



August 4, 2010

9000-1680-32640-02

Myron Seebeck
Senior Production Engineer
Apache Canada Ltd.
1000, 700 – 9th Avenue S.W.
Calgary, AB T2P 3V4

Dear Mr. Seebeck:

**RE: SALT WATER AND RECOVERED FLUIDS DISPOSAL APPROVAL, AMENDMENT #1
APACHE PATRY c-A30-A/94-O-12 (WA# 25140); SIKANNI FORMATION**

Commission staff have reviewed the application, dated July 19, 2010, and subsequent information submitted, requesting permission to extend the period for dispose of produced water, and completion/workover fluids resulting from fracture treatments, originally granted April 9, 2009, into the Sikanni formation of the subject well.

Acidization and injection testing of the relatively shallow Sikanni formation at the subject location exceeded the formation fracture pressure, resulting in communication between the injection zone and the surface casing vent of the twin wellbore c-30-A/94-O-12 (WA# 17127) located 14.9 meters away. Attempts to shut-off communication between these wells has been unsuccessful. Water disposal during three months in 2009 totaled 2106 m³.

Extension of the temporary disposal approval will allow continued production testing of shale gas wells in the immediate area. It is the understanding of the Commission that Apache Canada Ltd. commits to drilling and placing into service a new disposal well following access road construction.

Attached is Approval 09-02-006 (Amendment #1), granted under Part 8, Division 3, section 94 of the *Drilling and Production Regulation*. This approval is effective until December 31, 2010, or until such time as an alternate disposal well is in service, whichever occurs first. Additional conditions to the approval will ensure that injection remains below fracture pressure. The form Notice of Commencement or Suspension of Operations (BC-11) must be submitted upon re-commencing injection operations.

Should you have any questions, please contact Ron Stefik at (250) 419-4430.

Sincerely,

For Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering
Resource Conservation

Attachment

APPROVAL 09-02-006 (AMENDMENT #1)

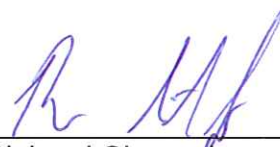
**THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
DRILLING AND PRODUCTION REGULATION
OIL AND GAS COMMISSION**

IN THE MATTER of a scheme of Apache Canada Ltd. (Apache) for Salt Water and Recovered Fluids Disposal in the Other Areas – Sikanni formation in the well Apache Patry c-A30-A/94-O-12 (WA# 25140).

NOW, THEREFORE, pursuant to Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, the scheme is hereby amended, as such scheme is described in

an application from Apache to the Commission dated January 13, 2009 and July 19, 2010 and related submissions.

1. The disposal interval must be in the Sikanni formation of the well, 469.0 – 488.0 mKB.
2. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure.
3. The pressure measured at the surface casing vent of the well Apache HZ Patry c-30-A/094-O-12 (WA# 17127) must not exceed a value of 2,100 kPa, with continuous pressure monitoring and a report to the Commission upon termination of this approval, or sooner if requested.
4. A record of volume of salt water and recovered fluid 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 not later than the 25th day of the month following the reported month.
5. This approval is effective until December 31, 2010, or until such time as an alternate disposal well is in service, whichever occurs sooner.
6. This approval may be modified or rescinded if deemed appropriate through a change in circumstances.

FOR 

Richard Slocomb
Supervisor, Reservoir Engineering
Resource Conservation
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this *4th* day of August 2010.