/2015 02:00 AM	DACLEMENS	BOL BOL6019

Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 015

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007648

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
74828 Methane	12.0 UG/L (U)	10/07/2015 02:00 AM	DACLEMENS	BOL BOL6019
74986 Propane	14.2 UG/L (U)	10/07/2015 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

\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

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: 10/15/2015 04:13:49

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: 0973 017

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007618

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp



Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: VOADW

Matrix: Water

Legal Seal:	I091190	Intact:	Yes
Legal Seal:	I091189	Intact:	Yes

Stream Condition:

Sample Lab Comment: No Tentatively Identified compound was found in this sample.

Appearance: clear, no odor



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 017

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007618

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
630206 1,1,1,2-Tetrachloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
71556 1,1,1-Trichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79345 1,1,2,2-Tetrachloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79005 1,1,2-Trichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75343 1,1-Dichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75354 1,1-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
563586 1,1-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
87616 1,2,3-Trichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
96184 1,2,3-Trichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
120821 1,2,4-Trichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95636 1,2,4-Trimethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95501 1,2-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
107062 1,2-Dichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
78875 1,2-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108678 1,3,5-Trimethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
541731 1,3-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
142289 1,3-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
106467 1,4-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
594207 2,2-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
591786 2-Hexanone	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
99876 4-Isopropyltoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
67641 Acetone	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
71432 Benzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108861 Bromobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74975 Bromochloromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75274 Bromodichloromethane	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75252 Bromoform	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74839 Bromomethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
56235 Carbon Tetrachloride	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108907 Chlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75003 Chloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75014 Chloroethene (vinyl chloride)	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
67663 Chloroform	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74873 Chloromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
156592 cis-1,2-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
10061015 cis-1,3-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 017

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007618

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
124481 Dibromochloromethane	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74953 Dibromomethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75718 Dichlorodifluoromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
100414 Ethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
87683 Hexachlorobutadiene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
98828 Isopropylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108383 m/p-Xylene	0.500 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
78933 MEK	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
1634044 Methyl Tert-Butyl Ether	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75092 Methylene Chloride	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108101 MIBK	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
91203 Naphthalene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
104518 n-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
103651 n-Propylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95498 o-Chlorotoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95476 o-Xylene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
106434 p-Chlorotoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
135988 Sec-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
100425 Styrene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75650 t-Butyl alcohol	2.50 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
98066 Tert-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
127184 Tetrachloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108883 Toluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
156605 trans-1,2-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
10061026 trans-1,3-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79016 Trichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75694 Trichlorofluoromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2

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

\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

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: 10/15/2015 04:09:17

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: 0973 018

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007619

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

Municipality: Sweden Twp

State:

Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: VOADW

Matrix: Water

Legal Seal: 1091192

Intact: Yes

Legal Seal: 1091191

Intact: Yes

Stream Condition:

Sample Lab Comment: No Tentatively Identified compound was found in this sample.

Appearance: clear, no odor



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 018

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007619

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
630206 1,1,1,2-Tetrachloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
71556 1,1,1-Trichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79345 1,1,2,2-Tetrachloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79005 1,1,2-Trichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75343 1,1-Dichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75354 1,1-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
563586 1,1-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
87616 1,2,3-Trichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
96184 1,2,3-Trichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
120821 1,2,4-Trichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95636 1,2,4-Trimethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95501 1,2-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
107062 1,2-Dichloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
78875 1,2-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108678 1,3,5-Trimethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
541731 1,3-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
142289 1,3-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
106467 1,4-Dichlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
594207 2,2-Dichloropropane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
591786 2-Hexanone	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
99876 4-Isopropyltoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
67641 Acetone	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
71432 Benzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108861 Bromobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74975 Bromochloromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75274 Bromodichloromethane	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75252 Bromoform	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74839 Bromomethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
56235 Carbon Tetrachloride	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108907 Chlorobenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75003 Chloroethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75014 Chloroethene (vinyl chloride)	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
67663 Chloroform	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74873 Chloromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
156592 cis-1,2-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
10061015 cis-1,3-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 018

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007619

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
124481 Dibromochloromethane	1.00 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
74953 Dibromomethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75718 Dichlorodifluoromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
100414 Ethylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
87683 Hexachlorobutadiene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
98828 Isopropylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108383 m/p-Xylene	0.500 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
78933 MEK	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
1634044 Methyl Tert-Butyl Ether	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75092 Methylene Chloride	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108101 MIBK	1.25 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
91203 Naphthalene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
104518 n-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
103651 n-Propylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95498 o-Chlorotoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
95476 o-Xylene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
106434 p-Chlorotoluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
135988 Sec-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
100425 Styrene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75650 t-Butyl alcohol	2.50 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
98066 Tert-Butylbenzene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
127184 Tetrachloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
108883 Toluene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
156605 trans-1,2-Dichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
10061026 trans-1,3-Dichloropropene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
79016 Trichloroethene	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2
75694 Trichlorofluoromethane	0.250 UG/L (U)	10/07/2015 02:00 AM	ALIU	EPA 524.2

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

\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

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: 10/30/2015 04:18:39

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: 0973 019

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007667

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp



Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: SV-DW

Matrix: Water

Legal Seal:	1091194	Intact:	Yes
Legal Seal:	1091193	Intact:	Yes

Stream Condition:

Sample Lab Comment: TICs - ethyl 3-acetoxybutyrate; benzoic acid; octanoic acid; substituted benzene.

Appearance: clear, no odor



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 019

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007667

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
52663715 2,2',3,3',4,4',6-Heptachlorobi	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
40186718 2,2',3,3',4,5',6,6'-Octachloro	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
60233252 2,2',3',4,6-Pentachlorobipheny	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
60145224 2,2',4,4',5,6'-Hexachlorobiphe	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2437798 2,2',4,4'-Tetrachlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
16605917 2,3-Dichlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15862074 2,4,5-Trichlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
121142 2,4-Dinitrotoluene	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
606202 2,6-Dinitrotoluene	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2051607 2-Chlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
208968 Acenaphthylene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15972608 Alachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
120127 Anthracene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1912249 Atrazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
56553 Benz(a)anthracene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
50328 Benzo(a)pyrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low. Low-level LFB recovery low. Reporting limit may be biased low.				
205992 Benzo(b)fluoranthene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
191242 Benzo(g,h,i)perylene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
207089 Benzo(k)fluoranthene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
103231 bis(2-Ethylhexyl)adipate	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
117817 bis(2-Ethylhexyl)phthalate	0.83 UG/L (B)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
314409 Bromacil	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
23184669 Butachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2008415 Butylate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
85687 Butylbenzylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
510156 Chlorobenzilate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
101213 Chlorpropham	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
218019 Chrysene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
54774457 cis-Permethrin	0.63 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1134232 Cycloate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
53703 Dibenzo(a,h)anthracene	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
62737 Dichlorvos	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
84662 Diethylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 019

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007667

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
131113 Dimethylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
84742 Di-n-butylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
957517 Diphenamid	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2921882 Dursban	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
759944 EPTC	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
13194484 Ethoprop	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
EXTRACTED DATE	10072015 Day	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
86737 Fluorene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
118741 Hexachlorobenzene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
77474 Hexachlorocyclopentadiene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
51235042 Hexazinone	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
193395 Indeno-1,2,3-cd-pyrene	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
78591 Isophorone	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
950356 Methyl Paraoxon	0.80 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
51218452 Metolachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
21087649 Metribuzin	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
7786347 Mevinphos	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
113484 MGK-264	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2212671 Molinate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15299997 Napropamide	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
27314132 Norflurazon	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1114712 Pebulate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
87865 Pentachlorophenol	0.86 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
85018 Phenanthrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
23950585 Pronamide	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1918167 Propachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
139402 Propazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
129000 Pyrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
122349 Simazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
22248799 Stirofos	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
5902512 Terbacil	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
39765805 trans-Nonachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
51877748 trans-Permethrin	0.63 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
43121433 Triadimefon	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1582098 Trifluralin	0.53 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 019

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007667

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
1929777 Vernolate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
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 ** Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP				
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: 10/30/2015 04:04:24

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: 0973 020

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007668

Status: Completed

Name of Sample Collector: Christopher Yeakel

Date Received: 10/07/2015

County: Potter

State:

Municipality: Sweden Twp

Sample Medium: Ground Water

Sample Medium Type: Water

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Suite: SV-DW

Matrix: Water

Legal Seal:	1091196	Intact:	Yes
Legal Seal:	1091195	Intact:	Yes

Stream Condition:

Sample Lab Comment: TICs - acetophenone; ethyl 3-acetoxybutyrate; benzoic acid; hexadecanoic acid and substituted phenol.

Appearance: clear, no odor



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 020

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007668

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
52663715 2,2',3,3',4,4',6-Heptachlorobi	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
40186718 2,2',3,3',4,5',6,6'-Octachloro	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
60233252 2,2',3',4,6-Pentachlorobipheny	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
60145224 2,2',4,4',5,6'-Hexachlorobiphe	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2437798 2,2',4,4'-Tetrachlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
16605917 2,3-Dichlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15862074 2,4,5-Trichlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
121142 2,4-Dinitrotoluene	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
606202 2,6-Dinitrotoluene	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2051607 2-Chlorobiphenyl	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
208968 Acenaphthylene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15972608 Alachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
120127 Anthracene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1912249 Atrazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
56553 Benz(a)anthracene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
50328 Benzo(a)pyrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low. Low-level LFB recovery low. Reporting limit may be biased low.				
205992 Benzo(b)fluoranthene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
191242 Benzo(g,h,i)perylene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
207089 Benzo(k)fluoranthene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
103231 bis(2-Ethylhexyl)adipate	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
117817 bis(2-Ethylhexyl)phthalate	0.62 UG/L (B)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
314409 Bromacil	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
23184669 Butachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2008415 Butylate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
85687 Butylbenzylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
510156 Chlorobenzilate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
101213 Chlorpropham	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
218019 Chrysene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
54774457 cis-Permethrin	0.65 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1134232 Cycloate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
53703 Dibenzo(a,h)anthracene	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
62737 Dichlorvos	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
84662 Diethylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 020

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007668

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
131113 Dimethylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
84742 Di-n-butylphthalate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
957517 Diphenamid	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2921882 Dursban	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
759944 EPTC	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
13194484 Ethoprop	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
EXTRACTED DATE	10072015 Day	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
86737 Fluorene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
118741 Hexachlorobenzene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
77474 Hexachlorocyclopentadiene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
The second source standard recovery was low. Results and/or reporting limits may be biased low.				
51235042 Hexazinone	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
193395 Indeno-1,2,3-cd-pyrene	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
78591 Isophorone	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
950356 Methyl Paraoxon	0.82 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
51218452 Metolachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
21087649 Metribuzin	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
7786347 Mevinphos	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
113484 MGK-264	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
2212671 Molinate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
15299997 Napropamide	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
27314132 Norflurazon	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1114712 Pebulate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
87865 Pentachlorophenol	0.87 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
85018 Phenanthrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
23950585 Pronamide	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1918167 Propachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
139402 Propazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
129000 Pyrene	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
122349 Simazine	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
22248799 Stirofos	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
5902512 Terbacil	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
39765805 trans-Nonachlor	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
51877748 trans-Permethrin	0.64 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
43121433 Triadimefon	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2
1582098 Trifluralin	0.54 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2



Analytical Report For  
Oil And Gas Mgmt

Sample ID: 0973 020

Date Collected: 10/06/2015 11:52:00 AM

Lab Sample ID: O2015007668

Status: Completed

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Analyst	Test Method
1929777 Vernolate	0.21 UG/L (U)	10/17/2015 02:00 AM	JKUBEIKA	EPA 525.2

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  
\*\* Laboratory is accredited by NJ NELAP, parameter not offered by PA LAP

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.