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March 28, 2024  
Canadian Energy Regulator  
Chief Conservation Officer - OGOA  
Operations Business Unit  
517-10th Avenue SW  
Calgary, AB T2R 0A8

Re: Utility Group Facilities Inc. (UGFI) 2023 Annual Production, Safety and  
Environmental Report

**Field:** Ikhil

**Pool:** Tertiary Taglu Delta

*[electronically submitted]*

Trisummit Utilities Ltd. ("Trisummit") on behalf of Utilities Group Facilities Inc. ("UGFI"), as operator of the Ikhil Project in the Northwest Territories, hereby submits the 2023 Annual Production, Environmental, Safety Reports as required by sections 85, 86, and 87 of the NWT Oil & Gas Drilling and Production Regulations.

If you would like additional details or have any questions, please do not hesitate to contact myself at 403-819-6096.

Sincerely

*JR Hogg*

John Hogg P.Ge.,  
Ikhil Asset Manager  
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## **2023 Annual Production Report**

**Field:** Ikhil

**Pool:** Tertiary Taglu Sandstones

**Region:** Mackenzie Delta, NWT

**Operator:** Utility Group Facilities Inc. (UGFI)

### **Operations History and Summary Ikhil K-35 and J-35 for 2023:**

The K-35 well has been shut-in since December 2010. A well work over program was conducted on the K-35 well in March of 2011, to contain a casing water inflow. The attempt to seal the leak was unsuccessful. The K-35 well remains shut-in and is being utilized as a pressure monitoring well.

The Ikhil J-35 well remains in operation and is currently utilized as a back-up energy supply for the two customers of the Utilities Group Facilities Inc., UGFI; the Northwest Territories Power Corp (NTPC) and Inuvik Gas Ltd. (IGL). NTPC utilized its diesel fired power generation units and Liquefied Natural Gas, LNG, units while IGL relies on a propane supply for its Propane Air System, PAS, for delivery of Synthetic Natural Gas, SNG, to its customers in Inuvik during the heating season.

The J-35 gas production is used primarily during fall freeze-up and spring break-up when the transportation of propane, LNG and Diesel up the Dempster Highway is not possible, and it is also used as an emergency supply if there is a supply disruption due to issues with delivery of propane and LNG for IGL and NTPC respectively. The last two winters have seen the Dempster Highway closed for significant parts of the winter season and the Ikhil gas field has been used to supplement the times when propane and LNG are not available to our customers.

The Ikhil transmission pipeline and J-35 gathering line were each pigged in September 2023. The quantity of methanol/water mix recovered was 0.1 m<sup>3</sup> from the transmission line and 0.03 m<sup>3</sup> from the J-35 gathering line. We have also initiated a program to pig the 4" transmission line from J-35 to the facility about once a month, when we are producing, these occur during our well unloading programs. This has been an easy procedure to introduce and keeps the line clear and provides us with a visual observation of the methanol that we are recovering. A pigging operation is planned for the upcoming late summer/fall of 2024 for the six-inch pipeline.

The Annual Cathodic Protection survey was completed in May 2023. There was one electrical isolation fault found at the Ikhil Plant on the 6" line where the isolation kit was recommended to be replaced in order to isolate the facility properly. This work was completed in the late spring of 2023.

The Ikhil field radio tower inspection and repairs were completed including guide wires adjustment the summer of 2021. The next inspection is scheduled for 2025. In the summer of 2023, Ikhil moved from a land-based network for our SCADA communications to a *Starlink* low-earth-orbit system that provides improved stability and reliability for our network.

An ultrasonic inspection of the vessels at Ikhil was conducted in 2022. There were no deficiencies found, the next inspection will be in 2025.

In 2016 the NEB granted the following modifications with respect to the UGFI request to modify the Corrosion Integrity Maintenance and Monitoring Program

1. Pigging program for the transmission line located in the Inuvialuit Settlement Region (ISR) from three times per year to once per year or as required.
2. Pigging program for the J-35 gathering flowline from three times per year to once per year or as required.
3. The frequency of ultrasonic and external inspection of pressure vessels and piping will be every three years.

Pipeline inspections were completed 2023 with multiple aerial and ground right of way inspections with no significant findings observed. We will continue with ongoing inspections during 2024 via snow machine in the winter and helicopter flights over the line in the summer months.

PSVs were switched out, on the prescribed three-year cycle, in 2020. A full switch-out was completed 2023. The next scheduled work will be in 2026.

## Natural Gas Hydrates:

During the periods of continuous well usage in April to June and October through December 2023 there were no instances where the surface wellhead pressure dropped indicating hydrate formation.

In the fall of 2020, we implemented of a chemical treatment for the hydrate that contains methanol, ethylene glycol, isopropanol and ethyl ether that is designed to chemically alter the hydrate for removal was used successfully throughout 2023 to mitigate hydrate formation in the J-35 well along with methanol injection daily when producing. On a go forward basis we continue to use chemical treatments to minimize hydrate formation and regularly unload the well so that we mitigate the hydrates before they can form.

## 2023 Production:

• 2023 Raw Production, K-35:	0.000 10 <sup>3</sup> m <sup>3</sup>
• 2023 Raw Production, J-35:	5,977 10 <sup>3</sup> m <sup>3</sup>
• 2023 Total Sales Volumes	5,578 10 <sup>3</sup> m <sup>3</sup>
• 2023 Total Lease gas:	373 10 <sup>3</sup> m <sup>3</sup>
• 2023 Total Flared (methanol)	2.59 m <sup>3</sup>

## 2023 Reserves and Pressure Data:

Original Reservoir Pressure, P\*= 10,047 kpa

Static bottom hole pressure for J-35 were obtained in 2021 and 2023, though acoustic measurement.

- March 2021 = 7,583 kpa
- August 2023 = 7458 kpa

Static bottom hole pressure for K-35 were obtained in 2021 and 2023, though acoustic measurement.

- March 2021 8064 kPa
- August 2023 7949 kPa.

Estimated remaining gas reserves effective April, 2022 per third party reserves assessment resulted in the following estimate:

Proved Producing (April 2022)	96.3 10 <sup>6</sup> m <sup>3</sup>
Produced Reserves in 2022	6.8 10 <sup>6</sup> m <sup>3</sup>
Produced Reserves in 2023	6.0 10 <sup>6</sup> m <sup>3</sup>
Remaining Reserves (12/31/23)	83.5 10 <sup>6</sup> m <sup>3</sup>

The K-35 well is unable to produce natural gas due to water influx and is being utilized as a monitoring well. Yearly surface wellhead pressures are seen below:

- K-35 wellhead pressure December 31, 2013 = 6,815 kPa
- K-35 wellhead pressure December 31, 2014 = 6,916 kPa
- K-35 wellhead pressure December 31, 2015 = 7,029 kPa
- K-35 wellhead pressure December 31, 2016 = 7,096 kPa
- K-35 wellhead pressure December 31, 2017 = 7,124 kPa
- K-35 wellhead pressure December 31, 2018 = 7,189 kPa
- K-35 wellhead pressure December 31, 2019 = 7,234 kPa
- K-35 wellhead pressure December 31, 2020 = 7,268 kPa
- K-35 wellhead pressure December 31, 2021 = 7,286 kPa
- K-35 wellhead pressure December 31, 2022 = 7,222 kPa
- K-35 wellhead pressure December 31, 2023 = 7189 kPa

### **Reservoir Management to Minimize Waste:**

When the J-35 well is flowing above a rate of 75 e<sup>3</sup>m<sup>3</sup>/day unloading of the methanol from the wellbore is not required. At production rates below 75 e<sup>3</sup>m<sup>3</sup>/day a draft and pack procedure is undertaken to clear the fluids from the J-35 wellbore to the Ikhil plant where the fluids are measured, collected and stored for periodic vaporization through the flare stack.

### **Fouled Diesel in fuel tanks at Ikhil**

While running our diesel generator in Q3 of 2023 we were having problems with the fuel. Upon further inspection we realized that the diesel in our tanks has become unusable due to fouling. There are approximately 900 litres of diesel in the 5,800-litre tank that we will flare-off, having been approved to flare the waste by the CER. This will

be completed at the same time as we flare our methanol under conditions that ideal for flaring, low winds wet conditions on the ground and during daylight hours.

## **2023 Annual Environmental Report**

**Field:** Ikhil

**Pool:** Tertiary Taglu Sandstones

**Region:** Mackenzie Delta, NWT

**Operator:** Utility Group Facilities Inc. (UGFI)

### **Environmental Summary:**

There were no uncontrolled discharges during 2023.

The Ikhil Pipeline Environmental Inspection was not completed in 2023. We have no plans to continue Environmental Inspections.

The pipeline was monitored aerially several times throughout the year and there was a full ground right of way inspection was conducted during 2023. With the surface land above the pipeline fully restored to its original vegetative state, we now believe that there is no requirement to continue environmental inspections and we will continue to complete operational aerial reconnaissance and full right of way inspections each year.

Summary of all waste generated at the Ikhil plant, the Inuvik gate station are included in the attached Waste Tracking Report

### **Efforts Undertaken to Reduce Pollution and Waste Material:**

The J-35 well provided the fuel gas requirements for the Ikhil facilities for 2023.

During summer operations in July and August the Ikhil plant and J-35 were placed on stand-by with periodic pipeline pack providing fuel for the Ikhil gensets for site electricity and IGL during the time the PAS supplies the demand from the town.

Minimal amounts of condensed wellbore liquids and methanol, used to inhibit hydrate formation in the J-35 well, are removed by unloading the well while re-pack the pipeline, as required, depending on facility load. Condensed hydrocarbons, water of condensation, and methanol are collected and then flare when the conditions are ideal for the burning of the waste product.

**2023 Waste Tracking Report:**

Below is the 2023 waste tracking report:

<b>Field: Ikhil</b>				
<b>Pool: Tertiary Taglu</b>				
<b>Operator: Utilities Group Facilities Inc. (UGFI)</b>				
<b>Date</b>	<b>Description</b>	<b>Manifest #</b>	<b>Receiver</b>	<b>Quantity</b>
04-16-2023	Flare V-400 Condensed Methanol/Water			2.59 m <sup>3</sup>
<b>Ikhil Gate Station</b>				
09-29-2023	Pipeline Pigging methanol			100 litres
09-29-2023	Pigging of the J-35 Highline methanol			30 litres
<b>Waste Products</b>				
	Waste Oil – donated to local Inuvik Contractors		Local Contractor	~400 litres

**Environmental Contingency Plan Exercises:**

There were no activities conducted regarding a spill response exercises during 2023. With the current operations procedures at the Ikhil gas field there were no operational activities that were likely to introduce potential spills. Environmental Spill Response training continues with the Staff through ongoing discussions at monthly meetings.

Bulk fluid inventories of diesel were replaced due to the issues of fouling of our diesel within the original tank. We have a 1,000-litre tank that we have refilled using our trucks, snowmachines and sleds. Delivery of methanol to the facility took place in the spring of 2023 without incident. We plan another deliver of 4 to 5 m<sup>3</sup> of methanol in the winter/spring of 2024. The fouled diesel will be flared when conditions are met, and the CER will be informed 24 hours before the flaring is commenced.





## 2023 Annual Safety Report

**Field:** Ikhil

**Pool:** Tertiary Taglu Sandstones

**Region:** Mackenzie Delta, NWT

**Operator:** Utility Group Facilities Inc. (UGFI)

### Safety Summary Production Facilities:

- Total Man Hours worked at Ikhil Facility in 2023 = 1283 hours
- Total Man Hours worked at the Ikhil Gate Station in 2023 = 730 hours
- Zero lost time injuries recorded.
- Zero medical aids recorded.
- Two Incidents were recorded in 2023, neither of them involved injuries.
- There were two near misses and 11 Hazard ID's in 2023
- Monthly safety inspections were carried out at both the Ikhil facility and Gate Station.
- Monthly Safety Meetings and weekly *Take 5* Meetings took place during 2023.

The two incidents in 2023 were:

1. While methanol was being flared a minor blockage and release in the flow line resulted in some methanol not being flared and landing on the snow. The methanol evaporated and left a stain of iron on the snow. Samples taken of the snow showed no hydrocarbons, just iron. This was reported as an incident to CER and OROGO and as a spill to ECCC NWT Spill Line.
2. A vehicle careened off our perimeter fence at the Gate Station and caused minor damage to the fence. The incident was reported to Inuvik RCMP but the case was not solved.

### Tabletop Emergency Response Planning Exercise:

IGL and IJV employees completed Emergency Response Training as two practice scenarios as our 2023 ERP program.

The first was a tabletop medical response at the Ikhil Facility on May 2, 2023, with an injured worker down with a possible head and neck injury after slipping on the stairs while leaving the facility.

The second training exercise took place on June 15, 2023, and involved a field exercise while slashing brush around the pipeline a brush cutter trips and pulls on the throttle and cuts into his calf-muscle with severe bleeding and needs immediate medical attention. This exercise also involved the Inuvik AMS services who took part in the exercise.

These two ERP exercises included the following personal: IGL staff and management, management from Trisummit Utilities.

The CER was informed of the exercises and declined participation. OROGO was informed of the May exercise and declined and was informed late on the June exercise and could not make the meeting due to short notice.

Summary reports of both exercises were sent to the Regulators.

**Undertakings to Improve and Promote Safety:**

Monthly safety meetings are conducted for all staff in the Inuvik Office. Meetings include all employees of Inuvik Gas Ltd. (IGL), the contract operator for the Ikhil Joint Venture operator for Utility Group Facilities Inc, our southern Operators, and Calgary staff. The monthly safety meetings provide a regular opportunity for staff input to the ongoing safety of operations, review any updates in regulations as well as a time to review Hazard IDs, near misses and any safety incidents. All employees participate in reviewing procedures at each safety meeting.

Weekly *Take 5* Meetings were also a regular part of the safety protocol for the full time and contract staff. These meeting take place after our weekly operations meeting each week.

Ikhil and Inuvik Gas continued to resource senior production operators from *SOS Inc.* to assist IGL staff in operating the Ikhil plant, the gate station and the J-35 and K-35 wells in 2023.

**Safety and Training:**

The following are the safety training certificates that are maintained by the Ikhil Operations Staff and our southern operators:

CMDS and spill response training (every 3 years)	Needs to be re-taken 2024
First Aid, CPR and AED (every 3 years)	Completed 2022
WHMIS (once only)	Completed 2023
TDG (every 3 years)	Completed 2022/2023
Defensive Driving (once only)	Completed 2019



Lockout/tag-out Procedures (every 2 years)	Completed 2022
Ground Disturbance (every 3 years)	Completed 2022
Fire Extinguisher Training (once only)	Completed 2019
Gas Detection	Completed 2019
Confined Spaces	Completed 2023
Chainsaw Safety	Completed 2019
Helicopter Safety	Completed 2023