

November 28, 1991

Mr. Ron Coke
Taylor McCaffrey
9th floor - 400 St. Mary Avenue
Winnipeg, Manitoba
R3C 4K5

Dear Mr. Coke:

RE: Daly Unit No. 1

As per our conversation, attached please find a list of producing wells in Daly Unit No. 1. You will note from the list that the 7-2-10-28 well is shut-in and has not been produced this year and a few other wells produce less than 0.5 cubic metres of oil per day.

All wells in Daly Unit No. 1 produce from the Daly Lodgepole A Pool. The well spacing in Daly Unit No. 1 is 16 hectares (40 acres).

I hope this information adequately addresses your questions.

Yours truly,


 John N. Fox, P. Eng.
Chief Petroleum Engineer

Att'd.

File: Day Unit No. 1 - Correspondence

CANADA NORTHWEST ENERGY LIMITED

2700 - 300 FIFTH AVENUE S.W., CALGARY, ALBERTA, CANADA T2P 3C4
TELEX 03-825692 • FAX (403) 260-2995 • TELEPHONE (403) 260-2900

March 7th, 1991

WORKING INTEREST OWNERS
DALY UNIT #1
(Addressee List Attached)



Dear Sirs:

Re Revised Mail Ballot No. 91-01
1991 Operating and Capital Expense Forecast
Daly Unit #1

Attached for your consideration and approval is the revised Mail Ballot No. 91-01 covering the 1991 Operating and Capital Expense Forecast for Daly Unit #1.

Approval of any capital expenditures will be requested through Mail Ballot on an individual basis.

Please indicate your approval of the forecast by returning one (1) executed copy of the attached Mail Ballot to the attention of Joan Allarie.

Yours truly,
CANADA NORTHWEST ENERGY LIMITED

Lorna Hatton

for Lorna Hatton, C.E.T.
Reservoir Technologist

cc: R. Davison
DAL1 (04)

LH:sb
039d/36
Encls.

Mail Ballot No. 91-01

DALY UNIT #1

1991 Operations and Capital Expense Forecast

Subject: Daly Unit #1

Authority: Article VIII Clause 8.04 Construction, Ownership and
 Operation Agreement

Resolution: Be it resolved that the Working Interest Owners approve
 the cost of the 1991 Operating and Capital Expense
 forecast estimated at \$537,800 to be approved.

Affirmative _____ Negative _____

Date: _____

Working Interest Owner: _____

Representative's Name: _____

Representative's Signature: _____

Mail Ballot Issued: February 26, 1991

Date Ballot to be Returned: March 20, 1991

Return to: Canada Northwest Energy Limited
 2700, 300 - 5th Avenue S.W.
 Calgary, Alberta
 T2P 3C4

Attention: Joan Allarie

**DALY UNIT #1
WORKING INTEREST OWNERS
ADDRESSEE LIST**

Chevron Canada Resources Ltd.
500 - 5th Avenue S.W.
Calgary, Alberta
T2P 0L7

Attention: R.J. Terlesky

Chevron Canada Resources Limited
Box 100
Virden, Manitoba
ROM 2C0

Attention: Cal G. Folden

Rundle Petroleum Ltd.
2304 Longridge Drive S.W.
Calgary, Alberta
T3E 5N6

Attention: R.F. Atkinson

Murphy Oil Company Ltd.
17th Floor, 800 - 6th Avenue S.W.
Calgary, Alberta
T2P 3Y3

Attention: W. Nibogie

Manitoba Energy & Mines
555 - 330 Graham Avenue
Winnipeg, Manitoba
R3C 4E3

Attention: Mr. L.R. Dubreuil
Director

Scurry-Rainbow Oil Limited
2300 Home Oil Tower
324 - 8th Avenue S.W.
Calgary, Alberta
T2P 2Z5

Attention: J. Anderson

Mr. B. Schlemmer
P.O. Box 32
Cromer, Manitoba
R3C 4E3

Navajo Petroleum Ltd.
5407 Lakeview Drive S.W.
Calgary, Alberta
T3E 5S2

Attention: N.W. Cuming

Sharon Oil Company Limited
Box 6930, Station 'D'
Calgary, Alberta
T2P 2G1

DALY UNIT #1

1991 OPERATING AND CAPITAL EXPENSE FORECAST

ESTIMATED COSTS (\$)					
ITEM	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	TOTAL
Administration & Overhead	10,500	10,500	10,500	10,500	42,000
Automotive & Transportation	8,500	8,500	8,500	8,500	34,000
Chemicals/Corrosion	10,000	10,000	10,000	10,000	40,000
Communication	1,200	1,200	1,200	1,200	4,800
Labour & Supervision	22,000	22,000	22,000	22,000	88,000
Miscellaneous	2,000	2,000	2,000	2,000	8,000
Property Taxes			51,000		51,000
Repairs & Maintenance - Labour	4,000	4,000	4,000	4,000	16,000
Repairs & Maintenance - Materials	10,000	10,000	10,000	10,000	40,000
Road & Lease Maintenance	1,200	1,200	1,200	1,200	4,800
Sales Tax	2,200	2,200	2,200	2,200	8,800
Surface Lease Rentals - Freehold	14,000	14,000	14,000	14,000	56,000
Utilities	26,100	26,100	26,100	26,100	104,400
Well Servicing	10,000	10,000	10,000	10,000	40,000
	121,700	121,700	172,700	121,700	537,800
Capital Expense					0
Total	121,700	121,700	172,700	121,700	537,800
Oil Production	3,963	3,935	3,907	3,837	15,642
Wells - Producers	31	31	31	31	
- Shut-in	5	5	5	5	
Operating Cost (\$/m3)	30.71	30.93	44.20	31.72	34.38
(\$/well month)	1,126.85	1,126.85	1,599.07	1,126.85	

CANADA NORTHWEST ENERGY LIMITED

OIL PROPERTY FORECAST
BUDGET PERIOD 1991

AREA: DALY UNIT #1

PERIOD	TOTAL DAILY PRODUCTION (M3/DAY)	TOTAL MONTHLY PRODUCTION (M3)
JANUARY 91	44.3	1373.3
FEBRUARY 91	44.0	1232.9
MARCH 91	43.8	1356.8
APRIL 91	43.5	1305.1
MAY 91	43.2	1340.5
JUNE 91	43.0	1289.4
JULY 91	42.7	1324.4
AUGUST 91	42.5	1316.4
SEPTEMBER 91	42.2	1266.2
OCTOBER 91	42.0	1300.6
NOVEMBER 91	41.7	1251.0
DECEMBER 91	41.4	1284.9

=====

YEAR TOTAL (1991):	15641.5
--------------------	---------

=====

Date : 23-Feb-91

FILE: DALYFOR.WR1 (SYM 6)



CANADA NO

2700 - 300 FIFTH A
TELEX 03-825692

JOHN

Is our approval

GY LIMITED

CANADA T2P 3C4
ELEPHONE (403) 260-2900

• required or is this

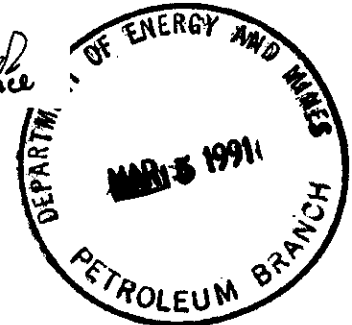
just for info

File: Daly unit

General Correspondence

February 15, 1991

WORKING INTEREST OWNERS
DALY UNIT #1
(Addressee List Attached)



Dear Sirs:

Re Mail Ballot No. 91-01
1991 Operating and Capital Expense Forecast
Daly Unit #1

Attached for your consideration and approval is Mail Ballot No. 91-01 covering the 1991 Operating and Capital Expense Forecast for Daly Unit #1.

Approval of capital expenditures will be requested through Mail Ballot on an individual basis.

Please indicate your approval of the forecast by returning one (1) executed copy of the attached Mail Ballot to the undersigned.

Yours truly,
CANADA NORTHWEST ENERGY LIMITED

Lorna M. Hatton

Lorna Hatton, C.E.T.
Reservoir Technologist

cc: R. Davison
DAL1 (04)

LH:sb
039d/35
Encls.

Mail Ballot No. 91-01

DALY UNIT #1

1991 Operations and Capital Expense Forecast

Subject: Daly Unit #1

Authority: Article VIII Clause 8.04 Construction, Ownership and
 Operation Agreement

Resolution: Be it resolved that the Working Interest Owners approve
 the cost of the 1991 Operating and Capital Expense
 Forecast estimated at \$610,800 to be approved.

Affirmative _____ Negative _____

Date: _____

Working Interest Owner: _____

Representative's Name: _____

Representative's Signature: _____

Mail Ballot Issued: February 26, 1991

Date Ballot to be Returned: March 20, 1991

Return to: Canada Northwest Energy Limited
 2700, 300 - 5th Avenue S.W.
 Calgary, Alberta
 T2P 3G4

 Attention: Joan Allarie

**DALY UNIT #1
WORKING INTEREST OWNERS
ADDRESSEE LIST**

**Chevron Canada Resources Ltd.
500 - 5th Avenue S.W.
Calgary, Alberta
T2P 0L7**

Attention: J.M. Taylor

**Chevron Canada Resources Limited
Box 100
Virden, Manitoba
R0M 2G0**

Attention: Cal G. Folden

**Rundle Petroleum Ltd.
2304 Longridge Drive S.W.
Calgary, Alberta
T3E 5N6**

Attention: R.F. Atkinson

**Murphy Oil Company Ltd.
17th Floor, 800 - 6th Avenue S.W.
Calgary, Alberta
T2P 3Y3**

Attention: H.A. Sum

**Manitoba Energy & Mines
555 - 330 Graham Avenue
Winnipeg, Manitoba
R3C 4E3
Attention: Mr. L.R. Dubreuil
Director**

**Scurry-Rainbow Oil Limited
2300 Home Oil Tower
324 - 8th Avenue S.W.
Calgary, Alberta
T2P 2Z5**

Attention: J. Anderson

**Mr. B. Schlemmer
P.O. Box 32
Cromer, Manitoba
R3C 4E3**

**Navajo Petroleum Ltd.
5407 Lakeview Drive S.W.
Calgary, Alberta
T3E 5S2**

Attention: N.W. Cuming

**Sharon Oil Company Limited
Box 6930, Station 'D'
Calgary, Alberta
T2P 2G1**

DALY UNIT #1

1991 OPERATING AND CAPITAL EXPENSE FORECAST

ESTIMATED COSTS (\$)					
ITEM	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	TOTAL
Administration & Overhead	10,500	10,500	10,500	10,500	42,000
Automotive & Transportation	8,500	8,500	8,500	8,500	34,000
Chemicals/Corrosion	10,000	10,000	10,000	10,000	40,000
Communication	1,200	1,200	1,200	1,200	4,800
Labour & Supervision	22,000	22,000	22,000	22,000	88,000
Miscellaneous	2,000	2,000	2,000	2,000	8,000
Property Taxes			51,000		51,000
Repairs & Maintenance - Labour	4,000	4,000	4,000	4,000	16,000
Repairs & Maintenance - Materials	10,000	10,000	10,000	10,000	40,000
Road & Lease Maintenance	1,200	1,200	1,200	1,200	4,800
Sales Tax	2,200	2,200	2,200	2,200	8,800
Surface Lease Rentals - Freehold	14,000	14,000	14,000	14,000	56,000
Utilities	26,100	26,100	26,100	26,100	104,400
Well Servicing	10,000	10,000	10,000	10,000	40,000
	121,700	121,700	172,700	121,700	537,800
Capital Expense					0
Total	121,700	121,700	172,700	121,700	537,800
Oil Production	3,963	3,935	3,907	3,837	15,642
Wells - Producers	31	31	31	31	
- Shut-in	5	5	5	5	
Operating Cost (\$/m3)	30.71	30.93	44.20	31.72	34.38
(\$/well month)	1,126.85	1,126.85	1,599.07	1,126.85	

CANADA NORTHWEST ENERGY LIMITED

OIL PROPERTY FORECAST
BUDGET PERIOD 1991

AREA: DALY UNIT #1

PERIOD	TOTAL DAILY PRODUCTION (M3/DAY)	TOTAL MONTHLY PRODUCTION (M3)
JANUARY 91	44.3	1373.3
FEBRUARY 91	44.0	1232.9
MARCH 91	43.8	1356.8
APRIL 91	43.5	1305.1
MAY 91	43.2	1340.5
JUNE 91	43.0	1289.4
JULY 91	42.7	1324.4
AUGUST 91	42.5	1316.4
SEPTEMBER 91	42.2	1266.2
OCTOBER 91	42.0	1300.6
NOVEMBER 91	41.7	1251.0
DECEMBER 91	41.4	1284.9

=====

YEAR TOTAL (1991):	15641.5
--------------------	---------

=====

Date : 23-Feb-91

FILE: DALYFOR.WR1 (SYM 6)

December 28, 1990

File: Daly Unit No. 1
General Correspondence

~~cc: V. N. D.~~

Mr. Ron Davison
Canada Northwest Energy Limited
2700, 300 Fifth Avenue S.W.
Calgary, Alberta
T2P 3G4

Dear Sir:

RE: Daly Unit No. 1
Maximum Wellhead Injection Pressure

Board Order No. PM 56 authorizes pressure maintenance operations in Daly Unit No. 1. Section 5 of Board Order No. PM 56 establishes a maximum wellhead injection pressure of 8000 kPa. A review of the Daly Unit No. 1 Progress Report for October, 1990 indicated the wellhead injection pressure for almost all injection wells exceeded 8000 kPa during October, 1990.

You are requested to reduce the wellhead injection pressure to less than 8000 kPa or make application to The Oil and Natural Gas Conservation Board for an increase in the maximum wellhead injection pressure. Such an application should include a technical discussion of the effect of an increase in wellhead injection pressure on the performance of the waterflood.

If you have any questions, please contact the undersigned at (204) 945-6574.

Yours truly,

ORIGINAL SIGNED BY
JOHN N. FOX

John N. Fox, P. Eng.
Chief Petroleum Engineer

December 28, 1990

File: Daly Unit No. 1
General Correspondence

cc: Virdi

Mr. Ron Davison
Canada Northwest Energy Limited
2700, 300 Fifth Avenue S.W.
Calgary, Alberta
T2P 3G4

Dear Sir:

RE: Daly Unit No. 1
Maximum Wellhead Injection Pressure

Board Order No. PM 56 authorizes pressure maintenance operations in Daly Unit No. 1. Section 5 of Board Order No. PM 56 establishes a maximum wellhead injection pressure of 8000 kPa. A review of the Daly Unit No. 1 Progress Report for October, 1990 indicated the wellhead injection pressure for almost all injection wells exceeded 8000 kPa during October, 1990.

You are requested to reduce the wellhead injection pressure to less than 8000 kPa or make application to The Oil and Natural Gas Conservation Board for an increase in the maximum wellhead injection pressure. Such an application should include a technical discussion of the effect of an increase in wellhead injection pressure on the performance of the waterflood.

If you have any questions, please contact the undersigned at (204) 945-6574.

Yours truly,

ORIGINAL SIGNED BY
JOHN N. FOX

John N. Fox, P. Eng.
Chief Petroleum Engineer



Energy and Mines

Petroleum

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

(204) 945-6577

February 5, 1987

Canada Northwest Energy Limited
2700, 300 - 5th Avenue S.W.
CALGARY, Alberta
T2P 3G4

Attention: Mr. L. Smith, Operations Manager

Re: Daly Lodgepole A Pool - Pressure Maintenance
Daly Unit No. 1

Dear Sir:

Enclosed is Oil and Natural Gas Conservation Board Order No. PM 56 authorizing pressure maintenance operations in the subject Unit. This approval replaces, consolidates and standardizes previous approvals without altering the conditions of approval. This Order also notes Canada Northwest Energy Limited as the Unit Operator.

If you have any questions please contact the undersigned
(204) 945-6574.

Yours sincerely

ONE
L. R.

L.R. Dubreuil
Chief Petroleum Engineer
Petroleum Division

LRD:dah

encl



Energy and Mines

Petroleum

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

(204) 945-6577

June 10, 1986

Canada North West Energy Limited
2700, 300 - 5th Avenue S.W.
CALGARY, Alberta
T2P 3C4

Attention: Diane Falck,
Land Department

Dear Ms. Falck:

Re: Daly Unit No. 1

Your letter of May 26, 1986 regarding the dissolution of Geocrude Energy Inc. is acknowledged. A copy of your letter has been forwarded to The Oil and Natural Gas Conservation Board for its information.

In accordance with the terms of the Liquidation and Dissolution Agreement dated December 2, 1985, you are hereby recognized as Operator of Daly Unit No. 1.

Please note that the performance deposit required by The Petroleum Drilling and Production Regulations, 1984 is currently in the name of Geocrude Energy Inc. This deposit covers all wells in Daly Unit No. 1 and the well, Geocrude et al Daly 1-20-9-28 (WPM). Upon transfer to this well licence to Canada North West, the performance deposit in the name of Geocrude can be released.

By copy of this letter, The Mining and Use Taxes Branch is hereby informed of Canada North West's operatorship.

Yours sincerely,

Original Signed by H. C. Moster

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

cc: The Oil and Natural Gas Conservation Board

S.J. Puchniak
Director, Mining and Use Taxes Branch
Dept. of Finance

- Sent
- to file
- Bob
- file

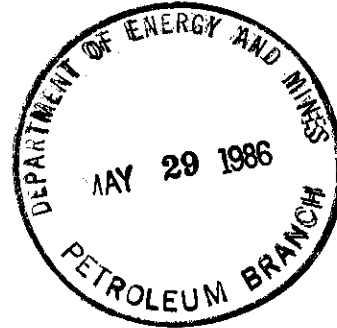


CANADA NORTHWEST ENERGY LIMITED

2700 - 300 FIFTH AVENUE S.W., CALGARY, ALBERTA, CANADA T2P 3C4
TELEX 03-825692 • FAX (403) 260-2995 • TELEPHONE (403) 260-2900

May 26, 1986

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



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

Dear Sir:

Re: DALY UNIT NO. 1
Geocrude File: 104-D

Please be advised that Geocrude Energy Inc. has assigned its interest in the referenced Unit to Canada Northwest Energy Limited, as evidenced by the enclosed Notarial Certificate and Liquidation and Dissolution Agreement dated December 2, 1985.

If you require further information or documentation, or if any other Department should be notified, please contact the undersigned at your earliest convenience.

Yours very truly,

CANADA NORTHWEST ENERGY LIMITED

Diane Falck

Diane Falck
Land Department

df
Enc.

- Bob - any Unit
Agreement conditions?

- BRAD - any other Geocrude
holdings in Man.

Draft Reply!

Notarial Certificate

CANADA
PROVINCE OF ALBERTA }

I, FREDERICK W. DENT, Barrister & Solicitor,
of the City of Calgary, in the Province of Alberta, a Notary Public
by royal authority duly appointed, DO CERTIFY that the paper writing hereto annexed is
a true copy of a document produced and shown to me from the custody of Messrs.
McLaws & Company, Barristers & Solicitors,
6th Floor, 407 - 8th Ave. S.W.,
CALGARY, Alberta.

and purporting to be a "true copy" of the Plan and Agreement of
Complete Liquidation and Dissolution of Geocrude Energy Inc.

the said copy having been compared by me with the original document an act whereof being
requested, I have granted under my notarial form and seal of office to serve as occasion shall
or may require.

IN TESTIMONY WHEREOF I have hereunto subscribed my name and
affixed my seal of office at the City of Calgary, in the
Province of Alberta, this 22nd day of
May A.D. 19 86.



A Notary Public in and for the Province of Alberta.

FREDERICK W. DENT
A Commissioner for Oaths - Notary Public
in and for the Province of Alberta.
My Appointment expires at the pleasure
of the Attorney General
for the Province of Alberta.

PLAN AND AGREEMENT OF COMPLETE LIQUIDATION AND DISSOLUTION
OF GEOCRUDE ENERGY INC.

THIS INDENTURE made as of the 2nd day of December, 1985.

BETWEEN:

GEOCRUDE ENERGY INC., a body corporate,
incorporated pursuant to the laws of Canada,
(hereinafter called "Corporation")

PARTY OF THE FIRST PART

- and -

CANADA NORTHWEST ENERGY LIMITED, a body corporate,
incorporated pursuant to the laws of Canada,
(hereinafter called "Shareholder")

PARTY OF THE SECOND PART

WHEREAS the Shareholder is the sole shareholder of the
Corporation; and

WHEREAS the Shareholder has determined to liquidate and
dissolve the Corporation pursuant to the terms hereof;

NOW THEREFORE THIS INDENTURE WITNESSETH THAT in
consideration of the mutual covenants and premises set forth
herein the parties hereby covenant and agree as follows:

ARTICLE I
DEFINITIONS AND INTERPRETATION

1.01 In this Plan, the recitals and the schedules hereto:

- (a) "Shareholder" means Canada Northwest Energy Limited.
- (b) "Corporation" means Geocrude Energy, Inc.
- (c) "Effective Date" means 7:01 A.M. Calgary Time on the date the Certificate of Intent to Dissolve the Corporation is issued by the Director of Corporations.
- (d) "Arrangement" means the Plan and Agreement of Arrangement set forth in an Arrangement Agreement between the Shareholder, PanCana Minerals Ltd. and the Corporation dated the 4th day of October, 1985.
- (e) "Plan" means this Plan and Agreement of Complete Liquidation and Dissolution and the agreement between the parties as set forth herein.

and any other terms utilized herein shall have the meanings ascribed to them in the Canada Business Corporations Act.

1.02 The division of this Plan into articles, sections, paragraphs and subparagraphs and the insertion of headings are for the convenience of reference only and shall not affect the construction or interpretation of this Plan.

1.03 Words importing the singular number only shall include the plural and vice versa, words importing the use of any gender shall include all genders and words importing persons shall include firms and corporations and vice versa.

1.04 This Plan shall be governed by and construed in accordance with the laws of the Province of Alberta and Canada and the parties hereby attorn to the jurisdiction of the courts of the Province of Alberta.

1.05 This Plan shall be binding upon and enure to the benefit of the parties hereto and their successors and assigns.

1.06 Time shall be of the essence hereof.

1.07 This Plan may be executed in one or more counterparts, and counterparts bearing execution of all parties shall together constitute one Plan.

1.08 If any term, covenant or agreement of this Plan or the application thereof to any party or circumstances shall, to any extent, be invalid or unenforceable, the remainder of this Plan or application of such term, covenant or agreement to a party hereto or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each term, covenant or agreement of this Plan shall be valid and shall be enforced to the full extent permitted by law.

ARTICLE II CONDITIONS PRECEDENT

2.01 This Plan shall not be effective unless and until the issuance of a Certificate of Intent to Dissolve the Corporation.

ARTICLE III
CESSATION OF BUSINESS

3.01 On and after the Effective Date, the Corporation shall not engage in any business activities, except for business necessary for the liquidation and dissolution of the Corporation in accordance with this Plan.

ARTICLE IV
ORDER

4.01 On the Effective Date, the Corporation shall obtain an Order of the Court pursuant to Section 210 of the Canada Business Corporations Act authorizing and ordering the distribution of the Assets pursuant to the terms and conditions of this Plan.

ARTICLE V
PROPERTY DISTRIBUTION

5.01 On the Effective Date, the Corporation hereby transfers, conveys, assigns, sets-over and distributes to the Shareholder, all the undertaking, property and assets of the Corporation as a going concern, including, without limiting the generality of the foregoing, the goodwill of the business carried on by the Corporation, all the property and assets of the Corporation, moveable or immoveable, real or personal, of every kind and nature and wheresoever situate, including freehold and leasehold property and leases, licences, franchises, and similiar rights owned or held by the Corporation; all choses-in-action, including all the book and other debts (including accounts receivable) due or

accruing due to the Corporation, and full benefit and advantage of all securities for such debts; the full advantage and benefit of all existing contracts and engagements to which the Corporation may be entitled and the full benefit of all forward commitments by the Corporation whether or not there are any contracts with respect to the same; all cash on hand and in any bank account or other accounts and all bills, notes, shares, bonds, debentures and other securities (if any) owned by the Corporation and all other property, assets and rights which the Corporation is or may hereafter be entitled to in connection with the business formerly carried on by the Corporation or otherwise (all of the foregoing hereinafter collectively called the "Assets"), TO HAVE AND TO HOLD the same, all and singular for its sole use and benefit absolutely, together with all benefits and advantages to be derived therefrom subject to all the encumbrances and obligations attributable to the Assets.

ARTICE VI ASSUMPTION OF LIABILITIES

6.01 The Shareholder hereby assumes and agrees to discharge all liabilities, debts and obligations of the Corporation, both present and future, direct or indirect, absolute or contingent, matured or not at any time owing by the Corporation to any person, firm or corporation (such persons, firm and corporation being hereinafter called "Creditors"), or remaining unpaid to the Creditors before or after the Effective Date, whether accrued or accruing and whether incurred by or arising from agreement or dealings between the Creditors and the Corporation or by or from any agreement or dealings by or with any third party or howsoever otherwise incurred or arising and whether as principal or surety (except liability as to share capital) (all hereinafter collectively called the "Liabilities") and also assumes and agrees

to pay for all expenses in connection with the liquidation and dissolution of the Corporation and, without limiting the generality of the foregoing, the Shareholder hereby assumes and agrees to discharge any and all of the liabilities of the Corporation for income and other taxes payable until the time of or arising upon the dissolution of the Corporation under the Income Tax Act (Canada) and any and all provincial taxing statutes to which the Corporation is subject.

ARTICLE VII
SHAREHOLDER'S INTERESTS

7.01 The interests of the Shareholder in and to the Assets and the Liabilities shall be fixed on the basis of the ownership of the outstanding shares of the Corporation of which the Shareholder holds or is entitled to hold under the Arrangement which shall be one hundred (100%) percent in and to the Assets and Liabilities.

ARTICLE VIII
SPECIFIC CONVEYANCES

8.01 All transfers, assignment and novation agreements and other documents and interests which the Shareholder may reasonably require for the purpose of conveying the Assets and assuming the Liabilities (hereinafter called the "Specific Agreements") shall be prepared by the Shareholder and shall be executed by the Shareholder and the Corporation and dated as of the Effective Date in such number of copies as may be reasonably requested.

8.02 After the date hereof, the Shareholder shall attend to circulating the Specific Agreements to the various parties thereto, other than the Shareholder and the Corporation whose execution thereof is required (execution by such third parties not

being required at or prior to the date hereof) and to registering the Specific Agreements at all public offices where such registration is appropriate.

8.03 The provisions contained in the Specific Agreements collateral hereto shall at all times be read subject to the provisions of this Plan and, in the event of conflict, the provisions of this Plan shall prevail.

ARTICLE IX DISSOLUTION

9.01 Upon the complete distribution of the Assets and assumption of Liabilities and liquidation of the business of the Corporation as set forth under this Plan, the Corporation shall execute and cause to be filed Articles of Dissolution of the Corporation in accordance with the Canada Business Corporations Act.

ARTICLE X ADJUSTMENTS

10.02 The assignment of the Assets and the assumption of the Liabilities effected hereunder shall be deemed to be made and effective as of the Effective Date for accounting and adjustment purposes. All benefits and obligations of every nature and kind of the Assets and the Liabilities whatsoever, including without limiting the generality of the foregoing, taxes and other payments and obligations, contractual or otherwise, accruing payable or paid in respect of the Assets and the Liabilities, shall be assumed by the Shareholder as of the Effective Date and shall be satisfied in accordance with the terms thereof.

ARTICLE XI
DISSENTING SHAREHOLDERS RIGHTS

11.01 Under the Arrangement the Court granted dissenting shareholders rights pursuant to Section 184 of the Canada Business Corporations Act, and the Shareholder hereby covenants and agrees to assume and pay the amounts that may be determined to be due to such dissenting shareholders in satisfaction of their rights.

ARTICLE XII
PREFERENTIAL RIGHTS OF PURCHASE

12.01 Notwithstanding the terms and conditions set forth herein, should any third party elect to exercise any preferential or preemptive rights of purchase pertaining to the Assets or any portion thereof (hereinafter called the "Rights"), the portion of the Assets so affected shall not be assigned, transferred or conveyed, so that the Corporation may comply with the terms and conditions of the Rights.

12.02 Notwithstanding the operation of Article 12.01 hereof, this Plan shall be deemed to have been amended, mutatis mutandis, and shall remain in full force and effect with respect to those Assets not so removed from the terms and conditions of this Plan.

ARTICLE XIII
FURTHER ASSURANCES

13.01 The Corporation shall, from time to time and at all times hereafter, at the request of the Shareholder do such further acts

and deliver all such further assurances, deeds and documents as shall reasonably be required in order to full perform the terms of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

GEOCRUDE ENERGY INC.

Per: *M. H. Mann*

Per: *L. B. Jones*

CANADA NORTHWEST ENERGY LIMITED

Per: *M. H. Mann*

Per: *L. B. Jones*



DOWELL SCHLUMBERGER
CANADA

Laboratory report

SOLUBILITY REPORT

CHEVRON CANADA RESOURCES LTD.

THREE WELLS FROM EACH:
DALY FIELD;
NORTH VIRDEN STALLION UNIT;
ROSELEA FIELD; AND,
ROUTLEDGE FIELD

MISSISSIPPIAN FORMATION

ART UNGER, ESTEVAN
TECHNICAL REPRESENTATIVE

HARLEY FEAR
LABORATORY REPRESENTATIVE

CALGARY LABORATORY
C.L. NO.: 86-138

MARCH 13, 1986



SOLUBILITY REPORT
FOR
CHEVRON CANADA RESOURCES LTD.

Laboratory report

WELL DATA

THREE WELLS FROM EACH:
DALY FIELD, NORTH VIRDEN STALLION UNIT; ROSELEA FIELD; AND,
ROUTLEDGE FIELD.
FORMATION: MISSISSIPPIAN

B.H.S.T. 32°C

INFORMATION REQUIRED

Solubility tests from samples from twelve different wells.
Scanning Electron Microscope Analysis.

TYPE OF SAMPLE SUBMITTED

<u>Well Name</u>	<u>Locations</u>	<u>Depth</u>
Cal Stan Daly	11-12-10-28-W1M	2324.5 metres
Canadian Superior Haskett	15-2-10-28-W1M	2306.5 metres
Cal Stan Daly	15-13-10-28-W1M	2394.5 metres
Cal Stan Stallion	4-27-11-26-W1M	2037.5 metres
Canadian Devonian Hepburn	15-23-10-26-W1M	2013.0 metres
Cal Stan Scallion	16-15-11-26-W1M	2041.5 metres
Canadian Prospects Roselea	10-30-10-25-W1M	1904.0 metres
Canadian Prospect Roselea	1-30-10-25-W1M	1784.5 metres
Cal Stan South Virden Prov.	4-11-10-26-W1M	2031.0 metres
Halliburton Vanderschaeghe	13-17-9-25-W1M	2110.5 metres
Cal Stan Routledge	16-21-9-25-W1M	2072.5 metres
Cal Stan Routledge	12-22-9-25-W1M	2068.0 metres

SOLUBILITY REPORT RESULTS

SOLUBILITY TESTS

A portion of each sample was ground up into a fine powder, weighed and placed in 15% HCl. These solutions were then placed in a 66°C hot bath for one hour, after which time they were filtered, dried, re-weighed and the solubilities calculated.

<u>Well Location</u>	Solubility in
	<u>15% HCl</u>
11-12-10-28-W1M	97%
15-2-10-28-W1M	71%
15-13-10-28-W1M	95%
4-27-11-26-W1M	100%
15-23-10-26-W1M	92%
16-15-11-26-W1M	97%
10-30-10-25-W1M	99%
1-30-10-25-W1M	99%
4-11-10-26-W1M	99%
13-17-9-25-W1M	97%
16-21-9-25-W1M	99%
12-22-9-25-W1M	100%

SCANNING ELECTRON MICROSCOPE AND ENERGY DISPERSIVE X-RAY ANALYSIS

In these analyses, small core chips were placed in the SEM chamber and visual examination under high magnification (220 times up to 231 times) was conducted. In conjunction with this, the core chips were subjected to an electron beam (EDX), which produced X-rays which were analyzed to give a semi-quantitative elemental analysis.

SOLUBILITY REPORT RESULTS

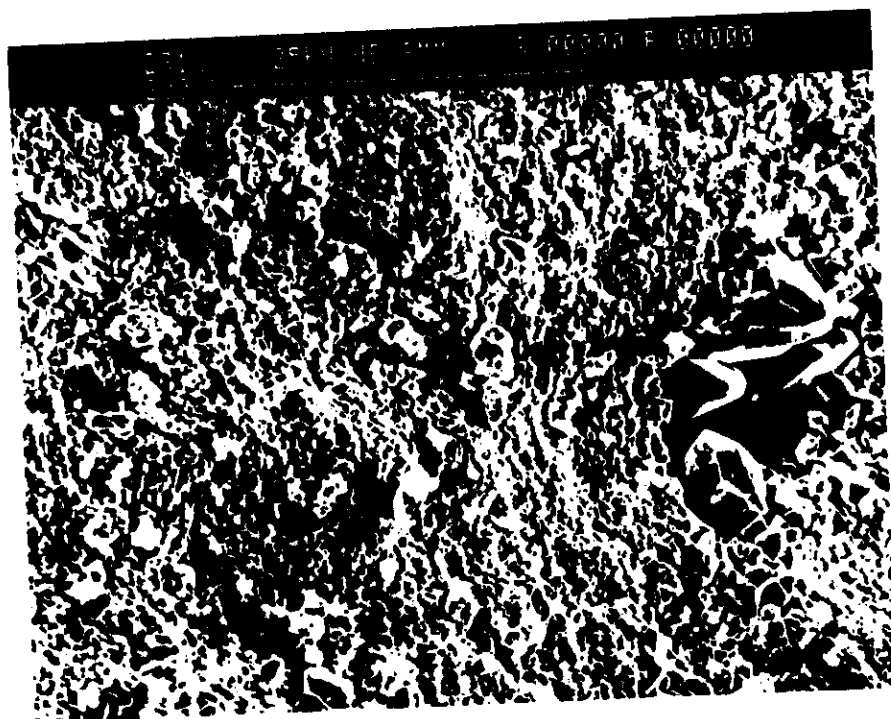


Figure 1
Formation Mississippian
Depth 2041.5 metres
Magnification 231X
Stub No. 86-17
Location: 16-15-11-26-W1M

This photomicrograph shows well developed Calcite cubes as well as larger Calcite cubes surrounding a pore throat. EDX Analysis gave Ca as the major element present. A small amount of Si was also detected, form chert nodules. The bar at the top measures 200 microns long.

SOLUBILITY REPORT
RESULTS

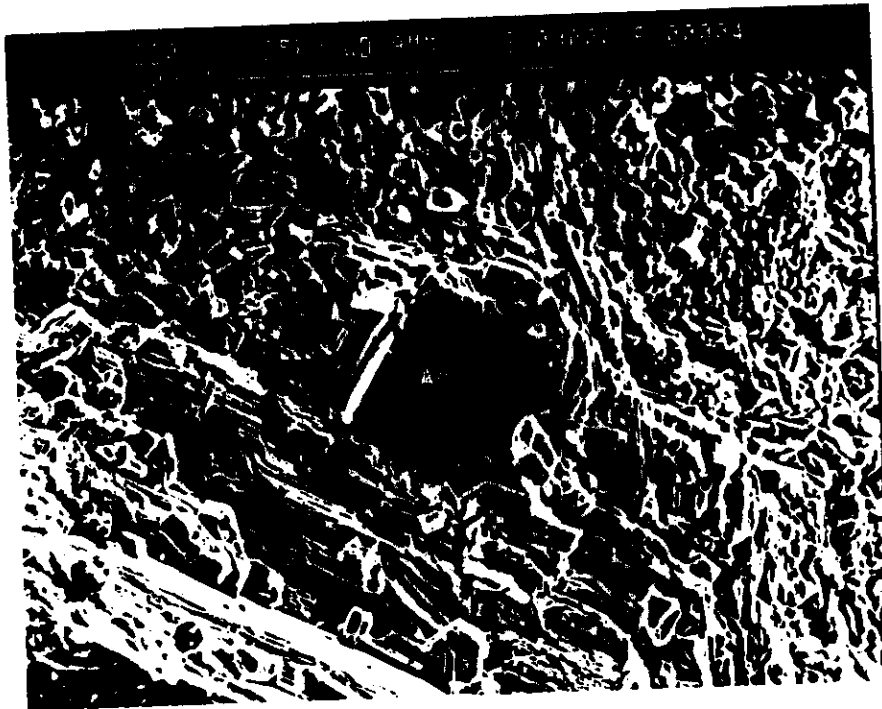


Figure	2
Formation	Mississippian
Depth	2306 metres
Magnification	220X
Stub No.	86-18
Location:	15-2-10-28-W1M

This photomicrograph shows well developed Calcite (Ca) and massive, blocky Anhydrite (An). EDX Analysis gave Ca and S as the major elements present. The bar at the top measures 200 microns long.

HARLEY FEAR
Telephone No.: (403) 250-7891
cc: Al McCallum, Calgary, Alberta
Julie Ferriman, Tulsa, Oklahoma

Manitoba



Bob
files

Energy and Mines

Petroleum

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

(204) 945-6577

March 18, 1985

→ Geocrude Energy Inc.
3300 Bow Valley Square 2
205 - 5th Avenue S.W.
Calgary, Alberta
T2P 2V7

Attention: Monica J. Bruchall
Supervisor, Land Administration

Dear Mrs. Bruchall:

Re: Daly Unit No. 1

Your letter of March 7, 1985 regarding the dissolution of Pan Cana Resources Ltd. is acknowledged. A copy of your letter has been forwarded to The Oil and Natural Gas Conservation Board for its information.

In accordance with the terms of your formal notice, you are hereby recognized as Operator of Daly Unit No. 1.

Please note that the performance deposit required by The Petroleum Drilling and Production Regulations, 1984 is currently in the name of Pan Cana Resources Ltd. This should be specifically assigned to Geocrude Energy Inc. at your earliest convenience.

By copy of this letter, The Mining and Use Taxes Branch is hereby informed of Geocrude's operatorship.

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

S. J. Puchniak
Director, Mining and Use Taxes Br.
Dept. of Finance



GEOCRUDE ENERGY INC.

1985-03-07

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



Attention: Director, Petroleum Branch

Dear Sir:

file → The following is an up-to-date list of Working Interest Owners of
Daly Unit No. 1:

Chevron Canada Resources Limited	32.388980
Navajo Petroleums Ltd.	1.752490
Murphy Oil Company Ltd.	4.979250
Scurry-Rainbow Oil Limited	17.108940
Geocrude Energy Inc.	27.255350
Sharon Oil Company Limited	3.181660
Rundle Petroleums Ltd.	<u>13.333330</u>
	100.000000

Enclosed is a copy of our formal notice together with a copy of the
"Certificate of Intent to Dissolve" for Pan Cana Resources Ltd.

If any other Department should be notified, kindly let us know.

Yours very truly,

GEOCRUDE ENERGY INC.

Monica J. Bruchall (Mrs.),
Supervisor, Land Administration.

MJB:do
Encl.

cc: All Working Interest Owners
Daly Unit No. 1

GEOCRUDE ENERGY INC
3300 BOW VALLEY SQUARE 2
205 - 5TH AVENUE S. W.
CALGARY, ALBERTA T2P 2V7

FEBRUARY 12, 1985

NOTICE IS HEREBY GIVEN, PURSUANT TO SECTION 204 OF THE BUSINESS CORPORATIONS ACT, ALBERTA, THAT PAN CANA RESOURCES LTD. INTENDS TO DISSOLVE. BY SPECIAL RESOLUTION DATED AS OF JANUARY 4, 1985, THE SOLE SHAREHOLDER OF PAN CANA RESOURCES LTD. (BEING GEOCRUDE ENERGY INC.) RESOLVED TO LIQUIDATE AND DISSOLVE VOLUNTARILY PAN CANA RESOURCES LTD. A CERTIFICATE OF INTENT TO DISSOLVE WAS ISSUED BY THE REGISTRAR ON JANUARY 18, 1985.

ALL RIGHTS AND OBLIGATIONS OF PAN CANA RESOURCES LTD. HAVE, BY AGREEMENT DATED AS OF JANUARY 4, 1985, BEEN ASSIGNED TO THE SOLE SHAREHOLDER, GEOCRUDE ENERGY INC. AND HAVE BEEN ASSUMED BY GEOCRUDE ENERGY INC. EFFECTIVE AS OF JANUARY 4, 1985.

A COPY OF THE CERTIFICATE OF INTENT TO DISSOLVE IS ATTACHED HERETO. THE ASSIGNMENT AGREEMENT DATED AS OF JANUARY 4, 1985, IS AVAILABLE UPON REQUEST. A CERTIFICATE OF DISSOLUTION, WHEN ISSUED BY THE REGISTRAR, WILL ALSO BE AVAILABLE. AN ASSIGNMENT AND NOVATION AGREEMENT WILL BE PREPARED AND DISTRIBUTED IN DUE COURSE.

PLEASE ADJUST YOUR RECORDS TO REFLECT THE ABOVE ASSIGNMENT AND DISSOLUTION. THE ADDRESS WILL REMAIN AT 3300 BOW VALLEY SQUARE 2, 205 - 5TH AVENUE S W, CALGARY, ALBERTA, T2P 2V7. SHOULD YOU REQUIRE ANY FURTHER INFORMATION OR WISH TO DISCUSS THE ABOVE, PLEASE DIRECT YOUR INQUIRIES TO:

LAND MATTERS - KEN MURPHY, VICE-PRESIDENT, LAND
ACCOUNTING MATTERS - DICK RIGGINS, CONTROLLER

AT (403) 263-0143.

YOURS TRULY,
GEOCRUDE ENERGY INC

ORIGINAL SIGNED BY

K.P. MURPHY
VICE-PRESIDENT - LAND



20295678

Corporate Access No.

BUSINESS CORPORATIONS ACT

Form 20

CERTIFICATE OF INTENT TO DISSOLVE

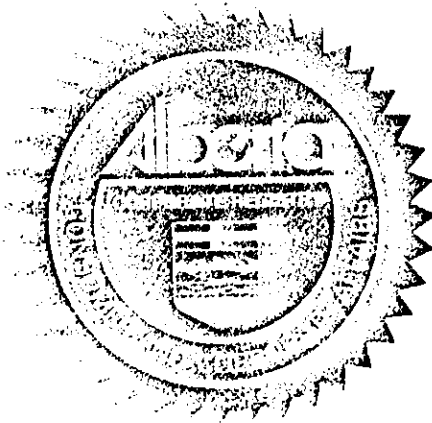
- PAN CANA RESOURCES LTD. -

Name of Corporation

I HEREBY CERTIFY THAT THE ABOVE-MENTIONED CORPORATION INTENDS TO DISSOLVE,
AS SET OUT IN THE ATTACHED STATEMENT OF INTENT TO DISSOLVE, UNDER SECTION
204 OF THE BUSINESS CORPORATIONS ACT.

M. M. Frachin

Registrar of Corporations



January 18, 1985

Date of Intent to Dissolve

/s/

Change of
Operator

working interest in the Unit Area.

7.06 Unit Operator:

- (a) Shall forthwith cease to act as Unit Operator in the event it should become bankrupt or insolvent, or make any general assignment for the benefit of creditors;
- (b) May be removed as Unit Operator by an affirmative vote of members of the Operating Committee representing Working Interest Owners, other than Unit Operator, who own at least eighty-five (85%) percent of the remaining Participating Interests;

Class
I cannot find any thing in the Act
or the Unitization Orders that apply to
this situation. The section in the Unit
Agreement deals with bankruptcy, resignation
or removal. The statement that "all
rights, obligations etc are transferred to
Geocrude" would suggest that we can
assume Pona Cane = Geocrude and no
change in Unit Operator has taken place.
The letter should be sufficient notification
But

ired and eighty
erating Commit-
tion of Unit
or (c) of
released from
at the hour
ntial Standard
of the calendar month

Rele:
Duties

following the expiration of one hundred and eighty (180) days from the date of delivery of notice of such removal or resignation, or such earlier date as a successor Unit Operator shall have been designated by the Operating Committee, and shall have assumed the duties of Unit Operator.

7.08 At the effective time of the release from its duties of any Unit Operator, or upon the selection of a successor Unit Operator, the preceding Unit

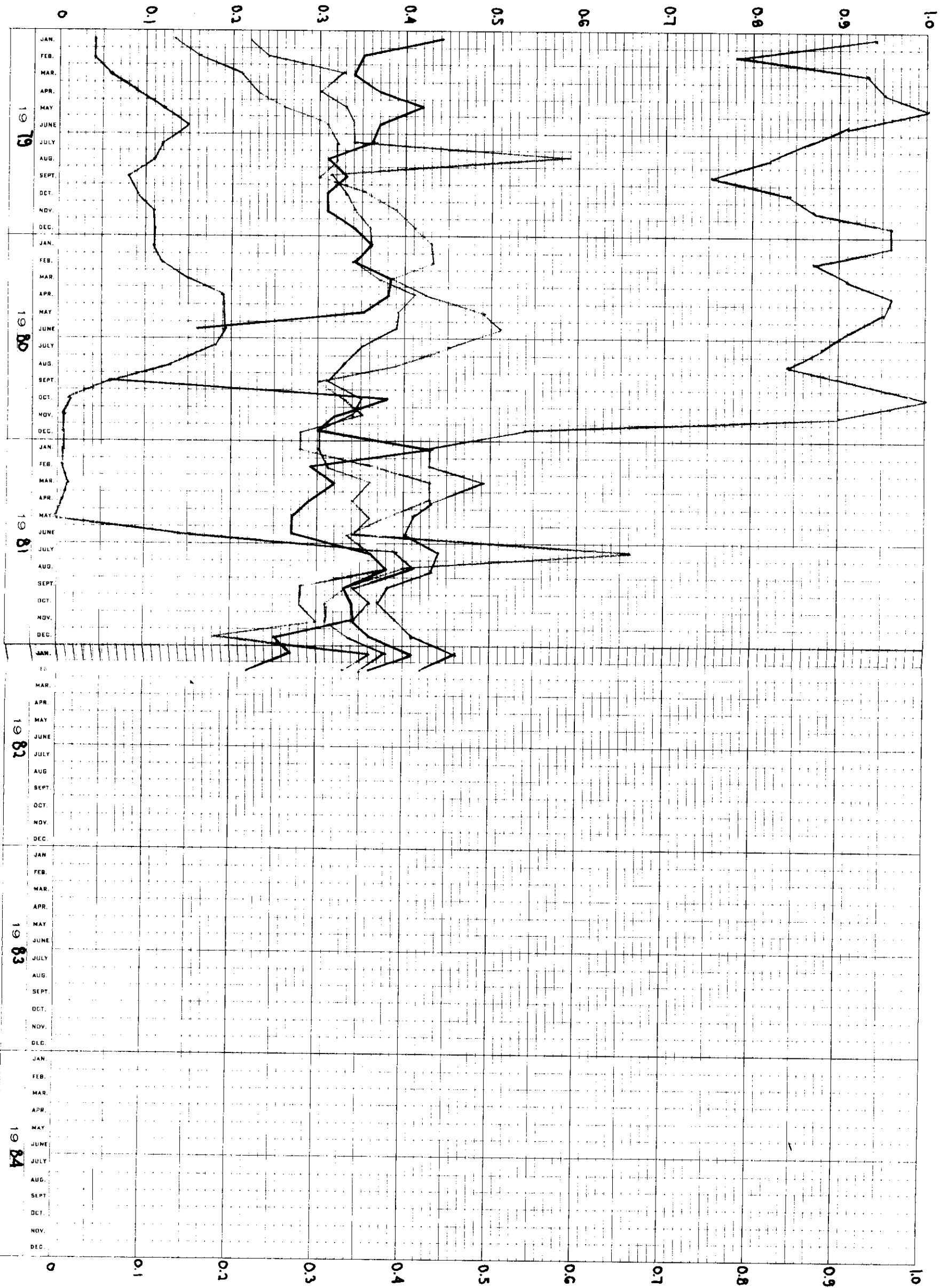
Bob
Brook

- review ^{Act 4} Unit Agreement to see in any further notifications necessary
- what registrations and/or name changes are required
- draft reply for my signature

M³/MTH.

KPa WHIP

DALY UNIT #1 "INSECTIVITY INDEX"



12-4 ——— 88-5 ——— 15D-4 ———

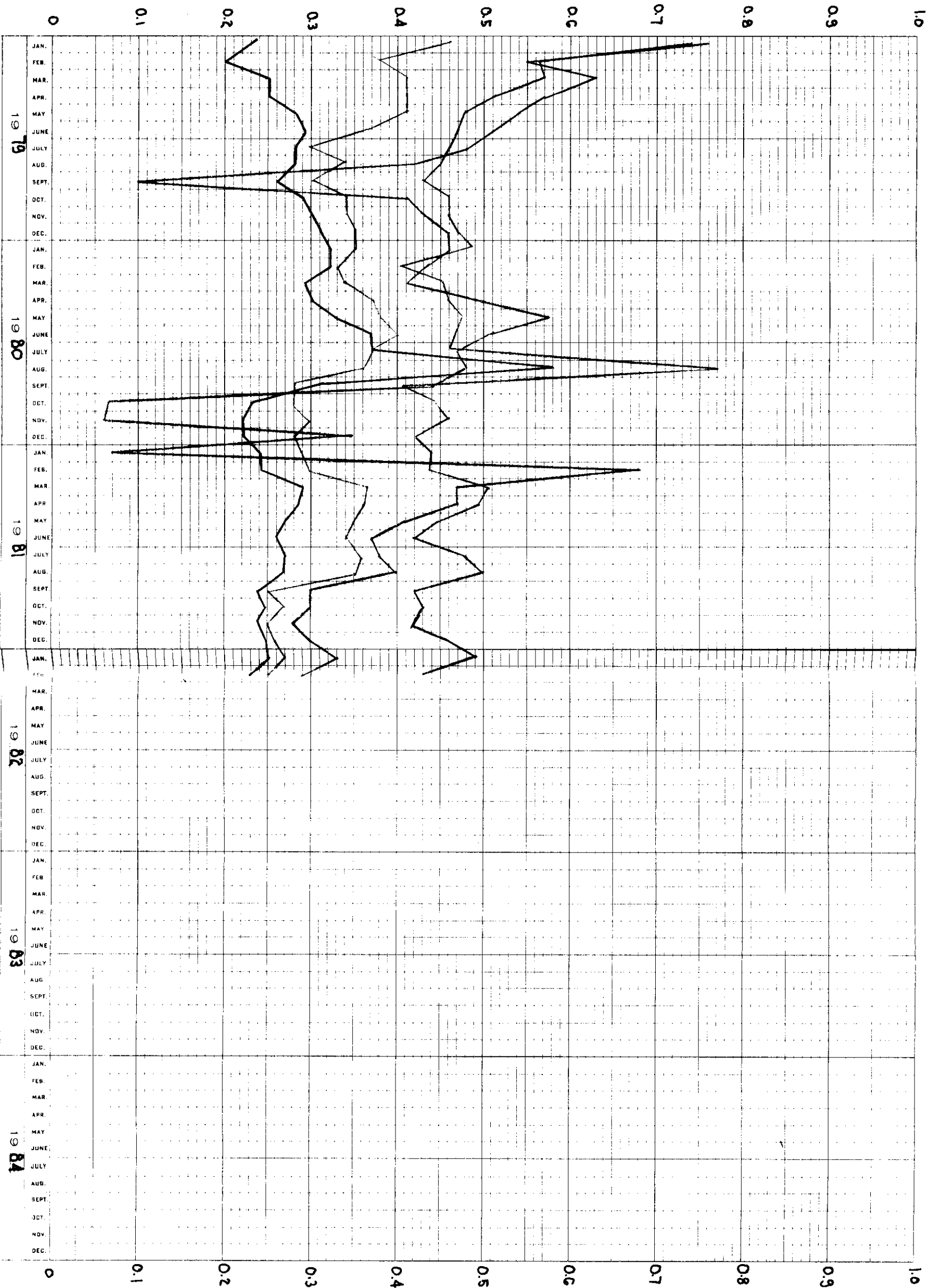
12B-4 ——— 14D-4 ———

22 6-8-81

$M^3/Mth.$
Kpa WHIP

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

DALY UNIT # 1
INSECTIVITY INDEX



13C-3 ——— 13C-4 ———
5A-4 ——— 15A-5 ———

6-8-81

INTER-DEPARTMENTAL MEMORANDUM

FROM S. S. GAMEY
Reservoir Engineer



PROVINCE
OF
MANITOBA

DATE January 13, 1971

TO M. J. COBERT - Senior Assistant Deputy Minister

J. S. ROPER - Director of Mines

SUBJECT Explanation - Table #II (copy attached)

RE: Last column -

Injection Rate
w/Frac. Press.
Exceeded

This is the "proposed" volume of water that would be injected at 1500 p.s.i. (in barrels of water per day)

The injectivity index at 1500 p.s.i. (BWPD/psi) for the well 12-1-10-28 is shown as .124.

The volume of water to be injected is shown as 186 in the last column - Injection Rate w/Fracture Pressure Exceeded.

$$\frac{186}{1500} = .124$$

42

TABLE II
(Updated December 1970)

DAILY INJECTION - BELOW AND ABOVE FRACTURE PRESSURE

(PROPOSED
 INJECTION RATE
 BHPD / 1500 psi)

<u>Well</u>	<u>Injection Rate</u> November 1970 BHPD	<u>Injectivity Index</u> @ 1,080 psi BHPD/psi	<u>Injectivity Index</u> @ 1,500 psi BHPD/psi	<u>Injection Rate</u> w/Frac. Press. Exceeded
<u>Effective</u>				
12-1-10-28	67	.062	.124	186
14-1-10-28	20	.019	.038	57
16-2-10-28	93	.086	.172	258
2-11-10-28	77	.071	.142	213
8-11-10-28	32	.030	.060	90
14-11-10-28	17	.016	.032	48
2-12-10-28	104	.096	.192	288
4-12-10-28	64	.059	.118	177
6-12-10-28	46	.043	.086	129
8-12-10-28	40	.037	.074	111
10-12-10-28	185	.171	.342	400*
12-12-10-28	70	.065	.130	195
14-12-10-28	255	.236	.472	400*
4-13-10-28	<u>140</u>	.130	.260	<u>390</u>
Subtotal	1,210			2,942
<u>Ineffective</u>				
16-1-10-28	-			300*
10-11-10-28	356			300*
12-11-10-28	<u>131</u>			<u>300*</u>
Total	1,697			3,842

*Maximum Rate

. . . 2

soon as possible, but not later than June 1, 1983. A supply of application forms is enclosed for your use.

On another topic related to the subject Unit, we are somewhat concerned with the incidence of a number of serious oil and salt water spills in the Unit over the last year and a half. In particular, three major spills, two involving flowlines and one involving a water injection plant have occurred. Consequently, we request that Pan Can indicate its plans, with respect to the Unit, to minimize both the number and size of spills as soon as possible but not later than June 1, 1983.

Yours sincerely,

Original Signed By
L. R. DUBREUIL

L. R. Dubreuil
Chief Petroleum Engineer
Petroleum Branch

LKD/sb
Enclosure.

cc: - Virden Office

Pan Cana Resources Ltd.

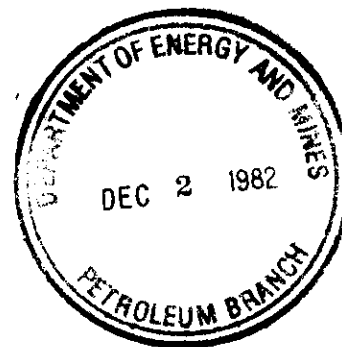
500 BOW VALLEY SQUARE 1, 202 - 6th AVENUE S.W., CALGARY, ALBERTA T2P 2W6

P.O. BOX 9237

TELEPHONE (403) 263-0143

TELEX 038-22796

1982 November 30



Province of Manitoba
Department of Energy and Mines
Mineral Resources Division
Petroleum Branch
975 Century Street
Winnipeg, Manitoba
R3H 0W4

Attention: Mr. L. R. Dubreuil

Dear Sir;

RE: Inactive and Suspended Wells
Daly Unit No. 1

Pursuant to your letter of 82-10-13 and our subsequent telephone conversation of 82-11-29, Pan Cana has reviewed the inactive and suspended wells within Daly Unit No. 1. We are proceeding with plans to return the following wells to production:

- (i) Chevron Daly 12-3-10-28
- (ii) Chevron Daly Prov. 10-4-10-28
- (iii) Chevron Daly 7-9-10-28

The remaining wells do not show as much promise for economic production as the above noted wells. We are reluctant to abandon the wells immediately. We are presently reviewing the reservoir performance of Daly Unit No. 1. This study may show some future use for these wells as water injection or disposal wells. We expect to complete this study by May 1, 1983. We therefore request an extension on providing you our plans for these wells until that time.

Yours very truly,

PAN CANA RESOURCES LTD.

Lowell E. Jackson

Lowell E. Jackson, P.Eng.
Chief Engineer

LEJ/lc

COPY

October 13, 1982

Pan Cana Resources Ltd.
500 Bow Valley Square I
202 - Sixth Ave. S.W.
Calgary, Alberta
T2P 2W5

Attention: Mr. Lowell Jackson,
Chief Engineer

Dear Sir:

Daly Unit No. 1
Inactive and Suspended Wells

A number of wells (listed on Attachment No. 1) in the Daly Unit No. 1 have been inactive for a considerable period of time. We are concerned that prolonged inactivity of these wells increases the potential for wellbore failure and aquifer contamination. It is further noted that all of these wells were originally shut-in on the basis of economic considerations. As you may be aware, the interim agreement between the Governments of Manitoba and Canada, regarding oil pricing provides for New Oil Reference Price (NORP) for all wells reactivated after January 1, 1981, which prior to reactivation had been shut-in for 3 years or more. On this basis, all the wells listed on the attachment would be eligible for NORP prices. Consequently, we submit that if these wells cannot presently be operated economically at NORP (essentially world level) prices, it is not likely that they will be economic in the future.

In view of the above, we request that, prior to December 1, 1982, you submit plans to either reactivate or abandon each of the wells listed on Attachment No. 1.

Yours sincerely,

L. R. Dubreuil
Chief Petroleum Engineer
Petroleum Branch

LRD/sb
Encl.

cc: Virden Office

COPY
ATTACHMENT NO. 1

DALY UNIT NO.1

SUSPENDED AND INACTIVE WELLS

<u>WELL</u>	<u>LOCATION</u>	<u>STATUS</u>	<u>DATE OF LAST OIL PRODUCTION</u>	<u>EXPIRY</u>
Murphy Daly	10-32-9-28	Inactive	April 1969	
Murphy Daly	15-32-9-28	Inactive	July 1971	
Murphy Daly	16-32-9-28	Suspended	February 1977	MAY 1/83
Chevron Daly	12-3-10-28	Suspended	May 1966	MAY 1/83
Chevron Daly Prov.	10-4-10-28	Suspended	November 1960	MAY 1/83
Chevron Daly Prov.	15-4-10-28	Inactive	October 1974	
Rundle M & H Daly	8-5-10-28	Suspended	August 1975	MAY 1/83
Chevron Daly	7-9-10-28	Suspended	June 1974	MAY 1/83

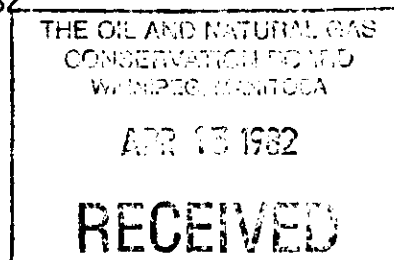
→ Daly Unit No. 1 - Sen Cove

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171

April 7, 1982

Chairman,
Oil and Natural Gas Conservation Board
Province of Manitoba
989 Century Street
Winnipeg, Manitoba
R3H 0W4



Gentlemen:

Further to our letter of October 19, 1981 where we requested guidance from your Board as to the resolution of the problem of selecting a new Unit Operator, we now wish to withdraw this request. A further meeting was held on April 5, 1982 and it has been decided that we will appoint an arbitrator to make a decision regarding this matter. As soon as any decision is made, we will inform your Board.

Yours very truly,

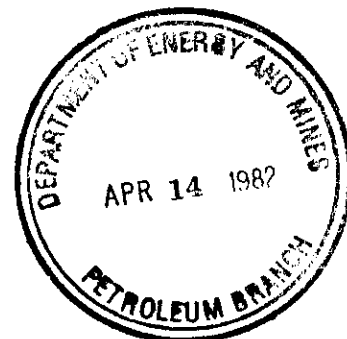
RUNDLE PETROLEUMS LTD.

RFA:vs
Encls.

cc: All Working Interest Owners
Daly Unit No. 1
H.C. Moster
Dept. of Energy & Mines,
Winnipeg

R.F. Atkinson
R.F. Atkinson, Chairman
Daly Unit No. 1
Operating Committee

x.c. - H. Clare Moster
April 14, 1982 - IH/ra



RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171

October 19, 1981

Chairman,
Oil and Natural Gas Conservation Board
Province of Manitoba
989 Century Street
Winnipeg, Manitoba
R3H 0W4

Gentlemen:

Re: Daly Unit No. 1 Operator

Enclosed are the Minutes of the adjourned Daly Unit No. 1 Operating Committee Meeting of October 7, 1981. You will note that the vote for a new Unit Operator resulted in the following:

<u>For Chevron Standard Limited</u>		<u>Total</u>
Chevron Standard Limited	32.388980%	32.388980%
<u>For Pan Cana Resources Ltd.</u>		
Pan Cana Resources Ltd.	27.255350%	
Murphy Oil Company Ltd.	4.979250%	
Scurry-Rainbow Oil Limited	17.108940%	
Sharon Oil Company Limited	3.181660%	
Rundle Petroleums Ltd.	13.333330%	
Navajo Petroleums Ltd.	1.752490%	67.611020%
		<u>100.000000%</u>

Under Section 6.01 of The Plan, neither of these companies received the required 75% participation. It was decided that Rundle, as Unit Operator, would refer this matter to your board for further guidance. I have asked both Pan Cana and Chevron to make written submissions outlining their positions as to why they should be named the Unit Operator.

Yours very truly,
RUNDLE PETROLEUMS LTD.

RFA:vs

cc: All Working Interest Owners
Daly Unit No. 1

R.F. Atkinson, Chairman
Daly Unit No. 1
Operating Committee

Pg. 2	Defn 1.02(i) - Operating Committee
Pg. 4	(t) - Unit Operator
Pg. 17	6.01 - voting requirements of Operating Committee
Pg. 18	6.03 Rights Granted the Operating Committee
	(e) filling vacancy of Unit Operator
Pg. 23	7.06 Change of Unit Operator
	7.09 Selection of Successor Unit Operator
Pg. 56	20.06 Rehearing Amendments

The Mines Act

76(3)	Bo Making of ^{Board} unitization order
76(4)	Provisions of unitization order
	(i)
	(j)
76(5)	"initial" appointment of a unit operator by board
78(2)	rehearing for amendments to order

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171



October 19, 1981

Chairman,
Oil and Natural Gas Conservation Board
Province of Manitoba
989 Century Street
Winnipeg, Manitoba
R3H 0W4

Gentlemen:

Re: Daly Unit No. 1 Operator

Enclosed are the Minutes of the adjourned Daly Unit No. 1 Operating Committee Meeting of October 7, 1981. You will note that the vote for a new Unit Operator resulted in the following:

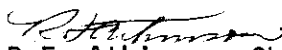
<u>For Chevron Standard Limited</u>		<u>Total</u>
Chevron Standard Limited	32.388980%	32.388980%
<u>For Pan Cana Resources Ltd.</u>		
Pan Cana Resources Ltd.	27.255350%	
Murphy Oil Company Ltd.	4.979250%	
Scurry-Rainbow Oil Limited	17.108940%	
Sharon Oil Company Limited	3.181660%	
Rundle Petroleums Ltd.	13.333330%	
Navajo Petroleums Ltd.	1.752490%	67.611020%
		<u>100.000000%</u>

Under Section 6.01 of The Plan, neither of these companies received the required 75% participation. It was decided that Rundle, as Unit Operator, would refer this matter to your board for further guidance. I have asked both Pan Cana and Chevron to make written submissions outlining their positions as to why they should be named the Unit Operator.

Yours very truly,
RUNDLE PETROLEUMS LTD.

RFA:vs

cc: All Working Interest Owners
Daly Unit No. 1


R.F. Atkinson, Chairman
Daly Unit No. 1
Operating Committee

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171

October 19, 1981

Chairman,
Oil and Natural Gas Conservation Board
Province of Manitoba
989 Century Street
Winnipeg, Manitoba
R3H 0W4

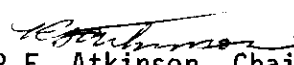
Gentlemen:

Re: Daly Unit No. 1 Operator

Rundle Petroleums Ltd. hereby gives notice of resignation as Unit Operator of Daly Unit No. 1, under Section 7.06 of The Plan for Unit Operation Governing the Unitized Management and Further Development of Daly Unit No. 1. It would be our preference to have a new unit operator named effective January 1, 1982, since the continuity of one operator for the full calendar year would then be in effect.

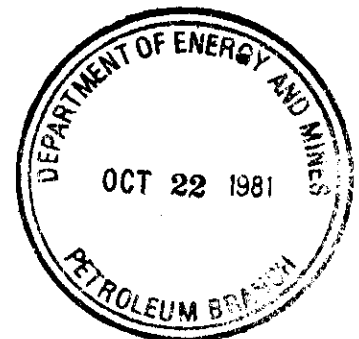
Yours very truly,

RUNDLE PETROLEUMS LTD.


R.F. Atkinson, Chairman
Daly Unit No. 1
Operating Committee

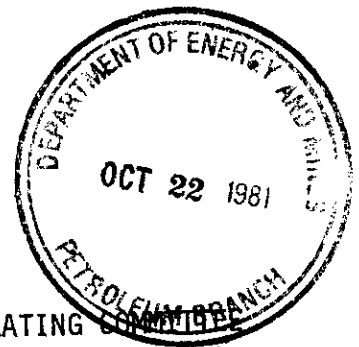
RFA:vs

cc: All Working Interest Owners
Daly Unit No. 1



RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171



DALY UNIT NO. 1 OPERATING COMMITTEE
MINUTES OF THE MEETING
OCTOBER 19, 1981 CONTINUED FROM
OCTOBER 7, 1981

TO: ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1

The Operating Committee Meeting of Daly Unit No. 1 of October 7, 1981 which was adjourned sine die was reconvened at 1:30 p.m., October 19, 1981 at #665 Gulf Canada Square, Calgary, Alberta with the following in attendance:

Representative

Anita Mathur
Ralph Atkinson
P. Pisio
S.N. Borowski
R.D. Friesen
Ed Chwyl
Lowell Jackson
J.A.S. Gibson
N.W. Cuming

Company

Scurry-Rainbow Oil Limited
Rundle Petroleum Ltd.
Chevron Standard Limited
Chevron Standard Limited
Murphy Oil Company Ltd.
Pan Cana Resources Ltd.
Pan Cana Resources Ltd.
Rundle Petroleum Ltd.
Navajo Petroleum Ltd.

Chairman of the meeting was Ralph Atkinson.

A Letter of Authority granted Pan Cana the right to vote on behalf of Sharon Oil Company Limited in their absence. (Letter attached to file copy of minutes.)

It was indicated by Chevron that based on the opinion of their company legal counsel, who were not present at the meeting, it was not necessary to again have nominations for Unit Operator.

Mr. Pisio on behalf of Chevron and Mr. Chwyl of Pan Cana made their respective presentations as to why their company should be selected as Operator of Daly Unit No. 1.

The Chairman then requested a vote of Working Interest Owners' preference as to who should be named the successor Operator to Rundle.

The results were as follows:

.....2

<u>For Chevron Standard Limited</u>		<u>Total</u>
Chevron Standard Limited	32.388980%	32.388980%
<u>For Pan Cana Resources Ltd.</u>		
Pan Cana Resources Ltd.	27.255350%	
Murphy Oil Company Ltd.	4.979250%	
Scurry-Rainbow Oil Limited	17.108940%	
Sharon Oil Company Limited	3.181660%	
Rundle Petroleums Ltd.	13.333330%	
Navajo Petroleums Ltd.	1.752490%	
	67.611020%	<u>67.611020%</u>
		<u>100.000000%</u>

Moved by Rundle, seconded by Murphy that the matter of Unit Operator of Daly Unit No. 1 be referred to the Oil and Natural Gas Conservation Board since the vote was not decisive under Section 6.01 of the Unit Plan. Carried unanimous.

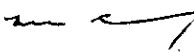
Recommendation:

It was recommended that Chevron and Pan Cana make written submissions direct to the Board setting out their reasons as to why they should be named Operator.

Moved by Pan Cana meeting adjourn 2:35 p.m.

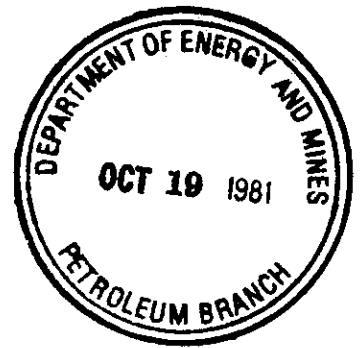
Carried.

Respectfully submitted by


N.W. Cuming

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171

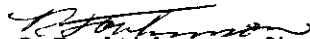


October 15, 1981

TO: ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1

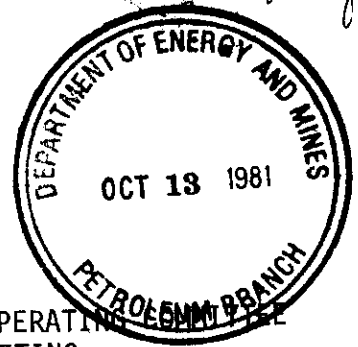
The October 7th meeting of Daly Unit No. 1 was adjourned sine die and will be reconvened at the office of Rundle Petroleum Ltd. at 1:30 p.m., Monday, October 19, 1981.

RFA:vs


R.F. Atkinson, Chairman
DALY UNIT NO. 1
Operating Committee

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171



DALY UNIT NO. 1 OPERATING
MINUTES OF THE MEETING
OCTOBER 7, 1981

TO: ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1

An Operator's Meeting of Daly Unit No. 1 was held on Wednesday, October 7, 1981 at 1:30 p.m. at 665 Gulf Canada Square, Calgary, Alberta, with the following in attendance:

Representative

Ralph Atkinson
J. Gibson
Dan Jennings
Lowell Jackson
Ed Chwyl
Ron Friesen
Anita Mathur
Dick Zeeuwen
P. Pisio
N. Cuming

Company

Rundle Petroleum Ltd.
Rundle Petroleum Ltd.
Sharon Oil Company Limited
Pan Cana Resources Ltd.
Pan Cana Resources Ltd.
Murphy Oil Company Ltd.
Scurry-Rainbow Oil Limited
Chevron Standard Limited
Chevron Standard Limited
Navajo Petroleum Ltd.

Chairman of the meeting was Ralph Atkinson.

Moved by Rundle, seconded by Chevron that the minutes of the last Operator's Meeting be adopted as read. Carried.

Moved by Pan Cana, seconded by Scurry that a review of Mail Ballots as circulated be approved. Carried.

Ralph Atkinson expressed the desire of Rundle to resign from the position as Unit Operator and asked the committee to consider a replacement.

Moved by Rundle, seconded by Sharon that Pan Cana be nominated for consideration as Unit Operator.

Moved by Murphy, seconded by Chevron that Chevron be nominated for consideration as Unit Operator.

Moved by Rundle, seconded by Pan Cana that nominations cease.

Presentations were made on behalf of Pan Cana by Ed Chwyl and for Chevron by Pete Pisio.

A vote by representatives resulted as follows:

<u>For Pan Cana</u>		<u>For Chevron</u>	
Pan Cana	27.255350%	Murphy	4.979250%
Sharon	3.181660	Chevron	32.388980
Navajo	1.752490	Scurry	17.108940
Rundle	<u>13.333330</u>		<u> </u>
	45.522830%		54.477170%

Under the Unit Plan, Part VI, Voting, Section 6.01, the results did not provide a clear majority and the two nominees agreed to reconsider their positions.

Rundle asked approval to raise unit administrative costs for which a mail ballot was not circulated.

Moved by Rundle, seconded by Chevron that administrative costs be increased from \$3,000 to \$3,333 per month effective April 1, 1981. Carried.

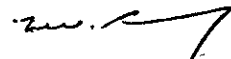
Moved by Rundle, seconded by Pan Cana that the Engineering Committee be instructed to investigate the feasibility to expand the unit to include Lsd. 11-5-10-28 and Lsd. 6-10-10-28. Carried.

Unit operations were briefly reviewed, particularly government directives relating to pits and casing leaks.

It was agreed to adjourn the meeting sine die at 3:20 p.m.

Respectfully submitted by

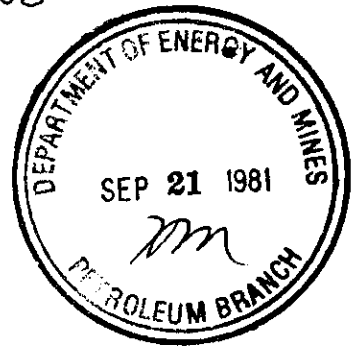
N.W. Cuming



Bob

RUNDLE PETROLEUMS LTD.

Suite #665, Gulf Canada Square
401 - 9th Avenue S.W.
Calgary, Alberta T2P 3C5
TELEPHONE: 263-7171



September 14, 1981

TO: ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1

DALY UNIT NO. 1 OPERATING COMMITTEE

A meeting of Daly Unit No. 1 Operating Committee will be held at #665, Gulf Canada Square, 401 - 9th Avenue S.W., Calgary, Alberta at 1:30 p.m. on Wednesday, October 7, 1981. The following items will be discussed -

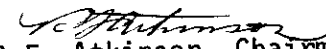
Agenda

- (1) Adoption of Minutes for April 17, 1978 meeting.
- (2) Mail Ballot review.
- (3) Discuss replacement of Rundle Petroleum Ltd. as Operator as Rundle wishes to resign from this position.
- (4) Discuss the administration costs for operation of Daly Unit No. 1.
- (5) Review the expansion of Daly Unit No. 1 to include Rundle-Scurry Daly 11-5-10-28 and Chevron Daly 6-10-10-28.
- (6) Review operations and performance of Daly Unit No. 1
- (7) Other business.

It would be appreciated if your company could be represented by your representative or alternate at this meeting.

XC - I. HAUGH
- VIRDEN OFFICE

RFA:vs


R.F. Atkinson, Chairman
DALY UNIT NO. 1
Operating Committee

RUNDLE PETROLEUMS LTD.

400 ~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

July 13, 1971

Department of Mines & Natural Resources
Mines Branch
Oil & Gas Conservation Board
911 Norquay Building
401 York Avenue
Winnipeg 1, Manitoba

Attention: Chairman, Oil & Gas Conservation Board

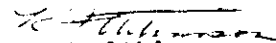
Dear Sir;

Re: Daly Unit #1

In accordance with Section 5.03, Part "C", an organization meeting of the Operating Committee for Daly Unit #1 was held on June 29, 1971 and Rundle Petroleum Ltd. was appointed Unit Operator. The representative of Rundle Petroleum Ltd. of the Operating Committee is R. F. Atkinson, and he will act as chairman at future operating committee meetings as directed.

Yours very truly,

RUNDLE PETROLEUMS LTD.


R. F. Atkinson

RFA:ft

MANITOBA REGULATION 94/71

Being

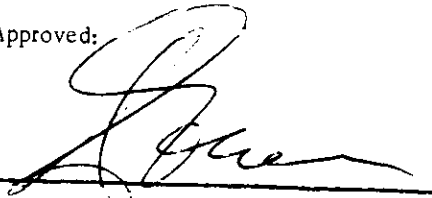
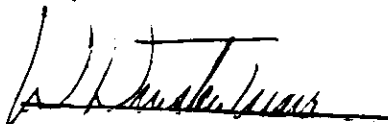
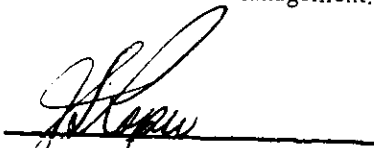
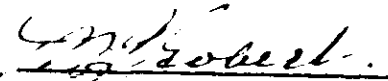
THE OIL AND NATURAL GAS CONSERVATION BOARD
UNITIZATION ORDER NO. 11Pertaining to the Unitized Management Operation and Further
Development of Daly Unit No. 1.Made and passed pursuant to "The Mines Act", Cap. M160, R. S. M.,
1970, and amendments thereto, by The Oil and Natural Gas Conservation
Board, of Manitoba.

(Filed June 24/71)

1. Effective at the hour of seven o'clock in the forenoon, Central Daylight Time, on the first day of July, 1971, that a certain part of the Daly Field, to be known as the Unit Area, shall be operated as a unit in accordance with the Plan for Unit Operation Governing the Unitized Management Operation and Further Development of Daly Unit No. 1, dated October 20, 1970, and amended January 6, 1971, and shall be known as the Daly Unit No. 1.
2. Excerpts from the Plan, namely: Parts XXII, XXIII, and XXIV here attached, are for publication in The Manitoba Gazette for the information of the public.

Oil and Natural Gas Unitization Order No. 11, made and passed this 17th day of June, A. D., 1971, at the City of Winnipeg, in the Province of Manitoba, by The Oil and Natural Gas Conservation Board.

Approved:

Sidney Green,
Minister of Mines, Resources
and Environmental Management.W. Winston Mair,
Chairman,
The Oil and Natural Gas
Conservation Board.J. S. Roper,
Deputy Chairman,
The Oil and Natural Gas
Conservation Board.M. J. Gobert,
Member,
The Oil and Natural Gas
Conservation Board.

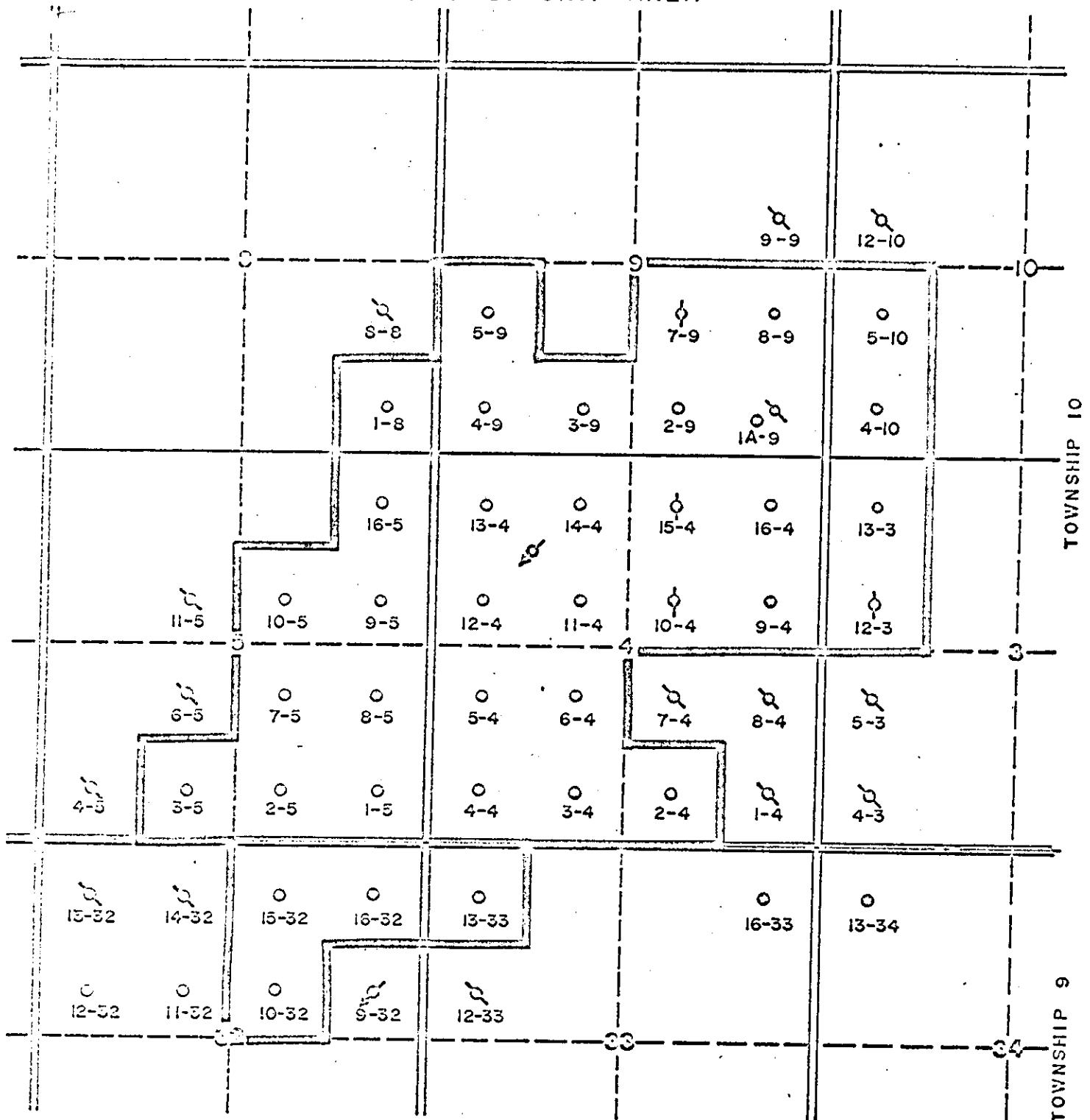
Printed by R. S. Evans - Queen's Printer for the Province of Manitoba.

PART XXII

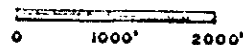
THE LANDS IN THE PROVINCE OF MANITOBA WHICH COMPRISE
THE DALY UNIT NO. 1 ARE AS FOLLOWS:

<u>TRACT NUMBER</u>	<u>LEGAL DESCRIPTION</u>	<u>TRACT NUMBER</u>	<u>LEGAL DESCRIPTION</u>
	<u>TOWNSHIP 10 RANGE 28</u>		<u>TOWNSHIP 10 RANGE 28</u>
2-4	LSD. 2, SECTION 4	3-5	LSD. 3, SECTION 5
12-3	LSD. 12, SECTION 3	11-4	LSD. 11, SECTION 4
13-3	LSD. 13, SECTION 3	12-4	LSD. 12, SECTION 4
9-4	LSD. 9, SECTION 4	13-4	LSD. 13, SECTION 4
10-4	LSD. 10, SECTION 4	14-4	LSD. 14, SECTION 4
15-4	LSD. 15, SECTION 4	1-5	LSD. 1, SECTION 5
16-4	LSD. 16, SECTION 4	2-5	LSD. 2, SECTION 5
1-9	LSD. 1, SECTION 9	7-5	LSD. 7, SECTION 5
2-9	LSD. 2, SECTION 9	8-5	LSD. 8, SECTION 5
3-9	LSD. 3, SECTION 9	9-5	LSD. 9, SECTION 5
4-9	LSD. 4, SECTION 9	10-5	LSD. 10, SECTION 5
5-9	LSD. 5, SECTION 9	16-5	LSD. 16, SECTION 5
7-9	LSD. 7, SECTION 9	3-4	LSD. 3, SECTION 4
8-9	LSD. 8, SECTION 9	4-4	LSD. 4, SECTION 4
4-10	LSD. 4, SECTION 10	5-4	LSD. 5, SECTION 4
5-10	LSD. 5, SECTION 10	6-4	LSD. 6, SECTION 4
1-8	LSD. 1, SECTION 8		
	<u>TOWNSHIP 9 RANGE 28</u>		
10-32	LSD. 10, SECTION 32		
15-32	LSD. 15, SECTION 32		
16-32	LSD. 16, SECTION 32		
13-33	LSD. 13, SECTION 33		

PART XXIII
MAP OF UNIT AREA



WEST DALY AREA

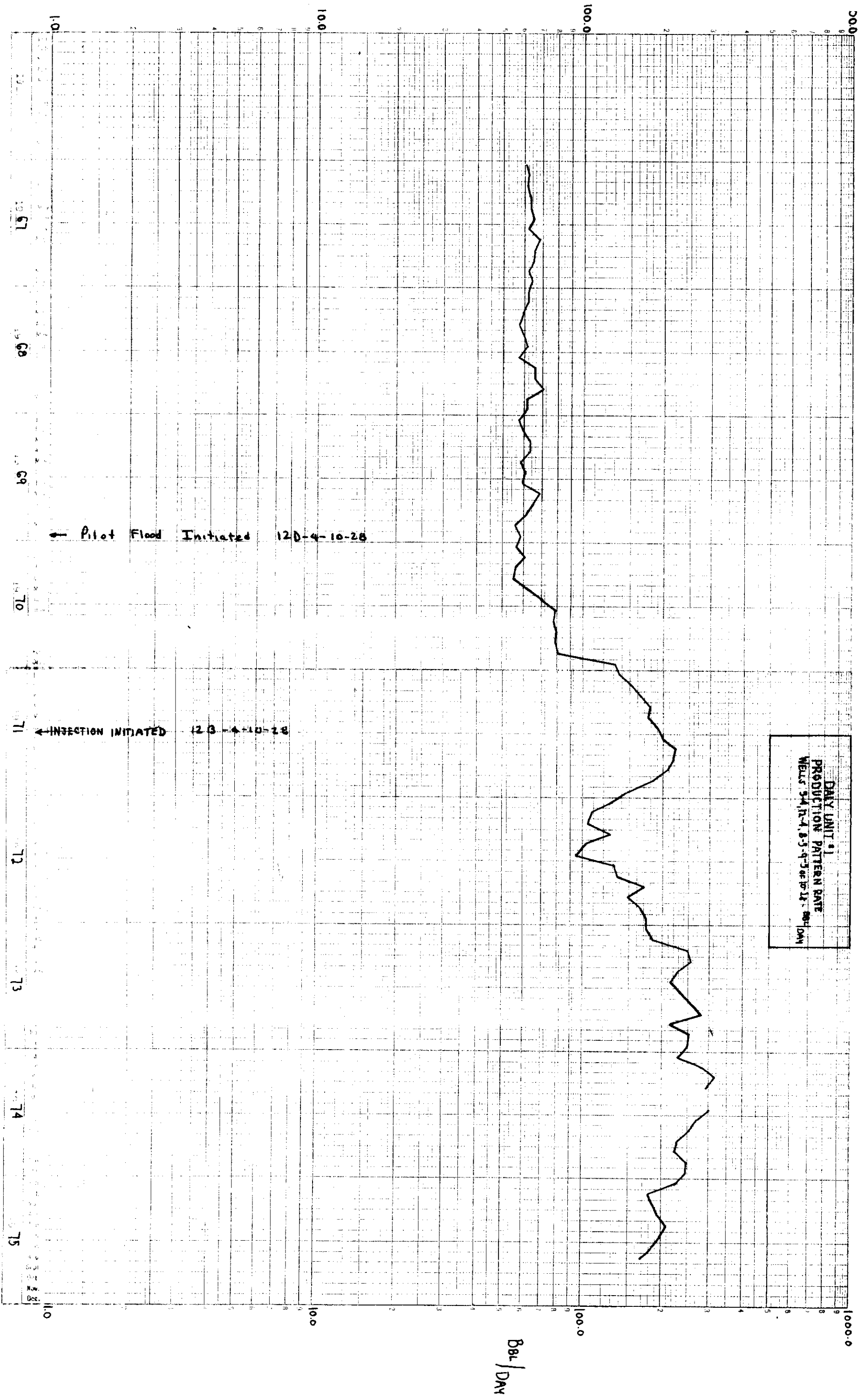


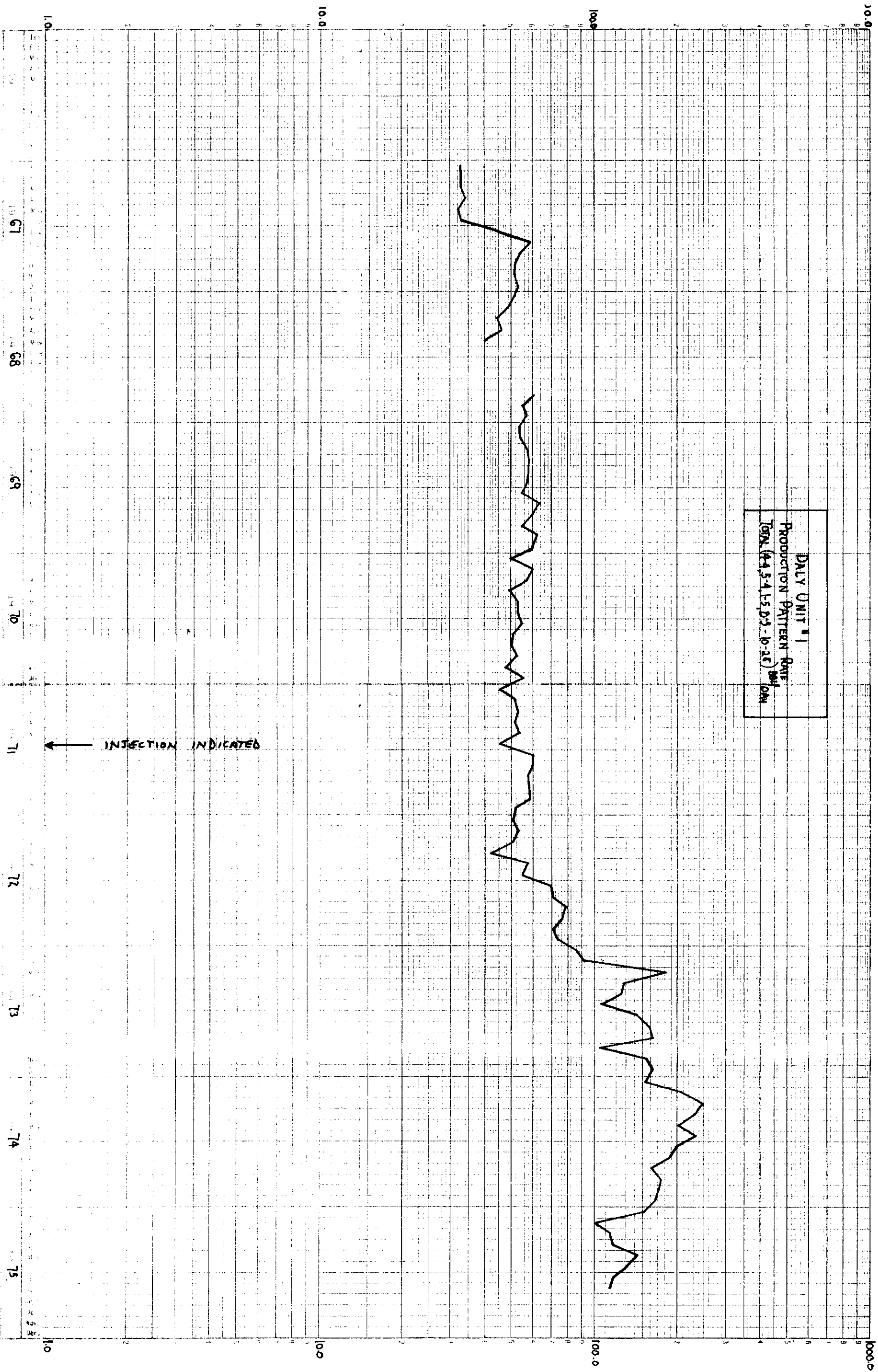
LEGEND

- | | |
|------------------------|----------------------------|
| ○ OILWELL | ⊗ SALT WATER DISPOSAL WELL |
| ⊗ ABANDONED OILWELL | ⊕ SUSPENDED OILWELL |
| ⊗ DRY HOLE | |
| ⊗ WATER INJECTION WELL | —— UNIT BOUNDARY |

PART XXIV

<u>TRACT NUMBER</u>	<u>TRACT PARTICIPATION</u>	<u>TRACT NUMBER</u>	<u>TRACT PARTICIPATION</u>
2-4	1.00403	3-5	1.43709
12-3	.13561	11-4	.52135
13-3	6.20309	12-4	8.02734
9-4 <i>CROWN</i>	2.41260	13-4	5.99796
10-4 <i>CROWN</i>	.29071	14-4	5.06476
15-4 <i>CROWN</i>	.00820	1-5	4.87978
16-4 <i>CROWN</i>	3.32522	2-5	.91478
1-9	2.09526	7-5	4.59511
2-9	5.42490	8-5	2.18513
3-9	4.21993	9-5	4.94419
4-9	.57987	10-5	2.64613
5-9	2.21090	16-5	2.34913
7-9	.00017	3-4	1.70549
8-9	.47271	4-4	2.85424
4-10 <i>CROWN</i>	1.84763	5-4	7.16099
5-10 <i>CROWN</i>	3.10550	6-4	5.88864
1-8	1.80375		
10-32 ✓	.20853		
15-32 ✓	.55718		
16-32 .	.96156		
13-33 .	1.96054		







Chevron Standard Limited
400 - Fifth Ave. S.W., Calgary, Alberta T2P 0L7

R. A. Park
Manager - Production

1980-01-15



Representative Change
Operating Committee
Daly Unit No. 1

The Oil and Natural Gas Conservation Board
Province of Manitoba
310 Legislative Building
Winnipeg, Manitoba
R3C 0V8

Attention: Mr. Paul E. Jarvis, Chairman

Gentlemen:

Please be advised that Chevron Standard Limited has changed their representatives on the Operating Committee for the Daly Unit No. 1 effective January 1, 1980 as follows:

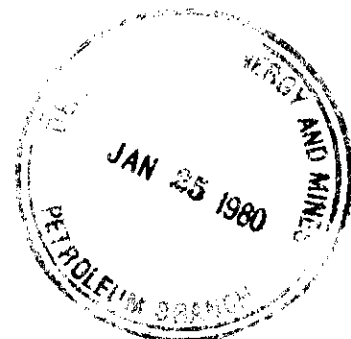
Representative - P. Pisio
Alternates - D. R. Henderson
 N. L. Lunde (Mrs.)

Yours very truly,


R. A. PARK

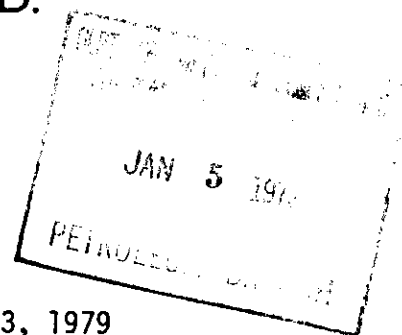
DRH/njs

cc: Rundle Petroleum Ltd.
Attention: Mr. R. F. Atkinson



RUNDLE PETROLEUMS LTD.

SUITE 1510 - BOW VALLEY SQUARE 2
205 - 5th AVENUE S.W.
BOX 9002
CALGARY, ALBERTA T2P 2W4
PHONE: 263-7171



January 3, 1979

file → TO: ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1

Dear Sirs:

The three new water injection wells were all on stream on December 22, 1978. The wells are pressuring up slowly as expected and by December 28 they were performing as follows -

#15A-5	1,160 barrels per day @ 740 psig
#5A-4	552 barrels per day @ 600 psig
#13C-4	575 barrels per day @ 800 psig.

When the weather improves, the #15A-5 well will be choked back to conform with the other rates in the new wells.

The interesting part of this process has been the indicated response to this water injection. Prior to the new wells going on stream, the unit was producing about 480 barrels of oil and 2,400 barrels of water per day. Since December 26, the production has shown a steady rise in oil and a decrease in water to January 2, 1979 when the oil rate was 553 barrels per day plus 2,200 barrels of water. This increased production is from the E 1/2 of Section 5 and appears to be a direct result of the #15A-5 and possibly #13C-4 wells. When weather permits some individual well testing will be done to further evaluate this response. At present it appears #16-5-10-28 is the likely well since it had shown response to about 25 barrels of oil per day before the new wells went on stream. It is located between the #15A-5 and #13C-4. The response is much faster than originally estimated but I see no cause for alarm in spite of the timing.

Yours very truly,

RUNDLE PETROLEUMS LTD.
Operator - Daly Unit No. 1

R.F. Atkinson
R.F. Atkinson

RFA:vs

→ PM 36 file
in Dally Unit
No. 1 cabinet
(drawer)

November 10, 1978

Handle Petroleum Ltd.
1510 Bow Valley Square Two
205 - 5th Avenue S.W., Box 9002
Calgary, Alberta
T2P 2W4

Attention: Mr. R. F. Atkinson, Chairman
Daly Unit No. 1
Operating Committee

Dear Sir:

Re: Order No. PM 36
Daly Unit No. 1

Enclosed are two (2) copies of The Oil and Natural Gas Conservation Board Order No. PM 36, filed as Manitoba Regulation 212/78, as it appeared in The Manitoba Gazette.

The Order adds the three (3) new injection wells to the list of approved injection wells for the Unit. You will also note the new name has been substituted for the well Handle Grubbsbank Daly MW 12-4-10-28, License Number 529.

Yours sincerely,

H. G. Muter, P. Eng.,
Director, Petroleum Branch.

HGM/et
Encls.
c.c. Virden Office

Manitoba Regulation 212/78

Being

THE OIL AND NATURAL GAS CONSERVATION BOARD

ORDER NO. PM 36

An Order Pertaining to Pressure Maintenance by Water Flooding

DALY UNIT NO. 1

*Made and Passed Pursuant to "The Mines Act", Cap. M160 of the
Continuing Consolidation of the Statutes of Manitoba, and
Amendments Thereto, by The Oil and Natural Gas
Conservation Board of Manitoba*

(Filed November 2, 1978)

Subsection 1(1) of Schedule F of Manitoba Revised Regulation M160—R8P is repealed and the following subsection is substituted therefor:

1(1) Water shall be injected to the Lodgepole Formation of the Mississippian Age in the wells

Daly Unit No. 1 WIW 13C-3-10-28
Daly Unit No. 1 WIW 5A-4-10-28
Daly Unit No. 1 WIW 12B-4-10-28
Daly Unit No. 1 WIW 12D-4-10-28
Daly Unit No. 1 WIW 13C-4-10-28
Daly Unit No. 1 WIW 14D-4-10-28
Daly Unit No. 1 WIW 15D-4-10-28
Daly Unit No. 1 WIW 8B-5-10-28
Daly Unit No. 1 WIW 15A-5-10-28

and, from time to time, in such other wells as the board may direct, or, upon application of the unit operator, may approve.

Oil and Natural Gas Order No. PM 36, made and passed this 19th day of October A.D., 1978, at the City of Winnipeg, in the Province of Manitoba, by The Oil and Natural Gas Conservation Board.

"J.S. Roper"

J.S. Roper,
Chairman,
The Oil and Natural Gas
Conservation Board.

"Ian Haugh"

Dr. Ian Haugh,
Deputy Chairman,
The Oil and Natural Gas
Conservation Board.

"James F. Redgwell"

J.F. Redgwell,
Member,
The Oil and Natural Gas
Conservation Board.

Approved:

"A. Brian Ransom"

A. Brian Ransom,
Minister of Mines, Resources
and Environmental Management.

Printed by the Queen's Printer for the Province of Manitoba

1. The design and
hereby approved
- (1) An "Urban"
(a) rec
(b) not
(c) wh
Oth
80
ind
"M
(d) dis
in t
per
(e) ref
and that
- (2) A "Rural"
(a) rec
(b) not
(c) wh
Otl
80
ind
"M
(d) ref
and that
- (3) A "Bac
(a) rec
(b) no

MANIT^{BA}

Inter-Departmental Memo

Date October 19, 1978

To The Oil and Natural Gas
Conservation Board:
J. S. Roper, Chairman,
Dr. I. Haugh, Deputy Chairman,
J. F. Redgwell, Member.

From H. C. Moster,
Director,
Petroleum Branch.

Subject Proposed Board Order No. PM 36

Telephone

Rundle Petroleums Ltd., Unit Operator of Daly Unit No. 1, in its application to The Oil and Natural Gas Conservation Board dated June 2, 1978 requested approval to expand the water injection system in the subject Unit by the drilling and inclusion of three additional water injection wells pursuant to Section 62(9)(d) of The Mines Act.

Subsequent to the July 5, 1978 Public Hearing held by the Board, the Unit Operator has drilled and completed the following three (3) wells:

Daly Unit No. 1 WIW 5A-4-10-28
Daly Unit No. 1 WIW 13C-4-10-28
Daly Unit No. 1 WIW 15A-5-10-28

Schedule F of Manitoba Revised Regulation M160 - R8P contains a listing of the six (6) wells presently approved by the Board to be used for water injection purposes in the Unit. Therefor an amendment to this Regulation is necessary to include the three (3) new wells.

Recommendation:

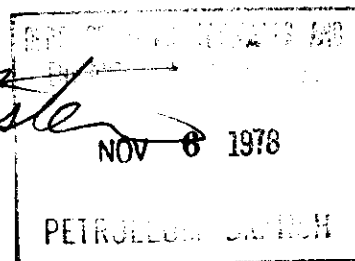
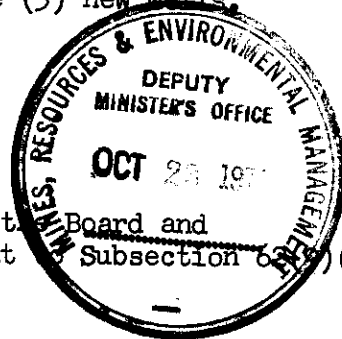
It is recommended that:

1. The attached Board Order No. PM 36 be passed by the Board and recommended to the Minister for approval pursuant of The Mines Act.
2. The attached Certificate of Regulation be signed by the Board Chairman.

Please return signed copies of the Order and Certificate to the Petroleum Branch for filing and gazetting.

HCM/et
Attachs.

H. C. Moster

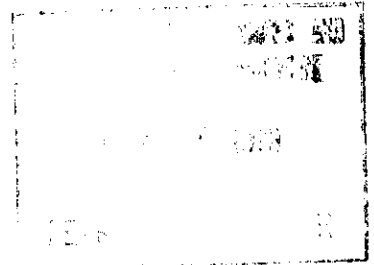


RUNDLE PETROLEUMS LTD.

SUITE 1510 - BOW VALLEY SQUARE 2
205 - 5th AVENUE S.W.
BOX 9002
CALGARY, ALBERTA T2P 2W4
PHONE: 263-7171

October 19, 1978

TO ALL WORKING INTEREST OWNERS
DALY UNIT NO. 1



Gentlemen:

Re: Enlargement of Daly Unit No. 1
Unitization Order No. 24

To assist you in updating your copy of -

Plan for Unit Operation
Governing the Unitization & Management
Operation and Further Development of
Daly Unit No. 1

(Amended)

we are enclosing amendment sheets prepared in accordance with
noted order.

Yours very truly,

RUNDLE PETROLEUMS LTD.


J.A.S. Gibson

JASG:vs
Encl.

Enlargement of Daly Unit No. 1
Manitoba Unitization Order No. 24
Filed September 14, 1978

Amendments to
"Plan for Unit Operation
Governing the Unitization Management
Operation and Further Development of
Daly Unit No. 1"

(Amended)

Dated October 20, 1970 as amended January 6, 1971

	<u>Remove Old Pages</u>	<u>Insert New Pages</u>
Part I - 1.01 to 1.02 (f)	1	1 - 1(a)
Part III - 3.01 to Part IV 4.01 (end of first line)	8 - 9	8 - 9
Part V - 5.08 (sixth line) to Part VI 6.01 (end of third line)	17	17 - 17(a)
Part VI - 6.03 (g) to Part VII - 7.01(a) (end of eleventh line)	20	20
Part VII - 7.02 (end of third line) to 7.05 (end of fourth line)	22	22 - 22(a)
Part XXI	57	57
Part XXI	58	58
Part XXI	59	59
Part XXIV	60	60
Part XXVI - 26.06 (end of twelfth line) to 26.07 (e)(i)	65	65 - 65(a)
Part XXVI - 26.07 (k) (ii) to 26.07(n)	68	68 - 68(a)

PLAN FOR UNIT OPERATION
GOVERNING THE UNITIZED MANAGEMENT
OPERATION AND FURTHER DEVELOPMENT OF
DALY UNIT NO. 1

Part 1

INTERPRETATION

- | | | |
|-------------------------------------|------|---|
| References to terms and expressions | 1.01 | This Plan shall be construed with reference to "The Interpretation Act" and the terms and interpretation of "The Mines Act" and regulations thereunder. |
| Definitions | 1.02 | In this Plan unless the context otherwise requires: |
| "Accounting Procedure" | (a) | "Accounting Procedure" means the rules, provisions and conditions set forth in Part XXVI hereof; |
| "Common Account" | (b) | "Common Account" means the account set up and maintained by Unit Operator on behalf of the Working Interest Owners as provided in Part VIII hereof. |
| "Conservation Board" | (c) | "Conservation Board" or "Board" means the Oil and Natural Gas Conservation Board; |
| * "Effective Date" | (d) | "Effective Date" means the hour of seven o'clock in the forenoon, official time, on the first day of July, 1971, except that with respect to the tract 15-5-10-28 WPM "Effective Date" means the hour of seven o'clock in the forenoon, official time, on the first day of September, A.D., 1978. |
| "Gas" | (e) | "Gas" means natural gas both before and after it has been subjected to any processing and includes all fluid hydrocarbons not defined as Oil; |

"Investment
Account"

(f) "Investment Account" means the account set up and maintained by Unit Operator on behalf of the Working Interest Owners as provided in Part X hereof;

such Royalty Owner is obligated to pay for the same by the terms of any Lease.

PART 111

TRACT PARTICIPATION

* Determination of
Tract Participation

- 3.01 The Tract Participation of each tract is shown in Part XXIV hereof and was determined as follows:
- (a) With respect to all tracts, except for Tract Number 15-5 (hereinafter called "the enlargement tract"), the sum of each of the following factors reduced by multiplying by the difference of one (1) minus the quotient of the tract participation for the enlargement tract divided by 100, namely:

1.0000000 minus 0.0284181

- (i) A current production factor - such factor is the percentage calculated by dividing the 1969 oil production of such tract by the oil production of all tracts during the same interval and multiplying by forty one-hundredths (40/100), plus ;
- (ii) An average monthly oil production factor penalized for water production, such a factor is arrived at by:
- (1) determining average monthly oil production of the tract by dividing its cumulative oil production to December 31, 1969 by the number of calendar months since the well on such tract first went on production, provided that the first calendar month shall not be

counted as such unless the oil production from the well on such tract for that calendar month was greater than one-half ($1/2$) of the oil production from such well for the next succeeding month;

- (2) calculating a fractional water cut for the tract by dividing the water production for the interval set out in paragraph (i) hereof by the sum of its water and oil production for the same period; PROVIDED THAT, with respect to these tracts which did not produce during the interval referred to, the fractional water cut tract during the consecutive twelve month period that ends with the last recorded production by the sum of such tracts water and oil production for the same period;
- (3) multiplying the average monthly oil production for the tract obtained in (1) by the fraction one minus the water cut appropriate to the tract as determined in (2);
- (4) dividing the product obtained in (3) for the tract by the sum of all products obtained in (3) for all the tracts and multiplying by sixty one-hundredths ($60/100$).

(b) With respect to the enlargement tract, namely Tract No. 15-5, a factor arrived at by:

- (i) Calculating the arithmetic average of the Tract

Participations of the four unit tracts directly and diagonally offsetting the enlargement tract, namely tracts numbered 10-5, 16-5, 9-5 and 1-8;

- (ii) Dividing the arithmetic average monthly oil production from the enlargement tract during the interval September 1, 1977 to February 28, 1978, both days inclusive, by the sum of the average monthly oil production from the enlargement tract during the interval September 1, 1977 to February 28, 1978, both days inclusive.
- (iii) Adding the arithmetic average tract participation determined in (i) to the quotient determined in (ii) and dividing the sum by two (2).

3.02 The total of the Tract Participations for all tracts shall at all times equal one hundred (100%) percent.

3.03 This Part III is explanatory and the Tract Participations shown in Part XXIV shall be deemed to be correctly made in accordance with this Part III.

PART IV

ALLOCATION OF PRODUCTION

Allocation
to Tracts

4.01 All Unitized Substances produced and saved shall

or telegram, and he shall keep a written record of the results and report the results thereof to the Working Interest Owners within a reasonable time, either by notice in writing to each of them, or by report to them at the next meeting. The voting interests necessary to act upon and determine matters or questions submitted by letter or telegram shall be the same as otherwise herein provided for. Such vote shall be made within not less than fifteen (15) days of the giving of such notice; PROVIDED, THAT, any failure to vote within the stipulated time, shall be considered as an affirmative vote.

* Minutes of
Proceedings

5.09 Unit Operator shall keep minutes of the proceedings of the Operating Committee and a copy thereof shall be forwarded to each member thereof. Such minutes need not be a verbatim record of all the proceedings, but shall show the names of the representatives present at the meeting, all motions and resolutions offered or acted upon, together with the result of such action and such other formal action as may be taken by the Operating Committee. Unless within forty-five (45) days of the date of mailing of the minutes a member of the Operating Committee advised Unit Operator of an error or omission or otherwise in such minutes, such minutes shall be deemed conclusively to be correct for all purposes. The Unit Operator shall mail out the minutes of each meeting to each member of the Operating Committee within 30 days of the date of such a meeting.

PART VI

POWERS AND DUTIES OF

THE OPERATING COMMITTEE

Voting

6.01 The Working Interest Owners acting through the Operating Committee and Unit Operator shall carry out the purposes of this Plan and shall determine and decide

- (g) To appoint and grant powers to such committees as they may deem proper and requisite;
- (h) To approve an annual budget as in Section 8.04 hereof provided;
- (i) To approve the method of disposal of surplus Major Material;
- * (j) To amend Part XXVI thereof from time to time whether in whole or in part, PROVIDED THAT, ^{two}~~two~~ copies of any amendment changing the charges to be made by Unit Operator under Section 26.07 (k) hereof shall be filed with the Conservation Board.

PART VII

POWERS AND DUTIES OF UNIT OPERATOR AND
CHANGE OF UNIT OPERATOR

Powers and
Duties

- 7.01 Unit Operator shall, subject to the provisions hereof and orders given or imposed by the Operating Committee as herein provided;
 - (a) Have exclusive charge, management and control of the development, operation and production of the Unitized Strata, and shall have the right and duty to conduct all operations in connection therewith including, but not limited to the following: the drilling, operating, maintaining, repairing, suspension and abandonment of all Unit Operated Wells whether for production, injection or water supply, including wells drilled after the date hereof and wells taken over under the provisions hereof; and the installation, construction and operation of

hours of labour and compensation to be paid to such employees. Such employees shall be the employees solely of Unit Operator.

Letting of
Contracts

7.03 Unit Operator shall let all contracts for the drilling, reworking, deepening, plugging back of, or other operations in connection with any Unit Operated Well on a competitive basis at the usual rates and terms prevailing in the area; PROVIDED, HOWEVER, that Unit Operator shall have the right to use its own equipment in carrying out such drilling, reworking, deepening, plugging back of, or other operations in connection with any Unit Operated Well;

* Unit Operator's
Authority for
Expenditures

7.04 In addition to any expenditures which Unit Operator is specifically authorized to make, Unit Operator is authorized to make an expenditure not in excess of Ten Thousand (\$10,000.00) Dollars, in respect to any single undertaking without the approval of the Operating Committee, or such other amount as may from time to time be approved by a vote of the Operating Committee, PROVIDED THAT, two copies of any such amendment approved by the Operating Committee shall be filed with the Conservation Board. Unit Operator may, without approval of the Operating Committee, take such action and make such expenditures for the Common Account as it may deem necessary in order to protect life or property. Within fifteen (15) days after taking any such action or making such expenditures, Unit Operator shall advise the Operating Committee of such action and expenditures.

Unit
Operator to
Have Rights
of Working
Interest Owner

7.05 Unit Operator shall continue to have all the rights,
duties and liabilities of a Working Interest Owner
in addition to its rights, duties and liabilities as
Unit Operator as long as it continues to own a

PART XXI

WELLS DELIVERED TO UNIT OPERATOR PURSUANT TO PART X.

- | | |
|-------------------------------|--|
| (a) Chevron Daly 2-4-10-28 | (a) Murphy Daly 13-33-9-28 |
| Chevron Daly 12-3-10-28 | (a) Murphy Daly 3-5-10-28 |
| Chevron Daly 13-3-10-28 | Rundle Cruickshank Daly 11-4-10-28 |
| Chevron Daly Prov. 9A-4-10-28 | Rundle Cruickshank Daly 12-4-10-28 |
| Chevron Daly Prov. 10-4-10-28 | Rundle Cruickshank Daly 13-4-10-28 |
| Chevron Daly Prov. 15-4-10-28 | Rundle Cruickshank Daly 14-4-10-28 |
| Chevron Daly Prov. 16-4-10-28 | Rundle Cruickshank Daly WIW 12-4-10-28 |
| Chevron Daly 1A-9-10-28 | Rundle M & H Daly 1-5-10-28 |
| Chevron Daly 2-9-10-28 | Rundle M & H Daly 2-5-10-28 |
| Chevron Daly 3-9-10-28 | Rundle M & H Daly 7-5-10-28 |
| Chevron Daly 4-9-10-28 | Rundle M & H Daly 8-5-10-28 |
| Chevron Daly 5-9-10-28 | Rundle M & H Daly 9-5-10-28 |
| Chevron Daly 7-9-10-28 | Rundle M & H Daly 10-5-10-28 |
| Chevron Daly 8-9-10-28 | * Rundle M & H Daly 15-5-10-28 |
| Chevron Daly Prov. 4-10-10-28 | Rundle M & H Daly 16-5-10-28 |
| Chevron Daly Prov. 5-10-10-28 | Scurry Cruickshank Daly 3-4-10-28 |
| Recovery Daly 1-8-10-28 | Scurry Cruickshank Daly 4-4-10-28 |
| (a) Murphy Daly 10-32-9-28 | Scurry Cruickshank Daly 5-4-10-28 |
| (a) Murphy Daly 15-32-9-28 | Scurry Cruickshank Daly 6-4-10-28 |
| (a) Murphy Daly 16-32-9-28 | |

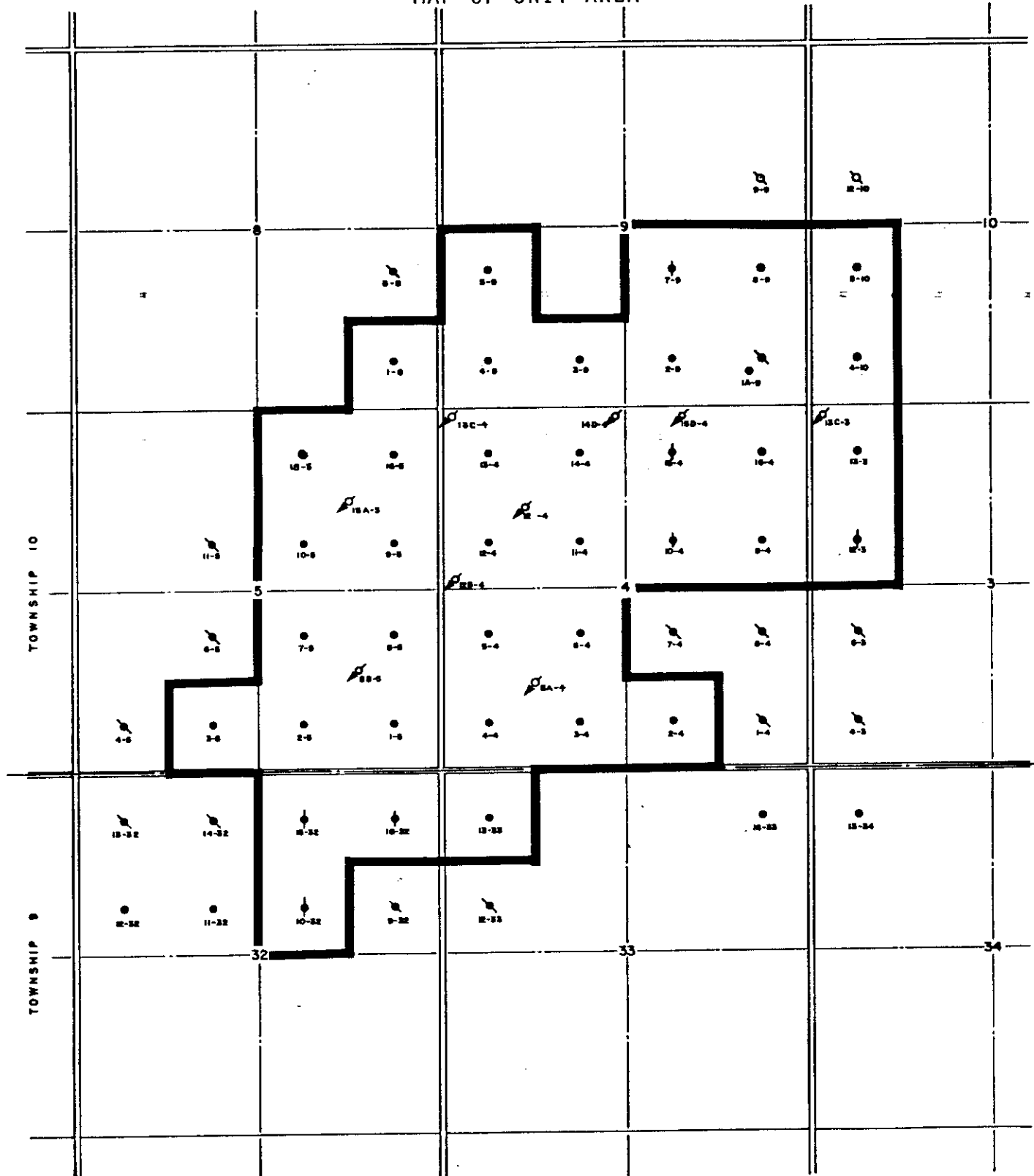
(a) Denotes name change.

PART XX11

THE LANDS IN THE PROVINCE OF MANITOBA WHICH COMPRISE
THE DALY UNIT NO. 1 ARE AS FOLLOWS:

<u>Tract Number</u>	<u>Legal Description</u>	<u>Tract Number</u>	<u>Legal Description</u>
	Township 10, Range 28		Township 10, Range 28
2-4	Lsd. 2, Section 4	3-5	Lsd. 3, Section 5
12-3	Lsd. 12, Section 3	11-4	Lsd. 11, Section 4
13-3	Lsd. 13, Section 3	12-4	Lsd. 12, Section 4
9-4	Lsd. 9, Section 4	13-4	Lsd. 13, Section 4
10-4	Lsd. 10, Section 4	14-4	Lsd. 14, Section 4
15-4	Lsd. 15, Section 4	1-5	Lsd. 1, Section 5
16-4	Lsd. 16, Section 4	2-5	Lsd. 2, Section 5
1-9	Lsd. 1, Section 9	7-5	Lsd. 7, Section 5
2-9	Lsd. 2, Section 9	8-5	Lsd. 8, Section 5
3-9	Lsd. 3, Section 9	9-5	Lsd. 9, Section 5
4-9	Lsd. 4, Section 9	10-5	Lsd. 10, Section 5
5-9	Lsd. 5, Section 9	* 15-5	Lsd. 15, Section 5
7-9	Lsd. 7, Section 9	16-5	Lsd. 16, Section 5
8-9	Lsd. 8, Section 9	3-4	Lsd. 3, Section 4
4-10	Lsd. 4, Section 10	4-4	Lsd. 4, Section 4
5-10	Lsd. 5, Section 10	5-4	Lsd. 5, Section 4
1-8	Lsd. 1, Section 8	6-4	Lsd. 6, Section 4
	Township 9, Range 28		
10-32	Lsd. 10, Section 32		
15-32	Lsd. 15, Section 32		
16-32	Lsd. 16, Section 32		
13-33	Lsd. 13, Section 33		

DALY UNIT No. 1
WATER INJECTION PATTERN
MAP OF UNIT AREA



PART XXIV

<u>Tract Number</u>	<u>Tract Participation</u>	<u>Tract Number</u>	<u>Tract Participation</u>
2-4	.97550	16-32	.93423
12-3	.13176	13-33	1.90482
13-3	6.02681	3-5	1.39625
9-4	2.34404	11-4	.50653
10-4	.28245	12-4	7.79922
15-4	.00797	13-4	5.82751
16-4	3.23072	14-4	4.92083
1-9	2.03572	1-5	4.74111
2-9	5.27073	2-5	.88878
3-9	4.10001	7-5	4.46453
4-9	.56339	8-5	2.12303
5-9	2.14807	9-5	4.80369
7-9	.00016	10-5	2.57093
8-9	.45928	* 15-5	2.84181
4-10	1.79512	16-5	2.28237
5-10	3.01725	3-4	1.65702
1-8	1.75249	4-4	2.77313
10-32	.20260	5-4	6.95749
15-32	.54135	6-4	5.72130

such auditing in a manner which will result in a minimum of inconvenience to the Unit Operator. The cost of such an audit shall be charged to the Common Account. In addition to the foregoing right, any Working Interest Owner shall have the right to make an individual audit at its own cost and expense.

Charges to
Common Account

26.07 Subject to the limitations hereinafter prescribed, Unit Operator shall charge the Common Account with the following costs of development and operation of the Joint Property:

- * (a) Salaries, wages and related expenses of Unit Operator's personnel, up to and including the first level of supervision, directly employed on the Joint Property in the development, maintenance and operation thereof, including salaries and wages paid to landmen acquiring rights-of-way, settling damage claims, etc., and to technical employees, such as geologist, engineers and other employees who are temporarily assigned to and located at and directly engaged on the Joint Property.
- (b) Unit Operator's cost of vacation and expenditures or contributions imposed or assessed by any governmental body having jurisdiction with respect to such salaries and wages referred to in paragraph (a) of Section 26.07.

- (c) Unit Operator's current cost of established plans for employees' group life insurance, sickness and disability benefits, hospitalization, pension, retirement, stock purchases, thrift, bonus and other benefit plans of like nature, applicable to such salaries and wages provided for in paragraph (a) of Section 26.07. Provided that such charges shall not exceed twelve (12%) percent of the total of the salaries and wages charged under paragraph (a) of Section 26.07. It is agreed, however, that if this limitation of twelve (12%) percent shall be found to be insufficient, the same may be increased from time to time when authorized by a vote of the Operating Committee.
- (d) Material purchased or furnished by Unit Operator for use in connection with the operation of the Joint Property. So far as it is reasonably practical and consistent with efficient and economical operation, only such material shall be purchased for or transferred to the Joint Property as is required for immediate use, and the accumulation of surplus stocks shall be avoided whenever possible.

(ii) Cost of maintaining and operating an area office and all necessary camps, including housing facilities for employees if necessary. The expense of, less any revenue from, these facilities shall include depreciation or a fair monthly rental in lieu of depreciation on investment.

* (iii) Any other costs of operating the division and/or principal office of the Unit Operator.

The rates, which are subject to review annually, as set forth in paragraph (j) of Section 6.03 are as follows:

(a) \$3,000.00 per month for all producing operations.

(b) \$65.00 per day for each drilling well, wells being plugged back, drilled deeper, reworked, or converted to source or input wells; charges to commence on the date the well is spudded or operations are commenced and terminate when the drilling rig or service rig as the case may be is released, except that no charge should be made during the suspension of drilling operations for fifteen (15) or more consecutive days.

(c) the charge in respect to construction of Unit Facilities, including but not limited to, water injection plant, battery consolidation, injection pipeline systems

and water supply systems shall be
calculated on direct expenditures on the
following basis:

5% of expenditures up to \$50,000.00 plus

3% of expenditures over \$50,000.00 and
up to \$150,000.00 plus

1% of expenditures over \$150,000.00.

- (1) A charge to cover the cost of handling material into and in Unit Operator's warehouse shall be assessed on new and used materials furnished from the warehouse on the basis of Two and one-half (2 1/2%) percent of the cost of tubular goods and Major Material and Five (5%) percent of the cost of all other material which shall in each case be deemed to be the actual cost thereof to Unit Operator.
- (m) Rentals, payments in lieu of actual production and royalties, when paid by Unit Operator for the Common Account.

MANIT^{BA}

Inter-Departmental Memo

To The Oil and Natural Gas
Conservation Board:
J. S. Roper, Chairman,
Dr. I. Haugh, Deputy Chairman,
J. F. Redgwell, Member.

Date 78 August 31

From H. C. Moster,
Director,
Petroleum Branch.

Subject Daly Unit No. 1 -- Order No. 66A

Telephone

Attached hereto is the original and two (2) copies of proposed Board Order No. 66A and Certificate.

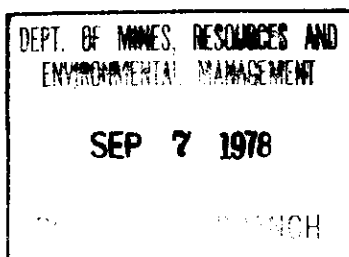
This Order will exempt all wells in Daly Unit No. 1 from the maximum permissible rate of production restrictions (75 BOPD/well) currently set for wells in the Daly Field under Manitoba Revised Regulation M160 - R4P. Presently under subsection 1(4) of the Regulation all producing wells in Daly Unit No. 1, other than the producing well in the new tract (15-5-10-28) added pursuant to the Board's Unitization Order No. 24 (dated August 16, 1978), are listed and exempted from the rate restrictions for the Field. This proposed Order No. 66A shall add the well in the new tract to the wells exempted by replacing the specific list of wells by the wording "the wells comprising Daly Unit No. 1". This will satisfy Rundle's application heard at the July 5, 1978 Hearing, may save having to further amend the regulation if additional tracts are added to the Unit in the future and will be consistent with the approach taken by the Board with respect to Daly Unit No. 3 (Board Order No. 64A) in July, 1976.

Recommendations:

1. The attached Order No. 66A be signed and dated by the Board and presented to the Minister pursuant to Section 62(9)(g) of The Mines Act for his approval and signature.
2. The attached Certificate of Regulation be signed and dated by the Chairman.

Please return all signed copies of the Order and Certificate to the Petroleum Branch in order that we may arrange for filing and publication in the Gazette.

HCM/et
Attachs.



H. C. Moster

800

PS-1-2

MANITBA

Inter-Departmental Memo

To

Mr. D. D. Blevins
Civil Litigation Branch
Attorney-General Department
6th Floor - Woodsworth Building

Date 78 July 21

From

S. Elsayed
Petroleum Engineer
Petroleum Branch
989 Century Street

DEPT. OF MINES, RESOURCES AND
ENVIRONMENTAL MANAGEMENT

JUL 26 1978

PETROLEUM BRANCH

Telephone 633-9543 Ext. 172

Subject

O-I-C — Rundle Petroleums Ltd.'s Application

Rundle Petroleums Ltd., the Unit Operator of Daly Unit No. 1, has made application to The Oil and Natural Gas Conservation Board to enlarge the Unit area and to amend certain sections of the Unitization Agreement.

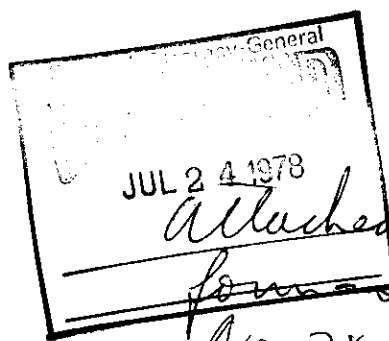
The attached draft O-I-C is related to Rundle's application and is prepared in accordance with subsections 78(5) and 79(3) of The Mines Act.

Since it is my understanding that you are acting as Departmental Solicitor in the absence of Mr. J. Redgwell, please review at your earliest convenience the attached draft O-I-C as to its completeness and form and return to this office along with your comments and/or any suggested changes thereto.

For comparison purposes, I am also attaching a previous O-I-C pertaining only to Unit enlargement.

If you have any questions, please contact me.

SE/et
Attachs.



S. Elsayed

Attached O-I-C is app'd as to
form & date of Unitization Order
No. 24 must be filled in on p 2
of O.I.C. once Order is signed.
D Blevins



MANITOBA

DRAFT ONLY — July 21/78

No.

ON MATTERS OF STATE

To His Honour the Lieutenant-Governor-in-Council

The undersigned, The Minister of Mines, Resources and Environmental Management
submits for approval of Council a report setting forth that:

WHEREAS, subsection (3) of Section 76 of The Mines Act, being Chapter M160 of The Continuing Consolidation of The Statutes of Manitoba provides as follows:

"76(3) If the board is of the opinion that the operation of the pool, field, or part thereof, as a unit would prevent waste therein having regard

- (a) to the production and recovery of oil and gas;
- (b) to the gathering and processing of gas;
- (c) to the disposal of salt water produced;
- (d) to the rights to each owner to a reasonable opportunity of recovering or receiving the oil and gas in which he has an interest or the equivalent thereof without being required to drill unnecessary wells or to incur other unnecessary expenses therefor; and
- (e) to any other circumstance pertaining to the drilling for or production of oil and gas;

the board may, with the approval of the Lieutenant Governor in Council, order that the pool, field, or part thereof, be operated as a unit.";

AND WHEREAS, subsection (4) of Section 78 of the said Act provides as follows:

"78(4) Upon receiving an application from a working interest owner under subsection (2) or (3), the board shall hold a re-hearing of the matters covered in, or hold a hearing to consider amendments to, the order.";

AND WHEREAS, subsection (5) of Section 78 of the said Act provides as follows:

"78(5) After holding a re-hearing of the matters covered in an order, or a hearing to consider amendments to an order, the board may, subject to the approval of the Lieutenant Governor in Council, make an order amending the order in any way or revoking the order and substituting a further order therefor, or revoking the order without any substitution.";

AND WHEREAS, subsection (1) of Section 79 of the said Act provides as follows:

"79(1) Notwithstanding section 78, the unit operator of a unit area, or the working interest owners of a tract adjoining a unit area, may apply to the board at any time to add to the unit area tracts that adjoin the unit area and that, in the opinion of the board, are in the same pool or field as the unit area.";

AND WHEREAS, subsection (2) of Section 79 of the said Act provides as follows:

"79(2) Upon receiving an application under subsection (1), or upon its own motion, the board may hold a hearing to consider adding further tracts to the unit area.";

AND WHEREAS, subsection (3) of Section 79 of the said Act provides as follows:

"79(3) Upon holding a hearing under subsection (2), the board may, with the approval of the Lieutenant Governor in Council, order that tracts that adjoin a unit area and that, in the opinion of the board, are within the same pool or field, be added to the unit area.";

AND WHEREAS, The Oil and Natural Gas Conservation Board, by its Unitization Order No. 11 dated June 17, 1971, pursuant to Subsection 76(3) of The Mines Act, ordered that part of the Daly Field be operated as a Unit, to be known as Daly Unit No. 1;

AND WHEREAS, the said Order was approved by the Lieutenant-Governor-in-Council by Order-In-Council No. 671/71, and filed under the Regulations Act as Manitoba Regulation 94/71;

AND WHEREAS, Rundle Petroleums Ltd., as the Unit Operator of Daly Unit No. 1, has applied to The Oil and Natural Gas Conservation Board pursuant to Subsection 79(1) of The Mines Act to have a certain tract adjoining the unit area added to the unit area, and pursuant to Section 78 of The Mines Act to make certain amendments to the above Order;

AND WHEREAS, The Oil and Natural Gas Conservation Board held a hearing on July 5, 1978 to consider the application by Rundle Petroleums Ltd.;

AND WHEREAS, The Oil and Natural Gas Conservation Board upon due consideration of the said application and testimony at the hearing and pursuant to Subsections 78(5) and 79(3) of The Mines Act has made Unitization Order No. 24, dated _____, 1978, set out in the Schedule hereto, amending Unitization Order No. 11;

AND WHEREAS, it is deemed advisable to approve Unitization Order No. 24 of The Oil and Natural Gas Conservation Board set out in the Schedule hereto.

THEREFORE he, the Minister, recommends:

THAT, Unitization Order No. 24 of The Oil and Natural Gas Conservation Board, set out in the Schedule hereto be approved.

Signature

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

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

.....
Date

.....
President or Presiding Member

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this day of A.D. 19.....

.....
Lieutenant-Governor

July 19, 1978

Hamble Petroleum Ltd.
1110 Bow Valley Square Two
201-5th Ave. S.W., Box 9002
Calgary, Alberta
T2P 2W4

Attention: Mr. H. F. Atkinson
President

Dear Sir:

Re: Lely Unit No. 1
Draft Unitization Order

The attached draft unitization order has been prepared by the Branch to provide for the amendments applied for by Hamble as Unit Operator of Lely Unit No. 1 regarding Unit enlargement and amendments to the unit agreement.

It would be appreciated if you would review this rough draft and advise this office if it appears correct and consistent with the intent of your application and the concerns expressed by the Board at the July 5th, 1978 hearing.

As discussed in a telephone conversation with Mr. Gibson on July 13, 1978 we would also request that the signed consents to your enlargement application from the royalty interest owners as stated in your initial application be submitted.

Yours sincerely,

H. J. Foster, P. Eng.,
Director, Petroleum Branch,

HJF/et
Attach.

Manitoba Regulation /78

Being 5

The Oil and Natural Gas Conservation Board

UNITIZATION ORDER NO. 24

Amending Unitization Order No. 11 Pertaining to

DALY UNIT NO. 1

Made and Passed Pursuant to "The Mines Act", Cap. M160, of the
Continuing Consolidation of the Statutes of Manitoba, and
Amendments Thereto, by the Oil and Natural Gas
Conservation Board of Manitoba

(Filed:)

The Plan for Unit Operation Governing the Unitized Management Operation and Further Development of Daly Unit No. 1, set out in Unitization Order No. 11 (Manitoba Regulation 94/71), is amended by adding to the Unit Area affected by the said Order, the following area:

Legal Subdivision 15 of Section 5 in Township 10,
Range 28, West of the Principal Meridian.

And is further amended as follows:

1. Paragraph (d) of Section 1.02 is rescinded, and the following substituted therefor:

(d) "Effective Date" means the hour of seven o'clock in the forenoon, official time, on the first day of July, 1971, except that with respect to the tract 15-5-10-28 WPM "Effective Date" means the hour of seven o'clock in the forenoon, official time, on the first day of September, A.D., 1978.

2. Part III is rescinded, and the following substituted therefor:

PART III

TRACT PARTICIPATION

Determination
of Tract
Participation

- 3.01 The Tract Participation of each Tract is shown in Part XXIV hereof and was determined as follows:

- (a) With respect to all Tracts, except for Tract Number 15-5 (hereinafter called "the enlargement tract"), the sum of each of the following factors reduced by multiplying by the difference of one (1) minus the quotient of the tract participation for the enlargement tract divided by 100, namely:

1.0000000 minus 0.0284181

(i) A current production factor — such factor is the percentage calculated by dividing the 1969 oil production of such tract by the oil production of all tracts during the same interval and multiplying by forty one-hundredths (40/100), plu

(ii) An average monthly oil production factor penalized for water production, such a factor is arrived at by:

(1) determining average monthly oil production of the Tract by dividing its cumulative oil production to December 31, 1969 by the number of calendar months since the well on such Tract first went on production, provided that the first calendar month shall not be counted as such unless the oil production from the well on such Tract for that calendar month was greater than one-half ($1/2$) of the oil production from such well for the next succeeding month;

(2) Calculating a fractional water cut for the Tract by dividing the water production for the interval set out in paragraph (i) hereof by the sum of its water and oil production for the same period; PROVIDED THAT, with respect to these tracts which did not produce during the interval referred to, the fractional water cut shall be calculated by dividing the water production for each such Tract during the consecutive twelve month period that ends with the last recorded production by the sum of such Tracts water and oil production for the same period;

(3) Multiplying the average monthly oil production for the tract obtained in (1) by the fraction one minus the water cut appropriate to the Tract as determined in (2);

(4) Dividing the product obtained in (3) for the Tract by the sum of all products obtained in (3) for all the Tracts and multiplying by sixty-one hundredths ($60/100$).

(b) With respect to the enlargement tract, namely Tract No. 15-5, a factor arrived at by:

(i) Calculating the arithmetic average of the Tract Participations of the four unit tracts directly and diagonally offsetting the enlargement tract, namely tracts numbered 10-5, 16-5, 9-5 and 1-8;

(ii) Dividing the arithmetic average monthly oil production from the enlargement tract during the interval September 1, 1977 to February 28, 1978, both days inclusive, by the sum of the average monthly oil production from all tracts during 1969 plus the arithmetic average monthly oil production from the enlargement tract during the interval September 1, 1977 to February 28, 1978, both days inclusive.

(iii) Adding the arithmetic average tract participation determined in (i) to the quotient determined in (ii) and dividing the sum by two (2).

3.02 The total of the Tract Participations for all Tracts shall at all times equal one hundred (100%) percent.

- 3.03 This Part III is explanatory and the Tract Participations shown in Part XXIV shall be deemed to be correctly made in accordance with this Part III.

3. Section 5.09 is rescinded, and the following is substituted therefor:

5.09 Unit Operator shall keep minutes of the proceedings of each meeting of the Operating Committee and a copy thereof shall be forwarded to each member thereof. Such minutes need not be a verbatim record of all the proceedings, but shall show the names of the representatives present at the meeting, all motions and resolutions offered or acted upon, together with the result of such action and such other formal action as may be taken by the Operating Committee. Unless within forty-five (45) days of the date of mailing of the minutes a member of the Operating Committee advised Unit Operator of an error or omission or otherwise in such minutes, such minutes shall be deemed conclusively to be correct for all purposes. The unit operator shall mail out the minutes of each meeting to each member of the Operating Committee within 30 days of the date of such a meeting.

4. Paragraph (j) of Section 6.03 is rescinded, and the following is substituted therefor:

6.03(j) To amend Part XXVI thereof from time to time whether in whole or in part, PROVIDED THAT, two copies of any amendment changing the charges to be made by Unit Operator under Section 26.07(k) hereof shall be filed with the Conservation Board.

5. Section 7.04 is rescinded, and the following is substituted therefor:

7.04 In addition to any expenditures which Unit Operator is specifically authorized to make, Unit Operator is authorized to make an expenditure not in excess of ^{Ten} ~~Twenty~~ Thousand (\$¹⁰~~20~~,000.00) Dollars, in respect to any single undertaking without the approval of the Operating Committee, or such other amount as may from time to time be approved by a vote of the Operating Committee, PROVIDED THAT, two copies of any such amendment approved by the Operating Committee shall be filed with the Conservation Board. Unit Operator may, without approval of the Operating Committee, take such action and make such expenditures for the Common Account as it may deem necessary in order to protect life or property. Within fifteen (15) days after taking any such action or making such expenditures, Unit Operator shall advise the Operating Committee of such action and expenditures.

6. Paragraph (a) of Section 26.07 is rescinded, and the following is substituted therefor:

(a) Salaries, wages and related expenses of Unit Operator's personnel, up to and including the first level of supervision, directly employed on the Joint Property in the development, maintenance and operation thereof, including salaries and

wages paid to landmen acquiring rights-of-way, settling damage claims, etc., and to technical employees, such as geologists, engineers and other employees who are temporarily assigned to and located at and directly engaged on the Joint Property.

7. Subparagraph (iii) of Paragraph (k) of Section 26.07 is rescinded and the following is substituted therefore:

(iii) Any other costs of operating the division and/or principal office of the Unit Operator.

The rates, which are subject to review annually, as set forth in paragraph (j) of Section 6.03 are as follows:

(a) \$3,000.00 per month for all producing operations.

(b) \$65.00 per day for each drilling well, wells being plugged back, drilled deeper, reworked, or converted to source or input wells; charges to commence on the date the well is spudded or operations are commenced and terminate when the drilling rig or service rig as the case may be is released, except that no charge should be made during the suspension of drilling operations for fifteen (15) or more consecutive days.

(c) the charge in respect to construction of Unit Facilities, including but not limited to, water injection plant, battery consolidation, injection pipeline systems and water supply systems shall be calculated on direct expenditures on the following basis:

5% of expenditures up to \$50,000.00, plus

3% of expenditures over \$50,000.00 and up to \$150,000.00, plus

1% of expenditures over \$150,000.00.

8. Part ~~XXI~~ is rescinded and the new Part hereunder is substituted therefor:

(list containing all initial wells delivered to the Unit Operator with any revised name changes plus inclusion of the well: Rundle M & H Daly 15-5-10-28)

9. Part ~~XXII~~ is rescinded, and the new Part ~~XXII~~ hereunder is substituted therefor:

(list showing original Tract Numbers and corresponding Legal Description plus inclusion of Tract No. 15-5 and Legal Description LSD. 15, SECTION 5)

10. Part ~~XXIII~~ is rescinded, and the new Part ~~XXIII~~ hereunder is substituted therefor:

(will include the attached map showing the original Unit plus 15-5 enlargement tract)

11. Part ~~XXIV~~ is rescinded, and the new Part ~~XXIV~~ hereunder is substituted therefor:

[list showing Tract Numbers and corresponding revised Tract Participation as per your submission - Pg. 3(f)]

Oil and Natural Gas Unitization Order No. 24
made and passed this day of
A.D., 1978 at the City of Winnipeg in the
Province of Manitoba, by the Oil and
Natural Gas Conservation Board.

J. S. Roper,
Chairman,
The Oil and Natural Gas
Conservation Board.

Dr. Ian Haugh,
Deputy Chairman,
The Oil and Natural Gas
Conservation Board.

J. F. Redgwell,
Member,
The Oil and Natural Gas
Conservation Board.

R3C OP3

February 15, 1972

Mr. R. F. Atkinson, Pres.
Rundle Petroleum Ltd.,
300 Royalite Building,
Calgary 2, Alberta.

Re: Daly Unit No. 1

Dear Sir:

This will acknowledge receipt of the semi-annual progress report to December 31, 1971, for the above Unit.

Yours very truly,

F. S. Gamey,
Reservoir Engineer.

FSG/h

RUNDLE PETROLEUMS LTD.

400 ~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

December 20th, 1971

To: All Working Interest Owners
Daly Unit No. 1

Gentlemen;

Re: Water Injection Daly Unit #1

On December 14th, 1971 Water Injection was started on the following wells:

Daly Unit WIW #12B-4-10-28 and #8B-5-10-28.

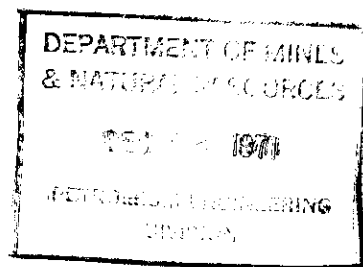
7
We have been unable to complete the injection line from #15D-4 to #13C-3 and we will probably delay injection on these three north wells until after spring break-up. Our present plans are to inject about 100 barrels per day in the original #12-4 WIW and the balance of water available will be divided between #12B-4 and #8B-5. This will give a faster response in this portion of the field and should enable us to approach the predicted production rates previously estimated.

Yours very truly,

RUNDLE PETROLEUMS LTD.

R. F. Atkinson
R. F. Atkinson

RFA:ft



Daly Unit No. 1 Injection Wells

FILE INJECTION WELLS

November 5, 1971

Mr. R. F. Atkinson, Chairman
Daly Unit No. 1
Rundle Petroleum Ltd.
400 Royalite Building
Calgary 2, Alberta

Dear Sir:

Re: Water Injection Wells - Daly Unit #1

Enclosed herewith is a photostat copy of Board Order No. PM 19, amending subclause (1) of Clause 1 of the Pressure Maintenance Rules of Order No. PM 17, to include the injection wells recently completed in the Unit area.

This Order was filed as Regulation 161/71 on November 5, 1971.

Yours very truly,

F. S. Ganev,
Reservoir Engineer.

FSG/h

Mr. J. S. Roper,
Director of Mines,
Mines Branch,
901 Norway Building.

COPY

November 4, 1971.

Mr. A. C. Balkaran,
Registrar of Regulations,
Legislative Assembly,
219 Legislative Building.

The Oil and Natural Gas Conservation Board -
Early Unit No. 1 -
Order No. PM 19.

Attached, hereto, for filing, original and 1 copy of
Certificate, and original and 1 copy of Manitoba Regulation, being
The Oil and Natural Gas Conservation Board Order No. PM 19, approved
by the Minister of Mines, Resources and Environmental Management on
November 1, 1971.

[Handwritten signature]

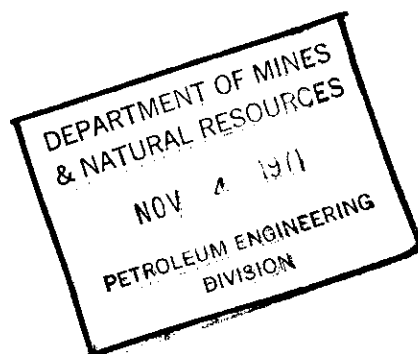
:DB

Incs. 4.

c. c. to: Mr. M. J. Gobert,
Senior Assistant Deputy Minister.

Mr. F. S. Gamey,
Reservoir Engineer

— with copy of above Order.



INTER-DEPARTMENTAL MEMORANDUM

FROM...

Mr. F. S. Ganey,
Reservoir Engineer.



PROVINCE
OF
MANITOBA

DATE October 28, 1971.

TO...

The Oil and Natural Gas
Conservation Board Members—
Mr. W. Winston Mair;
Mr. J. S. Roper;
Mr. M. J. Gobert.

SUBJECT

Daly Unit No. 1

Water Injection Wells.

DEPARTMENT OF MINES
& NATURAL RESOURCES

NOV 4 - 1971

Bundle Petroleum Ltd., the operator of the Daly Unit No. 1 Waterflood, has drilled and completed five injection wells in the Unit Area, on an inverted 5 Spot pattern using 20-acre spacing, in accordance with their water flooding Plan, submitted to the Board following the Hearing of December 15, 1970, re Daly Unit No. 1.

Induction laterologs and sonic logs were run on all holes, and core sections from two wells were analyzed. 4 1/2-inch casing was run, and the wells selectively perforated in the Daly Grinsidal producing zone.

Attached, please find:

1. Letter from Bundle Petroleum Ltd. requesting Board approval for water injection to the wells

12B-4-10-28
8B-5-10-28
14D-4-10-28
15D-4-10-28
13C-3-10-28

2. Suggested amendment to Board Order No. PM 17, to include the injection wells now completed.

F. S. Ganey
F. S. Ganey.

FSG:db

Enca.

RUNDLE PETROLEUMS LTD.

400~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

DEPARTMENT OF MINES
& NATURAL RESOURCES

NOV 4 - 1971

DIRECTOR OF MINES

October 26th, 1971

The Department of Mines & Natural Resources
Mines Branch
Petroleum Engineering Division
904 Norquay Building
401 York Avenue
Winnipeg 1, Manitoba

Attention: Mr. F. S. Gamey

Dear Mr. Gamey;

Re: Daly Unit WIW

Rundle Petroleums Ltd. as operator of Daly Unit No. 1 requests approval for water injection into the Mississippian zone in the following wells, further to the water flood plans for the above unit.

The following is a brief description of the completion of each well.

7 Daly Unit WIW #12B-4-10-28

PBTD - 2581'

4 1/2" casing - 2610'

Perforations - 2497' - 2504'

2518' - 2542'

2552' - 2580' w/ 2 jets/foot

Treated well with 200 gallons of Paran, 3000 gallons of 28% acid.

Well took salt water at 3 B.P.M. at 1200 psi.

7 Daly Unit WIW #8B-5-10-28

PBTD - 2602'

4 1/2" casing - 2627'

Perforations - 2510' - 2514'

2524' - 2536'

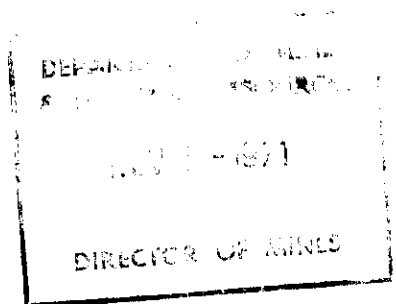
2570' - 2598' w/ 2 jets/foot

Treated well with 200 gallons of Paran, 2200 gallons 28% acid.

Well took salt water at 3 1/2 B.P.M. at 1250 psi.

cont...2

FILE
INJECTION WELLS
DALY UNIT No. 1



THE OIL AND NATURAL GAS CONSERVATION BOARD

ORDER NO. PM 19

FILED AS
REGULATION
16/11/71
NOV. 5/71.

An Order pertaining to Pressure Maintenance by Water Flooding

DALY UNIT NO. 1

Made and passed pursuant to "The Mines Act", Cap. M160, R. S. M., 1970, and amendments thereto, by The Oil and Natural Gas Conservation Board, of Manitoba.

Order No. PM 17, of The Oil and Natural Gas Conservation Board, made and passed on the 17th day of June, 1971, and filed as Manitoba Regulation 49/71, is amended as follows:

1. Subclause (1) of clause 1 of the Pressure Maintenance Rules of the Order is amended by adding to the list of wells therein set out, the following wells:

Daly Unit No. 1 WIW 13C-3-10-28

Daly Unit No. 1 WIW 12B-4-10-28

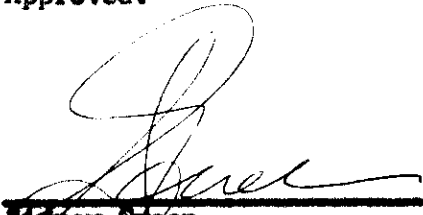
Daly Unit No. 1 WIW 14D-4-10-28

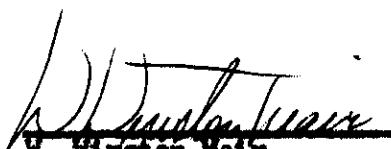
Daly Unit No. 1 WIW 15D-4-10-28


Daly Unit No. 1 WIW 8B-5-10-28

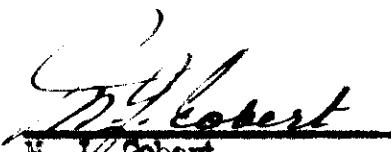
Oil and Natural Gas Order No. PM 19.
made and passed this 1 day
of November, A. D., 1971, at
the City of Winnipeg, in the
Province of Manitoba, by The Oil
and Natural Gas Conservation Board.

Approved:


Sidney Green,
Minister of Mines, Resources
and Environmental Management.


W. Winston Mair,
Chairman,
The Oil and Natural Gas
Conservation Board.


J. S. Roper,
Deputy Chairman,
The Oil and Natural Gas
Conservation Board.


H. J. Gobert,
Member,
The Oil and Natural Gas
Conservation Board.

NOVEMBER 1, 1971

F. S. GAMEY
Reservoir Engineer

M. J. GOBERT
Senior Assistant Deputy Minister

BOARD ORDER NO. PM 17

WATER INJECTION WELLS

DALY UNIT NO. 1

Attached:

1. Map showing injection wells drilled (Aug. - Sept. 1971)
2. Map from original plan, as discussed by Board -
Dec. 1970 and May 1971

A handwritten signature in dark ink, appearing to be 'M. J. Govert', is located in the lower right quadrant of the page.

October 28, 1971.

Mr. F. S. Gamay,
Reservoir Engineer.

The Oil and Natural Gas
Conservation Board Members—
Mr. W. Winston Mair;
Mr. J. S. Roper;
Mr. M. J. Gobert.

Daly Unit No. 1

Water Injection Wells.

Bundle Petroleum Ltd., the operator of the Daly Unit No. 1 Waterflood, has drilled and completed five injection wells in the Unit Area, on an inverted 5 Spot pattern using 20-acre spacing, in accordance with their water flooding Plan, submitted to the Board following the Hearing of December 15, 1970, re Daly Unit No. 1.

Induction laterologs and sonic logs were run on all holes, and core sections from two wells were analysed. 12-inch casing was run, and the wells selectively perforated in the Daly Grinnidal producing zone.

Attached, please find:

1. Letter from Bundle Petroleum Ltd.
requesting Board approval for water injection
to the wells

12B-4-10-28

8B-5-10-28

14B-4-10-28

15B-4-10-28

13C-3-10-28

2. Suggested amendment to Board Order No. PM 17, to include the injection wells now completed.


F. S. Gamay.

FSG:db

Encls.

RUNDLE PETROLEUMS LTD.

400XXX ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

October 26th, 1971

The Department of Mines & Natural Resources
Mines Branch
Petroleum Engineering Division
904 Norquay Building
401 York Avenue
Winnipeg 1, Manitoba

Attention: Mr. F. S. Gamey

Dear Mr. Gamey;

Re: Daly Unit WIW

Rundle Petroleum Ltd. as operator of Daly Unit No. 1 requests approval for water injection into the Mississippian zone in the following wells, further to the water flood plans for the above unit.

The following is a brief description of the completion of each well.

7 Daly Unit WIW #12B-4-10-28

PBTD - 2581' 4 1/2" casing - 2610'
Perforations - 2497' - 2504'
 2518' - 2542'
 2552' - 2580' w/ 2 jets/foot
Treated well with 200 gallons of Paran, 3000 gallons of 28% acid.
Well took salt water at 3 B.P.M. at 1200 psi.

Daly Unit WIW #8B-5-10-28

PBTD - 2602' 4 1/2" casing - 2627'
Perforations - 2510' - 2514'
 2524' - 2536'
 2570' - 2598' w/ 2 jets/foot
Treated well with 200 gallons of Paran, 2200 gallons 28% acid.
Well took salt water at 3 1/2 B.P.M. at 1250 psi.

cont...2

Daly Unit WIW #14D-4-10-28

PBTD - 2566' 4 1/2" casing - 2605'
Perforations - 2469' - 2474'
2509' - 2514'
2520' - 2540'
2544' - 2564' w/ 2 jets/foot
Treated with 200 gallons of Paran, 2500 gallons of 28% acid.
Well took salt water at 2 B.P.M. at 1400 psi.

Daly Unit WIW #15D-4-10-28

PBTD - 2536' 4 1/2" casing - 2570'
Perforations - 2460' - 2465'
2484' - 2490'
2500' - 2505'
2517' - 2522' w/ 2 jets/foot
Treated well with 200 gallons of Paran, 850 gallons of 28% acid.
Well took salt water at 1/2 B.P.M. at 1300 psi.

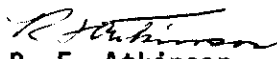
Daly Unit WIW #13C-3-10-28

PBTD - 2539' 4 1/2" casing - 2566'
Perforations - 2440' - 2450'
2494' - 2514' w/ 2 jets/foot
Treated well with 200 gallons of Paran and 1500 gallons of 28% acid.
Well took salt water at 3 1/4 B.P.M. at 1250 psi.

All wells are equipped with plastic lined 2 3/8" O.D. tubing set on plastic coated tension packer with corban inhibited fresh water in the annulus.

Yours very truly,

RUNDLE PETROLEUMS LTD.
Operator - Daly Unit No. 1


R. F. Atkinson
Chairman

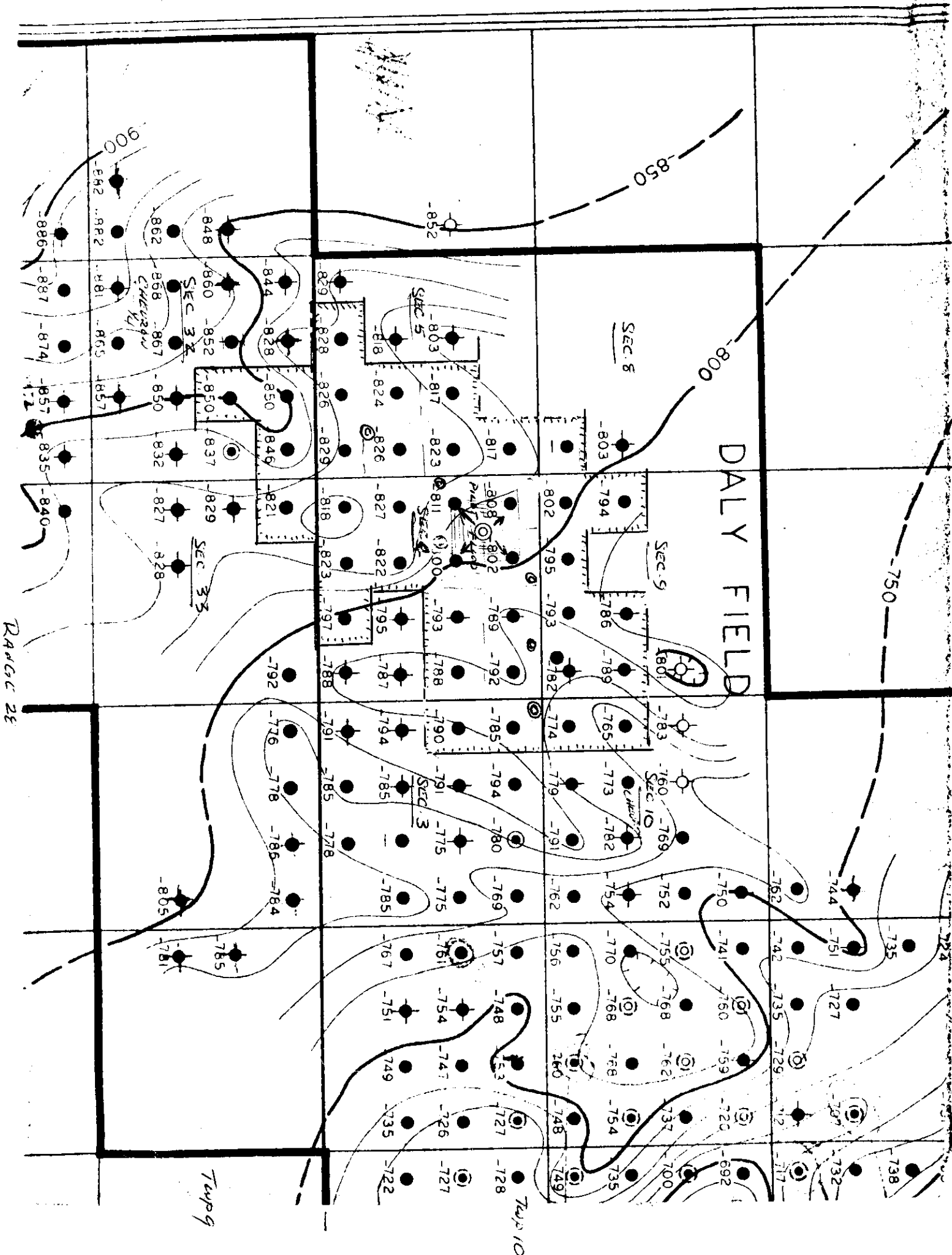
RFA:ft

DALY CRINOIDAL PRODUCING ZONE TOPS

F.S. GARNIEY

RUNDLE UNIT AREA

Twp 10
Twp 9



September 29, 1971

Mr. R. F. Atkinson, Chairman
Daly Unit #1 Operating Committee,
Humble Petroleum Ltd.,
400 Royalite Building,
Calgary 2, Alberta.

Dear Sir:

Re: Daly Unit Pipelines Application

This will acknowledge receipt of your application for exemption under The Pipe Line Act, under Part IV, Section 23, for the proposed Unit pipelines, together with 3 copies of the survey plans.

The plans have been forwarded to the Highways Branch for approval of the road crossings involved.

Please be advised that a "Grant of Right-of-User", either in the form suggested in Schedule A of The Pipe Line Act, or other form of agreement giving licence to enter on and use land for purpose of a pipeline, will be required by the Board before the approval of the Minister can be obtained.

Yours very truly,


J. S. Roper,
Deputy Chairman.

RSG/h

RUNDLE PETROLEUMS LTD.

400~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

September 27, 1971

Department of Mines & Natural Resources
Province of Manitoba
Winnipeg, Manitoba

Re: Daly Unit Pipelines

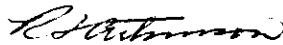
Dear Sirs;

Enclosed are three (3) copies of the Plan for Installation of Water Lines in the above mentioned unit. Since the total length of the proposed lines is less than 5 miles, we hereby apply for an exemption to the Pipe Line Act under Part IV Section 23.

It would be appreciated if these plans could be forwarded to the Department of Highways for their approval of road crossings as provided for in Part II, Section 16(5) of the Pipe Line Act.

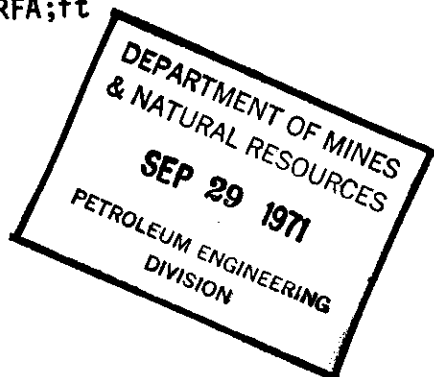
In view of the time of year it would be appreciated if you would let us know if any further data is required for processing these applications at an early date.

Yours very truly,



R. F. Atkinson
Chairman
Daly Unit No. 1 Operating Committee

RFA;ft



RUNDLE PETROLEUMS LTD.

400 ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

Daly Unit No. 1

Request for Exemption of the Pipe Line Act

As operator of Daly Unit No. 1 Rundle Petroleum Ltd. hereby request exemption to the Pipe Line Act under Part IV Section 23.

General

In the construction of the water injection facilities for water flooding of Daly Unit No. 1 it is necessary to lay some 3600' of 2" and 4400' of 3" high pressure steel injection lines to the injection wells. This is shown on the plat in blue. The 2" line is 0.154" wall, welded x 42 line pipe while the 3" is 0.125" wall welded x 42 line pipe. Both of these lines will be plastic lined internally with Tube Kote TK75 and externally wrapped with yellow Jacket.

The maximum working pressure is expected to be about 1500 psi while the test pressures of the lines will be in excess of 2000 psi. These lines will be carrying an estimated 5000 barrels of water per day, depending on the capacity of the injection wells.

The other line, shown in green on the plat, which will be constructed to carry water will be a 3" fiberglass line from LSD 8 of Sec. 4-10-28 to the injection plant at LSD 12-4-10-28. This line will carry produced salt water from Chevron's line and will supplement the unit water production to bring up the volume to the required amount. It is anticipated that this low pressure (under 50 psi) line will handle from 1500-3000 barrels of water per day, depending upon the supply and demand.

It may be necessary to install a booster pump on this line to obtain the required volume but this will not be known until after a test period since pressures on the Chevron line at this point are not known. Since the line will be fibercast no corrosion problems will be encountered. The total length of this line will be 5100'. It will terminate at the plant at the fiberglass storage tanks inside the injection plant building.

Road Crossings

It will be necessary to cross the Cromer road by the south west corner of LSD 12-4-10-28 and a profile is shown on the plat. This road crossing will be encased in a conduit and vented at either end.

It is also pointed out that numerous flowlines will be laid which will facilitate battery consolidation at LSD 12-4-10-28. These lines will be 3" fiberglass and the crossings will be similar to that shown on the profile and will be conduited as above. The flowline crossings will be located as follows:

1. Cross to E-W road between LSD 16-32-9-28 and LSD 1-5-10-28.
2. Cross E-W road from LSD 13-33-9-28 to LSD 4-4-10-28.
3. Cross N-S Cromer road between LSD 12-4-10-28 and LSD 8-5-10-28.
4. Cross undeveloped road allowance running N & S from LSD 16-4-10-28 to LSD 13-3-10-28.

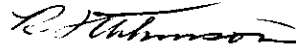
Construction

These lines will be layed by H & H Construction Ltd. of Virden, Manitoba.

Due to the impending winter weather expected in the next couple of months it is desireable to lay these lines as soon as possible.

Respectfully submitted,

RUNDLE PETROLEUMS LTD.
Operator for Daly Unit No. 1

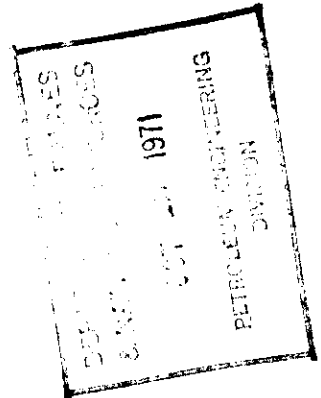


per R. F. Atkinson

RFA:ft

acknowledged

RUNDLE PETROLEUMS LTD.
400 Royalite Building
Calgary 2, Alberta



October 8th, 1971

Department of Mines & Natural Resources
Mines Branch
911 Norquay Building
401 York Avenue
WINNIPEG 1, Manitoba

Gentlemen; Re: Daly Unit #1

Enclosed please find three copies of
Dual Induction Laterologs and Borehole Compensated Sonic
Logs for each of the following wells.

1. Daly Unit WIW 15D-4-10-28
2. Daly Unit WIW 14D-4-10-28
3. Daly Unit WIW 13C-3-10-28

Yours very truly,

RUNDLE PETROLEUMS LTD.

F. Tomlinson
F. Tomlinson

FT:
Encls. (18)

Oct. 18

August 16, 1971.

Mr. R. F. Atkinson,
Rundle Petroleum Ltd.,
400 Royalite Building,
Calgary 2,
Alberta.

Dear Sir:

Re Daly Unit No. 1 WIW 15-4, WIW 13-3

This will acknowledge receipt of letter of approval from
Trans-Prairie Pipelines, Ltd., regarding the drilling sites for the
above Unit injection wells.

Yours very truly,

F. S. Gamey,
Reservoir Engineer.

FSG:cb

RUNDLE PETROLEUMS LTD.

400
300 ROYALITE BUILDING
xxx
CALGARY 2, ALBERTA
Telephone 263-7171

August 13, 1971

Department of Mines and
Mineral Resources,
Mines Branch,
911 - Norquay Building,
401 York Avenue,
Winnipeg 1, Manitoba.

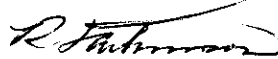
Attention: Mr. F. S. Gamey

Dear Sir:

Re: Daly Unit WIW 15-4 & 13-3

Further to our recent conversation regarding the location of the two above named Water Injection Wells, we hereby enclose a letter from Trans-Prairie Pipelines Ltd. relative to this consent for drilling. We trust this is satisfactory for this portion of the licensing requirements.

Yours very truly,



R. F. Atkinson,
Chairman,
Daly Operating Committee.

RFA:lr
Encl.

DEPARTMENT OF MINES
& NATURAL RESOURCES

AUG 16 1971

PETROLEUM ENGINEERING
DIVISION

TRANS - PRAIRIE PIPELINES, LTD.

11404 - 142ND ST., EDMONTON, ALBERTA
P.O. BOX 597, VIRDEN, MANITOBA
P.O. BOX 1180, WEYBURN, SASK.
P.O. BOX 2320, FORT ST. JOHN, B.C.

Edmonton, Alberta
August 12, 1971

Rundle Petroleum Ltd.
300 Royalite Building
CALGARY 2, Alberta

Attention: Mr. R. F. Atkinson

Dear Sir:

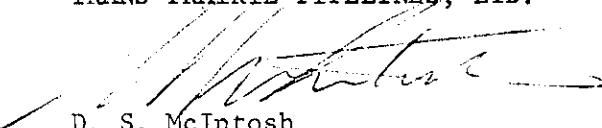
Re: Daly Unit No. 1

Further to your letter and attachments of August 10th respecting your two water injection wells at 13-3 and 15-4, both in township 10 - range 28, this will be our authorization for you to proceed with the drilling of these wells, considering that they are approximately 125 feet and 85 feet respectively from our pipeline. You will agree to locate all diggings on the further side from our pipeline location.

We will be pleased to review your plans for consolidation when available and there should be no problem respecting the leasing of our lines for unitized operation. We would appreciate having your early notification respecting any changes in this regard, since we have to apply to the provincial government for any authorities to lease or discontinue any of our pipelines.

Yours very truly,

TRANS-PRAIRIE PIPELINES, LTD.


D. S. McIntosh
Vice-President and
General Manager

DEPARTMENT OF MINES
& NATURAL RESOURCES

AUG 16 1971

PETROLEUM ENGINEERING
DIVISION

DSM/lfm

August 11, 1971

Mr. R. F. Atkinson, President
Dundee Petroleum Ltd.,
400 Royalite Building,
Calgary 2, Alta.

Dear Sir:

Re: Water Injection Wells
Saly Unit No. 1

Regarding the above injection wells now licensed for drilling, namely:

12B-4-10-23
3B-5-10-23
12B-4-10-23

Could you make application to The Oil and Natural Gas Conservation Board (J. S. Roper, Deputy Chairman) for approval to inject water to the Lodgepole formation in the above wells, in accordance with Pressure Maintenance Rules under PM Order No. 17 attached, when these injection wells are completed.

Yours very truly,


F. S. Ganey,
Reservoir Engineer.

FSG/a

August 9, 1971

Runlle Petroleum Ltd.,
200 Royalite Building,
Calgary, Alberta.


Attention: Mr. R. F. Atkinson, President

Re: Daly Unit #1

Dear Sir:

Enclosed herewith are four (4) certified copies of the
Unitization Order covering the Daly Unit #1.

Yours very truly,


F. S. Ganev,
Reservoir Engineer.

FSG/h

June 24, 1971

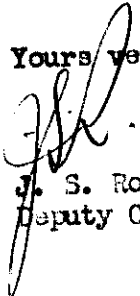
Mr. R. F. Atkinson, President
Rundle Petroleum Ltd.
400 Royalite Building
Calgary 2, Alberta

Dear Mr. Atkinson:

Re: Daly Unit #1

In accordance with Section 5.03 of the "Plan" governing the above Unit, the Board has selected you to act as Chairman pro tem of the organization meeting of the Operating Committee.

Yours very truly,



J. S. Roper
Deputy Chairman

FSG/h

Acknowledged

RUNDLE PETROLEUMS LTD.

400 ~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

May 20, 1971

Department of Mines & Natural Resources
Petroleum Engineering Division
911 Norquay Building
401 York Avenue
Winnipeg 1, Manitoba

Attention: Mr. Stan Gamey

Dear Sir;

Enclosed are 38 copies of the "Plan
for Unit Operation Governing the Unitized Management
Operation and Further Development of Daly Unit No. 1."

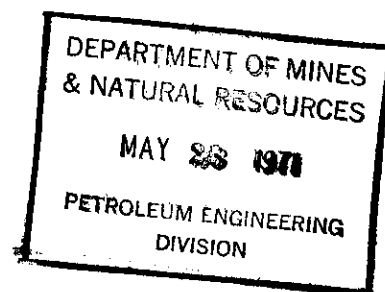
Yours very truly,

RUNDLE PETROLEUMS LTD.

R. F. Atkinson

per R. F. Atkinson

:ft
Encls.



~~THIS~~ DAY UNIT #1.

Ultimate Primary -	5,000,000	661s.
Cumulative to 1-1-71 -	3,500,000	" estimated.
Remaining	<hr/> 1,500,000	
Secondary.	5,000,000	
Primary & Secondary	<hr/> 6,500,000	661s.

April 14, 1971

Mr. R. F. Atkinson,
Sun Oil & Petroleum Ltd.,
400 Royalite Bldg.,
Calgary 2, Alta.

Re: No. 5 Progress Report
Daly Pilot Waterflood

Dear Ralph:

This will acknowledge receipt of the above.

The Board has been informed of your application to reconvene the December 15th, 1970, hearing, but no date has been set as yet.

Yours sincerely,

F. S. Gamey,
Reservoir Engineer.

FSG/h

RUNDLE PETROLEUMS LTD.

400~~XXX~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

April 8, 1971

Department of Mines & Natural Resources
Mines Branch
911 Norquay Building
401 York Avenue
Winnipeg 1, Manitoba

Dear Sirs;

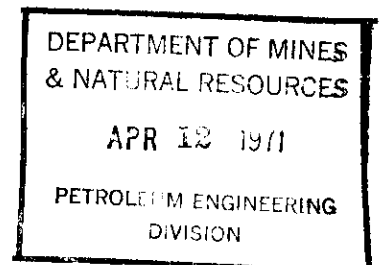
Enclosed is the No. 5 Progress
Report for the Daly Pilot Waterflood operated
by Rundle Petroleum Ltd. for the first quart-
er of 1971.

Yours very truly,

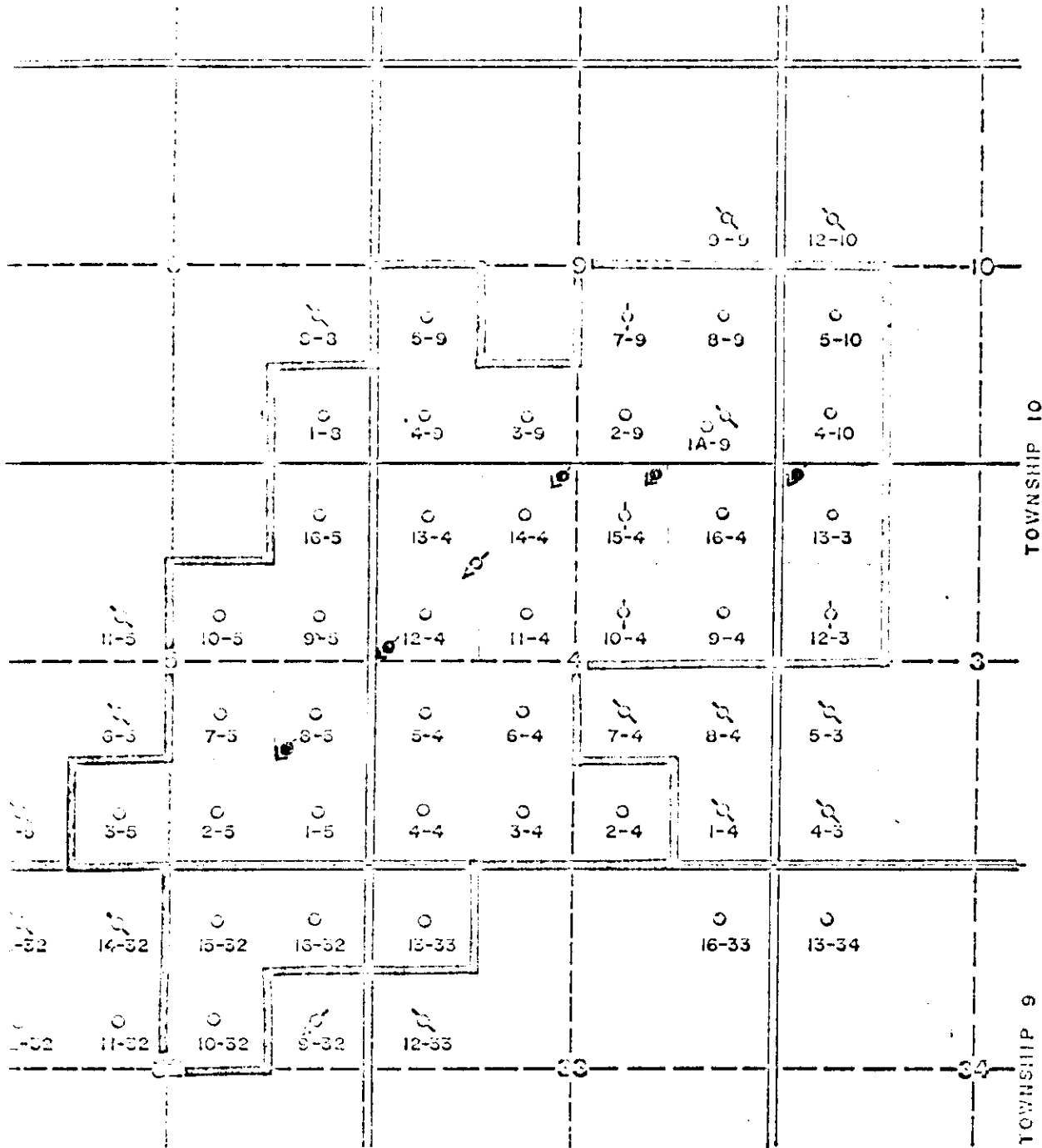
RUNDLE PETROLEUMS LTD.


R. F. Atkinson

RFA:ft
Encls.



MAP OF UNIT AREA



RANGE 23 W.P.M.

WEST DALY AREA

0 1000' 2000'

LEGEND

- OILWELL
- ⊗ ABANDONED OILWELL
- ⊘ DRY HOLE
- ⊙ WATER INJECTION WELL
- ⊗ SALT WATER DISPOSAL WELL
- ⊘ SUSPENDED OILWELL
- UNIT BOUNDARY

WATER INJECTION

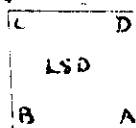
WELL- 13C-3

15D-4

14D-4

12B-4

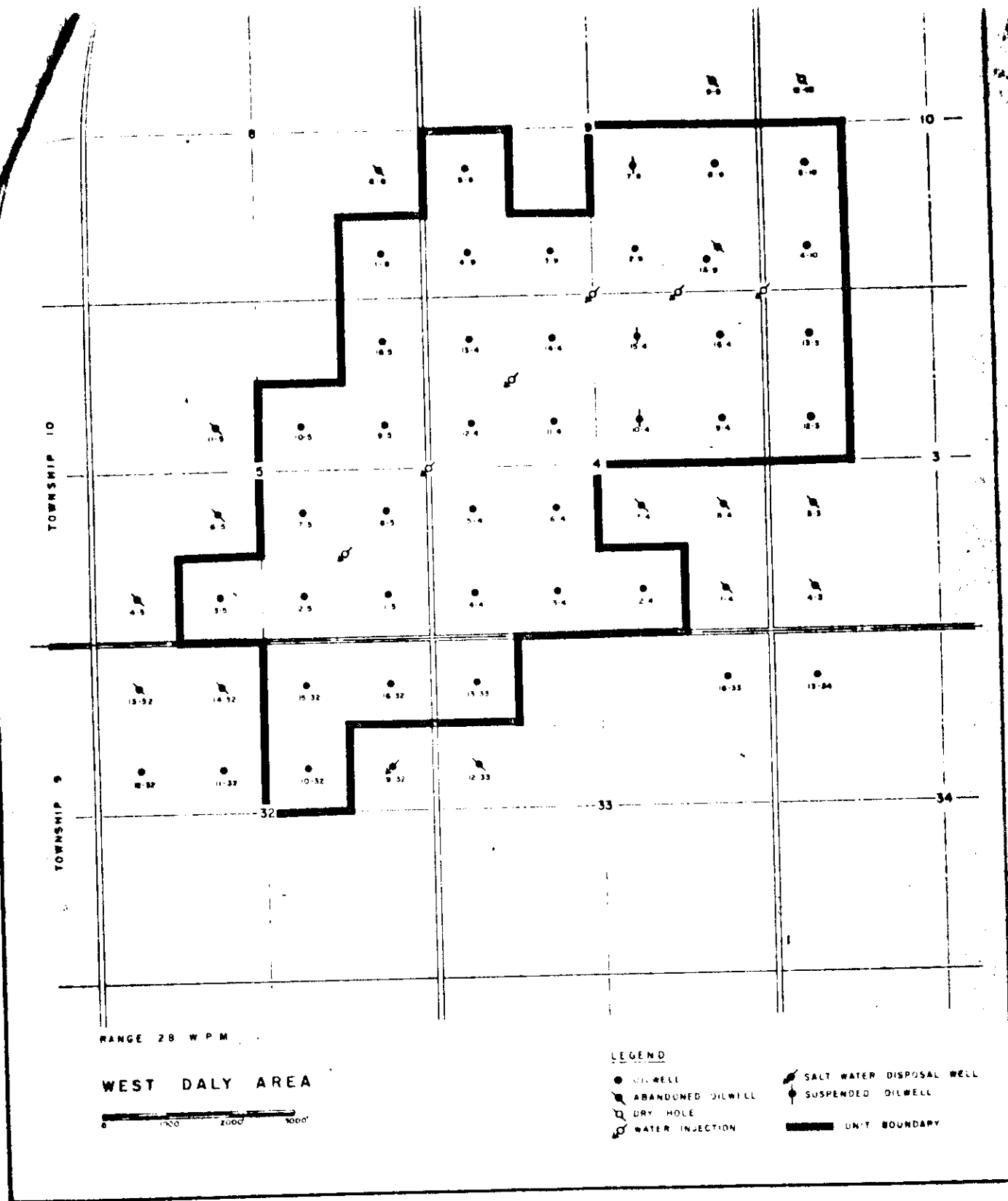
8B-5



DISAL WELL
WELL
NDARY

WATER INJECTION WELLS DRILLED (JAN-SEPT 1911)

DALY UNIT NO. 1



ORIGINAL PLAN FOR WATER INJECTION

BOARD HEARING DEC. 1970

DALY UNIT NO. 1

(1)

RUNDLE PETROLEUMS LTD.

300 ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

October 22, 1970

The Oil & Gas Conservation Board
Dept. of Mines & Natural Resources
Legislative Building
Province of Manitoba
Winnipeg 1, Manitoba

Dear Sirs;

Rundle Petroleum Ltd., under and pursuant to The Mines Act, Revised Statutes of Manitoba 1970, and amendments thereto, hereby, on behalf of itself and other Working Interest Owners in the Daly Field, requests the Board to hold a hearing to consider and approve the following:

1. "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF THE DALY UNIT NO. 1" pursuant to Section 62 of the Mines Act.
2. "PROPOSAL FOR PRESSURE MAINTENANCE BY WATERFLOODING" pursuant to Section 62 of the Mines Act.
3. "APPLICATION FOR A UNIT MAXIMUM PERMISSIBLE RATE OF PRODUCTION" pursuant to Section 62 of the Mines Act.

Enclosed please find ten copies of each of the following:

1. "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF THE DALY UNIT NO. 1."
2. "PROPOSAL FOR PRESSURE MAINTENANCE BY WATERFLOODING."
3. "APPLICATION FOR A UNIT MAXIMUM PERMISSIBLE RATE OF PRODUCTION."

We have included several maps and curves used by the Engineering Committee in its' study of the area.

cont...

In addition we are enclosing a list of the Royalty Owners and Working Interest Owners for the proposed area of Daly Unit #1.

Yours very truly,



R. F. Atkinson
Chairman
Proposed Daly Unit No. 1
Operating Committee

RFA:ft
Encls.

RUNDLE PETROLEUMS LTD.

400 ~~380~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

PROPOSAL FOR PRESSURE MAINTENANCE BY WATERFLOODING

The applicants propose to unitize a portion of the west side of the Daly Field. The proposed area consists of 37 oil-² wells. The primary purpose for unitizing the area is to facilitate waterflooding in that area.

No detailed waterflood study has been done on the area, mainly because of the following:

1. Reservoir core data is scant and not complete.
2. The results of the Rundle Cruickshank pilot flood is available.

PILOT FLOOD

Rundle Petroleums Ltd. started water injection into the Mississippian on December 13, 1969 on a 20 acre spacing located in the center of NW $\frac{1}{4}$ 4-10-28 WPM. The well had previously been used as a Devonian salt water disposal well and was recompleted as a Mississippian water injection well. The estimated bottom hole pressure in the area was approximately 450 psi compared to an original bottom hole pressure of 1000 psi.

Injectivity proved to be excellent upon recompletion and the well had a capacity in excess of 1000 BWPD at surface pressures up to 1300 psi.

The water injection rates reached a high of 24,000 bbls. per month in September 1970 with a total water injection to that time of some 166,000 barrels. This was all the produced water available to the pilot during this time.

Oil production showed a marked increase after 3 $\frac{1}{2}$ months. During 1969 the four producers averaged 56.7 BOPD for 11 months. In September, 1970 these same four wells averaged just under 100 BOPD and a steady climb has been noted since.

In view of the excellent injection rates and the accompanied oil response, it was felt that the flood should be expanded.

OPERATOR RECOMMENDATIONS

The operators of the adjoining tracts met and agreed to expand the flood as soon as possible. The Engineering Committee

cont...

studied the area and proposed various combinations of tract factors.

The Engineering Committee estimates that the ultimate primary recoverable reserves for the area would be 5,000,000 barrels. This was based on rate-time decline curves analysis. The estimated cumulative oil production to 1-1-71 is 3,500,000 barrels. This leaves another 1.5 million to be recovered. It is estimated that water-flooding will double the estimated primary figure, hence another 5 million barrels is expected on this basis. This leaves an estimated remaining primary and secondary reserves as of 1-1-71 at 6.5 million barrels.

Several approaches to tract factors were studied but only two parameters appeared feasible to use as a measure of the waterflood potential of a tract. In view of the scarce reservoir data and inconsistency of logs, a test period, (in this case 1969) was used to give a measure of the wells current producing capabilities. Flood response achieved in 1970, as a result of the Pilot Flood initiated December 13, 1969 in the NW $\frac{1}{4}$ 4-10-28 WPM, makes a more recent period unacceptable as current production criteria. The other factor considered was the cumulative oil production over its' present life. In order to bring the wells to a common denominator this was converted to a cumulative average monthly production which compensates for wells having a shorter history. In order to bring this into a more equitable realm this average monthly production was penalized for water production based on the 1969 water cut. In other words if a well had produced a large amount of oil but in 1969 had produced with a high water cut, it would be penalized accordingly. This method would relate to the residual oil remaining in the well and would enable one to place a numerical weighting factor to it. Several combinations of the two parameters were studied but the most equitable appeared to be 60% based on penalized average monthly production and 40% on the current (or 1969 oil production). This was adopted by the operators.

FLOOD PATTERN

Two basic patterns have been studied for waterflooding. No decision has been made at this time but it is currently under further study. These are:

1. 20 acre inverted 5 spot which could be converted to a line drive or standard 5 spot.
2. 40 acre 5 spot which could be changed to a line drive if need be.

The differential of costs is not great but it is felt that further study should be done on this phase before adoption of any specific pattern. It is not anticipated that any construction could be done until May or June, 1970. ? 1971 319

For the same reason the battery consolidation has not been finalized.

RUNDLE PETROLEUMS LTD.

400 ~~388~~ ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

APPLICATION FOR A UNIT MAXIMUM RATE OF PRODUCTION

The applicants propose that the operation of the Daly Unit #1 should not be restricted by the allowables presently in effect in the Daly Field. It is the applicants contention that no reservoir damage will be done by producing the wells at capacity.

It is important that the oil bank built up in front of a flood front be produced in the first line of offsetting wells if at all possible. This is good engineering and economic practice.

The applicants contend that no nearby non-unit wells will be harmed by this practice since the increased oil production will be a result of water injection within the unit boundaries.

The applicants respectfully request that, on and after the first day that the Daly Unit #1 becomes effective, the Unit be excluded from any provisions governing the limitations of production of oil.

RUNDLE PETROLEUMS LTD.

300 ROYALITE BUILDING
CALGARY 2, ALBERTA
Telephone 263-7171

PROPOSED DALY UNIT NO. 1

Engineering Committee - October 8, 1970

1. Unit Boundaries

It was decided that the proposed unit boundaries be extended to the north east to include a further 12 wells from the original proposal submitted by Rundle at the September 11/70 meeting. This would extend the boundaries to the edge of a line of suspended or abandoned wells in Section 3-10-28 WPM. The only producer left to the east would be 6-10-10-28.

The extension of the boundaries would aid in the selection of a water-flood pattern since it would add to the flexibility of locating injection wells and not having them located at the edge of the unit boundaries which could cause oil to be swept off the unit.

It will be noted that some of these wells have shown good to medium producing characteristics in the past.

2. The estimated recoverable oil reserves are based on rate-cumulative decline curves. Since the history is long on these wells, this method is felt to be most reliable as only limited core information is available. By using what core information was available and applying recovery factors used in the Chevron Daly waterflood, the figures compare most favourably.

In extrapolation of the decline curves it has been assumed that the economic limit would be 4BOPD/well for primary and 7 BOPD/well for waterflood.

It was assumed that the waterflood recovery would double the primary reserves and that the peak production would be 1000 BOPD for the proposed unit.

3. In the area of tract factor participation several approaches were studied. It is recommended that a similar method to that used in other Manitoba units be adopted. It is the belief of this committee that the only equitable method of equating the value of a well to a waterflood project is to arrive at some numerical value based on the past performance of the well. It is also important to devise a method whereby all information is available to everyone concerned in order to check the calculations. Since Manitoba has published oil production figures from inception, this is the most desirable data to use.

As in other Manitoba units the two factors which have been used to determine tract factors are -

1. A current test period to measure the wells' recent value or capacity.
2. Cumulative production based on an average monthly production and penalized by a water penalty factor from the test period.
As an example the penalized cumulative production value of a well which has produced 120,000 barrels of oil over a period of 15 years (or 180 months) and having a 60% water production during the test period would be - $120,000 \div 180 \times (1 - .60) = 266.7$ barrels/month.

age 2

In the case where a well did not produce in the test period, the last 12 months of production (or portion thereof) was used to determine the water penalty.

Four combinations are shown of these two factors on the attached data sheets.

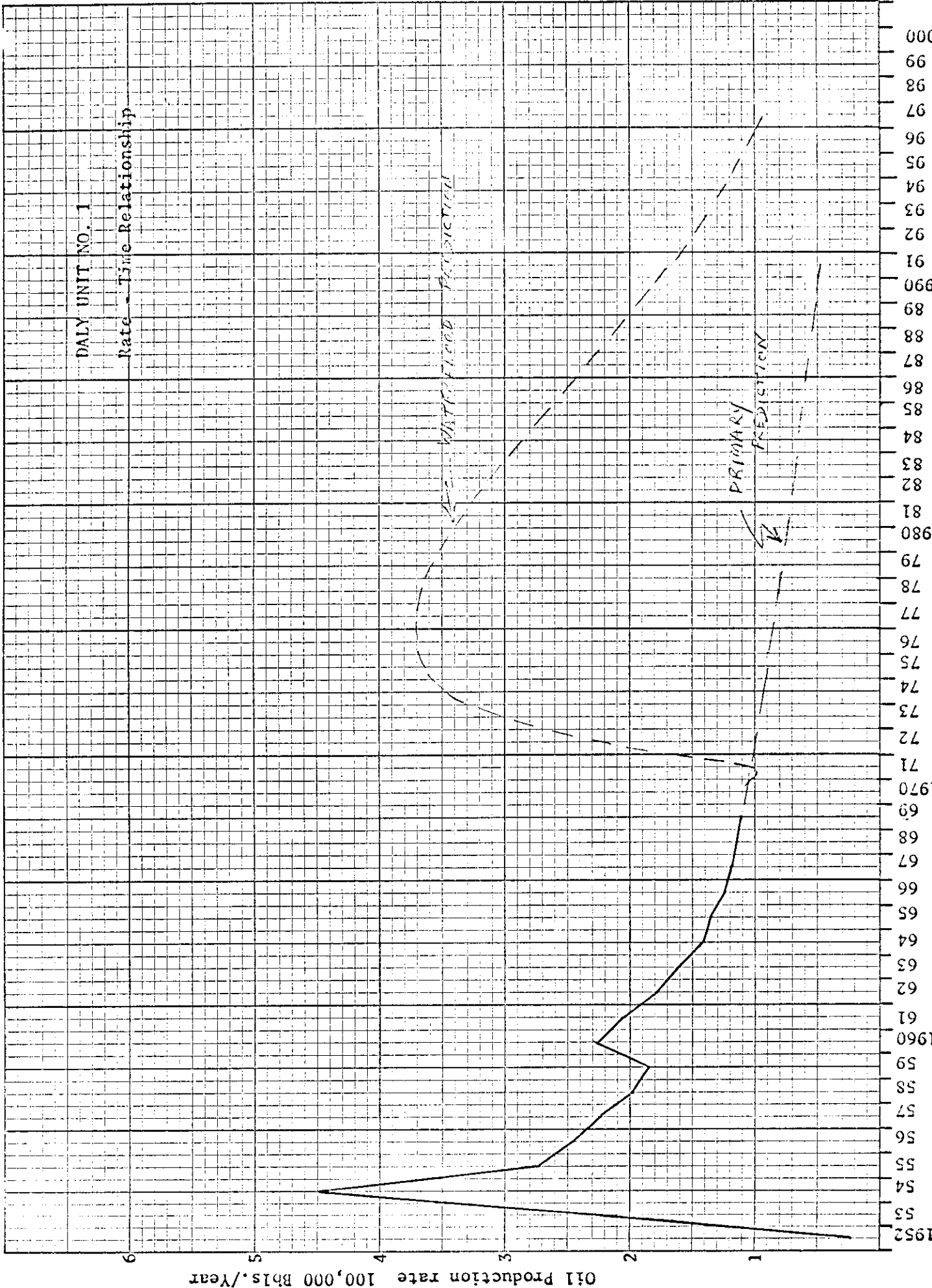
As a guide to choosing a combination the committee discounted the primary production at 10% and the secondary at 20%. It was found that comparing these two that the primary discounted barrels was 42% while the secondary was 58% of a total of the two figures. This can be used as a guide to arriving at the weighting to be used in the final analysis.

The committee used the 1969 figures for the test period since these figures were not influenced by the effects of the pilot waterflood.

4. The enclosed plats show the two patterns studied together with anticipated costs. No figures for battery consolidation have been included but will not vary from one pattern to another. Further study should be done on this aspect.
5. R.F. Atkinson recently met with some members of the Oil & Gas Conservation Board in Winnipeg. A tentative date of December 15, 1970 has been set for a hearing. If we can get our application in by the end of October, it is hoped that this hearing can include the proposed Daly Unit #1 at that time.


R. F. Atkinson.

K&E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES
MADE IN U.S.A.
KEUFFEL & ESSER CO.



DALY FIELDPERCENTAGES

	<u>Cumulative Oil Production to 31/12/69</u>	<u>Monthly Avge. Oil Production to 31/12/69</u>	<u>Monthly Avge. Penalized By 1969 Water Prod.</u>	<u>Oil Production 1969</u>
Basco	1.02239	1.17188	1.09467	.86807
Chevron	25.56927	26.02932	32.64495	31.86345
Rundle	46.40651	45.62076	40.87035	44.00838
Recovery	1.51238	1.55106	2.57741	.64328
R. B. Exploration	11.33249	11.47174	3.65770	7.32570
Scurry	<u>14.15696</u>	<u>14.15524</u>	<u>19.15492</u>	<u>15.29112</u>
	<u>100.00000%</u>	<u>100.00000%</u>	<u>100.00000%</u>	<u>100.00000%</u>

DALY FIELD

TRACT FACTOR COMBINATIONS

	<u>Basco</u>	<u>Chevron</u>	<u>Rundle</u>	<u>Recovery</u>	<u>R.B.</u>	<u>Scurry</u>
1. (a) 1969 - 50%	.43404	15.93172	22.00419	.32164	3.66285	7.64556
(b) Cumulative averaged on monthly basis penalized by 1969 water penalty - 50%	<u>.54775</u>	<u>16.30145</u>	<u>20.44785</u>	<u>1.28950</u>	<u>1.83000</u>	<u>9.58345</u>
	<u>.98179</u>	<u>32.23317</u>	<u>42.45204</u>	<u>1.61114</u>	<u>5.49285</u>	<u>17.22901</u>
2. (a) 1969 - 60%	.52084	19.11807	26.40503	.38597	4.39542	9.17467
(b) Cumulative averaged on monthly basis penalized by 1969 water penalty - 40%	<u>.43820</u>	<u>13.04116</u>	<u>16.35828</u>	<u>1.03160</u>	<u>1.46400</u>	<u>7.66676</u>
	<u>.95904</u>	<u>32.15923</u>	<u>42.76331</u>	<u>1.41757</u>	<u>5.85942</u>	<u>16.84143</u>
3. (a) 1969 - 40%	.34723	12.74538	17.60335	.25731	2.93028	6.11645
(b) Cumulative averaged on monthly basis penalized by 1969 water penalty - 60%	<u>.65730</u>	<u>19.56174</u>	<u>24.53742</u>	<u>1.54740</u>	<u>2.19600</u>	<u>11.50014</u>
	<u>1.00453</u>	<u>32.30712</u>	<u>42.14077</u>	<u>1.80471</u>	<u>5.12628</u>	<u>17.61659</u>
4. (a) 1969 - 30%	.26042	9.55904	13.20251	.19298	2.19771	4.58734
(b) Cumulative averaged on monthly basis penalized by 1969 water penalty - 70%	<u>.76685</u>	<u>22.82203</u>	<u>28.62699</u>	<u>1.80530</u>	<u>2.56200</u>	<u>13.41683</u>
	<u>1.02727</u>	<u>32.38107</u>	<u>41.82950</u>	<u>1.99828</u>	<u>4.75971</u>	<u>18.00417</u>

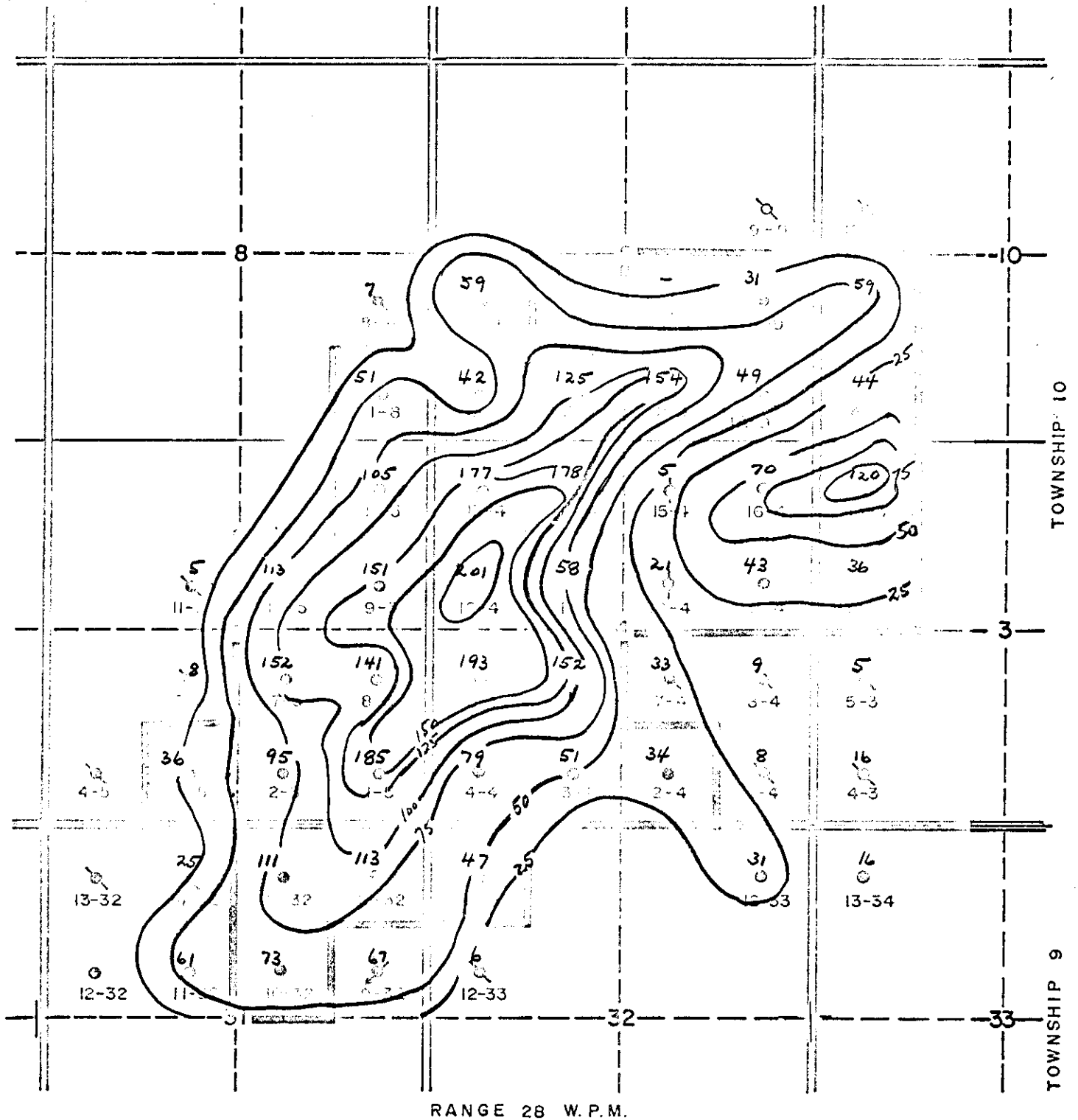
DALY FIELD

	Cumulative Oil Production to 31/12/69	Monthly Ave. Oil Production to 31/12/69	Water penalty Factor on 1969 Prod.	Monthly Ave. Penalized on 1969 Water Prod. Basis	Oil Prod. 1969
Basco Daly 2-4	34,302	201.77647	.56214	113.42663	977
Company Total	34,302	201.77647		113.42663	977
Chev. Daly 12-3	35,542	224.94937*	.10411	23.41948	-
Chev. Daly 13-3	119,977	605.94444	.99829	604.90828	7,598
Chev. Daly Prov. 9A-4	42,870	266.27329	1.00000	266.27329	2,450
Chev. Daly 10-4	21,369	133.55625*	.37591	50.20513	-
Chev. Daly Prov. 15-4	4,756	26.71910*	.05301	1.41638	-
Chev. Daly Prov. 16-4	69,785	396.50568	1.00000	396.50568	2,896
Chev. Daly 1A-9	48,913	238.60000	.58688	140.02957	3,614
Chev. Daly 2-9	153,894	750.70244	.85676	643.17182	4,785
Chev. Daly 3-9	125,484	603.28846	.73461	443.18174	4,653
Chev. Daly 4-9	42,279	215.70918	.18995	40.97396	964
Chev. Daly 5-9	59,186	287.31068	.55389	159.13851	3,628
Chev. Daly 7-9	46	.30873*	.09446	.02916	-
Chev. Daly 8-9	30,732	156.79592*	.52064	81.63423	-
Chev. Daly 4-10	43,669	221.67005	.85272	189.02249	2,119
Chev. Daly 5-10	59,374	353.41667	.96958	342.66574	3,155
Company Total	857,876	4,481.75026		3,382.57546	35,862
Rundle Cr. Daly 11-4	58,251	282.77185	.05620	15.89178	1,208
Rundle Cr. 12-4	201,359	1,027.34184	.83650	859.37145	8,585
Rundle Cr. Daly 13-4	177,172	868.49020	.79628	691.56138	5,609
Rundle Cr. Daly 14-4	178,156	840.35849	.64818	544.70357	5,376
Rundle M&H Daly 1-5	185,012	953.67010	.33706	321.44404	8,493
Rundle M&H Daly 2-5	94,547	489.88083	.02317	11.35054	2,389
Rundle M&H Daly 7-5	151,869	782.82990	.64230	502.81165	4,737
Rundle M&H Daly 8-5	141,212	720.46939	.32203	232.01276	2,368
Rundle M&H Daly 9-5	150,720	772.92308	.73695	569.60566	4,631
Rundle M&H Daly 10-5	113,286	583.94845	.43340	253.08326	3,322
Rundle M&H Daly 16-5	105,403	532.33838	.43775	233.03113	2,813
Company Total	1,556,987	7,855.02251		4,234.86722	49,531
Recovery Daly 1-8	50,742	267.06316	1.00000	267.06316	724
Company Total	50,742	267.06316		267.06316	724
R.B. Exp. Th. Daly 10-32	73,224	381.37500	.01814	6.91814	474
R.B. Exp. Th. Daly 15-32	111,460	577.51295	.01857	10.72442	1,393
R.B. Exp. Th. Daly 16-32	113,117	586.09845	.05504	32.25886	2,180
R.B. Exp. Th. Daly 13-33	46,567	242.53646	.77700	188.45083	2,446
R.B. Exp. Grieve Daly 3-5	35,849	187.69110	.74936	140.64820	1,752
Company Total	380,217	1,975.21396		379.00045	8,245
Scurry Cr. Daly 3-4	50,564	274.80435	.73744	202.65172	1,497
Scurry Cr. Daly 4-4	79,020	405.23077	.67582	273.86306	3,569
Scurry Cr. Daly 5-4	193,206	980.74112	.84266	826.43131	6,684
Scurry Cr. Daly 6-5	152,191	776.48469	.87810	681.83121	5,460
Company Total	474,981	2,437.26093		1,984.77730	17,210
GRAND TOTAL	3,355,105	17,218.08729		10,361.71022	112,549

* No 1969 production - penalty based on last 12 months of production

Amended October 13, 1970

PART XXIII
MAP OF UNIT AREA

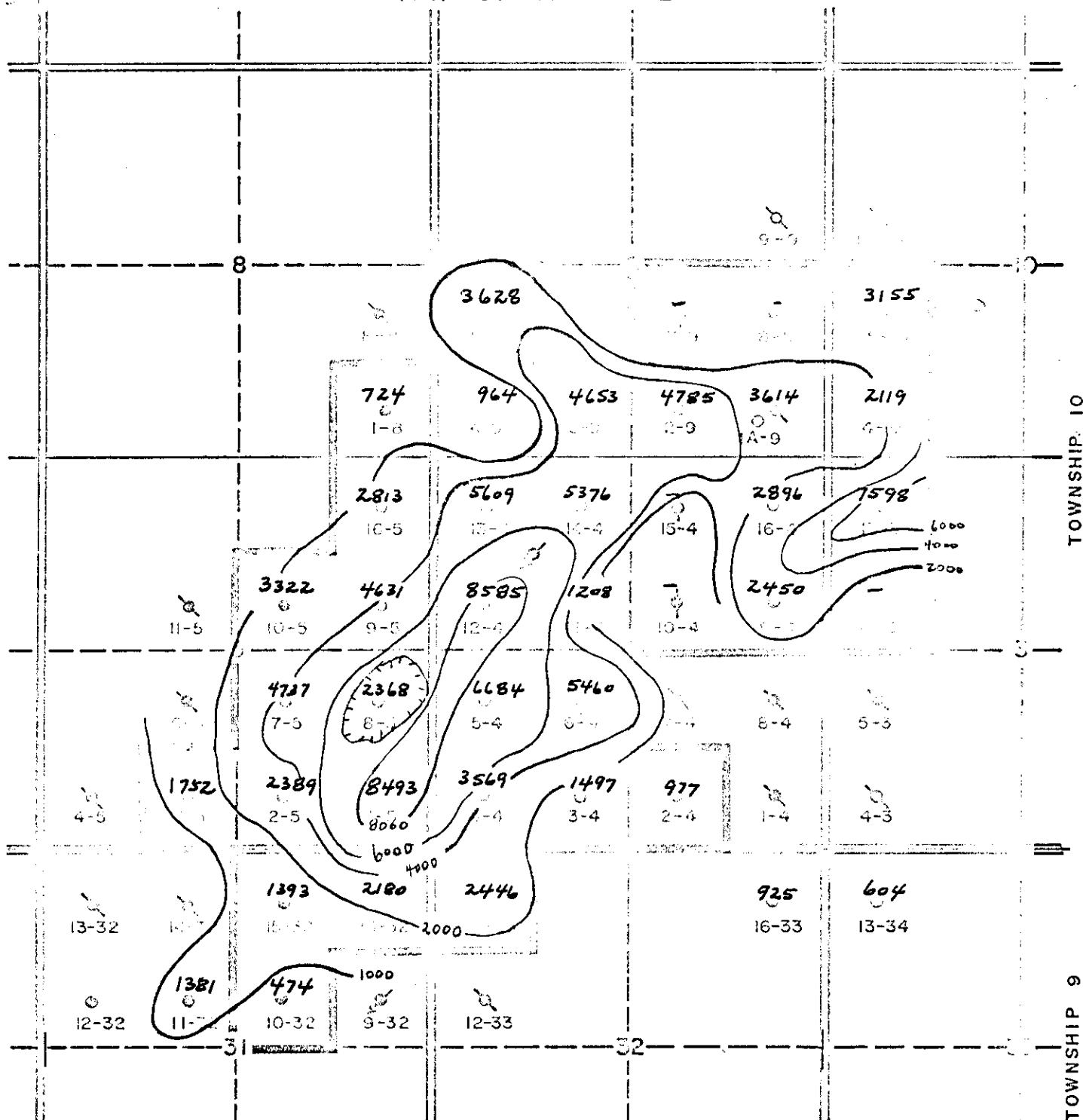


WEST DALY AREA

Cumulative Oil to Dec. 31,
1969 in Thousands of Bbls.

- | | |
|------------------------|----------------------------|
| ● OILWELL | ⊗ SALT WATER DISPOSAL WELL |
| ⊗ ABANDONED OILWELL | ⊕ SUSPENDED OILWELL |
| ⊗ DRY HOLE | |
| ⊗ WATER INJECTION WELL | --- UNIT BOUNDARY |

PART D'NEIL
MAP OF UNIT AREA



RANGE 28 W.P.M.

WEST DALY AREA

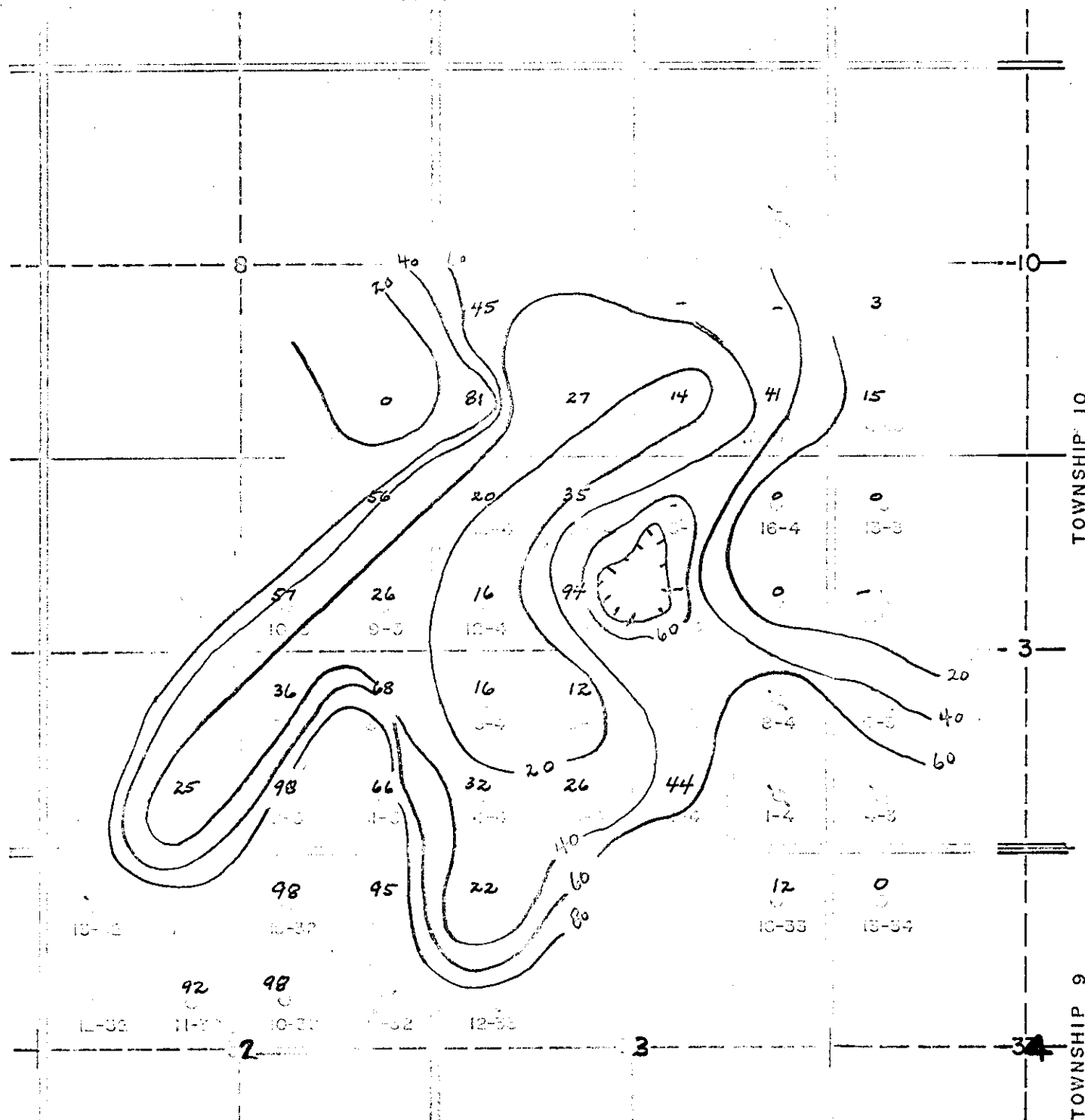
0 1000' 2000'

1969 Oil Production in bbls.

LEGEND

- OILWELL
- ⊗ ABANDONED OILWELL
- ⊗ DRY HOLE
- ⊗ WATER INJECTION WELL
- ⊗ SALT WATER DISPOSAL WELL
- ⊗ SUSPENDED OILWELL
- UNIT BOUNDARY

MAP OF UNIT AREA



RANGE 20 W.P.M.

WEST FLUX Percent Water Cut For 1969

0 100 200

LEGEND

- OILWELL
- SALT WATER DISPOSAL WELL
- ABANDONED OILWELL
- DRY HOLE
- WATER INJECTION WELL
- UNIT BOUNDARY

WATERFLOOD PATTERN STUDYCASE NO 1

40 acre 5 spot pattern - 7 additional injection wells

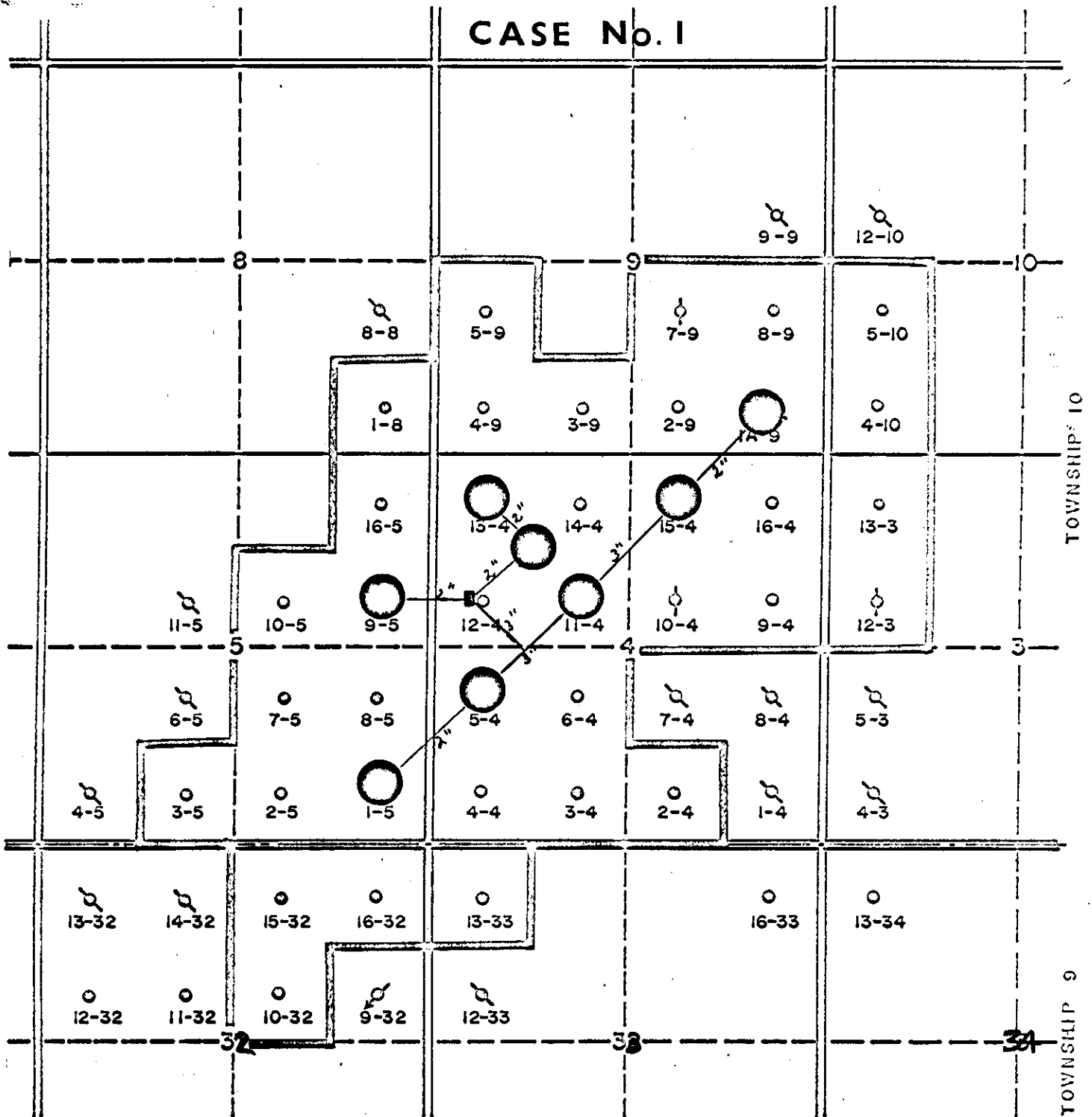
3" line required - 4000'

2" line required - 8400'

COST ESTIMATES

1. Inection lines (3")	4000 x 2.70	=	\$10,800
(2")	8400 x 2.10	=	<u>17,650</u>
			\$28,450
2. Well Conversions	8000 x 7	=	56,000
3. Plant Expansion	4000 x 3	=	12,000
4. Engineering & Overhead			<u>3,550</u>
TOTAL			<u><u>\$110,000</u></u>

PART XXIII
MAP OF UNIT AREA
CASE No. I



RANGE 28 W.P.M.

WEST DALY AREA

0 1000' 2000'

LEGEND

- OILWELL
- ABANDONED OILWELL
- DRY HOLE
- WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- SUSPENDED OILWELL
- UNIT BOUNDARY

WATERFLOOD PATTERN STUDYCASE NO 2

20 acre inverted 5 spot - 4 additional new injection wells

3" line required - 3800' x 2.70 = \$ 10,280

2" line required - 4740' x 2.10 = 10,500

20,780

COST ESTIMATES

1. Injection lines 20,780

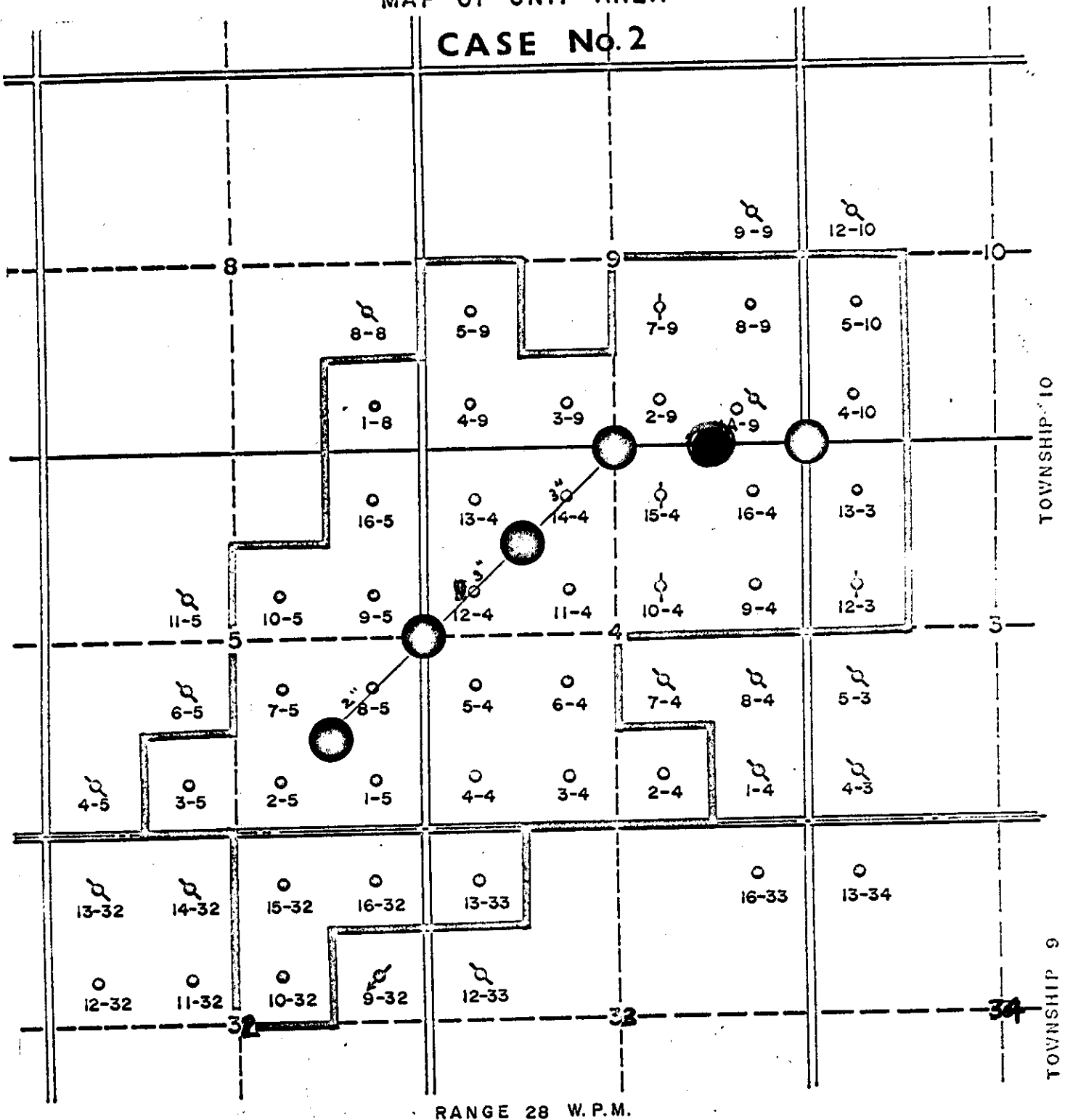
2. New Wells 4 x 25,000 100,000

3. Plant Expansion 3000 x 3 9,000

4. Engineering & Overhead 4,000

TOTAL \$133,780

PART XXIII
MAP OF UNIT AREA
CASE No. 2



WEST DALY AREA

0 1000' 2000'

LEGEND

- OILWELL
- ABANDONED OILWELL
- DRY HOLE
- WATER INJECTION WELL
- SALT WATER DISPOSAL WELL
- SUSPENDED OILWELL
- UNIT BOUNDARY

OIL PROD. RATE - 100 BBL./MONTH

