



Energy and Mines

Petroleum

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

(204) 945-6577
FAX: (204) 945-0586

January 24, 1991

Mr. Don Burns
Rideau Petroleums Ltd.
210 - 215 Lawrence Avenue
Kelowna, B.C.
V1Y 6L2

Dear Sir:

Re: Special Royalty Reduction
Rideau Daly Prov. 9D-28-9-29 (WPM)

Your application for classification of the subject well as a new oil well has been approved, effective September 21, 1990 the on production date for the well.

As a new oil well, Rideau Daly Prov. 9D-28-9-29 (WPM) is entitled to a holiday oil volume and is subject to new oil Crown royalty and oil and gas production tax. You will be advised by separate letter of the well's holiday oil volume and Crown royalty and oil and gas production tax liabilities.

You are also reminded that the Oil and Natural Gas Conservation Board only approved production from the 9D-28 well for six months before it is to be converted to water injection. The six month production period ends March 31, 1991.

Yours truly,

A handwritten signature in cursive script, reading "L.R. Dubreuil". The signature is written in dark ink and is positioned above the typed name and title.

L.R. Dubreuil
Director

LRD:cvs

cc: B. Thiessen

C. Matters of State

Manitoba



No. 43

To The Honourable the Lieutenant Governor in Council

The undersigned, the Minister of Energy and Mines

submits for approval of Council a report setting forth that:

WHEREAS Subsection 9(1) of the Petroleum Crown Royalty and Incentives Regulation, being Manitoba Regulation 63/87 under the Mines Act (C.C.S.M. c.M160), provides as follows:

"9(1) Notwithstanding anything contained in section 3, the Lieutenant Governor in Council may, at any time and from time to time, approve the temporary or permanent reduction or exemption of the Crown royalty to be charged on any oil or natural gas produced or deemed to be produced from a location.";

AND WHEREAS subsection 5(1) of the Oil and Gas Production Tax Regulation, being Manitoba Regulation 357/87 under The Oil and Gas Production Tax Act, (C.C.S.M. c.037), provides as follows:

"5(1) Notwithstanding anything contained in section 3, the Lieutenant Governor in Council may approve the temporary or permanent reduction or exemption of the freehold production tax to be charged on any oil or natural gas produced or deemed to be produced from a location.";

AND WHEREAS Rideau Petroleums Ltd. ("Rideau") has been given approval by The Oil and Natural Gas Conservation Board ("the Board") to conduct waterflood operations in Daly Unit No. 5 in the Daly Lodgepole D Pool;

AND WHEREAS Rideau drilled a well, Rideau Daly Prov. 9D-28-9-29 (WPM) ("the Well") as part of the waterflood project and has obtained approval of the Board to produce the Well for six months before converting it to water injection;

AND WHEREAS production from the Well will be allocated among the tracts in Daly Unit No. 5 and will be subject to both Crown royalty and freehold production tax;

AND WHEREAS under the provisions of MR 63/87 and MR 357/87, the Well is classified as an old oil well, subject to old oil Crown royalty and freehold production tax rates;

AND WHEREAS Rideau has applied under the subject Regulations to have any oil which may be produced from the Well assessed Crown royalty and charged freehold production tax under the Petroleum Crown Royalty and Incentives Regulation and the Oil and Gas Production Tax Regulation, respectively, at those lower rates applicable to "new oil" as that term is defined by the Regulations;

AND WHEREAS it is deemed to be in the public interest to support the implementation of a waterflood project involving the Well by means of allowing a reduction in the Crown royalty and freehold production tax to be charged and assessed on any oil produced from the Well;

THEREFORE, the Minister recommends:

THAT the Well be classified as a new oil well.

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

Signature *[Signature]*

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

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

16th January 1991
Date

[Signature]
President or Presiding Member

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this 16th day of January A.D. 1991

[Signature]
Lieutenant Governor



Date November 30, 1990

Memorandum

To H. Clare Moster

From L.R. Dubreuil

Subject

Telephone

The following are the basic guidelines used to evaluate an application for special royalty reduction under the Petroleum Crown Royalty and Incentive Regulation and/or the Oil and Gas Production Tax Regulation.

1. Technical Risk - The proposed project must involve either use of a new, unproven technology or a proven technology in a location with unproven hydrocarbon potential.
2. Marginal Project Economics - When the technical risk is incorporated, the resulting project economics are marginal.
3. Limited Crown Exposure - The revenue forgone by the Crown if the application is approved is limited.
4. Upside Hydrocarbon Potential - If the project proves successful the implications for recovery of additional hydrocarbon reserves are significant.
5. Potential Crown Benefits - If the project proves successful, Crown royalty and/or production tax revenue will increase significantly.

The application by Rideau Petroleums Ltd. for new oil status was recommended for approval because it conforms to all of the above guidelines.

L.R. Dubreuil
Director

LRD:cvs

~~-extra copy for me~~

file: Dely unit No. 5

Special Royalty

Reduction -

Manitoba



Date: November 29, 1990

Action / Route Slip

To: L.R. DUBREUIL

From: H.C. MOSTER

Telephone: 1111

- | | | | | |
|---|---|--|---|--|
| <input checked="" type="checkbox"/> Take Action | <input type="checkbox"/> Per Your Request | <input type="checkbox"/> Circulate, Initial and Return | <input type="checkbox"/> For Approval and Signature | <input type="checkbox"/> Make _____ Copies |
| <input type="checkbox"/> May We Discuss | <input type="checkbox"/> For Your Information | <input type="checkbox"/> Return With Comments or Revisions | <input type="checkbox"/> Draft Reply for Signature | <input type="checkbox"/> Please File |

Comments: RE: RIDEAU'S NEW OIL APPLICATION:

With reference to the Deputy's request, please draft a set of guidelines that are/could be used to evaluate applications of this nature,

Using generic guidelines, indicate on which basis Rideau's application is being recommended by approval.

Attachment

MG-1298 PS-1-182 8940100671

Manitoba



Date: November 28, 1990

Action / Route Slip

To: Clare Moster, ADM
Energy Division

From: Office of the Deputy Minister
Manitoba Energy and Mines
Room 309
Legislative Building
Winnipeg, Manitoba
R3C 0V8

- | | | | | |
|---|---|--|---|--|
| <input type="checkbox"/> Take Action | <input type="checkbox"/> Per Your Request | <input type="checkbox"/> Circulate, Initial and Return | <input type="checkbox"/> For Approval and Signature | <input type="checkbox"/> Make _____ Copies |
| <input type="checkbox"/> May We Discuss | <input type="checkbox"/> For Your Information | <input type="checkbox"/> Return With Comments or Revisions | <input type="checkbox"/> Draft Reply for Signature | <input type="checkbox"/> Please File |

Comments: As this is a discretionary matter what guidelines are in place to deal with precedent-setting consequences of such a decision?

Tan Haugh

John



November 30, 1990

Memorandum

To H. Clare Moster

From L.R. Dubreuil

Subject

Telephone

The following are the basic guidelines used to evaluate an application for special royalty reduction under the Petroleum Crown Royalty and Incentive Regulation and/or the Oil and Gas Production Tax Regulation.

1. Technical Risk - The proposed project must involve either use of a new, unproven technology or a proven technology in a location with unproven hydrocarbon potential.
2. Marginal Project Economics - When the technical risk is incorporated, the resulting project economics are marginal.
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5. Potential Crown Benefits - If the project proves successful, Crown royalty and/or production tax revenue will increase significantly.

The application by Rideau Petroleums Ltd. for new oil status was recommended for approval because it conforms to all of the above guidelines.

L.R. Dubreuil

L.R. Dubreuil
Director

LRD:cvs

First | Fold



Date: November 29, 1990

Action / Route Slip

To: L.R. DUBREUIL

From: H.C. MOSTER

Telephone: 1111

- | | | | | |
|---|---|--|---|--|
| <input checked="" type="checkbox"/> Take Action | <input type="checkbox"/> Per Your Request | <input type="checkbox"/> Circulate, Initial and Return | <input type="checkbox"/> For Approval and Signature | <input type="checkbox"/> Make _____ Copies |
| <input type="checkbox"/> May We Discuss | <input type="checkbox"/> For Your Information | <input type="checkbox"/> Return With Comments or Revisions | <input type="checkbox"/> Draft Reply for Signature | <input type="checkbox"/> Please File |

Comments: RE: RIDEAU'S NEW OIL APPLICATION:

With reference to the Deputy's request, please draft a set of guidelines that are/could be used to evaluate applications of this nature,

Using generic guidelines, indicate on which basis Rideau's application is being recommended by approval.

Attachment

MG-1296 PS-1-182 8940100671



Date: November 28, 1990

Action / Route Slip

To: Clare Moster, ADM
Energy Division

From: Office of the Deputy Minister
Manitoba Energy and Mines
Room 309
Legislative Building
Winnipeg, Manitoba
R3C 0V8

- | | | | | |
|---|---|--|---|--|
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| <input type="checkbox"/> May We Discuss | <input type="checkbox"/> For Your Information | <input type="checkbox"/> Return With Comments or Revisions | <input type="checkbox"/> Draft Reply for Signature | <input type="checkbox"/> Please File |

Comments: As this is a discretionary matter what guidelines are in place to deal with precedent-setting consequences of such a decision?

Tan Haugh

November 22, 1990

Ian Haugh
Deputy Minister
Manitoba Energy and Mines
309 Legislative Building

H. Clare Moster
Assistant Deputy Minister
Energy Division
555-330 Graham Avenue

RE: Rideau Daly Prov. 9D-28-9-29 (WPM)
Application for Special Royalty Reduction

Rideau Petroleums Ltd. has applied for new oil status for the well Rideau Daly Prov. 9D-28-9-29 (WPM), drilled as part of a waterflood project to be conducted in Daly Unit No. 5.

Recommendations

It is recommended that the well Rideau Daly Prov. 9D-28-9-29 (WPM) be classified as a new oil well subject to new oil royalty and tax rates and entitled to a holiday oil volume.

A copy of the proposed Cabinet Submission and Order-in-Council (approved by Legal Services) are attached.

Discussion

The Board has approved Rideau's waterflood project (Board Order. No. PM 63 - July 12, 1990). The Board also granted Rideau approval to produce the newly drilled 9D-28-9-29 well for six months before converting it to water injection.

The 9D-28 well is the second well capable of production in the spacing unit in which it is located. By definition under The Petroleum Crown Royalty and Incentives Regulation and The Oil and Gas Production Tax Regulation, production from the well is classified as old oil. Old oil is subject to higher royalties and production taxes than new oil and an old oil well is not entitled to a royalty or production tax free holiday oil volume. The regulations contain provisions for the reduction or exemption of royalties and production taxes by the Lieutenant-Governor-in-Council in special circumstances.

The Petroleum Branch has reviewed the economic feasibility of the waterflood project. The project is located in an area where three previous attempts to waterflood the same formation have recovered little or no incremental oil reserves.

Classification of the 9D-28 well as a new oil well will assist Rideau by providing additional front end revenue to reduce the considerable technical and economic risk of the project. Revenue foregone by the Crown is

estimated to be \$18,000. If the project is successful, it will result in the recovery of additional oil and generation of in excess of \$500,000 in additional Crown royalty and production tax revenue.

ORIGINAL SIGNED BY

H. C. MOSTER

H. Clare Moster

Encl.



Memorandum

Date : November 13, 1990

To : H. Clare Moster
Assistant Deputy Minister
Energy Division

From : John N. Fox
Chief Petroleum Engineer
Petroleum Branch

Subject : RE: Rideau Daly Prov. 9D-28-9-29 (WPM)
Special Royalty Reduction

Telephone :

In response to your questions regarding Rideau's application for special royalty reduction for the subject well:

- (1) Rideau applied to have production from 9D-28 classified as "new oil" or preferably "holiday oil". Further discussion with Rideau indicated the company wanted both a holiday volume and to pay new oil royalties and production taxes identical to the treatment a "new oil well" would receive.
- (2) The definition of a "new oil well" does not provide for any discretion to allow a well not meeting the definition to be reclassified as a "new oil well". The only provisions within the regulations for special royalty/tax reduction or exemption are:
 - (a) Subsection 9(1) of The Petroleum Crown Royalty and Incentives Regulation (MR 63/87), and
 - (b) Subsection 5(1) of The Oil and Gas Production Tax Regulation (MR 357/87).

ORIGINAL SIGNED BY
JOHN N. FOX

John N. Fox

First | Fold

November 1, 1990

H. Clare Moster
Assistant Deputy Minister
Energy Division

John N. Fox
Chief Petroleum Engineer
Petroleum Branch

RE: Rideau Daly Prov. 9D-28-9-29 (WPM)
Special Royalty Reduction

Rideau Petroleums Ltd. has applied for new oil status for the well Rideau Daly Prov. 9D-28-9-29 (WPM), drilled as part of the waterflood project to be conducted in Daly Unit No. 5.

RECOMMENDATION

It is recommended that the well Rideau Daly Prov. 9D-28-9-29 (WPM) be classified as a new oil well entitled to a holiday oil volume and subject to new oil royalty and tax.

A copy of the proposed Cabinet Submission and Order-in-Council are attached.

DISCUSSION

The Board has approved Rideau's plan to conduct a waterflood in the Daly Lodgepole D Pool in Daly Unit No. 5 (Board Order No. PM 63 - July 12, 1990).

There have been three previous attempts to waterflood the Lodgepole Formation in Township 9-29 (WPM). In each case, little or no incremental reserves were recovered and the projects were technical and economic failures. The reasons for the failure of the waterflood projects include:

- (1) lack of reservoir continuity,
- (2) insufficient injection volumes,
- (3) poor injection well completions and out of zone injection, and
- (4) lack of source water for injection.

The design of Rideau's waterflood project addresses these concerns. To reduce the technical risk, Rideau's plans include drilling an infill well at 9D-28-9-29 and conversion of the well to injection. Prior to converting the well, Rideau plans to produce it for six months to evaluate the well completion for any evidence of communication with the underlying aquifer. The Board has granted approval to produce the well for a period not to exceed six months from the finished drilling date (September 17, 1990).

The 9D-28 well will be the second well capable of production in the spacing unit in which it is located. By definition [subsection 1(1) of the Petroleum Crown Royalty and Incentive Regulation and the Oil and Gas Production Tax Regulation] production from the well is classified as old oil for royalty and production tax purposes. Old oil pays higher royalty and production tax than new oil and an old oil well is not entitled to a

royalty or tax free holiday oil volume. (Note: production from 9D-28 will be allocated to the various tracts in Daly Unit No. 5 and subject to both Crown royalty and freehold production tax.)

In order to reduce the economic risk associated with the waterflood project, Rideau has applied for new oil status for the 9D-28 well. Rideau in its application indicated that the higher royalties and taxes payable if production from the 9D-28 well is classified as old oil would have a detrimental impact on the project economics.

The Petroleum Branch has reviewed the economic feasibility of the project. Four economic runs were made that incorporate the technical risk and the impact of old and new oil status. A summary of the economic runs is shown in Table 1.

If the waterflood is a technical failure and no incremental reserves are recovered (except for the additional production from 9D-28 prior to the well's conversion) Rideau loses between \$126,000 (new oil) and \$144,000 (old oil). At the same time, the Crown receives additional revenue of between \$2,000 (new oil) and \$20,000 (old oil) from the 9D-28 well production.

If the waterflood is a technical success and performs as predicted in Rideau's pressure maintenance application, an additional 33 000 m³ of oil will be recovered over a 40 year period. The net present value (AIT @ DCF = 15%) is between \$310,000 (old oil) and \$293,000 (new oil). The Crown receives additional undiscounted revenue of between \$648,000 (new oil) and \$667,000 (old oil) if the project is successful.

Figure 1 is a plot of net present value versus incremental recovery. The graph indicates the break even point for the project occurs at an incremental recovery of between 9 500 m³ (new oil) and 10 900 m³ (old oil). When compared with past waterflood projects in this area, an incremental recovery of 9 500 - 10 900 m³ is quite optimistic.

If 9D-28 is classified as a new oil well, revenue foregone by the Crown is \$18,000. Classification of 9D-28 as a new oil well provides additional front end revenue to assist the operator to reduce the considerable technical and economic risk of the project. Because success of the project could have significant implications for increased recovery from the Lodgepole Formation in the area, the support of the Crown, through approval of this application, is recommended.

ORIGINAL SIGNED BY
JOHN N. FOX

John N. Fox

Encl.

Approved by: _____
L.R. Dubreuil, Director

DAILY UNIT NO. 5

ECONOMIC COMPARISON

OLD OIL VS NEW OIL

Case	Incremental Recoverable Reserves (m ³)	Capital Investment (\$M)	Net Present Value (AIT) (DCF=15%) (\$M)	Rate of Return (AIT) (%)	Pay-out (Years)	Incremental Gross Revenue (\$M)
No Incremental Recovery - Old Oil*	0	194	-144	-	-	20
No Incremental Recovery - New Oil**	0	194	-126	-	-	2
Incremental Recovery - Old Oil*	33 000	194	293	40	3.6	667
Incremental Recovery - New Oil**	33 000	194	310	44	3.4	648

* Production from 9D-28 classified as old oil. Remaining production from unit is new oil.

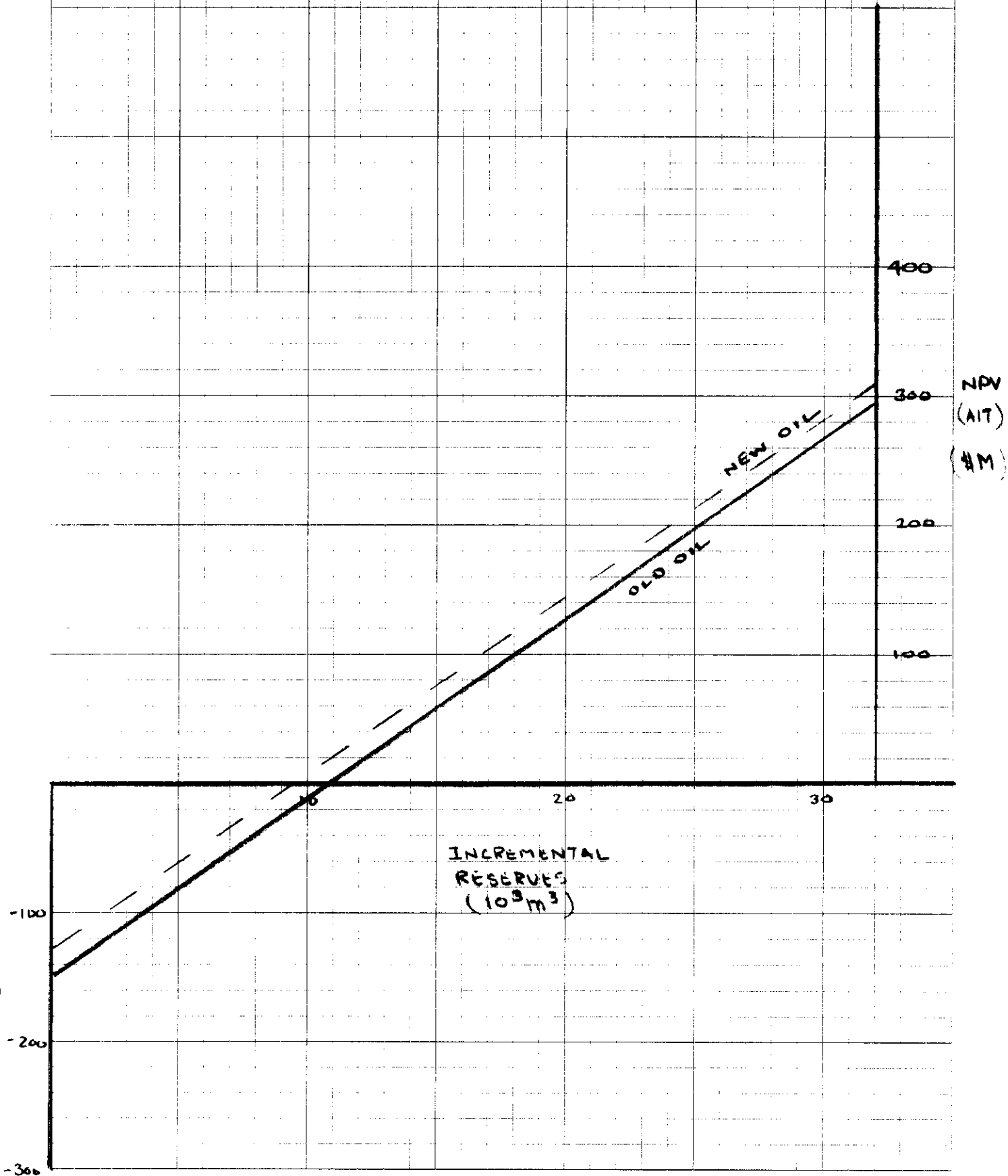
** All production from unit is classified as new oil.

FIGURE 1
ECONOMIC COMPARISON -
INCREMENTAL RECOVERY
VS.
NET PRESENT VALUE

46 0410

5 X 5 TO THE INCH • X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

NPV
(AIT)
(\$M)



DEPARTMENT OF ENERGY AND MINES

CABINET SUBMISSION

SUBJECT:

Application for reduced Crown royalty and freehold production tax rates on crude oil produced from the well, Rideau Daly Prov. 9D-28-9-29 (WPM).

BACKGROUND:

The newly drilled well is part of a waterflood project in Daly Unit No. 5. Rideau Petroleums Ltd. ("Rideau"), operator of the well, has obtained approval from The Oil and Natural Gas Conservation Board to produce the well for six months prior to converting it to water injection as part of an approved new waterflood pressure maintenance project. Production from the well will be allocated among the tracts in Daly Unit No. 5 and subject to both Crown royalties and freehold production taxes.

DISCUSSION:

Provisions in The Petroleum Crown Royalty and Incentives Regulation (MR 63/87) and The Oil and Gas Production Tax Regulation (MR 357/87) result in the well being classified as an old oil well, subject to higher Crown royalty and freehold production tax rates.

There have been three previous attempts to waterflood the Lodgepole Formation in Township 9, Range 29 (WPM). In each case, little or no additional oil was recovered and the projects were technical and economic failures.

Economic evaluation of Rideau's waterflood project indicates a substantial economic risk, a loss of \$144,000 if no incremental oil is recovered. For the project to break even, an additional 10 000 m³ of oil must be recovered.

Granting of the application will help reduce the project risk and improve the project economics.

Existing legislation provides for reduction or exemption of royalties and freehold production taxes by the Lieutenant Governor in Council in special circumstances.

If the waterflood project is successful, it will result in the recovery of additional oil and generation of additional Crown royalty and freehold production tax revenue. In addition, the technical information gained may be used by other operators to successfully implement waterflood operations in other areas in the Daly Field.

FINANCIAL IMPLICATIONS:

By granting reduced rates for the well, it is estimated the province will forego revenue from Crown oil royalties and freehold production taxes amounting to approximately \$18,000. If the waterflood project is successful, Crown revenue will increase by in excess of \$500,000. Successful waterflooding in this area may result in further projects which could further increase Crown revenues.

COMMUNICATIONS STRATEGY:

Letter from the Minister of Energy and Mines to Rideau outlining the terms of approval of reduced Crown royalty and freehold production tax rates.

RECOMMENDATION:

That the Lieutenant Governor in Council approve the temporary reduction of Crown royalty and freehold production tax payable on oil produced from the well, Rideau Daly Prov. 9D-28-9-29 (WPM), by classifying the well as a new oil well.

Harold Neufeld
Minister

Date Typed: November 9, 1990



To The Honourable the Lieutenant Governor in Council

The undersigned, the Minister of **Energy and Mines**

submits for approval of Council a report setting forth that:

WHEREAS

Subsection 9(1) of the Petroleum Crown Royalty and Incentives Regulation, being Manitoba Regulation 63/87 under the Mines Act (C.C.S.M. c.M160), provides as follows:

"9(1) Notwithstanding anything contained in section 3, the Lieutenant Governor in Council may, at any time and from time to time, approve the temporary or permanent reduction or exemption of the Crown royalty to be charged on any oil or natural gas produced or deemed to be produced from a location.";

AND WHEREAS subsection 5(1) of the Oil and Gas Production Tax Regulation, being Manitoba Regulation 357/87 under The Oil and Gas Production Tax Act, (C.C.S.M. c.037), provides as follows:

"5(1) Notwithstanding anything contained in section 3, the Lieutenant Governor in Council may approve the temporary or permanent reduction or exemption of the freehold production tax to be charged on any oil or natural gas produced or deemed to be produced from a location.";

AND WHEREAS Rideau Petroleums Ltd. ("Rideau") has been given approval by The Oil and Natural Gas Conservation Board ("the Board") to conduct waterflood operations in Daly Unit No. 5 in the Daly Lodgepole D Pool;

AND WHEREAS Rideau drilled a well, Rideau Daly Prov. 9D-28-9-29 (WPM) ("the Well") as part of the waterflood project and has obtained approval of the Board to produce the Well for six months before converting it to water injection;

AND WHEREAS production from the Well will be allocated among the tracts in Daly Unit No. 5 and will be subject to both Crown royalty and freehold production tax;

AND WHEREAS under the provisions of MR 63/87 and MR 357/87, the Well is classified as an old oil well, subject to old oil Crown royalty and freehold production tax rates;

AND WHEREAS Rideau has applied under the subject Regulations to have any oil which may be produced from the Well assessed Crown royalty and charged freehold production tax under the Petroleum Crown Royalty and Incentives Regulation and the Oil and Gas Production Tax Regulation, respectively, at those lower rates applicable to "new oil" as that term is defined by the Regulations;

AND WHEREAS it is deemed to be in the public interest to support the implementation of a waterflood project involving the Well by means of allowing a reduction in the Crown royalty and freehold production tax to be charged and assessed on any oil produced from the Well;

THEREFORE, the Minister recommends:

THAT the Well be classified as a new oil well.

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

Signature

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

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

..... Date

..... President or Presiding Member

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

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

..... Lieutenant Governor

WELL NAME & LOCATION WIDE-20 0.324 PROD 9D-28-9-29

LICENSEE Bidraw Petroleum Ltd

LIC. NO. 4223

LIC. DATE Aug 31/90

HOLIDAY VOLUME CALCULATION

TOTAL
HOLIDAY VOLUME 227.6 m³ ON PRODUCTION _____
(Max. 10 000.0)

LATEST DATE OFF HOLIDAY _____

ACTUAL DATE OFF HOLIDAY _____

(Will only prod.
for 6 mos.)

(Vk) DISTANCE FACTOR VOLUME = 227.6 m³
(Max. 5 000.0)

Vk = D(A) + B

* Special case
see Bob.

D = DISTANCE FROM NEAREST CASED WELL 0.30 km

X = 1 SU, Y = 0 SU LOCATION 10-28-9-29 (3516 COOP)
9-28-9-29 LIC. 3328 (COOP)

SPUD DATE Sept 12/90 AVERAGE PRICE (P) \$227.00

A = 1.7P + 230 = 615.9 B = 3130 - 13.6P = 42.8

(Vd) DEPTH FACTOR VOLUME = 0.0 m³ (well must be deeper than
1 000 m to qualify)

TD 815.0 m F.D. DATE Sept 17/90

(CALCULATION WILL BE SHOWN ON A SEPARATE SHEET IF NECESSARY)

(Vf) FORMATION FACTOR VOLUME = 0.0 m³

PRODUCING FORMATION _____

(VT1(t1)) QUALIFYING DRY HOLE VOLUME = 0.0 m³

(CALCULATION(S) WILL BE SHOWN ON A SEPARATE SHEET IF NECESSARY)

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 10:54:58
FILE: DALY5F

----- CASE DESCRIPTION -----
INCREMENTAL WATERFLOOD RECOVERY - NEW OIL
CONSOLIDATION

----- NET PRESENT VALUES (M\$) -----
DISC RATE (%) 0.0 12.0 15.0 18.0 20.0 22.0

B.T. OPER INC 3015 978 806 679 612 556
B.T. CAP INV. 194 190 189 189 188 187
B.T. CASH FLOW 2821 787 617 491 424 368

Royalty Regime: MANITOBA Gas Holiday: NO
Reserve type: Probable Oil Holiday: NO
Royalty Type: Crown Frhd Eval/Prod Start: 90- 9/90- 9
Sensitivity: NO Proj/Econ Life: 35.3/35.3 yrs

A.T. OPER INC 1801 599 500 427 388 355
A.T. CAP INV. 194 190 189 189 188 187
A.T. CASH FLOW 1608 409 310 238 200 168

----- ECONOMIC INDICATORS -----

----- PRODUCTS RECOVERY -----

----- COMPANY W.I. -----

		B.TAX	A.TAX		GROSS	WI	ROY	NET		Init%	Avr%	Rev%
ROR	- PCNT	60.0	44.3	OIL	E3m3	33	33	4	30	REVENUE	100.0	100.0
PAYOUT PERIOD	- EVAL	3.0	3.4	GAS-RAW	E6m3	0	0			FIELD CAP	100.0	100.0
	- CAPTL	2.8	3.2	GAS-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC PIR	- \$/M	14.56	8.30	ETHANE	E3m3	0	0	0	0	GATH CAP		
15.0 PCT PIR	- \$/M	3.26	1.64	PROPANE	E3m3	0	0	0	0	ORR-GAS		
12.0 PCT PIR	- \$/M	4.14	2.15	BUTANE	E3m3	0	0	0	0	ORR-OIL		
NPV @ 15.0	- \$/M3	18.42	9.27	CONDENS.	E3m3	0	0	0	0	ROYALTY	6.3	12.3
NPV @ 12.0	- \$/M3	23.52	12.22	SULPHUR	E3t	0	0	0	0			
				OTHER	E3m3	0	0	0	0			

----- WI CASH FLOW SUMMARY -----

YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%MINTAX	%	EXPENSE	INCOME		B.TAX	INV.	CASH	TAX	CASH	15.0%	CUM
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	M\$
ZERO											0	0	0	0	0	0
1990	2	0	220.00	54	3	6	7	28.06	44	178.16	194	-150	-6	-144	-141	-141
1991	1	0	190.00	38	6	17	6	31.22	26	127.42	0	26	-9	34	31	-110
1992	0	0	201.37	0	-3	-9987620	14	93435525.85	-11	-73323073.06	0	-11	-5	-1156	-40	-40
1993	5	2	157.25	284	49	17	39	21.40	196	108.71	0	196	96	110	74	-40
1994	5	2	157.25	270	44	16	37	21.81	188	109.77	0	188	82	107	63	22
1995	4	2	157.25	256	51	20	36	22.25	169	103.46	0	169	77	91	47	69
1996	4	2	157.25	244	46	19	35	22.70	162	104.78	0	162	73	89	39	108
1997	4	1	157.25	231	41	18	34	23.18	156	106.09	0	156	69	87	33	142
1998	4	1	157.25	220	37	17	33	23.69	150	107.39	0	150	65	85	28	170
1999	4	1	157.25	209	33	16	32	24.22	144	108.40	0	144	62	82	24	194
2000	3	1	157.25	198	29	15	31	24.79	138	109.23	0	138	58	79	20	214
2001	3	1	157.25	188	26	14	30	25.38	132	109.94	0	132	55	76	17	231
2002	3	1	157.25	179	24	13	30	26.00	126	110.55	0	126	52	74	14	245
2003	3	1	157.25	170	21	12	29	26.66	120	111.06	0	120	49	71	12	257
2004	3	1	157.25	161	19	12	28	27.35	114	111.47	0	114	47	68	10	267
SUBT		17		2703	427		422		1854		194	1660	756	904	267	
REM.		16		2584	221		1201		1162		0	1162	458	703	44	
TOTL		33		5287	648		1623		3015		194	2821	1214	1608	310	
15.0% DISC				1195	185		204		806		189	617	306	310		
% OF REV.				100	15		17		67		16	52	26	26		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 10:55:08
FILE: DALY5F

Case Notes

Evaluation Begins in 1990 9
Production Begins in 1990 9

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Consolidated Cases:

DALY5C	1.00	DALY5D	1.00	DALY5A	-1.00
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Case Parameters:

Probable

Production:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Resource allowance calculation turned off.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 10:55:11
FILE: DALY5F
REPORT: peepgip

===== INPUT DATA SUMMARY =====

O I L										G A S									
Year	Prod. Wells	Prod. Rate	Prod. Vol	WI Vol	New %	Oil Price	Oper Cost	Trans Cost	DRR	Prod Rate	Prod Vol	WI Vol	Shr %	New Price	Oper Cost	Bath OpCost	Plant/ Bath OpCost	Plant/ Bath OpCost	DRR
	#/d	E3m3	E3m3			\$/m3	\$/m3	\$/m3	%	E3m3/d	E6m3	E6m3	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr		%
1990	1.0	2	0.2	0.2	100	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1991	1.0	1	0.2	0.2	100	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1992	1.0	0	0.0	0.0	84	201.4	16.98	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1993	1.0	5	1.8	1.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1994	1.0	5	1.7	1.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1995	1.0	4	1.6	1.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1996	1.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1997	1.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1998	1.0	4	1.4	1.4	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
1999	1.0	4	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2000	1.0	3	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2001	1.0	3	1.2	1.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2002	1.0	3	1.1	1.1	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2003	1.0	3	1.1	1.1	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2004	1.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2005	1.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2006	1.0	3	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2007	1.0	2	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2008	1.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
2009	1.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0	0	0.00
=====																			
19.3			21.5	21.5							0.0	0.0						0	
16.0			12.0	12.0							0.0	0.0						0	
=====																			
35.3			33.5	33.5							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 10:55:31
FILE: DALY5F
REPORT: newbtax

===== WORKING INTEREST BEFORE TAX REPORT =====														
Year	Oil Oper Cost \$/m3	INITIAL CROWN/ MANUAL ROYALTY M\$	FINAL CROWN/ MANUAL ROYALTY M\$	ORR/ FRIED ROYALTY M\$	REVENUE AFTER ROYALTY	OTHER INC & ARTC M\$	TOTAL OPER COST M\$	MINERAL TAX M\$	OTHER EXP & NPI M\$	OPER INCOME M\$	TOTAL INTANG CAPITAL M\$	TOTAL TANG. CAPITAL M\$	TOTAL CAPITAL M\$	CASH FLOW BEFORE TAX M\$
											0	0	0	
1990	13.56	5	0	3	51	0	7	0	0	44	122	72	194	-150
1991	13.56	3	3	2	33	0	6	1	0	26	0	0	0	26
1992	16.98	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1993	13.56	18	18	15	251	0	39	16	0	196	0	0	0	196
1994	13.56	17	17	14	239	0	37	13	0	188	0	0	0	188
1995	13.56	27	27	14	216	0	36	11	0	169	0	0	0	169
1996	13.56	24	24	13	206	0	35	9	0	162	0	0	0	162
1997	13.56	22	22	12	197	0	34	7	0	156	0	0	0	156
1998	13.56	19	19	12	189	0	33	6	0	150	0	0	0	150
1999	13.56	17	17	11	181	0	32	5	0	144	0	0	0	144
2000	13.56	15	15	11	173	0	31	3	0	138	0	0	0	138
2001	13.56	14	14	10	165	0	30	3	0	132	0	0	0	132
2002	13.56	12	12	10	157	0	30	2	0	126	0	0	0	126
2003	13.56	11	11	9	150	0	29	1	0	120	0	0	0	120
2004	13.56	10	10	9	143	0	28	0	0	114	0	0	0	114
2005	13.56	9	9	8	136	0	27	0	0	109	0	0	0	109
2006	13.56	8	8	8	130	0	27	0	0	103	0	0	0	103
2007	13.56	7	7	7	124	0	26	0	0	98	0	0	0	98
2008	13.56	6	6	7	118	0	25	0	0	92	0	0	0	92
2009	13.56	6	6	7	112	0	25	0	0	87	0	0	0	87
19.3		247	242	182	2973	0	553	77	0	2343	122	72	194	2149
16.0		46	46	101	1742	0	1070	0	0	672	0	0	0	672
35.3		293	289	283	4715	0	1623	77	0	3015	122	72	194	2821

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version BB-11-1B
10/25/90 10:56:16
FILE: DALYSF
REPORT: peepat

===== WORKING INTEREST AFTER TAX DATA =====																
	Resorc	Resorc	Land&	Land&	Expl	Expl	Tang	Tang	Plant	Plant	Fed	Prov				
Year	Income	Allow	Dev	Dev	Bal	Bal	Bal	Bal	%Gath	%Gath	Taxbl	Fed	Taxbl	Prov	Inv	Total
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
1990	36	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6
1991	14	3	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9
1992	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5
1993	245	61	0	0	0	0	0	0	0	0	169	57	169	29	0	86
1994	232	58	0	0	0	0	0	0	0	0	160	54	160	27	0	82
1995	220	55	0	0	0	0	0	0	0	0	151	51	151	26	0	77
1996	208	52	0	0	0	0	0	0	0	0	143	49	143	24	0	73
1997	197	49	0	0	0	0	0	0	0	0	136	46	136	23	0	69
1998	187	47	0	0	0	0	0	0	0	0	128	44	128	22	0	65
1999	177	44	0	0	0	0	0	0	0	0	121	41	121	21	0	62
2000	167	42	0	0	0	0	0	0	0	0	115	39	115	19	0	58
2001	158	40	0	0	0	0	0	0	0	0	108	37	108	18	0	55
2002	149	37	0	0	0	0	0	0	0	0	102	35	102	17	0	52
2003	141	35	0	0	0	0	0	0	0	0	97	33	97	16	0	49
2004	133	33	0	0	0	0	0	0	0	0	91	31	91	16	0	47
2005	126	31	0	0	0	0	0	0	0	0	86	29	86	15	0	44
2006	119	30	0	0	0	0	0	0	0	0	81	28	81	14	0	42
2007	112	28	0	0	0	0	0	0	0	0	77	26	77	13	0	39
2008	106	26	0	0	0	0	0	0	0	0	72	25	72	12	0	37
2009	100	25	0	0	0	0	0	0	0	0	68	23	68	12	0	35
19.3	2815	704		62		0		29		0	1867	635	1867	317	0	952
16.0	820	205		0		0		0		0	514	175	514	87	0	262
35.3	3634	909		62		0		29		0	2381	809	2381	405	0	1214

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:04:42
FILE: DALY56

----- CASE DESCRIPTION -----
**INCREMENTAL WATERFLOOD RECOVERY - OLD OIL
CONSOLIDATION CASE**

----- NET PRESENT VALUES (M\$) -----
DISC RATE (%) 0.0 12.0 15.0 18.0 20.0 22.0

Royalty Regime: MANITOBA Gas Holiday: NO
Reserve type: Probable Oil Holiday: NO
Royalty Type: Crown Frhd Eval/Prod Start: 90- 9/90- 9
Sensitivity: NO Proj/Econ Life: 35.3/35.3 yrs

B.T. OPER INC	2997	960	788	662	595	538
B.T. CAP INV.	194	190	189	189	188	187
B.T. CASH FLOW	2803	769	599	473	407	351
A.T. OPER INC	1783	581	482	409	370	338
A.T. CAP INV.	194	190	189	189	188	187
A.T. CASH FLOW	1589	391	293	220	182	150

----- ECONOMIC INDICATORS -----

		B.TAX	A.TAX
ROR	- PCNT	55.5	40.2
PAYOUT PERIOD	- EVAL	3.1	3.6
	- CAPTL	2.9	3.4
UNDISC PIR	- \$/\$	14.46	8.20
15.0 PCT PIR	- \$/\$	3.16	1.55
12.0 PCT PIR	- \$/\$	4.05	2.06
NPV @ 15.0	- \$/M3	17.89	8.74
NPV @ 12.0	- \$/M3	22.98	11.68

----- PRODUCTS RECOVERY -----

		GROSS	WI	ROY	NET
OIL	E3m3	33	33	4	30
GAS-RAW	E6m3	0	0		
GAS-SALES	E6m3	0	0	0	0
ETHANE	E3m3	0	0	0	0
PROPANE	E3m3	0	0	0	0
BUTANE	E3m3	0	0	0	0
CONDENS.	E3m3	0	0	0	0
SULPHUR	E3t	0	0	0	0
OTHER	E3m3	0	0	0	0

----- COMPANY W.I. -----

	Init%	Avr%	Rev%
REVENUE	100.0	100.0	
FIELD CAP	100.0	100.0	
PLANT CAP			
GATH CAP			
DRR-GAS			
DRR-OIL			
ROYALTY	32.3	12.6	

----- WI CASH FLOW SUMMARY -----

YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%MINTAX	%	EXPENSE	INCOME		B.TAX	INV.	CASH	TAX	CASH	15.0%	CUM
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	M\$
ZERO											0	0	0	0	0	0
1990	2	0	220.00	54	17	32	7 28.06	30	120.78	194	-164	-6	-158	-154	-154	
1991	1	0	190.00	38	11	29	6 31.22	21	104.39	0	21	-9	30	27	-128	
1992	0	0	201.37	0	-3	-9987620	14 93435525.85	-11	-73323073.06	0	196	86	110	74	-58	
1993	5	2	157.25	284	49	17	39 21.40	196	108.71	0	188	82	107	63	5	
1994	5	2	157.25	270	44	16	37 21.81	188	109.77	0	169	77	91	47	51	
1995	4	2	157.25	256	51	20	36 22.25	169	103.46	0	162	73	89	39	91	
1996	4	2	157.25	244	46	19	35 22.70	162	104.78	0	156	69	87	33	124	
1997	4	1	157.25	231	41	18	34 23.18	150	107.39	0	150	65	85	28	152	
1998	4	1	157.25	220	37	17	33 23.69	144	108.40	0	138	58	79	20	196	
1999	4	1	157.25	209	33	16	32 24.22	132	109.94	0	132	55	76	17	213	
2000	3	1	157.25	198	29	15	31 24.79	126	110.55	0	126	52	74	14	227	
2001	3	1	157.25	188	26	14	30 25.38	120	111.06	0	120	49	71	12	239	
2002	3	1	157.25	179	24	13	29 26.66	114	111.47	0	114	47	68	10	249	
2003	3	1	157.25	170	21	12	28 27.35									
2004	3	1	157.25	161	19	12										
SUBT		17		2703	445		422	1835		194	1641	756	886	249		
REM.		16		2584	221		1201	1162		0	1162	458	703	44		
TOTL		33		5287	667		1623	2997		194	2803	1214	1589	293		
15.0% DISC				1195	203		204	788		189	599	306	293			
% OF REV.				100	17		17	66		16	50	26	24			

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:04:51
FILE: DALY56

Case Notes

Evaluation Begins in 1990 9
Production Begins in 1990 9

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Consolidated Cases:

DALY5B	1.00	DALY5D	1.00	DALY5A	-1.00
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Case Parameters:

Probable

Production:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Resource allowance calculation turned off.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 8B-11-18
10/25/90 11:04:54
FILE: DALY56
REPORT: peepogip

===== INPUT DATA SUMMARY =====

O I L										G A S									
Year	Prod Wells	Prod Rate m3/d	Prod Vol E3m3	WI		Oil Price \$/m3	Oper Cost \$/m3	Trans Cost \$/m3	ORR %	Prod Rate E3m3/d	Prod Vol E6m3	WI		Shr %	New Price \$/E3m	Oper Cost \$/E3m	Plant/ Bath		ORR %
				Vol E3m3	New %							Vol E6m3	Vol E6m3				OpCost \$/E3m3	OpCost M\$/Yr	
1990	1.0	2	0.2	0.2	0	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1991	1.0	1	0.2	0.2	-0	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1992	1.0	0	0.0	0.0	84	201.4	16.98	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1993	1.0	5	1.8	1.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1994	1.0	5	1.7	1.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1995	1.0	4	1.6	1.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1996	1.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1997	1.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1998	1.0	4	1.4	1.4	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1999	1.0	4	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2000	1.0	3	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2001	1.0	3	1.2	1.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2002	1.0	3	1.1	1.1	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2003	1.0	3	1.1	1.1	100	157.2	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2004	1.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2005	1.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2006	1.0	3	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2007	1.0	2	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2008	1.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2009	1.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
=====																			
19.3			21.5	21.5							0.0	0.0						0	
16.0			12.0	12.0							0.0	0.0						0	
=====																			
35.3			33.5	33.5							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:05:16
FILE: DALY56
REPORT: newbtax

===== WORKING INTEREST BEFORE TAX REPORT =====

Year	Oil Oper Cost \$/m3	INITIAL CROWN/ MANUAL ROYALTY M\$	FINAL CROWN/ MANUAL ROYALTY M\$	ORR/ FRIED ROYALTY M\$	REVENUE AFTER ROYALTY	OTHER INC & ARTC M\$	TOTAL OPER COST M\$	MINERAL TAX M\$	OTHER EXP & NPI M\$	OPER INCOME M\$	TOTAL INTANG CAPITAL M\$	TOTAL TANG. CAPITAL M\$	TOTAL CAPITAL M\$	CASH FLOW BEFORE TAX M\$
											0	0	0	
1990	13.56	9	9	3	42	0	7	6	0	30	122	72	194	-164
1991	13.56	6	6	2	31	0	6	3	0	21	0	0	0	21
1992	16.98	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1993	13.56	18	18	15	251	0	39	16	0	196	0	0	0	196
1994	13.56	17	17	14	239	0	37	13	0	188	0	0	0	188
1995	13.56	27	27	14	216	0	36	11	0	169	0	0	0	169
1996	13.56	24	24	13	206	0	35	9	0	162	0	0	0	162
1997	13.56	22	22	12	197	0	34	7	0	156	0	0	0	156
1998	13.56	19	19	12	189	0	33	6	0	150	0	0	0	150
1999	13.56	17	17	11	181	0	32	5	0	144	0	0	0	144
2000	13.56	15	15	11	173	0	31	3	0	138	0	0	0	138
2001	13.56	14	14	10	165	0	30	3	0	132	0	0	0	132
2002	13.56	12	12	10	157	0	30	2	0	126	0	0	0	126
2003	13.56	11	11	9	150	0	29	1	0	120	0	0	0	120
2004	13.56	10	10	9	143	0	28	0	0	114	0	0	0	114
2005	13.56	9	9	8	136	0	27	0	0	109	0	0	0	109
2006	13.56	8	8	8	130	0	27	0	0	103	0	0	0	103
2007	13.56	7	7	7	124	0	26	0	0	98	0	0	0	98
2008	13.56	6	6	7	118	0	25	0	0	92	0	0	0	92
2009	13.56	6	6	7	112	0	25	0	0	87	0	0	0	87
19.3		253	253	182	2962	0	553	84	0	2325	122	72	194	2131
16.0		46	46	101	1742	0	1070	0	0	672	0	0	0	672
35.3		300	300	283	4704	0	1623	84	0	2997	122	72	194	2803

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:06:02
FILE: DALY56
REPORT: peepat

===== WORKING INTEREST AFTER TAX DATA =====																	
	Resorc Income M\$	Resorc Allow M\$	Land& Dev Bal M\$	Land& Dev Depr M\$	Expl Bal M\$	Expl Depr M\$	Tang Bal M\$	Tang Depr M\$	Plant &Gath Bal M\$	Plant &Gath Depr M\$	Fed Taxbl Income M\$	Fed Tax M\$	Prov Taxbl Income M\$	Prov Tax M\$	Inv Credit M\$	Total Tax M\$	Cash Flow M\$
Year	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$

1990	36	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6	-158
1991	14	3	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9	30
1992	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1993	245	61	0	0	0	0	0	0	0	0	169	57	169	29	0	86	110
1994	232	58	0	0	0	0	0	0	0	0	160	54	160	27	0	82	107
1995	220	55	0	0	0	0	0	0	0	0	151	51	151	26	0	77	91
1996	208	52	0	0	0	0	0	0	0	0	143	49	143	24	0	73	89
1997	197	49	0	0	0	0	0	0	0	0	136	46	136	23	0	69	87
1998	187	47	0	0	0	0	0	0	0	0	128	44	128	22	0	65	85
1999	177	44	0	0	0	0	0	0	0	0	121	41	121	21	0	62	82
2000	167	42	0	0	0	0	0	0	0	0	115	39	115	19	0	58	79
2001	158	40	0	0	0	0	0	0	0	0	108	37	108	18	0	55	76
2002	149	37	0	0	0	0	0	0	0	0	102	35	102	17	0	52	74
2003	141	35	0	0	0	0	0	0	0	0	97	33	97	16	0	49	71
2004	133	33	0	0	0	0	0	0	0	0	91	31	91	16	0	47	68
2005	126	31	0	0	0	0	0	0	0	0	86	29	86	15	0	44	65
2006	119	30	0	0	0	0	0	0	0	0	81	28	81	14	0	42	62
2007	112	28	0	0	0	0	0	0	0	0	77	26	77	13	0	39	59
2008	106	26	0	0	0	0	0	0	0	0	72	25	72	12	0	37	56
2009	100	25	0	0	0	0	0	0	0	0	68	23	68	12	0	35	53

19.3	2815	704		62		0		29		0	1867	635	1867	317	0	952	1179
16.0	820	205		0		0		0		0	514	175	514	87	0	262	410

35.3	3634	909		62		0		29		0	2381	809	2381	405	0	1214	1589

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:16:15
FILE: DALY5Z

----- CASE DESCRIPTION -----

NO INCREMENTAL WATERFLOOD RECOVERY - NEW OIL
CONSOLIDATION

----- NET PRESENT VALUES (M\$) -----

DISC RATE (%) 0.0 12.0 15.0 18.0 20.0 22.0

B.T. OPER INC 10 33 36 38 39 40
B.T. CAP INV. 194 190 189 189 188 187
B.T. CASH FLOW -184 -157 -153 -151 -149 -147

Royalty Regime: MANITOBA Gas Holiday: NO
Reserve type: Probable Oil Holiday: NO
Royalty Type: Eval/Prod Start: 90- 9/90- 9
Sensitivity: NO Proj/Econ Life: 23.3/23.3 yrs

A.T. OPER INC 50 62 63 64 64 65
A.T. CAP INV. 194 190 189 189 188 187
A.T. CASH FLOW -143 -128 -126 -125 -124 -123

----- ECONOMIC INDICATORS -----

		B.TAX	A.TAX
RDR	- PCNT	800.0	800.0
PAYOUT PERIOD	- EVAL	0.0	0.0
	- CAPTL	0.0	0.0
UNDISC PIR	- \$/\$	-0.95	-0.74
15.0 PCT PIR	- \$/\$	-0.81	-0.67
12.0 PCT PIR	- \$/\$	-0.82	-0.67
NPV @ 15.0	- \$/E3M3	0.00	0.00
NPV @ 12.0	- \$/E3M3	0.00	0.00

----- PRODUCTS RECOVERY -----

		GROSS	WI	ROY	NET
OIL	E3m3	-1	-1	-0	-1
GAS-RAW	E6m3	0	0		
GAS-SALES	E6m3	0	0	0	0
ETHANE	E3m3	0	0	0	0
PROPANE	E3m3	0	0	0	0
BUTANE	E3m3	0	0	0	0
CONDENS.	E3m3	0	0	0	0
SULPHUR	E3t	0	0	0	0
OTHER	E3m3	0	0	0	0

----- COMPANY W.I. -----

	Init%	Avr%	Rev%
REVENUE	100.0	-128.9	
FIELD CAP	100.0	100.0	
PLANT CAP			
GATH CAP			
ORR-GAS			
ORR-OIL			
ROYALTY	6.4	10.0	

----- WI CASH FLOW SUMMARY -----

YEAR	-----GAS PRODUCTION----			TOTAL	--ROYALTY--		--OPERATING--		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	-----AFTER TAX-----		
	RATE	VOL.	PRICE	REV.	%MINTAX		EXPENSE	INCOME	B.TAX	INV.	CASH	TAX	CASH	15.0%	CUM	
	E3M3/D	E6m3	\$/B3	M\$	M\$	%	M\$ \$/E3M3	M\$	\$/E3M3	M\$	M\$	M\$	M\$	M\$	M\$	
ZERO											0	0	0	0	0	
1990	0	0	0.00	55	4	6	7	0.00	45	0.00	194	-149	-6	-143	-140	
1991	0	0	0.00	39	6	16	6	0.00	26	0.00	0	26	-9	35	31	
1992	0	0	0.00	0	-3	-9987620	14	0.00	-11	0.00	0	-11	-5	-6	-4	
1993	0	0	0.00	0	-3	0	14	0.00	-11	0.00	0	-11	-5	-6	-117	
1994	0	0	0.00	0	-2	0	14	0.00	-12	0.00	0	-12	-5	-6	-121	
1995	0	0	0.00	0	0	0	14	0.00	-14	0.00	0	-14	-5	-9	-126	
1996	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
1997	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
1998	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
1999	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
2000	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
2001	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
2002	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
2003	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
2004	0	0	0.00	0	0	0	-0	0.00	0	0.00	0	0	0	0	-126	
SUBT	0			94	2		70		23		194	-171	-36	-135	-126	
REM.	0			-215	-14		-189		-13		0	-13	-4	-8	-0	
TOTL	0			-121	-12		-119		10		194	-184	-40	-143	-126	
15.0% DISC				78	3		39		36		189	-153	-27	-126		
% OF REV.				100	4		50		46		242	-196	-35	-161		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:16:24
FILE: DALY5Z

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 9

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Consolidated Cases:

DALY5C	1.00	DALY5E	1.00	DALY5A	-1.00
--------	------	--------	------	--------	-------

Case Parameters:

Probable

Production:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Capital:

Tax Data:

Resource allowance calculation turned off.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:16:26
FILE: DALY5Z
REPORT: peepogip

===== INPUT DATA SUMMARY =====

----- O I L ----- G A S -----

Year	Prod. Wells	Prod Rate	Prod Vol	WI Vol	New %	Oil Price	Oper Cost	Trans Cost	ORR	Prod Rate	Prod Vol	WI Vol	Shr %	New %	Price	Oper Cost	Bath OpCost	Plant/ Bath OpCost	Plant/ Bath M\$/Yr	ORR
		m3/d	E3m3	E3m3	%	\$/m3	\$/m3	\$/m3	%	E3m3/d	E6m3	E6m3	%	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr	%	
1990	1.0	2	0.2	0.2	100	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1991	1.0	1	0.2	0.2	100	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1992	1.0	0	0.0	0.0	84	201.4	16.98	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1993	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1994	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1995	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1996	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1997	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1998	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
1999	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2000	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2001	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2002	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2003	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2004	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2005	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2006	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2007	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2008	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
2009	1.0	0	0.0	0.0	0	157.2	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00	
=====																				
19.3			0.5	0.5							0.0	0.0							0	
4.0			-1.4	-1.4							0.0	0.0							0	
=====																				
23.3			-0.9	-0.9							0.0	0.0							0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:16:48
FILE: DALY5Z
REPORT: newbtax

===== WORKING INTEREST BEFORE TAX REPORT =====														
Year	Oil Oper Cost \$/m3	INITIAL CROWN/ MANUAL ROYALTY M\$	FINAL CROWN/ MANUAL ROYALTY M\$	ORR/ FRHLD ROYALTY M\$	REVENUE AFTER ROYALTY	OTHER INC & ARTC M\$	TOTAL OPER COST M\$	MINERAL TAX M\$	OTHER EXP & NPI M\$	OPER INCOME M\$	TOTAL INTANG CAPITAL M\$	TOTAL TANG. CAPITAL M\$	TOTAL CAPITAL M\$	CASH FLOW BEFORE TAX M\$
											0	0	0	
1990	13.56	5	0	3	52	0	7	0	0	45	122	72	194	-149
1991	13.56	3	3	2	34	0	6	1	0	26	0	0	0	26
1992	16.98	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1993	0.00	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1994	0.00	-2	-2	0	2	0	14	0	0	-12	0	0	0	-12
1995	0.00	0	0	0	0	0	14	0	0	-14	0	0	0	-14
1996	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1997	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1998	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1999	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2000	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2001	0.00	0	0	0	-0	0	-0	0	0	0	0	0	0	0
2002	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2003	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2004	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2005	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2006	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2007	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2008	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2009	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
19.3		-0	-5	5	94	0	70	1	0	23	122	72	194	-171
4.0		-2	-2	-12	-201	0	-189	0	0	-13	0	0	0	-13
23.3		-2	-7	-6	-108	0	-119	1	0	10	122	72	194	-184

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:17:33
FILE: DALY5Z
REPORT: peepat

===== WORKING INTEREST AFTER TAX DATA =====																	
Year	Resorc Income M\$	Resorc Allow M\$	Land& Dev Bal M\$	Land& Dev Depr M\$	Expl Bal M\$	Expl Depr M\$	Tang Bal M\$	Tang Depr M\$	Plant %Gath Bal M\$	Plant %Gath Depr M\$	Fed Taxbl Income M\$	Fed Tax M\$	Prov Taxbl Income M\$	Prov Tax M\$	Inv Credit M\$	Total Tax M\$	Cash Flow M\$
1990	37	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6	-143
1991	14	4	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9	35
1992	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1993	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1994	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1995	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-9
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
=====																	
19.3	-5	-1		62		0		29		0	-71	-24	-71	-12	0	-36	-135
4.0	-27	-7		0		0		0		0	-8	-3	-8	-1	0	-4	-8
=====																	
23.3	-31	-8		62		0		29		0	-79	-27	-79	-13	0	-40	-143

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:10:04
FILE: DALY5Y

----- CASE DESCRIPTION -----

NO INCREMENTAL WATERFLOOD RECOVERY - *old oil*
CONSOLIDATION

----- NET PRESENT VALUES (M\$) -----

DISC RATE (%)	0.0	12.0	15.0	18.0	20.0	22.0
B.T. OPER INC	-9	15	18	20	22	23
B.T. CAP INV.	194	190	189	189	188	187
B.T. CASH FLOW	-202	-175	-171	-168	-166	-165

Royalty Regime: MANITOBA Gas Holiday: NO
Reserve type: Probable Oil Holiday: NO
Royalty Type: Crown Eval/Prod Start: 90- 9/90- 9
Sensitivity: NO Proj/Econ Life: 23.3/23.3 yrs

A.T. OPER INC	32	44	46	46	47	47
A.T. CAP INV.	194	190	189	189	188	187
A.T. CASH FLOW	-162	-146	-144	-142	-141	-140

----- ECONOMIC INDICATORS -----

		B.TAX	A.TAX
ROR	- PCNT	0.0	800.0
PAYOUT PERIOD	- EVAL	0.0	0.0
	- CAPTL	0.0	0.0
UNDISC PIR	- \$/\$	-1.04	-0.84
15.0 PCT PIR	- \$/\$	-0.90	-0.76
12.0 PCT PIR	- \$/\$	-0.92	-0.77
NPV @ 15.0	- \$/E3M3	0.00	0.00
NPV @ 12.0	- \$/E3M3	0.00	0.00

----- PRODUCTS RECOVERY -----

		GROSS	WI	ROY	NET
OIL	E3m3	-1	-1	-0	-1
GAS-RAW	E6m3	0	0		
GAS-SALES	E6m3	0	0	0	0
ETHANE	E3m3	0	0	0	0
PROPANE	E3m3	0	0	0	0
BUTANE	E3m3	0	0	0	0
CONDENS.	E3m3	0	0	0	0
SULPHUR	E3t	0	0	0	0
OTHER	E3m3	0	0	0	0

----- COMPANY W.I. -----

	Init%	Avr%	Rev%
REVENUE	100.0	-128.9	
FIELD CAP	100.0	100.0	
PLANT CAP			
GATH CAP			
ORR-GAS			
ORR-OIL			
ROYALTY	31.9	-5.3	

----- WI CASH FLOW SUMMARY -----

YEAR	-----GAS PRODUCTION----			TOTAL	--ROYALTY--		--OPERATING--		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	-----AFTER TAX-----		
	RATE	VOL.	PRICE	REV.	&MINTAX		EXPENSE	INCOME	B.TAX	INV.	CASH	TAX	CASH	15.0%	CUM	
	E3M3/D	E6m3	\$/GJ	M\$	M\$	%	M\$ \$/E3M3	M\$	\$/E3M3	M\$	M\$	M\$	M\$	M\$	M\$	
ZERO											0	0	0	0	0	
1990	0	0	0.00	55	18	32	7 0.00	30	0.00	194	-163	-6	-157	-154	-154	
1991	0	0	0.00	39	11	28	6 0.00	22	0.00	0	22	-9	30	27	-127	
1992	0	0	0.00	0	-3	-9987620	14 0.00	-11	0.00	0	-11	-5	-6	-4	-131	
1993	0	0	0.00	0	-3	0	14 0.00	-11	0.00	0	-11	-5	-6	-4	-135	
1994	0	0	0.00	0	-2	0	14 0.00	-12	0.00	0	-12	-5	-6	-4	-139	
1995	0	0	0.00	0	0	0	14 0.00	-14	0.00	0	-14	-5	-9	-4	-143	
1996	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
1997	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
1998	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
1999	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
2000	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
2001	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
2002	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
2003	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
2004	0	0	0.00	0	0	0	-0 0.00	0	0.00	0	0	0	0	0	-143	
SUBT	0			94	20		70	4		194	-190	-36	-154	-143		
REM.	0			-215	-14		-189	-13		0	-13	-4	-8	-0		
TOTL	0			-121	6		-119	-9		194	-202	-40	-162	-144		
15.0% DISC				78	21		39	18		189	-171	-27	-144			
% OF REV.				100	26		50	23		242	-219	-35	-184			

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:10:13
FILE: DALYSY

Case Notes

=====

Evaluation Begins in 1990 9

Production Begins in 1990 9

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Consolidated Cases:

DALY58	1.00	DALY5E	1.00	DALY5A	-1.00
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Case Parameters:

Probable

Production:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Capital:

Tax Data:

Resource allowance calculation turned off.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:10:15
FILE: DALY5Y
REPORT: peepogip

===== INPUT DATA SUMMARY =====

----- O I L -----

----- G A S -----

Year	Prod.	Prod	Prod	WI		Oil	Oper	Trans		Prod	Prod	WI				Oper	Plant/	Plant/	
	Wells	Rate	Vol	Vol	New	Price	Cost	Cost	ORR	Rate	Vol	Vol	Shr	New	Price	Cost	OpCost	OpCost	ORR
	m3/d	E3m3	E3m3	%	%	\$/m3	\$/m3	\$/m3	%	E3m3/d	E6m3	E6m3	%	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr	%
1990	1.0	2	0.2	0.2	2	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1991	1.0	1	0.2	0.2	3	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1992	1.0	0	0.0	0.0	84	201.4	16.98	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1993	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1994	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1995	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1996	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1997	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1998	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
1999	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2000	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2001	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2002	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2003	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2004	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2005	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2006	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2007	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2008	1.0	0	0.0	0.0	0	157.3	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00
2009	1.0	0	0.0	0.0	0	157.2	0.00	0.00	0.00	0.000	0.0	0.0	0.0	0	0.00	0.00	0.00	0	0.00

19.3	0.5	0.5	0.0	0.0	0
4.0	-1.4	-1.4	0.0	0.0	0
23.3	-0.9	-0.9	0.0	0.0	0

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:10:37
FILE: DALY5Y
REPORT: newbtax

===== WORKING INTEREST BEFORE TAX REPORT =====														
	Oil Oper Cost \$/m3	INITIAL CROWN/ MANUAL ROYALTY M\$	FINAL CROWN/ MANUAL ROYALTY M\$	DRR/ FRHLD ROYALTY M\$	REVENUE AFTER ROYALTY	OTHER INC & ARTC M\$	TOTAL OPER COST M\$	MINERAL TAX M\$	OTHER EXP & NPI M\$	OPER INCOME M\$	TOTAL INTANG CAPITAL M\$	TOTAL TANG. CAPITAL M\$	TOTAL CAPITAL M\$	CASH FLOW BEFORE TAX M\$
Year														
											0	0	0	
1990	13.56	9	9	3	43	0	7	6	0	30	122	72	194	-163
1991	13.56	6	6	2	31	0	6	3	0	22	0	0	0	22
1992	16.98	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1993	0.00	-3	-3	0	3	0	14	0	0	-11	0	0	0	-11
1994	0.00	-2	-2	0	2	0	14	0	0	-12	0	0	0	-12
1995	0.00	0	0	0	0	0	14	0	0	-14	0	0	0	-14
1996	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1997	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1998	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
1999	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2000	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2001	0.00	0	0	0	-0	0	-0	0	0	0	0	0	0	0
2002	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2003	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2004	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2005	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2006	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2007	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2008	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
2009	0.00	0	0	0	0	0	-0	0	0	0	0	0	0	0
=====														
19.3		6	6	5	83	0	70	9	0	4	122	72	194	-190
4.0		-2	-2	-12	-201	0	-189	0	0	-13	0	0	0	-13
=====														
23.3		4	4	-6	-119	0	-119	9	0	-9	122	72	194	-202

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 11:11:22
FILE: DALYSY
REPORT: peepat

===== WORKING INTEREST AFTER TAX DATA =====

Year	Resorc Income M\$	Resorc Allow M\$	Land& Dev Bal M\$	Land& Dev Depr M\$	Expl Bal M\$	Expl Depr M\$	Tang Bal M\$	Tang Depr M\$	Plant %Gath Bal M\$	Plant %Gath Depr M\$	Fed Taxbl Income M\$	Fed Tax M\$	Prov Taxbl Income M\$	Prov Tax M\$	Inv Credit M\$	Total Tax M\$	Cash Flow M\$
1990	37	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6	-157
1991	14	4	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9	30
1992	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1993	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1994	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-6
1995	-14	-4	0	0	0	0	0	0	0	0	-11	-4	-11	-2	0	-5	-9
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
=====																	
19.3	-5	-1		62		0		29		0	-71	-24	-71	-12	0	-36	-154
4.0	-27	-7		0		0		0		0	-8	-3	-8	-1	0	-4	-8
=====																	
23.3	-31	-8		62		0		29		0	-79	-27	-79	-13	0	-40	-162

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 14:43:02
FILE: DALYSA

CASE DESCRIPTION				NET PRESENT VALUES (M\$)						
DALY UNIT NO. 5 - BASE CASE				DISC RATE (%)	0.0	12.0	15.0	18.0	20.0	22.0
				B.T. OPER INC	1493	830	748	682	645	613
				B.T. CAP INV.	0	0	0	0	0	0
				B.T. CASH FLOW	1493	830	748	682	645	613
Royalty Regime: MANITOBA	Gas Holidays: NO									
Reserve type: Probable	Oil Holidays: NO									
Royalty Type: Crown Frhd	Eval/Prod Start: 90- 9/90- 9									
Sensitivity: NO	Proj/Econ Life: 49.3/23.3 yrs									
				A.T. OPER INC	912	504	455	414	392	372
				A.T. CAP INV.	0	0	0	0	0	0
				A.T. CASH FLOW	912	504	455	414	392	372

ECONOMIC INDICATORS				PRODUCTS RECOVERY						COMPANY W.I.		
		B.TAX	A.TAX			GROSS	MI	ROY	NET	Init%	Avg%	Rev%
ROR	- PCNT	0.0	0.0	OIL	E3m3	21	21	2	19	REVENUE	100.0	96.5
PAYOUT PERIOD	- EVAL	0.0	0.0	BAG-RAW	E6m3	0	0			FIELD CAP		
	- CAPTL	0.0	0.0	BAG-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC PIR	- %/%	0.00	0.00	ETHANE	E3m3	0	0	0	0	BATH CAP		
15.0 PCT PIR	- %/%	0.00	0.00	PROPANE	E3m3	0	0	0	0			
12.0 PCT PIR	- %/%	0.00	0.00	BUTANE	E3m3	0	0	0	0	ORR-BAG		
NPV @ 15.0	- %/MS	35.84	21.78	CONDENS.	E3m3	0	0	0	0	ORR-OIL		
NPV @ 12.0	- %/MS	39.75	24.17	SULPHUR	E3t	0	0	0	0			
				OTHER	E3m3	0	0	0	0	ROYALTY	9.4	7.9

MI CASH FLOW SUMMARY																
YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%INTAX		EXPENSE	INCOME	B.TAX	INV.	CASH	TAX	CASH	15.0%	CUM	
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	
ZERO											0	0	0	0	0	
1990	4	1	220.00	119	11	9	26	48.44	82	150.94	0	82	32	50	48	
1991	4	2	190.00	297	27	9	78	49.83	192	122.66	0	192	76	116	152	
1992	4	1	157.25	232	21	9	77	52.02	134	91.08	0	134	53	81	215	
1993	4	1	157.25	219	19	9	76	54.35	124	89.08	0	124	49	75	265	
1994	4	1	157.25	206	18	9	75	56.81	114	86.92	0	114	45	69	306	
1995	3	1	157.25	195	16	8	74	59.43	105	84.60	0	105	41	64	338	
1996	3	1	157.25	183	15	8	73	62.20	96	82.10	0	96	37	58	364	
1997	3	1	157.25	173	14	8	72	65.14	87	79.42	0	87	34	53	385	
1998	3	1	157.25	163	13	8	71	68.26	79	76.55	0	79	31	49	401	
1999	3	1	157.25	154	12	8	70	71.56	72	73.47	0	72	28	44	414	
2000	3	1	157.25	145	11	8	69	75.07	65	70.18	0	65	25	40	424	
2001	2	1	157.25	137	10	8	69	78.79	58	66.67	0	58	22	36	431	
2002	2	1	157.25	129	10	7	68	82.73	52	62.92	0	52	20	32	438	
2003	2	1	157.25	122	9	7	67	86.91	46	58.92	0	46	17	28	442	
2004	2	1	157.25	115	8	7	67	91.34	40	54.66	0	40	15	25	446	
SUBT		16		2589	215		1029		1345		0	1345	526	819	446	
REM.		5		779	52		378		148		0	148	56	93	9	
TOTL		21		3367	267		1607		1493		0	1493	581	912	455	
15.0% DISC				1370	117		505		748		0	748	293	454		
% OF REV.				100	9		37		55		0	55	21	33		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version BB-11-18
10/23/90 14:43:15
FILE: DALY5A

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 9

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Case Parameters:

Probable

Productions:

Oil Exponential Decline ---- Starting in 1990 : Ini Rate 4.5 : Final Rate 0.1 : Total Volume 27.5 : Decline Pcnt 5.70

Royalties:

Alberta par price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 14:43:18
FILE: DALY5A
REPORT: pwpoglp

***** INPUT DATA SUMMARY *****

O I L										G A S									
Year	Well	Prod	Prod	WI		Oil	Oper	Trans		Prod	Prod	WI				Oper	Bath	Bath	
	Rate	Vol	Vol	New	Price	Cost	Cost	ORR		Rate	Vol	Vol	Bhr	New	Price	Cost	OpCost	OpCost	ORR
	m3/d	E3m3	E3m3	%	\$/m3	\$/m3	\$/m3	%		E3m3/d	E6m3	E6m3	%	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr	%

1990	4.0	4	0.5	0.5	100	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1991	4.0	4	1.6	1.6	100	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1992	4.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1993	4.0	4	1.4	1.4	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1994	4.0	4	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1995	4.0	3	1.2	1.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1996	4.0	3	1.2	1.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1997	4.0	3	1.1	1.1	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1998	4.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1999	4.0	3	1.0	1.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2000	4.0	3	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2001	4.0	2	0.9	0.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2002	4.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2003	4.0	2	0.8	0.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2004	4.0	2	0.7	0.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2005	4.0	2	0.7	0.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2006	4.0	2	0.6	0.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2007	4.0	2	0.6	0.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2008	4.0	2	0.6	0.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2009	4.0	1	0.5	0.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00

19.3			19.0	19.0							0.0	0.0						0	
4.0			1.9	1.9							0.0	0.0						0	

23.3			20.9	20.9							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 14:44:15
FILE: DALY5A
REPORT: newbtax

***** WORKING INTEREST BEFORE TAX REPORT *****														
	INITIAL	FINAL												CASH
	D11	CROWN/	CROWN/	DRR/	REVENUE	OTHER	TOTAL		OTHER		TOTAL	TOTAL		FLOW
	Oper	MANUAL	MANUAL	FRHLD	AFTER	INC &	OPER	MINERAL	EXP &	OPER	INTANG	TANG.	TOTAL	BEFORE
	Cost	ROYALTY	ROYALTY	ROYALTY	ROYALTY	ARTC	COST	TAX	NPI	INCOME	CAPITAL	CAPITAL	CAPITAL	TAX
Year	\$/m3	M\$	M\$	M\$		M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
											0	0	0	
1990	13.56	5	5	6	108	0	26	0	0	82	0	0	0	82
1991	13.56	11	11	16	270	0	78	0	0	192	0	0	0	192
1992	13.56	8	8	12	211	0	77	0	0	134	0	0	0	134
1993	13.56	8	8	12	200	0	76	0	0	124	0	0	0	124
1994	13.56	7	7	11	189	0	75	0	0	114	0	0	0	114
1995	13.56	6	6	10	178	0	74	0	0	105	0	0	0	105
1996	13.56	5	5	10	168	0	73	0	0	96	0	0	0	96
1997	13.56	5	5	9	159	0	72	0	0	87	0	0	0	87
1998	13.56	4	4	9	150	0	71	0	0	79	0	0	0	79
1999	13.56	4	4	8	142	0	70	0	0	72	0	0	0	72
2000	13.56	3	3	8	134	0	69	0	0	65	0	0	0	65
2001	13.56	3	3	7	127	0	69	0	0	58	0	0	0	58
2002	13.56	3	3	7	119	0	68	0	0	52	0	0	0	52
2003	13.56	2	2	7	113	0	67	0	0	46	0	0	0	46
2004	13.56	2	2	6	106	0	67	0	0	40	0	0	0	40
2005	13.56	2	2	6	101	0	66	0	0	34	0	0	0	34
2006	13.56	2	2	5	95	0	66	0	0	29	0	0	0	29
2007	13.56	1	1	5	90	0	65	0	0	25	0	0	0	25
2008	13.56	1	1	5	85	0	65	0	0	20	0	0	0	20
2009	13.56	1	1	5	80	0	64	0	0	16	0	0	0	16
19.3		83	83	164	2823	0	1354	0	0	1469	0	0	0	1469
4.0		3	3	16	277	0	252	0	0	24	0	0	0	24
23.3		87	87	180	3100	0	1607	0	0	1493	0	0	0	1493

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18
 10/23/90 14:46:01
 FILE: DALY5A
 REPORT: psspat

***** WORKING INTEREST AFTER TAX DATA *****																	
Year	Resorc	Resorc	Land&	Land&	Expl	Expl	Tang	Tang	Plant	Plant	Fed	Prov					
	Income	Allow	Dev	Dev	Sal	Depr	Sal	Depr	Sal	Depr	Taxbl	Fed	Taxbl	Prov	Inv	Total	Cash
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	Income	Tax	Income	Tax	Credit	Tax	Flow
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1990	93	23	0	0	0	0	0	0	0	0	63	22	63	11	0	32	50
1991	219	55	0	0	0	0	0	0	0	0	149	50	149	25	0	76	116
1992	155	39	0	0	0	0	0	0	0	0	104	35	104	18	0	53	81
1993	143	36	0	0	0	0	0	0	0	0	96	33	96	16	0	49	75
1994	132	33	0	0	0	0	0	0	0	0	88	30	88	15	0	45	69
1995	121	30	0	0	0	0	0	0	0	0	80	27	80	14	0	41	64
1996	111	28	0	0	0	0	0	0	0	0	73	25	73	12	0	37	58
1997	101	25	0	0	0	0	0	0	0	0	67	23	67	11	0	34	53
1998	92	23	0	0	0	0	0	0	0	0	61	21	61	10	0	31	49
1999	84	21	0	0	0	0	0	0	0	0	55	19	55	9	0	28	44
2000	76	19	0	0	0	0	0	0	0	0	49	17	49	8	0	25	40
2001	68	17	0	0	0	0	0	0	0	0	44	15	44	7	0	22	36
2002	61	15	0	0	0	0	0	0	0	0	39	13	39	7	0	20	32
2003	54	14	0	0	0	0	0	0	0	0	34	12	34	6	0	17	28
2004	48	12	0	0	0	0	0	0	0	0	30	10	30	5	0	15	25
2005	42	11	0	0	0	0	0	0	0	0	26	9	26	4	0	13	21
2006	36	9	0	0	0	0	0	0	0	0	22	7	22	4	0	11	18
2007	31	8	0	0	0	0	0	0	0	0	18	6	18	3	0	9	15
2008	26	7	0	0	0	0	0	0	0	0	15	5	15	3	0	8	12
2009	21	5	0	0	0	0	0	0	0	0	11	4	11	2	0	6	10
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
19.3	1717	429	0	0	0	0	0	0	0	0	1123	382	1123	191	0	573	896
4.0	44	11	0	0	0	0	0	0	0	0	17	6	17	3	0	9	16
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
23.3	1760	440	0	0	0	0	0	0	0	0	1140	388	1140	194	0	581	912

OIL PRODUCTION										OpCosts	
Year	No. Well	Prod Mnth	Rate m3/D	Vol E3m3	% New	Price \$/m3	ORR %	OpCost \$/m3	Truck \$/m3	\$/M/M	M\$/Yr
1990	4.0	4.0	4.5	0.5	100	220.00	0.00	13.56	0.00	1182	0
1991	4.0	12.0	4.3	1.6	100	190.00	0.00	13.56	0.00	1182	0
1992	4.0	12.0	4.0	1.5	100	157.25	0.00	13.56	0.00	1477	0
1993	4.0	12.0	8.8	3.2	100	157.25	0.00	13.56	0.00	1477	0
1994	4.0	12.0	8.3	3.0	100	157.25	0.00	13.56	0.00	1477	0
1995	4.0	12.0	7.9	2.9	100	157.25	0.00	13.56	0.00	1477	0
1996	4.0	12.0	7.4	2.7	100	157.25	0.00	13.56	0.00	1477	0
1997	4.0	12.0	7.0	2.6	100	157.25	0.00	13.56	0.00	1477	0
1998	4.0	12.0	6.7	2.4	100	157.25	0.00	13.56	0.00	1477	0
1999	4.0	12.0	6.3	2.3	100	157.25	0.00	13.56	0.00	1477	0
2000	4.0	12.0	6.0	2.2	100	157.25	0.00	13.56	0.00	1477	0
2001	4.0	12.0	5.7	2.1	100	157.25	0.00	13.56	0.00	1477	0
2002	4.0	12.0	5.4	2.0	100	157.25	0.00	13.56	0.00	1477	0
2003	4.0	12.0	5.1	1.9	100	157.25	0.00	13.56	0.00	1477	0
2004	4.0	12.0	4.8	1.8	100	157.25	0.00	13.56	0.00	1477	0

49.3 Yrs 63.4 Net

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Prdcts 4Price 5Decln 6ORR 7Other 8Escite 9rn 10Scrn

Revenue Crown Frhld Man.						CAPITAL INVESTMENT					
Year	M.I. %	Split %	Split %	Roy. %	NPI %	M.I. %	Land M\$	Expl M\$	Devel M\$	Tang M\$	Other M\$
1990	(Undiscounted capital investment)						0	0	0	0	0
1990	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1991	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1992	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1993	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1994	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1995	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1996	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1997	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1998	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1999	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2000	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2001	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2002	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2003	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2004	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0

Resrc

12.5 %

Depreciation

10 100 30 30 0

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Royalty 4Holiday 5JPF 6Capitl 7Revert 8Escite 9rn 10Scrn

PETROLEUM ECONOMICS EVALUATION PROGRAM

XI Consultants Ltd.

Version 88-11-18

10/23/90 15:38:06

FILE: DALYSD

CASE DESCRIPTION		NET PRESENT VALUES (M\$)					
DALY UNIT NO. 5 - WATERFLOOD CASE - INCREMENTAL RECOVERY (EXCLUDING 9D-28)		DISC RATE (%)	0.0	12.0	15.0	18.0	20.0 22.0
		B.T. OPER INC	4439	1741	1489	1297	1193 1105
		B.T. CAP INV.	0	0	0	0	0 0
		B.T. CASH FLOW	4439	1741	1489	1297	1193 1105

Royalty Regime: MANITOBA Gas Holidays: NO

Resrc: Probable Oil Holiday: NO

B.T. OPER INC 2429 1023 875 762 702 650

Royalty Type: Crown	Frnd	Eval/Prod Start: 90-9/90-9	A.T. CAP INV.	0	0	0	0	0	0
Sensitivity: NO		Proj/Econ Life: 49.3/35.3 yrs	A.T. CASH FLOW	2629	1023	875	762	702	650

ECONOMIC INDICATORS				PRODUCTS RECOVERY						COMPANY W.I.		
		B. TAX	A. TAX			BROBB	WI	RDY	NET		Init%	Avr%
ROR	- PCNT	0.0	0.0	OIL	E3m3	54	54	5	49	REVENUE	100.0	98.1
PAYOUT PERIOD	- EVAL	0.0	0.0	BAB-RAW	E6m3	0	0			FIELD CAP		
	- CAPTL	0.0	0.0	BAB-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC PIR	- \$/\$	0.00	0.00	ETHANE	E3m3	0	0	0	0	BATH CAP		
15.0 PCT PIR	- \$/\$	0.00	0.00	PROPANE	E3m3	0	0	0	0			
12.0 PCT PIR	- \$/\$	0.00	0.00	BUTANE	E3m3	0	0	0	0	ORR-BAB		
NPV @ 15.0	- \$/M3	27.62	16.23	CONDENS.	E3m3	0	0	0	0	ORR-OIL		
NPV @ 12.0	- \$/M3	32.30	18.99	SULPHUR	E3t	0	0	0	0			
				OTHER	E3m3	0	0	0	0	ROYALTY	9.4	10.6

WI CASH FLOW SUMMARY																
YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B. TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%MINTAX		EXPENSE	INCOME		B. TAX	INV.	CASH	TAX	CASH	15.0%	CUM
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	M\$
ZERO											0	0	0	0	0	0
1990	4	1	220.00	119	11	9	26	48.44	82	150.94	0	82	32	50	48	48
1991	4	2	190.00	297	27	9	78	49.83	192	122.66	0	192	76	116	103	152
1992	4	1	157.25	232	18	8	91	61.62	123	83.55	0	123	48	76	59	210
1993	9	3	157.25	503	68	14	114	35.73	320	100.17	0	320	135	185	125	335
1994	8	3	157.25	476	62	13	112	36.98	302	99.87	0	302	126	176	103	438
1995	8	3	157.25	451	68	15	110	38.29	273	95.32	0	273	118	155	79	517
1996	7	3	157.25	427	61	14	108	39.67	258	95.04	0	258	110	148	65	582
1997	7	3	157.25	404	55	14	106	41.13	243	94.68	0	243	103	140	54	636
1998	7	2	157.25	383	49	13	104	42.67	230	94.25	0	230	96	133	45	681
1999	6	2	157.25	363	45	12	102	44.30	216	93.59	0	216	90	126	37	718
2000	6	2	157.25	343	40	12	101	46.02	203	92.73	0	203	84	119	30	748
2001	6	2	157.25	325	37	11	99	47.84	190	91.74	0	190	78	112	25	772
2002	5	2	157.25	308	33	11	97	49.76	177	90.60	0	177	72	105	20	793
2003	5	2	157.25	292	30	10	96	51.79	166	89.32	0	166	67	99	16	809
2004	5	2	157.25	276	27	10	95	53.93	154	87.88	0	154	62	92	13	822
SUBT		33		5199	632		1438		3129		0	3129	1297	1833	822	
REM.		21		3362	274		1779		1310		0	1310	514	796	52	
TOTL		54		8562	905		3217		4439		0	4439	1810	2629	875	
15.0% DISC				2475	293		694		1489		0	1489	614	875		
% OF REV.				100	12		28		60		0	60	25	35		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 15:38:18
FILE: DALY50

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 9

Parameter Files:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Case Parameters:

Probable

Productions:

Oil Exponential Decline --- Starting in 1993 : Ini Rate 9.0 : Final Rate 0.1 : Total Volume 63.4 : Decline Pcnt 5.30

Royalties:

Alberta per price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 15:38:21
FILE: DALYSD
REPORT: peepoglp

***** INPUT DATA SUMMARY *****
----- D I L ----- S A S -----

Year	Prod. Wells	Prod. Rate m3/d	Prod. Vol E3m3	WI Vol E3m3	New %	Oil Price \$/m3	Oper Cost \$/m3	Trans Cost \$/m3	ORR %	Prod. Rate E3m3/d	Prod. Vol E6m3	WI Vol E6m3	Shr %	New %	Price \$/E3m	Cost \$/E3m	Plant/		ORR %
																	Oper	Bath	
																	OpCost	OpCost	
																	M\$/Yr		
1990	4.0	4	0.5	0.5	100	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1991	4.0	4	1.6	1.6	100	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1992	4.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1993	4.0	9	3.2	3.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1994	4.0	8	3.0	3.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1995	4.0	8	2.9	2.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1996	4.0	7	2.7	2.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1997	4.0	7	2.6	2.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1998	4.0	7	2.4	2.4	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1999	4.0	6	2.3	2.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2000	4.0	6	2.2	2.2	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2001	4.0	6	2.1	2.1	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2002	4.0	5	2.0	2.0	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2003	4.0	5	1.9	1.9	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2004	4.0	5	1.8	1.8	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2005	4.0	5	1.7	1.7	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2006	4.0	4	1.6	1.6	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2007	4.0	4	1.5	1.5	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2008	4.0	4	1.4	1.4	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
2009	4.0	4	1.3	1.3	100	157.3	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00

19.3			40.0	40.0							0.0	0.0						0	
16.0			13.9	13.9							0.0	0.0						0	

35.3			53.9	53.9							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18

10/23/90 15:39:20

FILE: DALYSD

REPORT: newbtax

***** WORKING INTEREST BEFORE TAX REPORT *****

	Oil	INITIAL	FINAL											CASH
	Oper	CROWN/	CROWN/	ORR/	REVENUE	OTHER	TOTAL		OTHER		TOTAL	TOTAL		FLOW
	Cost	MANUAL	MANUAL	FRHLD	AFTER	INC &	OPER	MINERAL	EXP &	OPER	INTANG	TANG.	TOTAL	BEFORE
Year	\$/m3	ROYALTY	ROYALTY	ROYALTY	ROYALTY	ARTC	COST	TAX	NPI	INCOME	CAPITAL	CAPITAL	CAPITAL	TAX
	M\$	M\$	M\$	M\$		M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
											0	0	0	
1990	13.56	5	5	6	108	0	26	0	0	82	0	0	0	82
1991	13.56	11	11	16	270	0	78	0	0	192	0	0	0	192
1992	13.56	5	5	12	214	0	91	0	0	123	0	0	0	123
1993	13.56	26	26	27	450	0	114	16	0	320	0	0	0	320
1994	13.56	23	23	25	427	0	112	13	0	302	0	0	0	302
1995	13.56	33	33	24	394	0	110	11	0	273	0	0	0	273
1996	13.56	29	29	23	375	0	108	9	0	258	0	0	0	258
1997	13.56	26	26	22	357	0	106	7	0	243	0	0	0	243
1998	13.56	23	23	20	339	0	104	6	0	230	0	0	0	230
1999	13.56	21	21	19	323	0	102	5	0	216	0	0	0	216
2000	13.56	19	19	18	306	0	101	3	0	203	0	0	0	203
2001	13.56	17	17	17	291	0	99	3	0	190	0	0	0	190
2002	13.56	15	15	16	277	0	97	2	0	177	0	0	0	177
2003	13.56	13	13	16	263	0	96	1	0	166	0	0	0	166
2004	13.56	12	12	15	249	0	95	0	0	154	0	0	0	154
2005	13.56	11	11	14	237	0	93	0	0	143	0	0	0	143
2006	13.56	10	10	13	225	0	92	0	0	133	0	0	0	133
2007	13.56	9	9	13	213	0	91	0	0	122	0	0	0	122
2008	13.56	8	8	12	202	0	90	0	0	112	0	0	0	112
2009	13.56	7	7	11	192	0	89	0	0	103	0	0	0	103
19.3		322	322	341	5712	0	1894	75	0	3743	0	0	0	3743
16.0		50	50	117	2019	0	1323	0	0	696	0	0	0	696
35.3		372	372	458	7732	0	3217	75	0	4439	0	0	0	4439

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18

10/23/90 15:41:07

FILE: DALY5D

REPORT: peepat

***** WORKING INTEREST AFTER TAX DATA *****																	
	Resource	Resource	Land&	Land&	Expl	Expl	Tang	Tang	Plant	Plant	Fed	Prov					
	Income	Allow	Dev	Dev	Bal	Bal	Bal	Bal	&Bath	&Bath	Taxbl	Fed	Taxbl	Prov	Inv	Total	Cash
Year	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
1990	93	23	0	0	0	0	0	0	0	0	63	22	63	11	0	32	50
1991	219	55	0	0	0	0	0	0	0	0	149	50	149	25	0	76	116
1992	141	35	0	0	0	0	0	0	0	0	93	32	93	16	0	48	76
1993	389	97	0	0	0	0	0	0	0	0	264	90	264	45	0	135	185
1994	364	91	0	0	0	0	0	0	0	0	248	84	248	42	0	126	176
1995	341	85	0	0	0	0	0	0	0	0	232	79	232	39	0	118	155
1996	319	80	0	0	0	0	0	0	0	0	217	74	217	37	0	110	148
1997	299	75	0	0	0	0	0	0	0	0	202	69	202	34	0	103	140
1998	279	70	0	0	0	0	0	0	0	0	189	64	189	32	0	96	133
1999	260	65	0	0	0	0	0	0	0	0	176	60	176	30	0	90	126
2000	243	61	0	0	0	0	0	0	0	0	164	56	164	28	0	84	119
2001	226	57	0	0	0	0	0	0	0	0	152	52	152	26	0	78	112
2002	211	53	0	0	0	0	0	0	0	0	141	48	141	24	0	72	105
2003	196	49	0	0	0	0	0	0	0	0	131	45	131	22	0	67	99
2004	181	45	0	0	0	0	0	0	0	0	121	41	121	21	0	62	92
2005	168	42	0	0	0	0	0	0	0	0	112	38	112	19	0	57	86
2006	155	39	0	0	0	0	0	0	0	0	103	35	103	18	0	53	80
2007	143	36	0	0	0	0	0	0	0	0	95	32	95	16	0	48	74
2008	132	33	0	0	0	0	0	0	0	0	87	30	87	15	0	44	68
2009	121	30	0	0	0	0	0	0	0	0	80	27	80	14	0	41	62
19.3	4482	1120			0		0		0		3020	1027	3020	513	0	1540	2203
16.0	863	216			0		0		0		530	180	530	90	0	270	426
35.3	5345	1336			0		0		0		3550	1207	3550	604	0	1810	2629

Year	No. Well	Prod Mnth	OIL PRODUCTION						OpCosts	
			Rate m3/D	Vol E3m3	% New	Price \$/m3	ORR %	Opcost \$/m3	Truck \$/m3	\$/W/M M\$/Yr
1990	4.0	4.0	4.5	0.5	100	220.00	0.00	13.56	0.00	1182 0
1991	4.0	12.0	4.3	1.6	100	190.00	0.00	13.56	0.00	1182 0
1992	4.0	12.0	4.0	1.5	100	157.25	0.00	13.56	0.00	1477 0
1993	4.0	12.0	3.8	1.4	100	157.25	0.00	13.56	0.00	1477 0
1994	4.0	12.0	3.6	1.3	100	157.25	0.00	13.56	0.00	1477 0
1995	4.0	12.0	3.4	1.2	100	157.25	0.00	13.56	0.00	1477 0
1996	4.0	12.0	3.2	1.2	100	157.25	0.00	13.56	0.00	1182 0
1997	4.0	12.0	3.0	1.1	100	157.25	0.00	13.56	0.00	1182 0
1998	4.0	12.0	2.8	1.0	100	157.25	0.00	13.56	0.00	1182 0
1999	4.0	12.0	2.7	1.0	100	157.25	0.00	13.56	0.00	1182 0
2000	4.0	12.0	2.5	0.9	100	157.25	0.00	13.56	0.00	1182 0
2001	4.0	12.0	2.4	0.9	100	157.25	0.00	13.56	0.00	1182 0
2002	4.0	12.0	2.2	0.8	100	157.25	0.00	13.56	0.00	1182 0
2003	4.0	12.0	2.1	0.8	100	157.25	0.00	13.56	0.00	1182 0
2004	4.0	12.0	2.0	0.7	100	157.25	0.00	13.56	0.00	1182 0

20.3 Yrs 19.5 Net

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Prdcts 4Price 5Decln 6ORR 7Other 8Esclte 9rn 10Scrn

Year	Revenue					CAPITAL INVESTMENT					
	W.I.	Crown	Frhd	Man.	NPI	W.I.	Land	Expl	Deval	Tang	Other
	%	%	%	%	%	%	M\$	M\$	M\$	M\$	M\$
1990	(Undiscounted capital investment)							0	0	0	0
1990	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1991	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1992	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1993	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1994	100.00	36.60	42.80	0.00	0.0	100.00	0	0	0	0	0
1995	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1996	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1997	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1998	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1999	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2000	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2001	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2002	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2003	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
2004	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0

Resorce

12.5 %

Depreciation

10 100 30 30 0

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Roylty 4Holiday 5JPF 6Capitl 7Revert 8Esclte 9rn 10Scrn

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18

10/25/90 08:44:15

FILE: DALYSE

CASE DESCRIPTION				NET PRESENT VALUES (M\$)						
DALY UNIT NO. 5 - WATERFLOOD CASE				DISC RATE (%)	0.0	12.0	15.0	18.0	20.0	22.0
NO INCREMENTAL WATERFLOOD RECOVERY										
(EXCLUDING 9D-28)				B.T. OPER INC	1434	797	719	656	620	589
				B.T. CAP INV.	0	0	0	0	0	0
				B.T. CASH FLOW	1434	797	719	656	620	589
Royalty Regime: MANITOBA	Gas Holidays: NO									
Reserve type: Probable	Oil Holidays: NO			A.T. OPER INC	878	487	438	400	378	359
Royalty Type: Crown Frhd	Eval/Prod Starts: 90- 9/90- 9			A.T. CAP INV.	0	0	0	0	0	0
Sensitivity: NO	Proj/Econ Life: 20.3/20.3 yrs			A.T. CASH FLOW	878	487	438	400	378	359

ECONOMIC INDICATORS				PRODUCTS RECOVERY						COMPANY M.I.		
		B.TAX	A.TAX		GROSS	MI	RDY	NET		Init%	Avr%	Rev%
ROR	- PCNT	0.0	0.0	OIL	E3m3	20	20	2	18	REVENUE	100.0	100.0
PAYOUT PERIOD	- EVAL	0.0	0.0	BAB-RAW	E6m3	0	0			FIELD CAP		
	- CAPTL	0.0	0.0	BAB-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC PIR	- \$/M	0.00	0.00	ETHANE	E3m3	0	0	0	0	BATH CAP		
15.0 PCT PIR	- \$/M	0.00	0.00	PROPANE	E3m3	0	0	0	0			
12.0 PCT PIR	- \$/M	0.00	0.00	BUTANE	E3m3	0	0	0	0	QRR-BAS		
NPV @ 15.0	- \$/M3	36.83	22.47	CONDENS.	E3m3	0	0	0	0	QRR-OIL		
NPV @ 12.0	- \$/M3	40.85	24.94	SULPHUR	E3L	0	0	0	0			
				OTHER	E3m3	0	0	0	0	ROYALTY	9.4	7.8

MI CASH FLOW SUMMARY																
YEAR	DIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B. TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	\$/MINTAX		EXPENSE	INCOME	B. TAX	INV.	CASH	TAX	CASH	15.0%	CUM	
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	
ZERO											0	0	0	0	0	
1990	4	1	220.00	120	11	9	26	48.10	83	151.19	0	83	33	50	49	
1991	4	2	190.00	298	28	9	78	49.71	193	122.75	0	193	76	117	153	
1992	4	1	157.25	232	18	8	91	61.62	123	83.55	0	123	48	76	211	
1993	4	1	157.25	219	17	8	90	64.52	112	80.85	0	112	43	69	258	
1994	4	1	157.25	206	15	7	89	67.61	102	77.97	0	102	39	63	295	
1995	3	1	157.25	195	16	8	88	70.87	90	73.15	0	90	36	55	323	
1996	3	1	157.25	183	15	8	73	62.18	96	82.12	0	96	37	58	348	
1997	3	1	157.25	173	14	8	72	65.12	87	79.44	0	87	34	53	369	
1998	3	1	157.25	163	13	8	71	68.24	79	76.57	0	79	31	49	385	
1999	3	1	157.25	154	12	8	70	71.54	72	73.49	0	72	28	44	398	
2000	3	1	157.25	145	11	8	69	75.05	65	70.20	0	65	25	40	408	
2001	2	1	157.25	137	10	8	69	78.76	58	66.69	0	58	22	36	416	
2002	2	1	157.25	129	10	7	68	82.70	52	62.94	0	52	20	32	422	
2003	2	1	157.25	122	9	7	67	86.88	46	58.95	0	46	17	28	427	
2004	2	1	157.25	115	8	7	67	91.32	40	54.68	0	40	15	25	430	
SUBT		16		2591	207		1086		1298		0	1298	505	793	430	
REN.		4		563	39		389		136		0	136	51	85	8	
TOTL		20		3154	245		1475		1434		0	1434	556	878	438	
15.0% DISC				1358	111		528		719		0	719	280	438		
% OF REV.				100	8		39		53		0	53	21	32		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 08:44:27
FILE: DALYSE

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 9

Parameter Files

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Case Parameters:

Probable

Productions:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/25/90 08:45:27
FILE: DALYSE
REPORT: newbtax

***** WORKING INTEREST BEFORE TAX REPORT *****														
	INITIAL	FINAL												CASH
	D11	CROWN/	CROWN/	ORR/	REVENUE	OTHER	TOTAL		OTHER		TOTAL	TOTAL		FLOW
	Oper	MANUAL	MANUAL	FRHLD	AFTER	INC &	OPER	MINERAL	EXP &	OPER	INTANG	TANG.	TOTAL	BEFORE
	Cost	ROYALTY	ROYALTY	ROYALTY	ROYALTY	ARTC	COBT	TAX	NPI	INCOME	CAPITAL	CAPITAL	CAPITAL	TAX
Year	\$/m3	M\$	M\$	M\$		M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
											0	0	0	
1990	13.56	5	5	6	109	0	26	0	0	83	0	0	0	83
1991	13.56	12	12	16	271	0	78	0	0	193	0	0	0	193
1992	13.56	5	5	12	214	0	91	0	0	123	0	0	0	123
1993	13.56	5	5	12	202	0	90	0	0	112	0	0	0	112
1994	13.56	4	4	11	191	0	89	0	0	102	0	0	0	102
1995	13.56	6	6	10	178	0	88	0	0	90	0	0	0	90
1996	13.56	5	5	10	168	0	73	0	0	96	0	0	0	96
1997	13.56	5	5	9	159	0	72	0	0	87	0	0	0	87
1998	13.56	4	4	9	150	0	71	0	0	79	0	0	0	79
1999	13.56	4	4	8	142	0	70	0	0	72	0	0	0	72
2000	13.56	3	3	8	134	0	69	0	0	63	0	0	0	63
2001	13.56	3	3	7	127	0	69	0	0	58	0	0	0	58
2002	13.56	3	3	7	119	0	68	0	0	52	0	0	0	52
2003	13.56	2	2	7	113	0	67	0	0	46	0	0	0	46
2004	13.56	2	2	6	106	0	67	0	0	40	0	0	0	40
2005	13.56	2	2	6	101	0	66	0	0	34	0	0	0	34
2006	13.56	2	2	5	95	0	66	0	0	29	0	0	0	29
2007	13.56	1	1	5	90	0	65	0	0	25	0	0	0	25
2008	13.56	1	1	5	85	0	65	0	0	20	0	0	0	20
2009	13.56	1	1	5	80	0	64	0	0	16	0	0	0	16
19.3		75	75	164	2833	0	1411	0	0	1422	0	0	0	1422
1.0		1	1	4	75	0	64	0	0	12	0	0	0	12
20.3		77	77	169	2909	0	1475	0	0	1434	0	0	0	1434

PETROLEUM ECONOMICS EVALUATION PROGRAM

XI Consultants Ltd.

Version 88-11-18

10/25/90 08:47:13

FILE: DALYSE

REPORT: pmpat

***** WORKING INTEREST AFTER TAX DATA *****

Year	Resorc	Resorc	Land&	Land&	Expl	Expl	Tang	Tang	Plant	Plant	Fed	Prov	Inv	Total	Cash
	Income	Allow	Dev	Dev	Bal	Bal	Bal	Bal	LBath	LBath	Taxbl	Fed	Taxbl	Prov	Credit
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
1990	94	24	0	0	0	0	0	0	0	0	64	22	64	11	0
1991	220	55	0	0	0	0	0	0	0	0	149	51	149	25	0
1992	141	35	0	0	0	0	0	0	0	0	93	32	93	16	0
1993	129	32	0	0	0	0	0	0	0	0	85	29	85	14	0
1994	118	29	0	0	0	0	0	0	0	0	77	26	77	13	0
1995	107	27	0	0	0	0	0	0	0	0	70	24	70	12	0
1996	111	28	0	0	0	0	0	0	0	0	73	25	73	12	0
1997	101	25	0	0	0	0	0	0	0	0	67	23	67	11	0
1998	92	23	0	0	0	0	0	0	0	0	61	21	61	10	0
1999	84	21	0	0	0	0	0	0	0	0	55	19	55	9	0
2000	76	19	0	0	0	0	0	0	0	0	49	17	49	8	0
2001	68	17	0	0	0	0	0	0	0	0	44	15	44	7	0
2002	61	15	0	0	0	0	0	0	0	0	39	13	39	7	0
2003	54	14	0	0	0	0	0	0	0	0	34	12	34	6	0
2004	48	12	0	0	0	0	0	0	0	0	30	10	30	5	0
2005	42	11	0	0	0	0	0	0	0	0	26	9	26	4	0
2006	36	9	0	0	0	0	0	0	0	0	22	7	22	4	0
2007	31	8	0	0	0	0	0	0	0	0	18	6	18	3	0
2008	26	7	0	0	0	0	0	0	0	0	15	5	15	3	0
2009	21	5	0	0	0	0	0	0	0	0	12	4	12	2	0
19.3	1662	416			0	0			0		1082	368	1082	184	0
1.0	17	4			0	0			0		8	3	8	1	0
20.3	1679	420			0	0			0		1091	371	1091	185	0

OIL PRODUCTION										OpCosts	
No.	Prod	Rate	Vol	%	Price	DRR	Opcost	Truck			
Year	11 Mnth	m3/D	E3m3	New	\$/m3	%	\$/m3	\$/m3	\$/M/M	M\$/Yr	
1990	1.0	3.0	2.7	0.2	100	220.00	0.00	13.56	0.00	1182	0
1991	1.0	3.0	2.2	0.2	100	190.00	0.00	13.56	0.00	1182	0
1992	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1993	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1994	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1995	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1996	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1997	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1998	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
1999	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
2000	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
2001	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
2002	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
2003	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0
2004	1.0	12.0	0.0	0.0	100	0.00	0.00	0.00	0.00	0	0

1.3 Yrs 0.4 Net

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Prdctm 4Price 5Decln 6DRR 7Other 8Escite 9rn 10Scrn

Revenue Crown Frhld Man.						CAPITAL INVESTMENT					
M.I.	Split	Split	Roy.	NPI	M.I.	Land	Expl	Devel	Tang	Other	
Year	%	%	%	%	%	M\$	M\$	M\$	M\$	M\$	
1990	(Undiscounted capital investment)						0	0	0	0	0
1990	100.00	57.20	42.80	0.00	0.0	100.00	0	0	122	72	0
1991	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1992	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1993	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1994	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1995	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1996	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1997	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1998	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1999	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2000	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2001	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2002	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2003	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2004	100.00	0.00	0.00	0.00	0.0	100.00	0	0	0	0	0

Resrce

12.5 %

Depreciation

10 100 30 30 0

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Royalty 4Holiday 5JPP 6Capitl 7Revert 8Escite 9rn 10Scrn

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18

10/23/90 15:14:17

FILE: DALY5C

CASE DESCRIPTION			NET PRESENT VALUES (M\$)						
			DISC RATE (%)	0.0	12.0	15.0	18.0	20.0	22.0
DALY UNIT NO. 5									
NO INCREMENTAL WATERFLOOD RECOVERY									
NEW OIL STATUS			B.T. OPER INC	69	66	65	65	64	64
			B.T. CAP INV.	194	190	189	189	188	187
			B.T. CASH FLOW	-125	-124	-124	-124	-124	-124
Royalty Regime: MANITOBA	Gas Holidays: NO								
Reserve type: Probable	Oil Holidays: NO		A.T. OPER INC	84	80	79	79	78	77
Royalty Type: Crwn Frhd	Eval/Prod Start: 90- 9/90-10		A.T. CAP INV.	194	190	189	189	188	187
Sensitivity: NO	Proj/Econ Life: 1.3/ 1.3 yrs		A.T. CASH FLOW	-109	-110	-110	-110	-110	-110

ECONOMIC INDICATORS				PRODUCTS RECOVERY						COMPANY M.I.		
				B.TAX	A.TAX	BROSS	MI	ROY	NET	InitX	AvrX	RevX
ROR	- PCNT	800.0	0.0	DIL	E3m3	0	0	0	0	REVENUE	100.0	100.0
PAYOUT PERIOD	- EVAL	0.0	0.0	GAS-RAW	E6m3	0	0			FIELD CAP	100.0	100.0
	- CAPTL	0.0	0.0	GAS-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC PIR	- \$/\$	-0.64	-0.56	ETHANE	E3m3	0	0	0	0	BATH CAP		
15.0 PCT PIR	- \$/\$	-0.65	-0.58	PROPANE	E3m3	0	0	0	0			
12.0 PCT PIR	- \$/\$	-0.65	-0.58	BUTANE	E3m3	0	0	0	0	DRR-GAS		
NPV @ 15.0	- \$/M3	-278.47	-246.83	CONDENS.	E3m3	0	0	0	0	DRR-OIL		
NPV @ 12.0	- \$/M3	-278.79	-246.69	SULPHUR	E3t	0	0	0	0			
				OTHER	E3m3	0	0	0	0	ROYALTY	6.3	10.5

MI CASH FLOW SUMMARY																
YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B.TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%MINTAX		EXPENSE	INCOME	B.TAX	INV.	CASH	TAX	CASH	15.0X	CUM	
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	
ZERO											0	0	0	0	0	
1990	3	0	220.00	54	3	6	7	28.06	44	178.16	194	-150	-6	-144	-141	
1991	2	0	190.00	38	6	17	6	31.22	26	127.42	0	26	-9	34	31	
SUBT		0		92	10		13		69		194	-125	-15	-109	-110	
REM.		0		0	0		0		0		0	0	0	0		
TDTL		0		92	10		13		69		194	-125	-15	-109	-110	
15.0X DISC				87	9		12		65		189	-124	-14	-110		
% OF REV.				100	10		14		76		219	-143	-16	-127		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 15:14:26
FILE: DALYSC

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 10

Parameter File:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Case Parameters:

Probable

Productions:

Royalties:

Alberta par price files used

Oil price file: Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Maximum Exempted Crown Royalty Oil Volume = 228 E3m3

Capital:

Tax Data:

Oil production is Resource.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18
 10/23/90 15:14:29
 FILE: DALY5C
 REPORT: peepoqip

===== INPUT DATA SUMMARY =====

D I L										B A B									
										Plant/ Plant/									
Prod.	Prod	Prod	WI		Oil	Oper	Trans			Prod	Prod	WI			Oper	Bath	Bath		
Wells	Rate	Vol	Vol	New	Price	Cost	Cost	ORR		Rate	Vol	Vol	Shr	New	Price	Cost	OpCost	OpCost	ORR
Year	m3/d	E3m3	E3m3	%	\$/m3	\$/m3	\$/m3	%		E3m3/d	E6m3	E6m3	%	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr	%

1990	1.0	3	0.2	0.2	100	220.0	13.86	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1991	1.0	2	0.2	0.2	100	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00

1.3			0.4	0.4							0.0	0.0						0	
0.0			0.0	0.0							0.0	0.0						0	
1.3			0.4	0.4							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 18:14:37
FILE: DALY5C
REPORT: newbtax

===== WORKING INTEREST BEFORE TAX REPORT =====

	INITIAL	FINAL												CASH
	D11	CROWN/	CROWN/	DRR/	REVENUE	OTHER	TOTAL		OTHER		TOTAL	TOTAL		FLOW
	Oper	MANUAL	MANUAL	FRHLD	AFTER	INC &	OPER	MINERAL	EXP &	OPER	INTANG	TANG.	TOTAL	BEFORE
	Cost	ROYALTY	ROYALTY	ROYALTY	ROYALTY	ARTC	COST	TAX	NPI	INCOME	CAPITAL	CAPITAL	CAPITAL	TAX
Year	\$/B3	M\$	M\$	M\$		M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
											0	0	0	
1990	13.56	5	0	3	51	0	7	0	0	44	122	72	194	-150
1991	13.56	3	3	2	33	0	6	1	0	26	0	0	0	26
1.3		8	3	5	84	0	13	1	0	69	122	72	194	-125
0.0		0	0	0	0	0	0	0	0	0	0	0	0	0
1.3		8	3	5	84	0	13	1	0	69	122	72	194	-125

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18
 10/23/90 15:15:04
 FILE: DALY5C
 REPORT: pwppt

===== WORKING INTEREST AFTER TAX DATA =====																	
	Resorc	Resorc	Land& Dev	Land& Dev	Expl	Expl	Tang	Tang	Plant	Plant	Fed	Prov					
	Income	Allow	Bal	Depr	Bal	Depr	Bal	Depr	&Bath	&Bath	Taxbl	Fed	Taxbl	Prov	Inv	Total	Cash
Year	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
1990	36	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6	-144
1991	14	3	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9	34
1.3	50	12	62	0	0	0	29	0	0	0	-30	-10	-30	-5	0	-15	-109
0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.3	50	12	62	0	0	0	29	0	0	0	-30	-10	-30	-5	0	-15	-109

Year	No. Wells	Prod Mnth	OIL PRODUCTION							- OpCosts -	
			Rate m3/D	Vol E3m3	% New	Price \$/m3	ORR %	Opcost \$/m3	Truck \$/m3	\$/W/M	M\$/Yr
1990	4.0	4.0	4.5	0.5	100	220.00	0.00	13.56	0.00	1182	0
1991	4.0	12.0	4.3	1.6	100	190.00	0.00	13.56	0.00	1182	0
1992	4.0	12.0	4.0	1.5	100	157.25	0.00	13.56	0.00	1182	0
1993	4.0	12.0	3.8	1.4	100	157.25	0.00	13.56	0.00	1182	0
1994	4.0	12.0	3.6	1.3	100	157.25	0.00	13.56	0.00	1182	0
1995	4.0	12.0	3.4	1.2	100	157.25	0.00	13.56	0.00	1182	0
1996	4.0	12.0	3.2	1.2	100	157.25	0.00	13.56	0.00	1182	0
1997	4.0	12.0	3.0	1.1	100	157.25	0.00	13.56	0.00	1182	0
1998	4.0	12.0	2.8	1.0	100	157.25	0.00	13.56	0.00	1182	0
1999	4.0	12.0	2.7	1.0	100	157.25	0.00	13.56	0.00	1182	0
2000	4.0	12.0	2.5	0.9	100	157.25	0.00	13.56	0.00	1182	0
2001	4.0	12.0	2.4	0.9	100	157.25	0.00	13.56	0.00	1182	0
2002	4.0	12.0	2.2	0.8	100	157.25	0.00	13.56	0.00	1182	0
2003	4.0	12.0	2.1	0.8	100	157.25	0.00	13.56	0.00	1182	0
2004	4.0	12.0	2.0	0.7	100	157.25	0.00	13.56	0.00	1182	0

19.3 Yrs 21.3 Net

Enter number. u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Prdcts 4Price 5Decln 6ORR 7Other 8Esclte 9rtn 10scrn

Year	Revenue	Crown	Frhld	Man.	NPI	CAPITAL INVESTMENT					
	W.I. %	Split %	Split %	Roy. %		W.I. %	Land M\$	Expl M\$	Devel M\$	Tang M\$	Oth M\$
1990	(Undiscounted capital investment)						0	0	0	0	
1990	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1991	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1992	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1993	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1994	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1995	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1996	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1997	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1998	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
1999	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
2000	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
2001	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
2002	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
2003	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	
2004	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	

Resrce

12.5 %

Depreciation

10 100 30 30

Enter number: u up, d down, * times 10, / div by 10, r restores

1Help 2Dupcol 3Roylty 4Holiday 5JPF 6Capitl 7Revert 8Escle 9rr 10Scrn


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1.3 Yrs          0.4      Net
Enter number.  u up, d down, * times 10, / div by 10, r restores
1Help  2Dupcal 3Prdcts 4Price 5Decin 6DRR  7Other 8Escite 9nn 10Bcrn

```

Year	Revenue	Crown	Frhd	Man.	CAPITAL INVESTMENT						
	M.I.	Split	Split	Roy.	NPI	M.I.	Land	Expl	Devel	Tang	Other
	%	%	%	%	%	%	M\$	M\$	M\$	M\$	M\$
1990	(Undiscounted capital investment)							0	0	0	0
1990	100.00	57.20	42.80	0.00	0.0	100.00	0	0	122	72	0
1991	100.00	57.20	42.80	0.00	0.0	100.00	0	0	0	0	0
1992	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1993	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1994	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1995	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1996	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1997	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1998	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
1999	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2000	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2001	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2002	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2003	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0
2004	100.00	100.00	0.00	0.00	0.0	100.00	0	0	0	0	0

Resource	Depreciation				
12.5 %	10	100	30	30	0

Enter number. u up, d down, * times 10, / div by 10, r restores
1Help 2Dupcol 3Roylty 4Holiday 53PF 6Capitl 7Revert 8Escite 9rn 10Bcrn
PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 15:21:13
FILE: DALY5B

CASE DESCRIPTION		NET PRESENT VALUES (M\$)					
DAILY UNIT NO. 5	DISC RATE (%)	0.0	12.0	15.0	18.0	20.0	22.0
NO INCREMENTAL WATERFLOOD RECOVERY							
OLD OIL STATUS	B.T. OPER INC	50	48	48	47	47	46
	B.T. CAP INV.	194	190	189	189	188	187
	B.T. CASH FLOW	-143	-142	-142	-142	-141	-141
Royalty Regime: MANITOBA	Gas Holidays: NO						
Recovery Factor: Probable	Oil Holidays: NO						
	B.T. OPER INC	66	62	62	61	60	60

Reserve Type: Proved
 Royalty Type: Crown Frhd Eval/Prod Starts 90- 9/90-10 A.T. CAP INV. 194 190 189 189 188 187
 Sensitivity: NO Proj/Econ Life: 1.3/ 1.3 yrs A.T. CASH FLOW -128 -128 -128 -128 -128 -128

ECONOMIC INDICATORS				PRODUCTS RECOVERY					COMPANY W.I.			
		B.TAX	A.TAX			GROSS	WI	ROY	NET	Init%	Avr%	Rev%
	- PCNT	800.0	800.0	OIL	E3m3	0	0	0	0	REVENUE	100.0	100.0
PAYOUT PERIOD	- EVAL	0.0	0.0	BAB-RAW	E6m3	0	0			FIELD CAP	100.0	100.0
	- CAPTL	0.0	0.0	BAB-SALES	E6m3	0	0	0	0	PLANT CAP		
UNDISC FIR	- %/s	-0.74	-0.66	ETHANE	E3m3	0	0	0	0	BATH CAP		
15.0 PCT FIR	- %/s	-0.75	-0.67	PROPANE	E3m3	0	0	0	0			
12.0 PCT FIR	- %/s	-0.75	-0.67	BUTANE	E3m3	0	0	0	0	ORR-BAB		
NPV @ 15.0	- %/M3	-318.50	-286.86	CONDENS.	E3m3	0	0	0	0	ORR-DIL		
NPV @ 12.0	- %/M3	-319.16	-287.06	SULPHUR	E3t	0	0	0	0			
				OTHER	E3m3	0	0	0	0	ROYALTY	32.3	30.8

WI CASH FLOW SUMMARY																
YEAR	OIL PRODUCTION			TOTAL	ROYALTY		OPERATING		OPERAT	NETBACK	CAPTL	B. TAX	TOTAL	AFTER TAX		
	RATE	VOL.	PRICE	REV.	%MINTAX	%	EXPENSE		INCOME	B. TAX	INV.	CASH	TAX	CASH	15.0%	CUM
	M3/D	E3m3	\$/M3	M\$	M\$	%	M\$	\$/M3	M\$	\$/M3	M\$	M\$	M\$	M\$	M\$	M\$
ZERO											0	0	0	0	0	0
1990	3	0	220.00	54	17	32	7	28.06	30	120.78	194	-164	-6	-158	-154	-154
1991	2	0	190.00	38	11	29	6	31.22	21	104.39	0	21	-9	30	27	-128
SUBT		0		92	28		13		50		194	-143	-15	-128	-128	
REM.		0		0	0		0		0		0	0	0	0	-0	
TOTL		0		92	28		13		50		194	-143	-15	-128	-128	
15.0% DISC				87	27		12		48		189	-142	-14	-128		
% OF REV.				100	31		14		55		219	-164	-16	-148		

PETROLEUM ECONOMICS EVALUATION PROGRAM
XI Consultants Ltd.

Version 88-11-18
10/23/90 15:21:22
FILE: DALY58

Case Notes

Evaluation Begins in 1990 9

Production Begins in 1990 10

Parameter Files:

MANITOBA ENERGY AND MINES

Discount Method: ANNUAL MID PERIOD

Default Escalation Rates

Revenue	Year	Rate	Oper Costs	Year	Rate	Capital	Year	Rate
	1988	5.00		1988	5.00		1988	5.00
	1990	6.00		1990	6.00		1990	6.00
	1995	6.00		1995	6.00		1995	6.00
	2000	6.00		2000	6.00		2000	6.00

Case Parameters:

Probable

Productions:

Royalties:

Alberta per price files used

Oil price file

Gas price file

Freehold Royalty = 12.50 %, Freehold is Resource Royalty

Capital:

Tax Data:

Oil production is Resource.

Federal surtax of 3.0 % used.

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18
 10/23/90 15:21:26
 FILE: DALYSB
 REPORT: psepoglp

***** INPUT DATA SUMMARY *****

O I L										B A S									
										Plant/ Plant/									
Prod.	Prod	Prod	WI		Oil	Oper	Trans			Prod	Prod	WI				Oper	Bath	Bath	
Wells	Rate	Vol	Vol	New	Price	Cost	Cost	DRR		Rate	Vol	Vol	Shr	New	Price	Cost	OpCost	OpCost	DRR
Year	m3/d	E3m3	E3m3	%	\$/m3	\$/m3	\$/m3	%		E3m3/d	E6m3	E6m3	%	%	\$/E3m	\$/E3m	\$/E3m3	M\$/Yr	%
1990	1.0	3	0.2	0.2	0	220.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00
1991	1.0	2	0.2	0.2	0	190.0	13.56	0.00	0.00	0.000	0.0	0.0	0.0	100	0.00	0.00	0.00	0	0.00

1.3			0.4	0.4							0.0	0.0						0	
0.0			0.0	0.0							0.0	0.0						0	

1.3			0.4	0.4							0.0	0.0						0	

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18
 10/23/90 15:22:04
 FILE: DALYSB
 REPORT: newbtax

***** WORKING INTEREST BEFORE TAX REPORT *****														
	INITIAL	FINAL												CABH
	Oil	CROWN/	CROWN/	ORR/	REVENUE	OTHER	TOTAL		OTHER		TOTAL	TOTAL		FLOW
	Oper	MANUAL	MANUAL	FRHLD	AFTER	INC &	OPER	MINERAL	EXP &	OPER	INTANG	TANG.	TOTAL	BEFORE
	Cost	ROYALTY	ROYALTY	ROYALTY	ROYALTY	ARTC	COST	TAX	NPI	INCOME	CAPITAL	CAPITAL	CAPITAL	TAX
Year	\$/m3	M\$	M\$	M\$		M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
											0	0	0	
1990	13.56	9	9	3	42	0	7	6	0	30	122	72	194	-164
1991	13.56	6	6	2	31	0	6	3	0	21	0	0	0	21
1.3		14	14	5	73	0	13	9	0	50	122	72	194	-143
0.0		0	0	0	0	0	0	0	0	0	0	0	0	0
1.3		14	14	5	73	0	13	9	0	50	122	72	194	-143

PETROLEUM ECONOMICS EVALUATION PROGRAM
 XI Consultants Ltd.

Version 88-11-18

10/23/90 15:22:50

FILE: DALY58

REPORT: pmpat

***** WORKING INTEREST AFTER TAX DATA *****																	
		Land&		Land&				Plant		Plant		Fed		Prov			
Resort	Resort	Dev	Dev	Expl	Expl	Tang	Tang	&Gath	&Gath			Taxbl	Fed	Taxbl	Prov	Inv	Total
Income	Allow	Sal	Depr	Sal	Depr	Sal	Depr	Sal	Depr	Income	Tax	Income	Tax	Income	Tax	Credit	Tax
Year	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
1990	36	9	122	37	0	0	72	11	0	0	-12	-4	-12	-2	0	-6	-158
1991	14	3	85	26	0	0	61	18	0	0	-17	-6	-17	-3	0	-9	30
1.3	50	12		62		0		29		0	-30	-10	-30	-5	0	-15	-128
0.0	0	0		0		0		0		0	0	0	0	0	0	0	0
1.3	50	12		62		0		29		0	-30	-10	-30	-5	0	-15	-128



Energy and Mines

Petroleum

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

(204) 945-6577

August 14, 1990

FILE: NEW
Daly Unit No. 5
Special Royalty
Reduction

D.R. Burns, President
Rideau Petroleums Ltd.
Box 520, STN. A
Kelowna, B.C.
V1Y 7P1

Dear Sir:

Re: Application for Special Royalty Reduction
Rideau Daly Prov. WIW 9D-28-9-29 (WPM)

Your application for new oil status for the proposed well Rideau Daly Prov. WIW 9D-28-9-29 (WPM) is hereby acknowledged.

You are requested to file the following information in support of the application:

- (1) A comparison of pressure maintenance project economics using both old and new oil status for the 9D-28-9-29 well for the following cases:
 - (i) Incremental recovery of 10-15% of the OOIP and future peak production of 1.5-2.5 times current production rates as set out in Rideau's pressure maintenance application (90/02/02).
 - (ii) No pressure maintenance response and no incremental oil is recovered.

- (2) Any other economic runs that demonstrate the impact of old versus new oil status on the financial success of the project.

You are reminded that the economics should include the EOR incentive period estimated to be roughly 40 months in accordance with the Petroleum Crown Royalty and Incentive Regulation.

If you have any questions please contact John Fox at (204) 945-6574.

Yours truly,

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

L.R. Dubreuil

LRD:cvs

cc: H. Clare Moster
Deputy Chairman

RIDEAU PETROLEUMS LTD.

PHONE (604) 861-4661

201 - 215 LAWRENCE AVE.
KELOWNA, B.C. V1Y 6L2

MAILING ADDRESS:
BOX 520, STN. A
KELOWNA, B.C. V1Y 7P1

30 July 1990

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

Attention: Mr. H. Clare Moster, P.Eng., Assistant Deputy Minister

Dear Mr. Moster:

Re: Board Order No. PM63
Daly Lodgepole D Pool - Pressure Maintenance

I have received a copy of the above Board Order along with a covering letter from Chairman Ian Haugh granting approval to conduct a waterflood in the proposed Daly Unit No. 5. I look forward to formal approval of this Unit by the Manitoba Oil and Natural Gas Conservation Board.

The Board also approved production from the proposed injection well, Rideau Daly Prov. W1W 9D-28-9-29 (WPM) for a period not to exceed six months from the finished drilling date of the well. The purpose of this letter is to request your consideration and support in having production from this well classified as New Oil or preferably Holiday Oil.

It is my understanding that the purpose of the regulations in calling for production from certain new wells to be classified as Old Oil is to prevent the twinning of Old Oil wells to replace Old Oil production with "New Oil." This is clearly not the purpose or the rationale for producing the proposed injection well for a six month period. All existing production in the proposed Daly Unit No. 5 is presently classified as New Oil so the issue of replacing Old Oil should not arise.

An additional reason for my request is the disincentive the Old Oil classification will create in my efforts to get the injection well AFE approved by all working interest participants. My principal difficulty in getting all participants to agree to and sign the Unit Agreement was the economic argument that the drilling of the proposed pilot water injection was not justified under current and recent oil prices. The higher royalty commanded by the Old Oil classification will further discourage our participants.

I very much appreciate your consideration of the requested reclassification.

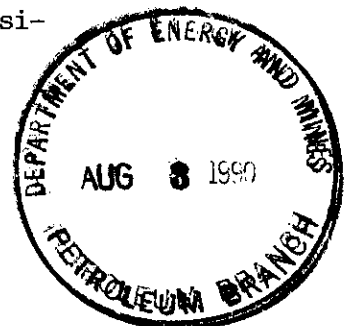
Yours sincerely,

RIDEAU PETROLEUMS LTD.



D.R. Burns, President

DRB:LB



✓ copy to L.R. Dubreuil, Director of Petroleum

RIDEAU PETROLEUMS LTD.

PHONE (604) 861-4661

201 - 215 LAWRENCE AVE.
KELOWNA, B.C. V1Y 6L2

MAILING ADDRESS:
BOX 520, STN. A
KELOWNA, B.C. V1Y 7P1

FAX # 604 861-3916

FACSIMILE COVER LETTER

DATE: AUG 24/90

TO: (204) 945-0586
(Fax number and code)

Please deliver the following pages:

TO: JOHN FOX FIRM: _____

FROM: NED STUDER

We are transmitting a total number of 4 pages including this cover page. If you do not receive all pages, please phone 604 861-4661

NOTES:

CONTACT DON IN MY ABSENCE (BACK SEAT. 1)
IF YOU NEED MORE INFORMATION.

Ned

11-00470017-0310

	Avg Annual	June	May	April	March	February
16-28						
Oil Sales m3	598.0	49.0	51.9	54.4	54.3	44.1
Clean Oil Hauling	1,988	152	180	202	183	137
Munic Taxes	1,483					
Surf Lse Rent	1,800					
Labor/Auto	2,912	212	217			
Utilities	934	126	62	235	260	260
Treating/SWD	6,122	495	525	50	45	97
Rep & Maint/Supplies	1,558	188	71	550	551	450
Oth-Bottomhole Pump	2,453	1,517	3,388	40	150	157
Overhead	3,000	250	250			
Crown Lse Rent	40			250	250	250
					40	
Total LOE	20,302	2,788	4,513	1,125	1,296	1,214

Avg. Annual is double the six month total excl. Munic. Taxes, Surf. Lse Rentals, and Crown Lse Rentals which are annual charges.

16-28 had a bottomhole pump change in M. Most wells on average need some type of WC every two years - so I halved that cost to annual. Should be added to others.

The 9D-28 should have similar costs except Treating/SWD which will be proportionately 4 if first production is higher (estimate 90 m³/mo. start - down to 60 m³/mo. by six months) and dis. when it becomes an injector. Other LC will be similar for injector.

WATER INJECTION WELL COSTS

Rideau Daly Prov WIW 9D-28-9-29 (4

Drilling Costs	*102,000	
Completion Costs	28,500	
Equiping Costs	34,000	
Flowline (water injection line)	7,300	<u> </u>
		*171,
Injection Pump and Related Facilities	22,000	
Total		<u><u>*193,</u></u>

INTANGIBLE

122,000

TANGIBLE 71,800

RIDEAU PETROLEUMS LTD.

PHONE (604) 861-4661

201 - 215 LAWRENCE AVE.
KELOWNA, B.C. V1Y 6L2

MAILING ADDRESS:
BOX 520, STN. A
KELOWNA, B.C. V1Y 7P1

30 July 1990

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

Attention: Mr. H. Clare Moster, P.Eng., Assistant Deputy Minister

Dear Mr. Moster:

Re: Board Order No. PM63
Daly Lodgepole D Pool - Pressure Maintenance

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I very much appreciate your consideration of the requested reclassification.

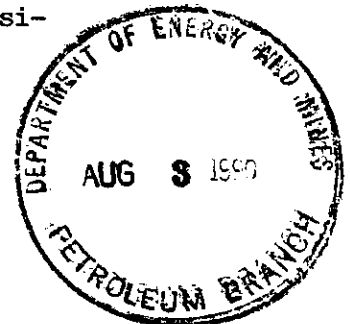
Yours sincerely,

RIDEAU PETROLEUMS LTD.



D.R. Burns, President

DRB:LB



✓ copy to L.R. Dubreuil, Director of Petroleum

FILE DALYSA - RUNDOWN PRIMARY PRODUCTION

- CONTINUED PRIMARY PRODUCTION OF THE EXISTING 4 WELLS IN DALY UNIT NO. 5 IS PROFITABLE
- NO INVESTMENT

NPV (AIT) @ DCF=15% - \$466 M
REMAINING RECOVERABLE RESERVES = 21300
REMAINING RESERVES LIFE = 24 YEARS

CROWN REVENUE (100% CROWN) - 935 m³ (\$154M)

FILE DALYSB - NO INCREMENTAL WATERFLOOD RECOVERY
OLD OIL STATUS

- ONLY ADDITIONAL REVENUE IS 6 MONTHS OF PRODUCTION FROM THE 9D-28 WELL PRIOR TO ITS CONVERSION TO WATER INJECTION

CAPITAL INVESTMENT - \$193.8 M

PRODUCTION FROM 9D-28 - 444 m³
PRIOR TO CONVERSION

NPV (AIT) @ DCF=15% \$ -125 M

CROWN REVENUE (100% CROWN) - \$27 M OLD OIL
125 m³

FILE DALYSC - NO INCREMENTAL WATERFLOOD RECOVERY

CAPITAL INVESTMENT - \$193.8 M

PRODUCTION 9D-28 - 444 m³

NPV (AIT) @ DCF=15% \$ -99 M

HOLIDAY VOLUME - 444 m³

CROWN REVENUE (100% CROWN) - 0 NEW OIL

FILE DAL-5D - WATERFLOOD RESPONSE (MODIFIED)) DOES NOT INCLUDE
INVESTMENT FOR
9D-28

REMAINING RECOVERABLE RESERVES - 54,400 L³

INCREMENTAL WATERFLOOD RECOVERY - 33,100 L³

NPV AT 0 DCF = 15% = \$891 M

CROWN REVENUE (100% CROWN) - \$654 M new oil

PROJECT LIFE = 36 YRS.

CONOMIC SUMMARY

1990 - 250 m³
 1991 - 188.7 m³
 1992 - 157.25 m³

① BASE CASE - PRIMARY PRODUCTION

NO INVESTMENT

RECOVERABLE RES. 21,300 m³

NPV @ 15% DCF (AIT) \$414,000

CROWN ROYALTIES (ASSUMING 100% CROWN) - 935 m³

PROVINCIAL TAX \$214,000

② COMPARISON OLD VS NEW OIL

	OLD	NEW	(holiday)
ROYALTIES	121 m ³	0 m ³	

③ DOWNSIDE RISK ASSUMING NO INCREMENTAL WATERFLOOD RECOVERY AND PROJECT ABANDONED AFTER EXPIRY OF INCENTIVE PERIOD (DEC/94)

INVESTMENT - \$193,800

NPV @ 15% (AIT) (- \$103,000) - NEW OIL
 (- \$121,000) - OLD OIL

④ ADDITIONAL RECOVERABLE RESERVES REQUIRED TO PAY-OUT PROJECT - APPROXIMATELY 3500 m³ - PAY-OUT 3.1 YRS. (1% OOIIP)

⑤ ADDITIONAL CROWN ROYALTY (NEW) IF PROJECT IS SUCCESSFUL 2238 m³

(incremental of 34,000 m³)

UNIT No. 5 - NEW OIL STATUS

PROJECT ECONOMICS

① BASE CASE

- a) Project start Sep 1/90
- b) Initial Production 4.5 L/d - 4 wells
- c) Decline Rate = 5.7 %
- d) Operating Costs - \$13.56/m³ trucking + treating
- \$1182 /well /mon
- f) New oil

② NO INCREMENTAL WATERFLOOD RECOVERY - OLD OIL

- a) Project start Sep 1 /90
- b) Initial Production - Oct /90 - MAR /91
 - 1990 - 2.7 L/d (3 months)
 - 1991 - 2.3 L/d (3 months)
- c) Capital cost - \$193,800
- d) Old oil
- e) Operating costs (see Base Case) use 5 wells*
- f) + Base Case - Incentive oil commencing Jan /92
for 36 months through Dec /94

$$* \frac{5 \text{ wells}}{4 \text{ wells}} \times \$1182 / \text{well} / \text{mon} = \$1477 / \text{well} / \text{mon}$$

(3) NO INCREMENTAL WATERFLOOD RECOVERY - NEW OIL

- a) Project Start Sep 1/90
- b) Initial Production - (see No INCR. WF REC. OLD OIL)
- c) Capital Cost - \$193,800
- d) New Oil
- e) Holiday Volume - 843 m^3 ($\$180/\text{m}^3 + D=0.3 \text{ KL}$)
- f) Operating Cost (see Base Case) use 5 wells
- f) + Base Case - Incentive oil Jan/92 through DEC/94

④ WATERFLOOD RESPONSE (NEW & OLD OIL)

a) Project start Sep 1/90

b) Production

1990	- 500 m ³	(4.5 L/d)
1991	- 1600 m ³	(4.4 L/d)
1992	- 1500 m ³	(4.1 L/d)
1993	- 9 m ³ /d	@ 5.3%

c) Capital Cost - \$193,800

d) Operating Cost (see Base Case 5 wells)

PEEP CONSOLIDATED CASES

(1) INCREMENTAL WATERFLOOD RECOVERY - OLD OIL (DALYSG)
 $DALYSD = DALYSA + DALYSB$

(2) INCREMENTAL WATERFLOOD RECOVERY - NEW OIL (DALYSF)
 $DALYSD = DALYSA + DALYSC$

(3) NO INCREMENTAL WATERFLOOD RECOVERY - OLD OIL (DALYST)
 $DALYSG = DALYSA + DALYGB$

(4) NO INCREMENTAL WATERFLOOD RECOVERY - NEW OIL (DALYSZ)
 $DALYSE = DALYSA + DALYSC$