



1300 SUN LIFE PLAZA III  
112 - 4TH AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743  
FAX (403) 264-5681

September 21, 1990

**MANITOBA ENERGY AND M**  
**Petroleum Branch**  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

**Attention:** Mr. John I  
Chief Petr

- BRANCH IS PREPARED TO GRANT A  
2 TR SUSPENSION APPROVALS IF THE  
RASING IS PRESSURE TESTED BEFORE  
OCTOBER 1, 1991 OTHERWISE WELL IS  
TO BE REACTIVATED OR ABANDONED,  
ON CONDITION WELL DISPLACED TO INHIBITED  
FLUID
- BRANCH WOULD LIKE OMEGA  
TO SUBMIT A REPORT ON THE  
WATERFLOOD PERFORMANCE OF  
WASKADA UNIT NO. 3 BEFORE AUG 1/91
- BRANCH WILL REVIEW WELL COMPLETION  
HISTORIES TO DETERMINE IF ANY WELLS  
SHOULD BE PRESSURE TESTED NOW

Dear Sir:

**RE: Suspend Production Application - MG416**

Omega Waskada 1-31-1-25 WPM  
Omega Waskada 2-31-1-25 WPM  
Omega Waskada 3-31-1-25 WPM  
Omega Waskada 4-31-1-25 WPM  
Omega Waskada 6-31-1-25 WPM  
Omega Waskada 8-31-1-25 WPM  
Omega Waskada 9-31-1-25 WPM  
Omega Waskada 10-31-1-25 WPM  
Omega Waskada 11-31-1-25 WPM  
Omega Waskada 14-31-1-25 WPM  
Omega Waskada 16-31-1-25 WPM

FILE  
WASKADA  
UNIT No. 3  
CORRESPONDENCE

Enclosed is the MG 416 forms requestin  
production on the above referenced wells.

and

In order to maintain the necessary internal company controls with  
respect to these suspensions, Omega Hydrocarbons Ltd. requests that  
all correspondence be sent to the Calgary office. If there are any  
comments or questions pertaining to this matter please contact the  
undersigned at (403) 261-0743.

Yours truly,

**OMEGA HYDROCARBONS LTD.**

D.M. Boyko  
Petroleum Engineer

DB/jb

Enclosures  
c.c.: Wellfile

WAGKADA UNIT NO. 3

90-10-00

INS. PAT. 10-31-88 7594 - 12224 1.16 7-31-88

INS. PAT. 10-31-88 7594 - 12224 1.16 7-31-88  
INS. PAT. 10-31-88 7594 - 12224 1.16 7-31-88  
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INS. PAT. 10-31-88 7594 - 12224 1.16 7-31-88  
INS. PAT. 10-31-88 7594 - 12224 1.16 7-31-88

$q_1 = 1.16$

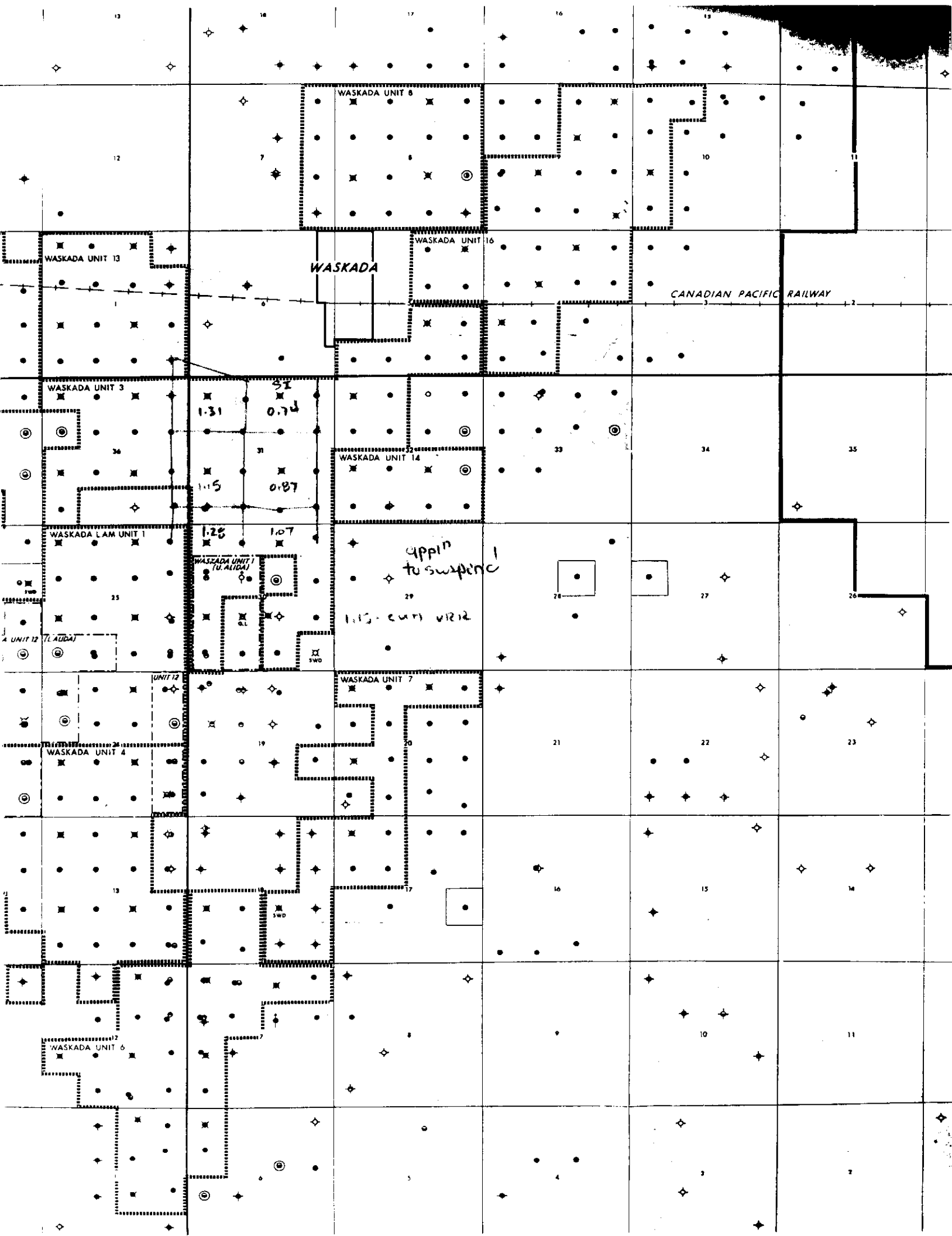
where  $q_1 = 1.16$

$q_1 = 1.16$

exp. dist. = 362 ft

$t = 2.5$  sec.





GROUP ID: WASKADA UNIT NO. 3

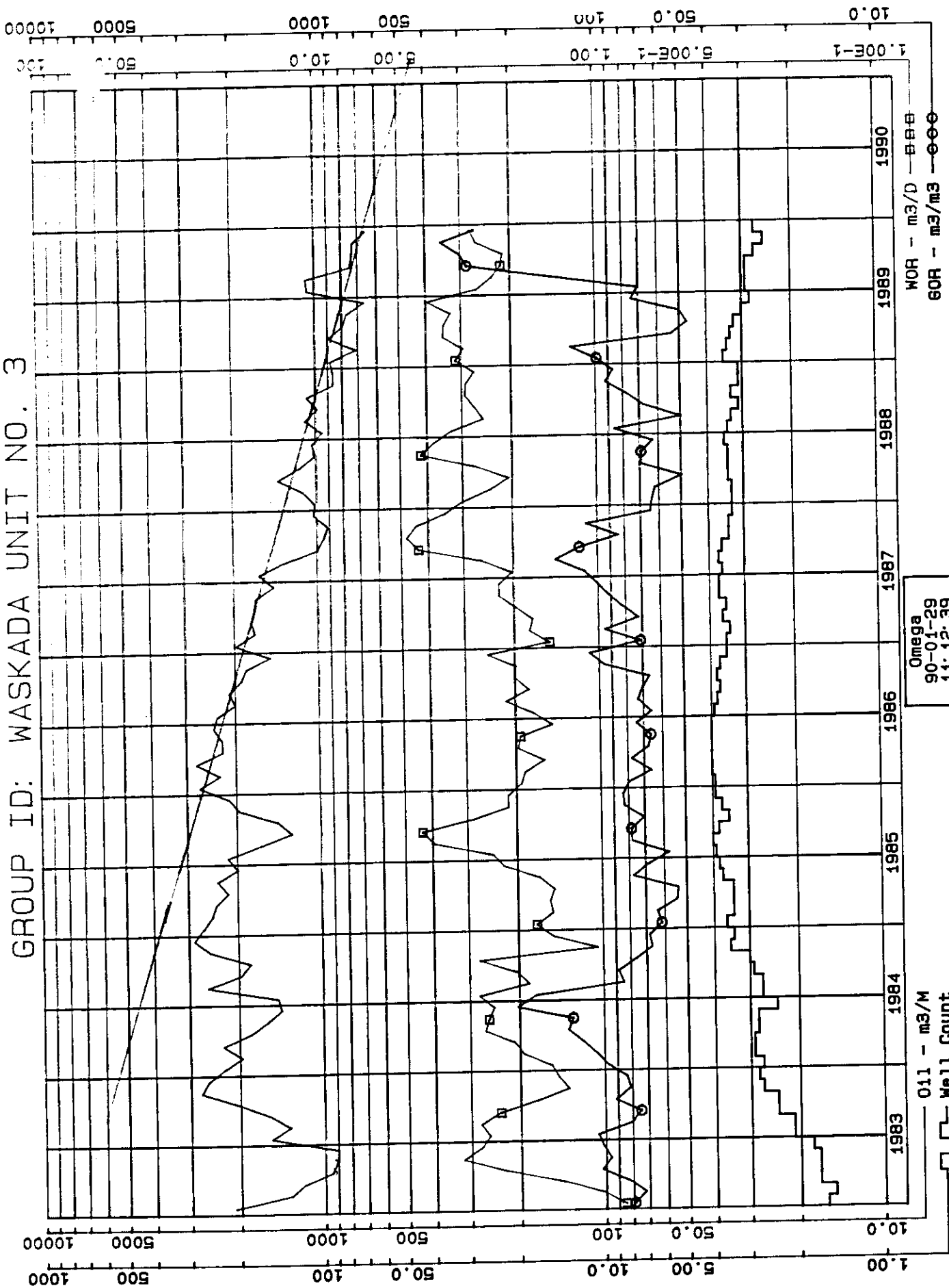
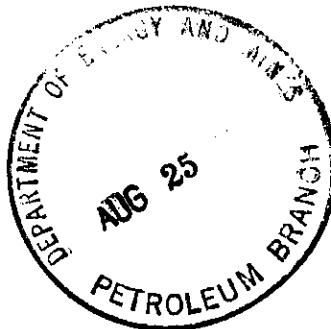


Figure 4



1300 SUN LIFE PLAZA III  
112 - 4TH AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

August 11, 1989



Royalty Interest Owners  
Waskada Unit No. 3  
(Addressee List Attached)

Gentlemen:

Re: Waskada Unit No. 3  
Unit Agreement Revisions

Enclosed for your records are revisions to pages 1,4,5,6 and 8 of Exhibit A in the Waskada Unit No. 3 Unit Agreement. This revision reflects an amalgamation of Triton Petroleums Ltd. into Triton Canada Resources Ltd. as well as the amalgamation of Dome Petroleum Limited and Hudson's Bay Oil and Gas Company Limited into Amoco Canada Resources Ltd.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to be "R.A. Brekke", followed by a long horizontal line.

R.A. Brekke  
Chairman, Operating Committee

c.c.: Unit File  
Accounting  
Land

**WASKADA UNIT NO. 3  
ROYALTY INTEREST OWNERS  
Addresse List**

Amoco Canada Resources Ltd.  
3300, 333 - 7th Avenue S.W.  
Box 200, Station "M"  
Calgary, Alberta  
T2P 0H8

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

DA-KA-DAL Enterprises Ltd.  
Waskada, Manitoba  
ROM 2E0

Department of Energy & Mines  
and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4  
Attention: R. Harrison  
Director, General Land Management

Ralph F. Spurrier  
273 Winding Canyon Lane  
Folsom, California  
U.S.A. 95630

Trewin Holdings Ltd.  
Box 175  
Waskada, Manitoba  
ROM 2E0

70015 Manitoba  
Box 70  
Waskada, Manitoba  
ROM 2E0

70016 Manitoba  
Box 70  
Waskada, Manitoba  
ROM 2E0

Que West Resources Ltd.  
1100, 910 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3W2

Smart Oils Ltd.  
c/o Box 93  
Waskada, Manitoba  
ROM 2E0

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Lee Oil Limited  
Box 656  
Carman, Manitoba  
R0G 0J0

Triton Canada Resources Ltd.  
c/o Canadian Worldwide Energy Ltd.  
4th Floor, 255 - 5th Avenue S.W.  
Calgary, Alberta  
T2P 3G6

60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 89  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Ltd.  
150 - 9th Avenue S.W.  
P.O. Box 2850  
Calgary, Alberta  
T2P 2S5

Rural Municipality of Brenda  
Box 40  
Waskada, Manitoba  
ROM 2E0

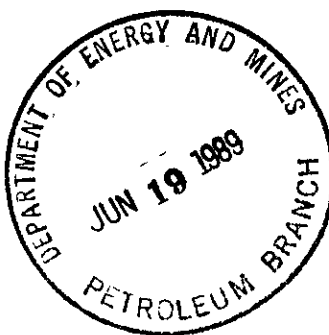
60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

Manitoba Department of Energy & Mines  
550 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3



**OMEGA**  
HYDROCARBONS LTD

1300 SUN LIFE PLAZA III  
112 - 4TH AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743



June 12, 1989

Royalty Interest Owners  
Waskada Unit No. 3  
(Addressee List Attached)

Gentlemen:

Re: Waskada Unit No. 3  
Revisions to Unit Agreement Exhibits

Enclosed for your records are revisions to pages 1,4,5,6 and 7 contained in Exhibit A of the Waskada Unit No. 3 Unit Agreement. The royalty interests held by Mr. J.A. McKinney and Mr. W.L. McKinney were recently transferred to number companies, the attached revisions reflect this change.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to be "R.A. Brekke", followed by a long horizontal line extending to the right.

R.A. Brekke, P. Eng.  
Chairman, Operating Committee

c.c.: Unit File  
Accounting File  
Land Department



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

Working Interest Owners  
Waskada Unit No.3  
(Addressee List Attached)

Gentlemen:

Re: Waskada Unit No. 3  
Revisions to Unit Agreement Exhibits

Enclosed for your records are revisions to pages 1,4,5,6 and 7 contained in Exhibit A of the Waskada Unit No. 3 Unit Agreement. The royalty interests held by Mr. J.A. McKinney and Mr. W.L. McKinney were recently transferred to number companies, the attached revisions reflect this change.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to be "R.A. Brekke", followed by a long horizontal line extending to the right.

R.A. Brekke, P. Eng.  
Chairman, Operating Committee

c.c.: Unit File  
Accounting Department  
Land Department

**WASKADA UNIT NO. 3  
ROYALTY INTEREST OWNERS  
Addresse List**

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

DA-KA-DAL Enterprises Ltd.  
Waskada, Manitoba  
ROM 2E0

Department of Energy & Mines  
and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4  
Attention: R. Harrison  
Director, General Land Management

Dome Petroleum Ltd.  
3300, 333 - 7th Avenue S.W.  
Box 200, Station "M"  
Calgary, Alberta  
T2P 0H8

Lee Oil Limited  
Box 656  
Carman, Manitoba  
R0G 0J0

70015 Manitoba  
Box 70  
Waskada, Manitoba  
ROM 2E0

70016 Manitoba  
Box 70  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Ltd.  
150 - 9th Avenue S.W.  
P.O. Box 2850  
Calgary, Alberta  
T2P 2S5

Que West Resources Ltd.  
1100, 910 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3W2

Smart Oils Ltd.  
c/o Box 93  
Waskada, Manitoba  
ROM 2E0

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Ralph F. Spurrier  
273 Winding Canyon Lane  
Folsom, California  
U.S.A. 95630

Trewin Holdings Ltd.  
Box 175  
Waskada, Manitoba  
ROM 2E0

Triton Petroleum Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 89  
Waskada, Manitoba  
ROM 2E0

60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

Rural Municipality of Brenda  
Box 40  
Waskada, Manitoba  
R0M 2E0

Manitoba Department of Energy & Mines  
550 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Hudson's Bay Oil & Gas  
Company Limited  
c/o Dome Petroleum Limited  
P.O. Box 200  
Calgary, Alberta  
T2P 3H8



HYDROCARBONS LTD.

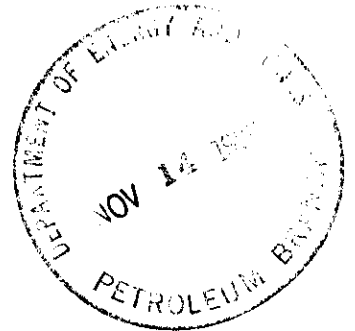
1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

November 7, 1986

Royalty Owners  
Waskada Unit No. 3  
(Addressee List Attached)

Gentlemen:

Re: Waskada Unit No. 3  
Enlargement No. 4  
Effective Date



Please be advised that the Manitoba Oil and Natural Gas Conservation Board have approved an Effective Date of November 1, 1986 for the captioned enlargement. The unit was enlarged to include Lsd's 4, 5 and 6 of Section 36-1-26 WPM.

Enclosed is a copy of Exhibits "A" and "B" which have been revised to reflect this enlargement.

Yours truly,

OMEGA HYDROCARBONS LTD.

R.A. Beamish  
Joint Interest Coordinator

Encl:

cc: Manitoba Petroleum Branch  
Manitoba Dept. of Energy and Mines

RAB/tct



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

November 7, 1986

Royalty Owners  
Waskada Unit No. 3  
(Addressee List Attached)

Gentlemen:

Re: Waskada Unit No. 3  
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Yours truly,

OMEGA HYDROCARBONS LTD.

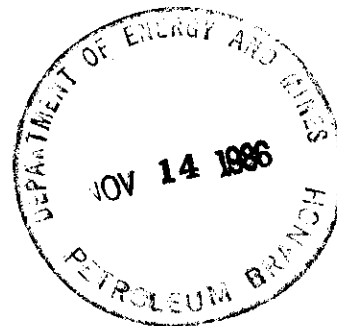
A handwritten signature in cursive script, appearing to read "R.A. Beamish".

R.A. Beamish  
Joint Interest Coordinator

Encl:

cc: Manitoba Petroleum Branch  
Manitoba Dept. of Energy and Mines

RAB/tct



**WASKADA UNIT NO. 3**  
**ROYALTY INTEREST OWNERS**  
**Addresse List**

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

DA-KA-DAL Enterprises Ltd.  
Waskada, Manitoba  
ROM 2E0

Department of Energy & Mines  
and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4  
Attention: R. Harrison  
Director, General Land Management

Dome Petroleum Ltd.  
3300, 333 - 7th Avenue S.W.  
Box 200, Station "M"  
Calgary, Alberta  
T2P 0H8

Lee Oil Limited  
Box 656  
Carman, Manitoba  
ROG 0J0

James Alexander McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

William Lloyd McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Ltd.  
150 - 9th Avenue S.W.  
P.O. Box 2850  
Calgary, Alberta  
T2P 2S5

Que West Resources Ltd.  
2300, 801 - 6th Avenue S.W.  
Calgary, Alberta  
T2P 3W2

Smart Oils Ltd.  
c/o Box 93  
Waskada, Manitoba  
ROM 2E0

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Ralph F. Spurrier  
9144 Shady Hollow Way  
Fair Oaks, California  
U.S.A. 95628

Trewin Holdings Ltd.  
Box 175  
Waskada, Manitoba  
ROM 2E0

Triton Petroleumsw Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

Rural Municipality of Brenda  
Box 40  
Waskada, Manitoba  
R0M 2E0

Manitoba Department of Energy & Mines  
550 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Hudson's Bay Oil & Gas  
Company Limited  
c/o Dome Petroleum Limited  
P.O. Box 200  
Calgary, Alberta  
T2P 3H8





1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

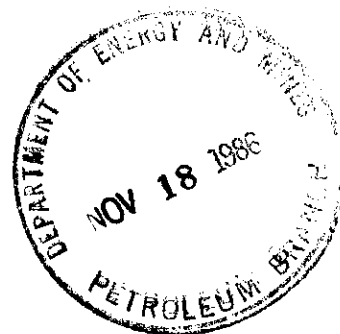
November 7, 1986

Manitoba Petroleum Branch  
550 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Attention: Mr. Bob Dubrieul

Dear Sir:

Re: Waskada Unit No. 3  
Enlargement No. 4  
Effective Date



This letter will confirm our request for an Effective Date of November 1, 1986 for the captioned enlargement and provide you with the appropriate replacements for the information sent by telecopier.

Enclosed is a copy of each parties execution of the Unit Agreement.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in cursive script, appearing to read "R.A. Beamish".

R.A. Beamish  
Joint Interest Coordinator

Encl:

RAB/tct



The Oil and Natural Gas  
Conservation Board

Room 309  
Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

(204) 945-3130

October 31, 1986

Omega Hydrocarbons Ltd.  
1300, 112 - 4th Avenue S.W.  
Calgary, Alberta  
T2P 0H3

Attention: D. Mark Mawdsley  
Production Engineer

Dear Sirs:

Re: Waskada Unit No. 3 - Fourth Enlargement

The Board hereby approves the enlargement of the Waskada Unit No. 3 as described in your letter of September 3, 1986. The effective date for the enlargement is November 1, 1986.

Please ensure that copies of the revised Exhibits A and B are submitted at your earliest convenience.

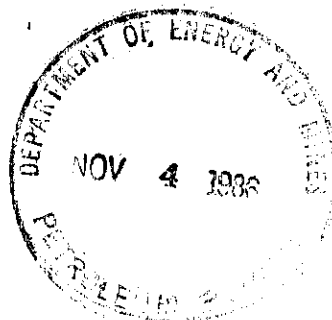
Sincerely yours

ORIGINAL SIGNED BY  
**CHARLES S. KANG**

.. Charles S. Kang

LRD/lk

b.c. Wm. McDonald  
B. Ball  
Petroleum





OMEGA HYDROCARBONS LTD.

1000 CENTRE PLAZA 10  
100 AVENUE SW  
CALGARY ALBERTA, CANADA T2P 1M3  
TEL: (403) 261-1111

October 31, 1986

Manitoba Dept. of Energy & Mines  
Petroleum Branch  
100 - 350 Graham Avenue  
Winnipeg, Manitoba  
R3C 1Z3

Attention: Mr. Bob Dubreuil

Dear Sir:

Re: Waskada Unit No. 3 - Enlargement No. 4  
Effective Date

Following this letter we are sending by telecopier a copy of the execution  
page of the Unit Agreement for Hudson's Bay Oil and Gas Company Limited.

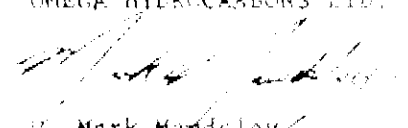
In a telephone conversation this morning with Mr. Brock Lee representing the  
uniting royalty interest owner Lee Oil Ltd., he stated that his Unit  
Agreement has been executed. Please expect a telephone call from Mr. Lee  
or message to call him so that he may give you a verbal confirmation of  
the document's execution.

As you are in possession of HBOG's execution page and Mr. Lee's confirmation,  
we respectfully request an Effective Date for this enlargement of November 1.  
Your confirmation by mail will follow as soon as possible.

Thank you for your attention to this matter.

Yours truly,

OMEGA HYDROCARBONS LTD.

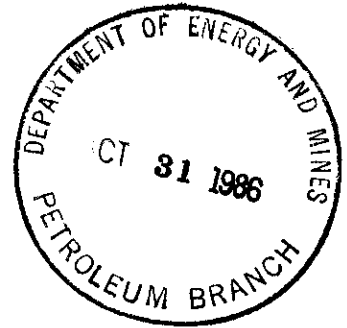
  
Mark Mawdsley  
Production Engineer

Mr. Bob Beamish  
Waskada Unit No. 3 File

MM/mtt



1000 MAIN STREET PLAZA III  
1000 AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0K2  
TELEPHONE (403) 270-7141



October 31, 1986

Manitoba Department of Energy & Mines  
Petroleum Branch  
100 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 1E7

Attention: Mr. Bob Dubreuil

Dear Sir:

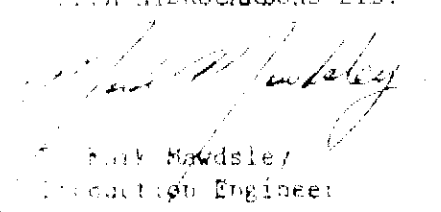
Re: Beneficial Owners Waskada Unit No. 3  
Enlargement No. 4

As per to our telephone conversation today, I submit the royalty interest  
and information that you requested.

The entire West half of Section 36-1-26 WPM which includes the enlargement  
of 36-1-26 WPM is held under one freehold lease from Lee Oil  
Limited. The lease also includes a GORR to Hudson's Bay Oil and Gas Company  
Limited. The lesser royalty is 15% on oil and 12.5% on gas and the GORR to  
Hudson's Bay is 50% of 15% and is non-convertable.

Sincerely,

OMEGA HYDROCARBONS LTD.

  
Mark Mawdsley  
Production Engineer

MM/11

Waskada Unit No. 3 File



Energy and Mines

Petroleum

555 — 330 Graham Avenue  
Winnipeg, Manitoba, CANADA  
R3C 4E3

(204) 945-6577

September 18, 1986

Omega Hydrocarbons Ltd.  
1300 SunLife Plaza III  
112 - 4th Avenue S.W.  
CALGARY, Alberta  
T2P 0H3

Attention: Mr. Mark Mawdsley  
Production Engineer

Dear Sir:

Re: Waskada Unit No. 3 - Enlargement No. 4

Your letter of September 3, 1986 to the Petroleum Division with respect to the enlargement of Waskada Unit No. 3 is acknowledged.

The Division has reviewed the porosity thickness and adjusted tract factor calculations for the proposed unit enlargement wells, 4-26-1-26 (WPM), 5-36-1-26 (WPM), 6-36-1-26 (WPM) and finds these to be acceptable. Please note that before the enlargement of Unit No. 3 can be approved, The Oil and Natural Gas Conservation Board requires executed signature pages from the affected royalty owners.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "L.R. Dubreuil". The signature is somewhat stylized and is positioned above the typed name.

L.R. Dubreuil  
Chief Petroleum Engineer  
Petroleum Division

LRD:dah

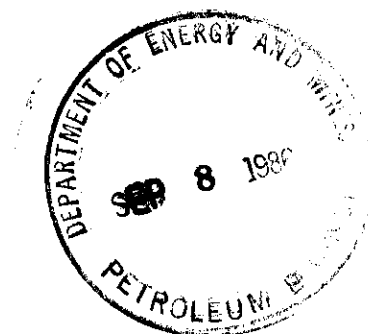
# Wabokad Unit No. 3 - Enlargement No. 4

location	<sup>1</sup> Øt-More	<sup>2</sup> Øt-Omega	<sup>3</sup> Adjusted Tract Factor - Omega	<sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>3</sub>
4-36-1-26	.40	1.45	2.30	.28	.17
5-36-1-26	<del>.40</del>	1.20	2.20	.33	.18
6-36-1-26	<del>.49</del>	1.15	2.13	.43	.23

} fairly  
consistent



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743



September 3, 1986

Manitoba Department of Energy and Mines  
Petroleum Branch  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Attention: Mr. Bob Dubreuil

Dear Sir:

Re: Waskada Unit No. 3 - Enlargement No. 4

Omega proposes to add LSD's 4, 5 and 6-36-1-26 WPM to Waskada Unit No. 3 in Enlargement No. 4. Enclosed for your review is a set of the data and calculations associated with this enlargement. Revised Unit Agreements for the proposed enlargement will be sent to the Royalty Owners of these LSD's for signature.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in cursive script, reading "D. Mark Mawdsley".

D. Mark Mawdsley  
Production Engineer

DMM/jr  
Encl.

cc: Waskada Unit No. 3 File

## WASHAGA UNIT NO. 3 ENLARGEMENT TRACT PARTICIPATION - BASIC DATA

9

#	TRACT	LAND DESCRIPTION	DUESA WORKING INT. (%)	AREA (Ha)	REC. (frac)	Sw	Boi	PHIsh	B6-07	PRODUCTION PERIOD # 1				PRODUCTION PERIOD # 2					
										WATER	OIL	HRS	WATER	OIL	HRS	WATER	OIL	HRS	
#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
1	1	4-30-1-25	100.00000	16	0.25	0.40	1.17	1.50	4896.8	2191	914.5	559.8							
2	2	5-30-1-25	100.00000	16	0.25	0.40	1.17	1.46	570.5	2280	151.3	327.0							
3	3	11-30-1-25	100.00000	16	0.25	0.40	1.17	1.38	3855.2	2904	72.8	51.4							
4	4	9-30-1-25	100.00000	16	0.25	0.40	1.17	1.33	909.3	2568	281.1	156.2							
5	5	16-30-1-25	100.00000	16	0.25	0.40	1.17	1.29	2666.3	2000	420.5	435.4							
6	6	15-30-1-25	100.00000	16	0.25	0.40	1.17	1.39	1775.3	1629	383.0	188.8							
7	7	14-30-1-25	100.00000	16	0.25	0.40	1.17	1.28	1834.2	2152	527.3	435.9							
8	8	13-30-1-25	100.00000	16	0.25	0.40	1.17	1.31	771.5	1914	158.4	617.8							
9	9	4-31-1-25	100.00000	16	0.25	0.40	1.17	1.45	1646.2	2121	597.9	255.1							
10	10	3-31-1-25	100.00000	16	0.25	0.40	1.17	1.44	2388.3	2328	820.0	43.0							
11	11	2-31-1-25	100.00000	16	0.25	0.40	1.17	1.32	3484.9	2534	868.6	644.7							
12	12	1-31-1-25	100.00000	16	0.25	0.40	1.17	1.05	3822.6	2857	610.8	778.2							
13	13	8-31-1-25	100.00000	16	0.25	0.40	1.17	1.74	4329.0	2670	792.1	1311.2							
14	14	7-31-1-25	100.00000	16	0.25	0.40	1.17	1.44	1360.5	1882	731.4	347.5							
15	15	6-31-1-25	100.00000	16	0.25	0.40	1.17	1.62	3005.9	1917	810.2	169.6							
16	16	5-31-1-25	100.00000	16	0.25	0.40	1.17	1.28	778.0	2309	467.4	118.8							
17	17	12-30-1-25	100.00000	16	0.25	0.40	1.17	1.54	4876.7	2401	1297.8	754.1							
18	18	8-36-1-26	100.00000	16	0.25	0.40	1.17	0.77	1693.7	2441	597.6	851.6							
19	19	11-32-1-25	100.00000	16	0.25	0.40	1.17	1.58	1635.3	1703	515.0	539.3							
20	20	12-32-1-25	100.00000	16	0.25	0.40	1.17	1.18	852.9	954	149.2	127.5							
21	21	9-31-1-25	100.00000	16	0.25	0.40	1.17	1.46	3726.2	1947	555.8	694.4							
22	22	10-31-1-25	100.00000	16	0.25	0.40	1.17	1.37	509.1	817	157.6	101.3							
23	23	11-31-1-25	100.00000	16	0.25	0.40	1.17	1.26	1861.0	2468	530.2	610.7							
24	24	12-31-1-25	100.00000	16	0.25	0.40	1.17	1.13	6758.1	2260	463.2	786.4							
25	25	9-36-1-26	100.00000	16	0.25	0.40	1.17	0.43	1936.5	1826	350.5	634.5							
26	26	10-36-1-26	100.00000	16	0.25	0.40	1.17	1.03	1925.4	2229	937.1	129.8							
27	27	11-36-1-26	100.00000	16	0.25	0.40	1.17	1.09	1854.6	2390	592.4	178.7							
28	28	14-32-1-25	100.00000	16	0.25	0.40	1.17	1.46	2725.9	1312	54.4	631.7							
29	29	13-32-1-25	100.00000	16	0.25	0.40	1.17	1.56	495.1	864	197.5	174.5							
30	30	16-31-1-25	100.00000	16	0.25	0.40	1.17	1.45	1484.4	1437	547.9	367.7							
31	31	15-31-1-25	100.00000	16	0.25	0.40	1.17	1.03	1028.4	1453	401.8	510.2							
32	32	14-31-1-25	100.00000	16	0.25	0.40	1.17	1.12	432.1	2891	145.5	605.5							
33	33	13-31-1-25	100.00000	16	0.25	0.40	1.17	1.13	513.0	1923	330.7	154.8							
34	34	15-36-1-26	100.00000	16	0.25	0.40	1.17	1.34	1272.1	2622	692.7	195.3							
35	35	14-36-1-26	100.00000	16	0.25	0.40	1.17	1.04	1709.0	2548	579.4	116.8							
36	36	13-36-1-26	100.00000	16	0.25	0.40	1.17	1.23	2604.7	2219	888.1	150.3							
37	37	2-30-1-25	100.00000	16	0.25	0.40	1.17	0.66	1033.4	2502	361.8	331.0							
38	38	7A-30-1-25	100.00000	16	0.25	0.40	1.17	1.20	2224.3	2290	1067.1	458.7							
39	39	8-30-1-25	100.00000	16	0.25	0.40	1.17	0.92	1659.7	2940	324.3	1687.7							
40	40	7-36-1-26	100.00000	16	0.25	0.40	1.17	1.17	701.5	1957	429.7	73.5							
41	41	16-36-1-26	100.00000	16	0.25	0.40	1.17	0.81	374.6	2761	758.0	185.1							





PAGE 1

REMAINING	RR OIL	OIL RATE	OIL CUT	OIL RATE	OIL CUT	UN-ADJ.	ORIGINAL	ADJUSTED	TRACT	LAND
#RECOVERABLE	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	TRACT	TRACT	TRACT	TRACT	DESCRIPTION
# OIL (#3)	#1	#1	#1	#2	#2	FACTOR	FACTOR	FACTOR	FACTOR	
34,841	1.8945	0.0598	0.7277	0.0000	0.0000	0.0000	2.8577	2.6885	44	3-5-2-25
15,568	0.8465	0.1590	0.1942	0.0000	0.0000	0.0000	1.1977	1.2220	45	4-5-2-25
24,117	1.3114	0.0795	0.1888	0.0000	0.0000	0.0000	1.5797	1.5694	46	7-5-2-25
35,374	1.9234	0.2751	0.4920	0.0000	0.0000	0.0000	2.5905	2.8874	47	8-5-2-25
1,152,387	62.5611	10.3564	20.3594	0.0000	0.0000	0.0000	93.3769	93.3769		
29,599	1.4095	0.1326	0.5535	0.0000	0.0000	0.0000	2.2958	2.2958	48	4-36-1-26
21,292	1.1577	0.3785	0.6554	0.0000	0.0000	0.0000	2.2016	2.2016	49	5-36-1-26
22,775	1.2584	0.2434	0.6439	0.0000	0.0000	0.0000	2.1257	2.1257	50	6-36-1-26
1,226,053	66.5667	11.1111	22.2222	0.0000	0.0000	0.0000	100.0000	100.0000		



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

July 8, 1986

Royalty Interest Owners  
Waskada Unit No. 3  
(addressee list attached)

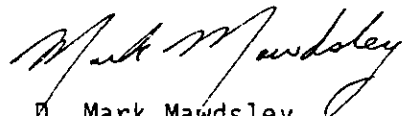
Gentlemen:

**Re: Effective Date for Enlargement No. 3**

Please be advised that the Effective Date for Waskada Unit No. 3 - Enlargement No. 3 is July 1, 1986. Attached are copies of revised Exhibits "A" and "B" which should be inserted into your copy of the Unit Agreement. Please note that L.S.D.'s 5 and 6-36-1-26 WPM are not included in the enlargement as originally intended. They will be included along with 4-36-1-26 WPM in a future enlargement.

Yours truly,

OMEGA HYDROCARBONS LTD.

  
D. Mark Mawdsley  
Production Engineer

DMM:vb  
Encl.  
c.c. Manitoba Petroleum Branch  
Waskada Unit No. 3 File



**Waskada Unit No. 3  
Royalty Interest Owner  
Addressee List**

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

DA-KA-DAL Enterprises Ltd.  
Waskada, Manitoba  
ROM 2E0

Department of Energy & Mines  
and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4  
Attention: R. Harrison  
Director, General  
Land Management

Hudson's Bay Oil And Gas  
Compay Limited  
c/o Dome Petroleum Ltd.  
3300, 333 - 7th Avenue S.W.  
Box 200, Station 'M'  
Calgary, Alberta  
T2P 0H8

**Attention: Joint Operations**

Lee Oil Limited  
P.O. Box 656  
Carman, Manitoba  
ROG 0J0

James Alexander McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

William Lloyd McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Ltd.  
150 - 9th Avenue S.W.  
P.O. Box 2850  
Calgary, Alberta  
T2P 2S5

Que West Resources Ltd.  
2300, 801 - 6th Avenue S.W.  
Calgary, Alberta  
T2P 3W2

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Smart Oils Ltd.  
c/o Box 93  
Waskada, Manitoba  
ROM 2E0

Ralph F. Spurrier  
9144 Shady Hollow Way  
Fair Oaks, California  
U.S.A. 95628

Trewin Holdings Ltd.  
Box 175  
Waskada, Manitoba  
ROM 2E0

Triton Petroleums Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

Manitoba Oil and Natural Gas  
Conservation Board  
309 Legislative Building  
450 Broadway Avenue  
Winnipeg, Manitoba  
R3C 0V8

Rural Municipality of Brenda  
P.O. Box 40  
Waskada, Manitoba  
ROM 2E0



The Oil and Natural Gas  
Conservation Board

Room 309  
Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

(204) 945-3130

Omega Hydrocarbons Ltd.  
112 - 4th Avenue S.W.  
Calgary, Alberta  
T2P 0H3

Attention: R. A. Beamish, P. Eng.  
Joint Interest Co-ordinator

Dear Sirs:

Re: Waskada Unit No. 3 - Third Enlargement

The Board hereby approves the enlargement of the Waskada Unit No. 3 as described in your letter of April 29, 1986 and modified by your letter of June 26, 1986. The effective date for the enlargement is July 1, 1986.

Please ensure that copies of revised Exhibits A and B are submitted at your earliest convenience.

With respect to the proposed fourth enlargement, please submit any additional information regarding tract factor calculations to the Petroleum Branch.

Yours sincerely,

ORIGINAL SIGNED BY  
CHARLES S. KANG

Charles S. Kang  
Chairman

LRD/1k

b.c. Wm. McDoanld  
B. Ball  
Petroleum Branch ✓

To Paulette  
Oekie

From: Bob

Re: Waskada Unit No. 3  
Enlargement No. 3

Effective July 1, 1986, the following  
wells are now in Waskada Unit No. 3

2-30-1-25 x

A7-30-1-25' x

8-30-1-25 x

7-36-1-26

16-36-1-26

1-5-2-25'

2-5-2-25'

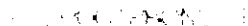
3-5-2-25'

4-5-2-25'

7-5-2-25'

8-5-2-25'

x Crown Wells.



JUNE 16, 1994

Attention: Mr. Bob Dubreuf

1. *Journal of the American Medical Association*, 1997; 277: 1033-1037.

Re: ~~Maskada~~ Unit No. 3 - Enlargement No. 3

41. Dave G. (Independent Owners) Dave executed the Joint Agreement - without signature of the Independent SOI - except the owners for Tract 42 and a "Joint Agreement" for Tract 43.

We request the approval of the Oil & Natural Gas Conservation Board for the proposed enlargement, including the above mentioned tracts, so we may have an effective date for the enlargement of July 1, 1986.

The royalty owners for the two excluded tracts do not appear to have any claim regarding that enlargement but have not returned an executed consent. We propose that a fourth enlargement will be carried out as quickly as possible to include these two tracts, and Lsd 4-36-1-06 WPM for which there is sufficient production from the new well to meet the tract participation requirements.

Revised Exhibits "A" and "B" to reflect this enlargement will be sent to you next week. We will also send copies of the execution pages.

Yours truly,

OMEGA HYDROCARBONS LTD.

22th March

R.A. Beamish, P. Eng.  
Joint Interest Coordinator

4AB;vb  
enc1.  
Waskada Unit No. 3 File

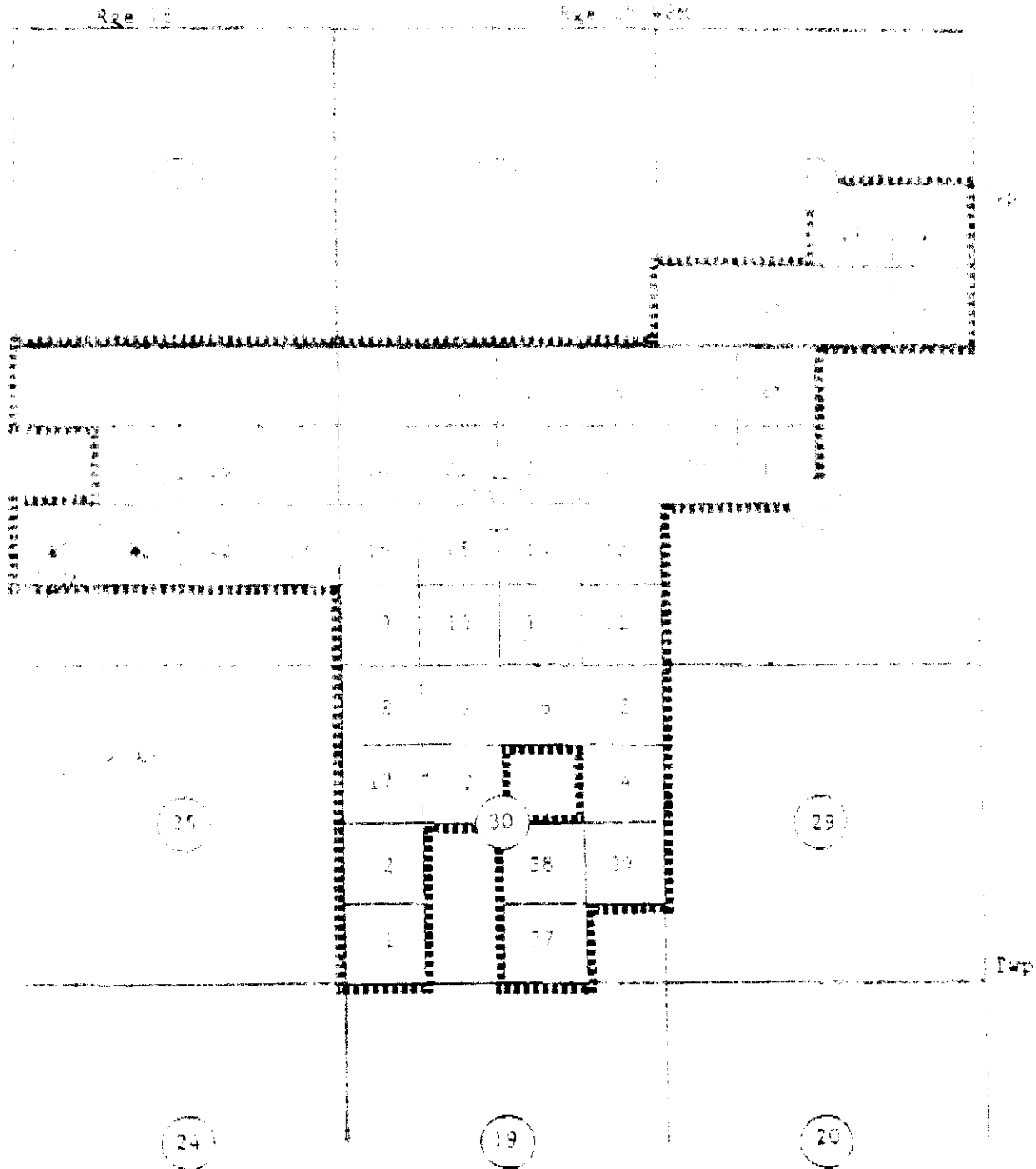


# EXHIBIT 12

ACQUISITION OF LAND IN THE STATE OF TEXAS

UNIT ACQUISITION - WATSON COUNTY, TEXAS

PLAT OF UNIT AREA



## LEGEND

Unit Outline

- Tract Number
- Section Number

Revision No. 1 1986-01-14

EFFECTIVE: AS OF THE DATE  
OF ENLARGEMENT NO. 1



Energy and Mines

Petroleum

555 — 330 Graham Avenue  
Winnipeg, Manitoba, CANADA  
R3C 4E3

(204) 945-6577

June 10, 1986

Omega Hydrocarbons Ltd.  
1300 Sunlife Plaza III  
112 - 4th Avenue S.W.  
CALGARY, Alberta  
T2P 0H3

Attention: R.A. Beamish  
Joint Interest Coordinator

Dear Sir:

Re: Waskada Unit No. 3 - Unit Agreement

Enclosed is a copy of the Waskada Unit No. 3 Agreement which has been executed by the Minister of Energy and Mines on behalf of the Crown as a royalty owner.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "L.R. Dubreuil". The signature is written in a cursive style with some ink bleed-through from the reverse side of the page.

L.R. Dubreuil  
Chief Petroleum Engineer  
Petroleum Branch

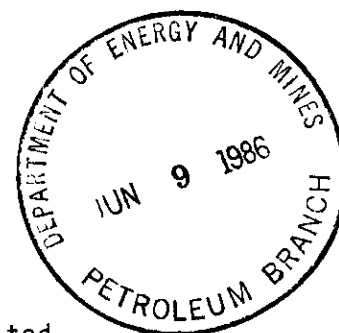
LRD:dah

encl



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

June 5, 1986



PanCanadian Petroleum Limited  
P.O. Box 2850, 150 - 9th Avenue S.W.  
Calgary, Alberta  
T2P 3S5

Dome Petroleum Limited  
20th Floor, 333 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 2Z1

Attention: Mr. J.S. Kelly

Attention: Mr. Karl Hansen

Gentlemen:

Re: Waskada Unit No. 3  
Enlargement No. 3

There is a concern by each of your companies regarding the natural gas rights for a portion of the area proposed for the captioned enlargement. Although the circumstances differ slightly, we believe there is a common answer which should satisfy the concern of each company. The problem arises for the Southeast quarter of Section 5-2-25 WPM, for which natural gas rights are held separately from petroleum rights, Omega did not lease certain natural gas rights, and there is no recognition of these facts in the Unit Agreement.

The definition in the Unit Agreement for Petroleum Substances, see sub-clause 101 (g), inadvertently includes "natural gas". Rather than having to pursue the much more difficult procedure of a revision to the document wording we propose to affix a notation in Exhibit "A" to each of the four tracts in the SE/4 of Section 5 as follows "Note (3) - Petroleum Substances does not include natural gas for this tract".

With such a note we believe that the separation of ownership of petroleum and natural gas in these lands should not pose a problem in clarity or for the owners of only natural gas rights. The unitized zone (Lower Amaranth) is a large oil pool developed on 40 acres spacing. To date there has been no gas cap found and no wells in this zone classed as gas well. As there is considerable well control up-dip from this Unit it is apparent that only petroleum and solution gas will ever be produced by the unit. Due to different working interest ownership and current plans it does not appear that this Unit will ever be expanded in any direction where the zone will contain natural gas and the wells be classified as gas wells.

As Unit No. 3 and any enlargements thereto is for the purpose of waterflooding the Lower Amaranth oil zone, Omega would not consider the inclusion of any lands which contained natural gas. We therefore would not treat any other area having natural gas differently from the SE/4 of Section 5-2-26 WPM.

A copy of this letter is being sent to the Manitoba Petroleum Branch and we believe at your request Mr. Clare Moster or Mr. Bob Dubreuil can confirm my statements regarding a gas-cap and classification of wells, and may express an opinion on the existence of petroleum only in the Lower Amaranth zone in and around Waskada Unit No. 3.

We trust this is the information you require to alleviate this concern, and look forward to receipt of an executed copy of the Unit Agreement.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to read 'T.J. Hall', written over the printed name.

T.J. Hall  
President

RAB:vb

c.c. Manitoba Petroleum Branch  
Waskada Unit No. 3 File



## Memorandum

Date May 14, 1986

To Charles S. Kang  
Deputy Minister of Energy & Mines  
309 Legislative Building

From H. Clare Moster  
Director, Petroleum Branch

Telephone

Subject Waskada Unit No. 3 - Enlargement No. 3

Omega Hydrocarbons Ltd. is proposing to enlarge the Waskada Unit No. 3 to include 13 additional tracts. This proposed enlargement involves 3 tracts (Lsd's) for which the Crown is the royalty interest owner (i.e. - mineral rights owner). Section 74 of The Mines Act states that before a Unitization Agreement may be put into effect, it must be approved by the Oil and Natural Gas Conservation Board. It further states that the Board shall not approve an agreement unless the royalty owners have agreed to the Unit operation. Therefore, Omega has submitted two copies of the proposed revised Unit Agreement for the Waskada Unit No. 3 for approval (execution) by the Minister, on behalf of the Crown, as an affected royalty owner.

Section 75 of The Mines Act states that the Minister, with the authorization of the Lieutenant Governor in Council, may enter such agreements on behalf of the Crown as a royalty owner.

### Recommendation:

It is recommended that the Minister:

1. Request authorization from Cabinet to permit him to enter into the enlarged Waskada Unit No. 3 unitization agreement on behalf of the Crown (draft OIC attached) with respect to Lsd's 2, 7 and 8 of Section 30-1-25 (WPM).
2. Execute the attached two copies of the Unit Agreement for the Waskada Unit No. 3 as a royalty owner.

### Discussion:

The 3 tracts in the proposed enlargement of the Waskada Unit No. 3 which contain Crown-owned mineral rights are Lsd's 2, 7 and 8 of Section 30-1-25 (WPM). These tracts are held under Crown Oil and Natural Gas Lease No. 2395 covering the southeast quarter of Section 30 by Omega Hydrocarbons Ltd. Omega has drilled 5 wells in Lsd's 1, 2, 8 and two in Lsd 7) on these lands. Currently, three of these wells (2-30, A7-30, 8-30) are producing from the Waskada Lower Amaranth A Pool. The wells 2-30 and 8-30-1-25 (WPM) produce at a combined rate of approximately  $46 \text{ m}^3$  per month or  $0.77 \text{ m}^3$  per day per well at a water-oil ratio  $7 \text{ m}^3$  per  $\text{m}^3$ . At such rates, both wells are marginally economic. The well A7-30-1-25 has not produced over a period of time long enough to establish an average monthly production rate.

With the proposed Unit enlargement and planned expansion of pressure maintenance operations in the area, it is likely that the productivity of these wells will be enhanced in the future. On this basis, inclusion of these tracts in the Unit is recommended.

By inclusion of these tracts in the Unit, the Crown will receive royalties based on allocated Unit production. The Branch has reviewed the Tract Participation Factors proposed for the tracts and feels they are reasonable.

The proposed enlarged Unit Agreement is of the same format as the existing Unit Agreement for Waskada Unit No. 3.

A handwritten signature in black ink, appearing to read 'H. Clare Moster', with a stylized, flowing script.

H. Clare Moster

HCM/lk



MANITOBA

ON MATTERS OF STATE

Order in Council

No. 583

The Honourable the Lieutenant Governor in Council  
Energy and Mines

The undersigned, the Minister of .....  
submits for approval of Council a report setting forth that:

WHEREAS Section 75 of "The Mines Act", being Chapter M160 of the Revised Statutes of Manitoba, provides as follows:  
\*75(1) Where the Crown is a working interest owner or royalty owner of a tract of land, the Lieutenant Governor in Council may authorize the minister, on behalf of the Crown, to enter into a unitization agreement for the unit operation of the pool or field, or part thereof, within which the tract is situated.

75(2) Notwithstanding any other provision of this Act or of an agreement or other disposition made under this Act, the Lieutenant Governor in Council may authorize the minister, on behalf of the Crown, to enter into an agreement for the calculation of the royalty payable to the Crown on the oil and gas produced from a unit area that includes a tract that is subject to the payment of a royalty to the Crown."

AND WHEREAS Omega Hydrocarbons Ltd. is the holder of Crown Oil and Natural Gas Lease No. 2395 covering the Southeast quarter of Section 30, in Township 1, Range 25, WPM;

AND WHEREAS Omega Hydrocarbons Ltd. is proposing to unitize its operations in part of the Waskada Lower Amaranth A Pool as Waskada Unit No.3, which unit includes the tracts described as Legal Subdivisions 2, 7 and 8 of Section 30, in Township 1, Range 25, WPM;

AND WHEREAS Omega Hydrocarbons Ltd. has requested agreement for the proposed unitization from the Crown as the royalty owner of the subject tracts;

AND WHEREAS in order to accomplish the more efficient and economical development and production of the oil and gas resources of the Waskada Lower Amaranth A Pool, it is deemed advisable for the Crown to enter into the said unitization agreement;

THEREFORE, he, the Minister, recommends:

THAT the Minister of Energy and Mines be authorized to enter into the Unit Agreement for Waskada Unit No. 3 in the form hereto annexed and marked as Schedule "A", or any form to the like effect.

Initiating Department/Agency	
Department/Agency	Authorized Officer
<i>[Signature]</i>	
Approved By	
C.S.C.	Finance
Approved as to form by:	
Name	<i>[Signature]</i>
Initials	
<i>[Signature]</i>	
Civil Litigation Branch: or Legislative Counsel:	

Signature .....

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

Upon consideration of the foregoing report and recommendation Council advises that it be done as recommended.

28 May 1986

Date

President

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this .....28th..... day of.....May..... A.D....1986...

*[Signature]*  
Lieutenant Governor

Location/Rst	X	Vsh	Ø	Ø(1-Vsh)	R <sub>LOG</sub>	R <sub>t</sub>	SW
2-30-1-25	.55	.35	14	9.1	2.5	2.8	74
Rsh=2.1	.45	.27	14	10.2	2.8	3.2	64
	0	0	6	6	4.0	4.0	87
	.15	.07	11.5	10.7	2.6	2.6	68
	?.09	.04	12	11.5	AVERAGE = 9.2	3.1	60
	*.09	.04	8.5	8.2	3.3	3.4	72
	.36	.19	10	8.1	3.0	3.3	74
	.45	.27	13	9.5	3.0	3.6	63
7A-30-1-25	.20	.10	13	11.7	3.0	3.2	57
Rsh=2.1	0	0	11	11.0	AVERAGE = 11	4.2	51
	.20	.10	6	5.47	4.0	4.4	90
	0	0	4	4	3.5	3.5	100
	.32	.17	12	10.0	3.0	3.3	62
8-30-1-25	.43	.27	14	10.2	2.3	2.4	73
Rsh=2.0	.43	.27	14	10.2	AVERAGE = 10.4	2.8	62
	0	0	2	2x	4.4	4.4	TIE
	0	0	11	11	3.0	3.0	61
	0	0	10	10	5.0	5.0	51
	.33	.17	13	10.8	3.0	3.3	60

SW  
AVERAGE  
=70

SW  
AVERAGE  
=57

90 TIE?  
100 TIE?

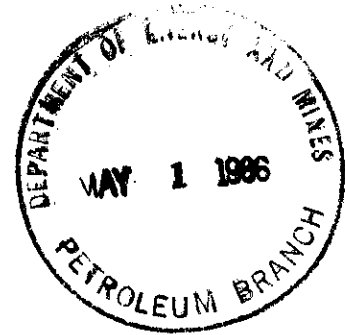
SW  
AVERAGE  
61





1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

April 29, 1986



Royalty Interest Owners  
Proposed Enlargement No. 3  
Waskada Unit No. 3  
(addressee list attached)

Gentlemen:

**Re: Proposed Enlargement No. 3**  
**Waskada Unit No. 3**

Encouraging results from waterflooding have been obtained in this unit and other parts of the Lower Amaranth (Spearfish) oil pool. We plan to enlarge Unit No. 3 to areas in which you have a royalty interest so that the waterflood project can be expanded.

Please signify your approval by signing the enclosed two copies of the Unit Agreement on page 21. If the royalty is held by an individual you should sign before an appropriate witness (Commissioner for Oaths, etc.). If the royalty is held by a corporation the appropriate officer(s) should sign, date, and affix the seal. One copy of the signed Unit Agreement is to be returned to Omega as soon as possible, and the other copy is for your file. If you live in the Waskada area, please drop the copy at our office there, otherwise please mail it to our Calgary office.

In order to expand the waterflood in this area of the Pool we must enlarge the unit and receive written approval of all parties affected. This is done by having all Royalty Interest Owners in the enlarged area approve by signing a Unit Agreement, and then applying to Manitoba Oil and Natural Gas Conservation Board for technical approval of the plan.

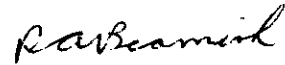
We expect to realize long term benefits for all parties through waterflooding by increasing the ultimate oil recovery. As a royalty Interest Owner in the Unit you share directly in these benefits. Unitization is required for a pressure maintenance project such as waterflooding so that the owner of any tract whose well is converted to water injection is properly compensated for the subsequent lack of oil production from such injection which contributes to the increased recovery from the surrounding producers.

Some of you have previously executed the Unit Agreement for this unit but your approval is again required pursuant to clause 901 on Page 11 of the agreement. The only change to the Unit Agreement are the revisions to Exhibits "A" and "B" as required by this enlargement. Tract participations have been calculated in the same manner as done for the original unit and previous enlargements, that is, on the basis of remaining recoverable oil in place and well productivity and we have followed the provisions set out in clause 903 on Page 13 of the agreement. Tract participations are shown on Exhibit "A".

If you have any questions regarding this matter, please call me collect at (403) 261-0743. An impartial third party opinion may be obtained by contacting Mr. Bob Dubreuil of the Manitoba Petroleum Branch at (204) 945-6574.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in cursive script, appearing to read "R.A. Beamish".

R.A. Beamish, P. Eng.  
Joint Interest Coordinator

RAB:vb

Encl.

c.c. Waskada Unit No. 3 file

**Waskada Unit No. 3**

**Enlargement No. 3**

**Royalty Interest Owner**

**Addressee List**

Dome Petroleum Ltd.  
3300, 333 - 7th Avenue S.W.  
Box 200, Station 'M'  
Calgary, Alberta  
T2P 0H8

Lee Oil Limited  
Box 656  
Carman, Manitoba  
ROG 0J0

James Alexander McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

William Lloyd McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Ltd.  
150 -9th Avenue S.W.  
P.O. Box 2850  
Calgary, Alberta  
T2P 2S5

Manitoba Oil and Natural Gas  
Conservation Board  
309 Legislative Building  
450 Broadway Avenue  
Winnipeg, Manitoba  
R3C 0V8

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Smart Oils Ltd.  
c/o Box 93  
Waskada, Manitoba  
ROM 2E0

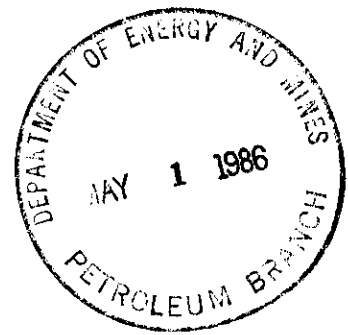
60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

Rural Municipality of Brenda  
Box 40  
Waskada, Manitoba  
ROM 2E0



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743



April 29, 1986

Manitoba Department of Energy & Mines  
Petroleum Branch  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

**Attention: Mr. Bob Dubreuil**

Dear Sir:

**Re: Waskada Unit No. 3, Enlargement No. 3**

I have enclosed a data package detailing our intended 13 tract enlargement of the captioned unit. You will note on the tract participation calculations that we have used the same criteria and formula as previously used for the original unit and enlargements 1 and 2. We would appreciate any comments you may have on the resulting tract factors etc. Thank you for your attention to this matter.

Yours truly,

OMEGA HYDROCARBONS LTD.

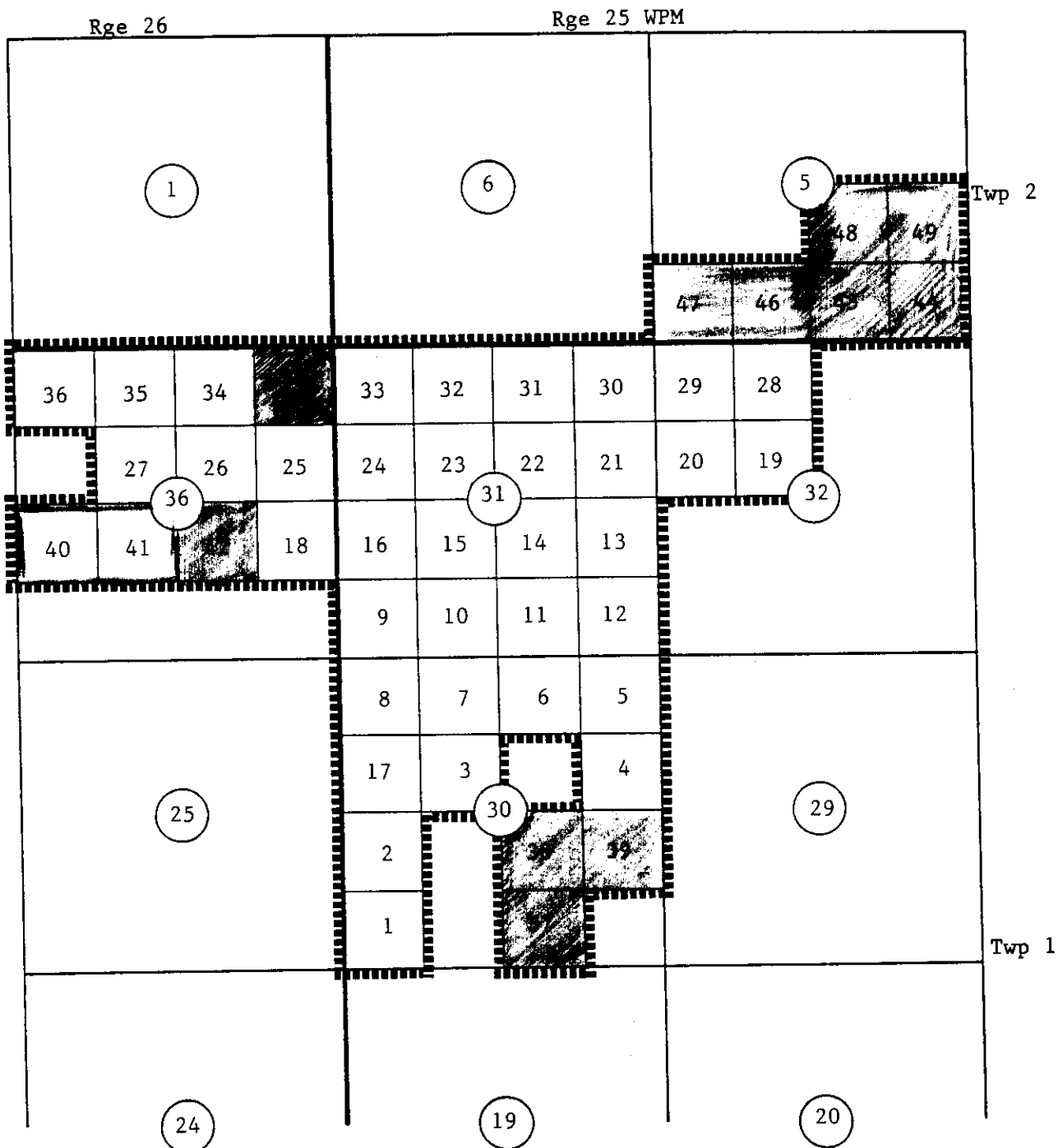
R.A. Beamish, P. Eng.  
Joint Interest Coordinator

RAB:vb  
Encl.  
c.c. Waskada Unit No. 3 File

# EXHIBIT "B"

Attached to and made part of an Agreement entitled  
 "Unit Agreement - Waskada Unit No. 3"

## PLAN OF UNIT AREA



### LEGEND

..... Unit Outline

8 Tract Number

31 Section Number

Revision No. 1 1986-01-14

EFFECTIVE: AS OF THE DATE  
 OF ENLARGEMENT NO. 3

## WASKADA LAM UNIT 3 TRACT FACTOR CALCULATIONS ENLARGEMENT TRACT PARTICIPATION - BASIC DATA

## PRODUCTION PERIOD # 1 ##										## PRODUCTION PERIOD # 2 ##									
TRACT#	LAND	OMEGA	WORKING	AREA	REC.	SW	Boi	PHI#	103-86 CUM#	FIRST 4 MONTHS PRODUCTION	##	##	##	##	##	##	##	##	##
DESCRIPTION	INT. (Z)	(Ha)	(frac)	(Ha)	(frac)	(a)	(a)	(a)	(a)	CDM. OIL	##	##	##	##	##	##	##	##	##
##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##	##
1	4-30-1-25	100.00000	16	0.25	0.40	1.17	1.50	3955.0	2191	914.5	559.8	##	##	##	##	##	##	##	##
2	5-30-1-25	100.00000	16	0.25	0.40	1.17	1.46	570.5	2280	151.3	327.0	##	##	##	##	##	##	##	##
3	11-30-1-25	100.00000	16	0.25	0.40	1.17	1.38	2991.2	2904	72.8	51.4	##	##	##	##	##	##	##	##
4	9-30-1-25	100.00000	16	0.25	0.40	1.17	1.33	902.3	2568	281.1	156.2	##	##	##	##	##	##	##	##
5	16-30-1-25	100.00000	16	0.25	0.40	1.17	1.29	2003.6	2000	420.5	435.4	##	##	##	##	##	##	##	##
6	15-30-1-25	100.00000	16	0.25	0.40	1.17	1.39	1773.3	1629	383.0	188.8	##	##	##	##	##	##	##	##
7	14-30-1-25	100.00000	16	0.25	0.40	1.17	1.28	1741.8	2152	527.3	435.9	##	##	##	##	##	##	##	##
8	13-30-1-25	100.00000	16	0.25	0.40	1.17	1.31	771.5	1914	158.4	617.8	##	##	##	##	##	##	##	##
9	4-31-1-25	100.00000	16	0.25	0.40	1.17	1.45	1601.7	2121	597.9	255.1	##	##	##	##	##	##	##	##
10	3-31-1-25	100.00000	16	0.25	0.40	1.17	1.44	2337.4	2328	820.0	43.0	##	##	##	##	##	##	##	##
11	2-31-1-25	100.00000	16	0.25	0.40	1.17	1.32	3437.5	2534	868.6	644.7	##	##	##	##	##	##	##	##
12	1-31-1-25	100.00000	16	0.25	0.40	1.17	1.05	3739.2	2857	610.8	778.2	##	##	##	##	##	##	##	##
13	8-31-1-25	100.00000	16	0.25	0.40	1.17	1.74	4038.5	2670	792.1	1311.2	##	##	##	##	##	##	##	##
14	7-31-1-25	100.00000	16	0.25	0.40	1.17	1.44	1360.5	1882	731.4	347.5	##	##	##	##	##	##	##	##
15	6-31-1-25	100.00000	16	0.25	0.40	1.17	1.62	2957.9	1917	810.2	169.6	##	##	##	##	##	##	##	##
16	5-31-1-25	100.00000	16	0.25	0.40	1.17	1.28	778.0	2309	467.4	118.8	##	##	##	##	##	##	##	##
17	12-30-1-25	100.00000	16	0.25	0.40	1.17	1.54	4632.1	2401	1297.8	254.1	##	##	##	##	##	##	##	##
18	8-36-1-26	100.00000	16	0.25	0.40	1.17	0.77	1344.0	2441	597.6	851.6	##	##	##	##	##	##	##	##
19	11-32-1-25	100.00000	16	0.25	0.40	1.17	1.58	1429.9	1703	515.0	539.3	##	##	##	##	##	##	##	##
20	12-32-1-25	100.00000	16	0.25	0.40	1.17	1.18	738.3	954	149.2	127.5	##	##	##	##	##	##	##	##
21	9-31-1-25	100.00000	16	0.25	0.40	1.17	1.46	3098.6	1947	555.8	694.4	##	##	##	##	##	##	##	##
22	10-31-1-25	100.00000	16	0.25	0.40	1.17	1.37	502.0	817	157.6	101.3	##	##	##	##	##	##	##	##
23	11-31-1-25	100.00000	16	0.25	0.40	1.17	1.26	1536.3	2468	530.2	610.7	##	##	##	##	##	##	##	##
24	12-31-1-25	100.00000	16	0.25	0.40	1.17	1.13	800.3	2260	463.2	786.4	##	##	##	##	##	##	##	##
25	9-36-1-26	100.00000	16	0.25	0.40	1.17	0.43	1670.7	1826	350.5	634.5	##	##	##	##	##	##	##	##
26	10-36-1-26	100.00000	16	0.25	0.40	1.17	1.03	1846.2	2229	937.1	129.8	##	##	##	##	##	##	##	##
27	11-36-1-26	100.00000	16	0.25	0.40	1.17	1.09	1747.8	2390	592.4	178.7	##	##	##	##	##	##	##	##
28	14-32-1-25	100.00000	16	0.25	0.40	1.17	1.46	2601.8	1312	54.4	631.7	##	##	##	##	##	##	##	##
29	13-32-1-25	100.00000	16	0.25	0.40	1.17	1.56	695.1	864	197.5	174.5	##	##	##	##	##	##	##	##
30	16-31-1-25	100.00000	16	0.25	0.40	1.17	1.45	1465.4	1437	547.9	367.7	##	##	##	##	##	##	##	##
31	15-31-1-25	100.00000	16	0.25	0.40	1.17	1.03	1028.4	1453	401.8	510.2	##	##	##	##	##	##	##	##
32	14-31-1-25	100.00000	16	0.25	0.40	1.17	1.12	427.1	2891	145.5	605.5	##	##	##	##	##	##	##	##
33	13-31-1-25	100.00000	16	0.25	0.40	1.17	1.13	513.0	1923	330.7	154.8	##	##	##	##	##	##	##	##
34	15-36-1-26	100.00000	16	0.25	0.40	1.17	1.34	1272.1	2622	692.7	195.3	##	##	##	##	##	##	##	##
35	14-36-1-26	100.00000	16	0.25	0.40	1.17	1.04	1578.5	2548	579.4	116.8	##	##	##	##	##	##	##	##
36	13-36-1-26	100.00000	16	0.25	0.40	1.17	1.23	2604.7	2219	868.1	150.3	##	##	##	##	##	##	##	##
SUBTOTALS:										74961	18571.7	14255.5	0	0.0	0.0	0.0	0.0	0.0	0.0
37	2-30-1-25	100.00000	16	0.25	0.40	1.17	0.66	1029.5	2502	361.8	331.0	##	##	##	##	##	##	##	##
38	7A-30-1-25	100.00000	16	0.25	0.40	1.17	1.20	1067.1	2290	1067.1	458.7	##	##	##	##	##	##	##	##

***** PRODUCTION PERIOD # 1 *****										***** PRODUCTION PERIOD # 2 *****									
TRACT#	LAND	DESCRIPTION	OMEGA	AREA	REC.	SW	Boi	PHI	103-86 CUM	FIRST 4 MONTHS PRODUCTION	HRS	OIL	WATER	HRS	OIL	WATER			
			WORKING	(FACT.)	(H <sub>2</sub> )	(frac)	(frac)	(m)	(m <sup>3</sup> )	(m <sup>3</sup> )									
*****										*****									
39	8-30-1-25		100.00000	16	0.25	0.40	1.17	0.92	1420.6	2940	324.3	1687.7							
40	5-36-1-26		100.00000	16	0.25	0.40	1.17	1.20	3345.0	2832	1138.5	144.5							
41	6-36-1-26		100.00000	16	0.25	0.40	1.17	1.15	933.0	2763	714.2	117.6							
42	7-36-1-26		100.00000	16	0.25	0.40	1.17	1.17	433.3	1957	429.7	73.5							
43	16-36-1-26		100.00000	16	0.25	0.40	1.17	0.81	333.0	2761	258.0	185.1							
44	1-5-2-25		100.00000	16	0.25	0.40	1.17	1.65	1024.8	1410	353.2	192.9							
45	2-5-2-25		100.00000	16	0.25	0.40	1.17	1.49	997.6	2245	398.6	168.9							
46	3-5-2-25		100.00000	16	0.25	0.40	1.17	1.78	1942.3	2735	173.6	5.3							
47	4-5-2-25		100.00000	16	0.25	0.40	1.17	0.81	597.6	2516	424.8	1215.6							
48	7-5-2-25		100.00000	16	0.25	0.40	1.17	1.22	996.8	2335	197.2	586.1							
49	8-5-2-25		100.00000	16	0.25	0.40	1.17	1.82	2028.8	1938	566.3	47.4							
*****										*****									
TOTALS:										106185	24979.0	19469.8	0	0.0	0.0	0.0	0.0	0.0	0.0
*****										*****									
AVERAGE OIL RATE (m <sup>3</sup> /operating day) FOR THE TOTAL UNIT: 5.6458										0.0000									
AVERAGE OIL CUT (oil/oil+water) FOR THE TOTAL UNIT: 56.2000%										0.0000%									

REMAINING : #RECOVERABLE:	RR OIL # OIL (m <sup>3</sup> ):	OIL RATE : # FACTOR :	OIL CUT : # FACTOR :	OIL RATE : # FACTOR :	OIL CUT : # FACTOR :	UN-ADJ. # TRACT :	ORIGINAL # TRACT :	ADJUSTED # TRACT :	TRACT # FACTOR :	LAND # DESCRIPTION :
# 27,165 :	1.4933 ##	0.3978 :	0.4770 ##	0.0000 :	0.0000 ##	0.0000 :	2.3701 :	3.4066 ##	2.5125 ##	1 : 4-30-1-25 :
# 29,720 :	1.5359 ##	0.0632 :	0.2433 ##	0.0000 :	0.0000 ##	0.0000 :	1.9424 :	2.6062 ##	1.9222 ##	2 : 5-30-1-25 :
# 25,639 :	1.4113 ##	0.0239 :	0.4508 ##	0.0000 :	0.0000 ##	0.0000 :	1.8860 :	2.3404 ##	1.7261 ##	3 : 11-30-1-25 :
# 26,691 :	1.4692 ##	0.1043 :	0.4943 ##	0.0000 :	0.0000 ##	0.0000 :	2.0678 :	2.7954 ##	2.0617 ##	4 : 9-30-1-25 :
# 24,760 :	1.3629 ##	0.2004 :	0.3778 ##	0.0000 :	0.0000 ##	0.0000 :	1.9411 :	2.6749 ##	1.9728 ##	5 : 16-30-1-25 :
# 27,065 :	1.4898 ##	0.2241 :	0.5151 ##	0.0000 :	0.0000 ##	0.0000 :	2.2290 :	3.0547 ##	2.2530 ##	6 : 15-30-1-25 :
# 24,814 :	1.3659 ##	0.2335 :	0.4210 ##	0.0000 :	0.0000 ##	0.0000 :	2.0204 :	2.7696 ##	2.0427 ##	7 : 14-30-1-25 :
# 26,407 :	1.4536 ##	0.0789 :	0.1569 ##	0.0000 :	0.0000 ##	0.0000 :	1.6894 :	2.8694 ##	2.1163 ##	8 : 13-30-1-25 :
# 28,481 :	1.5677 ##	0.2686 :	0.5390 ##	0.0000 :	0.0000 ##	0.0000 :	2.3753 :	3.2666 ##	2.4092 ##	9 : 4-31-1-25 :
# 27,538 :	1.5158 ##	0.3357 :	0.7307 ##	0.0000 :	0.0000 ##	0.0000 :	2.5822 :	3.5905 ##	2.6481 ##	10 : 3-31-1-25 :
# 23,948 :	1.3182 ##	0.3267 :	0.4414 ##	0.0000 :	0.0000 ##	0.0000 :	2.0863 :	2.1831 ##	2.1831 ##	11 : 2-31-1-25 :
# 18,045 :	0.9933 ##	0.2037 :	0.3382 ##	0.0000 :	0.0000 ##	0.0000 :	1.5352 :	2.4616 ##	1.8155 ##	12 : 1-31-1-25 :
# 32,061 :	1.7648 ##	0.2827 :	0.2896 ##	0.0000 :	0.0000 ##	0.0000 :	2.3371 :	3.3879 ##	2.4987 ##	13 : 8-31-1-25 :
# 28,515 :	1.5696 ##	0.3703 :	0.5214 ##	0.0000 :	0.0000 ##	0.0000 :	2.4613 :	2.7062 ##	1.9959 ##	14 : 7-31-1-25 :
# 30,652 :	1.6873 ##	0.4028 :	0.6359 ##	0.0000 :	0.0000 ##	0.0000 :	2.7260 :	3.7929 ##	2.7974 ##	15 : 6-31-1-25 :
# 25,778 :	1.4190 ##	0.1929 :	0.6132 ##	0.0000 :	0.0000 ##	0.0000 :	2.2251 :	2.5313 ##	1.8669 ##	16 : 5-31-1-25 :
# 27,318 :	1.5037 ##	0.5151 :	0.6431 ##	0.0000 :	0.0000 ##	0.0000 :	2.6619 :	3.2925 ##	2.4284 ##	17 : 12-30-1-25 :
# 14,631 :	0.8054 ##	0.2333 :	0.3171 ##	0.0000 :	0.0000 ##	0.0000 :	1.3558 :	1.8620 ##	1.3733 ##	18 : 8-36-1-26 :
# 31,350 :	1.7257 ##	0.2882 :	0.3757 ##	0.0000 :	0.0000 ##	0.0000 :	2.3896 :	3.2327 ##	2.3843 ##	19 : 11-32-1-25 :
# 23,743 :	1.3069 ##	0.1490 :	0.4147 ##	0.0000 :	0.0000 ##	0.0000 :	1.8706 :	2.4835 ##	1.8317 ##	20 : 12-32-1-25 :
# 27,192 :	1.4968 ##	0.2720 :	0.3419 ##	0.0000 :	0.0000 ##	0.0000 :	2.1107 :	2.9830 ##	2.2001 ##	21 : 9-31-1-25 :
# 27,921 :	1.5369 ##	0.1838 :	0.4681 ##	0.0000 :	0.0000 ##	0.0000 :	2.1688 :	2.8789 ##	2.1233 ##	22 : 10-31-1-25 :
# 24,605 :	1.3544 ##	0.2047 :	0.3574 ##	0.0000 :	0.0000 ##	0.0000 :	1.9165 :	2.5919 ##	1.9116 ##	23 : 11-31-1-25 :
# 22,643 :	1.2464 ##	0.1953 :	0.2851 ##	0.0000 :	0.0000 ##	0.0000 :	1.7268 :	2.3075 ##	1.7019 ##	24 : 12-31-1-25 :
# 7,250 :	0.3991 ##	0.1829 :	0.2737 ##	0.0000 :	0.0000 ##	0.0000 :	0.8557 :	1.2106 ##	0.8929 ##	25 : 9-36-1-26 :
# 19,523 :	1.0747 ##	0.4007 :	0.6755 ##	0.0000 :	0.0000 ##	0.0000 :	2.1509 :	2.9551 ##	2.1795 ##	26 : 10-36-1-26 :
# 20,866 :	1.1486 ##	0.2362 :	0.5908 ##	0.0000 :	0.0000 ##	0.0000 :	1.9756 :	2.6939 ##	1.9869 ##	27 : 11-36-1-26 :
# 27,688 :	1.5241 ##	0.0395 :	0.0610 ##	0.0000 :	0.0000 ##	0.0000 :	1.6246 :	2.2073 ##	1.6280 ##	28 : 14-32-1-25 :
# 31,670 :	1.7433 ##	0.2178 :	0.4083 ##	0.0000 :	0.0000 ##	0.0000 :	2.3694 :	3.1192 ##	2.3005 ##	29 : 13-32-1-25 :
# 28,617 :	1.5752 ##	0.3634 :	0.4602 ##	0.0000 :	0.0000 ##	0.0000 :	2.3988 :	3.2153 ##	2.3714 ##	30 : 16-31-1-25 :
# 20,341 :	1.1197 ##	0.2635 :	0.3388 ##	0.0000 :	0.0000 ##	0.0000 :	1.7220 :	2.2812 ##	1.6825 ##	31 : 15-31-1-25 :
# 22,809 :	1.2555 ##	0.0480 :	0.1490 ##	0.0000 :	0.0000 ##	0.0000 :	1.4525 :	1.9232 ##	1.4184 ##	32 : 14-31-1-25 :
# 22,931 :	1.2622 ##	0.1639 :	0.5238 ##	0.0000 :	0.0000 ##	0.0000 :	1.9499 :	2.1125 ##	1.9268 ##	33 : 13-31-1-25 :
# 26,528 :	1.4602 ##	0.2518 :	0.5959 ##	0.0000 :	0.0000 ##	0.0000 :	2.3119 :	3.1260 ##	2.3056 ##	34 : 15-36-1-26 :
# 19,998 :	1.1008 ##	0.2167 :	0.6400 ##	0.0000 :	0.0000 ##	0.0000 :	1.9575 :	2.6744 ##	1.9725 ##	35 : 14-36-1-26 :
# 22,914 :	1.2613 ##	0.3729 :	0.6556 ##	0.0000 :	0.0000 ##	0.0000 :	2.2897 :	3.1351 ##	2.3122 ##	36 : 13-36-1-26 :
# 897,817 :	49.4205 ##	8.5081 :	15.8253 ##	0.0000 :	0.0000 ##	0.0000 :	73.7539 :	100.0000 ##	73.7539 ##	73-7539 ##
# 12,663 :	0.8970 ##	0.1378 :	0.4016 ##	0.0000 :	0.0000 ##	0.0000 :	1.2364 :	##	##	2-30-1-25 :
# 23,829 :	1.3117 ##	0.4441 :	0.5378 ##	0.0000 :	0.0000 ##	0.0000 :	2.2936 :	##	##	7A-30-1-25 :
# 17,666 :	0.9724 ##	0.1051 :	0.1240 ##	0.0000 :	0.0000 ##	0.0000 :	1.2015 :	##	##	8-30-1-25 :
# 21,551 :	1.1863 ##	0.3931 :	0.6824 ##	0.0000 :	0.0000 ##	0.0000 :	2.2518 :	##	##	5-36-1-26 :



```

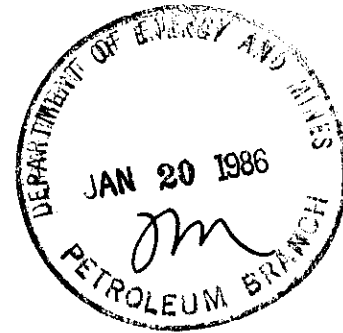
# REMAINING : RR OIL ## OIL RATE : OIL CUT ## OIL RATE : OIL CUT ## UN-ADJ. # ORIGINAL ## ADJUSTED ##TRACT: # LAND #
#RECOVERABLE: FACTOR ## FACTOR ## FACTOR ## FACTOR ## FACTOR ## TRACT ## TRACT ## ; DESCRIPTION #
# OIL (m^3) : ## # 1 : # 1 ## # 2 : # 2 ## FACTOR : FACTOR : FACTOR : FACTOR : FACTOR : FACTOR : FACTOR : FACTOR :
#####
# 22,926 : 1.2620 ## 0.2463 : 0.6603 ## 0.0000 : 0.0000 ## 2.1686 # 2.1686 ## 41 : 6-36-1-26 #
# 23,840 : 1.3123 ## 0.2693 : 0.6567 ## 0.0000 : 0.0000 ## 2.1783 # 2.1783 ## 42 : 7-36-1-26 #
# 16,472 : 0.9067 ## 0.0890 : 0.4478 ## 0.0000 : 0.0000 ## 1.4435 # 1.4435 ## 43 : 16-36-1-26 #
# 33,207 : 1.8279 ## 0.2387 : 0.4974 ## 0.0000 : 0.0000 ## 2.5640 # 2.5640 ## 44 : 1-5-2-25 #
# 29,915 : 1.6467 ## 0.1692 : 0.5402 ## 0.0000 : 0.0000 ## 2.3561 # 2.3561 ## 45 : 2-5-2-25 #
# 34,987 : 1.9259 ## 0.0605 : 0.7463 ## 0.0000 : 0.0000 ## 2.7327 # 2.7327 ## 46 : 3-5-2-25 #
# 16,207 : 0.8921 ## 0.1609 : 0.1992 ## 0.0000 : 0.0000 ## 1.2522 # 1.2522 ## 47 : 4-5-2-25 #
# 24,314 : 1.3384 ## 0.0805 : 0.1936 ## 0.0000 : 0.0000 ## 1.6125 # 1.6125 ## 48 : 7-5-2-25 #
# 35,730 : 1.9568 ## 0.2785 : 0.7096 ## 0.0000 : 0.0000 ## 2.9549 # 2.9549 ## 49 : 8-5-2-25 #
#####
# 1,211,124 : 65.6667 ## 11.1111 : 22.2222 ## 0.0000 : 0.0000 ## 100.0000 # 100.0000 ##
#####

```



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

January 15, 1986



→ Bob?  
file

Waskada Unit No. 3  
Royalty Owners  
(addressee list attached)

Gentlemen:

Re: Revision of Exhibits "A" and "B"

Mechanical revisions have been made to the captioned exhibits as follows:

Exhibit "A"

Page 1	Assignment of D.E. Young's interest equally to two corporations.
Page 3	Tract #18 - as above
Page 4	Tracts #25 and #26 - as above Tract #26 - correction of the Range No. in the Land Description.
Page 5	Tracts #32 and #33 - correction of the Range No. in the Land Description.

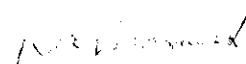
Exhibit "B"

Correction of the Numbers for each of  
Tracts #9-12, inclusive.

Enclosed for your files is a copy of each of the revised pages.

Yours truly,

OMEGA HYDROCARBONS LTD.

  
R.A. Beamish, P. Eng.  
Chairman - Operating Committee

RAB:vb  
c.c. Conservation Board (2 copies)  
Dept. of Energy & Mines (2 copies)  
Land  
Accounting

WASKADA UNIT NO. 3  
ROYALTY INTEREST OWNER  
ADDRESSEE LIST

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

DA-KA-DAL Enterprises Ltd.  
Waskada, Manitoba  
ROM 2E0

Department of Energy & Mines  
and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4  
Attention: R. Harrison  
Director, General Land  
Management

Dome Petroleum Limited  
3300, 333 - 7th Avenue S.W.  
Box 200, Station 'M'  
Calgary, Alberta  
T2P 0H8

Lee Oil Limited  
Box 656  
Carman, Manitoba  
R0G 0J0

James Alexander McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

William Lloyd McKinney  
Box 70  
Waskada, Manitoba  
ROM 2E0

PanCanadian Petroleum Limited  
150 - 9th Avenue S.W.  
Calgary, Alberta  
T2P 2S5

Que West Resources Ltd.  
501 Pembina Place  
1035 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3E9

RWR Resources Ltd.  
c/o R.J. Temple  
Box 353  
Carnduff, Saskatchewan  
S0C 0S0

Smart Oils Ltd.  
C/o Box 93  
Waskada, Manitoba  
ROM 2E0

Ralph F. Spurrier  
5915 Meghan Way  
Sacramento, California  
U.S.A. 95842

Trewin Holdings Ltd.  
Box 175  
Waskada, Manitoba  
ROM 2E0

Triton Petroleums Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

60273 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70,  
Waskada, Manitoba  
ROM 2E0

60274 Manitoba Ltd.  
c/o Dorothy E. Young  
Box 70  
Waskada, Manitoba  
ROM 2E0

July 31, 1985

Omega Hydrocarbons Ltd.  
1300 Sun Life Plaza III  
112 - 4th Avenue S.W.  
Calgary, Alberta  
T2P 0H3

Attention: Mr. R. A. Beamish, P. Eng.  
Manager - Engineering

Dear Sirs:

Re: Waskada Unit No. 3  
Second Enlargement

On behalf of The Oil and Natural Gas Conservation Board, we acknowledge receipt of your letter of July 26, 1985 with the attached copies of Exhibits A and B for the subject Unit Agreement.

Yours sincerely,

*Original Signed by H. C. Mooster*

H. Clare Mooster, P. Eng.  
Director, Petroleum Branch

LRD/1k



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

July 26, 1985

The Oil & Natural Gas Conservation Board  
309 Legislative Building,  
450 Broadway Avenue,  
Winnipeg, Manitoba  
T3C 0V8

Attention: Mr. R.B. Chenier

Dear Sir,

Re: Waskada Unit No. 3 - Enlargement No. 2

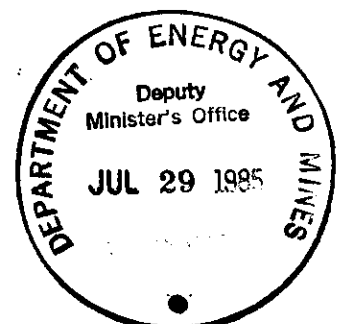
In accordance with Section 205 of the Waskada Unit No. 3 -  
Enlargement No. 2 Agreement, I enclose herewith two copies of Exhibit  
A and B for your records.

Yours truly,  
OMEGA HYDROCARBONS LTD.,

A handwritten signature in dark ink, appearing to read "R.A. Beamish".

R.A. Beamish, P. Eng.  
Manager - Engineering

RAB:ad  
Encls.



July 16, 1985

Omega Hydrocarbons Ltd.  
1300 Sun Life Plaza III  
112 - 4th Avenue S.W.  
Calgary, Alberta  
T2P 0H3

Attention: Mr. R. A. Beamish,  
Manager - Engineering

Dear Sirs:

Re: Waskada Unit No. 3 - Second Enlargement

The Board hereby approves the enlargement of the Waskada Unit No. 3 (as outlined on Figure 1 attached) as provided for in the Unit Agreement. Pursuant to section 905 of the Unit Agreement, enlargement of the Unit will be effective August 1, 1985.

Yours sincerely,

THE OIL AND NATURAL GAS  
Conservation Board

ORIGINAL SIGNED BY  
WM. M. McDONALD, P. ENG

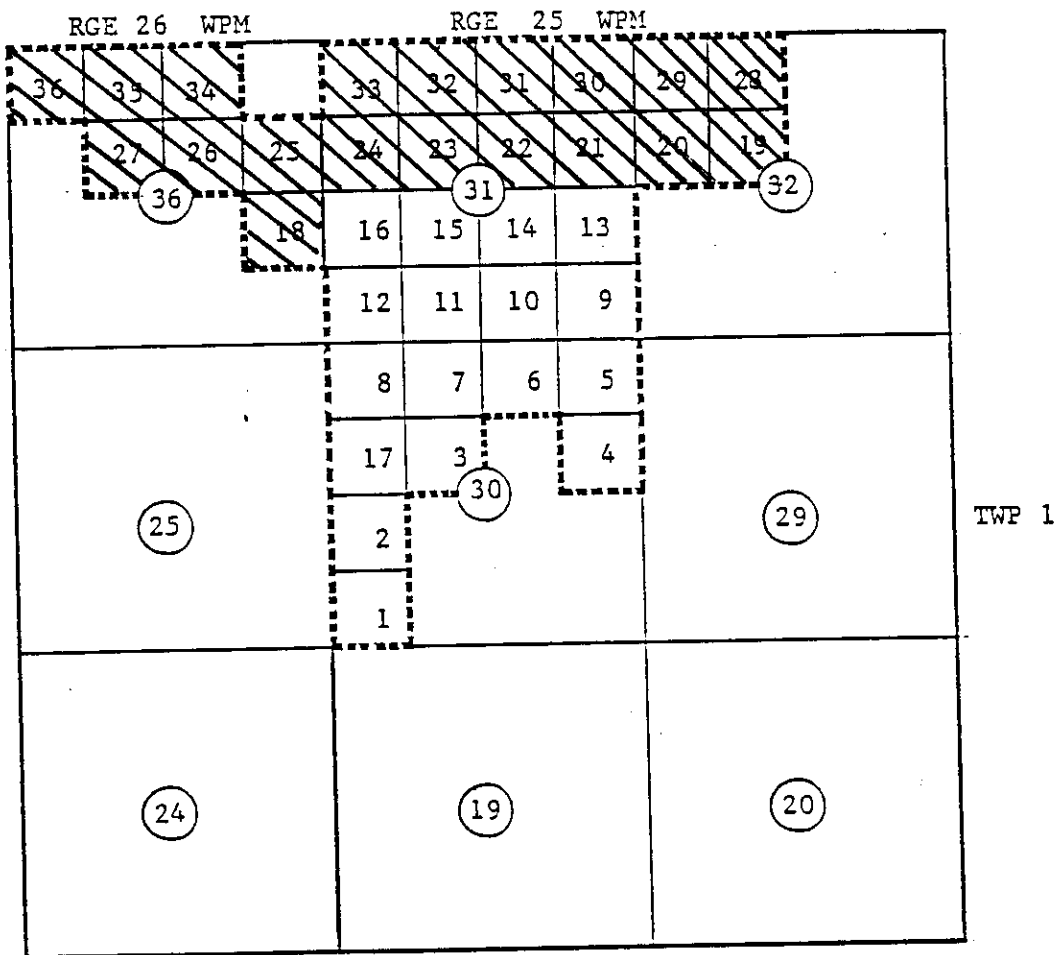
WM. McDONALD  
Deputy Chairman

LRD/1k


O.C. Petroleum Branch ✓  
J. F. Redgwell

~~CONFIDENTIAL~~

### PLAN OF UNIT AREA



- - - - Unit Outline  
 8 Tract Number  
 (31) Section Number

 AREA OF  
SECOND  
ENLARGEMENT

EFFECTIVE:  
AS OF THE DATE  
OF ENLARGEMENT No 2



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743

June 26, 1985

Manitoba Oil & Gas  
Conservation Board  
309 Legislative Building  
450 Broadway Ave.,  
Winnipeg, Manitoba  
R3C 0V8

Attention: Mr. G. McDonald

Dear Sir,

Re: Waskada Unit No. 3 - Enlargement No. 2

All Working Interest and Royalty Interest owners have executed the Unit Agreement - Waskada Unit No. 3 - Enlargement No. 2. In this connection we are enclosing counterpart execution pages for your records.

Also enclosed are two copies each of Exhibits "A" and "B" which reflect the Unit Agreement changes for this enlargement.

We request the approval of The Oil & Natural Gas Conservation Board to the Unit Agreement so that we may have an effective date of August 1, 1985.

Yours truly,  
OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to read "R.A. Beamish".

R.A. Beamish  
Manager - Engineering

RAB:ad  
Encls.

c.c. Dept. of Mines & Minerals



## EXHIBIT "A"

TRACT No.	Land Description (Lsd)	Excepted Zone	Working Interest		Royalty Interests		Tract Participation (%)
			Working Interest Owner	Share of Working Interest (%)	Royalty Interest Owner	Share of Royalty Interest (%)	
1	4-30-1-25 WPM	Mission Canyon	Omega	100	Federal Dept. of Energy Mines & Res. PanCanadian (1) Que West (1) Triton (1)	100	3.4066
2	5-30-1-25 WPM	Mission Canyon	Omega	100	Federal Dept. of Energy Mines & Res. PanCanadian (1) Que West (1) Triton (1)	100	2.6062
3	11-30-1-25 WPM	Mission Canyon	Omega	100	Canada Trust Co. Que West (1) Triton (1)	100	2.3404
4	9-30-1-25 WPM	Mission Canyon	Omega	100	Trewin Holdings Ltd.	100	2.7954
5	16-30-1-25 WPM	Mission Canyon	Omega	100	Trewin Holdings Ltd.	100	2.6749
6	15-30-1-25 WPM	Mission Canyon	Omega	100	Trewin Holdings Ltd.	100	3.0547
7	14-30-1-25 WPM	Mission Canyon	Omega	100	Canada Trust Co. Que West (1) Triton (1)	100	2.7696
8	13-30-1-25 WPM	Mission Canyon	Omega	100	Canada Trust Co. Que West (1) Triton (1)	100	2.8694

EFFECTIVE:

AS OF THE EFFECTIVE DATE  
OF ENLARGEMENT NO. 2

TRACT No.	Land Description (Lsd)	Excepted Zone	Working Interest		Royalty Interests		Tract Participation (%)
			Working Interest Owner	Share of Working Interest (%)	Royalty Interest Owner	Share of Royalty Interest (%)	
9	4-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	3.2666
10	3-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	3.5905
11	2-31-1-25 WPM	Mission Canyon	Omega	100	R.F. Spurrier Trewin Holdings Ltd.	50 50	2.9600
12	1-31-1-25 WPM	Mission Canyon	Omega	100	R.F. Spurrier Trewin Holdings Ltd.	50 50	2.4616
13	8-31-1-25 WPM	Mission Canyon	Omega	100	R.F. Spurrier Trewin Holdings Ltd.	50 50	3.3879
14	7-31-1-25 WPM	Mission Canyon	Omega	100	R.F. Spurrier Trewin Holdings Ltd.	50 50	2.7062
15	6-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	3.7929
16	5-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	2.5313
17	12-30-1-25 WPM	Mission Canyon	Omega	100	Canada Trust Co. Que West Triton (1) (1)	100	3.2925
18	8-36-1-26 WPM	Mission Canyon	Omega	100	D.E. Young W.L. McKinney J.S. McKinney	33 1/3 33 1/3 33 1/3	1.8620

TRACT No.	Land Description (Lsd)	Excepted Zone	Working Interest		Royalty Interests		Participation (%)
			Working Interest Owner	Share of Working Interest (%)	Royalty Interest Owner	Share of Royalty Interest (%)	
19	11-32-1-25 WPM	Mission Canyon	Omega	100	Dome Pet. Ltd. RWR Resources Ltd. Smart Oils Ltd.	50 37 1/4 12 1/2	3.2327
20	12-32-1-25 WPM	Mission Canyon	Omega	100	Dome Pet. Ltd. RWR Resources Ltd. Smart Oils Ltd.	50 37 1/4 12 1/2	2.4835
21	9-31-1-25 WPM	Mission Canyon	Omega	100	RWR Resources Ltd. Smart Oils Ltd.	75 25	2.9830
22	10-31-1-25 WPM	Mission Canyon	Omega	100	RWR Resources Ltd. Smart Oils Ltd.	75 25	2.8789
23	11-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	2.5919
24	12-31-1-25 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	2.3075
25	9-36-1-26 WPM	Mission Canyon	Omega	100	D.E. Young W.L. McKinney J.A. McKinney	33 1/3 33 1/3 33 1/3	1.2106
26	10-36-1-26 WPM	Mission Canyon	Omega	100	D.E. Young W.E. McKinney J.A. McKinney	33 1/3 33 1/3 33 1/3	2.9551
27	11-36-1-25 WPM	Mission Canyon	Omega	100	Lee Oil Limited Hudson's Bay (1)	100	2.6939
28	14-32-1-25 WPM	Mission Canyon	Omega	100	Dome Pet. Ltd. RWR Resources Ltd. Smart Oils Ltd.	50 37 1/4 12 1/2	2.2073

TRACT No.	Land Description (Lsd)	Excepted Zone	Working Interest		Royalty Interests		Tract Participation (%)
			Working Interest Owner	Share of Working Interest (%)	Royalty Interest Owner	Share of Royalty Interest (%)	
29	13-32-1-25 WPM	Mission Canyon	Omega	100	Dome Pet. Ltd. RWR Resources Ltd. Smart Oils Ltd.	50 37½ 12½	3.1192
30	16-31-1-25 WPM	Mission Canyon	Omega	100	RWR Resources Ltd. Smart Oils Ltd.	75 25	3.2153
31	15-31-1-25 WPM	Mission Canyon	Omega	100	RWR Resources Ltd. Smart Oils Ltd.	75 25	2.2812
32	14-31-1-26 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	1.9232
33	13-31-1-26 WPM	Mission Canyon	Omega	100	DA-KA-DAL	100	2.6125
34	15-36-1-26 WPM	Mission Canyon	Omega	100	D.E. Young W.L. McKinney J.A. McKinney	33 1/3 33 1/3 33 1/3	3.1260
35	14-36-1-26 WPM	Mission Canyon	Omega	100	Lee Oil Limited Hudson's Bay (1)	100	2.6744
36	13-36-1-26 WPM	Mission Canyon	Omega	100	Lee Oil Limited Hudson's Bay (1)	100	3.1351

NOTES:

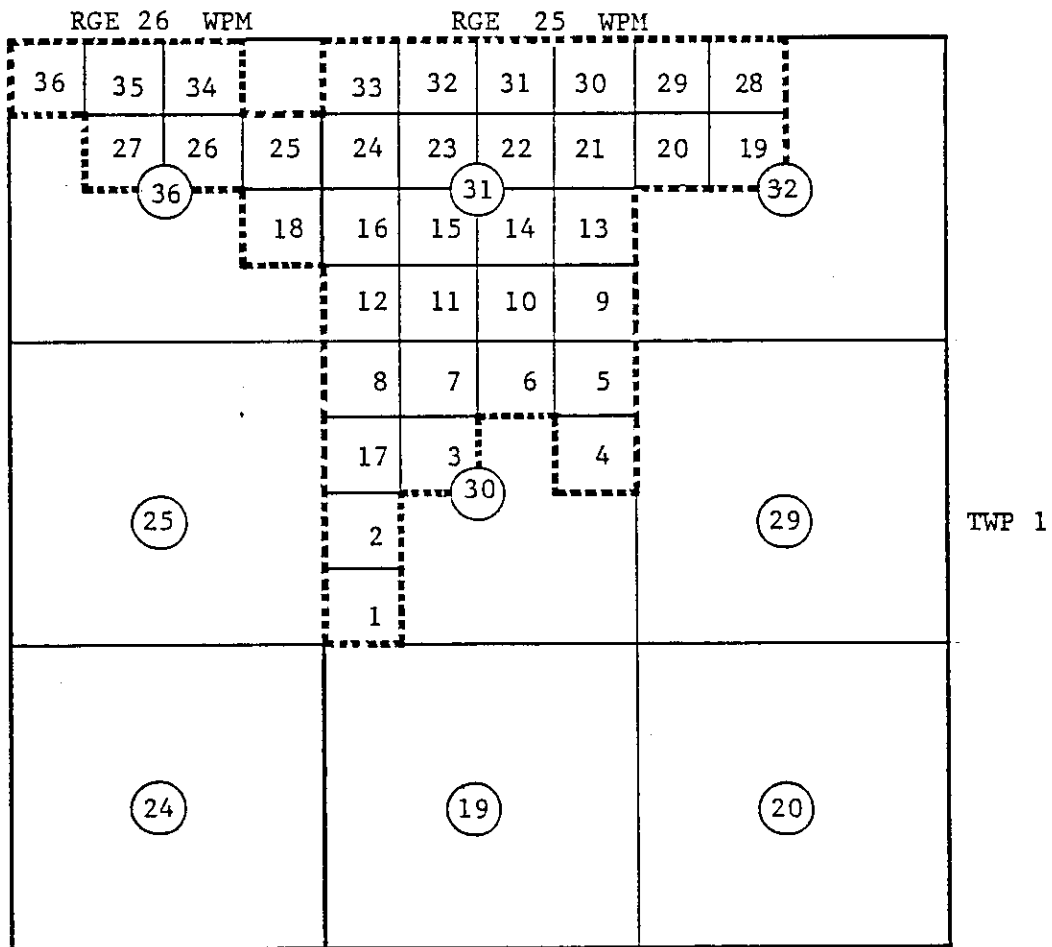
(1) Gross overriding royalty interest.

EFFECTIVE:  
AS OF THE EFFECTIVE DATE OF  
ENLARGEMENT No. 2

# EXHIBIT "B"

Attached to and made part of an Agreement entitled  
 "Unit Agreement - Waskada Unit No.3"

## PLAN OF UNIT AREA



### Legend

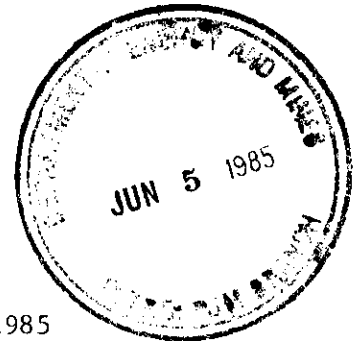
- Unit Outline
- 8 Tract Number
- (31) Section Number

EFFECTIVE:

AS OF THE DATE  
 OF ENLARGEMENT No.2



1300 SUN LIFE PLAZA III  
112 - 4th AVENUE S.W.  
CALGARY, ALBERTA, CANADA T2P 0H3  
TELEPHONE (403) 261-0743



June 3, 1985

Manitoba Petroleum Branch  
555 - 330 Graham Avenue  
Winnipeg  
Manitoba  
R3C 4EG

Attention: Mr. Bob Dubreuil

Dear Sir,

Re: Tract Factor Calculations  
Waskada Unit No. 2 - Enlargement  
Waskada Unit No. 3 - Enlargement  
Waskada Unit No. 8 - Proposal

In your recent conversation with Mr. Jack Hall it was mentioned that we propose to enlarge some of the current units and form new ones so that pressure maintenance by waterflooding can be initiated as soon as possible after development. This procedure will be on-going to include each summer's drilling program and any other recompletions or appropriate changes.

As requested at that meeting, we will forward the tract factor calculations prior to the request for approval and establishment of an effective date. For each of the captioned units we have sent out documents for execution.

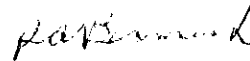
The formula utilized in each case is the same as that which we have used previously. That is, unitization or enlargement is based on Remaining Recoverable Oil by Waterflooding (2/3), Oil Rate (1/9), and Oil Cut (2/9). The latter two factors are based on the first four months of a well's production history. To obtain remaining reserves, recent cumulative production values are incorporated. The end of the month cut-off for the cumulative values reflect a convenient date to complete unit documentation, and are shown with the calculations. Documents for enlargement of Unit No. 3 were mailed out first (cumulatives to December 31, 1984), then those for the proposed Unit No. 8 were mailed (cumulatives to February 28, 1985), and we recently sent out those for enlargement of Unit No. 2. (cumulatives to April 30, 1985).

In each enlargement, the ratio of tract participations for the original tracts remains the same to each other as shown with the calculations.

Additional unitization is in progress and the tract factor calculations will be forwarded to you as soon as possible.

If you have any questions or if I can be of further assistance, please do not hesitate to call.

Yours truly,  
OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to read 'R.A. Beamish', written in a cursive style.

R.A. Beamish  
Manager - Engineering

RAB:ad  
Encls.

WASKADA LAM UNIT 3 TRACT FACTOR CALCULATIONS

TRACT	LAND	PHI <th (m)<="" th=""><th>112-84 CUM.</th><th>MONTH 1 PROD.</th><th>MONTH 2 PROD.</th><th>MONTH 3 PROD.</th><th>MONTH 4 PROD.</th></th>	<th>112-84 CUM.</th> <th>MONTH 1 PROD.</th> <th>MONTH 2 PROD.</th> <th>MONTH 3 PROD.</th> <th>MONTH 4 PROD.</th>	112-84 CUM.	MONTH 1 PROD.	MONTH 2 PROD.	MONTH 3 PROD.	MONTH 4 PROD.
:	DESCRIPTION	:	OIL (m <sup>3</sup> )	HRS	OIL	HRS	OIL	
:	:	:	:	:	:	:	:	
1	4-30-1-25	1.50	2547.5	504	232.1	131.9	744	
2	5-30-1-25	1.46	569.5	120	7.6	18.6	744	
3	11-30-1-25	1.38	2181.9	696	23.2	1.5	744	
4	9-30-1-25	1.33	761.7	384	71.1	6.3	720	
5	16-30-1-15	1.29	1567.0	312	80.3	61.0	300	
6	15-30-1-25	1.39	1773.3	336	111.7	48.6	271	
7	14-30-1-25	1.28	1339.9	456	101.8	109.1	232	
8	13-30-1-25	1.31	770.5	96	6.8	27.3	672	
9	4-31-1-25	1.45	1405.7	288	79.6	33.9	720	
10	3-31-1-25	1.44	1984.4	240	62.2	5.3	672	
11	2-31-1-25	1.32	3100.5	384	157.1	66.3	686	
12	1-31-1-25	1.05	2377.8	676	207.5	93.2	744	
13	8-31-1-25	1.74	2555.4	555	266.0	137.9	682	
14	7-31-1-25	1.44	1360.5	53	2.5	9.4	388	
15	6-31-1-25	1.62	2748.4	384	94.8	43.3	208	
16	5-31-1-25	1.28	778.0	520	148.8	51.3	504	
17	12-30-1-25	1.54	3079.8	285	87.0	22.4	736	
SUBTOTALS:				6289	1740.1	867.3	9767	
18	8-36-1-26	0.77	734.8	224	56.0	82.0	756	
19	11-32-1-25	1.58	515.0	4	1.0	1.5	240	
20	12-32-1-25	1.18	149.2	210	57.6	25.8	744	
21	9-31-1-25	1.46	555.8	217	54.3	57.9	327	
22	10-31-1-25	1.37	157.6	73	33.7	12.6	744	
23	11-31-1-25	1.26	1069.5	312	119.0	61.8	744	
24	12-31-1-25	1.13	624.5	32	6.4	13.8	768	
25	9-36-1-26	0.43	1080.7	138	32.1	46.9	727	
26	10-36-1-26	1.03	1123.3	162	98.4	17.2	760	
27	11-36-1-26	1.09	1384.7	292	106.6	46.0	692	
28	14-32-1-25	1.46	1932.8	24	0.2	3.3	552	
29	15-32-1-25	1.56	197.5	120	36.4	8.5	744	
30	16-31-1-25	1.45	547.9	36	17.1	7.4	657	
31	15-31-1-25	1.03	401.8	709	180.9	197.2	744	
32	14-31-1-25	1.12	291.5	687	48.7	293.4	744	
33	13-31-1-25	1.13	442.5	152	54.3	23.4	492	
34	15-36-1-26	1.34	864.5	430	195.8	38.0	766	
35	14-36-1-26	1.04	1169.7	415	164.6	36.9	731	
36	13-36-1-26	1.23	2124.5	127	15.3	7.2	668	
TOTALS:				10653	3018.5	1848.1	22367	
							6052.0	
							4411.4	
							21001	
							5028.5	
							3928.8	
							20940	
							4472.7	
							4067.2	



TRACT	LAND	REM REC	DIP	OIL RATE	OIL RATE	OIL CUT	UN-ADJ.	ORIGINAL	ADJUSTED	DIP	OIL RATE	OIL RATE	OIL CUT	OIL CUT	TRACT
	DESCRIPTION	(DIP	FACTOR	FACTOR	FACTOR	FACTOR	TRACT FACT.	TRACT FACT.	TRACT FACT.	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	4-30-1-25	40,053	2.0963	1.6847	0.5255	1.0965	0.6734	3.2952	6.7448	3.4066	4.1361	1.6290	1.0462	1.0395	1.3437
2	5-30-1-25	40,895	2.1404	0.2678	0.0835	0.5592	0.3434	2.5673	5.1601	2.6062	4.2230	0.2590	0.5301	0.5301	0.6852
3	11-30-1-25	37,010	1.9370	0.1012	0.0316	1.0362	0.6364	2.6050	4.6338	2.3404	3.8218	0.0978	0.0628	0.9823	1.2698
4	9-30-1-25	37,010	1.9370	0.4418	0.1378	1.1363	0.6978	2.7726	5.5348	2.7954	3.8218	0.4272	0.2744	1.0773	1.3926
5	16-30-1-15	35,069	1.8354	0.8486	0.2647	0.8685	0.5334	2.6335	5.2962	2.6749	3.6214	0.8206	0.5270	0.8234	1.0644
6	15-30-1-25	37,703	1.9733	0.9490	0.2960	1.1840	0.7271	2.9964	6.0482	3.0547	3.8934	0.9176	0.5893	1.1225	1.4510
7	14-30-1-25	35,012	1.8325	0.9890	0.3085	0.9677	0.5943	2.7353	5.4837	2.7696	3.6155	0.9563	0.6142	0.9175	1.1860
8	13-30-1-25	36,434	1.9069	0.8340	0.1042	0.3607	0.2215	2.2326	5.6813	2.8694	3.7624	0.3230	0.2074	0.3420	0.4421
9	4-31-1-25	39,774	2.0817	1.1378	0.3549	1.2391	0.7610	3.1976	6.4677	3.2666	4.1073	1.1002	0.7066	1.1747	1.5185
10	3-31-1-25	38,912	2.0366	1.4217	0.4435	1.6796	1.0315	3.5116	7.1090	3.5905	4.0182	1.3747	0.8829	1.5924	2.0584
11	2-31-1-25	34,388	1.7998	1.3836	0.4316	1.0146	0.6231	2.8545	5.8605	2.9600	3.5511	1.3378	0.8591	0.9619	1.2434
12	1-31-1-25	27,442	1.4363	0.8629	0.2692	0.7773	0.4774	2.1829	4.8738	2.4616	2.8338	0.8344	0.5359	0.7370	0.9527
13	8-31-1-25	46,861	2.4526	1.1974	0.3735	0.6657	0.4088	3.2349	6.7078	3.3879	4.8391	1.1578	0.7436	0.6311	0.8158
14	7-31-1-25	39,536	2.0692	1.5686	0.4893	1.1984	0.7360	3.2945	5.3581	2.7062	4.0827	1.5167	0.9740	1.1361	1.4685
15	6-31-1-25	43,260	2.2642	1.7059	0.5321	1.4617	0.8977	3.6940	7.5096	3.7929	4.4672	1.6495	1.0393	1.3858	1.7913
16	5-31-1-25	35,574	1.8619	0.8171	0.2549	1.4095	0.8656	2.9824	5.0117	2.5313	3.6736	0.7900	0.5073	1.3362	1.7272
17	12-30-1-25	40,656	2.1279	2.1817	0.6806	1.4783	0.9079	3.7164	6.5189	3.2925	4.1983	2.1095	1.3548	1.4015	1.8116
18	8-36-1-26	21,133	1.1061	0.9882	0.3083	0.7289	0.4476	1.8620			66.6667	17.3011	11.1111	17.1913	22.2222
19	11-32-1-25	44,357	2.3216	1.2206	0.3808	0.8635	0.5303	3.2327							100.0000
20	12-32-1-25	33,363	1.7462	0.5693	0.1776	0.9113	0.5397	2.4835							
21	9-31-1-25	40,908	2.1410	1.1522	0.3594	0.7859	0.4826	2.9830							
22	10-31-1-25	38,751	2.0281	0.7022	0.2190	1.0288	0.6318	2.8789							
23	11-31-1-25	34,715	1.8169	0.8671	0.2705	0.8215	0.5045	2.5919							
24	12-31-1-25	31,468	1.6470	0.8273	0.2581	0.6553	0.4024	2.3075							
25	9-36-1-26	11,131	0.5826	0.7748	0.2417	0.6290	0.3863	1.2106							
26	10-36-1-26	28,129	1.4722	1.6969	0.5293	1.5527	0.9536	2.9551							
27	11-36-1-26	29,571	1.5477	1.0905	0.3121	1.3581	0.8341	2.6939							
28	14-32-1-25	39,531	2.0690	0.1674	0.0522	0.1402	0.0661	2.2073							
29	13-32-1-25	44,107	2.3085	0.8321	0.2596	0.8973	0.5511	3.1192							
30	16-31-1-25	40,632	2.1266	1.4609	0.4557	1.0308	0.6330	3.2153							
31	15-31-1-25	28,850	1.5099	1.0067	0.3140	0.7446	0.4573	2.2812							
32	14-31-1-25	31,517	1.6495	0.2031	0.0634	0.3425	0.2103	1.9232							
33	13-31-1-25	31,650	1.6565	0.6941	0.2165	1.2041	0.7395	2.6125							
34	15-36-1-26	37,192	1.9466	1.0663	0.3326	1.3789	0.8468	3.1260							
35	14-36-1-26	28,366	1.4846	0.9178	0.2863	1.4712	0.9035	2.6744							
36	13-36-1-26	32,808	1.7171	1.5791	0.4926	1.5068	0.9254	3.1351							
TOTALS:		1,273,768	66.6667	35.6194	11.1111	36.1847	22.2222	100.0000							

SOURCES OF VALUES

1. PH14h 1 = POROSITY METERAGE AS DETERMINED BY D. MCCREARY  
AND SUBSEQUENTLY CHECKED BY J. BURNS. THESE VALUES  
CAN BE FOUND ON J. BURNS' MAP OF 85-03-20.

2. 12-84 CUM. OIL = CUM. OIL TO DECEMBER, 1984.

3. MONTH 1,2,3,4 PROD. = ACTUAL PRODUCTION FROM THE FIRST 4 MONTHS  
OF THE WELLS HISTORY.

4. REM. REC. DIP = (0.25)(10114)(16)(1-0.4)(1.17)(PH14H)-CUM. OIL  
0.25 = recovery factor  
10114 = constant to convert hectare-metres into m<sup>3</sup>.  
16 = drainage area in hectares.  
0.4 = Sw  
1.17 = oil formation volume factor.

5. DIP FACTOR = 2/3\*(RR DIP/TOTAL RR DIP)\*100

6. OIL RATE FACTOR 1 = OIL RATE (m<sup>3</sup>/day)/AVERAGE OIL RATE

7. OIL RATE FACTOR 2 = 66 PROPORTED TO ADD TO 11.1111

8. OIL CUT FACTOR 1 = OIL CUT (2)/AVERAGE OIL CUT

9. OIL CUT FACTOR 2 = 48 PROPORTED TO ADD TO 22.2222

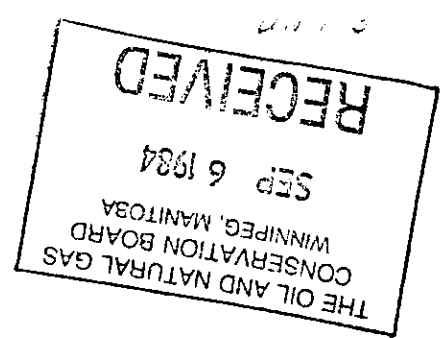
AVERAGE OIL RATES (m<sup>3</sup>/op. day) & AVERAGE OIL CUTS  
AFTER 'n' MONTHS OF PRODUCTION

MONTHS ON	RATE	CUT
2	6.5927	59.1700Z
3	6.2638	58.0500Z
4	5.9460	56.5700Z

MASKADA LAM UNIT 3 TRACT FACTOR CALCULATIONS

Mac

TRACT:	LAND	PLANT (m)	112-84 CUM.	HRS	OIL	WATER	HRS	OIL	WATER	HRS	OIL	WATER	HRS	OIL	WATER	HRS	OIL	WATER
DESCRIPTION																		
1	4-30-1-25	1.50/6.7	257.5	504	232.1	131.9	744	478.1	41.6	648	179.8	182.4	295	24.5	203.9			
2	5-30-1-25	1.46/7.3	569.5	120	7.6	18.6	744	54.6	81.5	672	36.4	91.8	744	52.7	135.1			
3	11-30-1-25	1.38/10.3	2181.9	696	23.2	1.5	744	12.4	13.9	744	18.9	18.3	720	18.3	17.7			
4	9-30-1-25	1.33/0.67	761.7	384	71.1	6.3	720	98.5	5.6	744	58.7	53.1	720	52.8	89.2			
5	16-30-1-15	1.29/0.55	1567.0	312	80.3	61.0	300	74.1	73.6	656	134.5	108.5	732	131.6	192.3			
6	15-30-1-25	1.39/1.23	1773.3	336	111.7	48.6	271	84.0	40.0	482	99.0	43.0	540	88.3	57.2			
7	14-30-1-25	1.28/0.55	1339.9	456	101.8	109.1	232	80.7	53.5	720	181.8	110.8	744	163.0	162.5			
8	13-30-1-25	1.31/0.57	770.5	96	6.8	27.3	672	50.1	228.1	468	49.2	195.5	678	52.3	166.9			
9	4-31-1-25	1.45/0.92	1405.7	288	79.6	33.9	720	181.2	77.6	412	132.1	56.4	701	205.0	87.2			
10	3-31-1-25	1.44/1.12	1984.4	240	62.2	5.3	672	316.1	19.6	696	260.8	10.6	720	180.9	7.5			
11	2-31-1-25	1.32/0.87	3100.5	384	157.1	66.3	686	266.6	157.1	744	230.2	202.3	720	214.7	219.0			
12	1-31-1-25	1.05/0.67	2377.8	676	207.5	93.2	744	163.6	192.7	705	128.1	138.3	732	111.6	354.0			
13	8-31-1-25	1.74/1.04	2555.4	555	266.0	137.9	682	120.7	375.8	689	185.2	337.8	744	220.2	459.7			
14	7-31-1-25	1.44/1.37	1360.5	53	2.5	9.4	388	82.2	164.3	697	275.6	41.0	744	371.1	132.8			
15	6-31-1-25	1.62/0.77	2748.4	384	94.8	43.3	208	97.1	41.4	581	306.2	33.7	744	312.1	51.2			
16	5-31-1-25	1.28/0.14	778.0	520	148.8	51.3	504	109.3	2.9	588	145.9	38.4	697	63.4	26.2			
17	12-30-1-25	1.54/2.46	3079.8	285	87.0	22.4	736	368.2	166.8	648	412.4	35.6	732	430.2	29.3			
SUBTOTALS:				6289	1740.1	867.3	9767	2637.5	1736.0	10894	2834.8	1699.5	11707	2692.7	2391.7			
18	8-36-1-26	0.77/0.23	734.8	224	56.0	82.0	756	341.5	154.0	716	80.2	333.0	745	119.9	282.6			
19	11-32-1-25	1.58/0.67	515.0	4	1.0	1.5	240	63.6	84.9	715	257.4	191.9	744	193.0	261.0			
20	12-32-1-25	1.18/0.34	149.2	210	57.6	25.8	744	91.6	101.7	0	0.0	0.0	0	0.0	0.0			
21	9-31-1-25	1.46/0.80	555.8	217	54.3	57.9	327	80.3	93.7	659	138.4	222.6	744	282.8	320.2			
22	10-31-1-25	1.37/0.65	157.6	73	33.7	12.6	744	123.9	88.7	0	0.0	0.0	0	0.0	0.0			
23	11-31-1-25	1.24/0.51	1089.5	312	119.0	61.8	744	244.7	177.7	668	67.7	274.1	744	98.8	97.1			
24	12-31-1-25	1.13/0.27	624.5	32	6.4	13.8	768	182.4	263.7	715	155.1	198.2	745	119.3	308.7			
25	9-36-1-26	0.43/0.19	1080.7	138	32.1	46.9	727	133.1	268.7	688	54.4	309.7	273	130.9	9.2			
26	10-36-1-26	1.03/0.24	1123.3	162	98.4	17.2	760	386.1	66.3	643	290.2	31.2	664	162.4	15.1			
27	11-36-1-26	1.09/0.74	1384.7	292	106.6	46.0	692	213.4	61.2	688	137.8	38.3	718	134.6	33.2			
28	14-32-1-25	1.46/0.74	1932.8	24	0.2	3.3	552	49.3	235.7	448	4.9	234.7	288	0.0	158.0			
29	15-32-1-25	1.56/0.87	197.5	120	36.4	8.5	744	161.1	166.0	0	0.0	0.0	0	0.0	0.0			
30	16-31-1-25	1.45/1.04	547.9	36	17.1	7.4	657	228.1	188.9	744	302.7	171.4	0	0.0	0.0			
31	15-31-1-25	1.03/0.93	401.8	709	180.9	197.2	744	220.9	313.0	0	0.0	0.0	0	0.0	0.0			
32	14-31-1-25	1.12/0.59	291.5	687	48.7	293.4	744	20.8	173.7	720	43.7	77.9	740	32.3	60.5			
33	13-31-1-25	1.13/1.19	442.5	152	34.3	23.4	492	136.5	57.6	601	86.6	38.0	678	53.3	35.8			
34	15-36-1-26	1.34/0.87	864.5	430	195.8	38.0	766	242.1	76.8	716	146.4	40.6	710	108.4	39.9			
35	14-36-1-26	1.04/2.91	1169.7	415	164.6	36.9	731	203.8	31.9	706	120.5	28.7	696	90.5	19.3			
36	13-36-1-26	1.23/0.95	2124.3	127	15.3	7.2	668	291.3	69.2	680	307.7	39.0	744	253.8	34.9			
TOTALS:				10653	3018.5	1848.1	22367	6052.0	4411.4	21001	5028.5	3928.8	20940	4472.7	4067.2			



TELEPHONE: (403) 261-0743

630 - 330 FIFTH AVENUE S.W., CALGARY, ALBERTA T2P 0L4

September 4, 1984

The Oil and Natural Gas  
Conservation Board  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Attention: Dr. Ian Haugh

Dear Sir:

Re: Waskada Unit No. 3, Enlargement - Lsd 12 of  
Section 30-1-25 WPM

As requested in your letter of August 27th, please find enclosed the details of the calculations of Tract Factors for the enlarged Unit.

Yours truly,

OMEGA HYDROCARBONS LTD.

W.E. Wyse  
Petroleum Engineer

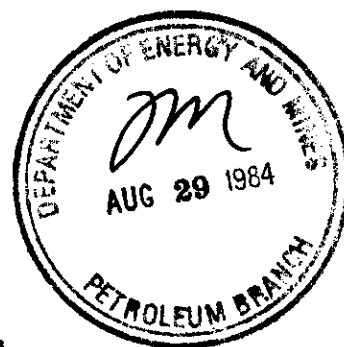
c.c. Land Files

Enclo:

WEW/tt

Ian Haugh's office-06Sep84  
pc: H. C. Moster

*Bob - inform Omega*



August 27, 1984

Omega Hydrocarbons Ltd.  
630, 130 - 5th Avenue, S.W.  
Calgary, Alberta  
T2P 0L4

Attention: Mr. Ed Wyse

Dear Sir:

Re: Washada Unit No. 3, Enlargement - Led 12 of  
Section 30-1-25 (WPM)

The Board hereby approves the enlargement of the Washada Unit No. 3 as provided for in the Unit Agreement. Pursuant to section 903 of the Unit Agreement inclusion of the subject tract will be effective September 1, 1984.

Please submit details of the tract factor calculations for the subject tract in order to complete our files.

Yours sincerely

THE OIL AND NATURAL GAS  
CONSERVATION BOARD

ORIGINAL SIGNED BY  
IAN HAUGH

Ian Haugh  
Deputy Chairman

LRD/IR/bb

bc: [REDACTED]

Marc Eliason  
J. F. Redgwell

## Waskada Unit No. 3 - Tract Factor Calculations

## REMAINING RECOVERABLE OIL IN PLACE FACTOR

Tract	Land Description	POR-M	Cum. Oil (m)	Area (ha)	REM. REC. OIP.
1	4-30-1-25	1.50	1810.3	16	29,310
2	5-30-1-25	1.49	568.4	16	30,344
3	11-30-1-25	1.18	1728.5	16	22,753
4	9-30-1-25	1.33	707.8	16	26,885
5	16-30-1-25	1.29	1399.6	16	25,365
6	15-30-1-25	1.39	1773.3	16	27,066
7	14-30-1-25	1.28	1263.9	16	25,293
8	13-30-1-25	1.75	771.5	16	35,537
9	4-31-1-25	1.46	1296.9	16	28,995
10	3-31-1-25	1.44	1724.2	16	28,152
11	2-31-1-25	1.32	2648.6	16	24,738
12	1-31-1-25	1.05	2002.8	16	19,782
13	8-31-1-25	1.74	2214.6	16	33,886
14	7-31-1-25	1.44	1360.5	16	28,516
15	6-31-1-25	1.62	2629.7	16	30,982
16	5-31-1-25	.91	778.0	16	18,102
17	12-30-1-25	1.19	1618.4	16	23,071
Total					458,777

## NOTES:

- 1) Remaining Recoverable Oil in Place calculated by equation  
 $U = (0.25) (10114) * \text{Area} * (1-0.4) 1.17 * \text{POR-M} - \text{Cum. Oil}$

where - Recovery factor is assumed = 0.25  
 - Water Saturation is assumed = 0.40  
 - Oil Formation Volume Factor measured 1.17

- 2) Cumulative Oil as of May 31/84

Waskada Unit No. 3 - Tract Factor Calculations

OIL PRODUCTION RELATED FACTORS

Tract	(mon)	First 4 Months		Rate Factor		Oil Cut Fa
		(hrs)	(oil)	(wat)		
1	4	2191	914.5	559.8	1.62897	1.03953
2	4	2280	151.3	327.0	0.25899	0.53012
3	4	2904	72.8	51.4	0.09784	0.98231
4	4	2568	281.1	156.2	0.42721	1.07726
5	4	2000	420.5	435.4	0.82055	0.82334
6	4	1629	383.0	188.8	0.91759	1.12252
7	4	2152	527.3	435.9	0.95628	0.91745
8	4	1914	158.4	617.8	0.32299	0.34200
9	4	2121	597.9	255.1	1.10017	1.17468
10	4	2328	820.0	43.0	1.37468	1.59236
11	4	2534	868.6	644.7	1.33778	0.96191
12	4	2857	610.8	778.2	0.83437	0.73695
13	4	2670	792.1	1311.2	1.15782	0.63113
14	4	1882	731.4	347.5	1.51672	1.13609
15	4	1917	810.2	169.6	1.64946	1.38578
16	4	2309	467.4	118.8	0.79002	1.33623
17	4	2401	1297.8	254.1	2.10954	1.40147
TOTALS		38657	9905.1	6694.5	17.30098	17.19113

NOTE:

The average oil rate for all wells after their first 4 months of production is 6.1495 m<sup>3</sup>/op. day and the oil cut is 59.6707%.

Waskada Unit No. 3 - Tract Factor Calculations

WEIGHTING FACTORS: UNADJUSTED TO ADJUSTED

Tract	Land Description	Oil Rate Factor	Oil Cut Factor	OIP Factor	Unadjusted Tract Factor	Original Tract Factor	Adjusted Tract Factor
1	4-30-1-25	1.0462	1.3438	4.2592	6.6492	7.2152	6.7448
2	5-30-1-25	0.1663	0.6853	4.4094	5.2610	5.5199	5.1601
3	11-30-1-25	0.0628	1.2698	3.3063	4.6389	4.9569	4.6338
4	9-30-1-25	0.2743	1.3925	3.9068	5.5736	5.9208	5.5348
5	16-30-1-25	0.5270	1.0643	3.6859	5.2772	5.6655	5.2962
6	15-30-1-25	0.5892	1.4510	3.9331	5.9733	6.4700	6.0482
7	14-30-1-25	0.6141	1.1859	3.6754	5.4754	5.8661	5.4837
8	13-30-1-25	0.2074	0.4421	5.1640	5.8135	6.0775	5.6813
9	4-31-1-25	0.7066	1.5185	4.2134	6.4385	6.9187	6.4677
10	3-31-1-25	0.8829	2.0584	4.0909	7.0322	7.6047	7.1090
11	2-31-1-25	0.8592	1.2434	3.5948	5.6974	6.2692	5.8605
12	1-31-1-25	0.5359	0.9526	2.8746	4.3631	5.2137	4.8738
13	8-31-1-25	0.7436	0.8158	4.9240	6.4834	7.1756	6.7078
14	7-31-1-25	0.9741	1.4686	4.1438	6.5865	5.7317	5.3581
15	6-31-1-25	1.0593	1.7913	4.5021	7.3527	8.0333	7.5096
16	5-31-1-25	0.5074	1.7273	2.6305	4.8652	5.3612	5.0117
				Subtotal	93.4811	100.0000	93.4811
17	12-30-1-25	1.3548	1.8116	3.3525	6.5189		6.5189
		11.1111	22.2222	66.6667	100.0000		100.0000



**HYDROCARBONS Ltd.**

TELEPHONE (403) 261-0743

800 330 FIFTH AVENUE S.W. CALGARY ALBERTA

August 21, 1984

The Oil & Natural Gas  
Conservation Board  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Attention: Dr. Ian Haugh

Dear Sir;

Re: Waskada Unit No. 3  
Unit Expansion

Omega Hydrocarbons Ltd. formally requested Board approval to expand the above Unit under section 74 of the Mines Act and according to Article IX of the Unit Agreement. The subject expansion will affect the addition of a new Tract, hence forward labelled Tract No. 17; Lsd 12-30-1-25 WPM.

Enclosed in support of this application is a copy of the Unit Agreement with revised Exhibits complete with copies of the execution pages from the counterparts executed by all Parties with an interest in Tract No. 17.

Upon approval of the Board, the effective date of this enlargement according to Clause 905 is anticipated to be September 1, 1984.

Yours truly,

OMEGA HYDROCARBONS LTD.

Ed Wyse  
Petroleum Engineer

cc. Land Dept.

EW/jr

Ian Haugh's office-23Aug84  
pc: H. C. Moster with attachment





THE OIL AND NATURAL GAS  
CONSERVATION BOARD  
WINNIPEG, MANITOBA

JUL 9 1984

RECEIVED

July 4, 1984

→ Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

Que West Resources Ltd.  
501 Pembina Place  
1035 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3E9

Triton Petroleums Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

Gentlemen:

RE: Waskada Unit No. 3  
Unit Expansion

Waskada Unit No. 3 became effective on May 1, 1984. Since formation of this Unit was initiated the well Omega Waskada 12A-30-1-25 WPM has been drilled and completed in the Lower Amaranth formation. The well is effectively already part of the waterflood project and needs to be brought into the Unit. The immediate effect of this expansion of the Unit is that 12A-30 which is currently production restricted to Maximum Permissible Rates will be allowed to produce at its maximum capable rate as provided for under Board Order No. 72A.

It is therefore to everyone's mutual advantage to promptly execute the enclosed Unit Agreement and return one copy to Omega in order that we may cause this expansion to become effective on August 1, 1984.

Any questions regarding this matter should be referred to Mr. Ed Wyse, Petroleum Engineer (403) 261-0743.

Yours truly,  
OMEGA HYDROCARBONS LTD.

*Ed Wyse for*  
R. F. Emerson  
Land Manager

EW/smp  
Encl.

cc: ✓ Dr. Ian Haugh, Conservation Board  
Ed Wyse

WASKADA UNIT NO. 3 INCLUSION OF 12-30LAM-1-25

1. Details of Tract Factor Calculations not provided.
2. No Provincial Crown Interest.
3. Article IX of the Unit Agreement provides for inclusion of tracts provided the royalty owner and the working interest owner execute the agreement.
4. Proposed tract factor is 6.5189% (unit average is 5.8824).  
Initial oil rate and oil cut are somewhat higher than the Unit average. Porosity thickness appears comparable with nearby wells. On this basis, tract factor appears reasonable.
5. On the basis of the foregoing, it is recommended that the Board approve inclusion of the tract.

12-30 initial production

<u>Month</u>	<u>Oil Rate</u>	<u>Oil Cut</u>	<u>Rate Ave. for Unit</u>	<u>Cut</u>
1	7.25 m <sup>3</sup> /d	79.525	6.61	66.18
2	11.88	68.822	6.26	61.90
3	15.27	92.054	5.96	61.78
4	13.88	93.624	5.57	59.43

WASKADA UNIT No 3  
EFFECTIVE DATE MAY 1, 1984

Wells

Omega Waskada	4-30 LAm -1-25
Omega Waskada	5-30-1-25
Omega Waskada	11-30-1-25
Omega Waskada	9-30-1-25
Omega Waskada	16-30-1-25
Omega Waskada	15-30-1-25
Omega Waskada	14-30-1-25
Omega Waskada	13-30-1-25
Omega Waskada	A4-31-1-25
Omega Waskada	3-31-1-25
Omega Waskada	2-31-1-25
Omega Waskada	1-31-1-25
Omega Waskada	8-31-1-25
Omega Waskada	7-31-1-25
Omega Waskada	6-31-1-25
Omega Waskada	5-31-1-25

→ 26f  
file

April 27, 1984

Omega Hydrocarbons Ltd.  
630, 930 - 5th Avenue S.W.  
Calgary, Alberta  
T2P 0L4

Attention: Mr. R. F. Emerson,  
Lead Manager

Dear Sirs:

Re: Waskada Unit No. 3

The Board hereby approves the Waskada Unit No. 3 Agreement, pursuant to Section 74 of The Mines Act. According to Article XIV of the Agreement, the effective date of the Unit is May 1, 1984.

Yours sincerely,

THE OIL AND NATURAL GAS  
CONSERVATION BOARD

VICINALLY SIGNED BY  
IAN HAUGH

Ian Haugh  
Deputy Chairman

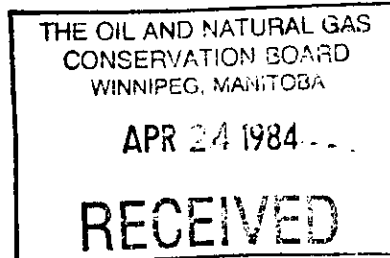
LRD/1k

b.c. Petroleum Branch ✓





April 19, 1984



Manitoba Department of  
Energy and Mines  
The Oil and Natural Gas  
Conservation Board  
Eaton Place  
555 - 330 Graham Avenue  
Winnipeg, Manitoba  
R3C 4E3

Attention: Dr. Ian Haugh  
Deputy Chairman

Dear Sir:

RE: Waskada Unit No. 3

Enclosed is a copy of Waskada Unit No. 3 complete with execution pages of all the Working Interest and Royalty Owners. Pursuant to Section 74 of the Mines Act, Omega Hydrocarbons requests the approval of the Board for this Unit. The effective date will be May 1, 1984.

Yours truly,

OMEGA HYDROCARBONS LTD.

R. F. Emerson  
Land Manager

RFE/smp

Encl.

p.c. - H. Clare Moster  
April 26, 1984 - IH/ra

February 28, 1984

Omega Hydrocarbons Ltd.  
630, 330 - 5th Avenue S.W.  
Calgary, Alberta  
T2P 0L4

Attention: Mr. T. J. Hall

Dear Sirs:

Re: Proposed Waskada Unit No. 3

Your letter of February 16, 1984 requesting that "the Board proceed with steps to effect a unitization agreement under Section 74 of The Mines Act, for the proposed Waskada Unit No. 3" is acknowledged.

Section 74(3) of The Mines Act prevents the Board from ~~entering~~ a unitization agreement unless all the royalty owners have indicated their agreement to the unit operation. Inasmuch as Omega has not yet received the necessary consents from all royalty owners, approval of the Unitization Agreement cannot be given at this time.

You are requested to keep the Board informed of your progress in obtaining the necessary consents.

Yours sincerely,

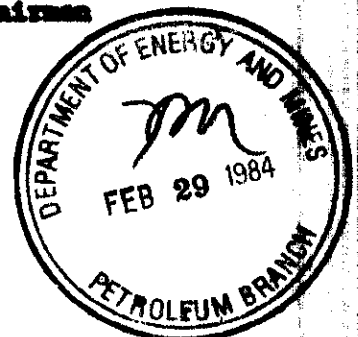
THE OIL AND NATURAL GAS  
CONSERVATION BOARD

ORIGINAL SIGNED BY  
IAN HAUGH

Ian Haugh  
Deputy Chairman

LED/lk

b.c. Petroleum Branch ✓



February 16, 1984

The Oil and Natural Gas  
Conservation Board  
309 Legislative Building  
Winnipeg, Manitoba  
R3C 0V8

THE OIL AND NATURAL GAS  
CONSERVATION BOARD  
WINNIPEG, MANITOBA

FEB 22 1984

**RECEIVED**

Attention: Dr. Ian Haugh  
Deputy Chairman

Dear Sir:

Re: Request for Unitization Agreement -  
Waskada Unit No. 3

Omega Hydrocarbons Ltd. formerly requests that the Oil and Natural Gas Conservation Board proceed with steps to affect a Unitization Agreement; under Section 74 of the Mines Act, for the proposed Waskada Unit No. 3.

Omega has received approval of 82.3080% of the Royalty Interest owners and has been advised that the approvals of Canada Trust Co. (4.9569%) and the Federal Department Energy, Mines and Resources (12.7351%) are imminent. Attached is a copy of the Unit Agreement with copies of all the executed counterparts.

A word of explanation regarding the copies of counterparts is necessary. Part way through the approval process, upon your instructions, several changes were made to the text of the Agreement. Parties that had already signed the Agreement were supplied with revised pages which they initialed. Copies of these pages are supplied. Three parties however signed the complete, revised document and therefore it was not necessary for them to initial the revised pages. Those three Parties were PanCanadian, Triton and Omega.

Omega originally sent out the Unit documents for Royalty Interest owner approval in September, 1983. While we remain hopeful that we will soon be able to send you copies of the two outstanding counterparts, if we continue

.../2

p.c. - H. Clare Moster (with original attachment)  
February 22, 1984 - IH/ra



Dr. Ian Haugh  
Page 2

to be unnecessarily delayed we may have to revise our approach and apply for a Unitization Order under Section 76.

Please direct any comments or questions regarding this subject to either myself or Mr. Ed Wyse.

Yours truly,

OMEGA HYDROCARBONS LTD.

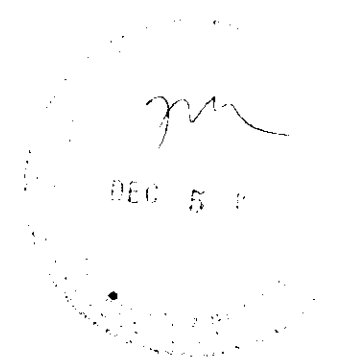
A handwritten signature in dark ink, appearing to read 'T.J. Hall', written over a horizontal line.

T.J. Hall  
President

c.c. D. Emerson  
G. Patey  
E. Wyse

TJH/tt

→ Bob  
file



December 2, 1983

Omega Hydrocarbons Ltd.  
630 - 330 Fifth Avenue S.W.  
Calgary, Alberta  
T2P 0L4

Attention: Mr. R. F. Emerson  
Land Manager

Re: Proposed Unit Agreements  
Waskada Unit No. 2 and  
Waskada Unit No. 3

The Board acknowledges receipt of your letter dated November 15, 1983, together with the revised pages to the proposed Unit Agreements.

One small new error has developed on the revised page 2 to both proposed Unit Agreements. In subclause 101(j), not only was Conservation capitalized but inadvertently so was The.

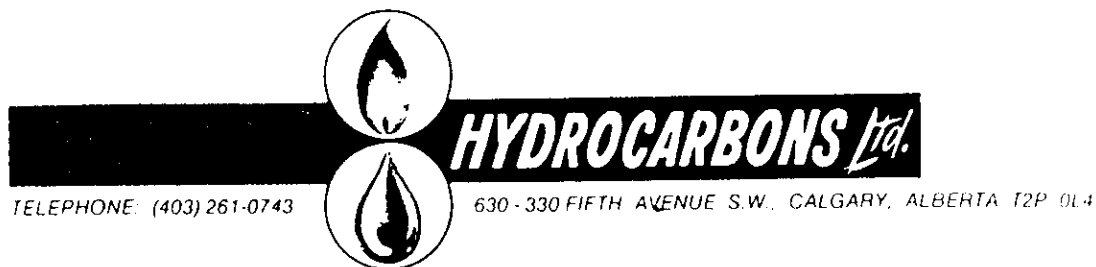
Yours sincerely

THE OIL AND NATURAL GAS  
CONSERVATION BOARD

ORIGINAL SIGNED BY  
IAN HAUGH

Ian Haugh  
Deputy Chairman

HCM/IH/ra  
cc: Petroleum Branch



November 15, 1983

Manitoba Department of Energy  
and Mines  
The Oil and Natural Gas Conservation Board  
309 Legislative Building  
Winnipeg, Manitoba  
R3C 0V8

Attention: Dr. Ian Haugh  
Deputy Chairman

Dear Sir:

RE: Proposed Unit Agreements  
Waskada Unit No. 2 and Waskada Unit No. 3

In reply to your letter of November 7, 1983 and further to our telephone conversation of November 14, 1983 we enclose the following for inclusion in your copy of Proposed Waskada Unit No. 2 and Waskada Unit No. 3:

WASKADA UNIT NO. 2

- 1) Revised Page 1. The word "The" has been capitalized in the Boards name in subclause 101(a).
- 2) Revised Page 2. The word "Conservation" has been capitalized in subclause 101(j).
- 3) Revised Page 3. The word "The" in the Mines Act has been capitalized in subclause 101(t).  
Reference is made to subclause 101(u) in Clause 201(c).
- 4) Revised Page 10. The word "Outside" has been capitalized on the first line of Clause 706.
- 5) Revised Page 19. The definition of time has been changed in Clause 1310. A new Clause 1311 has been added.
- 6) Revised Page 20. The spacing on this page changed due to the inclusion of Clause 1311 on Page 19.

WASKADA UNIT NO. 3

- 1) Revised Page 1. The word "The" has been capitalized in the Boards name in subclause 101(a).
- 2) Revised Page 2. The word "Conservation" has been capitalized in subclause 101(j).
- 3) Revised Page 10. The word "Outside" has been capitalized on the first line of Clause 706.
- 4) Revised Page 19. The definition of time has been changed in Clause 1310. A new clause 1311 has been added.
- 5) Revised Page 20. The spacing on this page changes due to the inclusion of Clause 1311 on Page 19.

As discussed we would prefer to leave subclause 502(b) in the Agreements to provide for the unlikely event that 100 percent of the Royalty Interest do not become Parties to the Agreement. If the Clause were removed there would not be any mechanism for indemnification by the Working Interest Owners to each other for tracts included in the Unit where the Royalty Interest are not Parties to the Agreement. We recognize that a Board Order may be required if less than 100% but more than 75% of royalty Owners consent.

We acknowledge that Section 74 of The Mines Act requires that the approval of the Board must first be obtained before a Unitization Agreement may be put into effect. We do not anticipate any problems with the Royalty Owners and will advise you as soon as all consents have been obtained.

Yours truly,

OMEGA HYDROCARBONS LTD.



R. F. Emerson  
Land Manager

RFE/smp  
Enclosures

p.c. - Petroleum Branch

SUBMISSION TO CABINET

by the

DEPARTMENT OF ENERGY AND MINES

2.4.5(1)

SUBJECT:

An agreement to unitize oil development operations in the Waskada oil field.

BACKGROUND:

The Province of Manitoba is the owner of the mines and minerals in the East half of Section 22, Township 1, Range 26 WPM which is part of the Waskada oil field. Omega Hydrocarbons Ltd. is the holder of a Crown oil and natural gas lease to the subject land and has drilled a well on the property. The well is completed in the Waskada Lower Amaranth A Pool but has produced no oil. Omega is planning to expand its waterflood pressure maintenance operations in that area of the Pool, but before proceeding, Omega must obtain the agreement of the mineral rights owners affected. As Omega wishes to include the subject well in the proposed Waskada Unit No. 2 and use it as a water injection well, it has requested the consent of the Minister of Energy and Mines on behalf of the Crown as mineral rights owner. Inclusion of the well in the proposed Unit will result in a portion of the total crude oil and natural gas produced from oil wells in the Unit being allocated to the Crown well, and the Crown will receive royalties on the allocated production.

The Mines Act specifically provides for the Minister to enter into unitization agreements on behalf of the Crown with the approval of the Lieutenant Governor in Council.

RECOMMENDATION:

It is recommended that the Minister of Energy and Mines be authorized to enter into the Unitization Agreement for Waskada Unit No. 2 on behalf of the Crown.

*Wilson D. Parasiuk*

Wilson Parasiuk  
Minister of Energy and Mines



MANITOBA

ON MATTERS OF STATE

To The Honourable the Lieutenant Governor in Council  
The undersigned, the Minister of ..... Energy and Mines  
submits for approval of Council a report setting forth that:

WHEREAS section 75 of "The Mines Act", being Chapter M160 of the Revised Statutes of Manitoba, provides as follows:

"75(1) Where the Crown is a working interest owner or royalty owner of a tract of land, the Lieutenant Governor in Council may authorize the minister, on behalf of the Crown, to enter into a unitization agreement for the unit operation of the pool or field, or part thereof, within which the tract is situated.

75(2) Notwithstanding any other provision of this Act or of an agreement or other disposition made under this Act, the Lieutenant Governor in Council may authorize the minister, on behalf of the Crown, to enter into an agreement for the calculation of the royalty payable to the Crown on the oil and gas produced from a unit area that includes a tract that is subject to the payment of a royalty to the Crown."

AND WHEREAS Omega Hydrocarbons Ltd. is the holder of Crown Oil and Natural Gas Lease No. L821-268 covering the East half of Section 22, in Township 1, Range 26 WPM;

AND WHEREAS Omega Hydrocarbons Ltd. is proposing to unitize its operations in part of the Waskada Lower Amaranth A Pool as Waskada Unit No. 2, which unit includes the tract described as Legal subdivision 16 of Section 22, in Township 1, Range 26 WPM;

AND WHEREAS Omega Hydrocarbons Ltd. has requested agreement for the proposed unitization from the Crown as the royalty owner of the subject tract;

AND WHEREAS in order to accomplish the more efficient and economical development and production of the oil and gas resources of the Waskada Lower Amaranth A Pool, it is deemed advisable for the Crown to enter into the said unitization agreement;

THEREFORE, he, the Minister, recommends:

THAT the Minister of Energy and Mines be authorized to enter into the Unit Agreement for Waskada Unit No. 2 in the form hereto annexed and marked as Schedule "A", or any form to the like effect.

Initiating Department/Agency		
Department Agency	Authorized Officer	
	<i>THE</i>	
Approved By		
MCC.	CSC.	Finance
Approved as to form by:		
Name <i>Robert C. Bell</i>		
Civil Litigation Branch; or Legislative Counsel:		Initials
		<i>8</i>

p.c. - H. Clare Moster  
November 28, 1983 - ra

Signature *Wilson D. Kussel*

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

Upon consideration of the foregoing report and recommendation Council advises that it be done as recommended.

16 November 1983  
Date

*Howard Leavelle*  
President or Presiding Member

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this 16th day of November A.D. 1983

*Gene Mason*  
Lieutenant Governor

November 7, 1983

Omega Hydrocarbons Ltd.  
630 - 330 Fifth Avenue S.W.  
Calgary, Alberta  
T2P 0L4

Attention: Mr. T. J. Hall  
President

Dear Sirs:

Re: Proposed Unit Agreements  
Waskada Unit No. 2 and Waskada Unit No. 3

The Board acknowledges receipt of copies of the proposed Unit Agreements for Waskada Unit No. 2 and Waskada Unit No. 3.

Having reviewed the two draft agreements, the Board requests the following corrections or changes be made in the final agreements. The revisions relate to both agreements, except for item 4, which pertains to Unit No. 2 only.

1. Page 1, subclause 101(a) - the word "The" in the Board's name should be capitalized to conform with The Mines Act.
2. Page 2, subclause 101(j) - the word "Conservation" should be capitalized to conform with definition 101(a).
3. Page 3, subclause 101(t) - the word "The" in The Mines Act should be capitalized.
4. Page 3, subclause 201(c) - reference should read "Subclause 101(u)." (Unit No. 2 only).
5. Page 7, subclause 502(b) - the inference in this subclause that "owners of less than 100 percent of the Royalty Interests therein have become Parties" appears to conflict with Section 74 of The Mines Act, which requires the consent of all royalty owners before the Board may approve a unitization agreement. Otherwise a Board order may be necessary if less than 100% but more than 75% of royalty owners consent.

Omega Hydrocarbons Ltd.

The Board requests that a new clause be added to the Agreement as follows:

"1311. Compliance With Legislation

The provisions of The Mines Act and regulations thereunder, as amended from time to time, take precedence over this Agreement".

6. Page 10, clause 706 - the word "Outside" in the first line thereof should be capitalized.
7. Page 19, clause 1310 - change to:

"In this agreement all times are "official times" as defined in The Official Time Act of the Province of Manitoba".

As you are aware, Section 74 of The Mines Act requires that the approval of the Board must first be obtained before a unitization agreement may be put into effect. Accordingly, once the required consents have been obtained and the above revisions made, the Board will be in a position to give consideration to approval of the agreements.

Yours sincerely  
THE OIL AND NATURAL GAS  
CONSERVATION BOARD

GENERAL MANAGER  
IAN HAUGH

Ian Haugh  
Deputy Chairman

HCM/IH/ra

bc: Marc Eliesen  
J. F. Redgwell  
Petroleum Branch



November 3, 1983

The Oil and Natural Gas  
Conservation Board

H. Clare Moster  
Director, Petroleum Branch

Marc Eliesen - Chairman  
Dr. I. Haugh - Deputy Chairman  
J. F. Redgwell - Member

Proposed Waskada Units 2 & 3 - Unit Agreements

The attached memorandums from L. R. Dubreuil dated October 13, 1983 and November 3, 1983 briefly discuss the proposed Unit Agreements related to the proposed Waskada Units No. 2 and 3.

Recommendation:

It is recommended that:

1. The Board inform Omega Hydrocarbons Ltd. of what changes the Board wishes to see in the subject two proposed Unit Agreements before Omega submits them to the Board for approval pursuant to Subsection 74(2) of The Mines Act (draft letter attached).

Discussion:

Unit Agreement - Waskada Unit No. 2

1. Unit Name

Because of the provision provided for in the agreement to permit "vertical enlargement - Clause 902", the exclusion of any pool/formation designation in the Unit name appears desirable.

2. Pg. 1 - Subclause 101(a) - capitalize The in Board name.
3. Pg. 2 - Subclause 101(j) - capitalize Conservation
4. Pg. 3 - Subclause 101(t) - capitalize The Mines Act
5. - Subclause 201(c) - change wording to Subclause 101(u)
6. 7 - Subclause 502(b) - The wording of this subclause conflicts with the provisions of Section 74 of The Mines Act. The Act requires that the Board approve voluntary unitization agreements (it is assumed this also includes enlargements of same) and before doing so that ~~all working interest owners~~ and ALL royalty interest owners must have agreed to the unitization agreement. The subject Subclause in the proposed Unitization Agreement appears to provide for approval by less than 100% of royalty interest owners.

It is suggested that Omega be requested to either

1. Clarify the intention of the Subclause and its apparent conflict with the Act and to provide an additional clause in the Unitization Agreement stating that the provisions of The Mines Act and regulations thereunder, as amended from time to time, takes precedence over the Agreement,

or

2. Remove the subject Subclause from the agreement.

Note: J. F. Radgwell confirmed that the subject Subclause does conflict with The Mines Act. This Subclause is in the ~~Waskada Lower Amaranth Unit No. 1 Agreement.~~

7. Pg. 9 - Clause 703 and Pg. 10 - Clause 706

Both these Clauses relate to how royalties will be determined. Again, it appears desirable that the Board require a clause be included in the Agreement stating that the provisions of The Mines Act and regulations thereunder, as amended from time to time, take precedence over the Agreement.

8. Pg. 10 - Clause 706 - capitalize Outside Substance
9. Pg. 19 - Clause 1310 - change to read "In this agreement all times are "official times" as defined in The Official Time Act of the Province of Manitoba.

Unit Agreement - Waskada Unit No. 3

All comments and suggestions made with respect to the proposed Unit Agreement for Waskada Unit No. 2, except item 5, also apply to the proposed Unit Agreement for Waskada Unit No. 3. (copy of L. R. Dubreuil's comments on tract participation factors is attached).

Original Signed by H. C. Moster

H. Clare Moster

HCM/lk



## Inter-Departmental Memo

Date November 3, 1983

To

From

H. Clare Moster

L. R. Dubreuil

Telephone

Subject

Re: Waskada Unit No. 3 - Evaluation of Tract Factors

Attached is a summary of a review of volumetric tract factors for the proposed Waskada Unit No. 3. Presented is a comparison of factors calculated using both Omega's interpreted pore volume and that interpreted by the Geology Section. Only the volumetric factors are compared as the other components of the total factor (productivity and oil cut) do not utilize an interpretational parameter.

In general, the factors calculated show a reasonable degree of agreement, and are probably all within interpretational limits. The largest royalty owner discrepancy is in the NW $\frac{1}{4}$  of Section 30-1-25 (WPM) where Omega's total participation factor is 4.7% points higher than the Branch's. The Geology Section does not feel it can challenge a pore volume determination which gives a discrepancy of this magnitude.

LRD/sb  
Att;

A handwritten signature in cursive script, appearing to read "L. R. Dubreuil".

First Fold

TABLE 1

Volumetric Tract  
Factors

<u>Tract</u>	<u>Ø-m</u>	<u>Cum P</u>	<u>Rem Rec</u>	<u>T.F. Omega</u>	<u>T.F. Branch</u>	<u>TFom-TFbr</u>
4-30	1.18	1296.8	23184	.066943	.073649	(.006706)
5-30	1.15	472.	23387	.068330	.074294	(.005964)
11-30	0.60	1338.	11110	.051949	.035293	.016656
9-30	1.02	616.	20545	.060555	.065266	(.004711)
16-30	1.02	1060.	20101	.057695	.063855	(.006160)
15-30	0.80	1145.	15452	.062162	.049087	.013075
14-30	0.80	1118.	15479	.057100	.049173	.007927
13-30	0.90	653.	18019	.080032	.057242	.022790
4-31	1.23	1038.	24480	.065661	.077766	(.012105)
3-31	1.09	1479.	21134	.063740	.067137	(.003397)
2-31	1.32	1641.	25744	.057789	.081782	(.023993)
1-31	1.03	371.	20998	.048065	.066705	(.018100)
8-31	1.00	387.	20360	.080162	.064678	.015484
7-31	1.00	85.	20661	.066869	.065634	.001235
6-31	1.03	1767.	19602	.071477	.062270	.009207
5-31	0.72	404.	<u>14533</u>	.041470	.046167	(.004697)
			314789			

TABLE 2

Participation Factors  
by Royalty Owner

<u>Owner</u>	<u>Tracts</u>	<u>TF Om</u>	<u>TF Br</u>	<u>TF Om-TF Br</u>
Fed Crown	1 & 2	.135273	.147943	(.012670)
Canada Trust	3, 7, 8	.189081	.141708	.047373
H. G. Trewin	4, 5, 6	.180412	.178208	.002204
D. E. Rowe	9, 10, 15, 16	.242348	.253340	(.010992)
Spurrier/Trewin	11, 12, 13. 14	.252885	.278799	(.025914)

OMEGA

S.E.A. S.

OMEGA

W $\frac{1}{2}$  Omega

E $\frac{1}{2}$

Omega

$\frac{1}{2}$  OMEGA

NE $\frac{1}{4}$

30

SMART OILS LTD  
RWR RESOURCES LTD

SMART et al  
DOME (Rony

UNIT  
3

W $\frac{1}{2}$  McKinney (1/3)  
J.A. McKinney (1/3)  
D.E. Young (1/3)

R.R. Spurrier (1/4)  
H.E. Trewin (1/4)

PRAIRIE Le  
J.D. Dams

W $\frac{1}{2}$  Omega

E $\frac{1}{2}$

NW $\frac{1}{4}$

NE $\frac{1}{4}$

SHELL  
CHAUVCO  
PETROSTA

25

Canada Trust Co

H.G. Trewin

OMEGA

SW $\frac{1}{4}$

OMEGA

SE $\frac{1}{4}$

UNIT  
1

H.F. Trewin

NW $\frac{1}{4}$  OMEGA

NE $\frac{1}{4}$

FEDERAL CROWN

CROWN

CROWN

NW $\frac{1}{4}$  OMEGA

NE $\frac{1}{4}$

Tundra

W $\frac{1}{2}$

KLM(TUNDRA)

NE $\frac{1}{4}$

20 (1/4)  
21 (1/2)  
22 (1/4)

G.F. McArthur (1/2)  
D.E. McGraw (1/4)  
Mississauga (1/4)

SW $\frac{1}{4}$  OMEGA

SE $\frac{1}{4}$

WASKADA PLAINS ENTERPRISES

Omega

|TF<sub>OM</sub> - TF<sub>BR</sub>| < .01

TF<sub>OM</sub> - TF<sub>BR</sub> > .01

TF<sub>BR</sub> - TF<sub>OM</sub> > .01

TRACT FACTOR CALCULATIONS FOR WASKADA LOUPE AMARANTH UNIT NUMBER 3

TRACT	TRACT LOCN	POR-M	CUMUL AREA	REM	REC OOIP	UNADJUSTED TRACT FACTOR
1	0430001251	1.50	1192.8	29927		.067007
2	0530001251	1.49	464.4	30448		.068173
3	1130001251	1.18	1321.5	23160		.051854
4	0930001251	1.33	594.9	26998		.060449
5	1630001251	1.29	1017.6	25746		.057644
6	1530001251	1.39	1104.0	27734		.062096
7	1430001251	1.28	1096.9	25459		.057002
8	1330001251	1.75	639.0	35668		.079860
9	0431001251	1.46	1013.1	29277		.065551
10	0331001251	1.44	1448.8	28426		.063647
11	0231001251	1.32	1460.2	25925		.058047
12	0131001251	1.05	207.5	21576		.048310
13	0831001251	1.74	266.0	35833		.080231
14	0731001251	1.44	2.5	29873		.066885
15	0631001251	1.62	1653.4	31956		.071550
16	0531001251	.91	258.1	18621		.041693

\* ( T F CALC. - T.F. SEARCH )



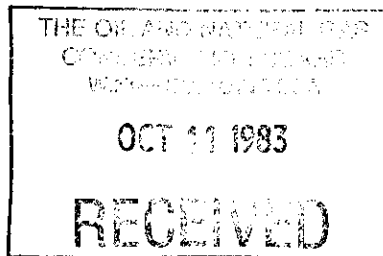
**HYDROCARBONS Ltd.**

TELEPHONE: (403) 261-0743

630-330 FIFTH AVENUE S.W., CALGARY, ALBERTA T2P 0L4

October 5, 1983

TO: All Royalty Interest Owners  
Proposed Waskada Unit No. 3  
(Addressee List Attached)



Dear Sir/Madam:

INTRODUCTION

You are no doubt aware of the success that Omega Hydrocarbons has had in finding and producing oil in the Waskada area. In an effort to maximize oil recovery Omega formed the Waskada Lower Amaranth Unit No. 1 on January 1, 1983 and initiated a pilot waterflood project. At this time, through encouraging results of the pilot project and continuing engineering and geological studies, we are preparing to expand our waterflood project to areas in which you have a royalty interest.

In order to implement our expansion plans Omega must receive the written approval of all parties affected. This is done by successfully applying to Manitoba Oil and Natural Gas Conservation Board for technical approval of the plan and by having all Working and Royalty Interest Owners approve by signing a Unit Agreement.

The necessary application has been filed with the Board in Manitoba and approval is anticipated in the coming weeks. Through this letter, and further discussion, as required; we hope to convince you that this project is to our mutual advantage. You would then indicate your approval by signing and returning one copy of the enclosed document "Unit Agreement - Waskada Unit No. 3".

BASIC PLAN

In many oil reservoirs it has already been demonstrated that oil recovery can be improved by injecting water down certain wells to push oil to neighbouring producing wells. Early results of our pilot project and our recently completed reservoir engineering studies verify that this is true for the Waskada Lower Amaranth Pool. We estimate that without waterflood we would produce only 12% of the original oil in place before the wells would become uneconomic to produce and that this recovery can be increased to approximately 28% by waterflood.

x.c. - H. Clare Moster

October 11, 1983 - IH/ra



To waterflood this pool it is necessary to convert approximately every fourth producing oil well to a water injection well. Obviously if oil recovery is to be improved for the overall good in this way, it is necessary to compensate those people that have a vested interest in those oil wells that will become water injection wells which explains the need for the Unit Agreement. The Unit agreement is the document by which all the people with interest in all the wells in the Unit agree to share the revenue from the total Unit's production. All wells get a share of production, regardless of whether they are producers or injectors, on the basis of what portion of the recoverable oil is determined to be in their individual Tract. The calculated Tract Participation Factors are determined from a combination of well log analysis, core studies and production histories and are shown in Exhibit "A" of the Unit Agreement.

Exhibit "B" shows a map of the proposed Waskada Unit No. 3 outline. There are 16 tracts in the unit representing 16 wells completed in the Lower Amaranth Pool. To waterflood we will be converting 5 of these wells into water injection; the wells located in Tracts No.'s 2, 6, 8, 14 and 16. These conversions will be done as soon as possible after all approvals have been received.

You will notice that there is a regular pattern to the location of the proposed water injection wells and this is no accident. This type of pattern is referred to in the oil industry as a nine-spot pattern (because most water injection wells are surrounded by 8 producing wells, ie. 9 wells to a pattern). The proposed Waskada Unit No. 3 is an extension of an already existing waterflood pattern in the Waskada Lower Amaranth Unit No. 1 and as such the location of the injection wells has been largely predetermined. Retaining the same pattern as Waskada Lower Amaranth Unit No. 1 should maximize the sweep efficiency of this waterflood.

#### SUMMARY

Omega Hydrocarbons expects to receive approval from the Conservation Board for this project any day now. We also hope to receive your approval as soon as possible to allow us to implement this project before the winter weather sets in at Waskada.

Please signify your approval by signing and returning one copy of the Unit Agreement. The second copy is for your records. Feel free to call us collect (403) 261-0743 if you have any questions. Either myself or Mr. Ed Wyse, our Petroleum Engineer, would be happy to try to answer them. The Chief Petroleum Engineer for the Manitoba Petroleum Branch in Winnipeg, Mr. Bob Dubreuil, may also be consulted (204) 944-6574.

Yours truly,



R. F. Emerson  
Land Manager

RFE/smp

cc: E. Wyse  
J. Hall  
Ian Haugh, Conservation Board

WASKADA UNIT NO. 3  
ROYALTY INTEREST OWNER  
ADDRESSEE LIST

Canada Trust Company  
230 Portage Avenue  
Box 881  
Winnipeg, Manitoba  
R3C 2S6

Department of Energy, Mines and Resources  
Resource Management Branch  
580 Booth Street  
Ottawa, Ontario  
K1A 0E4

Attention: R. Harrison  
Director General Land Management

PanCanadian Petroleum Limited  
150 - 9th Avenue S.W.  
Calgary, Alberta

Que West Resources Ltd.  
501 Pembina Place  
1035 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3E9

Dale Edward Rowe  
Waskada, Manitoba  
ROM 2E0

Ralph F. Spurrier  
5915 Meghan Way  
Sacramento, California  
U.S.A. 95842

Howard Gordon Trewin  
Box 175  
Waskada, Manitoba  
ROM 2E0

Triton Petroleums Ltd.  
10th Floor, 2 Energy Square  
4849 Greenville Avenue  
Dallas, Texas  
U.S.A. 75206

WASKADA UNIT NO. 3 - TRACT FACTOR CALCULATIONS

REMAINING RECOVERABLE OIL IN PLACE FACTOR

<u>TRACT</u>	<u>LAND DESCRIPTION</u>	<u>POR-M</u>	<u>CUM. OIL</u> (m <sup>3</sup> )	<u>AREA</u> (ha)	<u>REM. REC. OIP</u>
1	4-30-1-25 WPM	1.50	1297	16	29823
2	5-30-1-25 WPM	1.49	472	16	30441
3	11-30-1-25 WPM	1.18	1338	16	23143
4	9-30-1-25 WPM	1.33	616	16	26977
5	16-30-1-25 WPM	1.29	1060	16	25703
6	15-30-1-25 WPM	1.39	1145	16	27693
7	14-30-1-25 WPM	1.28	1118	16	25438
8	13-30-1-25 WPM	1.75	653	16	35654
9	4-31-1-25 WPM	1.46	1038	16	29252
10	3-31-1-25 WPM	1.44	1479	16	28396
11	2-31-1-25 WPM	1.32	1641	16	25745
12	1-31-1-25 WPM	1.05	371	16	21413
13	8-31-1-25 WPM	1.74	387	16	35712
14	7-31-1-25 WPM	1.44	85	16	29790
15	6-31-1-25 WPM	1.62	1767	16	31843
16	5-31-1-25 WPM	0.91	404	16	18475
				TOTAL	445498

NOTES: (1) Remaining Recoverable Oil in Place calculated by the equation

$$U = (0.25) (10114) * \text{Area} * (1-0.4) / 1.17 * \text{POR. M.} - \text{Cum. Oil}$$

where - Recovery factor is assumed = 0.25  
 - Water Saturation is assumed = 0.40  
 - Oil Formation Volume Factor measured = 1.17

(2) Cumulative oil as of August 31, 1983.

# WASKADA UNIT NO. 3 - TRACT FACTOR CALCULATIONS

## OIL PRODUCTION RELATED FACTORS

TRACT	First 4 Months				Rate Factor	Oil Cut Factor
	(mon)	(hrs)	(oil)	(wat)		
1	4	2191	914.5	559.8	1.79845	1.04373
2	4	2280	151.3	327.0	0.28593	0.53227
3	4	2904	72.8	51.4	0.10802	0.98628
4	4	2568	281.1	156.2	0.47165	1.08162
5	4	2000	420.5	435.4	0.90592	0.82668
6	4	1629	383.0	188.8	1.01306	1.12706
7	4	2152	527.3	435.9	1.05578	0.92116
8	4	1914	158.4	617.8	0.35659	0.34338
9	4	2121	597.9	255.1	1.21443	1.17943
10	4	2328	820.0	43.0	1.51770	1.59880
11	4	2534	868.6	644.7	1.47696	0.96580
12	2	1420	371.1	285.9	1.00174	0.91248
13	2	1237	386.7	513.7	1.19828	0.69380
14	2	441	84.7	173.7	0.73620	0.52953
15	4	1917	810.2	169.6	1.82107	1.39138
16	3	1612	404.0	92.6	1.00973	1.31683
					15.97151	15.45023

- NOTES: 1) The average oil rate for all wells after their first month of production is 6.6080 m<sup>3</sup>/op. day and the oil cut is 66.1769%.
- 2) The average oil rate for all wells after their first 2 months of production is 6.2612 m<sup>3</sup>/op. day and the oil cut is 61.9017%.
- 3) The average oil rate for all wells after their first 3 months of production is 5.9569 m<sup>3</sup>/op. day and the oil cut is 61.7798%.
- 4) The average oil rate for all wells after their first 4 months of production is 5.5700 m<sup>3</sup>/op. day and the oil cut is 59.4303%.

## WASKADA UNIT NO. 3 - TRACT FACTOR CALCULATIONS

## SUMMARY

<u>TRACT</u>	<u>LAND DESCRIPTION</u>	<u>OIL RATE FACTOR</u>	<u>OIL CUT FACTOR</u>	<u>OIP FACTOR</u>	<u>TOTAL FACTOR</u>
1	4-30-1-25 WPM	1.2511	1.5012	4.4629	7.2152
2	5-30-1-25 WPM	0.1989	0.7656	4.5554	5.5199
3	11-30-1-25 WPM	0.0751	1.4186	3.4632	4.9569
4	9-30-1-25 WPM	0.3281	1.5557	4.0370	5.9208
5	16-30-1-25 WPM	0.6302	1.1890	3.8463	5.6655
6	15-30-1-25 WPM	0.7048	1.6211	4.1441	6.4700
7	14-30-1-25 WPM	0.7345	1.3249	3.8067	5.8661
8	13-30-1-25 WPM	0.2481	0.4939	5.3355	6.0775
9	4-31-1-25 WPM	0.8449	1.6964	4.3774	6.9187
10	3-31-1-25 WPM	1.0558	2.2996	4.2493	7.6047
11	2-31-1-25 WPM	1.0275	1.3891	3.8526	6.2692
12	1-31-1-25 WPM	0.6969	1.3124	3.2044	5.2137
13	8-31-1-25 WPM	0.8336	0.9979	5.3441	7.1756
14	7-31-1-25 WPM	0.5122	0.7616	4.4579	5.7317
15	6-31-1-25 WPM	1.2669	2.0012	4.7652	8.0333
16	5-31-1-25 WPM	0.7025	1.8940	2.7647	5.3612
		<u>11.1111</u>	<u>22.2222</u>	<u>66.6667</u>	<u>100.0000</u>