

BATTLE LAKE WATERSHED SYNERGY GROUP

< <http://synergyalberta.ca/group/battle-lake-watershed-synergy-group> >

January 12, 2012

DRAFT

A meeting of the Battle Lake Watershed Synergy Group was held on Thursday, January 12, 2012 at the Lakedell Ag. Centre (Main Hall) with Paul McLauchlin acting as Facilitator.

CALLED TO ORDER:

Paul called the meeting to order at 7:00pm.

Agenda

1. Proposed Agenda
2. Introductions
3. Review of Minutes
4. Action Items
5. ERCB Updates
6. Industry Updates
7. Presentations: Bona vista regarding Fracking, Outsource regarding Seismic Best Practice
8. Community Updates
9. Next Meeting

ATTENDANCE:

In attendance were {6} residents, industry representatives and government officials. (See the attached list.)

Action Items Review:

#154 – Arnold not present; Extended Open invite to Mr. Schindler.

#166 – Ken Moen looked into the Crown Disposition; Letter to SRD, reference in Sept Minutes.

ACTION ITEM #170. *The BLWSG members have chosen to provide Junes minutes to the ERCB to indicate their input on Directive 050. Minutes provided to ERCB.*

Torqazine Discussion- (Herbicide) Outstanding, research by Paul

ERCB Updates:

New ERCB EnerFaq download not compatible with Apple computers. Helpdesk is working on glitch. Any objections from Apple computer owners, please print and fax any objections for time being.

Dan Longvie- team leader for Groundwater Section, interested in a Mapping Land/Water Management discussion. Possibly for March Meeting.

Farmers Advocate:

Property Rights Initiative for Landowners has been started with sessions across the Province. Schedule can be provided or found on gov.ab website.

- Acting advocate for 6 mos. Previously Jim Kiss for 6 yrs.
- Session Schedule:
 - Brooks Jan 16 1-3:30pm
 - Hanna Jan 16 6-9pm
 - Medicine Hat Jan 17 1-3:30pm
 - Lethbridge Jan 17 6:30-9pm

Industry Updates:

CononcoPhillips:

No activity for 2012.

BonaVista: refer to presentation.

Baytex: received non routine application approved for license of 12-23, 4- 22-46-2. Contacting local residents in regards to testing water wells. Schedule bumped up from February to move rig in on Jan 17, 2012.

Advantage: All is quiet. Nothing to report thus far for 2012.

Schollard: Pursuing 3 drilling licenses for the following locations, 12-10-46-2, 4-14-46-2, and 13-3-46-2. Two wells planned to be executed in 2012, timing to come. Work on water injection wells. Possible 2-4 service rig days, outside of Battle Lake Watershed area but will keep the group informed.

Karl:

Note: Location is Multi-Lake lateral, it won't be Fracked.

AB Environment: Association has decided to put together an Integrated Watershed Management Plan with the intent to update the science in greater detail with respect to nutrient loading, how it goes into the lake, how it operates.

- Long term objective to bring groups together to work in and around Pigeon Lake in taking a more holistic approach to Lake Stewardship, Management of Lakes & Resources, and Industry Representative Relations.
- Workshop is being put together, interested parties can attend.
- Going with in house Environment/Partnership with Battle River, based on established models, techniques.
- Science has not been done for Pigeon Lake; general analysis that has been done is from the 1980's.
- Support from AB Environment (partnership)

PennWest: Considering 2-4 oil wells. Scouting surface locations (12-6-46-1-W5, and 10-1-46-2-W5), considering expanding. Map is available. Would like input from landowners.

Trilogy:

From: Landon Whitlock [mailto:Landon.Whitlock@trilogyenergy.com]

Sent: January-12-12 8:45 AM

To: paulm@theheg.com

Subject: Trilogy Update - January

Hi Paul,

Happy New Year! Hope you had an enjoyable Christmas and New Years.

Can you please provide the following update for the group this evening as Sue and I are unable to attend;

Happy New Years to everyone! As a follow up from our last update in November, Trilogy is still awaiting a response from the ERCB regarding the Review and Variance request submitted back in July 2011. Trilogy will provide an update to the group of the timing of the project once it has been decided and once a decision has been released from the ERCB.

Thank you,

Landon Whitlock, PSL

Trilogy Energy | Surface Landman

Ph: (403) 718-2337

Cell: (403) 819-9054

Fax: (403) 262-9792

Community Updates:

Dave: Battle River Water Management Plan underway.
Desire to engage BLWSG for input & feedback.
What is the best way to engage group to gain feedback?

Follow up as Action Item} 3-4 month timeframe to reach out to Stakeholders, Possibly a May Presentation then follow up with Working Group.

Presentations:

BonaVista regarding Fracking:

Scott Johnson, Production Completion Engineer.

(Completion on well} information on 2-19-46-1, 3-30 Surface Well)

- Refer to attached presentation.

Q/A:

Karl: Water used for fracking comes from where?

Bought from Water Co-op from Sylvan Lake (fresh water needed for process); Town of Sylvan Lake (drinking water source).

What is done with used water?

New Alta Plant- treated and pumped into dispersal well approved by ERCB.

Horizontal line has holed in it already?

Yes, covered by bigger piece of metal.

- Drop a ball from surface that will seat in bigger metal piece,
- with pressure will push bigger metal piece back
- holes are not open to reservoir until fracturing starts at toe of well(furthest away from surface)
- Balls of different sizes getting bigger as you get to closest location from surface.

Is AB Environment involved in water usage?

ERCB has base groundwater guidelines set out

BonaVista abides by ERCB regulations.

Can't speak to AB Environment

How much total water used?

565 cubic meters

Dave restating: Taking fresh potable surface water, used for fracturing process, contaminating it, then deep well injecting in so it's out of the water cycle.

What is the recovery rate?

Depends on pressure of well and how it flows back

Lost from water cycle?

Yes

What percent of water?

Could find Statistics

Terry: What chemicals are added?

Designed by Frac Company, can have them come to next meeting for presentation on that.

Note: Database @ fracfocus.org (voluntary data entry)

BonaVista uses least chemical intensive frac system in Industry.

Enviro Water System – 100% non harming chemicals

- Fracture Methodology – reduce amount of water pumped and sand pumped to reduce costs and reduce everything going into the ground

Michael: Where do you source sand?

Man made sand (natural, not resin coated sand)

Not sure on sand process. Can get detail for next meeting.

Tom to Dave Helmer: Are there any applications in AB getting closer to horizontal drilling?

Not sure.

What is regulation on absolute minimum of buffer zone for horizontal fracturing and level of groundwater?

- 25m separation distance
- minimum oil reservoir heard of was 100m

Michael: Action Items:

1. What kind of chemicals are used in fracking
2. Frac Company Presentation

Scott gave an Open Hole Liner demonstration.

QA:

Things that could go wrong with frac process on suspended wells?

Casing not being able to pressure

Why re-enter a reclaimed/abandoned well site?

Why are companies using diesel to drill instead of water? To cut time in half?

Invert mud system, not a drilling engineer.

Give increased penetration rate

Most compatible fluid for that oil well.

Olympic Seismic/Outsource Seismic regarding Seismic Best Management Practice;

Dale Johnson (Outsource Seismic)

- Maps of Seismic Program
- 29 source spines- 315km

- 58 procedural lines- 486km
- Parameters:
- Source intervals -50m apart
- Line spacing – 450m apart
- ?? interval – 50m
- Procedural lines 250m
- 9m charge depth with 1kg charge
- 56% complete on Landowner consultation
- Start Surveying next couple of weeks (Glacier)
- Surveying culture, water wells; if close enough to but outside of program will want to map program area and consult about water well location outside of program
- Set back from water well 180m
- Survey 3-4 weeks
- Mulchers/slashers- Owen
- Line widths ½ -2.75m wide
- Drill- 3 types }
 - LIS 2.75m
 - Tandem Drill
 - Hand Auger -3m

Outsource Representative Paul McDonald for duration of program. He is staying in Rimbey.

Examples given of:

- Source spine 2.7m wide
- Geophone (sensor planted in ground to receive information from charge)
- How to cut fence & set back up
- Tandem drills & LIS drills

Presentation & Photos: see package

Shut Outs

- need to move things for houses, concrete, water wells etc.
- get holes in data
- goal is to fill up, get better picture of what's happening underground

Safety – Medivac on hand

Permitting – receiver line E-W

- Q:** What is going rate for payment to landowners for Geophysical?
 Why are fees/compensation not reflected to landowners} not taking up land permanently, comments of the rate being the same since 1971. Discrepancy lies in the standard for source spine is \$1200,

for procedural line \$600, this however can be negotiated individually by landowner.

Q: Any difference with wire size?

No

Intervals of lines- how deep (farther apart), or how shallow (closer together).

1000m deep or shallower = no data

Deeper you go the stronger the data

GPS: don't need large opening in trees to get GPS signal therefore reduce footprint from surveys.

When Blasting – stack, get further reading?

- After mulching, re-growth is phenomenal

Equipment – mulchers; take out smaller trees, leave bigger old growth trees.

How wide is the blade? 2.75m with ground clearing only.

Seismic Drilling

- Hand auger
- LIS
- Tandem drill

Loading hole- push charge down hole, charge cannot flow back, covered with Betonnite (natural clay)

Q: What keeps aquifers from co-mingling (springs) form surface? (Other than in Tier 1 areas)

Guided- follow Regulations

Detonators – Electronic, highest end, programmable equipment, for low population area, cannot be detonated unless by required equipment.

Q: Frac operation} Micro Seismic, similar technology?

Passive monitoring system. Source of Data is frac versus charge.

Recording Equipment distributed by helicopter or line truck.

Recording truck: Observer – monitors everything.

Processing: 3-D survey, remove things like power line data

Differentiates between any change in structure

Groundwater Contamination Issues: not had any problems

Concern: What is in place to protect landowners from contamination of water sources?

Interruption?

Not affecting, will test before & after charging.

Rust, smell, silt problems – no bacteria found, shock when necessary

Potability analysis.

<Must be 180m from wells>

Province has Water Restoration Project

- landowner water damaged by energy development
- approach company responsible
- landowner must absorb upfront cost to repair
- apply to program, goes to tribunal, award made 25-100%

Michael Black: Tier 1 BMP

- do not want springs, wetlands, surface water disturbed
- whole watershed fed by springs, therefore water flow within 9m

No Seismic activity in Tier 1 lands.

What parts of program would potentially be in Tier 1?

Tier 1 Lands are off limits for drilling

Need full coverage because it contributes back into data.

Follow up: Have a meeting to address Tier 1 Land

Circulated Seismic BMP – see attached.

Next Meeting: March 1, 2012

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Torqazine Discussion- (Herbicide) Outstanding, research by Paul

#171 - Battle River Water Management Plan underway; 3-4 month timeframe to reach out to Stakeholders, Possibly a May Presentation then follow up with Working Group.

#172 - a) What kind of chemicals are used in fracking?

b) Frac Company Presentation

#173 - Have a meeting with Olympic/Outsource to address Seismic on Tier 1 Land

#174 – Follow up with Reclamation BMP

#175 – Seismic Operation BMP

ATTENDANCE LIST

January 12, 2011

INDIVIDUAL	REPRESENTING
Dave Helmer	AB Environment
Monte Hurt	Advantage
? Johnson	BonaVista
Tammy Wilmer	BonaVista
Shane Koss	Baytex
Terry Kreese	Baytex
Ash Palms	Baytex
Steve Harrington	ERCB
Carol Goodbelowith	Farmer's Advocate
Warren Plough	Glacier Explorations Surveys
Arron Gardner	Olympic Seismic
Scott McDonald	Olympic Seismic
Ed Slovodiar	Olympic Seismic
Paul McDonald	Outsource Seismic
Jason Wilson	Outsource Seismic
Andrew Wright	Outsource Seismic
Andrew Styles	Outsource Seismic
Sean Traxler	Outsource Seismic
Dale Johnson	Outsource Seismic
Anna Burgess	PennWest
Allan Browse	PennWest
Stacey Hunchak	PennWest
Michael Black	Resident
Terry Wildman	Resident
? Hancock	Resident
Arthur Schmidt	Resident
Betty Schmidt	Resident
Jim Stevens	Resident
Dan Carrol	Resident
Owen Helgickson	SCL National
Trevor Krause	Scollard
Eric Scheerschmidt	Scollard
Ken Moen	Scollard
Jerry Ridell	SRD
Karl Zajes	Surface Rights Consultant
Kanthy Rooyackers	Wetaskiwin County
Paul McLauchlin	Facilitator