



January 13, 2009

2940-7400-59240-16

Harvey Heinrichs, P.Eng.
Keyera Energy Inc.
c/o Canadian Chemical Technology Inc.
3740A - 11A St NE
Calgary, AB T2E 6M6

Dear Mr. Heinrichs:

RE: ACID GAS DISPOSAL APPROVAL – AMENDMENT #1
KEYERA ET AL CARIBOU a-A30-G/94-G-7; WA# 10585; DEBOLT FORMATION

Commission staff have reviewed the application, dated June 30, 2008, requesting an amendment to the existing approval for acid gas disposal into the Debolt formation of the subject well.

Acid gas disposal commenced in the subject well in June 1998 and has a recent average daily injection rate of $32.2 \times 10^3 \text{ m}^3/\text{d}$ with a cumulative disposal volume of $73.1 \times 10^6 \text{ m}^3$. The average wellhead injection pressure has been 3200 kPag. Keyera has requested an increase in maximum daily injection rate; from $69.0 \times 10^3 \text{ m}^3/\text{d}$ to $130.0 \times 10^3 \text{ m}^3/\text{d}$ as well as removal of the maximum sandface injection pressure limitation. Keyera believes that the maximum wellhead injection pressure limitation is a good proxy for sandface injection pressure and is sufficient to protect against formation fracturing.

A recent pressure survey indicates that the reservoir pressure has increased from its initial pressure of 17,876 kPaa to 18,350 kPaa. Modelling of the most recent pressure fall-off data indicates an aquifer aerial extent of 20-50 sections with no boundary effects seen. The calculated maximum area of influence during acid gas injection is approximately 1.0 kilometre. The small area of influence relative to the aerial extent of the aquifer provides a degree of confidence that the proposed amendment should not result in a significant increase in overall formation pressure. Continuous monitoring of wellhead injection pressure and periodic monitoring of reservoir pressure are critical for refining the reservoir model; given the lack of well penetrations through the Debolt. This is important given the structurally complex nature of the Debolt formation in the amendment area.

This well would appear to be a suitable candidate for acid gas disposal in the Debolt formation at the increased disposal rate requested. Any future increase in approval limits would be dependent on demonstrated performance to support an application to amend the approval.

...2

RESOURCE CONSERVATION

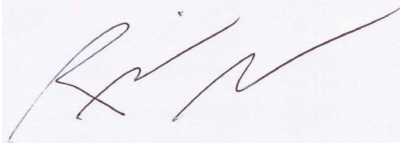
PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0291
Location: 6th Flr 1810 Blanshard St. Victoria BC

Headquarters: #200, 10003 110th Ave, Fort St. John BC V1J 6M7 Tel: (250) 261-5729 Fax: (250) 261-5744 www.ogc.gov.bc.ca

Attached please find Approval 98-16-001 (Amendment #1) for the application granted under Section 100 of the Petroleum and Natural Gas Act. Notice of this application was posted on the OGC website and no objections were received.

Should you have any questions, please contact the undersigned at (250) 952-0366.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R. Slocomb', is written over a light blue horizontal line.

Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering

APPROVAL 98-16-001 (Amendment #1)
THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
OIL AND GAS COMMISSION

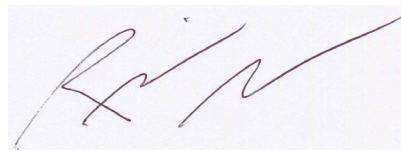
IN THE MATTER of a proposal (the Scheme) by Keyera Energy Ltd. (the Operator) to inject acid gas into the Debolt formation in the well Keyera et al Caribou a-A30-G/94-G-7; WA# 10585 (the well).

NOW THEREFORE, the Commission, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361 hereby orders as follows:

The Scheme of the Operator for the injection of acid gas (hydrogen sulphide and carbon dioxide) into the Debolt formation through the well, as such proposal is described in an application from the Operator to the Commission dated April 28, 1997, and supplemented with an additional application dated June 30, 2008 and related submissions, is hereby approved, subject to terms and conditions herein contained.

1. Acid gas shall be injected only into the Debolt formation (2000.0 – 2165.0 mKB) through the well.
2. The area of the Scheme shall consist of
94-G-7 Block F – units 11, 21
Block G – units 20 and 30.
3. The wellhead injection pressure must be continually measured and recorded, and must not exceed 10,500 kPag. Any sudden, significant wellhead injection pressure change that is sustained must immediately be reported to the Director, Resource Conservation.
4. The injection rate must not exceed $130 \times 10^3 \text{ m}^3/\text{d}$ expressed at 101.325 kPaa and 15 degrees Celsius.
5. The cumulative volume injected must not exceed $380.0 \times 10^6 \text{ m}^3$ expressed at 101.325 kPaa and 15 degrees Celsius.
6. The Operator must monitor the casing, conduct annular packer isolation tests and implement appropriate corrosion protection measures.
7. The Operator must maintain the hydraulic isolation of the injection zone.
8. The Operator must conduct a reservoir pressure test of the Debolt formation in the subject well, with a shut-in period of not less than 7 days, within 18 months of commencement of the amended higher injection rate.
9. The Wellhead Emergency Shut-Off Device must be linked to H₂S detector heads at the wellhead and a Subsurface Safety Valve or Injection Check Valve must be installed in the tubing string to operate “fail-safe”.
10. A barricade must be installed around the wellhead that is capable of withstanding vehicle collision.
11. All injection operations must be immediately suspended if any injection equipment, monitoring equipment or safety devices considered necessary for safe operation should fail.
12. A record of volume of acid gas disposed of through this well must be included on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18), which must be submitted to the Oil and Gas Commission (Victoria) not later than the 25th day of the month following the reported month.

13. The Operator must submit a progress report to the Commission for each six-month period the Scheme is in operation. The requirement may be amended at the request of the operator after the scheme has been in operation for a period of three years. The progress report is due within 60 days after the end of each period and must contain:
 - a) details of any workover or treatment program done on the well with reasons for the workover and results of the workovers,
 - b) a discussion of any changes in injection equipment and operations,
 - c) a general review of the operation of the project including identification of problems, remedial action taken and results of the remedial action on project performance,
 - d) a discussion of the overall performance of the scheme,
 - e) an evaluation of all monitoring done during the reporting period including corrosion protection, fluid analyses, logs and any other data collected,
 - f) a table showing monthly volumes of injected fluid, corresponding maximum wellhead injection pressures, maximum daily injection rates, average wellhead temperatures and hours on injection,
 - g) the volume-weighted average composition and formation volume factor for the injected fluid,
 - h) a plot showing monthly injection volume and average pressure versus time on an ongoing basis,
 - i) a table showing tonnes of sulphur and carbon dioxide disposed on a monthly and cumulative basis.
14. An updated Emergency Response Plan procedure must be filed with the Manager, Emergency Response and Safety Operations prior to commencement of amended injection operations.
15. The operations of the acid gas injection scheme will be subject to periodic review by the Commission. The Supervisor, Reservoir Engineering, Resource Conservation or the Director, Drilling and Production, may issue general guidelines regarding the operations of the acid gas injection scheme.
16. The approval or any condition of it may be modified or rescinded for non-compliance of the conditions or unsafe operations.



Richard Slocomb
Supervisor, Reservoir Engineering
Resource Conservation

DATED AT the City of Victoria, in the Province of British Columbia, this 13th day of January 2009.