

ILLUSTRATIVE PUBLIC-DATA WELL SCREEN

When the best research finding is: do not advance yet.



A sample of Iron Buffalo's AI-assisted, source-backed research workflow using Alberta licence 0376736 as a real public-data case study.

ALBERTA LICENCE	0376736
WELL EVENT	00/16-20-056-03W4/2
SCREENING RESULT	HOLD - OPERATOR DATA REQUIRED

DECISION SUMMARY

The public-data case does not support a restart decision.

Licence 0376736 initially screens as interesting because it is a relatively shallow 2007 vertical heavy-oil well in an actively developed Frog Lake area and its licence was only moved to suspension status in August 2026. The production record changes the conclusion: the final continuous 14-month window became water-dominant, with reported oil falling to zero while water production continued.

0.4 2024 AVG OIL RATE bbl/day across reported hours	62.2 2024 AVG WATER RATE bbl/day across reported hours	99.4% 2024 WATER CUT Jan-Aug aggregate	HOLD SCREENING OUTCOME No capital case from public data
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RECOMMENDED NEXT GATE

Request operator records before spending on technical evaluation.

Advance only if the licensee can explain the water-production pattern and provide evidence of a credible oil-restoration mechanism. The public record alone does not justify a workover, acquisition or reactivation recommendation.

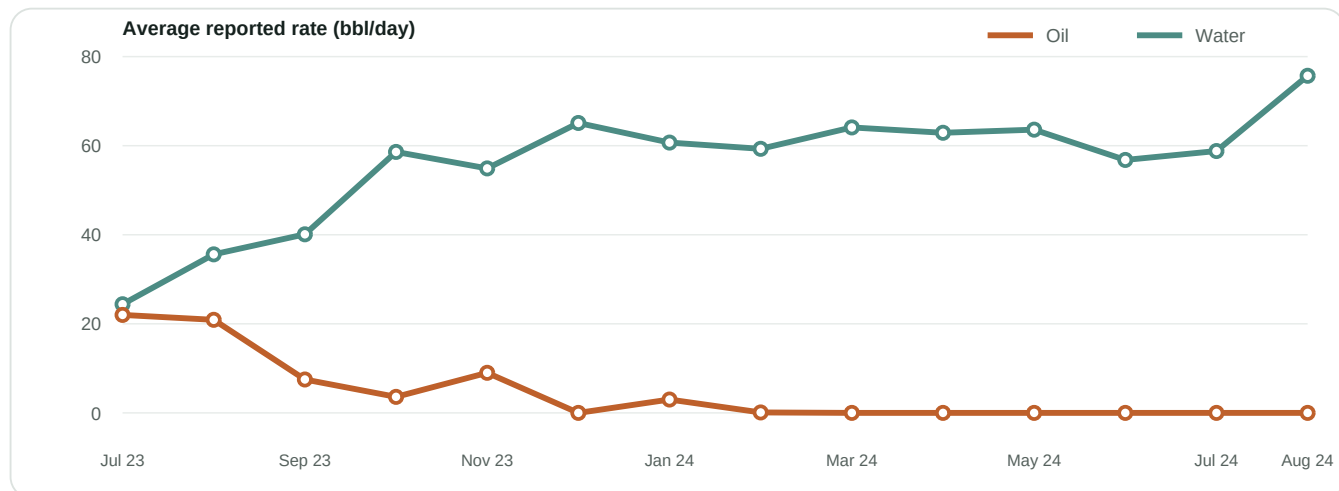
Asset snapshot

Public-record field	Observed value
Licence / well event	0376736 / 00/16-20-056-03W4/2
Current licensee	Rubellite Energy Inc. (Petrinex infrastructure snapshot)
Well type	Vertical crude-bitumen production well
Projected / terminating formation	Lower Grand Rapids
Final total depth	529 m
Spud / finished drill	26 May 2007 / 28 May 2007
Current licence status	Suspension - status date 13 August 2026
Reporting link	Frog Lake South 50/50 administrative grouping (ABBT0105910)

PRODUCTION EVIDENCE

Oil faded; water persisted.

The chart uses reported production volumes and hours from Petrinex. Rates are calculated as monthly volume divided by reported operating days, with cubic metres converted at 6.28981 barrels per cubic metre.



Month	Oil bbl/d	Water bbl/d	Water cut	Signal
Jul 23	22.0	24.4	52.6%	Material oil
Aug 23	20.9	35.6	63.0%	Material oil
Sep 23	7.5	40.1	84.3%	Marginal oil
Oct 23	3.6	58.6	94.2%	Marginal oil
Nov 23	9.0	54.9	85.9%	Marginal oil
Dec 23	0.0	65.1	100.0%	No oil reported
Jan 24	3.0	60.7	95.3%	Marginal oil
Feb 24	0.1	59.3	99.9%	Marginal oil
Mar 24	0.0	64.1	100.0%	No oil reported
Apr 24	0.0	62.9	100.0%	No oil reported
May 24	0.0	63.6	100.0%	No oil reported
Jun 24	0.0	56.8	100.0%	No oil reported
Jul 24	0.0	58.8	100.0%	No oil reported
Aug 24	0.0	75.7	100.0%	No oil reported

Key interpretation: July-August 2023 showed about 21-22 bbl/day of oil. By December 2023, no oil was reported. Across January-August 2024, the well reported only about 94 barrels of oil in total against roughly 14,500 barrels of water, producing an aggregate water cut near 99.4%.

SCREENING LOGIC

A promising context does not overcome weak well-level evidence.

POSITIVE CONTEXT	DECISION BLOCKERS
Why the asset deserved an initial look - Shallow 2007 vertical heavy-oil well with a clear licence and UWI trail. - Located in Frog Lake, where the current licensee publicly describes active Mannville Stack development. - Linked in Petrinex to an established reporting group rather than appearing completely isolated. - Licence status changed to suspension only in August 2026, making the record timely for screening.	Why the case cannot advance on public data - Oil rate collapsed from about 21 bbl/day in August 2023 to effectively zero by early 2024. - Water continued at material rates after oil disappeared, reaching about 76 bbl/day in August 2024. - Public data do not explain whether the well was being used for cleanup, testing, water handling or another operational purpose. - No public workover scope, integrity file, pump history, fluid-level record or operating-cost detail was reviewed.

Minimum operator data request

1	Reason for oil cessation and continued water reporting
2	Completion, perforation and workover history
3	Pump, fluid-level, pressure and mechanical-integrity records
4	Recent test data, fluid allocation method and water source explanation
5	Operating cost, water handling cost and facility constraints
6	Licensee's intended end state: restart, conversion, suspension or abandonment

Commercial recommendation: use this screen to avoid premature engineering spend. If the operator response provides a credible, testable explanation for the water-dominant period, commission a qualified technical review. Otherwise, close the lead and redirect research effort to stronger candidates.

METHOD & SOURCES

Traceable evidence, explicit limits.

This document is a compact example of the deliverable Iron Buffalo can produce. The workflow starts with a business question, gathers relevant public records, uses AI-assisted routines to organize and compare data, checks the result against source files, and reports both findings and uncertainty.

Stage	What was done in this sample
Scope	Screen one well for whether public evidence supports further reactivation diligence.
Gather	Petrinex Alberta volumetric and infrastructure files; AER reporting guidance; current licensee disclosures.
Normalize	Matched licence 0376736 to well event ABWI100162005603W402 and reporting group ABBT0105910.
Calculate	Converted m3 to barrels; divided monthly volumes by reported production hours; calculated oil-water ratios.
Verify	Rechecked licence, well, facility, operator, formation, depth and status fields against infrastructure records.
Decide	Applied a conservative evidence gate and identified the exact non-public records needed next.

Sources reviewed

1. **Petrinex Alberta Public Data.** Volumetric files Vol_2023-07-AB through Vol_2024-08-AB; Well Licence-AB, Well Infrastructure-AB and Facility Infrastructure-AB snapshots reviewed 1 September 2026.
<https://www.petrinex.gov.ab.ca/PublicData?Jurisdiction=AB>
2. **Alberta Energy Regulator - Directive 007.** Official volumetric and infrastructure reporting requirements; effective 9 January 2025.
<https://www.aer.ca/regulations-and-compliance-enforcement/rules-and-regulations/directives/directive-007>
3. **Alberta Energy Regulator - General Well Data.** Public well-identification and licence lookup context.
<https://www.aer.ca/data-and-performance-reports/activity-and-data/lists-and-activities/general-well-data>
4. **Rubellite Energy - Frog Lake operations.** Current licensee's public description of Frog Lake development, operating role and FLERC partnership.
<https://rubelliteenergy.com/operations/frog-lake/>
5. **Rubellite Energy - Q1 2026 operating update.** Public context for continuing Waseca development activity at Frog Lake.
<https://rubelliteenergy.com/wp-content/uploads/2026/05/Q1-2026-Rubellite-Press-Release.pdf>

IMPORTANT LIMITATIONS

Public records can be revised, corrected, reallocated or interpreted differently with operator context. This sample does not include proprietary production accounting, well files, pressure data, integrity records, economics, land rights, environmental liabilities or engineering analysis. It is not an asset valuation or a recommendation to buy, sell, reactivate, convert or abandon a well.

IRON BUFFALO ENERGY INTELLIGENCE

AI-assisted oil and gas research | Source-backed findings | Alberta focus

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