LEAD - SILVER PRODUCTION
PLATA GROUP

The accompanying "Source and Application for Funds" summarizes preliminary estimates of annual net cash flow obtained using various milling rates treating ore grading 30 percent lead and 80 ounces per ton silver over a five year life. Mine and mill operations were based on 120 working days per year, although 150 days (5 months) may be possible. Estimates for underground development of a particular vein zone during preproduction stages may be low due to possible excessive transportation costs, broken ground, location and present stage of development.

Production at 100 tons per day is by far the most economic allowing an immediate pay-back of capital debt and Northern Mineral Grant, as well as a 5-year return doubling the initial investment.

Production at 50 tons per day with increased transportation and operating costs yields a 5-year return which is roughly 40 percent of the 100 t.p.d. operation.

A 10 ton per day operation is not profitable at a grade of 30 percent lead and 80 ounces per ton silver. Small scale surface mining and shipping of vein material grading 235 ounces per ton silver and 80 percent lead, (typical of Showing No.6) should yield a good profit, comparable to a 50 t.p.d. operation treating 30 percent lead and 80 ounces per ton silver.

The following points summarize the potential silver-lead production from the Plata:

(1) If sufficient tonnage is outlined with an average grade (approximately) 80 oz/ton silver and 30 percent lead and a capital investment is necessary to increase airstrip length and build an all-weather road to the property,

then the profitability of a 100 t.p.d. operation for 4 to 5 months per year appears excellent.

(2) Sufficient tonnage is a minimum of 80,000 tons of proven reserves, i.e. Zone 2 with a depth extension of 340 feet.

(3) Small scale mining and shipping of ore grading less than 80 oz/ton silver and 30 percent lead at present metal prices is not profitable.

(4) To be profitable and overcome excessive transportation costs ($300/ton) from the property to Ross River by a combination of cat sloop and Pioneer aircraft, a small scale operation of less than 10 tons per day would require an average minimum grade of approximately 150 ounces per ton silver and 50 percent lead at metal prices of $4.50/ oz Ag and $0.20 per pound lead.

(5) Zones 1, 2 and 6 contain vein material grading better than 200 ounces per ton silver and 50 percent lead which is is mineable by cat trenching and hand cobbing methods.

Estimated tonnage presently available for surface mining is roughly 100 to 200 tons.

W. J. Roberts,

May, 1974

Production @ 100 T.P.D. for 4 months
Shipping during Fall and Winter

A. Development of property to feasibility state
Estimate - 500,000

B. Capital Outlay:

- 100 T.P.D. mill and transportation to site	300,000	
- Pre-production	300,000	
- Mining equipment	200,000	
- Administration & Accommodation	150,000	
- Transportation - road building airstrip improvement, etc.	400,000	
- Initial working capital	150,000	1,500,000

C. Operating Costs:

100 T.P.D. for 120 days		
-Mining cost est.	$35/T	
-Milling Cost est.	10/T	
-Administrative cost - est.	5/T	
-On site transportation - est.	5/T	$ 55/T

D. Transportation - of concentrate (containerized)

-Trucking from property to airstrip	$ 5/T	
-DC-6 from strip to Ross River	60/T	
-Ross to Whitehorse	35/T	
-White Pass rail and barge to Van.	20/T	
-Rail from Vancouver to Kellogg	15/T	
-Handling charges	5/T	$140/T

E. Smelter Payment:

-Assume grade of 30% Pb - current metal price $0.20/lb.
80 oz/T. Ag - current metal price $4.50/oz.

- Assume 20% Dilution
Assume 9.5% Mill Recovery
Assume 2:7 Concentration Ratio

- Conentrate grade 45% Pb, 122 oz/T. Ag

- Payment for Pb	- $ 145/T	
Payment for AG	- $ 513/T	
Treatment Charge	- $ 20/T	
Penalty	- $ 20/T	$618/T

F. Mining Rate:

- 120 T.P.D. or 15,000 T.P.Y.
- Reserves for 5 yrs. - 75,000 T.
- Size of Deposit - Approx. 5'x300'x500'

  e.g. - Zone 2 with 240 tons per vertical ft. should have depth of 300 ft.

G. Present Value of Total Earnings:

(1)	$ 90,000
(2)	$1,164,000
(3)	$1,040,000
(4)	$ 928,000
(5)	$ 828,000
Total	$4,050,000

Production @ 50 T.P.D. for 4 months
shipping during Fall and Winter

A. Development of Property to feasibility stage
Estimate 250,000

B. Capital Outlay:

- 50 T.P.D. mill ¢ transportation	100,000	
- Pre-production	200,000	
- Mining equipment	150,000	
- Administration & Accommodation	100,000	
- Transportation	400,000	
- Initial working capital	100,000	1,050,000

C. Operating Costs:

- 50 T.P.D. Mill		
- Mining Cost	$ 50/T	
- Milling Cost	10/T	
- Administration	5/T	
- On site transportation	5/T	$ 70/T

D. Transportation:

- Trucking from property to strip	$ 5/T	
- DC-6 to Ross	60/T	
- Ross to Whitehorse	35/T	
- Whse. to Van. via rail and barge	75/T	
- Rail Vancouver to Kellogg	15/T	
- Handling Charges	5/T	$145/T

E. Smelter Payment:

- Same assumptions as Appendix I
- Smelter payment $618/T

F. Mining Rate:

- 50 T.P.D. or 7,000 T.P.Y.
- Reserves for 5 yrs - Approx. 35,000 T.
- Size of Deposit - 5'x250'x300'

e.g. Zone 2 with 240 tons per vertical ft. should have depth of 150 ft.

G. Present value of Total Earnings:

(1)	$ 183,000
(2)	$ 180,000
(3)	$ 445,000
(4)	$ 398,000
(5)	$ 354,000
Total	$1,560,000

Production @ 10 T.P.D. for 4 months
shipping during Fall and Winter
- Initial front-end loader and cat operation
- Underground with tram

A. Development of Property to Production Stage — 50,000

B. Initial Capital Outlay:

- Underground development	$ 50,000	
- Mining equipment	25,000	
- Jaw crusher and jig	25,000	
- Transportation	100,000	
- Initial working capital	50,000	250,000

C. Operating Costs:

- Mining cost (Underground) est.	$60/T	
- Milling Cost	5/T	
- Administration	2/T	
- Transportation - on site	5/T	$72/T

D. Transportation:

- Property to Strip	$ 5/T	
- Pioneer to Ross	200/T	
- Ross to Whitehorse	35/T	
- Whitehorse to Vancouver	25/T	
- Rail to Kellogg	15/T	
- Handling Charges	5/T	$285/T

E. Smelter Payment:

- Assume grade of 30% Pb
  80 oz. Ag
- Assume 20% Dilution
  95% Recovery
- Concentration ratio 1.5 to 1
- Concentrage grade - 35% Pb, 91 oz/T Ag

- Payment for Pb	$110	
Payment for Ag	410	
Treatment charge	20/T	
Penalty	20/T	$480/T con.

F. Mining Rate:

- 10 T.P.D. or 1200 T.P.Y.
- Reserves for 5 yrs. - 7,500 T.
- Size of deposit - 5'x150'100'
  or Zone 2 with depth of 32 ft.

Production @ 10 T.P.D. for 4 months
Mining during summer, shipping during winter

A. Development to Production — 50,000

B. Capital Outlay:

- Road improvement)
- Airstrip improvement) — 80,000

C. Operating Costs

- Mining Cost			
- 10 hrs. cat time/day	$350		
- Barrel filling and sealing/day	100		
- Administration	50		
- Drum charges	200		
- Living allowance	200		
	$900	or	$90/T

D. Transportation:

- Property to strip - winter hauling by cat. -10 hrs. round trip @$40/hr. (including fuel) carrying 4 tons, hauling fuel back to camp	$100/T	
- Airstrip to Ross Pioneer	$200/T	
- Ross to Whitehorse	35/T	
- Whitehorse to Vancouver	25/T	
- Rail to Kellogg	15/T	
- Handling charges	10/T	$385/T

E. Smelter Payment - Zone 2:

- Assume grade of 30% Pb) per ton in barrels
  80 oz Ag)
- No concentration

- Payment for Pb	$ 90	
Payment for Ag	$338	
Treatment charge	$20/T	
Penalty	$25/T	$383/T

F. Mining Rate:

- 10 T.P.D. or 1200 T.P.Y.
- Reserves 7,500 T. for 5 yr. life
- Size of deposit - 5'x150'x100' or Zone 2 with depth of 32 ft.

G. Smelter Payment for material in Zone 6

Grades - 235 oz. Ag.
80.5% Pb

- Pb payment	$ 246	
Ag payment	1,000	
Treatment	20/T	
Penalty	25/T	$ 1,200

LEAD - SILVER PRODUCTION - PLATA GROUP

	100 T.P.D. for 120 days		50 T.P.D. for 120 days		10 T.P.D. for 120 days			
					(10 T.P.D. Mill)	Cat trenching and Barrel filling only		
	1st year	Year 2-5	Year 1-2	Year 3-5	Year 1-5	Zone 2	Zone 6 Year 1	Zone 6 Year 2-
Smelter payment/ton concentrate	$618/T	$618/T	$618/T	$618/T	$480/T	$383/T	$1200/T	$1200/T
Less Transportation	140/T	140/T	145/T	145/T	285/T	385/T	385/T	385/T
NET SMELTER RETURN	478/T	478/T	473/T	473/T	200/T	(-$2/T)	815/T	815/T
Per Ton Milled	239/T	239/T	237/T	237/T	133/T	(-$2/T)	815/T	815/T
Less Operating Costs	55/T	55/T	70/T	70/T	72/T	(-90/T)	90/T	90/T
DIRECT OPERATING PROFIT	$184/T	$184/T	$167/T	$167/T	$ 61/T	$(-92/T)	$725/T	$725/T
Direct Operating Profit per Year	$2,210,000	$2,210,000	$1,000,000	$1,000,000	$73,200	$(-62,000)	$870,000	$870,(
Less: Tax	450,000	650,000	200,000	300,000	(10,000-20,000)	-	170,000	260,(
Loan	1,500,000	-	500,000	-	(250,000)	-	80,000	-
Northern Mineral Grant	50,000	-	50,000	-	(50,000)	-	50,000	-
Refurbishment	100,000	100,000	25,000	25,000	10,000	-	20,000	20,(
ANNUAL NET CASH FLOW	$110,000	$1,460,000	$225,000	$625,000	No profit	No profit	$550,000	$590,(
Annualized for 5 yrs. and discounted @ 12%		$4,000,000		$1,560,000				$1,800,(

Avrge 19.5 oz/T Ag

0.06 oz/T Au

.112
.042
1.54

Tr-17 — 1.4' ∫ 36.2 oz Ag .08 Au

.6' ∫ 6.5 Ag .07 Au

Total 2.0' ∫ 27.29 oz Ag. + .07 Au.

or 5.0' ∫ 10.9 oz Ag. + .03 Au.

Total value over 5' = $33/T.

.043

TR-16 3.7' ∫ 21.4 + .1

3.8' ∫ 14.5 + .08

Average total 3.75' ∫ 18.0 oz Ag. + .09 Au

over 5' width = 13.4 oz Ag + .07 Au

Total value over 5' $36.18 + 7

= $43/T

TR-15 2.9 { 1.7' — 14.5 — .02
1.2' — 44.4 .06
20' — 13.93 .13 } = 2.5' ∫ 21.6 oz Ag
.07 Au

over 5' — 10.8 oz Ag + .04 Au

valued @ $29.16 + 4 = $33/T

TR - 14

		Ag	Au	Ag	Au
1	1.3'	8.02	.5		.65
	1.6	138.5	.23		.368
	.9	8.62	.02		.018
	.8	4.35	.05		.04
2	1.2'	267.9	.09		.108
	1.2'	26.3	.02		.024
	.7	2.06	.005		.004
	7.17			598	1.212

Average 3.85' @ 78 oz Ag + .16 Au

over 5' 60 oz Ag + .12 Au

Total Value 162 + 12 = $174/T

TR-13

		Ag	Au	w x Ag	w x Au
3.0'	.8	11.6	.39	9.28	.312
	.6	4.84	.12	2.9	.07
	1.6"	2.46	.01	3.94	.06
3.9'	.9	13.81	.31	12.4	.28
	1.0	3.28	.02	3.28	.02
	2.0	.72	.005	1.44	.01
Total 6.9				33.2	.71
3.45'				4.81	.1

3.45' @ 4.81 oz Ag
.10 oz Au

over 5' - 3.3 oz Ag
.07 Au

Value = $16/T

		A_g	A_n	$\times A_g$	$\times A_n$
TR-35	2.2'	3.9	.02	8.6	.044
	.5'	86.6	.12	43.3	.06
	1.8'	20.5	.02	36.9	.036
				88.8 g_3	.140

Total 4.5'

4.5' → 19.7 g_3 + .03

5' → 17.75 g_3 + .03

Total value 48 + 3 = $52

Zone 1

Length ~ 50 feet.
mining width – 5 feet.

A)

	Pb	As	Ag	xPb	xAg
.5'	.78	1.89	.01	.4	.95
.6'	41.7	66	Tr	25	39.6
1.0	.03	.8	Tr	.03	.8
2.1				25.4	41.

2.1' @ 12% Pb
19.5 oz/T Ag

or 5.0' @ 5% Pb
8 oz/T Ag

B) 1.5' — 260.4 Ag
70.0 Pb

or 5.0' — 78 oz/T Ag
21 % Pb

C) 4.2' — 283.2 Ag
65.9 Pb.

5.0' — 237.9 oz/T Ag
55.4 % Pb

D) 2.0' - .02 Au
434 Ag
58.8 Pb

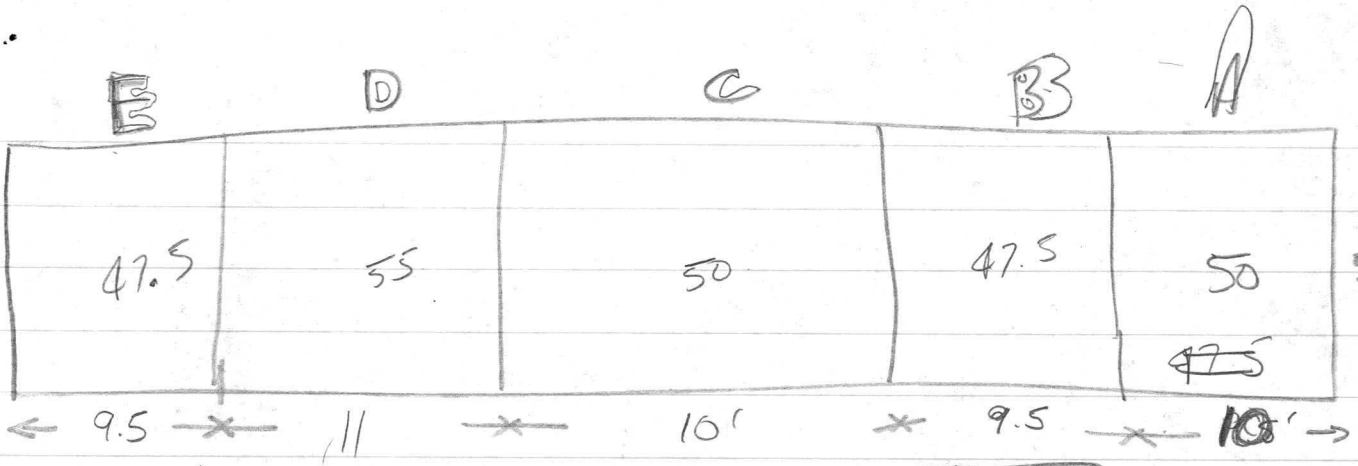
→ 5.0' of .008 Au
173.6 Ag
23.5 Pb

E)

		Ag	Pb	x Ag	x Pb
1.0'	-	.54	.13	.51	.13
1.2'		39.7	37.5	47.6	45
1.4		3.46	1.53	4.8	2.1
3.6'				53	47

3.6' - 14.7 oz Ag
18 % Pb

in 5.0' 10.6 oz Ag
9.4 % Pb



total ~~475~~ 50'x5'

	T+ Gr.	Area	Grade	Gr. x Area	T/vert Ft.
Block A	21.5	50	5 Pb	1750	4.3'
	34.4	50	8 Ag	400	
B	105	47.5	21 Pb	9971	5'
	390	47.5	78 Ag	3705	
C	426.6	30	55.4 Pb	2770	7.7'
	1831.9	50	237.9 Ag	11,895	
D	143.4	55	23.5 Pb	1292.5	6.1
	1059	55	173.6 Ag	9548	
E	47.	47.5	9.4 Pb	446.5	5.0
	53.	47.5	10.6 Ag	503.5	

28.1 T/vert ft

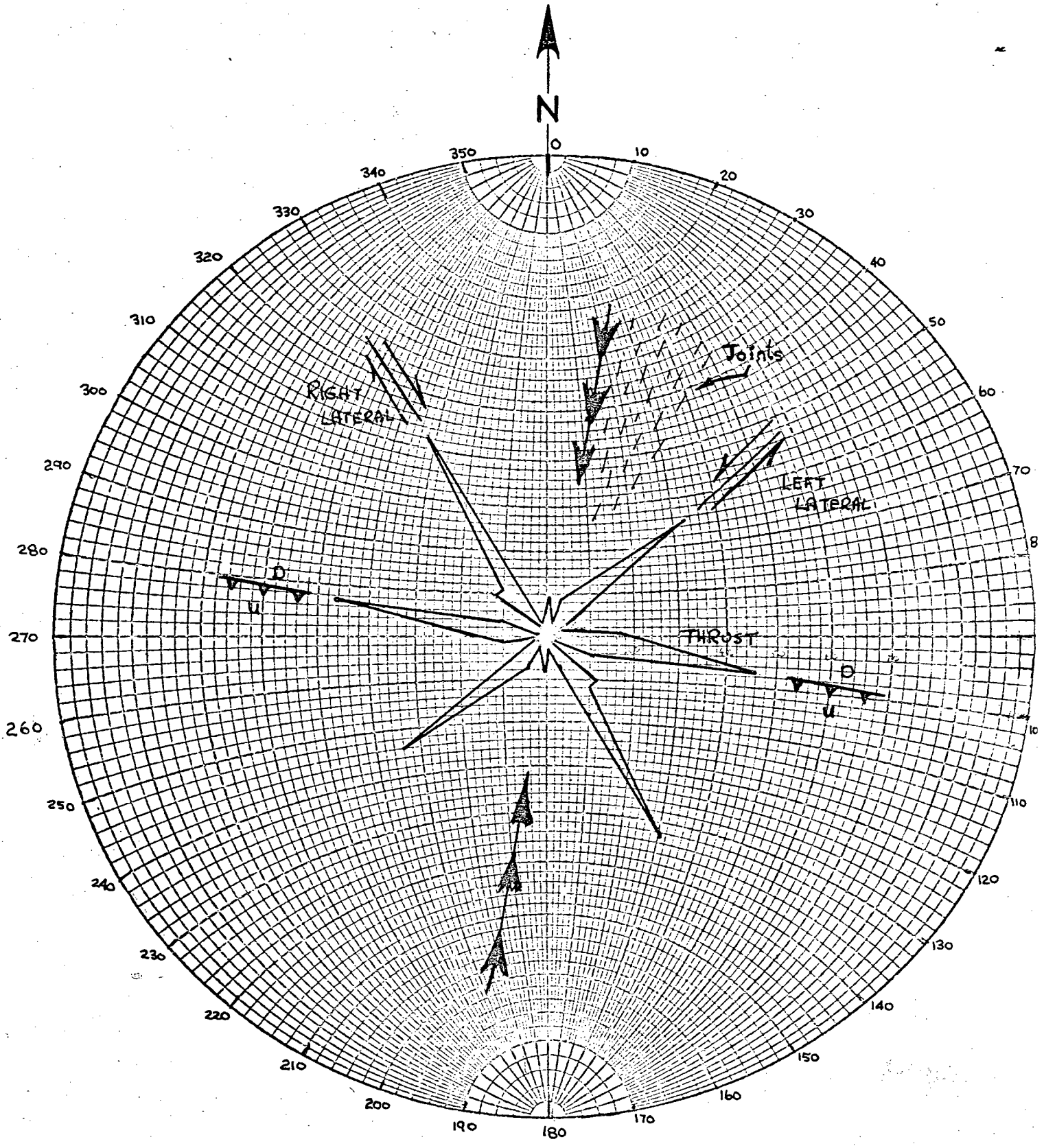
Pb 743.5
Ag 3368.3

Pb 5756
Ag 26,511

Grade - 26.5% Pb
120 oz/T Ag

All current metal prices 2.70/oz, 15¢/lb Pb
= $80 + $324
= $404

Tonnage Potential - expect 100 foot depth extension
- 28.1 x 100' - 2800 T
Gross value. 2800 x 400 = $1,120,000



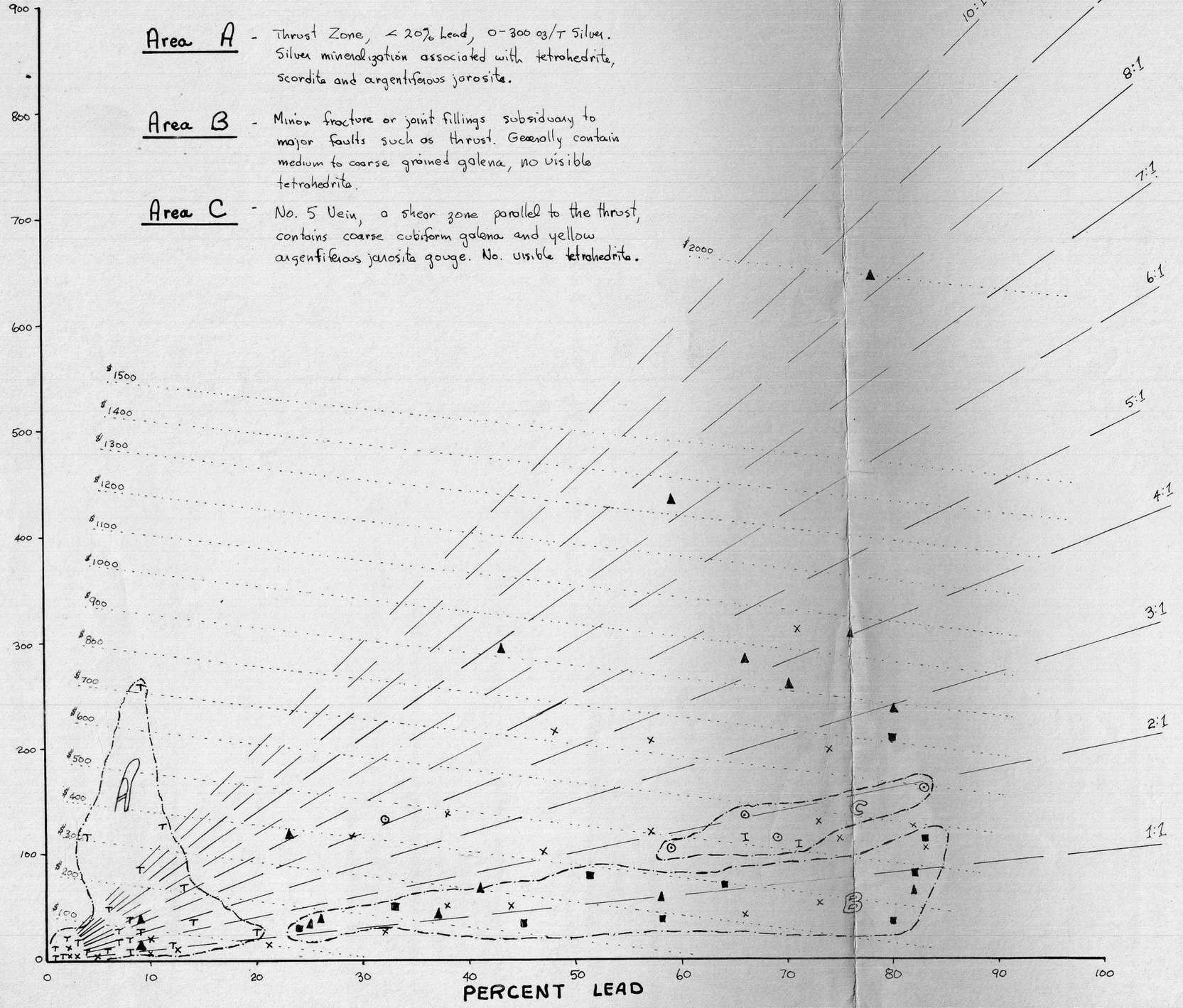
MAJOR FAULT PATTERN

PLATA GROUP

Area A - Thrust Zone, < 20% Lead, 0-300 oz/T Silver. Silver mineralization associated with tetrahedrite, scordite and argentiferous jarosite.

Area B - Minor fracture or joint fillings subsidiary to major faults such as thrust. Generally contain medium to coarse grained galena, no visible tetrahedrite.

Area C - No. 5 Vein, a shear zone parallel to the thrust, contains coarse cubiform galena and yellow argentiferous jarosite gouge. No. visible tetrahedrite.



In situ gross values per ton calculated using present metal prices

Ag - $2.70 per ounce
Pb - $0.15 per pound

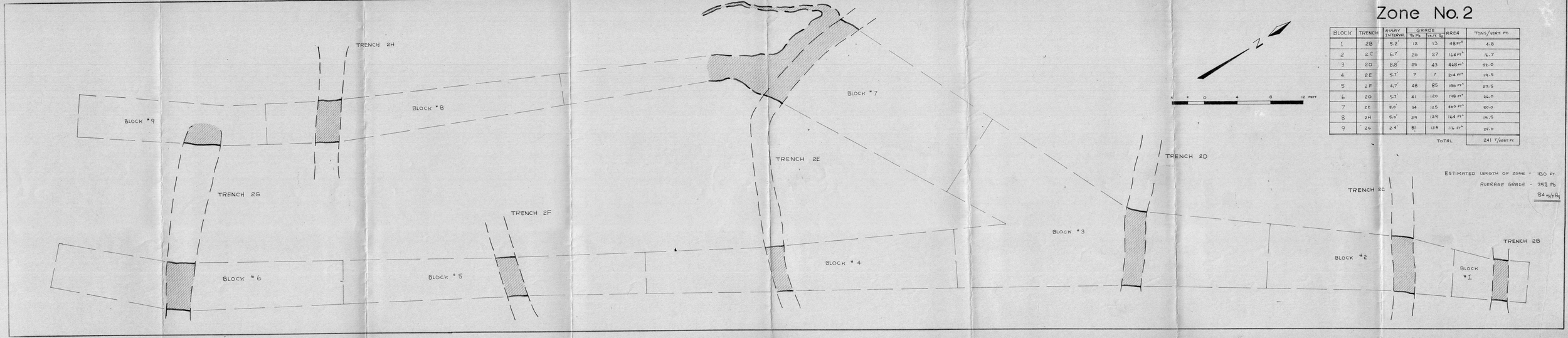
LEGEND

T - Thrust Zone
⊙ - No. 5 Vein
X - Zone # 2
■ - Subsidiary Veins
▲ - Zone's # 1 & # 6
I - Inca

PLATA PROJECT

SCATTER DIAGRAM

Ag:Pb Ratios | Nov. 73, WP



Zone No. 2

BLOCK	TRENCH	ASSAY INTERVAL	GRADE % Pb	GRADE oz/t Ag	AREA	TONS/VERT. FT.
1	2B	5.2'	12	13	48 FT²	4.8
2	2C	6.7'	20	27	164 FT²	14.7
3	2D	8.8'	25	43	468 FT²	52.0
4	2E	5.7'	7	7	214 FT²	19.5
5	2F	4.7'	48	85	186 FT²	27.5
6	2G	5.7'	41	120	198 FT²	24.0
7	2E	5.0'	34	125	400 FT²	50.0
8	2H	5.0'	29	129	164 FT²	19.5
9	2G	2.4'	81	124	116 FT²	26.0
				TOTAL		241 T/VERT FT.

ESTIMATED LENGTH OF ZONE - 180 FT.
AVERAGE GRADE - 35% Pb
84 oz/t Ag

EUGENE DIETZGEN CO. MADE IN U. S. A.

NO. 341-LZ2 DIETZGEN GRAPH PAPER LOGARITHMIC 2 CYCLES X 2 CYCLES

ppm Hg

bpb

bpb

#6 Shaving

36N, 18W

56N, 46W

64N, 54W

48W, 34W

52N, 24W

20N, 10W

52, 40W

36N, 28W

20N, 18W

36N, 24W

Zone A 208

High grade galena + tetra.

Axis of cloud

Footwall hydrothermal

Largely galena

1: 102 — Pb/Ag

ppm Pb