

Manitoba



The Oil and Natural Gas
Conservation Board

555 — 330 Graham Avenue
Winnipeg MB R3C 4E3
CANADA

(204) 945-1111
FAX: (204) 945-0586

May 10, 1993

Mr. J. B. Beardsworth
Manager, Production Operations
Omega Hydrocarbons Ltd.
1300, 112 - 4th Avenue S.W.
Calgary AB T2P 0H3

*copy
attached to
file
Waskada Field
Omega - Over-
Production
03294*

Dear Mr. Beardsworth:

**Re: Omega Waskada 7-14-2-25 (WPM)
Retirement of Over-Production**

The Board is in receipt of your letter dated April 29, 1993 proposing to reduce production from the subject well to 7 m³/d for 9-10 months to retire the over-production.

The Board concurs with your proposal but for administrative simplicity, the Board approves a maximum monthly permissible production rate of 210 m³ to continue until the well's over-production is retired. As of March 31, 1993 over-production totalled 261.6 m³.

If you have any questions in respect of this approval, please contact the undersigned at (204) 945-1111.

Yours respectfully,

H. Clare Moster
Deputy Chairman

April 19, 1993

H. Clare Moster
Deputy Chairman
Oil and Natural Gas
Conservation Board

John N. Fox
Chief Petroleum Engineer
Petroleum Branch

OVER-PRODUCTION - OMEGA WASKADA 7-14-2-25 (WPM)

In August 1990, the Board requested Omega retire over-production from the 7-14-2-25 well at 100 m³/month starting in August 1990. Over-production was retired but starting in December 1990 the well has been over-produced 5-30 m³/month, resulting in over-production of 284.5 m³ as of February 28, 1993. Attached is a letter requesting Omega advise the Board of its plans to retire over-production.

The Branch does not think the well should be shut-in, however, over-production should be retired at a rate of at least 50 m³/month. Omega would benefit by using the shut-in time to conduct a pressure survey at this well to help determine material balance reserves and reservoir limits.



John N. Fox

JNF/hw

April 20, 1993

Mr. Joe Beardsworth
Omega Hydrocarbons Ltd.
1300, 112-4th Avenue S.W.
Calgary AB T2P 0H3

Dear Mr. Beardsworth:

RE: OMEGA WASKADA 7-14-2-25 (WPM) OVER-PRODUCTION

As of February 28, 1993 the 7-14-2-25 well was over-produced 284.5 m³/d. With the exception of one month, the well has been produced at rates above the monthly maximum permissible production rate since December 1990. Subsection 51(6) of the Petroleum Drilling and Production Regulation requires that

51(6) Where accumulated overproduction for a well exceeds the maximum permissible monthly production rate, the well shall be shut in and remain shut in until its overproduction has been reduced to zero unless the board authorizes continued production.

You are requested to advise the Board by April 30, 1993 of your plans to retire over-production from the subject well. If you have any questions please contact the undersigned at (204) 945-1111.

Yours respectfully,

ORIGINAL SIGNED BY
H. CLARE MOSTER

H. Clare Moster
Deputy Chairman

JNF/hw
April 19, 1993



1300 SUN LIFE PLAZA III
112 - 4th AVENUE S.W.
CALGARY, ALBERTA, CANADA T2P 0H3
TELEPHONE (403) 261-0743
FAX (403) 264-5691

April 29, 1993

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

Attention: Mr. H. Clare Moster
Deputy Chairman

Dear Sir:

RE: Omega Waskada 7-14-2-25 WPM Over-Production

In order to retire over-production from the subject well, Omega proposes to reduce the allowable to 7 m³/d for a period of 9 or 10 months. This plan was implemented in March 1993 and our records indicate that 48 m³ of the over-produced volume has been retired during the March and April production months.

Following full retirement of the over-produced volumes, Omega will implement more stringent monitoring procedures in attempts to avoid future over-production.

Your approval of this plan is hereby requested.

Yours truly,

OMEGA HYDROCARBONS LTD.

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

J.B. Beardsworth
Manager, Production Operations

JB/ns

April 19, 1993

H. Clare Moster
Deputy Chairman
Oil and Natural Gas
Conservation Board

John N. Fox
Chief Petroleum Engineer
Petroleum Branch

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The Branch does not think the well should be shut-in, however, over-production should be retired at a rate of at least 50 m³/month. Omega would benefit by using the shut-in time to conduct a pressure survey at this well to help determine material balance reserves and reservoir limits.

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Deputy Chairman

JNF/hw
April 19, 1993



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Conservation Board

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Omega Hydrocarbons Ltd.
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Calgary AB T2P 0H3

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You are requested to advise the Board by April 30, 1993 of your plans to retire over-production from the subject well. If you have any questions please contact the undersigned at (204) 945-1111.

Yours respectfully,

A handwritten signature in dark ink, appearing to read "H. Clare Moster". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

H. Clare Moster
Deputy Chairman

October 1, 1990

File - Waskada
Field

Mr. D.M. Boyko
Production Engineer
Omega Hydrocarbons Ltd.
1300, 112 - 4th Avenue S.W.
Calgary, Alberta
T2P 0H3

Omega
over-production

Dear Mr. Boyko:

RE: Retirement of Over-Production
Omega Chevron Waskada COM 8-4-2-26 (WPM)

Your request dated September 11, 1990 to retire over-production at the subject well over a four (4) month period is hereby acknowledged.

As of July 31, 1990, cumulative over-production from the Waskada Lower Amaranth A Pool at the subject well totalled 874.8 m³.

Omega is hereby ordered to retire over-production at a minimum rate of 200 m³ /month commencing in October, 1990.

Omega is also required to isolate the MC3b and Lower Amaranth zones and conduct a production test on one of the zones as required under the Petroleum Branch's conditions of approval of commingled production. The production test results are to be reported to the Petroleum Branch upon completion of the test.

If necessary to eliminate cross-flow between the MC3b and the Lower Amaranth, the Director of Petroleum may require the commingled zones be isolated, while over-production is being retired.

The Board is concerned that over-production may have resulted in premature water breakthrough at the well and a possible loss in ultimate recoverable reserves. Omega is requested to comment on the reasons for the sudden drop in production and whether over-production of the well has proven detrimental to ultimate recovery.

If you have any questions in respect of this matter, please contact the undersigned at (204) 945-1111 or L.R. Dubreuil, Director of Petroleum, at (204) 945-6573.

Yours respectfully

ORIGINAL SIGNED BY
H. CLARE MOSTER

H. Clare Moster
Deputy Chairman

September 26, 1990

The Oil and Natural Gas
Conservation Board

Ian Haugh, Chairman

H. Clare Moster, Deputy Chairman

Wm. McDonald, Member

Oil Production

x
oleum Engineer
Branch

RE: Retirement of Over-Production
Omega Chevron Waskada COM 8-4-2-26 (WPM)

Omega Hydrocarbons Ltd. has applied to retire over-production at the subject well over a four month period. As of July 31, 1990, cumulative over-production from the Lower Amaranth totalled 874.8 m³.

RECOMMENDATIONS

It is recommended that the Board order Omega to retire over-production at a minimum rate of 200 m³ /month commencing in October, 1990.

It is also recommended that Omega be required to isolate the commingled zones and conduct a production test in accordance with the Branch's conditions of approval for commingled production. Based on the production test results, discretion should be granted to the Director of Petroleum to require the commingled zones be isolated while over-production is being retired, to eliminate zonal cross-flow. The proposed Board letter to Omega is attached.

DISCUSSION

The well Omega Chevron Waskada COM 8-4-2-26 (WPM) was commingled in the MC3b and Lower Amaranth zones in February, 1989.

Seven months after the zones were commingled total production from the well increased from less than 150 m³ /month to over 400 m³ /month of which approximately 350 m³ /month was allocated to the Lower Amaranth. Production is allocated between the commingled zones based on the MC3b production performance prior to recompletion of the Lower Amaranth. The production allocated to the Lower Amaranth is the difference between the total production from the well and the production allocated to the Mission Canyon.

As of July 31, 1990, cumulative over-production from the Lower Amaranth totalled 874.8 m³. Omega indicated in its application that total production from the well had dropped to 0.5 m³ OPD in August, 1990. Omega is proposing to continue producing the well at this rate and retire the over-production in approximately four months.

Omega has provided no explanation as to why the well rate has suddenly dropped. It is recommended that Omega be required to address this issue and provide an analysis to the Board.

The Petroleum Branch recommends that Omega be ordered to retire over-production at a rate of at least 200 m³ /month.

In accordance with the Branch's conditions of approval of commingled production, it is also recommended that Omega be requested to isolate the zones and conduct a production test on either the MC3b or Lower Amaranth zone. Depending upon the production test results, the zones may be required to be isolated while over-production is retired to eliminate the possibility of cross-flow. The Director of Petroleum should be given the discretion to require isolation of the commingled zones to prevent cross-flow.

ORIGINAL SIGNED BY
JOHN N. FOX

John N. Fox

Approved: _____

L.R. Dubreuil, Director

September 26, 1990

Mr. D.M. Boyko
Production Engineer
Omega Hydrocarbons Ltd.
1300, 112 - 4th Avenue S.W.
Calgary, Alberta
T2P 0H3

Dear Mr. Boyko:

RE: Retirement of Over-Production
Omega Chevron Waskada COM 8-4-2-26 (WPM)

Your request dated September 11, 1990 to retire over-production at the subject well over a four (4) month period is hereby acknowledged.

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Omega is hereby ordered to retire over-production at a minimum rate of 200 m³ /month commencing in October, 1990.

Omega is also required to isolate the MC3b and Lower Amaranth zones and conduct a production test on one of the zones as required under the Petroleum Branch's conditions of approval of commingled production. The production test results are to be reported to the Petroleum Branch upon completion of the test.

If necessary to eliminate cross-flow between the MC3b and the Lower Amaranth, the Director of Petroleum may require the commingled zones be isolated, while over-production is being retired.

The Board is concerned that over-production may have resulted in premature water breakthrough at the well and a possible loss in ultimate recoverable reserves. Omega is requested to comment on the reasons for the sudden drop in production and whether over-production of the well has proven detrimental to ultimate recovery.

If you have any questions in respect of this matter, please contact the Board or L.R. Dubreuil, Director of Petroleum, at (204) 945-6573.

Yours respectfully

H. Clare Moster
Deputy Chairman



1300 SUN LIFE PLAZA III
112 - 4TH AVENUE S.W.
CALGARY, ALBERTA, CANADA T2P 0H3
TELEPHONE (403) 261-0743
FAX (403) 264-5691

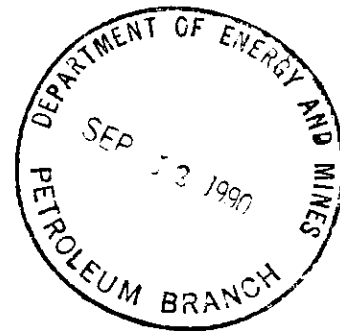
September 11, 1990

MANITOBA ENERGY & MINES
Petroleum Branch
555 - 330 Graham Avenue
Winnipeg, Manitoba
R3C 4E3

Attention: Mr. J. Fox
Chief Petroleum Engineer

Dear Sir:

Re: Omega Chevron Waskada COM 8-4-2-26 WPM
Omega Waskada COM 12-24-1-26 WPM



In response to our telephone conversation of September 6, 1990 the following proposals are put forward regarding the subject wells.

Well 8-4-2-26 WPM is currently overproduced by a volume of approximately 870 m³ of oil from the Lower Amaranth zone. However, at present this well is producing 0.5 m³/d of oil from both zones. At this rate, it is expected that this overproduced volume will be retired in approximately 4 months. In light of this short period, and due to the detrimental effect of shutting in a commingled well thus causing cross-flow, Omega recommends that this well be kept on production. As well, this well has recently exhibited a dramatic increase in water cut. In order to determine which zone is the cause of this increase of water production, Omega proposes to production test the Upper Alida zone in this well.

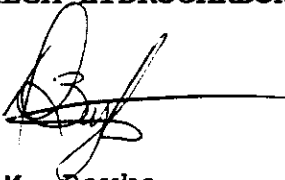
Well 12-24-1-26 WPM has been on an annual production test as part of the requirements for commingled wells since July 31. The results indicate that this well is not producing additional oil from the Lower Alida zone at this time. Omega therefore recommends that the Lower Alida zone be suspended and that the well continued to be produced from the Lower Amaranth zone as it is presently completed.

. . . . / 2

Attached is the MG416 form for well 12-24-1-26 WPM to suspend the Lower Alida zone. Should you require additional information regarding either well please contact me @ (403) 261-0743.

Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in dark ink, appearing to read 'D. Boyko', with a long horizontal stroke extending to the right.

D.M. Boyko
Production Engineer

DMB:jb

c.c.: G. Cormack
R. Brekke
W. Sharp
Waskada Special Projects - Commingling
Wellfiles

OMEGA BASELADA CON 8-4-2-26

CUMULATIVE OVER-PRODUCTION TO JUL 31/90 874.8 m³

Estimated Aug/90 PRODUCTION 29.5 m³

Daily production rate has dropped to < 1.0 m³/D

ESTIMATED CUM. OVER-PROD TO AUG 31/90 - 664 m³

- OMEGA PROPOSES TO CONTINUE TO PRODUCE THE WELL AT < 1.0 m³/D AND RETIRE OVER-PRODUCTION AT 210 m³/L.L. (estimate retirement of over-prod DEC/90)
- OMEGA has also indicated they will be testing the NC35 zone in the cased well to try & determine the source of the recent influx of water.

MASKADA FIELD

LOWER AMARANTH A POOL
03 29A

MASKADA FIELD

OIL WATER	Cum. Prod. Dec. 31/88 m	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	1989 Production m ³ Daily	m ³ Total	Cum. Total m ³
OMEGA HYDROCARBONS LTD. (Cont.)																
07 -16-02-25 (06/24)	--	--	--	--	--	--	36.2 38.7	247.5 20.7	176.1 10.2	141.8 4.9	132.5 5.5	124.9 9.7	116.3 9.4	5.11	975.3 99.1	975.3 99.1
08 -16-02-25	919.3 88.5	302.5 19.8	222.6 28.5	242.6 32.6	233.6 12.1	243.7 13.6	223.7 29.2	173.1 46.2	223.1 9.6	202.1 9.4	204.5 8.3	200.2 13.0	186.5 15.7	7.43	2 658.2 238.0	3 577.5 326.5
16 -01-02-26 *	252.6 212.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	252.6 212.3
05 -03-02-26 **	92.6 79.4	62.5 6.3	108.8 9.9	129.9 10.6	135.7 10.0	124.7 10.8	75.6 5.9	100.3 4.6	-- 18.4	-- 7.4	-- 3.0	-- 10.2	-- 13.3	2.18	737.5 110.4	830.1 189.8
06 -03-02-26 c	794.3 137.6	38.2 --	28.6 --	61.7 5.3	64.4 95.4	24.4 14.1	53.6 56.8	32.5 18.8	27.9 11.2	22.9 4.6	32.9 6.8	23.6 7.5	58.2 21.6	1.43	468.9 242.1	1 263.2 379.7
08 -04-02-26 ***	-- --	17.7 15.9	81.4 --	162.2 --	204.3 --	147.9 --	17.6 --	-- 68.1	122.4 --	362.9 297.2	281.4 324.8	370.3 78.3	378.7 50.9	6.67	2 146.8 835.2	2 146.8 835.2
02 -11-02-26 Prov. ****	990.2 721.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	990.2 721.1
04 -11-02-26 Prov.	1 850.5 803.2	26.1 3.5	22.9 3.5	25.8 5.1	24.9 7.7	22.7 7.7	20.9 1.0	25.3 0.4	30.1 0.4	20.7 8.1	17.9 5.0	7.7 14.2	24.1 9.0	0.76	269.1 65.6	2 119.6 868.8
06 -11-02-26 Prov. *****	1 578.6 781.8	5.5 2.9	3.4 1.2	--	--	--	--	--	--	--	--	--	--	0.21	8.9 4.1	1 587.5 785.9
08 -11-02-26 Prov. *	606.8 762.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	606.8 762.3
10 -11-02-26 Prov. *****	673.1 463.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.1 463.1
	107 153.5 163 204.1	2 645.8 1 821.6		2 763.9 1 807.2		2 494.4 2 097.3		2 502.9 2 479.4		2 459.5 2 637.1		2 337.1 2 392.3				138 558.0 190 771.0
TOTAL OIL		2 967.5		2 849.8		2 724.3		2 489.2		2 546.2		2 623.9			31 404.5	
TOTAL WATER		2 678.3		1 989.1		2 022.6		2 638.9		2 519.4		2 483.7			27 566.9	
TUNDRA OIL AND GAS LTD.																
04 -19-01-25	6 432.2 5 487.4	129.1 240.1	119.4 157.8	114.1 126.5	110.1 121.8	95.3 102.1	89.3 91.5	87.9 96.6	72.2 97.3	85.3 103.6	115.7 120.3	97.0 104.2	102.3 127.8	3.45	1 217.7 1 489.6	7 649.9 6 977.0
05 -19-01-25	41.7 648.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	41.7 648.9
09 -19-01-25	1 073.5 4 620.1	24.9 128.2	20.9 120.9	8.3 57.2	19.7 145.5	19.5 158.4	18.9 147.6	18.7 --	19.7 166.4	25.1 160.5	24.2 165.6	20.3 141.6	14.8 164.9	0.75	235.0 1 556.8	1 308.5 6 176.9
15 -19-01-25	363.0 1 875.8	--	--	2.0 6.9	15.1 38.3	20.8 53.2	20.9 51.3	13.7 40.7	5.7 27.1	8.1 29.1	6.7 26.0	6.8 26.7	4.0 13.3	0.45	103.8 312.6	466.8 2 188.4
	7 910.4 12 632.2		140.3 278.7		144.9 305.6		129.1 290.4		97.6 290.8		146.6 311.9		121.1 306.0			9 466.9 15 991.2
TOTAL OIL		154.0		124.4		135.6		120.3		118.5		124.1			1 556.5	
TOTAL WATER		368.3		190.6		313.7		137.3		293.2		272.5			3 359.0	
UNICORN AGRI-OIL LTD.																
04 -12-02-26	806.7 400.4	12.7 4.5	6.8 3.2	12.3 5.3	15.6 8.4	10.6 1.8	5.0 2.1	11.6 10.5	7.7 3.3	8.8 5.1	7.6 3.0	10.5 8.1	8.9 4.4	0.33	118.1 59.7	924.8 460.1
NON-UNIT PREVIOUS PRODUCERS	7 140.3 79 591.2															7 140.3 79 591.2

ON PRODUCTION DATE (MM/DD)

***RECOMPLETED FROM 03 42D - January 30, 1989 and COMMINGLED WITH 03 42D - February 19, 1989

*****ABANDONED PRODUCER - May 30, 1989

*ABANDONED PRODUCER - June 19, 1989

*****ABANDONED PRODUCER - July 31, 1989

**COMMINGLED WITH 03 42D - January 13, 1989

****ABANDONED PRODUCER - June 16, 1989

c - COMMINGLED

WASKADA FIELD

LOWER AMARANTH A POOL
03 29A

WASKADA FIELD

OIL WATER	Cum. Prod. Dec. 31/89 m ³	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	JUNE Daily m ³	1990 Y.T.Q. m ³	Cum. Total m ³
OMEGA HYDROCARBONS LTD. (Cont.)																
06 -03-02-26	1 263.2	60.7	56.1	62.6	63.5	67.7	64.8							2.16	375.4	1 638.6
	379.7	21.1	23.2	26.1	22.2	19.2	14.9								126.7	506.4
08 -04-02-26	2 146.8	335.7	235.5	333.7	364.0	326.4	314.6							10.49	1 909.9	4 056.7
	835.2	--	--	--	--	--	--								--	835.2
04 -11-02-26	2 119.6	21.8	23.5	3.5	47.3	26.6	22.6							0.78	145.3	2 264.9
Prov.	868.8	5.7	5.6	0.9	4.6	7.4	4.6								28.8	897.6
	130 630.7	2 099.2		3 403.2	2 952.6											147 711.3
	178 348.3	1 665.9		1 759.7	1 685.4											189 458.8
TOTAL OIL	2 445.2		3 057.0	3 123.4											17 080.6	
TOTAL WATER	2 111.3		1 861.0	2 027.2											11 110.5	

TUNORA OIL AND GAS LTD.

04 -19-01-25	7 649.9	81.8	87.8	110.2	73.9	63.9	68.8							2.37	486.4	8 136.3
	6 977.0	87.4	90.3	121.2	72.0	64.1	61.1								496.1	7 473.1
05 -19-01-25	41.7	--	--	--	--	--	--								--	41.7
	648.9	--	--	--	--	--	--								--	648.9
09 -19-01-25	1 308.5	13.7	14.3	14.9	14.0	12.3	12.9							0.46	82.1	1 390.6
	6 176.9	162.4	147.9	150.1	152.4	139.0	123.4								875.2	7 052.1
15 -19-01-25	466.8	7.4	8.6	8.9	8.4	3.0	--								36.3	503.1
	2 188.4	16.9	17.1	17.3	17.6	6.4	--								75.3	2 263.7
	9 466.9		110.7		96.3		81.7									10 071.7
	15 991.2		255.3		242.0		184.5									17 437.8
TOTAL OIL		102.9		134.0	79.2										604.8	
TOTAL WATER		266.7		288.6	209.5										1 446.6	

UNICORN AGRIL-OIL LTD.

04 -12-02-26	924.8	5.6	5.0	2.4	--	--	--								13.0	937.8
	460.1	3.5	3.6	1.0	--	--	--								8.1	468.2
NON-UNIT PREVIOUS PRODUCERS	15 270.1															15 270.1
	95 668.9															95 668.9
LOWER AMARANTH A POOL :	1 442 098.0	12 193.8		15 046.1	14 070.1											1 527 387.0
	2 159 006.3	17 114.9		16 428.7	15 495.8											2 263 474.2
TOTAL OIL	14 203.2		14 940.9	14 834.9											85 289.0	
TOTAL WATER	19 462.8		18 035.8	17 929.9											104 467.9	

LOWER AMARANTH I POOL
03 29I

NON-UNIT PREVIOUS PRODUCERS	1 858.0															1 858.0
	14 242.8															14 242.8
LOWER AMARANTH I POOL :	1 858.0	--	--	--	--											1 858.0
	14 242.8	--	--	--	--											14 242.8
TOTAL OIL	--	--	--	--	--										--	
TOTAL WATER	--	--	--	--	--										--	

LOWER AMARANTH J POOL
03 29J

NON-UNIT PREVIOUS PRODUCERS	193.2															193.2
	1 227.8															1 227.8
LOWER AMARANTH J POOL :	193.2	--	--	--	--											193.2
	1 227.8	--	--	--	--											1 227.8
TOTAL OIL	--	--	--	--	--										--	
TOTAL WATER	--	--	--	--	--										--	

c - COMMINGLED

MASKADA FIELD

MISSION CANYON 3b B POOL
03 42B

MASKADA FIELD

OIL WATER	Cum. Prod. Dec. 31/88 m	1989 Production												Cum. Total m ³	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.		m ³ Daily
MISSION CANYON 3b B	62 496.5		400.4		217.2		382.3		435.0		307.4		344.1		66 743.0
POOL :	153 150.0		2 621.3		1 389.4		2 079.7		2 778.5		2 581.4		2 215.8		180 449.7
TOTAL OIL	387.1		355.7		315.9		382.1		359.0		360.3			4 246.5	
TOTAL WATER	2 273.2		2 671.0		1 773.6		1 993.5		2 561.0		2 361.3			27 299.7	

MISSION CANYON 3b C POOL
03 42C

NEWSCOPE RESOURCES LIMITED

05 -07-01-25	3 721.5	25.8	18.0	20.0	16.1	17.1	15.8	16.0	16.5	11.2	17.3	17.2	1.5	0.55	192.5	3 914.0
	23 241.6	759.1	940.9	719.4	798.3	878.0	691.3	786.8	715.7	480.8	803.1	831.8	830.6		9 235.8	32 477.4
12 -07-01-25	2 653.6	--	--	--	--	--	--	--	--	--	--	--	--		--	2 653.6
	21 529.7	--	--	--	--	--	--	--	--	--	--	--	--		--	21 529.7
13 -07-01-25	3 822.3	--	--	--	--	--	--	--	--	--	--	--	--		--	3 822.3
	10 885.6	--	--	--	--	--	--	--	--	--	--	--	--		--	10 885.6
09 -12-01-26	5 528.0	24.9	21.3	19.8	19.9	17.7	20.9	12.3	18.3	6.2	15.9	13.6	12.0	0.59	202.8	5 730.8
	4 243.7	16.1	50.8	38.5	37.2	48.1	40.7	57.5	53.4	19.8	70.7	71.1	68.8		572.7	4 816.4
	15 725.4		39.3		36.0		36.7		34.8		33.2		13.5			16 120.7
	59 900.6		991.7		835.5		732.0		769.1		873.8		899.4			69 709.1
TOTAL OIL		50.7		39.8		34.8		28.3		17.4		30.8			395.3	
TOTAL WATER		775.2		757.9		926.1		844.3		500.6		902.9			9 808.5	
NON-UNIT PREVIOUS PRODUCERS	550.7															550.7
	1 496.4															1 496.4
MISSION CANYON 3b C	16 276.1		39.3		36.0		36.7		34.8		33.2		13.5			16 671.4
POOL :	61 397.0		991.7		835.5		732.0		769.1		873.8		899.4			71 205.5
TOTAL OIL		50.7		39.8		34.8		28.3		17.4		30.8			395.3	
TOTAL WATER		775.2		757.9		926.1		844.3		500.6		902.9			9 808.5	

MISSION CANYON 3b D POOL
03 42D

OMEGA HYDROCARBONS LTD.

03 -03-02-26	374.8	--	6.7	--	2.8	0.9	--	--	--	--	--	--	--	0.10	10.4	385.2
	4 431.0	529.1	311.4	347.3	365.4	125.2	--	--	--	--	--	--	--		1 678.4	6 109.4
05 -03-02-26	8 909.1	80.0	73.7	27.3	3.8	--	--	--	82.4	54.1	45.6	84.7	99.7	1.77	551.3	9 460.4
*	535.4	53.4	13.1	6.0	7.8	19.4	--	--	5.6	3.4	3.0	6.7	7.8		126.2	661.6
06 -03-02-26	3 464.1	42.4	37.8	31.1	--	--	13.2	--	--	--	--	--	--	0.48	124.5	3 588.6
c	3 208.0	5.4	6.5	4.9	--	--	--	--	--	--	--	--	--		16.8	3 224.8
08 -04-02-26	3 669.4	21.1	36.1	46.0	47.2	46.1	46.9	12.6	38.6	56.1	59.2	57.0	56.8	1.52	523.7	4 193.1
**	14 634.3	223.2	173.2	245.3	111.9	115.9	264.3	69.9	59.3	253.9	294.8	326.9	320.0		2 458.6	17 092.9
	16 417.4		154.3		53.8	237.2	60.1		121.0		104.8		156.5			17 627.3
	22 808.7		504.2		485.1		264.3		64.9		297.8		327.8			27 088.7
TOTAL OIL		143.5		104.4		47.0		12.6		110.2		141.7			1 209.9	
TOTAL WATER		811.1		603.5		260.5		69.9		257.3		333.6			4 280.0	
NON-UNIT PREVIOUS PRODUCERS	36.6															36.6
	515.9															515.9
MISSION CANYON 3b D	16 454.0		154.3		53.8		60.1		121.0		104.8		156.5			17 663.9
POOL :	23 324.6		504.2		485.1		264.3		64.9		297.8		327.8			27 604.6
TOTAL OIL		143.5		104.4		47.0		12.6		110.2		141.7			1 209.9	
TOTAL WATER		811.1		603.5		260.5		69.9		257.3		333.6			4 280.0	

*COMINGLED WITH 03 29A - January 13, 1989
c - COMINGLED

**RECOMPLETED TO 03 29A - January 30, 1989 and COMINGLED WITH 03 29A - February 19, 1989

WASKADA F

MISSION CANYON 3b B POOL
03 42B

WASKADA FIELD

OIL WATER	Cum. Prod. Dec. 31/89 m	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	JUNE Daily m	1990 Y.T.Q. m	Cum. Total m
<u>ENRON OIL CANADA LTD. (Cont.)</u>																
16 -28-01-26	10 828.7 24 367.3	67.0 381.2	59.1 336.4	65.4 370.7	64.1 363.5	65.8 372.8	65.5 371.1							2.18	386.9 2 195.7	11 215.6 26 563.0
	18 075.6 41 965.2		99.8 429.7		110.0 447.0		118.4 457.8									
TOTAL OIL		119.5		122.5		124.0									694.2	18 769.8
TOTAL WATER		563.9		487.8		480.9									2 867.1	44 832.3
<u>OMEGA HYDROCARBONS LTD.</u>																
07 -34-01-26	425.8 3 136.7	36.9 48.2	37.2 65.4	34.0 43.4	32.3 61.4	38.4 51.0	50.9 38.2							1.70	229.7 307.6	655.5 3 444.3
11 -34-01-26	7 277.3 555.1	48.2 2.5	74.5 3.9	44.1 2.3	86.8 3.7	66.3 2.9	73.4 2.9							2.45	393.3 18.2	7 670.6 573.3
14 -34-01-26	175.3 129.0	20.7 22.1	4.9 20.0	--	23.0 75.2	14.8 6.8	6.5 2.1							0.30	69.9 126.2	245.2 255.2
03 -03-02-26	385.2 6 109.4	--	--	--	--	--	--								--	385.2 6 109.4
05 -03-02-26	9 460.4 661.6	123.8 9.5	123.8 10.1	157.5 12.2	160.0 11.1	151.5 10.8	120.1 7.6							4.00	836.7 61.3	10 297.1 722.9
06 -03-02-26	3 588.6 3 224.8	12.2 --	12.3 --	16.8 --	17.4 --	3.1 --	10.4 --							0.35	72.2 --	3 660.8 3 224.8
08 -04-02-26	4 193.1 17 092.9	61.3 230.0	49.0 225.2	54.7 215.0	55.5 168.7	59.1 140.3	56.6 120.8							1.89	336.2 1 100.0	4 529.3 18 192.9
	25 505.7 30 909.5		301.7 324.6		375.0 320.1		317.9 171.6									
TOTAL OIL		303.1		307.1		333.2									1 938.0	27 443.7
TOTAL WATER		312.3		272.9		211.8									1 613.3	32 522.8
NON-UNIT PREVIOUS PRODUCERS	1 521.0 5 097.4															1 521.0 5 097.4
MISSION CANYON 3b B POOL :	84 406.9 208 054.3		508.3 2 499.9		528.5 1 709.5		527.4 2 183.9									87 479.1 221 092.9
TOTAL OIL		490.5		489.9		527.6										
TOTAL WATER		1 954.2		2 441.9		2 249.2									3 072.2 13 038.6	

MISSION CANYON 3b C POOL
03 42C

NEWSCOPE RESOURCES LIMITED

05 -07-01-25	3 914.0 32 477.4	1.6 919.7	8.9 788.8	9.9 683.9	9.6 612.1	10.3 607.1	9.6 644.6							0.32	49.9 4 256.2	3 963.9 36 733.6
12 -07-01-25	2 653.6 21 529.7	--	--	--	--	--	--								--	2 653.6 21 529.7
13 -07-01-25	3 822.3 10 885.6	--	--	--	--	--	--								--	3 822.3 10 885.6
09 -12-01-26	5 730.8 4 816.4	18.4 67.6	20.3 33.8	14.9 70.3	14.0 72.6	14.1 65.8	14.4 65.4							0.48	96.1 375.5	5 826.9 5 191.9
	16 120.7 69 709.1		29.2 822.6		23.6 684.7		24.0 710.0									
TOTAL OIL		20.0		24.8		24.4									146.0	16 266.7
TOTAL WATER		987.3		754.2		672.9									4 631.7	74 340.8
NON-UNIT PREVIOUS PRODUCERS	550.7 1 496.4															550.7 1 496.4

C - COMINGLED

July 26, 1990

The Oil and Natural Gas
Conservation Board
Ian Haugh, Chairman
H. Clare Moster, Deputy Chairman
Wm. McDonald, Member

John N. Fox
Chief Petroleum Engineer
Petroleum Branch

RE: Application for Permission to Over-Produce
Omega Waskada 7-14-2-25 (WPM)

Omega Hydrocarbons Ltd. has applied for permission to over-produce the subject well for the months of July and August, 1990, then retire the accumulated over-production.

RECOMMENDATION

It is recommended that the application to continue over-production of the well through August, 1990 be denied. It is also recommended that the over-production be retired at a rate of 70-80 m³ /month starting August 1, 1990. A copy of the proposed Board letter denying the application is attached.

DISCUSSION

Omega applied May 1, 1990 for a temporary six month exemption from MPR restrictions for the 7-14-2-25 (WPM) well. The Board denied the application (June 26, 1990) as a result of conservation and equity concerns expressed by the Petroleum Branch and the offsetting working interest and royalty owners.

The 7-14 well was put on production March 6, 1990. Table 1 shows that in every month the well has been over-produced and the estimated cumulative production to July 31, 1990 is 850 m³. If the Board removed the MPR restrictions for August, the estimated cumulative over-production to August 31, 1990 will total 1370 m³.

In Omega's letter (July 9, 1990) questioning the Board's decision to deny its original application for temporary exemption from MPR restrictions, the company indicated it expected to over-produce the well 900 m³ during the temporary six month MPR exemption. As of July 31, 1990, the actual over-production will have almost reached this volume.

Approval of this application would, in essence, be a reversal of the Board's previous decision because by the end of August the well would have been produced for a six month period without consideration of MPR restrictions.

It is therefore recommended that the application be denied. Consistent with the Petroleum Branch's treatment of over-production by Enron at the 3-14-2-25 well, it is also recommended that Omega be allowed to retire over-production at the rate of 70-80 m³ /month. This rate of under-production will allow the accumulated over-production to be retired over a 10-12 month period.

Approved by:
JOHN N. FOX

John N. Fox

ORIGINAL SIGNED BY
JOHN N. FOX

Encl.

Approved by:

L.R. Dubreuil, Director

LD

TABLE 1
OVER-PRODUCTION
OMEGA WASKADA 7-14-2-25 (WPM)

<u>1990</u>	Oil Production (m ³ /month)	Allowable (m ³ /month)	Over-Production	
			Monthly (m ³)	Cumulative (m ³)
March	276.3	240	36.3	36.3
April	331.8	240	91.8	128.1
May	314.4	240	74.4	202.5
June	339.8	240	99.8	302.3
July	571.5*	240	550.0**	850.0**

* Production to July 24, 1990.

** Estimated over-production to July 31, 1990.



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

Enron Oil Canada Ltd.
1300, 700 - 9 Avenue S.W.
Calgary, Alberta
T2P 3V4

Attention: Mr. Tim McKay

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

If no valid objection or intervention in writing is received by the Board at Room 309, Legislative Building, Winnipeg, Manitoba, R3C 0V8, within 14 days of the date of this letter, the Board may approve the application.

Yours respectfully,

A handwritten signature in black ink, appearing to read "H. Clare Moster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

H. Clare Moster,
Deputy Chairman



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

Wricada Resources Ltd.
Deloraine, Manitoba
ROM OMO

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

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Yours respectfully,

A handwritten signature in black ink, appearing to read "H. Clare Moster". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

H. Clare Moster,
Deputy Chairman



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

George Alexander Murray
Fairview Home
1351 - 13 Street
Brandon, Manitoba
R7A 4S5

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

If no valid objection or intervention in writing is received by the Board at Room 309, Legislative Building, Winnipeg, Manitoba, R3C 0V8, within 14 days of the date of this letter, the Board may approve the application.

Yours respectfully,

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H. Clare Moster,
Deputy Chairman



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

IVMH Inc.
Goodlands, Manitoba
ROM ORO

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

If no valid objection or intervention in writing is received by the Board at Room 309, Legislative Building, Winnipeg, Manitoba, R3C 0V8, within 14 days of the date of this letter, the Board may approve the application.

Yours respectfully,

H. Clare Moster,
Deputy Chairman



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

Howden Homestead Ltd.
Box 17
Waskada, Manitoba
ROM 2E0

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

If no valid objection or intervention in writing is received by the Board at Room 309, Legislative Building, Winnipeg, Manitoba, R3C 0V8, within 14 days of the date of this letter, the Board may approve the application.

Yours respectfully,

A handwritten signature in black ink, appearing to read "H. Clare Moster". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

H. Clare Moster,
Deputy Chairman



The Oil and Natural Gas
Conservation Board

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

(204) 945-3130

May 30, 1990

Harvey Bernard Thom
Box 125
Goodlands, Manitoba
ROM ORO

Dear Sir/Madam:

RE: Application for Exemption from Maximum
Permissible Production Rate Limitations
Omega Waskada 7-14-2-25 (WPM)

This letter is to notify you that Omega Hydrocarbons Ltd. has made application for a temporary six (6) month exemption from the maximum permissible production rate (MPR) limitations of subsection 51(1) of The Petroleum Drilling and Production Regulation for the well Omega Waskada 7-14-2-25 (WPM).

If no valid objection or intervention in writing is received by the Board at Room 309, Legislative Building, Winnipeg, Manitoba, R3C 0V8, within 14 days of the date of this letter, the Board may approve the application.

Yours respectfully,

A handwritten signature in black ink, appearing to read "H. Clare Moster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

H. Clare Moster,
Deputy Chairman



Energy and Mines

Petroleum

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

(204) 945-6577

May 12, 1989

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

Attention: Mr. R. A. Brekke

Dear Sir,

Re: Over-Production
Omega Waskada 08-16-02-25 (WPM) - Lic. No. 4098

The maximum permissible oil production rate for all pools in the Waskada Field, as set out in Schedule D of the Petroleum Drilling and Production Regulation, is 240 m³/month.

The above mentioned well was put on production on October 10, 1988 and as of March 31, 1989 the well had produced 1687 m³ of oil, resulting in over-production of 275.6 m³ as detailed below.

Month	Oil Production (m ³)	Monthly Allowable (m ³)	Over-Production (m ³)	Cumulative Over-Production (m ³)
<u>1988</u>				
Oct	195.4	240	-	0
Nov	348.7	240	108.7	108.7
Dec	375.2	240	127.2	235.9
<u>1989</u>				
Jan	302.5	240	54.5	290.4
Feb	222.6	240	-	273.0
Mar	242.6	240	2.6	275.6

Please provide the Petroleum Branch with your plans to retire the over-production by September 1, 1989.

Yours sincerely,

John N. Fox
Chief Petroleum Engineer

cc: Waskada



Energy and Mines

Petroleum

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

(204) 945-6577

May 6, 1985

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

Attention: Mr. G. E. Patey
Vice President, Production

Dear Mr. Patey:

Re: Omega Waskada 4-8-2-25 (WPM)
Over-production

A review of production data through March 1985 indicates that the subject well is now substantially over-produced (860.1 m³) Table 1 attached, details the over-production calculation.

Your immediate action to eliminate this over-production by October 1, 1985, pursuant to Subsection 51(6) of The Petroleum Drilling and Production Regulations, 1984, is requested.

Yours sincerely,

L. R. Dubreuil
Chief Petroleum Engineer
Petroleum Branch

LRD/sb
Att:

Table 1
Omega Waskada 4-8-2-25 (WPM)
Over-production*

<u>Month</u>	<u>Opening Cum. Over-prod. (m³)</u>	<u>Production (m³)</u>	<u>Closing Cum. Over-prod. (m³)</u>
October 1984			0
November 1984	0	430.6	190.6
December 1984	190.6	450.7	401.3
January 1985	401.3	446.0	607.3
February 1985	607.3	382.1	749.4
March 1985	749.4	350.7	860.1

* Based on monthly MPR of 240 m³.

Omega Overproduction

'85

Unit 4

Well Datum Jan Jan Cum Feb Feb Cum
OP(m³) (m³) OP(m³) (m³) OP(m³)

1-20	0	104.4	0	97.7	0
1-21	0	30.8	0	20.7	0
1-22	0	195.4	0	132.3	0
1-23	365.5	204.2	324.7	206.3	246.0
1-24	832.3	351.9	374.2	338.8	493.0
1-25	0	42.8	0	27.8	0

* $\bar{p} = 44.77 \text{ KPA}$ from pressure buildup analysis (84-03-01) (5-24)
 * 5-24: fall off (March 21/85). $\bar{p} = \bar{p} = 4909 \text{ LPA}$
 static test = 5174 KPAg MBOF
 * 7-24: fall off (March 21/85). $\bar{p} = \bar{p} = 8206 \text{ KPA}$
 static test = 9389 KPAg MBOF.

Notes like pressure no being maintained @ 5000 KPA, which would exempt Unit 4 from MFR.

Other Omega Wells

	March(m ³)	March Cum OP(m ³)	Apr.	May	J	J	A	S
1-20	0	76.9	0	34.8	0	79.3	0	
1-21	0	70.9	0	113.7	0	60.8	0	
1-22	401.3	446.0	607.3	382.1	749.4 *	350.7	860.1 *	208.2 182.3 96.4 10.2 0 74.9
1-23	31	175.5	0	102.1	0	86.7	0	828.3 770.6 627 391.2 157.2 ⊖
1-24	42.8	239.4	72.2	246.3	93.5	170.9	29.4	105.7 297.4 168.0 242.1 95.4 141.0
1-25	0	191.8	0	106.3	0	136.8	0	0 7.4 0 52.1 0 0
1-26	0	150.8	12.8	241.5	14.0	230.4	0	
1-27	16.0	167.3	0	151.8	0	202.3	0	
1-28	21.0	216.0	47.9	177.6	0	205.0	0	
1-29	0	194.9	0	158.7	0	116.1	0	
1-30	+25-	279.5	39.5	205.6	5.1	406.6	171.7	360.8 358.1 188.8 370.2 189.6 196.9
2-3		287.4	47.4					292.5 410.6 359.4 489.6 439.2 396.1
1-31								
1-32								
1-33								
1-34								
1-35								
1-36								
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Omega Overproduction

Oct - Nov - Dec / 84

MPR = 240 m³/mm.

UNIT 4

UNSKADA

Well	Sept Cum. OP (m ³)	Oct. (m ³)	Oct. Cum. OP (m ³)	Nov (m ³)	Nov. Cum OP (m ³)	Dec (m ³)	Dec. Cum OP (m ³)
1-3	0	145.4	0	92.4	0	102.0	0
1-24 AM	0	66.9	0	53.4	0	49.4	0
2-3	58.6	324.3	142.9	117.6	20.5	166.3	0
3-3	217.4	363.2	340.7	238.6	339.3	266.2	365.5 *
4-3	0	520.1	280.1	235.7	275.8	246.5	282.3 *
8-3 AM	76.3	158.9	0	107.6	0	65.3	0

Other Omega Wells

1-13-27	82.4	212.1	54.5	216.4	30.9	208.2	0
1-10-30-4-15	104.0	258.3	122.3	186.9	69.2	187.1	16.3
2-20-45	20.6	77.5	0	218.5	0	139.4	0
10-36-48	196.3	162.4	118.7	103.9	0	82.1	0
4-2-55	75.7	124.9	0	430.6	190.6	450.7	401.3 *
4-14-57	0	212.2	12.2	250.4	22.6	289.3	71.9 *
3-8-58	0	0	0	243.1	3.1	270.9	34
10-16-58	0	0	0	266.4	26.4	204.1	0
1-1-59	0	0	0	0	0	232.8	42.8
1-2-59	0	0	0	0	0	302.7	62.7

Omega Overproduction
Thru August and September, 1984

Well	July Cum. OP(m ³)	Aug. Prod. (m ³)	MPR (m ³)	Aug. Cum. OP(m ³)	Sept. Prod. (m ³)	Sept. Cum. OP (m ³)		
1-23	0	46.8	240	0	141.8	0	✓	Unit 4
1-24AM	12.4	167.0	"	0	99.7	0	✓	"
2-24	69.6	268.3	"	97.9	200.7	58.6		" *
3-24	49.8	309.0	"	118.8	338.6	217.4		" *
4-24	16.9	258.8	"	55.7	184.7	0	✓	"
8-24AM	74.5	243.7	"	78.2	238.1	76.3		" *

Unit 4 OP

June 148.3 m³
July 223.2 m³
Aug 330.6 m³
Sept 354.3 m³

Voidage 7-24 Pattern
Cum = 28.4 }
Month = 102.7 } Aug.
5-24
Cum = 129.7 }
Curr = 173.7 } Aug.

other Omega wells

A16-B	0	219.5	240	0	112.9	0	
3-1	1.5	247.4	"	8.9	141.4	0	
5-1	13.0	220.8	"	0	156.9	0	
16-27	13.1	220.0	"	0	322.4	82.4	
10-30	209.7	269.4	"	239.1	172.0	101.0	
7-20+25	0	271.8	"	31.8	228.8	20.6	
8-36+26	0	341.5	"	101.5	80.2	0	
10-36+26	0	386.1	"	146.1	290.2	196.3	*
15-36+26	0	242.1	"	2.1	146.4	0	
7-8-2-25	0		"		315.7	75.7	

* problem wells

MPR = 246.43 m^3 in July
($50 \text{ bbls/d} \times 31 \text{ days}$)

Unit 4 OF	June	148.3 m ³
	July	223.2 m ³

Omega Overproduction THRU JULY 1984

Well	June Cum O.P. (m ³)	JULY PROD (m ³)	July Cum. O.P. (m ³)	
1-23	48.6	181.5	0	Unit 4
3-24	0.7	295.5	46.2	Unit 4
4-24	76.0	187.3	13.3	Unit 4
12-30 Lam	236.9	132.6	119.5	
2-24	23.0	293.0	66.0	Unit 4
A16-13	62.0	183.9	0	
10-30	96.3	359.8	206.1	
1-24 Lam	0	258.8	8.8	Unit 4
8-24 Lam	0	320.9	70.9	Unit 4
5-1-2-26	0	259.4	<u>9.4</u>	
	541.7		540.2	

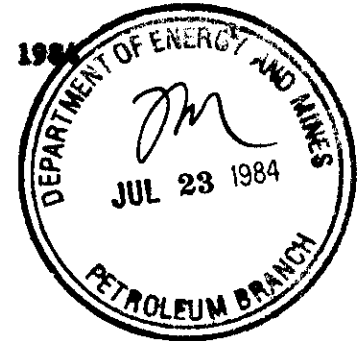
Unit 4 O.P.

June 148.3 m³
July 205.8 m³

NOTE: JULY O.P. is calculated using a monthly allowable of 250 m³, pursuant to Section 51 of The Petroleum Drilling and PRODUCTION Regulations, 1984

File
was

July 20, 1984



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

Attention: MR. Ed Wyse

Dear Sirs:

Re: Overproduction - Maskada Field

Your letter of July 16, 1984 outlining the overproduction status of wells in the subject Field is acknowledged. Please note, the well Omega Maskada 10-30-1-25 (WPM) was overproduced (by 96.3 m³) in June 1984 and therefore should be added to the list of wells to be monitored. The addition of this well results in a total overproduction of 543.5 m³.

In view of the substantial improvement in overproduction status during recent months, you are advised that monthly overproduction status reports will no longer be required. The overproduction status will, however, continue to be monitored and you are expected to eliminate all remaining overproduction as soon as possible.

Yours sincerely,

THE OIL AND NATURAL GAS
CONSERVATION BOARD

ORIGINAL SIGNED BY
IAN HAUGH

Ian Haugh
Deputy Chairman

LRD/lk

b.c. Petroleum Branch ✓

pc: J. Redgwell
M. Eliesen

DATE: July 19, 1984

MANITBA

TO: Clare

COMMENTS:

As per our discussion last month, I feel further monthly reports are unnecessary. Production data will be monitored on a monthly basis and status reports can be reinstated if necessary.

Note Unit 4 area O.P. dropped from 192.1 m³ to 148.3 m³ in June (4 wells still overproduced)

FROM: Bob

Dept.:

Branch:

Address:

Telephone:

- | | |
|---|---|
| <input type="radio"/> Take action | <input type="radio"/> Circulate |
| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
| <input type="radio"/> Call me on this matter | <input type="radio"/> For your information |
| <input type="radio"/> Investigate and report | <input type="radio"/> Supply data for my reply |
| <input type="radio"/> For your revision or approval | <input type="radio"/> Reply direct with copy to me |
| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |

DATE: 18 July 1984

TO: ~~H. C. Mosier~~ → *Bob*

COMMENTS:

RE: Omega Hydrocarbons Ltd.
letter dated July 16/84

FROM: Ian Haugh

Dept.:

Branch:

Address:

Telephone:

- | | |
|---|---|
| <input type="radio"/> Take action | <input type="radio"/> Circulate |
| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
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| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |



THE OIL AND NATURAL GAS
CONSERVATION BOARD
WINNIPEG, MANITOBA

JUL 18 1984

RECEIVED



HYDROCARBONS Ltd.

TELEPHONE: (403) 261-0743

630 - 330 FIFTH AVENUE S.W., CALGARY, ALBERTA T2P 0L1

July 16, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman

Dear Sir:

Re: Overproduction - Waskada Field

As has been our practice, attached is a status report on cumulative overproduction to the end of June, 1984. Present cumulative overproduction is 447.2 m³ from 6 wells.

Yours truly,

OMEGA HYDROCARBONS LTD.

W.E. Wyse
Petroleum Engineer

Enclo:

c.c. G.E. Patey

WEW/tt

CUMULATIVE OVERPRODUCTION
THROUGH JUNE, 1984 (m³)

Allowable
238.5 m³

	<u>to May/84</u>	<u>June</u>	<u>to June/84</u>	<u>% June Allow.</u>
<u>Unit #4 Wells</u>				
1-24Lam-1-26 WPM	0	137.2	(101.3)	58
8-24Lam-1-26 WPM	6.6	191.7	(40.2)	80
1-23-1-26 WPM	7.8	279.3	48.6	117
5-24-1-26 WPM	18.0	0	(220.5)DROP	0
4-24-1-26 WPM	140.5	174.0	76.0	73
3-24-1-26 WPM	6.8	232.4	0.7	97
2-24-1-26 WPM	37.0	224.5	23.0	94
<u>Other Lam Wells</u>				
12-30Lam-1-25 WPM	323.2	152.2	236.9	64
<u>Miss. Wells</u>				
16-27-1-26 WPM	0	232.3	(6.2)	97
16-13-1-26 WPM	66.9	233.6	62.0	98

Omega Overproduction
Thru June 1984.

<u>Well</u>	<u>May Cum O.P. (m³)</u>	<u>June Prod (m³)</u>	<u>June Cum O.P. (m³)</u>	
8-24 LAm	6.6	191.7	0	
1-23	7.8	279.3	48.6	- Unit 4
5-24	18.0	0	0	
3-24	6.8	232.4	0.7	- Unit 4
4-24	140.5	174.0	76.0	- Unit 4
12-30 LAm	323.2	152.2	236.9	
2-24	37.0	224.5	23.0	- Unit 4
A16-13	66.9	233.6	62.0	
10-30	307.0	334.8	<u>96.3</u>	
	606.8		543.5	

Unit 4. O.P. = 148.3 in June
192.1 in May

DATE:

June 22

MANITBA

TO:

Clare

file

COMMENTS:

① I agree with Omega's numbers

FROM:

Bot

Dept.:

Branch:

Address:

Telephone:

- ☐ Take action
- ☐ Per your request
- ☐ Call me on this matter
- ☐ Investigate and report
- ☐ For your revision or approval
- ☐ Return with comments or recommendations
- ☐ Circulate
- ☐ See me re attached
- ☐ For your information
- ☐ Supply data for my reply
- ☐ Reply direct with copy to me
- ☐ Draft reply for signature of:

② Suggest that if continued considerable progress shown with next report, we inform Omega that status reports no longer needed but reiterate that remaining O.P. to be eliminated



HYDROCARBONS Ltd.

TELEPHONE: (403) 261-0743

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

June 14, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman



Dear Sir:

Re: Overproduction - Waskada Field

The attached status report on cumulative overproduction to the end of May 1984, is to keep you informed on the progress of our program. Since November we have reduced cumulative overproduction from 3906.2 to 6068.8 m³ and the number of overproduced wells from 23 to 8. As noted, 16-13-1-26 has been added to the list.

Yours truly,

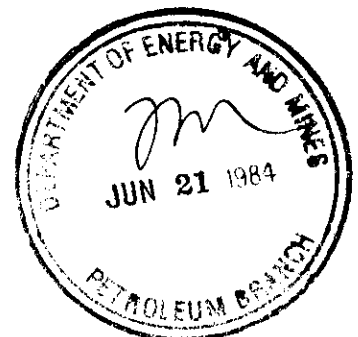
OMEGA HYDROCARBONS LTD.

G.E. Patey
V.P. Production

Enclo:

GEP/tt

p.c. - H. Clare Moster
June 21, 1984 - ra



CUMULATIVE OVERPRODUCTION
THROUGH MAY, 1984(m³)

Allowable

246.4 m³

	<u>to Apr/84</u>	<u>May</u>	<u>to May/84</u>	<u>% May Allow.</u>
<u>Unit #4 Wells</u>				
1-24Lam-1-26	43.2	82.1	(121.1)	33
6-24-1-26	0	67.1	(179.3)DROP	27
8-24Lam-1-26	106.9	146.1	6.6	59
1-23-1-26	30.3	223.9	7.8	91
8-23Lam-1-26	0	123.0	(123.4)DROP	50
5-24-1-26	22.6	241.8	18.0	98
4-24-1-26	152.6	234.3	140.5	95
3-24-1-26	28.6	224.6	6.8	91
2-24-1-26	115.8	167.6	37.0	68
<u>Other Lam Wells</u>				
12-30Lam-1-26	441.2	128.4	323.2	52
13-36-1-26	0	135.4	(111.0)DROP	45
<u>Miss. Wells</u>				
15-27-1-26	0	9.5	(236.9)DROP	96
16-27-1-26	22.3	221.5	(2.6)	90
16-13-1-26	65.5	247.8	66.9	101

June 22, 1984

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

Attention: Mr. G. E. Patey,
Vice President, Production

Dear Sirs:

Re: Overproduction - Waskada Field

Your letter of June 14, 1984 outlining the overproduction status of your wells in the Waskada Field is acknowledged. We wish to point out an apparent error in your reported current level of overproduction (reported as 6 068.3 m³, should be 606.8 m³).

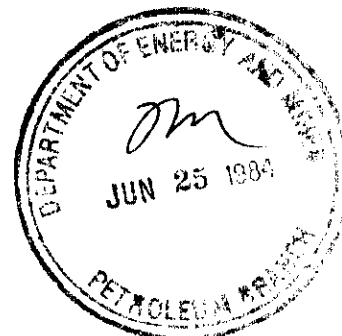
Yours sincerely,

THE OIL AND NATURAL GAS
CONSERVATION BOARD


Ian Haugh
Deputy Chairman

LRD/lk

b.c. Petroleum Branch ✓



OMEGA OVER PRODUCTION

MAY ALLOWABLE 246.3

THRU MAY 1984

<u>Well</u>	April Cum O.P. (m ³)	May Prod (m ³)	May Cum O.P. (m ³)
1-24 LAm	43.2	82.1	—
8-24 LAm	106.9	146.1	6.6 ✓
1-23	30.3	223.9	7.8 ✓
5-24	22.6	241.8	18.0 ✓
3-24	28.6	224.6	6.8 ✓
4-24	152.6	234.3	140.5 ✓
12-30 LAm	441.2	128.4	323.2 ✓
2-24	115.8	167.6	37.0 ✓
16-27	22.3	221.5	—
A16-13	65.5	247.8	<u>66.9 ✓</u>
			606.8



May 28, 1984

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

Attention: Mr. G. E. Patey,
Vice President, Production

Dear Sirs:

Re: Overproduction - Waskada Field

Your letter of May 15, 1984 outlining overproduction status of your wells in the Waskada Field through April 30, 1984 is acknowledged.

It is noted that one additional well, Omega S. Waskada A16-13-1-26 (WPM) was overproduced (65.5 m^3) during April 1984 and should, therefore, be added to the list of wells overproduced. Inclusion of this well results in a total overproduction of $1\ 029.0 \text{ m}^3$ from 10 wells through April 30, 1984.

Yours sincerely,

THE OIL AND NATURAL GAS
CONSERVATION BOARD

ORIGINAL SIGNED BY
IAN HAUGH

Ian Haugh
Deputy Chairman

LRD/lk

b.c. Petroleum Branch ✓

1957 24/10

April 11 Nov 1955

Cell	Jan Cum OP	Feb Cum OP	March Cum OP	April Prod	April Allow Cum OP	April Cum OP
1-24Am	305.0	211.1	300	201.7	43.2	
6-24	243.2	193.7	100.0	86.7	-	
8-24Am	266.6	273.0	137.0	165.4	106.9	
14-27	130.1	197.9	175.0	77.2	-	
1-23	193.2	135.3	77.0	191.3	36.3	
2-23	-	91.8	61.7	15.2	-	
3-24	200.6	155.1	71.3	189.8	22.6	
7-3	-	-	-	51.7	-	
7-24	134.2	10.1	42.2	223.9	28.6	
8-24Am	12.7	19.3	-	29.6	-	
9-24Am	1.1	-	-	246.8	83	residue being upland 13 27 pm 15000 ft
11-2	42.1	-	-	136.7	-	
12-30	-	-	-	64.4	-	
1-30	121.5	67.6	-	170.5	-	
2-26	-	-	-	185.1	-	
3-24	151.9	-	-	150.7	-	
4-24	88.7	12.9	8.9	194.5	-	
5-2	4.8	-	-	96.8	-	
6-2	-	-	-	70.8	-	
7-24	9.8	12.1	-	391.1	152.6	
8-24Am	45.0	13.4	-	117.9	-	
12-30Am	121.8	363.7	487.5	192.2	441.2	
2-24	-	-	55.1	301.2	115.8 62.7	
16-27	-	-	13.9	241.9	22.3 2.4	
16-13	-	-	-	304.0	<u>65.5</u> X	
					<u>1037.3</u> <u>1218.4</u> <u>965.3</u>	

DATE: May 22, 1984

MANIT^{BA}

TO: H. Clare Moster

COMMENTS:

RE: Overproduction - Waskada Field

FROM: Ian Haugh

Dept.

Branch:

Address:

Telephone:

- | | |
|---|---|
| <input type="radio"/> Take action | <input type="radio"/> Circulate |
| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
| <input type="radio"/> Call me on this matter | <input type="radio"/> For your information |
| <input type="radio"/> Investigate and report | <input type="radio"/> Supply data for my reply |
| <input type="radio"/> For your revision or approval | <input type="radio"/> Reply direct with copy to me |
| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |

Bob - ^① Please draft reply for my signature.
looks pretty good!

^② *What is status on New Seges' OP situation?*





HYDROCARBONS Ltd.

TELEPHONE: (403) 261-0743

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

May 15, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman

THE OIL AND NATURAL GAS
CONSERVATION BOARD
WINNIPEG, MANITOBA

MAY 17 1984

RECEIVED

Dear Sir:

Re: Overproduction - Waskada Field

The attached status report on cumulative overproduction to the end of April, 1984 is to keep you informed on the progress of our program. Since November we have reduced cumulative overproduction from 3906.2 m³ to 963.5 m³ and the number of overproduced wells from 23 to 9. Seventy-four percent of this overproduction is from three wells: 12-30Lam, 2-24 and 4-24. Well 12-30 Lam is a very new well and 2 & 4-24 had been controlled to the point where we thought they were not capable of overproduction of allowable. April proved us wrong and the wells have been restored to our list of control wells.

Yours truly,

OMEGA HYDROCARBONS LTD.

G.E. Patey
V.P. Production

Enclo:

WEW/tt

p.c. - H. Clare Moster
May 22, 1984 - IH/ra

Allowable
238.5 m³

CUMULATIVE OVERPRODUCTION
THROUGH APRIL, 1984 (m³)

<u>Unit #3 Wells</u>	<u>to Mar/84</u>	<u>April</u>	<u>to Apr/84</u>	<u>% of April Allow.</u>
8-31-1-25	0	150.7	(87.8) DROP	63
1-31-1-25	8.9	194.5	(35.1)	82

Unit #4 Wells

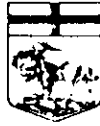
1-24Lam-1-26	80.0	201.7	43.2	85
6-24-1-26	65.0	86.7	(86.8)	36
8-24Lam-1-26	180.0	165.4	106.9	69
1-23-1-26	77.5	191.3	30.3	80
8-23Lam-1-26	61.7	159.0	(17.8)	67
5-24-1-26	71.3	189.8	22.6	80
4-24-1-26	0	391.1	152.6	164
3-24-1-26	43.2	223.9	28.6	94
2-24-1-26	53.1	301.2	115.8	126

Other Lam Wells

13-36-1-26	0	140.5	(98.0)	59
12-30Lam-1-26	487.5	192.2	441.2	81

Miss. Wells

15-27-1-26	117.5	77.2	(43.8)	32
16-27-1-26	18.9	241.9	22.3	101



MANITOBA
DEPARTMENT OF ENERGY AND MINES

THE OIL AND NATURAL GAS CONSERVATION BOARD
309 LEGISLATIVE BUILDING
WINNIPEG, MANITOBA
R3C 0V8

May 9, 1984

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

Attention: Mr. G. E. Patey,
Vice President, Production

Dear Sirs:

Re: Overproduction - Waskada Field

Your letter of April 11, 1984 and attached status report on cumulative overproduction is acknowledged. We concur with your comments regarding the well Omega Waskada 10-23LAm-1-26 (WPM) and have consequently dropped this well from the list of overproduced wells.

In reviewing your status report in detail, two small discrepancies have been noted, involving Omega Waskada 13-36-1-26 (where our calculations indicate overproduction has been eliminated) and Omega Waskada 8-23LAm-1-26 (where our calculations, which do not carry underproduction forward, indicate cumulative overproduction of 61.7 m³ compared to your 25.0 m³). Additionally, two wells, Omega Waskada Prov. 2-24-1-26 and Omega Waskada 16-27-1-26 showed overproduction in March 1984 and should therefore be added to the list. As a result of these modifications, a remaining overproduction of 1 264.6 m³ has been calculated from 12 wells. A summary of cumulative overproduction is attached.

While overall progress towards reducing the accumulated overproduction has been very good, the Board is concerned with the continued high level of overproduction from the well Omega Waskada 12-30LAm-1-25. This well has produced in excess of its maximum permissible rate for the past three months and you are therefore directed to restrict production to the extent necessary to eliminate overproduction for this well as soon as possible, but not later than September 1, 1984.

Yours sincerely

THE OIL AND NATURAL GAS
CONSERVATION BOARD

Ian Haugh
Deputy Chairman

LRD/IH/ra
Attach.

bc: Marc Eliesen
J. F. Redgwell
Petroleum Branch

ATTACHMENT NO. 1
CUMULATIVE OVERPRODUCTION THROUGH

Well	MARCH 1984			March (Allow = 246.4)	Mar. 31/84
	Dec. Cum. O.P.	Jan. Cum. O.P.	Feb. Cum. O.P.	Prod.	Cum. O.P.
1-24LAm	513.9 ✓	365.8	211.1	115.3	80.0
6-24	396.2 ✓	293.2	193.7	117.7	65.0
8-24LAm	349.9 ✓	266.6	273.0	153.4	180.0
15-27	177.5	130.1	197.9	166.0	117.5
1-23	258.5 ✓	198.2	135.3	188.6	77.5
8-23LAm	132.0 ✓	-	91.8	216.3	61.7
5-24	187.8 ✓	200.6	155.1	162.6	71.3
7-31	98.8	-	-	28.5	-
3-24	183.6 ✓	134.2	70.1	219.5	43.2
12-26LAm	117.5	12.7	19.3	102.6	-
14-27LAm	73.9	11.1	-	211.0	-
5-36	75.1	42.1	-	154.2	-
16-35	13.8	-	-	84.7	-
13-36	114.1	121.5	67.6	164.5	-
8-24	3.4 *	-	-	242.0	-
8-31	297.4	151.9	-	214.9	-
1-31	141.0	88.7	12.9	242.4	8.9
1-2	49.9	4.8	-	135.2	-
4-2	23.1	-	-	97.7	-
4-24	-	9.8	12.1	178.6	-
6-27LAm	-	95.0	13.4	117.6	-
12-30LAm	-	121.8	303.7	430.2	487.5
2-24				299.5	53.1
16-27				265.3	18.9
Total O.P.	3 207.4	2 248.1	1 812.1		1 264.6
Wells O.P.	19	17	14		12

DATE: April 24, 1984

TO: ~~H. Clare Moster~~ → *Job*
 RE: Overproduction - Waskada Field
 Omega Hydrocarbons Ltd.

COMMENTS:

FROM: Ian Haugh

Please draft reply for my signature.

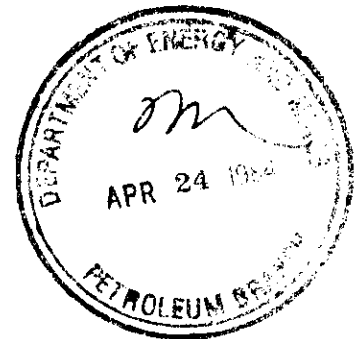
Dept.:

Branch:

Address:

Telephone:

- | | |
|---|---|
| <input type="radio"/> Take action | <input type="radio"/> Circulate |
| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
| <input type="radio"/> Call me on this matter | <input type="radio"/> For your information |
| <input type="radio"/> Investigate and report | <input type="radio"/> Supply data for my reply |
| <input type="radio"/> For your revision or approval | <input type="radio"/> Reply direct with copy to me |
| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |





TELEPHONE: (403) 261-0743

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

April 11, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman



Dear Sir:

Re: Overproduction - Waskada Field

The attached status report on cumulative overproduction to the end of March, 1984 is to keep you informed of the progress of our program. Since November we have reduced cumulative overproduction from 3906.2 m³ to 1155.2 m³ (70%) and the number of overproduced wells from 23 to 10 (57%). If 12-30Lam is eliminated from these figures because it is a new well only recently added to our list of control wells we have reduced cumulative production from the 23 wells in November to 677.7 m³ or 83% of the objective.

Referring to your letter of March 20th, Omega Waskada 10-23Lam-1-26 has not been added to our list of control wells because it is in the existing water flood project and Waskada Lower Amaranth Unit No. 1 and therefore not restricted by allowable by board and order.

Yours truly,

OMEGA HYDROCARBONS LTD.

G.E. Patey
G.E. Patey/
V.P. Production

c.c. Ed Wyse

Enclo:

WEW/tt p.c. - H. Clare Moster
April 24, 1984 - IH/ra

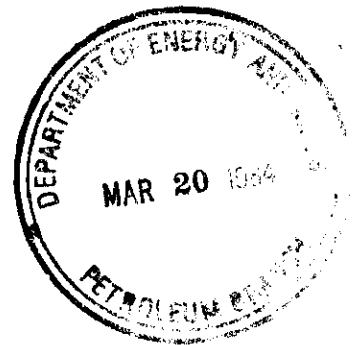
Clare.
What has the Board
to do Omega about O.P.
in Waskada LA
Unit No 1 127

Allowable
.4 m³

CUMULATIVE OVERPRODUCTION
THROUGH MARCH, 1984 (m³)

	<u>to Feb/84</u>	<u>March</u>	<u>to Mar/84</u>	<u>% of March Allow.</u>
<u>Unit #2 Wells</u>				
12-26Lam-1-26	19.2	102.6	(124.6) ✓	42
14-27Lam-1-26	(21.1)	211.0	(56.5) Drop ✓	86
6-27Lam-1-26	(7.1)	117.6	(135.9) Drop ✓	48
<u>Unit #3 Wells</u>				
8-31-1-25	10.6	214.9	(20.9) ✓	87
1-31-1-25	12.9	242.4	8.9 ✓	98
<u>Unit #4 Wells</u>				
1-24Lam-1-26	211.0	115.3	79.9 800	47
6-24-1-26	193.6	117.7	64.9 650	48
8-24Lam-1-26	272.9	153.4	179.9 1800	62
1-23-1-26	135.2	188.6	77.4 175	77
8-23Lam-1-26	55.1	216.3	25.0 617	88
5-24-1-26	155.0	162.6	71.2 ✓	66
4-24-1-26	(53.9)	178.6	(121.7) Drop ✓	72
3-24-1-26	70.0	219.5	43.1 432	89
<u>Other Lam Wells</u>				
5-36-1-26	(17.8)	154.2	(110.0) Drop ✓	63
13-36-1-26	67.5	164.5	(14.4) 400	67
1-2-2-26	(71.6)	135.2	(182.8) Drop ✓	55
4-2-2-26	(53.6)	97.7	(202.3) Drop ✓	40
12-30Lam-1-25	303.7	430.2	487.5 ✓	175
<u>Miss. Wells</u>				
15-27-1-26	197.8	166.0	117.4 ✓	67

Note: Total cumulative overproduction to March, 1984 omitting under produced wells is 1155.2 m³ from 10 wells. (42% of this overproduction is from the new well at 12-30Lam-1-25) this compares to 1400.8 m³ from 12 wells in February.



March 20, 1984

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

Attention: Mr. G. E. Patey,
Vice President - Production

Dear Sirs:

Re: Overproduction - Waskada Field

Your letter of March 9, 1984 relating to overproduction in the Waskada Field is acknowledged.

We concur with your comment that overproduction in Waskada Unit No. 2 and the proposed Unit No. 3 has been virtually eliminated. Board Order No. 71A, providing for exemption from maximum production rate restrictions in the Waskada Unit No. 2 is currently being executed and will be forwarded to you shortly. With respect to the proposed Waskada Unit No. 3, a similar order will be issued subsequent to Board approval of the Unit Agreement.

In reviewing production data submitted in support of your NORP claims for January and February 1984, it is noted that while cumulative overproduction has dropped considerably, there are two additional wells (Omega Waskada 10-23LA-1-26 and Omega Waskada 12-30LA-1-26) which have been overproduced significantly over the last two months. Consequently, these wells should be added to the list of wells to be considered in determining cumulative overproduction as should any other wells exceeding, and not exempt from, production allowables.

Yours sincerely,

THE OIL AND NATURAL GAS
CONSERVATION BOARD

ORIGINAL SIGNED BY
IAN HAUGH

Ian Haugh
Deputy Chairman

LRD/lk

b.c. Petroleum Branch

<u>Well</u>	<u>Cum OP Dec.</u>	<u>Prod. Jan.</u>	<u>Cum OP Jan.</u>	<u>Prod. Feb.</u>	<u>Cum OP Feb.</u>	
1-24LAm	513.9	98.3	365.8	75.8	211.1	
6-24	396.2	143.4	293.2	131.0	193.7	
8-24LAm	349.9	163.1	266.6	236.9	273.0	
15-27	177.5	199.0	130.1	298.3	197.9	
1-23	258.5	186.1	198.2	167.6	135.3	
8-23LAm	132.0	77.8	0	322.3	91.8	
5-24	187.8	259.2	200.6	185.0	155.1	
7-31	98.8	30.2	0	22.8	0	
3-24	183.6	197.0	134.2	166.4	70.1	
12-26LAm	117.5	141.6	12.7	237.1	19.3	Unit 2
14-27LAm	73.9	183.6	11.1	198.4	0	
5-36	75.1	213.4	42.1	170.7	0	
16-35	13.8	124.5	0	80.6	0	
13-36	114.1	253.8 ✓	121.5	176.6 ✓	122.7 676	
8-24	3.4	108.5	0	-	-	
8-31	297.4	100.9	151.9	89.3	0	
1-31	141.0	194.1	88.7	154.7	12.9	Unit 3
1-2	49.9	201.3	4.8	154.1	0	
4-2	23.1	146.4	0	100.0	0	
10-23LAm	-	312.5	66.1	306.4	142.0	
4-24	-	256.2	9.8	232.8	12.1	
6-27LAm	-	341.4	95.0	148.9	13.4	Unit 2
12-30LAm		368.2	121.8	412.4	303.7	
	<u>3207.4 (19)</u>		<u>2314.2 (18)</u>		<u>1954.1 (15)</u>	

DATE: March 15, 1984

MANIT  BA

TO ~~H. Clare Moster~~ → **Bob**

COMMENTS:

RE: Overproduction - Waskada Field
Omega Hydrocarbons

FROM: Ian Haugh

Please draft reply for my signature.

Dept.:

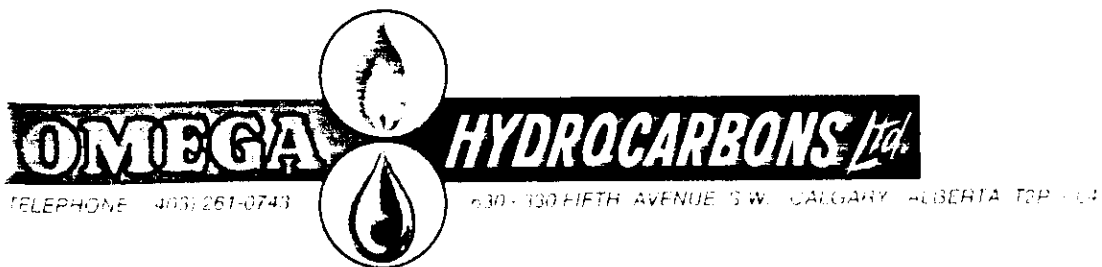
Branch:

Address:

Telephone:

- | | |
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| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
| <input type="radio"/> Call me on this matter | <input type="radio"/> For your information |
| <input type="radio"/> Investigate and report | <input type="radio"/> Supply data for my reply |
| <input type="radio"/> For your revision or approval | <input type="radio"/> Reply direct with copy to me |
| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |





March 9, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman

Dear Sir:


Re: Overproduction - Waskada Field

The attached status report on cumulative overproduction to the end of February, 1984 is to keep you informed of the success of our program for its elimination by June 1, 1984. Since November we have reduced cumulative overproduction from 3906.2 m³ to 1400.8 (64%) and the number of over-produced wells from 23 to 12 (48%).

We have virtually eliminated cumulative overproduction in Units No. 2 and No. 3 and are anxious to receive the previously discussed Board Order on Allowable relief for the Waterflood area. Our effort to control allowables have had a dramatic impact on our cash flow. Continued restriction of production in the waterflood area seems unnecessary.

Yours truly,

OMEGA HYDROCARBONS LTD.


G.E. Patey
V.P. Production

c.c. E. Wyse
Enclo:
WEW/tt

p.c. - Marc Eliesen
March 14/84 - IH/ra
H. Clare Moster

Cumulative Overproduction
Through February, 1984 (m³)

Allowable
230.5

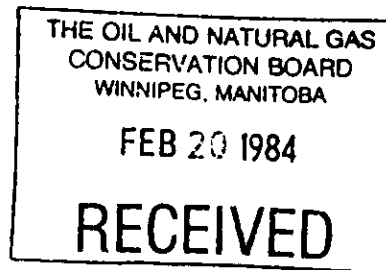
	<u>to Jan/84</u>	<u>Feb.</u>	<u>to Feb/84</u>	<u>% of Feb. Allowable</u>
<u>Unit #2 Wells</u>				
15-27Lam-1-26	79.1	0	(151.4) Drop	0
12-26Lam-1-26	12.6	237.1	19.2	103
14-27Lam-1-26	11.0	198.4	(21.1)	86
6-27Lam-1-26	74.5	148.9	(7.1)	65
13-27Lam-1-26	122.4	0	(108.1) Drop	0
<u>Unit #3 Wells</u>				
8-31-1-25	151.8	89.3	10.6	39
1-31-1-25	88.7	154.7	12.9	67
<u>Unit #4 Wells</u>				
1-24Lam-1-26	365.7	75.8	211.0	33
6-24-1-26	293.1	131.0	193.6	57
8-24Lam-1-26	266.5	236.9	272.9	103
1-23-1-26	198.1	167.6	135.2	73
8-23Lam-1-26	(36.7)	322.3	55.1	140
5-24-1-26	200.5	185.0	155.0	80
4-24-1-26	(56.2)	232.8	(53.9)	101
3-24-1-26	134.1	166.4	70.0	72
<u>Other Lam Wells</u>				
5-36-1-26	42.0	170.7	(17.8)	74
16-35-1-26	(108.2)	80.6	(258.1)	35
13-36-1-26	121.4	176.6	67.5	77
1-2-2-26	4.8	154.1	(71.6)	67
4-2-2-26	76.9	100.0	(53.6)	43
<u>Miss. Wells</u>				
15-27-1-26	130.0	298.3	197.8	129
8-24-1-26	(134.6)	227.3	(137.8) Drop	99

NOTE: Total Cumulative overproduction to February 1984 omitting under produced wells is 1400.8 m³ from 12 wells. This compares to 2296.8 m³ from 17 wells in January.

February 15, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman



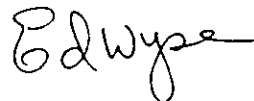
Dear Sir:

Re: Overproduction - Waskada Field

The attached status report on cumulative overproduction to the end of January, 1984 is to keep you informed of the success of our program for its elimination as soon as possible for Unit #2 and Unit #3 wells; and by June 1st, 1984 for other wells. As you can see there has been a significant reduction of overproduction from 3348.8 m³ in December to 2296.3 m³ in January.

Yours truly,

OMEGA HYDROCARBONS LTD.



Ed Wyse for G.E. Patey
V.P. Production

Enclo:

c.c. Ed Wyse

EW/tt

p.c. - Petroleum Branch
February 20, 1984 - IH/ra



CUMULATIVE OVERPRODUCTION
Through January, 1984 (m³)

Jan. Allowable
246.4

	<u>to Dec/83</u>	<u>Jan</u>	<u>to Jan/84</u>	<u>% of Jan. Allowable</u>
<u>UNIT #2 Wells</u>				
15-27Lam-1-26	240.9	84.6	79.1	34
8-27-1-26	(32.5)	151.8	(62.1) DROP	62
12-26Lam-1-26	117.4	141.6	12.6	58
14-27Lam-1-26	73.8	183.6	11.0	75
6-27Lam-1-26	(20.5)	341.4	74.5	139
13-27Lam-1-26	214.8	154.0	122.4	63
<u>UNIT #3 Wells</u>				
8-31-1-25 WPM	297.3	100.9	151.8	41
1-31-1-25	141.0	194.1	88.7	79
<u>UNIT #4 Wells</u>				
1-24Lam-1-26	513.8	98.3	365.7	40
6-24-1-26	396.1	143.4	293.1	58
8-24Lam-1-26	349.8	163.1	266.5	66
1-23-1-26	258.4	186.1	198.1	76
8-23Lam-1-26	131.9	77.8	(36.7)	32
5-24-1-26	187.7	259.2	200.5	105
4-24-1-26	(66.0)	256.2	(56.2)	104
3-24-1-26	183.5	197.0	134.1	80
1-13-1-26	(129.0)	85.9	(289.0) DROP	35
<u>OTHER Lam Wells</u>				
5-36-1-26	75.0	213.4	42.0	87
15-35-1-26	(95.1)	68.8	(272.7) DROP	28
16-35-1-26	13.7	124.5	(108.2)	51
13-36-1-26	114.0	253.8	121.4	103
1-2-2-26	49.9	201.3	4.8	82
4-2-2-26	23.1	146.4	(76.9)	59
<u>Miss. Wells</u>				
15-27-1-26	177.4	199.0	130.0	81
6-27-1-26	(119.7)	39.7	(326.0) DROP	16
8-24-1-26	3.3	108.5	(134.6)	44

NOTE: Total Cumulative overproduction to January 1984 omitting under produced wells is 2296.8 m³ from 17 wells. This compares to 3348.8 m³ from 17 wells in December.

Well	Cum OP <u>Dec</u>	246.9 Prod <u>JAN</u>	Cum OP <u>JAN</u>	Prod <u>Feb</u>	Cum OP <u>Feb</u>	
1-24LAm	513.9	98.3	365.8	75.8	211.1	
6-24	396.2	143.4	293.2	131.0	193.7	
8-24LAm	349.9	163.1	266.6	236.9	273.0	
15-27	177.5	199.0	130.1	298.3	197.9	
1-23	258.5	186.1	198.2	167.6	135.3	
8-23LAm	132.0	77.8	0	322.3	92 91.8	
5-24	187.8	259.2	200.6	185.0	155.1	
7-31	98.8	30.2	0	22.8	0	
3-24	183.6	197.0	134.2	166.4	70.1	
12-26LAm	117.5	141.6	12.7	237.1	19.3	Unit 2
14-27LAm	73.9	183.6	11.1	198.4	0	
5-36	75.1	213.4	42.1	170.7	0	
16-35	13.8	124.5	0	80.6	0	
13-36	114.1	253.8	121.5	176.6	122.7	
8-24	3.4	108.5	0	—	—	
8-31	297.4	100.9	151.9	89.3	0	
1-31	141.0	194.1	88.7	154.7	12.9	Unit 3
1-2	49.9	201.3	4.8	154.1	0	
4-2	23.1	146.4	0	100.0	0	
10-23LAm	—	312.5	66.1	306.4	142.0	
4-24	—	256.2	9.8	232.8	12.1	
6-27LAm	—	341.4	95.0	148.9	13.4	Unit 2
12-30LAm	—	368.2	121.8	412.4	303.7	
<hr/>			<hr/>			
3207.4 (19)			2314.2 (18)		1954.1 (15)	

ALLOWABLE
= 246.4 m³

UNIT 2 OR
PROPORTION 3

Well	CUM O.P. OCT.	CUM O.P. NOV	PROD DEC	CUM O.P. DEC	RANK IN O.P.	
1-24 LAM-1-26	610.9	640.4	119.9	513.9	1	
6-24-1-26	418.1	439.5	203.1	396.2	2	
8-24 LAM-1-26	363.0	403.5	192.8	349.9	3	
15-27-1-26	303.7	237.0	186.9	177.5	11 ¹⁰	
1-23-1-26	271.9	268.0	236.9	258.5	5	
1-13-1-26	224.5	79.5	38.0	—		
8-23 LAM-1-26	196.2	172.5	205.9	132.0	13 ¹²	
5-24-1-26	152.1	252.0	182.2	187.8	9 ⁸	
15-27 LAM-1-26	138.8	284.5 x	202.9	241.0	6	X
7-31-1-25	124.7	213.2 x	132.0	98.8	16 ¹⁵	X
3-24-1-26	92.0	204.9	225.1	183.6	10 ⁹	
11-17-1-25	87.0	—	113.6	—		
6-27-1-26	72.7	—	49.1	—		
8-27-1-26	50.7	25.8 x	188.2	—		
12-17-1-25	49.1	—	148.4	—		
12-26 LAM-1-26	43.0	128.3 x	235.6	117.5	14 ¹³	X
14-27 LAM-1-26	34.6	89.0 x	231.3	216.2 239.0	17	X
8-14-1-26	9.8	—	140.2	—		
2-24-1-26	8.4	—	224.9	—		
12-27-1-26	6.8	—	65.3	—		
5-36-1-26	—	83.5	238.0	75.1	17 ¹⁶	
15-35-1-26	—	50.4	101.0	—		
16-35-1-26	—	92.8	167.4	13.8	20	
13-36-1-26	—	52.8	307.7	114.1	18 ¹⁴	
8-24-1-26	—	12.2	237.6	3.4	21	
8-31-1-25	—	206.9 x	336.9	297.4	4	X
6-27 LAM-1-26	—	5.0 x	221.0	—		
13-27 LAM-1-26	—	73.0 x	388.3	214.9	8 ⁷	X

Well	CUM O.P. OCT	CUM O.P. NOV	DEC PROD	CUM O.P. DEC	
1-31-1-25	—	—	387.4	141.0	12 X
1-2-2-26	—	—	296.3	49.9	18
4-2-2-26	—	—	269.5	23.1	19
TOTAL O.P.	3258.0	4014.7		3663.3 3805.6	
WELLS	20	22		21	

0
3.700
- 120,000
6

Date Jan 17, 1984

To :

Clare

Attached is a summary of the over production status of Omega's wells through December (based on NORP claim)

The total over produced volume has dropped about 200 m³ to 3805.6 m³ 21 wells have cumulative over-production. Four wells were removed from the ~~over~~ overproduced status and 3 wells were added.

In December, only 6 wells exceeded the max. monthly allowable

Most of the highest over-produced wells are apparently being somewhat restricted.

Seven of ^{THINK POSITIVE} the 21 over produced wells (total O.P. = 1326.8 m³) are in

Memorandum from THE DESK OF L. R. DUBREUIL

Date _____

To :

the Ulaskada Unit 2 or the
proposed Ulaskada Unit 3,
areas for which Omega has
applied for relief ~~of~~ from
allowables. (8 wells had cum
O.P. of 1025.7 m³ in November.)

Bob

THINK POSITIVE

Well	(2) Cum. OF Out.	(3) 25% of (2)	240.4 (3) Richard Taylor	Actual Prod	Δ
1-24LAm	610.9	122.2	124.2	119.9	(4.3)
6-24	418.1	83.6	102.8	203.1	40.3
8-24LAm	363.0	72.6	173.8	192.8	19.0
15-27	303.7	60.7	183.7	186.9	1.2
1-23	211.9	54.4	192.0	236.9	44.9
1-13	224.5	44.9	201.5	33.0	(163.5)
8-23LAm	196.2	39.2	207.2	205.9	(1.3)
8-24	152.1	30.4	216.0	182.2	(33.8)
1-23LAm	138.8	27.8	218.4	202.9	(15.5)
7-23	124.7	24.9	221.5	133.0	(88.5)
8-24	120	18.4	228.0	225.1	(2.9)
1-7	87.0	17.4	229.0	113.6	(115.4)
1-27	72.7	14.5	231.9	49.1	(182.8)
7-27	50.7	10.1	236.3	188.2	(48.1)
2-7	44.1	9.8	236.6	148.4	(98.2)
12-26LAm	43.0	8.6	237.8	235.6	(2.2)
14-27LAm	34.6	6.9	239.5	231.3	(8.2)
8-14-1-26	4.8	2.0	244.6	140.2	(104.4)
2-24	3.4	1.7	244.7	224.9	(20.8)
12-27	0.8	1.4	245.2	65.3	(179.9)

Notes

As illustrated by the attached table, bridge was quite successful in following top planes, plus small but back interpretation through October. It appears that we have been behaving pretty good and getting positive numbers compared to the well logs.

ATTACHMENT No. 1

<u>Well</u>	<u>Cumulative Overproduction Through October 1983 (m³)</u>	<u>Cum O.P THRU NW 83</u>	<u>O P IN NOV</u>	<u>Δ PROD FROM OCT</u>
* 1-24LAm-1-26	610.9	640.4	24.5	(185.3)
* 6-24-1-26	418.1	439.5	21.4	(172.0)
* 8-24LAm-1-26	363.0	403.5	40.5	(49.8)
* 15-27-1-26	303.7	237.0	—	(209.9)
* 1-23-1-26	271.9	208.0	—	40.4
* 1-13-1-26	224.5	79.5	—	345 (65.4)
8-23LAm-1-26	196.2	172.5	—	23.7
5-24-1-26	152.1	252.0	100.1 99.9	74.0
15-27LAm-1-26	138.8	284.5	145.7	(1.0)
7-31 4-24 1-26	124.7	213.2	88.5	(44.1)
3-24-1-26	92.0	204.4	146.5	75.0
11-17-1-25	87.0	—	—	(72.8)
6-27-1-26	72.7	—	—	(184.3)
8-27-1-26	50.7	25.3	—	67.2
12-17-1-25	49.1	—	—	(123.9)
12-26LAm-1-26	43.0	128.3	85.3	34.4
14-27LAm-1-26	34.6	89.0	54.4	(88.1)
8-14-1-26	9.8	—	—	(61.2)
2-24-1-26	8.4	—	—	(105.5)
12-27-1-26	6.8	—	—	(21.5)
5-30-1-26		83.5	83.5	
15-35-1-26		50.4	50.4	
16-35-1-26		92.8	92.8	
13-36-1-26		52.8	52.8	
8-24-1-26		12.2	12.2	
8-31-1-25		206.9	206.9	
6-27LAm-1-26		5.0	5.0	
13-27LAm-1-26		73.0	73.0	
	3258.0	4014.7		

*noted in Board's
Letter of
Oct 24/83*

DATE:

MANIT  BA

TO:

Clare

COMMENTS:

FROM:

BoF

Dept.:

Branch:

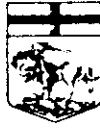
Address:

Telephone:

☐ Take action☐ Circulate☐ Per your request☐ See me re attached☐ Call me on this matter☐ For your information☐ Investigate and report☐ Supply data for my reply☐ For your revision
or approval☐ Reply direct
with copy to me☐ Return with comments
or recommendations☐ Draft reply
for signature of:

Attached is a comparison of October and November over production status for Omega. November is based on the NERP claim and is subject to adjustment.

While some of the highest over producers appear to have been restricted the total number of over produced wells has increased 20 to 22 as has the total over produced volume 3258.0 to 4014.7. Note that 5 out of 6 of the wells noted in the Board's Oct 24 letter produced less in Nov than in Oct.



MANITOBA
DEPARTMENT OF ENERGY AND MINES

THE OIL AND NATURAL GAS CONSERVATION BOARD
309 LEGISLATIVE BUILDING
WINNIPEG, MANITOBA
R3C 0V8

January 23, 1984

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

Attention: Mr. G. E. Patey
V.P. Production

Dear Sirs:

Re: Overproduction - Waskada Field

Your letter of January 10th outlining Omega's plans to eliminate overproduction on all wells prior to June 1st, 1984 is acknowledged. The proposal appears to be workable and is acceptable to the Board. A review of December 1983 production indicates that while the total overproduction has been reduced, six wells exceeded monthly allowables, (see attachment to this letter).

The Board also acknowledges receipt of your January 13th letter. From information contained in this letter, and from our subsequent telephone conversations, it is noted that with the conversion of the wells 15-27LAm-1-26 and 13-27LAm-1-26 to water injection, only two wells in Waskada Unit #2, (12-26LAm-1-26 and 14-27LAm-1-26), will continue to show cumulative overproduction. You advised that the latter two wells are now shut in as of January 18th, and will remain so until cumulative overproduction is eliminated.

The Board is now processing your request for relief from maximum production rate restrictions and the notice referred to in the Board's letter of January 9th has been sent forward for publication.

Yours sincerely

THE OIL AND NATURAL GAS
CONSERVATION BOARD

ORIGINAL
IAN HAUGH

Ian Haugh
Deputy Chairman

IH/ra

cc: Marc Eliesen, Chairman
J. F. Redgwell, Member

bc: Petroleum Branch

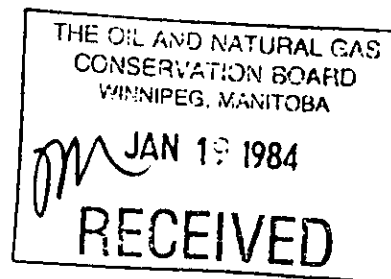
ATTACHMENT
WELLS OVERPRODUCED IN DECEMBER 1983

Well	Production Dec. 1983 m ³	Cumulative Overproduction through Dec. 1983 m ³
13-36-1-26	307.7	114.1
8-31-1-25	336.9	297.4
12-27LAM-1-26	388.3	214.9
1-31-1-25	387.4	141.0
1-2-2-26	296.3	49.9
4-2-2-26	269.5	23.1

January 13, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman



Dear Sir:

Re: Overproduction - Waskada Field


Attached for your information is a summary of the cumulative overproduction status of all Omega's Waskada wells. As you can see a substantial effort has been made to reduce cumulative overproduction. In the month of December only 3 wells of the 23 given special attention were over produced: 13-27LAM, 8-31 and 13-36. Of these three 8-31 and 13-36 were added to the list too late to affect the appropriate measures to control December rates.

Further to our letter of January 10th and in response to your letter of January 9th we supply the following additional comments:

- Our efforts to control allowables in the Unit 2 and Unit 3 areas will be accelerated. Wells 13-27LAM and 15-27LAM, as of this writing, have been shut in pending conversion to water injection and well 8-31 was shut in today. Well 8-31 will remain shut in until all cumulative production has been eliminated.
- The remaining wells will be controlled as described in our letter of January 10th.

Yours truly,

OMEGA HYDROCARBONS LTD.


G.E. Patey
V.P. Production

p.c. - H. Clare Moster
January 19, 1984 - IH/ra

cc E. Wyse

GEP/tt

CUMULATIVE OVERPRODUCTION
Through December 1983 (m³)

Dec. Allowable
246.5 m³/well

	<u>to Nov/83</u>	<u>Dec.</u>	<u>to Dec/83</u>	<u>% of Dec. Allowable</u>	
<u>UNIT #2 Wells</u>					
15-27LAM-1-26	284.5	202.9	240.9	82	— WIW
8-27-1-26	25.8	188.2	(32.5)	76	
12-26LAM-1-26	128.3	235.6	117.4	96	
14-27LAM-1-26	89.0	231.3	73.8	94	
6-27LAM-1-26	5.0	221.0	(20.5)	90	
13-27LAM-1-26	73.0	388.3	214.8	158	— WIW
12-27-1-26	(52.3)	65.3	(233.5) DROP	26	
<u>UNIT #3 Wells</u>					
8-31-1-25	206.9	336.9	297.3	137	Shut-in
<u>UNIT #4 Wells</u>					
1-24LAM-1-26	640.4	119.9	513.8	49	
6-24-1-26	439.5	203.1	396.1	82	
8-24LAM-1-26	403.5	192.8	349.8	78	
1-23-1-26	268.0	236.9	258.4	96	
1-13-1-26	79.5	38.0	(129.0)	15	
8-23LAM-1-26	172.5	205.9	131.9	84	
5-24-1-26	252.0	182.2	187.7	74	
4-24-1-26	27.0	153.5	(66.0)	62	
3-24-1-26	204.9	225.1	183.5	91	
8-14-1-26	(33.7)	140.2	(140.0) DROP	57	
2-24-1-26	(80.8)	224.9	(102.8) DROP	91	

Cumulative Overproduction
Page 2

	<u>to Nov/83</u>	<u>Dec.</u>	<u>to Dec/83</u>	<u>% of Dec. Allowable</u>
<u>OTHER LAM WELLS</u>				
11-17-1-26	(19.8)	113.6	(152.7)DROP	46
12-17-1-26	(17.8)	148.4	(115.9)DROP	60
5-36-1-26	83.5	238.0	75.0	97
15-35-1-26	50.4	101.0	(95.1)	41
16-35-1-26	92.8	167.4	13.7	68
13-36-1-26	52.8	307.7	114.0	125
<u>MISS WELLS</u>				
15-27-1-26	237.0	186.9	177.4	76
6-27-1-26	77.7	49.1	(119.7)	20
8-24-1-26	12.2	237.6	3.3	96

NOTE: Total Cumulative overproduction to December 1983 omitting under produced wells is 3348.8 m³ from 17 wells. This compares to 3906.2 m³ from 23 wells in November.

DATE: January 17, 1984

MANIT^{BA}

TO: H. Clare Moster

RE: Over Production - Waskada Field
Omega Hydrocarbons Ltd.

FROM: Ian Haugh

Dept.:

Branch:

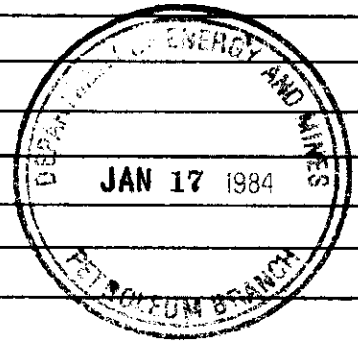
Address:

Telephone:

- | | |
|---|---|
| <input type="radio"/> Take action | <input type="radio"/> Circulate |
| <input type="radio"/> Per your request | <input type="radio"/> See me re attached |
| <input type="radio"/> Call me on this matter | <input type="radio"/> For your information |
| <input type="radio"/> Investigate and report | <input type="radio"/> Supply data for my reply |
| <input type="radio"/> For your revision or approval | <input type="radio"/> Reply direct with copy to me |
| <input type="radio"/> Return with comments or recommendations | <input type="radio"/> Draft reply for signature of: |

COMMENTS:

Please draft reply for my signature.



January 10, 1984

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

Attention: Dr. Ian Haugh
Deputy Chairman

THE OIL AND NATURAL GAS
CONSERVATION BOARD
WINNIPEG, MANITOBA

JAN 13 1984

RECEIVED

Dear Sir:

Re: Over Production - Waskada Field

This will acknowledge your letter of December 29th. The eight wells that you mentioned will be added to the list of wells that will be given special attention to eliminate over production.

Our plan to eliminate cumulative over production on all wells by June 1st, 1984 is to reduce the effective allowable for these wells by an increasing percentage of their remaining cumulative over production each month.

In December our field people were given a schedule of target production rates for the subject wells that was calculated on the basis of the monthly allowable less 20% of each well's remaining cumulative over production. These targets were adjusted slightly to account for the oil proration factor. Well production will be controlled by shutting the wells in when they have made their allowable. This is the only practical method to control the rate given the frequency with which we may have to adjust the targets.

In January, we will recalculate the over production status of each well and adjust over targets to eliminate 30% of the remaining over production. The process will continue in February with 40%, in March with 50%, in April with 75% and in May with 100%; thereby eliminating cumulative over production by June 1st, 1984.

p.c. - H. Clare Moster
January 17, 1984 - IH/ra

.../2

Dr. Ian Haugh
Page 2

Our efforts to control well production will be naturally aided by normal well decline and from the scheduled conversion of certain wells to water injection. The magnitude of the problem will be further reduced if the Board rules favourably to our application of December 22nd for unrestricted allowable for the waterflood project wells.

Insofar as the Board's ruling on this application could have a very significant effect on these plans we are understandably anxious for your decision. In this regard we ask to be advised if our application of December 22nd is sufficient in itself; what further actions may be required; and, when a decision may be forthcoming?

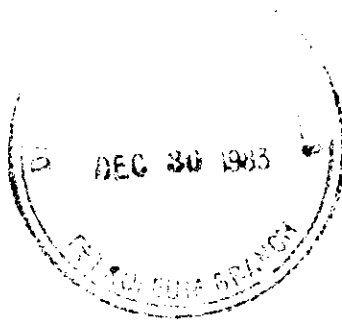
Yours truly,

OMEGA HYDROCARBONS LTD.

A handwritten signature in cursive script, appearing to read "G.E. Patey".

G.E. Patey
V.P. Production

GEP/tt



December 29, 1983

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

Attention: Mr. G. E. Patey
V.P. Production

Dear Sirs:

Thank you for your letter of December 13. The Board has noted the efforts being made by your Company to eliminate overproduction in the Waskada field and while we agree that some progress has been made, a number of wells continued to be overproduced in November and a total of eight additional wells showed overproduction ranging from 5.0 to 206.9 m³ as recorded on the attachment to this letter.

Your proposal to endeavour to implement steps to eliminate cumulative overproduction is also noted. However, the Board requests that you take the necessary steps to eliminate all overproduction by June 1st, 1984, and that you provide the Board, prior to January 15, 1984, with details of your Company's plan to achieve this.

Yours sincerely

THE OIL AND NATURAL GAS
CONSERVATION BOARD

CLERK OF THE BOARD
IAN HAUGH

Ian Haugh
Deputy Chairman

Attachment

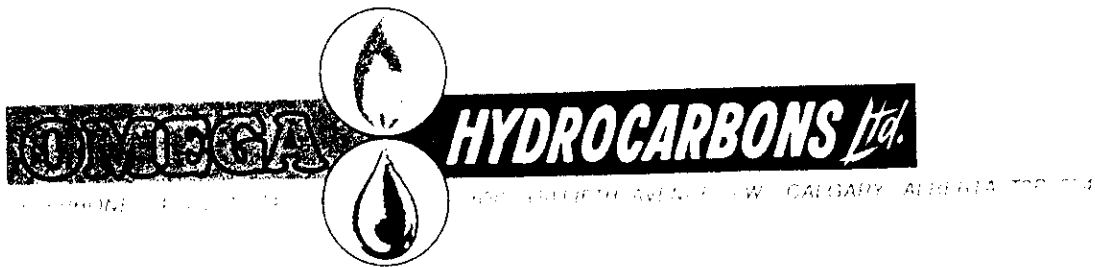
cc: Marc Eliesen, Chairman
J. F. Radgwell, Member

IH/ra

bc: Petroleum Branch

<u>Well</u>	<u>Overproduction in November 1983 (m³)</u>
-------------	--

5-36-1-26	83.5
15-35-1-26	50.4
16-35-1-26	92.8
13-36-1-26	52.8
8-24-1-26	12.2
8-31-1-25	206.9
6-27LAm-1-26	5.0
13-27LAm-1-26	73.0



December 13, 1983

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

Attention: Dr. Ian Haugh
Deputy Chairman

Dear Sir:

Re: Overproduction - Waskada Field

This will acknowledge receipt of your December 8th letter and hopefully reassure you that appropriate measures are being taken to eliminate overproduction of allowables at Waskada. Measures were initiated in November which, although not entirely successful, have brought under control the most severely overproduced wells. While initially we had targetted simply to eliminate overproduction we will now endeavor to implement steps to also eliminate cumulative overproduction.

The attached table represents the calculated overproduction status of the wells of concern through November, 1983. With a few words of explanation we offer this as evidence of our efforts to control allowables.

As you are probably aware the bulk of Omega's Waskada wells are produced through satellite testing facilities and actual production is prorated to battery totals from the individual well tests. It is therefore necessary to take into consideration the current oil proration factor in setting target levels of preprorated oil volumes. This was done and targets set for November. However, through a continuing effort to improve testing and the resulting prorating our November oil proration factor was 10% higher than our October oil proration factor. Because November targets were estimated using October's oil proration factor this resulted in our targets being inadvertently set 10% higher than they should have been. Bearing this in mind you can see that of


.../2

Dr. Ian Raugh
Page 2

the 20 wells that were overproduced only 5 were significantly over-produced in November and these 5 were down the prioritized list. While we acknowledge this performance is still less than acceptable we point out these facts only to help reassure you that we are working on the problem and will continue to make even a greater effort to do so.

Yours truly,

OMEGA HYDROCARBONS LTD.


G.E. Patey
V.P. Production

cc Ed Wyse

GEP/tt

CUMULATIVE OVERPRODUCTION
Through November 1983 (m³)

<u>Well</u>	<u>to Oct./83</u>	<u>Nov.</u>	<u>to Nov./83</u>	<u>% of Nov. Allowable</u>
1-24LAM-1-26	610.9	268.0	640.4	112
6-24-1-26	418.1	259.9	439.5	109
8-24LAM-1-26	363.0	279.0	403.5	117
15-27-1-26	303.7	171.8	237.0	72
1-23-1-26	271.9	234.6	268.0	98
1-13-1-26	224.5	93.5	79.5	39
8-23LAM-1-26	196.2	214.8	172.5	90
5-24-1-26	152.1	338.4	252.0	142
15-27LAM-1-26	138.8	384.2	284.5	161
4-24-1-26	124.7	140.8	27.0	59
3-24-1-26	92.0	351.4	204.9	147
11-17-1-26	87.0	131.7	(19.8)	55
6-27-1-26	72.7	243.5	77.7	102
8-27-1-26	50.7	213.6	25.8	90
12-17-1-25	49.1	171.6	(17.8)	72
12-26LAM-1-26	43.0	323.8	128.3	136
14-27LAM-1-26	34.6	292.9	89.0	123
8-14-1-26	9.8	195.0	(33.7)	82
2-24-1-26	8.4	149.3	(80.8)	63
12-27-1-26	6.8	179.4	(52.3)	75
	<hr/>		<hr/>	
TOTAL	3258.0		3125.2	

NOTE: Total Cumulative overproduction to November, 1983 omitting under produced wells = 3329.6

300 ASSINIBOINE AVENUE / WINNIPEG / MANITOBA / CANADA / R3C 0X6



December 8, 1983

DELIVERED

The Oil and Natural Gas
Conservation Board
989 Century Street
Winnipeg, Manitoba
R3H 0W4

ATTENTION: DR. IAN HAUGH, DEPUTY CHAIRMAN

Dear Sir:

RE: OMEGA HYDROCARBONS LTD.
OVERPRODUCTION IN THE WASKADA FIELD

Having first brought the problem of overproduction in the Waskada Field to the Board's attention in our letter of October 6, 1983, we now wish to restate these concerns and call upon the Board to take immediate action on this matter. Recent developments in the area have demonstrated the seriousness of the problem and we feel that Omega's continuing, flagrant disregard for Provincial regulations can no longer be tolerated.

Our concern regards Omega's production practices in the S.E. 24-1-26 WPM. As we indicated in our letter of October 6, 1983, the well 1-24LAM-1-26 produced an average of 27 m3/D. in June which is 3.4 times the production allowable of 7.9 m3/D. We are now greatly disturbed to see that Omega has continued to overproduce this well through July, August and September with the most recent production figures available (September) indicating a daily rate of 14 m3, still greatly in excess of the production allowable. Even more alarming are production figures recently released for 8-24LAM-1-26 which, like 1-24LAM, directly offsets our lands in Section 19-1-25. This well was put on production by Omega in August and during the first 25 days of production averaged 25.4 m3/D or 3.1 times the production allowable of 7.9 m3/D.

The deleterious effects of these excessive production practices are now becoming apparent. As was our indicated intention, we have now drilled and completed a well in LSD 4-19-1-25 which is currently on production from the Lower Amaranth zone. Although

.../2

The Oil and Natural Gas
Conservation Board
December 8, 1983
Page #2

we did not pressure test this well, all indications during the completion process suggested that the Lower Amaranth reservoir pressure at this location was significantly lower than original reservoir pressure as the formation was taking in oil on vacuum. We attribute this serious pressure depletion to the overproduction in offsetting wells in Section 24.

The rate at which this pressure depletion has occurred is particularly alarming. We are currently examining the alternatives for pressure maintenance on our lands either as a participant in Omega's proposed scheme or on our own as we feel that a secondary recovery scheme of some kind will be required in the near future.

In the meantime, we feel that the primary depletion stage of the reservoir in this area has been grossly inequitable due to Omega's flagrant disregard for Provincial regulations in the form of excessive production rates. At 4-19 we are facing a significant loss of primary reserves which we largely attribute to production by Omega on offsetting lands which amounted to roughly twice that allowed by regulation during the period of June to September, 1983.

We now call upon the Board to take immediate action to rectify this situation. We feel that the maximum permissible rate on all wells which have overproduced should immediately be set at an appropriate rate below the current maximum to ensure that the average production rate for the first year of production will not exceed the established maximum of 7.9 m³/D. This rate should be enforced diligently and under the threat of closure. It is only through measures such as this that the Board will be able to restore some semblance of equity to the current situation.

The inequities that have arisen out of this situation may also have some implications on future unitization negotiations. If we conclude that the optimum pressure maintenance scheme for our lands would be an expansion of Omega's proposed scheme in Section 24, and we had the support of the Board on this matter,

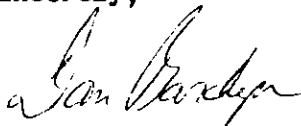
The Oil and Natural Gas
Conservation Board
December 8, 1983
Page #3

we would enter negotiations with the position that tract factors must be calculated on the basis of volumetrically-calculated in-place reserves and produced reserves only, without regard to primary production rates. In this way, no advantage would be given to operators who choose to disregard regulations by overproducing their wells and excessively deplete pressure on both their land and their neighbour's land.

We recognize that the development of the Waskada Lower Amaranth Pool has occurred very rapidly and that a certain flexibility in regulations may be required to accomodate the necessary experimentation in drilling, completion and production techniques. We are appreciative of the contributions which Omega has made in this area and we have been restrained in our reaction to excessive production in Lower Amaranth wells offsetting our lands. However, recent developments have convinced us that these excessive production rates pose a serious threat to our ability to prudently and efficiently produce the oil under our lands. This situation jeopardizes the economic viability of our operation, the interests of the mineral interest holders, to whom we are responsible, and the maximization of recoverable reserves which is in the interest of all the people of Manitoba.

We therefore call upon the Board to use its powers under The Mines Act to immediately end overproduction and to restore equity. Failing this, we will be forced to seek legal avenues for redressing this most serious situation.

Sincerely,



Daniel P. Barchyn
Exploration Manager
Tundra Oil and Gas

DB/eb

cc Ken Lee, John Mitchell and Clare Moster

Clare

Re: Overproduction - Waskada Field

A review of over production in the Waskada Field has been made. The calculation was based on provisions in M160-R4P and M160R6P. In a month when a well goes on production, the allowable is $1250 \text{ bbl} + 60 \times (\text{DAYS OP} - 5)$. There after it is $50 \times \text{CALENDAR DAYS}$. Underproduction is not carried forward. Data was cumulated from January '83

The following lists, in order of overproduced volume the overproduced wells

<u>Well</u>	<u>Operator</u>	<u>CUM OVER PRODUCTION - SINCE JAN 83</u>	<u>OVER PROD UCED IN OCT</u>	<u>Remarks</u>
16-23-1-26	Omega	2143.8	Yes	L. Am Unit 1
16-12LAm-1-26	New Scope	1275.4	No	
8-26-1-26	Omega	1026.8	Yes	L. Am Unit 1
12-7LAm-1-25	New Scope	819.8	No	
1-24LAm-1-26 *	Omega	610.9	Yes	
10-25-1-26	Omega	472.4	Yes	L. Am Unit 1
11-25-1-26	Omega	445.9	Yes	" " " 1
6-24-1-26 *	Omega	418.1	Yes	
9-23-1-26	Omega	411.8	No	L. Am Unit 1
8-24LAm-1-26 *	Omega	363.0	Yes	
10-12-1-26	New Scope	359.2	No	
15-27-1-26 *	Omega	303.7	Yes	
1-23-1-26	Omega	271.9	No	
1-13-1-26	Omega	224.5	No	
8-23LAm-1-26	Omega	196.2	No	

1-26-1-26	Omega	177.5	No	L. Am Unit 1
5-24-1-26	Omega	152.1	Yes	
15-27LAm-1-26	Omega	138.8	Yes	
4-24-1-26	Omega	124.7	Yes	
12 other wells.	11 Omega 1 New Scope	556.3	8-Yes 4-No.	

BoL

→ BOR



MANITOBA
DEPARTMENT OF ENERGY AND MINES
AND NATURAL GAS CONSERVATION BOARD
309 LEGISLATIVE BUILDING
WINNIPEG, MANITOBA
R3C 0V8

December 8, 1983



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

Attention: Mr. G. E. Patey,
Vice-President, Production.

Dear Sirs:

Re: Overproduction - Waskada Field

Further to our letter of October 24, 1983, the Board notes with concern that a number of Omega's wells continue to be substantially overproduced. Attachment No. 1 indicates cumulative overproduction from January to October 1983 calculated pursuant to the provisions of Manitoba Revised Regulation M160-R4P and M160-R6P.

You are hereby directed to ensure that all overproduced wells are restricted as necessary to eliminate all cumulative overproduction prior to June 1, 1984. Should November 1983 production data or data from subsequent months indicate that wells continue to be overproduced on a monthly basis, you may be required to appear before the Board at an inquiry to further investigate this situation.

Yours sincerely

The Oil and Natural Gas
Conservation Board

FOR THE CHAIRMAN
IAN HAUGH

Ian Haugh
Deputy Chairman

cc: Marc Eriksen
J. R. Redwell

12/11/83
[redacted]
[redacted] Branch
[redacted] Office

ATTACHMENT No. 1

Cumulative Overproduction

Well

Through October 1983 (m³)

1-24LAm-1-26	610.9
6-24-1-26	418.1
8-24LAm-1-26	363.0
15-27-1-26	303.7
1-23-1-26	271.9
1-13-1-26	224.5
8-23LAm-1-26	196.2
5-24-1-26	152.1
15-27LAm-1-26	138.8
4-24-1-26	124.7
3-24-1-26	92.0
11-17-1-25	87.0
6-27-1-26	72.7
8-27-1-26	50.7
12-17-1-25	49.1
12-26LAm-1-26	43.0
14-27LAm-1-26	34.6
8-14-1-26	9.8
2-24-1-26	8.4
12-27-1-26	6.8

October 24, 1983

Omega Hydrocarbons Ltd.
630, 330 - 5th Avenue S.W.
Calgary, Alberta
T2P 1K1

Attention: Mr. C. A. Patey,
Vice-President

Dear Sir:

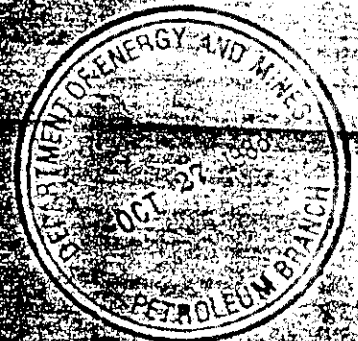
Re: Overproduction - Waskada Field

A review of recent production records indicates that a number of wells operated by Omega in the Waskada Field have been significantly, and in some cases consistently, overproduced with respect to the Field allowable of 50 barrels of oil per day (245 m³/month based on a 31 day month).

Attachment 1 to this memo is a tabulation of wells showing production rates exceeding the monthly allowable over the period May to September 1983. Not included in this list are wells located in the Waskada Lower Amaranth Unit No. 1 or wells that exceeded the allowable production rate for only one month during the above mentioned period.

While overproduction for a month, particularly on a new well, is understandable, we feel that you should be able to adjust operations to ensure that such overproduction does not recur consistently.

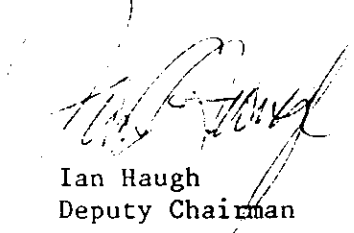
You are reminded that such overproduction is in contravention of Section 11(1) of Manitoba Revised Regulation 1100/82. Further, as you are aware, the Board has received complaints from other operators in the area that such overproduction may seriously jeopardize



that operator's ability to economically and efficiently produce its reserves. Consequently, you are hereby directed to restrict production rates in all wells, other than those in the Waskada Lower Amaranth Unit No. 1, to levels as defined by the above-mentioned regulation.

Yours sincerely

THE OIL AND NATURAL GAS
CONSERVATION BOARD



Ian Haugh
Deputy Chairman

LRD/lk/ra

cc: Marc Eliesen, Chairman
J. F. Redgwell, Member

Petroleum Branch

OVERPRODUCTION - WASKADA FIELD

OMEGA HYDROCARBONS LTD.

<u>WELL</u>	<u>Production (m³/mth)</u>					
	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG.</u>	<u>SEPT*</u>	
1-13-1-26	346.0	346.3	284.8	-	340.7	340.7
1-24LAm-1-26	-	431.3	-	364.3	392.8	392.8
15-27-1-26	-	337.1	331.4	340.7	407.2	
8-23LAm-1-26	-	-	429.3	363.3	-	
6-24-1-26	-	-	-	319.4	398.5	398.5
8-24LAm-1-26	-	-	429.3	-	470.2	470.2
1-23-1-26	378.2	295.7	294.1	-	-	
5-26-1-26	282.2	271.0	-	-	-	

NOTE: Allowable is 239 - 247 m³/mth.

*based on NORP claim

July 26, 1982

Dr. I. Haugh
L. A. Dubreuil
Omega Co. File

A. Clare Moster
Director
Petroleum Branch

RE: OMEGA OVER-PRODUCTION

George Dwyer (Omega), called today to indicate that Omega would be commencing an approximate \$2 million pipe lining program in the Waskada area within the next week or so. While these operations are underway, certain wells will have to be shut down. Omega will be making a written request to allow them to over-produce (monthly allowable) wells before they are shut-in, so as to compensate for loss of monthly allowable when wells are shut-in.

I indicated that approval for such measures would probably be confirmed on the condition that by the end of a certain period (i.e.: - September 30/82) that any over-production would be balanced off (on an individual well basis).

Section 2 of Manitoba Revised Regulation M80-R6P permits cumulative over-production for 3 consecutive months, so long as the cumulative over-production at the end of the 3 months does not exceed 10% of the cumulative allowable.



A. Clare Moster

HCM/sb



MANITOBA

DEPARTMENT OF ENERGY AND MINES

THE OIL AND NATURAL GAS CONSERVATION BOARD

156 LEGISLATIVE BUILDING

WINNIPEG, MANITOBA

R3C 0V8

June 8, 1982

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

Attention: Mr. Ed Wyse

Dear Sirs:

This will acknowledge receipt of your letter of April 6, 1982, in which you suggest changes in the methods employed to determine maximum production rates (MPR's) for wells in the Waskada area.

Your comments regarding the current inadequacy of testing facilities for Omega's Waskada area wells are noted. This deficiency, which has been brought to your attention a number of times in the past, makes any system of MPR administration impossible and seriously hampers efforts to obtain initial production information to properly plan the development of the reservoir. Consequently, you are requested to proceed with installation of adequate production testing facilities with the utmost dispatch.

With respect to the method of determination of maximum monthly production volumes, the Board is prepared to eliminate daily production restrictions for a period of one year, ending June 1st, 1983, on condition that results of a valid production test be submitted to the Petroleum Branch on a monthly basis for any well whose reported daily production rate has exceeded 8.0 m³/day for any one of the previous three months. Correspondingly, the monthly allowable production volume will henceforth be calculated by multiplication of the number of calendar days in the month by 8.0 cubic metres per day. At the expiry of this exemption (June 1, 1983), the Board requires that Omega submit a report on any operational advantages which may have resulted from this exemption, together with your appraisal of what effects the exemption has had on production rates and ultimate recovery. This exemption will apply to all wells completed in the Lower Amaranth Formation located in Township 1, Ranges 25 and 26 WPM.

Yours sincerely,

ORIGINAL SIGNED BY
IAN HAUGH

Ian Haugh,
Deputy Chairman.

cc: Marc Eliesen, Chairman
J. F. Redgwell, Member
x.c. - H. Clare Moster

→ Bob
file

May 21, 1982

The Oil and Natural Gas Conservation
Board

M. Eliason, Chairman
Dr. I. Haugh, Deputy Chairman
J. Radgwell, Member

H. Clare Moster
Director
Petroleum Branch

RE: WASKADA AREA ALLOWABLES - LOWER AMARANTH FORMATION

In Omega's letter of April 6th, 1982, (copy attached), summarizing a telephone conversation between L. R. Dubreuil and Ed Wyse of Omega, changes in the method used to calculate a well's monthly production allowable were suggested.

The first was elimination of the maximum operating day restriction of 60 BOPD required pursuant to Section 8 (1) of Manitoba Revised Regulation M160-R6P. The second suggestion involved pooling of well allowables in areas of common mineral ownership (production spacing units) similar to current practice in Alberta.

The attached recommended draft letter would grant approval of the first suggestion for a period of one year, at the end of which, the continuation would be subject to review. As noted in the draft, the need for production spacing units does not at this time, warrant their introduction.

The following list includes wells which may be affected by elimination of the maximum operating day rate.

<u>WELL</u>	<u>ON PRODUCTION</u>	<u>March 1982 Rate</u> <u>m³/day</u>
1-13-1-26	March 16, 1982	8.20
15-13-1-26	October 29, 1981	13.77
7-24-1-26	November 23, 1981	7.50
15-24-1-26	October 16, 1981	13.53
5-25-1-26	September 18, 1981	7.50
9-25-1-26	February 15, 1982	7.40

All the above wells are completed in the Lower Amaranth Formation. It is recommended that a similar exemption be granted, upon request, to anyone else with regards to wells in this area completed in the Lower Amaranth.

Original Signed by H. C. Moster

H. Clare Moster

HCM/sb

Att:

DRAFT

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

Attention: Ed Wyse

Dear Mr. Wyse:

Your letter of April 6, 1982 suggesting changes in the methods employed to determine maximum production rates (MPR's) is acknowledged.

We agree with your comments regarding the current inadequacy of testing facilities for your Waskada area wells. This deficiency has been brought to your attention a number of times in the past. This deficiency makes any system of MPR administration impossible and seriously hampers efforts to obtain initial production information to properly plan the development of the reservoir. Consequently, we reiterate that installation of adequate production testing facilities in the Waskada area are of utmost importance at this time. We are aware that you are taking steps to rectify this situation (i.e. new battery construction) and we encourage you to give this a high priority.

With respect to the method of determination of maximum monthly production volumes, we are prepared to eliminate for a period of one year, ending June 1st, 1983, the daily production restriction on the condition that results of a valid production test be submitted to the Petroleum Branch on a monthly basis for any well whose reported daily production rate has exceeded 8.0 m³/day for any one of the previous three months. Correspondingly, the monthly allowable production volume will henceforth be calculated by multiplication of the number of calendar days in the month by 8.0 cubic metres per day. At the expiry of this exemption (June 1, 1983) the Board requires that

Omega submit a discussion of the operational advantages resulting from the exemption and of the effects of the exempting on producing rates and ultimate recovery. This exemption will apply to all wells completed in the Lower Amaranth Formation located in Township 1, Ranges 25 and 26 WPM.

Further to your suggestion of our consideration of "production spacing units", for areas of common mineral ownership, in which maximum permissible production volumes for each of the wells would be pooled, the Board does not feel at the present time that such a provision is warranted or justified in the Waskada area. Should additional development and production history indicate that lack of such production spacing units would adversely affect the economic viability of maximum development, your proposal may be reconsidered.

The Petroleum Branch's letter of March 5, 1982 indicated that if Omega committed to a program of field and laboratory testing, MPR restriction on the well Omega S. Waskada 15-13-1-26 WPM would be suspended for a period of months, ending September 1982. As you have not included such a commitment in your recent letter, the Board assumes that you do not wish to pursue this matter at the present time. Consequently, that well's MPR will be calculated using the above described methods.

IH/sb.

Dr. I. Haugh
Deputy Chairman
Oil & Natural Gas
Conservation Board



OMEGA

HYDROCARBONS Ltd.

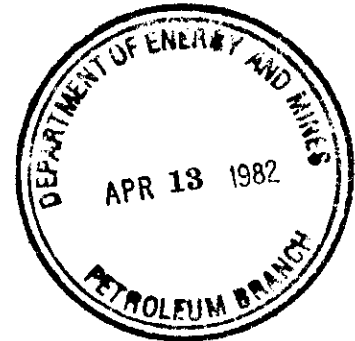
TELEPHONE (403) 261-0743

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

April 6, 1982

The Oil and Natural Gas Conservation Board
Manitoba Department of Energy & Mines
989 Century Street
Winnipeg, Manitoba
R3H 0W4

ATTENTION: DR. I. HAUGH,
DEPUTY MINISTER



Dear Sir:

RE: MAXIMUM PERMISSIBLE RATES (MPR'S) WASKADA AREA

This is to summarize recent telephone discussions with your Mr. Bob Dubrieul.

Existing MPR regulations, although arbitrary, have been acceptable in Manitoba largely due to the maturity of its oilfields. Operators in areas other than Waskada are generally dealing with stabilized production from wells not capable of sustained 8m³/day oil production. Omega's difficulty with the existing MPR regulations may be transitory due to high initial and rapidly declining production rates. These difficulties are aggravated by testing facilities that are not amenable to very close scrutiny of individual wells.

New Spearfish (Lower Amaranth) wells are expected to decline fairly rapidly for up to one year before stabilizing. MPR regulations are intended primarily to protect correlative rights as well as to prevent permanent detrimental effects of overproduction from a pool.

Although in the future Omega may be better equipped to argue the arbitrary nature of MPR levels through its efforts with ongoing PVT analysis, production monitoring and water flood feasibility studies, at the present time we are suggesting changes in the MPR regulations that afford us the flexibility to meet the intent of these regulations without seriously disrupting our operation.

Manitoba monthly allowables presently are calculated as the lesser of calendar days times 8.0m³/day or producing days times 9.5m³/day. We contend that the only practical method of controlling well production in our situation is through controlling days on production. The existing regulations does not allow this option because if days on production is reduced to less than 84% of calendar days the allowable is reduced. This is hardly an incentive to maintain production at allowable levels and we suggest allowables not be reduced as a result of fewer days on production.

April 6, 1982

(2)

MPR's WASKADA AREA

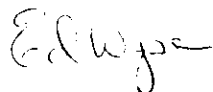
Secondly, because part of the intent of the allowable system is to protect correlative rights and taking in to consideration some variability in the wells' productive capability, it is suggested that Production Spacing Units (PSU's) or block allowables could be applied at Waskada. Essentially a PSU would allow the combining of allowables for wells from contiguous tracts of common ownership producing from the same formation. Each well in a PSU that is capable of production would contribute its allowable to a PSU allowable that could be produced, in any combination, from the wells in the PSU. "Capable of production" would be defined as perforated in the subject formation.

We feel that these measures, if acceptable to the Government of Manitoba, would allow Omega the flexibility it needs to meet the intent of the regulations without significantly altering the effects on ultimate recovery.


Omega is endeavoring to carry out further testing and studies to determine the most efficient recovery technique at Waskada. We are presently awaiting results of recent PVT analysis done on bottom hole samples taken from both the Spearfish and Lower Alida formations. We continue to feel however that extensive reservoir simulation at this time is impractical considering the fact that the size of the pool and its heterogeneous qualities are still being investigated by co-current drilling.

Further discussion regarding the acceptability of these suggestions should be directed to the undersigned. More formalized applications for PSU's could be forth coming upon request.

Yours truly:
OMEGA HYDROCARBONS LTD.



Ed Wyse
Petroleum Engineer

c.c. Mr. B. Dubrieul 

EW/dc

1 Review of individual well reported production rates and volumes confirm Omega's comment that testing facilities are not completely adequate. This deficiency has been pointed out both by ourselves and previously by Omega. The problem should be relieved with start up of the 1-26 battery and any other alternatives.

However, your comment is correct, this is a company problem and one which must be solved to allow ~~any other~~ administration of any allowable system. At any rate knowledge of individual well rates is necessary for proper exploitation of the field.

2. The attached plots of oil rate and WOR for a few key wells exhibit a rapid change from month to month. How much of this is due to production characteristics and how much is due to lack of adequate testing is difficult to tell. However, a rapid decline in the first few months of production appears to be typical of most Manitoba type wells. Such response could be due to low Permaton permeability. This apparent behavior does make it very difficult to control the well's rate by adjusting pumping speed or choking a well. A much easier method is, as Omega suggests, to control the monthly rate by shutting the well in.

3 A review of February production data indicates only two wells (15-13 and 15-24) having reported

production in excess of the allowable maximum of $95 \text{ m}^3/\text{d}$. Two other wells (7-24 and 5-25) have exceeded this amount but have since declined below that level.

The early production history of these wells does not indicate a rate dependant wor. Consequently, there is no reason to expect that producing a well at a higher rate for a shorter period of time (i.e same production volume) would have any detrimental effects on the reservoir. However, if days produced becomes the basis for administering ~~a~~ MPR's, it is fairly important that frequent well tests be obtained.

4 With respect to establishment of "FSU" (production spacing units) or areas of common mineral ownership the present situation, with only a couple of wells having capabilities exceeding the MPR, does not seem to warrant the additional administration this would involve. If however, further development results in a large number of wells exceeding the MPR capability and if an economic hardship is indicated, the subject could be reconsidered.

5 Based on above description, recommend calculation of ~~allowed~~ MPR based on $80 \text{ m}^3/\text{d}$ x calendar days with no daily rate restriction. This would be subject to submission of monthly well tests on the affected wells, and also subject to a maximum daily production rate should performance justify.

6 Our letter of March 5, 1982 indicated exemption of ~~the~~ MPR restrictions on the IS-13 well would be recommended if Omega was willing to commit to a program of data collection to provide the basis for a more logical method of determining the MPR. Omega's letter makes no specific response to our proposal. Consequently, our response to this request should ~~indicate that~~ reiterate that exemption from the MPR ~~is~~ for IS-13 is dependant upon acceptance of the terms stated in our previous letter.

Winstade Wells Produced in Excess of $8.0 \text{ m}^3/\text{d}$

	Feb	Jan	Dec	Nov	Oct
7-24	7.81	8.50 (s)	9.14 (s)	13.7 (s)	
15-24	11.58 (s)	9.29 (s)	8.41 (s)	24.5 (s)	
15-13	10.76 (s)	16.77 (s)	15.13 (s)	14.4 (s)	
16-23 1-25	2.29	8.13 (m) ??	12.20		
5-25	7.77	12.11 (s)			

7/2

Lower Amuranth
Completions

Feb 82 Rate
m³/d

Waskada

CANADIAN

WASKADA FIELD

251

2.08

2.10

1.01

3.68

7.77

2.53

1.42

0.36

1.93

2.67

4.15

6.78

2.23

11.58

2.5

7.81

10.76

February 22, 1982

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

Attention: Mr. T. J. Hall, President

Dear Sir:

Re: Omega S. Waskada 15-13-1-26 (WPM) - Overproduction

Review of production data on the subject well indicates that the well has been producing at rates in excess of its allowable as defined by Manitoba Revised Regulation M160-R6P (copy attached). The cumulative overproduction through the end of January 1982 is at least 209.8 m³.

You are hereby requested to reduce the production rate of this well immediately so as to eliminate the overproduced status by the end of March 1982. Should the well continue to be significantly overproduced, Section 5 of the above mentioned regulation will apply.

Also attached for your information is a copy of the overproduction calculation for the well.

Yours sincerely,

Original Signed By
L. R. DUBREUIL

L. R. Dubreuil
Chief Petroleum Engineer

LRD/lk

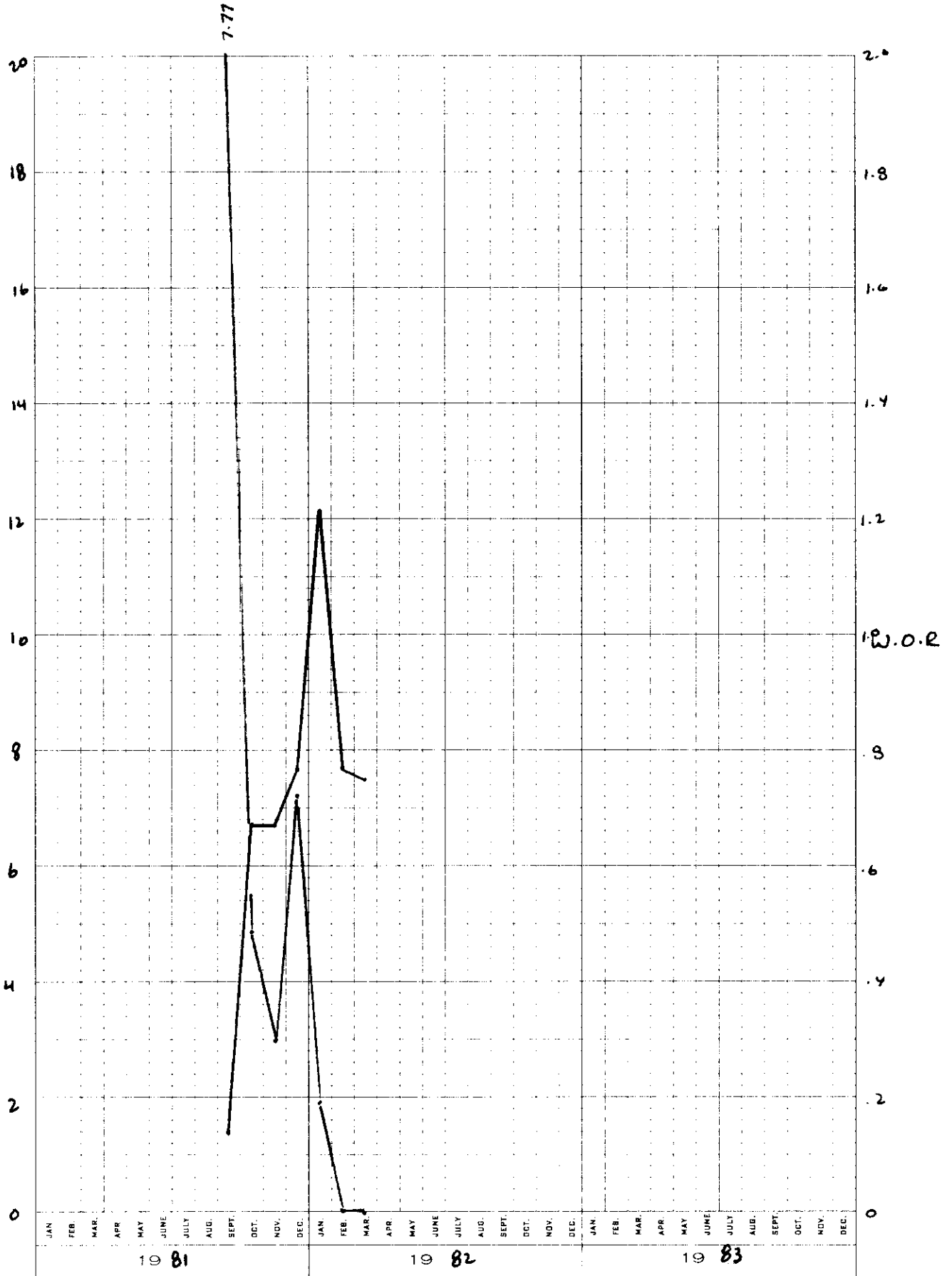
Enclosures

5-25-1-26

EUGENE DIETZGEN CO.
MADE IN U. S. A.

NO. 341-130 DIETZGEN GRAPH PAPER
3 YEARS BY MONTHS

OIL
RATE
m³/d

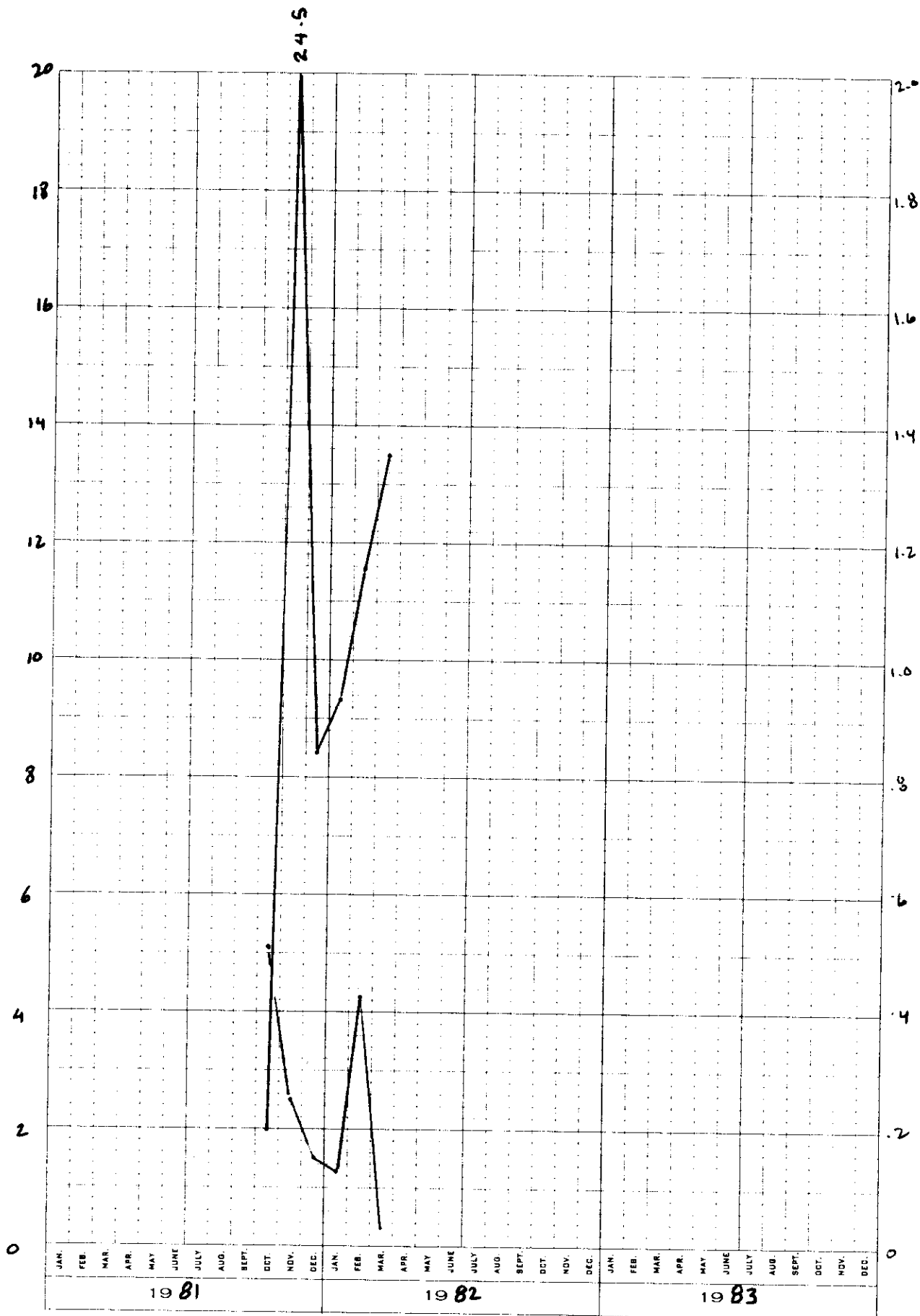


15-24-1-26

EUGENE DIETZGEN CO.
MADE IN U. S. A.

NO. 341-T30 DIETZGEN GRAPH PAPER
3 YEARS BY MONTHS

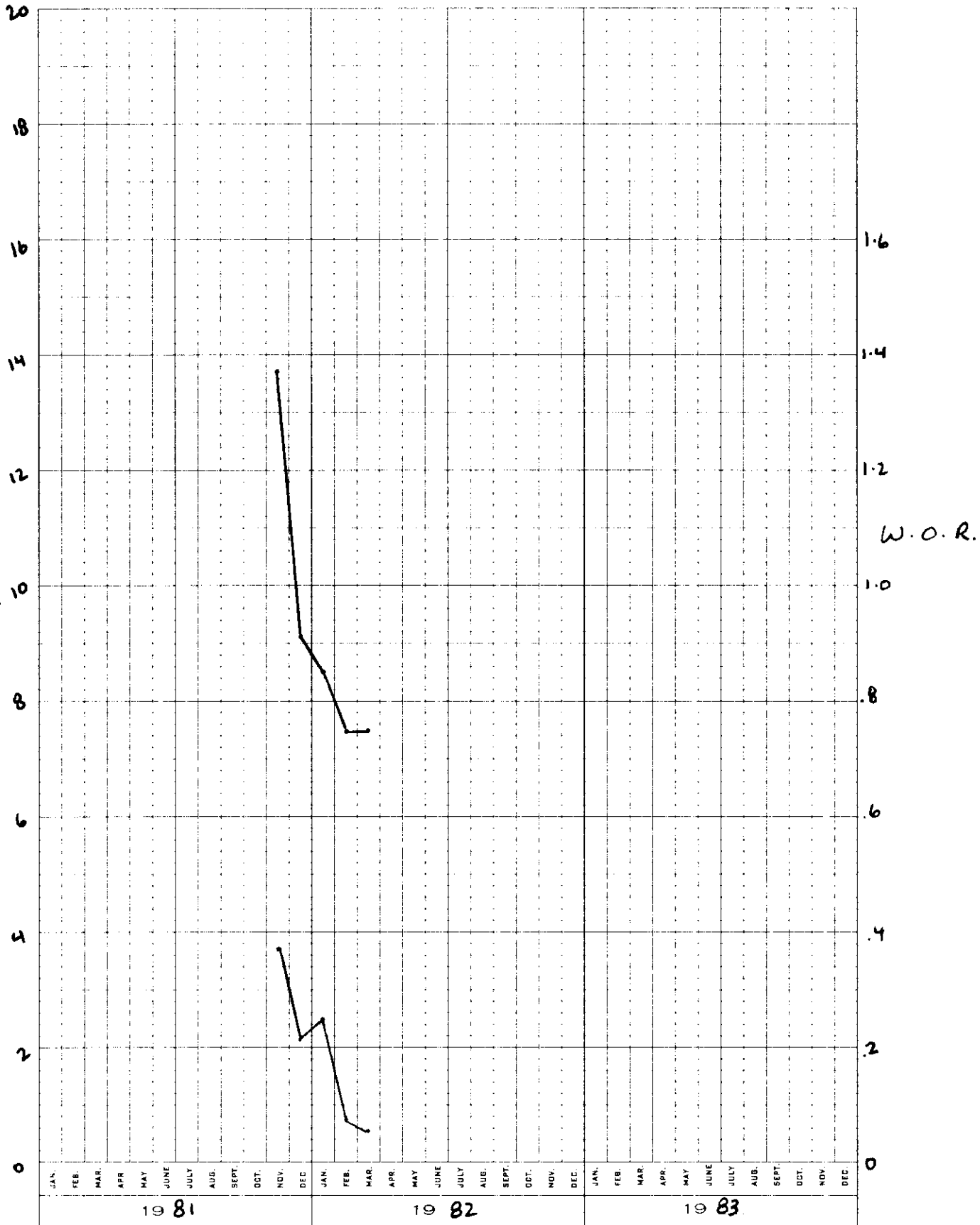
OIL
RATE
m³/d.



EUGENE DIETZEN CO.
MADE IN U. S. A.

NO. 341-T30 DIETZGEN GRAPH PAPER
3 YEARS BY MONTHS

OIL
RATE

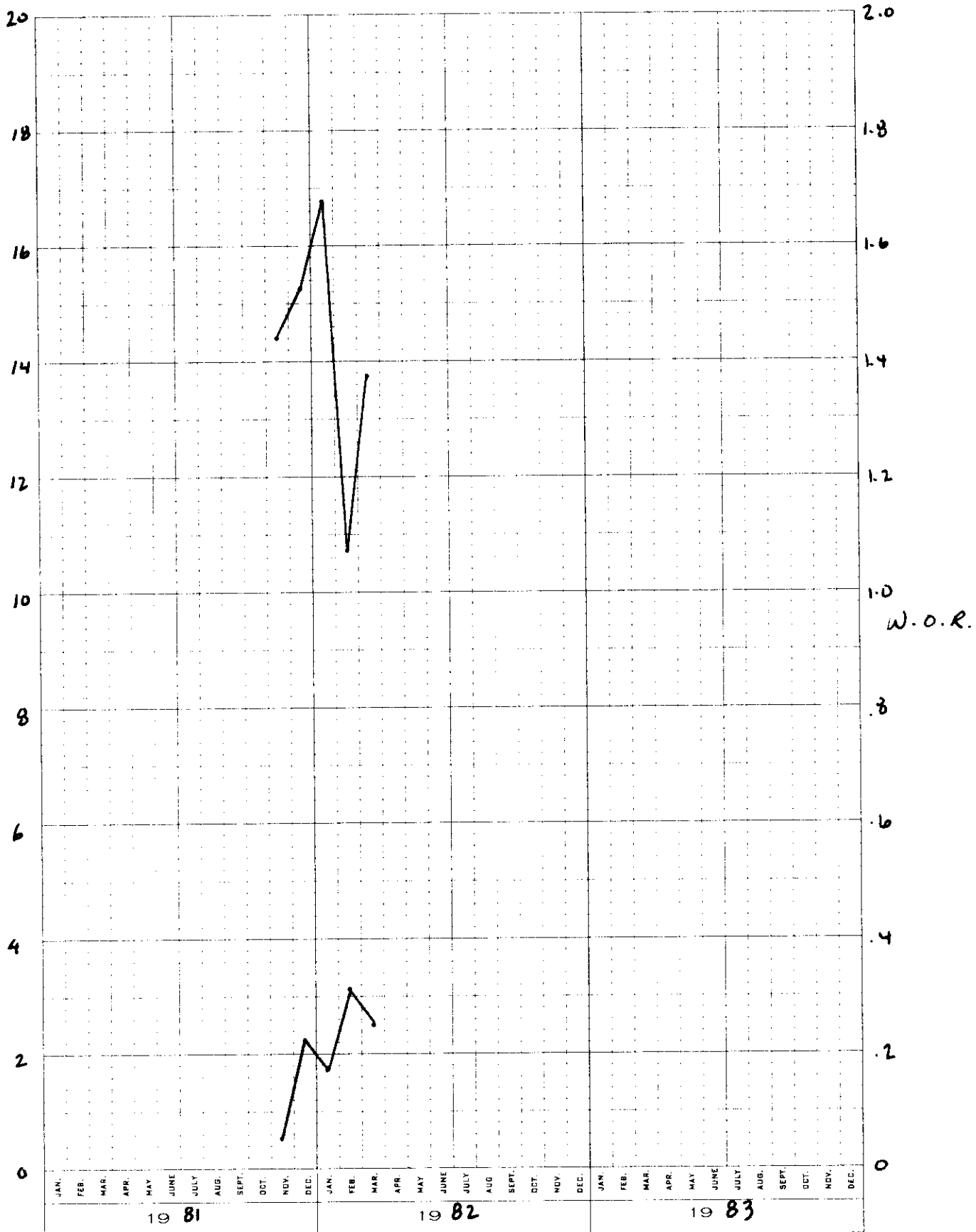
 $m^3/d.$ 

15-13-1-26

EUGENE DIETZGEN CO.
MADE IN U. S. A.

NO. 241-T30 DIETZGEN GRAPH PAPER
12 STRIPS BY MONTHS

OIL
RATE
m³/d



→ Bob

March 5, 1982

Omega Hydrocarbons Ltd.
630, 5th Ave. S.W.
Calgary, Alberta
T2P 0L4

Attention: Mr. T. J. Hall,
President

Dear Jack:

Re: Maximum Permissible Rates (MPR's) Waskada Area

Reference is made to our letter dated February 22, 1982, your letter of February 23, 1982 and telephone discussions, all dealing with the question of maximum permissible production rates in the Waskada area, specifically of the well Omega S. Waskada 15-13-1-26.

The Department's concerns regarding unrestricted production rates centre around the possibility that ultimate recovery from a reservoir may be dependent upon individual well production rates. Further, increased production rates will alter reservoir drainage patterns and could result in inequities to mineral rights owners, particularly in adjacent undeveloped spacing units.

One of the major reservoir mechanisms which must be considered is premature coning or channelling of reservoir or injected water into a wellbore, causing the well to become uneconomic and resulting in bypassing of otherwise recoverable reserves. Another possible mechanism is that increased production rates could result in pressure drawdown of a substantial part of the reservoir to pressures below the bubble point causing excess gas production and dissipation of reservoir energy. Lastly, in some instances, laboratory derived relative permeability data indicate that displacement efficiency (of oil by water) is a function of displacement rate.

Having regard for the above, it is our opinion that there is insufficient reservoir data and production history available to properly evaluate whether or not ultimate recovery is rate dependent in the two newly developed Waskada reservoirs. Further, the extent of altered drainage patterns on correlative rights of mineral holders similarly cannot be properly evaluated. Consequently, we are not prepared to recommend to The Oil and Natural Gas Conservation Board approval of your request for a one (1) year unrestricted allowable applying to all wells producing from the Lower Amaranth (Spearfish) Formation in the Waskada area.

Notwithstanding the above, it is recognized that the current well MPR of 50 barrels/day ($7.95 \text{ m}^3/\text{d}$) is arbitrary and that it may adversely affect the economic viability of further development in the area. Consequently, we are prepared to recommend approval of, subject to the conditions listed below, a temporary exemption from the production rate limitations set out in Manitoba Revised Regulation M160 R6P, Section 8(1) for the well Omega S. Waskada 15-13-1-26. The exemption could be effective March 1, 1982 and extend for a period of six months, terminating on August 31, 1982.

The purpose of such an interim exemption would be to provide sufficient data to evaluate the effect of increased production rates on the Lower Amaranth reservoir. As a condition of such an exemption and as a prerequisite for any further applications to extend or generalize such an exemption, you would be required to submit a technical report prior to September 30, 1982 providing an evaluation of the effect on recovery and protection of correlative rights of producing the Waskada Lower Amaranth reservoir at unrestricted rates. This report would include the following information.

1. Results of at least 3 production tests conducted at different production rates. One such test to be conducted at the well's unrestricted capability (high rate), one at the normal allowable of $7.95 \text{ m}^3/\text{day}$ (low rate) and one at an intermediate rate. These production tests should consist of a stabilized production period of at least three (3) days and should involve accurate measurement and reporting of produced oil, gas and water volumes.
2. The results of pressure build-up surveys obtained in conjunction with the high rate and low rate production tests described above. The pressure build-up surveys are to be obtained utilizing properly calibrated pressure bombs and should include sufficient pressure data to allow extrapolation to the static reservoir pressure.
3. A laboratory determination of oil water relative permeability relationships at various displacement rates (related to various field production rates) for representative samples of the Lower Amaranth reservoir rock.

4. A laboratory determination of the irreducible water and residual oil saturations on samples of Lower Amaranth core which have been cut in a manner so as to preserve original saturations (e.g. oil base core).
5. Calculations and discussion outlining the ultimate recoverable reserves both under primary and secondary recovery regimes. Calculations should be presented for both unrestricted production rates and assuming an MPR of $7.95 \text{ m}^3/\text{day}/\text{well}$.

If you have any questions or comments on the foregoing, please contact the undersigned or Bob Dubreuil.

If you are in agreement with this proposal, your letter of application should be made directly to the Board at this address. Also it would be more appropriate if other applications, falling under the jurisdiction of the Board, would be submitted directly to the attention of the Board.

Yours sincerely,

Original Signed by H. C. Moster

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

LRD/lk

c.c. The Oil and Natural Gas
Conservation Board

Dr. I. Haugh, Deputy Chairman



HYDROCARBONS Ltd.

TELEPHONE: (403) 261-0743

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

February 23, 1982

Manitoba Department of Energy & Mines
Mineral Resources Division
989 Century Street
Winnipeg, Manitoba
R3H 0W4

ATTENTION: H. CLARE MOSTER
DIRECTOR, PETROLEUM BRANCH



Dear Sir:

RE: MANITOBA ALLOWABLE OIL PRODUCTION
AT WASKADA

Pursuant to recent discussions with you concerning the 50 B/D production allowable, Omega herein submits an application to suspend for a period of one year, this allowable where it pertains to Spearfish wells. In support of this request we offer the following reasons.

1. Recoverable reserves in the Spearfish horizon for a 40 acre spacing unit is calculated to be approximately 350,000 STB when employing a primary and secondary recovery factor of 35%. This results in a content rate life factor of 19 years, approximately double the widely used 10 year period.
2. Omega's experience at Waskada is that the Spearfish development is such that recoverable reserves vary from tract to tract depending on the quality of the reservoir, the high quality area of the pool in our view should deserve a greater portion of the pool reserves, thus a higher producing rate than that of the poor quality area.
3. Omega submits that it should not be bound by an arbitrary ceiling on some wells while at the same time be restricted by the poorer incapable wells. This ceiling has the effect of reducing the average rate of production to a point where development could become uneconomic, assuming that a large number of low producing rate wells are combined with a few higher rate wells.

.....2

February 23, 1982

-2-

T.J. Hall
Omega Hydrocarbons Ltd.

4. Omega further submits that a higher rate of production will, to a large degree, assist management in its appraisal of the potential for initial secondary recovery.
5. Temporary suspension of the 50 B/D allowable will provide a period of time to develop the pool in an orderly fashion and at the same time it will provide an opportunity to monitor reservoir performance without otherwise penalizing the parties concerned.
6. A cut-back of the production of a few high producing rate wells will render an economic hardship at this early stage of development, particularly as it is related to winter drilling and completion problems.
7. Finally, this arbitrary 50 B/D allowable serves no purpose other than to prolong the life of the pool, while at the same time reducing the economic viability of a yet untested and unknown production entity.

Your early attention to this matter will be very much appreciated.

Yours very truly:
OMEGA HYDROCARBONS LTD.



T.J. Hall
President

TJH/dc

15-13-1-26

MONTH	OIL	WATER	DAYS	OIL RATE	WOR
NOV 81	360.0	20	25	14.40	0.056
DEC 81	302.6	67.2	20	15.13	0.222
JAN 82	402.4	69.8	24	16.77	0.173