



December 19, 2014

2985-4995-59240-06

Kimberley Toews-Koch
Engineering Technologist, North Asset
Taqa North Ltd
2100, 308 – 4th Avenue S.W.
Calgary AB T2P 0H7

Dear Ms. Toews-Koch:

**RE: GOOD ENGINEERING PRACTICE (GEP) SPECIAL PROJECT
OTHER THAN NORMAL SPACING ORDER
CHINCHAGA RIVER FIELD – LOWER CHARLIE LAKE/MONTNEY “A” POOL**

The Commission has reviewed your application, dated October 21, 2014, following a presentation in Victoria, requesting approval of Good Engineering Practice (GEP) for a portion of the Chinchaga River field – Lower Charlie Lake/Montney “A” pool for oil development.

A GEP for gas development of the subject pool was approved October 30, 1997 and expanded in an amendment dated October 23, 2001. Also, an area commingled production approval was issued December 11, 1997 for wells completed in the Bluesky-Gething-Detrital "A" & Lower Charlie Lake/Montney "A" pools, within the GEP area.

The area of current application is mapped as the down-dip oil leg to a pool being actively produced from multiple gas and limited vertical oil wells. Oil well production is normally subject to a daily oil allowable restriction as a conservation and equity measure. Proposed testing of an advanced completion technique to optimize oil recovery, and the existence of a gas GEP in the up-dip gas pool, are not conducive to imposing a normal gas-oil ratio adjusted production allowable restriction in this case. However, data gathering requirements and scheduled performance reviews, as outlined in this Order, will provide a basis to formulate appropriate pool management techniques and modification of the Order as required.

The following Orders are attached;

- 1) Order 14-06-002 designating Good Engineering Practice within the oil portion of the Chinchaga River field Lower Charlie Lake/Montney “A” oil pool as a Special Project under section 75 of the *Oil and Gas Activities Act*, and
- 2) Order 14-06-002-OTN approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject pool and area.

As a Good Engineering Practice Special Project, the applicant intends to locate, complete and operate wells in a manner to optimize resource recovery while minimizing surface impacts. Conditions of this Order, specifically a performance review, will serve to increase understanding of best practices in developing and maximizing oil recovery. No objections were received following notice of application on the OGC website. This approval may be modified at a later date if deemed appropriate.

Should you have any questions, please contact Petra Kriescher-Trudgeon at (250) 419-4415 or the undersigned at (250) 419-4430.

Sincerely,


Ron Stefik, Eng.L.
Supervisor, Reservoir Engineering
Oil and Gas Commission

Attachments

IN THE MATTER of an application from Taqa North Ltd. to the Oil and Gas Commission dated October 21st, 2014 for a Good Engineering Practice project.

ORDER 14-06-002

- 1 Under Section 75(1)(a) of the *Oil and Gas Activities Act*, the Chinchaga River field - Lower Charlie Lake/Montney "A" pool is designated as a special project for the recovery of oil utilizing Good Engineering Practice within the following area;
NTS 94-H-8 Block A Units 55 – 58, 65 – 68, 75 – 78 and 85 – 88
- 2 Horizontal oil wells are exempt from the provisions of section 54 of the Drilling and Production Regulation, daily oil allowable, pursuant to section 4(1)(p).
- 3 Project horizontal wells, located within approval area (1) are part of a special data requirement and scheduled performance review;
 - a) The following information must be recorded on each horizontal well completed with multi-stage hydraulic fracture stimulations in the oil-leg of the Lower Charlie Lake/Montney "A" pool;
 - i) Daily oil, gas and water production and hours on production.
 - ii) Daily tubing and casing pressure.
 - b) Prior to one year from the date of initial well production, a bottom-hole pressure test must be conducted on sample well(s) to calculate the stabilized average reservoir pressure.
 - c) A report of information (a) & (b) be submitted to the Commission within 30 days of the conclusion of the initial one year production period, in both tabular and graphical format, also including gas-oil ratio, water-cut percentage and cumulative volumes of each fluid.



Ron Stefik, Eng.L.
Supervisor Reservoir Engineering
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 19th day of December 2014.

IN THE MATTER of an application from TAQA North Ltd. to the Oil and Gas Commission dated October 21, 2014 for Other Than Normal Spacing.


ORDER 14-06-002-OTN

1 Under Section 65.1(2) of the *Petroleum and Natural Gas Act*, Other Than Normal Spacing is approved within the Chinchaga River field – Lower Charlie Lake/ Montney “A” pool within the following area;

NTS 94-H-8 Block A Units 55 – 58, 65 – 68, 75 – 78 and 85 – 88

2 Under section 65.1(3) of the *Petroleum and Natural Gas Act*, I specify the following:

- a) the target area for an oil well completed within the project area is not nearer than 100 m to the sides of the Other Than Normal Spacing area,
- b) an oil well completed outside the target area specified in paragraph (a) may be subject to an off-target production penalty,
- c) oil wells drilled within the specified project area are not subject to spacing requirements.



Ron Stefik, Eng.L.
Supervisor, Reservoir Engineering
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 19th day of December 2014.