



Government of Canada

Gouvernement du Canada

ACTION REQUEST

FICHE DE SERVICE

TO - À

FILE NO. - DOSSIER N°

Arlene

DATE

18/4/74

FROM - DE

Barry

REPORT
091336

<input type="checkbox"/> PLEASE CALL PRIÈRE D'APPELER	TEL. NO. - N° DE TEL.	EXT. - POSTE
<input type="checkbox"/> WANTS TO SEE YOU DÉSIRE VOUS VOIR	DATE	TIME - HEURE
<input type="checkbox"/> WILL CALL AGAIN DOIT RAPPÉLER		
CALL RECEIVED BY MESSAGE REÇU PAR ▶		
<input type="checkbox"/> ACTION. DONNER SUITE	<input type="checkbox"/> APPROVAL APPROBATION	<input type="checkbox"/> NOTE & RETURN NOTER ET RETOURNER
<input type="checkbox"/> COMMENTS COMMENTAIRES	<input type="checkbox"/> DRAFT REPLY PROJET DE RÉPONSE	<input type="checkbox"/> NOTE & FORWARD NOTER ET FAIRE SUIVRE
<input type="checkbox"/> MAKE FAIRE _____ COPIES	<input type="checkbox"/> SIGNATURE	<input type="checkbox"/> NOTE & FILE NOTER ET CLASSER

 Please attach to Assens
 filed by American
 Smelting & Refining Co.
 115 - F - 11 - MINUTE CLAIMS
 dated 26 Feb 74

C/W - 966765

DIAMOND DRILL LOG

COLLAR:—

LAT. 10-205N
 DEP. 9300 F
 ELEVATION ~2937
 AZIMUTH -90°

DIP TEST		
FOOTAGE	ANGLE	
	READING	CORRECTED

PROPERTY MINTO ASARCO
 HOLE NO. DDH-49-73
 COMMENCED OCT 2ND
 FINISHED 5 OCT
 PURPOSE OF HOLE
 LOGGED BY: H. b. v. d.

N.M.P.

FOOTAGE	DESCRIPTION	CORE SAMPLES					Recovery	ACTUAL			
		SAMPLE NO.	FROM	TO	WIDTH	ASSAY	WIDTH ASSAY	SAMPLE NO.	FROM	TO	ASSAY
0-112	OVERBURDEN										
112-268	C Foliated Biotite Hornblende Porphyry, Potassic Alteration Dominant with Chloritic Alteration common.	15045	112	122		.0	90%				.12
	Core Fractured, Limonite occurring in Fractures.	46	122	132		.1	75%				.16
	114 - Amber.	47	132	142		.0	90%				.09
	123' malachite on Fractures	48	142	152		.1	95%				.18
	130 Fracture Parallel to CA, Malachite										
	132-142' Potassic & Chloritic high Alteration Along Fractures 45° to CA. Minor Propylitic Alteration Along same.										
	143' malachite on Fractures 60° to CA										
	145.5' malachite on sides of small 1/2" pegmatite vein										
	147' malachite on Fractures ~60° to CA	49	152		162	.2	97%				.20
	151.5 - 153 Heavily altered & broken up section, possible Fault.										
	156. Malachite on Fracture, 60° to CA,										
	156.3 minor fault										
	159-160' - malachite in Fractures and Along foliation Platting Biotite & chlorite. Sulfides leached out partially.										
	161. Malachite Along 1/2" pegmatite dike.										
	161.5-162 - Pegmatite dike. 45° to CA.	50	162		172	.1	98%				.18

DIAMOND DRILL LOG

COLLAR: _____

LAT. 12840 N
 DEP. 9600 E
 ELEVATION -2662
 AZIMUTH 95

DIP TEST		
FOOTAGE	ANGLE	
	READING	CORRECTED

PROPERTY DD4-51-73
 HOLE NO. _____
 COMMENCED _____
 FINISHED _____
 PURPOSE OF HOLE _____
 LOGGED BY: Hubbards

N.M.P. _____

FOOTAGE	DESCRIPTION	CORE SAMPLES						Actual					
		SAMPLE NO.	FROM	TO	WIDTH	ASSAY	REC	SAMPLE NO.	FROM	TO	ASSAY		
0-230	OVERBURDEN												
230-241.5	OTZ Diabase marked horizon in halogen content. No Plagioclase etc. chloritic alteration downward. Potassic alteration along fractures.		230	240		NONE	50%						
			240	250		NONE	100%						
			250	250		NONE	100%						
	246-1" Pegmatite dike 45° to CA	15094	258	265		.2-3	100%						.55
	259- Malachite on Fractures + Plating mafics	95	265	275		.2-3	10%						1.07
261.5-283.5	C' Foliated Biotite Gneiss, Highly potassic + chlorite Alteration. Malachite in Fractures + Plating Mafics chalcoprite, Borwite, Magnetite, Tr pyrite	96	275	285		.7	60%						
		97	285	295		.1	100%						
		98	295	300.6		.1	100%						
	265-275 - Poor recovery - only small battered pieces to Extrapolate estimate from.	99	300.6	310		.3	95%						.48
	283 - Native copper = cuprite												
283.5-300.6	Biotite Hornblende Granite Porphyry, K spar Plenocrysts - Highly Altered + crumbly Potassic Alteration Dominant, with chloritic close second 287.5 - Malachite throughout rock.												
300.6-338	Biotite Granite Gneiss - Potassic Alteration heavy Chloritic Alteration common throughout core Sensible at 301 Alteration INCREASE along fractures Cup to Pyrite 2:1 - No borwite. Some magnetite many fractures with silica size calcite												

DIAMOND DRILL LOG

COLLAR:—

LAT. 10 55 N
 DEP. 10700 E
 ELEVATION 2632.7
 AZIMUTH

DIP TEST		
FOOTAGE	ANGLE	
	READING	CORRECTED

PROPERTY ASARCO - MINTO
 HOLE NO. DDH-70-73
 COMMENCED
 FINISHED
 PURPOSE OF HOLE
 LOGGED BY: S. GILBERT

N.M.P.

FOOTAGE	DESCRIPTION	CORE SAMPLES									
		SAMPLE NO.	FROM	TO	WIDTH	EST ASSAY	REC WIDTH X ASSAY	SAMPLE NO.	FROM	TO	ASSAY
0-135	Overburden										
135-153	Biotite Hornblende Granite Porphyry - K spar Phenocrysts, Extremely weathered Broken up core.		0	135		NONE					Actual
153-182	Biotite Granite Gneiss & foliation, weathered Extremely broken up core. Chalcopyrite Leached Out with trace left behind, also trace Muscovite		135	145		NONE	100%				
			145	153		NONE	100%				
		93829	153	168		2.1	50%				.01
		30	168	182		2.1	45%				.23
			182	192		NONE	80%				
	170 - Malachite Platina some Matrics		192	202		NONE	85%				
182-247	178 - Chalcopyrite - Bornite - Magnetite Biotite Hornblende Granite Porphyry. K-spar Phenocrysts, Core Not weathered as much & not broken up. Chloritic Alteration dominant at this point in time.		202	212		NONE	95%				
			212	222		NONE	95%				
			222	232		NONE	80%				
			232	238		NONE	85%				
	197 - Chloritic Alteration Increasing with some Potassic Alteration Along Fractures. Calcite in Vugs. Biotite ~ 14%, Hornblende ~ 5%		238	247		TR	100%				
	226-234 - Section with marked Increase in Potassic Alteration.										
	238 - Slight Foliation taking place. K-spar Long Axis Parallel to matrix foliation - tr Pyrite + hematite										

532

CLAIM NO. _____

DIAMOND DRILL RECORDPROPERTY ASARCO - MintoHOLE NO. 71-73

LATITUDE _____

ELEVATION _____

BEARING _____

DEPTH _____

STARTED _____

COMPLETED _____

DEPARTURE _____

SECTION _____

DIP _____

DRILLED BY _____

LOGGED BY S.M. Hubbard

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH EST	ASSAYS		
						GC		
	Hematite on Fractures Biotite w 13% Hornblende w 3%							
	Potassic Alteration Heaviest along Fractures.							
	135.1" Hematite vein w 45° to CA		133	148	NONE	98%		
	143- Propylitic Alteration along fracture 45° to CA		148	158	NONE	100%		
	145- 1" Quartz seam, barren.		158	168	NONE	95%		
	149- MINOR shear - 1/2" Biotite, calcite, Qtz; Hematite		168	178	NONE	95%		
	151.2 - 1" Micro Granite, c foliation 5° to CA, barren.		178	188	NONE	100%		
	153.5- calcite vein 4" 60° to CA		188	198	NONE	100%		
	155- 1" quartz seam 45° to CA, barren		198	208	NONE	100%		
	157.8-158.8 Hematite vein 45° to CA, silicified with fine grained Biotite, a foliation in center, intense chloritic alteration for one foot below vein							
	chloritic alteration common throughout core after 158							
	173- Propylitic Alteration along Fracture 10° to CA							
	178 1 1/2" Qtz seam, Epidote on bottom contact, 5° to CA							
	180.8- Epidote on Fracture system, 30° to CA							
	187.1 Quartz seam, Epidote on bottom contact, 10° to CA, barren.							
	191- MINOR shear - 1/4" calcite, Qtz Biotite.							
	195- Epidote on Fracture w 50° to CA - 197 - same							
	209-209.9 - Propylitic & Biotite							

CLAIM NO. _____

DIAMOND DRILL RECORD

PROPERTY ASARCO - M. J. to

HOLE NO. 71-73

LATITUDE _____

ELEVATION _____

BEARING _____

DEPTH _____

STARTED _____

COMPLETED _____

DEPARTURE _____

SECTION _____

DIP _____

DRILLED BY _____

LOGGED BY

S M Hubbard

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH EST	ASSAYS		
						Res		
	380 - Pegmatite vein, 6", 45° to ea, top contact, 1/2" s	93921	371	381	.3	100%		
	Breccia - 371-381 - Chry to pt = 5:1	22	381	391	.5	100%		
	388 - Foliation decreases to A; mineralization decreases proportionately	93926	391	400	NOT	100%		
	389 Pegmatite vein, normal to ca, 10"	93923	400	402.6	.3	100%		
390-400	Biotite Hornblende Granite Porphyry, K spar Plagioclase, Chloritic Alteration common throughout core, Few Hornblende plagioclase, Biotite ~ 17%, Calcite veins							
	394.5 - Epidote on fracture 45° to ca.							
400-402.6	Biotite Granite Gneiss, C foliation, Potassic Alteration, K-spar Porphyroblasts, Biotite, Chry, Mag,							
	401 - Quartz seam, chalcopyrite on fracture in seam Chry & Biotite disseminated throughout QTZ							
402.6-405	Biotite Hornblende Granite Porphyry, K-spar Plagioclase, Chloritic Alteration dominant, Biotite ~ 12%							
405-408	Biotite Granite Gneiss, C foliation, increase in Potassic Alteration over previous short section, K-spar porphyroblasts, Chalcopyrite, Sulfide							
	407.6 - 1 1/2" Quartz seam - Muscovite, Chalcopyrite, 45° to ca							
	407.8 - Potassic Alteration on fracture 60° to ca, few CaCO ₃ in							

CLAIM NO. _____

DIAMOND DRILL RECORDPROPERTY ASINZCO - MINTOHOLE NO. 75-73

LATITUDE _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DEPARTURE _____ SECTION _____ DIP _____ DRILLED BY _____ LOGGED BY _____

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH FS*	ASSAYS		
						REL		
196-257.6	Biotite Hornblende Granitic Porphyry - K Spar Plagioclase Potassic + chloritic alteration common throughout core. Biotite ~ 12% Hornblende ~ 3%.	93934	196	200	4.01	90%		
			200	211	None	50%		
			211	221	None	75%		
	Potassic alteration Greatest along Fractures		221	231	None	100%		
	197.5 - Pegmatite vein 25° to ca 2"		231	241	None	100%		
	221 - Pegmatite fragments - no contact recovered		241	251	None	95%		
	231.3 - Pegmatite 3", 45° to CA		251	257	None	100%		
	243 - Potassic + chloritic Alteration Increasing	93935	257	263	4.1	100%		
	257 - 252.5 - Pegmatite vein 45° to CA.							
	255 - Hematite on Fracture parallel to CA.							
	253.4 1" Silicified Pegmatite ~ 30° to CA							
257.6-263	- Biotite Granitic Gneiss - A foliation - K Spar Porphyroblasts Light Potassic Alteration, Medium Chloritic Alteration throughout core. No Economic Mineralization, but sampled anyway. - foliation ~ 35° - 45° to CA							
	262 - Concentration of mafics, 45° to ca. Barren							
263-314	Biotite Hornblende Granitic Gneiss - K Spar Plagioclase - Chloritic Alteration common, Potassic alteration common along Fractures. Biotite ~ 12%							

CLAIM NO.

DIAMOND DRILL RECORDPROPERTY Asarco - mintoHOLE NO. 76-73

LATITUDE ELEVATION BEARING DEPTH STARTED COMPLETED

DEPARTURE SECTION DIP DRILLED BY LOGGED BY Hubbard

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH est	ASSAYS		
						Rec		
	330 - Bsmite ve appears	93940	330	335	1.0	100%		
	334.6 - Chpy + Borinite mineralization drops off. 335-	93939	335	340	4.01	100%		
	336 is a transitional section from Greens back to		340	350	None	100%		
	Granite, with Qtz injections + calcite injections cutting		350	360	None	100%		
	a deformed pegmatite		360	370	None	100%		
336-370	Biotite Hornblende Granite Porphyry - red stain around	93938	370	380	4.1	100%		
	matrix gives it a red appearance - Biotite ~ 15%	93937	380	390	4.1	100%		
	Richer in silica than average. - K spar Phenocrysts	93936	390	397	.6	100%		
	341.5 - $\frac{3}{8}$ " calcite vein 20° to CA							
	351.5 - $\frac{3}{8}$ " calcite vein Normal to CA							
	358 - 2 calcite veins 3" apart $\frac{1}{4}$ " wide 50° to core							
370-397	Biotite granite Green - Biotite - K spar Porphyroblasts							
	foliated 80° to CA has fine calcite veins every							
	few feet. No visible mineralization to matrix							
	381 - $\frac{1}{2}$ " calcite vein 45° to CA							
	390 - 8" section of 50° to 90° around 381							
	395 - 5" Pegmatite vein 30° to CA							
	394 - Chalcopyrite starts - C foliation 10° to core							
	potassic alteration 395 - Borinite starts							

CLAIM NO. _____

DIAMOND DRILL RECORD (4)PROPERTY Asarco-MintoHOLE NO. 81-73

LATITUDE _____

ELEVATION _____

BEARING _____

DEPTH _____

STARTED _____

COMPLETED _____

DEPARTURE _____

SECTION _____

DIP _____

DRILLED BY _____

LOGGED BY S. Hubbard

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH EST	ASSAYS			
						Fe L			
	395.3 - Pyrometite veins, Fractured - calcite - epidote 45° to CA	/	385	395	none	100%			Ep
	401 - minor shear - 1/4" chlorite, hematite slickenside. 85° to CA	/	395	405	none	95%			
	408 - 410 - minor shear near parallel to CA, 4-1/2" foliation	/	405	416	none	98%			
	along shear - some brecciation.	18460	416	426	.1	98%			
	410 - Rock becomes fresher - moderate chloritic Alteration, minor Potassic Alt.	18461	426	436	.5	100%			Chl (K)
416.6 - 441	Biotite Granite Gneiss - "B" foliation 10° to CA. Potassic Alteration heavy along fractures, chloritic alteration heavy & common throughout section, trace chertopyrite & magnetite - calcite Injection & fracture fillings - top contact is 1/2" minor Breccia.								Chl (K) Mg Cal
	417.5 Quartz vein, Epidote on contacts								
	418 - 419.6 - minor shear 1/2", slickenside - calcite filling Angle near to CA.								Ep Cal
	423.1 - Epidote Fracture filling - Chpy trace								
	431 - 1/2" Shear Area - calcite matrix, 45° to CA, substantial Bornite, Chpy.								
	* - It has been noted that calcite Injection is the youngest, or was the last solution to permeate both the granites & gneiss. Also small (1/4" to 1/2") ^{mass} of calcite Brecciation are closely associated with the best ore zones in DDH-80-73. Evidence: calcite veins cross cut Gneiss - Granite contacts, Pass through secondary K spars, Pass through areas of silification & secondary Qtz.								

PROJECT		MINTO		HOLE NO.		51-3													
OVERBURDEN		176		TOTAL DEPTH		274.5		EASTINGS		2075		NORTHINGS		2471.5		ELEVATION		2074.0	
SAMPLE NO.	FROM	TO	INTER	TOTAL COPPER	NON SULPHIDE COPPER	Oz Ag	Oz Au					CORE RECOVERY %	CORRECTED GRAVITY	REMARKS					
18451	240	245	5	0.01								100							
52	245	250										100							
53	250	255										100							
54	255	260	0									100							
55	260	265										100							
56	265	270										100							
57	270	275										100							
58	275	280	2									100							
59	280	285	5									100							
18460	416	426	10	0.07								100							
61	426	436	10	0.06								100							
62	436	441	5	0.14								100							
63	441	446	5	0.01								100							



AMERICAN SMELTING AND REFINING COMPANY

No 8532 V 11004

VANCOUVER, B.C. 13 Nov/73

\$ 79,486.44

PAY TO THE ORDER OF

Canadian Longyear Limited
60 West 7th
Vancouver 10, B.C.

Handwritten notes: MINTO (29-73-1) 79,486.44
Signature
DATE PAID 12/11/73
No. 8532

THE ROYAL BANK OF CANADA
685 WEST HASTINGS STREET
VANCOUVER 2, B.C.

INVOICE DATE	INVOICE NUMBER		
15 Oct/73 8 Nov/73 31 Oct/73	7625-2 7764-2 CN 7752-2	\$ 36,792.47 (1,689.31) <u>44,383.28</u>	<u>\$ 79,486.44</u>

PLEASE DETACH BEFORE DEPOSITING CHEQUE

THIS CHEQUE IS TENDERED IN FULL PAYMENT OF INVOICES LISTED ABOVE

AMERICAN SMELTING AND REFINING COMPANY
VANCOUVER, B.C.

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800
 TELEX 027-76194

POSTAL CODE P1B 8H6

American Smelting & Refining Company
 504 - 535 Thurlow Street,
 Vancouver, British Columbia.

Asarco Minto
 Invoice No. 7752-2
 Invoice date: October 31, 1973
 for October 1973

terms net 30 days — interest charged at 1% per month on overdue accounts

To: Invoice for diamond drilling performed on mining properties located 150 miles north-west of Whitehorse, Yukon Territories, during period October 1-15, 1973, per agreement dated September 7, 1973

Hole No.	Size	From	To	Total	Rate	Amount
C-65-73	BQ Wireline	184	428	244	7.65	1,866.60
49-73	Overburden	Ø	35	35	7.65	267.75
	Overburden	35	70	35	10.50	367.50
	Overburden	70	100	30	13.00	390.00
	Overburden	100	110	10	13.00	130.00
	BQ Wireline	110	467	357	7.65	2,731.05
51-73	Overburden	Ø	35	35	7.65	267.75
	Overburden	35	70	35	10.50	367.50
	Overburden	70	100	30	13.00	390.00
	Overburden	100	230	130	13.00	1,690.00
	BQ Wireline	230	466	236	7.65	1,805.40
53-73	Overburden	Ø	35	35	7.65	267.75
53-73	Overburden	35	70	35	10.50	367.50
53-73	Overburden	70	100	30	13.00	390.00
53-73	Overburden	100	206	106	13.00	1,378.00
53-73	BQ Wireline	206	358	152	7.65	1,162.80
55-73	Overburden	Ø	35	35	7.65	267.75
55-73	Overburden	35	70	35	10.50	367.50
55-73	Overburden	70	100	30	13.00	390.00
55-73	Overburden	100	200	100	13.00	1,300.00
55-73	BQ Wireline	200	430	230	7.65	1,759.50
56-73	Overburden	Ø	35	35	7.65	267.75
56-73	Overburden	35	70	35	10.50	367.50
56-73	Overburden	70	88	18	13.00	234.00
56-73A	Overburden	Ø	35	35	7.65	267.75
56-73A	Overburden	35	70	35	10.50	367.50
56-73A	Overburden	70	100	30	13.00	390.00
56-73A	Overburden	100	140	40	Field Cost	-
56-73A	BQ Wireline	140	378	238	7.65	1,820.70
66-73	Overburden	Ø	35	35	7.65	267.75
	Overburden	35	70	35	10.50	367.50
	Overburden	70	75	5	13.00	65.00
	BQ Wireline	75	328	253	7.65	1,935.45

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors

NORTH BAY, ONTARIO, CANADA

P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800

TELEX 027-76194

POSTAL CODE P1B 8H6

American Smelting & Refining Company
 504 - 535 Thurlow Street,
 Vancouver, British Columbia.

Asarco Minto
 Invoice No. 7752-2
 Invoice Date: October 31/73
 for October, 1973

- 2 -

terms net 30 days — interest charged at 1% per month on overdue accounts

Hole No.	Size	From	To	Total	Rate	Amount
68-73	Overburden	Ø	32	32	7.65	244.80
	BQ Wireline	32	378	346	7.65	2,646.90
70-73	Overburden	Ø	35	35	7.65	267.75
	Overburden	35	70	35	10.50	367.50
	Overburden	70	100	30	13.00	390.00
	Overburden	100	138	38	13.00	494.00
	BQ Wireline	138	444	306	7.65	2,340.90
72-73	Overburden	Ø	35	35	7.65	267.75
	Overburden	35	70	35	10.50	367.50
	Overburden	70	100	30	13.00	390.00
	Overburden	100	175	75	13.00	975.00
				<u>3756</u>		<u>33,027.35</u>

OVERBURDEN

Hole #56-73A

26 man hours	@ \$8.40	218.40
13 hours machine rental	@ \$8.00	104.00
1 BQ Starting Barrel		28.61
1 BW Econo Shoe		65.63
2 BQ Wireline Bits #16432		182.09
	#18313	176.37
Setting charges	@ \$35.60	71.20
1 BQ Reaming Shell #16281		79.80
Setting charge		49.77
Diamond Recovery (See later invoice)		(-) cr.
Plus 10%		975.87
		<u>97.59</u>

1,073.46

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors

NORTH BAY, ONTARIO, CANADA

P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800

TELEX 027-76194

POSTAL CODE P1B 8H6

American Smelting & Refining Company
504 - 535 Thurlow Street,
Vancouver, British Columbia.

Asarco Minto
Invoice No. 7625-2
Invoice Date: October 15/73
for September, 1973

terms net 30 days — interest charged at 1% per month on overdue accounts

To: Invoice for diamond drilling performed on mining properties located 150 miles north-west of Whitehorse, Yukon Territories, during period September 14-30, 1973, per agreement dated September 7, 1973

Hole No.	Size	From	To	Total	Rate	Amount
70-73	Overburden	Ø	35	35	7.65	267.75
70-73	Overburden	35	70	35	10.50	367.50
70-73	Overburden	70	99	29	13.00	377.00
70-73	BQ Wireline	99	304	205	7.65	1,568.25
54-73	BQ Wireline	Ø	427	427	7.65	3,266.55
61-73	Overburden	Ø	35	35	7.65	267.75
61-73	Overburden	35	50	15	10.50	157.50
61-73	BQ Wireline	50	427	377	7.65	2,884.05
63-73	BQ Wireline	Ø	428	428	7.65	3,274.20
65-73	Overburden	Ø	35	35	7.65	267.75
65-73	Overburden	35	70	35	10.50	367.50
65-73	Overburden	70	100	30	13.00	390.00
65-73	Overburden	100	139	39	13.00	507.00
65-73	BQ Wireline	139	184	45	7.65	344.25
60-73	Overburden	Ø	35	35	7.65	267.75
60-73	Overburden	35	70	35	10.50	367.50
60-73	Overburden	70	90	20	13.00	260.00
62-73	Overburden	Ø	35	35	7.65	267.75
62-73	Overburden	35	70	35	10.50	367.50
62-73	Overburden	70	100	30	13.00	390.00
62-73	Overburden	100	200	100	13.00	1,300.00
62-73	BQ Wireline	200	445	245	7.65	1,874.25
64-73	Overburden	Ø	35	35	7.65	267.75
64-73	Overburden	35	70	35	10.50	367.50
64-73	Overburden	70	100	30	13.00	390.00
64-73	Overburden	100	230	130	13.00	1,690.00
64-73	BQ Wireline	230	327	97	7.65	742.05
				2632		22,859.10

PAID NOV 1 1973



AMERICAN SMELTING AND REFINING COMPANY

No 8622 V 12017

VANCOUVER, B.C., 17 Dec/73

\$ 22,479.87

PAY TO Canadian Longyear Limited
THE P.O. Box 330
ORDER OF North Bay, Ontario.

THE ROYAL BANK OF CANADA
685 WEST HASTINGS STREET
VANCOUVER 2, B.C.

INVOICE DATE	INVOICE NUMBER	
6 Dec/73	7901-2	<p>MINTE (24-73-1) 22479.87</p> <p><u>\$ 22,479.87</u></p> <p>22479.87</p> <p>17/12/73 86rv</p>

PLEASE DETACH BEFORE DEPOSITING CHEQUE

THIS CHEQUE IS TENDERED IN FULL PAYMENT OF INVOICES LISTED ABOVE

AMERICAN SMELTING AND REFINING COMPANY
VANCOUVER, B.C.

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800
 TELEX 027-76194

POSTAL CODE P1B 8H6

American Smelting & Refining Company,
 504-535 Thurlow Street,
 Vancouver, British Columbia.

Asarco Minto
 #7901-2

Invoice Date: Dec. 6, 1973
 for November 1973

terms net 30 days — interest charged at 1% per month on overdue accounts

To: Invoice for diamond drilling performed on mining properties located 150 miles north-west of Whitehorse, Yukon Territories, during period November 1 - 17th, 1973, per agreement dated September 7, 1973

HOLE NO.	SIZE	FROM	TO	TOTAL	RATE	AMOUNT
77-73	BQ Wireline	324	388	64	7.65	489.60
79-73	Overburden	∅	35	35	7.65	267.75
79-73	Overburden	35	70	35	10.50	367.50
79-73	Overburden	70	100	30	13.00	390.00
79-73	BQ Wireline	100	420	320	7.65	2,448.00
80-73	Overburden	∅	35	35	7.65	267.75
80-73	Overburden	35	60	25	10.50	262.50
80-73	BQ Wireline	60	455	395	7.65	3,021.75
81-73	Overburden	∅	35	35	7.65	267.75
81-73	Overburden	35	70	35	10.50	367.50
81-73	Overburden	70	100	30	13.00	390.00
81-73	Overburden	100	160	60	13.00	780.00
81-73	BQ Wireline	160	448	288	7.65	2,203.20
78-73	BQ Wireline	252	426	174	7.65	1,331.10
				1561		12,854.40

Overburden
 Hole #67-73

Diamond Recovery

(104.99) CR
 Plus 10% (10.50) CR

(115.49) CR

Hole #69-73

Diamond Recovery

(73.64) CR.
 Plus 10% (7.36) CR

(81.00) CR



AMERICAN SMELTING AND REFINING COMPANY

No 8605 V11082

VANCOUVER, B.C., 30 Nov/73

\$ 40,024.27

PAY TO THE ORDER OF Canadian Longyear Limited
60 West 7th,
Vancouver 10, B.C.

THE ROYAL BANK OF CANADA
685 WEST HASTINGS STREET
VANCOUVER 2, B.C.

MEMO (29-73-1)		400,427
TOTAL		400,427
OK'D BY	DATE PAID	CHEQ NO
<i>K&J</i>	30/11/73	8605

INVOICE DATE	INVOICE NUMBER	
16 Nov/73	7753-2	\$ 40,024.27

PLEASE DETACH BEFORE DEPOSITING CHEQUE

THIS CHEQUE IS TENDERED IN FULL PAYMENT OF INVOICES LISTED ABOVE

AMERICAN SMELTING AND REFINING COMPANY
VANCOUVER, B.C.

S.A.A.
NOV 16 1973

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors

NORTH BAY, ONTARIO, CANADA

P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800

TELEX 027-76194

POSTAL CODE PIB 8H6

American Smelting & Refining Company
504 - 535 Thurlow Street,
Vancouver, British Columbia.

Asarco Minto
Invoice No. 7753-2
Invoice date: Nov. 16, 1973
for October, 1973

terms net 30 days — interest charged at 1% per month on overdue accounts

To: Invoice for diamond drilling performed on mining properties located 150 miles north-west of Whitehorse, Yukon Territories, during period October 16-31, 1973, per agreement dated September 7, 1973

Hole No.	Size	From	To	Total	Rate	Amount
67-73	Overburden	Ø	35	35	7.65	267.75
67-73	Overburden	35	70	35	10.50	367.50
67-73	Overburden	70	100	30	13.00	390.00
67-73	Overburden	100	150	50	Field Cost	-
67-73	BQ Wireline	150	379	229	7.65	1,751.85
69-73	Overburden	Ø	35	35	7.65	267.75
69-73	Overburden	35	70	35	10.50	367.50
69-73	Overburden	70	100	30	13.00	390.00
69-73	Overburden	100	108	8	Field Cost	-
69-73	BQ Wireline	108	391	283	7.65	2,164.95
71-73	Overburden	Ø	35	35	7.65	267.75
71-73	Overburden	35	70	35	10.50	367.50
71-73	Overburden	70	100	30	13.00	390.00
71-73	BQ Wireline	100	448	348	7.65	2,662.20
76-73	Overburden	Ø	35	35	7.65	267.75
76-73	Overburden	35	50	15	10.50	157.50
76-73	BQ Wireline	50	413	363	7.65	2,776.95
77-73	Overburden	Ø	35	35	7.65	267.75
77-73	Overburden	35	60	25	10.50	262.50
77-73	BQ Wireline	60	324	264	7.65	2,019.60
72-73	Overburden	175	255	80	13.00	1,040.00
72-73	BQ Wireline	255	466	211	7.65	1,614.15
73-73	Overburden	Ø	35	35	7.65	267.75
73-73	Overburden	35	70	35	10.50	367.50
73-73	Overburden	70	100	30	13.00	390.00
73-73	Overburden	100	170	70	13.00	910.00
73-73	BQ Wireline	170	340	170	7.65	1,300.50
74-73	Overburden	Ø	35	35	7.65	267.75
74-73	Overburden	35	70	35	10.50	367.50
74-73	Overburden	70	100	30	13.00	390.00
74-73	Overburden	100	135	35	13.00	455.00
74-73	BQ Wireline	135	375	240	7.65	1,836.00

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR
 POSTAL CODE P1B 8H8

TELEPHONE 474-2800
 TELEX 027-76194

American Smelting & Refining Company
 504 - 535 Thurlow Street,
 Vancouver, British Columbia.

Asarco Minto
 Invoice No. 7753-2
 Invoice date: Nov. 16, 1973
 for October, 1973

- 2 -

terms net 30 days — interest charged at 1% per month on overdue accounts

Hole No.	Size	From	To	Total	Rate	Amount
75-73	Overburden	Ø	35	35	7.65	267.75
75-73	Overburden	35	70	35	10.50	367.50
75-73	Overburden	70	100	30	13.00	390.00
75-73	Overburden	100	120	20	13.00	260.00
75-73	BQ Wireline	120	394	274	7.65	2,096.10
78-73	Overburden	Ø	35	35	7.65	267.75
78-73	Overburden	35	70	35	10.50	367.50
78-73	Overburden	70	100	30	13.00	390.00
78-73	Overburden	100	205	105	13.00	1,365.00
78-73	BQ Wireline	205	252	47	7.65	359.55
				3607		30,744.10

OVERBURDENHole #67-73

32 man hours	@ \$8.40	268.80
16 hours machine rental	@ \$8.00	128.00
2 BQ Wireline Bits #18670		178.63
#18672		178.63
Setting charge	@ \$35.60	71.20
2 - BW Econo Shoes	@ \$65.63	131.26
Diamond Recovery (see later invoice)		(-) cr.
		956.52
Plus 10%		95.65
		1,052.17

Hole #69-73

8 man hours	@ \$8.40	67.20
4 hours machine rental	@ \$8.00	32.00
1 BQ Wireline Bit #19215		185.90
Setting charge		35.60
1 BW Econo Shoe		65.63
Diamond Recovery (See later invoice)		(-) cr.
		386.33
Plus 10%		38.63
		424.96

SILVER STANDARD MINES LIMITED, N.P.L.

TO THE

BANK OF NOVA SCOTIA
VANCOUVER 2. B.C.

VANCOUVER 2. B.C.,

October 16

1973

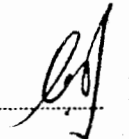
VOUCHER NO

PAY TO THE ORDER OF Canadian Longyear Limited \$ 30,597.89
THE SUM OF

Canadian Longyear Ltd.
P.O. Box 330
NORTH BAY, Ontario

OFFICE COPY

THE ABOVE CHEQUE IN FULL PAYMENT OF ITEMS HEREON
THIS VOUCHER SHOULD BE DETACHED AND RETAINED BY PAYEE

PARTICULARS	DISTRIBUTION	
Re: Statement dated Aug. 31/73	50,369.46	
<u>Less: Paid - Ch. 1270</u>	<u>19,771.57</u>	
	30,597.89	
		C 29
		APPROVED FOR PAYMENT
CERTIFIED CORRECT.....		
ACCOUNTANT		



CANADIAN LONGYEAR LIMITED

NORTH BAY, ONTARIO

P.O. BOX 330

TELEPHONE 474-2800

DATE AUG 31 1973

SILVER STANDARD MINES LTD.,
602 WEST HASTINGS ST. SUITE 808
VANCOUVER, B.C.

TERMS. NET 30 DAYS

1% PER MONTH INTEREST CHARGED ON OVERDUE ACCOUNTS

DATE	REFERENCE	CHARGES	CREDITS	BALANCE
			BALANCE FWD.	
AUG 31 B	7,482,002	19,771.57		
AUG 31 B	7,483,002	30,597.89		50,369.46
		<i>Less paid 421270</i>		<i>19,771.57</i>
				<i>30,597.89</i>
			<i>n.</i>	
			<i>1596</i>	

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800
 TELEX 027-76194

POSTAL CODE P1B 8H6

Silver Standard Mines Limited
 602 West Hastings Street, Suite 808
 Vancouver, British Columbia.

Silver Standard Minto
 Invoice No. 7483-2
 Invoice Date: Sept. 18, 1973
 for August, 1973

terms net 30 days — interest charged at 1% per month on overdue accounts

To: Invoice for Diamond Drilling performed on mining properties located 150 miles north-west of Whitehorse, Yukon Territories, during period August 16-31, 1973, per agreement dated August 24, 1973

HOLE NO.	SIZE	FROM	TO	TOTAL	RATE	AMOUNT
23-73	BQ Wireline	Ø	303	303	7.85	2,378.55
25-73	BQ Wireline	Ø	398	398	7.85	3,124.30
26-73	BQ Wireline	Ø	346	346	7.85	2,716.10
37-73	BQ Wireline	Ø	448	448	7.85	3,516.80
28-73	BQ Wireline	Ø	291	291	7.85	2,284.35
29-73	BQ Wireline	Ø	278	278	7.85	2,182.30
30-73	BQ Wireline	Ø	378	378	7.85	2,967.30
31-73	BQ Wireline	Ø	280	280	7.85	2,198.00
32-73	BQ Wireline	Ø	338	338	7.85	2,653.30
				3060 ✓		24,021.00

MUD OPERATIONS (Attached)

Thiessen Equipment Limited	198.00	
Plus 10%	<u>19.80</u>	217.80

REAMING

Hole #30-73

16 man hours @ \$8.40	134.40 ✓	
8 hours machine rental @ \$8.00	<u>64.00 ✓</u>	
1 BW Econo Shoe (See Left in Hole #30-73)	-	
	198.40	
Plus 10%	<u>19.84</u>	218.24

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR
 TELEPHONE 474-2800
 TELEX 027-76194
 POSTAL CODE P1B 8H6

Silver Standard Mines Limited
 602 WEST Hastings Street, Suite 808
 Vancouver, British Columbia

Silver Standard Minto
 Invoice No. 7483-2
 Invoice Date: Sept. 18, 1973
 for August, 1973

page 2

terms net 30 days — interest charged at 1% per month on overdue accounts

MOVES BETWEEN HOLES (Client Portion)Hole #22-73 to #23-73

36 man hours	@ \$8.40	302.40 ✓	
6 hours machine rental	@ \$8.00	48.00 ✓	
		<u>350.40</u>	
Plus 10%		35.04	
			385.44 ✓

Hole #23-73 to #25-73

92 man hours	@ \$8.40	772.80 ✓	
17 hours machine rental	@ \$8.00	136.00 ✓	
		<u>908.80</u>	
Plus 10%		90.88	
			999.68 ✓

Hole #31-73 to #32-73

43 man hours	@ \$8.40	361.20 ✓	
10 hours machine rental	@ \$8.00	80.00 ✓	
		<u>441.20</u>	
Plus 10%		44.12	
			485.32 ✓

From Hole #32-73

29 man hours	@ \$8.40	243.60 ✓	
9 hours machine rental	@ \$8.00	72.00 ✓	
		<u>315.60</u>	
Plus 10%		31.56	
			347.16 ✓

TRACTOR OPERATOR - D. Hall

August 19-31, 1973 - 157 hours @ \$8.40		1,318.80 ✓	
Plus 10%		131.88	
		<u>1,450.68</u>	
			1,450.68 ✓

3,668.28 ✓

INVOICE



CANADIAN LONGYEAR LIMITED

Diamond Core — Percussion — Geotechnical — Industrial Drilling Contractors
 NORTH BAY, ONTARIO, CANADA
 P.O. BOX 330 — CABLE LONGYEAR

TELEPHONE 474-2800
 TELEX 027-76194

POSTAL CODE P1B 8H6

Silver Standard Mines Limited
 602 West Hastings Street, Suite 808
 Vancouver, British Columbia.

Silver Standard Minto
 Invoice No. 7483-2
 Invoice Date: Sept. 18, 1973
 for August, 1973

page 3

terms net 30 days — interest charged at 1% per month on overdue accounts

TRAVEL TIME

<u>Hole #23-73</u>	1 hour		8.40	
<u>Hole #25-73</u>	4 hours @ \$8.40		33.60	✓
<u>Hole #26-73</u>	5 hours @ \$8.40		42.00	✓
<u>Hole #27-73</u>	5 hours @ \$8.40		42.00	✓
<u>Hole #28-73</u>	4 hours @ \$8.40		33.60	✓
<u>Hole #29-73</u>	2 hours @ \$8.40		16.80	✓
<u>Hole #30-73</u>	6 hours @ \$8.40		50.40	✓
<u>Hole #31-73</u>	3 hours @ \$8.40		25.20	✓
<u>Hole #32-73</u>	4 hours @ \$8.40		33.60	✓
				285.60 ✓

PIPE, CASING & DIAMOND SET ARTICLES LEFT IN HOLESHole #23-73

1 pcs. BW 10' Casing		31.97	
1 BW Econo Shoe		65.63	
			97.60 ✓

Hole #27-73

2 pcs. BW 10' Casing	@ \$31.97	63.94	✓
1 BW Casing Shoe #9912		63.53	
Setting charge		25.67	
			153.14 ✓

Hole #29-73

1 pcs. BW 10' Casing		31.97	
1 BW Econo Shoe		65.63	
			97.60 ✓