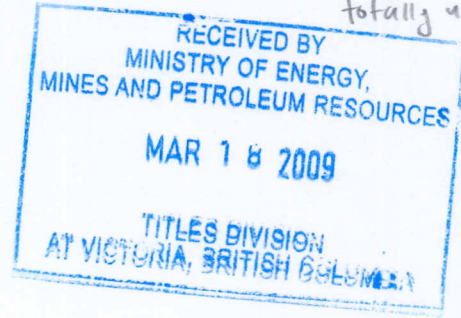


Application contained many errors including totally unreasonable reserves, wrong logs, referenced wrong formations.



February 9, 2009

Oil and Gas Commission  
Engineering and Geology Branch  
6<sup>th</sup> Floor, 1810 Blanshard St.  
Victoria BC  
V8W 9N3

Attention: Richard Slocomb

**Re: Application to Commingle Production from Multiple Zones  
Town area Bluesky and Gething formations**

Progress Energy Resources Corporation hereby makes application to commingle production from the Bluesky and Gething formations in accordance with Section 41 of the Drilling and Production Regulations in the following wells in the Town area: Progress Town 200/b-~~11-K~~/94-B-16 (WA 21425) and 202/b-~~11-K~~/94-G-1 (WA 49628) WA 21308.

b-11-K ✓

b-9-B

WA ~~19813~~

~~21425~~

**1) Proposed Commingled Production**

This application is made to commingle gas production from the Bluesky and Gething zones in the subject wells in the Town field.

Maps illustrating the well locations and the mineral rights owners of the two zones in the area are attached. There is common ownership of the Bluesky and Gething formations in the subject wellbores therefore there are no equity concerns

**2) Geological Discussion**

The Bluesky Gething zone in and around Town is a mixed Continental to Marine depositional environment. The lower portion of the Gething (which sits unconformably on the Cadomin) was deposited in a dominantly continental setting. The lower Gething consists of thin sand and shale units that are interbedded with coals and carboniferous shales.

This continental system switches over to a dominantly marine environment at about mid-Gething level where the coals disappear and thicker sand and shale units become apparent. These units are widespread, mappable and fairly predictable. The Gething sand that we're drilling for at Town is a good example of a Gething marine sand.

This marine middle-upper Gething gives way to a dominantly estuarine Bluesky. The Bluesky is generally a sandy estuarine system with fluvial modification of the sand units.

Syn-depositional and post depositional structuring has modified the Bluesky and Gething in this area.

### 3) Well Information

The well, b-9-B/94-G-1 was drilled in June of 2006 and was dually completed in the Bluesky formation from 1305.0 – 1311.0, and the Gething formation from 1351.0 – 1354.0 mKB. The Gething has been producing since August 1, 2006 and the Bluesky has never produced to date.

The well b-11-K/94-B-16 was drilled in March of 2008 and dually completed in the Bluesky and Gething and started producing on April 1, 2008. The Bluesky is producing up the annulus and the Gething up the tubing.

A summary of the pertinent information from the two zones is as follows:

200/8-1148

<b>b-9-B/94-G-1</b> WA <del>19215</del> 21308	Bluesky	Gething
Perforations (mKB)	1305 - 1311	1351 - 1354
H2S %	0	0
Initial Reservoir Pressure (kPa)	10,484	10,414
Initial Production Rate (e3m3/d)	Shut-in	69
Current Production Rate (e3m3/d)	AOF = 3.8	4
Liquid/Gas Ratio bbl/mmcft	N/A	4.3
Expected Remaining Reserves (e6m3)	<del>57</del>	<del>74</del>
Proposed Production Allocation	45%	55%
<b>202/b-11-K/94-B-16</b> WA 21425	1267 - 1276	1297 - 1302
Perforations (mKB)	1273 - 1276	1304 - 1307
H2S %	0	0
Initial Reservoir Pressure (kPa)	9,280	8,371
Initial Production Rate (e3m3/d)	7.6	3.1
Current Production Rate (e3m3/d)	5.5	1.4
Liquid/Gas Ratio bbl/mmcft	0	2.1
Expected Remaining Reserves (e6m3)	<del>112</del>	<del>110</del>
Proposed Production Allocation	80%	20%

not valid!

not valid!

#### 4) Proposed Production Method

Progress has reviewed the wellbore configurations which were designed to allow for segregated production from both zones in these two wellbores. The proposed optimal method to produce both zones is by opening the sliding sleeves and commingling the Bluesky and Gething zones and producing up the 60.3 mm tubing. No equipment change will be required. Liquids are not measured at the well level in both wells, therefore the liquid/gas ratios mentioned above are estimates.

While the wells are producing, there will be no cross flow between the zones since the flowing bottom hole pressure is substantially less than the reservoir pressure of either zone. Should an extended shut-in period (over two weeks) occur, any cross flow that may occur would immediately be removed from the zone as soon as it was placed back on production. Neither zone produces any H2S Both zones have the same ownership so there are no equity issues in the event of any crossflow.

WA 21308 - Gething 700ppm

The Trutch Creek formation cannot produce up the annulus because of the H2S content and therefore a packer is necessary. Economics do not support drilling for the Trutch reserves alone and the Halfway is expected to produce for at least 20 years before the Trutch could be produced.

Bluesky & Gething.

In support of this application for commingling the ~~Trutch~~ Trutch Creek and Halfway formations please find the following attachments:

- Attachment 1a, 1b: Map showing the lessees in the proposed commingled formations
- Attachment 2: Log over the Bluesky and Gething formations in b-11-K/94-B-16
- Attachment 3: Log over the Bluesky and Gething formations in 200/b-9-B/94-G-1
- Attachment 4: Volumetric reserves determination from the Bluesky in b-11-K/94-B-16
- Attachment 5: Volumetric reserves determination from the Gething in b-11-K/94-B-16
- Attachment 6: Volumetric reserves determination from the Bluesky in 200/b-9-B/94-G-1
- Attachment 7: Volumetric reserves determination from the Gething in 200/b-9-B/94-G-1
- Attachment 8: Production history from the Bluesky in b-11-K/94-B-16
- Attachment 9: Production history from the Gething in 200/b-9-B/94-G-1
- Attachment 10: Production history from the Gething in b-11-K/94-B-16
- Attachment 11: Gas analysis from the Bluesky in b-11-K/94-B-16
- Attachment 12: Gas analysis from the Gething in b-11-K/94-B-16
- Attachment 13: Gas analysis from the Bluesky in 200/b-9-B/94-G-1
- Attachment 14: Gas analysis from the Gething in 200/b-9-B/94-G-1
- Attachment 15: Schematic diagram of the wellbore configuration in b-11-K/94-B-16
- Attachment 16: Schematic diagram of the wellbore configuration in 200/b-9-B/94-G-1
- Attachment 17: Deliverability test report from the Bluesky in b-11-K/94-B-16
- Attachment 18: Deliverability test report from the Gething in b-11-K/94-B-16
- Attachment 19: Deliverability test report from the Bluesky in b-9-B/94-G-1
- Attachment 20: Deliverability test report from the Gething in b-9-B/94-G-1

Production from  
Twin well WA 19813?

see Kelly  
if need  
to see.

## 5) Conclusion

Approval of this application for commingling of the Bluesky and Gething formations in the 200/b-9-B/94-G-1 and b-11-K/94-b-16 wellbores will allow for the optimal production of both zones and will help with the lifting of liquids.

Should you have any questions or concerns, please contact the undersigned at (403) 539-1828 or by email at [cleitch@progressenergy.com](mailto:cleitch@progressenergy.com).

Yours truly,

**PROGRESS ENERGY LTD.**



Cheryl Leitch C.E.T.  
Sr. Engineering Technologist

Attachments

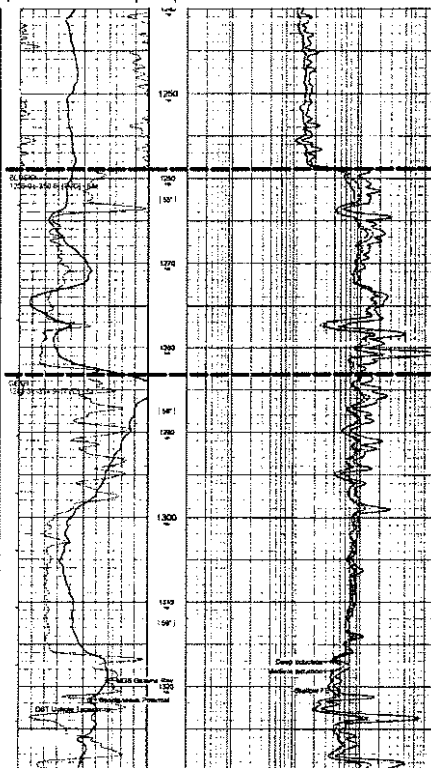
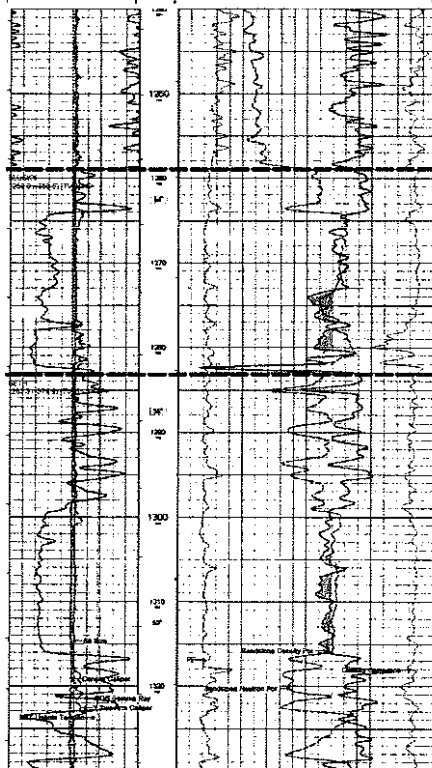
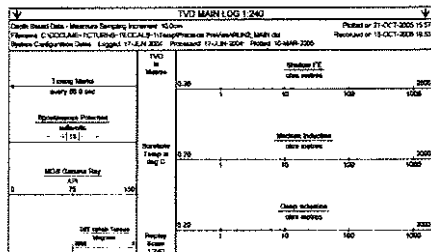
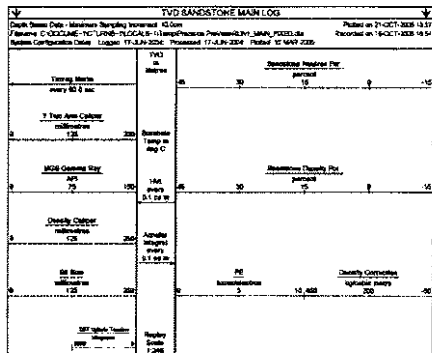
# ATTACHMENT 3

\* WA 19813

(not application

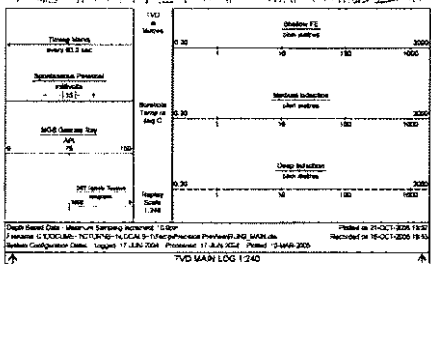
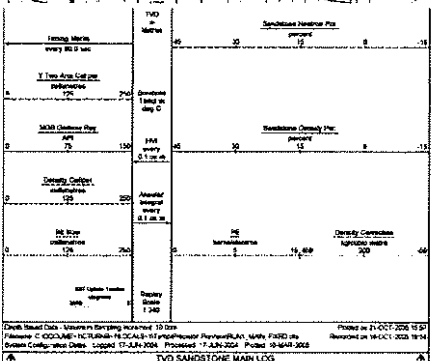
wellbore WA 21425)

**00/B-011-K/094-B-16/0**  
 KB: 908.4 m      RR: 2005-10-19  
 TD: 1446.3 m [TVD]      Form TD: NORD  
 Mode: Flow      Fluid: Gas  
 PRO ET AL TOWN B-011-K/094-B-16



BLUE SKY

GETTING.



BST Information

	Prod	Oil (m3)	Gas (E3m3)	Water (m3)
Cum	0.0	0.0	2440.3	0.0
Daily	0.0	0.0	3.1	0.0

# VOLUMETRIC GAS RESERVES

**WELL NAME:** Progress Town b-11-K/94-B-16

**Zone:** Blue ~~sky~~ **Interval:** 1267-1270,1273-1276  
**Date:** Mar-09 **Operator:** **W.I.:** 100.00%

	<u>Imperial</u>	<u>Metric</u>	<u>Source</u>
Pay Thickness (ft/m)	29.5	9.0	
Porosity	6%	10%	changing $\phi$ ?
Drainage Area (ac/ha)	640	256	
Water Saturation	25%	25%	
Formation Factor (Bg)	0.0108	0.0109	
Z factor	0.86	0.87	
T res (°F/°C)	136	58	
T res (°R/°K)	596	331	
P res (psi/Kpa)	1,346	9,280	
Recovery Factor	80%	80%	
Surface Loss	10%	10%	

<b>MARKETABLE GAS</b>	2,302	114,069
(mmcf / E3M3)		
<b>NET GAS RESERVES</b>	2,302	114,069

Assumptions and Comments

1,831 CUM TO DATE PROD  
 112,238 RRGIP

# ATTACHMENT 5

GASRESV

## VOLUMETRIC GAS RESERVES

**WELL NAME:** Progress Town b-11-K/94-B-16

<b>Zone:</b> Gething	<b>Interval:</b> 1297-1302, 1304-1307		
<b>Date:</b> Mar-09	<b>Operator:</b>	<b>W.I.:</b> 100.00%	

	<u>Imperial</u>	<u>Metric</u>	<u>Source</u>
<b>Pay Thickness (ft/m)</b>	36.1	11.0	
<b>Porosity</b>	6%	9%	
<b>Drainage Area (ac/ha)</b>	640	256	
<b>Water Saturation</b>	25%	25%	
<b>Formation Factor (Bg)</b>	0.0120	0.0123	
<b>Z factor</b>	0.86	0.88	
<b>T res (°F/°C)</b>	138	59	
<b>T res (°R/°K)</b>	598	332	
<b>P res (psi/Kpa)</b>	1,214	8,371	
<b>Recovery Factor</b>	80%	80%	
<b>Surface Loss</b>	10%	10%	

<b>MARKETABLE GAS</b>	2,528	111,494
(mmcf / E3M3)		
<b>NET GAS RESERVES</b>	2,528	111,494

Assumptions and Comments 
*915 CUM TO DATE PROD*  
*110,579 RRGIP*

# VOLUMETRIC GAS RESERVES

**WELL NAME:** Progress Town b-9-B/94-G-1

**Zone:** Bluesky                      **Interval:** 1305 - 1311  
**Date:** Mar-09                      **Operator:**                      **W.I.:** 100.00%

	<u>Imperial</u>	<u>Metric</u>	<u>Source</u>
<b>Pay Thickness (ft/m)</b>	16.4	5.0	
<b>Porosity</b>	6%	8%	
<b>Drainage Area (ac/ha)</b>	640	256	
<b>Water Saturation</b>	25%	25%	
<b>Formation Factor (Bg)</b>	0.0096	0.0097	
<b>Z factor</b>	0.86	0.87	
<b>T res (°F/°C)</b>	140	60	
<b>T res (°R/°K)</b>	600	333	
<b>P res (psi/Kpa)</b>	1,521	10,484	
<b>Recovery Factor</b>	80%	80%	
<b>Surface Loss</b>	10%	10%	

<b>MARKETABLE GAS</b>	1,435	56,896
(mmcf / E3M3)		
<b>NET GAS RESERVES</b>	1,435	56,896

Assumptions and Comments

SHUT-IN



# VOLUMETRIC GAS RESERVES

**WELL NAME:** Progress Town b-9-B/94-G-1

<b>Zone:</b>	Gething	<b>Interval:</b>	1351 - 1354
<b>Date:</b>	Mar-09	<b>Operator:</b>	W.I. : 100.00%

	<u>Imperial</u>	<u>Metric</u>	<u>Source</u>
<b>Pay Thickness (ft/m)</b>	13.1	4.0	
<b>Porosity</b>	6%	14%	
<b>Drainage Area (ac/ha)</b>	640	256	
<b>Water Saturation</b>	25%	25%	
<b>Formation Factor (Bg)</b>	0.0098	0.0097	
<b>Z factor</b>	0.86	0.86	
<b>T res (°F/°C)</b>	144	62	
<b>T res (°R/°K)</b>	604	335	
<b>P res (psi/Kpa)</b>	1,510	10,414	
<b>Recovery Factor</b>	80%	80%	
<b>Surface Loss</b>	10%	10%	

<b>MARKETABLE GAS</b>	1,134	79,565
(mmcf / E3M3)		
<b>NET GAS RESERVES</b>	1,134	79,565

Assumptions and Comments

5,649 CUM PROD TO DATE  
73,916 RRGIP