

June 5, 2003

2020-4800/4900-59070-20 OGC - 03128

Brent McGillivray, P.Eng. Sr. Exploitation Engineer Pointwest Energy Inc. 700, 635 – 8th Avenue S.W. CALGARY AB T2P 3M3

Dear Mr. McGillivray:

RE: APPLICATION FOR COMMINGLED PRODUCTION APPROVED DAILY OIL ALLOWABLE

POINTWEST BOUNDARY N 3-17-88-14 W6M; WA# 15113

The Commission has reviewed your application dated April 17, 2003 requesting permission to commingle production from the Halfway and Doig zones encountered in the subject well.

The Commission has designated these pools as the Boundary Lake North – Halfway "P" gas pool and Doig "E" oil pool. Both the Halfway "P" and Doig "E" pools are interpreted to be single well pools. Well test data indicates that these zones are in communication behind the casing, likely due to fracture stimulation.

We wish to advise you that your application to commingle production is hereby approved, under the authority of Section 41 of the *Drilling and Production Regulation*, subject to the following conditions:

- 1. Production from the Halfway (1308.0–1311.0 mKB) and Doig (1320.1–1321.1 mKB) zones may be commingled.
- Oil, gas and water production should be allocated on the Ministry of Provincial Revenue BC S-1 and BC S-2 forms on the basis of:
 Doig (UWI 100031708814W602) all oil and water, and solution gas up to a GOR of 177 m³/m³
 Halfway (UWI 100031708814W600) all remaining gas.
- 3. This approval may be modified at a later date if deemed appropriate through a change in circumstances.

As noted above, a UWI has been created for reporting production allocated to the Doig zone. Amended S-1 statements should be filed to reflect these allocation factors, back to the month of initial production. Also, attached please find an approved daily oil allowable of 10.0 m³ for the Doig zone.

Sincerely,	Daily Oil Allowables (including overproduction)	Approval Letters to Industry COMMINGLED PRODUCTION Copy 8			
Peter Attariwala, P.Eng. Supervisor	Copy 4 Wellfile (originals) 59070-04 Daily R. Stefik	Wellfile (originals) 59070-20 Daily Resource Revenue			
Reservoir Engineering Attachment		R. Stefik G. Farr P.S. Attariwala D. Krezanoski			

ENGINEERING AND GEOLOGY BRANCH

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



Mailing Address: Engineering and Geology Branch PO BOX 9329 STN PROV GOV'T VICTORIA BC V8W 9N3

Location:

Authorized Commission Employee

59070-04/WA

1810 Blanshard St - 6th Fl Victoria BC V8T 4J1

Phone: (250) 952-0302 FAX: (250) 952-0291

APPLICATION FOR DAILY OIL ALLOWABLE (DOA)

Individual Well

Form must be submitted under the authority of the Petroleum and Natural Gas Act R.S.B.C. 1996, c. 361, Drilling and Production Regulation, s.73(1), to the Oil and Gas Commission, at the address noted above. Information collected on this form will be used for public record in accordance with s.57 of the Drilling and Production Regulation.

	☑ Initial Application ☐ Revision No									
Well Name Pointwest Boundary N 03-17-88-14						Well Authorization No. 15113				
Field Bo	Boundary Lake North 2020 Po					ol Doig				
Factors		Nominal Values	Operator's C		Calculations Values Used in This Calculation		COMMISSION USE ONLY Branch Calculations			
Depth to top oil pay		mKb	Logs		1314		Logs	1320.1		
Depth to bottom oil pay		mKb	Logs		1324		Logs	1321.1		
Average net pay thickness	h	metres	Logs analysis and chip samples		1.5 m		Logs	1.1		
Average net porosity	φ	10%	Logs analysis and chip samples		8.0 %	7, 74	Logs	6.6		
Average water saturation	С	25%	Detail Log analysis by Schlumberger		10 %		Log analysis	53.2		
^::arage shrinkage	s	0.75	Murphy Halfway I Pool		0.75			0.776		
Recovery factor	R	20%			20%			20		
Expected uniform rate life	L	10 years			10			10		
Assigned area	А	hectares			66			66.0		
Unadjusted Daily Oil Allowable = $(h) \left(\frac{\phi}{10}\right) \left(\frac{100 - C}{75}\right) \left(\frac{100 - C}{10}\right)$			$\left(\frac{S}{0.75}\right)\left(\frac{F}{2}\right)$	$\frac{R}{L} \left(\frac{A}{31.05} \right) = m^3/d$	3.8 m (min 10			1.0		
Name Brent J. McGillivray Positi				Position Sr. E	sition Sr. Exploitation Engineer					
Signature				Company Pointwest Energy Inc.						
Date 02.09.10 Phone No. 40			403.218.6405		FAX	FAX No. 403.232.6120				
		APP	ROVAL (for commission use	only)					
Off-target penalty factor 1.00 Daily oil allowable 10.0 m³/d, before gas-oil ratio penalty. (minimum UDOA is in accordance with Schedule 3 of the Drilling and Production Regulation)										
Date Effective Jan	nuary 1,	2003					ming unu 1 100	netion regulation)		
Field Boundary Lake North Pool Doig "E"										
	ne 5, 20	03		12_	IAI					
OGC_009_DOA Rev. 99/04					VI					

R. G. Steffk