

August 22, 2011

4700-8295/8550-59240-06

Curtis Fong, P. Eng. Exploitation Engineer Penn West Exploration 200, 207 - 9th Ave S.W. Calgary AB T2P 1K3

Dear Mr. Fong:

RE:

GOOD ENGINEERING PRACTICE SPECIAL PROJECTS
OTHER THAN NORMAL SPACING ORDERS

HELMET FIELD - MUSKWA-OTTER PARK & EVIE SHALE FORMATIONS

Commission staff have reviewed the information submitted June 28, 2011, from Fekete Associated Inc. on your behalf, requesting approval of Good Engineering Practice for areas within the Helmet field - Horn River formation.

The Helmet field is an area of new activity for shale gas development. Gas recovery from this resource will benefit from the ability to produce horizontal wells in optimal locations, drilling from central sites.

The following Orders are attached;

- Orders 11-06-030 and 11-06-031 designating Good Engineering Practice within portions of the regional Helmet field Muskwa-Otter Park and Evie shale gas formations as Special Projects under section 75 of the Oil and Gas Activities Act, and
- 2) Orders 11-06-030-OTN and 11-06-031-OTN approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject formations and areas.

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.

For regulatory purposes, the Commission designates the Middle Devonian aged Muskwa-Otter Park as a single formation, and the Evie shale as a separate zone. Therefore, wells completed within the Muskwa-Otter Park formation are not considered commingled, removing any requirement for application, notification or approval. Completing a wellbore for un-segregated production from both the Muskwa-Otter Park and the Evie will require submission of the form Notification of Commingled Production.

Please note that the following Experimental Scheme approvals are hereby terminated, the areas now included within the subject GEP approvals;

Approval 08-15-012 PENN WEST SHALE GAS PROJECT

...2

Any well rig released within the Experimental Schemes prior to October 4, 2010 will retain the remaining portion of the 3-year confidentiality period, however new wells will <u>not</u> obtain Experimental status. A final Progress Report, required as a condition of the Experimental Scheme approval, must be submitted to the Commission within 60 days regardless of the previous reporting cycle.

Should you have any questions, please contact Kelly Okuszko at (250) 419-4433 or Travis Mercure at (250) 419-4448.

Sincerely,

Paul Jeakins

Chief Operating Officer
Oil and Gas Commission

Attachments

cc: Maria Tjoa - Fekete Associates Inc.

IN THE MATTER of the application from Penn West Petroleum Ltd., via Fekete Associates Inc., to the Commission dated June 28, 2011 for a Good Engineering Practice project.

ORDER 11-06-030

Under Section 75(1)(a) of the Oil and Gas Activities Act, the Helmet field – Muskwa-Otter Park and Evie formations are designated as a special project for the enhanced recovery of natural gas utilizing Good Engineering Practice within the following area;

NTS 94-P-10 Block A Units 32-37, 42-47, 52-57, 62-67, 72-77, 82-87.

Pau Jeakins

Chief Operating Officer
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 24 day of August 2011.

IN THE MATTER of the application from Penn West Petroleum Ltd., via Fekete Associates Inc., to the Commission dated June 28, 2011 for Other Than Normal Spacing.

ORDER 11-06-030-OTN

Under Section 65.1(2) of the Petroleum and Natural Gas Act, Other Than Normal Spacing is approved within the Helmet field Muskwa-Otter Park and Evie formations within the following area;

NTS 94-P-10 Block A Units 32-37, 42-47, 52-57, 62-67, 72-77, 82-87.

- 2 Under section 65.1(3) of the Petroleum and Natural Gas Act, I specify the following:
 - a) the target area for a gas well completed within the project area is not nearer than 250 m to the sides of the Other Than Normal Spacing area,
 - b) a gas well completed outside the specified target area may be subject to an off-target production penalty,
 - c) gas wells drilled within the specified project area are not subject to spacing requirements.

Kelly Okuszko

Supervisor, Reservoir Engineering

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 24th day of August 2011.

IN THE MATTER of the application from Penn West Petroleum Ltd., via Fekete Associates Inc., to the Commission dated June 28, 2011 for a Good Engineering Practice project.

ORDER 11-06-031

Under Section 75(1)(a) of the Oil and Gas Activities Act, the Helmet field – Muskwa-Otter Park and Evie formations are designated as a special project for the enhanced recovery of natural gas utilizing Good Engineering Practice within the following area;

NTS 94-P-10 Block B Units 92-95

NTS 94-P-10 Block G Units 2-5, 12-15, 22-25, 31-35, 41-45, 51-55, 61-65, 71-75, 81-85, 92-95

NTS 94-P-10 Block H Units 36-40, 46-50, 56-60, 66-70, 76-80, 86-90

NTS 94-P-10 Block J Units 2-5.

Paul Jeakins

Chief Operating Officer Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 24 day of August 2011.

IN THE MATTER of the application from Penn West Petroleum Ltd., via Fekete Associates Inc., to the Commission dated June 28, 2011 for Other Than Normal Spacing.

ORDER 11-06-031-OTN

1 Under Section 65.1(2) of the Petroleum and Natural Gas Act, Other Than Normal Spacing is approved within the Helmet field Muskwa-Otter Park and Evie formations within the following area;

NTS 94-P-10 Block B Units 92-95 NTS 94-P-10 Block G Units 2-5, 12-15, 22-25, 31-35, 41-45, 51-55, 61-65, 71-75, 81-85, 92-95 NTS 94-P-10 Block H Units 36-40, 46-50, 56-60, 66-70, 76-80, 86-90 NTS 94-P-10 Block J Units 2-5.

- 2 Under section 65.1(3) of the Petroleum and Natural Gas Act, I specify the following:
 - a) the target area for a gas well completed within the project area is not nearer than 250 m to the sides of the Other Than Normal Spacing area,
 - a gas well completed outside the specified target area may be subject to an off-target production penalty,
 - c) gas wells drilled within the specified project area are not subject to spacing requirements.

Kelly Okuszko

Supervisor, Reservoir Engineering

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 24th day of August 2011.