

August 29, 2003

RE:

2700-2400/2900-59070-20 OGC - 03236

G. Farr

P.S. Attariwala

Rod Hume, P.Eng.			
BC Asset Team	Approval Letters to Industry		
Dominion Exploration Canada Ltd.	COMMINGLED PRODUCTION Copy 8		
3200, 605 – 5 th Avenue S.W.	Wellfile (originals)		
CALGARY AB T2P 3H5	59070-20		
	Daily		
Dear Mr. Hume:	Resource Revenue		
	R. Stefik		

DECL ET AL N BUICK a-66-K/94-A-14; WA# 13378

D. Krezanoski

The OGC granted an interim approval on July 4, 2003 to commingle gas production from the

COMMINGLED PRODUCTION APPROVAL

Gething and Spirit River zones in the subject well. Commission staff have now reviewed the required final application, dated August 20, 2003, including additional well test data.

The OGC designates the zones as the Buick Creek North, Dunlevy "F" and Spirit River "A" pools.

As noted in your application, gas compositions and reservoir pressures are dissimilar for the two zones, Spirit River sweet virgin pressure gas versus Dunlevy sour gas at lower comparative pressure. However, commingled completion should allow the Spirit River zone to be completed and produced in an economic manner, thereby increasing well gas recovery. We understand that attempts to configure the well to allow future zonal isolation have been unsuccessful, however, as this well is intended as a fuel gas source, extended shut-in periods allowing subsurface cross-flow are not expected to be an issue. Therefore condition #3 of the interim approval, requiring a sliding sleeve completion, is rescinded.

We wish to advise that your application to commingle production from these pools is hereby granted approval, under the authority of Section 41 of the *Drilling and Production Regulation*, subject to the following conditions:

- 1. Production from the Spirit River (912.0 926.0 mKB) and Dunlevy (1170.0 1174.0 mKB) formations may be commingled.
- 2. Gas, condensate and water production should be allocated on the Ministry of Provincial Revenue BC S-1 and BC S-2 forms between the two formations on the basis of proposed gas analysis test results. The allocation factors may be amended to reflect results of any future tests.
- 3. This approval may be modified at a later date if deemed appropriate through a change in circumstances.

...2

Please note that the Spirit River zone in the subject well is off-target for gas production. A penalized daily gas allowable (DGA) of 17.7 e³m³ is attached, based on the minimum unadjusted DGA and the calculated off-target penalty factor. Waiver of the off-target penalty may be granted if control of the affected rights to the east can be demonstrated, or upon successful application for new pool discovery.

Should you have any questions, please contact the undersigned at (250) 952-0311 or Ron Stefik at 952-0310.

Sincerely,

For

P. S. Attariwala

Supervisor

Reservoir Engineering

Attachment



Mailing Address: Engineering and Geology Branch PO BOX 9329 STN PROV GOV'T VICTORIA BC V8W 9N3 Location: 1810 Blanshard St - 6th Fl Victoria BC V8T 4J1 Phone: (250) 952-0302 FAX: (250) 952-0291

APPLICATION FOR DAILY GAS ALLOWABLE (DGA)

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.88, 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 DECL e	t al N	Buick	a-66-1	K/94-A-	14	Well Authorizati	on No. 13378	
Field Buick Creek North Pool Spirit River "A"								
Factors		Units	Owner's Calculations			COMMISSION USE ONLY Branch Calculations		
				alues Obtained Values Used in This from Calculation			Dianon Calculations	
Depth to top gas pay		mKb		u gu eu			912.6	
Depth to bottom gas pay		mKb					926.4	
Assigned area	А	hectares					282.3	
Average net pay thickness	h	metres					9.7	
Average net porosity	φ	fraction					0.122	
Average water saturation Nominal 0.25)	S _w	fraction					0.530	
Initial pool pressure at MPP	P _i	kPaa					4445	
Formation temperature	Т	к					321	
Initial supercompressibility factor	Z _i						0.922	
Recovery factor	R	fraction					0.90	
Unadjusted Daily Gas Allowable (10^3m^3) = $\left(\frac{\text{Ah}\phi(1-\text{Sw})\text{Pi R}}{35.16398\text{TZi}}\right) \left(\frac{1}{3.68}\right)$			50			16.5		
Name			Position					
Signature				Company				
Date		Phone No),		FAX	No.		
APPROVAL (for commission use only)								
Off-target penalty factor 0, 2954 Daily gas allowable 17.7 (minimum UDGA is 60.0 10³m³ in accordance with Section 1 of the Drilling and Production Regulation)								
Date Effective August 20, 2003								
Field Buick Creek North Pool Spirit River "A"								
Approval Date August 29, 2003 Rush								
OGC_038_DGA Rev. 99/05 R. G. Stefin Authorized Commission Employee 59070-03/WA								