



October 14, 1997

File: 6460-4520-59240-09
Reference: 970940

Mr. Mike Fabi, P. Eng.
Sr. Reservoir Engineer
Apache Canada Ltd.
Suite 1000, 700 - 9th Avenue S.W.
Calgary, AB T2P 3V4

Apache Project (03)

Dear Mr. Fabi:

**RE: APPLICATION FOR WATERFLOOD PRESSURE
MAINTENANCE APPROVAL; Oak Cecil "I" Pool**

This refers to your application dated August 13, 1997 wherein you requested approval of a waterflood pressure maintenance scheme in the subject oil pool.

Attached is Approval # 97-09-004 for the application, granted under section 100 of the Petroleum and Natural Gas Act.

Please note that Progress Reports shall be filed as stipulated in Part 9, section 108 of the Drilling and Production Regulation, B.C. Reg. 336/91.

The GEP Approval 95-06-002 granted for the pool is hereby rescinded.

Yours truly,

Bou van Oort, P. Eng.
Director
Engineering and Operations Branch

- 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

Attachment



APPROVAL 97-09-004

THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
MINISTRY OF EMPLOYMENT AND INVESTMENT
ENERGY AND MINERALS DIVISION

IN THE MATTER of a pressure maintenance scheme of Apache Canada Ltd. (Apache) for waterflood recovery of oil by water injection into the Oak Cecil "I" pool.

The Deputy Minister of Employment and Investment, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C.1996, c.361 orders as follows:

The pressure maintenance scheme of Apache for waterflood recovery of oil from the Oak Cecil "I" pool as described in the Application from Apache to the Ministry dated August 13, 1997 is approved, subject to the following terms:

1. The project area of the pressure maintenance scheme consists of SW/4 sec 20, E/2 sec 20, W/2 sec 21, sec 28, E/2 sec 29 and sec 33-86-17 W6M.
2. The project oil production allowable is 100 m³/d.
3. Water may only be injected into wells 7-20 and 4-33-86-17 W6M.
4. The scheme is deemed to have commenced upon water being injected into the wells referred to in clause 3.
5. The Division must be notified in writing of the date of commencement.
6. The injection pressure at the sandface must not exceed the formation fracture pressure.
7. Equipment must be installed at the well head of water injection wells to ensure that fracturing of the formation does not occur.
8. All associated gas production must be conserved.
9. An oil well may be drilled anywhere within the project area provided that it is not completed within 100 m of the boundary of the project area.
10. The operations of the pressure maintenance scheme are subject to periodic review, and modification to the approval may be ordered, if deemed appropriate, by the Director of the Engineering and Operations Branch.



Charles Kang
Deputy Minister
Ministry of Employment
and Investment

DATED AT the City of Victoria, in the Province of British Columbia, this 25 day of September, 1997.