# **Director's Order Number**

#### Director's Order Issued To:

Glenfred Gas Wells Limited 1016 Haldimand Road 55 Jarvis, ON N0A 1J0

#### Site

Wells licensed under the *Oil, Gas and Salt Resources Act* to Glenfred Gas Wells Limited in the County of Haldimand, in the vicinity of the Town of Jarvis, and as further described in Part B of this Director's Order.

Refer to the Definitions section in Part B of this Director's Order, for the meaning of all the capitalized terms that are used in this Director's Order.

#### PART A - WORK ORDERED

Pursuant to my authority under section 18 of the EPA, I order you to do the following:

#### Item No. 1

# Compliance Due Date: May 15, 2024

By May 15, 2024, retain the services of a Qualified Person to implement the Work Plan required by Work Ordered Item No. 3 and carry out the work in Work Ordered Item Nos. 4 and 5.

#### Item No. 2

# Compliance Due Date: May 15, 2024

By May 15, 2024, submit to the Director written confirmation from the Qualified Person(s) by email to <u>Stephen.Burt@Ontario.ca</u>, with a copy to <u>Jeremy.Gamble@ontario.ca</u> and <u>Environment.Hamilton@ontario.ca</u>, that the Qualified Person(s) have (1) received a copy of this Order; (2) been retained to carry out the work as described in Work Ordered Item Nos. 3, 4 and 5; and (3) the experience and qualifications to carry out such work.

#### Item No. 3

# Compliance Due Date: May 31, 2024

Commencing May 31, 2024, have a Qualified Person forthwith implement the Work Plan.

#### Item No. 4

Prior to implementing any work under the Work Plan that may affect private property, provide written notice to the owner of said property of the work to be carried out and make any necessary arrangements to permit access to said property.

#### Item No. 5

If permission to access private property for the purpose of implementing the Work Plan,

as described in Work Ordered Item No. 4, cannot be obtained, the Qualified Person shall provide written notification to the Director by email to <u>Stephen.Burt@Ontario.ca</u>, with a copy to <u>Jeremy.Gamble@ontario.ca</u>, that includes an explanation of the efforts made to obtain access and the responses to same.

# PART B – BACKGROUND AND REASONS

This Director's Order is being issued for the reasons set out below.

# Definitions

For the purposes of this Director's Order, the following capitalized terms shall have the meanings set out below:

"**Director**" means a person appointed by the Minister pursuant to section 5 of the EPA in respect of sections of the EPA or its regulations.

"EPA" means the Environmental Protection Act, R.S.O. 1990, c. E. 19.

"Glenfred" means Glenfred Gas Wells Limited.

"Ministry" or "MECP" means the Ontario Ministry of the Environment, Conservation and Parks.

"MNRF" means the Ministry of Natural Resources and Forestry.

"OGSRA" means the Oil, Gas and Salt Resources Act, R.S.O. 1990, c. P.12.

"**Order**" means this Director's Order Number [Number to be assigned at time of issuance], as it may be amended.

"**Orderee**" means Glenfred Gas Wells Limited, with a registered office located at 1016 Haldimand Road 55, Jarvis, Ontario, N0A 1J0.

"Qualified Person" means a contractor or other person satisfactory to the Director who has obtained the appropriate education and training and has demonstrated experience and expertise in the areas relating to the work required to be carried out in this Order, including experience in gas well isolation and shutdown processes.

"Site" means the properties that are the subject of this Order, namely the Wells located in the vicinity of the Town of Jarvis in the County of Halidmand.

"TSSA" means the Technical Safety and Standards Authority.

"Wells" means the 62 gas wells that are the subject of Order 135-21-13113-002 dated December 17, 2021, and issued by an Inspector in the ministry currently known as MNRF under s. 7(1) of the OGSRA to Glenfred, with the following licence numbers: T000257, T000454, T000814, T009720, T009729, T009730, T009731, T009736, T009738, T009739, T009741, T009742, T009743, T009744, T009745, T009746, T009747, T009748, T009749, T009753, T009754, T009757, T009758, T009759, T009762, T009763, T009767, T009768, T009770, T009771, T009772, T009773, T009775, T009776, T009778, T012336, T000270, T009734, T009774,

T009769, T009755, T009764, T009737, T009766, T012337, T009725, T009717, T009733, T009732, T009722, T009719, T0009777, T009756, T009760, T009715, T009716, T009740, T009721, T009718, T009723, T009727, and T009724.

"**Work Plan**" means the work plan, entitled "Work Plan to Address Immediate Risk Associated with Glenfred Gas Wells Ltd. Wells", dated March 5, 2024, attached as Schedule "A" to this Order, as may be amended.

# Description of Person(s) Subject to the Director's Order

Glenfred is a company incorporated under the laws of Ontario with corporation number 145063. The company was involved in the extraction and distribution of natural gas deposits in Haldimand County and in the vicinity of Jarvis, Ontario. Glenfred is the licensee under OGSRA for the Wells that are the subject of this Order and operated the Wells in question for decades. There are currently no living directors or officers of the company, as the two persons listed as directors in the corporate profile report are now deceased.

# Description of the Site and/or System/Facility

The Wells are located in Haldimand County, in the vicinity the Town of Jarvis, and currently supply natural gas to residential properties in the area.

# Events Leading up to Director's Order

In July 2021, Glenfred first commenced insolvency proceedings under the *Bankruptcy and Insolvency Act* before the Ontario Superior Court of Justice. In September 2022, a licensed trustee in bankruptcy was appointed for the company, however it appears the trustee is attempting to be discharged. Although the Wells remain active, the trustee in bankruptcy informed MNRF that they are not taking responsibility for the care or maintenance of the wells in accordance with compliance obligations under the OGSRA.

In the summer and fall of 2021, MNRF conducted inspections of the Wells, and identified a number of hazards due to leaks, lack of monitoring and maintenance. As a result, on July 30, 2021, October 4, 2021 and December 17, 2021, an MNRF inspector issued three separate orders to Glenfred, as well as to Nathan Reicheld and Sally Reicheld. The MNRF orders required plugging of the 62 wells licensed to Glenfred, and the repair of leaks on 43 of these wells.

The Orders were appealed by Nathan Reicheld and Sally Reicheld. Glenfred did not appeal. As a result of the appeal under OGSRA, on October 27, 2022, the MNRF Orders were upheld as against Nathan Reicheld as an operator. Sally Reicheld was found not to be an operator.

Nathan Reicheld sought a judicial review of the appeal decision before the Ontario Superior Court of Justice and a date for the hearing has been set for June 2024.

To date, none of the plugging or repair work on the Wells has been completed by Glenfred or Nathan Reicheld. Similarly, the trustee in bankruptcy has declined MNRF's requests for consent to allow MNRF to arrange for a contractor to shut-in the Wells. Given the ongoing leaks, deteriorated well heads and continued use by some of the residents connected to the unlicensed distribution system, MNRF has determined that the risks associated with the Wells are becoming increasingly urgent.

On July 21, 2023, TSSA sent letters to 32 landowners using natural gas supplied by Glenfred, indicating that they will need to find a new fuel distributor or other source of heating for their properties by November 1, 2023. The pressures on the Wells are currently increasing as the residential homes and Enbridge stop taking natural gas from Glenfred, making any existing leaks or problems related to the Wells worse.

In the summer of 2023, MNRF reached out to MECP to seek assistance in addressing its concerns regarding the risks of adverse effects that may result from the discharge of contaminant, namely methane and/or hydrogen sulphide, from the Wells into the natural environment. The adverse effects include the impacts resulting from a potential explosion. In particular, MNRF identified a number of risks with the Wells, which include:

- 43 wells with leaks;
- 6 wells with valve failures;
- 3 wells with cement annular failures (natural gas is leaking through the cement seal between the steel casings);
- 6 wells with damaged infrastructure;
- 2 wells with oil residue around them that has been present for a long period of time, which is indicative of the potential leak or failure of well components;
- 62 wells that have not been inspected by the operator since July 4, 2021;
- No hydrogen sulphide gas was detected at the time of inspection in July 2021, however, this area is known to have sulphur water, which can deteriorate steel casing at an accelerated rate, as well as become a source of hydrogen sulphide under the right conditions;
- Many of the wells are producing pressures on them that far exceed the maximum acceptable operating pressures of the existing well fittings and equipment;
- As a result of residential homes and Enbridge ceasing to take natural gas from Glenfred, pressures on the Wells are increasing;
- Glenfred has been supplying natural gas to all their customers since July 2021 with no oversight, and there is currently no contact person from Glenfred to respond in

the event of emergency or supply problems.

Based on the information summarized above, I am of the opinion that there is a risk of a discharge of methane and/or hydrogen sulphide from the Wells to the natural environment. In addition, I am of the opinion that adverse effects may result from such discharge, including injury or damage to property, harm or material discomfort to any person, adverse effect on the health of any person, impairment of the safety of any person, rending any property unfit for human use, and/or loss of enjoyment of normal use of property.

The requirements of this Order are intended to require a Qualified Person to forthwith implement the Work Plan to prevent or reduce the risk of a discharge of a contaminant, namely methane and/or hydrogen sulphide, into the natural environment. The Work Plan requires substantially the same work as required by MNRF Order 135-21-13113-002, dated December 17, 2021, namely the inspection, repair and shutting-in of the Wells, with the addition of the requirement for the shutting-in of Wells to address the increased risks since that Order's issuance. In general, the Work Plan includes the following work:

- a) inspection of all Wells and related infrastructure, including the location of each well, well specifications, associated equipment, valves and safety features;
- b) the fixing of all leaks and repair of damaged Wells including the replacement of substandard parts;
- c) identification of all Wells to be isolated and shutdown;
- d) well isolation and shut down procedures for the Wells identified in item (d) including:
  - (i) pressure bleed-off procedures;
  - (ii) fluid containment and removal;
  - (iii) isolation techniques; and
  - (iv) well plugging procedures to permanently plug or cap well if isolation techniques are not successful;
- e) plans to obtain any necessary permits and approvals to complete the work in the plan; and
- f) in the case of any Wells with leaks that cannot be fixed, the decommissioning/capping using cement to plug the zone of production.

The Work Plan was reviewed by MNRF staff, who agree that the work required by the plan is necessary to address the immediate, short-term risks and hazards associated with the Wells.

Based on this information, I believe that the requirements of the Work Plan are necessary to address the risk of a discharge of a contaminant from the Wells, and to prevent, reduce or ameliorate an adverse effect that may result from the discharge. I understand that Glenfred remains responsible for long-term monitoring of the Wells, and that MNRF may exercise its authority to conduct inspections of the well in the future to ensure that the work undertaken continues to be effective.

I understand that a separate notice will be issued under section 147 of the EPA concurrently with this Order to require that the work required by this Order will be caused to be done by the Director. That notice is being issued on the basis that it is in the public interest to do so and that the person required to do the work in this Order is not likely to comply with the Order promptly, given that there is no director, officer or other person with authority who is currently making decisions on behalf of Glenfred.

Lastly, it is the Ministry's position that it retains the authority to issue further orders to any person(s) who discharged or caused or permitted the discharge of a contaminant from the Wells into the natural environment, and/or person(s) in management and control of the Wells, including Nathan Reicheld.

# Authority to Issue the Director's Order

I am issuing this Director's Order pursuant to my authority, as a Director, under section 18 of the EPA. I reasonably believe that the requirements specified in this Order are necessary or advisable so as to prevent or reduce the risk of a discharge of a contaminant, namely methane and/or hydrogen sulphide, into the natural environment from the Wells.

# AND

I further reasonably believe that the requirements specified in this Order are necessary or advisable so as to prevent, decrease or eliminate an adverse effect, that may result from (i) the discharge of a contaminant from the undertaking, or (ii) the presence or discharge of a contaminant in, on or under the property.

# To be signed by ISSUING DIRECTOR upon issuance

#### APPEAL TO THE ONTARIO LAND TRIBUNAL INFORMATION

#### **REQUEST FOR HEARING**

You may require a hearing before the Ontario Land Tribunal if, within 15 days of service of this Director's Order, you serve written notice of your appeal on the Ontario Land Tribunal and the Director as indicated in the Contact Information below. Your notice of appeal must state the portions of this Director's Order for which a hearing is required and the grounds on which you intend to rely at the hearing. Unless you receive leave (permission) from the Ontario Land Tribunal, you are not entitled to appeal a portion of this Director's Order or to rely on grounds of appeal that are not stated in the notice of appeal.

#### **CONTACT INFORMATION**

The contact information for the Director and the Ontario Land Tribunal is the following:

Registrar Ontario Land Tribunal 655 BAY STREET, SUITE 1500 TORONTO, ON M5G 1E5 Email: <u>OLT.Registrar@ontario.ca</u>

and

Director Ministry of the Environment, Conservation and Parks Hamilton District Office 119 KING ST W, 9TH FLR HAMILTON, ON L8P 4Y7 Office Email: <u>Environment.Hamilton@ontario.ca</u> Fax: (905) 521-7820

The contact information of the Ontario Land Tribunal and further information regarding its appeal requirements can be obtained directly from the Tribunal at:

Tel: (416) 212-6349, Toll Free: 1(866) 448-2248 or www.olt.gov.on.ca

#### SERVICE INFORMATION

Service of the documentation referred to above can be made personally, by mail, by fax (in the case of the Director only), by commercial courier or by email in accordance with the legislation under which this Director's Order is made and any corresponding Service Regulation.

Please note that where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and choosing service by mail does not extend any of the above-mentioned timelines.

# ADDITIONAL INFORMATION

Unless stayed by the Director or the Ontario Land Tribunal, this Director's Order is effective from the date of service.

Failure to comply with a requirement of this Director's Order constitutes an offence.

The requirements of this Director's Order are minimum requirements only and do not mean that you are not required to comply with any other applicable legal requirements, including any:

- statute, regulation, or by-law;
- federal, provincial, or municipal law; or
- applicable requirements that are not addressed in this Director's Order.

The requirements of this Director's Order are severable. If any requirement of this Director's Order, or the application of any requirement to any circumstance, is held invalid, such finding does not invalidate or render unenforceable the requirement in other circumstances. It also does not invalidate or render unenforceable the other requirements of this Director's Order.

Further orders may be issued in accordance with the legislation as circumstances require.

This Director's Order is binding upon any successors or assignees of the persons to whom this Director's Order is issued.

The procedures to request a hearing and an appeal of this Director's Order and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference. Further information can be obtained from e-Laws at <u>www.ontario.ca/laws</u>.

Schedule "A"

# Work Plan to Address Immediate Risk Associated with Glenfred Gas Wells Ltd Wells

#### Intro & Technical Brief

Glenfred Gas Wells Ltd. operates 62 natural gas wells within the Haldimand-Norfolk County, as identified in *Table 1, page 9*. Most of these gas wells can be found in remote and uneven terrain, making them difficult to access. The condition of the gas wells and equipment has deteriorated over time due to the lack of maintenance. The gas wells are connected to a distribution system which supplies natural gas to a limited number of customers. The gas wells must be shut in and isolated from the distribution system.

#### Gas Well Isolation Notes & Shutdown Guide

#### Preliminary Preparations at the Customer Endpoint

1. Customers and users will be notified by TSSA that the gas will be shut off on a specific date (Nov 1, 2023) and informed that alternative arrangements for gas needs to be made by that date. Once that deadline has passed, TSSA will close and lock all the valves at the users / customers locations to stop the flow of natural gas from the distribution system into their residences and businesses.

#### Gas Well Isolation & Shutdown (Overarching Conditions)

- 1. The contractor performing the work on the wells must be qualified to do such work and hold any and all licences / certificates needed by the authorities regulating said work.
- 2. Throughout the shut-in and repair process, it is crucial that the contractor have extra valves with them on site to immediately replace any that break during the shut-in process.
- 3. Throughout the shut-in and repair process, a service rig and BOP must be **<u>immediately</u>** available in the event there is a catastrophic failure of the well head during the shut-in process.

#### Page **2** of **13**

- 4. The contractor performing the work will also need to repair any leaks or substandard parts (ex: schedule 40 fittings) found on the well head prior to shutting in the well and disconnecting from the distribution line. A bull plug will need to be installed on the valve going into the distribution system.
- 5. Once each well is shut in and disconnected from the distribution system, an MNRF inspector will affix a "Tag" on the main valve of each well to ensure it is not tampered with after.

#### **General Objectives**

#### Gas Well Isolation & Shutdown

- 1. To isolate the gas wells from the distribution system, as itemized in *Table 1 page 9*, the inlet and outlet valves (Items 1 & 2 on Figure 1) must be capped, and the gas piping and associated equipment in between the two valves (Item 6 on Figure 1) must be removed. A standard gas well configuration can be seen in Figure 1. The valves vary in nature and size some are greaseable, while others are not. Due to condition of the valves and the use of non-greaseable valves, many were observed to be inoperable.
- 2. In addition, the gas wells utilize many different styles of valves which are either in the open or closed position. All the gas wells have been inspected and the condition of the valves can be seen in Table 1. The contractor performing the work will need to confirm if the condition of the valves has changed and verify if they are operable or not.
- 3. Valves that cannot be rendered operable or are badly damaged will need to be replaced in accordance with schedule #1. Once replaced, they will also be moved and secured in the closed position. Inoperable valves that have the option to be greased may be worked into the closed position instead of being replaced.
- 4. Once the inlet and outlet valves have been moved to the closed position, the piping connecting the well to the distribution system (Item 6 on Figure 1) can be disassembled and capped from both sides (wellhead outlet valve and distribution system inlet valve). The wellhead will have an inlet that can be fitted with a pressure gauge to verify the pressure during future inspections.

#### Page **3** of **13**

# <u>NOTE:</u> ALL OF THE GAS WELLS NEED TO BE SHUT IN. THE CONTRACTOR MUST PROCEED WITH CAUTION AND DUE DILIGENCE.



Figure 1: Gas Well #9746

#### Page **4** of **13**

# Schedule #1

# Some potential scenarios the contractor may come across when shutting in the wells and disconnecting them from the distribution system.

#### Scenario One: Two working valves, valves do not leak

- Shut in the inlet and outlet valves (#1 and #2) isolating a section of pipe between them. The contractor needs to work with TSSA to ensure the valve on the distribution side is closed before they can disconnect the well from the distribution system.
- Bleed off natural gas in the isolated pipe (#6).
- Remove the isolated pipe (#6) from outlet of the valve on the well.
- Install bull plugs into valve openings with sufficient sealant on it to prevent any leaks from occurring.
- Remove and or lock valve handle in the closed position, if possible.
- Install a pressure gauge (500 psi) on the well (#4) to check well head pressures.
- Check wellhead for leaks and fix any that are found. If leaks cannot be fixed, the well must be killed using cement to plug the zone of production.



#### Page **5** of **13**

#### Scenario Two: Two working valves, valve packings leak

- Shut in the inlet and outlet valves (#1 and #2) isolating a section of pipe between them. The contractor needs to work with TSSA to ensure the valve on the distribution side is closed before they can disconnect the well from the distribution system.
- Bleed off natural gas in the isolated pipe (#6).
- Remove the isolated pipe (#6) from outlet of the valve on the well.
- Bleed down well to a safe working pressure as determined by the contractor performing the work. Most wells have a port used to put a pressure gauge on. The well can be bled down using this.
- Remove and dispose of old leaking valve.
- Install new valve, insert bull plugs into valve openings. Use sufficient sealant on it to prevent any leaks from occurring.
- Install a pressure gauge (500 psi) on the well (#4) to check well head pressures
- Check wellhead for leaks and fix any that are found. If leaks cannot be fixed, the well must be killed using cement to plug the zone of production.





Wellhead

#### Page 6 of 13

#### Scenario Three: Freeing up a Crane 200 stuck valve, valve does not leak thru the packing or valve body

- If the valve at locations 1 and or 2 are a Crane 200 valve, **<u>slightly</u>** loosen the nut on the back side of the valve to see if this will allow the valve to function.
- If this works, shut in the inlet and outlet valves (#1 and #2) isolating the section of pipe between them. The contractor needs to work with TSSA to ensure the valve on the distribution side is closed before they can disconnect the well from the distribution system.
- If this does not work, see "Technical steps (stuck valve and or valve packing leaks")
- Bleed off natural gas in the isolated pipe (#6).
- Remove the isolated pipe (#6) from outlet of the valve on the well.
- Install bull plugs into both valve openings. Use sufficient sealant to prevent any leaks from occurring.
- Snug up nut on backside of Crane 200 valve to prevent leaks.
- Remove the handle and lock or secure the valve in the closed position.
- Install a pressure gauge (500 psi) on the well (#4) to check well head pressures.
- Check wellhead for leaks. Fix any leaks found. If leaks cannot be fixed, the well must be killed using cement to plug the zone of production.



#### Scenario Four: Freeing up a Crane 200 stuck valve, valve leaks thru valve body

- If the valve at locations 1 and 2 are a crane 200 valve, slightly loosen the nut on the back side of the valve to see if this will allow the valve to function.
- If this works, shut in the inlet and outlet valves (#1 and #2) isolating a section of pipe between them. The contractor needs to work with • TSSA to ensure the valve on the distribution side is closed before they can disconnect the well from the distribution system.
- If this does not work, see "Technical steps (stuck valve and or valve packing leaks") ٠
- Bleed off natural gas in the isolated pipe (#6). •
- Remove the isolated pipe (#6) from outlet of the valve on the well. .
- Install a new pipe on the outlet of the valve that is leaking and install a new valve. Install bull plugs into valve openings. Use sufficient ٠ sealant to prevent leaks from occurring.
- Remove the handle and lock or secure the valve in the closed position. ٠
- Install a pressure gauge (500 psi) on the well (#4) to check well head pressures. ٠
- Check wellhead for leaks. Fix any leaks found. If leaks cannot be fixed, the well must be killed using cement to plug the zone of • production.





Wellhead

#### Page **8** of **13**

#### Scenario Five: Stuck valve and or valve packing leaks

- Ensure well is isolated from distribution line and or other gas wells. The contractor needs to work with TSSA to ensure the valve on the distribution side is closed before they can disconnect the well from the distribution system.
- Bleed down well to safe working pressure as determined by the contractor performing the work. Most wells have a port used to put a pressure gauge on. The well can be bled down using this.
- Remove and dispose of old leaking valve.
- Install new valve and install bull plugs in the openings of the inlet and outlet valves. Use sufficient sealant on it to prevent any leaks from occurring.
- Remove the handle and lock or secure the valve in the closed position.
- Install a pressure gauge (500 psi) on the well (#4) to check well head pressures.
- Check wellhead for leaks. Fix any leaks found. If leaks cannot be fixed, the well must be killed using cement to plug the zone of production.

Current

Disconnected





Wellhead

# Page **9** of **13**

# Table 1: Survey of Gas Wells

Well Number	Inlet Valve Size	Outlet Valve Size	Inlet Valve Status	Outlet Valve Status	Inlet Valve Type	Outlet Valve Type	Inlet Valves Operability	Outlet Valves Operability	Greaseable?
257	2''	2''	OPEN	CLOSED	Unknown	Ball Valve	NO	YES	INLET
270	2''	2''	OPEN	OPEN	Unknown	Unknown	NO	YES	BOTH
454	2''	2"	OPEN	OPEN	KVC Ball	Unknown	YES	NO	OUTLET
814	2''	2''	OPEN	OPEN	Unknown	CRANE 200	NO	NO	INLET
9715	2"	2"	OPEN	OPEN	Unknown	Unknown	YES	Unknown	None
9716	2"	2"	CLOSED	CLOSED	CRANE 200	ADP Ball	YES	YES	NONE
9717	2"	2"	OPEN	OPEN	Unknown	CRANE 200	NO	NO	NONE
9718	2"	2"	OPEN	OPEN	CRANE 200	ADP Ball	NO	YES	NONE
9719	2"	2"	OPEN	OPEN	ADP Ball	ADP Ball	YES	YES	NONE
9720 (Listed as 9721)	2"	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9721 (Listed as 9720)	2"	2"	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9722	2''	2''	OPEN	OPEN	CRANE 200	ADP Ball	NO	YES	NONE
9723	2"	2"	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9723	2"	2"	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9724	2"	2"	CLOSED	CLOSED	Unknown	Unknown	NO	NO	INLET
9725	2"	2"	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9727 (Listed as 972)	2"	2"	OPEN	OPEN	CRANE 200	PORTER	NO	NO	OUTLET

Well Number	Inlet Valve Size	Outlet Valve Size	Inlet Valve Status	Outlet Valve Status	Inlet Valve Type	Outlet Valve Type	Inlet Valves Operability	Outlet Valves Operability	Greaseable?
9729	2''	2"	OPEN	CLOSED	Unknown	Unknown	NO	NO	BOTH
9730	2''	2''	OPEN	OPEN	Unknown	Unknown	NO	NO	BOTH
9731	2''	2''	CLOSED	UNKNOWN	PORTER	PORTER	NO	NO	BOTH
9732	2''	2''	OPEN	OPEN	PORTER	UNKNOWN	NO	NO	NONE
9733	2''	1''	OPEN	OPEN	ADP Ball	Ball Valve	YES	YES	NONE
9734	2''	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9736	2"	2x1", 1x2"	OPEN	OPEN	CRANE 200	2x Ball, 1x Crane 200	NO	NO	NONE
9737	2''	2"	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9738	2''	2''	CLOSED	CLOSED	KVC Ball	Unknown	YES	NONE	NONE
9739	2''	2''	OPEN	OPEN	PORTER	Unknown	NO	NO	NONE
9740	2''	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9741	2''	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9742	2''	2''	OPEN	OPEN	Unknown	CRANE 200	YES	NO	NONE
9743	2''	2''	OPEN	OPEN	CRANE 200	Unknown	NO	Yes	NONE
9744	2''	1.25''	CLOSED	OPEN	Peacock	Unknown	NO	NO	INLET
9745	2''	2''	CLOSED	CLOSED	CRANE 200	Unknown	NO	NO	NONE
9746	2''	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9747	2''	2''	OPEN	CLOSED	Unknown	CRANE 200	Yes	NO	OUTLET
9748	2"	2''	OPEN	UNKNOWN	ADP Ball	Unknown Ball	YES	YES	NONE
9749 (Called into SAC)	2''	2''	OPEN	OPEN	NO VALVE	NO VALVE	OPEN TO ATMOSPHERE	OPEN TO ATMOSPHERE	NONE

Well Number	Inlet Valve Size	Outlet Valve Size	Inlet Valve Status	Outlet Valve Status	Inlet Valve Type	Outlet Valve Type	Inlet Valves Operability	Outlet Valves Operability	Greaseable?
9753	2"	2x2''	CLOSED	ONE OPEN, ONE CLOSED	KVC Ball	Unknown	YES	NO	NONE
9754	2''	2"	OPEN	OPEN	CRANE 200	Unknown (Damaged)	NO	NO	NONE
9755	2''	2''	CLOSED	CLOSED	ADP Ball	Greaseable	YES	NO	Outlet
9756	2''	2"	OPEN	OPEN	CRANE 200	Newer type Ball	NO	YES	INLET
9757	2"	2"	CLOSED	OPEN	ADP Ball	Unknown	YES	NO	OUTLET
9758	2''	2''	OPEN	CLOSED	Unknown	KVC Ball	NO	YES	INLET
9759	2''	2''	CLOSED	OPEN	Ball Valve	Unknown	YES	NO	Outlet
9760	2''	2''	CLOSED	CLOSED	Unknown	CRANE 200	YES	YES	NONE
9762	2''	NO VALVE	OPEN	N/A	CRANE 200	N/A	NO	N/A	NONE
9763	2''	NO VALVE	OPEN	N/A	Ball Valve	N/A	YES	N/A	NONE
9764	2''	2''	OPEN	OPEN	CRANE 200	Unknown	NO	NO	NONE
9766	2''	2''	OPEN	OPEN	PORTER	Unknown	NO	NO	NONE
9767	2''	2''	OPEN	OPEN	CRANE 200	CRANE 200	NO	NO	NONE
9768	2''	2''	OPEN	OPEN	CRANE 200	Unknown	NO	NO	NONE
9769	2"	2"	OPEN	OPEN	CRANE 200	Unknown	NO	NO	NONE
9770	2''	2"	PARTIALLY OPEN	OPEN	ADP Ball	Unknown	YES	NO	NONE
9771	2''	2"	OPEN	OPEN	CRANE 200	Unknown	NO	NO	NONE
9772	2''	2"	OPEN	OPEN	CRANE 200	Unknown	NO	NO	NONE
9773	2''	2''	CLOSED	CLOSED	CRANE 200	CRANE 200	NO	NO	NONE

Page **12** of **13** 

Well Number	Inlet Valve Size	Outlet Valve Size	Inlet Valve Status	Outlet Valve Status	Inlet Valve Type	Outlet Valve Type	Inlet Valves Operability	Outlet Valves Operability	Greaseable?
9774	2''	2"	OPEN	OPEN	KVC Ball	KVC Ball	YES	YES	NONE
9775	2''	2"	OPEN	OPEN	Ball Valve	Unknown	YES	NO	NONE
9776	2"	2"	CLOSED	OPEN	Ball Valve	Ball Valve	YES	YES	NONE
9777	2''	2"	OPEN	CLOSED	CRANE 200	Unknown	NO	YES	OUTLET
9778	2″	2″	OPEN	OPEN	CRANE 200	Unknown	NO	Unknown	OUTLET
12336	2''	2"	CLOSED	CLOSED	Ball Valve	Ball Valve	YES	YES	NONE
12337	2"	2"	OPEN	OPEN	PORTER	CRANE 200	NO	NO	INLET



Wells that should be shut in first due to condition.



Figure 1: Glenfred Active Gas Wells (Dec 2018)