019821 Grum Ore Reserves

Grum 13

LEGEND:

GEOLOGY

X-SECTIONS BLOCK 11N-75W PLAN

78 W

80 "

84 "

86"

88"

LONGITUDINAL SECTIONS

12 N

14 N

ORE RESERVE

X-SECTIONS

78 W

80 "

84 "

86 "

88 "

LEGEND :

GEOLOGY

X-SECTIONS — BLOCK 1S - 91 W

92 W
100 "
104"

BLOCK 11N - 91W

92 W
98 W

ORE RESERVE

X-SECTIONS — BLOCK 1S -91 W

92 W
100W
104W

BLOCK 11N -91 W

98 W

LEGEND:

GEOLOGY

X-SECTIONS

108 W

112 W

BLOCK 11N - 107 W

BLOCK 1S - 107 W

ORE RESERVE

SAME AS ABOVE

LEGEND:

GEOLOGY

FIRTH ZONE

BLOCK IIN - 123 W

PLAN

X - SECTION 128 W

LONGITUDINAL SECTION 14 N

ORE RESERVE

X - SECTION 128 W

LONG. SECT. 14 N

SECTIONS 78 To 88W (11N-75W)

Drill indicated:

Category	Metric Tonnes	% Lead	% Zinc	gms/m.t Silver
+12	131,114	4.59	9.97	61.27
10 - 12	—	—	—	—
+10	—	—	—	—
8 - 10	243,760	3.41	5.66	52.30
+8	332,429	3.69	6.34	52.65
6 - 8	281,129	2.49	4.59	34.58
+6	613,551	2.71	5.54	44.37
4 - 6	216,481	1.87	3.02	27.48
+4	784,418	2.58	4.97	40.63

MINERAL RESERVE SUMMARY

SECTION 78W

GRUM DEPOSIT

DATE : JULY. 26th/78
CALCULATION BY: P. HAILLO
REVISED :

ZONE SEGMENT	DIP Length	Thick-ness	AREA m2	S.G.	TONNE/m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/mt	TONNE x GRADE Pb% m.t.	TONNE x GRADE Zn% m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1A ⌐	60.0	6.5	390.0	3.5	1365	2.61	3.93	40.04	3562.6	5364	54.655	⌐		
2A	83.5	3.0	250.5	4	1002	3.88	5.66	64.21	3888	5671	64.439	⊓		
3A |	90.0	5.5	495.0	3	1485	1.67	3.26	25.12	2480	4841	37.303	|		
1B ⌐	30.5	5.0	152.5	4	610	2.74	5.20	7.94	1671	3172	4.843	⌐		
1	23.0	1.5	42.0	3	126	5.03	4.80	65.48	634	605	8.250	⊓		
2	26.5	5.0	132.5	3.5	463.7	5.32	9.09	77.08	2467	4215	35.742	⧅		
3 |	26.0	1.6	41.6	3	124.8	1.73	3.84	27.8	216	479	3.469	|		
> 12	26.5	5.0	132.5	3.5	463.7	5.32	9.09	77.08	2467	4215	35,742	14.4		
10-12	/	/	/	/	/	/	/	/	/	/	/			
8-10	111.5	4.5	292.5	3.5	1128	4.01	5.56	64.44	4522	6276	72.689	9.6		
T>8	138	4.75	425	3.5	1592	4.39	6.59	68.11	6987	10.491	108.1431	10.9		
6-8	90.5	11.5	542.5	3.5	1975	2.65	4.32	30.13	5234	8536	59.498	6.9		
		–									–			
T>6	228.5		967.5	3.5	3567	3.43	5.33	47.08	12.223	19.027	167.929	8.7		
4-6	116		536.6	3.5	1610	1.67	3.30	25.32	2696	5320	40.772	4.9		
T>4	344.5		1504.1	3.5	5177	2.88	4.70	40.31	14.919	24.347	208.701	7.6		

MINERAL RESERVE SUMMARY

SECTION 80 W

GRUM DEPOSIT

DATE : JULY, 78
CALCULATION BY: P. HAILLS
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m³	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	53.0	3.0	159.0	3	477	3.86	4.25	42.69	1841	2027	20.363	⊓		—
2 X	52.0	3.0	156.0	3	468	2.72	2.78	33.11	1273	1301	15.495	⊥		
3	52.0	5.5	286.0	3	858	1.97	4.50	30.72	1690	3861	26.358	⌐		
4	52.5	3.0	157.5	3	472.5	2.93	5.24	37.37	1384	2476	17.657	⊓		—
5	51.5	5.0	257.5	3	772.5	2.79	5.08	40.8	2155	3924	31.518	⌐		
6	49.0	3.0	147.0	3	441	2.73	6.06	46.8	1204	2672	20.639	⊓		—
7	47.5	6.0	285.0	3.5	997.5	4.05	8.26	42.7	4039	8239	42.593	⊠		
8 X	45.0	8.0	360.0	3	1080	1.85	2.89	29.45	1998	3121	31.806	⊥		
9	43.5	3.5	152.3	3	456.9	2.69	6.16	44.4	1229	2814	20.286	⊓		—
10	60.1	3.5	210.3	4	841.2	3.64	5.74	60.1	3062	4828	50.556	⊓		—
> 12	47.5	6.0	285.0	3.5	997.5	4.05	8.26	42.7	4039	8239	42,593	12.3		
10 - 12	/	/	/	/	/	/	/	/	/	/	/	/		
8 - 10	258.1	3.25	826	3	2689	3.24	5.51	48.16	8720	14,817	129,501	8.7		
T > 8	305.6		1111	3	3686	3.46	6.26	46.69	12,759	23,056	172,094	9.7		
6 - 8	103.5		543.5	3	1630	2.36	4.78	35.51	3845	7785	57,876	7.1		
T > 6	409		1654	3	5316	2.40	5.80	43.26	12,759	30,841	229,970	8.2		
4 - 6	97	11	613	3	1548	2.11	2.86	30.56	3271	4422	47,301	4.9		
T > 4	506		2267	3	6864	2.34	5.14	40.39	16,030	35,263	277,271	7.5		

MINERAL RESERVE SUMMARY

SECTION 84W

GRUM DEPOSIT

DATE :
CALCULATION BY:
REVISED :

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb% m.t.	TONNE x GRADE Zn% m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	46.0	3.8	174.8	4	699.2	4.87	12.99	77.25	3405	9083	54.013	☒		

MINERAL RESERVE SUMMARY

SECTION 86W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILLO
REVISED :

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/mt	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	40.5	2.3	93.2	3	279.6	2.70	4.70	48.34	755	1314	13,516	Γ		
2	19.0	3.0	57.0	3.5	199.5	2.37	5.94	39.36	473	1185	7,852	⊓		
>12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
10-12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8-10	19.0	3.0	57.0	3.5	199.5	2.37	5.94	39.36	473	1185	7,852	8.3		
>8	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃			
6-8	40.5	8.3	93.2	3	279.6	2.70	4.70	48.34	755	1314	13,516	7.4		
T>6	59.5	2.5	150.2	3	479.1	2.56	5.22	44.60	1228	2499	21,368	7.8		
4-6	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		

MINERAL RESERVE SUMMARY

SECTION 88W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HALL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m2	S.G.	TONNE / m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	49.0	2.4	117.6	3	352.8	2.50	5.08	47.4	882	1792	16.723	⌐		
2	47.0	2.8	131.6	3	394.8	2.06	4.63	31.8	813	1828	12.555	⌐		
3	45.5	3.0	136.5	3	409.5	1.70	2.53	24.34	696	1036	9.967	1		
7 1 2	—	—	—	—	—	—	—	—	—	—	—	—		
10 - 12	—	—	—	—	—	—	—	—	—	—	—	—		
8 - 10	—	—	—	—	—	—	—	—	—	—	—	—		
6 - 8	96	2.6	249	3	747.6	2.27	4.84	39.16	1695	3620	29,278	7.1		T > 6
4 - 6	45.5	3.0	136.5	3	409.5	1.70	2.53	24.34	696	1036	9,967	4.2		
T 7 4	141.5	2.7	385.5	3	884	2.70	5.27	44.39	2391	4656	39,245	7.9		—

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 11N-75W

ZONE SEGMENT		Tonnes/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
11N-75W	—												
712	78W	463.7			5.32	9.09	77.08	2,467	4215	35,742	28,142		
	80W	997.5			4.05	8.26	42.7	4039	8239	42,593	60,538		
	82W	—			—	—	—	—	—	—	—		
	84W	699.2			4.87	12.99	77.25	3405	9,083	54,013	42,434		
	86W	—			—	—	—	—	—	—	—		
	88W	—			—	—	—	—	—	—	—		
712	78W – 88W	2,160			4.59	9.97	61.27	9,911	21,537	132,348	131,114		
10-12	78W	—			—	—	—	—	—	—	—		
	80W	—			—	—	—	—	—	—	—		
	82W	—			—	—	—	—	—	—	—		
	84W	—			—	—	—	—	—	—	—		
	86W	—			—	—	—	—	—	—	—		
	88W	—			—	—	—	—	—	—	—		
8-10	78W	1128			4.01	5.56	64.44	4522	6,276	72,689	68,458		
	80W	2689			3.24	5.51	48.16	8,720	14,817	129,501	163,195		
	82W	—			—	—	—	—	—	—	—		
	84W	—			—	—	—	—	—	—	—		
	86W	199.5			2.37	5.94	39.36	473	1185	7,852	12,107		
	88W	—			—	—	—	—	—	—	—		
T8-10		4,016			3.41	5.66	52.3	13,715	22,728	210,042	243,760		

Date: JULY, 1978 Calcin. by: P. HAILOT Revised: _____

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 11N - 75W

ZONE SEGMENT		Tonnes/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
+8%	78 W	1592			4.39	6.59	68.11	6,989	10,491	108,431	96,618		
	80 W	3686			3.46	6.26	46.69	12,759	23,056	172,094	223,703		
	82 W	—			—	—	—	—	—	—	—		
	84 W	—			—	—	—	—	—	—	—		
	86 W	199.5			2.37	5.94	39.36	473	1,185	7,852	12,108		
	88 W	—			—	—	—	—	—	—	—		
T +8%		5,477			3.69	6.34	52.65	20,221	34,732	788,377	332,429		
6-8	78 W	1,975			2.65	4.32	30.13	5,234	8,536	59,498	119,863		
	80 W	1,630			2.36	4.78	35.51	3,845	7,785	57,876	98,925		
	82 W	—			—	—	—	—	—	—	—		
	84 W	—			—	—	—	—	—	—	—		
	86 W	279.6			2.70	4.70	48.34	755	1314	13,516	16,969		
	88 W	747.6			2.27	4.84	39.16	1,695	3,620	29,278	45,372		
T 6-8		4,632			2.49	4.59	34.58	11,529	21,255	160,168	281,129		
+6%	78W	3,567			3.43	5.33	47.08	12,223	19,027	167,929	216,481		
	80 W	5,316			2.40	5.80	43.26	12,759	30,841	229,970	322,628		
	82 W	—			—	—	—	—	—	—	—		
	84 W	—			—	—	—	—	—	—	—		
	86 W	479			2.56	5.22	44.6	1,228	2,499	21,368	29,070		
	88 W	747.6			2.27	4.84	39.16	1,695	3,620	29,278	45,372		
T +8		10,109			2.76	5.54	44.37	27,905	55,987	448,545	613,521		

Date: JULY, 1978 Calcn. by: P. HAILOT Revised: _____

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 11N - 75W

ZONE SEGMENT		TONNES/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69m long. sect.	TONNES CUMULATIVE	REMARKS
4-6	78 W	1610			1.67	3.30	25.32	2,696	5,320	40,772	97,711		
	80 W	1548			2.11	2.86	30.56	3,271	4,422	47,301	93,948		
	82 W	—			—	—	—	—	—	—	—		
	84 W	—			—	—	—	—	—	—	—		
	86 W	—			—	—	—	—	—	—	—		
	88 W	409			1.70	2.53	24.34	696	1,036	9,967	24,822		
T4-6		3,567			1.87	3.02	27.48	6,663	10,778	98,040	216,481		
+4	78 W	5,177			2.88	4.70	40.31	14,919	24,347	208,701	314,192		
	80 W	6,864			2.34	5.14	40.39	16,030	35,263	277,271	416,576		
	82 W	—			—	—	—	—	—	—	—		
	84 W	—			—	—	—	—	—	—	—		
	86 W	—			—	—	—	—	—	—	—		
	88 W	884			2.70	5.27	44.39	2,391	4,656	39,245	53,650		
T+4		12,925			2.58	4.97	40.63	33,340	64,266	525,217	784,418		

Date: JULY, 1978 Calcin. by: D. HAILLOT Revised: _____

SECTIONS 92 To 104 W (IS-91W)

Drill indicated:

Category	Metric Tonnes	% Lead	% Zinc	Silver
+12	72,889	5.45	9.42	104.84
10 - 12	54,135	4.34	6.91	90.60
+10	127,024	4.97	8.35	98.77
8 - 10	142,743	3.26	5.67	52.44
+8	269,767	4.07	6.93	74.26
6 - 8	122,867	3.48	3.65	57.77
+6	372,970	2.96	5.92	70.61
4 - 6	365,535	1.62	3.09	26.41
+4	738,475	2.82	4.52	48.74

MINERAL RESERVE SUMMARY

SECTION 92W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE/m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	33.0	6.5	214.5	4	858	5.63	9.73	108.44	4831	8348	93.041	⊠		
2	33.0	2.6	85.8	4	343.2	5.01	8.63	95.77	1719	2962	32.868	⊠		
3	33.0	5.5	181.5	3	544.5	1.46	2.97	31.28	795	1617	17.032	∣		
4	33.0	4.5	148.5	3.5	519.7	4.16	7.48	99.00	2162	3887	51.450	□		
5	33.0	5.0	165.0	4	660	4.01	5.97	66.75	2647	3940	44.055	⊓		
1A	38.0	7.0	266.0	3	798	4.22	3.50	80.83	3367	2793	64.502	⌐		
2A	35.0	2.8	106.4	3.5	372.4	4.58	6.12	78.36	1706	2279	29.367	□		
3A	38.0	3.5	133.0	4	532	4.02	3.41	51.37	2139	1814	27.329	⌐		
4A	38.0	3.2	121.6	3	364.8	1.98	3.84	34.97	722	1401	12.757	∣		
5A	38.0	2.8	106.4	3	319.2	3.60	5.58	48.68	1149	1781	15.538	⊓		
6A	38.0	12.2	463.6	3.5	1622.6	1.84	2.84	27.63	2986	4608	44.832	∣		
7>12	66.0	4.6	300	4	1201	5.45	9.42	104.84	6550	11,210	125,909	14.8		
10-12	71	3.6	255	3.5	892	4.34	6.91	90.60	3868	6166	80,817	11.2		
T>10	137	4.0	555	3.5	2093	4.97	8.35	98.77	10,418	17,476	206,726	13.3		
8-10	71	3.8	271.4	3.5	979	3.88	5.84	60.87	3796	5721	59,593	9.7		
T>8	208	3.9	826.4	3.5	3072	4.63	7.55	86.69	14,214	23,197	266,319	12.2		
6-8	76	5.2	399	3.5	1330	4.14	3.46	69.05	5506	4607	91,831	7.6		
T>6	284	4.3	1225.4	3.5	4402	4.48	6.32	81.36	19,720	27,804	358,150	10.8		
4-6	109	7.0	766.7	3	2532	1.78	3.01	29.47	4503	7626	74,621	4.8		
T>4	393	5.1	1992	3.5	6934	3.49	5.11	62.41	24,223	35,430	432,771	8.6		

MINERAL RESERVE SUMMARY

SECTION 98W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m2	S.G.	TONNE / m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	32.5	4.2	136.5	3	409.5	2.33	3.85	39.0	9.54	1577	15.970	[illegible]		
2	32.5	4.0	130.0	3	390	1.45	3.19	23.3	565	1244	9.087	1		
12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
10-12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8-10	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
6-8	32.5	4.2	136.5	3	409.5	2.33	3.85	39	954	1577	15,970	6.2		
4-6	32.5	4.0	130	3	390	1.45	3.19	23.3	565	1244	9,087	4.6		
T>4	65	4.1	267	3	799	1.90	3.53	31.36	1519	2821	25,057	5.4		

MINERAL RESERVE SUMMARY

SECTION 100 W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1 X	38.0	6.5	247.0	3	741	1.33	2.87	19.48	986	2127	14.435	1		4.2
2 X	"	2.7	102.6	3	308	2.04	2.81	30.53	628	865	9.403	1		4.8
3 X	"	3.0	114.0	3	342	1.71	2.79	24.64	585	954	8.427	1		4.5
4 X	"	8.0	304.0	3	912	1.61	3.62	25.25	1468	3301	23.028	1		5.2
5	"	2.5	95.0	3	285	2.10	4.20	32.23	598	1197	9.186	Γ		6.3
6	"	6.2	235.6	3	707	3.24	5.00	51.94	2291	3535	36.722	Π		8.2
7 X	"	7.0	266.0	3	798	1.51	3.14	25.16	1205	2506	20.077	1		4.65
8	"	3.0	114.0	3	342	2.28	6.59	40.70	779	2254	13.919	Π		8.8
7 12	—	—	—	—	—	—	—	—	—	—	—	—		
10 - 12	—	—	—	—	—	—	—	—	—	—	—	—		
8 - 10	76	4.6	350	3	1049	2.93	5.12	48.27	3070	5789	50,641	8.1		
6 - 8	38	2.5	95	3	285	2.10	4.20	32.23	598	1197	9 186	6.3		
T 7 6	114	3.9	445	3	1334	2.75	5.24	44.85	3668	6986	59,827	7.9		
4 - 6	190	5.4	1034	3	3101	1.57	3.14	24.31	4872	9753	75,370	4.7		
T 7 4	304	4.8	1479	3	4435	1.92	3.77	30.48	8540	16,739	135,197	5.7		

MINERAL RESERVE SUMMARY

SECTION 104W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILLS
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	36.0	3.0	108.0	3	324	2.49	5.64	40.45	807	1827	13,106	⊓	8.1	
>12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
10-12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8-10	36.	3	108	3	324	2.49	5.64	40.45	807	1827	13,106.			
>8	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃			

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 1S-9iW

ZONE SEGMENT		Tonnes/m. (longitudinal DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
> 12	92W	1201			5.45	9.42	104.84	6,550	11,310	125,909	72,889		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	—			—	—	—	—	—	—	—		
	100W	—			—	—	—	—	—	—	—		
	102W	—			—	—	—	—	—	—	—		
	104W	—			—	—	—	—	—	—	—		
T+12		1201			5.45	9.42	104.84	6,550	11,310	125,909	72,889		
10-12	92W	892			4.34	6.91	90.60	3868	6,166	80,817	54,135		
T+10	92W	2093			4.97	8.35	98.77	10,418	17,476	206,726	127,024		
8-10	92W	979			3.88	5.84	60.87	3796	5721	59,593	59,415		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	—			—	—	—	—	—	—	—		
	100W	1049			2.93	5.12	48.27	3070	5789	50,641	63,664		
	102W	—			—	—	—	—	—	—	—		
	104W	324			2.49	5.64	40.45	807	1827	13,106	19,664		
T8-10		2352			3.26	5.67	52.44	7,673	13,337	123,340	142,743		
+8	92W	3072			4.63	7.55	86.69	14,214	23,197	266,319	186,439		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	—			—	—	—	—	—	—	—		
	100 W	1,049			2.93	5.12	48.27	3,070	5,789	50,641	63,664		
	102W	—			—	—	—	—	—	—	—		
	104 W	324			2.49	5.64	40.45	807	1,827	13,106	19,664		

Date: JULY, 1978 Calcn. by: P. HAILLOT Revised: _____

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 1S-9W

ZONE SEGMENT		Tonnes/m. (longitudinal)			GRADE			TONNES x GRADE			TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
		DRILL PROVEN	DRILL INDICATED	TOTAL	Pb %	Zn %	Ag gm/mt.	Pb % mt.	Zn % mt.	Ag gm mt.			
T+8	92W-104W	4,445			4.07	6.93	74.26	10,091	30,813	330,066	269,767		
6-8	92W	1,330			4.14	3.46	69.05	5,506	4,607	91,831	80,718		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	409.5			2.33	3.85	39.0	954	1,577	15,970	24,852		
	100W	285			2.10	4.20	32.23	598	1,197	9,186	17,297		
	102W	—			—	—	—	—	—	—	—		
	104W	—			—	—	—	—	—	—	—		
T6-8		2,025			3.48	3.65	57.77	7,058	7,381	116,987	122,867		
+6	92W	4,402			4.48	6.32	81.36	19,720	27,804	358,150	267,157		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	409.5			2.33	3.85	39.0	954	1,577	15,970	24,853		
	100W	1,334			2.75	5.24	44.85	3,668	6,986	59,827	80,960		
	102W	—			—	—	—	—	—	—	—		
	104W	—			—	—	—	—	—	—	—		
T+6		6,146			3.96	5.92	70.61	24,342	36,367	433,947	378,970		
4-6	92W	2,532			1.78	3.01	29.47	4,503	7,626	74,621	153,667		
	94W	—			—	—	—	—	—	—	—		
	96W	—			—	—	—	—	—	—	—		
	98W	390			1.45	3.19	23.3	365	1,244	9,087	23,669		
	100W	3101			1.57	3.14	24.31	4,872	9,753	75,370	188,199		
	102W				—	—	—	—	—	—	—		
	104W				—	—	—	—	—	—	—		
T4-6		6023			1.62	3.09	26.41	9,740	18,623	159,078	365,535		

Date: JULY, 1978 Calcn. by: P. HAILLOT Revised: _____

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION 15 - 91W

ZONE SEGMENT		Tonnes/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
+4	92W	6,934			3.49	5.11	62.41	24,223	35,480	432,771	420,824		
	94 W	—			—	—	—	—	—	—	—		
	96 W	—			—	—	—	—	—	—	—		
	98 W	799			1.90	3.53	31.36	1,519	2,821	25,057	48,491		
	100 W	4,435			1.92	3.77	30.48	8,540	16,739	135,197	269,160		
	102 W	—			—	—	—	—	—	—	—		
	104 W	—			—	—	—	—	—	—	—		
T+4		12,168			2.82	4.52	48.74	34,282	54,990	593,025	738,475		

Date: JULY, 1978 Calc'n. by: P. HAILLOT Revised: _____

SECTIONS 108 To 120 W (11 N - 107 W / 1 S - 107 W)

Drill indicated:

Category	Metric Tonnes	% Lead	% Zinc	Silver
+12	20,392	2.71	11.60	56.60
10-12	—	—	—	—
+10	—	—	—	—
8-10	43,697	2.46	6.31	36.28
+8	64,089	2.54	7.99	42.75
6-8	88,850	2.16	3.89	30.70
+6	152,939	2.32	5.61	35.75
4-6	50,373	1.62	3.37	21.53
+4	263,311	2.14	5.06	32.23

MINERAL RESERVE SUMMARY

SECTION 108W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb% m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1 X	40.0	2.2	88.0	3	264	2.00	4.02	17.14	528	1061	4.525	⌐		103W(15-10
2 X	40.0	6.8	272.0	3	816	2.22	3.84	35.0	1811	3133	28.560	⌐		
3	40.0	2.8	112.0	3	336	2.71	11.60	56.6	911	3898	19.018	⧅		
4	40.0	6.0	24.0	3	720	2.46	6.31	36.28	1771	4543	2.6122	⊓		
1A X	40.0	3.2	128.0	3	384	2.14	3.93	30.9	822	1509	11.866	⌐		103W(11N-107
2A	40.0	5.6	224.0	3	672	1.65	3.47	23.3	1109	2332	15.658	|		
7/2	40.	2.8	112.	3	336	2.71	11.60	56.6	911	3898	19,018	14.3		
10-12	—	—	—	—	—	—	—	—	—	—	—	—		
8-10	40	6.0	240	3	720	2.46	6.21	36.28	1771	4543	26,122	8.8		
T78	80	4.4	352	3	1056	2.54	7.99	42.75	2682	8441	45,140	10.5		
6-8	120	4.1	488	3	1464	2.16	3.89	30.70	3161	5703	44951	6.1		
T76	200	4.2	840	3	2520	2.32	5.61	35.75	5843	14,144	90,091	7.9		
4-6	40	5.6	224	3	672	1.65	3.47	23.3	1109	2332	15,658	5.1		
T74	240	4.4	1064	3	3192	2.18	5.16	33.13	6952	16,476	105,749	7.3		

MINERAL RESERVE SUMMARY

SECTION 112W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILLOT
REVISED :

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m²	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	21.0	2.5	52.5	3	157.5	1.48	2.94	14.06	2.33	463	2.214	1		
>12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
10-12	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8-10	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
6-8	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		
4-6	21	2.5	52.5	3	158	1.48	2.94	14.06	233	463	2 214	4.4		
T>4	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃		

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

11N - 10.7W

SECTION 15 - 10.7W. (8.L TO 18N)

ZONE SEGMENT		TONNES/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
+12	108 W.	336			2.71	11.60	56.6	911	3,898	19,018	20,392		
	110 W	—			—	—	—	—	—	—	—		
	112 W	—			—	—	—	—	—	—	—		
	114 W	—			—	—	—	—	—	—	—		
	116 W	—			—	—	—	—	—	—	—		
	118 W	—			—	—	—	—	—	—	—		
	120 W	—			—	—	—	—	—	—	—		
T+12		336			2.71	11.60	56.60	911	3,898	19,018	20,392		
10-12	—	—	—	—	—	—	—	—	—	—	—		
T10	—	—	—	—	—	—	—	—	—	—	—		
8-10	108W	720			2.46	6.31	36.28	1771	4543	26,122	43,697		
T8-10	"	"			"	"	"	"	"	"	"		
+8	108W	1056			2.54	7.99	42.75	2,682	8,441	45,140	64,089		
T+8	"	"			"	"	"	"	"	"	"		
6-8	108W	1,464			2.16	3.89	30.7	3,161	5,703	44,951	88,850		
T6-8	108W	"			"	"	"	"	"	"	"		
+6	108W	2,520			2.32	5.61	35.75	5,843	14,144	90,091	152,939		
T+6	"	"			"	"	"	"	"	"	"		
4-6	108W	672			1.65	3.47	23.3	1,109	2,332	15,658	40,784		
	112W	158			1.48	2.94	14.06	233	463	2,214	9,589		
T4-6		830			1.62	3.37	21.53	1,342	2,795	17,872	50,373		

Date: JULY, 1978 Calcn. by: P. HAILLOT Revised: _____

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

11N – 107W

SECTION 1S - 107W (B.L. To 18N)

ZONE SEGMENT		Tonnes/m. (longitudinal DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
+ 4	108W	3,192			2.18	5.16	33.13	6,952	16,476	105,749	193,722		
	112W	158			1.48	2.94	14.06	233	463	2,214	9,589		
T+4		3350			2.14	5.06	32.23	7,185	16,939	107,963	203,311		

Date: JULY 1978 Calcn. by: P. HAILLOT Revised: _____

SECTION 128 W FIRTH ZONE

(11N-123W)

Drill indicated:

Category	Metric Tonnes	% Lead	% Zinc	Silver
+12	—	—	—	—
10 - 12	20,634	3.52	6.96	55.16
+10	"	"	"	"
8 - 10	6,554	2.80	6.80	69.26
+8	27,189	3.34	6.92	58.56
6 - 8	—	—	—	—
+6	—	—	—	—
4 - 6	24,337	2.70	2.64	35.31
+4	51,526	3.04	4.90	47.58

MINERAL RESERVE SUMMARY

SECTION 128W

GRUM DEPOSIT

DATE : JULY, 1978
CALCULATION BY: P. HAILL
REVISED:

ZONE SEGMENT	DIP Length	Thick-ness	AREA m²	S.G.	TONNE m	GRADE Pb %	GRADE Zn %	GRADE Ag gm/m.t.	TONNE x GRADE Pb % m.t.	TONNE x GRADE Zn % m.t.	TONNE x GRADE Ag gm m.t.	Pb + Zn %	Total Sulph. %	REMARKS
1	9.0	3.0	27.0	4	108	2.80	6.80	69.26	302	734	7.480	□		9.6
2+3	38.5	2.6	100.1	4	401	2.70	2.64	35.31	1083	1059	14,159	1		5.3
4	17.0	3.0	51.0	4	204	3.80	6.81	58.56	775	1389	11,946	□		10.6
5	17.0	2.0	34.0	4	136	3.10	7.20	50.06	422	979	6.808	□		10.3
					849									
>12	—	—	—	—	—	—	—	—	—	—	—	—		
10-12	34	2.5	85	4	340	3.52	6.96	55.16	1197	2368	18,754	10.5		
>10	34	2.5	85	4	340	3.52	6.96	55.16	1197	2368	18,754			(Averaged Ag.)
8-10	9	3	27	4	108	2.80	6.80	69.26	302	734	7480	9.6		
>8	43	2.6	112	4	448	3.34	6.92	58.56	1499	3102	26,234	10.2		
6-8	—	—	—	—	—	—	—	—	—	—	—	—		
4-6	38.5	2.6	100	4	401	2.70	2.64	35.31	1083	1059	14,159	5.3		
>4	81.5	2.6	212	4	849	3.04	4.90	47.58	2582	4161	40,393	7.9		

MINERAL RESERVE SUMMARY

GRUM DEPOSIT, Y.T.

SECTION FIRTH ZONE

ZONE SEGMENT		Tonnes/m. (longitudinal) DRILL PROVEN	DRILL INDICATED	TOTAL	GRADE Pb %	Zn %	Ag gm/mt.	TONNES x GRADE Pb % mt.	Zn % mt.	Ag gm mt.	TONNES per 60.69 m long. sect.	TONNES CUMULATIVE	REMARKS
712	128 W.	—	—		—	—	—	—	—	—	—		
T10-12	128 W	340			3.52	6.96	55.16	1197	2368	18,754	20,634		
T+10	"	"			"	"	"	"	"	"	"		
T8-10	128 W	108			2.80	6.80	69.26	302	734	7480	6,554		
T+8		448			3.34	6.92	58.56	1,499	3,102	26,234	27,189		
T6-8	128 W	—			—	—	—	—	—	—	—		
T+6	"	—			—	—	—	—	—	—	—		
4-6	128 W	401			2.70	2.64	35.31	1,083	1,059	14,159	24,337		
+4	"	849	1		3.04	4.90	47.58	2,582	4,161	40,393	61,526		

Date: JULY 1978 Calcn. by: P. HAILLOT Revised: _____