ENHANCE ENERGY CLIVE MMV PLAN
APPENDICES F:

CO_2 Risk Assessment of Clive Existing Wells

July, 2019

CO2 Injection Risk Assessment

April 2018

VZFOXCanada engineering

ENHANCE ENERGY INC.

Table of Contents

List of Figures

List of Tables

List of Appendices

1 INTRODUCTION

VZFOX Canada Engineering (VZFOX) was retained by Enhance Energy Inc. (Enhance) to complete an Engineering Risk Assessment for their proposed carbon dioxide (CO2) Leduc gas injection scheme in the area of Clive, Alberta. Enhance intends to use CO2, which will be pipelined to the Clive area by way of their Alberta Carbon Trunk Line, for EOR purposes and for permanent CO2 storage. The gas will be injected by two new horizontal wells into the Leduc formation approximately 1900m below the surface.

Enhance is committed to the safe completion and ongoing operation of this project and has therefore requested an Engineering Risk Assessment be performed on all of the existing wells in the area that could be affected by gas injection which is grouped under their Phase 1 project area. The intent of the risk assessment is to assist in identifying the inherent risks of the project to the offsetting producers, mineral holders in the vicinity, and the public occupants. Enhance has continued to demonstrate their committed support on ensuring the project is developed with the deepest consideration and respect of all parties surrounding the EOR scheme.

2 SCOPE OF WORK

The scope of work for the well reviews include:

- Review injection scheme area proposed by Enhance
- Review the abandonment criteria as per the regulations set forth by the Alberta Energy Regulator (AER).
- Collect and tabulate the well drilling, completion, and abandonment details
- Review the methodology of the abandonments to determine if there are any wells at risk from improperly abandoned wells.
- Provide risk assessment of CO2 injection and confirming geological seal of CO2 into the Leduc unit

3 SURROUNDING INFRASTRUCTURE

The proposed injection scheme is located in the area of Clive, Alberta, approximately 45km northwest of Red Deer. Clive (15km) and Alix (12km) are the closest communities. The surroundings are primarily farm land with numerous residences located within Area of Notification.

The figures below show the intended Scheme Area (red line) as well as the Area of Notification (dashed purple line). CO2 will be transported from Enhance's oil processing and gas compression facility site located at 4-15-40-24W4 through new pipelines designed for EOR purposes to the injection wellheads located at 15-35-39-24W4.

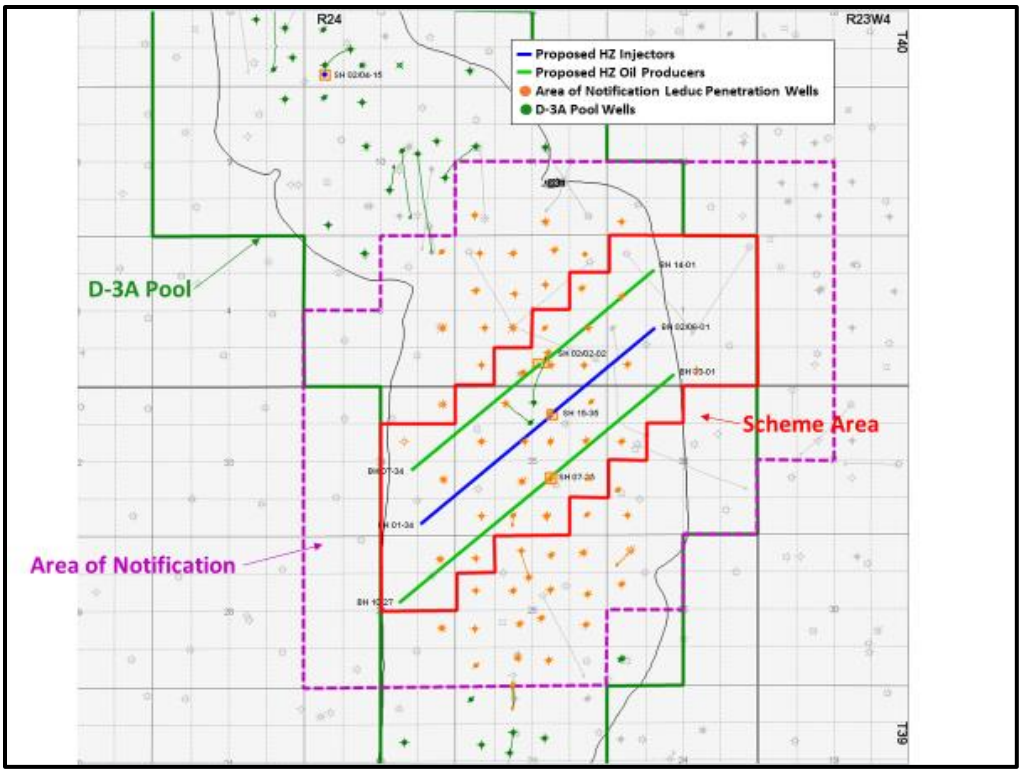

Figure 1: Proposed Injection Scheme Area and Area of Notification

Figure 2: Satellite View of Proposed Scheme

4 AREA REVIEW

This area was primarily developed by Gulf Canada Ltd. in the 1960's and 1980's. Within the area of notification, there are approximately 130 wells, 69 of which were drilled into the Leduc (D-3) zone. The mass majority of wells are verticals with a scattering of horizontal and deviated wells. Currently, Tourmaline Oil Corp. operates 54 of the 69 wells that penetrate the Leduc. In the below figures, the complete breakdown of well vintage, original operators, and current operators can be seen.

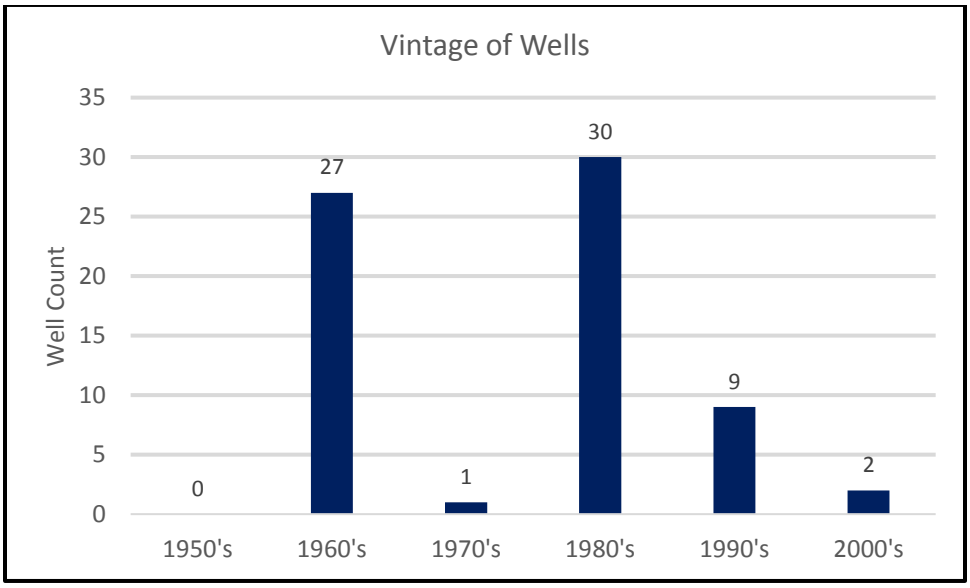

Figure 3: Breakdown of Leduc wells by year drilled

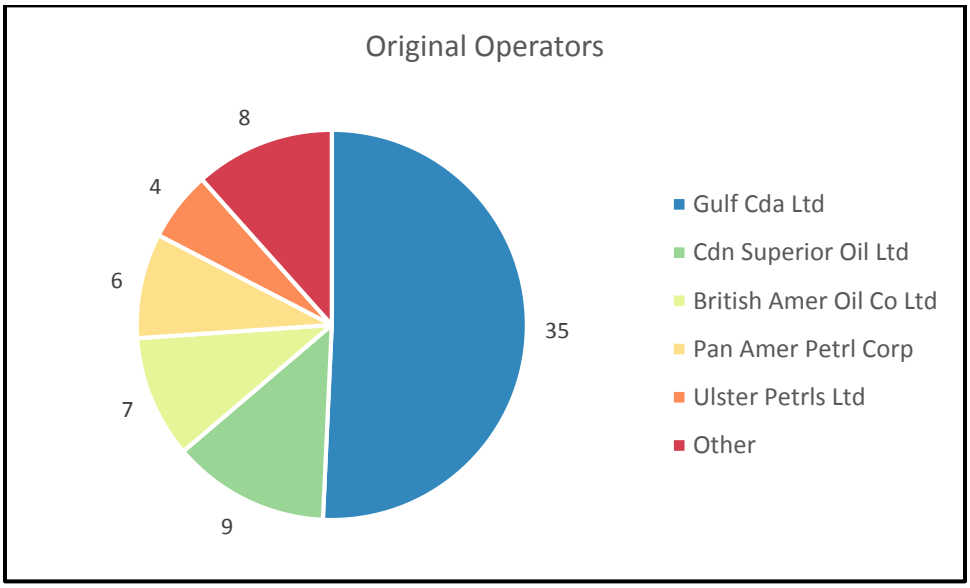

Figure 4: Breakdown of original operators of Leduc wells

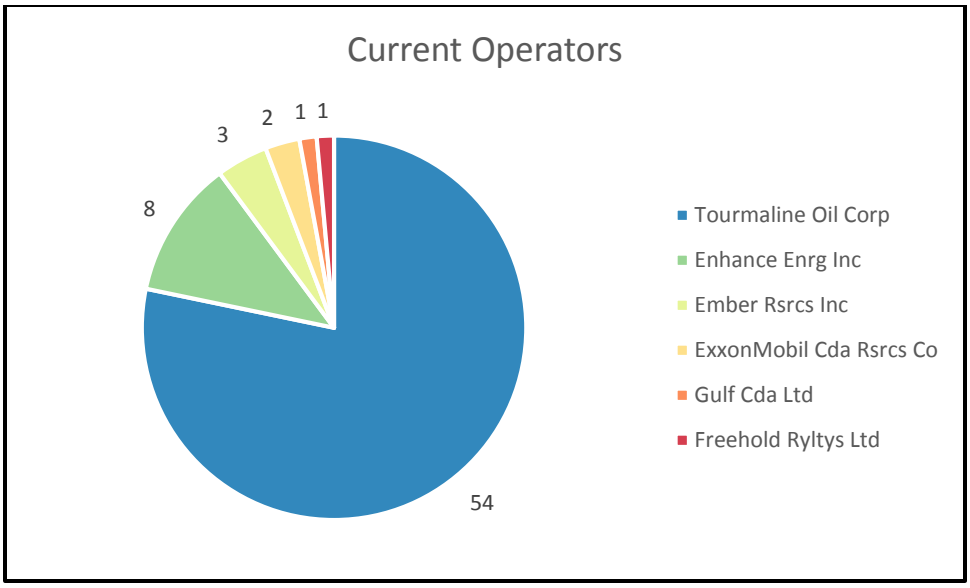

Figure 5: Breakdown of current operators of Leduc wells

5 POTENTIAL RISKS ASSOCIATED WITH GAS INJECTION

The process of gas injection comes with inherent risks which are the responsibility of the operator to mitigate. Three of the primary risks include

1. Injection gas being released at surface
2. Injection gas permeating into porous zones uphole
3. Injection gas penetrating into groundwater

5.1 Surface Release

Many of these wells were drilled during the early development of the Leduc zone when the reservoir pressures were at virgin conditions. Since then, reservoir pressures have declined and are presently supported by the natural aquifer system. Enhance intends to re-pressurize the reservoir and produce hydrocarbons at or below these pressures. After reviewing the tour reports associated with the study wells, it can be concluded that there was no indication of any surface releases at the original, higher reservoir pressure and that the wells maintained their wellbore integrity and should continue to do so.

Every well that penetrates the zone where gas is being injected provides any opportunity for gas to reach surface by way of two routes:

a. Inside production casing and out through a leak in the wellhead
b. Outside production casing and through an open surface casing vent

For any well that is not producing, it is recommended that a plug be set downhole to either suspend or abandon the wellbore to prevent unwanted gas from coming to surface. Wellhead pressure tests should also be done at scheduled intervals in order to confirm integrity.

Production casing is cemented into place during the initial drilling of a well which is intended to prevent any formation fluids from reaching surface. Cement bond logs are often run to ensure a sufficient cement bond was obtained. Additionally, surface casing vent flow tests should be completed regularly to ensure no flow is reaching surface.

5.2 Porous Zones Uphole

It is also important to ensure that injected gas does not have an opportunity to penetrate into porous zones uphole. The production casing cement job isolates these zones to ensure that no crossflow exists. Above the Leduc, the following porous zones have been identified in some of, if not all wells and shown in the table below.

Table 1: Porous Zones Above the Leduc

Zone	Approximate Depth (m TVD)
Belly River	575
Viking	1375
Manville	1425
Ellerslie	1565
Wabamun	1675
Nisku	1800
Leduc	1875

In every well, the Leduc is the deepest zone penetrated and the production casing is cemented from the Leduc up. The cement bond logs that were reviewed indicate in every case that the cement behind the casing is providing hydraulic isolation between the Leduc and all porous zones above. It is reasonable then to assume that this holds true for the wells without CBL's. In the below figure, the Leduc Tops and the trend through the region can be seen. The tops range from depths of 1844m to 1926m.

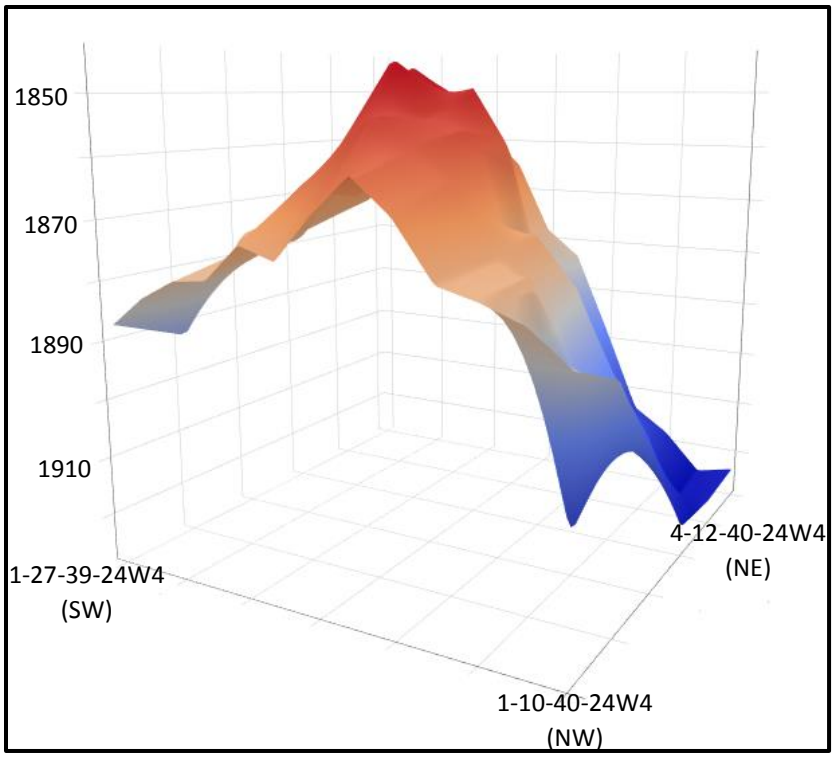

Figure 6: Leduc Tops (mKB) 3D Surface Plot

5.3 Base of Groundwater Protection

The base of groundwater protection (BGWP) is the best estimate of the elevation of the base of the formation in which non-saline groundwater occurs at a given location. It is imperative that injected gas and formation fluids be completely isolated from the base of groundwater. The is done by ensuring that the surface and production casing strings are properly cemented in place. In all wells reviewed, the surface casing was cemented fully to surface. While production casing cement jobs vary in height, they provide complete hydraulic isolation between the Leduc and the BGWP.

In the below figure, the BGWP trend in the area can be seen as it gets higher going from south to north through the region ranging from 275m above sea level (m asl) to 354m asl.

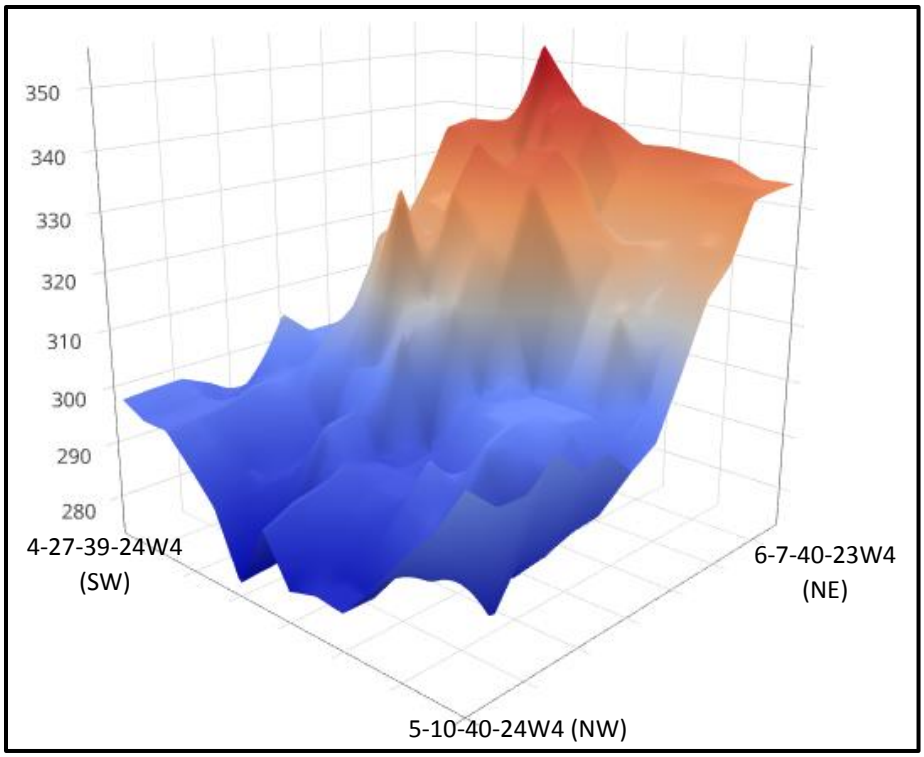

Figure 7: BGWP (m asl) 3D Surface Plot

6 ABANDONMENT REQUIREMENTS

The Alberta Energy Regulator published on March 15th, 2015 the minimum requirements for wellbore abandonments in *Directive 20: Well Abandonments*. The objective of a well abandonment is to cover all non-saline groundwater intervals and to isolate all porous zones. Abandonments can be executed as routine without pre-approval or can be planned as non-routine if the abandonment operations vary from the requirements in Directive 20.

The intent of the scheme at 15-35-039-24W5 is to inject carbon dioxide (CO2) into the Leduc formation. In the event the offsetting wells were not effectively abandoned, the injection scheme poses the risk of not sealing the injected volumes and potentially cross flowing to an offsetting well or to surface.

6.1 Abandonment Requirements for Completed Well

Th AER dictates that there are four options for zonal abandonment of a completed well which are summarized below. For complete details, refer to Directive 20.

1. Setting a Permanent Bridge Plug
    - Bridge plug must be set within 15m above the perforations
    - Bridge plug must be pressure tested to 7,000 kPa for 10 minutes
    - Topped with 8 linear meters of Class G cement

2. Setting a Cement Retainer
    - Retainer must be set within 15m above the perforations
    - Retainer must be pressure tested to 7,000 kPa for 10 minutes
    - A cement squeeze must be conducted on the perforations
    - Topped with 8 linear meters of Class G cement
    - If the retainer is drilled out, the squeezed perforations must be pressure tested to 7,000 kPa for 10 minutes

3. Setting a Plug in a Permanent Packer
    - A plug must be set in the packer within 15m above the perforations
    - The plug and packer must be pressure tested to 7,000 kPa for 10 minutes
    - Topped with 8 linear meters of Class G cement

4. Setting a Cement Plug / Squeezing Cement
    - Cement plug must be set across the perforations
    - Cement plug must extend a minimum of 15m below (or PBTD) and 15m above the perforations
    - Cement plug must be pressure tested to 7,000 kPa for 10 minutes

7 OFFSETTING GAS INJECTION WELL REVIEWS

A total of 69 wells were identified as being both within the Area of Notification and penetrating the Leduc formation. The complete list of wells can be seen in Table 2 below.

Table 2: List of 69 Leduc wells within the Area of Notification

100/12-25-039-24W4/00	100/08-27-039-24W4/00	100/15-35-039-24W4/00	100/08-02-040-24W4/00
100/13-25-039-24W4/00	100/16-27-039-24W4/00	102/15-35-039-24W4/00	100/09-02-040-24W4/00
100/02-26-039-24W4/00	100/08-34-039-24W4/00	100/16-35-039-24W4/00	100/10-02-040-24W4/00
100/03-26-039-24W4/00	100/10-34-039-24W4/00	100/04-36-039-24W4/00	100/11-02-040-24W4/00
100/14-23-039-24W4/00	100/16-34-039-24W4/00	100/05-36-039-24W4/00	100/12-02-040-24W4/00
100/04-26-039-24W4/00	100/01-35-039-24W4/00	100/12-36-039-24W4/00	100/13-02-040-24W4/00
100/05-26-039-24W4/00	100/02-35-039-24W4/00	100/02-01-040-24W4/00	100/14-02-040-24W4/00
100/06-26-039-24W4/00	102/02-35-039-24W4/00	100/04-01-040-24W4/00	100/15-02-040-24W4/00
100/07-26-039-24W4/00	100/03-35-039-24W4/00	100/05-01-040-24W4/00	100/16-02-040-24W4/00
100/08-26-039-24W4/00	100/04-35-039-24W4/00	100/12-01-040-24W4/00	100/08-03-040-24W4/00
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100/10-26-039-24W4/00	100/07-35-039-24W4/00	100/02-02-040-24W4/00	102/09-10-040-24W4/00
100/11-26-039-24W4/00	100/08-35-039-24W4/00	102/02-02-040-24W4/00	100/02-11-040-24W4/00

100/14-26-039-24W4/00	100/09-35-039-24W4/00	100/03-02-040-24W4/00	100/04-11-040-24W4/00
100/12-26-039-24W4/00	100/10-35-039-24W4/00	100/04-02-040-24W4/00	100/04-12-040-24W4/00
100/13-26-039-24W4/00	100/11-35-039-24W4/00	100/05-02-040-24W4/00	
100/15-26-039-24W4/00	100/12-35-039-24W4/00	100/06-02-040-24W4/00	
100/16-26-039-24W4/00	100/14-35-039-24W4/00	100/07-02-040-24W4/00	

The details of the offsetting wells are provided in *Attachment A – Offsetting Well Details.* The well list consists of 69 total wells including 25 abandoned wells, 35 suspended wells, and 9 producing wells. Note that wells were marked as abandoned when all of the downhole zonal abandonment work was completed; this does not necessarily correlate with the well being cut and capped.

A thorough well review was done for each of the 69 wells. In every case, the following details were collected and reviewed.

- Drilling
  - Hole size
  - Surface & Production Casing data (size, weight, grade, depth, etc.)
  - Cementing data (volumes, returns to surface)
- Completions
  - Cement Bond Logs
  - Zones completed
  - Completion methods (perforating, acidizing, fracturing)
  - Depths
  - Casing Inspection Logs
- Suspensions & Abandonments
  - Bridge plugs
  - Packers
  - Cement squeezes (pressures, rates, volumes)
  - Cement plugs

The following is a list of general conclusions and findings from the thorough review of the tour reports.

- Surface casing was cemented to surface in every well. Multiple wells did not get returns on the original cement job and were then topped up from surface.
- Production casing was cemented in one of two ways: Two-Stage or Lead/Tail. No wells had cement returns to surface.
- In nearly every well, both the Leduc and Nisku zones were perforated and acidized with 15% HCl.
- Well development commonly followed the below stages:
  - Complete one set of perforations in the Leduc and Nisku towards the bottom of the zone, produce.
  - Set a cement retainer above the Leduc perforations and cement squeeze the Leduc perforations, then balance a cement plug and squeeze the Nisku perforations. Shut off

pressures varied significantly throughout the wells – sometimes the Leduc was gravity fed cement, while others it was squeezed to a standing 7 MPa.

- Drill out the cement plug to the top of the cement retainer. Pressure test the squeezed Nisku perforations. The cement retainer was typically left in place and not drilled out.
- Recomplete with one or two sets of perforations in the Leduc and Nisku slightly uphole from the previous, produce.

7.1 Cement Tops

Typical drilling methods involved cementing the production casing in two stages. This results in two separate cement columns behind the casing rather than one continuous cement column to surface. In over half of the wells reviewed, Cement Bond Logs (CBL) were run in order to evaluate the quality of the cement behind the casing. Note that the results from the CBL's discussed in this report are based on the field interpretations that were written in the tour reports. The logs were not reevaluated at this time.

The below figure shows the results of the 38 bond logs that indicated a cement top. The average cement top was found to be 1256 mKB, while the average Leduc top was at 1875m indicating a cement column of 619m isolating the Leduc zone from zones uphole.

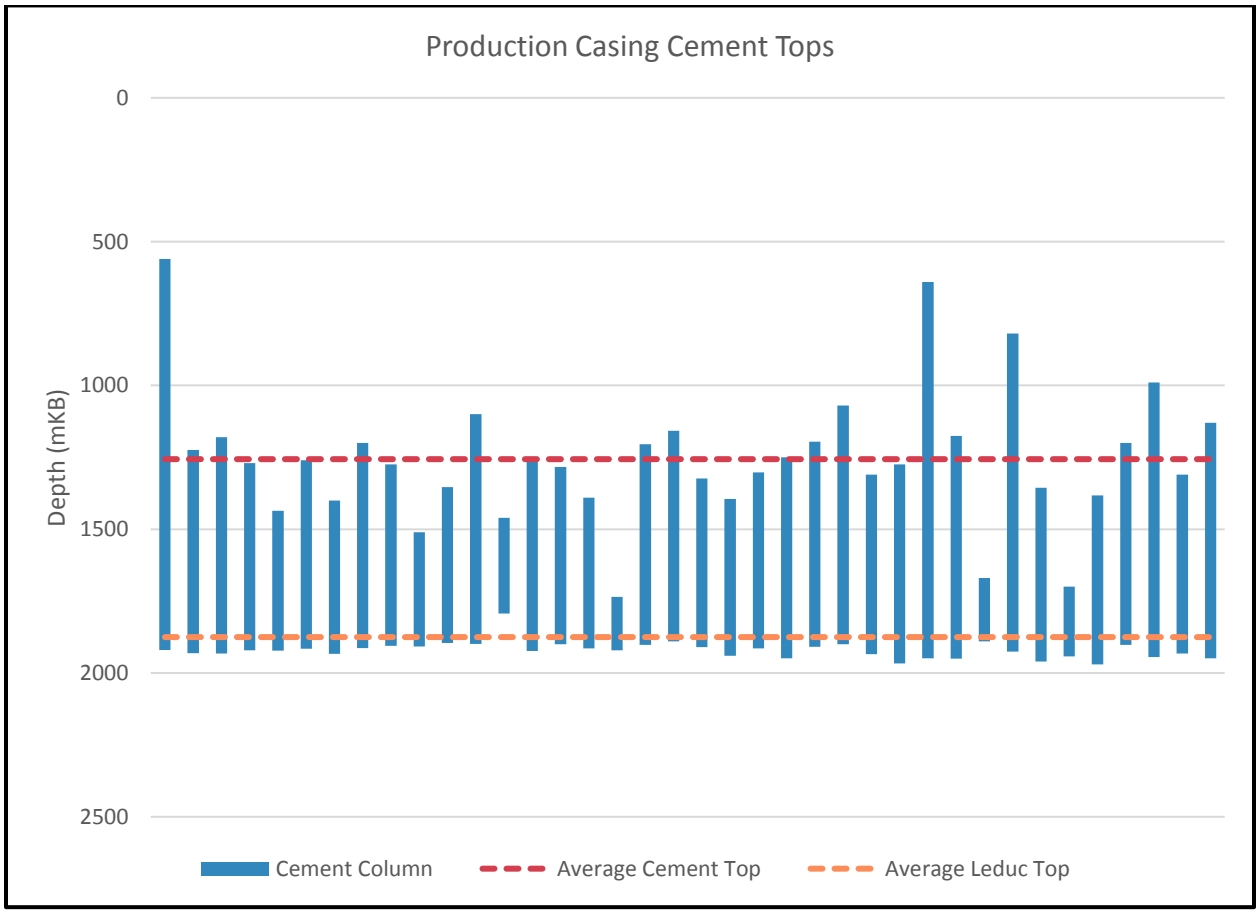

Figure 8: Production Casing Cement Tops

8 RISK ASSESSMENT

The tour reports for the above 69 wells were used to review the drilling, completion, workover, and abandonment history. A summary of the findings for each well can be seen in *Appendix A – Offsetting Well Details.* Each well was then assigned a risk level based on the outlines in Table 3 below.

Table 3: Risk Level Categories

1	Low-Low Risk	Wells where the Leduc zone has been abandoned and there are no indications that the Leduc is not segregated from above zones
2	Low Risk	Wells where the Leduc zone has been suspended with a bridge plug and there are no indications that the Leduc is not segregated from above zones
3	Medium Risk	Wells where the Leduc zone is currently open and capable of production, or where there may be segregation issues between the Leduc and above zones
4	High Risk	Wells where the Leduc zone is currently open and capable of production and within 800m of the planned gas injection wells.

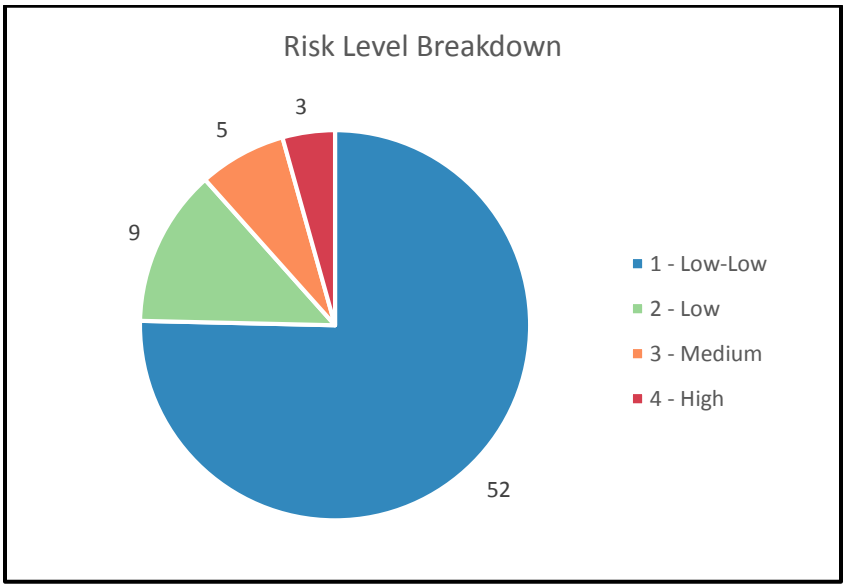

Figure 9: Number of wells in each risk category

It should be noted that due to the vintage of many of these wells, zonal abandonment work was not always completed to the same standards that are required today. A shut off pressure of 7 MPa was not always obtained when perforations were cement squeezed. In certain instances, a cement retainer was used to gravity feed cement into the perforations below but a squeeze was never attempted. For full abandonment details of every perforation in every zone, refer to the attached wellfiles.

8.1 Low-Low Risk

Of the 69 wells reviewed, a total of 52 wells were assigned a risk level of Low-Low. In all of these wells, the Leduc zone has been abandoned and isolated from the rest of the wellbore. No further action is required in order to minimize the risk of gas breakthrough for these wells.

8.2 Low Risk

A total of 9 wells were categorized as Low risk due to the Leduc zone being suspended with a bridge plug. In order to mitigate risk for these wells, the bridge plugs should be pressure tested in accordance with the requirements laid out in *Directive 13: Suspension Requirements for Wells.*

8.3 Medium Risk

A total of 5 wells were assigned a risk level of Medium due to having open Leduc perforations. Three of the wells are suspended but there are no records of bridge plugs being run or any other form of isolation existing. Two wells are still active and producing. These wells range in proximity to the injection wells from 1100m to 2150m.

- 100/04-26-039-24W4
    - Proximity to injection wells: 1600m
    - Current status: Suspended (no bridge plug)
    - Cement top: Not available. Estimated at 1418m (504m column height) based on the CBL results from 08-27 offset and using 80% of the cement.
    - Leduc formation top is at 1891.9 mTVD
    - Completed zones:
        - Leduc: 1 set of perforations has been cement squeezed, 1 set remains open and capable of production
        - Nisku: 3 sets of perforations have been cement squeezed, 2 sets remains open and capable of production

- 100/01-35-039-24W4
    - Proximity to injection wells: 1150m
    - Current status: Suspended (no bridge plug)
    - Cement top: 1100m (799m column height)
    - Leduc formation top is at 1850.0 mTVD
    - Completed zones:
        - Leduc: 1 set of perforations has been cement squeezed, 1 set remains open and capable of production
        - Nisku: The only set of perforations has been cement squeezed

- 100/05-36-039-24W4
  - Proximity to injection wells: 1100m
  - Current status: Suspended (no bridge plug)
  - Cement top: 1302 m (612m column height)
  - The Leduc formation top is at 1864.5 mTVD
  - Completed zones:
    - Leduc: The only set of perforations remains open and capable of production
    - Nisku: The only set of perforations remains open and capable of production

- 100/16-03-040-24W4
  - Proximity to injection wells: 2050m
  - Current status: Active
  - Cement top: Not available. Estimated at 1641m (264m column height) based on the CBL results from 12-02 offset and using 20% more cement.
  - The Leduc formation top is at 1879.4 mTVD
  - Completed zones:
    - Leduc: 3 sets of perforations have been cement squeezed, 1 set remains open and capable of production
    - Nisku: The only set of perforations has been cement squeezed

- 100/04-11-040-24W4
  - Proximity to injection wells: 2150m
  - Current status: Active
  - Cement top: Not available. Estimated at 1400m (498m column height) based on the CBL results from 02-11 offset and using 80% of the cement.
  - The Leduc formation top is at 1889.2 mTVD
  - Completed zones:
    - Leduc: 1 set of perforations has been cement squeezed, 1 set remains open and capable of production
    - Nisku: All 3 sets of perforations have been cement squeezed

The above wells are all at higher risk of communicating with the injection wells due to the open perforations; however, this risk is somewhat minimized due to the greater proximity from the injection wells. It is recommended that for these wells casing pressures be monitored regularly. The wellheads should also be pressure tested. In the event that communication with the injection wells is seen, the Leduc zone should be suspended or abandoned with a bridge plug.

8.4 High Risk

A total of 3 wells were identified as high risk due to having open Leduc perforations and their close proximity (less than 800m) to the injection wells.

- 100/10-35-039-24W4
    - Proximity to injection wells: 200m
    - Current status: Active
    - Cement top: Not available. Estimated at 1135m (762m column height) based on the CBL results from 12-35 offset and using an equivalent amount of cement.
    - The Leduc formation top is at 1848.6 mTVD
    - Completed zones:
        - Leduc: 3 sets of perforations have been cement squeezed, 2 sets have been suspended with a bridge plug, and 1 set remains open and capable of production
        - Nisku: All 4 sets of perforations have been cement squeezed

- 100/14-35-039-24W4
    - Proximity to injection wells: 50m
    - Current status: Suspended (bridge plug not set properly)
    - Cement top: Not available. Liner was fully cemented in place.
    - The Leduc formation top is at 1855.6 mTVD
    - Completed zones:
        - Leduc: A bridge plug was set in the liner directly above the open hole section; however, the bridge plug did not pressure test successfully

- 100/07-02-040-24W4
    - Proximity to injection wells: 700m
    - Current status: Suspended (no bridge plug)
    - Cement top: 1310m (624m column height)
    - The Leduc formation top is at 1883.0
    - Completed zones:
        - Leduc: The only set of perforations remains open and capable of production
        - Nisku: The only set of perforations remains open and capable of production

The above wells have a high risk of communicating with the injection wells due to their open Leduc perforations and close proximity. It is recommended that for these wells casing pressures be monitored regularly. The wellheads should also be pressure tested. In the event that communication with the injection wells is seen, the Leduc zone should be suspended or abandoned with a bridge plug.

8.5 Cementing Issues

Three wells were identified with significantly lower cement tops than the average.

- 100/09-35-039-24W4
    - Proximity to injection wells: 450m
    - Current status: Suspended

  - Cement top: 1735m (186m column height)
  - The Leduc formation top is at 1870.8 mTVD
  - Completed zones:
    - Leduc: abandoned with a bridge plug and cement
    - Nisku: one set of perforations remain open but have been suspended with a bridge plug

- 100/12-02-040-24W4
  - Proximity to injection wells: 1500m
  - Current status: Abandoned
  - Cement top: 1670m (220m column height)
  - The Leduc formation top is at 1876.3 mTVD
  - Completed zones:
    - Leduc: 3 sets of perforations were cement squeezed, 1 set was abandoned with a 175m cement plug
    - Nisku: all perforations have been cement squeezed

- 100/15-02-040-24W4
  - Proximity to injection wells: 1350m
  - Current status: Abandoned
  - Cement top: 1700m (242m column height)
  - The Leduc formation top is at 1906.8 mTVD
  - Completed zones:
    - Leduc: 1 set of perforations was cement squeezed, 1 set was abandoned with a 269m cement plug
    - Nisku: all perforations were abandoned with a 269m cement plug

For these wells it is recommended that regularly scheduled Surface Casing Vent Flow checks be performed to ensure that the cement is providing an adequate seal of the Leduc formation and no injection gas is reaching surface.

8.6 Casing Integrity

Any wells with a casing leak provide increased opportunity for injection gas to migrate to other porous zones, into groundwater, or up to surface. From the well reviews, two instances of casing failure were found. The remaining wells showed no indications of casing integrity issues. The casings were routinely pressure tested when perforations were cement squeezed confirming the integrity of the wellbore. Additionally, one Pipe Analysis Logs (PAL) from 100/08-27-039-24W4 was provided for review and no indications of failed casing were noted.

- 100/11-35-039-24W4
  - Proximity to injection wells: 50m
  - Current status: Abandoned

  - Cement top: 1204m (698m column height)
  - The Leduc formation top is at 1853.6 mTVD
  - Completed zones:
    - Leduc: 4 sets of perforations were cement squeezed with the retainers left in place. 1 set of perforations was abandoned with a bridge plug and cement
    - Nisku: All perforations have been abandoned with bridge plugs and cement
  - Comments: A casing leak was found at 72m and at 300m and identified as being from when the tubing was perforated while stripping out. Remedial cementing was attempted but a final shut off pressure could not be obtained. The wellbore below the leak was pressure tested satisfactorily.

- 100/10-02-040-24W4
  - Proximity to injection wells: 1050m
  - Current status: Suspended
  - Cement top: Not available. Estimated at 1700m (220m column height) based on the CBL results from 12-02 offset and using an equivalent amount of cement.
  - The Leduc formation top is at 1897.1 mTVD
  - Completed zones:
    - Leduc: 2 sets of perforations were cement squeezed with the retainer left in place. 1 set of perforations was abandoned with a bridge plug and cement.
    - Nisku: 4 sets of perforations were abandoned with a bridge plug and cement.
  - Comments: A casing leak was found at 1235m. A patch was set but has since failed or been removed. During the zonal abandonment work, a feed rate of 110 L/min at 4 MPa through the leak was obtained. A cement bond log run indicated a good cement bond over the Nisku but did not indicate the cement top. The wellbore below the leak was pressure tested satisfactorily.

Based on the CBL results, and the plugs set downhole to abandon the Leduc and Nisku zones, the Leduc should be effectively isolated; however, it is recommended that casing pressures be monitored and Surface Casing Vent Flow checks be performed regularly to ensure no injection gas is reaching surface.

9 CONCLUSIONS

VZFOX has reviewed a total of 69 wells offsetting the gas injection scheme planned by Enhance Energy in order to determine the risks associated with injecting CO2 into the Leduc formation. Eight wells were identified as having open Leduc perforations, three of which were deemed to be at higher risk due to their close proximity, and therefore at a higher risk of communicating with the injection wells. It is recommended that these wellheads be pressure tested to ensure their integrity and that the wells be constantly monitored to ensure that no unwanted gas is reaching surface. In the event that this happens, a workover operation should be commenced immediately in order to downhole suspend or abandon the open perforations and fully isolate the Leduc zone.

Five wells were identified with wellbore integrity concerns. Three of these wells have significantly lower production casing cement tops and are therefore at a higher risk of not providing an adequate seal of the Leduc formation. It is recommended that regularly scheduled Surface Casing Vent Flow checks be performed in order to ensure no gas is reaching surface. Two wells were identified with casing leaks. In both cases, the Leduc has already been zonally abandoned.

The remaining wells that were reviewed show no indications of not being able to maintain an active seal of the Leduc formation. Due to the vintage of these wells and the lower abandonment standards that some received, it is still recommended that casing pressures be monitored regularly where possible to ensure that the active seal of the Leduc formation is being achieved.

10 DISCLOSURE

VZFOX Canada Engineering has prepared this report taking into account government regulations available at the time of the assessment. VZFOX has not made an independent verification of historical or analytical results provided by third parties and therefore makes no assurances regarding the accuracy of such information. It has assumed such information is correct. Where indicated or implied, the conclusions and recommendations are based on information made available at the time of the assessment. The conclusions do not apply to any areas or locations not identified in this report.

This report is intended for the exclusive use of the company, organization, or individual to whom it is addressed and may not be relied upon by any third party without the express written permission of VZFOX. The investigation and reporting have been conducted with a reasonable level of attention and skill, in accordance with standards prevailing in the environmental consulting profession at the time of report date in the location in which the report was prepared.

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APPENDIX A

Offsetting Well Details

APPENDIX B

Downhole Profiles