

May 25, 2011

BY RESS & Courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited
Jacob Storage Pool
Board File # EB-2011-0013, EB-2011-0014, EB-2011-0015**

Further to the Kent Federation of Agriculture's letter dated May 16th, 2011, please find attached two copies of Union's responses to the KFA's interrogatories.

Sincerely,



Mary Jane Patrick
Administrative Analyst, Regulatory Projects
:mjp
Encl.

cc: Neil McKay, Manager Facilities Applications
Zora Crnojacki, Project Advisor
All Intervenors

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Section 2 Need for Facilities

Issue 1 (1.4) Need for incremental storage capacity in Ontario

Paragraph 6

Prefiled evidence states that the sale of storage capacity and deliverability will be consistent with the sale of the rest of Union's ex-franchise storage.

1. What is the volume of Union's current ex-franchise storage?
2. How are ex-franchise profits allocated and distributed?

Response:

1. Union's total physical working gas storage assets are 166.9 PJ. Union sets aside the first 100 PJ of working gas for in-franchise use. Therefore the remaining 66.9 PJ is available for ex-franchise use.
2. Union's shareholders are at risk and exposed to any profit or losses in the unregulated business. 100 PJ is set aside in any given year for in-franchise needs. If less than 100 PJ is required then the remaining storage is sold short term and any profit or loss is shared between the ratepayer and Union's unregulated storage business.

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Issue 1 (1.4) Need for storage
Reference Section 2 Page 1

1. Is the total storage capacity in Ontario sufficient to service the Ontario demand, if it is not utilized by parties outside Ontario?
2. What is the total Ontario storage capacity?
3. What percentage of the total demand originates outside Ontario?

Response:

1. Storage is held to meet peak requirements, such as winter demand or demand necessary to support dispatchable gas-fired power generation. Utilities own or acquire storage to meet peak demand in accordance with the requirements of the Ontario Energy Board. Storage operators in Ontario compete to provide storage services in a competitive, geographic market that includes Michigan and parts of Illinois, Indiana, New York and Pennsylvania. Storage services will be sourced and contracted to parties that provide the most value.
2. Currently, the total Ontario storage capacity as listed on the STAR Informational Postings on Ontario storage provider internet sites is as follows:

Union Gas – 166.9 PJ's
Enbridge – 105.9 PJ's
Market Hub Partners Canada L.P.
 - St. Clair Pool 1.1 Bcf
 - Sarnia Airport Pool 5.26 BcfHuron Tipperary Limited Partnership 1 – 3.0 PJ's
3. Union cannot provide the percentage of the total demand that originates outside of Ontario. Customers, such as marketers, purchase storage services from Union and other storage providers and use the space and deliverability to i) support transactional activity and ii) to support services provided to their customers. Union Gas cannot identify where the demand for these services originate. In addition, for Ontario customers purchasing "ex-franchise" storage, Union cannot confirm whether that storage on any given day is being used to support demand originating in Ontario.

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Geology and Reservoir Engineering

Reference Prefiled Evidence

Section 3 Page 5

Issue 2(2.5) Is the applicant appropriately accountable for losses or damages caused by its activities?

Paragraph 15

Prefiled evidence states that several wells are actively producing oil and or gas from Black River Group.

1. Will Union or Liberty or successors be accountable to royalty owners for any losses or damages directly or indirectly resulting from storage operations? To be more specific, if reserves or oil or gas are not produced with current or future technology, and left in place due to storage operations being conductions, will Union be accountable to royalty owners for those losses or damages?
2. If Union is not responsible for any losses or damages from lost production, who would be accountable?
3. Please outline the anticipated procedure whereby losses or damages would be addressed.

Response:

1. Please refer to Union's response to MNR interrogatory #1.
2. Please refer to Union's response to MNR interrogatory #1.
3. Please refer to Union's response to MNR interrogatory #1.

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Section 3 Page 8

Original Gas in Place
Paragraphs 26 and 27 + Schedule 13

1. Please provide the monthly or weekly production volumes for the 24 months prior to shut in.
2. Please provide well head pressure for 24 months prior to shut in.

Response:

1. The production for the last 24 months is included in Attachment # 1.
2. The only available shut-in pressure during the final 24 months of production was recorded on November 23, 2009 and is included in Section 3 – Schedule 13.

Jacob Pool Production

Date	Volume (10 ³ m ³)
September 2009	33
October 2009	28
November 2009	24
December 2009	25
January 2010	19
February 2010	27
March 2010	30
April 2010	26
May 2010	25
June 2010	25
July 2010	26
August 2010	25
September 2010	22
October 2010	28
November 2010	23
December 2010	36
January 2011	28
February 2011	25
March 2011	27
April 2011	21
May 2011	23
June 2011	36
July 2011	58
August 2011	50

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Land Matters
Issue 1(1.3) Leases and Agreements
Reference Section 7 Page 1
Paragraph 1 & 2

According to prefiled evidence, Union holds all Petroleum and Natural Gas rights.

1. Please provide copies of any Unit Agreements applicable to the Jacob Pool.
2. Please provide copies of any agreements or assignments of production with Liberty Oil & Gas or any other operators in the Jacob Pool.
3. Is Union responsible to provide payment of royalties due on any oil or gas produced within the proposed DSA? If not, who is?

Response:

1. A redacted copy of the Unit agreement applicable to the Jacob Pool is attached as Attachment # 1.
2. The agreements between the parties contain commercially sensitive provisions. Union has subleased its rights under the P&NG Leases that cover the proposed Designated Storage Area for the Jacob Pool to Liberty Oil and Gas Ltd. and Torque Energy Inc. Under the sublease Liberty Oil and Gas Ltd. and Torque Energy Inc., can explore, drill for and produce petroleum substances from these areas not utilized by Union for the purpose of developing gas storage reservoirs. Within the proposed DSA, exploration, drilling and production excludes the Trenton Group.
3. Please refer to Union's response to MNR interrogatory # 1.

UNIT OPERATION AGREEMENT

AGREEMENT made this 13th day of May, 1985.

B E T W E E N:

→ [REDACTED] of the Township of Dover East
in the County of Kent, Province of Ontario,
hereinafter called "the Lessor"
of the First Part

AND

RAM PETROLEUM LIMITED, a body corporate having
its head office in the City of Toronto, Province
of Ontario, and

CCNR PETROLEUM CORP., a body corporate having
its head office in the City of Toronto, Province
of Ontario, and

E. P. ROWE OIL LIMITED, a company incorporated
pursuant to the laws of Canada having its head
office in the City of London, in the County of
Middlesex

hereinafter called "the Lessee"
of the Second Part

WHEREAS by an Oil and Gas Lease dated the 14th day of June,
A.D. 1984, and registered on the 5th day of July, A.D. 1984, in the
Registry Office for the Registry Division of the County of Kent as
No. 404605 for the Township of Dover East, (hereinafter together with any
amendments thereto made prior to the date hereof, referred to as and
included in the expression, the "said lease"), the Lessor (or the Lessor's
predecessor in title or interest) did demise and lease unto the Lessee (or
its predecessor in interest) for the purposes set forth therein, those
certain lands in the Township of Dover East, in the County of Kent,
Province of Ontario, described as follows:

Part of Lot 6, in the Fourth Concession, in the Township of Dover East, in
the County of Kent, more particularly described in Schedule "A" attached
hereto and made a part hereof.

containing in all 0.4 acres more or less (hereinafter referred to as the
"Lessor's lands");

AND WHEREAS it is believed that the Trenton - Black River formations underlying those certain lands listed and described in Schedule "B" hereunto annexed and made part hereof, (and which include all or part of the Lessor's lands but whatever of the Lessor's lands is so included is hereinafter referred to as the "said lands") contain a certain oil or gas and oil reservoir or pool known as the DOVER EAST 6-6-IV POOL (hereinafter called the "said pool");

AND WHEREAS for the purpose of protecting the said pool from unnecessary and wasteful drilling and undue depletion, and for the protection of their correlative rights therein with respect to production of the leased substances, the parties hereto desire to amend the said lease to unite and combine that portion of the said lands which is included in Schedule "B" hereunto annexed and made part hereof, with all of the other lands in the said Schedule, into a single operative unit to the extent hereinafter set forth:

WITNESSETH that in consideration of the mutual considerations hereinafter contained and the sum of Five Dollars (\$5.00) by the Lessee to the Lessor in hand paid (receipt whereof is hereby acknowledged), the parties hereto each covenant and agree with the other as follows:

1. In this Agreement, including this clause, unless the context otherwise requires:
 - (a) "leased substances" means severally and collectively gas and oil and related hydrocarbons other than coal;
 - (b) "unit area" means the lands described in, and from time to time remaining in Schedule "B" hereunto annexed and made part hereof;
 - (c) "participating section of the unit area" means all of Lot 6, Concession 4, in the Township of Dover East, in the County of Kent;
 - (d) DOVER EAST 6-6-IV POOL means the Trenton - Black River formations underlying the participating section of the unit area;
 - (d) "other Lessors" means all those persons other than the Lessor herein, who, or whose predecessors in title or interest at any time prior to the date of or during the currency of this Agreement shall have demised and leased lands in the unit area to the Lessee or its predecessor in interest for oil and gas development purposes;
 - (f) "Lessors" means the Lessor herein and the other Lessors, collectively.
2. It is understood and agreed that the Lessee and the other Lessees of other lands in the unit area are endeavouring to have executed by all of the other Lessors in the unit area agreements similar to this Agreement, and that this Agreement together with any such other agreements entered into and executed shall be interpreted and treated as a common agreement for the purpose of developing and obtaining production of the leased substances from those portions of the unit area covered by this Agreement and such other agreements.
3. Schedule "D" hereunto annexed and made part hereof, is a list of the oil and gas leases now held from the Lessors in the unit area as presently delineated showing in respect of each such lease the acreage in the participating section of the unit area.
4. Notwithstanding anything to the contrary expressed or implied in the said lease:
 - (a) It is understood and agreed that in respect of each calendar year hereafter the Lessee shall pay or tender to the Lessor in lieu of all payments under the said lease:

Page 3

(1) that proportion of the following royalties which the Lessor's acreage from time to time in the participating section of the unit area bears to the total acreage at such respective times in the participating section of the unit area;

(i) Twelve and one-half percent (12 1/2%) of the current market value at the point of measurement of all gas produced, saved and marketed by the Lessee from the participating section of the unit area as measured by the Lessee;

(ii) Twelve and one-half percent (12 1/2%) of the current market value at the point of measurement of crude oil produced, saved and marketed by the Lessee from the participating section of the unit area;

which royalties shall be paid or tendered to the Lessor monthly not later than the last day of the month following the month during which production is taken; providing that if the total of such royalties paid or tendered to the Lessor during any calendar year hereafter is less than Fifteen Dollars -- (\$15.00) -- for each and every acre of the said lands which during such year has been included in the participating section of the unit area, the Lessee shall, not later than the thirty-first day of January next following, pay or tender to the Lessor and the Lessor shall accept in respect of such calendar year an amount sufficient to bring the total amount payable to the Lessor under this sub-clause (a) (1) during such calendar year, up to the said sum of Fifteen Dollars -- (\$15.00) -- per acre;

(2) the sum of Fifteen Dollars -- (\$15.00) -- for each and every acre of the said lands which during such calendar year has been retained by the Lessee under the said lease and/or this Agreement and which has not been included in the participating section of the unit area during such year, which sum shall be paid or tendered to the Lessor not later than the thirty-first day of January next following;

(3) the sum of Ten Dollars -- (\$10.00) -- for each and every acre of the Lessor's lands which during such calendar year has been retained by the Lessee under the said Lease and which has not been included in the said lands during such year, which sum shall be paid or tendered to the Lessor not later than the thirty-first day of January next following;

and as long as the payments in this sub-clause (a) provided are made or tendered, the lease substances shall be deemed to be produced from and operations for the recovery of same shall be deemed to be conducted by the Lessee on the said lands under the said lease, and the said lease as hereby amended shall remain in full force and effect as to all of the Lessor's lands retained by the Lessee under the said lease and/or this Agreement.

Provided further that any royalties or rentals paid in advance under the said Lease in respect of any period within the effective term of this Agreement and which under the provisions or this sub-clause (a) would not have been required to be paid, shall be deducted from payments aforesaid.

And provided further that in the calendar year in which this Agreement becomes effective the minimum payments under this sub-clause (a) shall be that proportion of the aforesaid minimum payments which the unexpired term of the said calendar year bears to the full calendar year.

(b) This Agreement shall be deemed to become effective on the first day of May, 1985.

5. The Lessee shall have the right from time to time and at any time to include as part of the unit area additional lands in the vicinity thereof and the same thereafter for the purposes of this Agreement shall be treated in all respects as if included in the appropriate schedules hereto; PROVIDED, however, always that such additional lands shall not be included in the unit area except with the consent in writing first had and obtained of those Lessors who together own not less than sixty percent (60%) of all the lands within the unit area (as existing immediately prior to such enlargement) which are then subject to agreements with the Lessee similar to or identical in terms with this Agreement.

6. It is understood and agreed that the Lessee shall, at any time or from time to time, have the right to withdraw all of the said lands or any portion or portions thereof from the unit area, whereupon such lands or portion or portions thereof so withdrawn shall no longer be subject to the terms of this Agreement, but shall be governed thereafter instead by the terms of the said lease. The provisions of this paragraph shall be subject to and effected only with the written consent of 60% of the lessors as required in paragraph 5.

7. The Lessee shall have the right at any time and from time to time to enlarge or reduce the limits of the participating section of the unit area within such limitations as may be determined from the geological and scientific information then available to it. The provisions of this paragraph shall be subject to and effected only with the written consent of 60% of the lessors as required in paragraph 5.

8. Whenever the limits of the unit area or of the participating section of the unit area are altered in accordance with the provisions or any of the three clauses next preceding, the changes so made shall be deemed to have occurred at the expiration of the last day of the month in which the same was effected, and the payments required to be made under the provisions of Clause 4 hereof shall be adjusted and apportioned accordingly. The Lessee shall notify the Lessor in writing of all such changes.

9. The spacing pattern, location and number of wells drilled in the unit area and the rate of drilling and the manner of operating such wells, including amongst other things but not so as to limit the foregoing, the rate of production of the leased substances therefrom shall be at all times in the sole discretion of the Lessee.

10. As part of the consideration for the payments provided for under Clause 4 hereof, the Lessor hereby grants and conveys to the Lessee for so long as development or production are continued or deemed to be continued on the unit area, the right and privilege to fence any portion of the said lands used as a well site not in excess of one hundred feet by one hundred feet.

11. The Lessee may at its option pay or discharge any tax, mortgage, lien, balance or purchase money or encumbrance of any kind or nature whatsoever, incurred or created by the Lessor and/or the Lessor's predecessors or successors in title or interest which may now or hereafter exist on or against or in any way affect the said lands or the leased substances, in which event, and in addition to any similar or other remedies in that behalf conferred upon the Lessee under the terms of the said lease, the Lessee shall have the right at its option, to reimburse itself by applying on the amount so paid by it any and all sums accruing to the Lessor under the terms of this Agreement.

12. It is hereby declared and agreed that this Agreement and all the terms, conditions and covenants herein contained shall extend to, be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns respectively, it being understood that the privilege of assigning in whole or in part is hereby expressly allowed and that the unit operation contemplated herein may be conducted by someone other than the Lessee and that the terms of this Agreement binding on the Lessee may be performed by someone on behalf of the Lessee. No assignment, however, of this Agreement by the Lessor, and no change of division in ownership of the said lands and no change or division in the ownership of the sums payable hereunder, shall operate to enlarge the obligations or diminish the rights of the Lessee hereunder.

13. All payments to the Lessor provided for in this Agreement shall, at the Lessee's option, be paid or tendered either to the Lessor, or on behalf of the Lessor at [REDACTED] hereinafter call "the depository"), which said depository shall be deemed to be the Lessor's agent and shall continue as the depository for receipt of any and all sums payable hereunder regardless of any change or division in ownership (whether by assignment or otherwise) of the said lands or of the leased substances therein contained or of the royalties or other payments to accrue hereunder, unless and until the Lessee shall have been directed in writing by the Lessor to make such payments to another depository in Canada which shall be specified in such direction; PROVIDED, however, that only one such depository shall be designated at any time or from time to time aforesaid. All such payments or tenders may be made by cheque or draft either mailed or delivered to the Lessor or to the depository by him so designated.

[illegible]

SIGNED, SEALED AND DELIVERED
in the presence of

) RAM PETROLEUMS LIMITED
)
) *Robert J. Opekar*
) President - Robert J. Opekar
)
) *Roger Barton*
) Secretary - Roger Barton
)
) CCNR PETROLEUM CORP.
) *Jean-Claude Bonhomme*
) Jean-Claude Bonhomme
)
) E. P. ROWE OIL LIMITED
)
) *E. Peter Rowe*
) President - E. Peter Rowe
)
)

DOVER EAST TOWNSHIP, KENT COUNTY
SCHEDULE "C"


V

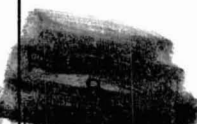
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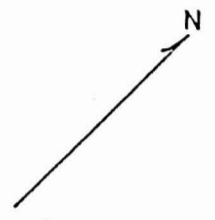

49.9 ac.



49.9 ac.


49.9 ac.


49.9 ac.

IV




0.4 ac.

III

UNIT OPERATION AGREEMENT


gpk

DOVER EAST 6-6-IV POOL

DOVER EAST TOWNSHIP

UNIT OPERATION AGREEMENT
DOVER EAST 6-6-IV POOL
DOVER EAST TOWNSHIP, KENT COUNTY
SCHEDULE "D"

ORIGINAL EFFECTIVE APRIL 1, 1985

Lease No.	Registered Instrument No.	Name of Lessor	Acreage In Unit Area	Acreage In Participating Area	Acreage In Non- Participating Area	% of Lessor Acreage In Participati Area to Tot Acreage o Participati Area
E-49	391919		49.9	49.9		24.95
E-50	391914		49.9	49.9		24.95
E-51	403803		49.9	49.9		24.95
E-52	392530		49.9	49.9		24.95
E-167	404605		<u>0.4</u>	<u>0.4</u>		<u>0.200</u> ✓
			<u>200.0</u>	<u>200.0</u>		<u>100.000</u>

SPR

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Land Matters
Issue 1(1.3) Leases and Agreements
Reference Section 7 Page 1
Paragraph 5

1. Does Union's current Landowner Compensation package contain any provision for landowner participation in ex-franchise storage operation profits?
2. When is the expiry date of the current landowner agreement?

Response:

1. No Union's current Landowner Compensation package doesn't contain provisions for landowner participation in ex-franchise storage operation profits.
2. The current expiry date is December 31, 2013.

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Jacob Pool
Issue 2(2.5) Losses or damages
Section 7 Page 2

Paragraph 12 states "There are no recoverable reserves".

1. Please explain how this conclusion was reached?
2. Is technology and expertise available to produce from low pressure reservoirs?
3. Is Union aware of any production operations in Ontario where natural gas is being or has been produced down to pressures below 50 psia? If yes, where?

Response:

1. Section 3 paragraphs 26 erroneously reports the total production as $66,745 \text{ } 10^3 \text{ m}^3$. The correct total production is $66,461 \text{ } 10^3 \text{ m}^3$. This changes the remaining gas in place shown in paragraph 27 from $1,385 \text{ } 10^3 \text{ m}^3$ to $1,669 \text{ } 10^3 \text{ m}^3$. Therefore the remaining gas in place as follows:

Original gas in place	$68,130 \text{ } 10^3 \text{ m}^3$
Total production	$66,461 \text{ } 10^3 \text{ m}^3$
Remaining gas in place	$1,669 \text{ } 10^3 \text{ m}^3$

Based on the OGIP calculation the volume of gas in the reservoir at 50 psia bottom hole is $2,459 \text{ } 10^3 \text{ m}^3$. The Gas Storage Leases define commercially recoverable reserves as those volumes above 50 psia bottom hole. Based on the gas remaining in place and in accordance with the Gas Storage Leases there are no recoverable reserves in the storage formation for the proposed Jacob Pool.

2. Yes.
3. Union is not aware of any designated natural gas storage pools in Ontario that have been produced below 50 psia bottom hole. Union has not completed an analysis on other production pools in Ontario to determine if they have been commercially recoverable below 50 psia bottom hole.

UNION GAS LIMITED
Response to Interrogatory
from Kent Federation of Agriculture ("KFA")

Land Matters
Issue 1(1.3) Necessary Leases and Agreements
Section 7 Page 1 Paragraph 5

1. Is Union aware of any other storage operators in Ontario which mirror or closely resemble Union's existing Landowner Compensation Program? If yes, then please name those operators.

Response:

Union is aware of three other storage pools where landowners are compensated with Union's storage compensation package:

- 1) Tipperary Storage Pool
- 2) Sarnia Airport Storage Pool
- 3) St. Clair Storage Pool