NAME

CANADIAN JAVELIN LTD. (1970)

THE Julian - Star - O'Keefe PRoject
Feasibility Assessment

Labrador (414)

No.
Lab(414)

Lab. 414 ≠ 6 of 7

Lab 414

CANADIAN JAVELIN LIMITED

Confidential

THE JULIAN-STAR-O'KEEFE PROJECT
FEASIBILITY ASSESSMENT

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TECHNICAL ECONOMISTS LIMITED

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LIST OF EXHIBITS

SUMMARY & CONCLUSIONS

Iron ore reserves at the Julian-Star-O'Keefe deposits are in excess of 700 million tons and are ample to sustain a production rate of 12 million long tons per year of high grade pellets from the three ore deposits over the next 25 years. The Julian deposit alone can sustain a production rate of 9 million tons of pellets per year. The technical feasibility of producing commercial grade concentrates and pellets containing in excess of 65% Iron and less than 5% Silica has been demonstrated and proven in preliminary metallurgical tests.

The total investment involved in bringing these properties into production is largely a function of the scale of operations and the method of transportation contemplated. The investment amount may vary from a low of $320 million if the Julian deposit alone is mined to produce 9 million tons of pellets per year and if the existing rail system of the QNS & LRR is used. Alternatively, a total investment of $600 million might be required for mining the Julian-Star-O'Keefe deposits to produce 12 million tons of pellets per year and if the Javelin owned pipeline concept is followed, but it is later discovered that the pipeline system is a failure and that haulage must therefore be undertaken via the existing QNS & LRR.

Cash operating costs are projected to be in the order of $5.25 per ton of pellets (FOB vessel, North Shore Port) under the assumption that all facilities are owned by the Company and the pipeline works well. Expected revenues are projected to be in the order of 18.5¢ per long ton unit or approximately $12.00 per long ton of pellets at the North Shore Port. Under such conditions the projected cash margin available for profit and the recovery of capital costs is around $6.55 per long ton or $79 million annually. Under the proposed new mining tax laws, the total investment of $550 million is expected to be recoverable in about 8 years after the commencement of production, and the indicated rate of return for the project would be 8% with no debt financing involved. The projected cash flows from such operations over the next 25 years are capable of supporting a debt load of around $600 million if funds are borrowed at an 8% interest rate. This capability is ample and safe for considering substantial debt financing.

The incremental costs of proceeding with the Star-O'Keefe mine at this point in time are substantial and suggest that a very low rate of return is indicated for the efforts involved in obtaining the 3 million tons of pellets per year from these deposits. On the other hand, the benefits to be derived from a railroad system owned and controlled by Javelin are considerable and merit further review.

World demand for iron ore continues to be strong, and at least 12 million tons per year of new pellet capacity is needed each year to keep up with demand. Under these conditions the proposed Julian venture is a good candidatefor implementation within the near future,and the economic feasibility of the proposed mining operations is supported on the basis of these preliminary estimates.

INTRODUCTION

Canadian Javelin Limited is contemplating mining operations at the Julian, Star, and O'Keefe iron ore deposits in Labrador and Quebec. This proposed venture involves the initiation of major mining operations at the three deposits to produce 12 million long tons per year of commercial grade pellets containing at least 65%Fe for sale on the international market place.

The development has been in an exploratory and planning stage for over fifteen years by the Company. The project is approaching the mine development stage and a preliminary feasibility assessment of the venture was requested by the Company. Technical Economists Limited were retained in July to review background data and technical assessments which had been prepared over the past decade. The terms of reference required the consultants to test the economics under probable current market conditions and operating costs. The following report is a result of such preliminary investigations.

PROJECT DESCRIPTION

LOCATION

The Julian and Star-O'Keefe iron ore deposits are located in Labrador and Northern Quebec respectively, midway between the established iron ore mining communities of Gagnon and Schefferville; the Julian property is located only 15 miles from the town of Wabush in Labrador. The Wabush area is now served by the Labrador and North Shore Railroad Company which carries the iron ore shipments from both Schefferville and Wabush at an annual rate in excess of 25 million tons of concentrates and pellets per year. The Star-O'Keefe deposit is 75 miles southeast of the Julian, and approximately midway between Gagnon and Wabush in undeveloped territory which is presently not served by any railroad. The general location of the respective properties, rail-lines and the port facilities at Seven Islands, Quebec, are illustrated in Exhibit 1.

PROPERTY OWNERSHIP

The Julian deposit is held under a sublease by Julco Iron Corporation Limited, a company incorporated under the laws of Canada; Julco is a wholly owned subsidiary of Canadian Javelin Limited. The property was leased from Newfoundland and Labrador Corporation Limited which acquired the original lease from the Province of Newfoundland and Labrador. Newfoundland and Labrador Corporation Limited is a company incorporated under the laws of the Province of Newfoundland and Labrador, and it is owned to the extent of about 94.6% by Canadian Javelin Limited.

The Star and O'Keefe deposits are owned by Dominion Jubilee Corporation Limited, a company incorporated under the laws of Canada, and in which Canadian Javelin Limited and its subsidiaries hold a controlling interest.

ORE RESERVES

Extensive diamond drilling has delineated a series of ore deposits at the three properties which collectively contain in excess of 700 million tons of iron ore containing around 30% iron. The Julian deposit alone accounts for some 500 million tons of the total ore reserves. These are of a concentrating nature similar to the deposits currently being mined nearby by the Iron Ore Company of Canada Limited, Cartier Mining Company Ltd., and Wabush Mines Limited. The deposits are described thoroughly in several geological reports undertaken by the Company and verified by outside independent geologists. The ore reserves are ample to sustain large scale mining operations over at least the next 25 years.

METALLURGICAL RESEARCH

Representative ore samples from these deposits have been subjected to metallurgical tests on a bench scale and on a pilot scale at Lakefield Research of Canada Limited and at the Mines Branch laboratories in Ottawa. These have demonstrated the technical feasibility of producing commercial grade concentrates that contain in excess of 65%Fe and less than 5% silica. The results of such tests are documented in numerous reports which are available in the Company's files.

MINE DEVELOPMENT

Preliminary mine plant designs and open pit layouts have been analysed by Kilborn Engineering Limited, a firm of independent mining consultants. Their most recent report, dated November 1970, is the basis for this feasibility assessment. That report includes estimates of capital costs and operating costs for mining and concentration plants at Julian and at the Star-O'Keefe properties with annual production capacities of 9,000,000 and 3,000,000 long tons of concentrates respectively.

TRANSPORTATION STUDIES

The issues concerning the movement of bulk concentrates and ore pellets from the three respective iron ore deposits have been the subject of extensive investigations by the Company. Whereas railroad shipment may be the most likely one to consider, the Company has found that the quoted freight rates in the order of $2.50 to $3.00 per ton are artificial and perhaps non-competitive with other forms of conveyance that might be considered. Among these other forms is the movement of slurried concentrates by pipeline. This possibility is the subject of a feasibility assessment by ShelPac Research of Canada Limited who have been asked to investigate a pipeline system to serve the two proposed concentration sites and a pelletizing plant that is expected to be located near the shipping port. The final studies have not yet been tabled but some preliminary and general findings have been disclosed to Javelin for this feasibility assessment. The system is deemed to be practicable and operable by ShelPac, but their proposed concept has not been divulged in sufficient detail to permit a thorough scrutiny. Their concept appears to involve privileged information which cannot be revealed to Javelin until it enters into a contract with ShelPac.

PELLETIZING RESEARCH

Samples of concentrate produced from the bench scale tests have been sent to several established manufacturers of pelletizing equipment. On the basis of such preliminary tests and investigations the process of Dravo of Canada Limited was selected for consideratior by Javelin. Dravo was requested to quote on the costs of designing and providing a conventional pelletizing plant capable of producing 12 million long tons per year of commercial grade pellets. Dravo proposes to use proven equipment based on its many years of experience with similar concentrates. They furnished estimates of capital costs and operating costs for this study; their opinions are considered reliable and safe for feasibility considerations.

PORT DEVELOPMENT

The proposed shipping port for this new facility is contemplated at a point near Schefferville and Pte. Noire, Quebec, on the north shore of the St.Lawrence River. Hydrographic surveys for the area have been initiated by the Department of Public Works; the port design and preliminary engineering have been commissioned to C.D.Howe Construction Company Limited. The capital costs and operating costs estimates for this feasibility study are based on their preliminary data.

PROJECT ECONOMICS

The feasibility studies described herein were based on engineering data and related capital cost and operating cost estimates provided by several consulting engineering groups and constructors commissioned by Canadian Javelin Limited to apprise the company of the costs and consequences of exploiting the Julian-Star-O'Keefe deposits. The data thus furnished was cross-checked with public information available in current mining magazines and reports issued by operating companies. The development possibilities and various transportation alternatives available to the company were categorized into seven basic cases for which cash flow analyses were undertaken. These seven cases were the following:

Case 1: Annual pellet production of 12 million tons per year from the three deposits, and pipeline transportation by a private carrier in accord with a preliminary ShelPac proposal, under conditions deemed to be the probable ones.

Case 2: The same general conditions as in Case 1 except that the pipeline is owned by Canadian Javelin Limited.

Case 3: This assumes that the pipeline is initially installed as in Case 2 but that the pipeline concept is a failure, and that railroad haulage via the Quebec North Shore and Labrador Railroad must be considered.

Case 4: Essentially the same conditions are assumed as in Case 2 except that the pipeline operating costs are $1 per ton higher than previously expected.

Case 5: The pipeline concept is rejected and transportation is assumed via the existing Quebec North Shore and Labrador Railroad from the outset.

Case 6: Mining of the Julian deposit only is considered at an annual production rate of 9 million tons of pellets, with haulage via the Quebec North Shore and Labrador Railroad.

Case 7: Production from the Julian deposit only is considered with production at 9 million tons per year, but a 400 mile railroad to an East Coast port on the Atlantic is assumed to be constructed and owned by Canadian Javelin Limited at a capital cost of $400,000 per mile.

GENERAL ASSUMPTIONS

The capital costs and operating costs estimates provided by the respective consultants were employed as the probable conditions to be expected by Javelin. The range from the minimum expected costs to a maximum were also estimated in consultation with the respective consultants to enable a range of values to be considered for economic analysis. The capital costs and operating costs are illustrated in Exhibits 2 and 3 respectively.

The range of estimated unit revenues is shown in Exhibit 4; these are based on the expectations of prices to be received for commercial grade iron ore pellets loaded on the vessels. The price levels are consistent with current values reported for international sales; the 18.5¢ price per long ton unit is a reasonable expectation. The economic analysis included tests with prices at 22¢ per unit on the high side, and 16¢ per unit on the low side. Under the general assumption that long term markets are available and will be negotiated, a cash margin before taxes was calculated under the probable conditions as well as under minimum and maximum bases. In each instance the cash margins were determined under expected prices as well as under the lowest and highest prices as illustrated in Exhibit 5.

The range of estimated unit book profit available before taxes by conventional accounting methods, assuming 25 year depreciation of the plant, is illustrated in Exhibit 6. The annual cash margin available before taxes with a Javelin owned pipeline concept is illustrated in Exhibit 7.

Conventional amortization factors for this kind of a venture with interest rates varying between 5% and 10% are shown in Exhibit 8. From the annual cash flows available, and by their relationship to the annual amortization factors, a maximum debt burden capability for several combinations of circumstances is shown in Exhibit 10.

CASH FLOW ANALYSIS

The summary statistics and cash flow data for the seven cases are illustrated in Exhibits 11 to 17 inclusive. These are based on the assumption that the total investment can be recovered from profits before any income taxes are payable. After the investment is recovered a 50% income tax rate is contemplated. No residual values and salvage values have been assumed.

The cash flow analysis technique employed in this study assumes that all funds needed to implement the respective cases are made available from a common pool of corporate funds and no interest burden is incorporated. This evaluation technique prevents misunderstandings which might otherwise highlight profits that are attributable to the financing alternative employed rather than to the project under consideration.

RATE OF RETURN

For each of the seven cases described, a rate of return was calculated by discounted cash flow analysis; the comparative summary statistics for all cases are shown in Exhibit 18. This data suggests that the pipeline alternatives may yield an 8% return under the general assumption that 100% equity financing is employed. This return, however, is very sensitive to operating cost changes, and the rate of return diminishes rapidly to the point of serious concern under assumptions of a pipeline failure.

The merits of mining the Julian deposit alone are suggested in this assessment which indicate that the incremental cost of opening up the Star and O'Keefe deposits may be onerous. From a financial point of view, a mining development at the Julian deposit alone appears superior to any other alternative considered.

The possibility of rail haulage, and the construction of Javelin's own railroad to an Atlantic port emerge as matters that merit serious consideration. There is no question about the greater control and flexibility available to Javelin under such conditions, and there is also the possibility of supplementary revenues from other operations that might be interested in a railroad system heading eastward, paralleling the Churchill River towards Goose Bay. The indicated 6% rate of return could thus be enhanced considerably because of such additional revenue potential.

DEBT CAPABILITY

The cash flow potential from this venture, under the stated probable conditions with a Javelin owned pipeline can support up to 600 million dollars of debt; thus 100% financing might be considered if long term firm contracts for the pellets can be initiated before hand. Even under difficult and adverse conditions a 50% debt burden can be tolerated safely by the projected cash flows.

MAIN RISKS

A general review of the overall uncertainties confronting Canadian Javelin Limited if it proceeds with the proposed mine development plans for the Julian-Star-O'Keefe iron ore deposits suggests the following to be the main risks:

1. Under the proposed pipeline concept, the main risk is the possibility that the pipeline might fail and that the whole mining and pelletizing operations can thus be shut down for considerably long periods of time until the system can be made operable again. The operational problems are complex and the ability to cope with spills, breakages, fluctuations in the production rates at both ends of the pipe, and exposure to natural hazards, as well as sabotage, could result in serious complications. In the event of a failure during the shipping season the whole system could be shut down for several weeks at the least.

2. A loss of markets and fluctuating prices for iron ore pellets are also important possibilities to be considered. These can be overcome in part by prior assurances such as firm long term contracts and associations with major steel producers.

3. Uncertainties associated with the assembling of a competent operating staff and general management pose additional risks which must be considered. Future financial performance and results are largely dependent on the quality of people assembled for this venture. The mine operators already established in Labrador will provide intense competition for capable personnel, and they may have an advantage over Javelin.

4. Fluctuations in transportation costs can produce adverse consequences from a financial point of view; such fluctuations can be expected if Javelin cannot control the rate-making process. Because of the large annual tonnages involved, transportation costs and dependability of the transportation system are critical variables that affect the venture. The uncertainties can be minimized to Javelin's advantage if it owns or controls the transportation system.

5. Variations in capital costs do not appear to be serious risks; however, the wide variation in probable capital requirements among the various alternatives is noteworthy. On the other hand,the ability to raise capital is somewhat dependent upon the amount involved. In large projects, such as the one contemplated, the preference is usually towards circumstances which offer the best combination of least capital cost, shortest pay-back period and highest rate of return; this combination is most likely to be realized by focusing attention on mining of the Julian deposit alone, using the existing rail facilities of the Quebec North Shore and Labrador Railway, or perhaps by considering a new railroad to the east coast.

BACKGROUND INFORMATION

REGIONAL ACTIVITY

The major mine operators in the Labrador-Quebec region are the Iron Ore Company of Canada Limited, Wabush Mines Limited, and Quebec Cartier Limited; all of these companies are closely affiliated with major steel producers throughout the world. They are currently implementing major expansions at their respective operations in the area. Whereas their collective annual production is around 30 million tons per year today, the new increases are likely to boost total capacity in excess of 50 million tons per year, without the Javelin consideration.

COMPANY HISTORY

Canadian Javelin Limited was incorporated under a Dominion charter in 1951 for the purpose of engaging in the exploitation of natural resources in the western hemisphere. Since that time it was instrumental in the initiation of several major mining developments and its most successful achievement is the discovery of the Wabush iron ore deposit. This was brought into production by Wabush Mines Limited, under an arrangement whereby Javelin receives substantial annual royalties today. Javelin is one of the acknowledged innovators of the concept that suggested the practicability of mining and concentrating low grade Labrador iron ores to produce high grade concentrates (+65%Fe) in preference to mining the direct shipping ores that contain around 55%Fe. Other ventures undertaken by Javelin and its subsidiaries include several mining developments in Central America, and exploration prospects throughout North America and South America. The company recently initiated a pulp and paper complex that includes wood harvesting and lumbering in Labrador, and pulp production and linerboard manufacturing in Newfoundland; these latter facilities are expected to be in operation in 1972.

MANAGEMENT CAPABILITY

The exploration and mining programme of Javelin is directed by a Board of Directors that includes several knowledgeable and prominent members of the mining industry. The programme is managed by Mr.W.Hegler, a mining engineer with considerable experience in the iron ore mining industry which he gained while associated with Steep Rock Iron Mines Ltd. for over a decade. The company has made it a policy to retain prominent and capable consultants with proven experience in mining developments to supplement its own staff. The company is pursuing this policy in proceeding with development plans for the Julian-Star-O'Keefe project.

TAX LAWS

The taxation laws of Canada are about to be revised drastically and the final form proposed for legislation is not yet common knowledge. There have been many disclosures by cabinet ministers in the recent past to indicate that the mining industry will continue to receive fair treatment in matters of taxation. For the purposes of this report we have assumed that the following recently enunciated policies will apply:

1. The three year tax holiday and depletion allowances will be discontinued.

2. Capital expenditures and development expenditures will be recoverable in full from operating profits as rapidly as the cash flows permit. During the capital recovery period no income taxes have been assumed to be payable; after that time a 50% corporate income tax rate has been assumed on profits as well as on capital gains.

WORLD DEMAND FOR IRON ORE

A review of current literature and statistics published in several reliable sources indicates that world production of iron ore today is in excess of 700 million long tons, and is produced in about 60 countries. The U.S.A. and U.S.S.R. continue to be the leading consumers of iron ore; Japan and Western Europe are the other important consumers. Canada, with iron ore production in the order

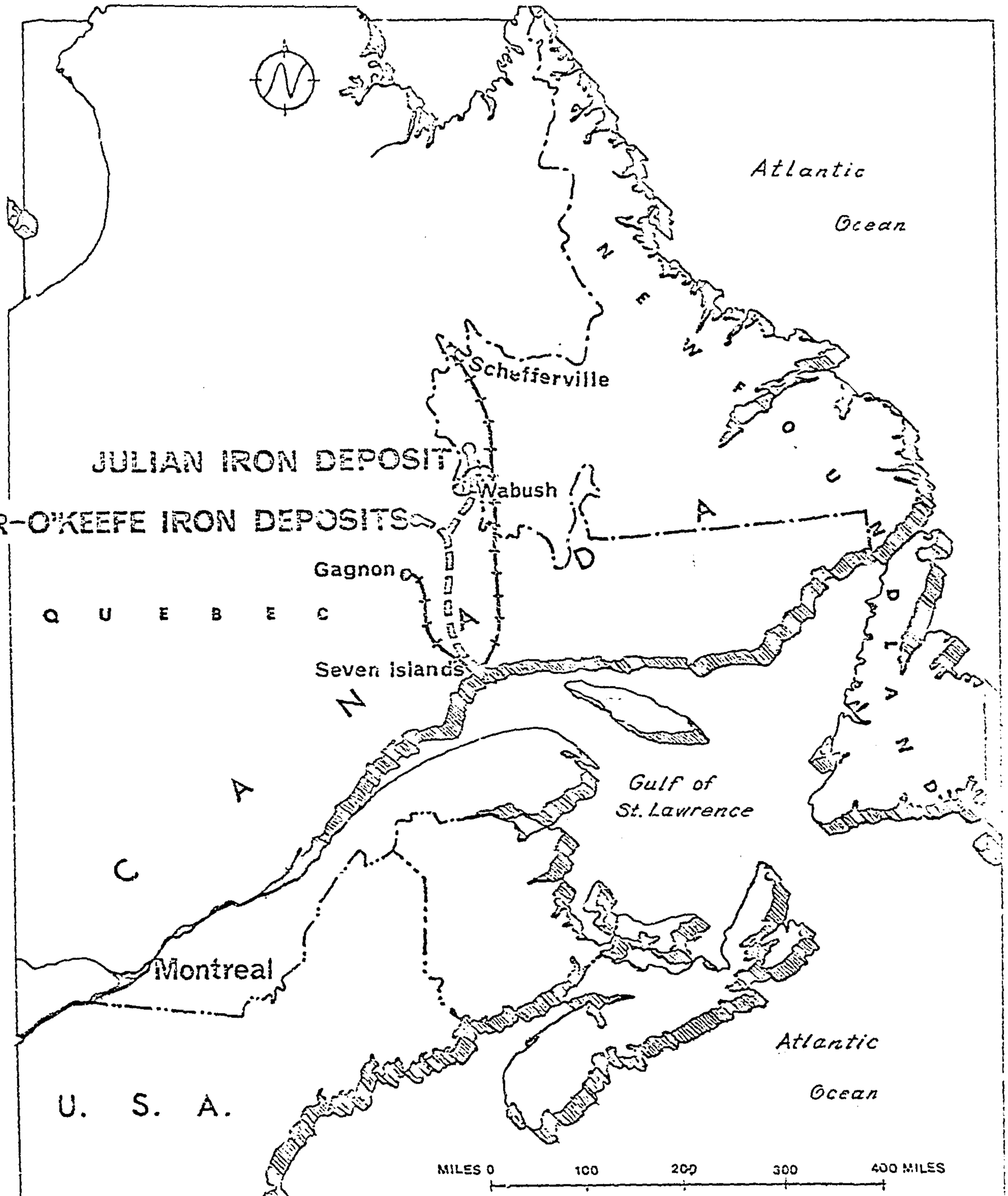
World Demand for Iron Ore (Cont'd.)

of 40 million tons is becoming a major supplier and, because of its proximity to the main consuming nations, its long term iron ore position and market share are expected to improve.

Vast reserves of iron ore are known to occur throughout the world. The magnitude of these reserves is in the order of 250 billion tons, and would be sufficient to meet world requirements for more than 300 years. These reserves however are scattered far and wide, especially in the underdeveloped and developing nations, and very few are as ideally situated to the North American and European markets as Javelin's deposits in Labrador and Quebec.

Iron ore consumption is closely tied to population growth and to the growth in the standard of living throughout the world. Most market analysts project a 2% growth rate in the demand for iron ore. Accordingly, nearly 12 million tons per year of new pellet production capacity will be required each year to meet the growing world demand. Despite the vast iron ore projects recently implemented in Australia, South Africa, India and Brazil, there is room for several more such ventures over the next decade. The project now contemplated by Canadian Javelin Limited can be a strong contender for such consideration.

APPENDIX



Canadian Javelin Limited

Julian and Star-O'keefe iron ore deposits with proposed slurry pipe line to tide water

EXHIBIT 1

CANADIAN JAVELIN LIMITED

JULIAN-STAR-O'KEEFE PROJECT

RANGE OF ESTIMATED CAPITAL COSTS
(in millions of dollars)

	Minimum $	Maximum $	Probable $
For Julian Mine (9,000,000 TPY)	110	160	135
For Star-O'Keefe Mine (3,000,000 TPY)	70	100	85
Concentrate Pipelines	80	150	100
Pelletizing Plant and Administration Centre at North Shore Port (12,000,000 TPY)	85	110	105
Dock Facilities at North Shore Port	25	50	35
Start-up and Preproduction Expenses	15	30	20
Interest during Construction (at 8% over three years)	30	80	60
Working Capital	10	20	15
TOTAL	$420	$700	$550

EXHIBIT 2

CANADIAN JAVELIN LIMITED

JULIAN-STAR-O'KEEFE PROJECT

RANGE OF ESTIMATED UNIT OPERATING COSTS
($/LT of Pellets)

Item	Minimum $	Maximum $	Probable $
Cash Expenses			
Mining and Concentration	2.50	4.00	3.00
Pipeline Transportation	.30	.80	.40
Pelletizing	.14	1.76	1.26
Stockpiling and Loading	.15	.50	.25
Royalties	.56	.56	.56
Interest on Debt	0	0	0
Sub Total	$4.47	$7.60	$5.47
Non-Cash Expenses			
Depreciation of Capital Costs over 25 years	1.40	2.33	1.84
Grand Total	$5.87	$9.93	$7.31

EXHIBIT 3

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

RANGE OF ESTIMATED UNIT REVENUE AT NORTH SHORE PORT

Item	Lowest $	Highest $	Expected $
Per long ton unit	0.160	0.220	0.185
Per long ton of pellets (65%Fe)	10.40	14.30	12.02

EXHIBIT 4

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

RANGE OF ESTIMATED UNIT CASH MARGIN AVAILABLE BEFORE TAXES
(in $ per long ton of pellets)

	For Projected Unit Revenue Basis ($ per LT)		
	Lowest $	Highest $	Expected $
Revenue	10.40	14.30	12.02
Less Cash Expenses (Probable)	5.47	5.47	5.47
Probable Cash Margin	4.93	8.83	6.55
Revenue	10.40	14.30	12.02
Less Cash Expenses (Minimum)	4.47	4.47	4.47
Maximum Cash Margin	5.93	9.83	7.55
Revenue	10.40	14.30	12.02
Less Cash Expenses (Maximum)	7.60	7.60	7.60
Minimum Cash Margin	2.80	6.70	7.60

EXHIBIT 5

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

RANGE OF ESTIMATED UNIT BOOK PROFIT AVAILABLE BEFORE TAXES

	For Projected Unit Revenue Basis ($/LT)		
	Lowest $	Highest $	Expected $
Probable Cash Margin	4.93	8.83	6.55
Less Probable Depreciation	1.84	1.84	1.84
Probable Book Profit	3.09	6.99	4.71
Maximum Cash Margin	5.93	9.83	7.55
Less Minimum Depreciation	1.40	1.40	1.40
Maximum Book Profit	4.53	8.43	6.15
Minimum Cash Margin	2.80	6.70	4.42
Less Maximum Depreciation	2.33	2.33	2.33
Minimum Book Profit	0.47	4.37	2.09

EXHIBIT 6

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

ANNUAL CASH MARGIN AVAILABLE BEFORE TAXES*
(in $ millions at full capacity)
(of 12,000,000 LT/Yr)

	For Projected Unit Revenue Basis		
	Lowest	Highest	Expected
	$	$	$
Probable Cash Margin	59	106	79
Maximum Cash Margin	71	118	91
Minimum Cash Margin	34	80	53

* Note - The above cash margin may be available to the company under the proposed new mining regulations until the total initial investment is recovered. After that period approximately 50% may be lost as income taxes.

EXHIBIT 7

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

ANNUAL AMORTIZATION FACTORS*

Years	For Interest Rates at			
	5%	6%	8%	10%
20	7.89	8.59	9.95	11.42
25	6.98	7.68	9.16	10.74
30	6.41	7.14	8.70	10.36
40	5.75	6.55	8.23	10.00

*Note: The annual amortization factor is a number, expressed as a percentage amount, which represents the proportion of the original principal that must be repaid in uniform annual payments for principal and interest over the loan period.

EXHIBIT 8

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

MAXIMUM DEBT BURDEN FACTORS*

Years of Amortization	For Interest Rates at 5%	6%	8%	10%
20	12.7	11.6	10.1	8.8
25	14.3	13.0	10.9	9.3
30	15.6	14.0	11.5	9.7
40	17.4	15.3	12.2	10.0

*Note: The Maximum Debt Burden Factor is the reciprocal of the annual amortization factor and it represents the multiplier applicable to the annual cash margin available to determine the debt burden capability.

EXHIBIT 9

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

DEBT BURDEN CAPABILITY
for 100% Financing over 25 years
(in $millions)

	For Projected Unit Revenue Basis		
	Lowest	Highest	Expected
With Probable Cash Margin			
@ 5% Interest	672	1212	904
6% Interest	612	1104	820
8% Interest	514	923	688
10% Interest	440	788	588
With Maximum Cash Margin			
@ 5% Interest	812	1352	1048
6% Interest	736	1228	944
8% Interest	620	1032	792
10% Interest	532	880	676
With Minimum Cash Margin			
@ 5% Interest	388	912	604
6% Interest	352	832	552
8% Interest	296	696	460
10% Interest	252	596	392

EXHIBIT 10

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOW FOR CASE 1
SHELPAC PROPOSAL

($ millions)

Year	Cash Inflow	Cash Outflow	Net Annual Cash Flow	Cumulative Cash Flow
1971		(75)	(75)	(75)
1972		(150)	(150)	(225)
1973		(150)	(150)	(375)
1974	20	(75)	(55)	(430)
1975	45		45	(385)
1976	62		62	(323)
1977	62		62	(261)
1978	62		62	(199)
1979	62		62	(137)
1980	62		62	(75)
1981	62		62	(13)
1982	62		62	49
1983	31		31	80
1984	31		31	111
1985	31		31	142
1986	31		31	173
1987	31		31	204
1988	31		31	235
1989	31		31	266
1990	31		31	297
1991	31		31	328
1992	31		31	359
1993	31		31	390
1994	31		31	421
1995	31		31	452
1996	31		31	483

Note: Project R.O.I. = 8% after taxes

EXHIBIT 11

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOWS FOR CASE 2
PROBABLE CONDITIONS FOR 12,000,000
TONS PER YEAR JAVELIN PIPELINE

($ millions)

Year	Cash Inflows	Cash Outflows	Net Annual Cash Flows	Cumulative Cash Flows
1971		(100)	(100)	(100)
1972		(200)	(200)	(300)
1973		(200)	(200)	(500)
1974	25	(50)	(25)	(525)
1975	55		55	(470)
1976	79		79	(391)
1977	79		79	(312)
1978	79		79	(233)
1979	79		79	(154)
1980	79		79	(75)
1981	79		79	4
1982	79		79	83
1983	40		40	123
1984	40		40	163
1985	40		40	203
1986	40		40	243
1987	40		40	283
1988	40		40	323
1989	40		40	363
1990	40		40	403
1991	40		40	443
1992	40		40	483
1993	40		40	523
1994	40		40	563
1995	40		40	603
1996	40		40	643

Note: Project R.O.I. = 8% after taxes

EXHIBIT 12

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOWS FOR CASE 3
PIPELINE FAILURE AND SWITCH TO RAILROAD
HAULAGE VIA QNS & LRR @ $2.40 PER TON

($ millions)

Year	Cash Inflows	Cash Outflows	Net Annual Cash Flows	Cumulative Cash Flows
1971		(100)	(100)	(100)
1972		(200)	(200)	(300)
1973		(200)	(200)	(500)
1974	0	(100)	(100)	(600)
1975	35		35	(565)
1976	55		55	(510)
1977	55		55	(455)
1978	55		55	(400)
1979	55		55	(345)
1980	55		55	(290)
1981	55		55	(235)
1982	55		55	(180)
1983	55		55	(125)
1984	55		55	(70)
1985	55		55	(15)
1986	28		28	13
1987	28		28	41
1988	28		28	69
1989	28		28	97
1990	28		28	125
1991	28		28	153
1992	28		28	181
1993	28		28	209
1994	28		28	237
1995	28		28	265
1996	28		28	293

Note: Project R.O.I. = 4% after taxes

EXHIBIT 13

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOWS FOR CASE 4
PROBABLE CONDITIONS BUT WITH $1.00 PER TON INCREASE IN PIPELINE OPERATING COSTS

($millions)

Year	Cash Inflow	Cash Outflow	Net Annual Cash Flow	Cumulative Cash Flows
1971		(100)	(100)	(100)
1972		(200)	(200)	(300)
1973		(200)	(200)	(500)
1974	25	(50)	(25)	(525)
1975	40		40	(485)
1976	67		67	(418)
1977	67		67	(351)
1978	67		67	(284)
1979	67		67	(217)
1980	67		67	(150)
1981	67		67	(83)
1982	67		67	(16)
1983	67		67	51
1984	34		34	85
1985	34		34	119
1986	34		34	153
1987	34		34	187
1988	34		34	221
1989	34		34	255
1990	34		34	289
1991	34		34	323
1992	34		34	357
1993	34		34	391
1994	34		34	425
1995	34		34	459
1996	34		34	493

Note: Project R.O.I. = 7% after taxes

EXHIBIT 14

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOWS FOR CASE 5
NO PIPELINE AND HAULAGE VIA QNS & LRR @ $2.40 PER TON

($millions)

Year	Cash Inflows	Cash Outflows	Net Annual Cash Flows	Cumulative Cash Flows
1971		(100)	(100)	(100)
1972		(150)	(150)	(250)
1973		(150)	(150)	(400)
1974	30	(75)	(45)	(445)
1975	45		45	(400)
1976	55		55	(345)
1977	55		55	(290)
1978	55		55	(235)
1979	55		55	(180)
1980	55		55	(125)
1981	55		55	(70)
1982	55		55	(15)
1983	28		28	13
1984	28		28	41
1985	28		28	69
1986	28		28	97
1987	28		28	125
1988	28		28	153
1989	28		28	181
1990	28		28	209
1991	28		28	237
1992	28		28	265
1993	28		28	293
1994	28		28	321
1995	28		28	349
1996	28		28	377

Note: Project R.O.I. = 6% after taxes

EXHIBIT 15

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOW FOR CASE 6
JULIAN DEPOSIT - 4,000,000 TONS PER YEAR
HAULAGE VIA QNS & LRR

($millions)

Year	Cash Inflows	Cash Outflows	Net Annual Cash Flows	Cumulative Cash Flows
1971		(75)	(75)	(75)
1972		(100)	(100)	(175)
1973		(100)	(100)	(275)
1974	20	(45)	(25)	(300)
1975	38		38	(262)
1976	44		44	(218)
1977	44		44	(174)
1978	44		44	(130)
1979	44		44	(86)
1980	44		44	(42)
1981	44		44	2
1982	22		22	24
1983	22		22	46
1984	22		22	68
1985	22		22	90
1986	22		22	112
1987	22		22	134
1988	22		22	156
1989	22		22	178
1990	22		22	200
1991	22		22	222
1992	22		22	244
1993	22		22	266
1994	22		22	288
1995	22		22	310
1996	22		22	332

Note: Project R.O.I. = 8% after taxes

EXHIBIT 16

CANADIAN JAVELIN LIMITED
JULIAN-STAR-O'KEEFE PROJECT

PROJECTED CASH FLOW FOR CASE 7
JULIAN DEPOSIT - 9,000,000 TONS PER YEAR
OWN RAILROAD TO EAST COAST

($millions)

Year	Cash Inflows	Cash Outflows	Net Annual Cash Flows	Cumulative Cash Flows
1971		(100)	(100)	(100)
1972		(150)	(150)	(250)
1973		(150)	(150)	(400)
1974	35	(70)	(35)	(435)
1975	53		53	(382)
1976	59		59	(323)
1977	59		59	(264)
1978	59		59	(205)
1979	59		59	(146)
1980	59		59	(87)
1981	59		59	(28)
1982	59		59	2
1983	30		30	32
1984	30		30	62
1985	30		30	92
1986	30		30	122
1987	30		30	152
1988	30		30	182
1989	30		30	212
1990	30		30	242
1991	30		30	272
1992	30		30	302
1993	30		30	332
1994	30		30	362
1995	30		30	392
1996	30		30	422

Note: Project R.O.I. = 6% after taxes

EXHIBIT 17

COMPARATIVE SUMMARY STATISTICS

Case No.	Description	Annual Pellet Production L.T. millions	Total Capital Cost $millions	Payback Period in Years From Start Of Construction	Payback Period in Years From Start Of Start-up	Cumulative Net Cash Inflows (after taxes) $millions	Project R.O.I. %
1	Probable Conditions ShelPac Pipeline	12	450	11	8	483	8
2	Probable Conditions Javelin Pipeline	12	550	10	7	643	8
3	Pipeline Failure use QNS Rail-road	12	600	15	12	293	4
4	Higher Piping Costs - Javelin Pipeline	12	550	12	9	493	7
5	No Pipeline - Use QNS Railroad	12	475	12	9	377	6
6	Julian Only - Use QNS Railroad	9	320	10	7	294	8
7	Julian Only - Javelin Railroad to East Coast	9	470	11	8	422	6

EXHIBIT 18

LIST OF REFERENCE MATERIAL

Knowles, D.M., "The Julian Deposit
October 1967.

_____ "Report on Grinding and Concentration Tests
on Julian Iron Ore",
by Lakefield Research of Canada Ltd.,
March 8, 1961.

_____ "Preliminary Site Selection Study of Proposed
Ore Shipping Terminal",
by C.D.Howe Company Limited,
August 1970.

_____ "Spiral Tests on Julian Iron Ore",
by Humphreys Engineering Company,
June 27, 1961.

_____ "Labrador Iron Ore Pellet Project",
by Canadian Javelin Limited,
1970.

_____ "Julian and Star O'Keefe Iron Ores"
Vol.1 - Capital and Operating Costs
Vol.2 - Drawings
by Kilborn Engineering Limited,
November, 1970.

TECHNICAL ECONOMISTS LIMITED

1000 Yonge Street, Suite 302
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Telephone (416) 925-2831

November 27, 1970

CERTIFICATE

I, William B. Magyar, of the City of Toronto, in the Province of Ontario, hereby certify:

1) That I am a Consulting Engineer, and reside at 5 Sheffley Crescent, Weston, Ontario.

2) That I am a registered Professional Engineer of the Province of Ontario and of the Province of Quebec. I have practised my profession for over fifteen years.

3) That I am a graduate of McGill University and hold a Bachelor of Engineering Degree in Mining Engineering. I am also a graduate of the University of Western Ontario, and hold a Master of Business Administration Degree. I am associated with Technical Economists Limited, Toronto, Ontario, a firm of consulting economists and engineers.

4) That I have no interest, either directly or indirectly, in the property or securities of Canadian Javelin Limited, Dominion Jubilee Corporation Limited, and Newfoundland and Labrador Corporation Limited, and that I do not expect to receive, either directly or indirectly, any interest in the securities of those companies.

5) That the accompanying report entitled "The Julian-Star-O'Keefe Project, Feasibility Assessment" is based on knowledge of the properties gained through discussions with Mr. W. Hegler, Vice-President of Engineering, and Mr. W. B. Blakeman, Geologist, both of Canadian Javelin Limited. I did not visit the properties but I had the privilege of reviewing property ownership agreements, work contracts, results of exploration activities, relevant reports by independent consultants, and the Company's files. My current examinations were conducted during the period from July 15, 1970, to November 27, 1970, inclusive.

6) This certificate applies to the lands which contain the Julian, Star, and O'Keefe iron ore deposits that are controlled by Canadian Javelin Limited and/or its subsidiaries and affiliates.

William B. Magyar, P.Eng.