

The Great Getaway:

by Jessica Ernst
Allegations to be proven in court
www.ernstversusencana.ca



Secrets of a Frac Cover-Up

Under Western Skies 2
Mount Royal University
Calgary . Alberta
October 12 . 2012

Historic Data on some Rosebud water wells

Gas Present: Yes or No?

1977 Paterson well: *No*

1986 Ernst (Feckly) well: *No*

1987 County well, near Ernst: *No*



Water Well Drilling Report

The data contained in this report is supplied by the Driller. The province disclaims responsibility for its accuracy.

Well I.D.: 0123548
 Map Verified: Map
 Date Report Received: 1986/05/14
 Measurements: Imperial

1. Contractor & Well Owner Information

Company Name: UNKNOWN DRILLER
 Mailing Address: UNKNOWN
 Well Owner's Name: FECKLEY, F.L.
 P.O. Box Number: 723
 City:

Drilling Company Approval No.: 99999
 City or Town: UNKNOWN AB CA
 Well Location Identifier:
 Mailing Address: ROSEBUD
 Province:

2. Well Location

1/4 or LSD: SE
 Sec: 13
 Twp: 027
 Rge: 22
 West of M: 4

Location in Quarter: 0 FT from Boundary
 0 FT from Boundary

Lot Block Plan

Well Elev: FT
 How Obtain: Not Obtain

3. Drilling Information

Type of Work: Chemistry
 Reclaimed Well
 Date Reclaimed:
 Method of Drilling: Drilled
 Flowing Well:
 Gas Present: No

Materials Used:
 Rate: Gallons
 Oil Present: No

Proposed well use: Domestic
 Anticipated Water Requirements/day: 0 Gallons

6. Well Yield

Test Date (yyyy/mm/dd):
 Start Time:
 Test Method:
 Non pumping static level: FT

4. Formation Log

Depth from ground level (feet)

Lithology Description

5. Well Completion

Date Started(yyyy/mm/dd):
 Date Completed(yyyy/mm/dd):
 Well Depth: 190 FT
 Borehole Diameter: 0 Inches
 Casing Type:
 Liner Type:
 Size OD: 0 Inches
 Size OD: 0 Inches
 Wall Thickness: 0 Inches
 Wall Thickness: 0 Inches
 Bottom at: 0 FT
 Top: 0 FT Bottom: 0 FT
 Perforations from: 0 FT to: 0 FT
 Perforations Size: 0 Inches x 0 Inches
 Perforations from: 0 FT to: 0 FT
 Perforations Size: 0 Inches x 0 Inches
 Perforations from: 0 FT to: 0 FT
 Perforations Size: 0 Inches x 0 Inches
 Perforated by:
 Seal: from: 0 FT to: 0 FT
 Seal: from: 0 FT to: 0 FT
 Seal: from: 0 FT to: 0 FT
 Screen Type: from: 0 FT to: 0 FT
 Screen ID: 0 Inches
 Slot Size: 0 Inches
 Screen Type: from: 0 FT to: 0 FT
 Screen ID: 0 Inches
 Slot Size: 0 Inches
 Screen Installation Method:
 Fittings Top: Bottom:
 Pack: Grain Size: Amount:
 Geophysical Log Taken:
 Retained on Files:
 Additional Test and/or Pump Data
 Chemistries taken By Driller: No
 Held: 1 Documents Held: 1
 Pitless Adapter Type:
 Drop Pipe Type: Length: Diameter:
 Comments:

Rate of water removal: Gallons/Min
 Depth of pump intake: FT
 Water level at end of pumping: FT
 Distance from top of casing to ground level: Inches
 Depth To water level (feet)
 Elapsed Time
 Drawdown Minutes:Sec Recovery

Total Drawdown: FT
 If water removal was less than 2 hr duration, reason why:

Recommended pumping rate: Gallons/Min
 Recommended pump intake: FT
 Type pump installed
 Pump type:
 Pump model:
 H.P.:
 Any further pumptest information?

7. Contractor Certification

Driller's Name: UNKNOWN DRILLER
 Certification No.:
 This well was constructed in accordance with the Water Well regulation of the Alberta Environmental Protection & Enhancement Act. All information in this report is true.
 Signature Yr Mo Day

Method of Drilling

Flowing Well:

Gas Present: No

~ 2300 historic water well records 50 km²
around my home completed prior to the
arrival of shallow frac'd Coalbed Methane
(~2001)

4 (0.17%) noted the presence of a gas that
could be methane

Husky, 1993

Industry Gas Migration Research Study in Alberta & Saskatchewan

Big problem

Expensive to fix

Difficult to completely stop

Husky's 1993: 46% energy wells tested had gas migration



When did the idea form to blame nature for industry's gas migration?

“Could some part of the problem be attributable to “natural sources” (e.g. swamp gas) which are using the wellbores as a conduit?”

Quote in Husky's 1993 Report

Canadian Association
of Petroleum Producers



Migration of Methane into
Groundwater from Leaking
Production Wells near
Lloydminster

Report for Phase 2 (1995)

March 1996
CAPP Pub. #1996-0003

CAPP Gas Migration Study (Final Report 1995)

~24,000 historic Alberta water well records were reviewed by the regulator

17 (0.07%) reported “gas” present before oil & gas development (1935-53)

41 (0.17%) reported “gas” present after (1960-95)

Table 13. Water wells in study area in which gas was noted to be present (Alberta Environmental Protection waterwell database).

Q or LSD	Sec	T	R W4	Well Owner	Depth (m)	Year Reported	Q or LSD	Sec	T	R W4	Well Owner	Depth (m)	Year Reported
Reported between 1935 and 1953						Reported between 1960 and 1995							
NE	32	41	2	Feero	117.3	1935	NE	29	36	5	Provo Gas Prod.	237.7	1960*
SW	4	42	2	McMann	114.3	1935	NE	31	37	9	G. Hewitt	42.7	1960
NW	6	42	7	S. McLaughlin	19.8	1935	NW	28	41	13	D. Bownes	73.2	1979
SW	3	43	4	S.V. Snyder	3.0	1935		34	37	8	S. Twa	160.0	1988
SW	11	44	3	A. Cooper	97.5	1935	NW	23	37	13	R. Holloway	142.0	1964*
12	3	48	12	F. Ploc	45.4	1935	SW	15	50	2	W. Ulan	87.8	1964*
8	35	49	1		6.1	1935	SE	24	36	12	H. Plenhert	132.6	1965*
14	36	49	1		38.7	1935	SW	22	37	13	H. Wideman	189.0	1965*
1	3	50	1	Blackwell	50.6	1935	14	20	46	2	J. W. Gordon	106.7	1966*
15	23	50	1	K. Parr	34.1	1935	NW	30	43	9	Mon-Max Services	67.1	1967*
SE	34	50	2		28.3	1935	SW	4	39	13	D. Coppack	106.7	1968*
15	34	52	4	Hodgson	47.2	1935	NE	32	36	12	S. Mereski	82.3	1969*
4	36	52	4	R. Seville	102.4	1935	9	25	42	10	Hardisty Storage	125.3	1969*
SE	4	53	4	G. Brett	71.9	1935	SE	14	36	12	A. McRae	118.9	1970*
NE	16	45	11	G.F. Albrecht	115.8	1936	NW	4	57	3	North School (Frog L. IR)	56.4	1970*
SW	14	50	2	Plater	63.4	1949	SE	19	43	2	R. Morrison	71.9	1971*
4	7	45	12	Seman Engin.	54.9	1953	NE	3	40	5	H. Tennant	167.6	1972*
							11	25	50	5	Water Res.	51.8	1972*
								19	36	11	D.&E. Dennis	173.7	1973*
							NE	8	48	11	J. Veenstra	106.7	1973*
							SE	36	36	12	A. Bye	137.2	1974*
							NW	20	40	8	L. Crone	192.0	1974*
							SW	9	39	8	R. Gilbertson	152.4	1975*
							SE	18	51	2	General Crude Oil	91.4	1975*
							SE	6	36	3	R. Worobo	184.1	1976*
							NW	8	36	6	K. Gilmer	160.3	1976*
							NE	22	36	12	C. Plehnert	137.2	1976*
							SE	28	37	8	J. Ekrof	177.4	1977*
							SW	36	41	9	B. Cullen	169.5	1977*
							SW	16	38	13	A. Engel	117.7	1978*
							NW	11	59	9	A. Severin	68.3	1978*
							NW	25	36	2	J. Scheck	142.0	1979*
							10	28	60	3	World Wide Energy	109.7	1982*
							SW	6	41	12	P. Spady	125.6	1986*
							NW	26	50	2	L. Gnyra	109.7	1989*
							NW	2	53	12	E. Horon	103.6	1989*
							NE	19	53	7	Jacula Farms	85.3	1990*
							4	21	38	1	Pan Cdn.	218.8	1992*
							8	33	42	11	C. Davidson	65.5	1994*
							NE	17	42	13	B. Kuefler	76.2	1994*
							SW	33	52	2	M. Hames	97.5	1995*

*reported by driller at time of well installation

CAPP study of methane in water wells on Alberta side

“provides useful data on dissolved methane in groundwater as used in the region”

Methane detected in 20/23 water wells

most < 0.05 mg/l

2 highest were slightly > 1 mg/l

I bought my place at Rosebud
in 1998







Breaking the law to frac in secret

**My statement of claim lists the laws
violated by EnCana**

**No permit under the Water Act to
divert fresh water from CBM
(thus no need to consult!)**



Experimental, Risky Shallow Hydraulic Fracturing at Rosebud (~6 mi around my well):

Gas wells completed above
Base of Groundwater Protection
in secret

2001: 3
2002: 6
2003: 17
2004: 40
2005: 94



2003 – Frac'd Life begins

With Noise

**EnCana continues to violate my legal right
to quiet enjoyment of my home & land**

2003: Test by EnCana on my well

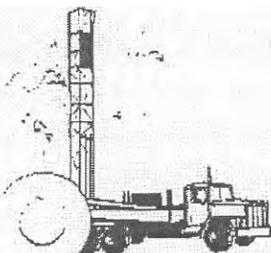
Water appearance: *Clear*

Tester did not report visible gas in my water

M & M Drilling Co. Ltd.

Box 1, Site 22, RR 2, Strathmore, AB T1P 1K5

(403) 934-4271 • Fax (403) 934-4865



Name: ERNST, JESSICA **Test #:** 1061 - 2211
Address: BOX 753 **Date:** 6/20/2003
Location: ROSEBUD, ALBERTA **Start Time:** 8:45 AM
Post. Code: T0J 2T0 **Phone:** 677-2074 **Static Level:** 28' 5"
Tested For: ENCANA CORP., G. PEKRUL **Well Name:** ECA/ECOG REDLANDS
Well Location/Description: SE-13-27-22-W4 HOUSE WELL **Land Location:** 14-12-27-22-W4
Pumping Rate: STATIC & SAMPLES ONLY **AFE Number:** CD05391
GPS: N-51-18-02.2 W-112-57-41.1 **Readings By:** DAVID SAWYER
 PRE-TEST POST TEST REALESTATE

Well Location On Site: IN OLD BARN NORTH OF HOUSE

Pit Type: WELL HEAD

Pit Condition: N/A

Pump Size and Type: 2 WIRE SUBMERSIBLE

Tank Size and Type: MARK IV CONSTANT PRESSURE

Casing Size and Type:

Liner Size and Type: N/A

Well Depth: N/A

Water: - Appearance

Clear Colour

- Odor

None Yes

SLIGHT H2S

- Suspended Solids:

None Yes

FEW BLACK PARTICLES

Pumping Procedure: - Open Discharge:

No Yes

- Pressure Tank

No Yes

- Pressure Reading

N/A

- Special Fitting

None Yes

3/4" PUMP OUT HOSE

Samples Taken: Chemical23:

Other Sample

Chemical51:

Coliform Bacteri.

Heavy Metals:

TOC

H2S:

OilAndGrease:

Lab where samples were tested:

WSH Other

Measurement Taken From:

CASING TOP

Miscellaneous test information:

SAMPLES TAKEN FROM PUMP OUT HOSE
WELL OFF FOR ONE HOUR BEFORE STATIC TAKEN

Well Depth: N/A

Water: - Appearance Clear Colourt



2003

Natural methane release from coal formations in Alberta is **rare** because reservoirs are "tight"

WELL ID: 00 / 05-14-027-22 W4 / 0

EUB COMPANY INFORMATION
CURRENT TO June 29, 2007

COMPANY NAME:	ENCANA CORPORATION		
ADDRESS:	Box 2850, 150 - 9 Avenue SW Calgary, AB T2P 2S5		
PHONE #:	403-845-2000	BUSINESS ASSOCIATE CODE:	0028

EUB WELL PRODUCTION DATA
CURRENT TO MAY 25, 2007

AVERAGE DAILY PRODUCTION RATE

WATER												
YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
2004	0	0	0	0	0	0	0	96	0	0	0	0

EUB WELL LICENSING DATA

UNIQUE WELL ID:	0274221405000	WELL LICENCE NUMBER:	0293679
REGULATION SECTION:	Section 2.020	WELL LICENCE DATE:	SEPTEMBER 24, 2003
SURFACE LOCATION:	05-14-027-22 W4	SURFACE OFFSETS:	N 570 E 40
ACTUAL SURFACE LATITUDE:	51.304912	LONGITUDE:	113.004771
THEORETICAL SURFACE LATITUDE:	0	LONGITUDE:	0
LICENCEE:	ENCANA CORPORATION		
EUB AREA OFFICE:	MIDNAPORE	TERMINATING FORMATION:	BELLY RIVER GRP
LAHEE CLASSIFICATION:	DEVELOPMENT	CONFIDENTIAL STATUS:	NON CONFIDENTIAL
SURFACE OWNER:	FREEHOLD	MINERAL RIGHTS OWNER:	FREEHOLD
AGREEMENT NUMBER:		AGREEMENT TYPE:	
AGREEMENT EXPIRY DATE:		DRILL COST AREA:	
SCHEME APPROVAL NUMBER:		SCHEME EXPIRY DATE:	
INCENTIVE CERTIFICATE NUMBER:	00000	INCENTIVE CERTIFICATE DATE:	
SURFACE ABANDONED TYPE:		SURFACE ABANDONED DATE:	

EUB WELL TOUR - CEMENTING DATA

STAGE NO	UNIT	AMOUNT	TYPE	RECEMENT
0	TONNEST	4	CLASS G NEAT	0
0	TONNEST	6	CLASS G NEAT	0

There is no Tour - Cores Cut data for this well.

EUB WELL TOUR - PERFORATION / TREATMENT DATA

DATE	TYPE	INTERVAL TOP	INTERVAL BASE	SHOTS
Feb 15 2004	JET PERFORATION	418.9	419.9	13
Feb 15 2004	JET PERFORATION	415.5	416.5	13
Feb 15 2004	JET PERFORATION	374.3	375.3	13
Feb 15 2004	JET PERFORATION	371.7	372.7	13
Feb 15 2004	JET PERFORATION	358.4	359.4	13
Feb 15 2004	JET PERFORATION	354.5	355.5	13
Feb 15 2004	JET PERFORATION	347.8	348.8	13
Feb 15 2004	JET PERFORATION	342.6	343.6	13
Feb 15 2004	JET PERFORATION	284.9	286.9	13
Feb 15 2004	JET PERFORATION	283.5	284.5	13
Feb 15 2004	JET PERFORATION	259.3	260.3	13
Feb 15 2004	JET PERFORATION	248	250	13
Feb 15 2004	JET PERFORATION	244.9	245.9	13
Feb 15 2004	JET PERFORATION	238.6	239.6	13
Feb 15 2004	JET PERFORATION	234.6	235.6	13
Feb 15 2004	JET PERFORATION	228.7	230.7	13
Feb 15 2004	JET PERFORATION	222	223	13
Feb 15 2004	JET PERFORATION	220.1	221.1	13
Feb 15 2004	JET PERFORATION	188.1	187.1	13
Feb 15 2004	JET PERFORATION	177.1	178.1	13
Feb 15 2004	JET PERFORATION	141.4	142.4	13
Feb 15 2004	JET PERFORATION	133	134	13
Feb 15 2004	JET PERFORATION	131.7	132.7	13
Feb 15 2004	JET PERFORATION	125.5	126.5	13
Mar 2 2004	FRACTURED	131.7	419.9	0
Jul 12 2004	CEMENT SQUEEZE	141.4	142.4	0



Owner: **EnCana Corporation**
[unknown], AB
 Contractor: **[unknown saskatchewan contractor]**
 Well Name: **ECA ECOG HUSSAR 5-14-27-22**

METRIC REPORT
 Easting (m): **139,003** ** 84/83
 Northing (m): **5,683,326** **
 Elevation (m): **868.5** ***
[Google Earth](#)

05-14-027-22 W4M
M38268.500313

Work Type: **Gas Well** Date Started: **Oct 13, 2003**
 Drilling Method: **Drilled** Date Completed: **Oct 13, 2003**
 Proposed Use: **Industrial**
 Completion Type: **Casing/Perforated Liner**

Elog Taken: **No**
 Gamma Taken: **No**
 Flowing: **No**

General Details
 Depth Completed (m): **219.0**
 Depth Drilled (m): **463.0** Completion Interval (m): **121.5 — 219.0 ***

Lithology Details

Elevation (AMSL)	Depth (BGL)	Lithology Descriptions (1)
405.5	463.0	[unknown]

Completion Details
 Surface Casing: **[unknown] — 177.8 mm (O.D.) x 2.00 mm (thick) x 81.00 m (bottom)**
 Liner: **[unknown] — 114.3 mm (O.D.) x 2.00 mm (thick)**

Intervals (Liner Bottom at: 463.0 m)
 -- Completion Interval(s) --
 Slotted: **121.5 to 122.5 m - 2 - Method: Other**
 Slotted: **127.7 to 130.0 m - 2 - Method: Other**
 Slotted: **137.4 to 138.4 m - 2 - Method: Other**
 Slotted: **173.1 to 174.1 m - 2 - Method: Other**
 Slotted: **182.1 to 183.1 m - 2 - Method: Other**
 Slotted: **216.1 to 219.0 m - 2 - Method: Other**

Chemistry Summary Details (mg/L) (most recent first)

General Comments / Observations
 HC well added to be included in a x-sec for 04-510. Perforations are representative of coal layers. Perforations performed with nitrogen gas. Objective of perforations was to obtain coal bed methane gas production.

Oil Present: **No** Gas Present: **No**
 Observations (water): Colour: ; Odor: ; Quality:

Aquifer Tests

Alias IDs

* TGWC calculated or determined value.
 ** 84 - Surveyed (other) — 10TM NAD83
 *** 83 - Surveyed (other) — {Ground ; AMSL}

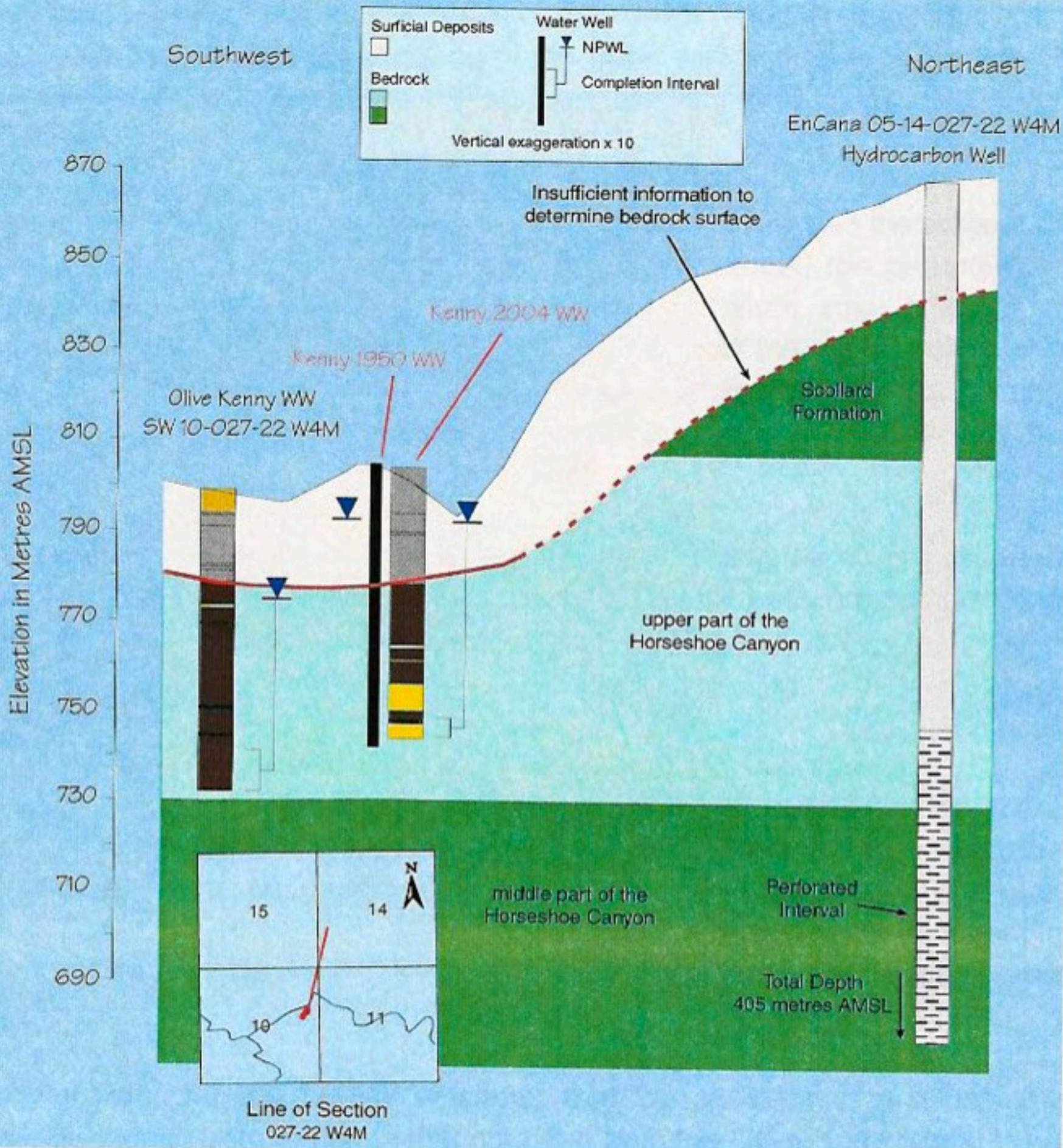
Intervals**(Liner Bottom at: 463.0 m****-- Completion Interval(s) --**Slotted: **121.5** to **122.5 m** - **2** - Method: **Other**Slotted: **127.7** to **130.0 m** - **2** - Method: **Other**Slotted: **137.4** to **138.4 m** - **2** - Method: **Other**Slotted: **173.1** to **174.1 m** - **2** - Method: **Other**Slotted: **182.1** to **183.1 m** - **2** - Method: **Other**Slotted: **216.1** to **219.0 m** - **2** - Method: **Other**

Shallow Operations Issues

Jim Reid, ERCB Manager

May 12, 2004

**shallow operations can be
“high risk”**



South-North Cross-Section



ENCANA™



**ALBERTA
RESEARCH
COUNCIL**



**will not disclose what
chemicals were injected**

2004 EnCana's fresh water production problems at Rosebud

From 2008 FOIP* results:

“Pressure test to 21 Mpa (supervisor error). Pressure cracked the remedial cement. Cement will no longer pressure test to 7 Mpa”
(July 16, 2004)

* Freedom of Information Legislation

Summer 2004

Water wells start to go bad

EnCana investigated itself, declares itself innocent.

EnCana & Alberta Environment blamed our local water well driller!

August 2004: EnCana Landman

EnCana's inappropriate
blanket approval type document

EnCana's land manager:

“If we can get them to sign this, we don't need to consult”

He refuses to consult. We chat a long time.
He finally agrees to hold an open house

A few days later ...

EnCana's land man was back at it ...
with the same document

September 9, 2004:
I resigned from EnCana

How could I ethically consult for a company that
was lying to my community?

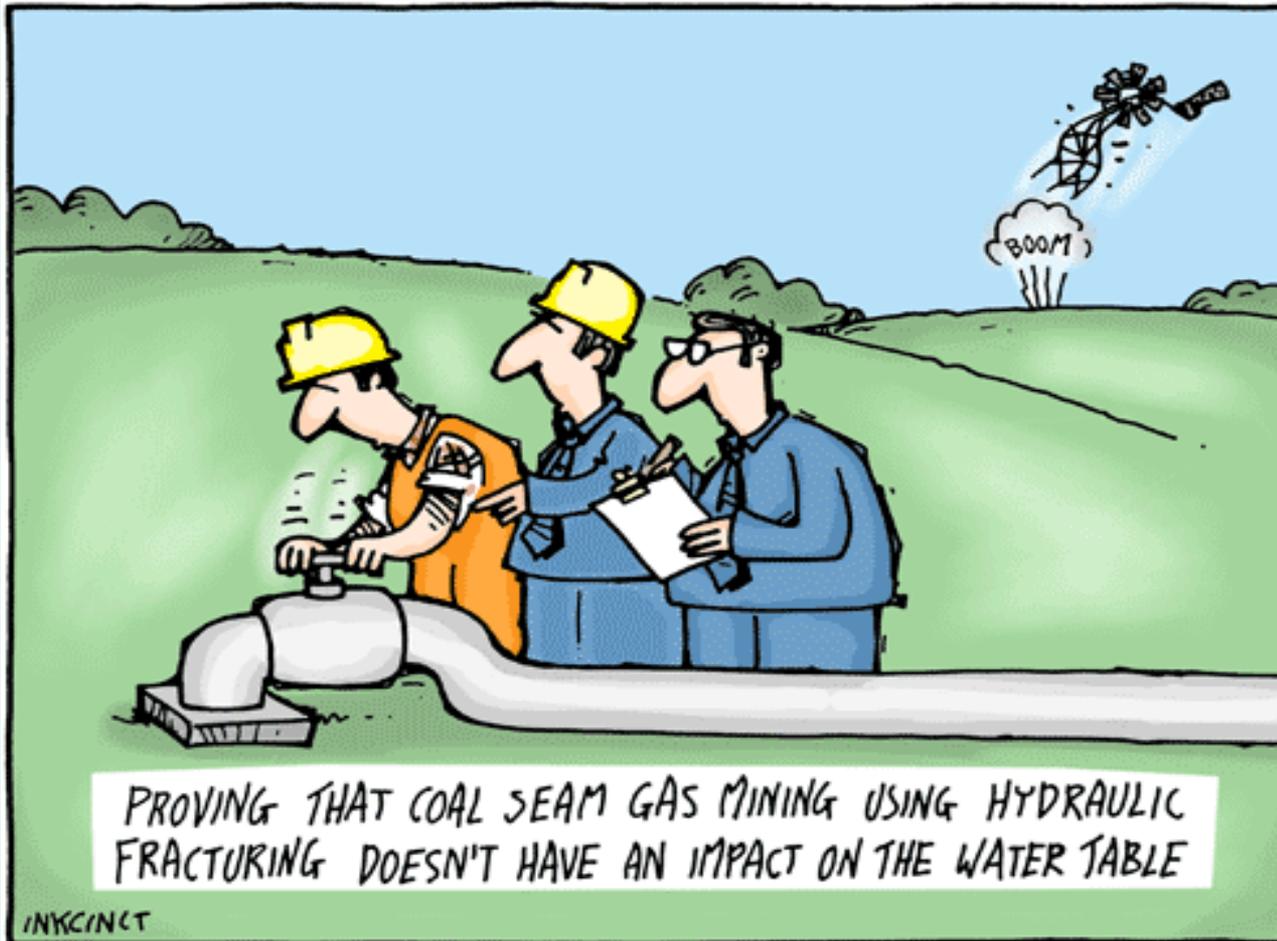


Open House Oct 21, 2004

EnCana promised that they would only frac
far below our fresh water aquifers
and below the impermeable layer to prevent
gas migration into our water.

\$150,000 promise to Rosebud Theatre

January 2005, Rosebud Water Tower Explodes
Water manager seriously injured, hospitalized
Investigators: “accumulation of gases”



2011-511 © INKCIINCT Cartoons www.inkciinct.com.au

My water dramatically changed

Whistling taps/blowing gas

Caustic burns to skin/irritated eyes.

Painful cracks on hands after doing dishes

Soaps/shampoos no longer make suds

Gas spurting water out of tub & toilets

Dogs repulsed by the water

October 2005: My water post-frac'd



**Punishing citizens who ask
questions**

Nov 24 2005: Banished!

“I have instructed my staff to avoid any further contact with you.”

Jim Reid, Regulator Manager

November 24, 2005

Jessica Ernst
Box 753
Rosebud AB T0J 2T0

NOISE CONTROL DIRECTIVE

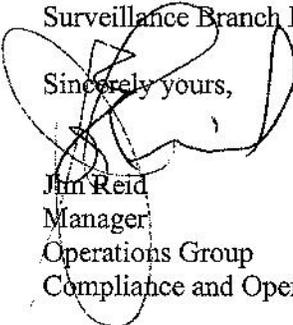
Dear Ms. Ernst:

It is clear that over the past several months you have undertaken an intensive letter writing campaign as a means to pressure the Alberta Energy and Utilities Board (EUB) to rule that EnCana has not met the regulatory requirements for noise control in the Rosebud region. As you know, compliance with the EUB *Noise Control Directive (Directive)* can only be determined using the results of a "representative" comprehensive noise survey. Consequently, even though two previous surveys conducted by a reputable acoustical engineering firm were technically defensible and did demonstrate that EnCana was compliant, the EUB agreed to not accept those results for your residence to demonstrate the fairness of the EUB regulatory process. In fact, the EUB offered to conduct a separate noise survey at your residence, at the time of your choosing, placing the microphone where you want, and without the knowledge of EnCana to determine compliance at your residence.

Rather than accept this offer, you have chosen to perpetuate accusations that the EUB has not been responsive to your concerns. In fact, the EUB has tried to be very accommodating to you and even provided you with a copy of the current draft of the *Directive* so that you may provide comments for the multi-stakeholder review committee to consider. I believe that you know quite well that as a draft, the *Directive* is still subject to change. Rather than raise any concerns about the draft *Directive* with our staff as requested, you chose to circulate widely through the internet untruths that the EUB has unilaterally made significant changes to the *Directive* that would result in higher noise levels for rural residents. Your statement about the EUB raising the acceptable noise levels for winter operations is not true. In fact, this option has been in the *Directive* since 1988. While I again may find this approach disappointing, it is your right to free speech.

What I cannot and will not accept is your threat, veiled as something someone said to you, as a means to incite people to resort to the "Wiebo Way". Criminal threats will not be tolerated, and we are deciding on how best to work with the office of the Attorney General of Alberta and the RCMP to register our concern and to ensure the protection of the public including our staff. Until the safety and security issues have been satisfactorily addressed and resolved, I have instructed my staff to avoid any further contact with you. The EUB Field Surveillance Branch have been made aware of this situation as well.

Sincerely yours,

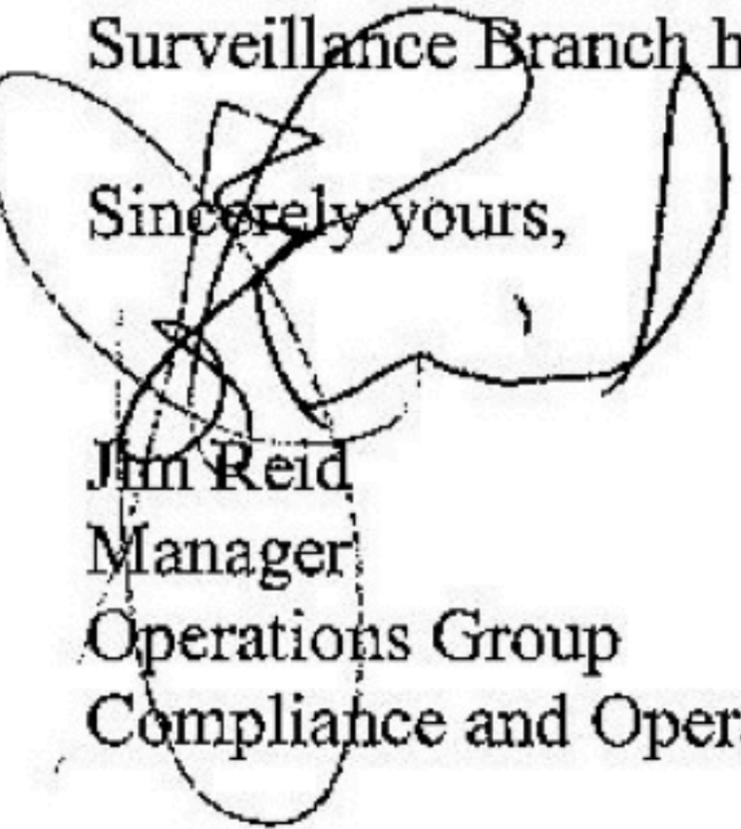


Jim Reid
Manager
Operations Group
Compliance and Operations Branch

pc: RCMP Drumheller Detachment
Ron Paulson, Manager, EUB Field Surveillance Branch
Al Palmer, Manager, EUB Security

protection of the public including our staff. Until the safety and security issues have been satisfactorily addressed and resolved, I have instructed my staff to avoid any further contact with you. The EUB Field Surveillance Branch have been made aware of this situation as well.

Sincerely yours,



Jim Reid
Manager
Operations Group
Compliance and Operations Branch

pc: RCMP Drumheller Detachment
Ron Paulson, Manager, EUB Field Surveillance Branch
Al Palmer, Manager, EUB Security

STAMPED: "REFUSED BY ADDRESSEE"

REGIONAL - FOR USE WITHIN A REGION OF CANADA
LETTER CARRIER DEPOT #1
POSTE DE PAQUEURS
DEC 8 2005
Enveloppe
CALGARY, AB T2P 1J0

RÉGIONAL - LIVRAISON D'UN POINT À UN AUTRE D'UNE MÊME RÉGION AU CANADA

Comment utiliser les produits prépayés Xpresspost
1. Indiquez votre adresse et l'adresse du destinataire sur l'étiquette Xpresspost (ou apposez vos propres étiquettes préimprimées sur l'étiquette d'expédition).
2. Décollez l'étiquette et apposez-la dans l'espace indiqué. Conservez votre copie.
3. Déposez cette enveloppe dans une boîte aux lettres publique, à un comptoir postal ou à une installation désignée de Postes Canada.



2005 12 07
DRUMHELLER, AB
T0J 0Y0

CANADA POSTES
POST CANADA

Polished by addressee
Reloué par le destinataire

1

Xpresspost

SHIPPING COPY
Detach and apply to item

ÉTIQUETTE D'EXPÉDITION
Détachez et apposez sur l'article

Date
Year Année MM 01
2005 12 07

From Customer No. / Expéditeur
Name: Box 753
Address: Rosebud AB
City / Prov. / Postal Code: T0J 0T0

DETACH HERE / DÉTACHEZ ICI



PP 209 463 666

Xpresspost

1

Return to Sender / Renvoi à l'expéditeur

Manifest or Collect Postage Due
Manifeste ou percevoir le port dû

Signature on delivery? / Signature à la livraison?

Sender warrants that this item does not contain dangerous goods and agrees with the terms and conditions on the reverse.
L'expéditeur garantit que cet envoi ne contient pas de matières dangereuses et accepte les conditions à l'envers.



December 13, 2005 Edmonton Journal

edmontonjournal.com

EDMONTON'S NEWSPAPER SINCE 1913

Tainted water lights fire under gas fears



January 2006: EUB Shallow Frac Directive 027

Industry advised the regulator that shallow
fracturing had harmed oilfield wells

and

“there may not always be a complete
understanding of fracture propagation at shallow
depths”

EUB = Energy Utilities Board, now ERCB, Energy Resources Conservation Board

February 6, 2006

EnCana CBM Technical Briefing

“If water supply is a concern, EnCana will supply necessary water.”

Feb 28, 2006

Alberta Legislature



Environment Minister
promised affected
families

safe alternate water
“now and into the future”

regardless if
the methane is from
“natural flow”
or not.

March 3, 2006

Alberta Environment tests my water

**Alarmed by the level of gas in my water
And drop in static water level and other tests**

**I am to blame for the methane
contamination because I do not run cattle,
thus do not use enough water.**

March 6, 2006

**Environment Minister & staff
emergency meeting with
contaminated water well owners**

**We are to blame because
we use too much water**

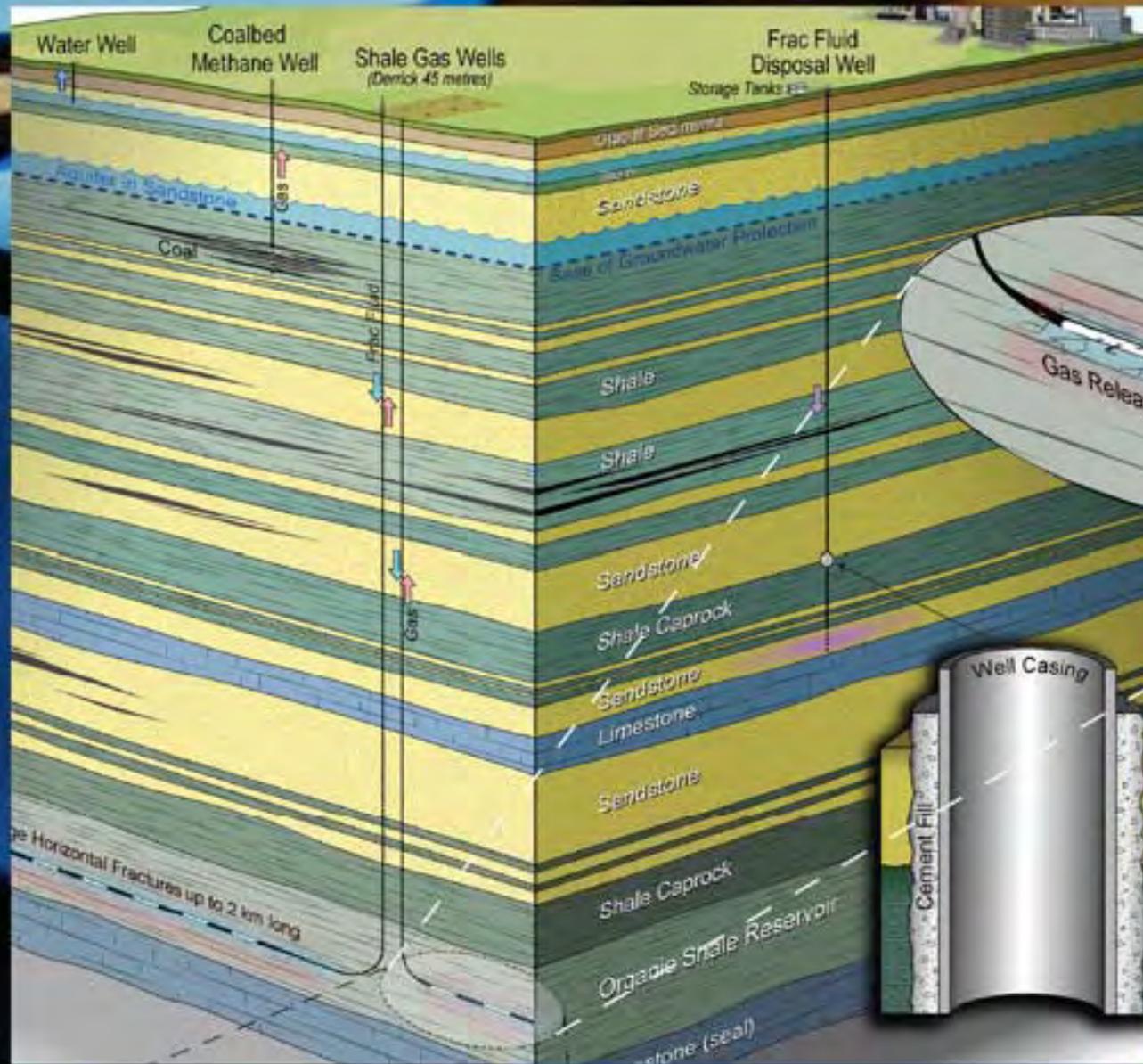
Shallow Gas Wells Drilled and Frac'd Near Rosebud, Alberta

Circles: EnCana Wells Perforated and or Hydraulically Fractured Above the Base of Groundwater Protection before April 2006
Solid dots: EnCana Wells Perforated and or Hydraulically Fractured Above 200m before April 2006



E - approximate location of Ernst property

~ 1 mile



**Standard for Baseline Water-Well Testing for
Coalbed Methane/Natural Gas in Coal Operations**

April 2006

April 12 2006, The Alberta Government knew!!



Two Labs:

- 1) Maxxam: “(3-14-27-22-w4m and 102/8-27-22-w4m) it is a likely source of this water well gas”
- 1) Dr. Karlis Muehlenbachs: “indicates a source from or near the shallower wells, 27-22-W4M”

(obtained via FOIP, 2 years later)



Maxxam's Remarks:

- ◆ Based on a comparison of the carbon isotope data to the data from the reference well (3-14-27-22-w4m and 102/8-12-27-22-w4m) it is a likely source of this water well gas is from near or from the Belly River Formation.
- ◆ When comparing this gas the with the database is likely coming from a shallow, mixed source of biogenic and thermogenic gas

Dr. Karlis Muehlenbachs' Remarks (University of Alberta):

- ◆ Methane isotope value indicates a biogenic source whereas ethane, propane and butanes indicates a source from or near the shallower wells, 27-22-W4
- ◆ Water well gas may be a mixture of in situ biogenic gas with some deeper gas.

- ◆ Maxxam's interpretation and remarks were done by Margaret Woodruff
- ◆ Email: margaret.woodruff@maxxamanalytics.com
- ◆ The University of Alberta interpretation and remarks were done by Dr. Karlis Muehlenbachs
- ◆ Email: kartis.muehlenbachs@ualberta.ca

2006: Toxic chemicals found by the regulator in Rosebud Hamlet water:

Petroleum distillates,
bromodichloromethane,
phenanthrene,
toluene,
methyl ethyl ketone,
xylene,
benzene,
butylbenzyl phthalate,
di-ethyl phthalate,
di-n-butyl phthalate,
bis(2-ethyhexyl) phthalate and
benzothiazole.

Hexavalent chromium (of Erin Brokovich fame) was found by the regulator in a monitoring well in the Hamlet [via FOIP results]

Toxic Chemicals found by the regulator in my water

- March 3, 2006: 0.21 mg/L of F-2 petroleum hydrocarbons (primary components of various fuels including gasoline, kerosene, diesel fuel and jet fuel);
- **March 3, 2006: Chromium increased in my water by factor of 45 after EnCana fractured the aquifer that supplies my well.**
- June 6, 2007: 2.0 µg/L of 2-Propanol 2-Methyl. 2-Propanol 2-Methyl is a product of degrading methyl *tert*-butyl (MTBE), and may indicate MTBE contamination. Both 2-Propanol 2-Methyl and MTBE are hazardous;
- June 6, 2007: 3.6 µg/L of Bis (2-ethylhexyl) phthalate (BEHP). BEHP can cause cancer as well as damage to the liver after prolonged exposure.



Frac'ing chemicals: “Safe as guar gum in ice cream”

Industry doesn't tell us there are 2 types:

Food grade & **Industrial**

“Crosslinking Guar ...

Several metal additives have been used for crosslinking, among them are **chromium**, aluminum, antimony, zirconium, and the more commonly used, boron.”

Methane in Rosebud Water

30 – 66 mg/l

Risk of explosion at **1** mg/l

(if water passes confined space in CAPP Gas Migration Report, 1996)

Compare to historic data:

My water well: Gas Present: **No**

CAPP 1996: most < 0.05

**Investigating without
investigating in order to ensure
the frac experiments continue**

2006 Briefing Note by Alberta Research Council on the Contamination Cases (to blame bacteria), before the Council is retained to review the cases!

[Obtained in 2008 via FOIP]

“landowners may not willingly accept the findings determined by Alberta Environment and Alberta Research Council”





June 14, 2006

Ernst witnessing

E. coli was detected in Signer water *after* the investigator repeatedly put his sampling canister in mud laden with gopher feces, and then into the well water

This bad data from 1 sampling event on 1 water well was used to dismiss the contamination in **everyone's** water citing

“naturally occurring methane”

“maintenance issues” and “**bacteria**”

**Ignored by the regulators &
government:**

**EnCana frac'd & still frac's
biogenic
naturally
occurring methane**

ERCB CBM Water Chemistry study, September 2006

Studied water wells in coal

Methane (and ethane) not detected in
~90% of water wells tested!

All 7/7 industry CBM wells tested had
“natural” biogenic methane!

April 2007, Alberta Environment:

3 monitoring wells drilled at Rosebud
to get “baseline” data

6 years too late.



May 2007

Alberta Environment finally agrees to comprehensive investigation

Changed labs half way through the investigation to one that detected but **did not fingerprint the ethane** in our water.

The regulator already knew the ethane in Rosebud water indicated match to EnCana's **Breaks promise** a few months later

**Using Alberta Innovates
(the Alberta Research Council)
to conceal public water testing data**



2007

Alberta Environment retains
the Alberta Research Council

to review the 5 water well
contamination cases
that had been reported in the
media



“Understanding Alberta’s Water Resources”

“Funding for this research comes
from Alberta Environment,...
EnCana....”

STAYING AHEAD OF THE CURVE

UNDERSTANDING ALBERTA'S WATER RESOURCES

Rapid industrial, agricultural and municipal growth in the province is putting immense strain on water supplies. The Alberta government has responded decisively with the Water for Life strategy – an approach to water management that is designed to ensure safe, secure drinking water, healthy aquatic ecosystems, and reliable water supplies for a sustainable economy.

One of the focus areas of Water for Life is groundwater. In addition to being important for household and industrial use, groundwater is a major contributor to the flow of streams and rivers, the quality of lake water, and the preservation of wetlands. Although Alberta has large amounts of groundwater, there is a lot we don't know about the location and quantity of groundwater, its movement and interaction with surface waters.

Enter ARC's water resources team. Although ARC's expertise in hydrogeology dates back some 60 years, the current team takes an integrated approach to water resource issues through the study of groundwater, surface water and ecosystems. One key technique used by the group is environmental tracers. Tracers can provide information about many aspects of the hydrogeologic system including sources of groundwater and water quality, recharge, salinity and contamination.

"Tracers can help answer vital questions that will give us the science base to better manage water resources," says Dr. Sue Gordon, program leader. "That's why we're building up our tracer expertise at ARC. We are in a great position; we've assembled one of the strongest scientific teams in Canada, with skills in both surface water and groundwater."

ARC's water resources team is using tracers in a number of major, collaborative projects. A few examples include:

IMPACT OF COALBED METHANE DEVELOPMENT. Groundwater contamination from coalbed methane wells is a serious public concern in many jurisdictions. But methane in water wells can come from a number of sources. Advanced tracer technology can identify the methane that comes from coalbed methane wells. ARC is involved in a number of studies designed to address the possible effects on water quality and quantity issues arising from coalbed methane development.

IMPACT OF OIL SANDS DEVELOPMENT. Because it is anticipated that emissions from oil sands development will increase over time, it's important to ensure that acid deposition from these emissions do not affect aquatic ecosystems in the region. ARC is part of a pre-emptive study that is using tracer technology to monitor 50 lakes in northeastern Alberta for potential impacts.

PREVENTING PATHOGEN CONTAMINATION IN GROUNDWATER. The experience in Walkerton, Ontario, where seven people died from contaminated drinking water, showed that pollution can travel through groundwater. ARC scientists are involved in developing provincial studies aimed at understanding how pathogens such as bacteria and viruses move through groundwater and their potential impact on human health.

"All these tracer studies are vital because the pressures on water resources are increasing," adds Dr. Gordon. "As surface water is fully allocated, people and industry will turn to groundwater. Climate change will also affect groundwater and surface water supplies. Environmental and economic sustainability are closely linked to the sustainability of groundwater and surface water. We need to understand both water systems and the links between them."

Funding for this research comes from Alberta Environment, the Alberta Energy Research Institute (Energy Environment Fund), Encana and the Cumulative Environmental Management Association.



Dr. Alec Blyth, research hydrogeologist (left) Andrea Mellor, hydrogeologist (right)

Alberta Research Council*

January, 2008

Dismissed contamination as **natural**

Suggests bacteria to blame, can't explain where the methane came from

Bacteria do not make ethane, propane, butane, petroleum distillates and hexavalent chromium

Used anecdotal, unsubstantiated stories
of methane in other water wells

Avoided the most damning data
Formal reports filled with “errors”

*Name changed to Alberta Innovates

Instead of using the damning
data the regulator
collected in our community
they used
data from energy wells
over 100 miles away

(that were frac'd much deeper!)

2008 – 2012

ALBERTA
RESEARCH
COUNCIL



Refused to release public data used to blame bacteria, nature and water well owners ~!

Not even after I spent \$4,150.00 requesting the records under FOIP law

Media Alerts

March 19, 2008

Albertans
reject government's
conclusion that
nature contaminated
their well water

EnCana donates
7.5 Million \$
to
the
University of Alberta

April 2008: Alberta Environment Breaks Legislature Made Promise

Takes away the water deliveries

**Declares our dangerously
explosive & toxic water safe**



**2 thousand gallons takes about an hour to fill
I forgot to bring a book**



My turn. 185 gal tank.



Magic always comes along



WARNING



B

B

A

A

Organics
Armat Coffee

**Feb 7, 2009 CTV W5
National News**

**Aired segment on my explosive water and the ERCB's
treatment of me**

The following week ...







**If the contamination in my water is natural,
would they send the RCMP?**

RCMP = Royal Canadian Mounted Police



Buy Our Silence
EnCana increases donation to \$350,000
EnCana Rosebud Centre August 24, 2010

January 28, 2011
ERCB Unconventional Gas
Regulatory Framework

Deep **and shallow** shales will be frac'd

Hydraulic fracturing **can contaminate**
“useable water aquifers” with toxic
chemicals and **“is a recognized risk”**

ERCB Report 2011-A

May 9, 2011 Jackson *et al's*
(Duke University) Peer Reviewed Study

17x more methane in water wells near
drilled & fractured energy wells

Mountain View
GAZETTE

THE SECOND SECTION OF THE CANADIAN COURIER, DORSETTY REVIEW, INDIAN PROVINCE, C.E.D.S ALBERTA, SUNDAY ROUND UP
SERVING MOUNTAIN VIEW & RED DEER COUNTIES



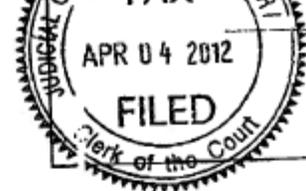
2012 DURANGO AWD

**Frac site
evacuated
after bomb
threat**
/3

**Munro calls
for tougher
frac regs**
/2

**Violence,
threats not
the answer:
activist**
/5





COURT FILE NUMBER

0702-00120

COURT OF QUEEN'S BENCH OF ALBERTA
JUDICIAL CENTRE

DRUMHELLER

PLAINTIFF

JESSICA ERNST

DEFENDANTS

ENCANA CORPORATION
ENERGY RESOURCES CONSERVATION BOARD and
HER MAJESTY THE QUEEN IN RIGHT OF ALBERTA

BRIEF OF ARGUMENT OF THE DEFENDANT, ENERGY
RESOURCES CONSERVATION BOARD,
TO BE HEARD APRIL 26 AND 27, 2012

ADDRESS FOR SERVICE AND CONTACT
INFORMATION OF PARTY FILING THIS
DOCUMENT

JENSEN SHAWA SOLOMON DUGUID HAWKES LLP
Barristers
800, 304 8th Avenue SW
Calgary, Alberta T2P 1C2

Glenn Solomon, Q.C.
Phone: 403 571 1507
Fax: 403 571 1528
Filer 12133-001

alternative, it is plain and obvious that the Defendant ERCB's claims against the Defendant ERCB are without merit, and as such, Summary Judgment should be granted in favour of the ERCB.

(i) **The ERCB does not owe a private duty of care to the Plaintiff**

51. Any private duty of care between the Plaintiff and the ERCB must be grounded in the ERCB's governing statutes, because those statutes are the sole basis for the ERCB's duties. The governing statutes relevant to the present matter are the *Energy Resources Conservation Act* [ERCA] and the *Oil and Gas Conservation Act* [OGCA].

- *Cooper v Hobart, supra*, at paras 43-4 [Tab 6].
- *Oil and Gas Conservation Act, RSA 2000, c O-6* [Tab 42].
- *Energy Resources Conservation Act, RSA 2000, c E-10* [Tab 41].

52. Although the ERCA and the OGCA may impose a duty on the ERCB to the public as a whole, they do not impose a private duty of care between the Plaintiff and the ERCB. As stated above, in order for the OGCA or the ERCA to impose a private law tort duty, the statute must, expressly or by implication, demonstrate that the legislature intended to impose such a duty.

53. The purposes of the OGCA are set out at section 4:

4 The purposes of this Act are

- (a) to effect the conservation of, and to prevent the waste of, the oil and gas resources of Alberta;
- (b) to secure the observance of safe and efficient practices in the locating, spacing, drilling, equipping, constructing, completing, reworking, testing, operating, maintenance, repair, suspension and abandonment of wells and facilities and in operations for the production of oil and gas or the storage or disposal of substances;
- (c) to provide for the economic, orderly and efficient development in the public interest of the oil and gas resources of Alberta;
- (d) to afford each owner the opportunity of obtaining the owner's share of the production of oil or gas from any pool;
- (e) to provide for the recording and the timely and useful dissemination of information regarding the oil and gas resources of Alberta;
- (f) to control pollution above, at or below the surface in the drilling of wells and in operations for the production of oil and gas and in other operations over which the Board has jurisdiction.

These purposes demonstrate that any duty imposed on the ERCB pursuant to the OGCA are duties owed to the public as a whole. The purposes of the OGCA do not indicate, either expressly or by implication, that the Legislature intended to impose a duty on the ERCB to any particular individual. The ERCB has a public duty of care in implementing the regulation of an industry, but no private duty of care.

- *Oil and Gas Conservation Act, supra*, at s 4.

54. Although not referred in the Second Amended Statement of Claim, the ERCA governs the composition and conduct of the ERCB, and as such, is relevant to the determination of the applicable duty of care. The purposes of the ERCA are set out in section 2:

2 The purposes of this Act are

- (a) to provide for the appraisal of the reserves and productive capacity of energy resources and energy in Alberta;

April 16, 2012
(ARC reviews were in 2007)

**Office of the Information & Privacy
Commissioner orders**



**to release 6,000 pages of records and full
refund!**



“We thought we were doing the right thing by not supplying the information”

Calgary Herald, April 17
Matthew McClure

May 16, 2012 Refund! **4 years later**
“public” baseline data not released as
ordered ~ **WHY?**

 Alberta Innovates Technology Futures

PETTY CASH ACCOUNT
250 KARL CLARK ROAD
EDMONTON, ALBERTA
T6N 1E4

2767

DATE: 20120516
Y Y Y Y M M D D

PAY TO ERNST ENVIRONMENTAL SERVICES \$ 4125^{xx}/₁₀₀
the order of

— FOUR THOUSAND ONE HUNDRED TWENTY FIVE — xx DOLLARS 

BMO  Bank of Montreal
10803 - 23RD AVE.
EDMONTON, ALBERTA T6J 7B5

ALBERTA INNOVATES TECHNOLOGY FUTURES
PETTY CASH ACCOUNT

PER: M. Mitterville
PER: Anna Choung

RE: FOID ORDER 2012-06 REFUND



⑈002767⑈ ⑆06789⑈00⑆ ⑆007⑈850⑈

Standing Tall Lois Frank, Blood Tribe



Sept 9, 2011

Arrested
Charged
with intimidation

**June 20, 2012
Crown Stays Charges**



8 years

2004-2006: 2 years bathing in, breathing
and ingesting who knows what toxics

6 years alternate water hauled, so far
2006-2008 by Alberta government
2008-2012 by Ernst

and then ...

Ernst Replacement Drinking Water

June 2012 Plains Midstream Crude Oil Spill into Red Deer River



“World Class”
Alberta ERCB

No “duty of care”

That’s **all** of us!

October 8, 2012

Teen has stomach removed after bar serves nitrogen cocktail

EnCana: In CBM frac'ing, "we pump nitrogen (N₂) into a coal zone"

Rigzone: "oil-based and foam-based frac fluids use nitrogen bubbles to achieve the fracture."



Where do I go now to get water?



Where will you?

www.ernstversusencana.ca