

ConocoPhillips Canada

2100 Bow Valley Square IV 250 - 6th Avenue S.W. Calgary, Alberta T2P 3H7 (403) 260-8000

November 22, 2010

Oil and Gas Commission

Resource Conservation Branch 6th Floor, 1810 Blanshard St. Victoria, B.C. V8W 9N3

Attention:

Ron Stefik

Resource Conservation Branch

Dear Mr. Stefik:

RE: Application for Good Engineering Practice (GEP)

Hiding Creek BC Field

Falher C Pool

H / 093-I-16 Units: 16, 17, 26, 27

ConocoPhillips Canada Operations Ltd., (ConocoPhillips), hereby submits this application for Good Engineering Practice Area under Section 75 of the Oil & Gas Activities Act in the Falher C pool of the Hiding Creek Field. This application is made on the basis that one well per Spacing Unit in the Falher C formation is insufficient to adequately drain reserves from a full Spacing Unit and that incremental gas reserves can be recovered economically by drilling more than one well per Spacing Unit.

The subject application is presented in a form consistent with the British Columbia Oil and Gas Handbook Section 12.6: Application for Approval of a Good Engineering Practice Area.

1. Legal; Description of Application Area and Designation of Pool within Application

The GEP Application Area is for the Falher C formation within the Hiding Creek Field.

H / 093-I-16

Units: 16, 17, 26, 27

2. Map of Application Area with Title Holders in and around Application Area

ConocoPhillips holds 50% working interest for all lands within the application area for the Falher formation. Lessees within the application area have been identified on an accompanying map.

Please refer to Attachment #1 for the area of application and Lessee / Lessor Map.

3. Map of Well Status and Completion Intervals for All Wells in the Pool

A review of the Hiding Creek and surrounding area shows there are 2 wells completed in the Falher C pool and both wells are licensed to ConocoPhillips.

Please refer to Attachment #2 for a Well List of the Falher C wells.

Table #1: Completion Intervals for Falher wells.

Well Location	Field	Pool	Completion Intervals (mKB TVD)
00/B-016-H/093-I-16/2	Hiding Creek	Falher C	2780.0-2784.0
00/A-025-H/093-I-16/3	Hiding Creek	Falher C	2728.1-2734.1

4. General Discussion of Pool History and Development

Current spacing in the Hiding Creek area is normal gas well spacing of one well per pool per DSU. To date there are 2 producing wells which have been completed in the Falher C pool, the B-16-H/093-I-16 well is within the area of application and began producing in September 2005.

Table #2: Production Summary of the Wells in the Hiding Creek Falher C Pool.

Well Location	Field	Pool	Avg Gas Rate (E3m3/d)	On Production date	Cum gas (E6m3)	Cum Water (m3)
B-16-H/93-I-16/2	Hiding Creek	Falher C	7.5	Sep 1, 2005	44.4	1046
A-25-H/93-I-16/3	Hiding Creek	Falher C	7.7	Mar 1, 2008	18.0	27

5. A Discussion of Pool Geology

In the Hiding Creek area of Northern British Columbia, the Falher member of the Spirit River Formation is conformably overlain by the Notikewin and underlain by the Wilrich shale. The Falher "C" sub-member is a progradational sequence that consists mainly of coarse sandstone and/or conglomerate deposited by wave and storm processes along a gravelly, wave-dominated strandplain.

South of these shoreface deposits is the associated Coastal Plain, within which can be found the channel deposits that feed and control the orientation of the Falher C shorefaces. These channels sometimes cut through the shorefaces themselves, but are not seen as economic gas producers in this area.

The Falher C in the Hiding Creek area can range from 30m - 80m in thickness. A minimum porosity cutoff of 6% and a SW cutoff of 50% in conglomerate is generally used when targeting productive units.

Please refer to Attachment #3 for the Net Pay map of the Falher C pool

6. A Discussion of Reservoir Properties (Fluid Properties and Estimate of OGIP)

The average porosity and water saturation for the Hiding Creek Falher C was estimated to be approximately 10% and 22%, respectfully. Production from the Hiding Creek Falher C pool resulted in small amounts of water production and the reservoir is sweet with a no H₂S indicated.

Table #3: Reservoir Properties for the Falher C Formation (OGC Reserves Data).

Pool: Falher	Area (ha)	Net gas pay (m)	Avg Gas Porosity (%)	Gas Recovery Factor (Frac)	Shrinkage (Frac)	Init Res Pres (MPa)	OGIP (E6m3)	Wtr Sat'n (%)
С	298	4.2	10	0.9	0.888	17.3	112.0	22

The average drainage area for the Falher wells in the area based on well decline analysis and volumetric calculations is 80 ha per well, justifying a density of 3 wells per DSU.

Please Refer to **Attachment #4** for the decline analysis and volumetric calculations for the Falher C pool.

7. A Discussion of Pressure History, Production Rates

Pressure

Graphical representation of the pressure from the A-25-H/93-I-16 well has been plotted to show the decline in the Falher C reservoir pressure over time. The initial pressure of the B-16-H/93-I-16 well was 17184 KPaa, similar to the A-25-H/93-I-16 well initial pressure of 17062 KPaa.

Please Refer to **Attachment #5** for the pressure history for the Falher C pool in the Hiding Creek field.

<u>Production</u>

The producing wells B-16-H and A-25 H in the Hiding Creek Falher C pool show rates that are initially steep with high initial rates 78 and 43 E3m3/d respectively, that drop quickly prior to leveling off at a low rates of 7.5 and 7.7 E3m3/d respectively. This poses a problem with respect to the time in which it takes to produce available reserves with a single wellbore. Enhanced value and reserve drainage are expected with additional infill drilling of this reservoir.

8. Graphical Representation of Production history of All Wells in Application Area

ConocoPhillips has included production plots of the 2 wells producing from the Falher C to represent the production trend in the pool. The A-25-H/93-I-16 well was commingled in Feb 2009, therefore the production plot is the production of the Nikanassin, Bluesky and Falher

zones commingled. The Falher zone has a 38% allocation factor in this well as described in the commingling approval letter dated Dec 3, 2008.

Please refer to **Attachment #6** for the production plots illustrating relevant production for the Falher C pool

9. Discussion of Proposed Method of Producing the Area

The purpose of the subject application is to produce Falher gas in the Hiding Creek field in a time efficient manner. In ConocoPhillips' opinion, higher well density is essential in order to effectively drain gas reserves associated with the subject formations, while maintaining the standard 250 meter buffer.

Below is the well ConocoPhillips is planning on drilling inside the GEP application area:

A-27-H/93-I-16 (Spud in January, Tie-in March 15, 2011)

10. Predication of the Rate Time Performance and Ultimate Recovery Under Present Conditions

This application is made on the basis that one well per Spacing Unit in the Falher C formation is insufficient to adequately drain reserves from a full Spacing Unit and that incremental gas volumes can be recovered economically by drilling more than one well per spacing unit.

11. Request for Approval of a Proposed Application Area

ConocoPhillips respectfully submits this application for Good Engineering Practice Area under 75 of the Oil & Gas Activities Act in the Hiding Creek Field to include the above noted areas.

12. Written Statements from Interest Parties Indicating Their Reaction to the Application

The lands within the area of application are held jointly with ConocoPhillips and Devon. Please refer to **attachment #7** for the Devon consent letter

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In support of our request please find the following attachments:

Attachment #1: GEP Application Area and Lessee Lessor map

Attachment #2: Well List of Falher C Wells

Attachment #3: Falher C Net Pay map

Attachment #4: Decline analysis and Well Volumetrics

Attachment #5: Pressure History for Falher C

Attachment #6: Falher C Production Plots

Attachment #7: Devon Consent to Application for GEP

Summary

We trust this fulfills the application requirements for the granting of Good Engineering Practice with reduced spacing. If you have any questions or require any further information, please contact Neil Rubeniuk at (403) 260-6517 or Troy Miller at (403) 260-8384. Also, please address any written correspondence to the undersigned by mail or by fax at (403) 260-6684.

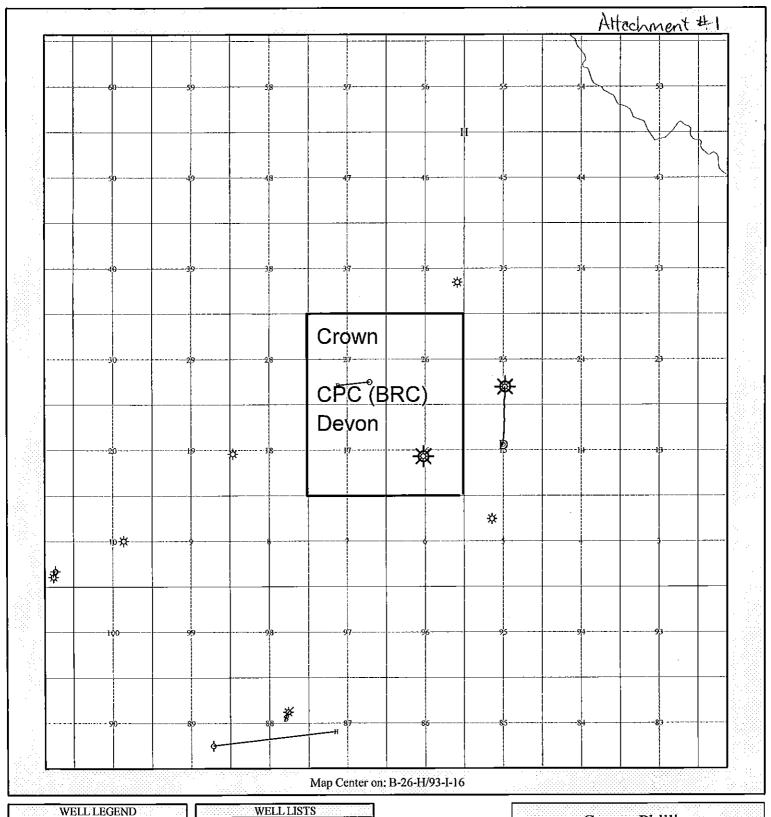
Sincerely,

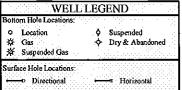
Neil Rubeniuk

Engineering Manager

Sub-Surface Regulatory & Royalty Optimization

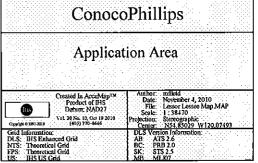
Attachments





WELLLISTS

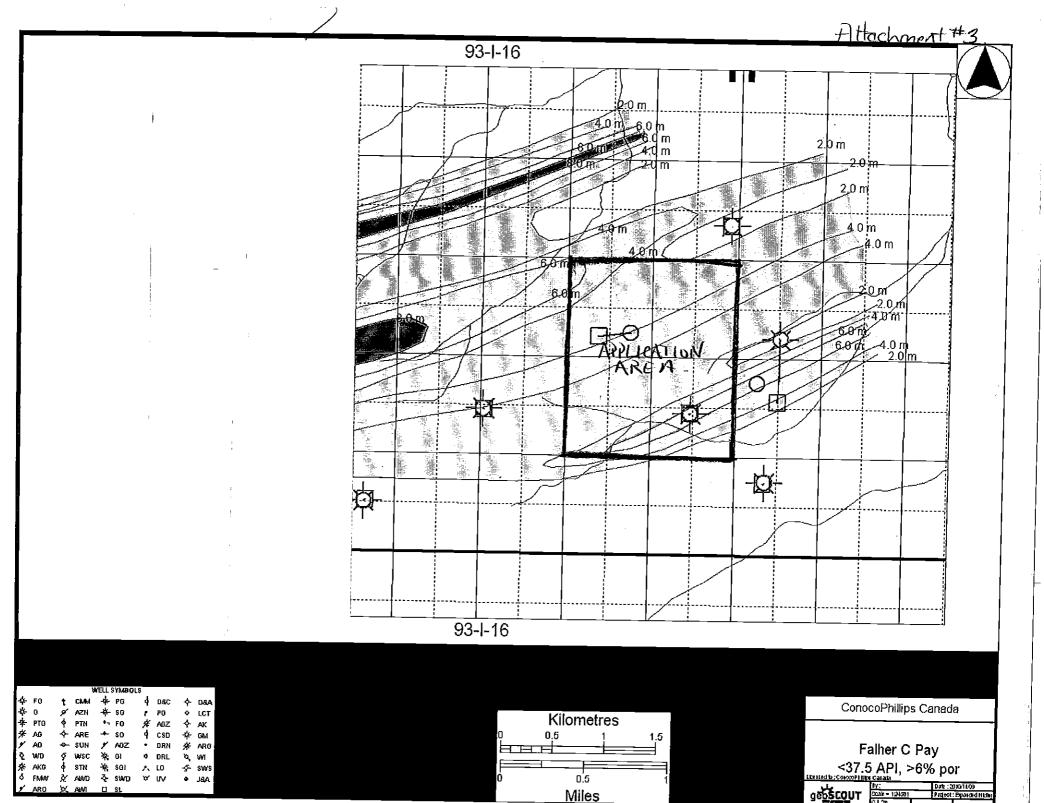
Hidng Creek-GEP-Falher C





Hiding Creek - Falher C Well List

				1					Oil Avg Ra	Gas Avg R	Water Avg	WGR	WCT	Cum Oil	Cum Gas	Cum Water
Well ID	Curr Lic	Ştatus	Lahee	Prd Form	Pool Name	On Prod	Last Prod	Hours	m3/d	E3m3/d	m3/d	m3/E3m3	%	E3m3	E3m3	E3m3
00/B-016-H/093-I-16/2	CONOCOPHIL	Gas,Pro	NFW	FLHD	FALHER C - K	2005/09	2010/07	744	0	7.5	0.2	0	100	-0	44419.3	1
00/A-025-H/093-I-16/0	CONOCOPHIL	Gas,Pro	OUT	NKNS, BLS	NIKANASSIN - D	2008/03	2010/07	720	0	20.3	0.4	ō	100	0	25772.8	0.1
00/A-025-H/093-I-16/3	CONOCOPHIL	Gas,Pro	OUT	FLHC	FALHER C - K	2008/03	2009/02	384	0	13.8	0	0	0	ō		

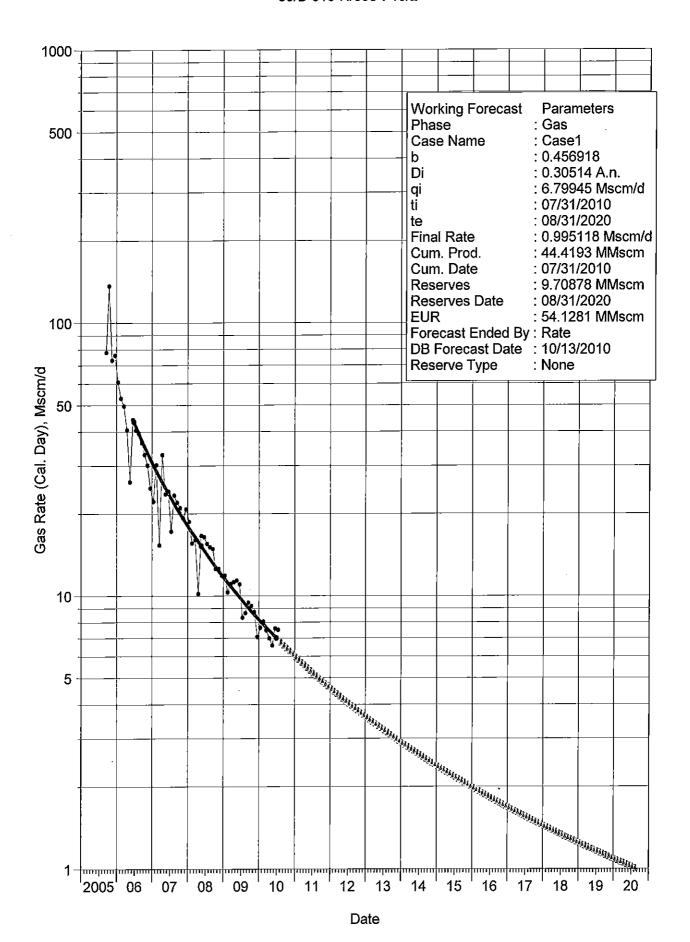


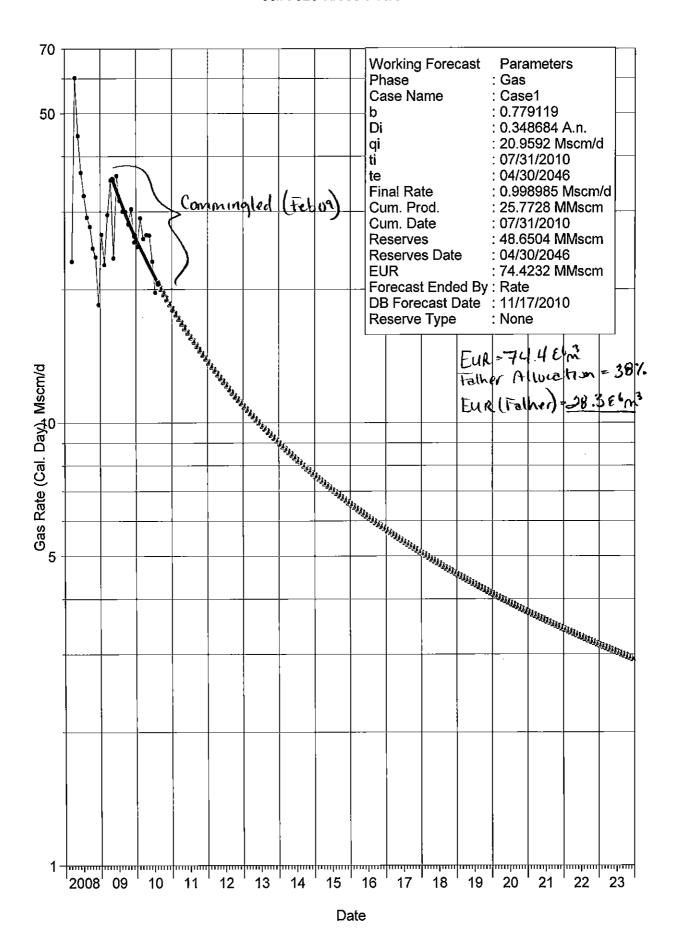
Drainage Calculations

Well ID	Producing Fm/Pool	Pool Recovery Factor	Net Pay (m)	Avg (Ø) fraction	Avg 1-Sw fraction	Area hectares	Initial Pressure (kPa)	Initial Temp. (K)	Compressibi lity (Z)	1/Bgl	OGIP (E6m3)	EUR from Decline (E6m3)	Calculated Recovery Factor	Drainage Area (ha)	Number of Wells per Section
8-16-H/93-I-16/2	Falher C	0.900	5.1	0.078	0.72	256	17,245	363	0.885	152.6520786	111.93	54.1	0.48334508	137.5	2
A-25-H/93-I-16/3	Falher C	0.900	11.0	0.078	0. <u>72</u>	256	18,168	363	0.885	160.8271022	254.34	28.3	0.111267274	31.6	8
													Averege:	84.6	3

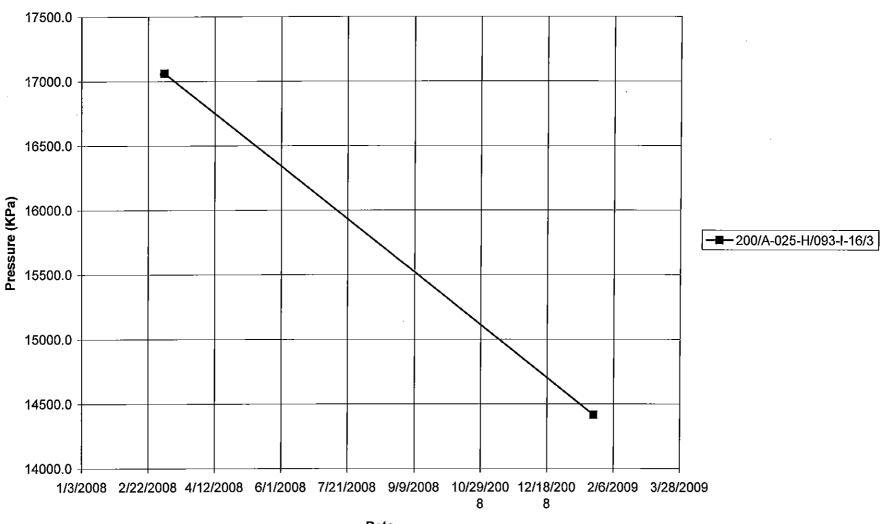
Drainage Area = EUR/n*porosity*(1-Sw)*1/Bgi*10000*Ri Rec Factor = EUR/OGIP OGIP= (A*10000*h*porosity*(1-Sw)*1/Bgi)/1000

00/B-016-H/093-I-16/2



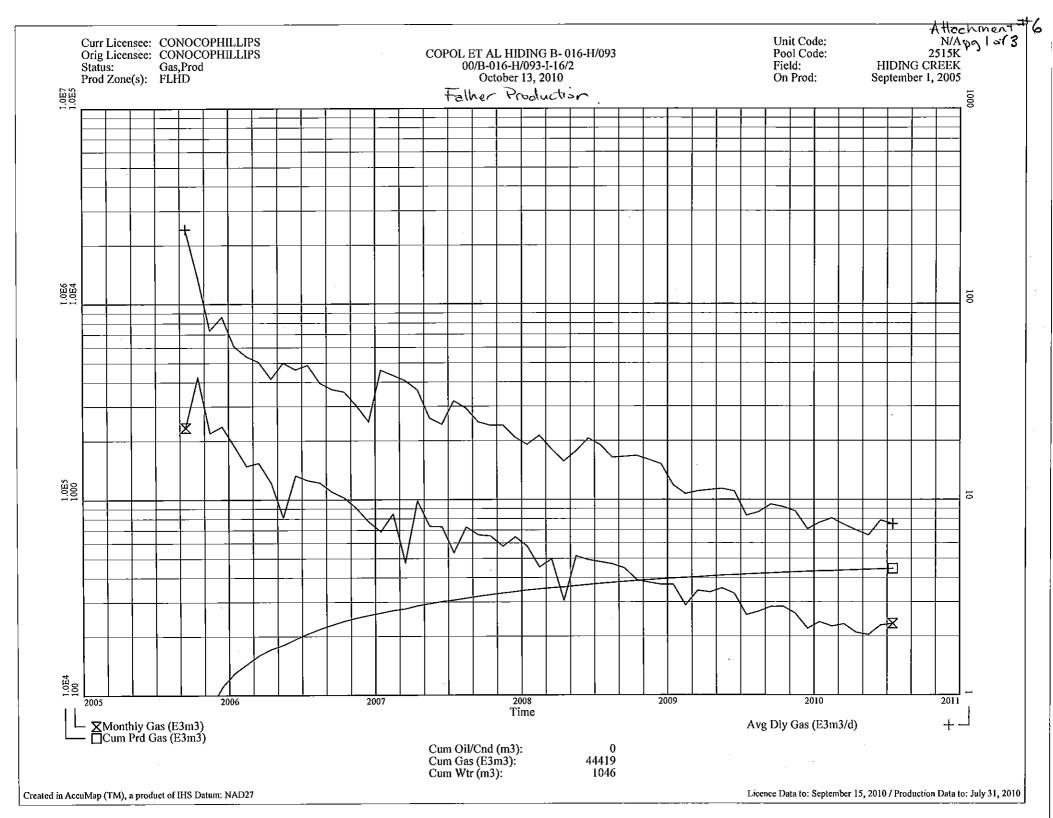


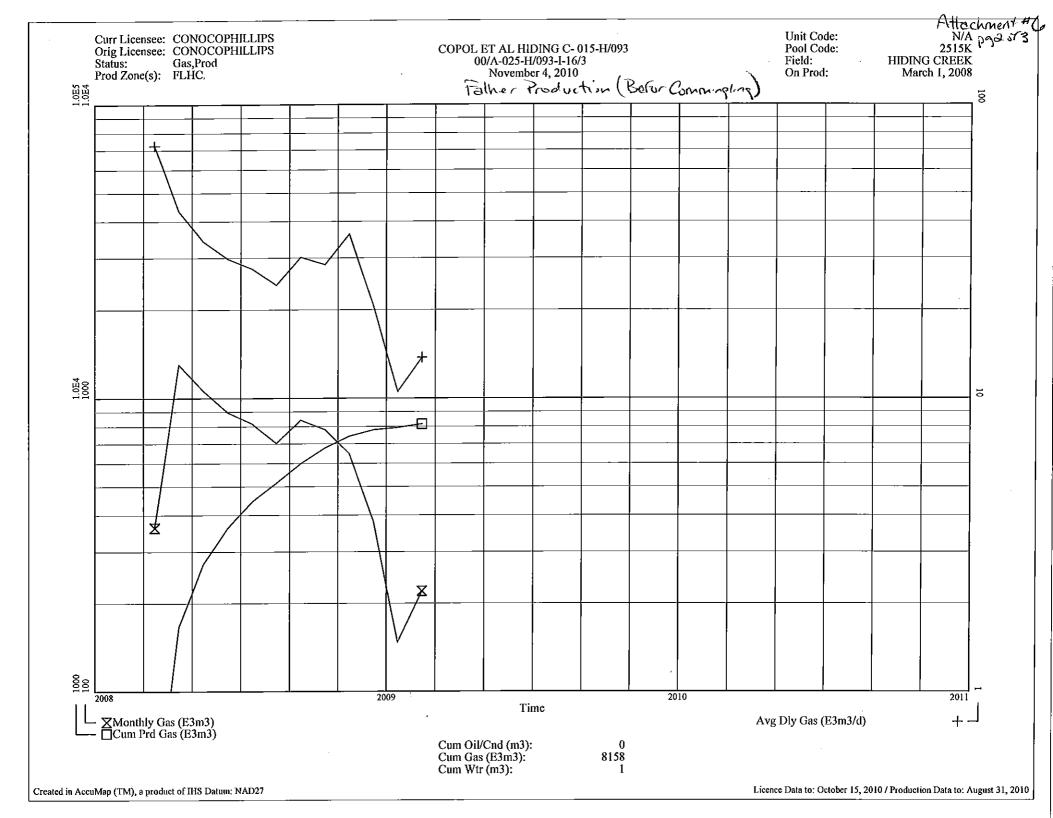
Hiding Creek - Falher C - Pressure Vs. Time

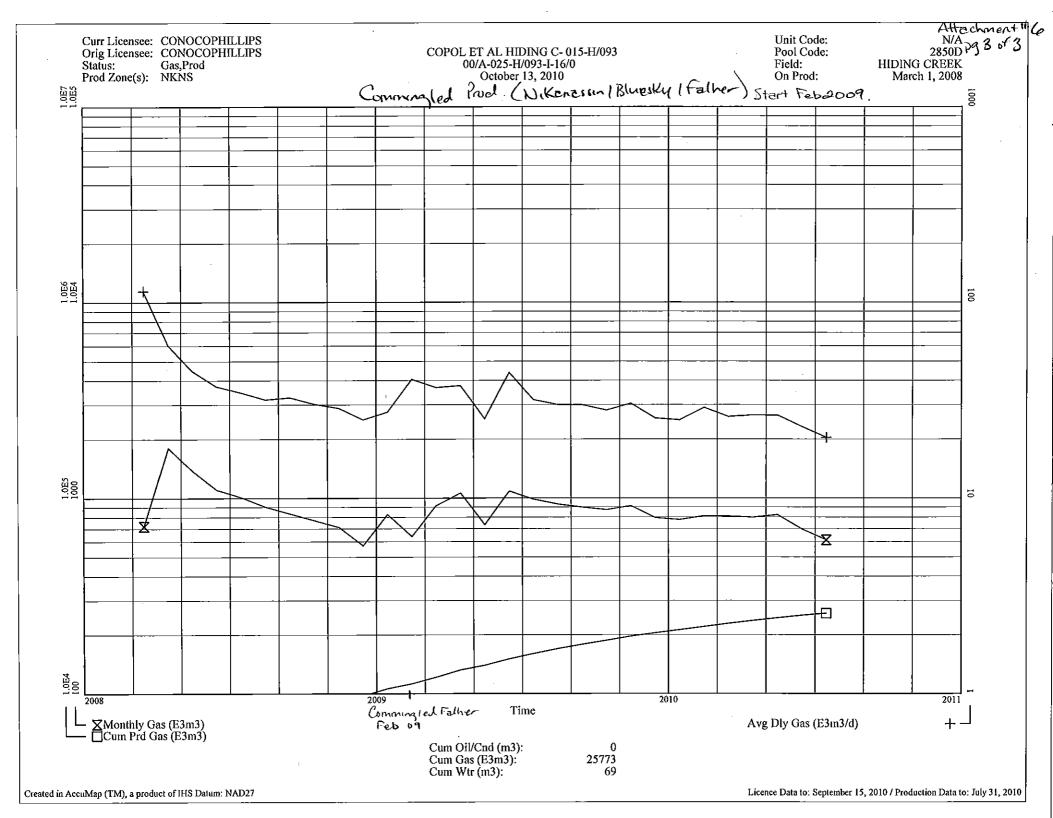


Date

(Falher C Pressures	List: Hidng Creek-GEP-Falher C.wisDatum; NAD27 (ATS 2.6 Grid)											
	Current	License	Spud	On Prod				Producing		Test	Run Depth		Datum
UWI	Licensee	Date	Date	Date	Lahee	Mode	Fluid	Zone	Туре	Date	Pressure	Run Depth	Pressure
											(kPaa)	(m)	(kPaa)
200/B-016-H/093-I-16/2	CONOCOPHILLIPS CANADA OPERATIONS LTD.	2/3/2005	3/1/2005	9/1/2005 N	ew Fleld Wildcat	Producing	Gas	FLHD	Vertical	7/29/2005	17178.0	2777.4	17184.0
200/A-025-H/093-I-16/3	CONOCOPHILLIPS CANADA OPERATIONS LTD.	2/3/2005	12/4/2007	3/1/2008 O	utpost	Producing	Gas	FLHC,BLSK	Dir/Dev	3/5/2008	17062.0	2725.4	17062.0
	CONOCOPHILLIPS CANADA OPERATIONS LTD.		12/4/2007	3/1/2008 O	utpost	Producing	Gas	FLHC,BLSK	Dir/Dev	1/22/2009	14416.0	2721.0	14415.0







Altachment #7

DEVON CANADA

ConocoPhillips

ConocoPhillips Canada 2100 Bow Valley Square IV 250 - 6th Avenue S.W.

Calgary, Alberta T2P 3H7

(403) 260-8000

OCT 1 5 2010

LAND DEPARTMENT

Devon Canada 2000, 400 – 3 Avenue SW Calgary, AB T2P 4H2

October 14, 2010

Attention: Land Manager

Dear Sir/Madam

RE:

Consent to Application for Good Engineering Practices

Hiding Creek BC Field (4780)

Falher C Pool

H / 093-I-16 Units: 16, 17, 26, 27

W3603H

ConocoPhillips Canada Operations Ltd., (ConocoPhillips) hereby makes an application to the BC Oil and Gas Commission for approval of G.E.P. (Good Engineering Practice) to allow increased well density within the subject lands and formations. A requirement of the application is that consent is requested from working interest owners within these lands:

Please be advised that Devon Canada as the registered tenure holder of Petroleum & Natural Gas Lease(s) 56323 within the lands above, your consent is requested in the space provided below.

Any concerns and/or questions regarding this application are to be directed to Troy Miller (403) 260-8384, or Neil Rubeniuk at (403) 260-6517.

Sincerely,

Neil Rubeniuk

Engineering Manager

Sub-Surface Regulatory & Royalty Optimization

Signature of Company Representative:

Karen Hertel

Menu

Printed Name: .

Senior Landman

*By signature above herby provides consent to the subject application for GEP