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TULAMEEN COAL PROJECT
DATA FOR D.C.F.-R.O.R. ANALYSIS

January, 1979

Revised July, 1980

TULAMEEN COAL PROJECT

Data for D.C.F.-R.O.R. Analysis

Feb 72

Project Schedule:

- Year 0 - exploration, engineering, land acquisition,
B.C. Government approvals;
- Year 1 - site preparation, construction;
- Year 2-13 - raw coal production: 800,000 tonnes,
- clean coal production: 424,000 tonnes.

Capital and operating costs are tabulated below for each of the two following situations:

- I - Major mobile equipment owned.
- II - Major mobile equipment leased.

I MAJOR EQUIPMENT OWNED

A. Capital Cost Summary

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Total</u>
Mine Capital	\$440,000	\$1,045,000	\$5,135,900 (see note 1)	\$
Plant Capital	-	8,668,267	-	
Other Capital	-	275,000	2,000,000	
	<hr/>	<hr/>	<hr/>	<hr/>
	440,000	9,988,267	7,135,900	17,564,167

Mine equipment replacement and addition to fleet schedule (see note 1):

	<u>Cost</u>
Year 3	\$ -
4	-
5	-
6	1,173,000
7	2,515,000
8	1,664,000
9	391,000
10	391,000
11	391,000
12	391,000
13	-

B. Operating Cost Summary

	<u>Cost</u>
Year 2	\$19.75
3	19.75
4	19.75
5	19.75
6	21.26
7	22.01
8	22.75
9	23.48
10	24.24
11	24.97
12	25.73
13	16.07

II MAJOR EQUIPMENT LEASED

A. Capital Cost Summary

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Total</u>
Mine Capital	\$440,000	\$1,045,000	\$ 220,000	\$
Plant Capital	-	8,668,267	-	
Other Capital	-	275,000	2,000,000	
	<u>440,000</u>	<u>9,988,267</u>	<u>2,220,000</u>	<u>12,648,267</u>

B. Operating Cost Summary

	<u>Cost</u>
Year 2	\$23.25
3	23.25
4	23.25
5	23.25
6	25.61
7	26.60
8	27.64
9	28.51
10	29.70
11	30.72
12	31.66
13	18.04

ROYALTIES

B.C. Coal Royalty: - \$0.75/clean tonne

Royalties payable to Imperial Metals & Power Ltd. - \$0.98/clean tonne

N.B. Prepaid royalty, totalling \$75,000, to end of Year 1 to be deducted from royalty payable in Year 2.

CAPITAL COST DETAIL

CASE I - Major Mobile Equipment Owned

Mine Capital

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>
Exploration	400,000	200,000	-
Mobile Mine Equipment (see note 1)			
7 - 631 D Scrapers	-	-	2,219,000)
4 - D9H Cats			1,280,000)*
3 - 16G Graders			681,000)
1 - 988B Loader			289,000)
Sand and water truck			200,000
Site Preparation and Pre-production Stripping (see note 2)	-	750,000	-
Contingency - 10%	40,000	95,000	466,900
	<u>440,000</u>	<u>1,045,000</u>	<u>5,135,900</u>

Surface Plant Capital

Preparation Plant (see note 3)	-	5,001,700	-
Recycle Water System (see note 3)	-	88,700	-
Fresh Water System (see note 3)	-	182,600	-
Tailings Pond (see note 3)	-	272,000	-
Sewage Treatment System (see note 3)	-	1,500	-
Rail Load Out (see note 4)	-	150,000	-
Rail Yard (see note 5)	-	452,173	-
Power (see note 6)	-	195,000	-
Machine shop, office, dry, washdown facility (see note 7)	-	1,536,570	-
Contingency - 10%	-	788,024	-
		<u>8,688,267</u>	

Other Capital

Access road (see note 8)	-	150,000	-
Property acquisition (re: railyard)	-	100,000	-
Working Capital (see note 9)	-	-	2,000,000
Contingency - 10% (excluding working capital)	-	25,000	-
		<u>275,000</u>	<u>2,000,000</u>

*(Lease in Case II)

OPERATING COST DETAIL

CASE I - Major Mobile Equipment Owned

Year	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
Direct Mining cost/ tonne raw, del. to plant (see note 10)	3.20	3.20	3.20	3.20	4.00	4.39	4.79	5.18	5.58	5.97	6.37	1.25
Total cost del. to plant/tonne clean (53% recovery)	6.04	6.04	6.04	6.04	7.55	8.28	9.04	9.77	10.53	11.26	12.02	2.36
Coal Preparation cost (see note 12)	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Trucking (see note 13)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Road Maint. and rail car loading (see note 14)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Admin., Sales (see note 15)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Rail (see note 11)	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Port or destina- tion handling	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Direct Cost F.O.B. or delivered Vancouver area	19.75	19.75	19.75	19.75	21.26	22.01	22.75	23.48	24.24	24.97	25.73	16.07

OPERATING COST DETAIL

CASE II - Major Mobile Equipment Leased

Year	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
Direct mining cost/ tonne raw (see note 16)	4.89	4.89	4.89	4.89	6.14	6.67	7.22	7.68	8.31	8.85	9.40	2.13
Total cost del. to plant/tonne clean (53% recovery)	9.23	9.23	9.23	9.23	11.59	12.58	13.62	14.49	15.68	16.70	17.74	4.02
Coal Preparation cost	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Trucking	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Road Maint. and rail car loading (see note 14)	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Administration, Sales	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Rail	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Port	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Direct Cost F.O.B. or delivered Vancouver area	23.25	23.25	23.25	23.25	25.61	26.60	27.64	28.51	29.70	30.72	31.66	18.04

NOTES TO ACCOMPANY TULAMEEN
CAPITAL AND OPERATING COST ESTIMATE

NOTE 1 Mine Equipment Capital Investment Schedule:

From Pre-feasibility Mining Plan, M. O. Hampton, May, 1978,
revised 24 November, 1978.

(Stripping 1.95 million m³/yr. Years 2 - 5;
" 2.93 million m³/yr. Years 6 - 12).

<u>Year</u>	<u>Scrapers</u>	<u>Dozers (D9H)</u>	<u>Graders (16H)</u>	<u>Water Sand Truck</u>	<u>Loader</u>	<u>Total (000)</u>
2	631 (7) 2,219	(4) 1,280	(3) 681	(2) 200	(1) 289 ⁰⁰	4,669
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	637 (3) 1,173	-	-	-	-	1,173
7	(Trade 631's for 637's) (7) 2,515	-	-	-	-	2,515
8	(1) 391	(3) 864	(2) 409	-	-	1,664
9	(1) 391	-	-	-	-	391
10	(1) 391	-	-	-	-	391
11	(1) 391	-	-	-	-	391
12	(1) 391	-	-	-	-	391
13	-	-	-	-	-	-

NOTE 2 M. Hampton Memo, March 20, 1978.

NOTE 3 Costs direct from Techman report.

NOTE 4 Total derived from Techman unit costs.

Rail loading concept - Single 70-car unit train; cycle time - 4 days; loading time - 12 hours using a 988B loader from an open air stockpile. Loading facility consists of a stockpile pad, ramp 6' high x 100' long x 150' wide, adjacent to rail line; track scales and scale house.

Scales	\$ 79,400
Scale House	21,000
Ramp)	49,600
Pad)	<hr/>
	\$150,000

988B loader capital cost included in mobile mine equipment.

NOTE 5 Costs derived from Techman rail yard unit costs.

Modification to Techman plan: (1) 2 rail spurs rather than 3,
 (2) 85 lb. rail rather than 100 lb.

Total from Techman unit costs \$452,173.

N.B. - Swan Wooster estimated only \$330,000.

NOTE 6 As recommended by Techman, i.e. three 400 KW Flygt diesel generators.

NOTE 7 See cost estimate and plan by C. J. Blascok, March 22, 1978.

Warehouse and shop area reduced 25% after discussion with 01k.

Cost in 1978 dollars.

NOTE 8 M. O. Hampton, "Pre-feasibility Mining Plan Report", February, 1978 (revised November, 1978).

NOTE 9 Amount recommended by J. F. 01k.

NOTE 10 Mining costs derived by M. O. Hampton, "Pre-feasibility Mining Plan Report", February 1978, revised November 24, 1978.

Includes supervision costs of:

- 1 - Mine Superintendent
- 3 - Mine Foremen
- 2 - Surveyors
- 1 - Mechanical Superintendent
- 1 - Mechanical Foreman.

N.B.: - all mine mechanical costs, except supervision, included in heavy equipment hourly operating costs.

NOTE 11 Rail Transport Costs:

C.P. Rail quote:	10.91/tonne
Swan Wooster "Rail Transport Cost" Study, Dec. 1978:	6.57/tonne
Until further discussion with C.P. Rail, use:	8.00/tonne

NOTE 12 Coal Preparation Cost:

Derived from Techman Operating Cost Estimate (page 101).

Modifications - reduction in operating labour: load-out labourers (3) and operators (3) included in a separate operating cost category.

NOTE 13 Trucking of clean coal from preparation plant to clean coal stock pile in Coalmont, a distance of 7 miles on existing road.

Coleman Collieries 19 mine haul: - 2.91/tonne

At this rate, Coalmont 7 mile haul: - 1.07/tonne

Use: - 1.20/tonne

200
300
400
500
600
700
800
900
1000

NOTE 14 Road Maintenance and Rail Car Loading Operating Cost:

Concept:

- Crew of 3 operators,
- Train loading - 12 hours every 4 days,
- Remainder of operators' time on road maintenance,
- 988B for loading,
- 16G grader for road work.

A. Equipment Owned

Labour:	3 load-out/grader operators @ \$7.88/hour - 3 x 1,984 hrs./year x 7.88/hour + 25% loading:	58,627/year
Equipment:	Grader operating cost - approx. 4,309 hrs./year @ \$20.00:	86,180
	Loader operating cost - approx. 1,643 hrs./year @ \$40.00:	<u>65,720</u>
		\$210,527

$$\text{Cost/tonne clean} - \frac{210,527}{424,000} = \$0.50$$

B. Equipment Leased

Labour:	As above	58,627
Equipment:	Grader - lease rental/year	66,650
	- operating cost 4,309 hrs. @ \$20.00	86,180
	Loader - lease rental/year	66,768
	- operating cost 1,643 hrs. @ \$40.00	<u>65,720</u>
		\$343,945

$$\text{Cost/tonne clean} - \frac{343,945}{424,000} = \$0.81$$

NOTE 15 Administration Personnel Costs:

See flow chart for administration personnel as recommended by Hampton, Oik. Additional administration personnel recommended by P. Taggart (memo, March 28th) has not been included.

1 Manager	@ \$35,000 + 14% loading	\$ 39,900
1 Secretary	16,000 "	18,240
1 Receptionist/Typist	15,000 "	17,100
1 Payroll/Accounting Clerk	16,000 "	18,240
1 Warehouseman (Purchasing)	25,000 "	28,500
1 Warehouseman (Issuing/Receiving)	25,000 "	28,500
4 Guard/First Aid Men	15,000 "	68,400
2 Janitorial Personnel	13,000 "	29,640
		<hr/>
		\$248,520
Miscellaneous administration (travel costs, vehicles, insurance, legal expenses, accounting expenses, office expenses)	Say	<hr/>
		\$175,480
		<hr/>
		\$424,000

Use \$1.00/tonne

NOTE 16 See Pre-feasibility Mining Plan, M. O. Hampton, November, 1978.

LEASING COST OF MINE EQUIPMENT (using Caterpillar Equipment)

Project Years 2 - 5 Stripping 1.95 million m³/yr.

Scrapers	7 @ \$8,191.33/mo.	\$ 57,339
Dozers	4 @ \$8,173.08/mo.	32,692
Graders	3 @ \$5,190.79/mo.	<u>15,572</u>

105,603

Plus 7% tax 112,996

÷ 66666

\$1.69/tonne raw

Project Year 6 Stripping 2.93 million m³/yr.

Add 3 (637's) @ \$9,300/mo. 39,853 \$2.14/tonne raw

Project Year 7

10 (637's) @ \$9,300/mo.	93,000
Dozers	33,000
Graders	<u>16,000</u>

142,000

Plus 7% tax 151,940 \$2.28/tonne raw

Project Year 12

15 (637's) @ \$9,300/mo.	139,500
Dozers	33,000
Graders	<u>16,000</u>

188,500

Plus 7% tax 201,695 \$3.03/tonne raw

Project Year 13

Scrapers	3 @ \$9,300	27,900
Dozers	2 @ \$8,200	16,400
Graders	2 @ \$5,200	<u>10,400</u>

54,700

Plus 7% tax 58,529 \$0.88/tonne raw

NOTE 16 - (Cont'd)

Straight line incremental cost can be used between Year 7 and Year 12 as the only change is the continual increase in scraper cycle time requiring additional machines.

	<u>Direct Mining Cost with Owned Equipment (per tonne raw coal)</u>	<u>Direct Mining Cost with Leased Equipment (per tonne raw coal)</u>
Year 2	\$3.20	\$4.89
3	3.20	4.89
4	3.20	4.89
5	3.20	4.89
6	4.00	6.14
7	4.39	6.67
8	4.79	7.22
9	5.18	7.68
10	5.58	8.31
11	5.97	8.85
12	6.37	9.40
13	1.25	2.13

July, 1980

TULAMEEN COAL PROJECT

Data for D.C.F. - R.O.R. Analysis

July, 1980

PROJECT SCHEDULE: Year -1 - engineering, land acquisition, B.C. Government approvals;
 Year 0 - site preparation, construction;
 Year 1-13 - raw coal production: 800,000 tonnes
 - clean coal production: 440,000 tonnes
 = 9,300 BTU/lb. @ 15% T.M.

MAJOR EQUIPMENT OWNED

A. Capital Cost Summary

	<u>Year -1</u>	<u>Year 0</u>	<u>Year 1</u>	<u>TOTAL</u>
Mine Capital	440,000	418,000	8,151,000	
Plant Capital	-	10,327,091	-	
Other Capital	-	1,100,000	2,000,000	
	\$440,000	\$11,845,091	\$10,151,000	\$22,436,091

Mine equipment replacement and addition to fleet schedule (see Note A).

	<u>Cost</u>
Year 2	\$ -
3	-
4	-
5	2,686,000
6	5,836,000
7	230,000
8	-
9	1,034,000
10	2,656,000
11	272,000
12	-
13	-
	\$12,714,000

B. Operating Cost Summary

	<u>Cost</u>
Year 1	\$28.86
2	28.86
3	28.86
4	28.86
5	29.90
6	30.81
7	30.81
8	30.81
9	31.79
10	31.79
11	31.79
12	25.79
13	23.52

CAPITAL COST DETAIL

Major Mobile Equipment Owned

	<u>Year -1</u>	<u>Year 0</u>	<u>Year 1</u>
<u>Mine Capital</u>			
Exploration	\$ 400,000	\$ 200,000	\$ -
Mobile Mine Equipment (Note A)			
10 - 631 D Scrapers	-	-	4,310,000
4 - D9H Cats	-	-	1,652,000
3 - 16G Graders	-	-	816,000
1 - 988B Loader ←	-	-	372,000
2 - Sand and Water Trucks	-	-	230,000
3 - 3/4-ton Pick-ups	-	-	30,000
Site Preparation (Note B)	-	180,000	-
Contingency - 10%	<u>40,000</u>	<u>38,000</u>	<u>741,000</u>
	440,000	418,000	8,151,000
<u>Surface Plant Capital</u>			
Preparation Plant)			
Recycle Water System)			
Fresh Water System) (Note C)		6,711,265	
Tailings Pond)			
Sewage Treatment System)			
Rail Load Out (Note D)	-	182,000	-
Rail Yard	-	400,000	-
Power (Note E)	-	236,000	-
Machine Shop, Office, Dry, Washdown Facility (Note F)	-	1,859,000	-
Contingency - 10%	<u>-</u>	<u>938,827</u>	<u>-</u>
	-	10,327,091	-
<u>Other Capital</u>			
Access Road (Note G)	-	900,000	-
Property Acquisition (re: railyard)	-	100,000	-
Working Capital	-	-	2,000,000
Contingency - 10% (excluding working capital)	<u>-</u>	<u>100,000</u>	<u>-</u>
	-	1,100,000	2,000,000

OPERATING COST DETAIL

Major Mobile Equipment Owned

YEAR	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
Direct Mining Cost per tonne raw, del. to plant	5.44	5.44	5.44	5.44	6.01	6.51	6.51	6.51	7.05	7.05	7.05	3.75	2.50
Total Cost del. to plant/tonne clean (55% recovery)	9.89	9.89	9.89	9.89	10.93	11.84	11.84	11.84	12.82	12.82	12.82	6.82	4.55
Coal Preparation Cost (Note H)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Trucking (Note I)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Road Maint. and Rail Car Loading (Note J)	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Admin., Sales (Note K)	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Rail (Note L)	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96
Port or Destination Handling	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Direct Cost F.O.B. or delivered Vancouver Area	28.86	28.86	28.86	28.86	29.90	30.81	30.81	30.81	31.79	31.79	31.79	25.79	23.52

NOTES

A. Original mining plan developed by M. Hampton, Faro. This plan and costs refined and updated by Wright Engineers Ltd. Wright Engineers mining equipment replacement schedule and mining operating cost further modified by Hampton, July, 1980 (attached).

B. Wright Engineers.

C. Techman Capital Costs, March, 1978, x 121%.

D. Techman, March, 1978 Costs x 121%.

Scale	\$ 79,400
Scale House	21,000
Ramp)	
Pad)	49,600
	<hr/>

\$150,000 x 121% = \$182,000

E. Techman 1978 Cost x 121%.

F. Blascock March, 1978 Cost x 121%.

G. Wright Engineers, September, 1979.

H. Techman March, 1978 Cost escalated 10%/year = \$1.81
Weirco rough estimate - \$2.30
Use - \$2.00

I. Techman March, 1978 Cost x 125%.
Rate based on comparison with Coleman Collieries 19-mile truck haul.

J. Techman March, 1978 Cost x 121%.

K. January, 1979 Cost (mainly salaries) x 115%.

L. 1978 Swan Wooster \$ 6.61/tonne
C.P. Rail 10.91/tonne

1979 C.P. Rail verbal quote \$10.00/tonne
after refining 1978 train model.

1980 Swan Wooster \$ 9.20
C.P. Rail 11.96

USE \$11.96/tonne.

ROYALTIES

A. Crown Royalty

(Section 28 of the B.C. Coal Act)

- "(1) Effective July 1, 1978, there is reserved to the Crown in right of the Province a royalty of 3.5% of the mass of coal produced from a location.
- (2) Disposition of coal produced from a location, and use of coal under subsection (4)(a) includes the royalty portion of the production unless otherwise ordered by the Lieutenant Governor in Council.
- (3) Where the royalty portion of coal is disposed of or used under subsection (4)(a), the holder of the location shall pay the Crown the minehead value of that portion.
- (4) Where coal produced from a location is
- (a) used by the holder of the location for his own purpose;
 - or
 - (b) disposed of to a person with whom the holder of the location is not dealing at arm's length,

the Lieutenant Governor in Council may, where he is of the opinion that the value received, if any, does not represent a fair minehead value, determine a fair minehead value for subsection (3)."

B. Royalty to Optionor

(excerpt from Option Agreement between Cyprus Anvil Mining Corporation and Imperial Metals & Power Ltd. - Section 6)

"At such time as Optionee produces coal from the Property at a minimum rate of 100,000 tons of product coal per year the Optionee shall pay to the Optionor the following royalty payments calculated on the tonnage of any coal produced from the Property for purposes other than exploration or testing expressed as long tons of coal product available for shipment:-

- (a) the royalty for product coal having greater than 9,000 Btu/lb. shall have a minimum base rate of \$1.00/ton or 3-1/2% of the FOR sales price of the coal, whichever is the greater;
- (b) the royalty for coal product having less than 9,000 Btu/lb. shall have a minimum base rate of \$1.00/ton or 5% of the FOR sales price of the coal, whichever is the greater."

ROYALTIES - (Cont'd)

C. Royalty Pre-payment to Optionor

(excerpt from Option Agreement between Cyprus Anvil Mining Corporation and Imperial Metals & Power Ltd. - Section 3)

"The Optionor hereby gives and grants to Optionee the sole right and option subject to the consent of that member of the Executive Committee charged by Order of the Lieutenant-Governor in Council with the administration of the Coal Act of the Province of British Columbia to acquire the Licences and the Optionor's interest in the Mullin's Agreement, free of encumbrance upon payment in lawful money of Canada of the following sums:

- (a) The sum of \$40,000 on the execution hereof;
- (b) The sum of \$40,000 on or before February 1, 1978;
- (c) The sum of \$40,000 on or before February 1, 1979;
- (d) The sum of \$75,000 on or before February 1, 1980;
- (e) The sum of \$75,000 on or before February 1, 1981;
- (f) The sum of \$100,000 on February 1 of each year thereafter until commencement of production at a minimum rate of 100,000 tons of product coal per year;
- (g) The assumption of all terms and conditions of the Optionor under the Mullin's Agreement subject to the provisions of Clause 15 hereof.

PROVIDED that each \$75,000 payment made under subclauses (d) and (e) of this Clause 3 and each \$100,000 payment made under subclause (f) of this Clause 3 shall be deemed to be an advance in the royalty payments to be paid under Clause 6 hereof PROVIDED FURTHER that advance royalty payments will not be deducted from earned royalty payments at a rate which would reduce Optionor's income under this Agreement below \$50,000 in any year.

PROVIDED ALWAYS that the payment of one or more of the payments referred to in subclauses (a) to (g) of this Clause 3 shall not obligate the Optionee to make any further payments to the Optionor in respect of the Licences or the Mullin's Agreement and this Agreement may be terminated at any time after December 31, 1977 by the Optionee provided that the Licences are valid and in good standing for a further period of one year subsequent to the termination date."