

Alec Blyth

EPA TOIS

2286

From: Steve Wallace [Steve.Wallace@gov.ab.ca]  
Sent: December 17, 2007 4:51 PM  
To: Alec Blyth  
Subject: RE: report comments

Hi Alec, some more comments on the Ernst report that for some reason I failed to include below:

**Ernst Report (con't)**

- ✓ Pg 19 – not sure Wikipedia is a valid reference source, though I've been out of the academic scene for awhile
- ✓ Pg 19 "No CDWG limits have been exceeded" – can you finish the sentence off so its clear it applies to all dissolved organic
- ✓ Pg 23 – state reason why Ernst well is not on ethane plot Fig 10
- Pg 27/28 – Mention that propane/butane not detected by GC in any of the water wells, but propane/butane carbon isotopes were measured on 2 water wells. Please comment on validity.
- ✓ Pg 28 – 2<sup>nd</sup> last sentence. Elaborate on the fact that ethane signature similar for CBM and water wells does not necessarily imply impact.

Thanks  
steve

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From: Steve Wallace  
Sent: Friday, December 14, 2007 10:43 AM  
To: 'Alec Blyth'  
Subject: report comments

Hi Alec

Sorry for the delay in my comments, its been pretty crazy around here the last week.

**Ernst Report**

- ✓ Pg 3/9 - use early 2006 instead of Jan or Feb. I will try to nail down a month with the compliance guys
- ✓ Pg 5 – last para in sec 2. "Large downward vertical gradients.....are expected". Can you tack on "(see pg. 12 or 4.4.2)" at the end so that it is clear 'expected' is verified later in report
- ✓ Pg.6 – CBM well 100/07-13-27-22W4M on Table 2 is 00/07-13-027-22W4. Prefix 00 or 100 needs to be corrected
- ✓ Pg 8 – clarify units as mbgl (could be confused for masl)
- ✓ Pg 9 – 4.2 construction should be constructed
- ✓ Pg 9 – 4.2 – 1<sup>st</sup> para, what is date of analyses ? 2<sup>nd</sup> para, "detected in the well in the past" - when?
- ✓ Fig 2 – red dots look like wells. Can arrows be inserted from label to black dots?
- ✓ Pg. 12, 1<sup>st</sup> para – insert reference to Bachu&Michael 2002 at the end.

Please leave the Kenny well out for now, as you'll address it in the other reports. Perhaps send me an updated draft before we finalize.

**Zimmerman Report**

- ✓ Intro - future tense sounds a little odd to me (not to mention Mr. Zimmerman), what do you think? Perhaps past tense is more appropriate (eg. has compiled instead of will compile)
- ✓ Pg 6 sec 2.3 – is 3 MGV wells correct? YES
- ✓ Pg 8 sec 2.4.2 – AQ/QC
- ✓ Pg 11 sec 3.1.1 – "These well....". Same bottom of pg in Sec 3.2
- ✓ Pg 12 sec 3.3.2 – 1<sup>st</sup> para, "analysis of gas was use by AENV"
- ✓ Pg 14 sec 5.1.1 – "This basin as formed...." Also, comma at end "....craton" – should be period
- ✓ Pg 18 sec 5.3 – "A cement log showed good a cement bond"
- ✓ Pg 28, 2<sup>nd</sup> para - "....in the D35 water well....."

- Pg 30, 2<sup>nd</sup> para – “ Of these eight well, the average.....”
- Pg 32, 2<sup>nd</sup> bullet – “The AENV (staff member?) involved in the case was not a Hydrogeologist, but they.....”

For this report, just send me an electronic final version.

Thanks  
steve

*Steve Wallace, M.Sc., P. Geol.*  
*Hydrogeologist*

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Alec Blyth

From: Steve Wallace [Steve.Wallace@gov.ab.ca]  
Sent: December 20, 2007 8:19 AM  
To: Alec Blyth  
Subject: Lauridsen report  
Attachments: RE: Lauridsen well complaint draft

Hi Alec, please find comments below,

ME 17 DEC 07

- ✓ • Pg 5, 3<sup>rd</sup> para- please reference flow in the deeper HCF to the northeast (Bachu and Michael?)
- ✓ • Pg 6, 2<sup>nd</sup> para - 175.9 - 177.9 mKB, does not match up with Table 1, though it matches Fig 3.
- ✓ • Pg 7, top - EnCana CBM well 100/05-14-027-22 W4M. Supposed to be 00? Also pg 8 a few times
- ✓ • Pg 8, 2<sup>nd</sup> para - a study of the potential for methane migration.....is currently under investigation by AENV. We plan to mention this study when we roll out the complaint review findings, so perhaps we should leave it out of this report.
- ✓ • Two of page 9?
- ✓ • Pg 11, top - perhaps use "initiated the investigative process as a formal "investigation" (as per legislation) was not done as far as I am aware
- \* ✓ • Table 1 - missing shallow perfs on 00/07-11-027-22W4 *THEY ARE THERE*
- ✓ • Pg 12 - of 125 typo
- ✓ • Pg 14 - 102/14-02-027-22 W4M
- \* ✓ • Pg 17 4.5.2 - WhorlyParsons - *reports say "WhorlyParsons Komer"*
- ✓ • Pg 31 - last para - "This statistically validates.....are the same as the ethane.....". Perhaps mention this does not necessarily imply impact
- Any other comments from Ernst report that may apply

Also I attach a comment by Leslie Miller, which you may want to consider incorporating.

Steve

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**Alec Blyth**

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**From:** Steve Wallace [Steve.Wallace@gov.ab.ca]  
**Sent:** December 27, 2007 11:27 AM  
**To:** Alec Blyth  
**Subject:** Ernst report

Hi Alec

Just a couple of more comments on the Ernst report, please make the changes then send final hardcopies and CD.

- ✓ • Pg 5 – last para of Sec 2 – perhaps "calculated" is more accurate than "measured"
- ✓ • Pg 19 (4.5.3) - BETX should be BTEX
- ✓ • Pg 19 (4.5.4) - last two sentences – should there only be one?
- ✓ • Pg 20 –sentence at top needs corrected (The analytical techniques....)
- ✓ • Pg.30, 4<sup>th</sup> bullet – need to change gradient value (I see its been revised)

Thanks  
Steve

*Count from the page*

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**Alec Blyth**

**From:** Steve Wallace [Steve.Wallace@gov.ab.ca]  
**Sent:** December 28, 2007 9:29 AM  
**To:** Alec Blyth  
**Subject:** Signer and Ernst Reports

Hi Alec

Comments on the Signer report. Please finalize and send report.

- ✓ Pgs 5-6 – 100/05
- ✓ Pg 6, iii) – please remove last sentence like before
- ✓ Table 1 – mbKb in table
- ✓ Pg 10, 4.3 – "A good quality records is..."
- ✓ Table 2 – please make sure table is not split between two pages
- ✓ Pg 14 – 4.4.4. Only water drop (and possible gas exsolution) occurs from 2002-2003 (rises since). So this line of evidence is not as strong. Don't necessarily need to change, but need we need to be prepared for the question. For instance, daily pumping drops may be the overriding factor as you mention. Same for Lauridsen (drop 1977-2003, rise since). If re-worded, change in conclusion section too.
- ✓ Pg 32 – please expand at the end of last paragraph as you did in the conclusions
- ✓ Pg 34, 3<sup>rd</sup> bullet. Does not match statement in sec 2.2
- Comments in other reviews that may apply

Also, I like how you phrase things at the end of page 31 about propane/butane (last sentence) and wonder if you can use this wording in the Ernst report as well if its not too late.

NON-RESPONSIVE

Steve

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