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TOPGAS CLAIM TAKE OR PAY GAS

DATA & CLAIMS RESEARCH & ANALYSIS

JUNE 2024

GuildOne Inc.

Suite 100, 602 12th Ave SW Calgary, AB T2R 1J3

CLAIM DATA RESEARCH & ANALYSIS

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CLAIM DATA RESEARCH & ANALYSIS

Take or Pay Gas Data & Claims Analysis TOPGAS

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Claim Background

- 3 Between 1982 and 1994, the Government of Canada breached its fiduciary duty to
- 4 ECN by allowing producers operating on its lands to deduct "take-or-pay" gas
- 5 (TOPGAS) financing charges prior to calculating the royalties owed to the nation.
- 6 These wrongful deductions lowered the royalties due to ECN and prevented ECN
- 7 from obtaining the use and benefit of these funds

Take or Pay Contracts Granted

- 9 Take-or-pay gas contract provisions require the purchaser of gas to pay for a
- 10 minimum volume each year. If the purchaser is unable to market the gas due to low
- 11 demand or other market conditions, the purchaser is still required to pay for the
 - minimum volume of gas. In the context of First Nations claims, TOPGAS refers to
- financing and/or interest charges that were paid by producers as a result of debt
- 14 agreements on the part of TransCanada and wrongfully included in calculations of
- 15 owed gas royalties.

First Nations Exempt Status

- 17 A 1998 ruling in the Alberta Court of Queen's Bench set the precedent that
- 18 TOPGAS charges are not allowable deductions when calculating gas royalties owed
- 19 to First Nations. However, the pursuit of compensation against producers for
- 20 underpaid royalties was challenged by time limitations in the conventional court
- 21 system.

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PURCHASE CONTRACTS

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DEVELOPMENTS IN NATURAL GAS PURCHASE CONTRACTS J. JAY PARK*

This paper examines some of the legal implications resulting from developments in the natural gas industry, with particular emphasis on take-or-pay provisions of gas purchase contracts and the prooferation of discount buyers of natural gas.

I. INTRODUCTION

The past few years have seen some significant changes in natural gas markets. In particular, market demand is down in United States export markets where Canadian gas is priced higher than domestic supplies, and Canadian market demand is relatively flat. Natural gas supply increases have been greater than was expected by gas purchasers. Also, many industrial gas users in Alberta have commenced contracting for their own supply in response to the large volumes of gas available for purchase and the unregulated price for gas used in Alberta. Changes in the business world usually have legal implications, and these market changes are no exception. This paper will examine some of the changes in natural gas purchase contracts and other agreements which will be of concern to oil and gas lawyers.

II. TAKE-OR-PAY

Most gas purchase contracts between gas producers and gas purchasers contain "take-or-pay" provisions which require the gas purchaser to "take and pay for, or nevertheless pay for, if available but not taken" a certain minimum volume of gas during the course of a year. This obligation is usually referred to as the "minimum annual obligation". If the purchaser does not take the minimum annual obligation, it must make a payment equal to all or a portion of the value of gas not taken, and hope to recover that gas at some time in the future. With market demand falling, gas purchasers have been unable to meet their minimum annual obligations and have faced significant prepayment liabilities. Debt financing of these prepayments can be an onerous burden, and even though regulatory authorities have generally permitted interest costs to be included in the purchaser's cost of service, the purchaser's ability to raise equity money in financial markets can be seriously impaired.

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TransCanada Pipelines Funds & Structures

- 2 During the subject period between 1982 and 1994, TransCanada Pipelines Limited
- 3 (TCPL) was the largest gas purchaser in Canada and the main counterparty for
- 4 take-or-pay gas contracts with producers operating on First Nations reserves.
- 5 Challenging market conditions in the 1970's and 1980's, including production
- 6 oversupply, regulated gas pricing under federal-provincial agreements, and reduced
- 7 consumer demand, resulted in significant prepayment liabilities to TCPL and
- 8 obstacles to obtaining further debt financing to fulfil its contractual obligations¹.



TransCanada Pipeline and the Banks

In 1982, TCPL undertook arrangements with a consortium Canadian of banks, including the Canadian Imperial Bank of Commerce, Royal Bank of Canada, Morgan Bank of Canada, and Citibank Canada, to restructure its debt financing and revise its agreements with gas producers. The consortium created a corporation under the TOPGAS I agreement, TOPGAS Holdings Ltd², as a financing vehicle that would take on some of TCPL's liabilities and undertake agreements with and pay producers. This was amended in 1983 under the TOPGAS II agreement.

ECN TOPGAS • DRAFT 2.0

¹ https://albertalawreview.com/index.php/ALR/article/view/745/738

² https://digital.library.mcgill.ca/images/hrcorpreports/pdfs/6/636039.pdf

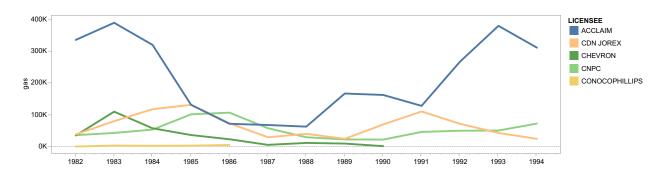
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CLAIM DATA RESEARCH & ANALYSIS



Federal Settlements with First Nations

- 3 Since the establishment of the Specific Claims Tribunal in 2008, numerous
- 4 settlements have been made between Nations and the Federal Government for
- 5 TOPGAS charges on the grounds that the government was in breach of its fiduciary
- 6 duties by allowing these deductions.

ECN TOPGAS • DRAFT 2.0

JUDICIAL CONSIDERATION OF THE INDIAN OIL AND GAS ACT AND REGULATIONS

W. TIBOR OSVATH AND L. DOUGLAS RAE* RAE AND COMPANY

Some 1.29 million hectares of land are under the control and management of the Government of Canada for the "use and benefit" of First Nations¹ (for ease of reference, "Indian reserves"). In the provinces of British Columbia, Alberta, Saskatchewan and Manitoba over 60 First Nations have oil and gas exploration and/or production on their lands.² This represents approximately 670 mineral agreements covering 612 thousand hectares of land.³ To better gauge the scope of oil and gas production on First Nation lands, approximately 452 thousand cubic meters of oil and 2,175 million cubic meters of natural gas were produced in 2002-2003.⁴ Given these statistics, it is not surprising that from time to time disputes arise in regard to royalties payable on oil and gas production from Indian reserves. What is surprising is the general lack of Canadian case law, to assist the parties in resolving these disputes.

I. RESERVE LANDS AND THE INDIAN OIL AND GAS REGIME

At law First Nations do not have the right to develop and exploit the oil gas resources underlying their reserve lands if this requires alienation or disposition of any portion of these lands to third parties.⁵ As a result, First Nations must rely upon the Crown's trust and fiduciary obligations to

Cost Components of TOPGAS Charges

- 3 TCPL's financing and interest charges were included in fees charged to producers
- 4 under the Alberta Cost of Service (ACOS), a fee determined at that time by the
- 5 Alberta Petroleum and Marketing Commission under the terms of the that includes
- 6 various marketing, metering, and transportation of natural gas. Producers on First

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1 Nations reserves deducted these charges related to TOPGAS financing from the

2 sales price of gas, resulting in the Regulated Field Price under regulated gas

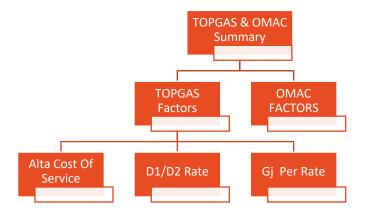
3 pricing or the post-deregulation Contract Price³.

4

TOPGAS & OMAC COST COMPONENTS CATEGORIES IOGC

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ECN TOPGAS • DRAFT 2.0

³ https://faolex.fao.org/docs/pdf/al154372.pdf



NATURAL GAS MARKETING ACT

NATURAL GAS MARKETING REGULATION

Alberta Regulation 358/1986

With amendments up to and including Alberta Regulation 172/2020 Current as of September 30, 2020

Take or Pay Cost Sharing Act

- 3 TOPGAS charges were included in ACOS for all gas produced in Alberta.
- 4 Additionally, the Alberta Energy Regulator permitted the deduction of TOPGAS
- 5 charges when calculating Crown royalty obligations. This allowance of TOPGAS
- 6 charges was formalized in 1986 through actions by the National Energy Board under
- 7 the Take-or-Pay Cost Sharing Act4.

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⁴ https://www.canlii.org/en/ab/laws/stat/sa-1986-c-t-0.1/latest/sa-1986-c-t-0.1.html

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Γake-Or-P	ay Costs Sh	naring Act, SA 1986, c T-0.1 🔊	
Document	Versions (1)	Regulations (0) Amendments (1) Cited by (13)	
This statute is	repealed, spent o	r not in force since 2003-08-19.	
Past version: in	force between Jan	1, 2002 and Aug 19, 2003	
Link to the late	st version :	https://canlii.ca/t/81vs	
Stable link to th	is version 2:	https://canlii.ca/t/j8cp	
Citation to this	version:	Take-Or-Pay Costs Sharing Act, SA 1986, c T-0.1, https://canlii.ca/t/j8cp retrieved	d on 2024-04-26
Currency:		Last updated from the Alberta King's printer on 2024-04-23	
		First Nations Claims	

- 3 Under Section 2, Schedule 1 of the 1977 Indian Oil and Gas Act, "fair and
- 4 reasonable" processing costs were the only allowable deduction on basic and
- 5 supplementary gas royalties payable to First Nations for on-reserve production. In
- 6 addition to processing costs, Indian Oil and Gas Canada permitted the deduction of
- 7 transportation costs to calculate the wellhead value of gas for royalty purposes⁵.
- 8 TCPL's loan repayment was finalized on October 31, 1994, ending the TOPGAS
- 9 period. The Act was revised in 1995 to clarify allowable deductions and the point at
- 10 which royalties were calculable.

ECN TOPGAS • DRAFT 2.0

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⁵ 2000CanLIIDocs159.pdf

ALBERTA LAW REVIEW

VOL. 38(1) 2000

RECENT CASES ON THE CALCULATION OF ROYALTIES ON FIRST NATIONS' LANDS

NIGEL BANKES' AND L. DOUGLAS RAE"

This article examines the statutory and regulatory framework for the calculation of royalties for oil and gas produced from First Nations' lands. Against this backdrop, the article goes on to explore in detail three recent cases involving different aspects of royalty calculation for on-reserve resources and attempts to synthesize these divergent decisions.

Les auteurs examinent d'abord les lois et le cadre de réglementation régissant le calcul des redevances pétrolières et gazières appartenant aux autochtones; ils procèdent ensuite à un examen approfondi de trois arrêts récents portant sur les ressources dans les réserves et tentent de mettre en rapport ces décisions divergentes. décisions divergentes.

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IOGC Attempts to Address

2 IOGC responded to First Nations opposition to the application of TOPGAS charges

- 3 with a series of meetings and negotiations with producers and 12-15 affected
- 4 Nations in the late 1980's and early 1990's⁶. In 1991, the Crown issued a notice to
- 5 producers that TOPGAS charges were not permitted and demanded the
- 6 recalculation of royalties and payment of the owed amounts to First Nations7.

TOPGAS SETTLEMENT FREQENTLY ASKED QUESTIONS



What is the TOPGAS Settlement About?

The TOPGAS Settlement is a negotiated settlement between the Government of Canada and the Blood Tribe stemming from wrongful deductions from royalties payable to the Tribe that were made by oil companies and allowed to take place by Canada, the fiduciary. These deductions were made on gas production from the Blood Tribe Reserve #148 (Timber Limits) from 1977 to 1994.

What is TOPGAS?

TOPGAS is short for **T**ake-**o**r-**P**ay **Gas**. In the 1970's Trans Canada Pipelines (TCPL), believed that a gas shortage might occur because of high demand. So, they agreed to make a commitment to pay the producing companies for a certain quantity of gas each year, whether they took delivery or not. This allowed the Producers to plan on exploration and drilling estimates in advance. This arrangement went along okay until the late 70's, when due to higher gas prices, increasing reserves, and a downturn in the economy, resulted in TCPL not being able to meet its financial commitment to the producers, which was over 1 billion dollars.

As a result of this pressure on TCPL, a consortium of 30 domestic and foreign banks agreed to establish two holdings' companies (TOPGAS I and TOPGAS II), which were empowered to take on TCPL's liabilities, and paid TCPL \$2.3 billion and \$360 million. This was to reduce TCPL's ongoing obligations.

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ECN TOPGAS • DRAFT 2.0

 $^{^6\} https://bloodtribe.org/wp-content/uploads/2021/07/TOPGAS-FAQ2.pdf$

⁷ https://specific-claims.bryan-schwartz.com/wp-content/uploads/docs/Canada v Ear FCA 2007.pdf

2007 FCA 39 (CanLII)

ENOCH CREE NATION

CLAIM DATA RESEARCH & ANALYSIS

Date: 20070212

Docket: A-150-06

Citation: 2007 FCA 39

CORAM: NOËL J.A.

SHARLOW J.A. RYER J.A.

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF CANADA

and

THE HONOURABLE PAULINE BROWES, Minister of Indian Affairs and Northern Development, Parliament Buildings, Ottawa, Ontario

and

THE HONOURABLE GILLES LOISELLE, Minister of Finance, Parliament Buildings, Ottawa, Ontario

Appellant

and

CHIEF JOHN EAR acting on his own behalf and on behalf of the other members of the Bearspaw Band of the Stoney Band and Tribe and on behalf of the Stoney Tribe and all its members

and

CHIEF KEN SOLDIER acting on his own behalf and on behalf of the other members of the Chiniki Band of the Stoney Band and Tribe and on behalf of the Stoney Tribe and all its members

and

CHIEF ERNEST WESLEY acting on his own behalf and on behalf of the other members of the Wesley Band of the Stoney Band and Tribe and on behalf of the Stoney Tribe and all its members

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ECN TOPGAS • DRAFT 2.0

Industry Refusal to Recalculate

- 2 Various discussions between the Crown, IOGC, and producers after 1991 did not
- 3 result in changes to royalty calculations. Producers maintained that the TOPGAS
- 4 charges were allowable and refused to recalculate past royalties for repayment of
- 5 overcharges or remove these charges from current royalty calculations.

Stoney Tribal Council v. PanCanadian Petroleum

- 7 In 1993, the Stoney Tribal Council initiated a lawsuit against PanCanadian
- 8 Petroleum for royalty deductions of both TOPGAS fees and Operating, Marketing,
- 9 and Administrative Charges (OMAC). In 1998, the Alberta Court of Queen's Bench
- 10 ruled that both TOPGAS and OMAC charges were disallowed deductions from First
- 11 Nations royalties and ordered the recalculation and payment of the underpaid
- royalty amounts from 1983-19938.

ECN TOPGAS • DRAFT 2.0

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⁸ https://www.sac-isc.gc.ca/DAM/dam-inter-iogc/staging/texte-text/dd 1100110010227 eng.pdf

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Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada

Indian Oil and P Gas Canada I

Pétrole et gaz des Indiens du Canada

Suite 100, 9911 Chula Boulevard, Tsuu T'ina, AB T2W 6H6

Tel.: (403) 292-5625 Fax: (403) 292-5618

Your file - Votre référence

February 2001

Our file - Notre référence E-5855-4-0

Information Letter Disallowance of Deductions for TOPGAS Charges and OMAC

Background

For a general discussion of the history of the take or pay gas (TOPGAS) issue see the article by Jay Park, "Developments in Natural Gas Purchase Contracts" published in 1984 in the <u>Alberta Law Review</u> (Vol. XXII ,NO.1). On May 3, 1993, the Stoney Tribal Council commenced legal action against PanCanadian Petroleum Limited on the issue of whether TOPGAS and OMAC charges should be deducted from the price of gas prior to the calculation of Indian royalties.

TOPGAS

TOPGAS, which means take or pay gas, refers to certain financing (or interest) charges associated with gas that TransCanada PipeLines (TransCanada) had contracted for but was not able to market. A consortium of banks loaned TransCanada money, which was subsequently paid to producers to satisfy TransCanada's contractual obligations. TOPGAS financing charges are the interest charges that were payable by TransCanada's producers to finance the loan. TransCanada included TOPGAS financing charges in the Alberta Cost of Service which was deducted from the sales price of gas to arrive at the Regulated Field Price, or the Contract Price (under deregulation), upon which the Indian royalty calculations were based.

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Recovering Owed Royalties

- 3 In 2000, the Alberta Court of Appeal ruled that a six year, as opposed to a ten year,
- 4 period of limitations applied to royalty recalculations, but maintained that the
- 5 TOPGAS and OMAC charges were disallowed. After this ruling, IOGC began

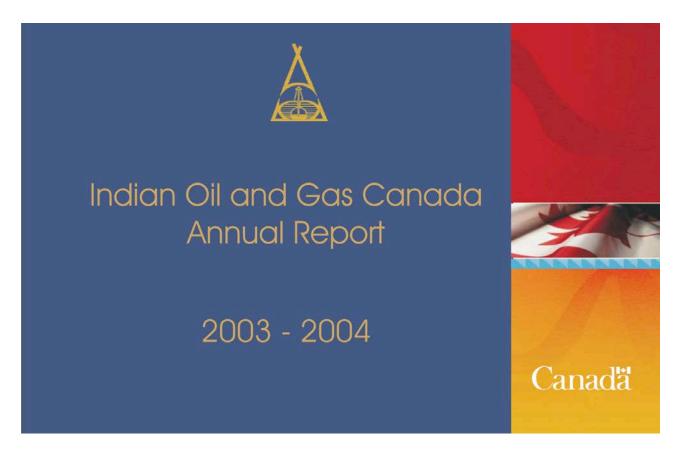
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1 conducting regular audits of charges applied to royalty calculations and recovering

2 owed royalties9.



Pursuing TOPGAS Claims via the Special Claims Tribunal

5 In 2008, the establishment of the Specific Claims Tribunal allowed First Nations the

ability to pursue claims directly against the Government of Canada for its inaction

in preventing and addressing disallowed TOPGAS charges in contravention of its

fiduciary responsibilities under the Indian Oil and Gas Act. Most claims have been

for both TOPGAS charges and OMAC. Numerous settlements have been paid to

10 Nations through this venue, including:

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⁹ https://publications.gc.ca/collections/Collection/R1-5-2004E.pdf

- 1 Blood Tribe, 2018¹⁰:
- 2 In 2018, the Blood Tribe submitted a claim regarding TOPGAS charges from the period
- 3 between 1977 and 1994. Canada originally offered \$2,400,000, which Blood negotiated to
- 4 \$17,600,000 in 2020/2021. This settlement was reportedly being finalized in 2022.

Blood Tribe TOPGAS Settlement Update – (August 20, 2021)

Leave a Comment / News, Public Notice / By Joey Sugai

BLOOD TRIBE TOPGAS SETTLEMENT

Update August 20, 2021

The Blood Tribe is finalizing the negotiations of the TOPGAS \$17.6 million settlement agreement with the Government of Canada. In September of 2018 the Blood Tribe submitted a claim to Canada regarding the wrongful deduction of royalties arising from the sale of natural gas extraction that was from reserve lands.

From 1977 to 1994, as a part of TOPGAS, certain industry costs were wrongfully calculated as part of deductions to royalty payments owing to the Blood Tribe.

- 7 Beaver Lake Cree Nation, 2020¹¹:
- 8 In 2020, a settlement of \$2,974,794 was accepted from Canada by Beaver Lake
- 9 Cree for the Nation's TOPGAS Specific Claim.

ECN TOPGAS • DRAFT 2.0

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¹⁰ https://bloodtribe.org/index.php/2021/08/20/blood-tribe-topgas-settlement-update-august-20-2021/

¹¹ https://beaverlakecreenation.ca/wp-content/uploads/2023/03/BLCN-Settlement-Communication.pdf

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CLAIM DATA RESEARCH & ANALYSIS

BEAVER LAKE CREE NATION TOPGAS & OMAC SETTLEMENT Information to Members

SETTLEMENT INFORMATION

SETTLEMENT BACKGROUND

On Dec 21, 2019, Beaver Lake Cree Nation (BLCN) and the Governments of Canada signed a TOPGAS and OMAC Settlement Agreement. The settlement was approved through a Band Council Resolution with no community vote. In Jan 2020 BLCN received \$2,974,794 as compensation, from the settlement BLCN paid \$203,362.62 in legal fees for the negotiations of the claim.

PLAN FOR SETTLEMENT FUNDS

From the \$2,771,431.38 remaining claim amount, BLCN intends to use the funds in two ways, a per capita distribution to registered members as a per capita distribution and on infrastructure spending.

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- 1 Siksika Nation, 2021¹²:
- 2 In April of 2021, Siksika filed a TOPGAS and OMAC Specific Claim for Canada's
- 3 breach of fiduciary and statutory duties in collecting the full value of Siksika's
- 4 royalty entitlements. In 2022, an offer was received for \$3,000,000. Sikika
- 5 negotiated further and received and accepted an offer of \$5,162,198.

Siksika Nation filed the TOPGAS and OMAC Specific Claim

October 12, 2023 | No Comments

On April 19, 2021, Siksika Nation ("Siksika") filed the TOPGAS and OMAC Specific Claim (the "Claim"). The Claim relates to Canada's collection of royalties for gas produced on Siksika's Reserve. The Claim alleges that Canada breached its fiduciary and statutory duties in collecting royalties for gas produced on the Reserve. Siksika seeks equitable compensation for the financial losses arising from Canada's failure to collect all of the royalties owing to Siksika for gas produced on the Reserve and the loss of use of those royalties.

Siksika and Canada agreed that resolving the Claim is a matter of determining the appropriate amount of compensation for Canada's fiduciary and statutory breaches, including deciding the interest rate to be applied to the total value of TOPGAS and OMAC royalty adjustments (the "Unpaid Royalties") to arrive at a suitable net present value. This amount was verified by Sproule Consulting, a Siksika-retained oil and gas consultant.

In or around February 2022, Canada made an informal indication of offer to settle the Claim for under \$3 million based on the formula applied from previous TOPGAS claims with other First Nations.

On August 30, 2022, Canada advised that it could settle the Claim for a higher amount, but the amount was still unacceptable to Siksika. This offer used the BandTrust Fund rate with 100% compounding interest to bring forward the value of the Unpaid Royalties plus an amount to account for Siksika's costs in bringing the Claim.

Enoch Claim

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- 8 No settlements have been reached between ECN and Canada for TOPGAS charges.
- 9 GuildOne undertook an extensive review and analysis of the data available from the
- 10 claim period between 1982-1994.

ECN TOPGAS • DRAFT 2.0

¹² https://siksikanation.com/siksika-nation-filed-the-topgas-and-omac-specific-claim/

CLAIM DATA RESEARCH & ANALYSIS



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IOGC Calculations 1982-1990

3 In 1991 Indian Oil & Gas Canada undertook a review of pricing that counterparties

4 deducted TOPGAS carrying charges from the price of natural gas before the

calculation of royalties due to the Bands. Advancing the opinion that the Bands had

6 no obligation to share in the cost of take-or-pay charges IOGC reassessed the

7 royalties due in an effort to recover the royalties not paid as a result of the

improper application of charges. The reassessment covered the period of Oct 1982

9 to June 1990.

IOGC CALCULATION FACTORS



12	I. OLD PRICE GAS	Selling price used on which royalties have been calculated and paid
13 14	II.OMAC COSTS/E3m3	Marketing charges that were deducted from the oil price. Rates were multiplied by the tested GJ content of the gas sold
15 16 17 18	III.TAKE OR PAY/E3m3	Charge deducted by TCPL for financing TOPGAS debt. Attached information shows various rates applicable to the produce. Rates vary depending on the amount and timing of monies received by the producer from TCPL or TOPGAS
19	IV. NEW PRICE/E3m3	Revised selling price (old price plus OMAC costs plus take or pay costs
20	V. INDIAN SALES GAS	Sales volumes attributed to production from Indian lands
21	VI. INDIAN SALES VOLUMES	Item IV times item V
22	VII. REVISED GAS ROYALTY	Recalculation of gas royalty based on the new price

CLAIM DATA RESEARCH & ANALYSIS

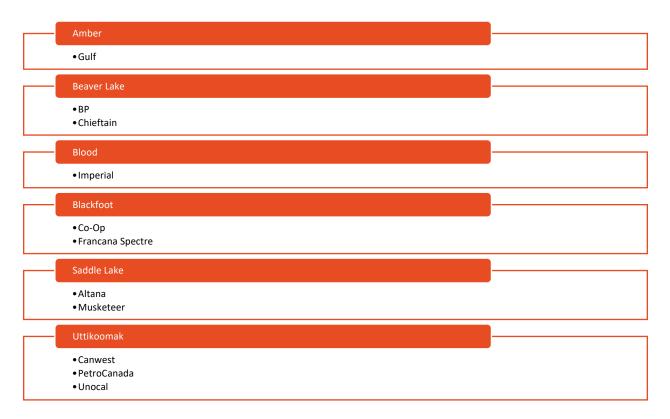
1 **VIII. OLD GAS ROYALTY** 2

Item VII less item VII

Gas royalty previously calculated and paidIX. ADDITIONAL ROYALTY DUE

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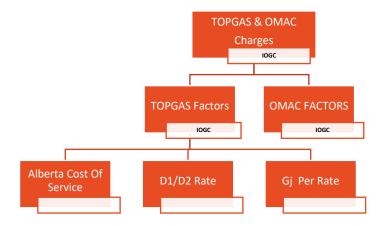
CALCULATION SPECIMENS



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COST COMPONENT AGGREGATION



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CLAIM DATA RESEARCH & ANALYSIS

CALCULATION COMPONENT SPECIMENS

4 OMAC COSTS /E3M

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf					2.58	8.88	12.30	6.85	
Beaver Lake	ВР					2.23	9.67	9.80	13.97	6.01
	Chieftain					2.23	5.01	6.34	4.70	
ackfoot	Со-ор					2.26	6.33	5.69	9.97	1.35
	Francana Spectre					2.32	4.21	4.80	7.49	1.30
ood	Shell					2.46	13.63	10.18	11.59	0.00
ddle Lake	Altana					3.33	5.78	6.68	8.38	1.19
	Musketeer					2.24	9.04	9.08	11.76	7.27
ikoomak	Conwest									
	Petro Canada									
	Unocal									

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CLAIM DATA RESEARCH & ANALYSIS

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OLD PRICE GAS
S

B3m

III

OMAC COSTS
E3m3

III

OMAC COSTS
E3m3

IV

OMAC COSTS
E3m3

VI

OMAC COSTS
E3m3

VII

OLD GAS ROYALTY
S

VII

OLD GAS ROYALTY
S

VIII

REVISED ROYALTY
S

OLD GAS ROYALTY
S

ROYALTY DUE
S

TAKE OR PAY COSTS /E3M3

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf		31.4			105.4	71.9	83.4	31.0	
Beaver Lake	ВР	23.7	99.1	95.3	84.6	79.7	71.1	63.1	69.7	24.5
	Chieftain	23.2	71.2	76.0	72.5	39.2	30.5	35.1	20.2	
ackfoot	Со-ор	15.9	56.2	61.2	47.6	92.8	76.7	58.1	82.6	7.3
	Francana Spectre		78.3	63.6	51.2	48.6	28.4	29.4	37.7	4.1
ood	Shell	23.4	133.0	152.0	117.1	109.9	104.7	62.7	59.1	0.0
ddle Lake	Altana	33.1	82.4	60.5	60.5	40.3	38.6	37.6	36.9	5.1
	Musketeer	32.9	124.9	109.3	82.7	84.2	63.5	54.7	55.9	31.8
ikoomak	Conwest	24.8	127.1	142.5	115.9	18.0				
	Petro Canada	24.8	127.0	123.3	115.9	18.0				
	Unocal				68.7	17.5				

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

I II IV GAS SALES VOLUMES \$ UNI SAME OR PAY E3m3 E3m3 E3m3 E3m3 E3m3 SALES SAL

3 NEW PRICE GAS /E3M3

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf		473			1,094	578	821	334	
Beaver Lake	ВР	320	1,045	970	1,004	846	688	652	667	301
	Chieftain	320	730	751	899	433	333	421	225	
ackfoot	Со-ор	233	676	677	414	725	421	378	481	60
	Francana Spectre		797	685	628	539	281	315	368	70
ood	Shell	335	1,399	1,542	1,420	1,196	920	666	547	0
ldle Lake	Altana	333	856	850	850	552	386	426	412	58
	Musketeer	332	1,242	1,094	970	860	602	606	566	302
ikoomak	Conwest	339	1,270	1,399	1,317	214				
	Petro Canada	338	1,270	1,380	1,318	214				
	Unocal				768	213				

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

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4 INDIAN SALES VOLUMES E3M3

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990	Oper
mber	Gulf		40			418	199	348	77		■ A
eaver Lake	ВР	1,535	3,682	4,892	3,589	3,071	3,218	3,902	4,147	1,890	Ch
	Chieftain	266	378	445	547	325	208	182	61		■ Co
ackfoot	Со-ор	1,005	3,242	1,417	881	1,831	1,485	1,325	1,817	154	■ Fra ■ Gu
	Francana Spectre		5,355	3,935	9,659	3,868	2,781	3,091	1,884	779	■ Mus ■ Pet
lood	Shell	13,604	52,511	50,720	46,177	42,225	39,769	26,834	23,523	0	■ Uno
iddle Lake	Altana	2,431	9,421	11,312	11,312	4,485	4,156	4,196	3,877	639	
	Musketeer	1,970	7,801	7,377	7,426	6,835	3,260	3,658	3,907	1,833	
tikoomak	Conwest	39	152	64	16	3					
	Petro Canada	15	56	26	9	2					
	Unocal				8	3					

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

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4 INDIAN SALES VALUE CA\$

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf		4,671			41,684	14,255	23,748	5,147	
eaver Lake	ВР	163,904	389,726	528,169	347,011	264,866	220,092	232,294	231,005	113,231
	Chieftain	28,284	39,729	47,589	54,414	27,909	14,123	10,931	3,517	
ackfoot	Со-ор	116,941	363,584	163,003	92,800	166,234	67,088	83,115	108,541	9,249
	Francana Spectre		617,253	450,745	364,100	345,474	195,909	239,401	116,908	54,128
od	Shell	1,525,077	6,094,455	6,513,055	5,466,127	4,217,384	3,050,666	1,776,216	1,435,029	0
dle Lake	Altana	265,250	1,011,629	1,196,184	1,196,184	307,333	269,332	253,790	229,597	37,045
	Musketeer	214,215	814,138	804,351	750,185	580,939	219,811	222,802	221,810	90,353
koomak	Conwest	4,454	16,033	7,400	1,707	316				
	Petro Canada	1,687	5,954	2,966	958	239				
	Unocal				827	316				

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CLAIM DATA RESEARCH & ANALYSIS

REVISED GAS ROYALTY CA\$

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf		2,810			24,665	8,037	13,277	2,865	
aver Lake	ВР	97,752	232,211	315,400	214,229	153,805	123,106	113,418	123,780	61,681
	Chieftain	16,866	23,657	21,695	32,191	16,198	7,890	5,956	1,898	
ckfoot	Со-ор	70,382	176,485	97,991	55,261	83,591	58,839	40,063	59,084	5,039
	Francana Spectre		371,147	270,853	216,488	200,479	108,221	106,323	62,606	29,696
d	Shell	914,378	3,667,077	3,957,038	3,295,501	2,496,094	1,740,472	987,412	784,738	0
lle Lake	Altana	158,579	603,730	712,656	712,656	203,505	149,046	138,464	124,693	20,027
	Musketeer	128,018	484,327	480,838	444,597	336,647	122,624	121,801	119,383	46,923
oomak	Conwest	2,622	9,545	4,453	1,021	189				
	Petro Canada	1,012	3,547	1,781	574	143				
	Unocal				566	214				

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

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OLD ROYALTY GAS

E3M3

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990
Amber	Gulf		2,615			21,986	6,664	11,568	2,464	
Beaver Lake	ВР	89,559	209,261	281,969	195,822	136,748	105,465	109,108	104,428	54,007
	Chieftain	15,517	18,999	21,456	29,371	14,392	6,909	5,243	1,711	
lackfoot	Со-ор	65,092	197,669	89,065	47,612	70,616	44,500	36,312	41,233	4,151
	Francana Spectre		334,215	247,135	196,939	179,827	95,786	94,882	55,569	27,591
lood	Shell	844,945	3,269,739	3,536,812	2,998,557	2,232,755	1,471,289	858,860	662,144	0
addle Lake	Altana	144,660	541,786	658,209	658,209	184,949	129,151	121,154	108,182	17,389
	Musketeer	116,756	432,841	424,735	404,016	298,050	104,875	106,896	101,728	39,186
tikoomak	Conwest	2,458	8,486	3,985	925	171				
	Petro Canada	931	3,154	1,624	517	130				
	Unocal				444	172				

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

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ADDITIONAL ROYALTY DUE CA\$

Band	Operator	1982	1983	1984	1985	1986	1987	1988	1989	1990	Operator
Amber	Gulf		195			2,676	1,372	1,707	401		Altana BP
Beaver Lake	ВР	6,294	22,954	33,432	18,409	17,056	17,642	17,255	19,351	7,674	Chieftain
	Chieftain	1,346	2,431	3,207	2,822	1,807	980	712	187		■ Conwest
Blackfoot	Со-ор	5,290	13,283	8,928	7,649	14,771	14,338	9,399	13,884	888	Francana SpectreGulfMusketeer
	Francana Spectre		36,933	23,717	19,548	20,652	12,433	11,443	7,038	2,105	Petro Canada Shell
Blood	Shell	69,433	397,338	420,226	296,944	263,339	269,183	128,552	122,595	0	Unocal
Saddle Lake	Altana	13,918	61,944	54,449	54,449	18,559	19,893	17,313	16,512	2,638	
	Musketeer	11,260	51,487	56,100	40,583	38,596	17,748	14,905	17,656	7,736	
Utikoomak	Conwest	215	1,068	467	96	17					
	Petro Canada	82	396	159	57	12					
	Unocal				121	42					

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CLAIM DATA RESEARCH & ANALYSIS

Cost Components, Deductions & Charges Specimens

D1/D2 Cost of Service Rates

Product Quality Rate

TOPGAS & OMAC Factors

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Alberta Cost Of Service Ca\$

		1982	1983	1984	1985	1986	1987	1988	1989	1990	Operator (P1)
Amber	Gulf		274.3			506.1	158.7	200.0	72.3		Altana
Beaver Lake	ВР	141.9	560.8	517. 8	502.1	440.3	195.1	173.3	190.4	69.3	■ BP
	Chieftain	141.9	396.3	412.7	435.8	181.3	83.9	96.6	82.5		Chieftain
Blackfoot	Co-Op	92.8	312.4	330.1	226.6	403.4	196.1	149.1	210.1	19.0	■ Co-Op ■ Conwest
	Francana Spe		377.6	334.1	286.4	225.0	73.9	76.4	97.3	11.3	
Blood	Shell	141.7	697.2	714.9	613.9	556.7	246.2	152.6	145.2		■ Gulf
Saddle Lake	Musketeer	141.6	705.7	582.8	604.1	566.3	239.0	186.7	188.8	90.1	Musketeer
Saddle Lake	Altana	112.8	300.8	300.9	300.9	263.5	226.2	263.9	264.0	37.7	Petro CanadaShell
Utikoomak	Conwest	141.7	703.2	715.2	613.9	93.9					_ 5.15.1
	Petro Canada	141.7	703.2	600.1	613.9	93.9					

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ECN TOPGAS • DRAFT 2.0

CLAIM DATA RESEARCH & ANALYSIS

1 D1/D2 Rates Ca\$

		1982	1983	1984	1985	1986	1987	1988	1989	1990	Operator (P1)
Amber	Gulf		201.7			262.5	3.8	4.6	1.6		■ Altana
Beaver Lake	ВР	78.5	295.2	262.4	275.3	236.8	4.6	4.2	3.6	3.5	■ BP
	Chieftain	79.8	205.6	209.1	241.6	76.4	2.1	2.4	2.0		■ Chieftain
Blackfoot	Co-Op	53.8	171.1	172.5	105.9	167.4	2.5	2.2	2.6	0.8	■ Co-Op ■ Conwest
	Francana Spe		187.1	179.8	156.7	100.8	1.6	1.9	1.8	0.8	
Blood	Shell	81.8	372.2	350.6	330.0	296.6	5.8	3.7	2.9		■ Gulf
Saddle Lake	Musketeer	53.8	372.2	292.1	330.0	296.6	5.8	4.6	3.6	5.6	
Saddle Lake	Altana	141.9	455.0	379.9	379.9	263.5	102.7	102.2	100.1	14.3	Petro CanadaShell
Utikoomak	Conwest	78.8	372.2	350.6	330.0	50.8					
	Petro Canada	78.8	372.2	295.4	330.0	50.8					

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Product Quality Ca\$/GJ

Amber	Gulf	1982	1983 173.0	1984	1985	1986 475.8		1988 513.1	1989 218.9	1990	Operator (P1) ■ Altana
Beaver Lake	ВР	63.4	265.6	255.3	226.8	213.5	190.4	169.2	186.8	69.3	■ BP
	Chieftain	62.2	190.7	203.6	194.3	104.9	81.8	94.2	80.5		Chieftain
Blackfoot	Co-Op	81.3	239.3	233.0	157.3	313.2	237.8	80.3	317.8	40.2	■ Co-Op ■ Conwest
	Francana Spe		277.9	237.3	236.6	235.0	157.2	197.0	236.5	38.9	Francana Spectr
Blood	Shell	117.5	490.8	500.5	495.0	505.4	519.5	422.4	373.8		■ Gulf
Saddle Lake	Musketeer	112.4	449.4	375.8	451.5	451.5	338.7	451.4	451.1	226.3	Musketeer
Saddle Lake	Altana	88.2	219.1	160.9	160.9	148.1	102.4	99.7	97.7	13.4	Petro CanadaShell
Utikoomak	Conwest	62.9	331.0	364.6	283.9	43.1					_ 0.1011
	Petro Canada	62.9	331.0	304.7	283.9	43.1					

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ECN TOPGAS • DRAFT 2.0

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EXTRAPOLATING MISSING DATA WITH PREDICTIVE MODELLING



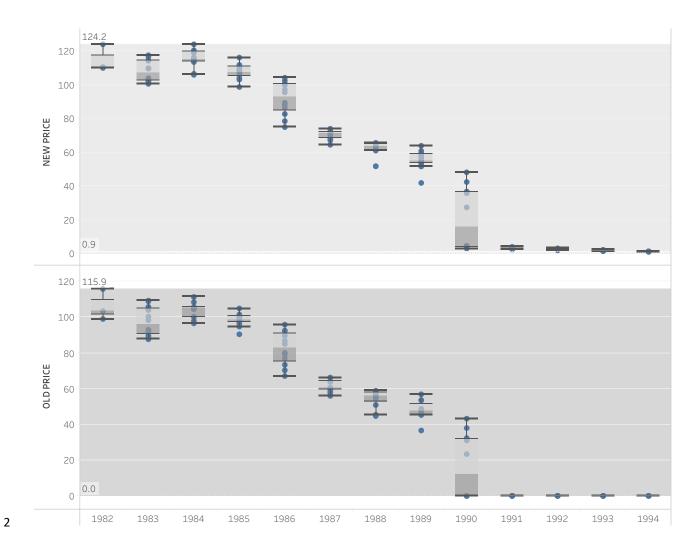
Forecast indicator
Actual

Estimate

1

ENOCH CREE NATION

PRICE COMPARISON IOGC vs. REVISED



1

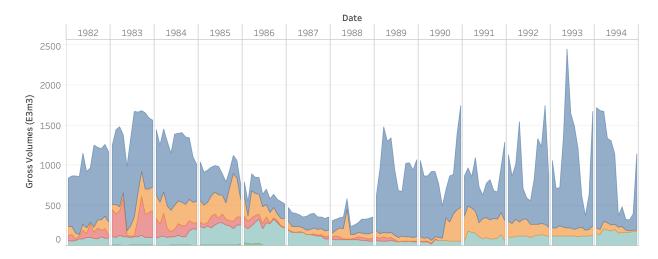
8

CLAIM DATA RESEARCH & ANALYSIS

Gas Production On ECN 135 TOPGAS Era

- 2 Acclaim, Chevron, CNPC, ConocoPhillips, and Canadian Jorex were the five on-
- 3 reserve producers actively producing gas from Enoch lands during the TOPGAS
- 4 period. Wrongful deductions for TCPL fund repayments from royalties owned to ECN
- 5 would have originated from . In 1990, IOGC modelled the TOPGAS funds owing to
- 6 First Nations using a ten-step process based on factors like operators, commodity
- 7 prices, cost of services, and royalty amounts for the period between 1982-1990.

TOTAL PRODUCTION BY LICENSEE DURING TOPGAS ERA



TOTAL PRODUCTION BY LICENSEE DURING TOPGAS ERA MCF

Grand Total		4,561,961
CONOCOPHILLIPS	CONOCOPHILLIPS CANADA RESOURCES CORP.	13,949
CNPC	MAGA ENERGY LTD.	781,547
CHEVRON	CHEVRON CANADA LIMITED	261,529
CDN JOREX	MAGA ENERGY LTD.	847,910
ACCLAIM	MAGA ENERGY LTD.	2,657,026

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ECN TOPGAS • DRAFT 2.0

CONFIDENTIAL Tuesday, June 11, 2024

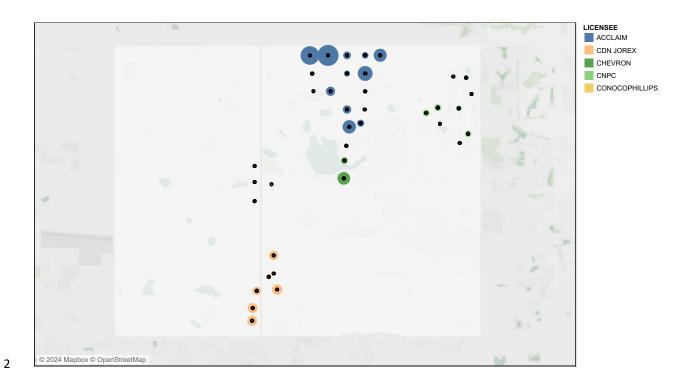
ENOCH CREE NATION

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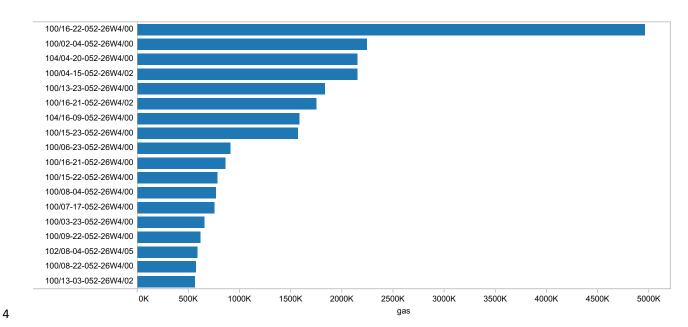
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CLAIM DATA RESEARCH & ANALYSIS

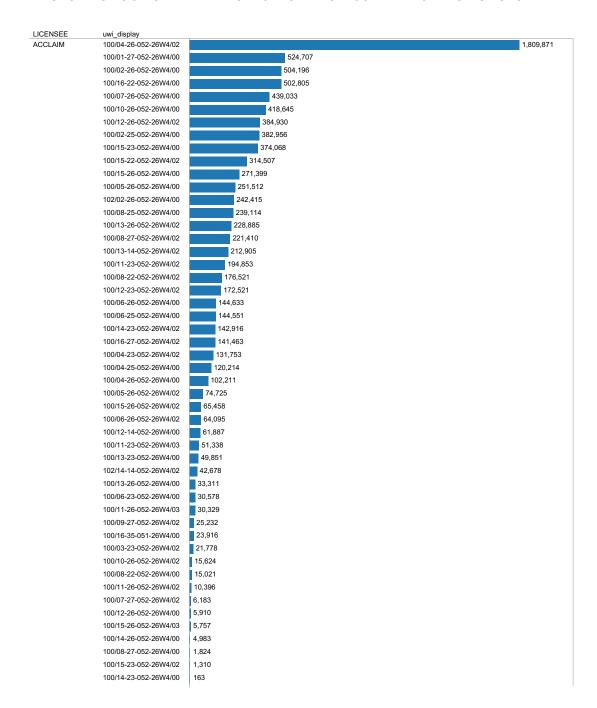
1 GAS PRODUCTION BY WELL & LICENSEE DURING TOPGAS ERA



GAS PRODUCTION BY WELL & LICENSEE DURING TOPGAS ERA



1 GAS PRODUCTION BY WELLS LICENSED TO ACCLAIM DURING TOPGAS ERA



CLAIM DATA RESEARCH & ANALYSIS

1 GAS PRODUCTION BY MONTH BY LICENSEE TOPGAS ERA MCF

Month of month December 1979 102,619 316 5,910 1,182 3,908 3,383 January 1980 96,192 529 5,825 1,274 4,330 0 4,366 February 1980 100,273 685 6,559 1,438 4,657 0 6,307 April 1980 78,249 209 2,797 92 3,375 0 0 4,817 May 1980 82,594 0 3,884 405 3,567 18,244 4,557 June 1980 83,843 0 4,636 0 0 4,494 43,814 4,121 July 1980 103,556 756 6,900 0 5,448 43,514 4,125 July 1980 82,277 504 3,251 0 3,798 48,634 5,672 September 1980 84,770 312 2,208 0 3,965 23,004 6,112 Cotober 1980 68,294 0 1,033 0 4,096 6,797 5,431 November 1980 90,829 390 6,414 0 3,826 12,483 8,000 January 1981 101,832 646 5,349 3,446 46,887 8,900 Lanuary 1981 104,330 153 4,586 3,081 40,090 7,599 March 1981 103,234 362 5,799 2,982 4,000 3,789 4,090 7,599 March 1981 103,234 362 5,799 2,982 4,000 3,833 6,872 July 1981 96,419 103,234 362 5,799 2,982 4,000 3,840 4,090 7,599 March 1981 103,234 362 5,799 2,982 4,000 3,800 4,091 4,090 7,599 March 1981 96,419 213 3,972 4,405 33,119 8,902 4,0903 4,096 4,096 4,096 4,090 7,599 March 1981 96,419 213 3,972 4,405 33,119 8,902 4,0903 4,096 4		ACCLAIM	ADVANTAGE	CDN JOREX	CHEVRON	CNPC	CONOCOPHILLIPS	DUNDEE	LEDDY
January 1980 96,192 529 5,825 1,274 4,330 0 4,366 February 1980 90,981 504 5,470 1,633 4,703 0 5,459 1,980 March 1980 100,273 685 6,559 1,438 4,657 0 6,307 April 1980 78,249 209 2,797 92 3,375 0 4,817 May 1980 82,594 0 3,894 405 3,567 18,244 4,557 19,000 103,556 756 6,500 0 4,434 4,434 4,121 July 1980 92,277 504 3,251 0 3,798 44,634 4,121 July 1980 92,277 504 3,251 0 3,798 44,634 4,254 August 1980 92,277 504 3,251 0 3,798 44,634 4,525 2,500 6,820 0 3,965 23,004 6,112 0,000 6,904 0,000 6,909 0 0 4,405 0 3,863 0 0 6,904 0,000 6,797 5,431 0,000 1,00							0		
February 1980									
March 1980									
April 1980	=								
May 1980 82,594 0 3,894 405 3,567 18,244 4,557 June 1980 103,566 756 6,900 0 5,448 48,314 4,121 July 1980 103,566 756 6,900 0 5,448 48,314 4,121 July 1980 92,277 504 3,251 0 3,788 48,634 5,672 September 1980 84,770 312 2,208 0 3,965 23,004 6,112 Cotober 1980 68,294 0 1,033 0 4,096 6,797 5,431 November 1980 69,390 0 4,405 0 3,833 0 0 6,994 December 1980 90,829 390 6,414 0 3,826 12,483 8,000 January 1981 101,832 646 5,349 3,446 46,887 8,902 February 1981 104,330 153 4,586 3,081 40,000 7,599 March 1981 103,234 362 5,399 2,982 40,903 8,409 May 1981 82,250 401 6,080 1,789 45,982 6,893 June 1981 96,419 213 3,972 4,405 33,119 8,902 July 1981 96,419 213 3,972 4,405 33,119 8,902 July 1981 97,309 124 4,021 4,923 19,152 8,898 September 1981 70,750 288 5,486 4,778 43,686 7,787 Cotober 1981 54,628 288 2,470 4,458 30,014 11,032 December 1981 79,531 224 628 December 1981 79,309 217 3,670 2,811 2,000 0 12,803 11,305 December 1981 79,531 24 628 December 1981 79,531 24 628 December 1981 79,531 24 628 December 1982 71,378 611 3,791 2,449 2,243 0 25,366 9,349 February 1982 65,369 217 3,670 2,811 2,000 0 12,803 11,305 December 1982 71,378 611 3,791 2,449 2,243 0 25,366 19,349 February 1982 67,768 376 749 6,250 3,443 0 21,257 2,963 Duly 1982 67,768 376 749 6,250 3,443 0 21,257 2,963 Duly 1982 67,768 376 749 6,250 3,443 0 21,257 2,963 Duly 1982 67,768 376 749 6,250 3,443 0 21,257 2,963 December 1982 92,880 280 3,564 4,795 2,953 0 17,161 2,4416 December 1982 92,880 280 3,564 4,795 2,953 0 17,161 2,4416 December 1982 92,880 280 3,564 4,795 2,953 0 17,161 2,443 December 1982 92,880 280 3,564 4,795 2,953 0 17,161 2,443 December 1982 92,880 280 3,564 4,795 2,953 0 17,161 2,443 December 1982 92,880 380 3,564 4,795 2,953 0 17,161 2,443 December 1982 92,880 36,64 2,871 3,943 0 21,257 2,963 December 1982 92,880 36,64 2,871 3,943 0 21,256 2,962 December 1982 92,880 36,64 2,871 3,943 0 21,243 25,151 December 1983 65,646 529 2,062 12,174 3,436 376 2,999 2 Dece									
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March 1983 75,115 362 2,186 10,528 4,274 284 36,090 28,015 April 1983 53,848 518 2,027 17,307 3,808 82 24,860 22,198 May 1983 60,069 476 1,917 476 3,890 131 30,581 16,444 June 1983 80,024 362 4,699 458 3,439 270 28,250 24,097 July 1983 105,605 600 8,479 430 3,550 291 0 26,425	January 1983	56,964	529	2,062				29,982	20,477
April 1983 53,848 518 2,027 17,307 3,808 82 24,860 22,198 May 1983 60,069 476 1,917 476 3,890 131 30,581 16,444 June 1983 80,024 362 4,699 458 3,439 270 28,250 24,097 July 1983 105,605 600 8,479 430 3,550 291 0 26,425	=								
May 1983 60,069 476 1,917 476 3,890 131 30,581 16,444 June 1983 80,024 362 4,699 458 3,439 270 28,250 24,097 July 1983 105,605 600 8,479 430 3,550 291 0 26,425	March 1983	75,115			10,528			36,090	
June 1983 80,024 362 4,699 458 3,439 270 28,250 24,097 July 1983 105,605 600 8,479 430 3,550 291 0 26,425	April 1983								
July 1983 105,605 600 8,479 430 3,550 291 0 26,425									
	•	105,605						0	

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CLAIM DATA RESEARCH & ANALYSIS

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1 GAS PRODUCTION BY MONTH BY LICENSEE TOPGAS ERA (2) MCF

2	Month of month	ACCLAIM	ADVANTAGE	CDN JOREX	CHEVRON	CNPC	CONOCOPHILLIPS	DUNDEE	LEDDY
_	August 1983	93,359	515	11,251	8,128	3,521	387	0	22,499
	•	76,464	483	11,049	17,321	4,121	330	0	22,897
	September 1983 October 1983	81,515	1,924	11,507	10,027	3,116	298	0	17,406
	November 1983	83,279	5,026	10,286	11,127	3,383	213	35,103	19,213
	December 1983	72,361	2,172	10,538	11,926	3,230	238	32,463	19,433
	January 1984	72,482	1,927	10,613	8,611	3,084	138	28,782	25,108
	February 1984	69,326	2,442	9,683	5,338	3,830	149	20,762	21,768
	March 1984	72,688	4,526	9,395	9,931	4,181	75	21,708	24,075
	April 1984	77,274	2,804	10,137	3,752	3,507	135	0	22,759
	May 1984	62,905	2,449	9,544	2,307	3,642	188	0	18,812
	June 1984	81,916	5,008	10,598	3,351	3,414	323	0	25,186
	July 1984	95,045	4,004	10,243	4,959	4,171	451	0	26,212
	August 1984	96,124	3,077	10,449	4,888	3,557	252	0	23,841
	September 1984	94,129	2,492	9,466	4,856	3,691	170	0	25,293
	October 1984	90,190	2,747	9,502	4,376	6,272	234	0	25,697
	November 1984	68,929	3,564	9,051	2,389	7,376	146	22,705	25,190
	December 1984	69,383	2,900	9,292	2,974	6,857	160	30,759	27,586
	January 1985	68,734	3,095	9,520	1,906	8,114	220	18,847	26,045
	February 1985	60,077	3,294	8,256	1,760	7,479	227	14,127	23,181
	March 1985	63,832	2,829	9,069	1,232	8,405	302	11,330	21,623
	April 1985	62,362	2,449	9,008	5,246	7,425	217	16,107	27,902
	May 1985	59,097	1,764	9,725	4,852	8,877	241	4,785	22,123
	June 1985	69,536	1,562	10,481	2,020	9,686	220	13,676	24,842
	July 1985	62,984	2,375	8,341	3,766	9,903	220	4,132	30,546
	August 1985	56,964	2,162	7,188	2,641	8,856	199	4,728	28,885
	September 1985	56,180	2,126	14,407	2,446	8,440	188	16,789	33,361
	October 1985	58,227	1,789	20,845	3,407	7,212	213	12,512	33,815
	November 1985	62,220	1,902	17,250	3,581	8,767	249	12,057	29,559
	December 1985	60,269	2,783	7,621	3,574	8,632	536	1,136	29,272
	January 1986	56,439	2,201	8,760	4,316	7,358	1,136	0	28,122
	February 1986	45,052	2,037	2,566	3,038	6,371	1,118	0	24,189
	March 1986	50,188	1,771	11,947	3,507	7,979	717	0	26,759
	April 1986	35,117	2,048	9,644	2,903	9,495	951	0	27,373
	May 1986	42,585	1,984	8,909	2,013	10,840	909	0	25,808
	June 1986	48,303	1,998	7,369	2,332	7,259	227	0	32,051
	July 1986	50,664	1,572	5,353	2,563	10,087	0	4,884	35,533
	August 1986	41,201	2,176	4,426	433	9,637	0	25,779	34,560
	September 1986	45,947	3,269	4,646	582	11,677	0	23,351	31,902
	October 1986	43,313	3,202	2,850	898	10,165	0	15,727	33,144
	November 1986	41,641	2,946	3,194	330	8,387	0	7,837	32,552
	December 1986	35,547	2,801	3,950	174	7,819	0	4,178	33,950
	January 1987	32,023	3,170	3,596	323	6,865			35,792
	February 1987	34,507	2,719	2,293	121	5,938			31,515
	March 1987	53,862	2,974	2,438	174	5,796			34,816
	April 1987	47,079	2,328	2,265	249	5,775			30,730
	May 1987	49,266	3,258	2,037	167	5,690			31,746
	June 1987	47,466	2,875	1,949	167	4,813			31,824
3	July 1987	48,122	3,031	2,044	270	4,703			36,786

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CLAIM DATA RESEARCH & ANALYSIS

GAS PRODUCTION BY MONTH BY LICENSEE TOPGAS ERA (3) MCF

2	Month of month	ACCLAIM	ADVANTAGE	CDN JOREX	CHEVRON	CNPC	CONOCOPHILLIPS	DUNDEE	LEDDY
_	August 1983	93,359	515	11,251	8,128	3,521	387	0	22,499
	•	76,464	483	11,049	17,321	4,121	330	0	22,897
	September 1983 October 1983	81,515	1,924	11,507	10,027	3,116	298	0	17,406
	November 1983	83,279	5,026	10,286	11,127	3,383	213	35,103	19,213
	December 1983	72,361	2,172	10,538	11,926	3,230	238	32,463	19,433
	January 1984	72,482	1,927	10,613	8,611	3,084	138	28,782	25,108
	February 1984	69,326	2,442	9,683	5,338	3,830	149	20,762	21,768
	March 1984	72,688	4,526	9,395	9,931	4,181	75	21,708	24,075
	April 1984	77,274	2,804	10,137	3,752	3,507	135	0	22,759
	May 1984	62,905	2,449	9,544	2,307	3,642	188	0	18,812
	June 1984	81,916	5,008	10,598	3,351	3,414	323	0	25,186
	July 1984	95,045	4,004	10,243	4,959	4,171	451	0	26,212
	August 1984	96,124	3,077	10,449	4,888	3,557	252	0	23,841
	September 1984	94,129	2,492	9,466	4,856	3,691	170	0	25,293
	October 1984	90,190	2,747	9,502	4,376	6,272	234	0	25,697
	November 1984	68,929	3,564	9,051	2,389	7,376	146	22,705	25,190
	December 1984	69,383	2,900	9,292	2,974	6,857	160	30,759	27,586
	January 1985	68,734	3,095	9,520	1,906	8,114	220	18,847	26,045
	February 1985	60,077	3,294	8,256	1,760	7,479	227	14,127	23,181
	March 1985	63,832	2,829	9,069	1,232	8,405	302	11,330	21,623
	April 1985	62,362	2,449	9,008	5,246	7,425	217	16,107	27,902
	May 1985	59,097	1,764	9,725	4,852	8,877	241	4,785	22,123
	June 1985	69,536	1,562	10,481	2,020	9,686	220	13,676	24,842
	July 1985	62,984	2,375	8,341	3,766	9,903	220	4,132	30,546
	August 1985	56,964	2,162	7,188	2,641	8,856	199	4,728	28,885
	September 1985	56,180	2,126	14,407	2,446	8,440	188	16,789	33,361
	October 1985	58,227	1,789	20,845	3,407	7,212	213	12,512	33,815
	November 1985	62,220	1,902	17,250	3,581	8,767	249	12,057	29,559
	December 1985	60,269	2,783	7,621	3,574	8,632	536	1,136	29,272
	January 1986	56,439	2,201	8,760	4,316	7,358	1,136	0	28,122
	February 1986	45,052	2,037	2,566	3,038	6,371	1,118	0	24,189
	March 1986	50,188	1,771	11,947	3,507	7,979	717	0	26,759
	April 1986	35,117	2,048	9,644	2,903	9,495	951	0	27,373
	May 1986	42,585	1,984	8,909	2,013	10,840	909	0	25,808
	June 1986	48,303	1,998	7,369	2,332	7,259	227	0	32,051
	July 1986	50,664	1,572	5,353	2,563	10,087	0	4,884	35,533
	August 1986	41,201	2,176	4,426	433	9,637	0	25,779	34,560
	September 1986	45,947	3,269	4,646	582	11,677	0	23,351	31,902
	October 1986	43,313	3,202	2,850	898	10,165	0	15,727	33,144
	November 1986	41,641	2,946	3,194	330	8,387	0	7,837	32,552
	December 1986	35,547	2,801	3,950	174	7,819	0	4,178	33,950
	January 1987	32,023	3,170	3,596	323	6,865			35,792
	February 1987	34,507	2,719	2,293	121	5,938			31,515
	March 1987	53,862	2,974	2,438	174	5,796			34,816
	April 1987	47,079	2,328	2,265	249	5,775			30,730
	May 1987	49,266	3,258	2,037	167	5,690			31,746
	June 1987	47,466	2,875	1,949	167	4,813			31,824
3	July 1987	48,122	3,031	2,044	270	4,703			36,786

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CLAIM DATA RESEARCH & ANALYSIS

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GAS PRODUCTION BY MONTH BY LICENSEE TOPGAS ERA (3) MCF

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		_	Ж	×	7		CONOCOPHILLIPS		
		ACCLAIM	ADVANTAGE	CDN JOREX	CHEVRON	ပ္	풒	DUNDEE	LEDDY
		100	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	⊃ Z	¥	CNPC	8	<u> </u>	
		⋖	ΑĎ	8	٥		9 9		_
2	Month of month						8		
	August 1987	52,914	2,854	2,719	703	4,373			33,442
	September 1987	34,223	1,934	2,485	288	4,224			33,109
	October 1987	31,739	2,751	2,541	763	4,057			36,278
	November 1987	35,859	3,035	2,499	937	3,003			32,044
	December 1987	35,139	2,896	2,595	1,278	2,797			31,540
	January 1988	38,483	3,088	1,888	1,136	2,630		0	31,778
	February 1988	26,372	2,662	2,396	1,672	2,662		0	27,653
	March 1988	34,457	2,179	3,908	1,207	2,627		0	30,077
	April 1988	32,594	2,428	4,735	142	2,644		0	26,035
	May 1988	29,591	2,009	13,420	188	2,623		0	30,425
	June 1988	41,155	1,317	1,697	472	2,602		0	29,257
	July 1988	34,663	1,959	1,736	618	2,591		0	27,806
	August 1988	33,957	2,225	1,970	1,331	2,584		0	28,122
	September 1988	31,266	3,819	1,849	1,480	2,236		0	25,016
	October 1988	33,173	3,237	2,055	1,008	2,197		0	25,094
	November 1988	30,784	2,616	2,162	969	2,073		0	21,673
	December 1988	55,619	2,726	2,396	1,328	1,988		14,567	26,737
	January 1989	42,046	2,233	2,492	1,736	2,108		25,875	24,956
	February 1989	44,850	1,906	1,917	1,264	1,885		25,257	22,109
	March 1989	43,675	2,176	2,183	1,796	1,984		24,161	23,383
	April 1989	39,483	1,789	2,165	1,278	2,076		22,098	23,121
	May 1989	54,852	2,059	2,183	1,505	2,108		12,029	23,529
	June 1989	33,173	1,420	2,087	486	2,091		0	21,236
	July 1989	32,459	2,048	2,027	160	1,477		0	19,188
	August 1989	32,935	1,846	2,144	121	1,938		0	20,782
	September 1989	35,994	1,626	1,945	167	1,650		0	21,566
	October 1989	37,133	1,434	1,835	238	1,846		0	23,976
	November 1989	35,174	1,945	1,533	469	1,615		0	22,638
	December 1989	52,037	2,428	1,924	245	1,771		0	21,378
	January 1990	53,745	3,464	1,945	273	1,516			20,320
	February 1990	45,450	3,319	1,278	209	1,608			19,163
	March 1990	39,274	4,937	1,704	291	1,558			20,359
	April 1990	35,792	4,824	1,498	199	689			18,947
	May 1990	32,800	4,373	1,203	231	2,584			18,996
	June 1990	36,438	3,422	1,136	131	2,186			18,996
	July 1990	34,138	5,164	1,111	0	2,257			17,310
	August 1990	34,461	4,533	10,197 8,614	0	2,176 1,878			19,170 16,671
	September 1990	31,128 57,990	6,233		0	1,949			16,962
	October 1990 November 1990	150,522	6,499 6,634	12,011 14,134	0	1,828			16,359
	December 1990	131,479	7,411	15,025	0	1,853			13,651
	January 1991	51,931	6,439	11,110		1,867			10,822
	February 1991	94,463	6,868	10,904		6,478			12,941
	March 1991	135,551	7,415	10,680		5,956			13,076
	April 1991	126,450	7,248	9,665		5,441			13,967
	May 1991	135,636	5,431	6,180		3,943			14,837
	June 1991	123,728	5,704	8,937		2,939			14,190
2	July 1991	129,233	7,574	8,994		3,468			14,549
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CLAIM DATA RESEARCH & ANALYSIS

GAS PRODUCTION BY MONTH BY LICENSEE TOPGAS ERA (5) MCF

2	Month of month	ACCLAIM	ADVANTAGE	CDN JOREX	CHEVRON	CNPC	CONOCOPHILLIPS	DUNDEE	LEDDY
_	August 1991	128,239	12,189	8,430		2,953			15,493
	September 1991	140,026	23,646	8,980		2,982			14,702
	October 1991	146,323	20,310	8,480		3,212			14,989
	November 1991	120,342	19,483	9,516		4,898			12,749
	December 1991	132,093	16,018	8,810		2,119			14,237
	January 1992	120,505	16,874	6,751		4,025			14,652
	February 1992	94,449	15,504	6,158		3,698			13,544
	March 1992	103,798	13,584	7,329		4,259			14,382
	April 1992	109,072	9,445	6,126		4,245			13,839
	May 1992	34,741	14,364	7,578		4,163			14,198
	June 1992	45,712	15,277	7,621		4,146			14,719
	July 1992	28,061	13,541	5,828		3,674			15,504
	August 1992	71,427	12,547	5,058		4,206			15,454
	September 1992	102,034	11,141	4,909		4,479			12,948
	October 1992	90,346	10,733	5,001		4,856			11,411
	November 1992	107,628	9,051	5,079		4,469			10,435
	December 1992	75,712	8,675	4,465		3,769			12,458
	January 1993	72,805	8,575	3,560		4,213		0	12,086
	February 1993	67,303	7,450	3,596		4,210		0	11,116
	March 1993	82,420	8,093	4,472		4,352		0	12,696
	April 1993	89,348	6,712	3,975		4,050		0	10,588
	May 1993	136,623	6,950	3,603		4,064		0	10,180
	June 1993	106,169	6,591	3,525		4,185		0	11,014
	July 1993	96,795	7,592	2,932		4,295		0	10,315
	August 1993	73,717	7,610	3,787		4,039		0	11,727
	September 1993	50,522	6,680	3,823		4,199		0	10,996
	October 1993	44,250	6,421	2,595		4,124		0	11,081
	November 1993	59,974	6,141	2,967		4,277		0	11,596
	December 1993	101,146	6,300	4,163		4,664		0	11,031
	January 1994	106,329	5,455	2,548		5,104			12,015
	February 1994	108,462	5,310	2,509		4,707			9,807
	March 1994	105,505	5,026	3,368		7,340			10,680
	April 1994	71,169	5,161	3,134		6,794			10,030
	May 1994	70,782	3,972	2,481		6,463			11,866
3	June 1994	65,720	5,175	2,431		6,992			11,972

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ECN TOPGAS • DRAFT 2.0

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CLAIM DATA RESEARCH & ANALYSIS

TOPGAS WELLS LICENSEE & OPERATOR

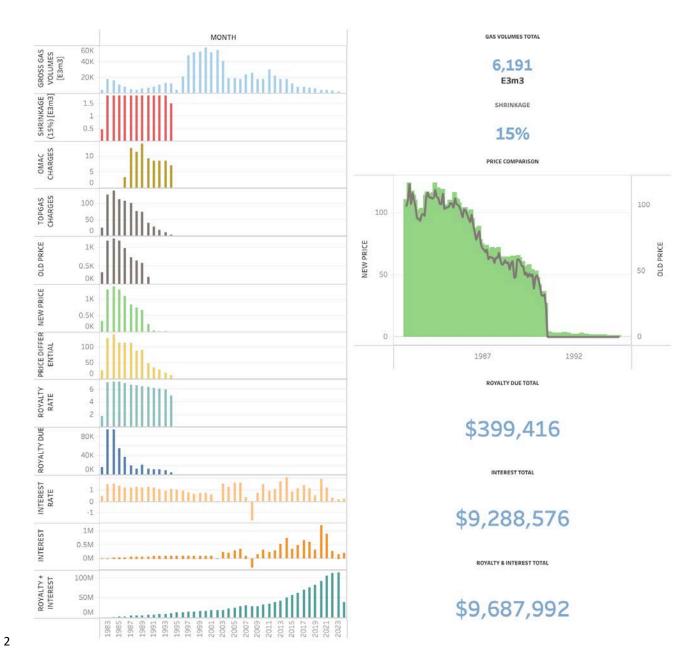
UWI	LICENSEE	OPERATOR									
100/04-26-052-26W4/02	ACCLAIM	MAGA	500K	_					757	,546	74,114
100/14-08-055-03W5/00	DUNDEE	DUNDEE		261,781							0
100/02-26-052-26W4/00	ACCLAIM	OBSIDIAN	500K	97,466					6,251		
100/01-27-052-26W4/00	ACCLAIM	MAGA	500K		113,5	562			13,1	61	
100/14-25-052-26W4/00	LEDDY	LEDDY	500K			80,0	99			25,098	
100/16-22-052-26W4/00	ACCLAIM	MAGA	500K			16	3				223,213
100/09-25-052-26W4/00	LEDDY	LEDDY	500K				80,699)			25,999
100/10-25-052-26W4/00	LEDDY	LEDDY	500K				75,559)		19),774
100/10-26-052-26W4/00	ACCLAIM	MAGA	500K		105,9	988		192			
100/07-26-052-26W4/00	ACCLAIM	MAGA	500K				7	'5,996	31,6	61	
100/15-23-052-26W4/00	ACCLAIM	MAGA	500K		155,846		2,101				
100/02-25-052-26W4/00	ACCLAIM	MAGA	500K			97	₅ 80,954				
100/12-26-052-26W4/02	ACCLAIM	MAGA	500K	_		2,60)5	76,7	76		
100/10-19-052-25W4/00	LEDDY	LEDDY	500K		51,2	81			4,2	263	
100/08-04-052-26W4/00	JOREX	MAGA	500K		91,7	19				856	
100/07-19-052-25W4/00	LEDDY	LEDDY	500K	16,856			4	3,302			
100/15-22-052-26W4/02	ACCLAIM	MAGA	500K						20,317		152,776
100/02-30-052-25W4/00	LEDDY	LEDDY	500K				5	2,790			309
100/05-26-052-26W4/00	ACCLAIM	MAGA	500K		65,198		4,831				
100/15-26-052-26W4/00	ACCLAIM	MAGA	500K		56,644			2,88	32		
100/08-25-052-26W4/00	ACCLAIM	OBSIDIAN	500K			41,5	31				8,732
100/11-30-052-25W4/00	ADVANTAGE	ADVANTAGE	500K							86,697	41,194
102/02-26-052-26W4/00	ACCLAIM	MAGA	500K						155	,101 1,55	58
100/06-19-052-25W4/00	LEDDY	LEDDY	500K				33,414		7,148		

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REVISED TOPGAS CALCULATIONS



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