Ansell, Mark

From:	Oprendek, Anthony
Sent:	Tuesday, February 03, 2009 2:40 PM
To:	Kucsma, Paul; Lobins, Craig; Ansell, Mark; O'Donnell, Michael
Subject:	FW: 1/22/09 water sample results

Just FYI. She is not the only one getting a little anxious about things. Not sure how to respond outside of we're working on it. Can we tell Cabot to give them water? Are we waiting on Fred? -----Original Message-----From: valdema5@aol.com [mailto:valdema5@aol.com] Sent: Tuesday, February 03, 2009 2:24 PM To: Oprendek, Anthony

Subject: Re: 1/22/09 water sample results

Hi Tony! I hate to keep on being a pain in the butt, but. Our water changes color on almost a daily basis. My toilets, showers, and sinks are almost always dirty. We noticed the problem in the beg. of Nov. and I'm sure it started in Oct. Our water becomes more flammable on an almost daily basis as well. When Cabot has someone test it they say it's not bad and if it's at the level they say it shouldn't ignite like it does. Cabot trucks zoom in and out almost every day sometimes more than once a day. Nothing is being done. I know it isn't your fault and I don't want to be nasty or mean to you but enough is enough. When are they going to have to do something about this? If I contaminated someone's water I'm sure I would be held accountable and have to correct it. They should be as well and I think they should have done something long before now. Again, I'm sorry for ranting at you. Thanks, Debbie Mave

-----Original Message-----From: Oprendek, Anthony <aoprendek@state.pa.us> To: 'valdema5@aol.com' <valdema5@aol.com> Cc: O'Donnell, Michael <miodonnell@state.pa.us>; Ansell, Mark <mansell@state.pa.us> Sent: Fri, 30 Jan 2009 2:27 pm Subject: RE: 1/22/09 water sample results

Thanks Debbie. Again, Methane seems to be the only elevated parameter for this sample, and I think the sample was collected before Cabot began venting the Baker well. Still not sure whether there is a connection or not. Mike or I will let you know whether our 1/29 sample showed a decrease in methane. Also, in case we've neglected to get our previous results to you, I will send Mike's results from 11/19/08, 12/16/08 and 1/12/09 in separate emails. As always, don't hesitate to call anytime. Tony

-----Original Message-----From: valdema5@aol.com [mailto:valdema5@aol.com] Sent: Friday, January 30, 2009 1:55 PM To: Oprendek, Anthony Subject: Fwd: 1/22/09 water sample results

----Original Message-----

5

From: Wesley Smith < <u>wesley.smith@cabotog.com</u>> To: <u>valdema5@aol.com</u> Sent: Fri, 30 Jan 2009 12:54 pm Subject: 1/22/09 water sample results

See attached....

Wesley A. Smith Assistant Coal & Survey Coordinator Cabot Oil & Gas Corp. - East Region Telephone - 304-347-1637 Fax - 304-347-1635 email: wesley.smith@cabotog.com

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Great Deals on Dell Laptops. Starting at \$499.

Ansell, Mark

From: Sent: To: Subject:

Welsh, Douglas Tuesday, February 03, 2009 10:00 AM Lobins, Craig; Kucsma, Paul; Gleeson, Robert; Oprendek, Anthony; Ansell, Mark Dimock Morning Report

The Baker is still venting. No rig on site. The service rig is still on the Costello 2. A gas sample was collected from the 7" as requested. Gesford 3A, 498' and tripping out of the hole. They think they missed the target or drilled out of the hole. A logging unit is scheduled to be there at 4PM to try to find out what happened. Ely 4 is not venting. Costello 1 is venting. Cabot is fishing on the Costello 2. Tripping out of the hole on the Ratzel to rig up the down hole assembly at 5920'. The Ely 5H is at a TD of 10,392'. Waiting on Cabot for pressures.

7

Douglas Welsh | Oil & Gas Inspector Supervisor Department of Environmental Protection 230 Chestnut Street | Meadville, PA 16335 Phone: 814-332-6854 | Fax: 814-332-6120 www.depweb.state.pa.us

Kucsma, Paul

From:Welsh, DouglasSent:Wednesday, January 28, 2009 9:10 AMTo:Lobins, Craig; Kucsma, Paul; Oprendek, Anthony; Ansell, MarkSubject:Herb's update.

1/27/09

Susquehanna County Commissioner Marianne Warren (570-278-4600 ext 108)left Herb a message that she wanted to know what was going on in Dimock. He gave Freda the name and phone number.

Baker 1 4 1/2" 520# 7" is venting. Guess, a couple thousand a day. Costello 1 4 1/2" 750# 7" is venting. Guess, a couple thousand a day. Costello 2 problems fracking, tubing parted, will be fishing. Gesford 3A at 286' and the rig was broke down. No gas was apparent in the Gesford 3 cellar. Ely 5H mud pump went down. Ely 4H tubing 1000#, 4 1/2" 1050#, 7" 1100#.

Potter County Ohl complaint. Mr. Bishop called him and asked if he thought the well had integrity.

Douglas Welsh | Oil & Gas Inspector Supervisor Department of Environmental Protection 230 Chestnut Street | Meadville, PA 16335 Phone: 814-332-6854 | Fax: 814-332-6120 www.depweb.state.pa.us

FOR IMMEDIATE RELEASE Jan. 23, 2009

COMMONWEALTH OF PENNSYLVANIA Department of Environmental Protection Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711

CONTACT: Mark Carmon (570) 826-2511

DEP CONTINUING INVESTIGATION INTO HIGH METHANE LEVELS IN SUSQUEHANNA COUNTY WATER WELLS Elevated Natural Gas Found in Four Water Wells, But Not in Nearby Homes

HARRISBURG – An ongoing investigation in Dimock Township, Susquehanna County, by the Department of Environmental Protection has discovered elevated natural gas levels in four water wells, but not at levels that pose a risk of danger. Gas has not been found in any of the nearby homes.

DEP staff have been working since Jan. 1 to identify the source of elevated natural gas levels in water wells along Carter Road. Investigators assessed water wells and living space at more than 20 residences in the rural area about 25 miles north of Scranton.

"This is an ongoing process and we will continue to evaluate and investigate areas around homes and wells," said Department of Environmental Protection Northeast Regional Director Mike Bedrin. "Three additional residents alerted us early this week about possible natural gas in and around their homes and the department acted quickly, mobilizing staff and investigating the area."

Using a diagnostic procedure called isotopic analysis, the department sampled gas from two nearby gas wells, a pipeline and two water wells in an attempt to determine the source of the migrating gas. Isotopic analysis compares the chemistry of the gas from the various sources to determine if there are chemical similarities. The results analysis is ongoing. The department is also reviewing records from recently drilled wells in the area.

DEP is sending letters to residents in the study area regarding the investigation and providing information about precautions that residents can take.

Drinking water standard limitations have not been established for natural gas and associated health risks have not been identified.

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FOR IMMEDIATE RELEASE Jan. 21, 2009

COMMONWEALTH OF PENNSYLVANIA Department of Environmental Protection Northwest Regional Office 230 Chestnut St. Meadville, PA 16335

CONTACT: Teresa Candori (717) 332-6816

DEP CONTINUES INVESTIGATION INTO HIGH METHANE LEVELS IN SUSQUEHANNA COUNTY WATER WELLS

HARRISBURG: Ever since January 1, Department of Environmental Protection staff have been working on identifying the source of natural gas that has surfaced in a number of water wells along Carter Road in Dimock Township, Susquehanna County.

DEP investigators assessed water wells and living space at over ten residences in the rural area about 25 miles north of Scranton. Gas was found at four of the water wells while no gas was found within the homes.

"This is an ongoing process and we continue to evaluate homes and wells," said ______. "Three more residences came to our attention over the weekend and we have added those homes to our investigation."

DEP also sampled gas from two gas wells, a pipeline and two water wells for isotopic analysis. The isotopic analysis will compare the chemistry of the gas from the various sources to determine if the chemical make up is similar.

In addition, the department is reviewing well records from recently drilled wells.

Cabot Oil and Gas Corporation is the only well operator drilling in the area. DEP has apprised Cabot of the investigation and the company has been cooperative.

DEP is sending letters to residents in the study area regarding the investigation and providing fact sheets on precautions that residents can take.

Drinking water standard limits have not been established for natural gas. Associated health risks have not been identified.

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Lobins, Craig

From:	Pitcavage, Robert
Sent:	Thursday, January 08, 2009 1:40 PM
То:	Bedrin, Michael; Greenfield, Gary; Agustini, Dino; Manner, William; O'Donnell, Michael; Augustine, Kevin; Carmon, Mark
Cc:	Gaito, Jill; Lobins, Craig; Knaus, Ann
Subject:	FW: Norma Fiorentini

See the attached e-mail from Ed Z from Congressman Carney's Office. Please keep Ed updated on this case, (As most of you Congressman Carney lives in the Dimock area) Thank you -----Original Message----- **From:** Zygmunt, Ed [mailto:Ed.Zygmunt@mail.house.gov] **Sent:** Thursday, January 08, 2009 12:40 PM **To:** Pitcavage, Robert **Subject:** Norma Fiorentini

Bob,

Mrs. Fiorentini from Dimock has called here a couple of times. I know DEP is on top of the situation with her water well exploding. I told her we would contact DEP just to reinforce her concerns. If you here anything regarding her water quality test results, I'd appreciate getting a summary from you. She told me someone tested her well yesterday and it showed a 60% gas level, whatever that means.

Thanks,

Ed

Ed Zygmunt, Field Representative

Office of Rep. Christopher P. Carney

233 Northern Blvd., Suite 4

Clarks Summit, PA 18411

570-585-9866

ed.zygmunt@mail.house.gov



Methane Gas and Your Water Well

Residents of the coal and natural gas producing regions of Pennsylvania need to be aware of the potential dangers from the accumulation of coal bed methane, or natural gas, in their water wells.

High concentrations of methane in water wells, water well enclosures and other confined spaces could cause an explosion.

What is Methane?

Methane (CH₄) is a naturally occurring hydrocarbon gas found underground. It is formed by microbial and thermogenic processes and is present in shallow and deep coal beds as well as other rock units. It is the main hydrocarbon found in natural gas, coal bed gas, and can occur naturally in some aquifer systems. Methane can occur dissolved in the groundwater or as a gas in the soil and rock zones below the surface.

Methane migrates from areas of high pressure to areas of low pressure. Mining and well drilling operations can affect the pressure in the subsurface and cause the migration of methane to areas of lower pressure such as shallow aquifers, and water wells used as water supplies. Gas migration in the subsurface can also be influenced by an increase or decrease in the water level of an aquifer.

Active underground mining operations can lower groundwater levels, reducing pressure in aquifers occurring above and adjacent to the area of coal extraction. This reduction in pressure can allow gases within the overlying rock layers to migrate into nearby water wells. Methane can also be released from abandoned deep mines, and from abandoned gas wells that are prone to leakage. These releases can also migrate into nearby water wells.

Methane can migrate into water wells in a gaseous phase or dissolved in the ground water. At atmospheric pressure, methane is soluble in water between 26-32 mg/l. It is some times recognizable as effervescent gas bubbles in water drawn from a faucet. In some cases, the release of methane in a water well may be recognized by a sound similar to that of boiling water. However, methane is a colorless and odorless gas, and may accumulate undetected in water well bores and water well enclosures that are not properly vented. Methane may also move into basements of homes and other structures through plumbing and piping containing electrical connections. These conditions could lead to an explosion.

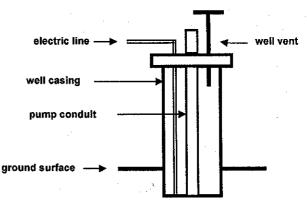
What Can You Do?

Methane is lighter than air with a specific gravity of .555. As such, methane will not accumulate in the water well bore if the water well is properly vented to the atmosphere. Venting is an inexpensive and effective way to prevent methane accumulation in water wells, water well enclosures and other confined spaces, such as basements. Proper venting eliminates the potential for methane gas to seep into homes or structures from water wells.

Recommended Venting Procedures

Well vents provide an exit for methane trapped in water well bores or water well enclosures. Proper design is extremely important.

The vent should extend above any possible flood level, potential ignition sources, and areas of exposure, and should have watertight connections to prevent surface water from entering. The well vent should be at least one (1) inch diameter or larger to facilitate gas flow. The end of the vent pipe should have a down-turned "gooseneck" or "T" and be capped with corrosion-resistant



FACT SHEET

screening. If the vent is not screened, it can become a potential entry point for debris and small animals. In addition, conduits from the water well that carry electrical lines or waterlines into the building should be

Lobins, Craig

From: Lobins, Craid Monday, February 02, 2009 9:38 AM Sent: To: Winschuh, Charles Bedrin, Michael; O'Donnell, Michael; Oprendek, Anthony; Kucsma, Paul; Ansell, Mark Cc: Subject: Water Supply sampling

Mr. Winschuh -

Unfortunately the Department doesn't routinely perform this service. Last year we issued 8,000 drilling permits so you can imagine the huge expense and workload the department would have in sampling water supplies near drilling locations.

However, the gas drilling operator typically samples water supplies within 1000 feet before the gas well is drilled. This sampling is not required but 99% of the Operators do this. The Oil and Gas law presumes that a well operator is responsible for pollution of a water supply that is within 1,000 feet of the oil and/or gas well, where pollution occurred within 6 months after completion of drilling or alteration of such well. Unless the Operator can demonstrate the pollution existed prior to the drilling/alteration activity, i.e., predrill water sample.

With all that said, please send me your address & phone number and if you are located within our investigation area we will contact you to schedule a sample. ÷.

Sincerely, Craig Lobins Regional Oil & Gas Mgr

-----Original Message-----From: Winschuh, Charles Sent: Friday, January 23, 2009 8:21 AM To: EP, Contact Us Subject: Dimock PA gas well tests.

N N N N

Dear DEP, My name is Charles Winschuh. I live in Dimock Township PA. The media has reported that DEP is testing residential water wells in my Township due to suspected problems related to natural gas drilling. A gas well drilling pad has been constructed adjacent to my property/residence. My property is not under lease with any gas company due to my concerns about environmental impact. Can DEP test my well water so that I have a benchmark test before they start drilling this well? Thank you

1

Lobins, Craig

From:	Ansell, Mark
Sent:	Thursday, January 29, 2009 2:48 PM
То:	Gleeson, Robert; Lobins, Craig
Subject:	Switzer phone call

Bob and Craig,

I have been in contact with Victoria Switzer and she has several questions that I was unable to answer. She is predominantly concerned for her quality of life, the lack of inspectors, assurance that pits are being closed properly and that future gas wells will be drilled without problems. She was informed of the developments of the investigation and Mike O'Donnell sampled her well on Wed. 1/28/09. I sent her a copy of the letter sent to all area residents today. She would appreciate a call back. Thanks, Mark Victoria Switzer: H:(579) 278-0223, W:(570) 278-9222



Pennsylvania Department of Environmental Protection

230 Chestnut Street Meadville, PA 16335-3481 January 22, 2009

Northwest Regional Office

814-332-6860 Fax: 814-332-6121

«line1» «line2» «line3»

Dear «line1»:

This correspondence is intended to make you aware that the Department of Environmental Protection is investigating a potential stray gas migration that has been reported in your neighborhood. Departmental representatives may already have contacted you in order to sample your water supply or to determine if combustible gas was present in your residence. If you have been contacted, thank you for your cooperation and be assured that all analytical results will be provided to you as soon as they become available.

A fact-sheet on fugitive gas migration is enclosed with this correspondence. The information is being provided to all residents in the vicinity regardless if gas has been encountered at their property. The fact-sheet contains important information and provides suggestions for actions that you may take to ensure your safety. Specifically, because combustible gas has been encountered in a few water wells in the area, please carefully review the recommended venting procedures found in the fact sheet.

At this time the source of the potential fugitive gas migration has not been determined. Please be aware that the Department is working diligently to assess the situation and will take measures to keep you informed and to protect public health and safety. Please contact Mark Ansell at the letterhead address and telephone number with any questions regarding this matter.

Sincerely,

5. Gring Lot

S. Craig Lobins Regional Manager Oil and Gas Management

Enclosures

SCL:MA:ll

www.dep.state.pa.us



Methane Gas and Your Water Well

Residents of the coal and natural gas producing regions of Pennsylvania need to be aware of the potential dangers from the accumulation of coal bed methane, or natural gas, in their water wells.

High concentrations of methane in water wells, water well enclosures and other confined spaces could cause an explosion.

What Is Methane?

Methane (CH₄) is a naturally occurring hydrocarbon gas found underground. It is formed by microbial and thermogenic processes and is present in shallow and deep coal beds as well as other rock units. It is the main hydrocarbon found in natural gas, coal bed gas, and can occur naturally in some aquifer systems. Methane can occur dissolved in the groundwater or as a gas in the soil and rock zones below the surface.

Methane migrates from areas of high pressure to areas of low pressure. Mining and well drilling operations can affect the pressure in the subsurface and cause the migration of methane to areas of lower pressure such as shallow aquifers, and water wells used as water supplies. Gas migration in the subsurface can also be influenced by an increase or decrease in the water level of an aquifer.

Active underground mining operations can lower groundwater levels, reducing pressure in aquifers occurring above and adjacent to the area of coal extraction. This reduction in pressure can allow gases within the overlying rock layers to migrate into nearby water wells. Methane can also be released from abandoned deep mines, and from abandoned gas wells that are prone to leakage. These releases can also migrate into nearby water wells.

Methane can migrate into water wells in a gaseous phase or dissolved in the ground water. At atmospheric pressure, methane is soluble in water between 26-32 mg/l. It is some times recognizable as effervescent gas bubbles in water drawn from a faucet. In some cases, the release of methane in a water well may be recognized by a sound similar to that of boiling water. However, methane is a colorless and odorless gas, and may accumulate undetected in water well bores and water well enclosures that are not properly vented. Methane may also move into basements of homes and other structures through plumbing and piping containing electrical connections. These conditions could lead to an explosion.

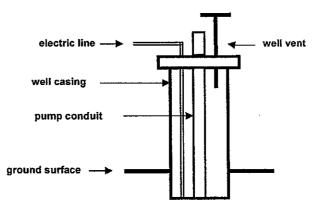
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screening. If the vent is not screened, it can become a potential entry point for debris and small animals. In addition, conduits from the water well that carry electrical lines or waterlines into the building should be

sealed so that the air in the conduit does not vent into the building. Well venting will not appreciably remove methane dissolved in the groundwater, however, properly designed water aeration systems are an effective way to lower the concentration of methane dissolved in the water.

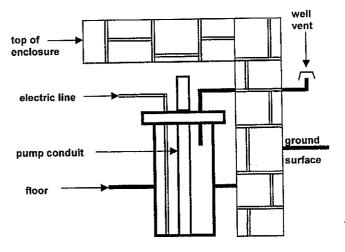
Enclosed Wells

1.1

When the top of the water well is buried in a covered pit or enclosed in a basement, the vent pipe must vent gas to the outside air, as shown in the diagram below.

The vent pipe should be screened, and extend above any possible flood level, potential ignition sources, and areas of exposure.

In cases where the water well is located in an enclosure, it should have a tight-fitting well cap, and all openings through the cap should be properly sealed to prevent methane from escaping into the water well enclosure.



Play It Safe

When a water well is no longer in service, the plumbing connections should be disconnected and sealed to prevent methane from entering the home or building.

NOTE: Your water well may differ considerably from the wells depicted in the diagrams. Also, well venting requirements may vary from place to place due to differences in local plumbing codes. Therefore, water well owners are encouraged to contact a professional water well specialist or a local building code enforcement officer to determine the proper venting procedures required under the local plumbing code.

For more information on methane and water wells, please contact the DEP Office in your area.

Southwest Regional Office

400 Waterfront Dr. Pittsburgh, PA 15222 Telephone: 412-442-4000 *Counties Served: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland.*

Southcentral Regional Office

909 Elmerton Avenue Harrisburg, PA 17110 Telephone: 877-333-1904 *Counties Served: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and* York.

Southeast Regional Office

2 East Main Street Norristown, PA 19401 Telephone: 484-250-5900 *Counties Served: Bucks, Chester, Delaware, Montgomery, and Philadelphia*

Northeast Regional Office

2 Public Square Wilkes-Barre, PA 18711-0790 Telephone: 570-826-2511 Counties Served: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming

Northcentral Regional Office

208 West Third Street, Suite 101 Williamsport, PA 17701-6448 Telephone: 570-327-3636 *Counties Served: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union*

Northwest Regional Office

230 Chestnut Street Meadville, PA 16335 Telephone: (814) 332-6945 Counties Served: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, Mckean, Mercer, Venango, and Warren.

For more information, visit www.depweb.state.pa.us, keyword: Wells.

Commonwealth of Pennsylvania www.depweb.state.pa.us

line1	line2	line3
Karl A. and Colleen Gesford	RR 6, Box 6163	Montrose, PA 18801
Ronald and Jean Carter	P.O. Box 82	Dimock, PA 18816
Martin and Patricia Farnelli	RR 6, Box 6151	Montrose, PA 18806
Timothy and Deborah Maye	RR 6, Box 6147A	Montrose, PA 18801
Frederick and Jessica Hein	RR 6, Box 6148	Montrose, PA 18801
Craig and Julie Sautner	RR 6, Box 6147	Montrose, PA 18801
Gene R. and Denise A. Hubbard	P.O. Box 70	Dimock, PA 18816
Lawrence and Paula Scartozzi	RR 6, Box 6208A	Montrose, PA 18801
Jesse and Marda Wells	RR 6, Box 6207	Montrose, PA 18801
James B. and Julie Costello	RR 1, Box 6176C	Montrose, PA 18801
William and Sheila Ely	RR 1, Box 6176	Montrose, PA 18801
Raymond Kemble and Lorna L. Schoperth	RR 1, Box 6177	Montrose, PA 18801
Kenneth R. Ely	P.O. Box 23	Dimock, PA 18816
Nolen Scott Ely	P.O. Box 39	Dimock, PA 18816
Ronald James Teel	RR 6, Box 6182	Montrose, PA 18801
Robert and Mary Jane Christian	Box 41	Dimock, PA 18816
Cory and Phyllis Cohen	RR 6, Box 6171	Montrose, PA 18801

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Oprendek, Anthony

From:valdema5@aol.comSent:Monday, February 09, 2009 9:13 AMTo:Oprendek, AnthonySubject:water

Hi Tony! Sorry to bother you. Can you tell me why Cabot continues to send people to our house? They come on an almost daily basis, they fly down the driveway, and they seem to get upset if and when they don't come in. The other wk. they sent two people, they claimed they drilled a new hole in the vent pipe they put in. They tested the water in the kitchen. They did it differently than the man they had been sending. When I questioned the difference in the way they were testing they told me if the other man wasn't doing it the way they were then he wasn't doing it right. Lately we don't answer the door. If they aren't going to give their names, who they work for, a phone #, or anything like that and they are getting the wrong results when they test they don't need to be here. I'm going to bet that none of them have any clearances or ins. either. Our water still ignites when you put it in a bottle. At what point is enough enough and will they step up and provide us with water and take responsibility for what they have done. It looks like most of the other people on our street have been taken care of. Thanks for your time,

Debbie Maye 570-278-1788

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Page 1 of 3

Oprendek, Anthony

From:Oprendek, AnthonySent:Friday, February 06, 2009 11:49 AMTo:'valdema5@aol.com'Subject:RE: 1/22/09 water sample results

You're absolutely correct. Sorry about that....I've been dealing with so many different labs and samples lately, I thought you were referring to a Cabot sample. If you are looking at our 12/16/08 results, the "time limit exceeded is for the pH test, because the results drift rapidly as time goes by. You will likely see that statement on every result for pH. However, we are basically looking for any pH results that are way out of line, and your pH is normal, even with the time lapse. The comment about the blank being out of acceptance range means that they checked the test results for your Chlorides by analyzing a sample that is known to have no chlorides present. It's just a check to make sure their instruments are reading properly. That statement tells me that their test for chlorides were reading somewhat high when your water was analyzed. Therefore, your result of 20.8 mg/l for Chloride may be higher than the true concentration in your water. That's good, since your reported result of 20.8 mg/l is way below the maximum limit that sends up the red flag (250 mg/l). Again, sorry for the confusion. I should have Mike's methane sample results from 1/29 later today or tomorrow. I'll email them as soon as I can. In the meantime, call or email anytime. Tony

-----Original Message----- **From:** valdema5@aol.com [mailto:valdema5@aol.com] **Sent:** Friday, February 06, 2009 10:24 AM **To:** Oprendek, Anthony **Subject:** Re: 1/22/09 water sample results

These statements are on the results you sent me. Aren't these from your lab? Thanks, Debbie

-----Original Message-----From: Oprendek, Anthony <aoprendek@state.pa.us> To: 'valdema5@aol.com' <valdema5@aol.com> Sent: Fri, 6 Feb 2009 7:58 am Subject: RE: 1/22/09 water sample results

Groundwater and well water are the same thing. We'll have to ask Cabot or their lab about the other statements.

-----Original Message----- **From:** valdema5@aol.com [mailto:valdema5@aol.com] **Sent:** Monday, February 02, 2009 11:12 AM **To:** Oprendek, Anthony **Subject:** Re: 1/22/09 water sample results

Thank you! Can you please tell me why these say it's ground water. Isn't it well water. They also say "Time limit for test exceeded" and "Laboratory Blank out of Acceptance Range - Biased High" Thank you, Debbie Maye -----Original Message-----From: Oprendek, Anthony <<u>aoprendek@state.pa.us</u>> To: '<u>valdema5@aol.com</u>' <<u>valdema5@aol.com</u>> Cc: O'Donnell, Michael <<u>miodonnell@state.pa.us</u>>; Ansell, Mark <<u>mansell@state.pa.us</u>> Sent: Fri, 30 Jan 2009 2:27 pm Subject: RE: 1/22/09 water sample results

Thanks Debbie. Again, Methane seems to be the only elevated parameter for this sample, and I think the sample was collected before Cabot began venting the Baker well. Still not sure whether there is a connection or not. Mike or I will let you know whether our 1/29 sample showed a decrease in methane. Also, in case we've neglected to get our previous results to you, I will send Mike's results from 11/19/08, 12/16/08 and 1/12/09 in separate emails. As always, don't hesitate to call anytime. Tony

-----Original Message----- **From:** valdema5@aol.com [mailto:valdema5@aol.com] **Sent:** Friday, January 30, 2009 1:55 PM **To:** Oprendek, Anthony **Subject:** Fwd: 1/22/09 water sample results

-----Original Message-----From: Wesley Smith <<u>wesley.smith@cabotog.com</u>> To: <u>valdema5@aol.com</u> Sent: Fri, 30 Jan 2009 12:54 pm Subject: 1/22/09 water sample results

See attached....

Wesley A. Smith Assistant Coal & Survey Coordinator Cabot Oil & Gas Corp. - East Region Telephone - 304-347-1637 Fax - 304-347-1635 email: wesley.smith@cabotog.com

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Great Deals on Dell Laptops. Starting at \$499.

Oprendek, Anthony

From:Farnham & Associates, Inc. [dfarnham@epix.net]Sent:Wednesday, January 28, 2009 8:25 AMTo:Oprendek, AnthonySubject:RE: Well site distance

Hi Tony,

Thanks for the info.

I have heard much about the water well/gas contamination issue lately. Phone is ringing off the hook. I live about 15miles from the Cabot play in Dimock and know many of the people in the area. Sounds like a grouting issue. I have hit natural gas in several water wells in NW Susquehanna County a few in the Dallas area (lower Wyoming County) and Bradford County. I have not personally hit any in the area in question. Certainly nothing anywhere near the volume seen there. Occasional H2S from Lock Haven geological formation, but no discernable natural gas.

That being said, can I help in any way? I have installed many air strippers over the years for Iron, Manganese, H2S and gasoline removal.

I have a number of well applications to be submitted as soon as my clients decide what they are going to do this year - I will keep you posted.

Good to hear from you.

 Daniel B. Farnham, Principal Engineer
 Engineers with Business Sense

 President
 Farnham & Associates, Inc.

 President
 F-Cote Chemical, Inc.

 1620 N. Main Ave., Suite 1
 Scranton, PA 18508

 dfarnham@epix.net
 tel:

 www.farnhaminc.com
 (570) 558-5267

 Want a signature like this?
 Want a signature like this?

From: Oprendek, Anthony [mailto:aoprendek@state.pa.us] Sent: Tuesday, January 27, 2009 7:20 AM To: 'Farnham & Associates, Inc.' Subject: RE: Well site distance

Dan - So sorry I haven't been getting back to you. I'm sure you've heard about the gas migration situation in Susquehanna Co....we've been consumed with it for several weeks now. Anyway, to answer your question (s).....Section 205 of the Oil and Gas Act cites our isolation distance requirements. If your "well site" is proposed to be closer than 100' to a stream, spring, body of water shown on 71/2 minute quad map or to a wetland greater than one acre in size, you must submit a form requesting waiver of distance requirements prior to constructing site.

As far as getting involved with frac wastewater issues, I'd try someone at POGAM, IOGA or our Harrisburg Central Office folks.

Still want to talk with you regarding what you've heard from western PA.

Will try to call you today. If not cancelled due to pending storm, I will be in Williamsport tomorrow and Thurs conducting interviews for new (badly needed) field staff out that way.

Hope all is well. Talk with you soon.

Tony

-----Original Message----- **From:** Farnham & Associates, Inc. [mailto:dfarnham@epix.net] **Sent:** Wednesday, January 21, 2009 12:49 PM **To:** Oprendek, Anthony **Subject:** Well site distance

Tony, are there any state requirements regarding well site distance from bodies of water? There is nothing noted on the permit addendum – let me know.

Want a signature like this?

From: Farnham & Associates, Inc. [mailto:dfarnham@epix.net] Sent: Wednesday, January 14, 2009 11:11 AM To: Tony Oprendek (aoprendek@state.pa.us) Subject: Issues

Tony, just read an article in the paper about a DEP/Industry partnership with the objective of resolving frac wastewater issues. Apparently, the group just met in Harrisburg. How can I get involved?

Also, give me a call when you get a chance – I'm curious about the issues in Western PA that are circulating in the industry.

Thanks, Tony.

Daniel B. Farnham, Principal Engineer President

Engineers with Business Sense

Farnham & Associates, Inc. 1620 N. Main Ave., Suite 1 Scranton, PA 18508

> tel: (570) 558-5267 fax: (570) 558-3478 mobile: (570) 614-3479

dfarnham@epix.net www.farnhaminc.com

Want a signature like this?

Ansell, Mark

From:	Lobins, Craig
Sent:	Friday, February 13, 2009 11:34 AM
То:	Ansell, Mark; Oprendek, Anthony; Welsh, Douglas; O'Donnell, Michael; Karlinsey, Herbert; Gleeson, Robert; Kucsma, Paul
Cc:	Rozakis, James; Duffy, Donna
Subject:	FW: Dimock Twp. Gas Migration, RTKL #4200-09-007

Gentlemen -

We have been granted a 1 week extension. Please have all relevant information to me by Thursday, February 19. Thank you

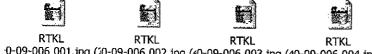
Original M	essage
From:	Rozakis, James
Sent:	Monday, February 09, 2009 12:41 PM
To:	Lobins, Craig
Cc:	Kucsma, Diane; Conaway, Linda; Duffy, Donna
Subject:	Dimock Twp. Gas Migration, RTKL #4200-09-007

Craig, as we discussed, attached is a request that the Department has received under the new Right to Know Law for, among other things, "all documents and records, including sampling data and analytical results and reports, relating to natural gas levels in Dimock Township, Susquehanna County, PA." <u>The Department's response to this request is due on February 13, 2009</u>.

To ensure that the Department can prepare and issue its response by the due date identified above, <u>by</u> <u>Tuesday, February 10, 2009</u>, please provide to Diane or Linda all records, including relevant e-mail messages, not already in the public file that is responsive to this request.

Diane or Linda, **by Wednesday, February 11, 2009,** please provide to Donna the information in the public file and that you have received from Craig for review and determination of which, if any, records are exempt from disclosure under the new Right to Know Law.

All, if you have any questions about this request or the information that must be collected for this request, please see me or Donna. Thank you, Jim



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DEP Right-To-Know Law Record Request Form

DEP Office name and address: Northeast Regional Office, 2 Public Square, Wilkes-Barre, PA 18711

Name & residence address of requester:

April Milburn-Knizner, 317 Dogwood Drive, Delmont, PA 15626

Address to which DEP should send written response (if different than residence):

Babst, Calland, Clements & Zomnir, P.C., Two Gateway Center, 8th Floor, Pittsburgh, PA 15222

Requester's telephone number: <u>412-394-6468</u> Requester's fax number: <u>412-394-6576</u>

Records being requested/reviewed (please identify or describe the record(s) requested in enough detail so that it is clear which record(s) you are requesting):

All documents and records, including sampling data and analytical results and reports, relating to natural gas levels in Dimock Township, Susquehanna County, PA, as described in PADEP's January 23, 2009 News Release (attached hereto). Records are specifically requested for the water well samples taken along Cater Road, the water wells and living spaces sampled at the "20+ residences in the rural area approximately 25 miles north of Scranton" and the other gas and water wells sampled in connection with determining the source of migrating gas in Dimock Township.

Company Name & Address: Not Applicable

Company Name (including former names)

Facility Name (if different than Company Name)

Street Address

County
Known Permit Number(s): Not Applicable

Municipality

Please list Program(s) of interest for record(s) being requested: <u>All programs that maintain documents and</u> records relating to oil and gas.

Dates or time frame of records requested: On or about January 1, 2009

Purpose of review (optional):

Date/Time of Scheduled Review:

(DEP Office Use Only)

N E W S R E L E A S E COMMONWEALTH OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA Dept. of Environmental Protection Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711

FOR IMMEDIATE RELEASE 1/23/2009

CONTACT: Mark Carmon Phone: (570) 826-2511

DEP CONTINUING INVESTIGATION INTO HIGH METHANE LEVELS IN SUSQUEHANNA COUNTY WATER WELLS

Elevated Natural Gas Found in Four Water Wells, But Not in Nearby Homes

HARRISBURG – An ongoing Department of Environmental Protection investigation in Dimock Township, Susquehanna County, has discovered elevated natural gas levels in four water wells, but not at levels that pose a risk of danger. Gas has not been found in any of the nearby homes.

DEP has worked since Jan. 1 to identify the source of elevated natural gas levels in water wells along Carter Road. Investigators assessed water wells and living space at more than 20 residences in the rural area about 25 miles north of Scranton.

"This is an ongoing process and we will continue to evaluate and investigate areas around homes and wells," said Department of Environmental Protection Northeast Regional Director Mike Bedrin. "Three additional residents alerted us early this week about possible natural gas in and around their homes and the department acted quickly, mobilizing staff and investigating the area."

Using a diagnostic procedure called isotopic analysis, the department sampled gas from two nearby gas wells, a pipeline and two water wells in an attempt to determine the source of the migrating gas. Isotopic analysis compares the chemistry of the gas from the various sources to determine if there are chemical similarities. The results analysis is ongoing.

The department is also reviewing records from recently drilled wells in the area.

DEP is sending letters to residents in the study area regarding the investigation and providing information about precautions that residents can take.

Drinking water standard limitations have not been established for natural gas and associated health risks have not been identified.

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Return to Main News Releases Page.

KL # 4200-09-006 FEB 6 - 2009

BABST | CALLAND | CLEMENTS | ZOMNIR A PROFESSIONAL CORPORATION

APRIL MILBURN-KNIZNER Altorney at Law 412-394-6488 amilburn@bccz.com

February 4, 2009

VIA FEDERAL EXPRESS

Attn: Records Officer NorthEast Regional Office Commonwealth of Pennsylvania Department of Environmental Protection 2 Public Square Wilkes-Barre, PA 18711

Re: Right to Know Law Request

Dear Sir/Madam:

Pursuant to the Department of Environmental Protection's Public Access to Information Policy (012-0200-003) and the Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101 <u>et seq.</u>, enclosed please find a completed DEP Right-To-Know Law Record Request Form. We look forward to the Department's response.

Sincerely,

April Milburn-Knizner

Encl.

TWO GATEWAY CENTER | PITTSBURGH, PA 15222 | T 412.394.5400 | F 412.394.6576 | WWW.BCCZ.COM



Methane Gas and Your Water Well

Residents of the coal and natural gas producing regions of Pennsylvania need to be aware of the potential dangers from the accumulation of coal bed methane, or natural gas, in their water wells.

High concentrations of methane in water wells, water well enclosures and other confined spaces could cause an explosion.

What is Methane?

Methane (CH₄) is a naturally occurring hydrocarbon gas found underground. It is formed by microbial and thermogenic processes and is present in shallow and deep coal beds as well as other rock units. It is the main hydrocarbon found in natural gas, coal bed gas, and can occur naturally in some aquifer systems. Methane can occur dissolved in the groundwater or as a gas in the soil and rock zones below the surface.

Methane migrates from areas of high pressure to areas of low pressure. Mining and well drilling operations can affect the pressure in the subsurface and cause the migration of methane to areas of lower pressure such as shallow aquifers, and water wells used as water supplies. Gas migration in the subsurface can also be influenced by an increase or decrease in the water level of an aquifer.

Active underground mining operations can lower groundwater levels, reducing pressure in aquifers occurring above and adjacent to the area of coal extraction. This reduction in pressure can allow gases within the overlying rock layers to migrate into nearby water wells. Methane can also be released from abandoned deep mines, and from abandoned gas wells that are prone to leakage. These releases can also migrate into nearby water wells.

Methane can migrate into water wells in a gaseous phase or dissolved in the ground water. At atmospheric pressure, methane is soluble in water between 26-32 mg/l. It is some times recognizable as effervescent gas bubbles in water drawn from a faucet. In some cases, the release of methane in a water well may be recognized by a sound similar to that of boiling water. However, methane is a colorless and odorless gas, and may accumulate undetected in water well bores and water well enclosures that are not properly vented. Methane may also move into basements of homes and other structures through plumbing and piping containing electrical connections. These conditions could lead to an explosion.

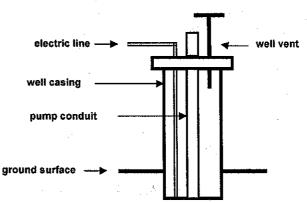
What Can You Do?

Methane is lighter than air with a specific gravity of .555. As such, methane will not accumulate in the water well bore if the water well is properly vented to the atmosphere. Venting is an inexpensive and effective way to prevent methane accumulation in water wells, water well enclosures and other confined spaces, such as basements. Proper venting eliminates the potential for methane gas to seep into homes or structures from water wells.

Recommended Venting Procedures

Well vents provide an exit for methane trapped in water well bores or water well enclosures. Proper design is extremely important.

The vent should extend above any possible flood level, potential ignition sources, and areas of exposure, and should have watertight connections to prevent surface water from entering. The well vent should be at least one (1) inch diameter or larger to facilitate gas flow. The end of the vent pipe should have a down-turned "gooseneck" or "T" and be capped with corrosion-resistant



FACT SHEET

screening. If the vent is not screened, it can become a potential entry point for debris and small animals. In addition, conduits from the water well that carry electrical lines or waterlines into the building should be

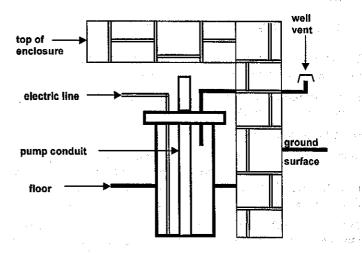
sealed so that the air in the conduit does not vent into the building. Well venting will not appreciably remove methane dissolved in the groundwater, however, properly designed water aeration systems are an effective way to lower the concentration of methane dissolved in the water.

Enclosed Wells

When the top of the water well is buried in a covered pit or enclosed in a basement, the vent pipe must vent gas to the outside air, as shown in the diagram below.

The vent pipe should be screened, and extend above any possible flood level, potential ignition sources, and areas of exposure.

In cases where the water well is located in an enclosure, it should have a tight-fitting well cap, and all openings through the cap should be properly sealed to prevent methane from escaping into the water well enclosure.



Play it Safe

When a water well is no longer in service, the plumbing connections should be disconnected and sealed to prevent methane from entering the home or building.

NOTE: Your water well may differ considerably from the wells depicted in the diagrams. Also, well venting requirements may vary from place to place due to differences in local plumbing codes. Therefore, water well owners are encouraged to contact a professional water well specialist or a local building code enforcement officer to determine the proper venting procedures required under the local plumbing code.

For more information on methane and water wells, please contact the DEP Office in your area.

Southwest Regional Office

400 Waterfront Dr. Pittsburgh, PA 15222 Telephone: 412-442-4000 Counties Served: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland.

Southcentral Regional Office

909 Elmerton Avenue Harrisburg, PA 17110 Telephone: 877-333-1904 *Counties Served: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York.*

Southeast Regional Office

2 East Main Street Norristown, PA 19401 Telephone: 484-250-5900 *Counties Served: Bucks, Chester, Delaware, Montgomery, and Philadelphia*

Northeast Regional Office

2 Public Square Wilkes-Barre, PA 18711-0790 Telephone: 570-826-2511 Counties Served: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming

Northcentral Regional Office

208 West Third Street, Suite 101 Williamsport, PA 17701-6448 Telephone: 570-327-3636 Counties Served: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union

Northwest Regional Office

230 Chestnut Street Meadville, PA 16335 Telephone: (814) 332-6945 Counties Served: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, Mckean, Mercer, Venango, and Warren.

For more information, visit www.depweb.state.pa.us, keyword: Wells.

Commonwealth of Pennsylvania www.depweb.state.pa.us

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Department of Environmental Protection 5600-FS-DEP2690 Rev. 11/2008