

Subject: Re: [William Harrison] potash in Crawford County?
From: "William B Harrison, III" <william.harrison_iii@wmich.edu>
Date: 5/17/2016 1:35 PM
To: Ellis Boal <ellisboal@voyager.net>

Mr. Boal,

I would only comment that the same type of drilling rig machinery can and is used for drilling both oil and gas and mineral exploration wells.

I am not interested in any consulting work for you or your client. I provide basic general information about Michigan subsurface geology and the various operations that gather data from below ground as a public educational service to members of the public. I am not involved in any of the regulatory decisions that are made about classification of wells drilled in Michigan. However, I would encourage you to examine an oil and gas lease in Michigan, I think you will see that the term "mineral rights" is commonly used. I believe that you will find that oil and gas is uniformly referred to as a "mineral" commodity.

I think that my professional credentials are publicly available.

Bill

Dr. William B. Harrison, III
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----- Original Message -----

From: "Ellis Boal" <ellisboal@voyager.net>
To: "William B Harrison, III" <william.harrison_iii@wmich.edu>
Sent: Tuesday, May 17, 2016 12:26:22 PM
Subject: Re: [William Harrison] potash in Crawford County?

Bill,

Thank you so much for your quick and informative response, which confirms our suspicions.

I attach:

- * the FOIA complaint,
- * exhibit 1 (the DEQ listing of Michigan minerals, which shows no

minerals at all in Crawford County, and which does not list oil or gas as minerals though one outlying "hydrocarbon" is noted in a far-west UP county),

* exhibit 2 (page 1 of Marathon's permit application for D4-11 which it was required to produce to the township), and

* pictures of the sign next to the clearing (which is some 3-4 acres).

As you will see from the complaint, there is no definition of "mineral" in part 625 (MCL 324.62501 et seq) which governs "mineral wells." Further, there is a strict separation between it and part 615 (which governs oil-gas wells). If a mineral well driller finds oil or gas, yes the well can then be re-permitted under part 615.

Note the pictures show that a permit was indeed issued, and the number is "M645". I assume the "M" means "mineral". Oil-gas permits are the letter "P" followed by five digits not three.

You write:

"Wildcat exploratory wells for oil and gas have often been drilled under the State 'Mineral well act' so that a company can gain information about the geologic deposits in that area with out releasing the information to the public and hence their competitors."

If you are correct and this is in fact a common practice, I believe the practice is illegal under current law. If an operator intends to explore for oil or gas -- even if it is simultaneously exploring for potash, salt, brine, or any other mineral -- the operator should state that in the application, particularly if oil or gas is the primary ore being sought.

Another indication that D4-11 is an oil-gas well not a mineral well: The decision to leave a blowout preventer in place after the rig departed. The oil-gas rules require this, but the mineral well rules do not require a BOP after the drilling process.

I take it -- since you did not comment on it -- that you could tell nothing about the nature of the well from the video at https://youtu.be/XWn_0DroCKQ . That surprises me since I had assumed mineral wells and oil-gas wells would utilize different types of drilling equipment.

One puzzling aspect of the case: As mentioned, a regularly-permitted oil-gas well was drilled by the same rig a ½-mile away, right after drilling D4-11. The permit for that well says it is aiming for 4407 feet in Detroit River Group, almost the same depth as D4-11. Amherstburg is part of the Detroit River group. Why did Marathon bother with D4-11 as a mineral well, if it was already permitted to explore the same formation a short distance away? I can send you the

application and permit for that well if it would interest you.

Let's chat a bit more, at the end of which I wonder if you would mind writing me a letter stating your credentials, your examination of the documents, and the same opinion you already expressed:

"The Amherstberg is not a formation that contains Salt, Potash or any other type of solid minerals that could be produced commercially, so I am reasonably confident that this was an exploratory well for oil and gas that was drilled under the Mineral Well Act to maintain confidentiality."

(I have seen "Amherstburg" spelled with "burg".)

That would likely suffice to win the case, without need for testimony. I will pay your regular rates.

About me: My website is <http://ellisboal.org> . At the bottom of the "global warming" page is a listing of my enviro-oil-gas cases as of 1½ years ago. I just started doing them and they still number under a half-dozen. The second-listed case is still ongoing. We have not yet totally won it and the pipelines are still in the ground. But I am sanguine about our chances in the court of appeals, which should decide by the end of the year.

Ellis, 231-547-2626

On 5/17/2016 10:10 AM, William B Harrison, III wrote:

Dear Mr. Boal,

The State of Michigan has a category of permitted wells called "mineral wells" that guarantee a very high level of confidentiality to the driller of that well for an extended period of time (over 10 years, I think). The term Mineral well cannot be assumed that it is specifically drilled for some type of solid mineral like Potash, Salt, etc. In fact, oil and gas are considered "minerals" under the definition of that type of well. Wildcat exploratory wells for oil and gas have often been drilled under the State "Mineral well act" so that a company can gain information about the geologic deposits in that area with out releasing the information to the public and hence their competitors. I believe that under this Mineral well act, it is not even possible for the existence of the well to be disclosed by the DEQ until the confidentiality period expires. The rules about mineral wells are that they may be kept confidential from the public, but if they are for oil and gas exploration, t

hat wel

l can never be produced for oil and gas. It has to be repermited

as
an oil and gas well and then the information is available to the public before it can ever be produced. If the mineral well drilled for oil and gas evaluation is never re-permitted as an oil and gas well, I would assume that the company did not find enough positive information to encourage them to continue development in that area.

I do not have any specific knowledge about the Marathon well you mentioned, but the area in Beaver Creek Township is a well-known oil and gas region with an old very large oil field there called the Beaver Creek Field. The Amherstberg formation is a known oil and gas producing zone in other parts of the state and is very likely the target zone they were evaluating.

The naming of the well "Beaver Creek D4-11" is also a very common naming style for oil and gas wells. As far as I know other mineral wells that are looking for solid minerals do not use this type of naming convention.

The Amherstberg is not a formation that contains Salt, Potash or any other type of solid minerals that could be produced commercially, so I am reasonably confident that this was an exploratory well for oil and gas that was drilled under the Mineral Well Act to maintain confidentiality. Unless the company relinquishes the confidentiality of this well I don't think any information about it will be available to the public.

In that region of the state, the depth of 4700 feet is approximately accurate for the Amherstberg formation.

If I can answer any other questions, please feel free to contact me.

Bill

Dr. William B. Harrison, III
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From: ellisboal@voyager.net To: "william harrison iii" <william.harrison_iii@wmich.edu> Sent: Monday, May 16, 2016 7:24:48 PM

Subject: [William Harrison] potash in Crawford County?

Ellis Boal sent a message using the contact form at <https://wmich.edu/> .

William Harrison,

I am an attorney in Charlevoix. I just started a FOIA case about a

well

claimed by the DEQ to be a mineral well in Crawford County, named

"State

Beaver Creek D4-11". For a variety of reasons the well gives the

appearance

of being an oil-gas exploratory well not a mineral well. The

operator,

Marathon Oil, used a drill rig last fall which saw service in oil-gas

exploration immediately before and after D4-11. A worker there told

me at

the time the company was looking for gas and oil, a blowout preventer

was

left in place after the rig departed the several-acre site in the

state

forest clearing and since then there has been no activity. The rig

went 4700

feet into the Amberstberg formation, at the same level at which

Marathon was

exploring for oil and gas a half-mile away. A DEQ inventory brochure

says

there are no minerals in Crawford County. Marathon Oil to my

understanding

is in the oil-gas business, not potash business. The rig was brought

1000

miles from oil-gas sites in North Dakota and must have cost Marathon

millions to transport and operate.

A 43-second video of the drilling operation from last fall is

viewable at at https://youtu.be/XWn_0DroCKQ .

I saw an article of last year by Dan Calabrese featuring a discussion

with

you of potential potash production centered around a plant in Hersey

near Big

Rapids. Apparently there is a large deposit of potash underlying

much of the

lower peninsula, although I am not clear as to what the formation is

in which

the deposit is thought to be.

The purpose of the case, on behalf of a neighbor and an enviro

organization,

is simply to obtain DEQ documents about the well. DEQ is refusing

any

information on a claim that the well is a mineral well, under the law

of

which there are special confidentiality provisions which do not apply

to

oil-gas wells. The minerals which DEQ typically regulates under this

law, to

my understanding, are potash, salt, and brine.

DEQ will not even say if it did permit the well.

Salt and brine are abundant in Michigan so it is not likely that

D4-11 was

drilled for them. That leaves potash as the potential sought-after

ore.

Puzzling, because Crawford County does not show up in the map

accompanying

the above article.

If it turns out the well is a legitimate exploratory well for a

Michigan

mineral I will drop the case. But so far DEQ will tell us nothing,

even

though the unusual law on this point is that the burden of proof is

on it.

I will send documents and pictures on request. Would you be willing

to view

the 43-second video and then call or write me to discuss the above.

Perhaps

you will immediately see clues in the video which tell you the

purpose of

this well.

Thank you.

Ellis Boal, phone 231-547-2626