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UPDATE TO THE WEST MACDONALD MINE ECONOMIC FEASABILITY STUDY

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West MacDonald Mine
Economic Feasibility Study

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I. INTRODUCTION

This report is an update to the report "Economic Feasibility Study of the West MacDonald Mine", by D.W. Esson, P.Eng and N. Lecuyer, P.Eng, dated August, 1990. In this original report, all aspects of the West MacDonald project are covered, including description of geology and underground mining. As the commencement of production nears, Deak Resources have done further detailed work on the ore reserves and production scheduling of the open pit. As well, a number of agreements have been signed for contract mining, trucking, milling, and smelting. This report is an update, using all the latest information, to provide monthly cash flow projections for the period covering the open pit operations. The underground operations are still planned, but in no further detail than in the original report, and so are not covered in this update.

II. PIT ORE RESERVES

The open pit ore reserves for the West MacDonald open pit have been estimated to be:

	Tons	% Zn	Oz/Ton Ag	Oz/Ton Au
Geological Reserves	733,310	7.15	0.82	0.033
Diluted Mine Reserves	834,301	6.64	0.80	0.032

The diluted mining reserve includes:

A) Mining losses of 20,913 tons averaging 5.37% Zn, 0.82 opt Ag, and 0.033 opt Au

B) Dilution of 121,904 tons averaging 2.6% Zn, 0.78 opt Ag, and 0.029 Au. (This represents a dilution factor of 16.6%)

A. Methodology and Parameters

1. Geological Reserve

The reserves were calculated using 25 foot cross-sections which traverse the pit area. This method was selected over the previously used method of bench polygons in order to include the prior mining grades.

The prior open pit mining and underground workings were plotted on the cross sections which previously included the diamond drilling. Zinc values greater than 4% from this mining were plotted on the sections. The ore limits were then adjusted to conform to the ore limits as defined by the mining.

Grades from the mining were averaged over the 25 foot area of influence of each sections and applied to the section.

Grades for each bench, on each cross section, were then determined using the mining grades as well as the diamond drill hole grades.

The cross sectional areas of each bench were then measured with a planimeter. The detailed list of each area with its assigned grade is included. (Geological Ore Reserve Estimate - By Bench)

Comments:

Grades 1) Zinc. The zinc grade has been determined by the previously described methods (ie. measured and weighted accordingly)

2)Silver-Gold. These grades were determined by averaging the +4% Zn blast holes from bench 2. These grades were then applied to the lower benches.

2. Diluted Mining Reserve

To convert the geological reserve to a realistic mining reserve the following steps were taken.

Adjustments were made for mining losses and dilution. These adjustments were made to allow for sub vertical 30 foot benches mined through areas of ore where the dips were not vertical.

A 4% cut off for the perimeter holes was used to determine the mining limits of each bench. Any ore outside these limits was included as a mining loss. Any low grade material included within the mining limits was included as a mining dilution.

In addition to the mining loss and dilution, the following dilutions were applied:

Bench 2	5 foot dilution
Bench 3 - 6	10% dilution
Salvage	20% dilution

The dilution, which amounts to be 16.6% has been estimated to grade 2.6% Zn, 0.78 opt Ag, and 0.029 opt Au.

This grade was determined by averaging the perimeter blast holes outside of the +4% Zn contour from bench 2.

Comments:

Dilution. Bench 2. Three perimeter areas remain to be mined. These areas are relatively narrow (ie. 20 - 30') so a 5' dilution was applied rather than the less severe 10% dilution.

Salvage. As this would be the last cuts, where the ore narrows and the grade control may suffer, a 20% dilution was applied.

3. Parameters

Tonnage Factor:	8 cu. ft/ton
Cut Off:	4% Zinc
Dilution:	Overall 16.6%
Dilution Grade:	2.6% Zn, 0.78 Ag, 0.029 Au.

B. Diluted Mining Reserve Summary

On the following two pages is the summary by bench of the diluted mining reserves. In Appendix A, the detailed geological reserve calculations are shown by section on each bench.

WEST MACDONALD
DILUTED MINING RESERVE SUMMARY

Summary of the Diluted Mining Reserves

Bench	Elevation	Tons	% Zn	Oz. Ag	Oz Au
2	9940-9910	29,440	5.36	0.64	0.044
3	9910-9880	265,002	6.74	0.81	0.032
4	9880-9850	240,957	6.61	0.81	0.032
5	9850-9820	163,561	7.16	0.81	0.032
6	9820-9790	111,341	6.48	0.81	0.032
Salvage	Below 9790	24,000	4.65	0.81	0.032
Total		834,301	6.64	0.80	0.032

Bench 2 (9940-9910)

Geological Reserve	20861	6.79	0.82	0.046
Diluted Mining Reserve	29440	5.36	0.64	0.044

NOTE: In addition to the mining design a 5' dilution was included (i.e. equivalent of 41% dilution)

Bench 3 (9910-9880)

Geological Reserve	240,519	7.25	0.82	0.033
- Mining Losses	8,935	5.08	0.82	0.033
+ Mining Dilution	9,327	2.6	0.78	0.029
Mining Reserve	240,911	7.15	0.81	0.033
+ 10% Dilution	24,091	2.6	0.78	0.029
Diluted Mining Reserve	265,002	6.74	0.81	0.032

Bench 4 (9880-9850)

Geological Reserve	215,295	7.16	0.82	0.033
- Mining Losses	6,045	5.22	0.82	0.033
+ Mining Dilution	9,802	2.6	0.78	0.029
Mining Reserve	219,052	7.01	0.82	0.033
+ 10% Mining Dilution	21,905	2.6	0.78	0.029
Diluted Mining Reserve	240,957	6.61	0.81	0.032

Bench 5 (9850-9820)

Geological Reserve	142,854	7.89	0.82	0.033
- Mining Losses	3,126	5.68	0.82	0.033
+ Mining Dilution	8,964	2.6	0.78	0.029
Mining Reserve	148,692	7.62	0.82	0.033
+ 10% Dilution	14,869	2.6	0.78	0.029
Diluted Mining Reserve	163,561	7.16	0.81	0.032

.../2

	Tons	% Zn	Oz. Ag	Oz Au
Bench 6 9820-9790)				
Geological Reserve	93,781	7.32	0.82	0.033
- Mining Losses	2,807	6.29	0.82	0.033
+ Mining Dilution	10,245	2.6	0.78	0.029
Mining Reserve	101,219	6.87	0.82	0.033
+ 10% Dilution	10,122	2.6	0.78	0.029
Diluted Mining Reserve	11,341	6.48	0.81	0.032

Salvage Cut (Below 9790)

A Salvage Cut of 20 - 30 feet deep has been forcasted at the end of the Pit. This production has been included in the -6 Bench (i.e. below Bench 6) in the Geological Reserve.

The Salvage Cut has been estimated to recover 24,000 tons of diluted ore grading 4.65% Zn, 0.81 oz/ton Ag, 0.032 oz/ton Au. The following is the section by section summary of the Salvage Cut.

Section	Non	Diluted	Grade	Diluted	Grade	(20% Dil.)
5975	5.3	0.82	0.033	4.85	0.81	0.032
6000	5.3	0.82	0.033	4.85	0.81	0.032
6025	4.3	0.82	0.033	4.02	0.81	0.032
6050	5.2	0.82	0.033	4.76	0.81	0.032
6075	5.2	0.82	0.033	4.76	0.81	0.032
Total	5.06	0.82	0.033	4.65	0.81	0.032

III. PRODUCTION PLANS

A. Pit Dewatering

The water treatment plant is currently shut down with a modified clean-up in progress. Assuming that an accelerated clean-up starts on November 19th and that the ventilation (dewatering in this case) raise is rehabilitated simultaneously, a December 1st start-up is realistic.

Pit Dewatering Balance Calculation

- Estimated gallons to be pumped on December 1, 1990	10,900,000
- Assuming a net dewatering rate of 300,000/day, No. of days to dewater	36

Open pit operations would commence on January 7th from the 9910 bench. As this mining progresses, dewatering will continue to attain sufficient freeboard to mine on the 9880 bench, and would be executed as follows:

Dewatering required	1,750,000 gallons
No. of days	6

Assuming an additional 3 days for clean-up, etc., blasted material will be available from the 9880 Bench on January 16th.

The dewatering and water treatment plant operating schedules will then be synchronized with the pit operating schedule, with additional effort concentrated to create maximum freeboard in the underground workings to contain the spring runoff.

B. Pit Operations

Mining will be performed on the following benches: 9910 (clean-up and wall shaping), the 9880, 9850, 9820 and 9790. A sinking cut will also be extracted below the 9790 bench.

The pit has been laid our using the following parameters:

1. 30 foot bench heights
2. 45 foot ramp widths
3. 15 foot berm widths
4. 10% gradient on all ramps
5. final wall pre-shearing where required
6. maximum high wall is 60'
7. pit dewatering to be performed via the existing ventilation raise, with local dewatering by means of small pit pumps where required, feeding into any available stope or other opening.

C. Summary of Mining Plan

Extraction	Cubic yards	Tons
Ore	247,200	834,000
Waste Stripping	257,900	743,700
Backfill	54,100	162,300

The in-situ stripping ratio is .89 to 1, while the whole weight ratio including backfill removal is 1.09 to 1.

IV. CONTRACTUAL AGREEMENTS

A. Mining and Trucking

All of the mining operations will be contracted to Lemay Vican of Rouyn. They have agreed to a full scope, one year mining contract with Deak.

The trucking will be performed by Transport Nord Ouèst, who will haul all of the ore (crushed to -6") to the Kidd Creek Concentrator at Hoyle, located some twenty miles east of Timmins Ontario.

B. Milling and Smelting

Deak Resources are in final negotiations with Falconbridge Ltd. to custom mill the MacDonald West Ore at the Kidd Creek concentrator in Timmins, Ontario for the year 1991. A contract to process the Zinc concentrate at Valleyfield is in place. Negotiations for the sale of the copper concentrate (which includes precious metals) are ongoing with Kidd Creek.

V. FINANCIAL ANALYSIS

A. Summary

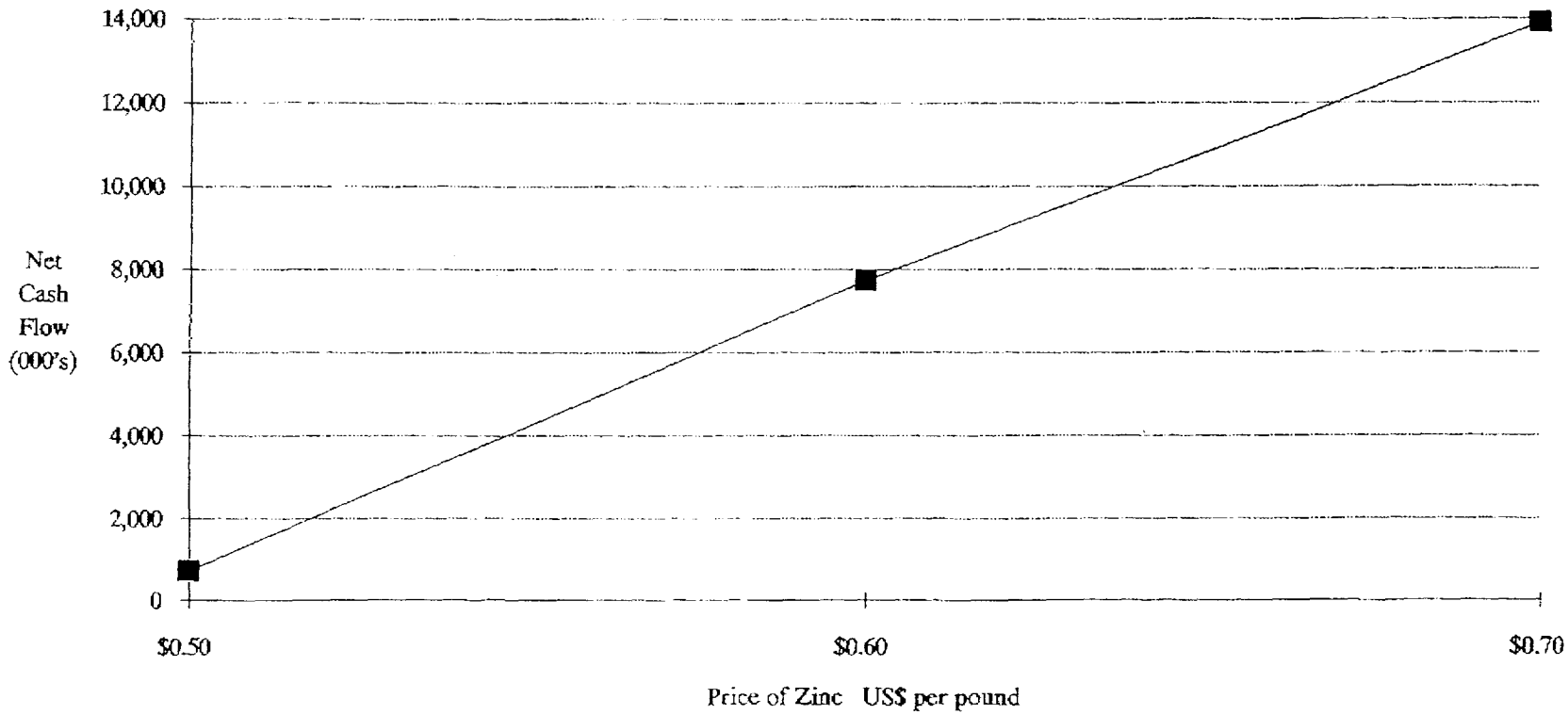
As can be seen in the cash flow projections following, the project has a net cash flow of $7.7 million, using price assumptions of US$.60 zinc and US$375 for gold, the current prices at the time of writing. The zinc price will likely be fixed for approximately six months production, thus assuring these assumptions for this period. The following price sensitivity chart shows the project is viable down to $.50 zinc with no forward selling. These net cash flows are net of the Noranda Security agreement that places $4.0 million in deposit against reclamation at the end of production.

B. Cash Flow Projection

On the following pages is the monthly project cash flow projections based on the reserves, costs, and contract prices as described in this Update.

Deak Resources Corporation - West MacDonald

Sensitivity of Net Cash Flow to Price of Zinc



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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
PROJECT DETAILS														
Tons Pit Ore Mined			30	60	45	45	45	45	45	45	45	45	45	45
Tons Pit Waste & Fill			43	77	75	75	75	70	60	59	55	55	55	55
Tons Underground Ore														
Tons Milled - Deak														
Tons Milled - Custom			30	60	45	45	45	45	45	45	45	45	45	45
Tons in Inventory														
Grade:														
Zinc %			6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70
Gold (opt)			0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Silver (opt)			0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Recovery:														
Zinc			88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%
Gold			40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Silver			20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Recovered Metal:														
Zinc			3,538	7,075	5,306	5,306	5,306	5,306	5,306	5,306	5,306	5,306	5,306	5,306
Gold			0.389	0.778	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583	0.583
Silver			5	10	7	7	7	7	7	7	7	7	7	7
Market Prices US$														
Zinc	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60
Gold	$375	$375	$375	$375	$375	$375	$375	$375	$375	$375	$375	$375	$375	$375
Silver	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
Net Smelter Returns														
Zinc	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.39	$0.39
Gold	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397
Silver	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29
Metal Revenues:														
Zinc			1,314	2,627	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970	2,072	2,072
Gold			154	309	232	232	232	232	232	232	232	232	232	232
Silver			25	51	38	38	38	38	38	38	38	38	38	38
Total Net Revenue			1,493	2,987	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,342	2,342
Net revenue per ton			$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$52.05	$52.05

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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
ROYALTY:														
Royalty Account	748	833	918	2,141	4,189	4,417	3,230	2,690	2,062	1,385	702			
Interest @ 15%	9	10	11	27	52	55	40	34	26	17	9			
Expenditure			1,493	2,987	747	-747							102	102
Operating Profits	-75	-75	282	965	572	496	581	662	703	701	716	711	818	813
Closing Account	833	918	2,141	4,189	4,417	3,230	2,690	2,062	1,385	702	-5	-711	-716	-711
Royalty Base											-5	-711	-716	-711
15% NPI											1	107	107	107
OPERATING COSTS														
Unit Cost($/Ton)														
Contractor Mine & Truck			23.90	19.45	22.09	23.78	22.11	20.31	19.73	19.67	19.44	19.44	19.44	19.44
Milling - Custom			12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Deak Costs			1.98	0.99	1.32	1.32	1.32	1.32	1.32	1.43	1.32	1.43	1.32	1.43
Dewater & water Treatment			2.50	1.25	1.67	1.67	1.44	1.44	1.11	1.11	1.11	1.11	1.11	1.11
Total Cost per Ton Mined			40.38	33.69	37.08	38.77	36.88	35.08	34.17	34.21	33.88	33.99	33.88	33.99
Contractor Mine & Truck			717	1,167	994	1,070	995	914	888	885	875	875	875	875
Milling - Custom			360	720	540	540	540	540	540	540	540	540	540	540
Deak Costs			60	60	60	60	60	60	60	65	60	65	60	65
Dewater & water Treatment	75	75	75	75	75	75	65	65	50	50	50	50	50	50
Total Operating Cost	75	75	1,212	2,022	1,669	1,745	1,660	1,579	1,538	1,540	1,525	1,530	1,525	1,530
Operating Profit	(75)	(75)	282	965	572	496	581	662	703	701	715	604	710	706
Operating Profit / ton			$9.40	$16.09	$12.70	$11.01	$12.90	$14.70	$15.61	$15.57	$15.88	$13.42	$15.78	$15.69

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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
Noranda Security Package														
Strip Bond Purchase	1,400													
Sinking fund					135	135	135	135	135	135	135	135	135	135
Interest	2	2	2	2	2	3	4	5	6	8	9	10	11	12
Cumulative Sinking Fund	205	207	208	210	347	485	624	764	905	1,048	1,192	1,337	1,483	1,630
Debenture Value	1,400	1,415	1,430	1,445	1,461	1,477	1,492	1,508	1,524	1,541	1,557	1,574	1,591	1,608
Payment to Deak														
Security pkg balance	1,605	1,622	1,639	1,656	1,808	1,961	2,116	2,272	2,430	2,589	2,749	2,911	3,074	3,238
PARTICIPANT CASH FLOW														
Working Interest														
Revenue			1,493	2,987	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,342	2,342
Operating Costs	75	75	1,212	2,022	1,669	1,745	1,660	1,579	1,538	1,540	1,525	1,530	1,525	1,530
Royalties											1	107	107	107
Operating Profits	-75	-75	282	965	572	496	581	662	703	701	715	604	710	706
Deferred Revenue			(1,493)	(2,987)	(747)	747							(102)	(102)
Deferred Costs			1,077	1,887	457	(277)	1	(156)	(107)	(29)	(13)	(10)		
Cash from Operations	(75)	(75)	(135)	(135)	282	965	582	506	596	672	702	594	608	604
Strip Bond Purchase	(1,400)													
Sinking Fund Payments					(135)	(135)	(135)	(135)	(135)	(135)	(135)	(135)	(135)	(135)
Fund Payments to Deak														
Contractor Interest Paid					(7)	(31)	(30)	(29)	(28)	(27)	(27)	(27)	(27)	(27)
Total Capital Expenditure														
Pre-Tax Cash Flow	(1,475)	(75)	(135)	(135)	140	799	417	341	433	510	540	432	447	442
Cumulative Cash Flow	(1,475)	(1,550)	(1,685)	(1,819)	(1,679)	(880)	(463)	(121)	311	821	1,361	1,794	2,240	2,683
Present Value at 10%	(1,541)	(1,613)	(1,740)	(1,865)	(1,735)	(1,000)	(619)	(310)	78	532	1,009	1,387	1,775	2,156
Rate of Rerturn														

1381
1215
59
603

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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	2-Mo. 1990	1991	7-Mo 1992	Total
PROJECT DETAILS											
Tons Pit Ore Mined	45	45	45	45	45	45	24		540	294	834
Tons Pit Waste & Fill	55	38	19	14	14	8	4		754	152	906
Tons Underground Ore											
Tons Milled - Deak											
Tons Milled - Custom	45	45	45	45	45	45	24		540	294	834
Tons in Inventory											
Grade:											
Zinc %	6.70	6.70	6.70	6.70	6.70	6.70	4.65		6.70	6.53	6.64
Gold (opt)	0.032	0.032	0.032	0.032	0.032	0.032	0.032		0.032	0.032	0.036
Silver (opt)	0.80	0.80	0.80	0.80	0.80	0.80	0.80		0.80	0.80	0.80
Recovery:											
Zinc	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%
Gold	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	36.2%
Silver	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Recovered Metal:											
Zinc	5,306	5,306	5,306	5,306	5,306	5,306	1,989		63,677	33,827	97,504
Gold	0.583	0.583	0.583	0.583	0.583	0.583	0.315		6.998	4	10.813
Silver	7	7	7	7	7	7	4		86	47	133
Market Prices US$											
Zinc	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	$0.60	
Gold	$375	$375	$375	$375	$375	$375	$375	$375	$375.00	$375.00	
Silver	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	
Net Smelter Returns											
Zinc	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.39	$0.39	$0.39	
Gold	$397	$397	$397	$397	$397	$397	$397	$397	$397	$397	
Silver	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	$5.29	
Metal Revenues:											
Zinc	1,970	1,970	1,970	1,970	1,970	1,970	738		23,849	12,561	36,410
Gold	232	232	232	232	232	232	125		2,779	1,514	4,293
Silver	38	38	38	38	38	38	21		457	249	707
Total Net Revenue	2,240	2,240	2,240	2,240	2,240	2,240	884		27,085	14,325	41,410
Net revenue per ton	$49.78	$49.78	$49.78	$49.78	$49.78	$49.78	$36.38		$50.16	$48.67	$49.63

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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	2-Mo. 1990	1991	7-Mo 1992	Total
ROYALTY:											
Royalty Account									918		
Interest @ 15%								20	272		291
Expenditure									4,684		4,684
Operating Profits	711	752	728	695	766	852	77	-150	8,016	4,578	12,445
Closing Account	-711	-752	-728	-695	-766	-852	-77	918	-711	-77	
Royalty Base	-711	-752	-728	-695	-766	-852	-77		-711	-77	
15% NPI	107	113	109	104	115	128	12		321	687	1,008
OPERATING COSTS											
Unit Cost($/Ton)											
Contractor Mine & Truck	19.44	18.53	19.07	19.80	18.22	16.31	16.50		20.61	18.39	19.83
Milling - Custom	12.00	12.00	12.00	12.00	12.00	12.00	12.00		12.00	12.00	13.50
Deak Costs	1.43	1.43	1.43	1.43	1.43	1.43	2.65		1.35	1.53	1.41
Dewater & water Treatment	1.11	1.11	1.11	1.11	1.11	1.11	2.06		1.35	1.19	1.47
Total Cost per Ton Mined	33.99	33.08	33.61	34.34	32.77	30.86	33.21		35.31	33.12	34.72
Contractor Mine & Truck	875	834	858	891	820	734	401		11,130	5,413	16,543
Milling - Custom	540	540	540	540	540	540	292		6,480	3,532	10,012
Deak Costs	65	65	65	65	65	65	65		729	452	1,181
Dewater & water Treatment	50	50	50	50	50	50	50	150	730	350	1,230
Total Operating Cost	1,530	1,489	1,513	1,546	1,475	1,389	807	150	19,069	9,746	28,965
Operating Profit	604	639	618	590	651	724	65	(150)	7,695	3,892	11,436
Operating Profit / ton	$13.42	$14.20	$13.74	$13.12	$14.46	$16.09	$2.69		$14.25	$13.22	$13.71

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Deak Resources Corporation

WEST MACDONALD

US$ Au 375, Zn .60

(000's)

	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	2-Mo. 1990	1991	7-Mo 1992	Total
Noranda Security Package											
Strip Bond Purchase											
Sinking fund	135	135	135	135	90				1,350	630	1,980
Interest	14	15	16	17	19	20	20	3	73	120	196
Cumulative Sinking Fund	1,779	1,929	2,080	2,232	2,341	2,360	2,380	207	1,630	2,380	
Debenture Value	1,625	1,642	1,660	1,678	1,696	1,714	1,732	1,415	1,608	1,732	
Payment to Deak					37	38	38			112	112
Security pkg balance	3,404	3,571	3,740	3,910	4,000	4,000	4,000	1,622	3,238	4,000	
PARTICIPANT CASH FLOW											
Working Interest								100.0%			
Revenue	2,240	2,240	2,240	2,240	2,240	2,240	884		27,085	14,325	41,410
Operating Costs	1,530	1,489	1,513	1,546	1,475	1,389	807	150	19,069	9,746	28,965
Royalties	107	113	109	104	115	128	12		321	687	1,008
Operating Profits	604	639	618	590	651	724	65	-150	7,695	3,892	11,436
Deferred Revenue	102	102					4,480		(4,684)	4,684	
Deferred Costs							(2,830)		2,830	(2,830)	
Cash from Operations	706	741	618	590	651	724	1,716	(150)	5,840	5,746	11,436
Strip Bond Purchase								(1,400)			(1,400)
Sinking Fund Payments	(135)	(135)	(135)	(135)	(90)				(1,350)	(630)	(1,980)
Fund Payments to Deak					37	38	38			112	112
Contractor Interest Paid	(27)	(27)	(26)	(26)	(27)	(26)	(24)		(258)	(182)	(440)
Total Capital Expenditure											
Pre-Tax Cash Flow	545	579	457	429	570	736	1,729	(1,550)	4,233	5,046	7,728
Cumulative Cash Flow	3,227	3,807	4,264	4,693	5,264	5,999	7,728	(1,550)	2,683	7,728	7,728
Present Value at 10%	2,622	3,112	3,497	3,854	4,326	4,928	678	(1,409)	2,089	5,880	5,880
Rate of Return											263%

APPENDIX

Appendix A - Geological Reserve Details

On the following four pages are the Geological Ore Reserve Calculation details by section on each bench, as prepared by Jim Fortin

Appendix B - Mining Plan Schedule

Following Appendix A are three sheets containing the backup for production tonnage and costs, as prepared by Ron Moran and Gerry MacDonald.

WEST MACDONALD
GEOLOGICAL ORE RESERVE ESTIMATE - BY BENCH

SECTION	BENCH	AREA SQ. FT.	INFLUENCE FEET	VOLUME CU. FT.	TONNAGE TONS	GRADE %ZN
5600E	2	545	25	13,625	1,703	8.8
5625E	2	986	25	24,650	3,081	11.2
5650E	2	856	25	21,400	2,675	9.2
5675E	2	849	25	21,225	2,653	6.9
5700E	2	477	25	11,925	1,491	6.9
5975E	2	986	25	24,650	3,081	4.2
6000E	2	1135	25	28,375	3,547	4.2
6025E	2	291	25	7,275	909	4.2
6050E	2	688	20	13,760	1,720	4.2
TOTAL				166,885	20,861	6.79
5550E	3	1,203	25	30,075	3,759	4.9
5575E	3	2,194	25	54,850	6,856	9.4
5575E	3	713	25	17,825	2,228	5.8
5600E	3	837	25	20,925	2,616	5.8
5600E	3	1,631	25	40,775	5,097	10.1
5625E	3	2,027	25	50,675	6,334	11.6
5625E	3	1,048	25	26,200	3,275	6.8
5650E	3	2,412	25	60,300	7,538	11.7
5650E	3	911	25	22,775	2,847	6.8
5675E	3	539	25	13,475	1,684	7.3
5675E	3	2,842	25	71,050	8,881	11.5
5700E	3	2,232	25	55,800	6,975	11.0
5700E	3	818	25	20,450	2,556	6.0
5725E	3	2,306	25	57,650	7,206	8.2
5750E	3	1,823	25	45,575	5,697	5.3
5775E	3	1,878	25	46,950	5,869	5.8
5775E	3	638	25	15,950	1,994	5.2
5800E	3	589	6	3,534	442	6.6
5875E	3	2,703	35	94,605	11,826	6.3
5900E	3	521	21	10,941	1,368	6.4
5925E	3	1,153	25	28,825	3,603	6.3
5950E	3	1,364	16	21,824	2,728	5.0
5975E	3	1,463	25	36,575	4,572	4.2
5975E	3	3,770	25	94,250	11,781	5.8
5975E	3	949	25	23,725	2,966	4.2
6000E	3	2232	25	55,800	6,975	4.2
6000E	3	3,850	25	96,250	12,031	7.0
6025E	3	949	25	23,725	2,966	4.2
6025E	3	4,141	25	103,525	12,941	8.2
6050E	3	4,507	25	112,675	14,084	8.9
6050E	3	477	20	9,540	1,193	4.2
6075E	3	663	25	16,575	2,072	4.8
6075E	3	3,943	25	98,575	12,322	7.3

6100E	3	2,480	25	62,000	7,750	8.0
6125E	3	2,070	25	51,750	6,469	6.4
6150E	3	3,174	25	79,350	9,919	7.2
6175E	3	2,282	25	57,050	7,131	5.9
6200E	3	1,853	25	46,325	5,791	7.0
6225E	3	1,705	25	42,625	5,328	6.3
6225E	3	304	25	7,600	950	5.0
6250E	3	552	25	13,800	1,725	4.3
6250E	3	682	18	12,276	1,535	6.3
6275E	3	1584	25	39,600	4,950	5.0
6300E	3	1407	25	35,175	4,397	4.4
6075E MINED OUT	3	(205)	6.5	(1,333)	(167)	7.3
6075E MINED OUT	3	(663)	6.5	(4,310)	(539)	4.8
TOTAL				1,924,153	240,519	7.25
5550E	4	446	17	7,582	948	8.5
5575E	4	986	25	24,650	3,081	4.7
5575E	4	626	25	15,650	1,956	5.3
5600E	4	521	25	13,025	1,628	8.9
5600E	4	1,376	25	34,400	4,300	6.6
5625E	4	1,339	25	33,475	4,184	9.5
5625E	4	918	25	22,950	2,869	7.5
5650E	4	1,755	25	43,875	5,484	8.1
5650E	4	899	25	22,475	2,809	6.8
5675E	4	2,567	25	64,175	8,022	10.2
5700E	4	632	25	15,800	1,975	6.7
5700E	4	1,965	25	49,125	6,141	11.3
5725E	4	2,362	25	59,050	7,381	8.7
5750E	4	2,269	25	56,725	7,091	4.9
5775E	4	1,879	25	46,975	5,872	6.6
5775E	4	620	25	15,500	1,938	4.7
5800E	4	2,256	6	13,536	1,692	6.8
5875E	4	2,238	35	78,330	9,791	6.9
5900E	4	799	21	16,779	2,097	6.5
5925E	4	1,178	25	29,450	3,681	7.1
5950E	4	1,438	16	23,008	2,876	7.0
5975E	4	1,574	25	39,350	4,919	4.2
5975E	4	3,391	25	84,775	10,597	6.1
5975E	4	428	25	10,700	1,338	4.2
6000E	4	1041	25	26,025	3,253	4.2
6000E	4	3,838	25	95,950	11,994	7.3
6025E	4	3,763	25	94,075	11,759	9.1
6025E	4	372	25	9,300	1,163	4.2
6050E	4	3,515	25	87,875	10,984	9.1
6075E	4	657	25	16,425	2,053	6.6
6075E	4	3,317	25	82,925	10,366	7.2
6100E	4	2,622	25	65,550	8,194	8.0
6125E	4	2,808	25	70,200	8,775	6.6
6150E	4	3,174	25	79,350	9,919	7.1
6175E	4	2,375	25	59,375	7,422	5.7
6200E	4	1,407	25	35,175	4,397	4.5
6200E	4	440	15	6,600	825	6.0

6225E		4	1,631	25	40,775	5,097	6.0
6225E		4	577	25	14,425	1,803	7.4
6250E		4	645	18	11,610	1,451	5.9
6250E		4	837	25	20,925	2,616	8.7
6275E		4	1773	25	44,325	5,541	6.6
6300E		4	1885	25	47,125	5,891	5.4
6075E	MINED OUT	4	(657)	6.5	(4,271)	(534)	6.6
6075E	MINED OUT	4	(421)	6.5	(2,737)	(342)	7.2
TOTAL					1,722,363	215,295	7.16
5600E		5	837	50	41,850	5,231	6.6
5625E		5	1,618	25	40,450	5,056	7.7
5650E		5	1,726	25	43,150	5,394	7.5
5675E		5	1,810	25	45,250	5,656	9.7
5700E		5	2,015	25	50,375	6,297	11.6
5725E		5	2,374	25	59,350	7,419	9.3
5750E		5	2,275	25	56,875	7,109	8.2
5775E		5	2,244	25	56,100	7,013	7.5
5800E		5	1,891	6	11,346	1,418	6.9
5875E		5	1,817	35	63,595	7,949	7.4
5900E		5	236	21	4,956	620	6.6
5925E		5	936	25	23,400	2,925	7.8
5950E		5	1,128	16	18,048	2,256	8.9
5975E		5	1,562	25	39,050	4,881	4.2
5975E		5	2,827	25	70,675	8,834	6.4
6000E		5	3,875	25	96,875	12,109	7.7
6025E		5	3,112	25	77,800	9,725	9.6
6050E		5	2,796	25	69,900	8,738	9.2
6075E		5	2,734	25	68,350	8,544	7.2
6100E		5	2,511	25	62,775	7,847	8.0
6125E		5	2,697	25	67,425	8,428	6.7
6150E		5	3,391	25	84,775	10,597	7.0
6075E	MINED OUT	5	(601)	6.5	(3,907)	(488)	7.2
6150E	MINED OUT	5	(663)	8.5	(5,636)	(704)	7.0
					1,142,828	142,854	7.89
5625E		6	694	25	17,350	2,169	8.7
5650E		6	849	25	21,225	2,653	7.5
5675E		6	1,290	25	32,250	4,031	12.1
5700E		6	1,079	25	26,975	3,372	13.1
5725E		6	1,823	25	45,575	5,697	9.3
5750E		6	2,058	25	51,450	6,431	8.0
5775E		6	1,265	25	31,625	3,953	7.3
5800E		6	1,525	6	9,150	1,144	6.9
5875E		6	1,197	35	41,895	5,237	4.1
5975E		6	1,767	25	44,175	5,522	5.9
5975E		6	639	25	15,975	1,997	4.2
6000E		6	2,691	25	67,275	8,409	6.5
6025E		6	2,771	25	69,275	8,659	7.0
6050E		6	2,375	25	59,375	7,422	7.2

6075E	6	2,362	25	59,050	7,381	6.2
6100E	6	2,064	25	51,600	6,450	6.6
6125E	6	1,946	25	48,650	6,081	6.7
6150E	6	2,846	25	71,150	8,894	7.3
6075E MINED OUT	6	(837)	6.5	(5,441)	(680)	6.2
6150E MINED OUT	6	(980)	8.5	(8,330)	(1,041)	7.3
TOTAL				750,250	93,781	7.32
5675E	-6	1,587	25	39,675	4,959	14.5
5700E	-6	1,389	25	34,725	4,341	13.4
5725E	-6	1,023	25	25,575	3,197	10.3
5725E	-6	980	25	24,500	3,063	13.5
5750E	-6	1,134	25	28,350	3,544	6.6
5750E	-6	465	25	11,625	1,453	11.5
5775E	-6	1,004	25	25,100	3,138	6.8
5800E	-6	1,860	6	11,160	1,395	6.8
5975E	-6	1,085	25	27,125	3,391	4.8
6000E	-6	1,686	25	42,150	5,269	5.3
6025E	-6	4,142	25	103,550	12,944	4.3
6025E	-6	422	25	10,550	1,319	8.0
6025E	-6	1,110	25	27,750	3,469	6.2
6050E	-6	6,529	25	163,225	20,403	5.0
6075E	-6	1,742	25	43,550	5,444	5.2
6075E MINED OUT	-6	(731)	6.5	(4,752)	(594)	5.2
6100E	-6	1,190	25	29,750	3,719	5.3
TOTAL				643,609	80,451	6.89

S U M M A R Y

BENCH 2		166,885	20,861	6.79
3		1,924,153	240,519	7.25
4		1,722,363	215,295	7.16
5		1,142,828	142,854	7.89
6		750,250	93,781	7.32
BELOW BENCH 6		643,609	80,451	6.89
TOTAL			793,761	7.30

J.R. FORTIN
NOV 11/90

macbud

WEST MACDONALD BUDGET NOV. 12 1990

PRODUCT PERAMETERS		$US	In	$0.50	Ag	$4.25	Au	$375.00
EXCHANGE RATE	$0.86	$CDN	In	$0.58	Ag	$4.94	Au	$436.05
MILL RECOVERIES			In	60.00%	Ag	50.00%	Au	40.00%

COST CENTER	UNIT	UNIT COST	NOV. 90	DEC.	JAN. 91	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT.	NOV.	DEC.
5001 MOBILIZATION	L.S.	$110,000			$110,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5002 OVERBURDEN REMOVAL	TAD	$4.50			$1,125	$1,125	$0	$1,125	$1,125	$0	$0	$0	$0	$0	$0	$0
5011 DRILLING ORE	/TON	$0.50			$15,000	$30,000	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500
5013 BLASTING ORE	/TON	$1.36			$40,800	$81,600	$61,200	$61,200	$61,200	$61,200	$61,200	$61,200	$61,200	$61,200	$61,200	$61,200
5021 LOAD & HAUL ORE	/TON	$1.38			$41,400	$82,800	$62,100	$62,100	$62,100	$62,100	$62,100	$62,100	$62,100	$62,100	$62,100	$62,100
5015 SITE PRIMARY CRUSHING	/TON	$1.50			$45,000	$90,000	$67,500	$67,500	$67,500	$67,500	$67,500	$67,500	$67,500	$67,500	$67,500	$67,500
5022 ORE HAULAGE TO MILL	/TON	$10.95			$328,500	$657,000	$246,375		$246,375	$492,750	$492,750	$492,750	$492,750	$492,750	$492,750	$492,750
(MALE LOAD RATE)	/TON	$16.41					$313,948	$634,950	$313,948							
5010 DRILLING WASTE /ST.	/TON	$0.85			$22,950	$45,250	$45,250	$45,250	$45,250	$91,000	$42,500	$41,375	$38,250	$38,250	$38,250	$38,250
5012 BLASTING WASTE	/TON	$0.75			$20,250	$40,750	$40,750	$40,750	$40,750	$45,000	$37,500	$36,525	$33,750	$33,750	$33,750	$33,750
5020 LOAD & HAUL WASTE	/TON	$0.95			$25,650	$51,750	$51,750	$51,750	$51,750	$57,000	$47,500	$46,265	$42,750	$42,750	$42,750	$42,750
5025 BACKFILL REHANDLE	/TON	$1.96			$31,360	$23,520	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600	$19,600
MINING CONTINGENCY					$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
FUEL ESCALATION CONT.					$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
SUB-TOTAL CONTRACTOR					$717,045	$1,166,805	$993,973	$1,069,735	$995,108	$913,650	$898,150	$884,835	$875,400	$875,400	$875,400	$875,400
5024 GROUND CONTROL	/MONTH												$5,000		$5,000	$5,000
5033 DEWATERING	/MONTH		$25,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
5036 TREATMENT PLANT	/MONTH		$50,000	$70,000	$70,000	$70,000	$70,000	$70,000	$60,000	$60,000	$45,000	$45,000	$45,000	$45,000	$45,000	$45,000
5041 SERVICE VEHICLES	/MONTH				$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
5042 SITE OPERATING	/MONTH				$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
5043 SITE ENGINEERING	/MONTH				$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500
5044 SITE GEOLOGY	/MONTH				$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500
5045 ASSAY COSTS	/MONTH				$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
5046 HYDRO	/MONTH				$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000
5047 ADMIN	/MONTH				$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
SUB-TOTAL COMPANY	/MONTH		$75,000	$75,000	$134,500	$134,500	$134,500	$134,500	$124,500	$124,500	$109,500	$114,500	$109,500	$114,500	$109,500	$114,500
MILLING COSTS	/TON	$12.00				$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$540,000
MONTHLY FIXED COSTS			$75,000	$75,000	$134,500	$134,500	$134,500	$134,500	$124,500	$124,500	$109,500	$114,500	$109,500	$114,500	$109,500	$114,500
TOTAL MONTHLY COSTS			$75,000	$75,000	$851,545	$1,846,305	$1,668,473	$1,744,235	$1,659,608	$1,578,150	$1,537,650	$1,539,335	$1,524,900	$1,529,900	$1,524,900	$1,529,900

JAN. 92	FEB.	MARCH	APRIL	MAY	JUNE	JULY	TOTALS
$0	$0	$0	$0	$0	$0	$0	$110,000
$0	$0	$0	$0	$0	$0	$0	$4,500
$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$12,150	$417,150
$61,200	$61,200	$61,200	$61,200	$61,200	$61,200	$33,048	$1,134,648
$62,100	$62,100	$62,100	$62,100	$62,100	$62,100	$33,534	$1,151,334
$67,500	$67,500	$67,500	$67,500	$67,500	$67,500	$36,450	$1,251,450
$492,750	$492,750	$246,375		$246,375	$492,750	$266,085	$7,164,585
		$317,673	$634,956	$317,673			$2,332,745
$30,250	$25,500	$12,750	$8,500	$8,500	$3,400	$3,400	$632,343
$33,750	$22,500	$11,250	$7,500	$7,500	$3,000	$3,000	$557,775
$82,750	$28,500	$14,250	$9,500	$9,500	$3,800	$3,800	$706,525
$19,600	$16,268	$7,840	$7,840	$7,840	$7,840	$0	$338,168
$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$190,000
$25,000	$25,000	$25,000					$375,000
$875,000	$833,818	$858,240	$891,596	$820,498	$734,090	$491,467	$16,565,995
$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$50,000
$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$95,000
$65,000	$65,000	$65,000	$65,000	$65,000	$65,000	$65,000	$985,000
$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$28,500
$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$76,000
$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$85,500
$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$85,500
$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$95,000
$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$285,000
$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$475,000
$114,500	$114,500	$114,500	$114,500	$114,500	$114,500	$114,500	$2,410,500
$540,000	$540,000	$540,000	$540,000	$540,000	$540,000	$833,600	$10,011,600
$114,500	$114,500	$114,500	$114,500	$114,500	$114,500	$114,500	$2,410,500
$1,529,990	$1,488,318	$1,512,740	$1,546,096	$1,474,998	$1,388,590	$1,347,567	$28,968,095

MRN - GÉOINFORMATION 1998

GM 55748

WEST MACDONALD OPEN PIT ORE RESERVES

INTRODUCTION

The open pit ore reserves for the West MacDonald open pit has been estimated to be:

	TONS	% ZN	OZ/TON AG	OZ/TON AU
Geological Reserves	733,310	7.15	0.82	0.033
Diluted Mine Reserves	834,301	6.64	0.80	0.032

The diluted mining reserve includes:

A) Mining losses of 20,913 tons averaging 5.37, 0.82, 0.033

B) Dilutions of 121,904 tons averaging 2.6, 0.78, 0.029
(This represents a dilution factor of 16.6%)

METHODOLOGY AND PARAMETERS

A) GEOLOGICAL RESERVE

The reserves were calculated using 25 foot cross-sections which traverse the pit area. This method was selected over the previously used method of bench polygons in order to include the prior mining grades.

The prior open pit mining and underground workings were plotted on the cross sections which previously included the diamond drilling. Zinc values greater than 4% from this mining were plotted on the sections. The ore limits were then adjusted to conform to the ore limits as defined by the mining.

Grades from the mining were averaged over the 25 foot area of influence of each sections and applied to the section.

Grades for each bench, on each cross section, were then determined using the mining grades as well as the diamond drill hole grades.

The crosssectional areas of each bench were then measured with a planimeter. The detailed list of each area with its assigned grade is included. (Geological Ore Reserve Estimate - By Bench)

Comments:

Grades 1) Zinc. The zinc grade has been determined by the previously described methods (ie. measured and weighted accordingly)

2) Silver-Gold. These grades were determined by averaging the +4% Zn blast holes from bench 2. These grades were then applied to the lower benches.

]

B) DILUTED MINING RESERVE

To convert the geological reserve to a realistic mining reserve the following steps were taken.

Adjustments were made for mining losses and dilution. These adjustments were made to allow for sub vertical 30 foot benches mined through areas of ore where the dips were not vertical.

A 4% cut off for the perimeter holes was used to determine the mining limits of each bench. Any ore outside these limits was included as a mining loss. Any low grade material included within the mining limits was included as a mining dilution.

In addition to the mining loss and dilution, the following dilutions were applied:

Bench 2	5 foot dilution
Bench 3 - 6	10% dilution
Salvage	20% dilution

The dilution, which amounts to be 16.6% has been estimated to grade 2.6, 0.78, 0.029.

This grade was determined by averaging the perimeter blast holes outside of the +4% Zn contour from bench 2.

Comments:

Dilution. Bench 2. Three perimeter areas remain to be mined. These areas are relatively narrow (ie. 20 - 30') so a 5' dilution was applied rather than the less severe 10% dilution.

Salvage. As this would be the last cuts, where the ore narrows and the grade control may suffer, a 20% dilution was applied.

C) PARAMETERS

Tonnage Factor:		8 cu. ft/ton
Cut Off	:	4% Zinc
Dilution	:	Overall 16.6%
Dilution Grade	:	2.6% Zn, 0.78 Ag, 0.029 Au.

J.R. Fortin
Nov 12, 1990

WEST MACDONALD
DILUTED MINING RESERVE SUMMARY

Summary of the Diluted Mining Reserves

Bench	Elevation	Tons	% Zn	Oz. Ag	Oz Au
2	9940-9910	29,440	5.36	0.64	0.044
3	9910-9880	265,002	6.74	0.81	0.032
4	9880-9850	240,957	6.61	0.81	0.032
5	9850-9820	163,561	7.16	0.81	0.032
6	9820-9790	111,341	6.48	0.81	0.032
Salvage	Below 9790	24,000	4.65	0.81	0.032
Total		834,301	6.64	0.80	0.032

Bench 2 (9940-9910)

Geological Reserve	20861	6.79	0.82	0.046
Diluted Mining Reserve	29440	5.36	0.64	0.044

NOTE: In addition to the mining design a 5' dilution was included (i.e. equivalent of 41% dilution)

Bench 3 (9910-9880)

Geological Reserve	240,519	7.25	0.82	0.033
- Mining Losses	8,935	5.08	0.82	0.033
+ Mining Dilution	9,327	2.6	0.78	0.029
Mining Reserve	240,911	7.15	0.81	0.033
+ 10% Dilution	24,091	2.6	0.78	0.029
Diluted Mining Reserve	265,002	6.74	0.81	0.032

Bench 4 (9880-9850)

Geological Reserve	215,295	7.16	0.82	0.033
- Mining Losses	6,045	5.22	0.82	0.033
+ Mining Dilution	9,802	2.6	0.78	0.029
Mining Reserve	219,052	7.01	0.82	0.033
+ 10% Mining Dilution	21,905	2.6	0.78	0.029
Diluted Mining Reserve	240,957	6.61	0.81	0.032

Bench 5 (9850-9820)

Geological Reserve	142,854	7.89	0.82	0.033
- Mining Losses	3,126	5.68	0.82	0.033
+ Mining Dilution	8,964	2.6	0.78	0.029
Mining Reserve	148,692	7.62	0.82	0.033
+ 10% Dilution	14,869	2.6	0.78	0.029
Diluted Mining Reserve	163,561	7.16	0.81	0.032

.../2

	Tons	% Zn	Oz. Ag	Oz Au
Bench 6 9820-9790)				
Geological Reserve	93,781	7.32	0.82	0.033
- Mining Losses	2,807	6.29	0.82	0.033
+ Mining Dilution	10,245	2.6	0.78	0.029
Mining Reserve	101,219	6.87	0.82	0.033
+ 10% Dilution	10,122	2.6	0.78	0.029
Diluted Mining Reserve	11,341	6.48	0.81	0.032

Salvage Cut (Below 9790)

A Salvage Cut of 20 - 30 feet deep has been forcasted at the end of the Pit. This production has been included in the -6 Bench (i.e. below Bench 6) in the Geological Reserve.

The Salvage Cut has been estimated to recover 24,000 tons of diluted ore grading 4.65% Zn, 0.81 oz/ton Ag, 0.032 oz/ton Au. The following is the section by section summary of the Salvage Cut.

Section	Non	Diluted	Grade	Diluted	Grade	(20% Dil.)
5975	5.3	0.82	0.033	4.85	0.81	0.032
6000	5.3	0.82	0.033	4.85	0.81	0.032
6025	4.3	0.82	0.033	4.02	0.81	0.032
6050	5.2	0.82	0.033	4.76	0.81	0.032
6075	5.2	0.82	0.033	4.76	0.81	0.032
Total	5.06	0.82	0.033	4.65	0.81	0.032

WEST MACDONALD
GEOLOGICAL ORE RESERVE ESTIMATE - BY BENCH

SECTION	BENCH	AREA SQ. FT.	INFLUENCE FEET	VOLUME CU. FT.	TONNAGE TONS	GRADE %ZN
5600E	2	545	25	13,625	1,703	8.8
5625E	2	986	25	24,650	3,081	11.2
5650E	2	856	25	21,400	2,675	9.2
5675E	2	849	25	21,225	2,653	6.9
5700E	2	477	25	11,925	1,491	6.9
5975E	2	986	25	24,650	3,081	4.2
6000E	2	1135	25	28,375	3,547	4.2
6025E	2	291	25	7,275	909	4.2
6050E	2	688	20	13,760	1,720	4.2
TOTAL				166,885	20,861	6.79
5550E	3	1,203	25	30,075	3,759	4.9
5575E	3	2,194	25	54,850	6,856	9.4
5575E	3	713	25	17,825	2,228	5.8
5600E	3	837	25	20,925	2,616	5.8
5600E	3	1,631	25	40,775	5,097	10.1
5625E	3	2,027	25	50,675	6,334	11.6
5625E	3	1,048	25	26,200	3,275	6.8
5650E	3	2,412	25	60,300	7,538	11.7
5650E	3	911	25	22,775	2,847	6.8
5675E	3	539	25	13,475	1,684	7.3
5675E	3	2,842	25	71,050	8,881	11.5
5700E	3	2,232	25	55,800	6,975	11.0
5700E	3	818	25	20,450	2,556	6.0
5725E	3	2,306	25	57,650	7,206	8.2
5750E	3	1,823	25	45,575	5,697	5.3
5775E	3	1,878	25	46,950	5,869	5.8
5775E	3	638	25	15,950	1,994	5.2
5800E	3	589	6	3,534	442	6.6
5875E	3	2,703	35	94,605	11,826	6.3
5900E	3	521	21	10,941	1,368	6.4
5925E	3	1,153	25	28,825	3,603	6.3
5950E	3	1,364	16	21,824	2,728	5.0
5975E	3	1,463	25	36,575	4,572	4.2
5975E	3	3,770	25	94,250	11,781	5.8
5975E	3	949	25	23,725	2,966	4.2
6000E	3	2232	25	55,800	6,975	4.2
6000E	3	3,850	25	96,250	12,031	7.0
6025E	3	949	25	23,725	2,966	4.2
6025E	3	4,141	25	103,525	12,941	8.2
6050E	3	4,507	25	112,675	14,084	8.9
6050E	3	477	20	9,540	1,193	4.2
6075E	3	663	25	16,575	2,072	4.8
6075E	3	3,943	25	98,575	12,322	7.3

6100E	3	2,480	25	62,000	7,750	8.0
6125E	3	2,070	25	51,750	6,469	6.4
6150E	3	3,174	25	79,350	9,919	7.2
6175E	3	2,282	25	57,050	7,131	5.9
6200E	3	1,853	25	46,325	5,791	7.0
6225E	3	1,705	25	42,625	5,328	6.3
6225E	3	304	25	7,600	950	5.0
6250E	3	552	25	13,800	1,725	4.3
6250E	3	682	18	12,276	1,535	6.3
6275E	3	1584	25	39,600	4,950	5.0
6300E	3	1407	25	35,175	4,397	4.4
6075E MINED OUT	3	(205)	6.5	(1,333)	(167)	7.3
6075E MINED OUT	3	(663)	6.5	(4,310)	(539)	4.8
TOTAL				1,924,153	240,519	7.25
5550E	4	446	17	7,582	948	8.5
5575E	4	986	25	24,650	3,081	4.7
5575E	4	626	25	15,650	1,956	5.3
5600E	4	521	25	13,025	1,628	8.9
5600E	4	1,376	25	34,400	4,300	6.6
5625E	4	1,339	25	33,475	4,184	9.5
5625E	4	918	25	22,950	2,869	7.5
5650E	4	1,755	25	43,875	5,484	8.1
5650E	4	899	25	22,475	2,809	6.8
5675E	4	2,567	25	64,175	8,022	10.2
5700E	4	632	25	15,800	1,975	6.7
5700E	4	1,965	25	49,125	6,141	11.3
5725E	4	2,362	25	59,050	7,381	8.7
5750E	4	2,269	25	56,725	7,091	4.9
5775E	4	1,879	25	46,975	5,872	6.6
5775E	4	620	25	15,500	1,938	4.7
5800E	4	2,256	6	13,536	1,692	6.8
5875E	4	2,238	35	78,330	9,791	6.9
5900E	4	799	21	16,779	2,097	6.5
5925E	4	1,178	25	29,450	3,681	7.1
5950E	4	1,438	16	23,008	2,876	7.0
5975E	4	1,574	25	39,350	4,919	4.2
5975E	4	3,391	25	84,775	10,597	6.1
5975E	4	428	25	10,700	1,338	4.2
6000E	4	1041	25	26,025	3,253	4.2
6000E	4	3,838	25	95,950	11,994	7.3
6025E	4	3,763	25	94,075	11,759	9.1
6025E	4	372	25	9,300	1,163	4.2
6050E	4	3,515	25	87,875	10,984	9.1
6075E	4	657	25	16,425	2,053	6.6
6075E	4	3,317	25	82,925	10,366	7.2
6100E	4	2,622	25	65,550	8,194	8.0
6125E	4	2,808	25	70,200	8,775	6.6
6150E	4	3,174	25	79,350	9,919	7.1
6175E	4	2,375	25	59,375	7,422	5.7
6200E	4	1,407	25	35,175	4,397	4.5
6200E	4	440	15	6,600	825	6.0

6225E	4	1,631	25	40,775	5,097	6.0
6225E	4	577	25	14,425	1,803	7.4
6250E	4	645	18	11,610	1,451	5.9
6250E	4	837	25	20,925	2,616	8.7
6275E	4	1773	25	44,325	5,541	6.6
6300E	4	1885	25	47,125	5,891	5.4
6075E MINED OUT	4	(657)	6.5	(4,271)	(534)	6.6
6075E MINED OUT	4	(421)	6.5	(2,737)	(342)	7.2
TOTAL				1,722,363	215,295	7.16
5600E	5	837	50	41,850	5,231	6.6
5625E	5	1,618	25	40,450	5,056	7.7
5650E	5	1,726	25	43,150	5,394	7.5
5675E	5	1,810	25	45,250	5,656	9.7
5700E	5	2,015	25	50,375	6,297	11.6
5725E	5	2,374	25	59,350	7,419	9.3
5750E	5	2,275	25	56,875	7,109	8.2
5775E	5	2,244	25	56,100	7,013	7.5
5800E	5	1,891	6	11,346	1,418	6.9
5875E	5	1,817	35	63,595	7,949	7.4
5900E	5	236	21	4,956	620	6.6
5925E	5	936	25	23,400	2,925	7.8
5950E	5	1,128	16	18,048	2,256	8.9
5975E	5	1,562	25	39,050	4,881	4.2
5975E	5	2,827	25	70,675	8,834	6.4
6000E	5	3,875	25	96,875	12,109	7.7
6025E	5	3,112	25	77,800	9,725	9.6
6050E	5	2,796	25	69,900	8,738	9.2
6075E	5	2,734	25	68,350	8,544	7.2
6100E	5	2,511	25	62,775	7,847	8.0
6125E	5	2,697	25	67,425	8,428	6.7
6150E	5	3,391	25	84,775	10,597	7.0
6075E MINED OUT	5	(601)	6.5	(3,907)	(488)	7.2
6150E MINED OUT	5	(663)	8.5	(5,636)	(704)	7.0
				1,142,828	142,854	7.89
5625E	6	694	25	17,350	2,169	8.7
5650E	6	849	25	21,225	2,653	7.5
5675E	6	1,290	25	32,250	4,031	12.1
5700E	6	1,079	25	26,975	3,372	13.1
5725E	6	1,823	25	45,575	5,697	9.3
5750E	6	2,058	25	51,450	6,431	8.0
5775E	6	1,265	25	31,625	3,953	7.3
5800E	6	1,525	6	9,150	1,144	6.9
5875E	6	1,197	35	41,895	5,237	4.1
5975E	6	1,767	25	44,175	5,522	5.9
5975E	6	639	25	15,975	1,997	4.2
6000E	6	2,691	25	67,275	8,409	6.5
6025E	6	2,771	25	69,275	8,659	7.0
6050E	6	2,375	25	59,375	7,422	7.2

6075E	6	2,362	25	59,050	7,381	6.2
6100E	6	2,064	25	51,600	6,450	6.6
6125E	6	1,946	25	48,650	6,081	6.7
6150E	6	2,846	25	71,150	8,894	7.3
6075E MINED OUT	6	(837)	6.5	(5,441)	(680)	6.2
6150E MINED OUT	6	(980)	8.5	(8,330)	(1,041)	7.3
TOTAL				750,250	93,781	7.32
5675E	-6	1,587	25	39,675	4,959	14.5
5700E	-6	1,389	25	34,725	4,341	13.4
5725E	-6	1,023	25	25,575	3,197	10.3
5725E	-6	980	25	24,500	3,063	13.5
5750E	-6	1,134	25	28,350	3,544	6.6
5750E	-6	465	25	11,625	1,453	11.5
5775E	-6	1,004	25	25,100	3,138	6.8
5800E	-6	1,860	6	11,160	1,395	6.8
5975E	-6	1,085	25	27,125	3,391	4.8
6000E	-6	1,686	25	42,150	5,269	5.3
6025E	-6	4,142	25	103,550	12,944	4.3
6025E	-6	422	25	10,550	1,319	8.0
6025E	-6	1,110	25	27,750	3,469	6.2
6050E	-6	6,529	25	163,225	20,403	5.0
6075E	-6	1,742	25	43,550	5,444	5.2
6075E MINED OUT	-6	(731)	6.5	(4,752)	(594)	5.2
6100E	-6	1,190	25	29,750	3,719	5.3
TOTAL				643,609	80,451	6.89

S U M M A R Y

BENCH	2	166,885	20,861	6.79
	3	1,924,153	240,519	7.25
	4	1,722,363	215,295	7.16
	5	1,142,828	142,854	7.89
	6	750,250	93,781	7.32
BELOW BENCH	6	643,609	80,451	6.89
TOTAL			793,761	7.30

J.R. FORTIN
NOV 11/90

SOMMAIRE METALLURGIQUE--MINES GALLEN

PRODUCTION DE L'ANNEE A DATE

	POIDS		TENEUR					UNITE DE METAL (SDT ou OZ)					RECUPERATION				
	SDT	WT%	%Cu	%Zn	%Pb	Ag(oz/t)	Au(oz/t)	Cu	Zn	Pb	Ag	Au(oz/t)	%Cu	%Zn	%Pb	Ag	Au(oz/t)
ALIM.	17997.0	100.00	0.113	6.212	0.229	0.882	0.037	20.36	1117.99	41.30	15870.27	667.80	100.00	100.00	100.00	100.00	100.00
CONC Ag	140.9	0.78	1.834	1.893	0.527	9.339	0.917	2.58	2.67	0.74	1316.24	129.22	12.69	0.24	1.80	8.29	19.35
CONC Zn	1807.6	10.04	0.486	51.251	0.939	2.343	0.069	8.79	926.39	16.97	4235.83	125.58	43.17	82.86	41.09	26.69	18.81
REJETS	16048.5	89.17	0.056	1.177	0.147	0.643	0.026	8.99	188.93	23.59	10318.21	413.00	44.14	16.90	57.11	65.02	61.84

COMMENTAIRES:

SURINTENDANT DU CONCENTRATEUR

DEAK RESOURCES CORPORATION

THE WEST MACDONALD PROJECT
FINAL RECLAMATION PLAN

Upon completion of mining activities, the following procedures will be executed to realize a proper reclamation of the site:

(1) Some 850,000 tons of pyritic waste rock will be returned to the open pit (this material will be generated during the upcoming mining operations).

(2) Some 1,650,000 tons of pyrite waste stored on existing stockpiles will also be returned to the pit.

(3) The sludge from the existing sludge disposal basin will also be returned to the pit and mixed in with (1) and (2) above.

(4) The above will be levelled out and a two foot layer of clay will be placed over it.

(5) A two foot layer of clay will be placed over the stockpile base area created after (2) has been removed.

(6) Clay from the existing sludge pond levelled out to provide a two foot covering for the area created by the removal of sludge from the sludge disposal basin.

(7) A two foot layer of clay will be placed over existing haulroads and all other areas where pyrite waste is exposed to the atmosphere.

(8) All areas will be fertilized and seeded.

(9) The area will be subjected to periodic inspections.

The total cost of this program will be $_____. This effort will afford Deak Resources a ""walk away"" situation.

DEAK RESOURCES CORPORATION

FINAL RECLAMATION PLAN

BASIC ASSUMPTIONS

The first phase of the mining plan will involve open pit mining with 825,000 tons of ore and 840,000 tons of waste being mined to an elevation of 9790. This represents four full mining cuts from the current open pit floor.

The underground mining will involve the extraction of some 395,000 tons of ore and 30,000 tons of waste.

In total, upon completion of mining, some 2,500,000 tons of fill will be returned to the pit. The final fill elevation in the pit will be 952, some 13 feet below the level of lake Dufault.

DEAK RESOURCES CORPORATION

TO : W. G. Cooper Date: September 5,1990

FROM: G. M. McDonald

SUBJECT: WEEKLY REPORT - August 27,1990
Quebec Operations.

A. THE WEST MacDONALD PROJECT

The main dike work was completed on Tuesday, the 28th. Overflow pipes, plant discharge lines and plant cleanup was completed by Friday the 31st. Problems were incurred in adjusting the controls for addition of lime to the circuit at the lesser amount of 300 G.P.M. Saturday and Sunday were full pumping days at 300 G.P.M.

Noranda minerals has requested the return of the original drawings which they supplied Deak. Prints will be sent to them next week. The originals will be kept by Deak.

Several energetic contractors have been inquiring about the mining at West MacDonald , they are being held at bay pending our evaluation of the ore supply and the preparation of a subsequent mining plan.

Respectfullu submitted,

G. M. McDonald,
General Manager
Quebec Operations.

DEAK RESOURCES CORP/GSR MINING CORP
KERR MINE/MILL

MEMO TO: Mr. W. G. Cooper

FROM: G. M. McDonald

DATE: September 12, 1990

SUBJECT: MONTHLY REPORT, QUEBEC OPERATIONS, AUGUST 1990

1. THE WEST MACDONALD

A. SURFACE ORE STOCKPILE

All of the ore stockpiles have been shipped to the Mattagami mill by Noranda. There remains approximately 500 tons of oversized at the site.

B. DEWATERING

During the month, the decision was made to raise the dike for the main sludge pond at the West MacDonald. The work was completed in eight days and was very well executed. The plant was put back into service on August 28 as scheduled. At month end, there were 12,843,320 gallons pumped with a pH of 2.5. There was ten feet of water remaining in the pit.

The remaining water is very high in iron and the current plant set-up is unable to handle the pit pump discharge to execute an efficient oxidation of iron. The volume was decreased to 200 G.P.M. until additional air could be made available in the plant to oxidize the iron. The iron sludge discharged into the pond must be oxidized, otherwise zinc would get back into solution when the sludge is exposed to open air.

CURRENT ESTIMATE FOR DEWATERING: DATE: SEPTEMBER 12, 1990

Water Remaining: 9.5 feet
Assumed dewatering: 3"/day
Pumping days left: 38
Estimated completion date: October 20, 1990

Noranda people expect that the dewatering rate will be faster when the aeration problem is resolved.

C. PROPOSED MINING PLAN

The Noranda Plan has been followed through and no major problems were discovered.

Respectfully Submitted

G. M. McDonald
General Manager - Quebec Operations

GMM:dt

DEAK RESOURCES CORP/GSR MINING CORP
KERR MINE/MILL

MEMO TO: W. G. Cooper

FROM: G. M. McDonald

DATE: September 19, 1990

SUBJECT: WEEKLY REPORT, SEPTEMBER 10TH, 1990

A. THE WEST MACDONALD PROJECT

1. MINING PLAN

Work continues on the revision of the mining plan, which is to be incorporated in the mining contract.

2. MINING CONTRACT

The schedule for the contract award has been revised to the following:

September 21	-	tenders sent out
September 27	-	site visit
October 3	-	tenders close at 4:00 p.m.
October 5	-	short list finalized
October 9	-	successful bidder determined - start date set

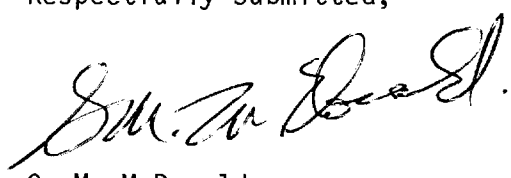
3. DEWATERING THE PIT

Noranda continues to explore avenues in increasing treating plant throughput above 200 gallons/minute. There remained some 8.6 feet of water in the pit at week-end.

4. NORANDA DRAWINGS

All of the requested drawings were sent to Noranda Inc. on September 13th.

Respectfully Submitted,



G. M. McDonald
General Manager - Quebec Operations

GMM:dt

Deak Resources Corporation
P.O. Box 390
Virginiatown, Ontario, Canada P0K 1X0
705 634-2121 • Fax 705 634-2396

MEMO TO: Mr. W. G. Cooper
FROM : G. M. McDonald
DATE : September 25, 1990
SUBJECT: Weekly report, Quebec operations week of September 17, 1990

A The West MacDonald Project

1) MINING CONTRACT:

Tender preparation was finalized and all tenders were sent out on September 14th, to a total of eight bidders. The site visit will take place on September 26th.

2) PIT DEWATERING:

At week-end there remained an average of 7.5 feet of water on the pit floor. The dewatering gain for the week was one foot. The pumping rate is currently 200 gallons/minute and precipitation has increased. The water surface area is decreasing substantially as we continue, but this rate of dewatering will not permit an October start-up.

3) MATTAGAMI MILL RUN:

Metallurgical results are being released by Noranda to Deak.

B The Hebecourt

Plans and sections have been received, as well as the Certificat d'Autorization for the extraction of some 50,000 tons of ore from the open pit. A budget is being prepared for mine dewatering and mining.

Respectfully submitted,

G. M. McDonald
General Manager-Quebec Operations.

Deak Resources Corporation
P.O. Box 390
Virginiatown, Ontario, Canada P0K 1X0
705 634-2121 • Fax 705 634-2396

MEMO TO: MR. W. G. COOPER

FROM: G. M. MCDONALD

DATE: APRIL 2, 1991

SUBJECT: WEST MACDONALD PROJECT, BACKFILLING PIT UPON TERMINATION OF MINING PROGRAM

A detailed volume analysis has been performed to determine the amount of material removed from the West MacDonald during past mining operations.

The volume of material remaining to be mined under the current mining plan has also been tabulated.

A Volume available to be backfilled

1) Previous mining:

	Cu. ft.	Short Tons
a) Overburden:	8,938,250	
b) Open Pit mining + 9940 Bench:	11,994,225	1,499,278
c) Open pit mining + 9910 Bench:	6,857,500	857,188

2) Current program:

a) Open Pit ore:	6,600,000	825,000
waste:	6,720,000	840,000
b) Underground ore:	3,160,000	395,000
waste:	240,000	30,000

Total fill volume available upon completion of mining (excluding overburden) 35,571,725

B Volume Required

a) Waste from previous mining (Currently stored on surface dumps)

	Cu. ft.	Cu. ft. @ 75% expansion
Total mined:	18,851,725	
Ore 754,000 t @ 8.0:	- 6,032,000	
	12,819,725 x 1.75 =	22,434,518
Waste which was dumped into open stopes		- 5,682,000
BALANCE (a)		16,752,518

b) Waste from current mining plan:

	Cu. ft.	Cu. ft. @ 75% expansion
Open Pit 840,000 t @ 8.0:	6,720,000	
U/G 30,000 t @ 8.0:	240,000	
	6,960,000 x 1.75 =	12,180,000

c) Sludge from sludge pond: 1,620,000

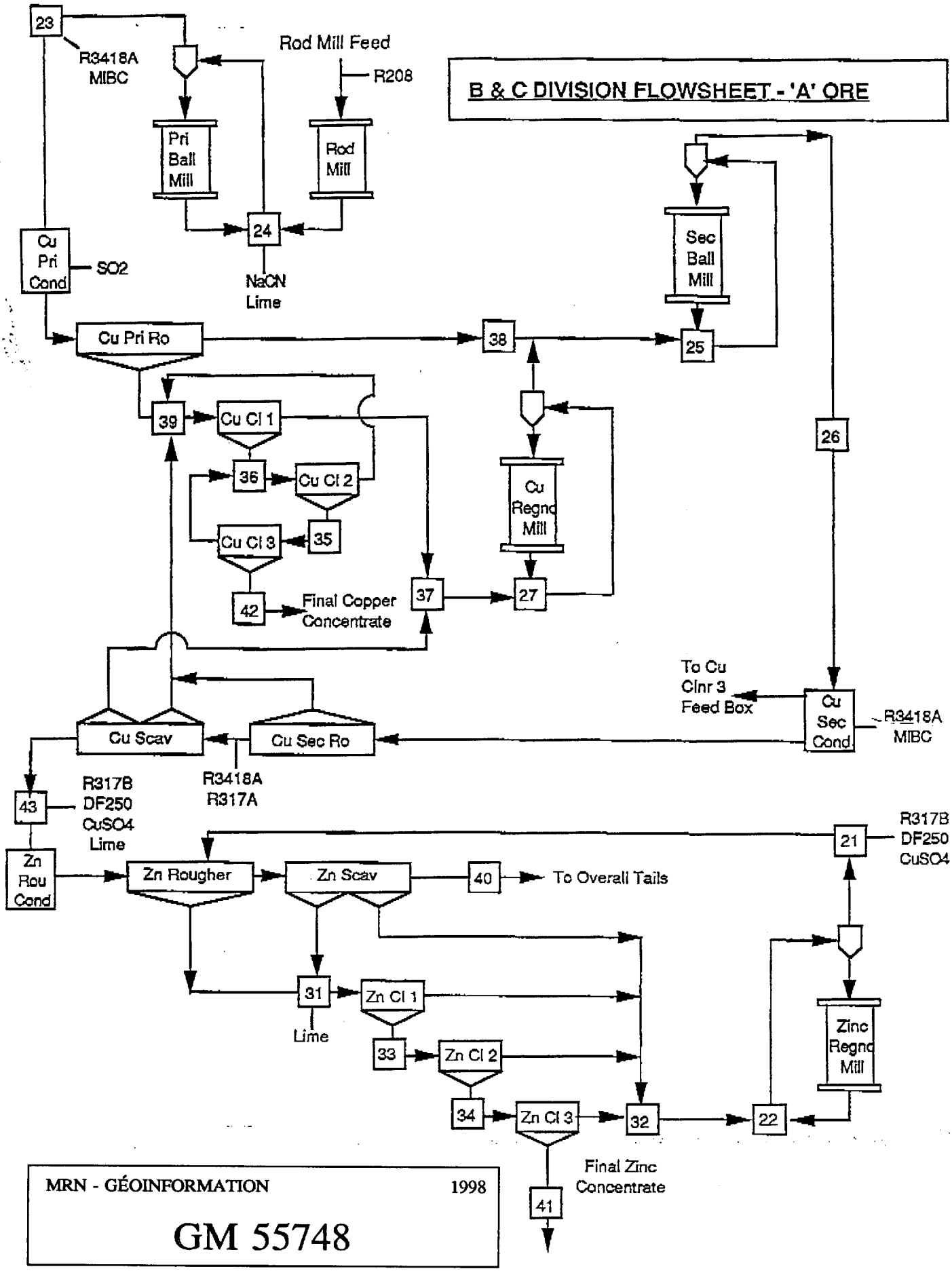
Total volume required: 30,552,518

C Calculation for freeboard

	Cu. ft.
Total volume available (A)	35,571,725
Total volume required (B)	30,552,518
Excess	5,019,207
Clay allowance (2')	- 459,000
NET	4,560,207

The final elevation of the fill inside the pit will be 949', some sixteen feet under the normal elevation of Lake Dufault.

G. M. McDonald,
General Manager - Quebec.



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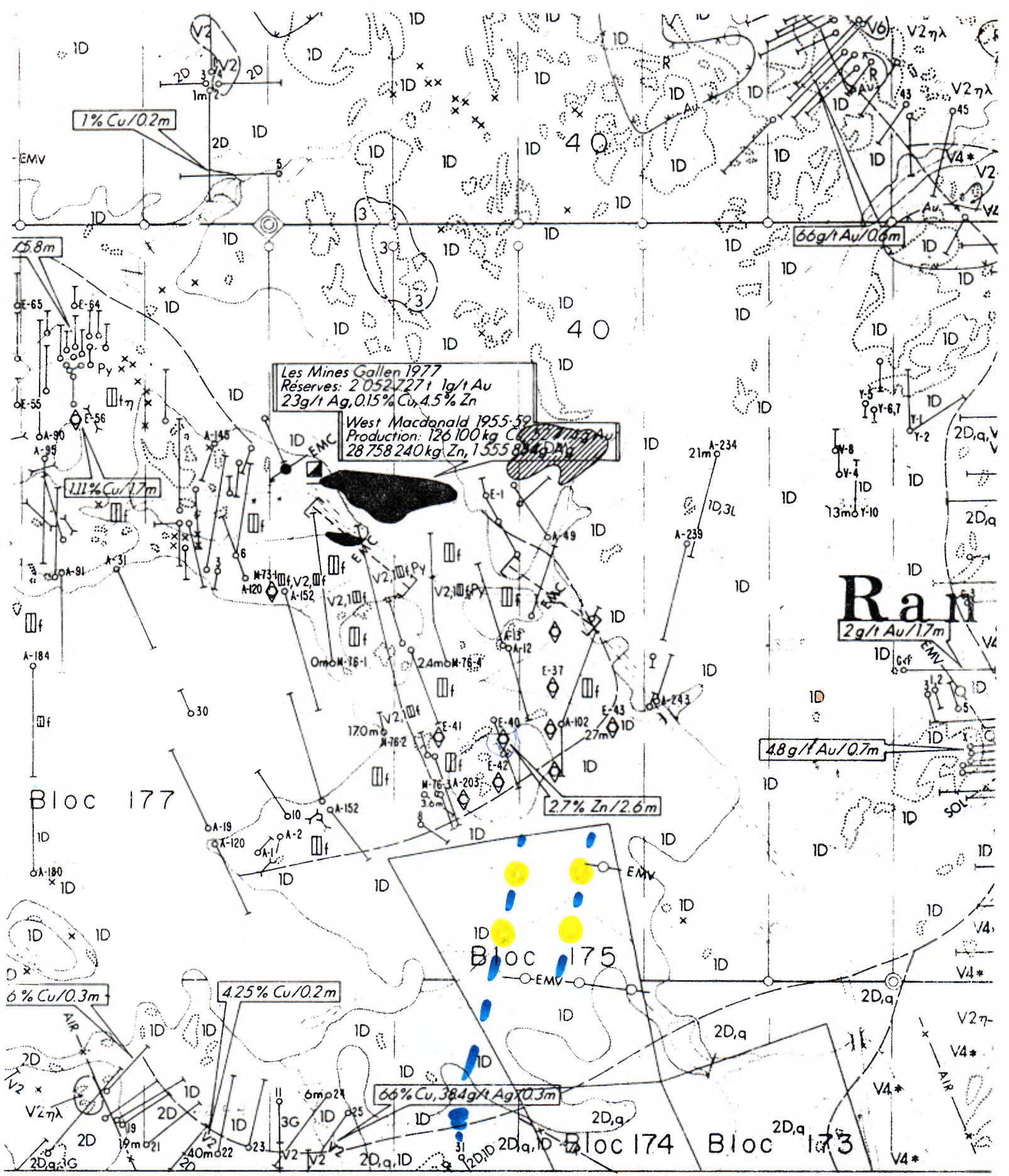

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