



October 6, 1997

4800  
File: 2940-8400-59240-16  
Reference: 970912

Mr. David W. Lui, P. Eng  
Petroleum Engineering Consultant  
Novagas Canada Ltd.  
Suite 800, 707 Eighth Avenue SW  
Calgary, AB T2P 3V3

Dear Mr. Lui:

**RE: APPROVAL 97-16-001; ACID GAS INJECTION  
NORCEN CARIBOU C-4-G/94-G-7 (WA 7961) HALFWAY FORMATION**

This refers to your Application of September 30, 1997 wherein you requested an addition to the approved volume of acid gas injection into the subject well. It is noted that NCL is the contract operator of the subject well on behalf of Norcen Energy Resources Limited.

Your request for an addition to the disposal volume is hereby approved. Please note that item 6 of the Approval 97-16-001 of April 23, 1997 is modified to read as follows:

- 6. The cumulative volume injected must not exceed  $16.6 \times 10^6 \text{ m}^3$  expressed at 101.325 kPa and 15 degrees Celsius.

Norcen will place the c-4-G well on continuous gas production from the Halfway formation following the termination of acid gas injection phase.

Yours sincerely,

Bou van Oort  
Director  
Engineering and Operations Branch

cc: Jonas Marshall  
Norcen Energy Resources Ltd.

Copies for Approval Letter to Industry (11)  
RE: GEP, Salt Water Disposals, etc.

- G. Miltenberger
- Data Management
- R. Stefik
- D. Richardson
- P. Attariwala
- G. Farr
- S. Chicorelli
- Resource Revenue
- 59240
- Wellfiles (originals)
- Daily



**WELL DETAILS**

*NOT ON RMS*

Well Name: Norcen Caribou *C-004-6/094-607*

Operator Name: Norcen Energy Resources Ltd. Operator Code: 0, 5, 6, 7

New Status: Acid Gas Injector Effective Date: Year 917, Month 014, Day 215

Field Name: Caribou Field Code: *2940* 91000

Pool Name: Halfway Pool Code: *4800* 48000

Gross Perforated Interval: 1679 m kb to 1713 m kb

EMPR Confidentiality: *RESOURCE REVENUE BRANCH* Year: 98, Month: 02, Day: 12

**UNIQUE WELL IDENTIFIER**

S	LE	UNIT	B	NTS MAP	P	ES
S	LE	LSD	SEC	TWP	RGE	W M P ES
2	00	C004G094G07			0	3

**WELL AUTHORIZATION**

Well Authorization Number: 0, 7, 9, 6, 1

*3597*

**OPERATIONS INFORMATION**

JUN 5 1991

Is this well in an oil unit?  Yes  No

Is this well in a concurrent scheme?  Yes  No

Well Production Allowable: Oil \_\_\_\_\_ m<sup>3</sup> Gas \_\_\_\_\_ 10<sup>3</sup> m<sup>3</sup> Project  Waived

Title Number (insert Lease number): \_\_\_\_\_

Well Crown Interest: \_\_\_\_\_

P.E. Code: \_\_\_\_\_

Project Code: \_\_\_\_\_

**COMMENCEMENT/RESUMPTION OF WELL ACTIVITY**

Commencement  Resumption

Reporting Facility Name: NCL Caribou

Physical Facility Name: \_\_\_\_\_

Type of Well:  Oil or  Gas Oil Vintage % New: \_\_\_\_\_

97/06/09  
 Faxed to Ft. St. John  
 (George Holland) to confirm  
 Facility.

**GAS TESTING**

Period	Year	Month	Day	to	Year	Month	Day	Test Facility Code	Approved Flaring Volume
									10 <sup>3</sup> m <sup>3</sup>

**COMMENTS**

*97-05-08 Compl.*

**OPERATOR CONTACT**

Name: Lynette Gardner Phone: (403) 618-4050 Date: 97-05-28

**MINISTRY USE ONLY**

*KT* Data Management Reservoir Engineering Petroleum Geology Petroleum Titles Field Operations Resource Revenue