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Volume 2 ; Book 10 0028

TOMBSTONE

Mining District

Cochise County

ARIZONA

State of Maine Reports and Maps
1985

A.J. Graves (4-9-85)

~~COPY~~ SAN RINGBINDER
EXCEPT FOR
2 MAPS TO
NORSO.

Tombstone Silver Mines Inc.

Tombstone:
P.O. Box 715
Tombstone, Az 85638

Scottsdale:
8238 E. Indian School Rd.
Scottsdale, Az 85251

Corporate & Administration:
P.O. Box 11509
650 W. Georgia St.
Vancouver, V.C. Canada V 6B 4N7

April 9, 1985

James Briscoe
5701 E Glenn
Tucson, AZ 85712

Dear Jim:

Enclosed is the inventory of maps and drill logs that you requested during our April 9, 1985 conversation.

These maps and the three reports concerning geology and ore reserves will be available to you if your project at TSM is implemented.

Sincerely,

Arthur J. Graves

AJG/am

Tombstone Silver Mines Inc.

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P.O. Box 715
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MAP INVENTORY

The following tabulation is the inventory of original plan maps and drill hole logs of the mineral lands controlled by the Tombstone Silver Mines, Inc. this material was generated from August 15, 1984 to the present.

There are numerous prints of these original maps which were used as work sheets. These prints are in file folders.

The originals are in different stages of completion due to lack of draftsman availability and additional field mapping. The completion of individual maps will become top priority as drilling and mining progresses. To date, the maps have been adequate to write reports and calculate ore reserves.

The plan maps are plotted from transit and stadia field data using Arizona State Coordinates.

Scale	Size	Title	Number
1 in=400 ft.	17 X 22 in.	Section 16	1
1 in=200 ft.	17 X 22 in.	State Mineral Lease Area(SE¼16)	1
1 in=100 ft.	17 X 22 in.	State of Maine Area	5
1 in=50 ft.	17 X 22 in.	Escapule Patent Area	5
1 in=50 ft.	12 X 24 in.	State of Maine Area	1
1 in=50 ft.	12 X 24 in.	State of Maine Area Cross Section Overlay	1
1 in=50 ft.	8 X 17 in.	Triple-X	1
1 in=50 ft.	8 X 17 in.	Triple-X Cross Section Overlay	1
1 in=20 ft.	17 X 22 in.	Composite Pad Plan	2
1 in=20 ft.	17 X 22 in.	Composite Pad Section 5	1
1 in=20 ft.	17 X 22 in.	State of Maine	3
1 in=20 ft.	17 X 22 in.	Merrimac No. 1	4
1 in=20 ft.	17 X 22 in.	Clipper	1
1 in=20 ft.	17 X 22 in.	Triple-X	3
1 in=20 ft.	17 X 22 in.	Main Office Area	2
1 in=20 ft.	17 X 22 in.	Mine Office and Shop	1
1 in=20 ft.	17 X 22 in.	Randolph Surface	6
1 in=20 ft.	17 X 22 in.	Randolph Underground	1
1 in=20 ft.	8½ X 11 in.	Geology 7 Assay Plans & Cross-Section's	21
1 in=20 ft.	8½ X 11 in.	Drill Hole Logs	196

Bailey Escapade (9/27-28)

EVALUATION OF PREVIOUSLY CALCULATED ORE RESERVES

by BAILEY ESCAPULE

STATE OF MAINE MINING COMPANY

TOMBSTONE, ARIZONA

for JAMES A. BRISCOE

(TOMBSTONE SILVER MINES, INC)

SEPTEMBER 27, 1985

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I. PURPOSE

The purpose of this report is to evaluate the ore reserve estimates made by Mr. A. J. Graves in his report to Tombstone Silver Mines, Inc. (T.S.M. Inc.) titled Geology, Ore Reserves, and Open Cut Mine Planning, dated December 1, 1984.

The reason for this evaluation is that one of the open cut mining areas proposed by Mr. Graves has been mined by T.S.M. Inc. Using the information gained by this mining, we can update the ore reserves and revise the mining method.

II. MINING PLAN

Mr. Grave's ore reserve estimates appear to have been based on a final pit design with the final pit slope about 1:1. From experience gained by mining one of the proposed pits (Merrimac #1 Pit), we feel we could revise the original pit design.

Fifteen foot benches can be mined using the International Harvester Excavator owned by T.S.M. Inc. Material mined "underhand" (from the next bench down) can be loaded into dump trucks that will haul the ore or waste from the pit. Access to and from the pits is by ramps at a 20% grade.

Instead of having a 1:1 final pit slope on the hanging wall, we can leave vertical walls up to 25 ft. high. Where the final pit depth is greater than 25 ft., a 5 ft. bench is made 25 ft. above the last working bench. Final pit slope on the foot wall will be the dip of the ore.

Prior to mining all material will be drilled, sampled and blasted.

With this revised mining plan a lower waste to ore stripping ratio will be attained.

III. RESULTS

*GRADE CLASSIFICATION

M = Measured	+/- <20% Accuracy
I = Indicated	+/- 20 - 30% Accuracy
I-F = Indicated-Inferred	+/- 30 - 40% Accuracy
Inf = Inferred	+/- >40% Accuracy

STATE OF MAINE #2 PIT

BENCH	TONS ORE	OZ/TON GRADE	CLASS/% ACC.	TONS WASTE	W/O RATIO
#1	1,983	1.40	I-F/35%	8,925	4.5:1
#2	2,034	2.37	I-F/25%	9,367	4.6:1
#3	2,067	2.82	I-F/35%	4,282	2.1:1
TOTAL	6,084	2.21	I-F/32%	22,574	3.7:1

SMELT ROOM PIT

BENCH	TONS ORE	OZ/TON GRADE	CLASS/% ACC.	TONS WASTE	W/O RATIO
4560	343	0.38	I-F/35%	543	1.6:1
4545	393	2.59	I-F/25%	2,182	5.6:1
4530	420	2.59	I-F/35%	1,003	2.4:1
TOTAL	1,156	1.93	I-F/32%	3,728	3.2:1

TRIPLE EX PIT OPTION "A" (includes block of inferred waste)

BENCH	TONS ORE	OZ/TON GRADE	CLASS/% ACC.	TONS WASTE	W/O RATIO
4565	2,019	1.70	I-F/35%	6,535	3.2:1
4550	3,523	0.28	I-F/35%	10,492	3.0:1
4535	3,458	1.36	I-F/35%	13,717	4.0:1
TOTAL	9,000	1.01	I-F/35%	30,744	3.4:1

TRIPLE EX PIT OPTION "B" (includes block of inferred ore)

BENCH	TONS ORE	OZ/TON GRADE	CLASS/% ACC.	TONS WASTE	W/O RATIO
4565	2,980	1.70	I-F/40%	5,574	1.9:1
6	4550	5,233	0.28	I-F/40%	8,782	1.7:1
4535	5,119	1.36	I-F/40%	12,056	2.4:1
TOTAL	13,332	1.01	I-F/40%	26,412	2.0:1

SUMMARY OF RECALCULATED RESERVES

PIT	ORE	GRADE OZ/TON	CLASS.	% ACCURACY	WASTE	W/O RATIO
ST. OF MAINE #2	6,084 TONS	2.21	I-F	32%	22,574 TONS	3.7:1
SMELT ROOM	1,156 TONS	1.93	I-F	32%	3,728 TONS	3.2:1
TRIPLE EX "A"	9,000 TONS	1.01	I-F	35%	30,744 TONS	3.4:1
TOTALS	16,240 TONS	1.53	I-F	34%	57,046 TONS	3.5:1

PIT	ORE	GRADE OZ/TON	CLASS.	% ACCURACY	WASTE	W/O RATIO
ST. OF MAINE #2	6,084 TONS	2.21	I-F	32%	22,574 TONS	3.7:1
SMELT ROOM	1,156 TONS	1.93	I-F	32%	3,728 TONS	3.2:1
TRIPLE EX "B"	13,332 TONS	1.01	I-F	40%	26,412 TONS	2.0:1
TOTALS	20,572 TONS	1.42	I-F	37%	52,714 TONS	2.6:1

A.J. GRAVES ORE RESERVE CALCULATIONS SUMMARY

PIT	ORE TONS	GRADE OZ/TON	WASTE TONS	RATIO W:O
ST. OF MAINE	21,490	2.53	68,105	6.1:1
ST. OF MAINE #2	3,710	6.70	8,700	2.4:1
SMELT ROOM	1,110	2.91	7,120	6.4:1
TRIPLE EX	5,320	1.42	24,030	4.5:1
MERRIMAC	3,960	3.11	13,290	3.4:1
TOTALS	35,590	2.69	121,245	3.4:1
LESS ST. OF MAINE	21,490		68,105	
TOTALS	14,100	2.93	53,140	3.8:1

MERRIMAC #1 PIT

	A.J. GRAVES	ACTUAL	DIFFERENCE	% DIFF.
ORE	3,960 TONS	3,926 TONS	-34 TONS	1 %
GRADE	3.11 OZ/TON	2.92 OZ/TON	-0.19%	6 %
WASTE	13,290 TONS	11,224 TONS	-2066 TONS	16 %
RATIO	3.4:1	2.9:1	-0.5:1	15 %

The State of Maine shaft area has been eliminated for open cut mining due to the probable distructuion of the main shaft and some of the old workings. After a well executed sampling program in the upper workings, some of this are may be mined with the careful preservation of the main State of Maine shaft.

IV. RECOMMENDATIONS:

Due to the relatively small amount of ore reserves and their classification of indicated-inferred, it is recommended that further drilling be done. This drilling is needed to upgrade the ores classification to measured and also to determine if ore grade values can be extended from the currently proposed pits.

A plan has been suggested by J.A. Briscoe of drilling angle holes in a "fan" shape to intersect the veins at right angles and at different depths. This plan would include drilling an angle hole 10 ft. from the vein's hanging wall outcrop to intersect the vein at right angles. This will determine the veins true thickness. A second hole, at the same location, drilled vertically through the vein will indicate the extent of leaching of ore values from the surface. A second set of holes would be drilled 20 ft. from the vein's hanging wall outcrop. These include a vertical hole, and angle hole at -45 degrees, and an angle hole to intersect the vein at right angles. These three holes should penetrate the vein at the same location along strike, but at different locations down dip.

This series of two drilling locations perpendicular to the strike should be repeated every 20 ft. along the strike of the vein in the areas desgnated for proposed pits.

This drilling plan would give more detailed information on the widths of the veins and extent of leaching of ore values. Also, the percent accuracy in estimating the ore grade and ore reserves would be upgraded to plus or minus 20% or within a measured ore reserve classification.

Calculations of the SOM & assoc Mines - overall grades. From 1928 Sarle Report, 1924 Chapman thesis & Pg 1 of

Verbal comments from. C Escarpale, Louis E. & Bailey

I. SOM mine

A $\frac{1.30}{90} = \frac{80}{60}$

$1.44 = 1.33$

$\frac{1:40}{94} = 1.55$

$\frac{1.20}{.9} = 1;333$

$\frac{1:30}{90} =$

$\frac{1:30}{1:00}$

$\frac{1.5}{35}$ $\frac{1}{23,33}$ oz $= 0.043$ Au/10 oz Ag or 0.0043/oz Ag

or

Bonanza dips 65° 3,500,000 ÷ 1.20

S.D.M. - Area mines were worked in the period 1876 - 1890

Pg 45 - Sarle states that 40 K Tons mined (including dumps) avg. grade of #60 @ an est. 1 oz/oz Ag price = 60 oz interest

Since there is about 35 K tons left in dumps then 5K tons would have been worth 3.5 mm ∴ value/Ton = 3,500,000 ÷ 5,000 = #700/T oz

700 oz/T.

Dumps Run. 4.95 - 3/4"
4.85 + 3/4

B. Chas Says

25,K Tons of dump vs 40K mined

15 K tons ore ∴ 3,500,000 ÷ 15,000 = #233

÷ 1.25 = 191.

3,500,000 ÷ 40,000 = #87.5

3.500,000 ÷ 70,000 = #50.

35,000 T × 4.93 oz Ag × = 172,550 oz Ag = 1,035,300

35,000 T × 0.018 oz Au = 630 oz Au = 189,000

Ag/Au ratio = 273.89:1 1,224,300

Grades in the Western - State of Maine area.

We've already calculated the average grade of ore in the SOM mine using figures from Bull. 143 (Butler-Wilson) volumes and Chapman (1924). However, other estimates are found in the 1928 - "Report on Mellgren Mines, by Dr. C. J. Sarle. Unfortunately the Sarle report is less a professional document and more a promotional piece for Mellgren mines. The data on tonnage and grade is undocumented, apparently based on hearsay from Mellgren, and the data themselves are confusing and hard to interpret. As in many reports of the genere, production is frequently based on dollar production and "current or present" prices without stating what these are. As an example Mellgren states that the production of the SOM is $3.5 million - without reference - contrasting with the Butler-Wilson estimate of $200,000. -- a 17.5 fold difference.

Further, Mellgren (Sarle - its hard to tell who wrote it, the Sarle signed), suggests an average grade of $60/ton at "present" prices. In 1928 silver was probably about ~~75~~ 60¢/oz so the average grade would have been 80 oz/ton - higher than the main District average. I think the previous estimate using Butler Wilson & Chapman's figures are more reasonable - an average grade for all rock hoisted of 7.73 oz Ag & 0.013 Au. This compares with the P.D. assays for average grade of 3.3 Ag & 0.018 Au. It should be pointed out that it isn't known how P.D. samples were taken and that high grade samples on the 3rd level of 465.3 oz Ag were probably not included in the averages. Further high grade pods as well as possible enrichment zones are to be expected. How these are mined and treated will determine the profitability of any operation

Subjects to be discussed

1. Reason for bromides.
   ie Hanging & F.W ppt by halides from weathering volcs.

2. Reason to expect enriched sulfides at depth ie in CC zone argentite & stromeyerite.
   — Note CC occurrence in San Pedro mine — Park. pg 38
   Note surface leaching indic. by chang. in Ag:Au ratio, P.D. assays pg 102 Bull 143

3. Sed intersection at depth

4.

If Clipper like 5.0M w/ Avg grade of
@ 7.0z then x we'd be in fat city. But assume
leaching in 1st 100' so assume a 3.50z & 0.017 Au - sim
to SOM.

Clipper Vn Expl.
1500 Length or 2000' length if
Interstrat ground is obtained.
Drill fan of holes every 100' along length
- 4 holes, 140, 140, 160, 180 = 620' x 20 = 12,400
(poss 300' dep. vert & 50' bench to get to sulfides)
about 24,000 at 2.00/foot.

Pb-Zn geochem on 10' centre - 2,000 x 80'
or 200 x 8 grid = 1600 x 8.00/samp assay + Pu
= $12,800

Hg Assays are same - Same cost 12,800

Potential Tonnage in Clipper Vn.
Assumptions 75' horiz width. 2,000' length
mined to a 60' depth on 4 - 15' benches
∴ 75' x 2,000' x 60' ÷ 13 ft³/T = 692,307 Tons
@ S.R. of 355,384 ÷ 692,307 = 0.51 : 1

See pg 12 opposite

① Assume high grade will be 5 oz + 0.018 Au & compose 10 % of ore
Low grade will assay 2 oz + 0.018 Au

② 2 mm tons drilled out
200,000 Tons of 5 oz
1,800,000 Tons of 2 oz

③ Will mine & crush 800 T/Day of hi grade
x 250 work days = 200,000 in 1 year

④ Will mine & pile on pad 7200 TPD of low grade.

⑤ Recovery will be:
a. High Grade – 200,000 x 5 oz x 80% = 800,000 oz
200,000 x 0.018 x 90 = 32,400 oz Au
b. Low Grade – 1,800,000 x 2 oz x 50% = 1,800,000
1,800,000 x 0.014 x 80% = 20,160

Avg. Grade

200,000 x 5 oz = 1,000,000
1,800,000 x 2 oz = 3,600,000
4,600,000 ÷ 2 mm = 2.3 oz/T

Recovery/Ton high grade

5 oz x 80% = 4 oz x 6 = 24
0.018 x 90% = 0.016 x 300 4.86
28.86 − 8.65 = $20.21
− ~~12.65~~
16.21 Oper Profit

Mining − $3.00/Ton
Crushing & proc. 4.85/Ton
Refining ~~$2~~ 4.80/Ton Chas says 20¢/oz x 24 oz = 4.80
~~$9.85~~
~~12.65~~
8.65

wrong 20¢ x 4 = 80¢

Recov./Ton Low Grade

40% CE .80 oz x 6 = 4.80
2 oz x 50% = 1 oz x 6 = ~~6~~
0.014 x 80% = 0.011 x 300 = 3.36
8.16
~~9.36~~

Mining ore 1.25 6.10
" waste 2.25 2.06 Oper Profit
Processing 2.40
Refining 0.20
6.10

See overleaf. →

If grade were same as P.D. assays of the 1st two levels of the S.O.M. ie 1.98 oz/T Ag and 0.017 Au, and!! values distributed in high and low grade zones such that 10% of the potentially 2 mm tons available would average 5 oz., Then

The grade of the remaining 1,800 tons would be:

$$X\ oz/T \quad \frac{2{,}000{,}000\ T \times 1.98\ oz\ Ag/Ton - 200{,}000\ Tons \times 5\ oz\ Ag}{1{,}800{,}000\ Tons}$$

$$= \frac{3{,}960{,}000\ oz}{1{,}800{,}000\ Tons} - \frac{1{,}000{,}000\ oz}{} = \frac{2{,}960{,}000\ oz}{1{,}800{,}000\ Tons}$$

$$= 1.644\ oz/Ton$$

Thus Profit/Ton for the high grade would be the same, but Profit/Ton low Grade would be

Ag	1.644 oz/T × 40% recov. = 0.6576 oz Ag × 6.00 Ag		= 3.95
Au	0.014 oz/T Ag × 80% Recov = 0.011 oz Au × 300		= 3.36
	Less costs of:		7.31
	Mining oz/Ton	1.25	1.25
	" Waste/Ton	2.25	2.25
	Processing /Ton	2.40	costs at 2.40
	Refining 20¢/oz /Ton	0.13	lower Rec 0.12
		6.03	6.02

$$\$\ 7.31 - 6.03 = 1.28$$

If Au rec. is 50% & Ag 35%

				Ag
1.644	× 35%	= 0.5754 × 6.00	=	3.45
0.014	× 50%	= 0.007 × 300.00	=	2.10
				5.55

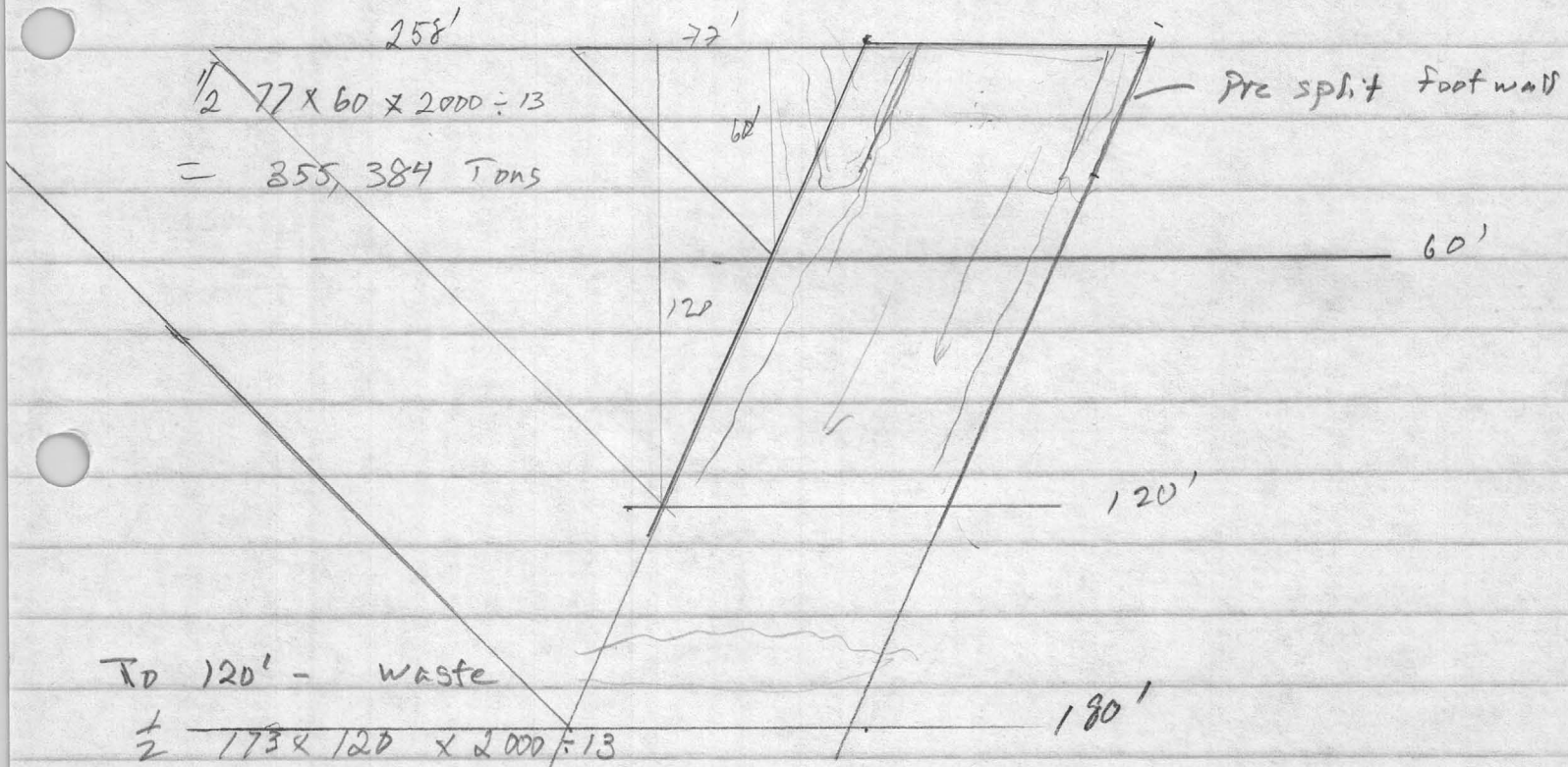
$$\$\ 5.55 - 6.02 = 0.47$$

High Grade Oper Profit.

		16.21		3,242,000	
H.G.	200,000	x ~~19.01~~	=	~~3,802,000~~ 3,708,000	
L.G.	1,800,000	x ~~2.96~~ 2.06	=	5,328,000	
			#	~~9,130,000~~	6,950,000
Less 1.5mm Expl, Eng				1,500,000	1,500,000
Mg. & finance chgs.				7,630,000	5,450,000

5% State
2 1/2 Sales } would be on gross

50 scale



½ 77 X 60 X 2000 ÷ 13

= 855, 384 Tons

To 120' - waste

½ 173 X 120 X 2000 ÷ 13

= ~~3, 143, 846~~ wrong Tons 1,596,923 (correct)

Ore = 75' X 120 X 2000 ÷ 13 ft³/t =

= 1, 384, 615.3

W : Ore ratio = 1,596,923 ÷ 1,384,615 = 1.15 : 1

To 180'

½ $\frac{258 \times 180 \times 2{,}000}{13}$ ÷ 13 = 3, 572 307

waste

Ore = 1, 384,615.3 + 692, 307 = 2,076,922

W : Ore = 3, 572, 307 ÷ 2,076,922 = 1.72 : 1

Need to Know from Charlie:

1. Lab. cost -

2. Large Volume Stripping Cost
   Assume. 1.00/T + blasting 25¢

3. Approximate Treatment cost/Ton on a large scale 4.85/ton for 500 + TPD Crushing agglomerating leaching to get 88%.
   for mine run leaching - 2.40/T.

4. Cost of Bailey's time on Computer on hourly or daily basis - $20

5. Max. mining rate in Tons/hr on 2 10 hr. shifts for excavator using however many trucks are necessary & assuming optimumly blasted ground. - 800 tons/shift

BASE COSTS USED IN

TOMBSTONE SILVER MINES, INC.

PROJECTIONS

JAB Time

$31.25/hour or	$250/day
food @	$ 15/day
travel (truck) @	$ 10/day

	$275/day - 8 = $34.38/hour
with ATV @	$ 20/day

	$295/day - 8 = $36.88/hour

Mobe & demobe (1 round trip/week from Tucson)

150 miles x 2 x $.45/mile = $135/week

TEW time (same as above)

MAS time

$15/hour x 8 hours = $120/day

Mobe and demobe as above

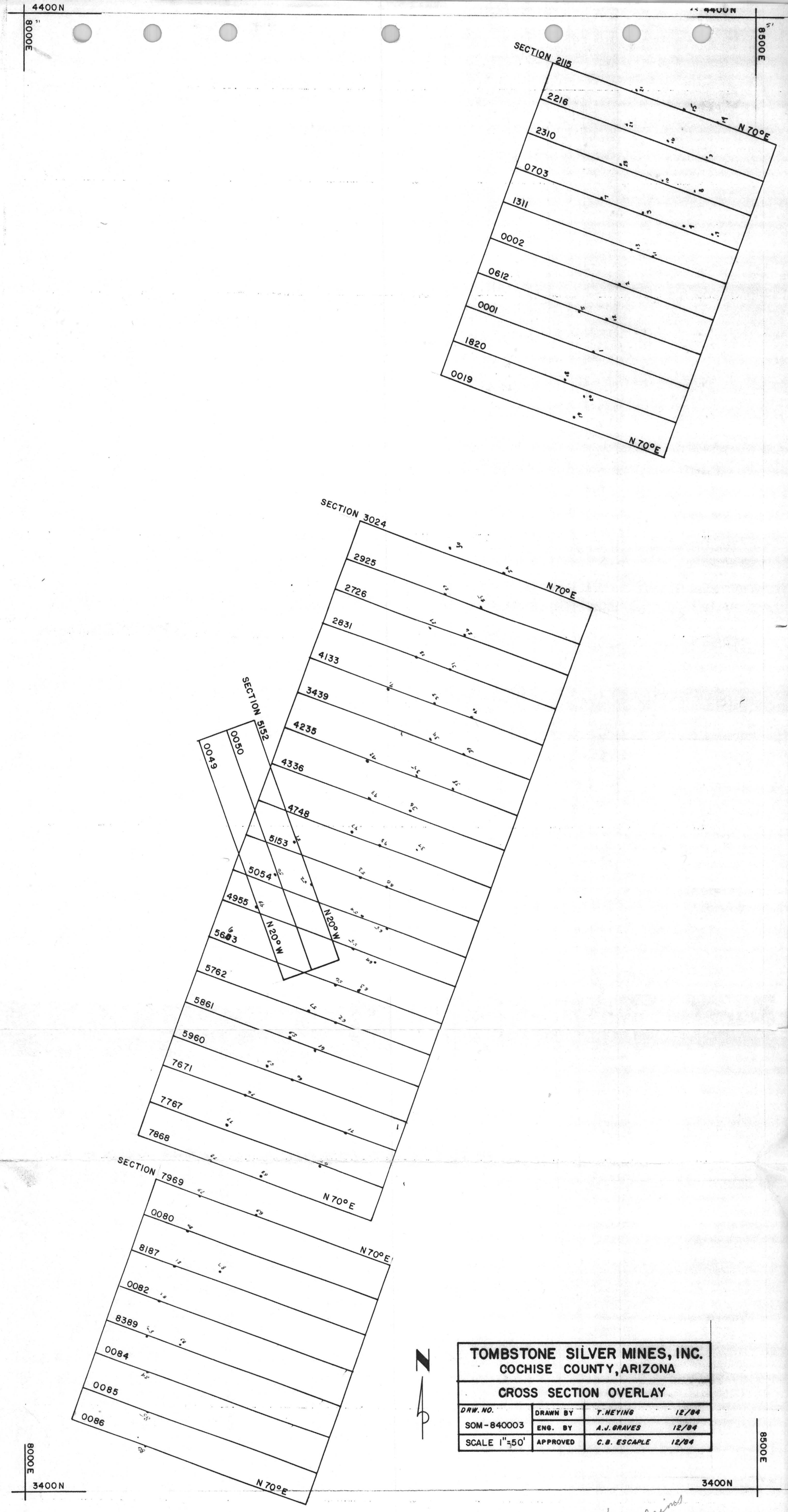
CAD time

Bailey Escapule for Charlou

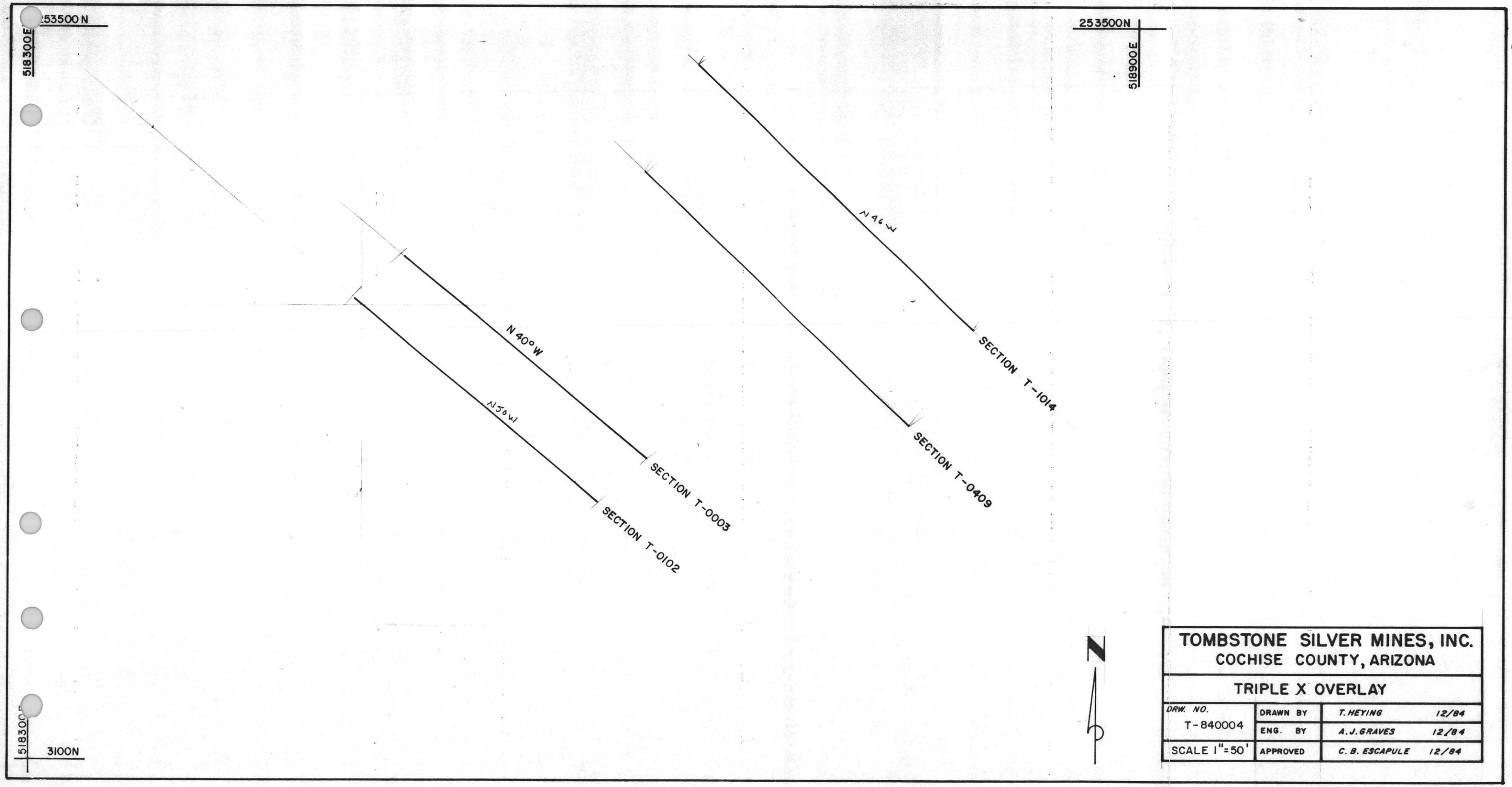
$15/hour x 8 hours/day = $120/day

Computer @ $5/hour x 8 hours/day = $40/day

Total - $20/hour x 8 = $160/day

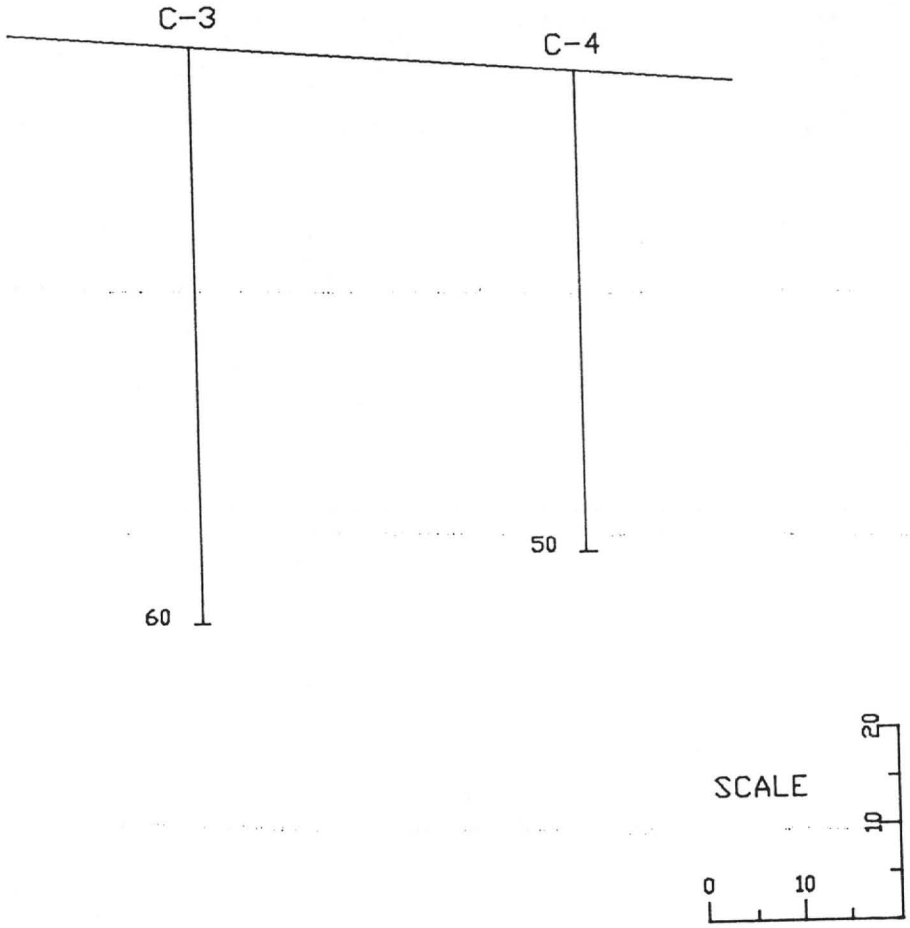


C - Clipper
T - Triple X claims
M - Merrimac
S. SOM



TOMBSTONE SILVER MINES, INC. COCHISE COUNTY, ARIZONA			
TRIPLE X OVERLAY			
DRW. NO. T-840004	DRAWN BY	T. HEYING	12/84
	ENG. BY	A. J. GRAVES	12/84
SCALE 1"=50'	APPROVED	C. B. ESCAPULE	12/84

SECTION C-0304



C-0304

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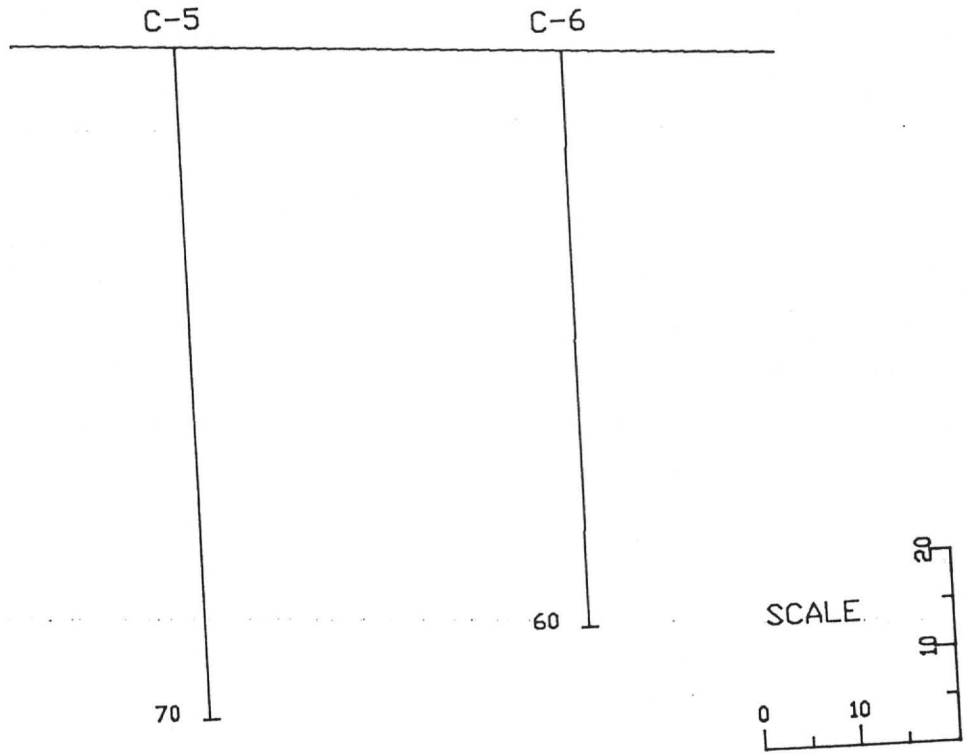

C-0506

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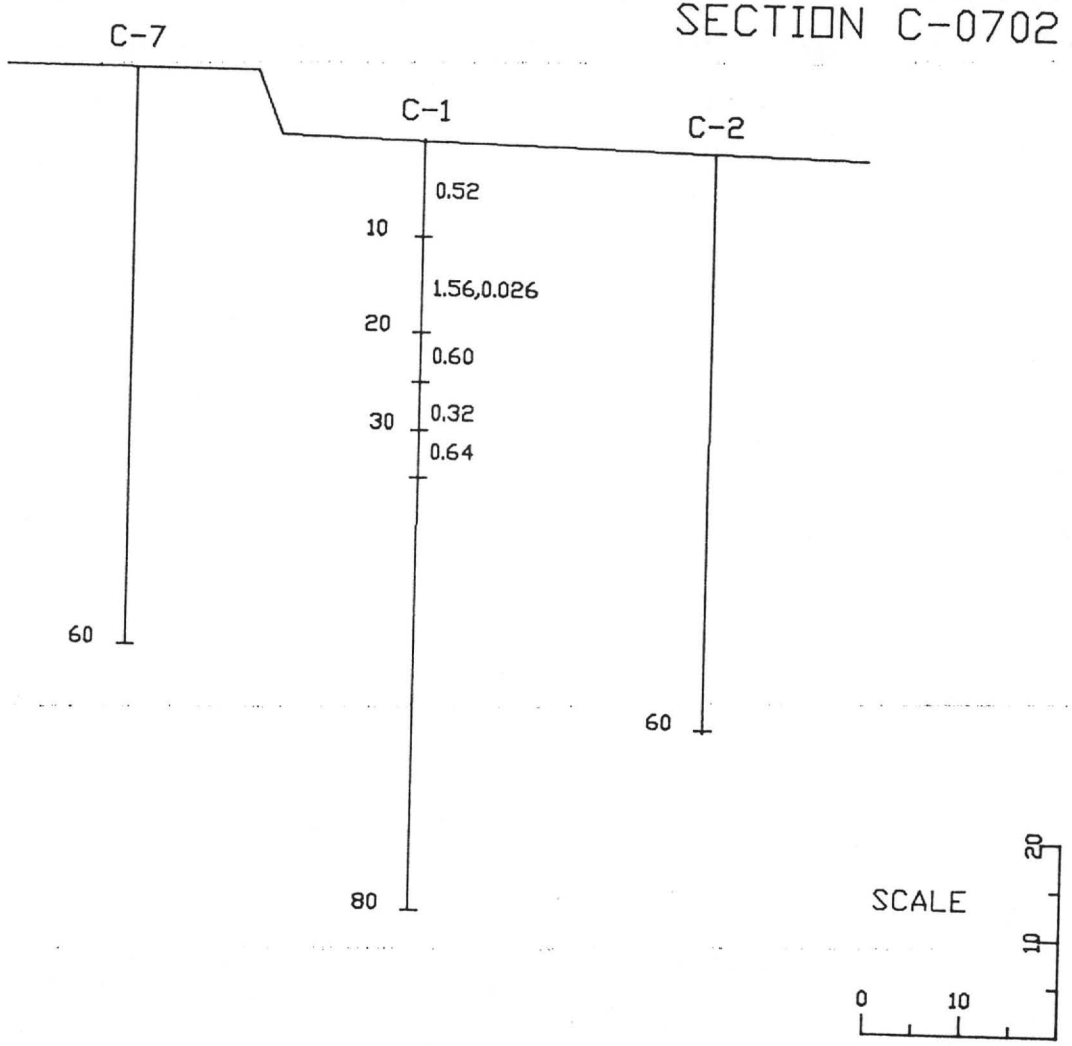
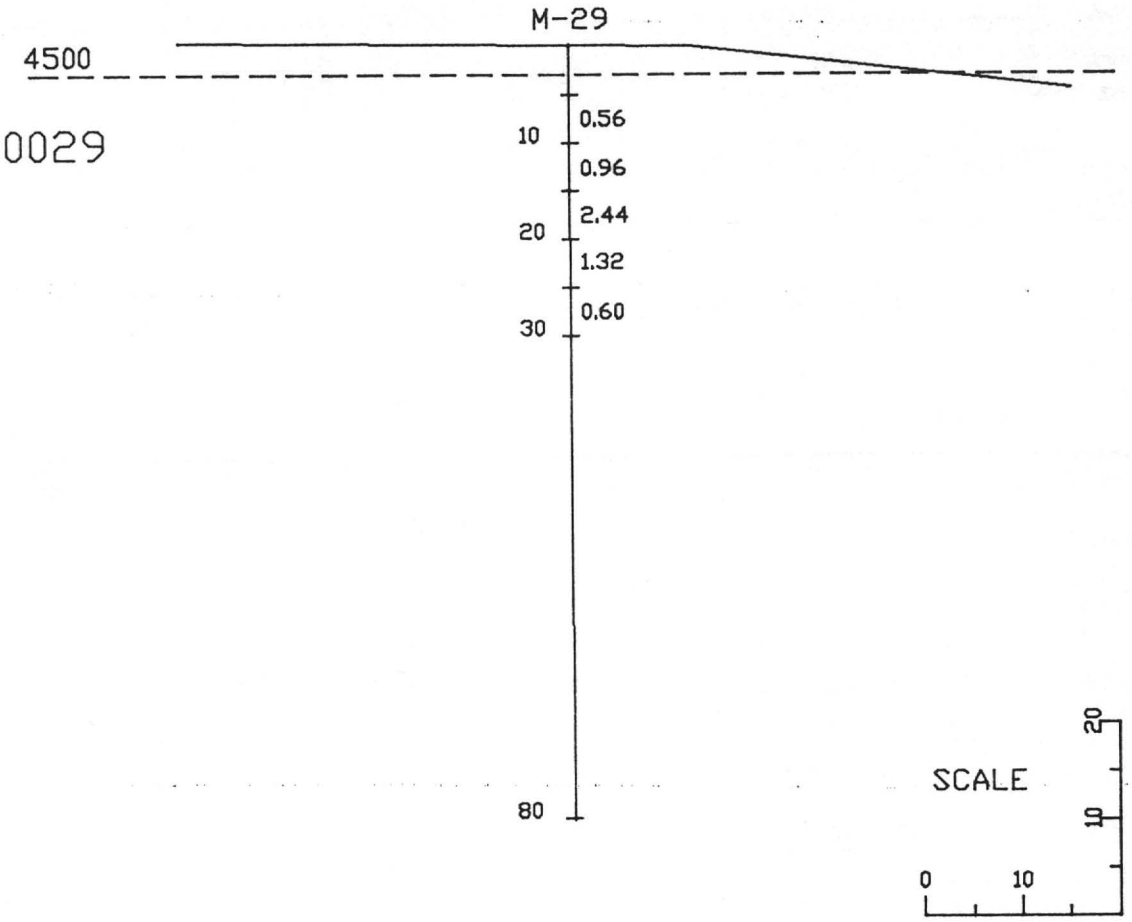


C-0702

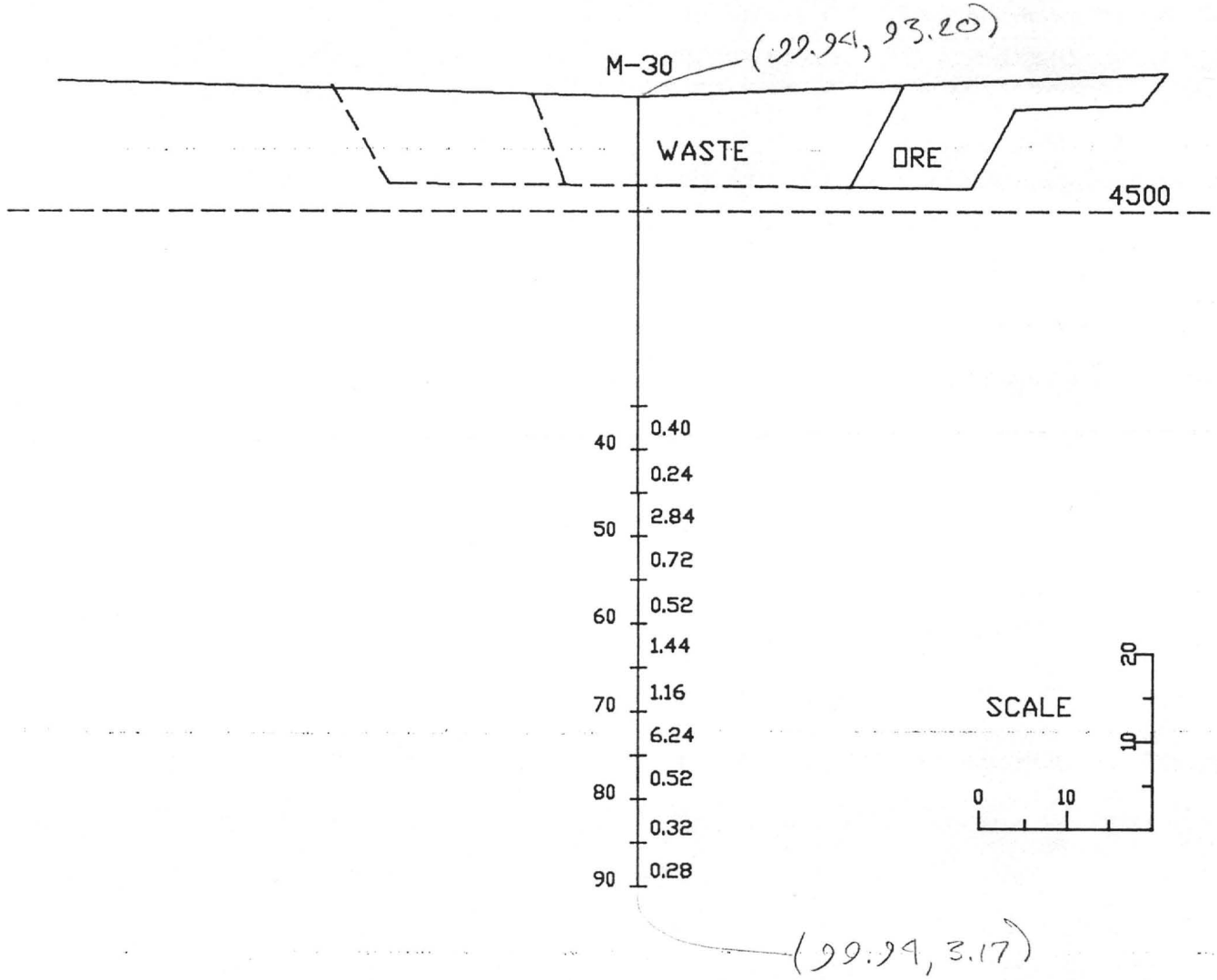
SECTION M-0029



M-0029

51 47 44 35 28 38 50 54 62 69 81
16 18 18 10 4500 4500 10 12 14 16 16
30

SECTION M-0030



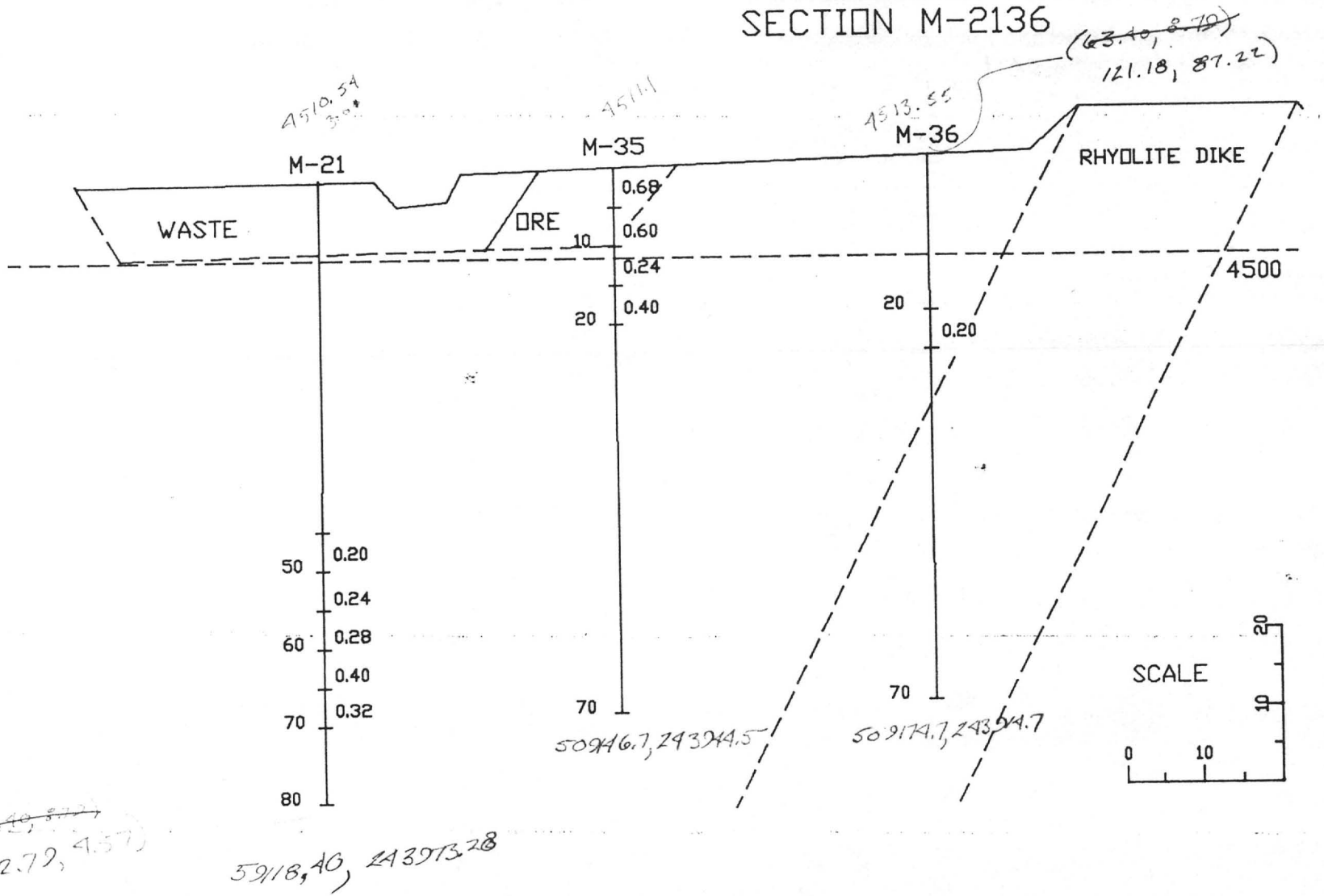
M-0030

17 41 81 91 108 111 114 115 118 126 134
4500 95N 90 02 04 06 08 10 12 14 16

31A

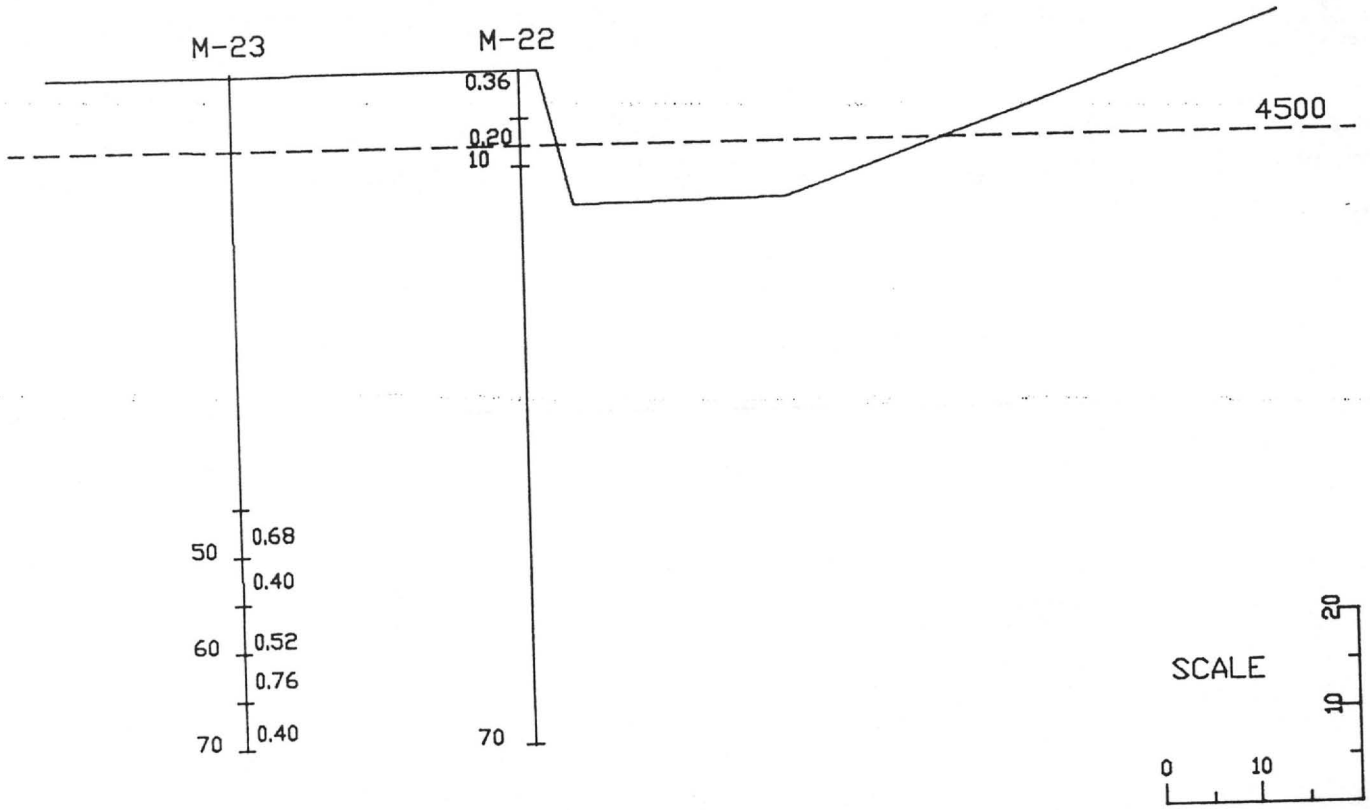
ORE 168
~~WASTE~~ 487

SECTION M-2136



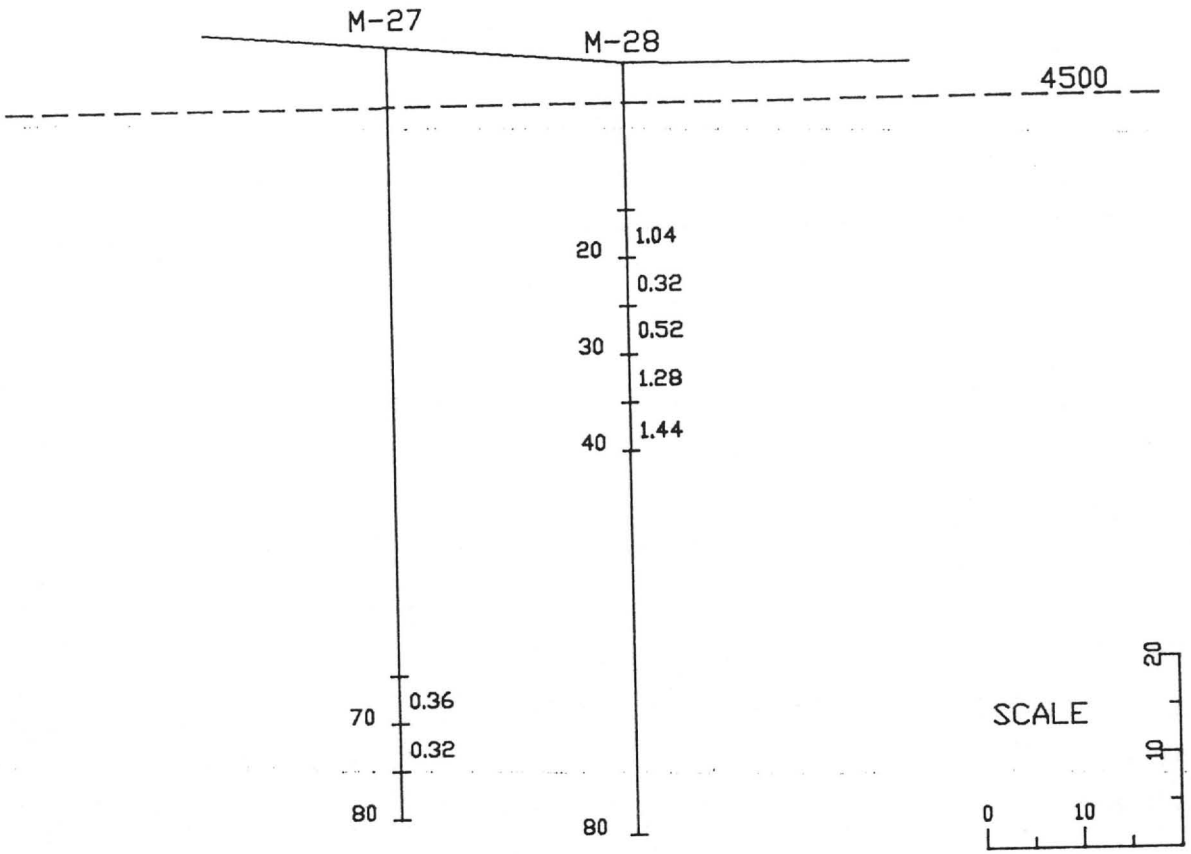
M-2136

SECTION M-2322



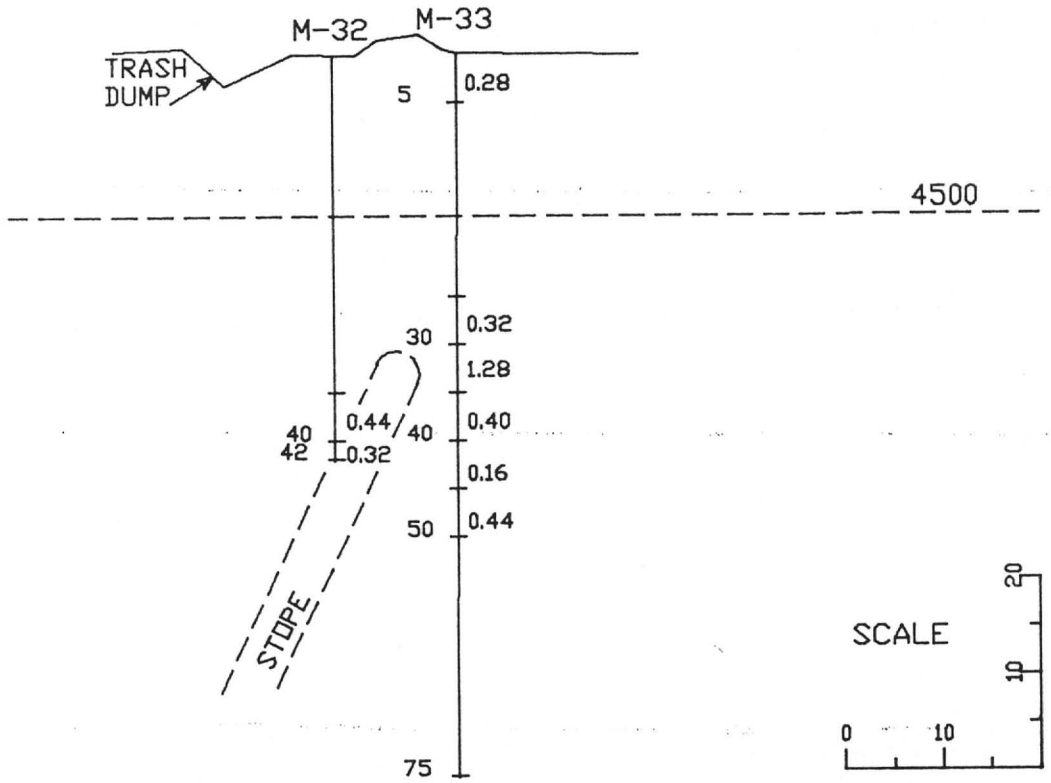
M 2322

SECTION M-2728



M-2728

SECTION M-3233



M-3233

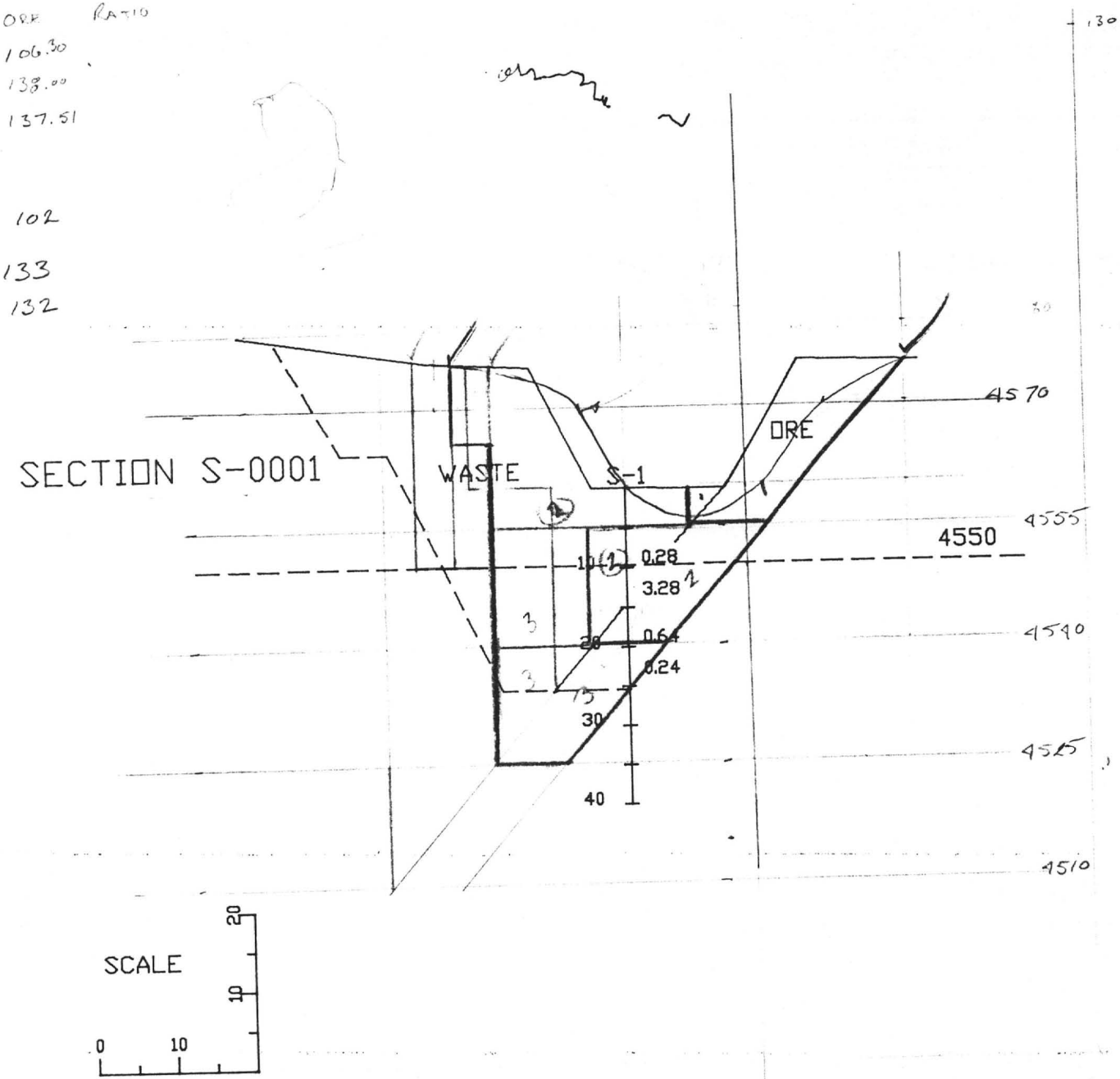
	WASTE	ORE	RATIO
①	0.62	106.30	
②	225.00	138.00	
③	162.03	137.51	

①	1	102	
②	217	133	
③	259	132	

PTC - PTC
SURF

(129.27, 62.22, 87.72)

19.84, 19.81, 32.05, 6.42

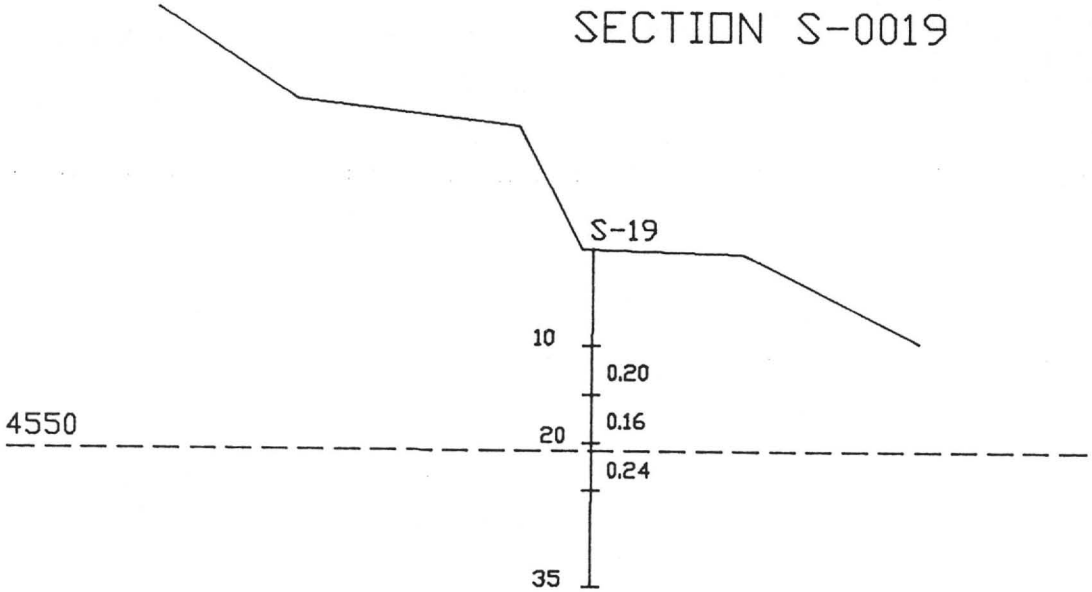


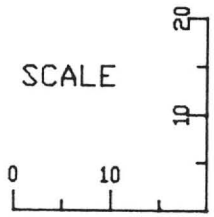
S-0001

88.8, 63

53

SECTION S-0019

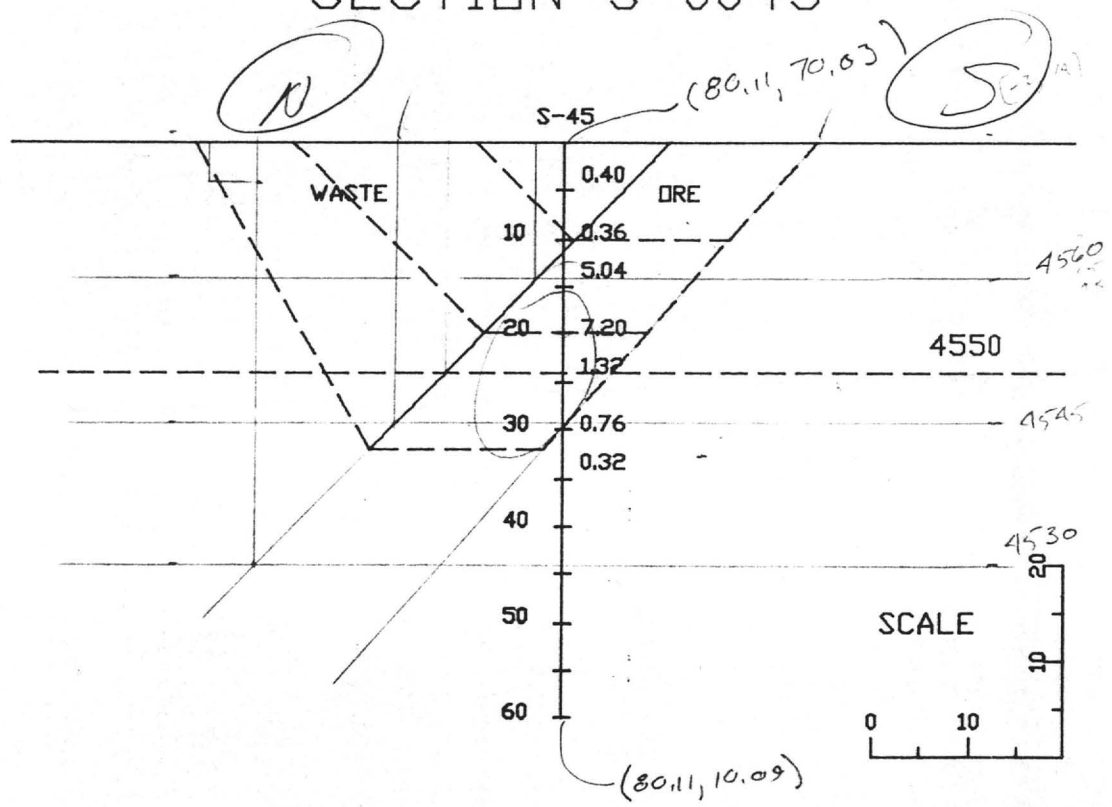




S-0019

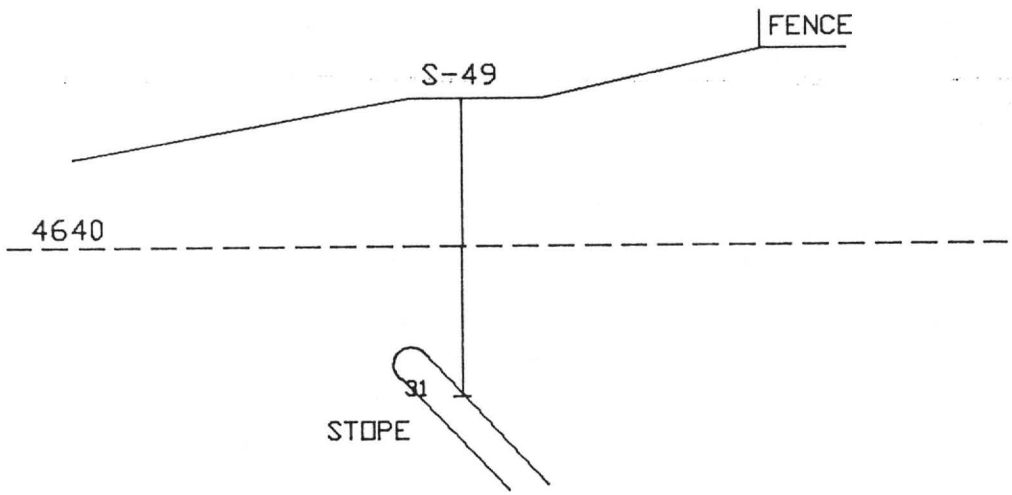
	WASTE	ORE
4560	92	216
4545	311	254
4530	539	267

SECTION S-0045



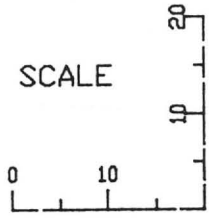
4580
95 12 34 60 74 93 116 122
-8 -10 -12 -14 -16 -18 -20
4574
-6

5-0045



SECTION S-0049

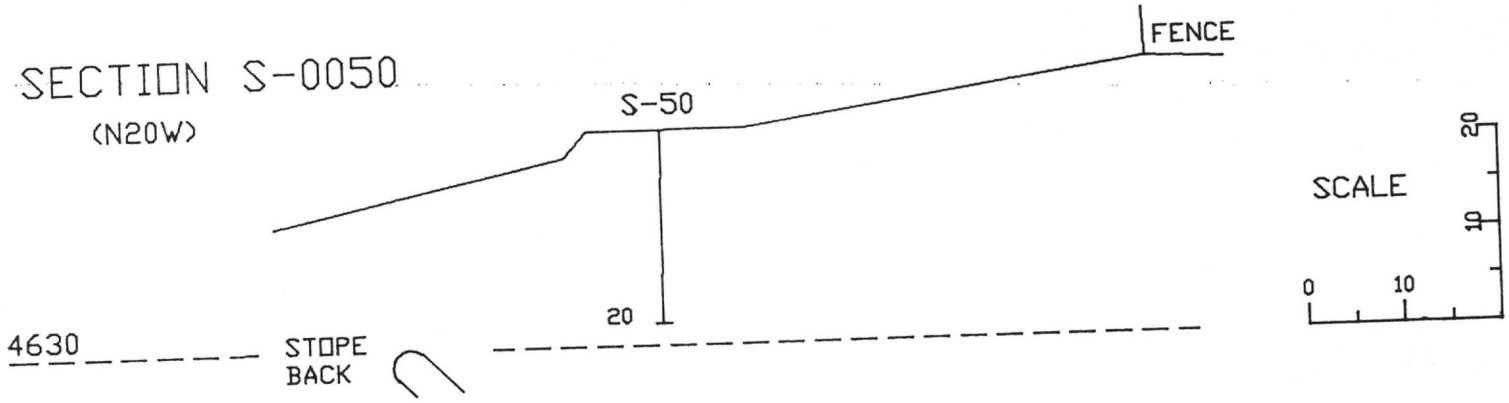
(N20W)



S-0049

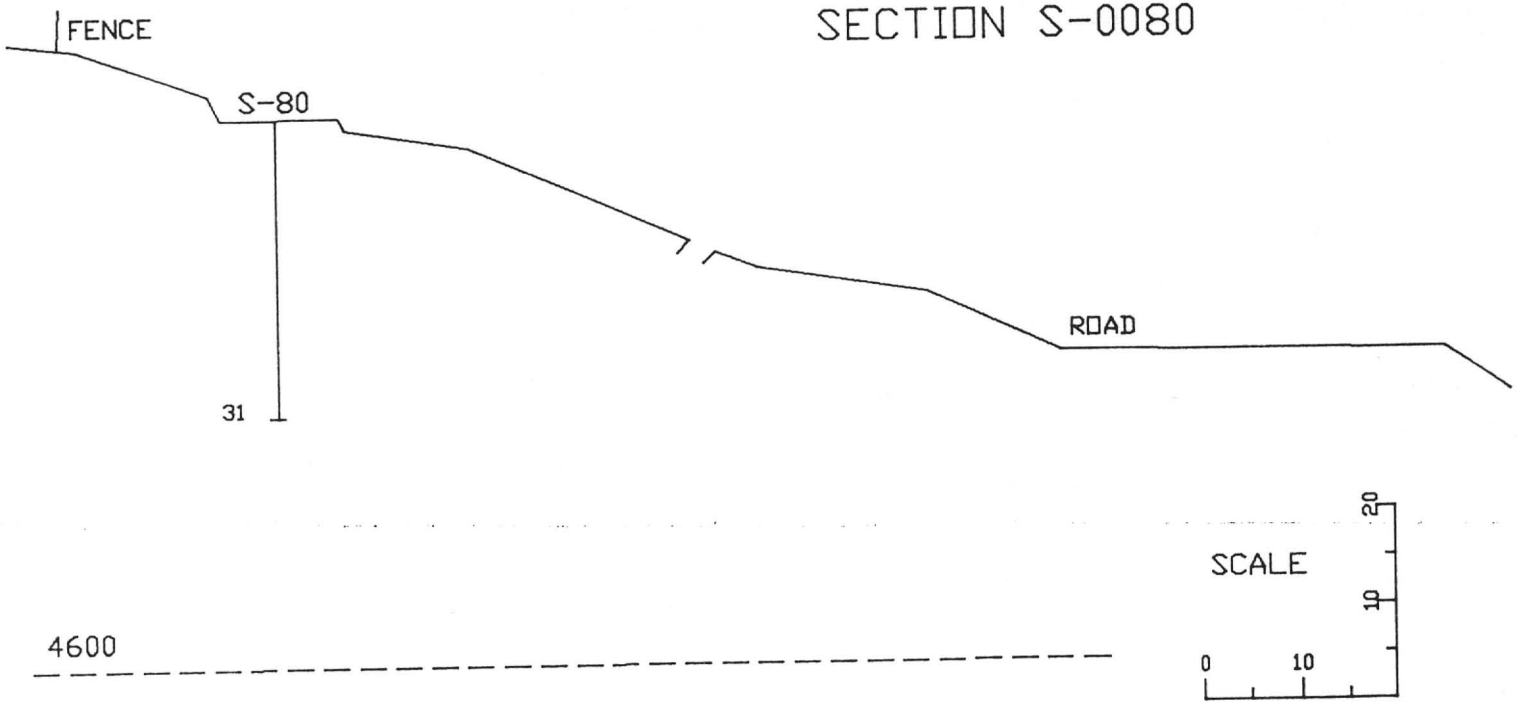
SECTION S-0050

(N20W)



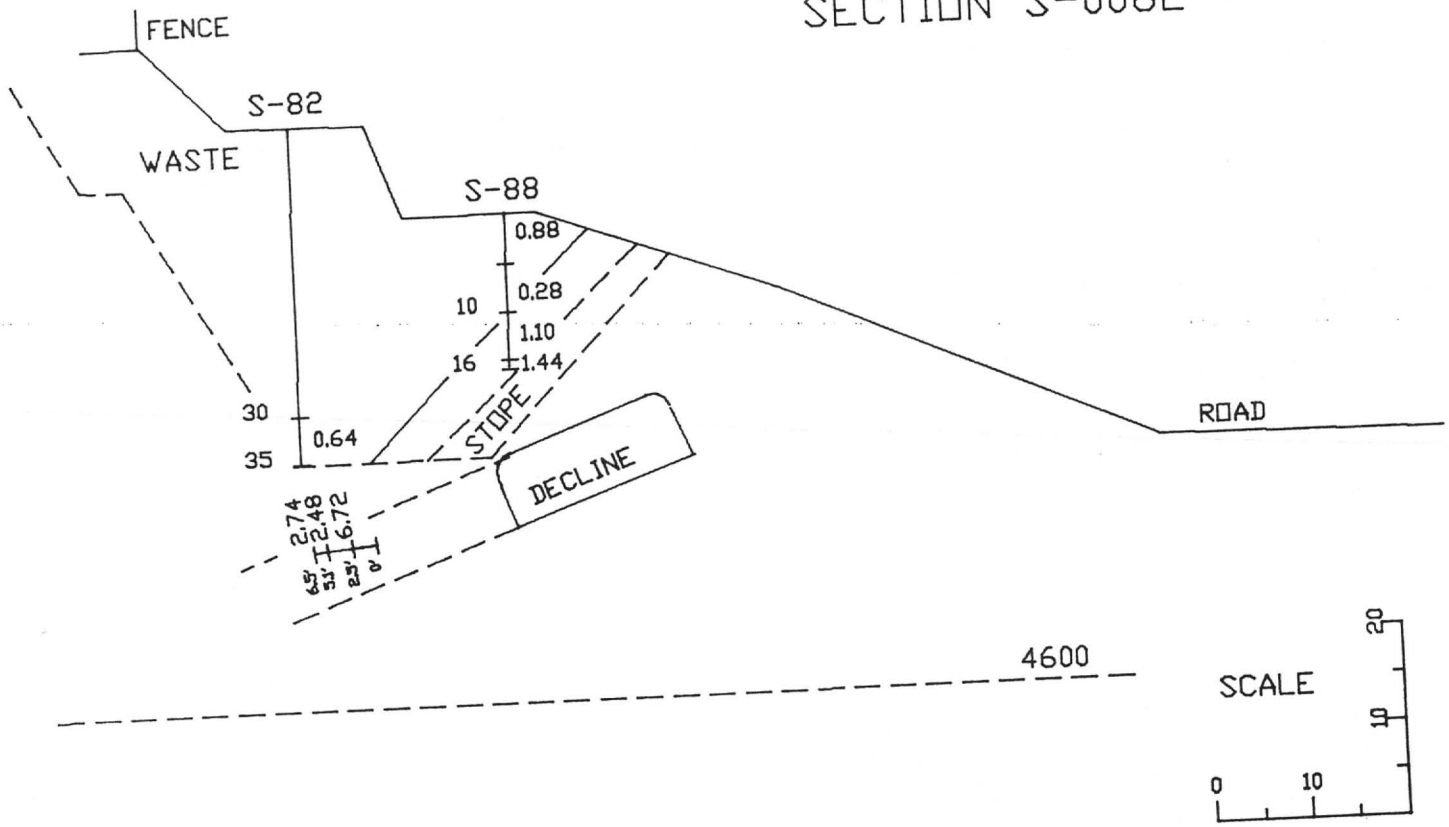
S-0050

SECTION S-0080

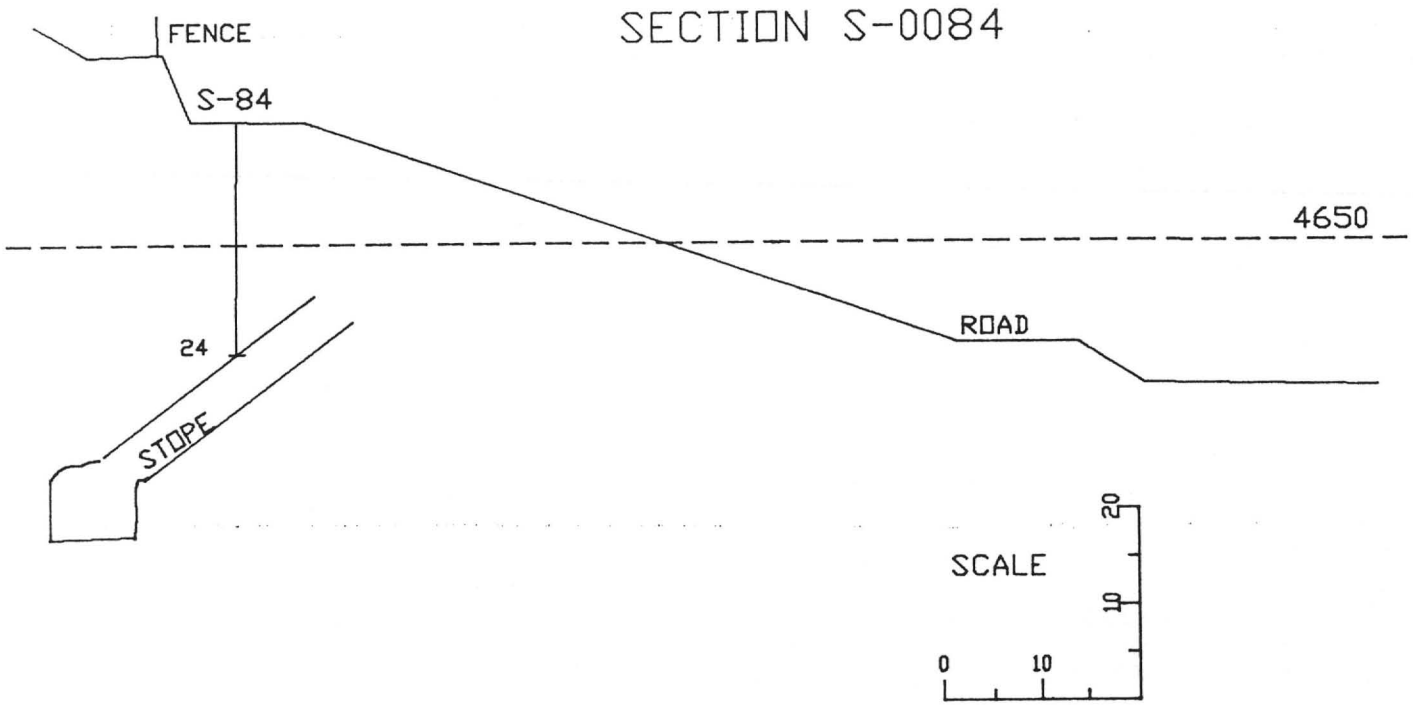


S-0080

SECTION S-0082

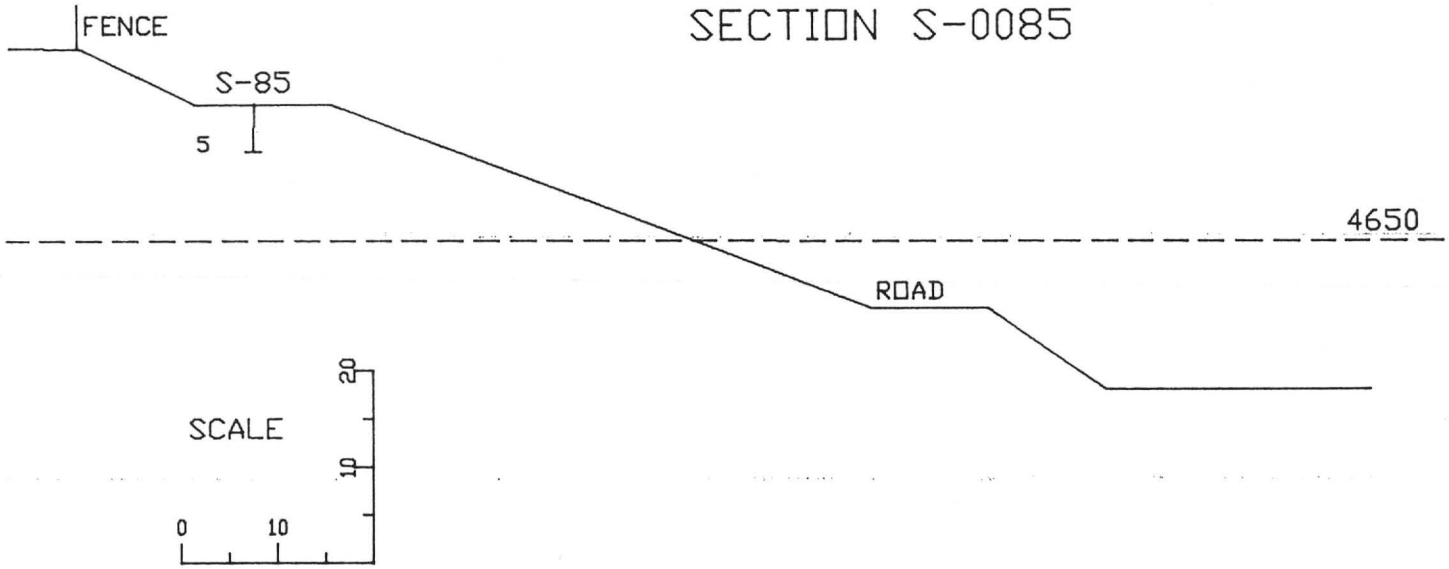


S-0082

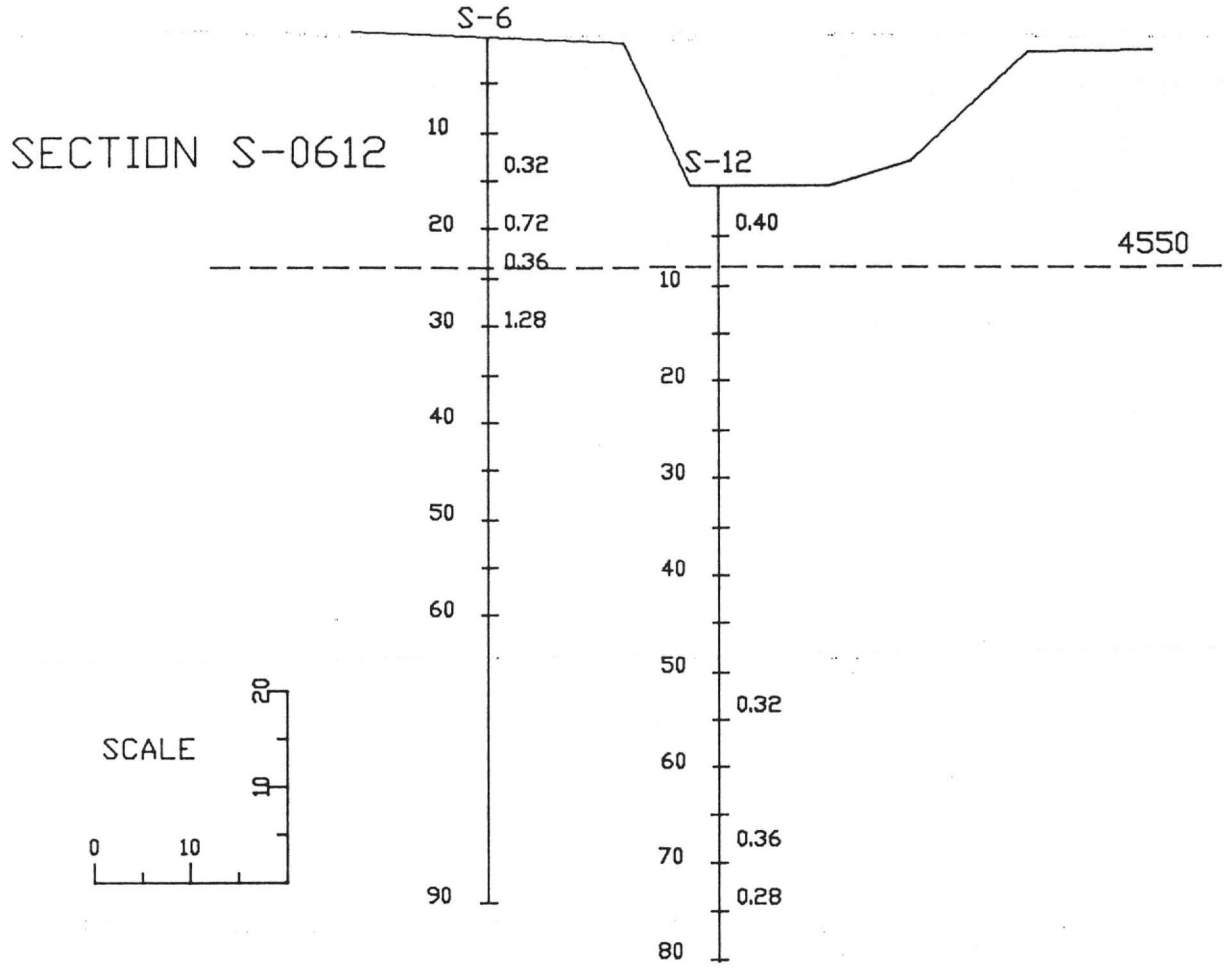


S-0084

SECTION S-0085

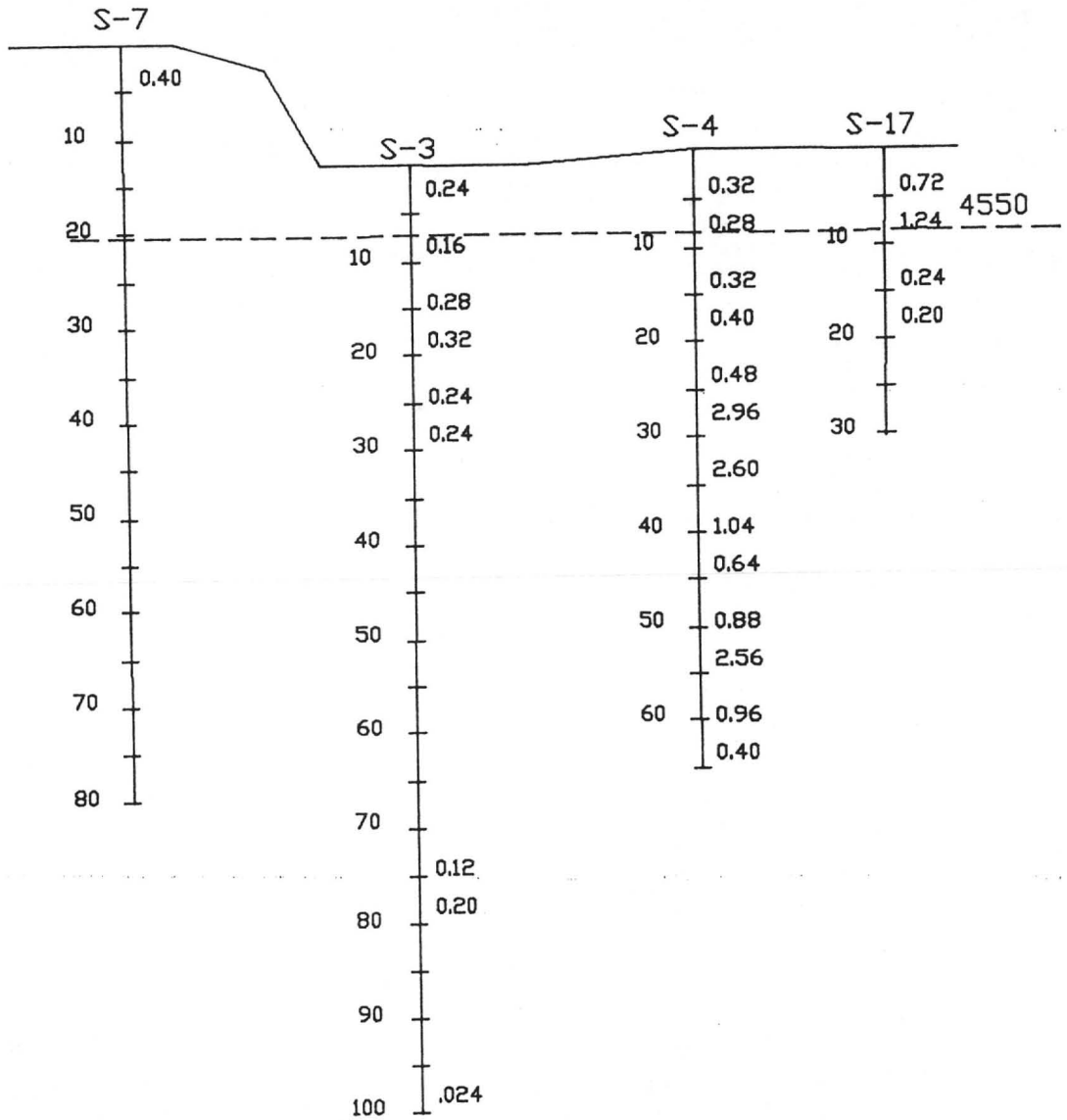


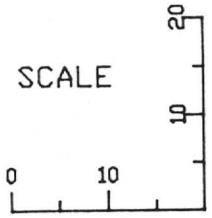
S-0085


SECTION S-0612
S-6
S-12
4550
10
20
30
40
50
60
90
0.32
0.72
0.36
1.28
0.40
10
20
30
40
50
60
70
80
0.32
0.36
0.28
SCALE
0
10
10
20

S-0612

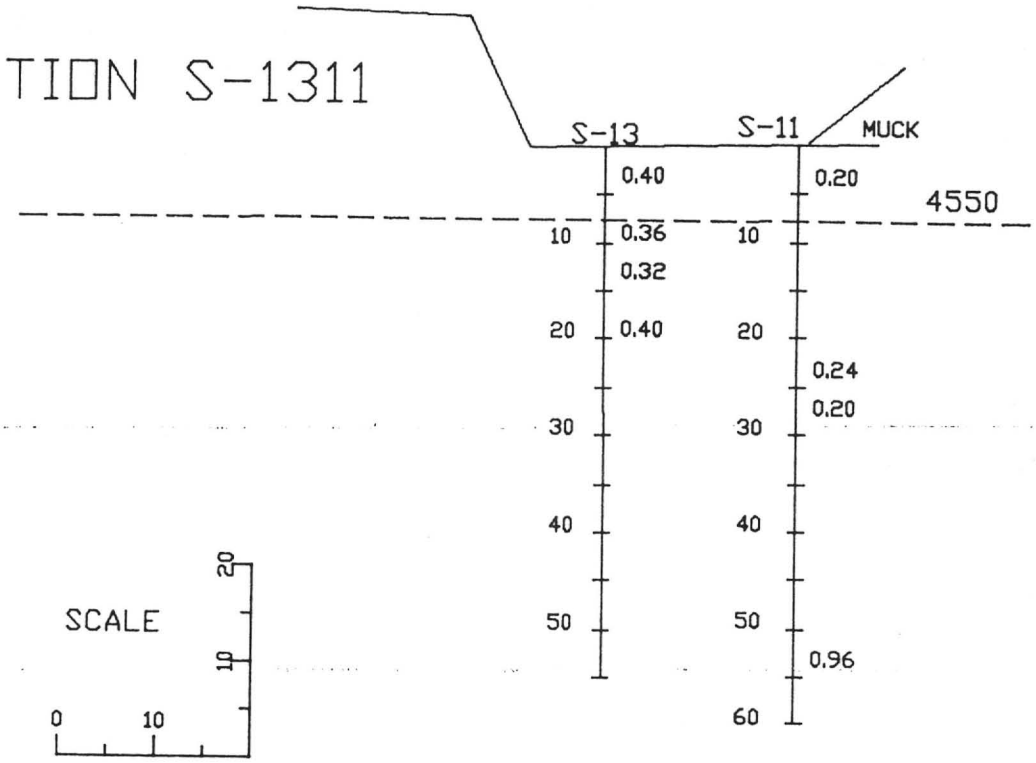
SECTION S-0703



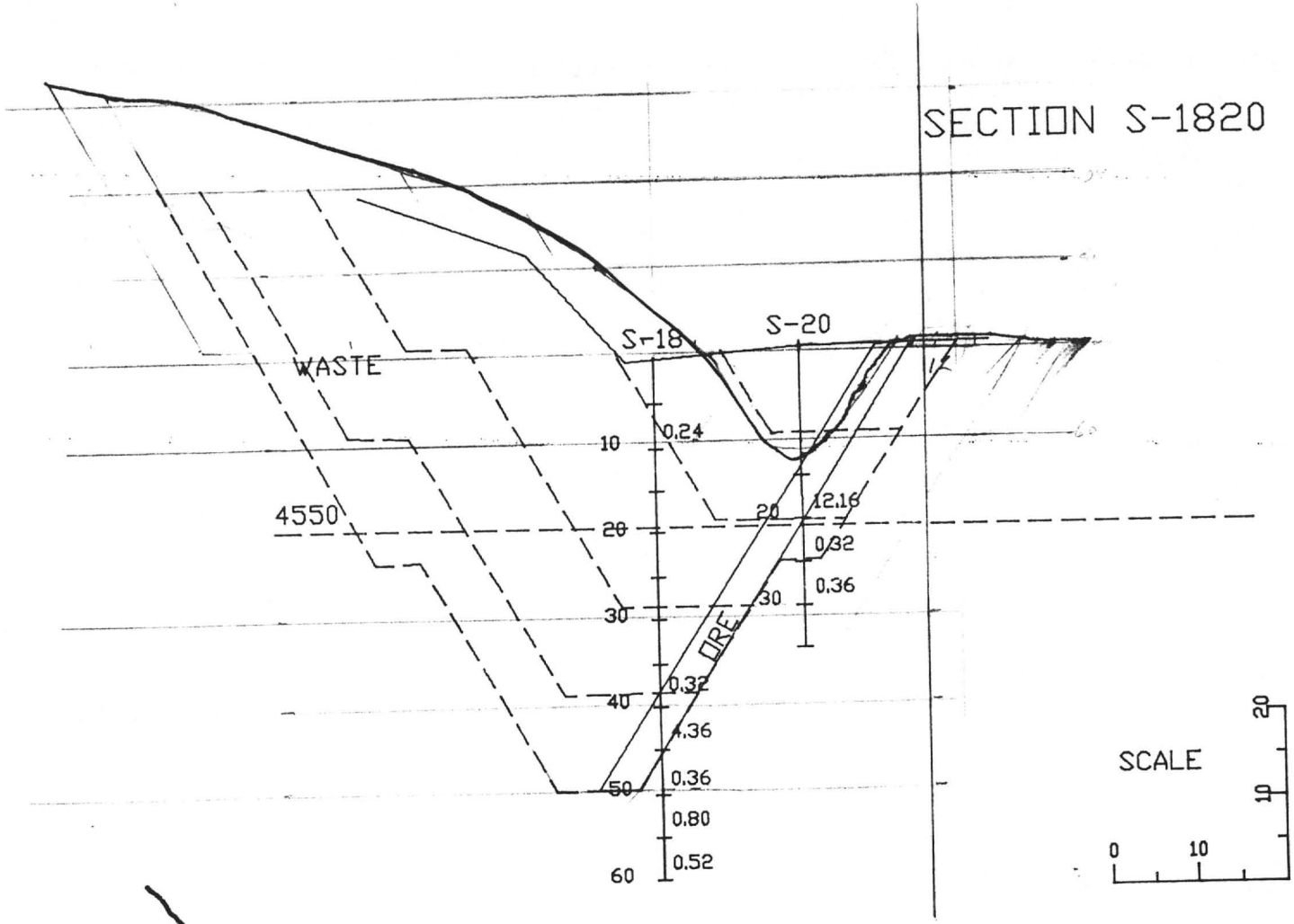


3-0703

SECTION S-1311

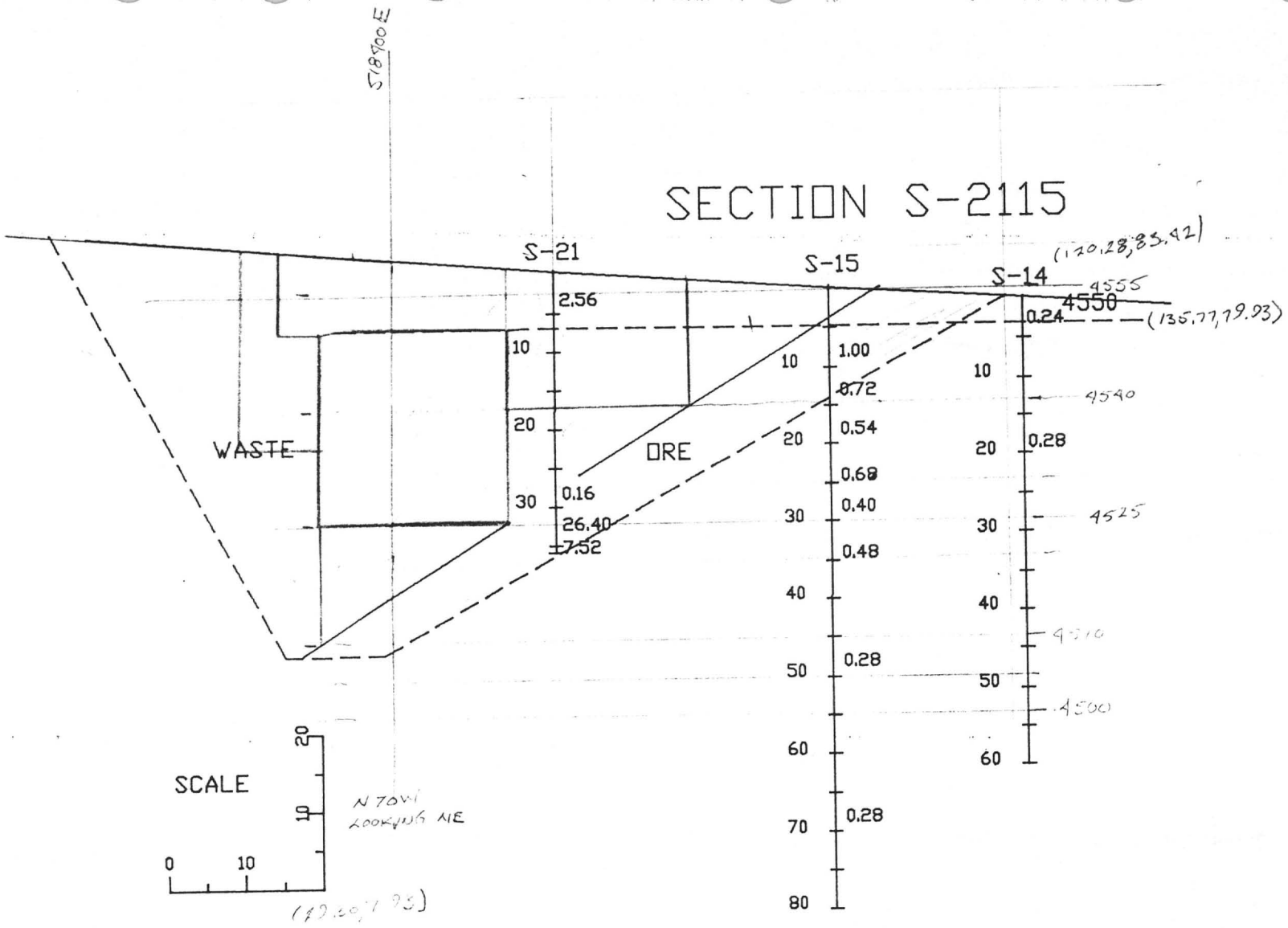


S-1311


SECTION S-1820
S-18
S-20
WASTE
4550
ORE
10
20
30
40
50
60
0.24
12.16
0.32
0.36
0.32
4.36
0.36
0.80
0.52
SCALE
0
10
20

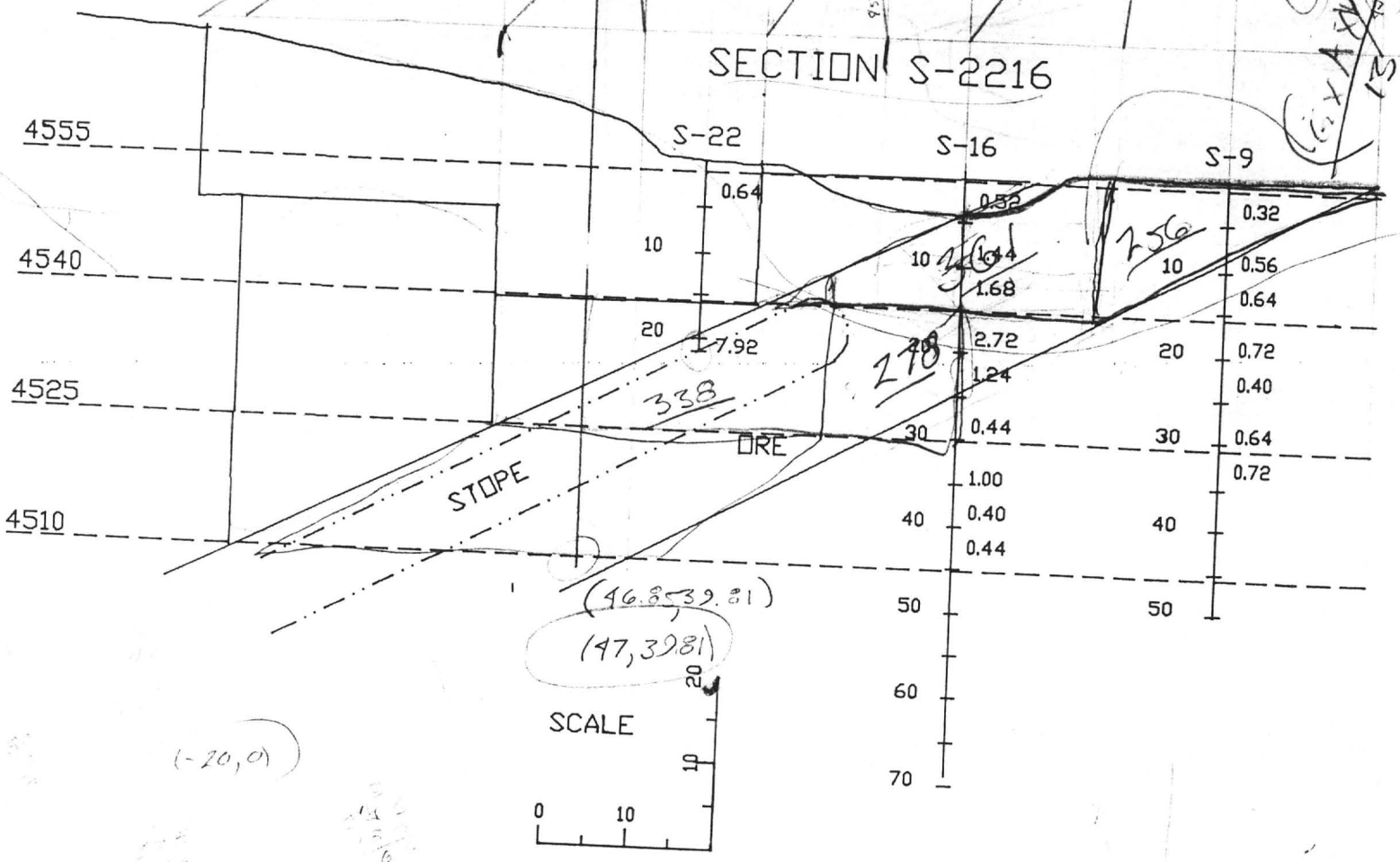
S-1820

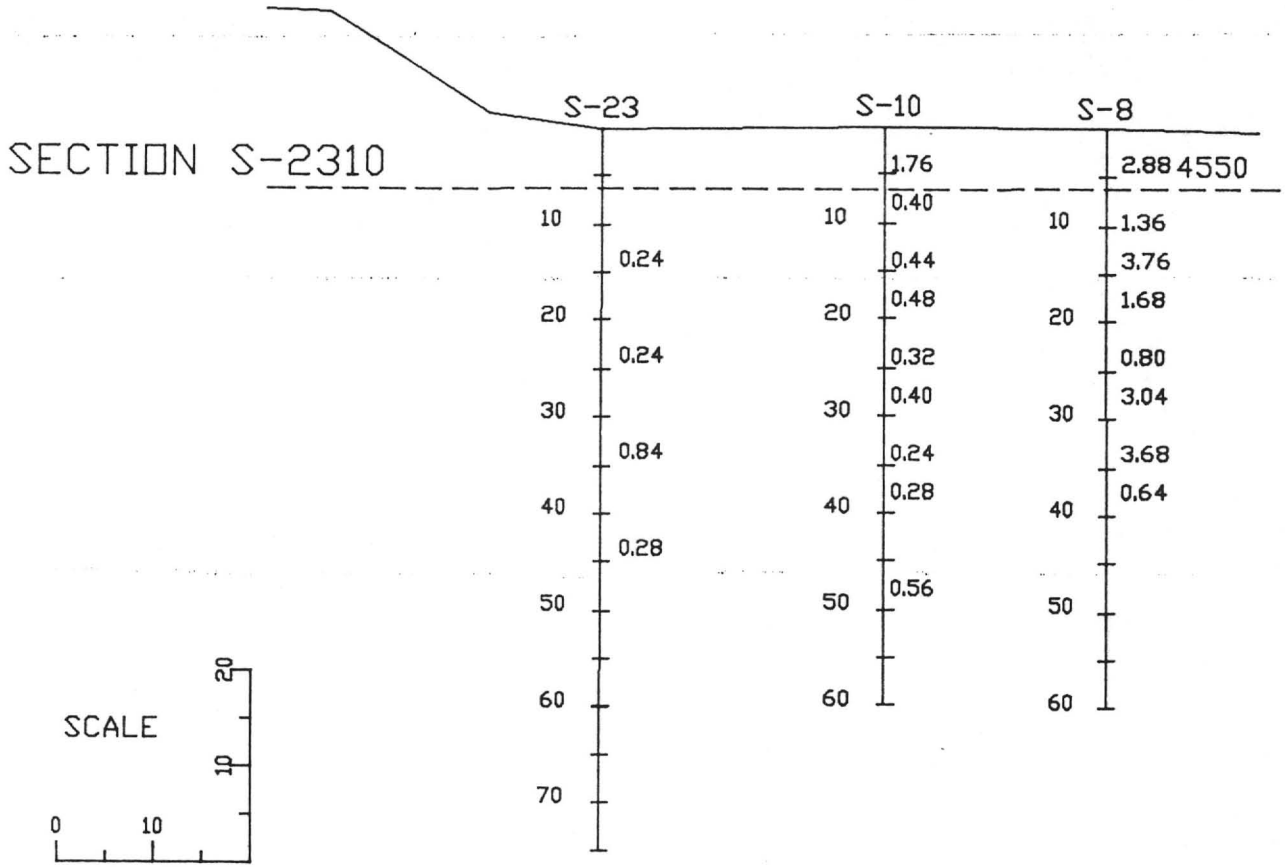
SECTION S-2115



	WASTE	ORE
1	188.02	261.41
2	836.34	237.00
3	792.64	182.83
1	181	251
2	804	228
3	762	176

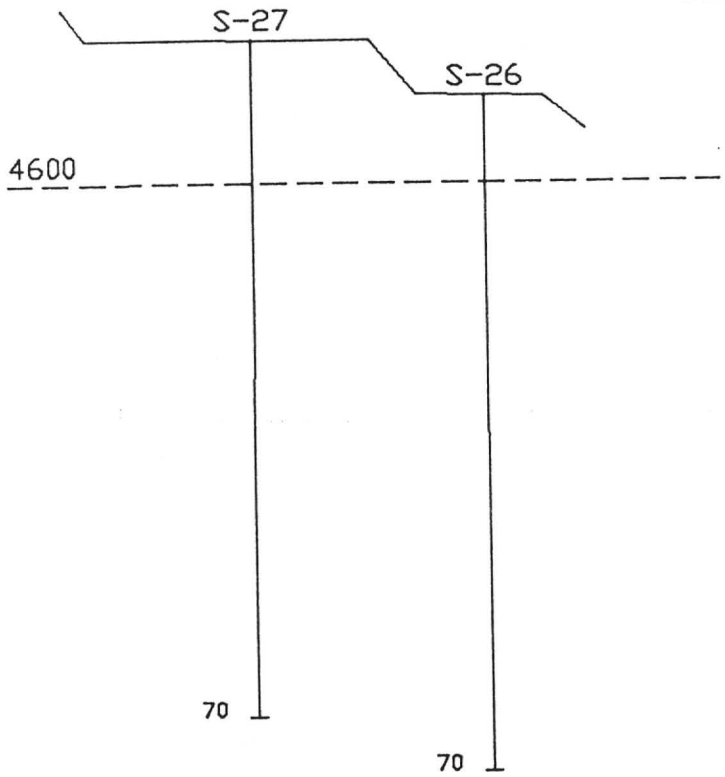
S-2115

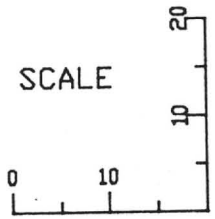

SECTION S-2216
S-22
S-16
S-9
4555
4540
4525
4510
0.64
7.92
0.32
1.68
2.72
1.24
0.44
1.00
0.40
0.44
0.32
0.56
0.64
0.72
0.40
0.64
0.72
10
20
30
40
50
60
70
ORE
STOPE
SCALE
0
10
20
(46.85,39.81)
(47,39.81)
(-20,0)
342
518248,254090
254086
(-46.67,-12.29)
93.67
S-2216


SECTION S-2310
S-23
S-10
S-8
1.76
2.88 4550
10
0.40
1.36
0.24
0.44
3.76
20
0.48
1.68
0.24
0.32
0.80
30
0.40
3.04
0.84
0.24
3.68
40
0.28
0.64
0.28
50
0.56
60
70
SCALE
0
10
20

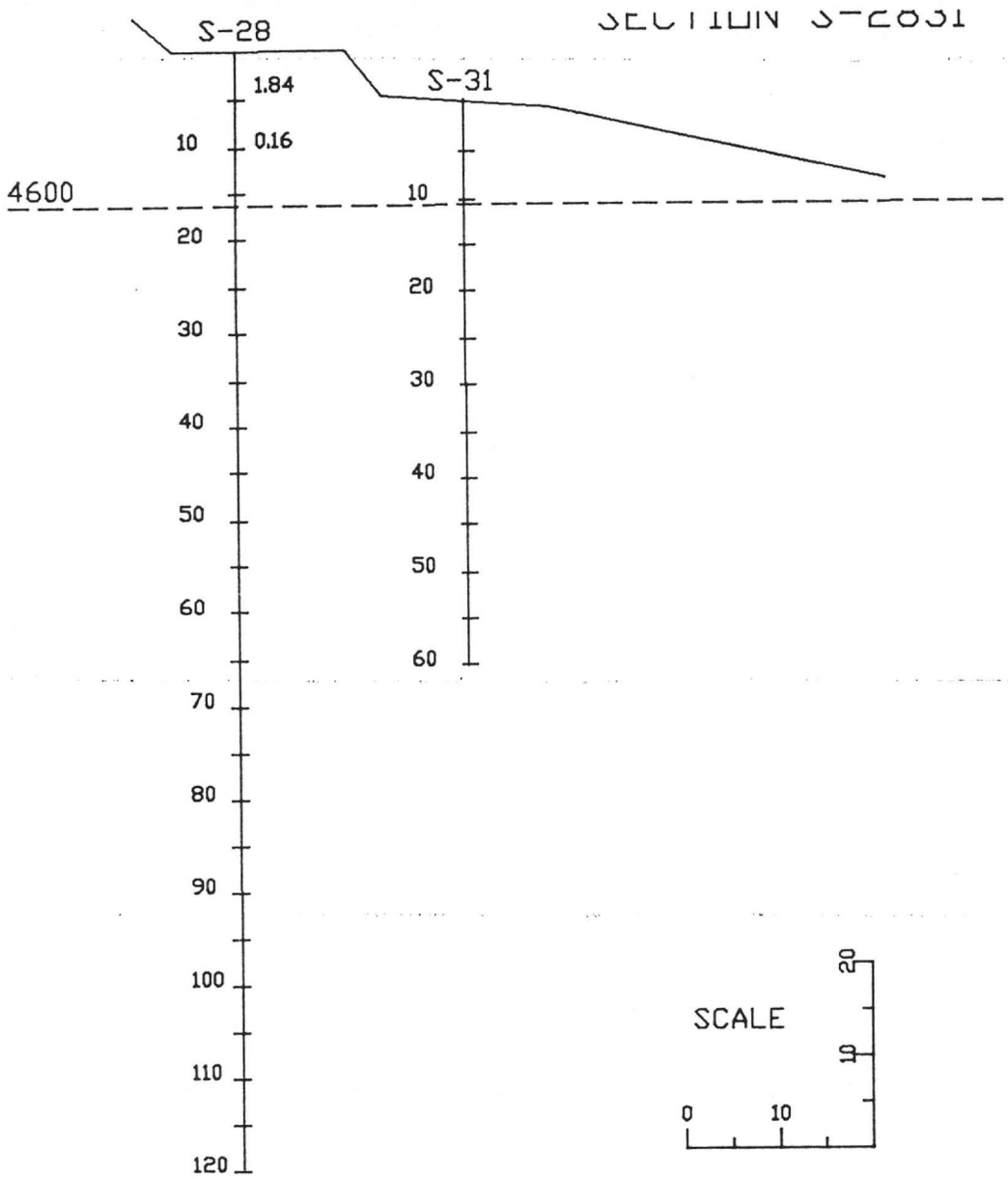
S-2310

SECTION S-2726



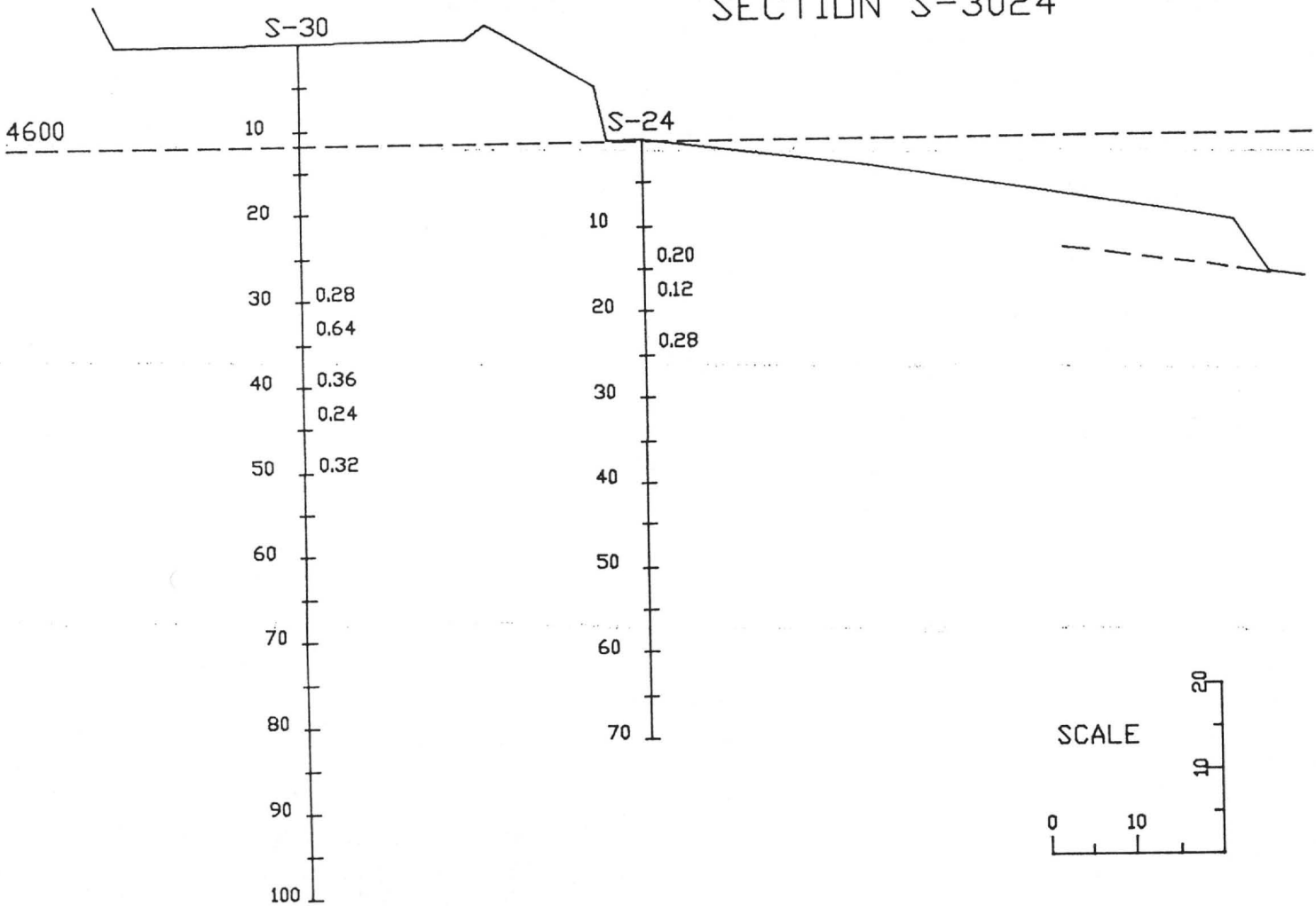


S-2726


S-28
S-31
1.84
0.16
4600
10
20
30
40
50
60
70
80
90
100
110
120
SCALE
0
10
20

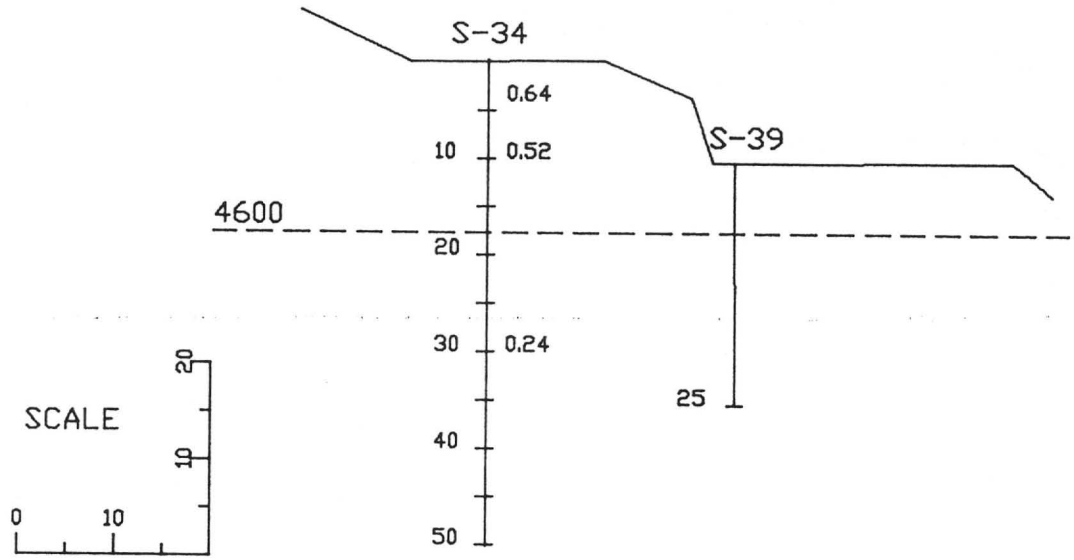
5-2831

SECTION S-3024

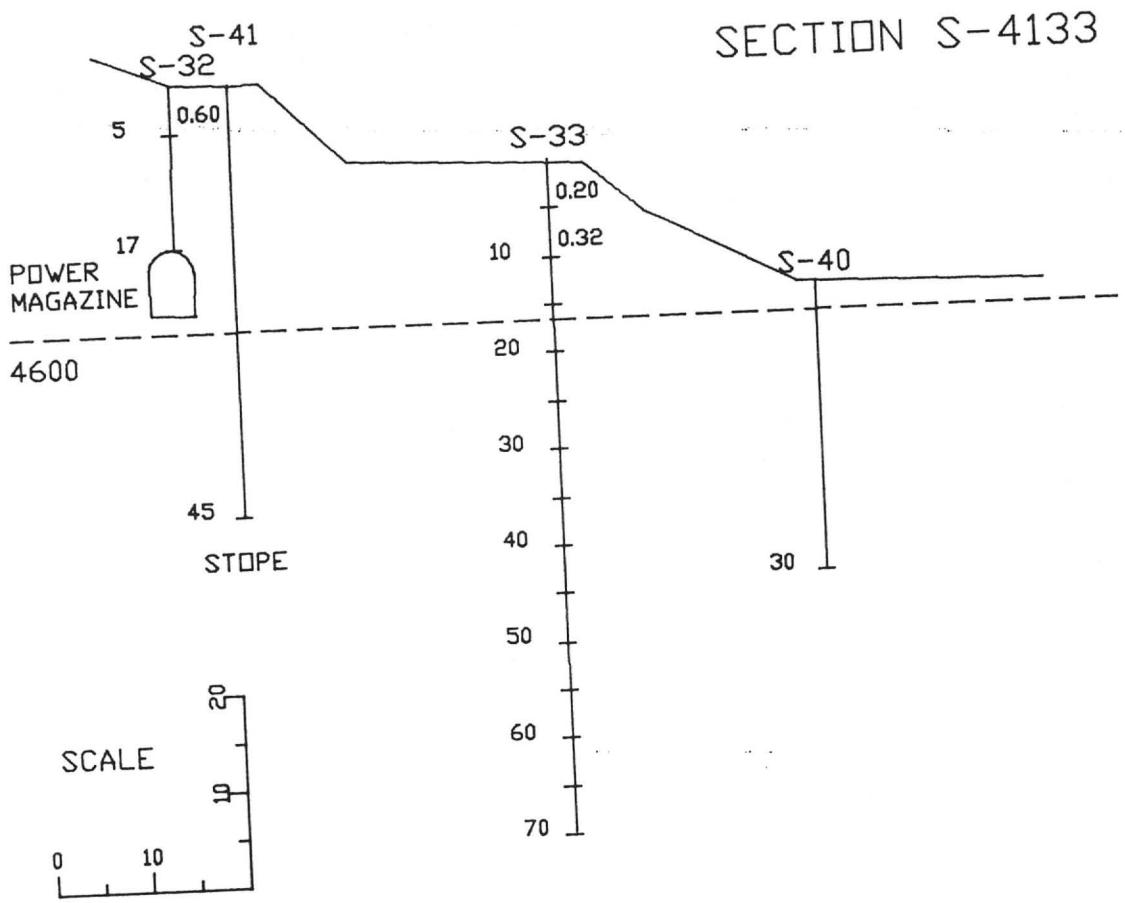


S-3024

SECTION S-3439

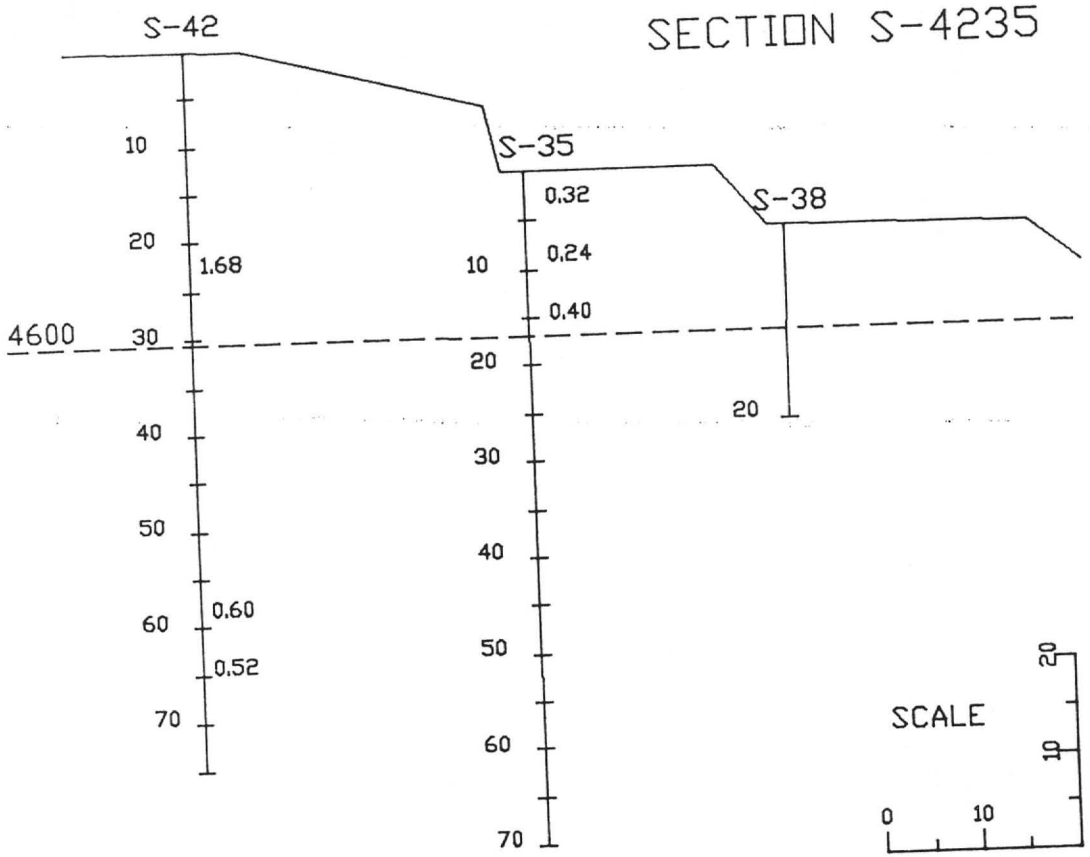


S-3439


SECTION S-4133
S-41
S-32
0.60
5
17
POWER
MAGAZINE
4600
45
STOPE
S-33
0.20
0.32
10
20
30
40
50
60
70
S-40
30
SCALE
0
10
20

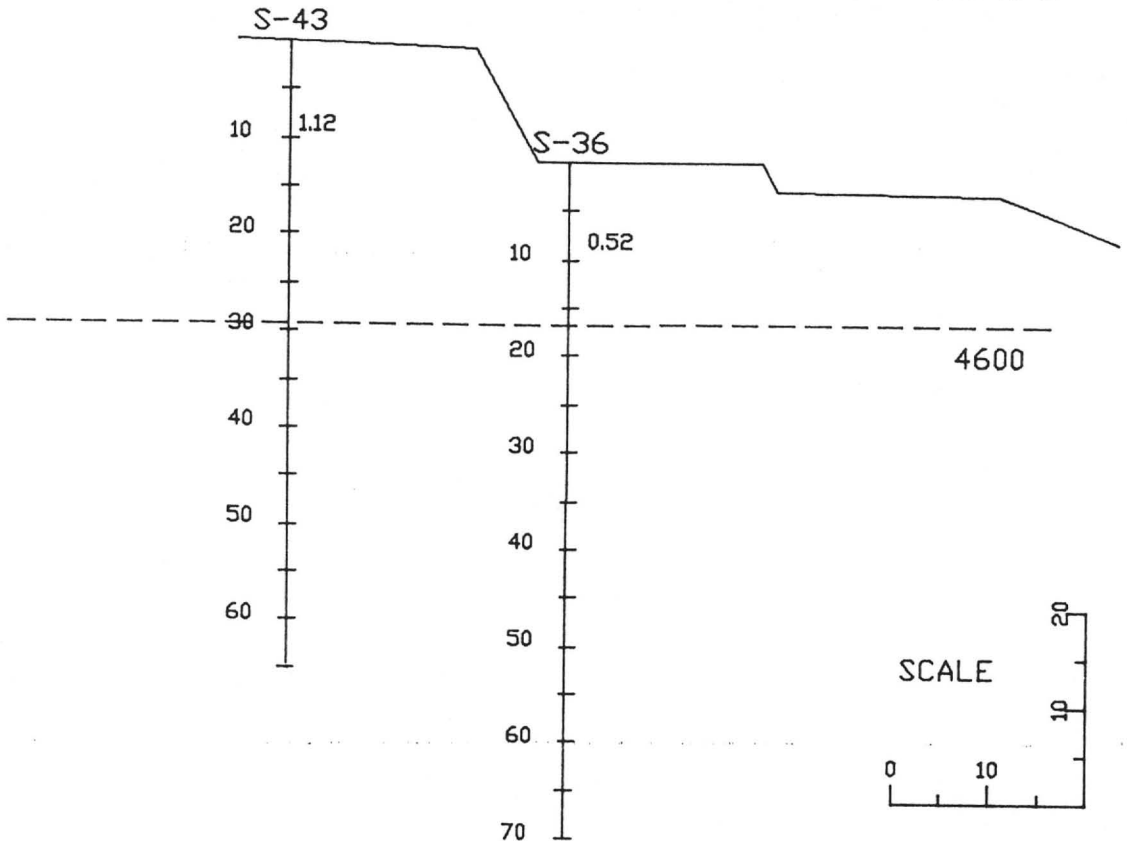
S. 4133

SECTION S-4235



S-4235

SECTION S-4336

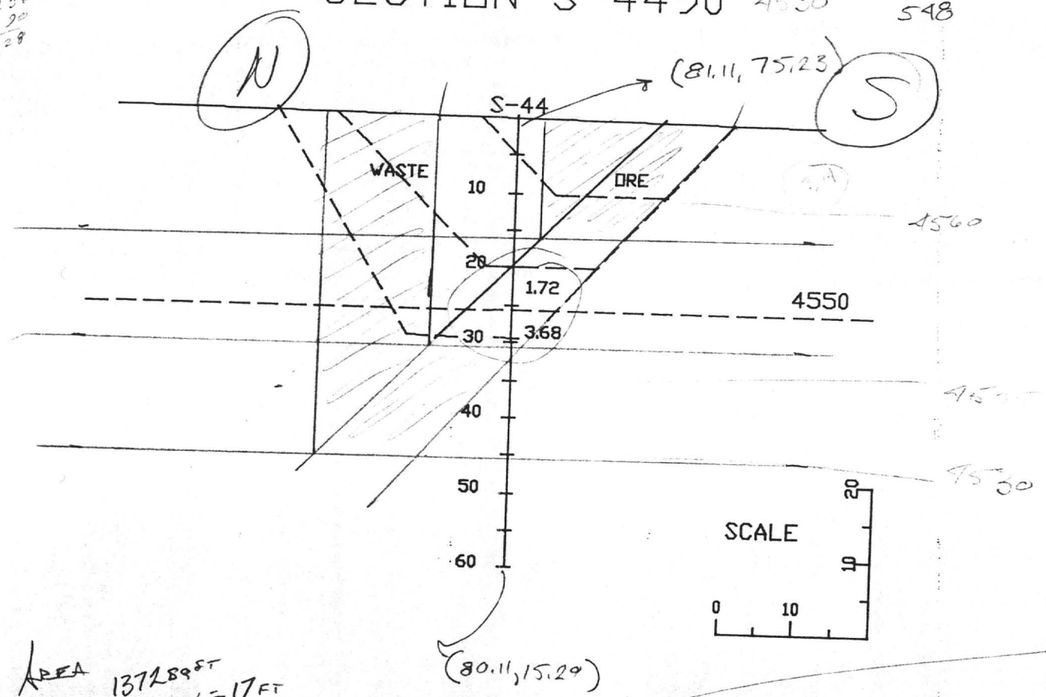


S-4336

12 FT BETWEEN X-SECTIONS

	WASTE	ORE
4560	119	157
4545	349	172
4530	548	188

SECTION S-4490



RAMP AREA 1372 SQFT

WIDTH = 24+10 = 34/2 = 17 FT

RAMP #1 266

RAMP #2 = 1372 − 266 =

AREA CONTOUR 28 SQ FT.

WIDTH 4.75 FT

RAMP #1 A = 266 SQ FT

W = 17 FT

RAMP #2 1372 SQFT

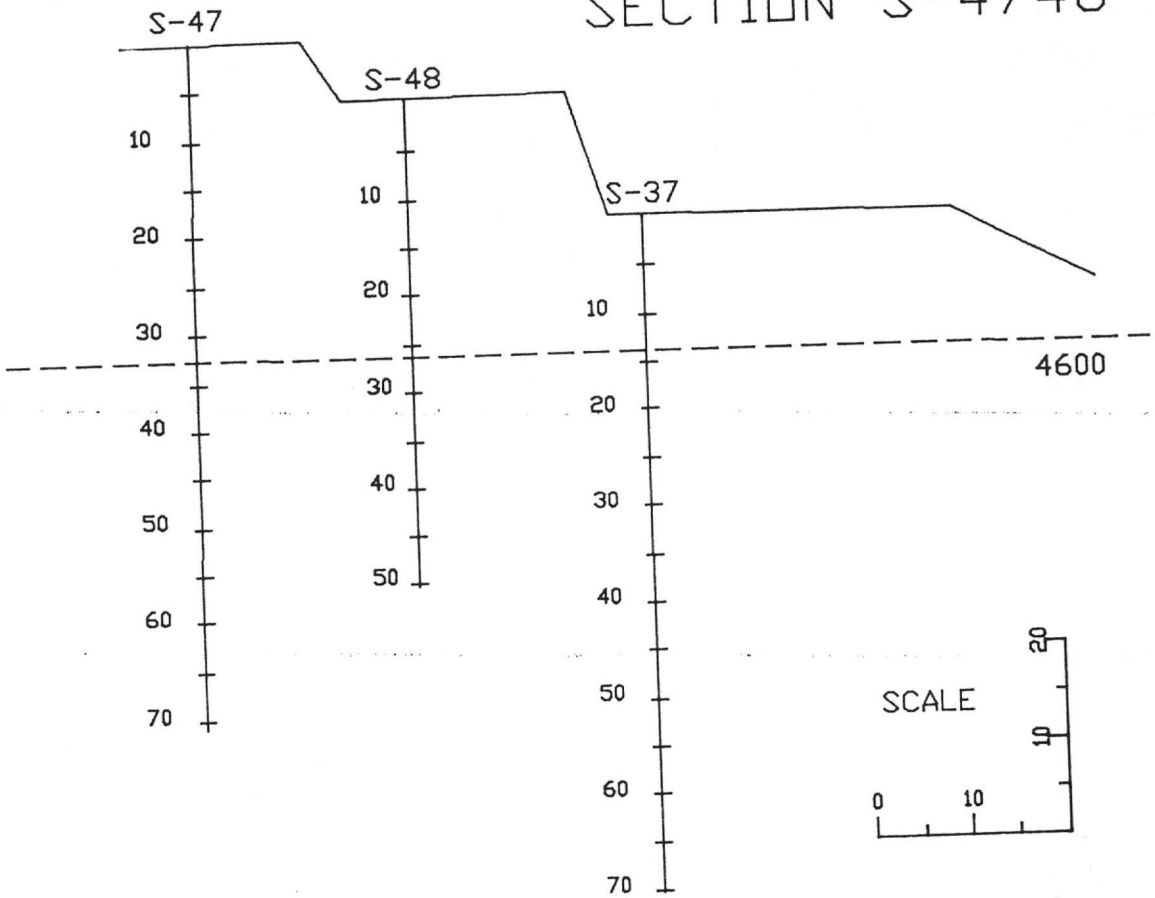
W = 15 FT

LESS − 28 SQFT

FROM RAMP #1 4.8 FT

5-4490

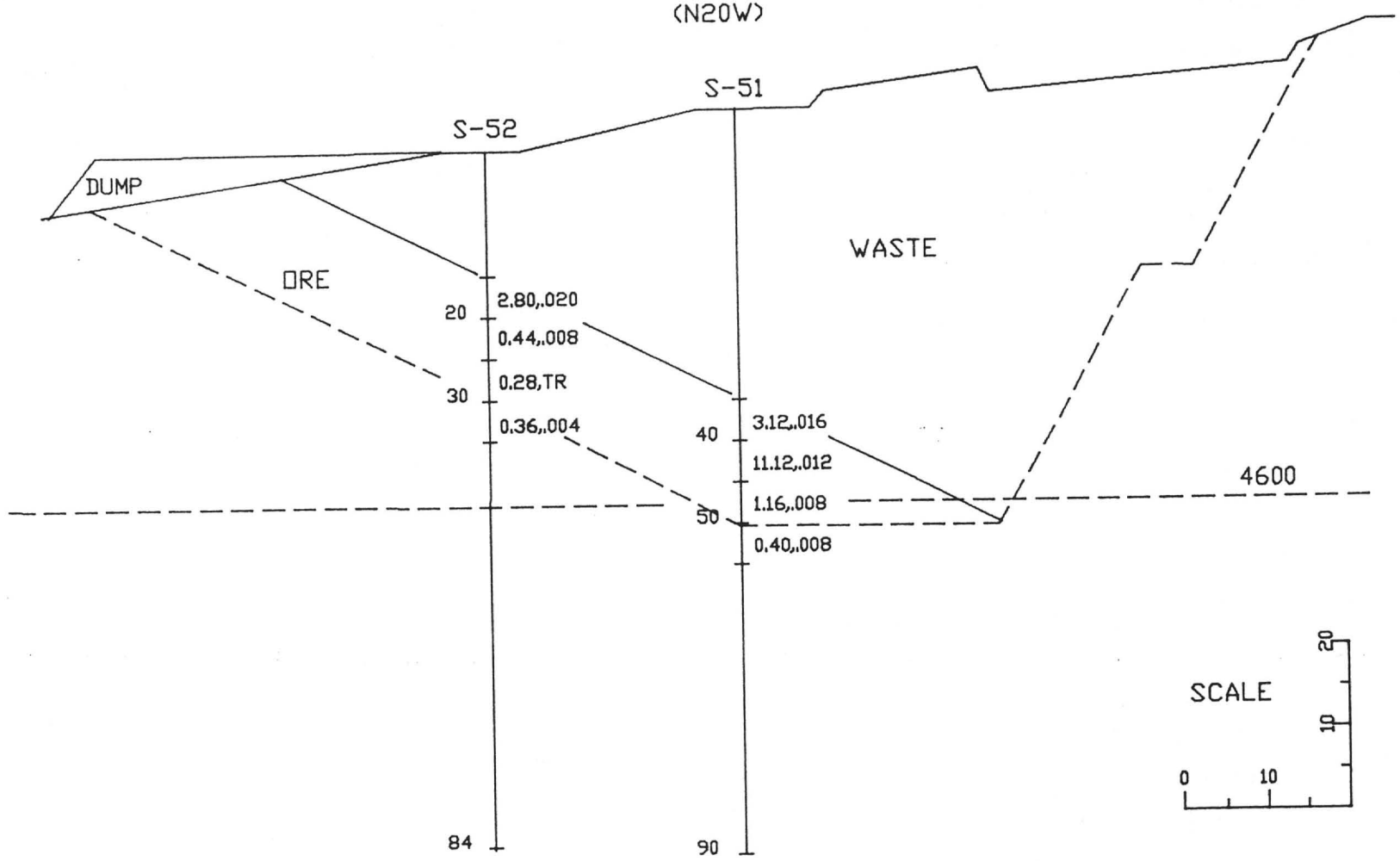
SECTION S-4748



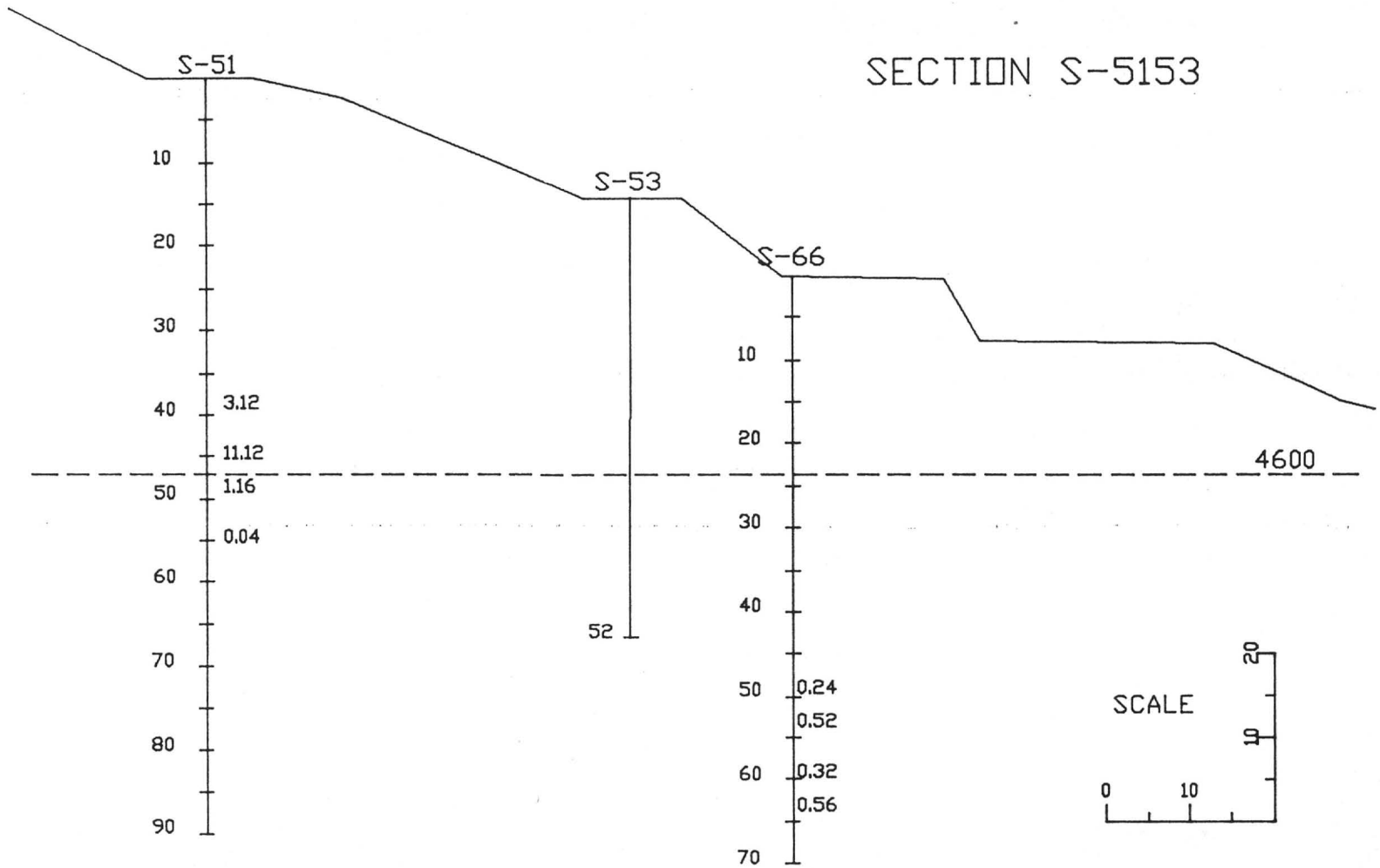
S-4748

SECTION S-5152

(N20W)



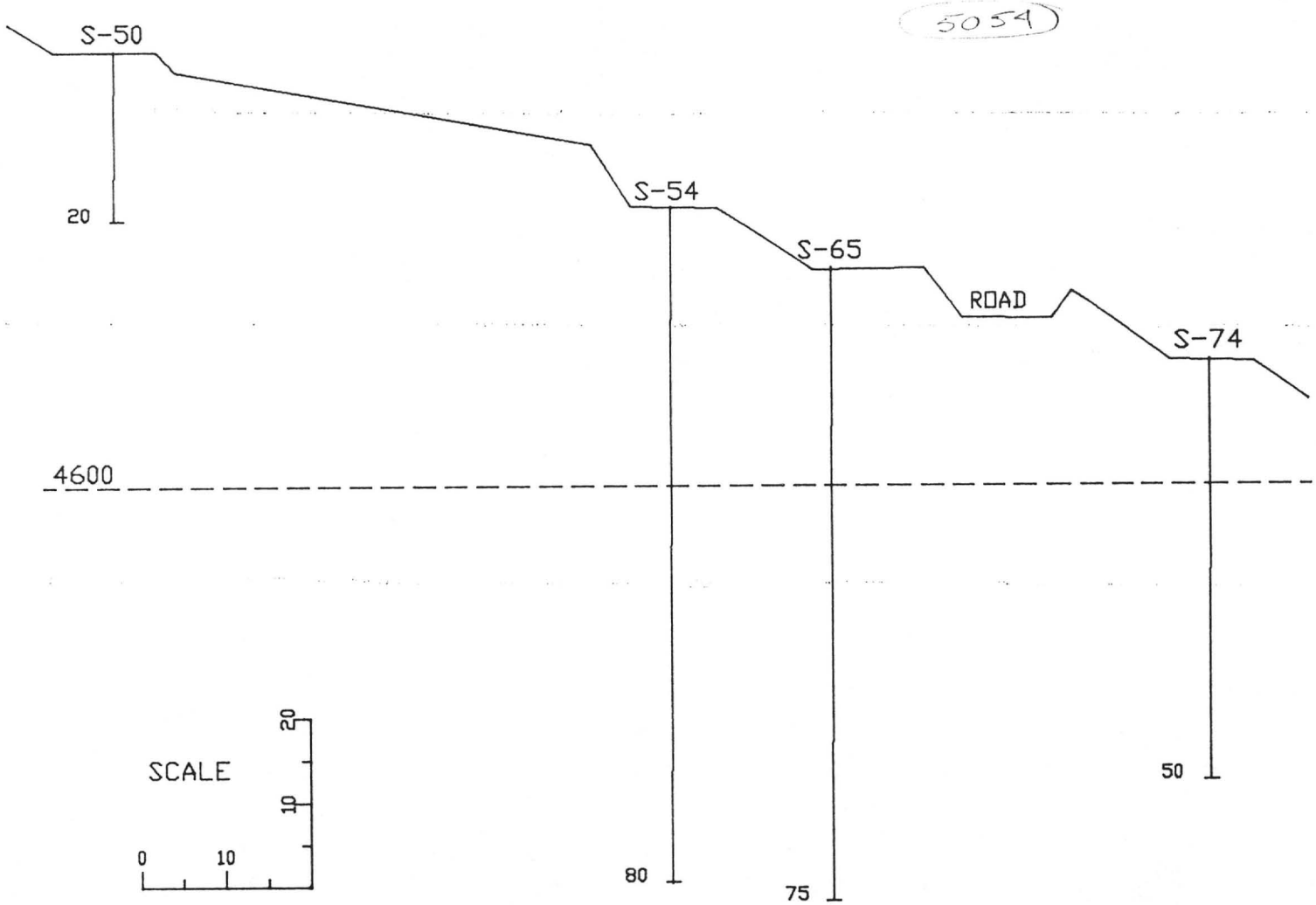
S-5152


SECTION S-5153
S-51
S-53
S-66
10
20
30
40
50
60
70
80
90
3.12
11.12
1.16
0.04
52
10
20
30
40
50
60
70
0.24
0.52
0.32
0.56
4600
SCALE
0
10
10
20

S-5153

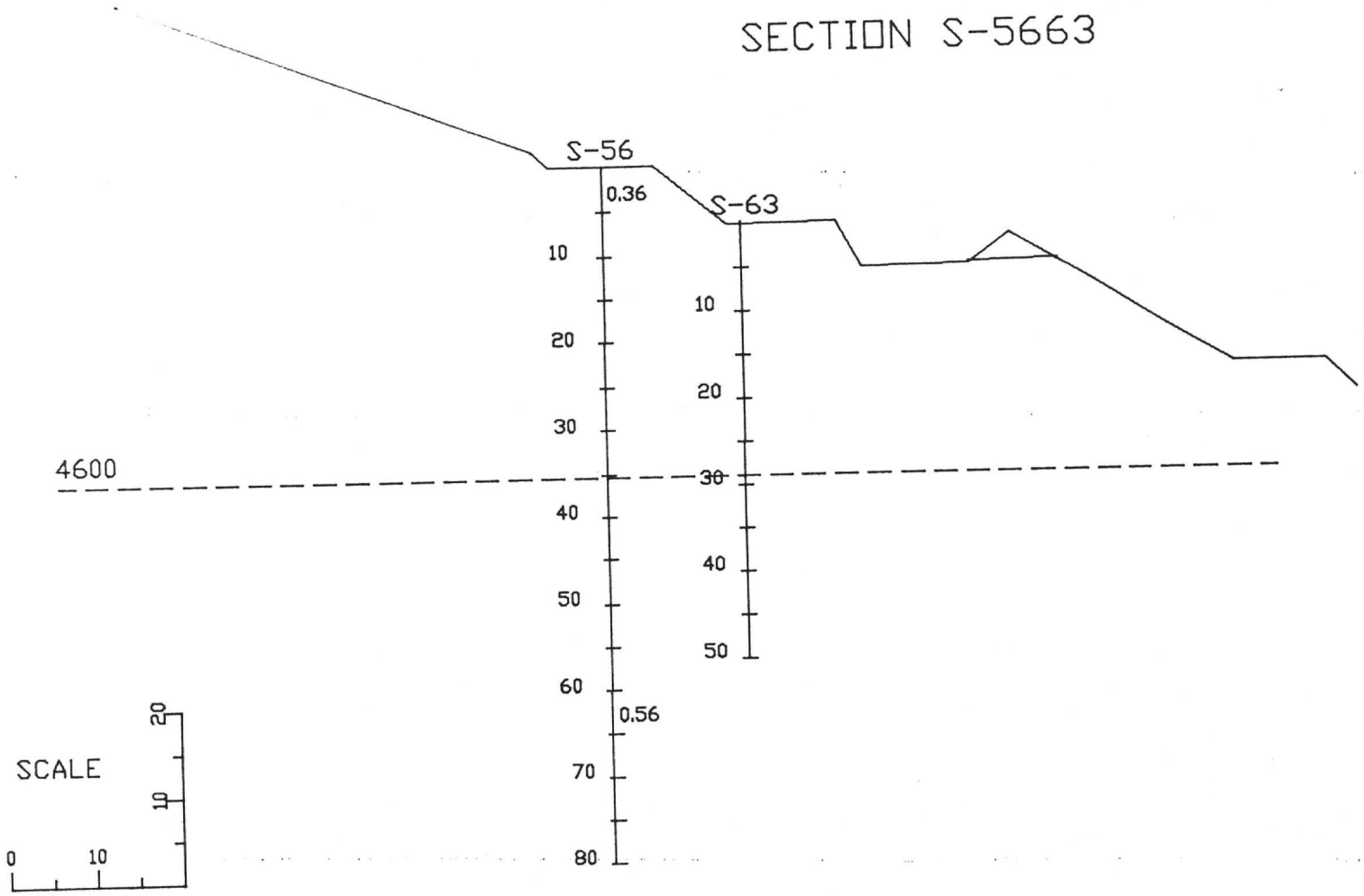
SECTION S-5465

5054

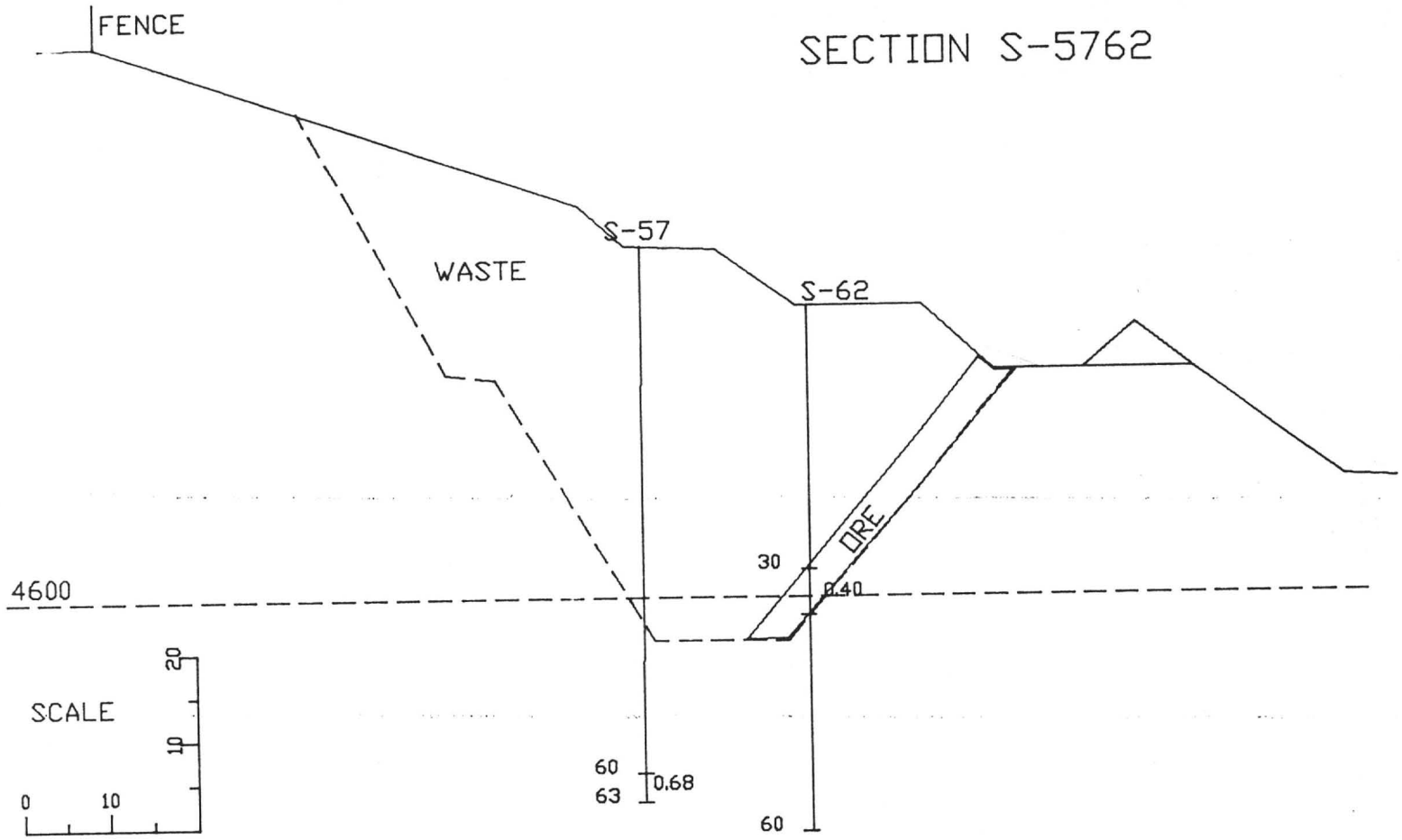


S-5465

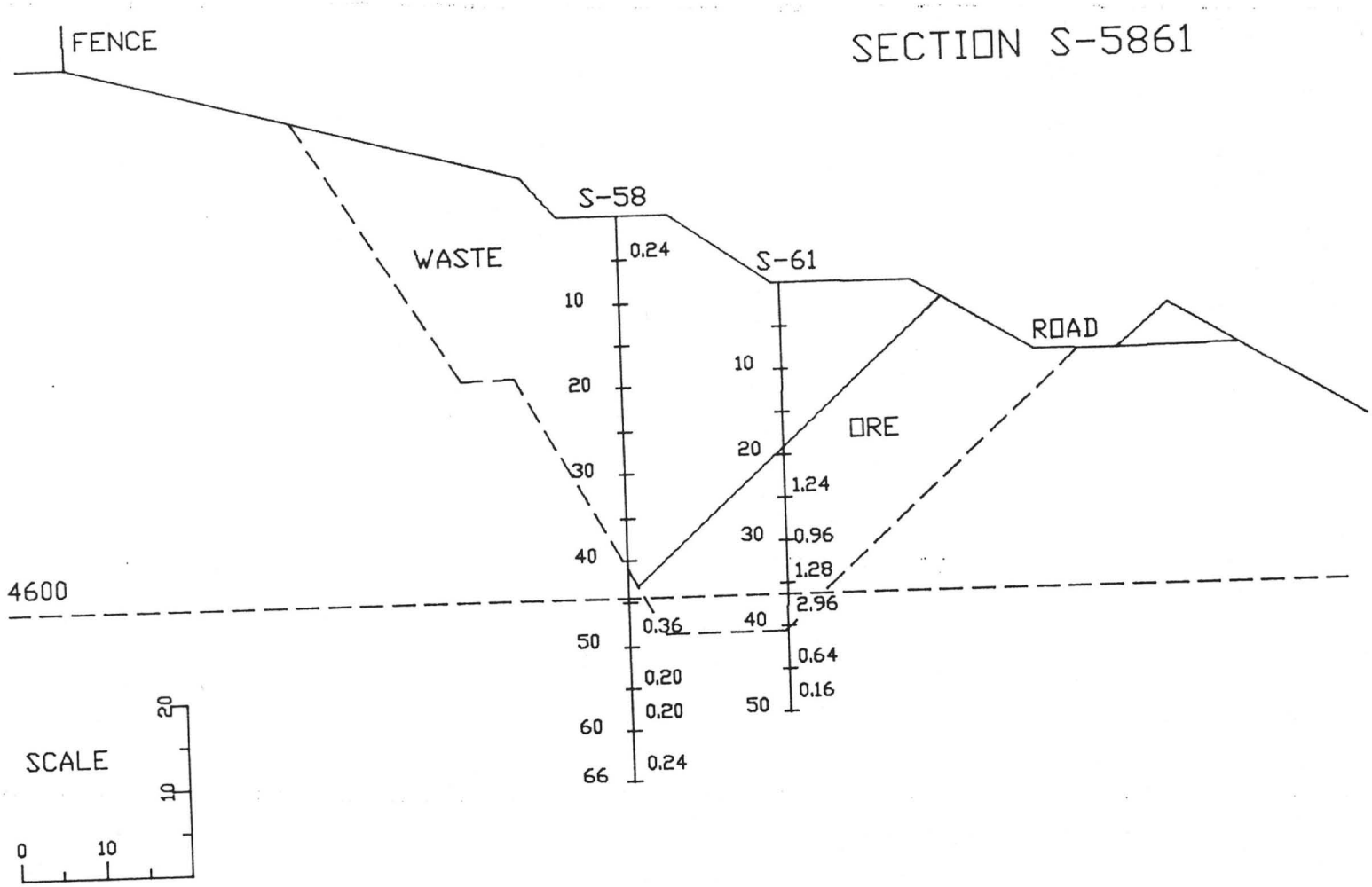
SECTION S-5663



S-5663

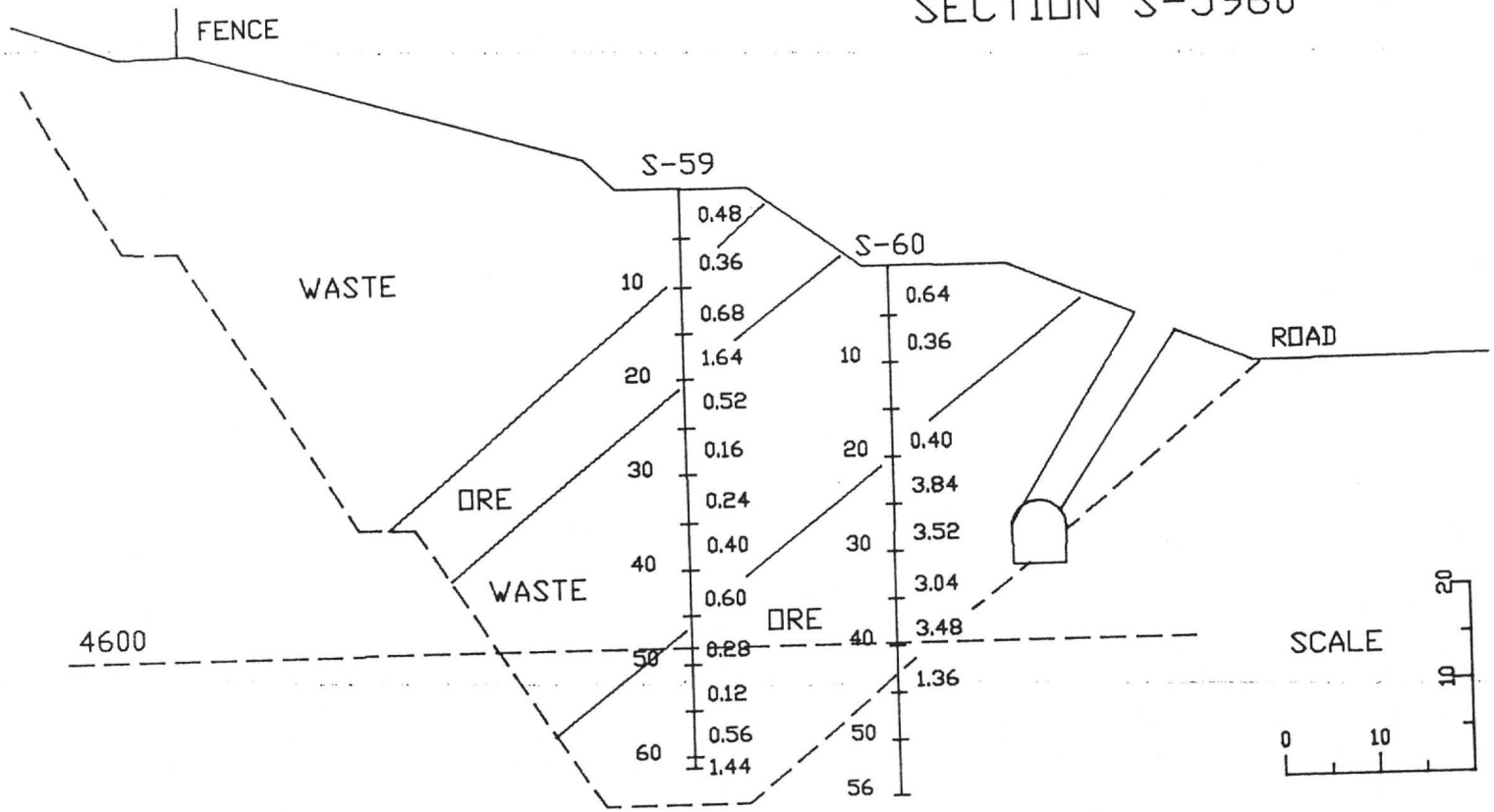

SECTION S-5762
FENCE
WASTE
S-57
S-62
ORE
30
0.40
4600
60
63
0.68
60
SCALE
0
10
10
20

S-5762

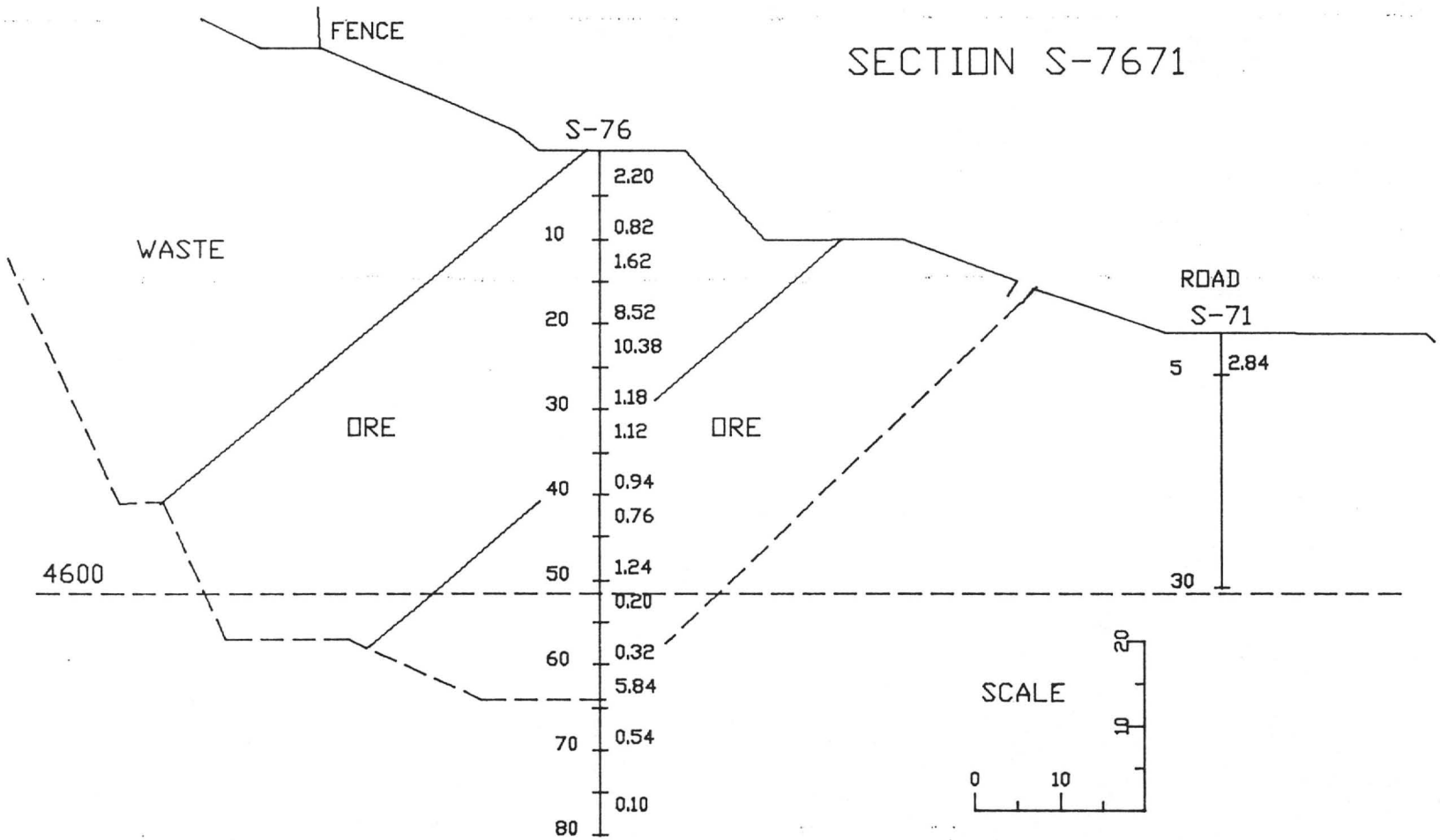

SECTION S-5861
FENCE
S-58
S-61
WASTE
ORE
ROAD
4600
0.24
10
20
30
40
50
60
66
0.36
0.20
0.20
0.24
10
20
30
40
50
1.24
0.96
1.28
2.96
0.64
0.16
SCALE
0
10
20

S-5861

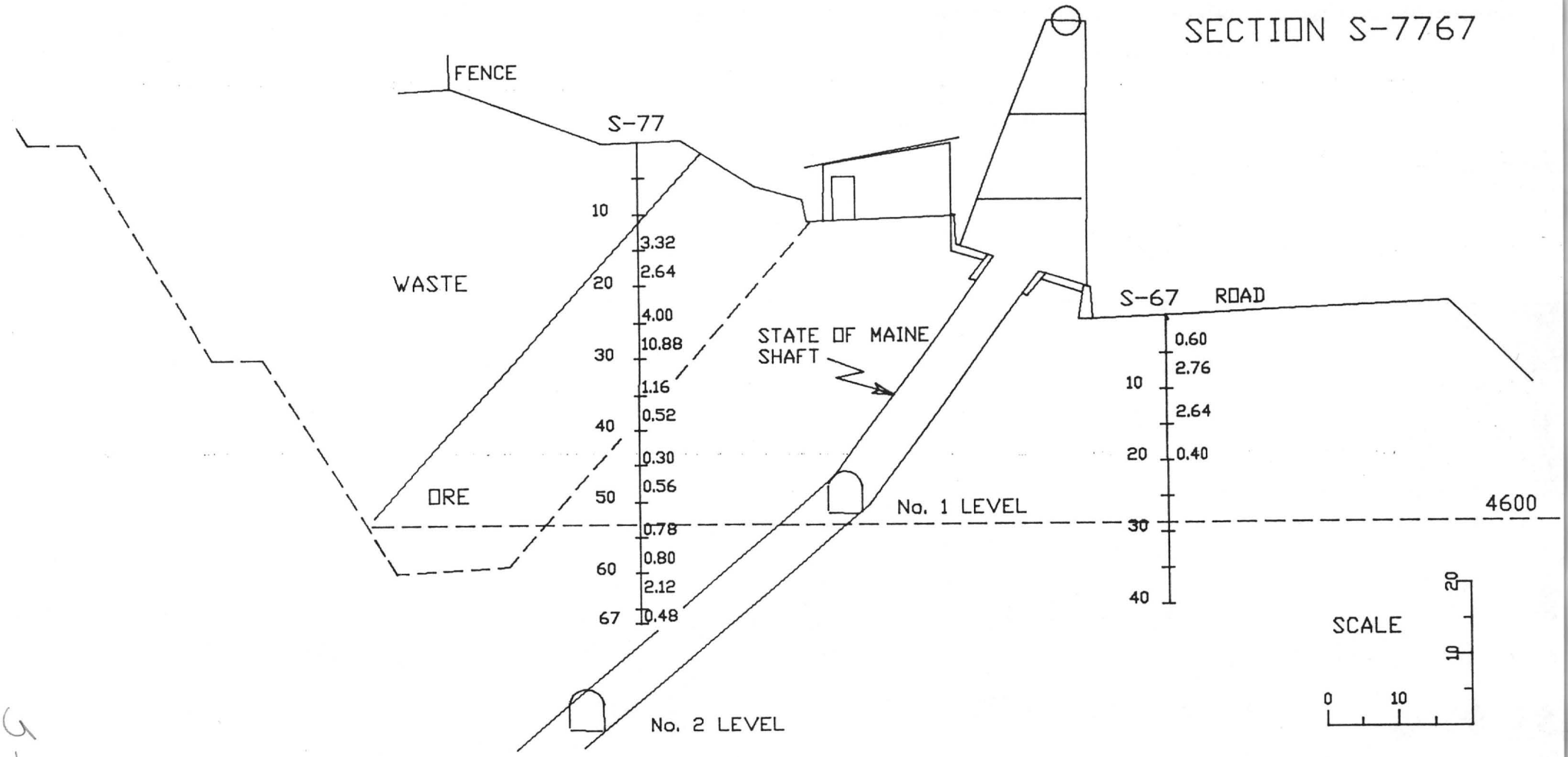
SECTION S-5960



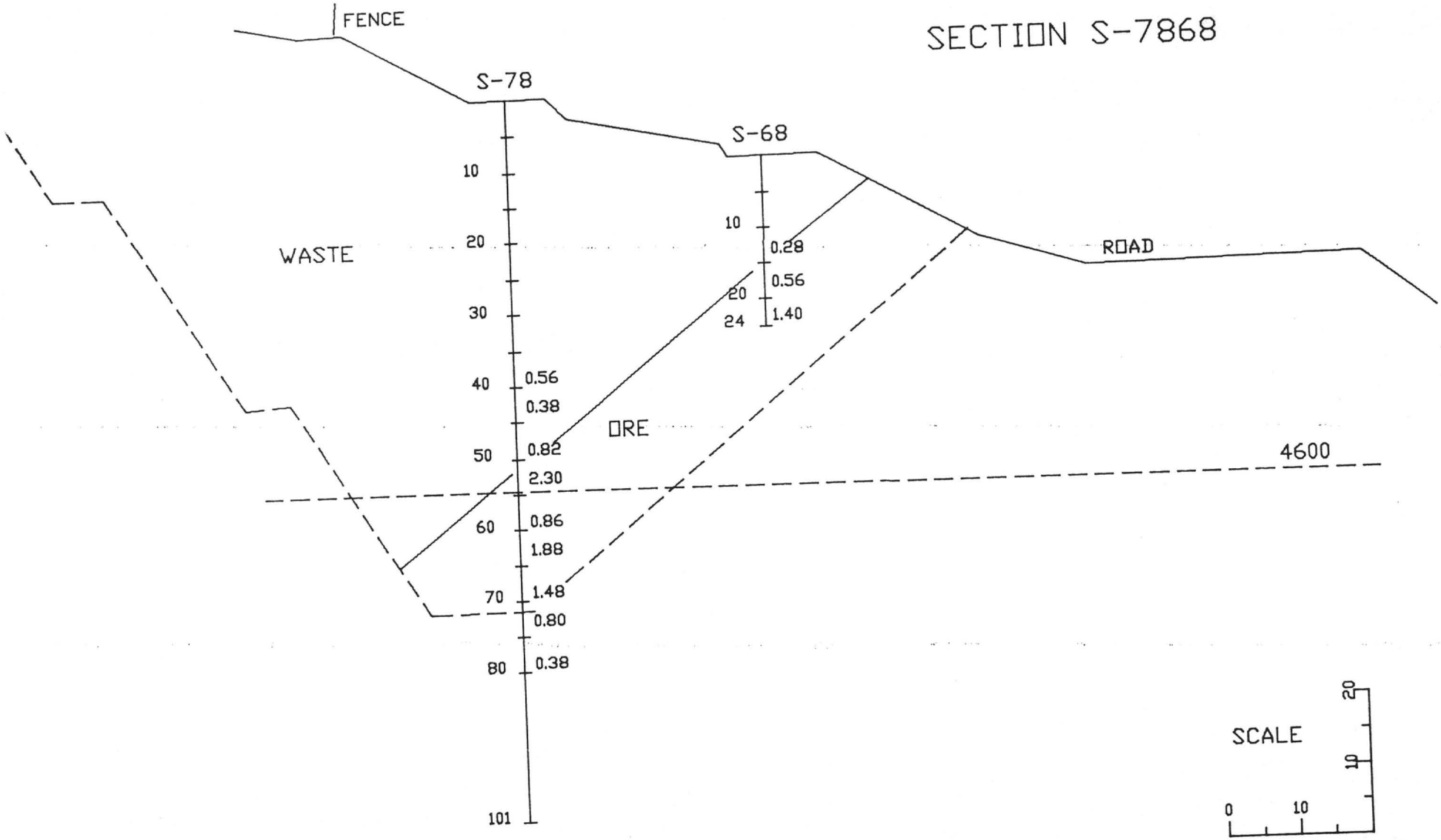
S-5960


SECTION S-7671
FENCE
S-76
WASTE
ORE
ORE
ROAD
S-71
4600
2.20
0.82
1.62
8.52
10.38
1.18
1.12
0.94
0.76
1.24
0.20
0.32
5.84
0.54
0.10
10
20
30
40
50
60
70
80
5
2.84
30
SCALE
0
10
10
20

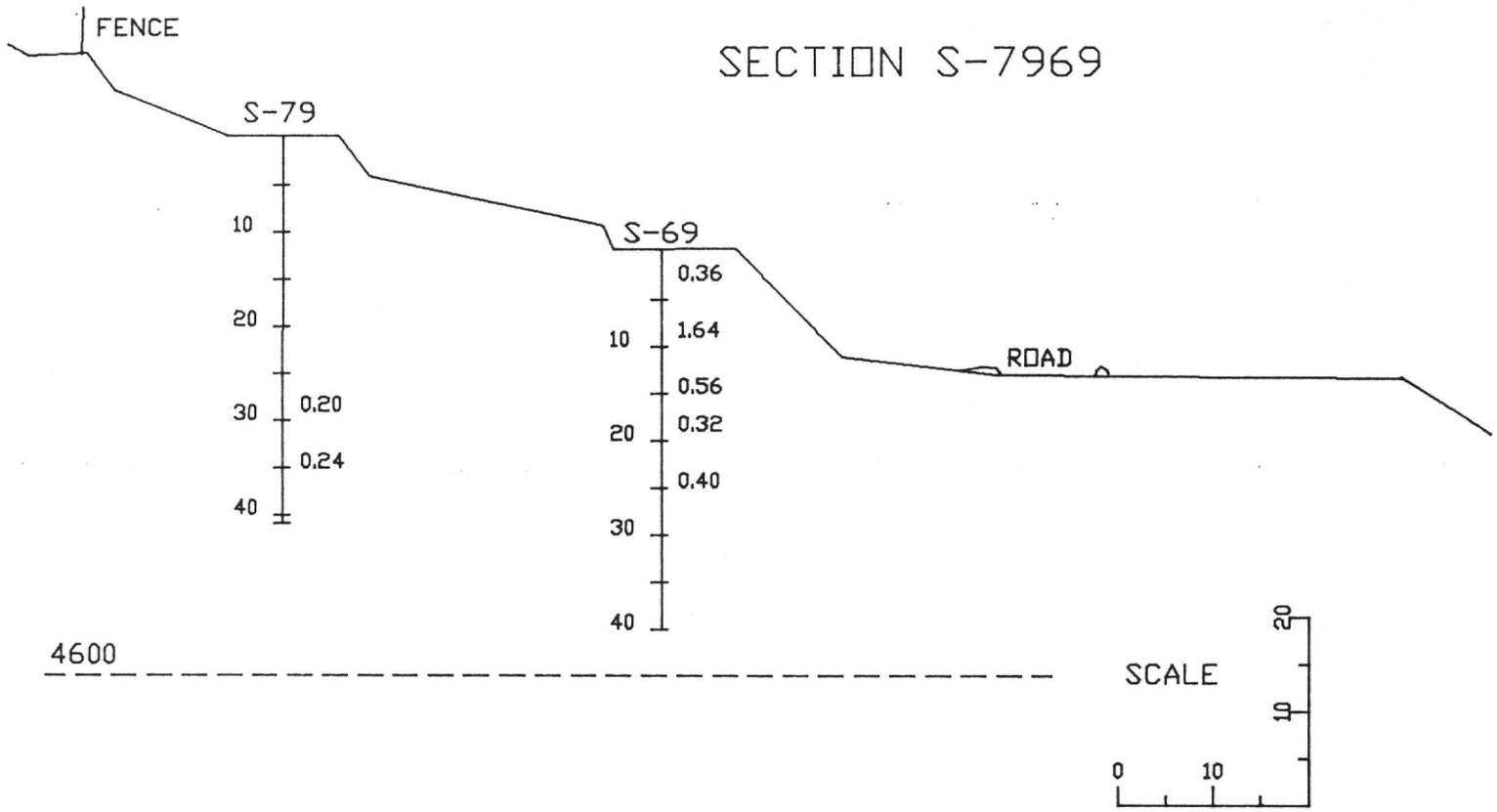
S-7671


SECTION S-7767
FENCE
S-77
10
3.32
20
2.64
4.00
30
10.88
1.16
40
0.52
0.30
50
0.56
0.78
60
0.80
2.12
67
0.48
WASTE
ORE
STATE OF MAINE
SHAFT
No. 1 LEVEL
No. 2 LEVEL
S-67
ROAD
0.60
2.76
10
2.64
20
0.40
30
40
4600
SCALE
0
10
20

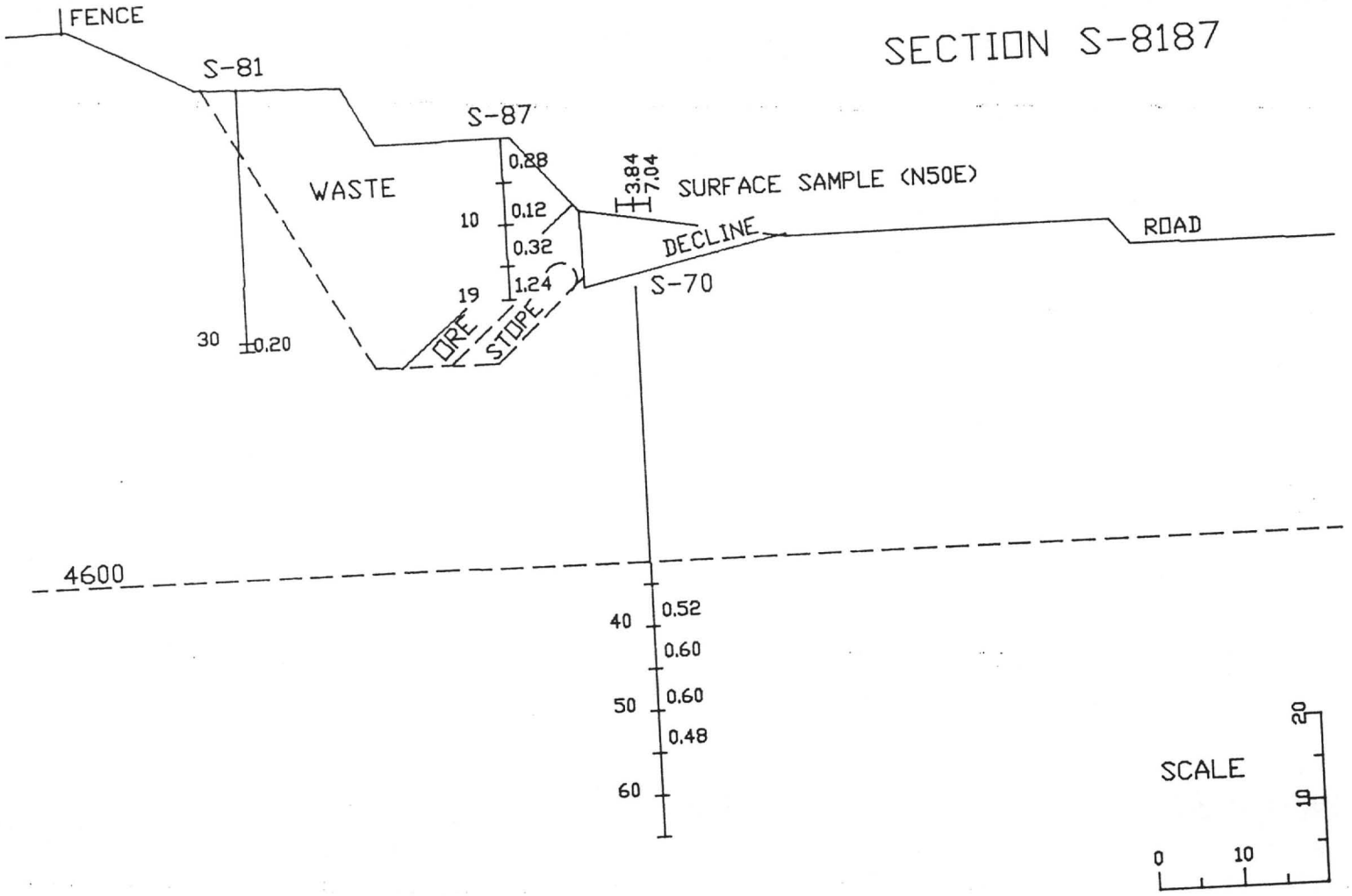
5-7767


SECTION S-7868
FENCE
S-78
S-68
ROAD
WASTE
ORE
4600
10
20
30
40
50
60
70
80
101
0.56
0.38
0.82
2.30
0.86
1.88
1.48
0.80
0.38
10
20
24
0.28
0.56
1.40
SCALE
0
10
20

S-7868

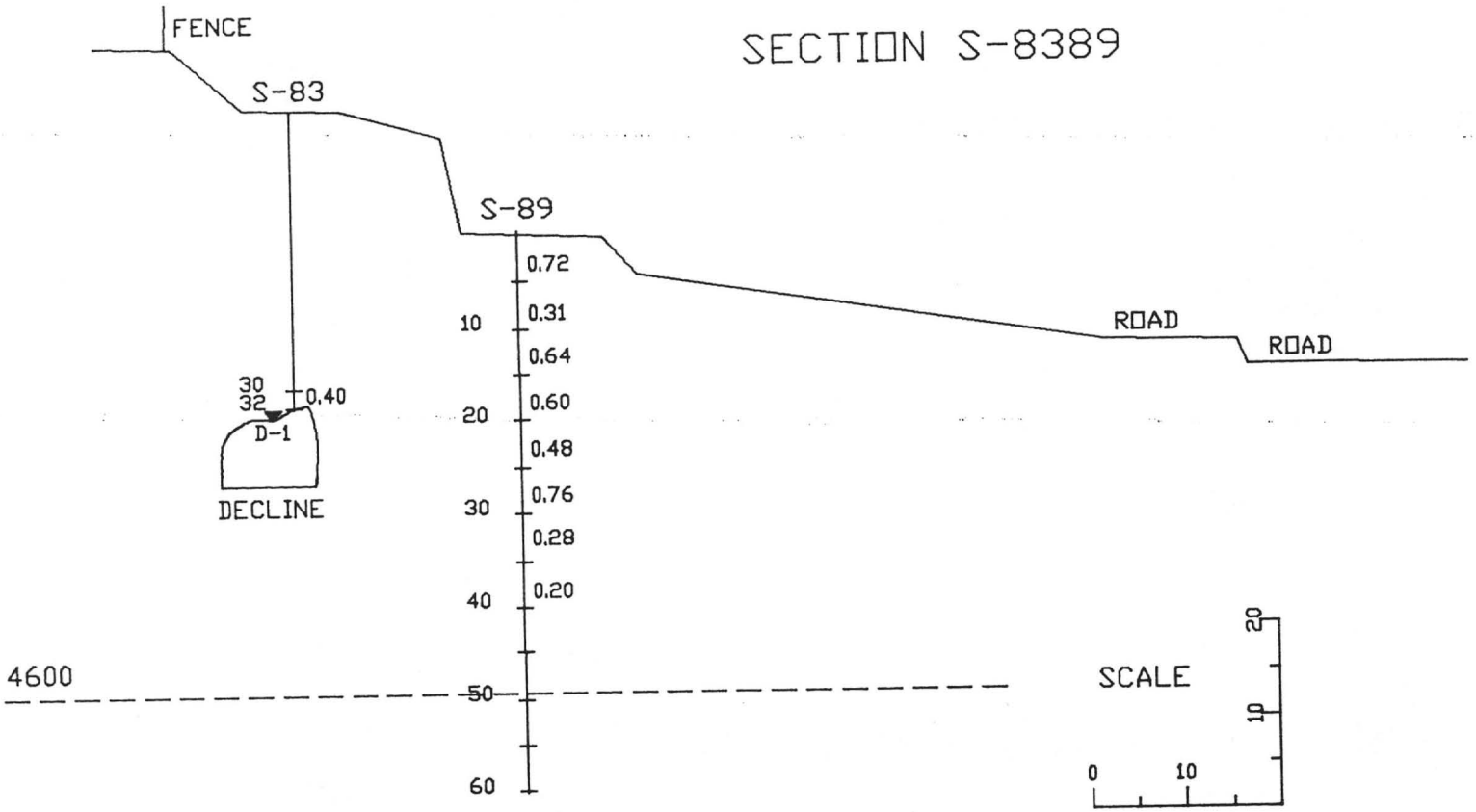

SECTION S-7969
FENCE
S-79
S-69
ROAD
10
20
30
40
0.20
0.24
0.36
1.64
0.56
0.32
0.40
4600
SCALE
0
10
20

S-7969


SECTION S-8187
FENCE
S-81
S-87
WASTE
0.28
10
0.12
0.32
19
1.24
ORE
STOPE
30
0.20
3.84
7.04
SURFACE SAMPLE (N50E)
DECLINE
ROAD
S-70
4600
40
0.52
0.60
50
0.60
0.48
60
SCALE
0
10
20

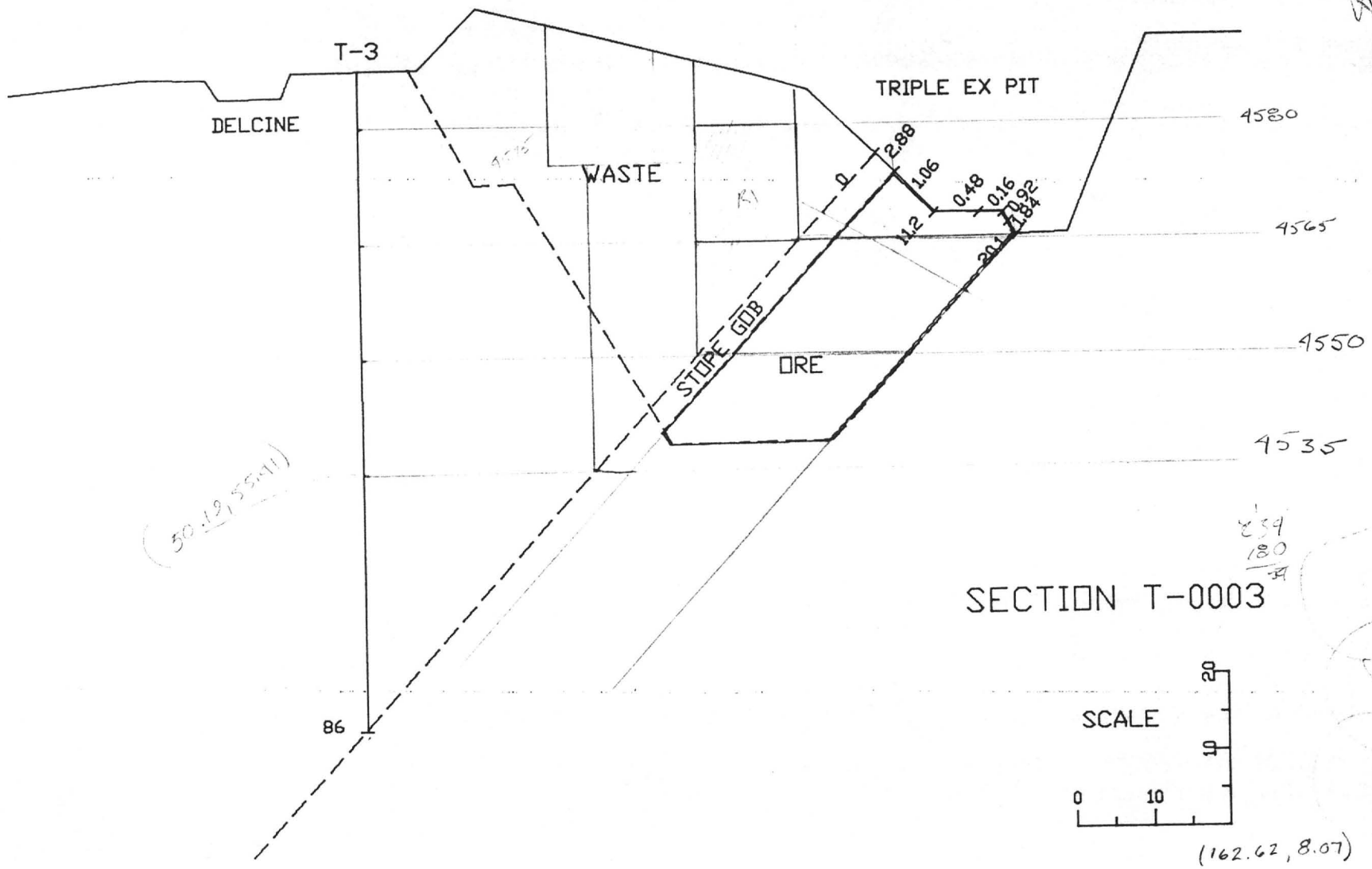
S-8187

SECTION S-8389



S-8389

	WASTE	ORE
4565	313	195
4550	621	423
4535	427	419



SECTION T-0003

T-0003

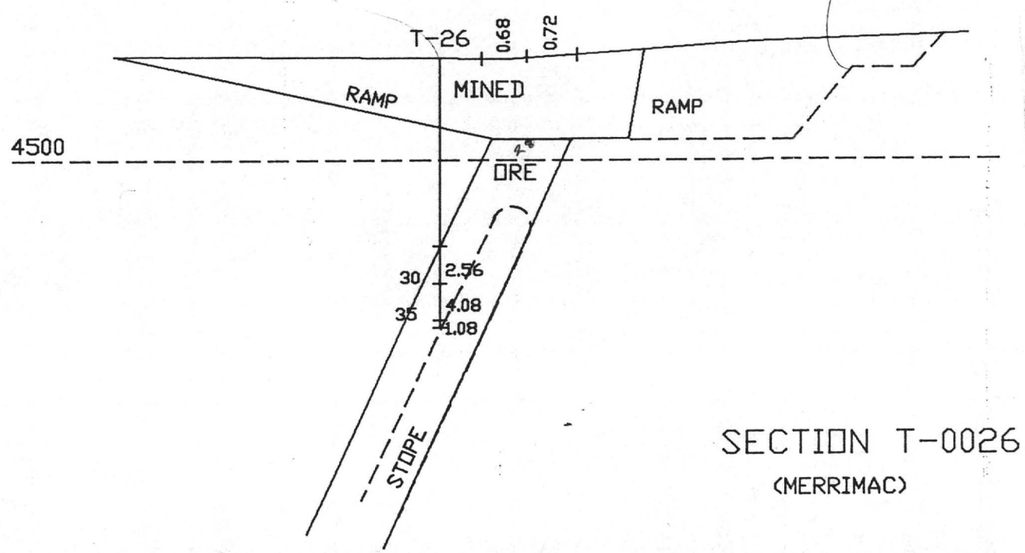
55 52 45 27 21 30 37 48 63
18 18 10 4300 4500 16 12 14 20

2.6

(87.99, 73.47)

ORE 28

(142.76, 72.12)



509049.12 , 2439038.38

SCALE

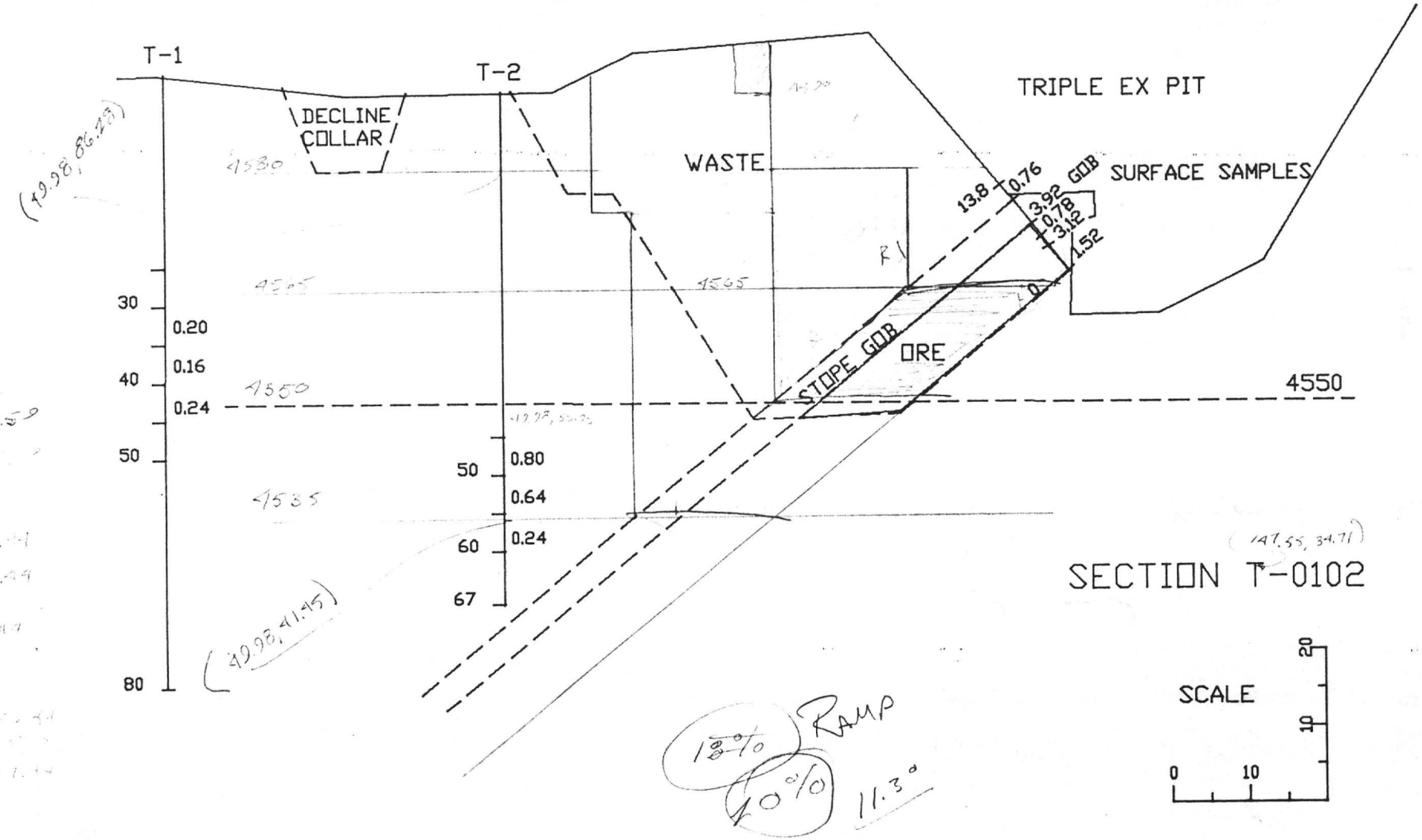
0 10 20

SECTION T-0026

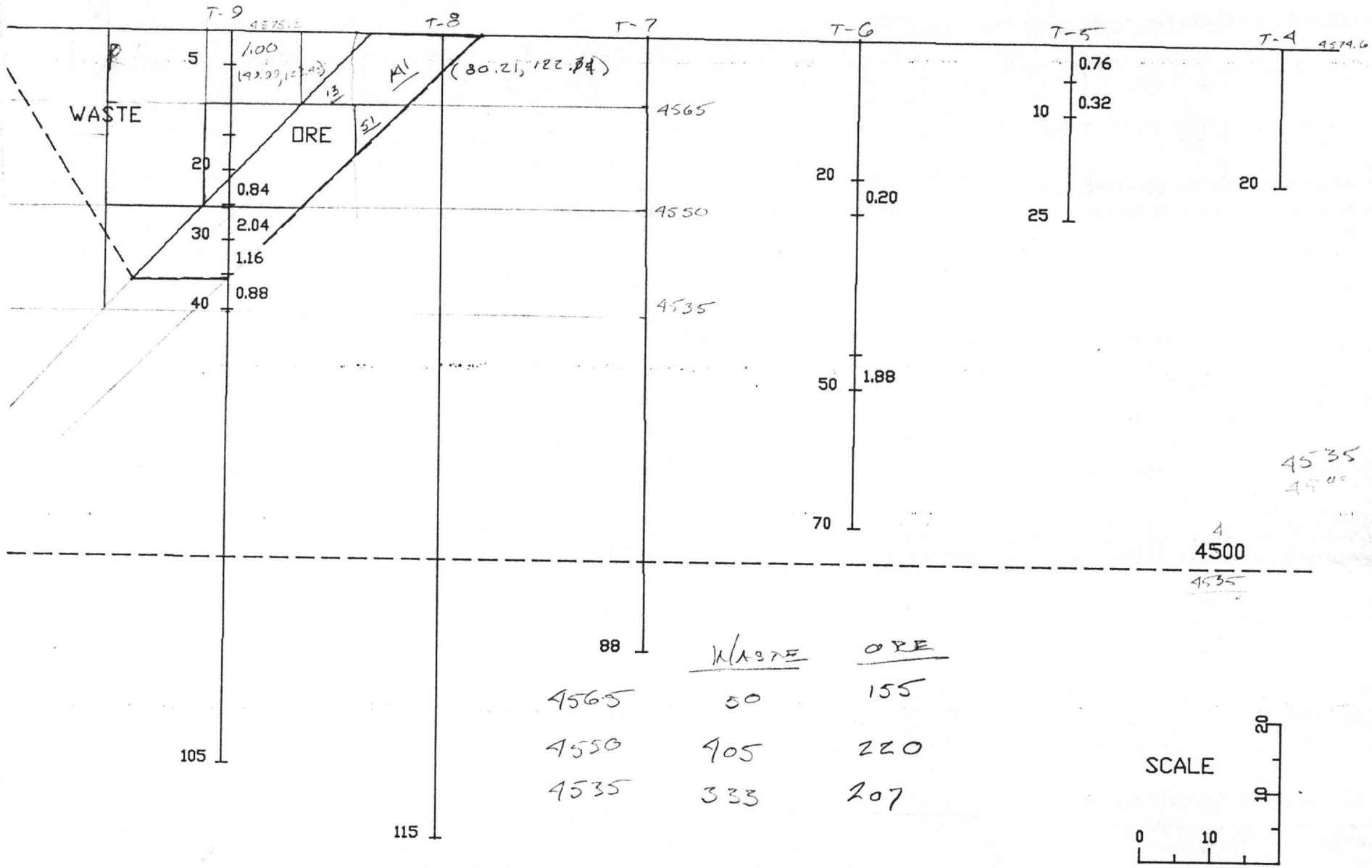
(MERRIMAC)

T-0026

	WASTE	ORE
4565	594	161
4550	399	279
4535	1047	276



T-0102

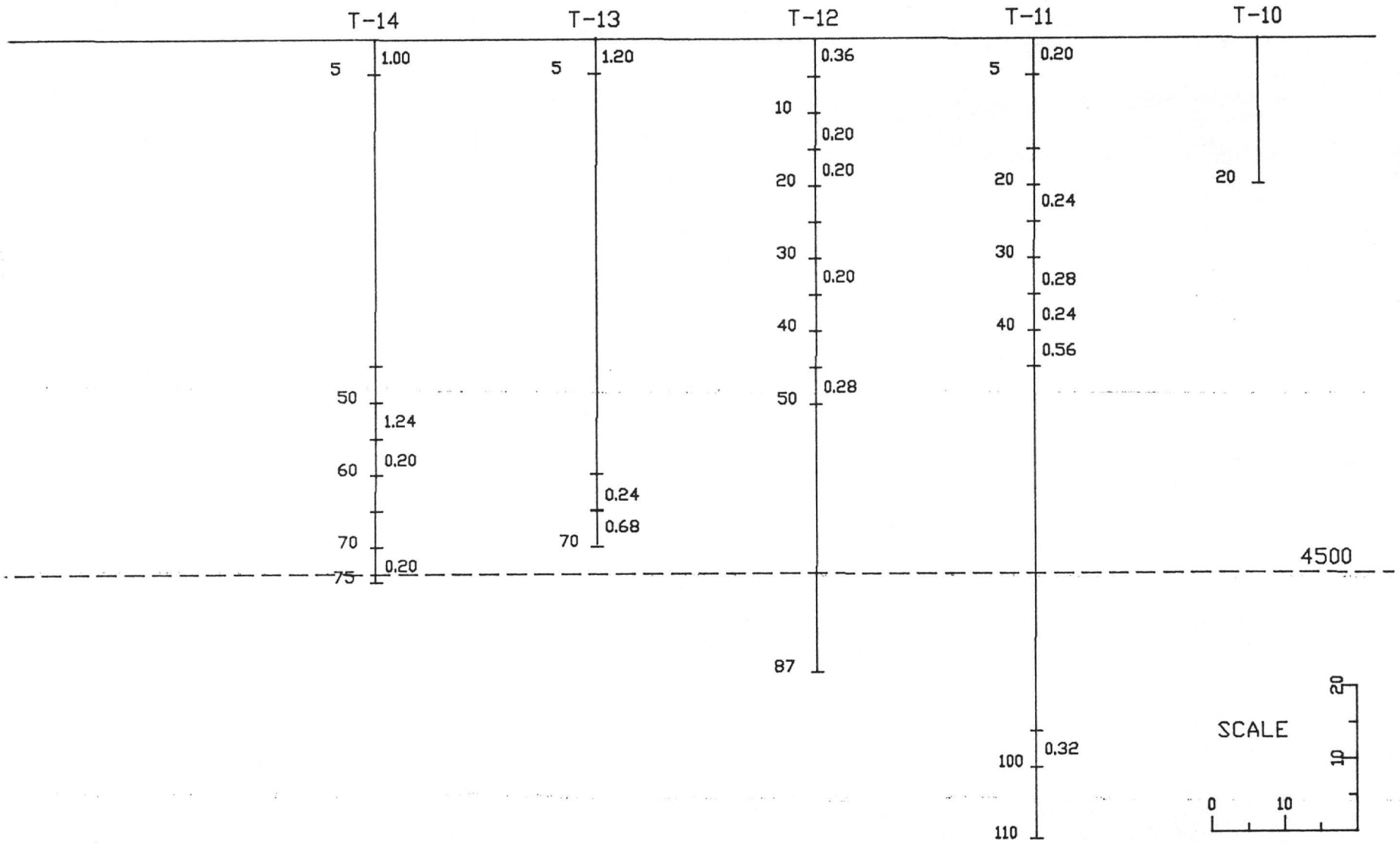


	WASTE	ORE
4565	00	155
4550	405	220
4535	333	207

SECTION T-0409

T-0409

SECTION T-1014

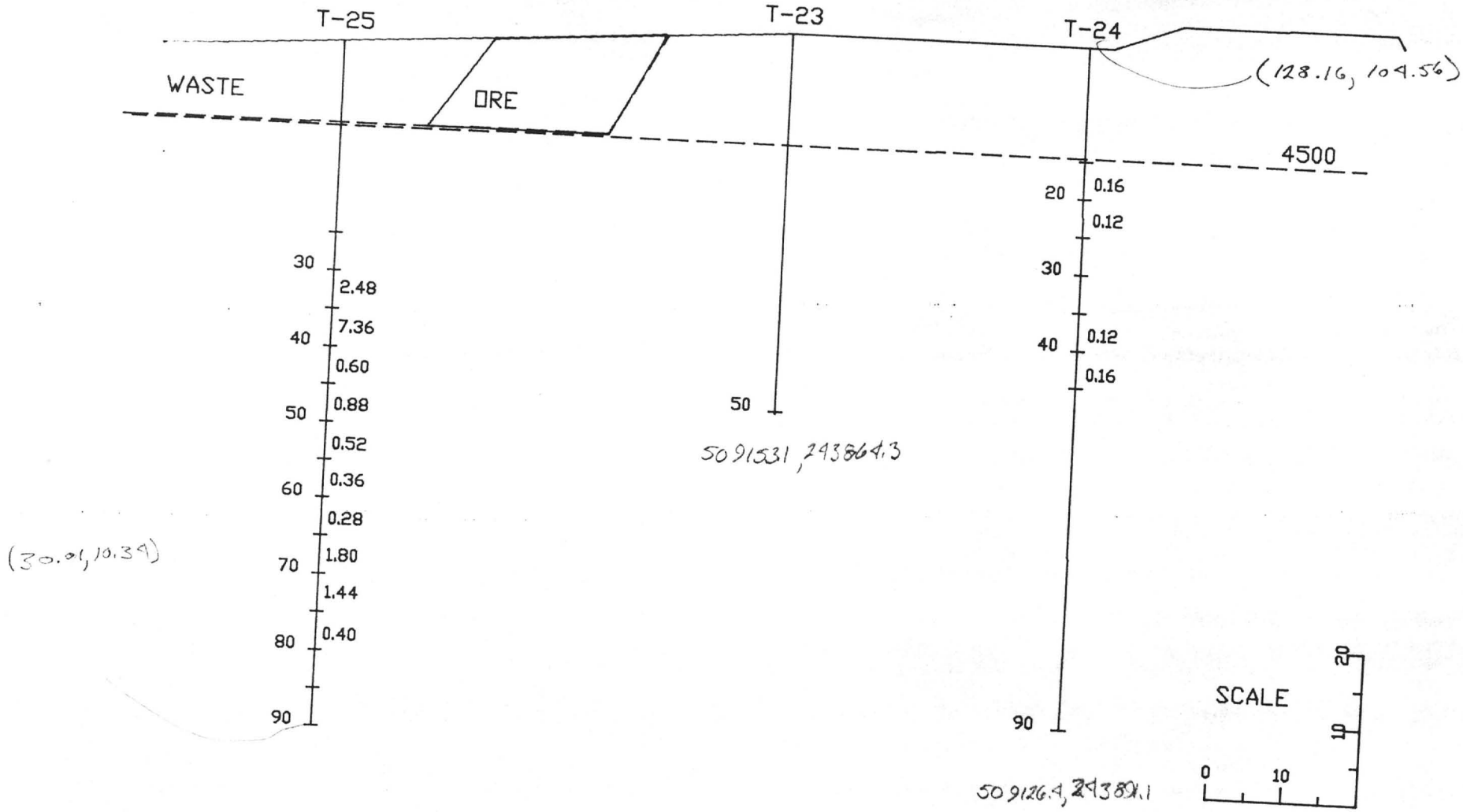


T 1014

158 151 138 130 69 56 48 40
20 20 10 4500 4500 10 12 14

29

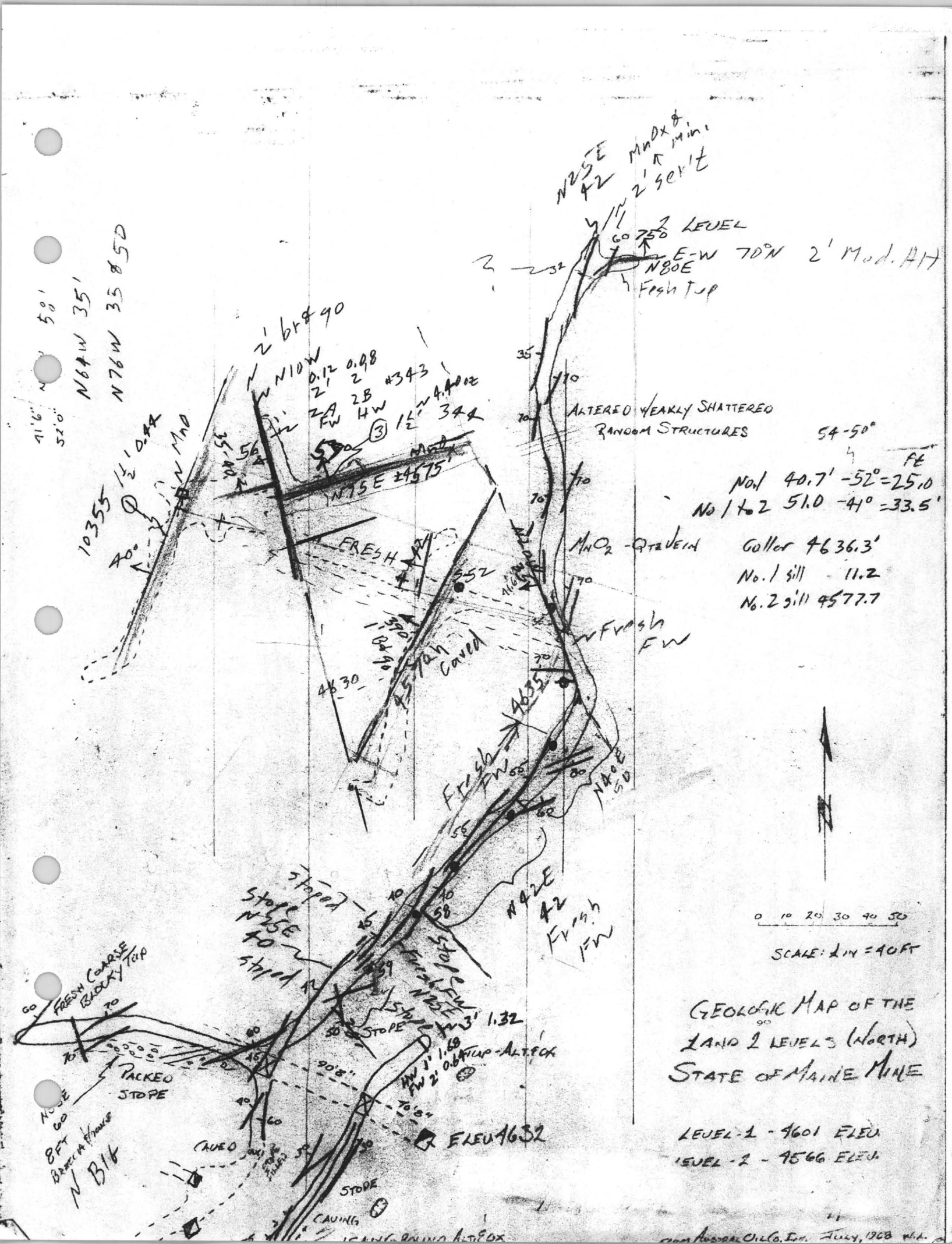
SECTION T-2524
(MERRIMAC)



T-2524

S.O.M. Underground.

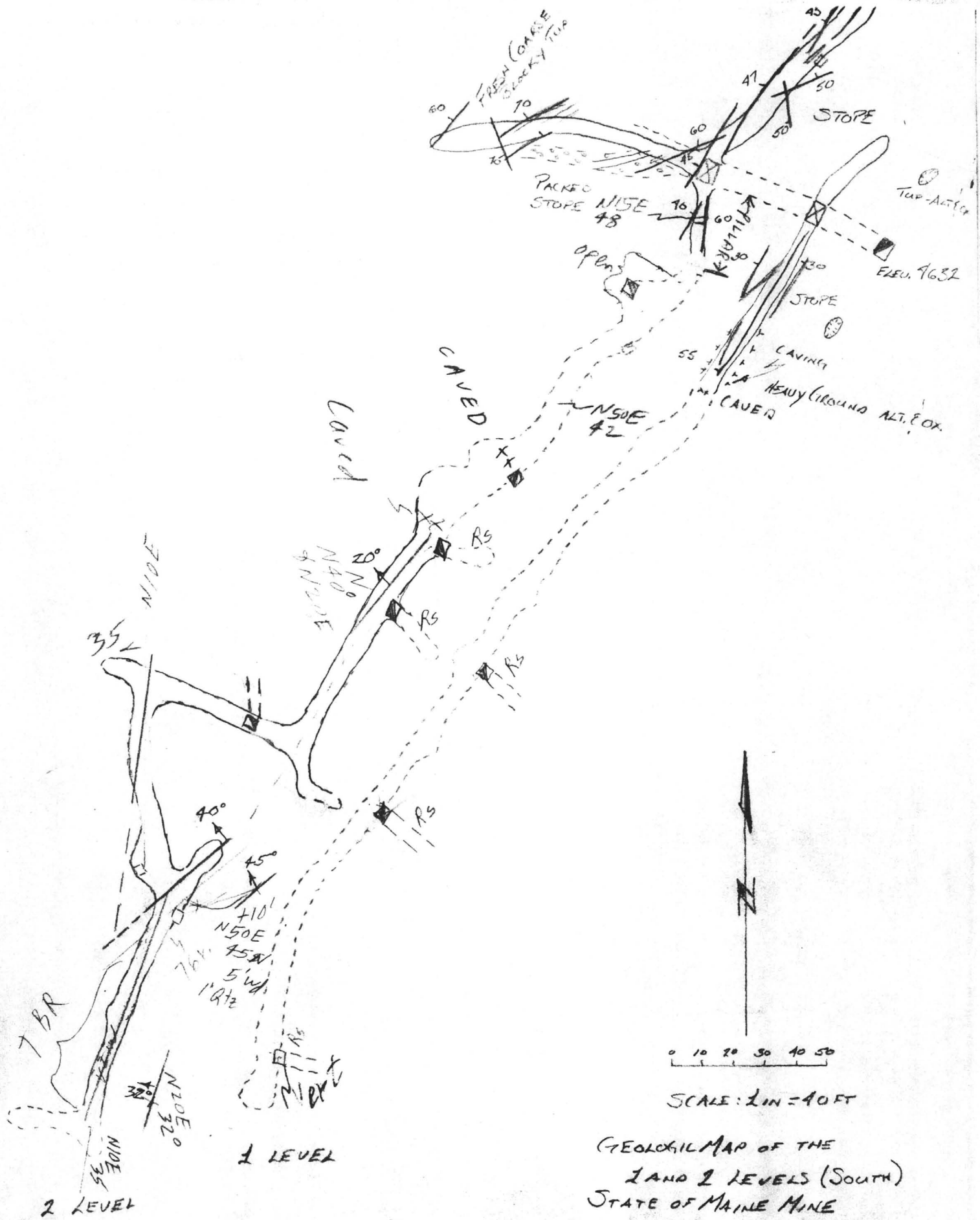
State of Maine
underground



GEOLOGIC MAP OF THE 1 AND 2 LEVELS (NORTH) STATE OF MAINE MINE

LEVEL-1 - 4601 ELEV.
LEVEL-2 - 4566 ELEV.

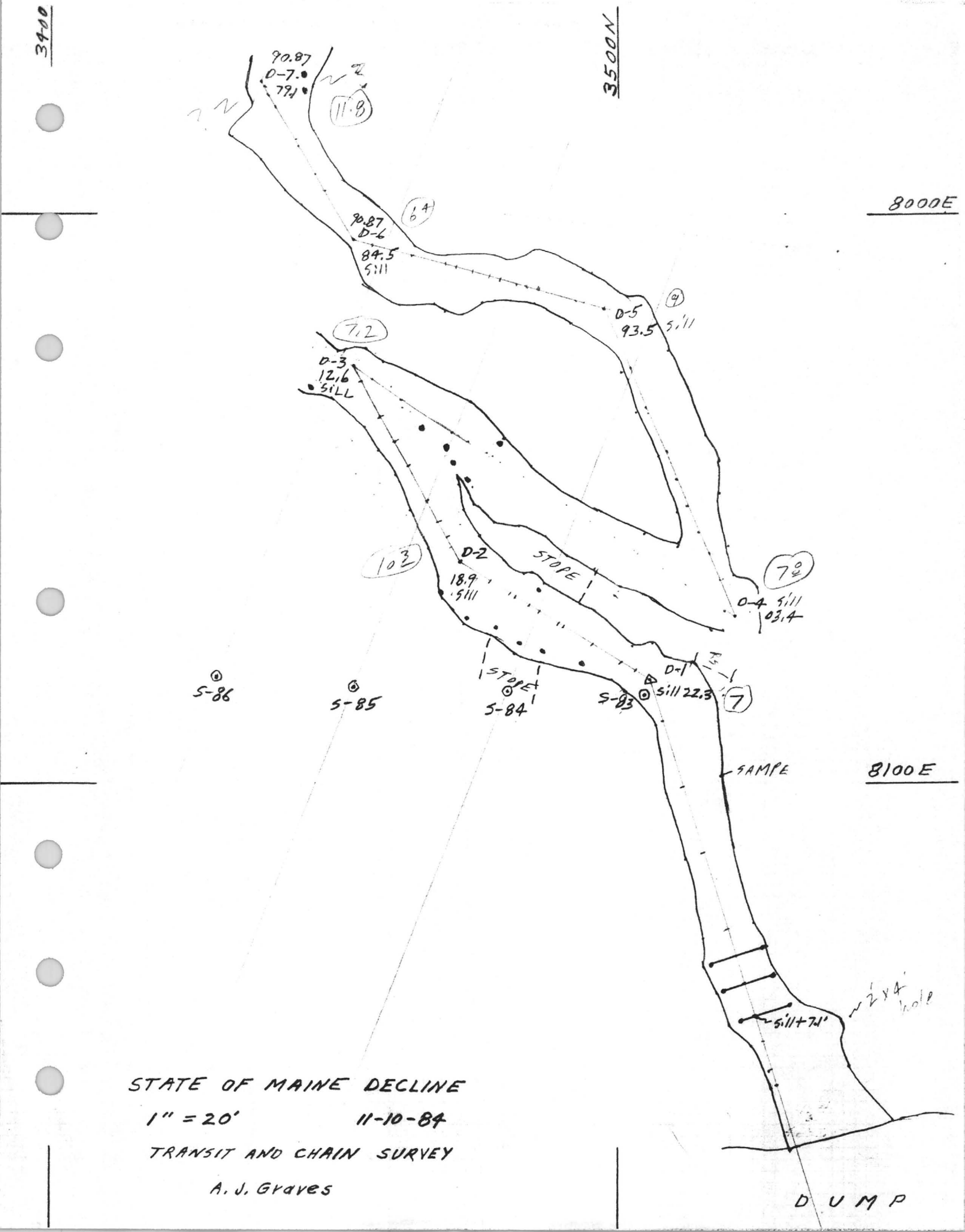
Copper Range Co. Inc. July, 1968



GEOLOGIC MAP OF THE
1 AND 2 LEVELS (SOUTH)
STATE OF MAINE MINE

LEVEL 1 - 4601 ELEV.
LEVEL 2 - 4566 ELEV.

FROM AUSTRAL OIL COMP. INC. JUNE, 1968 W.L.



STATE OF MAINE DECLINE

1" = 20' 11-10-84

TRANSIT AND CHAIN SURVEY

A. J. Graves

Samples

No. 1 1 3' Sh + 34' N

+10' Level 2A 0-2 FW

2B 2-3 Hw) " 26' "

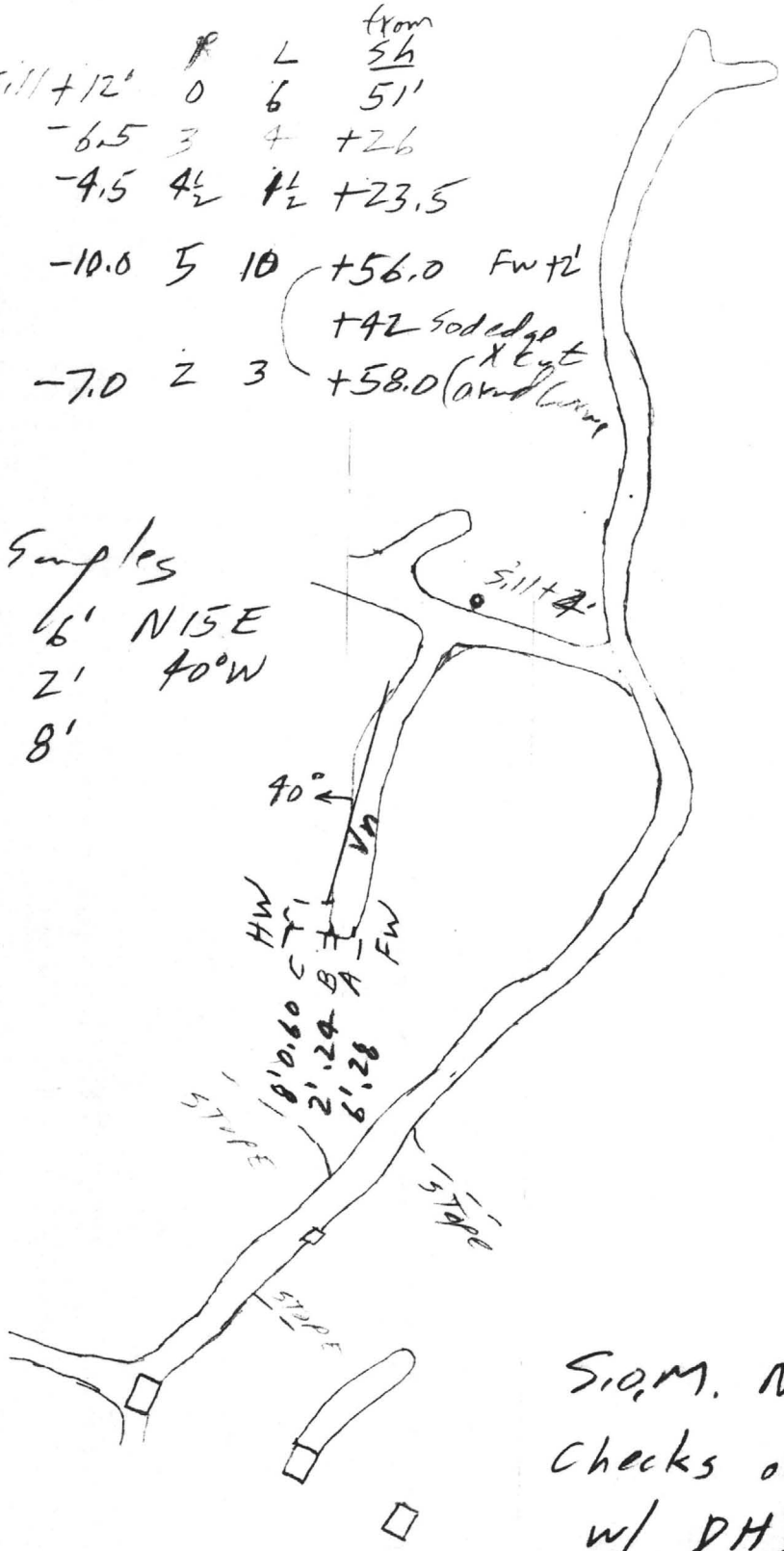
				from Sh
H 59	Sill +12'	0	6	51'
58	-6.5	3	4	+26
57	-4.5	4½	1½	+23.5
55	-10.0	5	10	+56.0 Fw +2'
X-cut				+42 Sod edge X cut
53	-7.0	2	3	+58.0 (on end wall)

No. 2 Level Samples

4 A FW 6' N15E

B Vn 2' 40°W

C Hw 8'

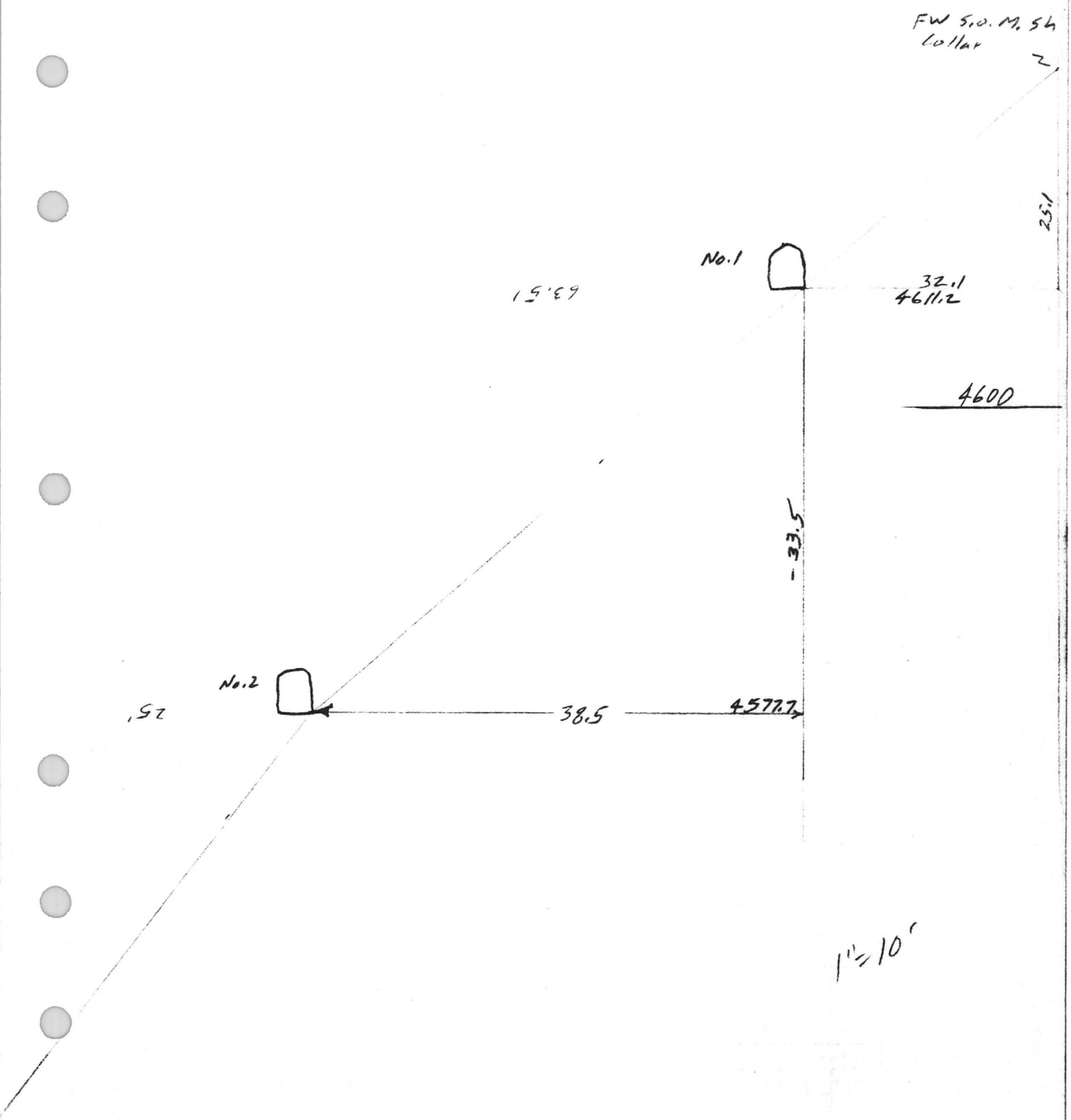


#59 48.4
63
4585.4
12
73.3

#55 33.2
70
63.2
63.2 10
53.2 53.2

#52 43.0
-66
77.0
7
70.0

S.O.M. No. 2 Level
Checks of V.G. holing
w/ DH's
Oct 1984
AVG


FW S.O. M. 54
Collar
25.1
No.1
32.1
4611.2
63.51
4600
33.5
No.2
25'
38.5
4577.7
1" = 10'

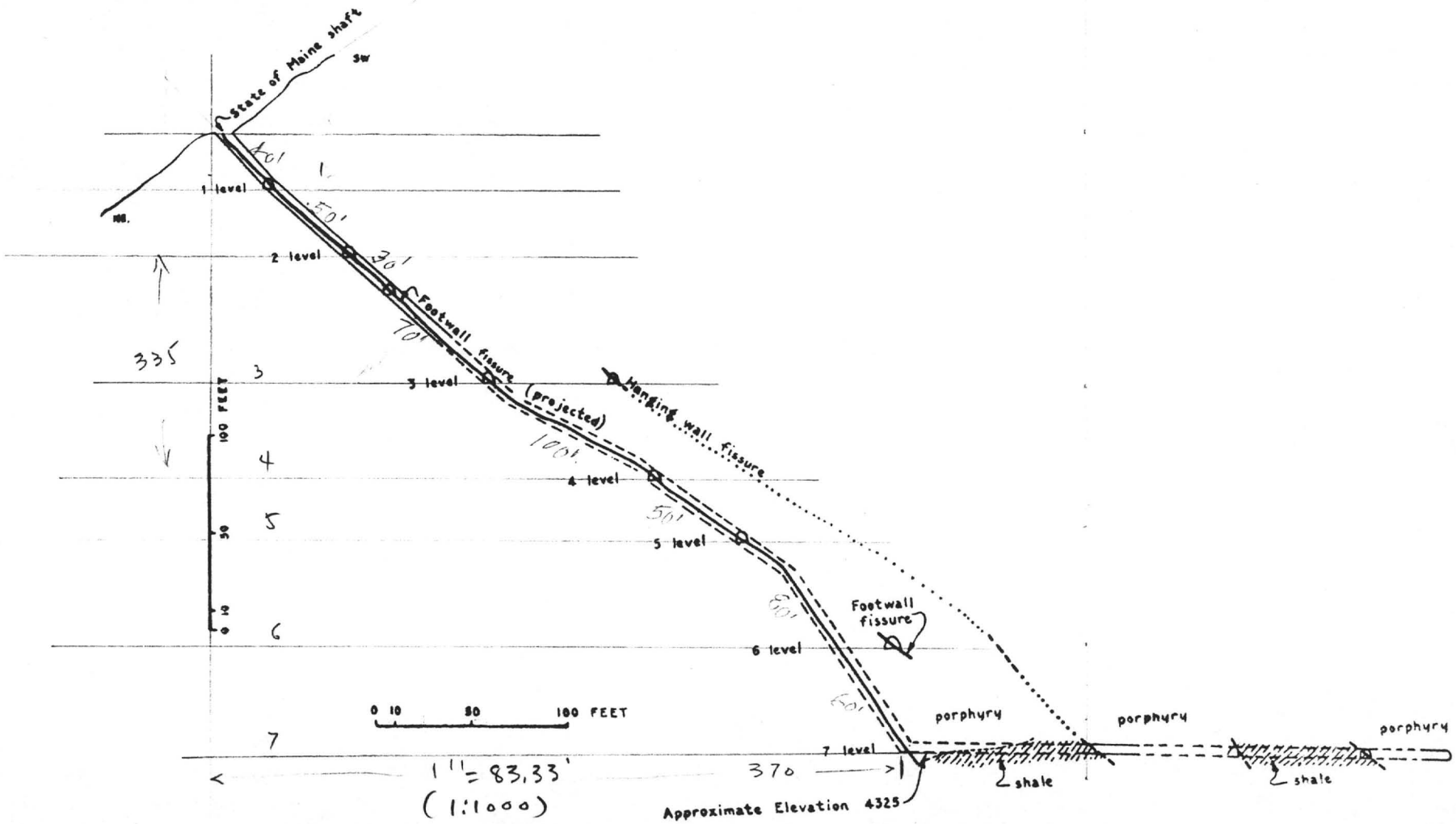


Plate XXVI.—Cross section through State of Maine Mine, looking southwest.

A-A'

LINDROOS LABORATORIES
GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 29, 1984

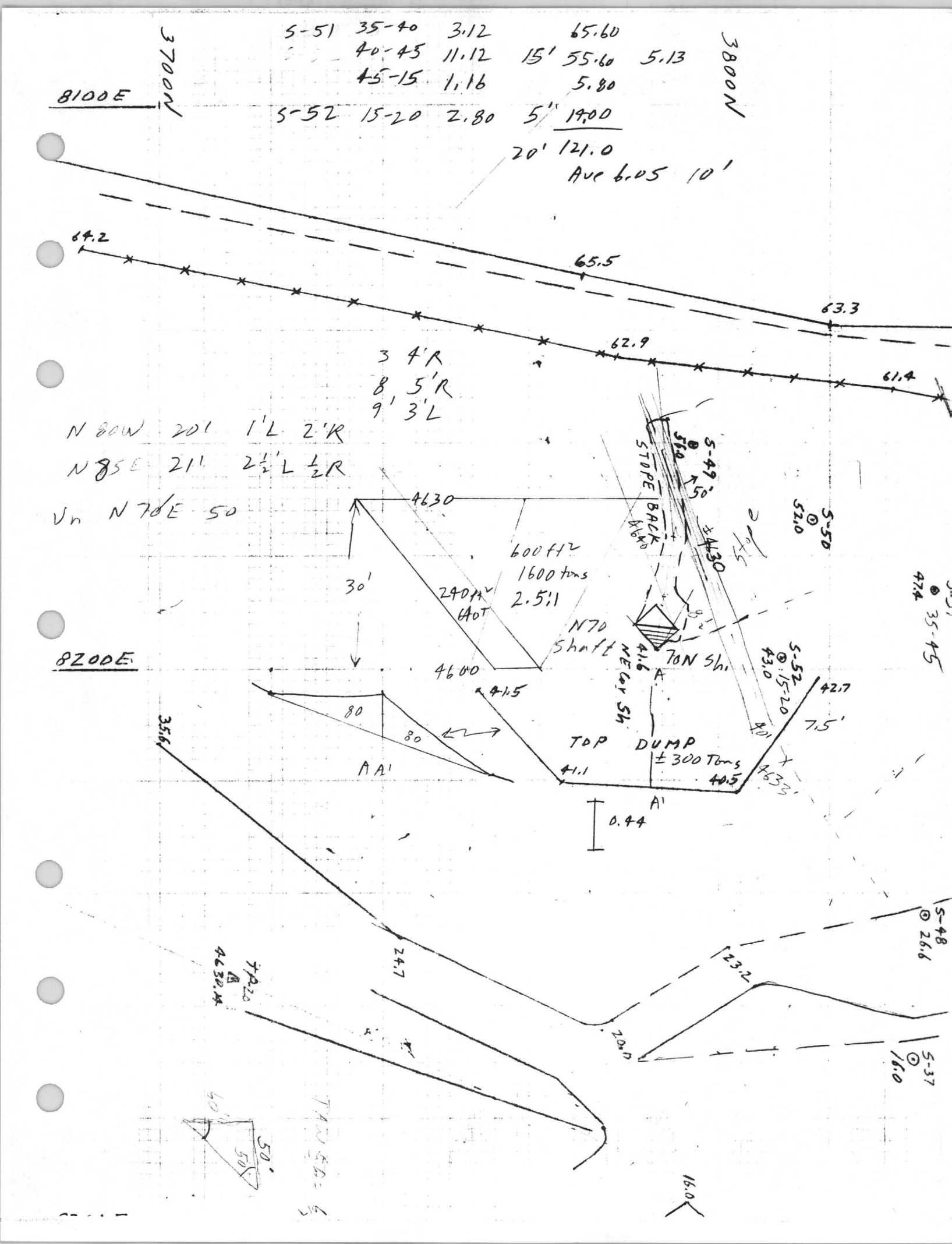
Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

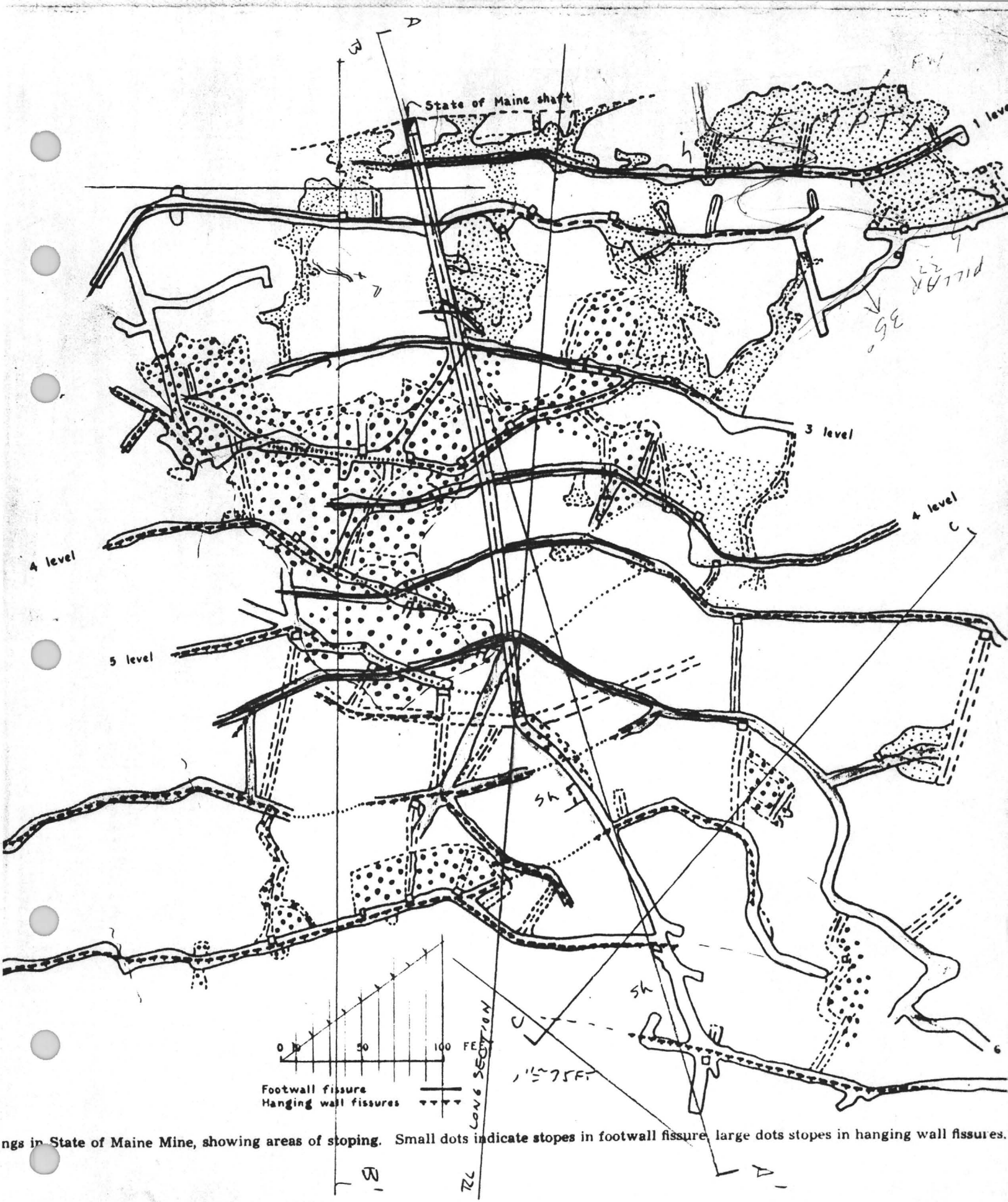
CERTIFICATE OF ANALYSIS

Sample Identification	Ag Oz/T	Au Oz/T				
SV 1 Pit 0-3'	1.16	0.008	0.22			
SV 3 Pit 0-3'	0.04	trace	0.10			
#1 Lev #1 0-3'	1.32	0.008	0.60			
#1 Lev #2A 0-2'	0.64	0.004	0.20			
#1 Lev #2B 2'-3'	1.68	0.016	0.64			
#2 4A 0-6'	0.28	0.004	0.10			
#2 4B 6-8'	0.24	0.004	0.08			
#2 4C 8-16'	0.60	0.008	0.08			

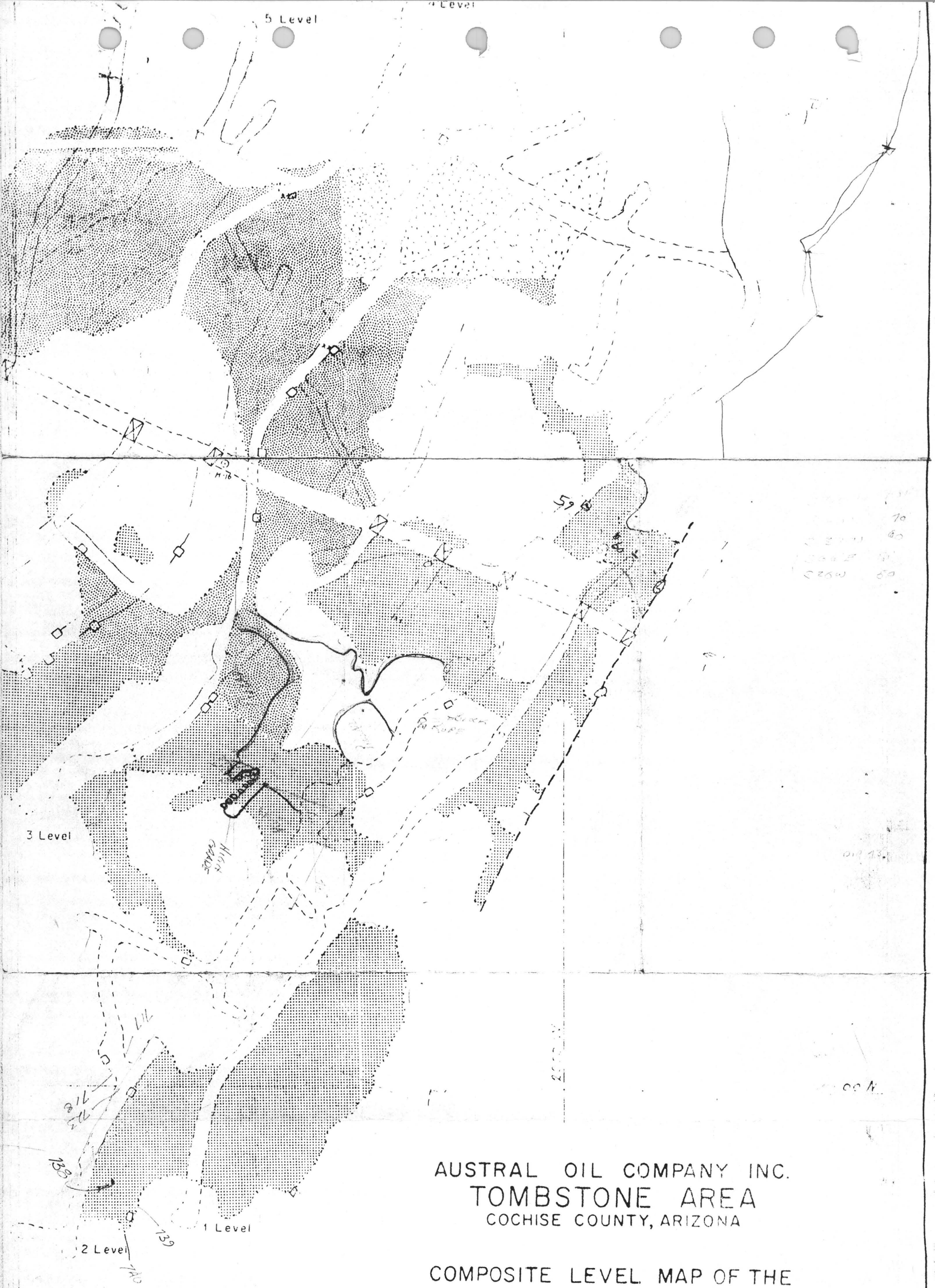
Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE No. 14160
GARY ALVIN LINDROOS
Date Issued 10-29-84
ARIZONA, U.S.A.


3700N
3800N
8100E
8200E
5-51 35-40 3.12 65.60
40-45 11.12 15' 55.60 5.13
45-15 1.16 5.80
5-52 15-20 2.80 5' 14.00
20' 121.0
Ave 6.05 10'
64.2
65.5
63.3
62.9
61.4
3 4'R
8 5'R
9' 3'L
N 80W 20' 1'L 2'R
N 85E 21' 2½'L ½R
Vn N 70E 50
4630
600 ft²
1600 tons
2.5:1
30'
240 ft² HOT
N70 Shaft
4600
41.5
STOPE BACK
5-49
5-50
52.0
±4630
5-52
43.0
15-20
42.7
7.5'
41.6
NEGr Sh
70N Sh.
A
TOP DUMP
± 300 Tons
41.1
40.5
A'
0.44
80
80
AA'
35.6
24.7
23.2
20.0
5-48
26.6
5-37
16.0
35-45
47.4
16.0



ngs in State of Maine Mine, showing areas of stoping. Small dots indicate stopes in footwall fissure, large dots stopes in hanging wall fissures.



AUSTRAL OIL COMPANY INC.

TOMBSTONE AREA

COCHISE COUNTY, ARIZONA

COMPOSITE LEVEL MAP OF THE STATE OF MAINE MINE

Scale: 1" = 40'

0 10 50 100 Feet

W.L July, 1968

S.O.M. Surface Maps.

State of Maine

Surface

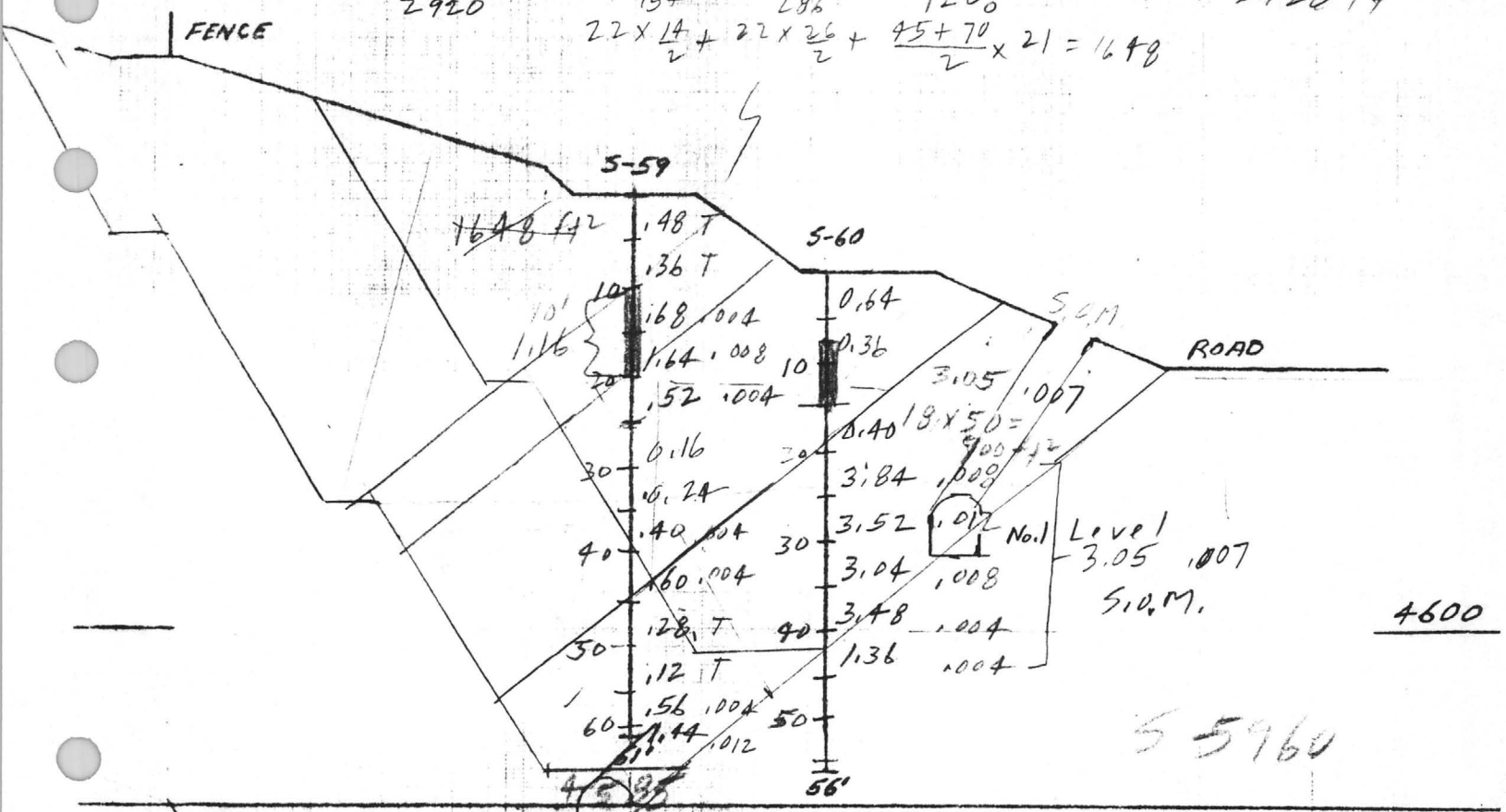
ORE: 12x10 1.15 3.05 → 2.63 oz 4379
53x7 370 1.16 1665 ft²
1665
1720

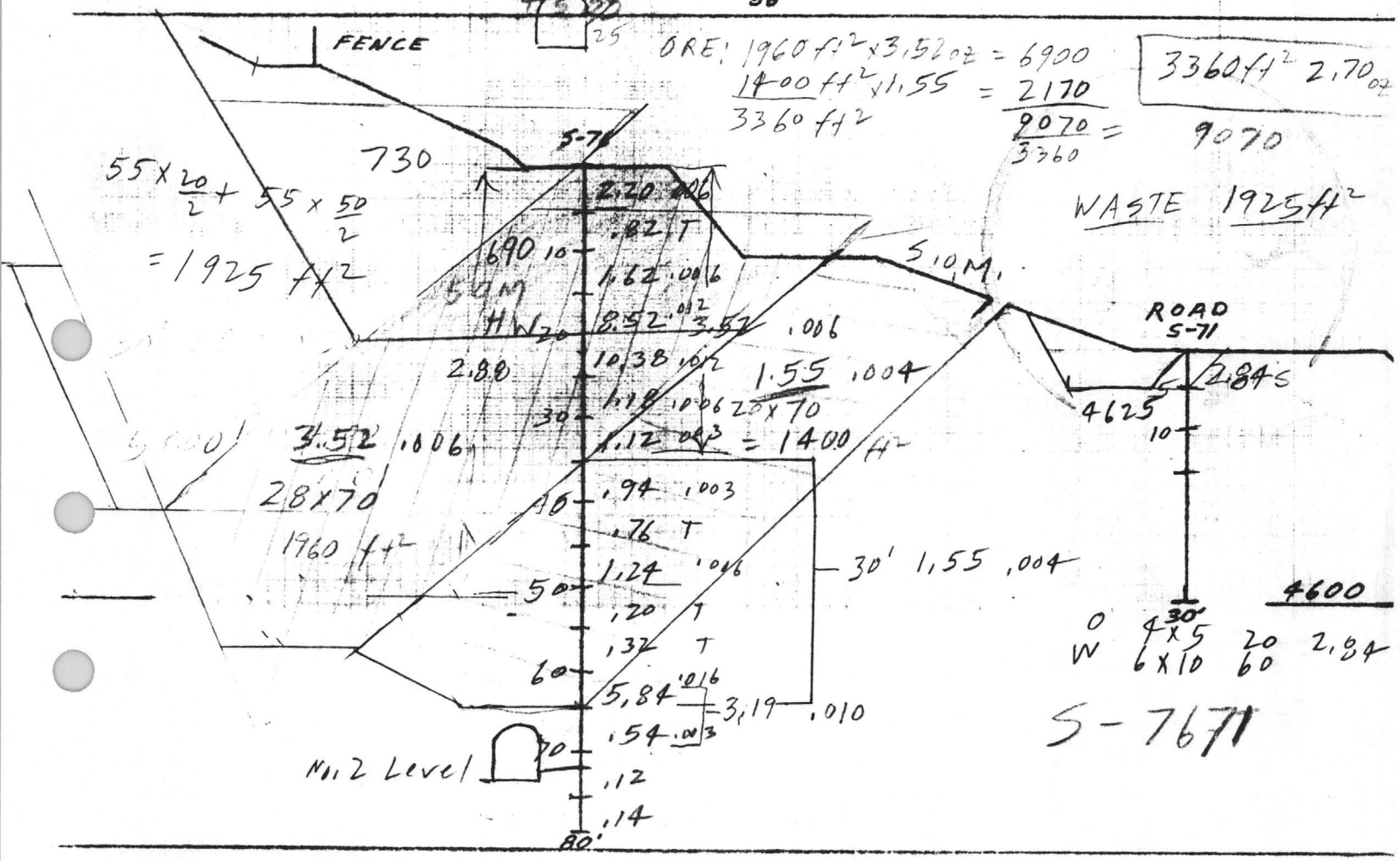
1665 ft² 2.63 oz
6.93
4380

Waste: 20x60 1200
47/2 x 80 1720
2920

Waste: 2920 ft²

154 286 1208
22 x 14/2 + 22 x 26/2 + (45+70)/2 x 21 = 1648

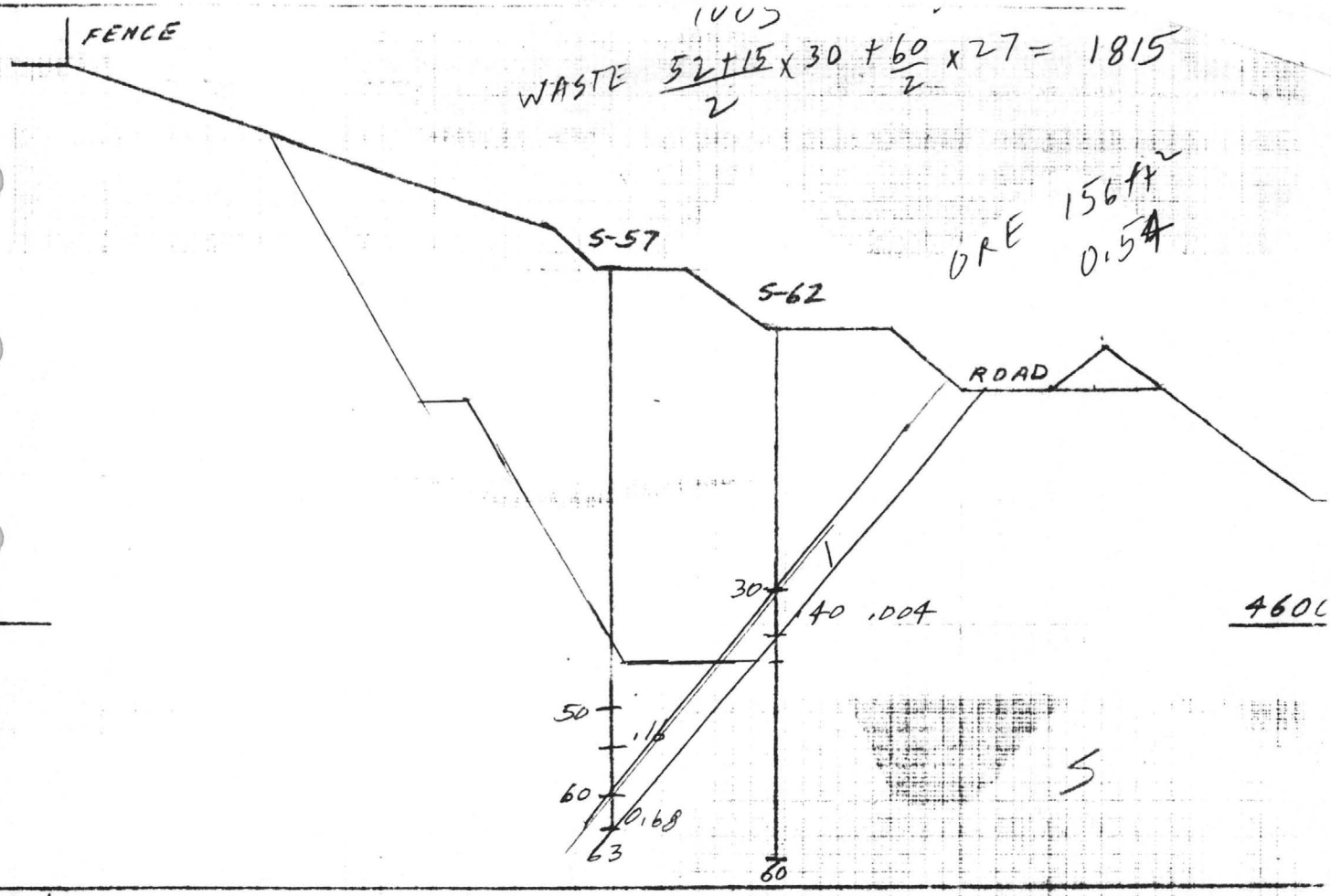


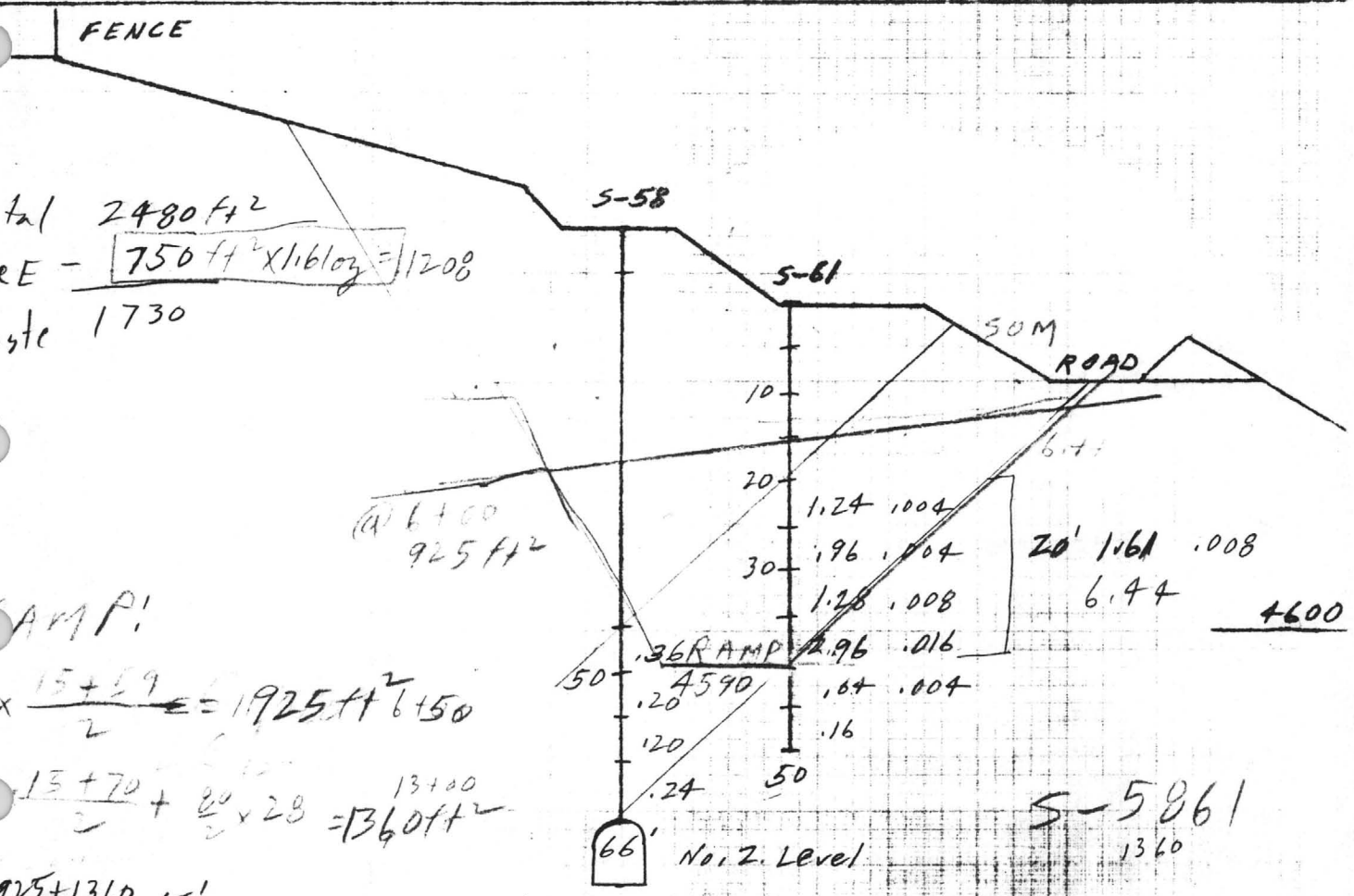


1005

WASTE $\frac{52+15}{2} \times 30 + \frac{60}{2} \times 27 = 1815$

ORE 156 ft²
0.54





Total 2480 ft²
ORE − 750 ft² × 1.6 log = 1200
Waste 1730

(a) 6+00
925 ft²

RAMP!

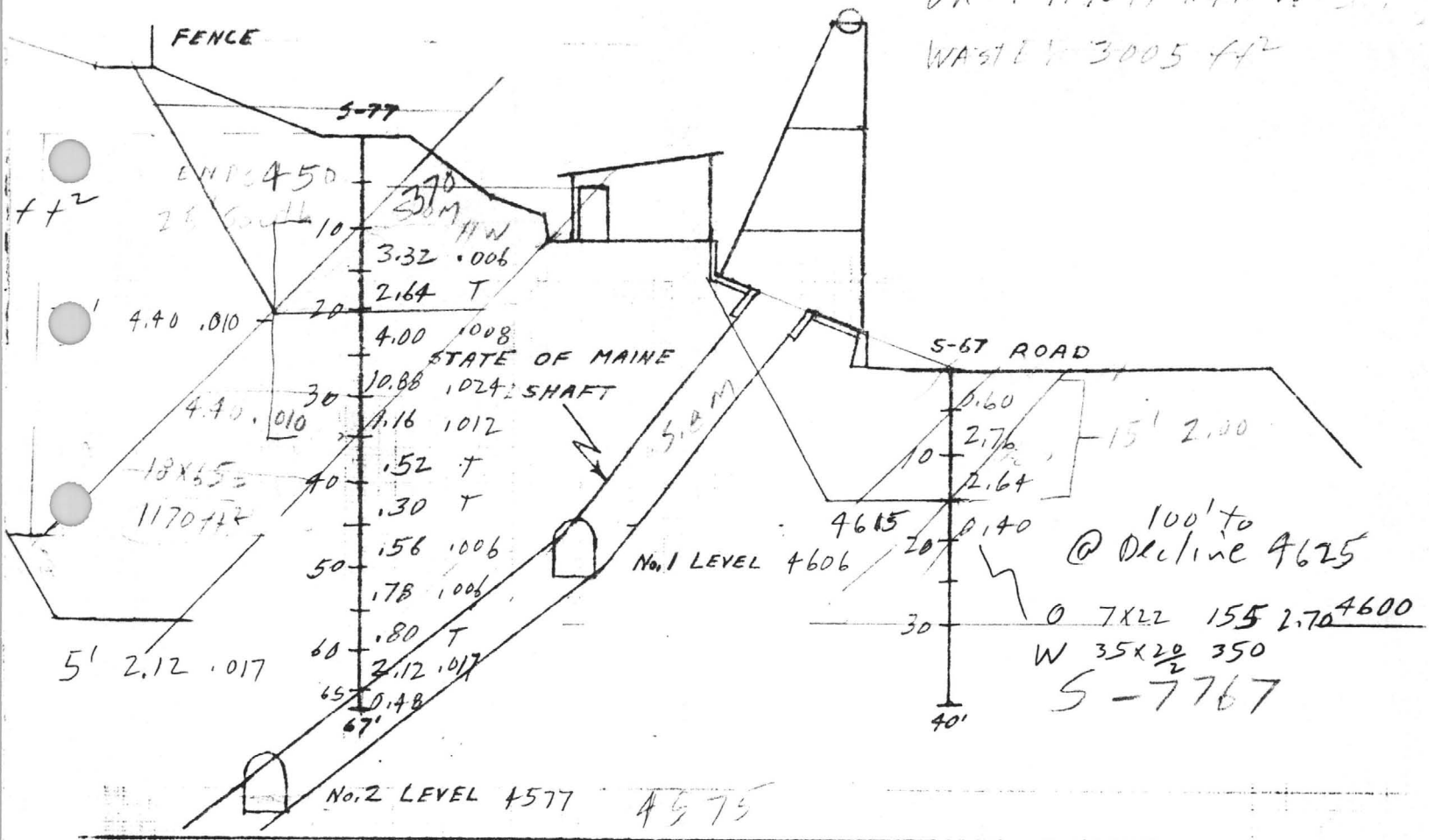
$25' \times \frac{15+29}{2} = 1925 ft^2$ 6+50

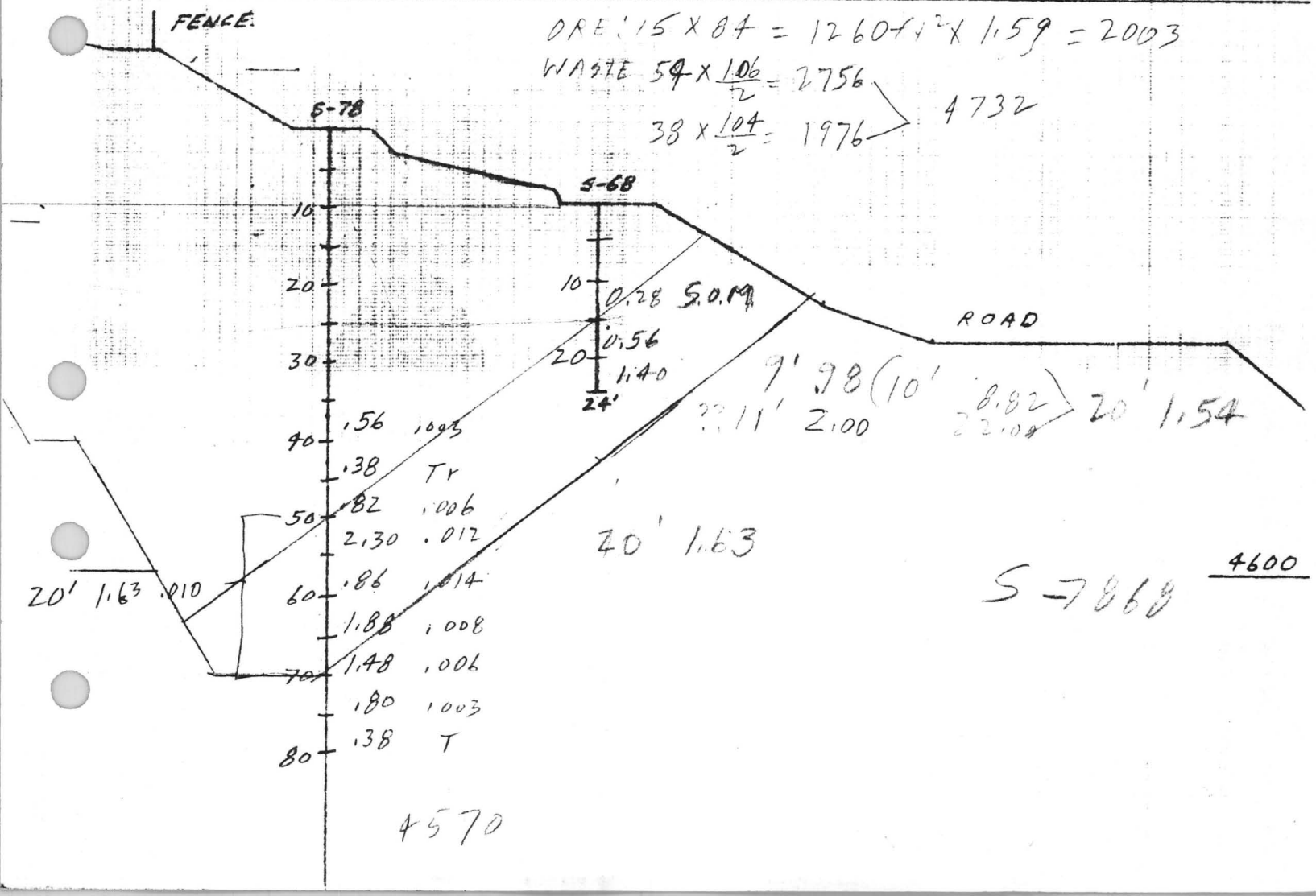
$32' \frac{15+70}{2} + \frac{80}{2} \times 28 = 1360 ft^2$ 13+00

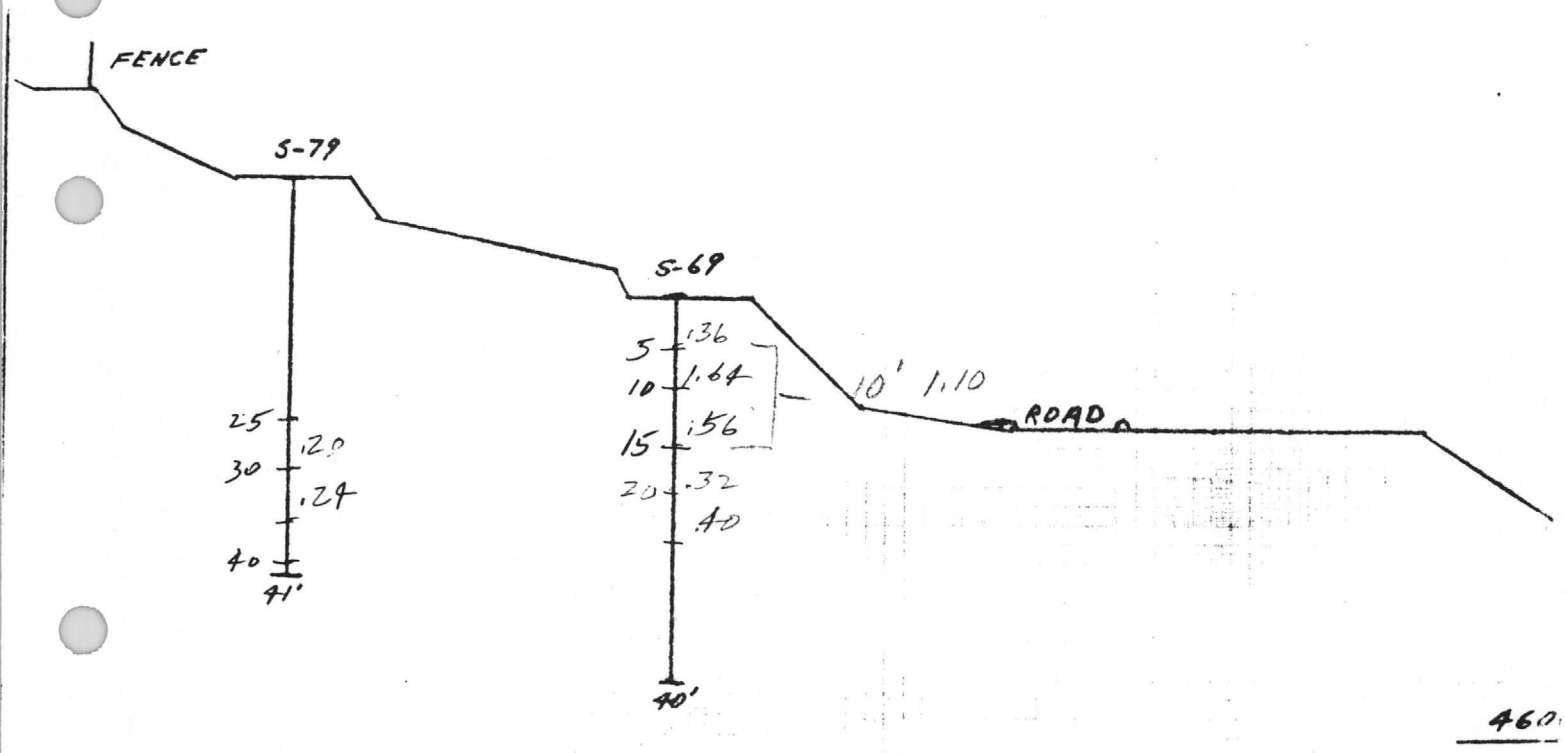
$\frac{925+1360}{2} \times 65' = \frac{}{13.5} = 5500$ tons

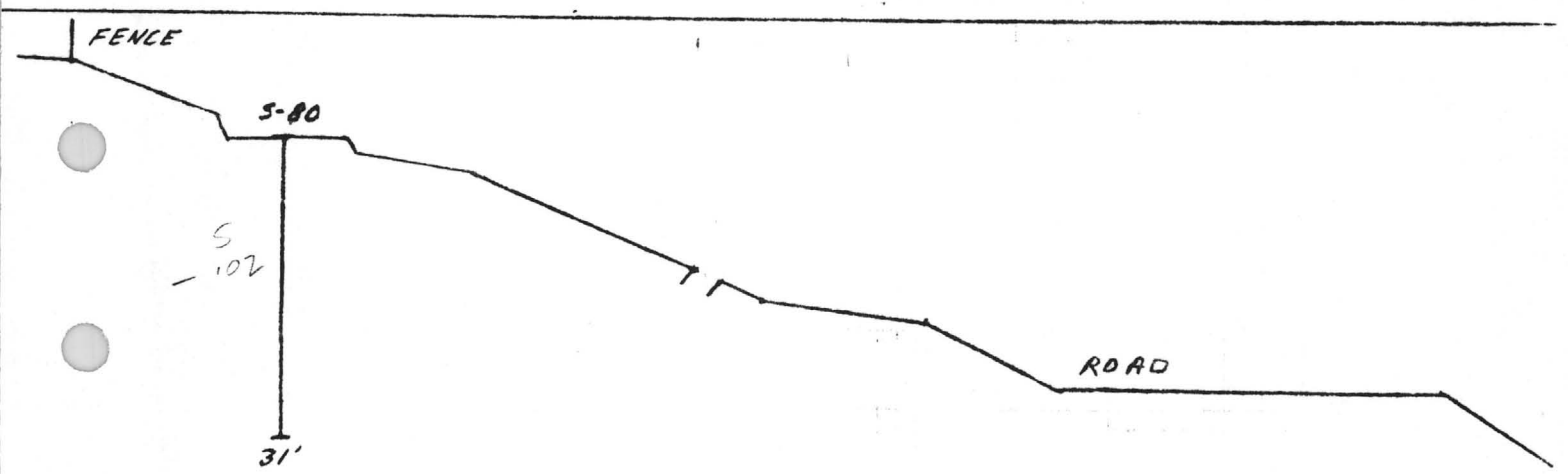
$\frac{925+0}{2} \times 65 = \frac{}{13.5}$ 2230

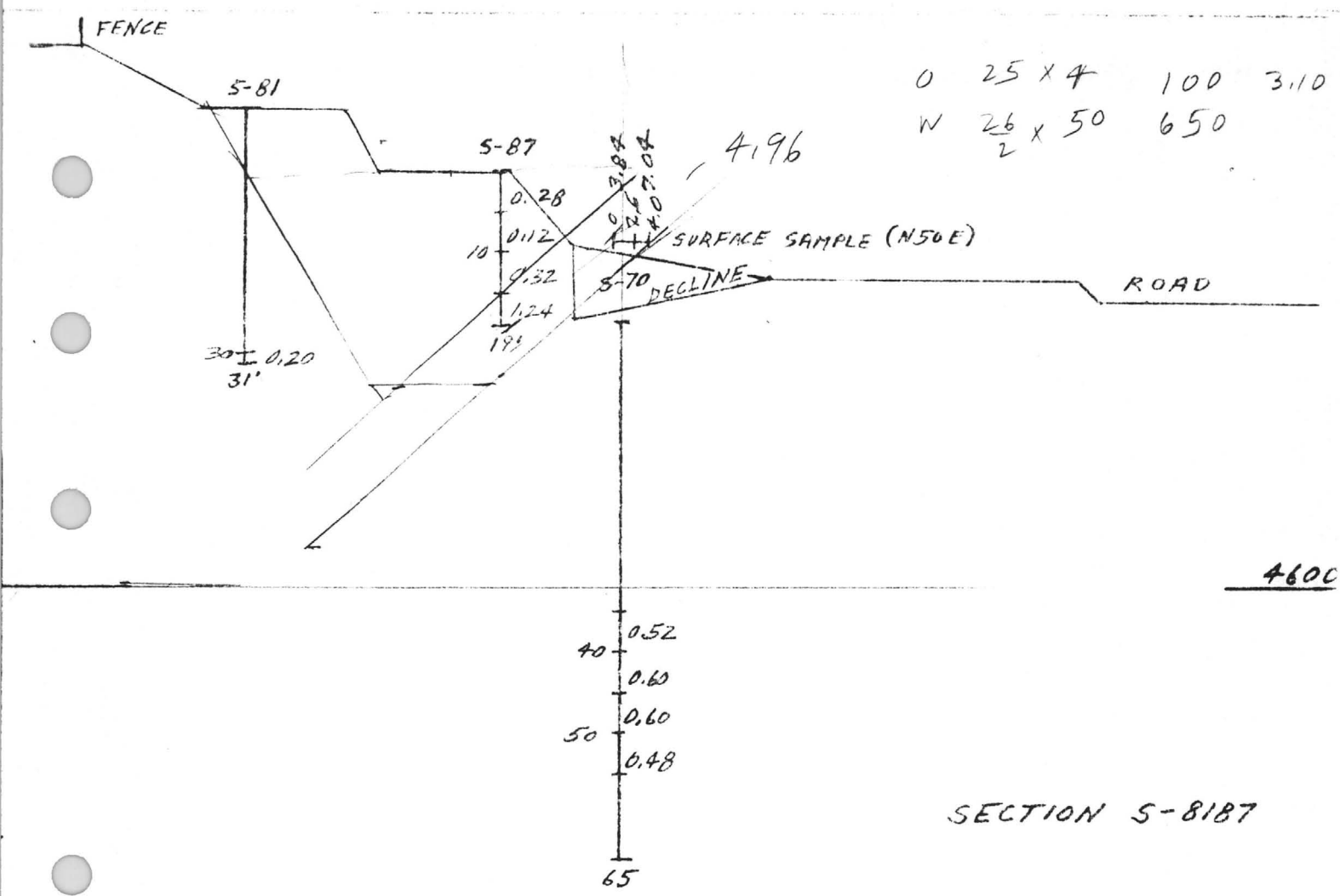
RAMP = 7730 Tons Waste


FENCE
S-77
STATE OF MAINE SHAFT
No. 1 LEVEL 4606
S-67 ROAD
No. 2 LEVEL 4577
4575
WASTE 3005 ft²
100' to @ Decline 4625
4600
S-7767

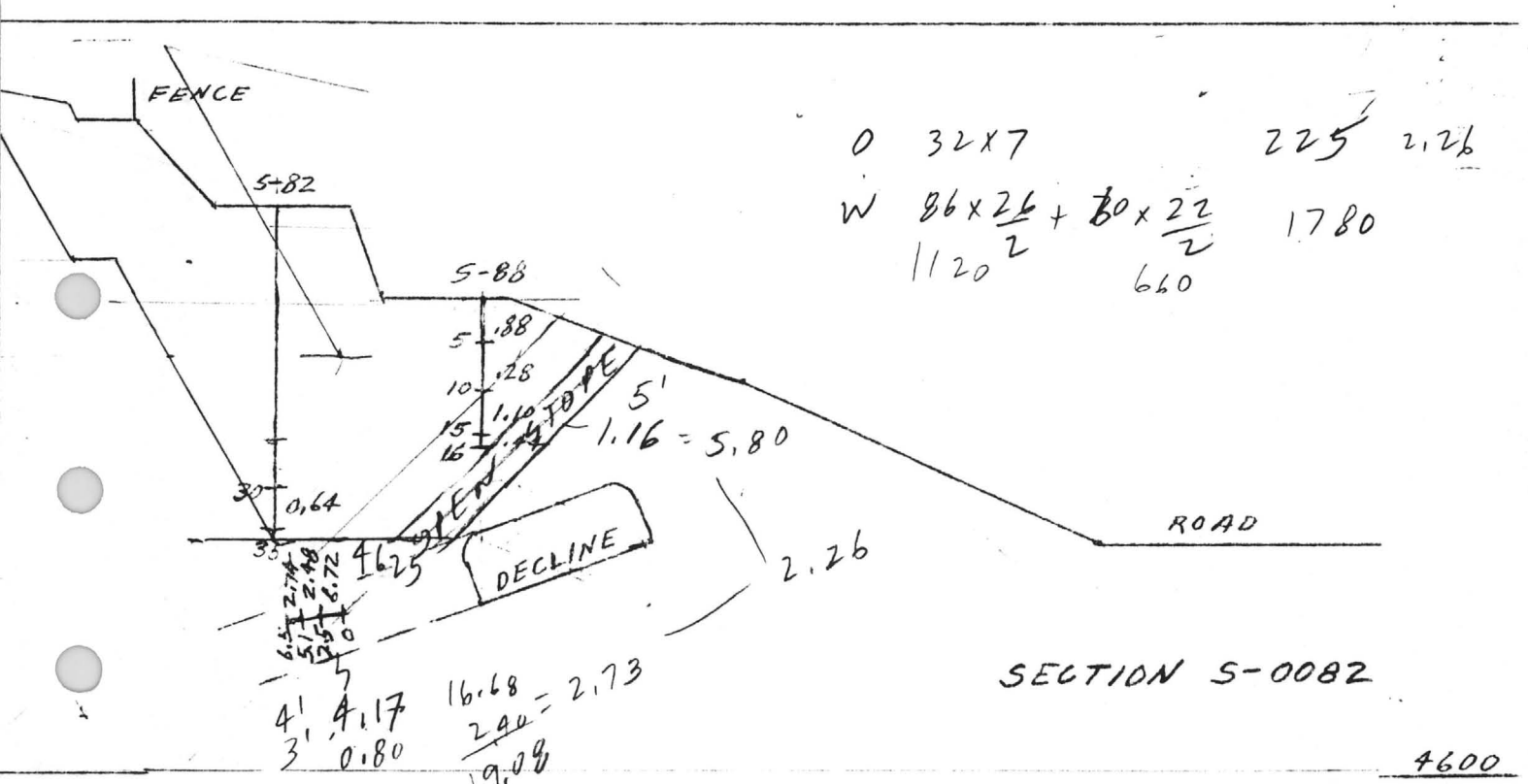

FENCE
S-78
S-68
ROAD
ORE 15 X 84 = 1260 ft² X 1.59 = 2003
WASTE 54 X 106/2 = 2756
38 X 104/2 = 1976
4732
4570
4600
S-7868


FENCE
S-79
S-69
5
.36
10
1.64
10' 1.10
ROAD
25
.20
30
.24
15
.56
20
.32
40
.40
41'
40'
460


FENCE
S-80
5
.02
ROAD
31'
4600

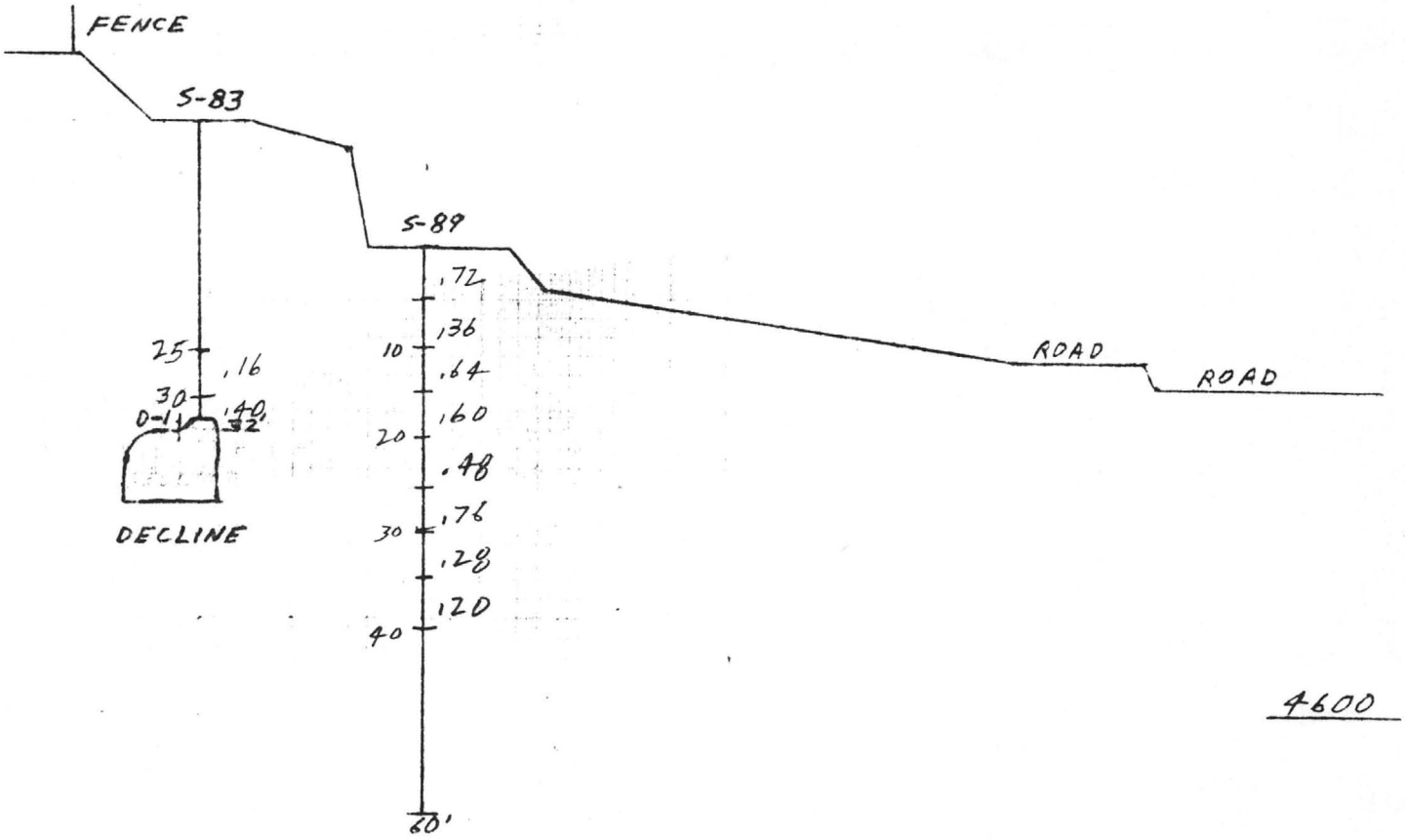


O 25 X 4 100 3.10
W 26/2 X 50 650



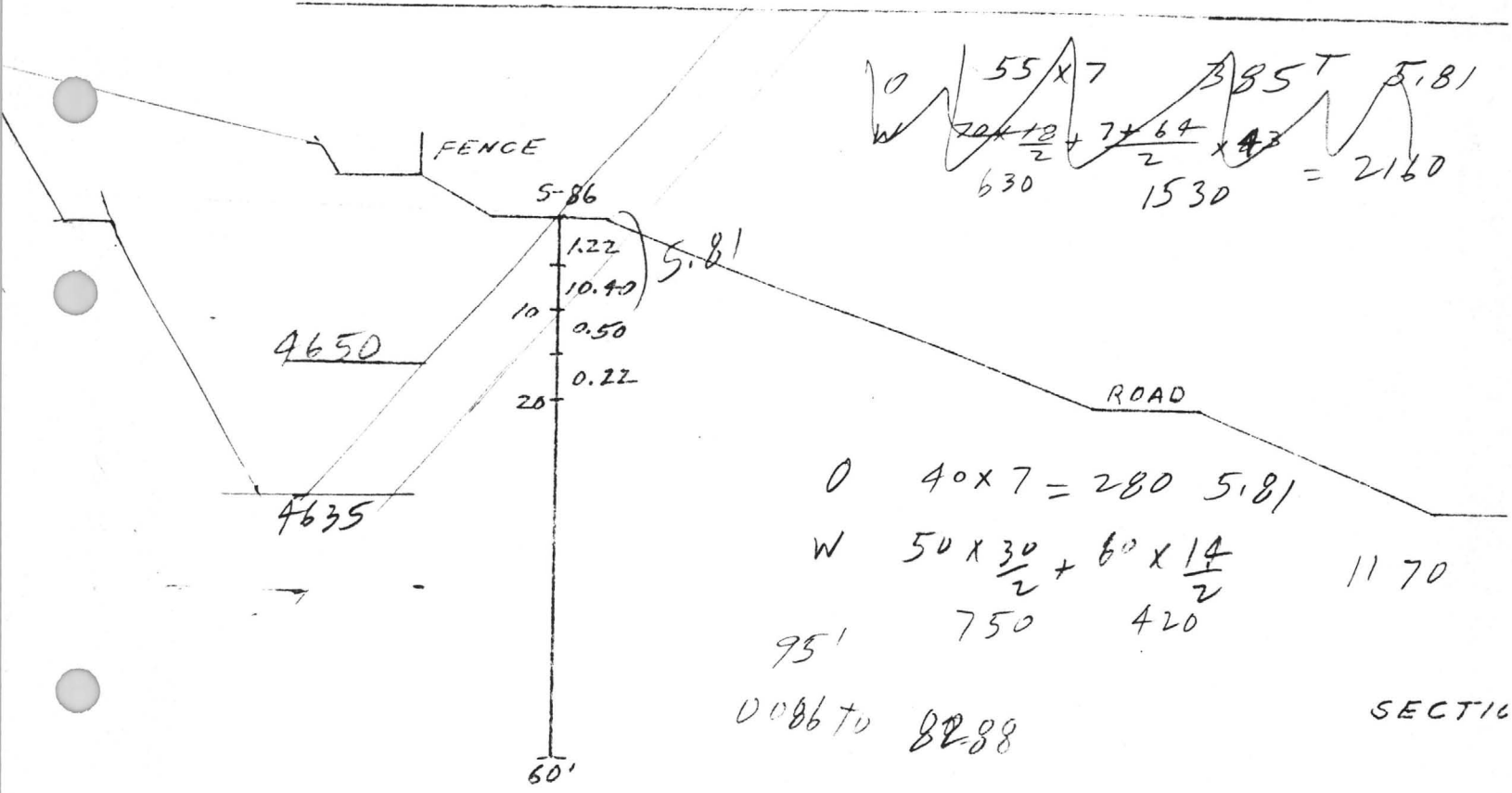
O 32X7 225 2.26
W 86 x 26/2 + 80 x 22/2 1780
1120 660

4' 4.17 16.68 / 2.40 = 2.73
3' 0.80 19.08


FENCE
S-83
S-89
25
.16
30
.40
0-1
.32
DECLINE
.72
10
.36
.64
20
.60
.48
30
.76
.28
.20
40
60'
ROAD
ROAD
4600

2/15/00

SECTIO



~~O 55 x 7 385 T 5.81~~

~~W 70 x 18/2 + 7 x 64/2 x 43 = 2160~~

630 1530

O 40 x 7 = 280 5.81

W 50 x 30/2 + 60 x 14/2 1170

750 420

95'

0086 to 8288

SECTIO

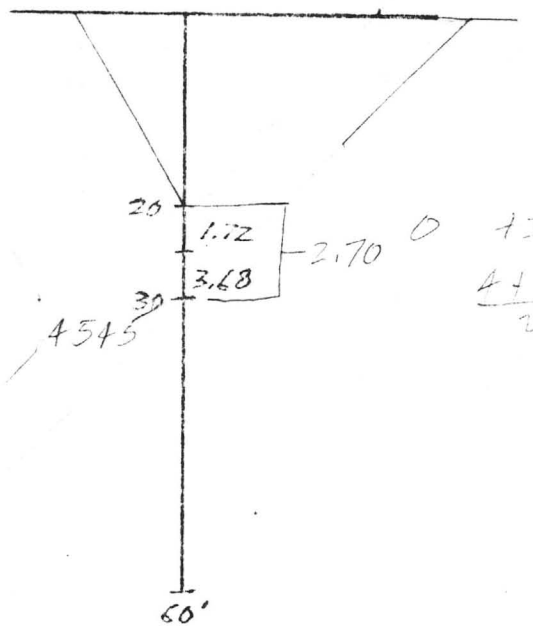
VN

S-44

20' Depth

Ore 10 x 20' = 200 ft²

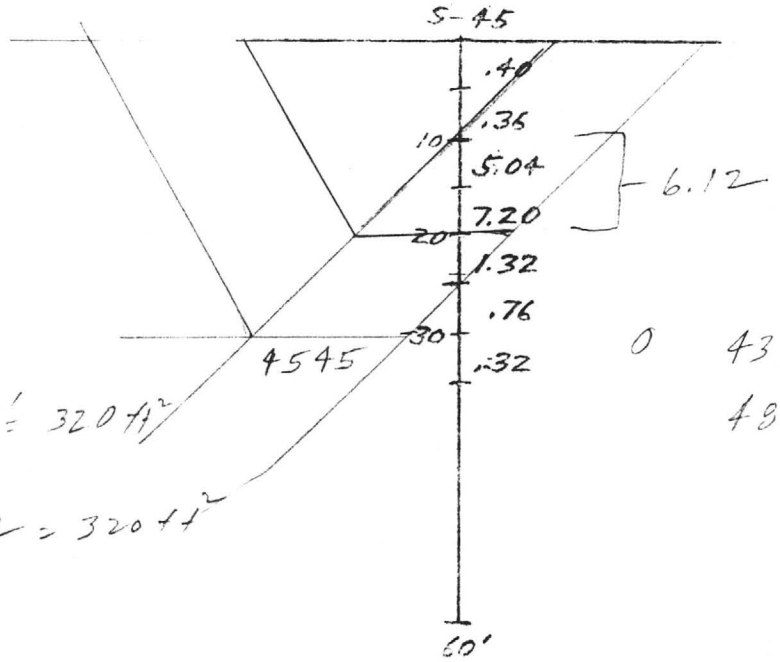
Waste $\frac{20}{2}$ x 30 = 300 ft²



0 43 x 7 300 2.70

$\frac{4+48}{2}$ x 30 780 4550

S-45



4550

0 43 X 11 = 470 4.52

48 x $\frac{30}{2}$ = 720

Ore 16 x 20' = 320 ft²

Waste $\frac{20}{2}$ x 32 = 320 ft²

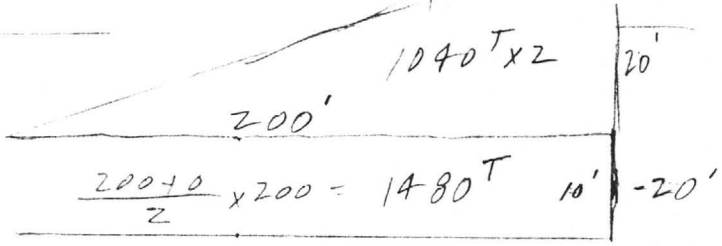
120' Ramp 0 ft² to 1190.

RAMP to 20' depth

3560 Tons

200' x 10' wd @ bot

x 10% grade



$\frac{200+0}{2}$ x 200 = 1480T

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 29, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

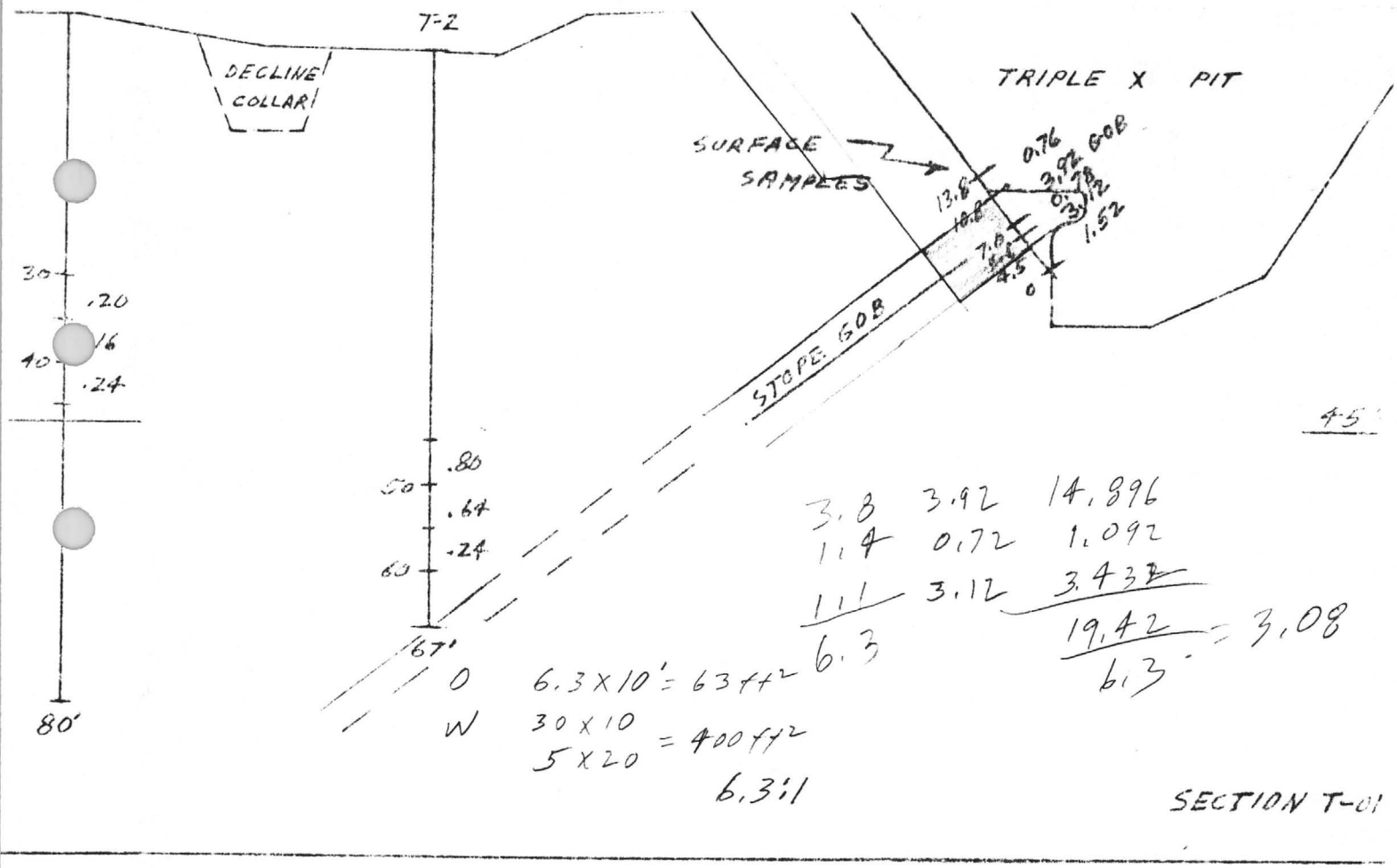
CERTIFICATE OF ANALYSIS

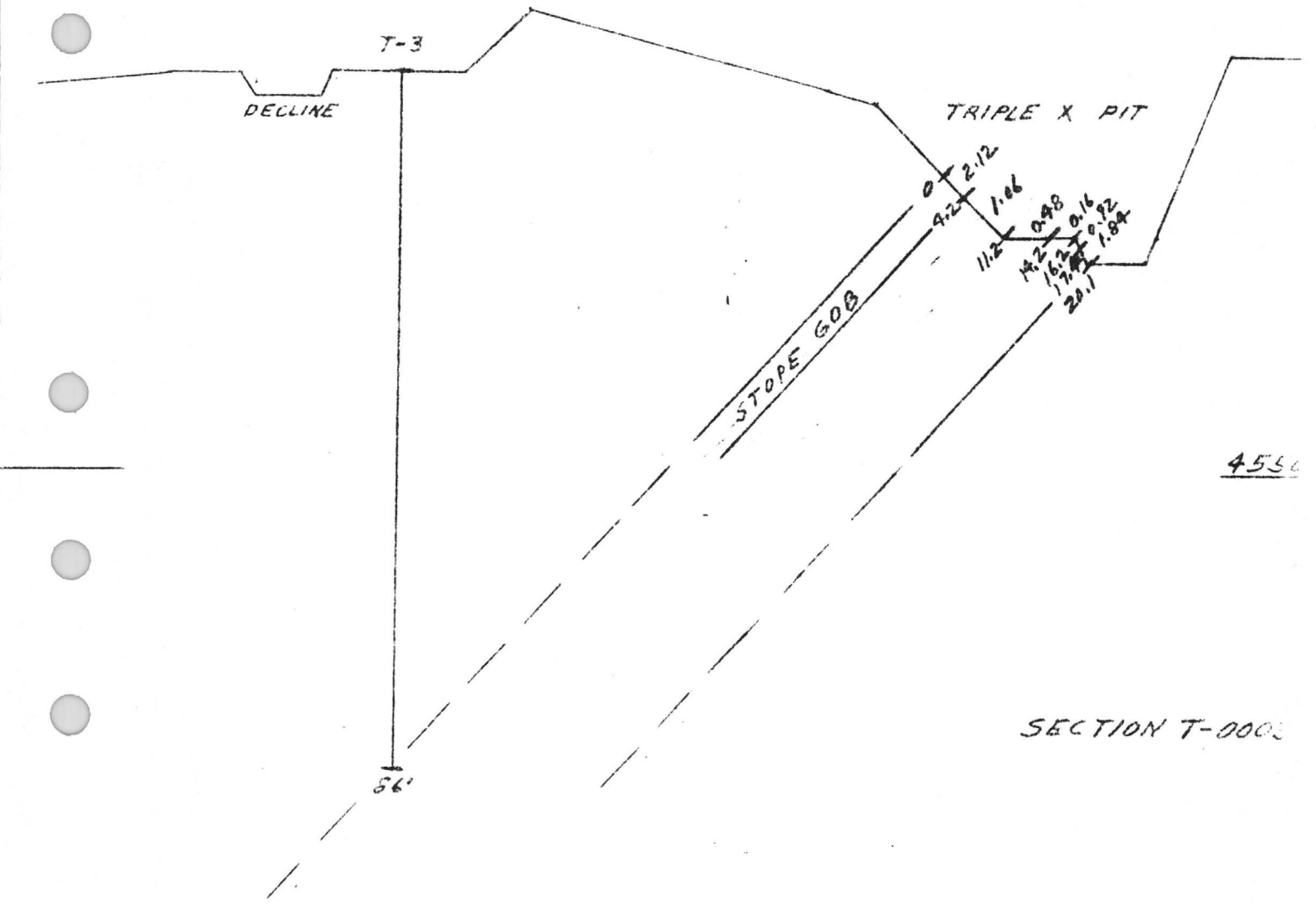
Section #7671

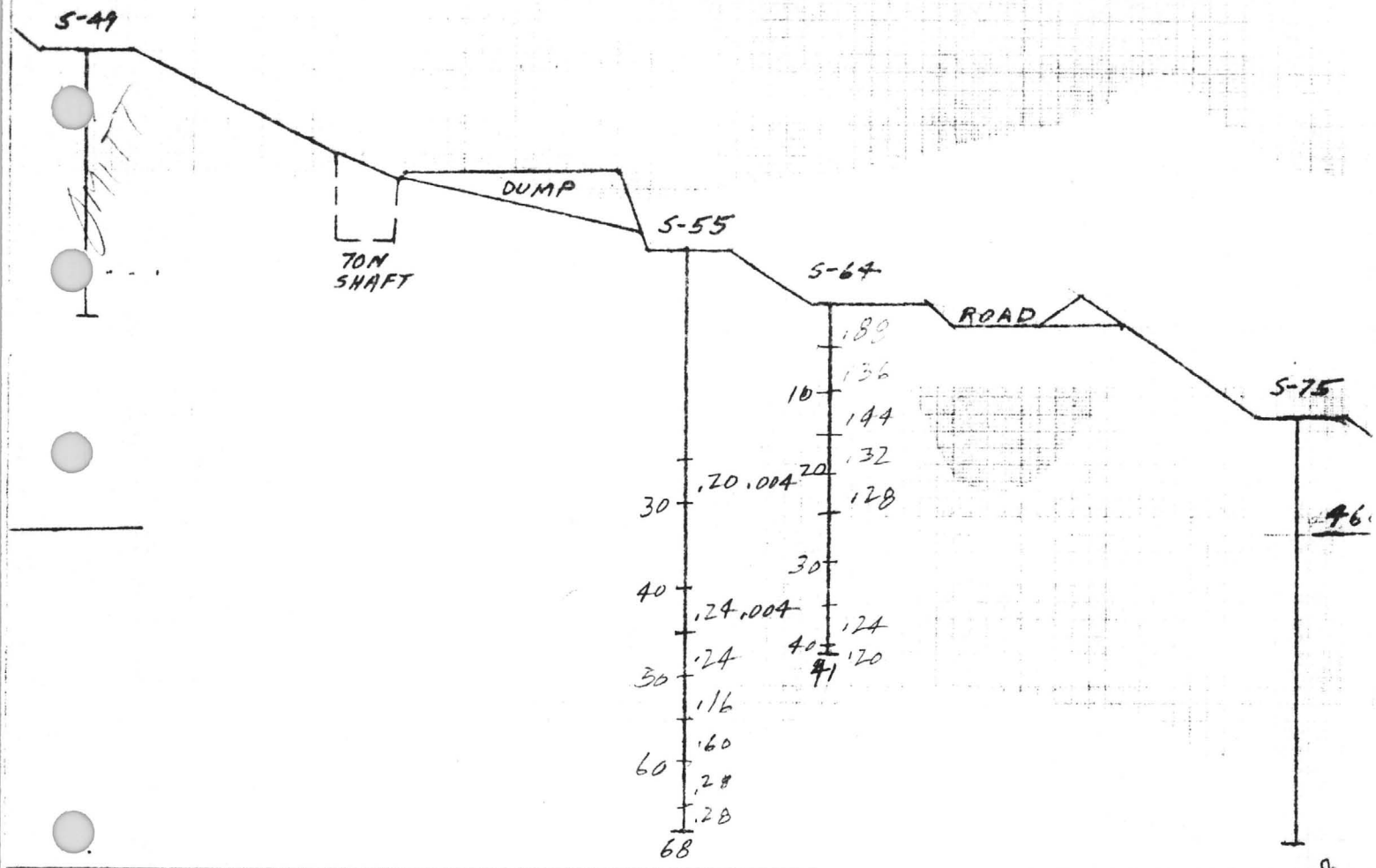
Sample Identification	Ag Oz/T	Au Oz/T				
SV 1 Pit 0-3'	1.16	0.008	0.22			
SV 3 Pit 0-3'	0.04	trace	0.10			
#1 Lev #1 0-3'	1.32	0.008	0.60			
#1 Lev #2A 0-2'	0.64	0.004	0.20			
#1 Lev #2B 2'-3'	1.68	0.016	0.64			
#2 4A 0-6'	0.28	0.004	0.10			
#2 4B 6-8'	0.24	0.004	0.08			
#2 4C 8-16'	0.60	0.008	0.08			

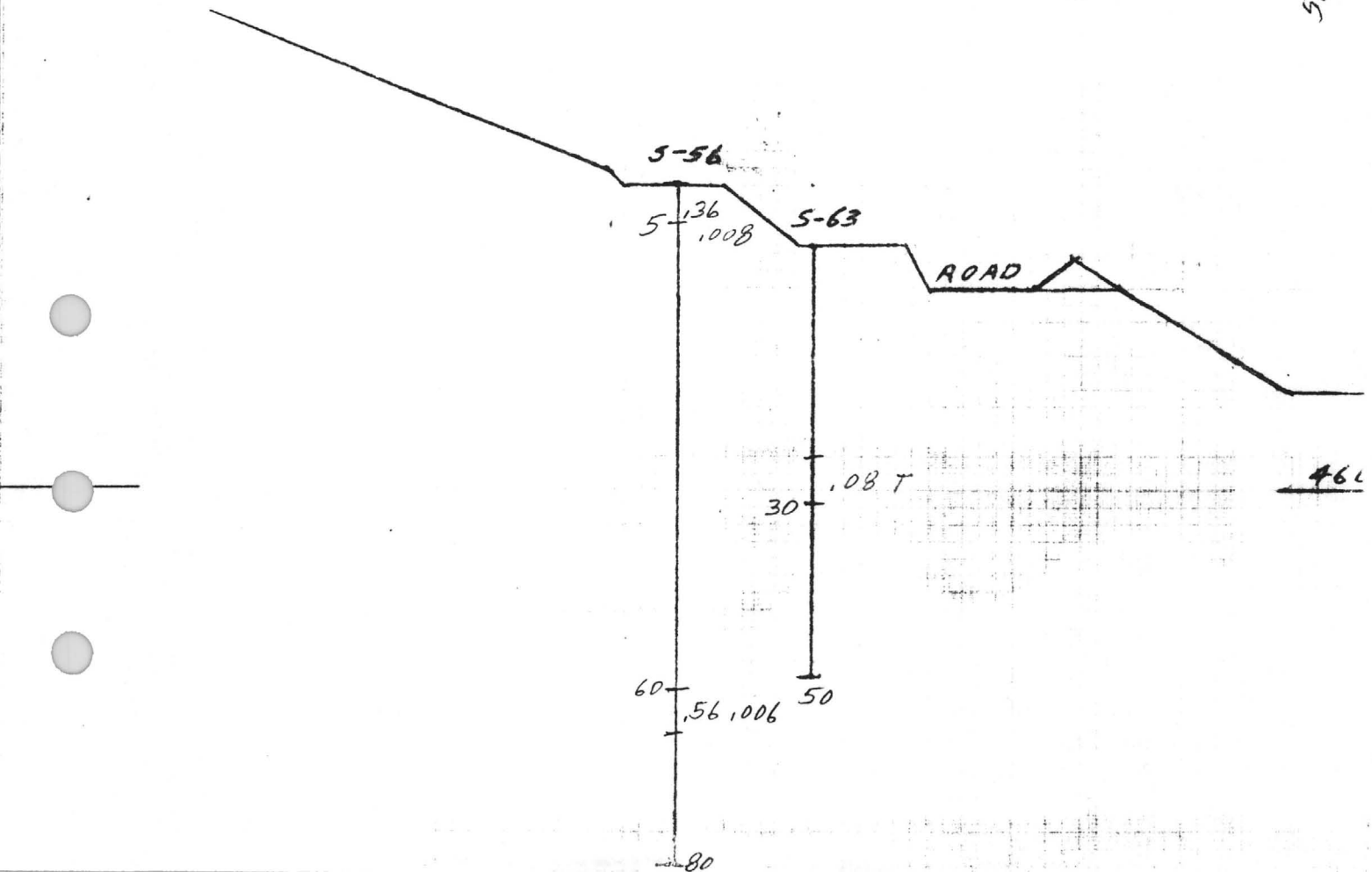
Method of Analysis: Geochemical

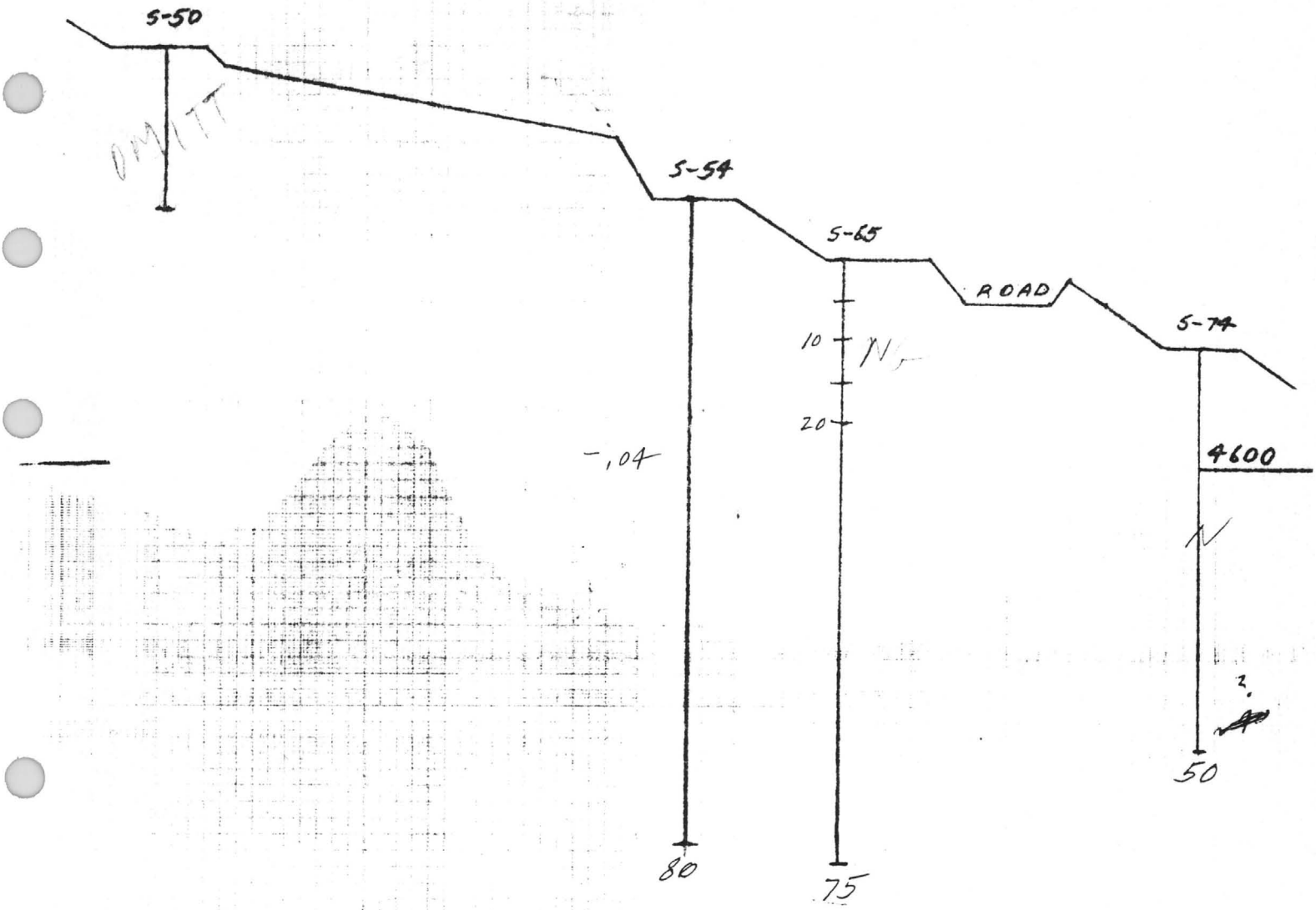
REGISTERED ASSAYER
CERTIFICATE NO. 14160
GARY ALVIN LINDROOS
Date Issued 10-29-84
ARIZONA U.S.A.

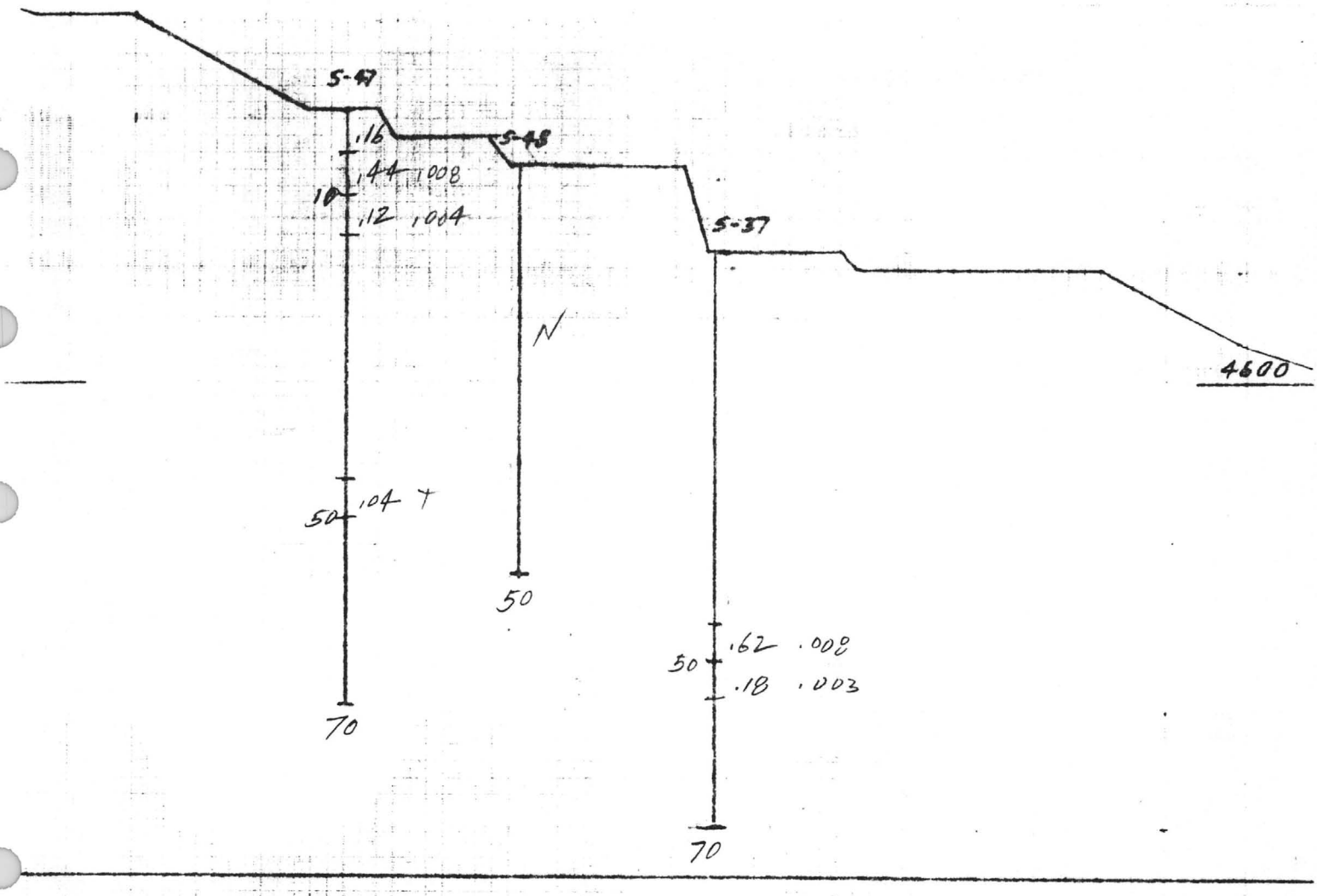

T-2
DECLINE COLLAR
TRIPLE X PIT
SURFACE SAMPLES
0.76
3.92 GOB
13.6
10.8
7.8
4.5
0
0.78
3.12
1.52
STOPE GOB
30
.20
40
.16
.24
.80
50
.64
.24
60
67'
80'
4-5
3.8 3.92 14.896
1.4 0.72 1.092
1.1 3.12 3.432
6.3 19.42 = 3.08
6.3
O 6.3 X 10' = 63 ft²
W 30 X 10
5 X 20 = 400 ft²
6.3:1
SECTION T-01

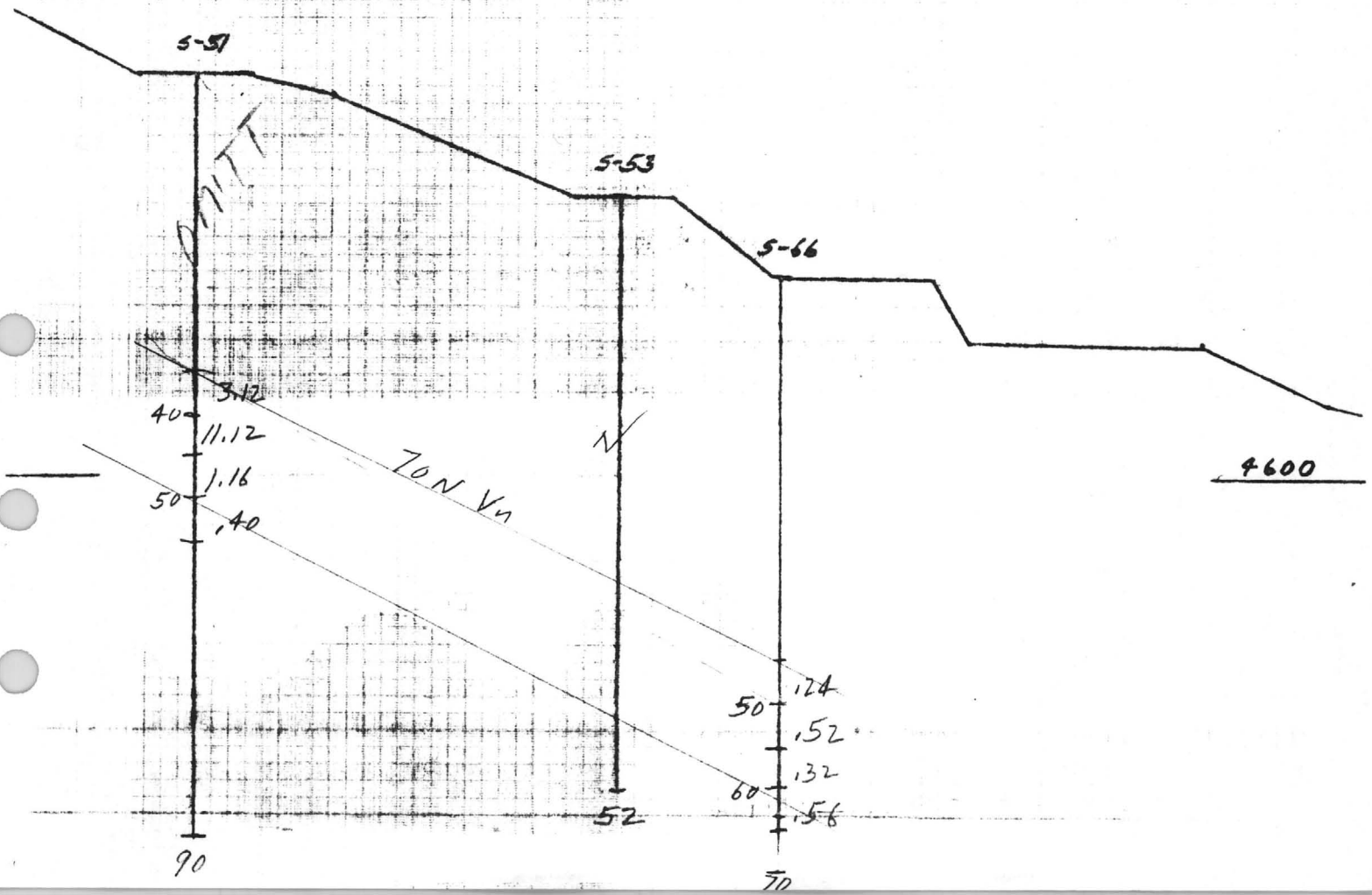

T-3
DECLINE
TRIPLE X PIT
0
2.12
4.2
1.06
0.48
11.2
0.16
0.92
1.84
20.1
STOPE GOB
56'
4556
SECTION T-0002

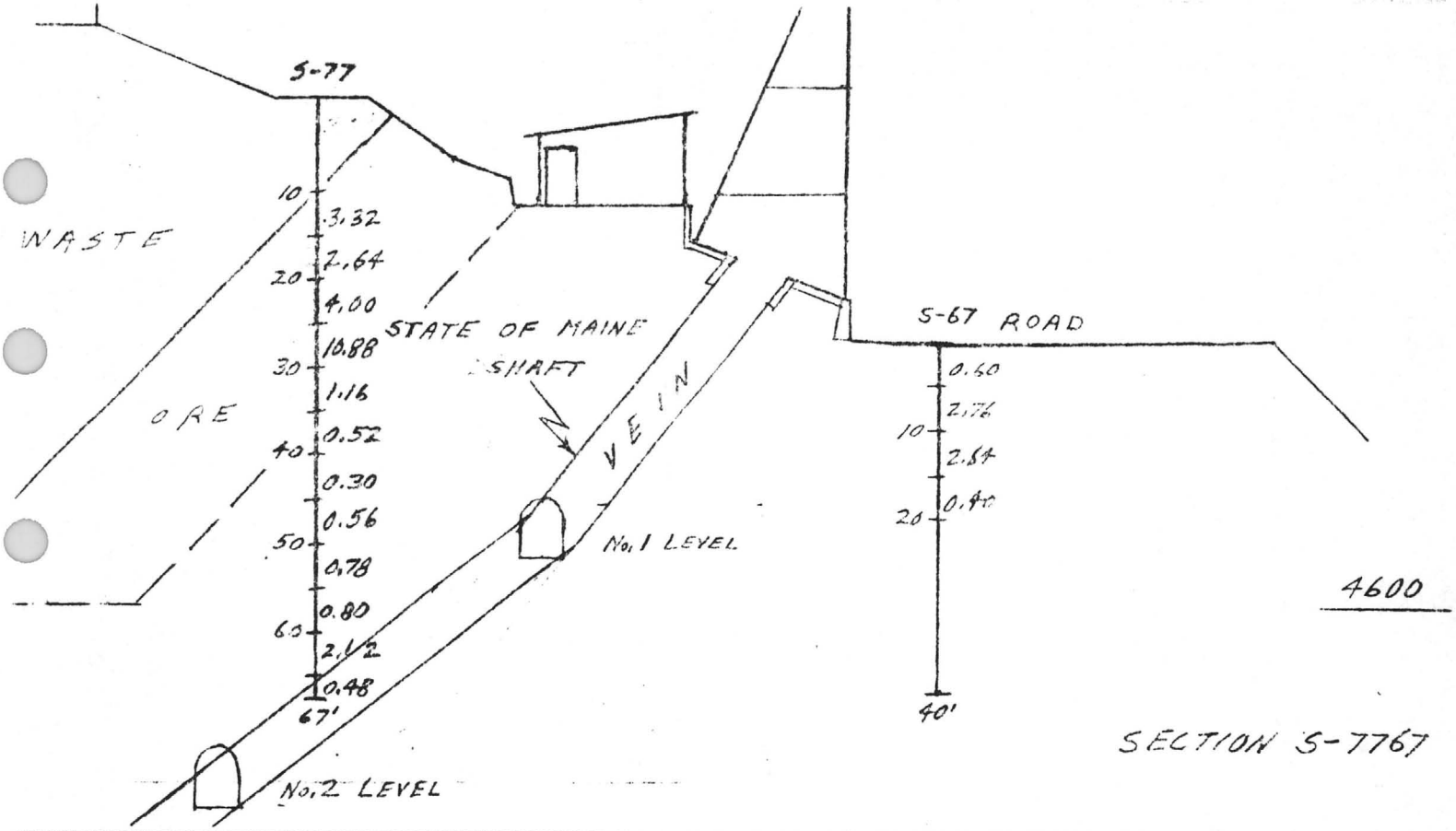

S-49
DUMP
70N SHAFT
S-55
S-64
ROAD
S-75
.20 .004
.24 .004
.24
.16
.60
.28
68
.36
.44
.32
.28
.24
.20
41

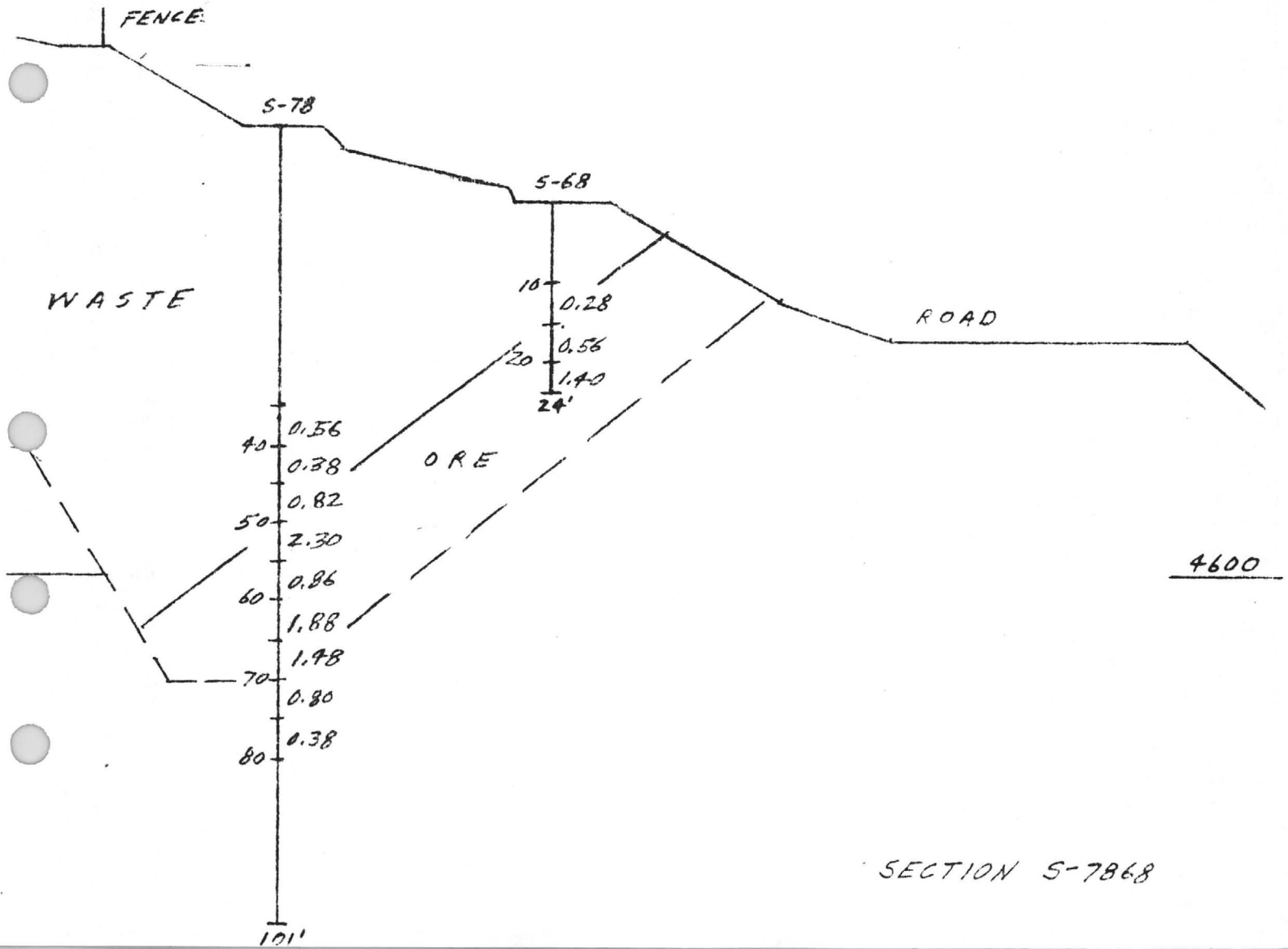

S-56
.36
.008
S-63
ROAD
.08 T
.56 .006
50
80

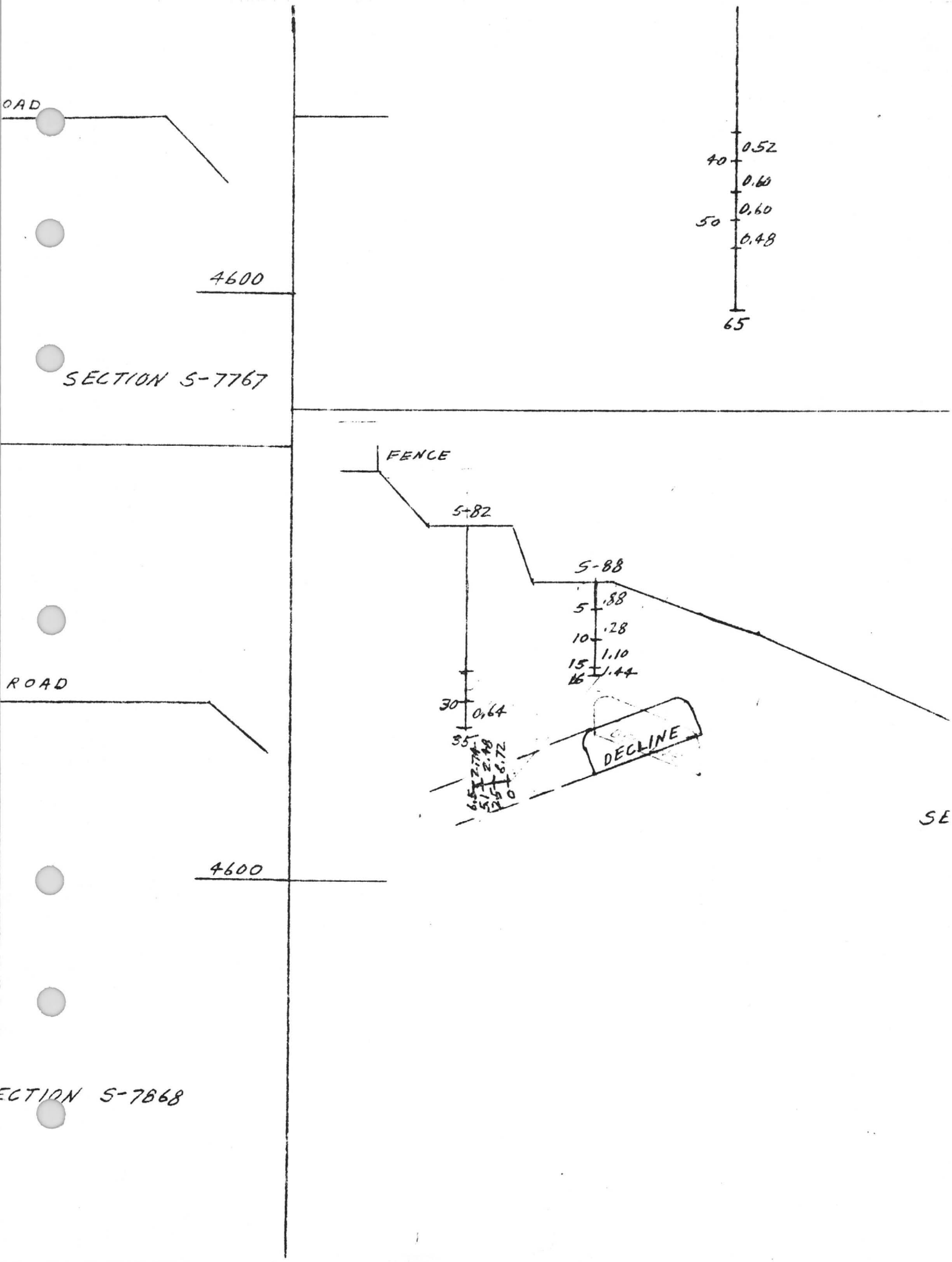

S-50
OMITT
S-54
S-65
ROAD
S-74
10
20
-.04
4600
80
75
50

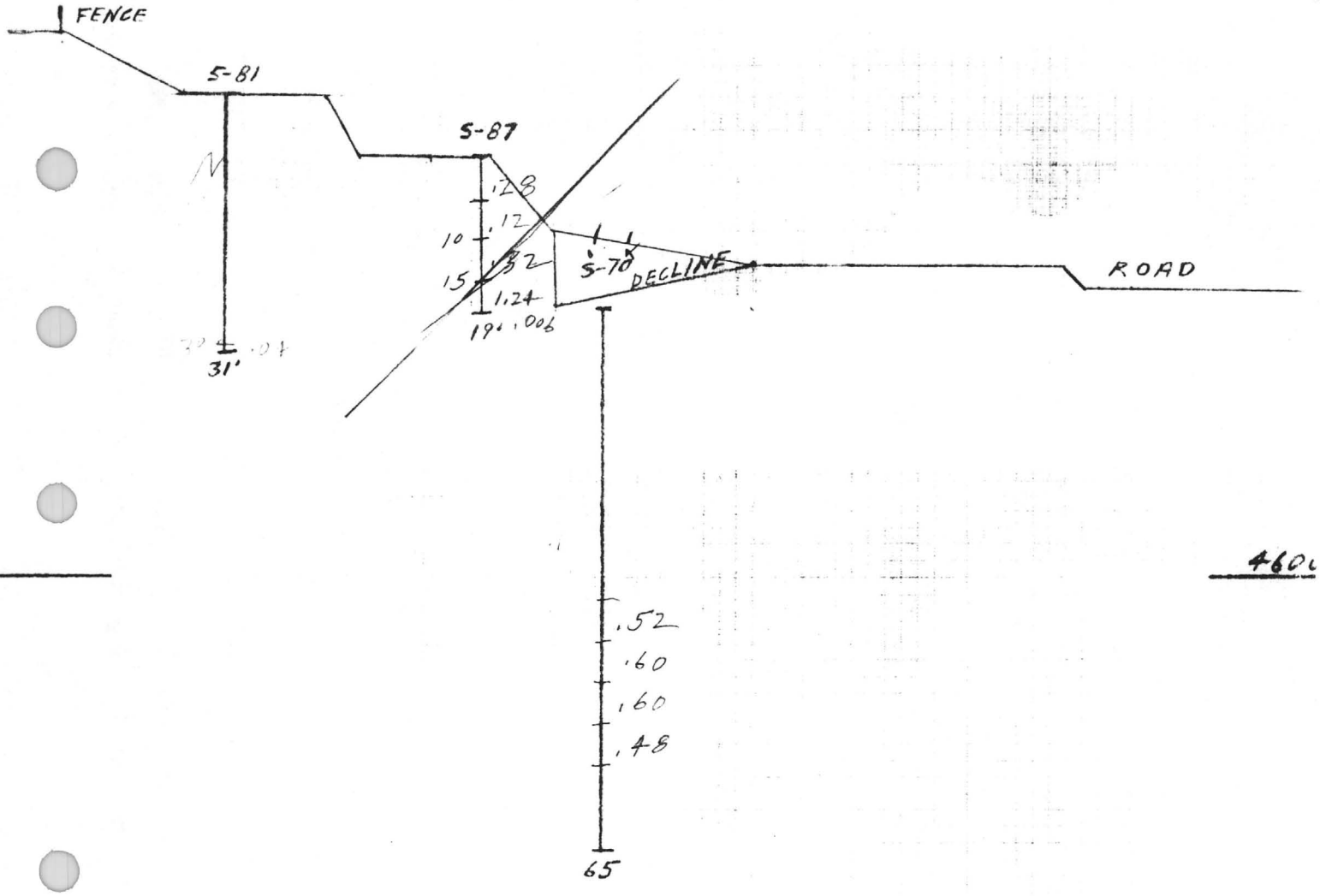

5-47
.16
5-48
.44 .008
10
.12 .004
5-37
N
4600
.04
50
50
70
.62 .008
50
.18 .003
70

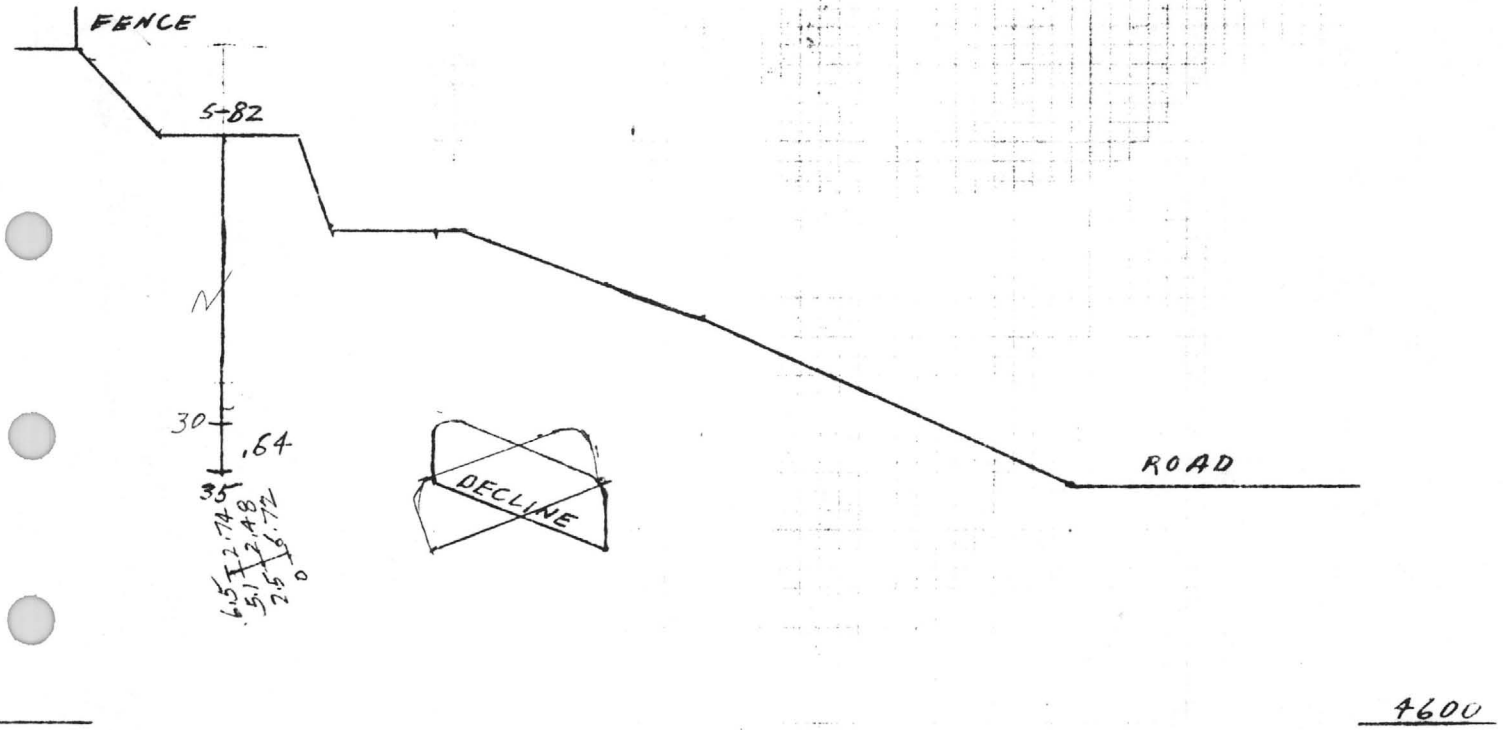

5-51
5-53
5-66
3.12
40
11.12
1.16
50
.40
70N Vn
N
4600
.24
50
.52
.32
60
.56
52
90
70

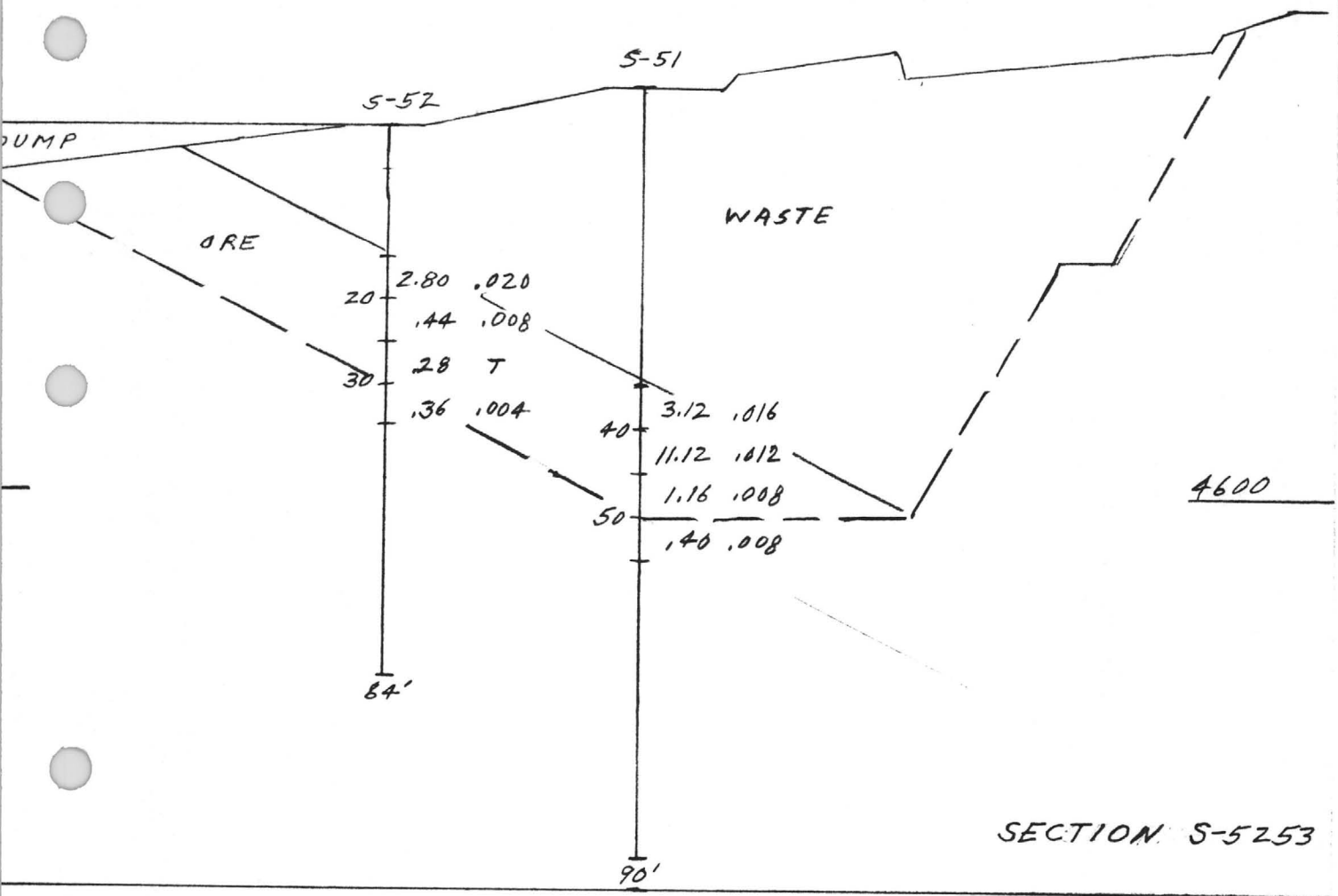

S-77
WASTE
ORE
10
3.32
20
2.64
4.00
STATE OF MAINE
SHAFT
30
10.88
1.16
40
0.52
0.30
VEIN
50
0.56
0.78
No. 1 LEVEL
60
0.80
2.12
0.48
67'
No. 2 LEVEL
S-67 ROAD
0.60
2.76
10
2.84
20
0.40
40'
4600
SECTION S-7767

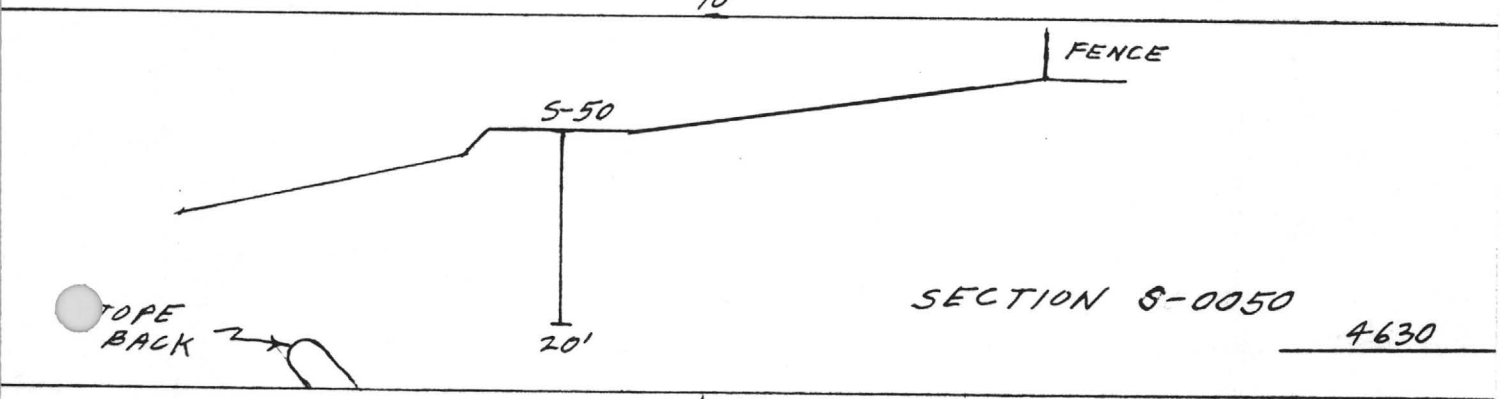

FENCE
S-78
S-68
WASTE
10
0.28
ROAD
20
0.56
1.40
24'
40
0.56
0.38
ORE
50
0.82
2.30
60
0.86
1.88
70
1.48
0.80
80
0.38
101'
4600
SECTION S-7868

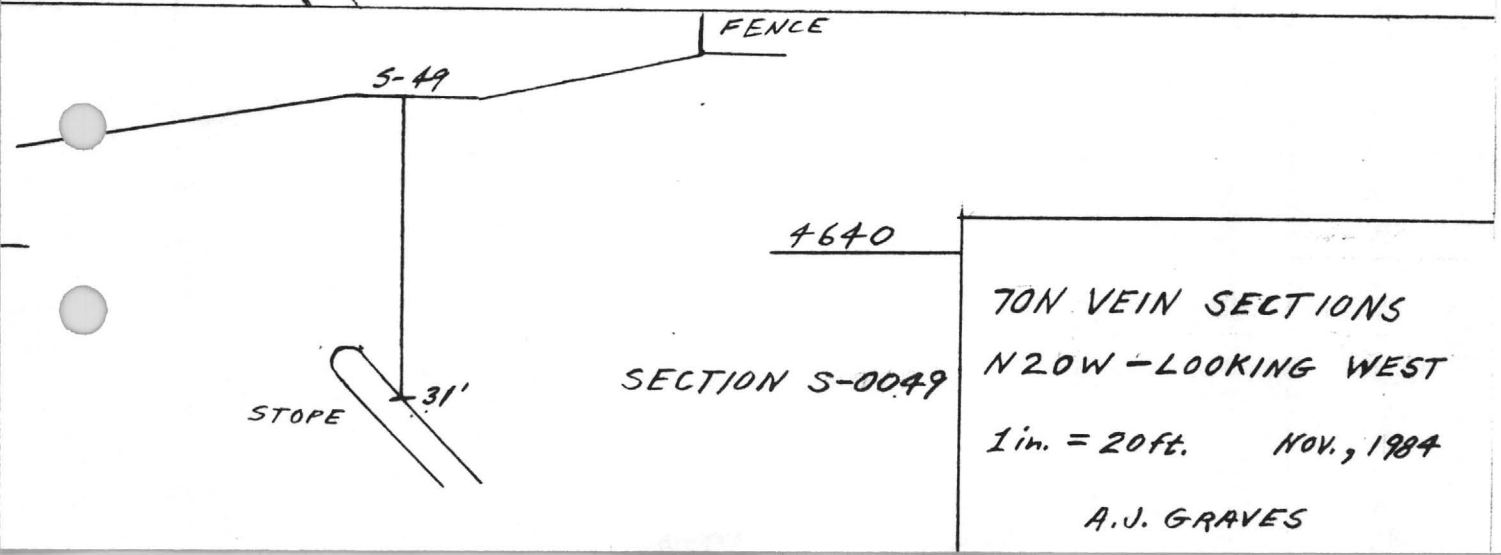

OAD
4600
SECTION S-7767
40
0.52
0.60
50
0.60
0.48
65
FENCE
5+82
S-88
5
.88
10
.28
15
1.10
16
1.44
ROAD
30
0.64
35
DECLINE
4600
SE
ECTION S-7868


FENCE
5-81
5-87
.28
.12
10
.32
15
1.24
19
.006
5-70
DECLINE
ROAD
31'
.52
.60
.60
.48
65
4600


FENCE
5-82
30
.64
35
DECLINE
ROAD
4600





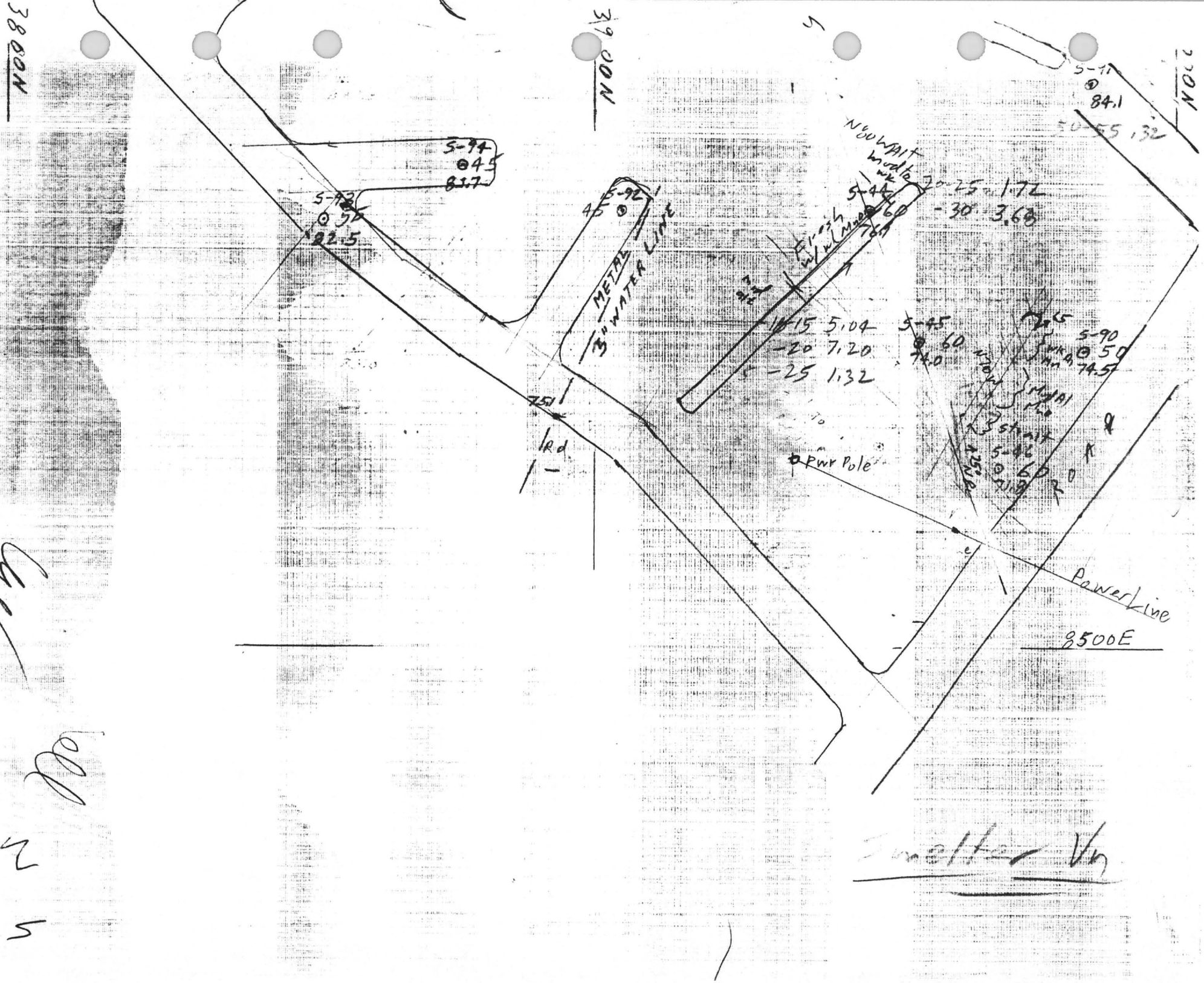


70N VEIN SECTIONS

N20W – LOOKING WEST

1 in. = 20 ft. NOV., 1984

A.J. GRAVES


3800N
3600N
5-94
45
83.7
5-93
37
22.5
5-92
45
METAL
3" WATER LINE
Rd
75.1
5-44
60
76.1
15 5.04
-20 7.20
-25 1.32
5-45
60
74.0
5-90
50
74.5
5-42
60
Pwr Pole
Power Line
8500E
5-71
84.1
-25 1.72
-30 3.68

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 18, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S-44	20-25	1.72	0.024	0.24			
	25-30	3.68	0.036	0.18			
S-45	0-5	0.40	0.010	0.18			
	5-10	0.36	0.006	0.10			
	10-15	5.04	0.020	9.92			
	15-20	7.20	0.020	6.00			
	20-25	1.32	0.012	0.70			
	25-30	0.76	0.008	0.40			
	30-35	0.32	0.004	0.12			
	35-40	0.12	0.004	0.08			
	40-45	0.12	0.004	0.10			
	50-55	0.16	0.004	0.06			
S-46	15-20	0.20	0.008	0.02			
	20-25	0.08	0.004	0.02			
S-47	0-5	0.16	0.004	0.06			
	5-10	0.44	0.008	0.16			

Method of Analysis: Acid Digestion

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-18-84
ARIZONA, U.S.A.

Gary A. Lindroos

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 18, 1984

Mill Vn

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

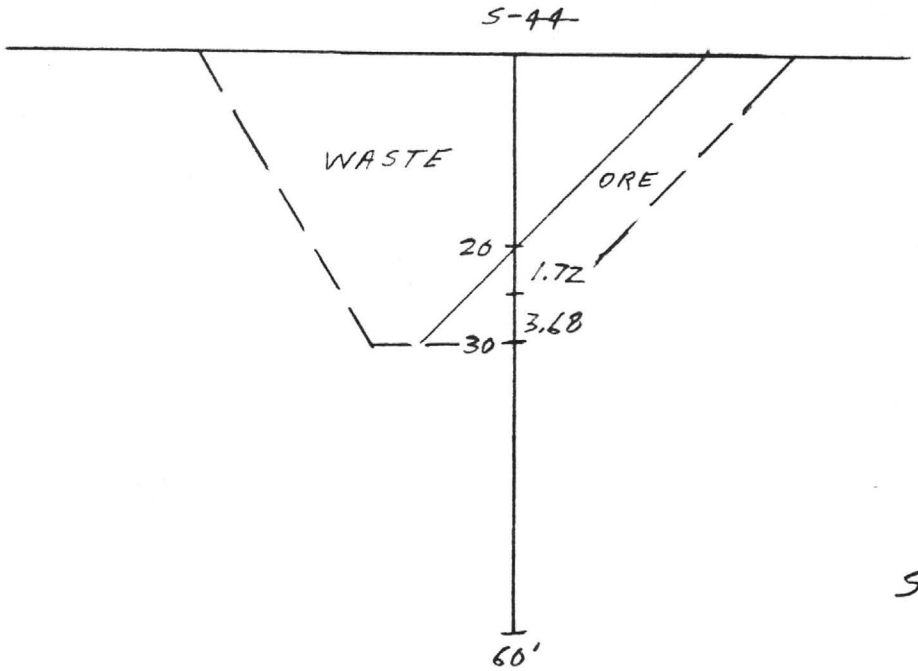
CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S-44	20-25	1.72	0.024	0.24	10' 2.70		27.00
	25-30	3.68	0.036	0.18			
S-45	0-5	0.40	0.010	0.18			
	5-10	0.36	0.006	0.10			
	10-15	5.04	0.020	9.92	67.80		
	15-20	7.20	0.020	6.00	15' 4.52	20' 3.58	71.60
	20-25	1.32	0.012	0.70		30'	98.60
	25-30	0.76	0.008	0.40		Ave 15'	3.29
	30-35	0.32	0.004	0.12		Ave 12.5'	3.79
	35-40	0.12	0.004	0.08			
	40-45	0.12	0.004	0.10			
	50-55	0.16	0.004	0.06			
S-46	15-20	0.20	0.008	0.02			
	20-25	0.08	0.004	0.02			
~~S-47~~	~~0-5~~	~~0.16~~	~~0.004~~	~~0.06~~			

Method of Analysis: Acid Digestion

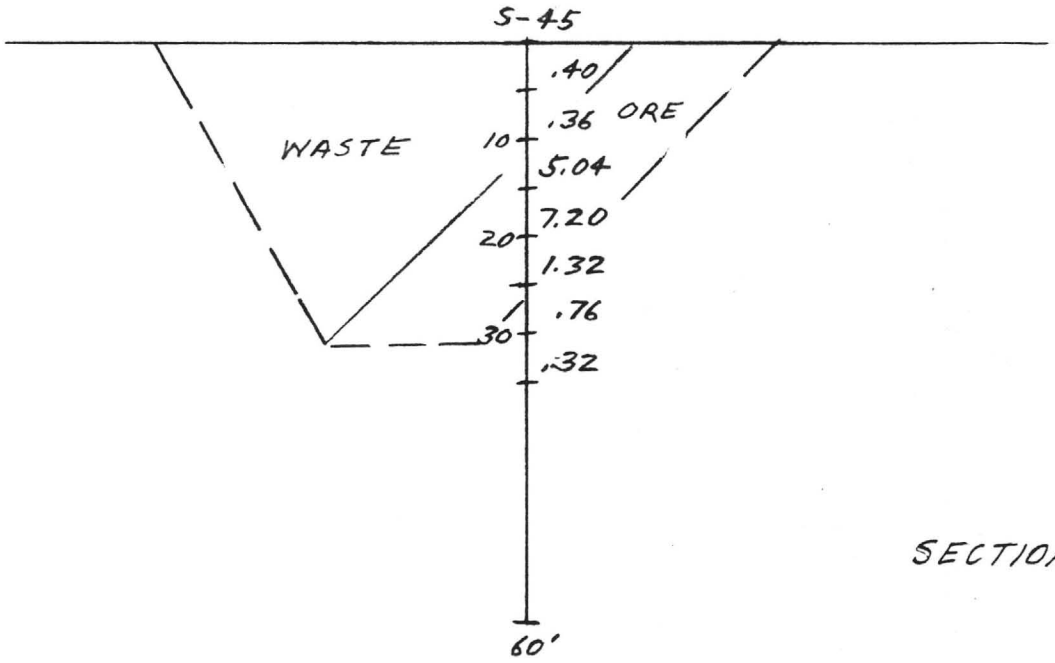
REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-18-84
ARIZONA, U.S.A.

Gary A. Lindroos



4550

SECTION S-4490



4550

SECTION S-0045

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 18, 1984

Tombstone Silver Mines
Page 2

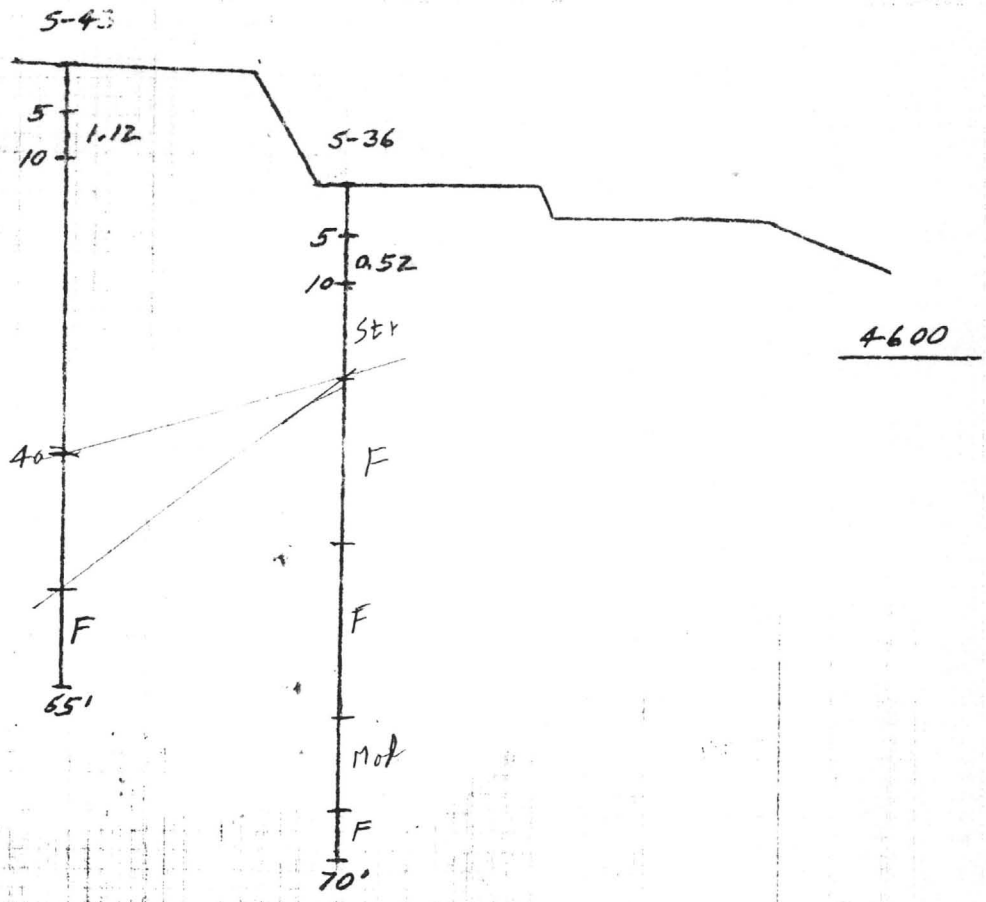
CERTIFICATE OF ANALYSIS

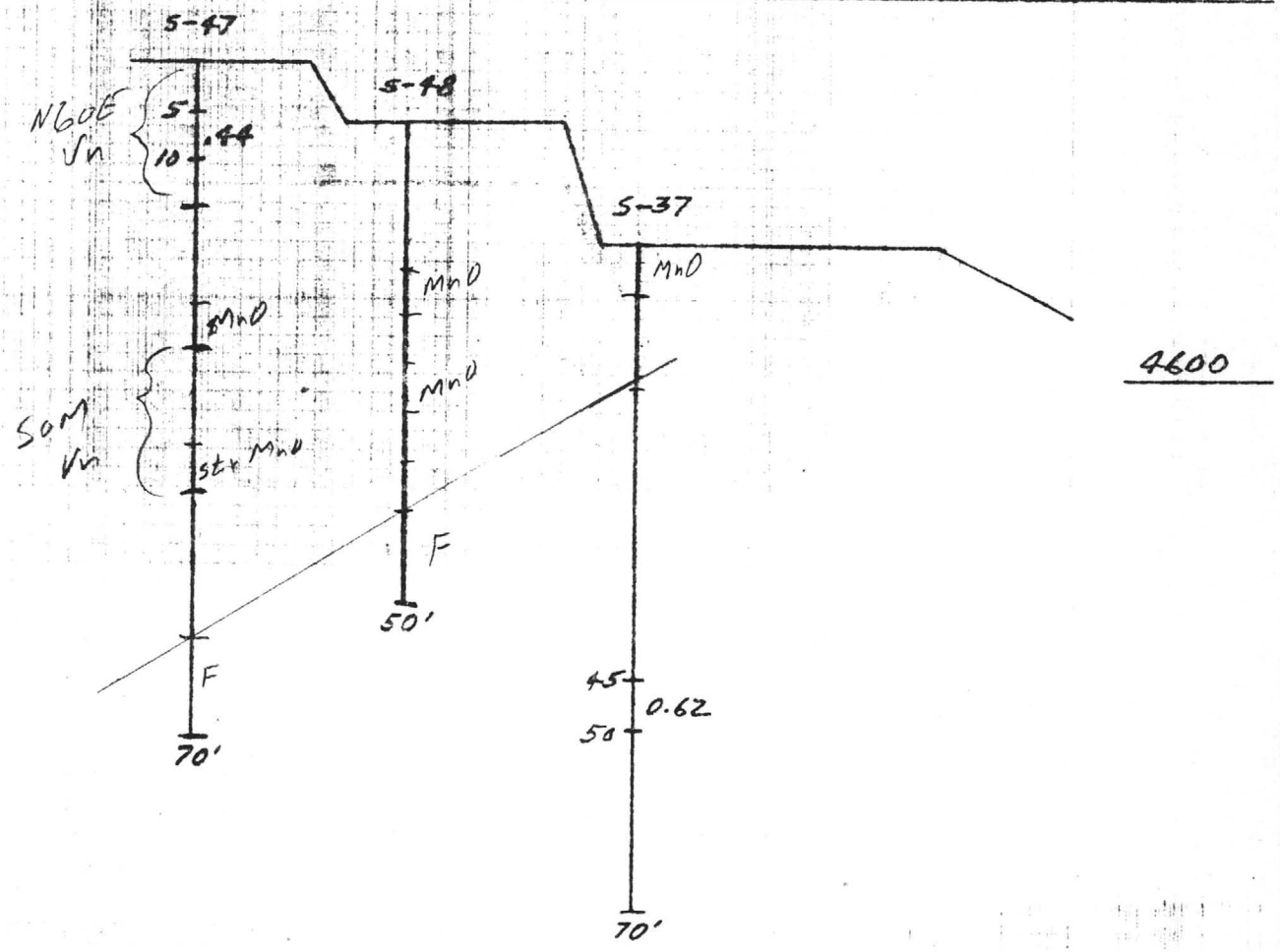
Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S-47	5-10	0.44	0.008	0.16			
	10-15	0.12	0.004	0.04			
	45-50	0.04	trace	Nil			
SV-16	0-5	0.68	0.012	0.14			
	5-10	0.48	0.008	0.06			
	25-30	0.12	0.004	0.06			
	30-35	0.32	0.004	0.10			
SV-17	0-5	0.44	0.008	0.06			
	10-15	0.72	0.016	0.24			
	15-20	4.72	0.016	0.64			
	20-25	2.24	0.020	0.30			
	35-40	3.20	0.012	0.44			

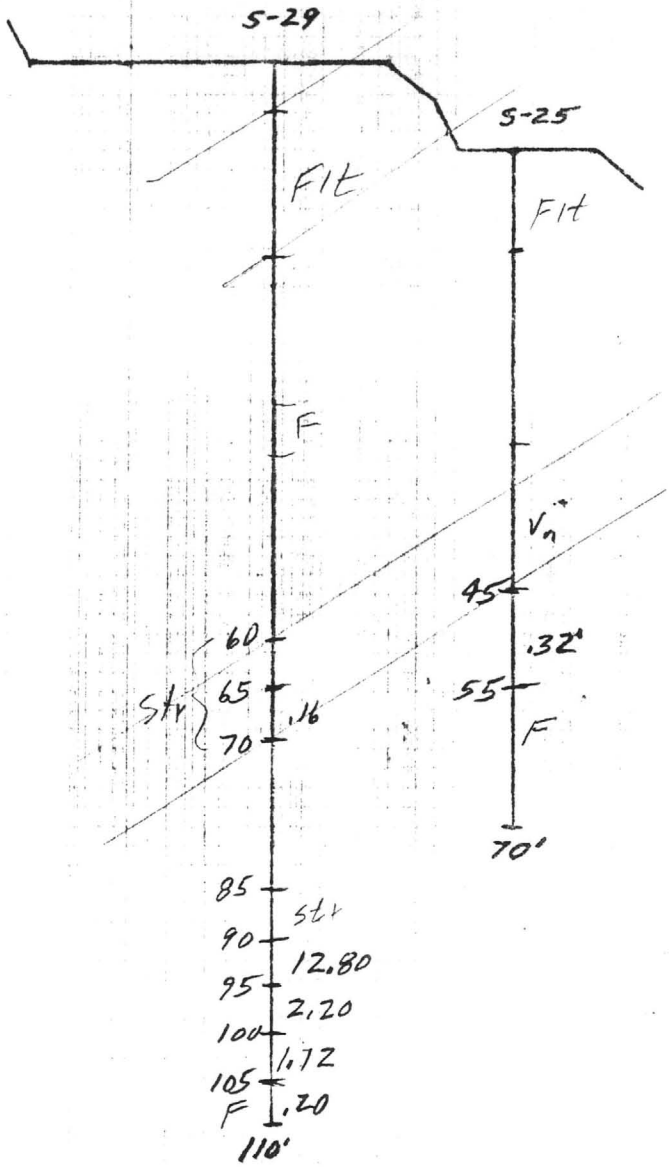
Method of Analysis: _____

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-18-84
ARIZONA, U.S.A.

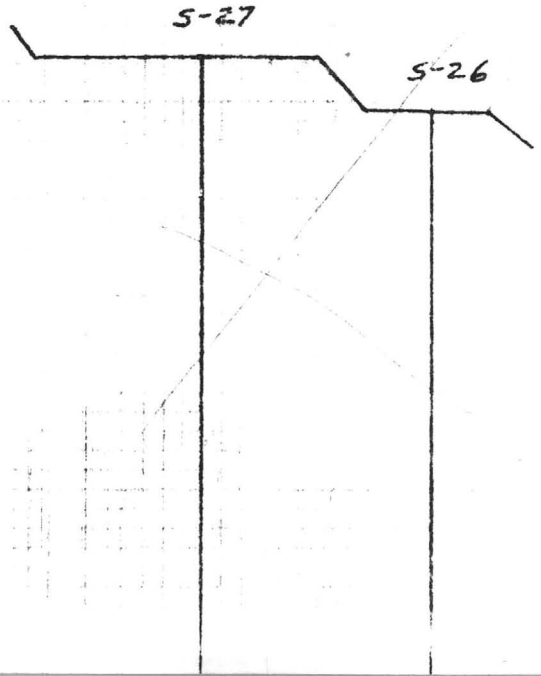
Gary A. Lindroos


5-43
5
10
1.12
40
F
65'
5-36
5
10
0.52
Str
F
F
Mod
F
70'
4600

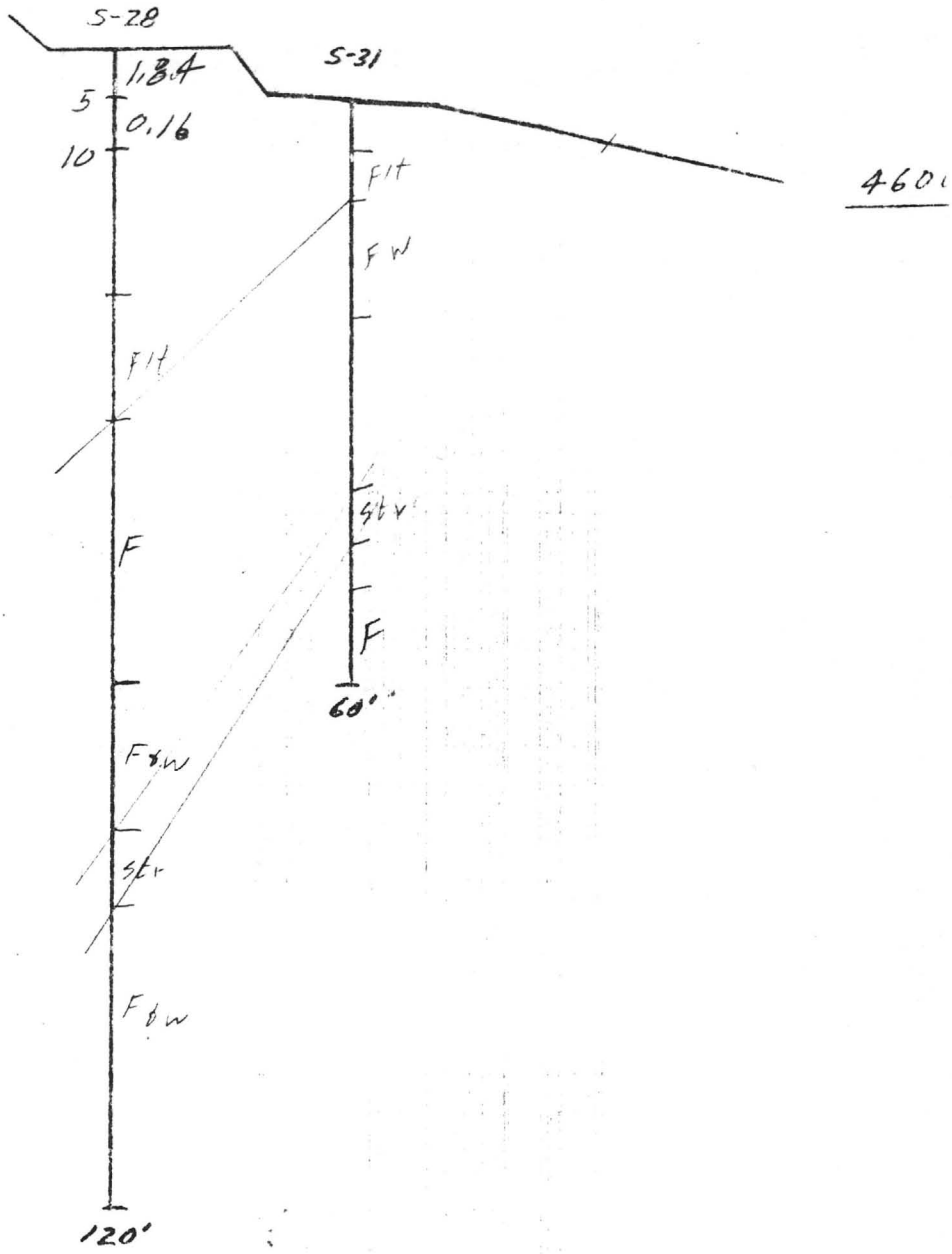

5-47
N60E
Vn
5
10
.44
MnO
SoM
Vn
str MnO
F
70'
5-48
MnO
MnO
F
50'
5-37
MnO
45
50
0.62
70'
4600

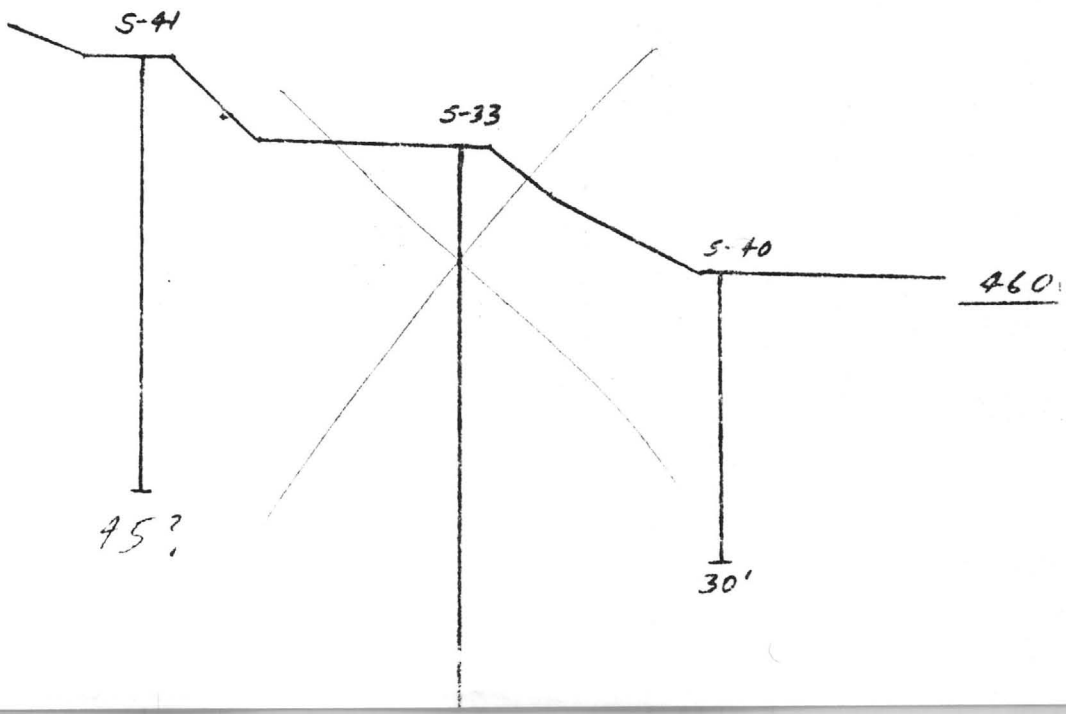

S-29
S-25
Flt
Flt
F
V_n
45
.32'
60
55
Str
65
.16
70
F
70'
85
Str
90
12.80
95
2.20
100
1.72
105
F
.20
110'

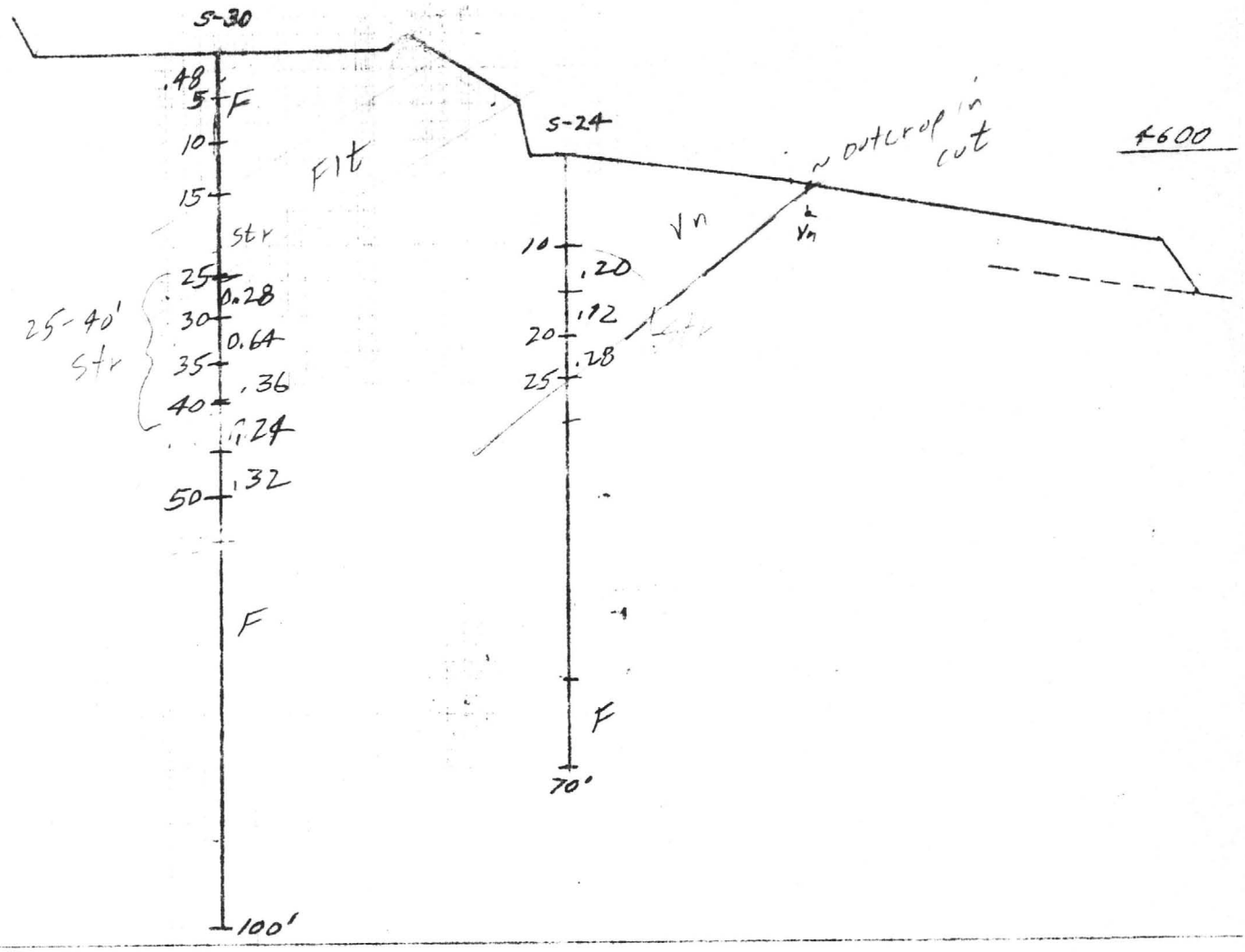
4600

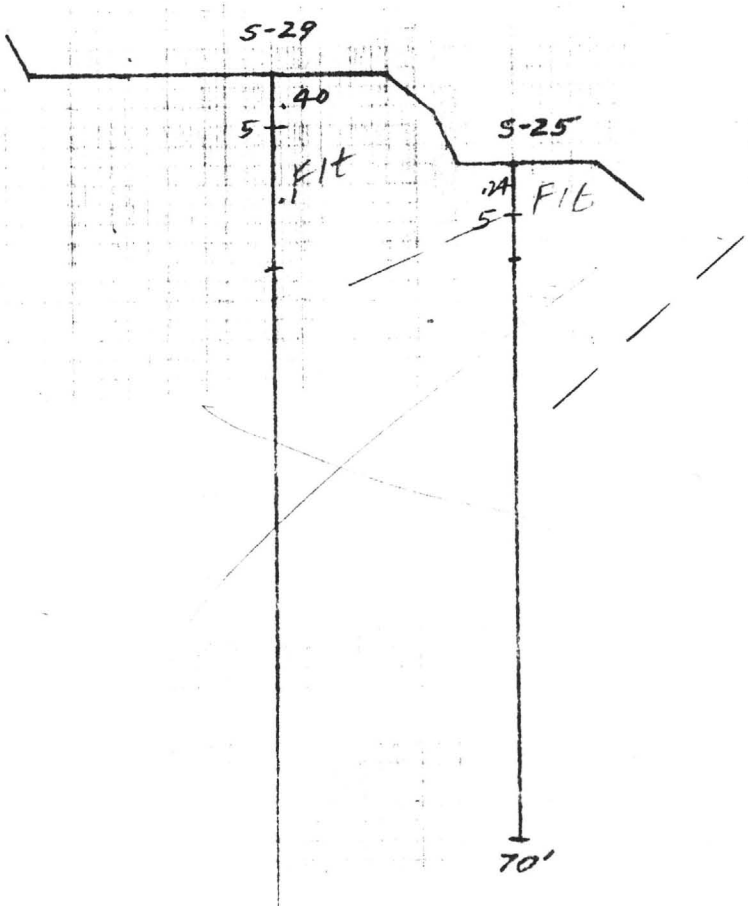

S-27
S-26

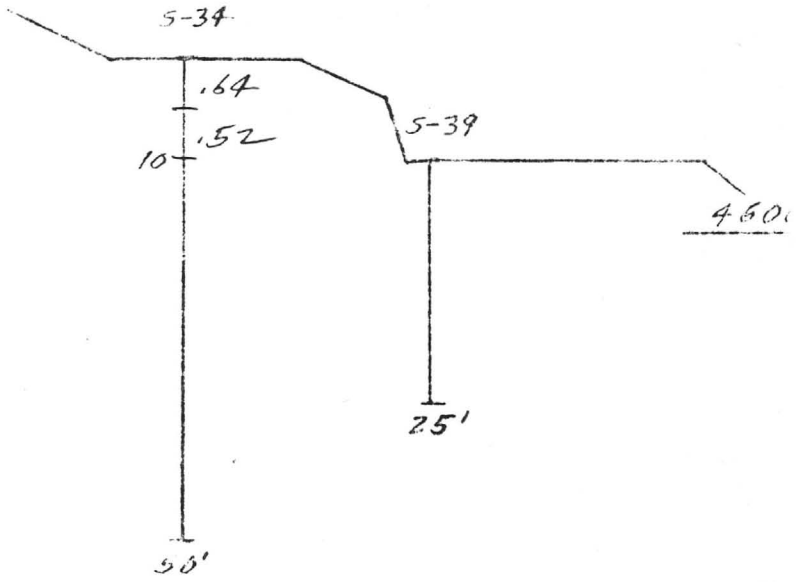
4600

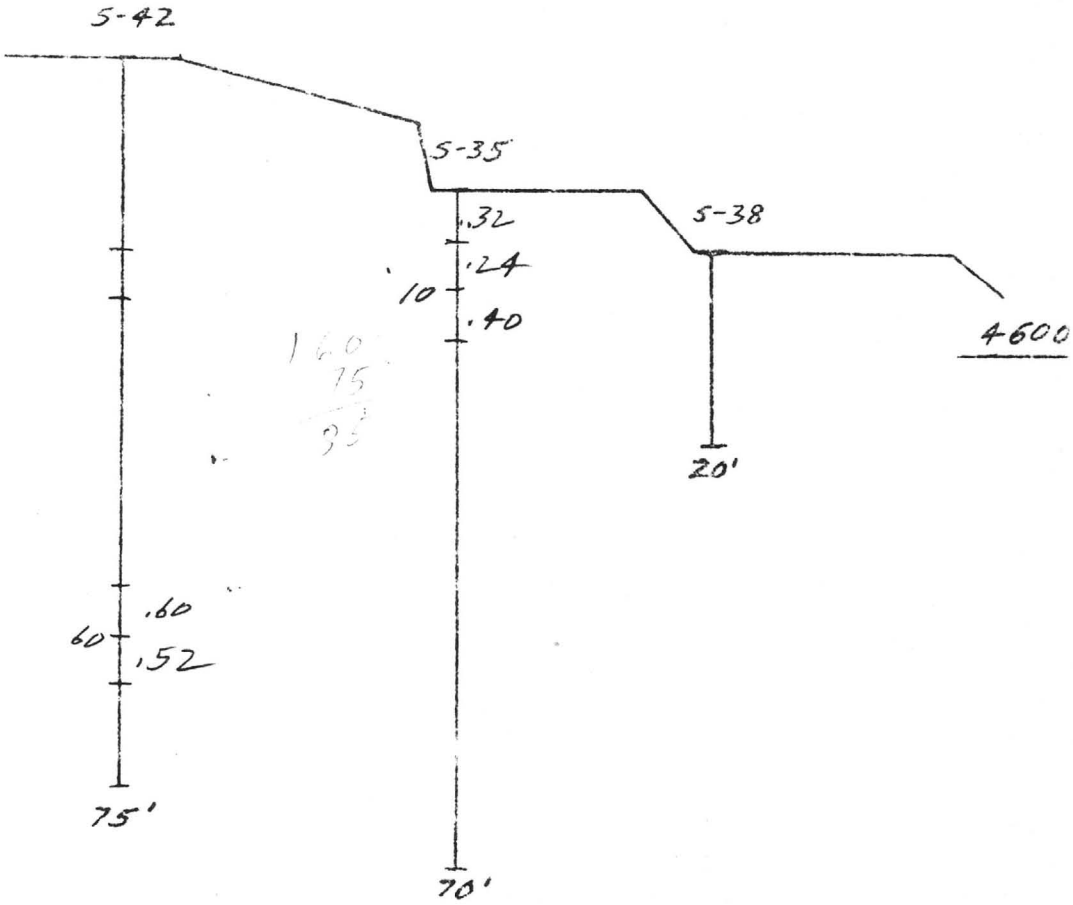

S-28
1.8.4
5
0.16
10
F
F&W
F&W
120'
S-31
F
F&W
F
60'
460

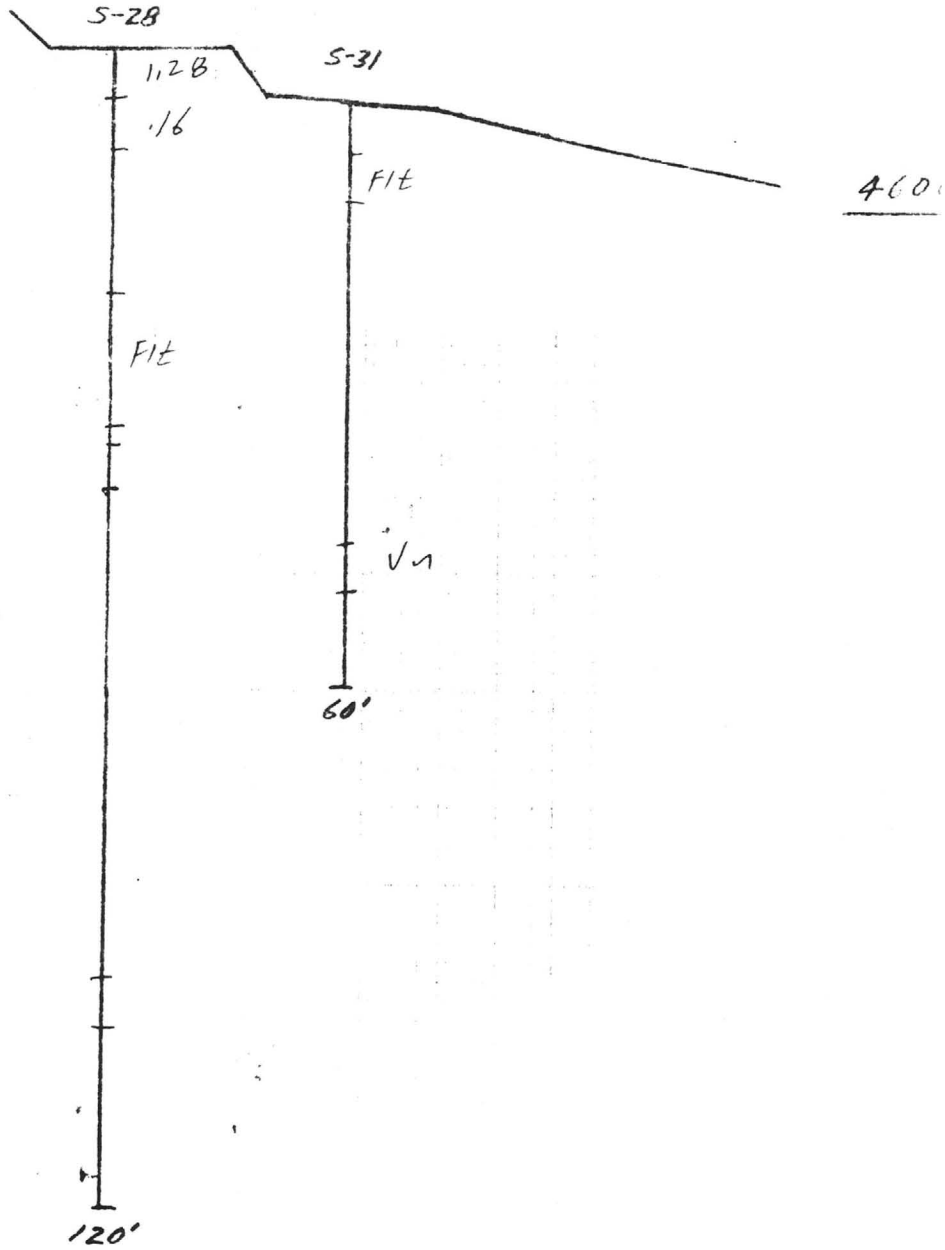

S-41
45?
S-33
S-40
30'
460

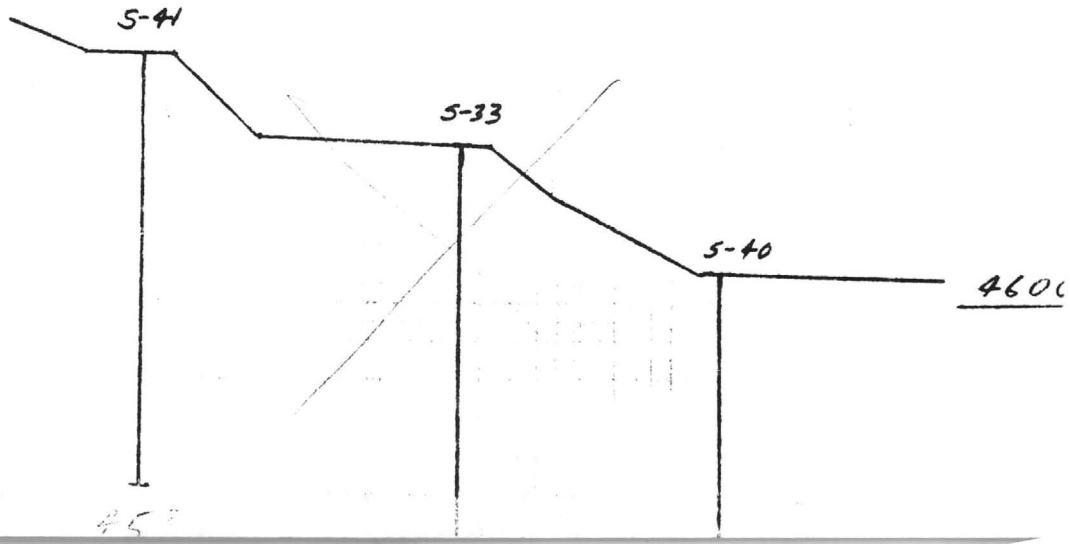

S-30
.48
5
F
10
15
Fit
str
25
0.28
30
0.64
35
.36
40
.24
50
.32
25-40'
Str
F
100'
S-24
outcrop in cut
4600
10
.20
.12
20
.28
25
Vn
F
70'

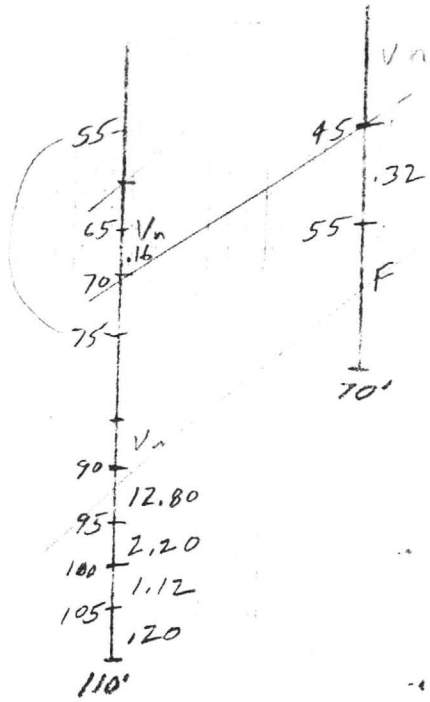

S-29
.40
5
Fit
S-25
.24
5
Fit
4600
70'

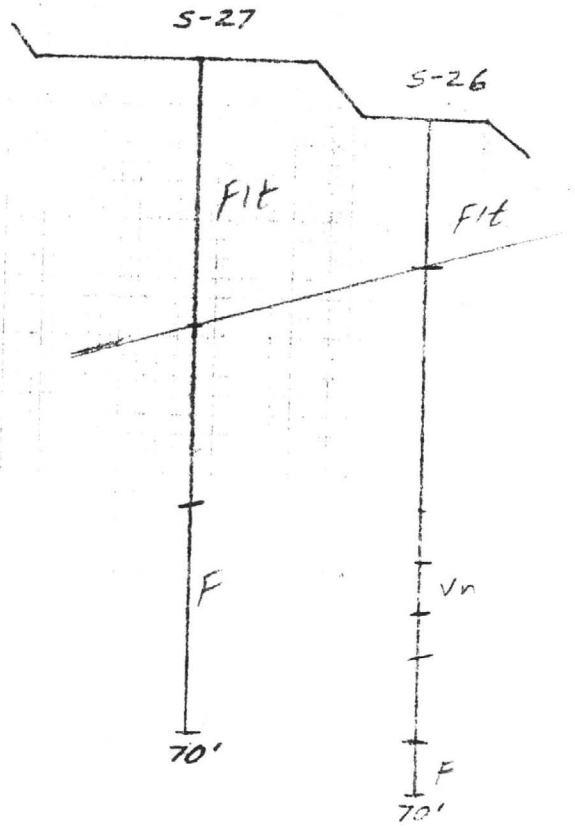

5-34
.64
.52
10
5-39
4600
25'
50'


5-42
5-35
.32
.24
10
.40
5-38
4600
20'
.60
60
.52
75'
70'

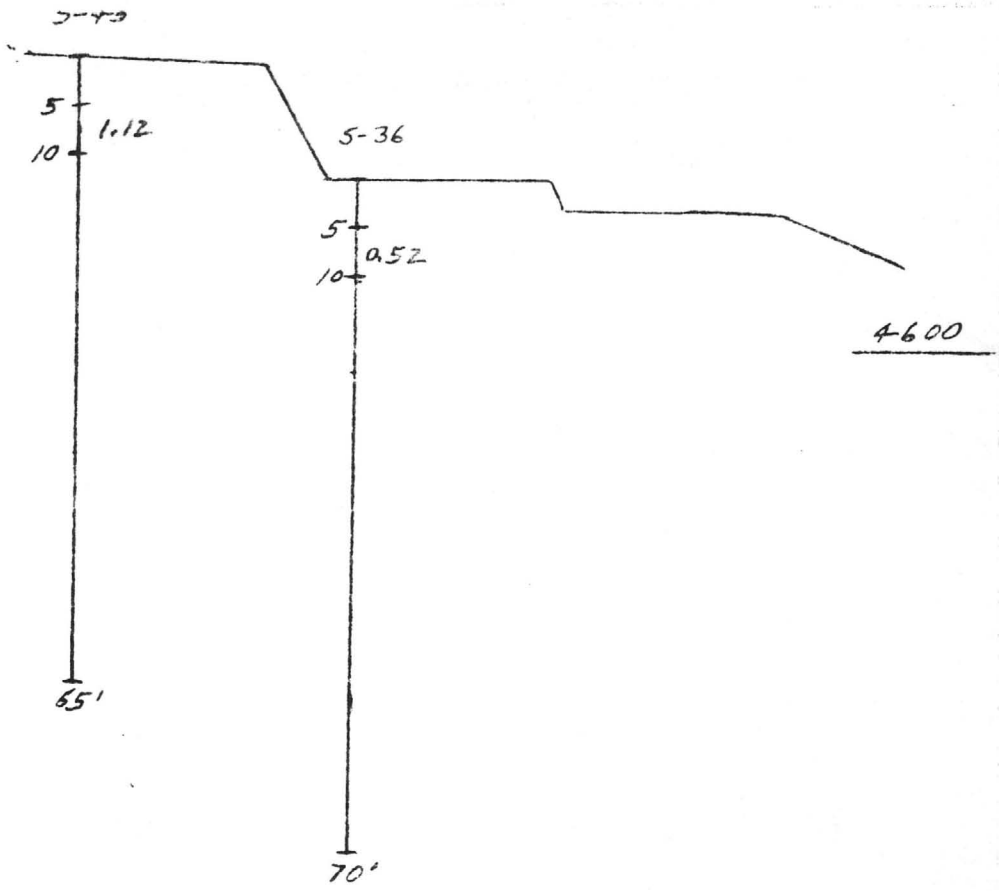

S-28
1.28
.16
Flt
120'
S-31
Flt
Vn
60'
4600

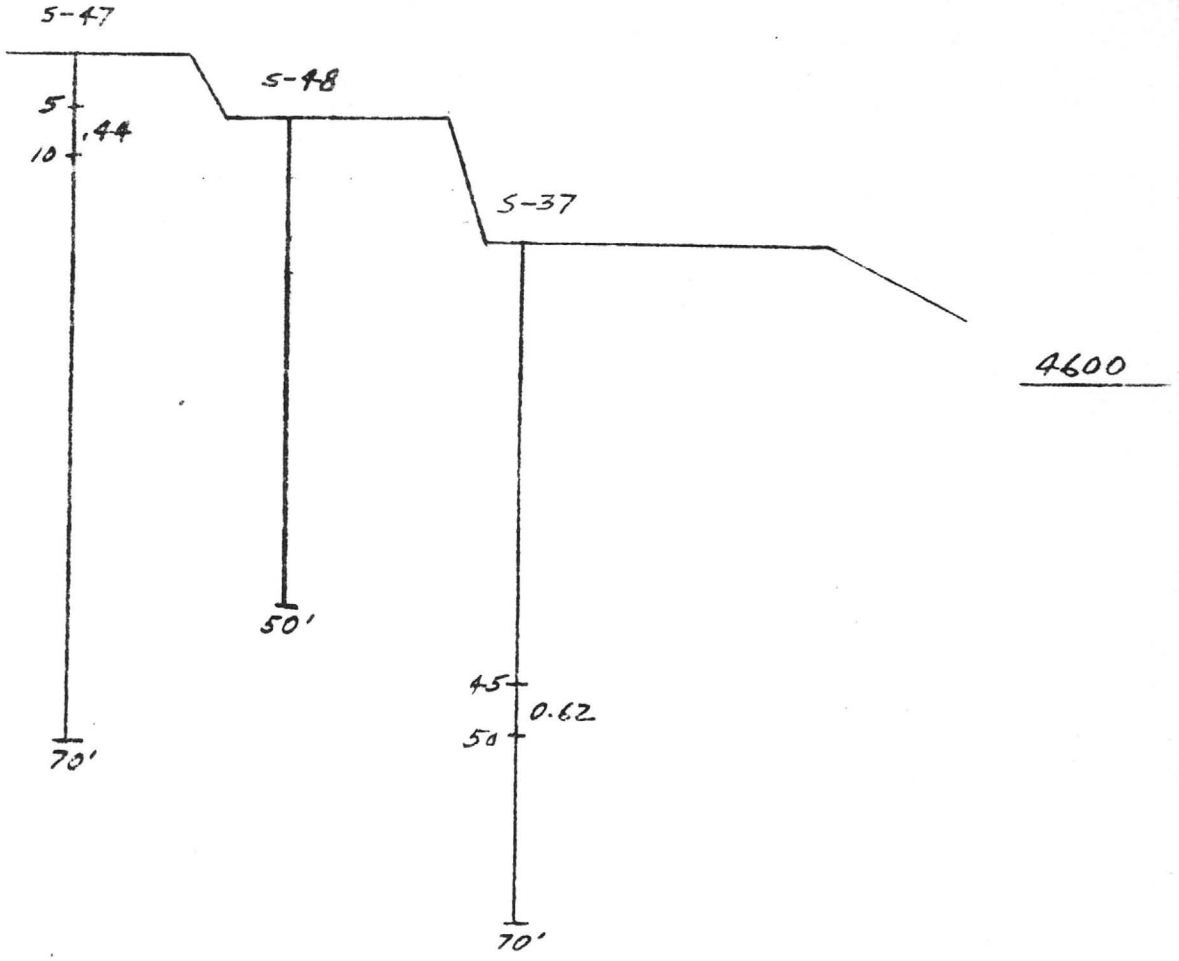

S-41
S-33
S-40
4600

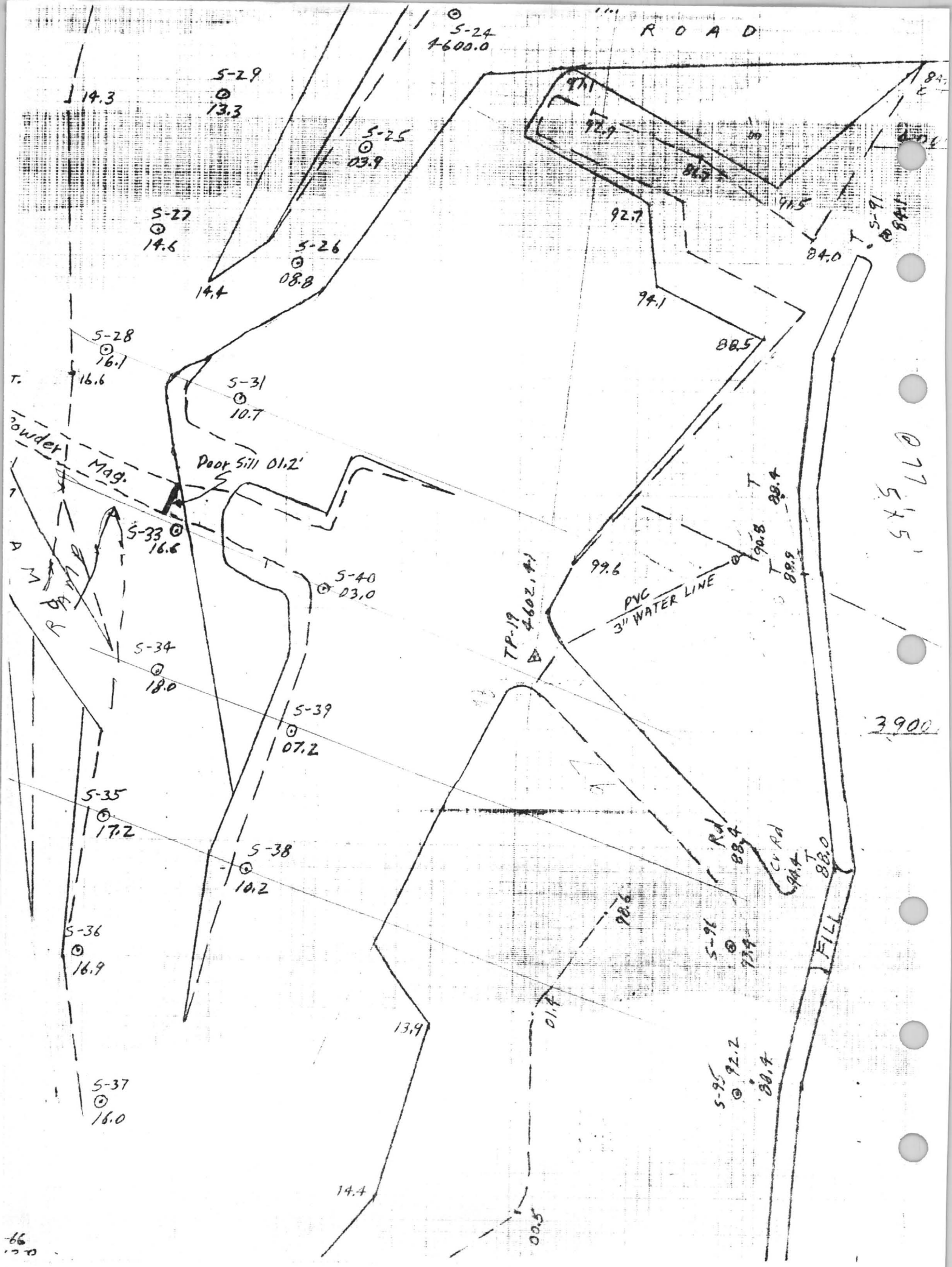

Vn
45
.32
55
F
70'
55
65
Vn
.16
70
75
Vn
90
12.80
95
2.20
100
1.12
105
.120
110'

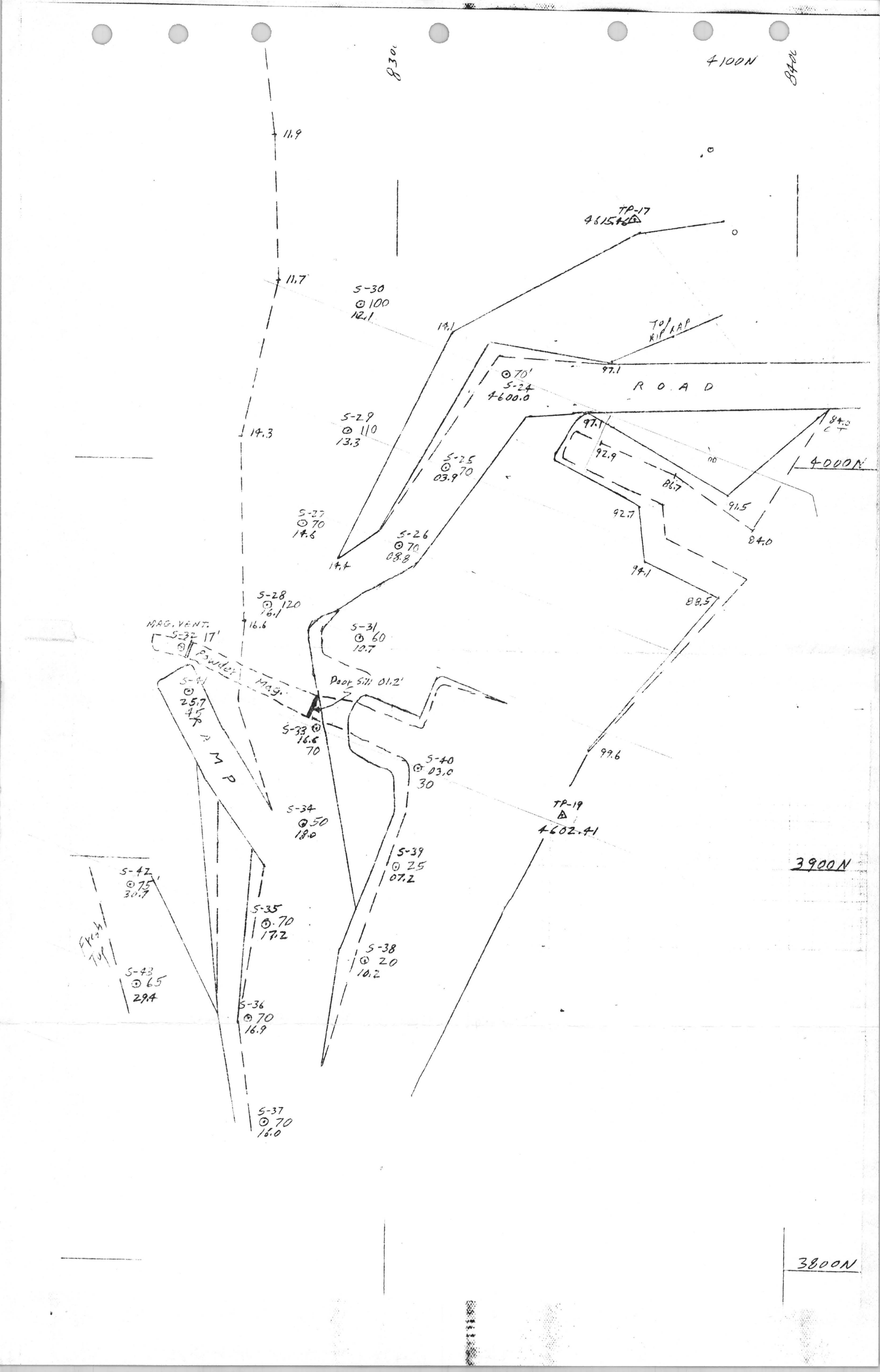

S-27
S-26
Flt
Flt
F
70'
Vn
F
70'

4600

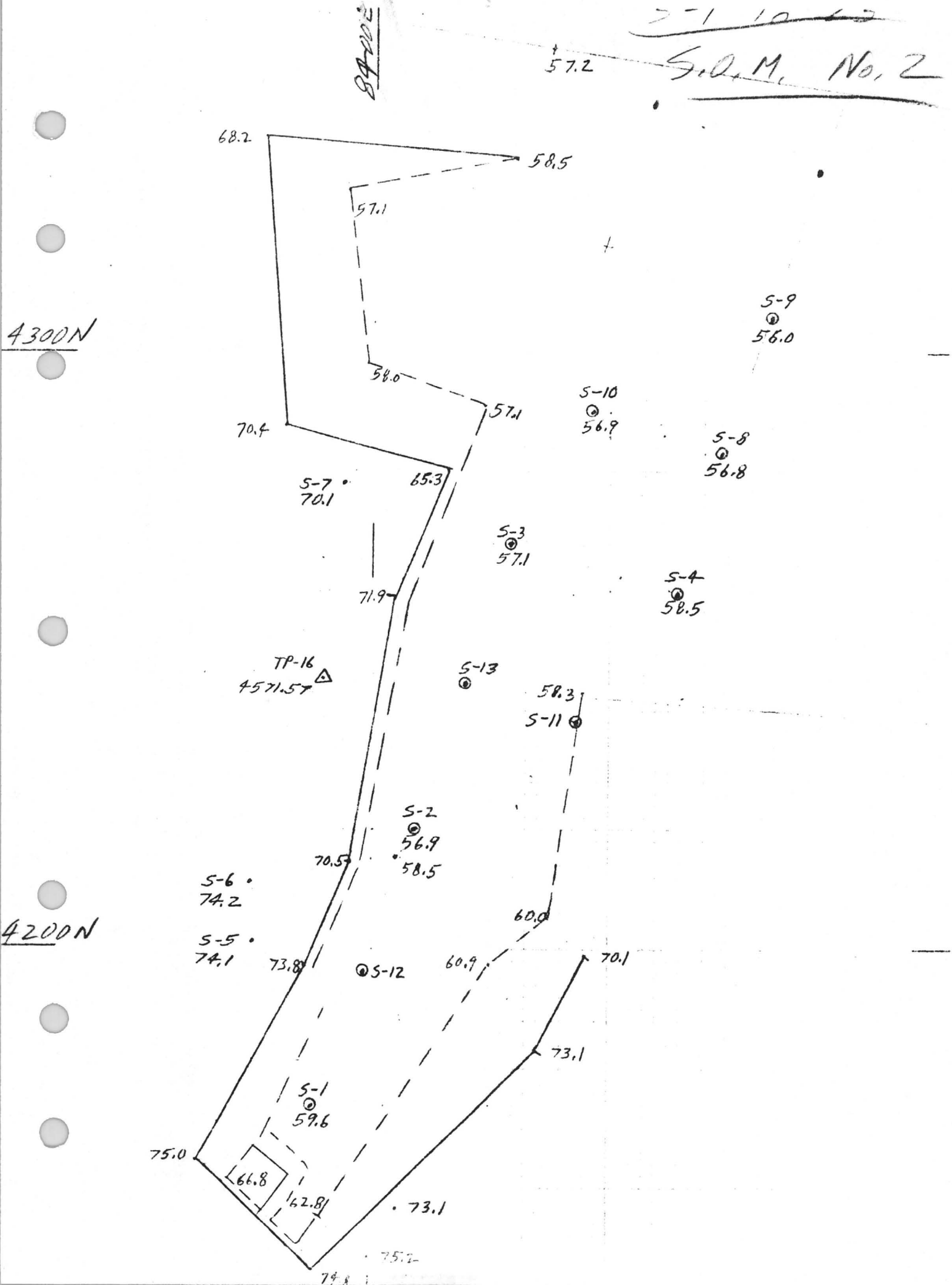

5-49
5
1.12
10
65'
5-36
5
0.52
10
70'
4600

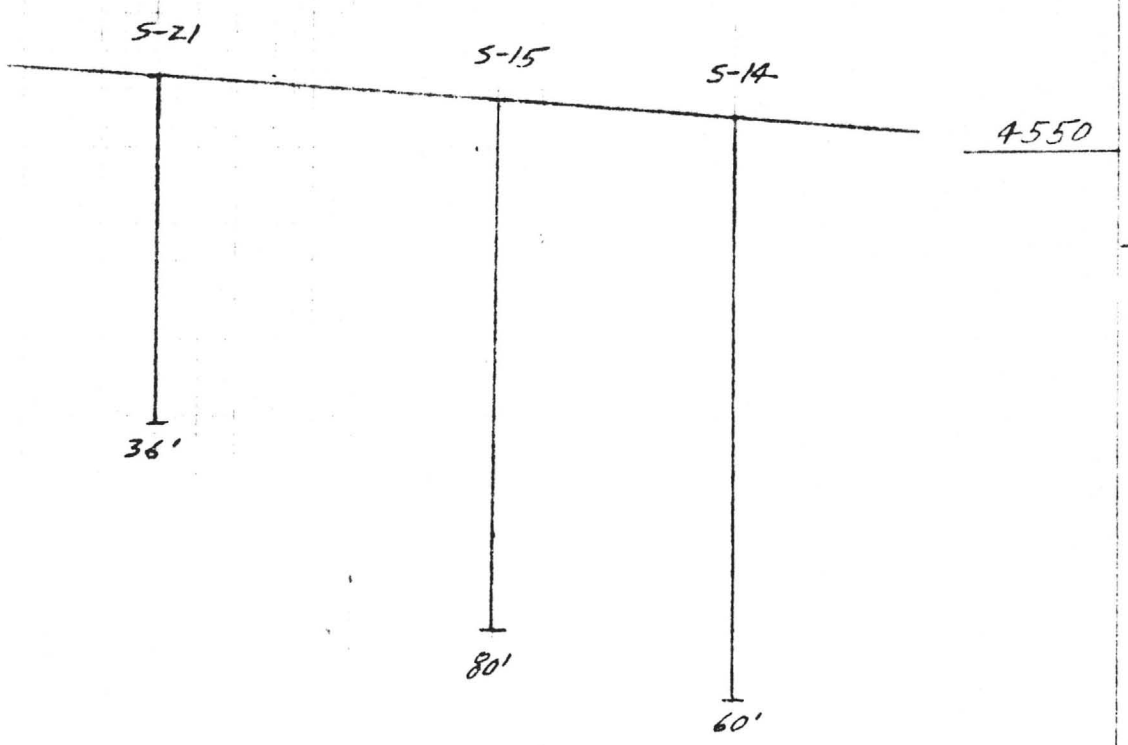

5-47
5
.44
10
70'
5-48
50'
5-37
45
0.62
50
70'
4600

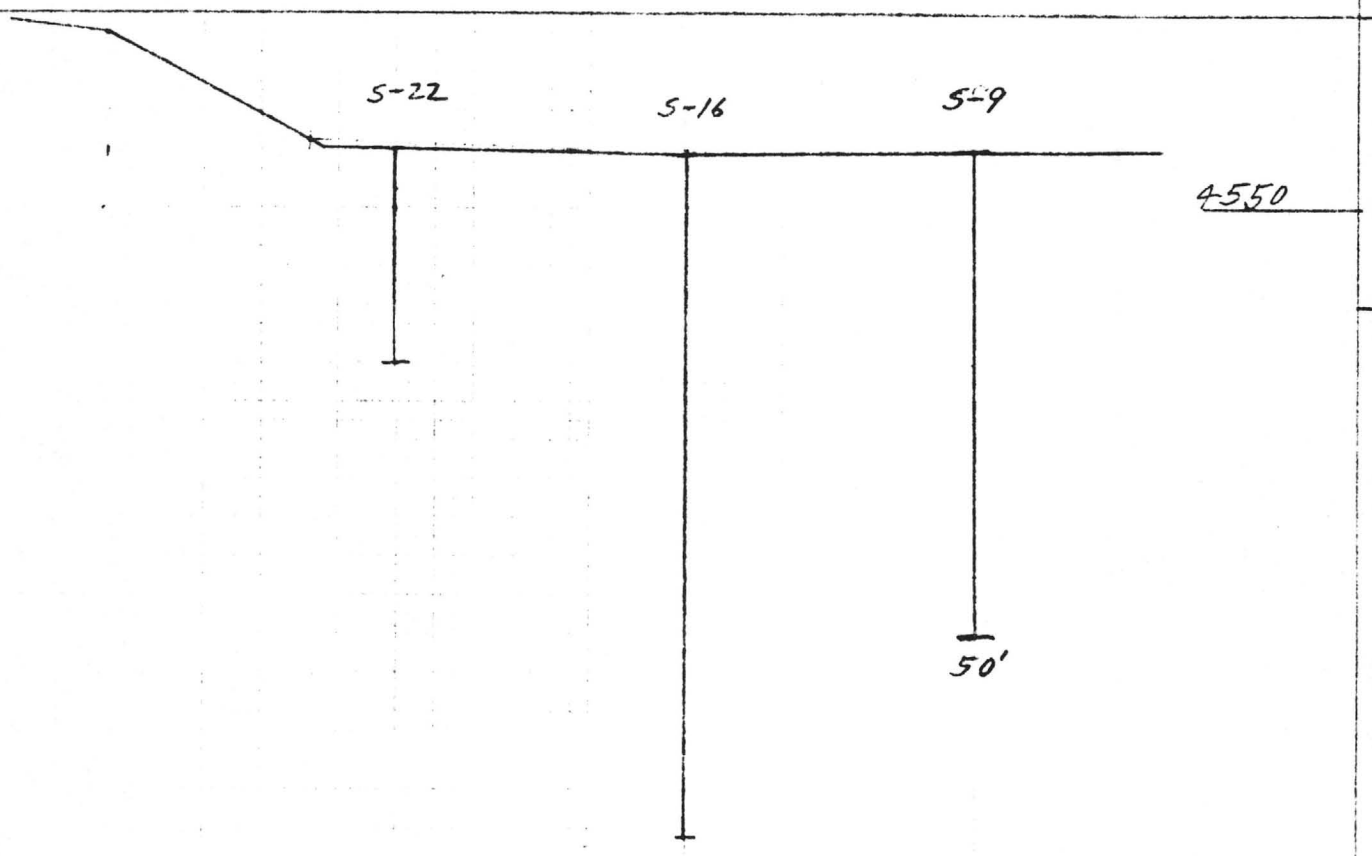

ROAD
S-24
4-600.0
S-29
13.3
14.3
S-25
03.9
S-27
14.6
S-26
08.8
14.4
97.1
92.9
86.5
91.5
92.7
84.0
S-91
94.1
88.5
S-28
16.1
16.6
S-31
10.7
Powder Mag.
Door Sill 01.2'
S-33
16.6
S-40
03.0
99.6
90.8
89.4
89.9
PVC
3" WATER LINE
TP-19
4602.4
S-34
18.0
S-39
07.2
3900
S-35
17.2
S-38
10.2
Rd
88.4
Cv. Rd
94.4
88.0
FILL
98.6
S-96
73.4
S-36
16.9
01.4
13.9
S-95
92.2
88.4
S-37
16.0
14.4
00.5
545'

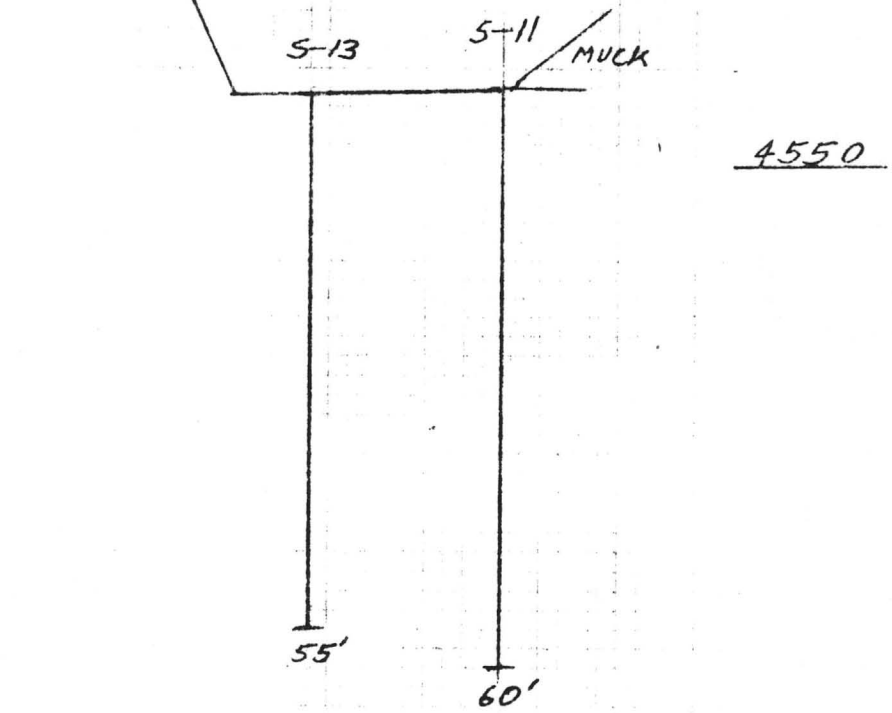

830L
4100N
840L
11.9
11.7
TP-17
4615.46
5-30
100
12.1
14.1
TO RIP RAP
97.1
70'
5-24
4600.0
ROAD
14.3
5-29
110
13.3
97.1
92.9
84.0
4000N
5-25
70
03.9
86.7
91.5
92.7
84.0
5-27
70
14.6
5-26
70
08.8
14.4
94.1
88.5
5-28
120
16.1
16.6
MAG. VENT.
5-32
17'
Powder Mag.
5-31
60
10.7
Door Sill 01.2'
5-41
25.7
45
RAMP
5-33
16.6
70
99.6
5-40
03.0
30
TP-19
4602.41
5-34
50
18.0
3900N
5-39
25
07.2
5-42
75
30.7
5-35
70
17.2
Fresh Top
5-38
20
10.2
5-43
65
29.4
5-36
70
16.9
5-37
70
16.0
3800N

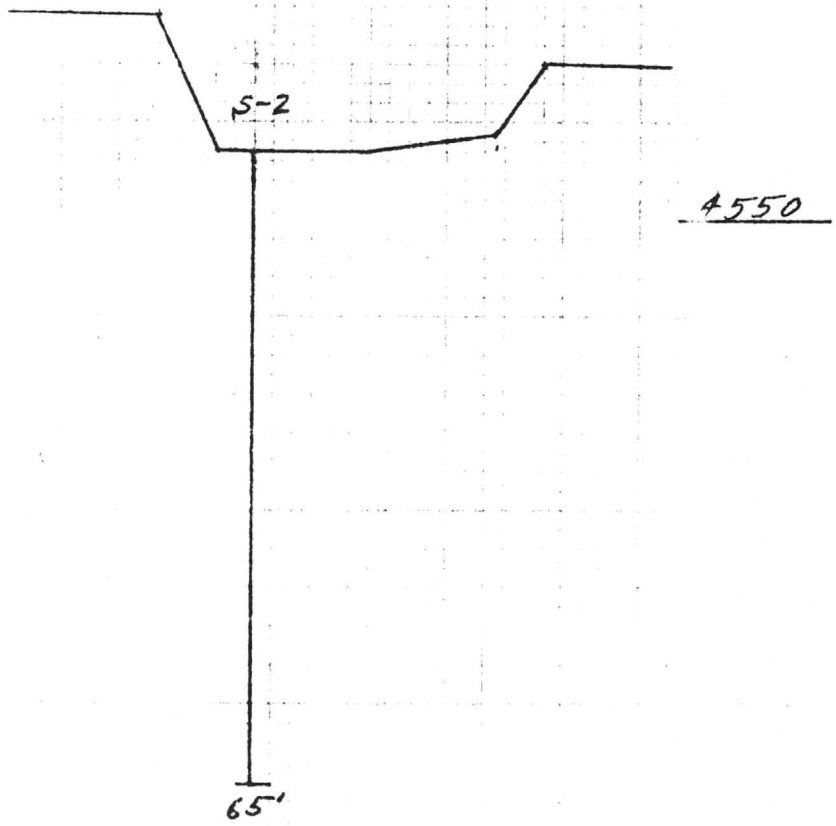
S.O.M. No. 2

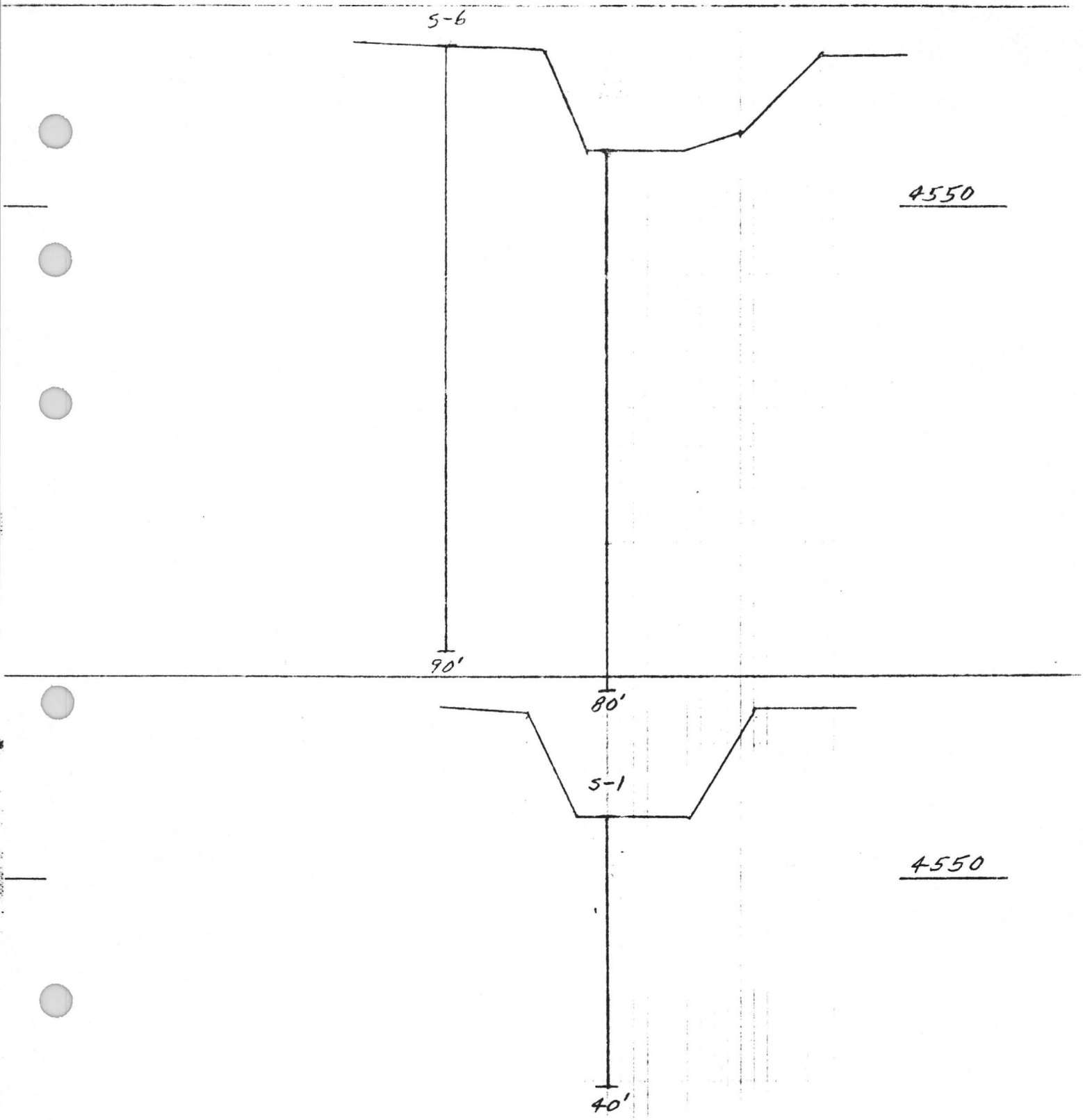

57.2
68.2
58.5
57.1
4300N
S-9
56.0
58.0
S-10
56.9
57.1
70.4
S-8
56.8
S-7
70.1
65.3
S-3
57.1
S-4
58.5
71.9
TP-16
4571.57
S-13
58.3
S-11
S-2
56.9
58.5
70.5
S-6
74.2
60.0
4200N
S-5
74.1
73.8
S-12
60.9
70.1
73.1
S-1
59.6
75.0
66.8
62.8
73.1

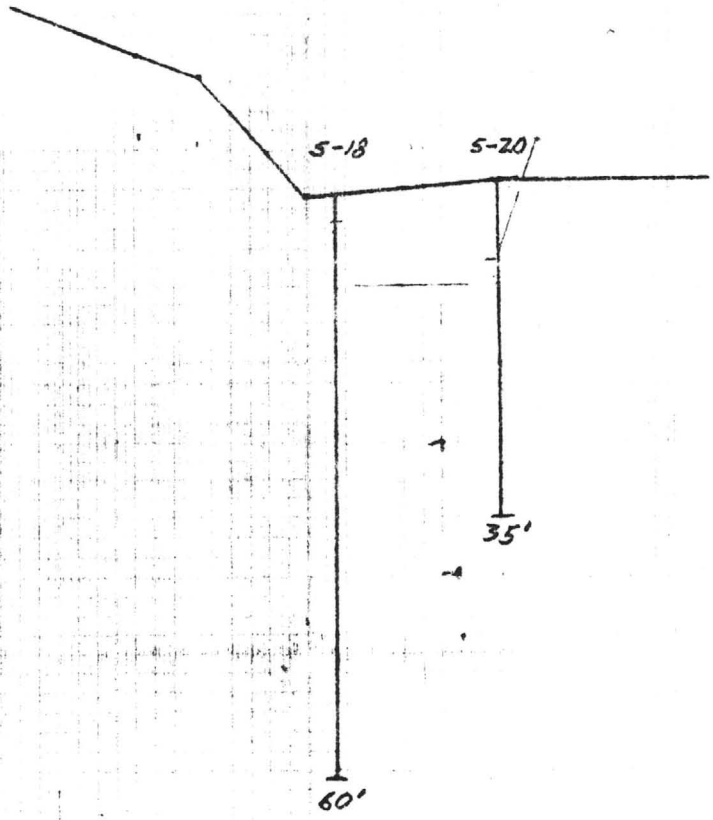

S-21
S-15
S-14
4550
36'
80'
60'


S-22
S-16
S-9
4550
50'

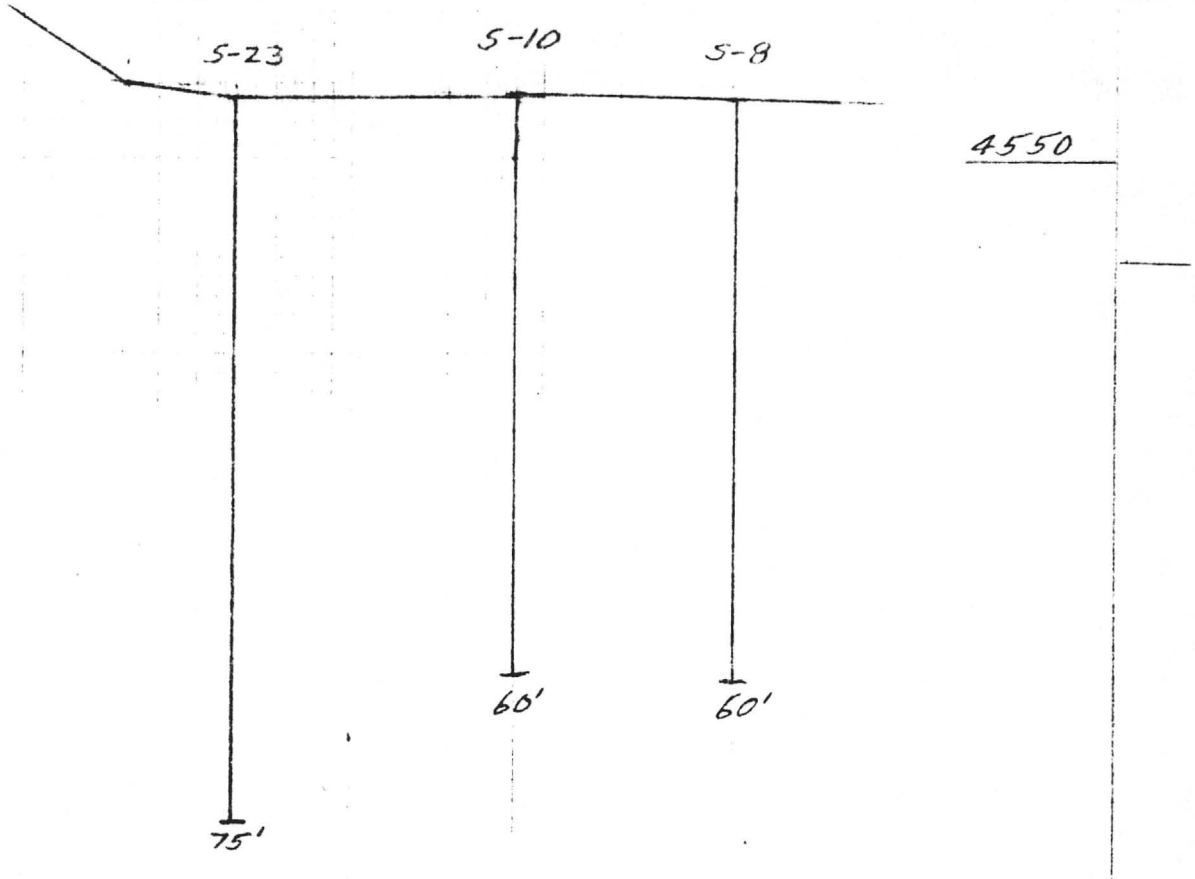

S-13
S-11
MUCK
4550
55'
60'

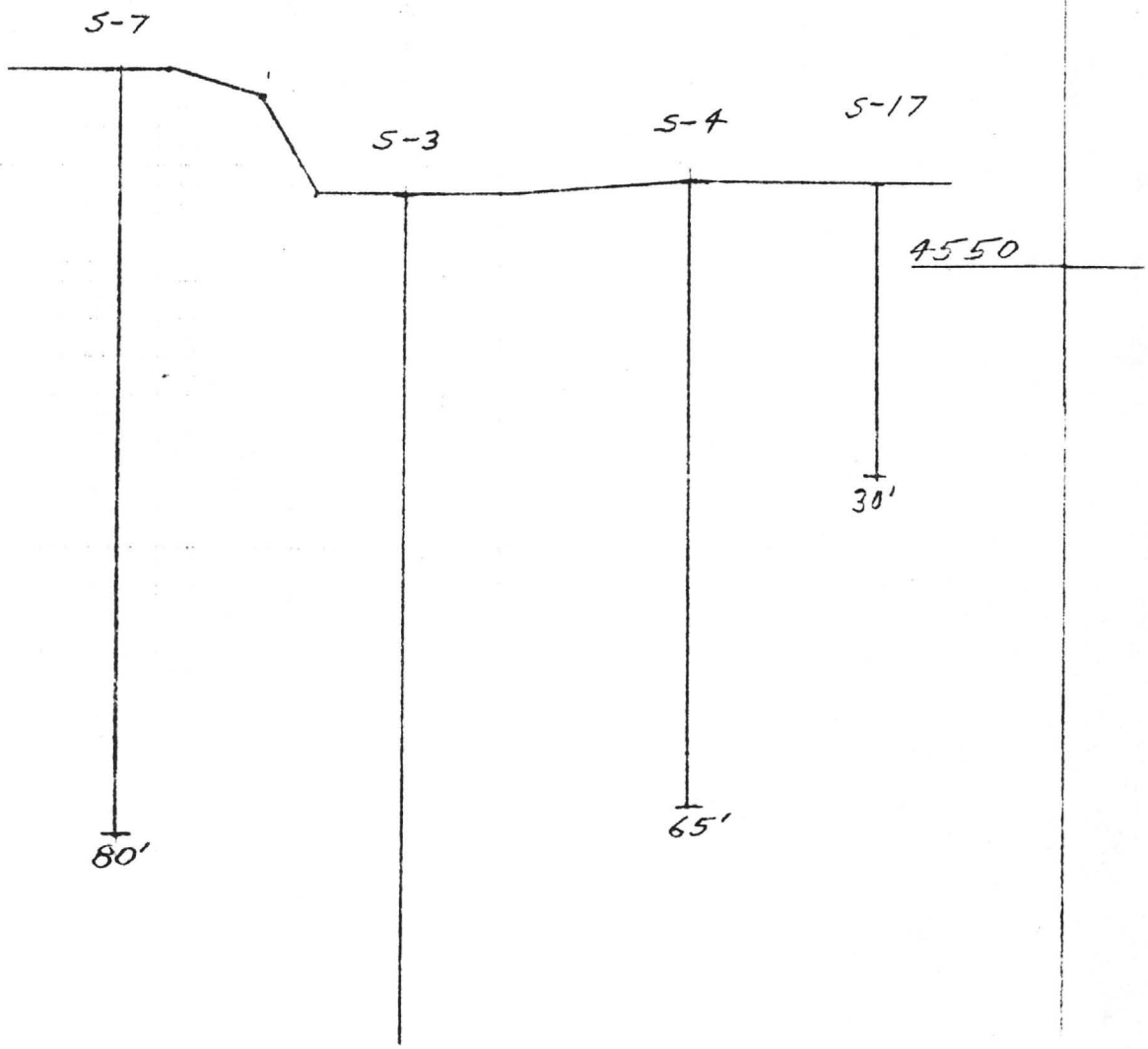

S-2
4550
65'

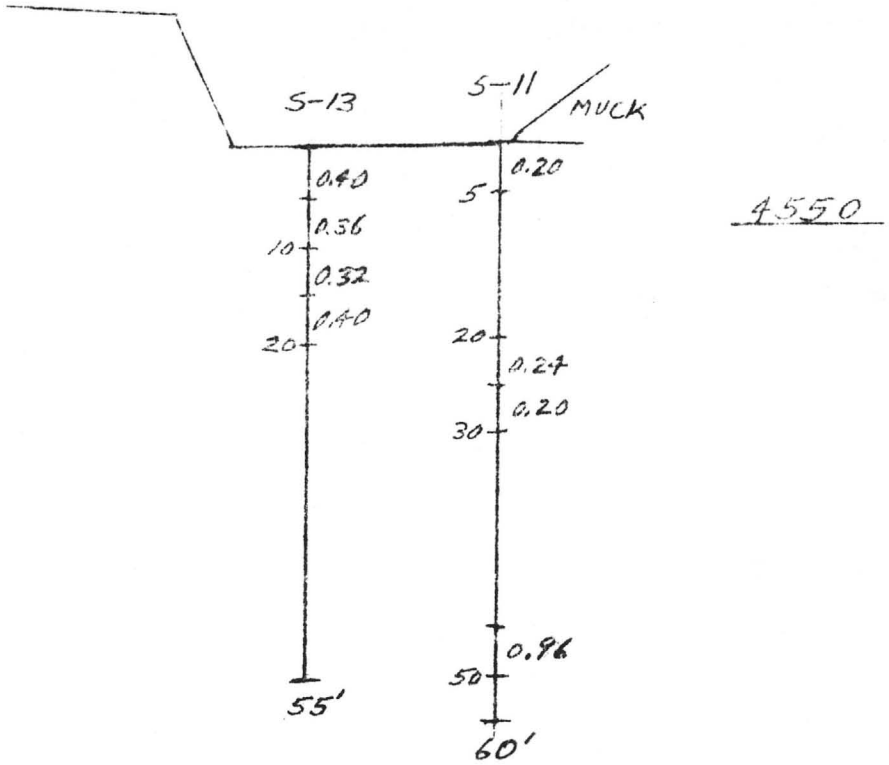

5-6
4550
90'
80'
5-1
4550
40'



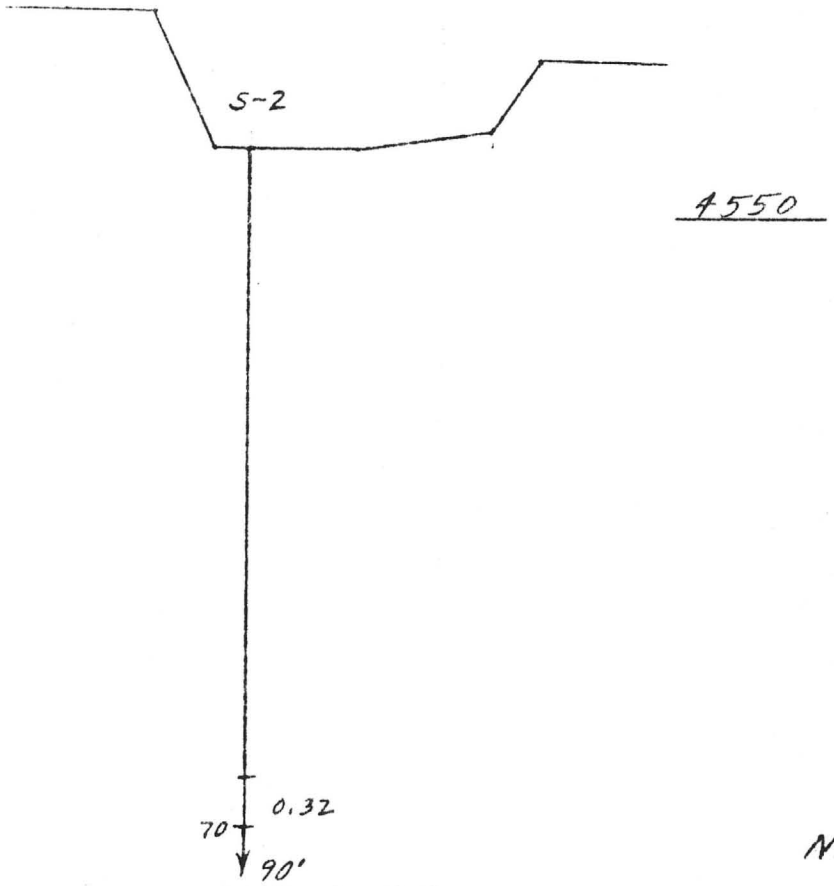
4550


S-23
S-10
S-8
4550
60'
60'
75'

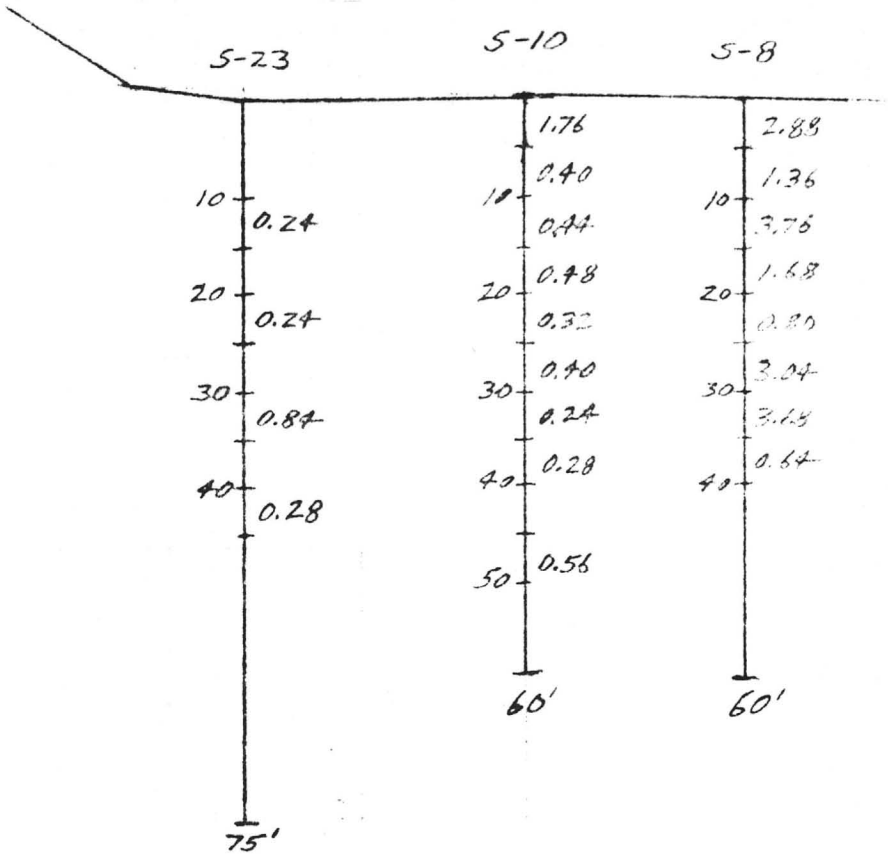

S-7
S-3
S-4
S-17
4550
30'
65'
80'


S-13
S-11
MUCK
0.40
0.36
0.32
0.40
10
20
55'
0.20
5
20
0.24
0.20
30
0.96
50
60'
4550

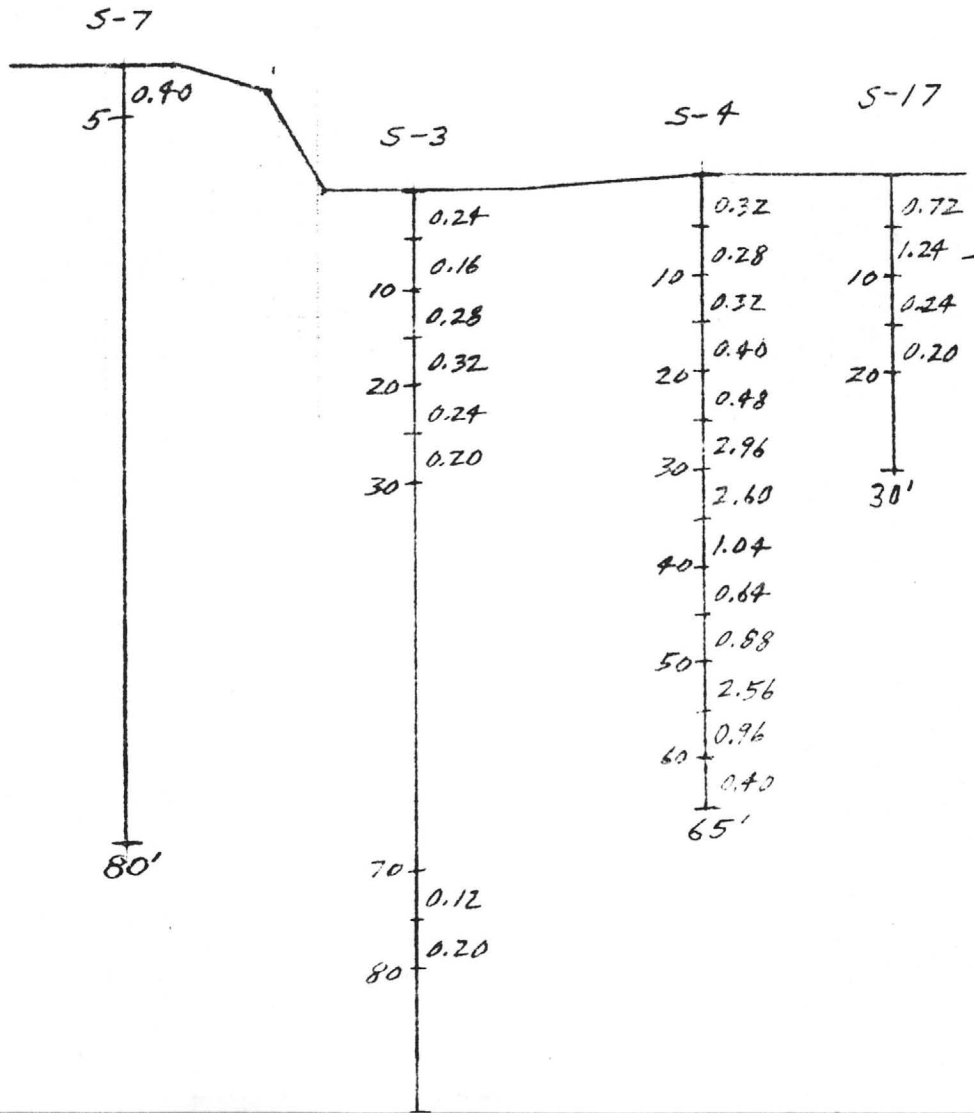
No. 13

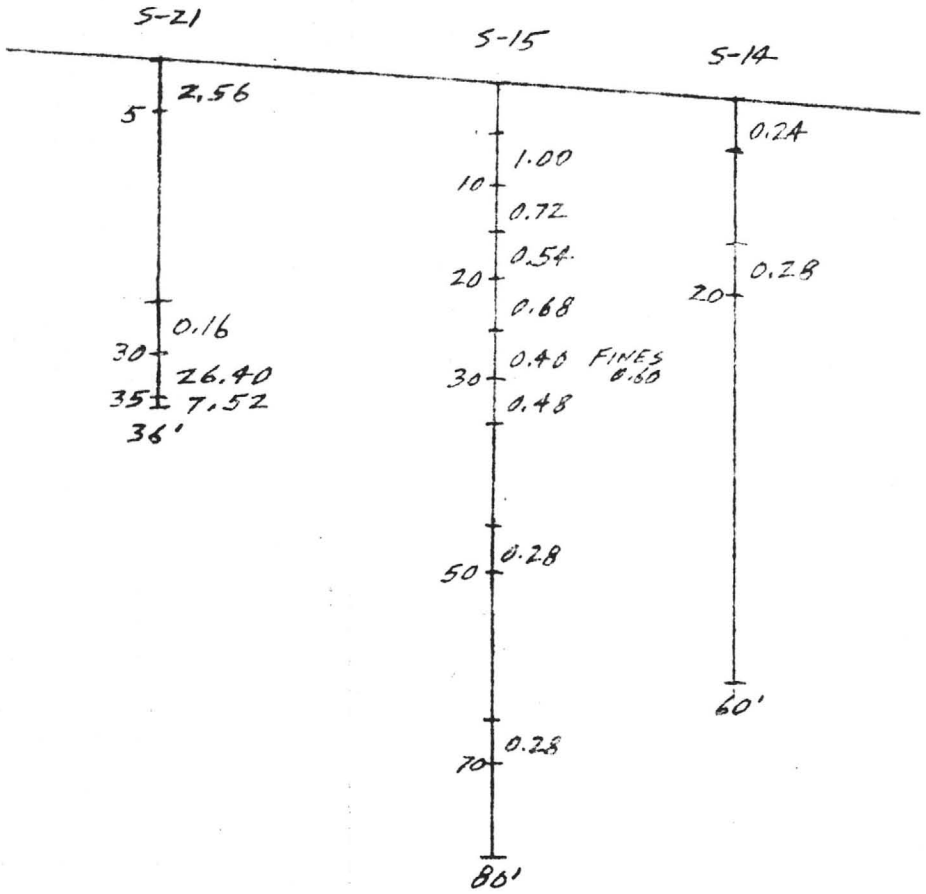

S-2
4550
0.32
70
90'

No. 006

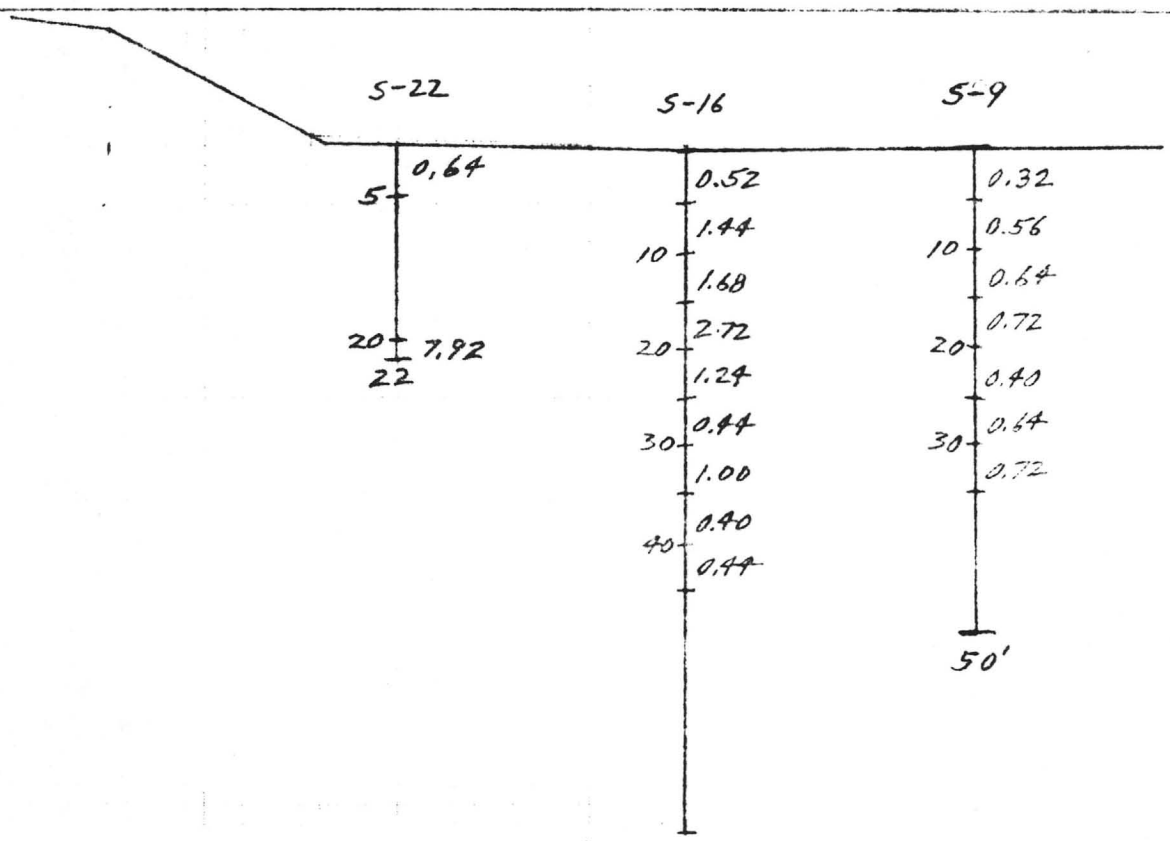

S-23
S-10
S-8
4550
10
0.24
20
0.24
30
0.84
40
0.28
75'
1.76
10
0.40
0.44
20
0.48
0.32
30
0.40
0.24
40
0.28
50
0.56
60'
2.88
10
1.36
3.76
20
1.68
0.80
30
3.04
3.68
40
0.64
60'

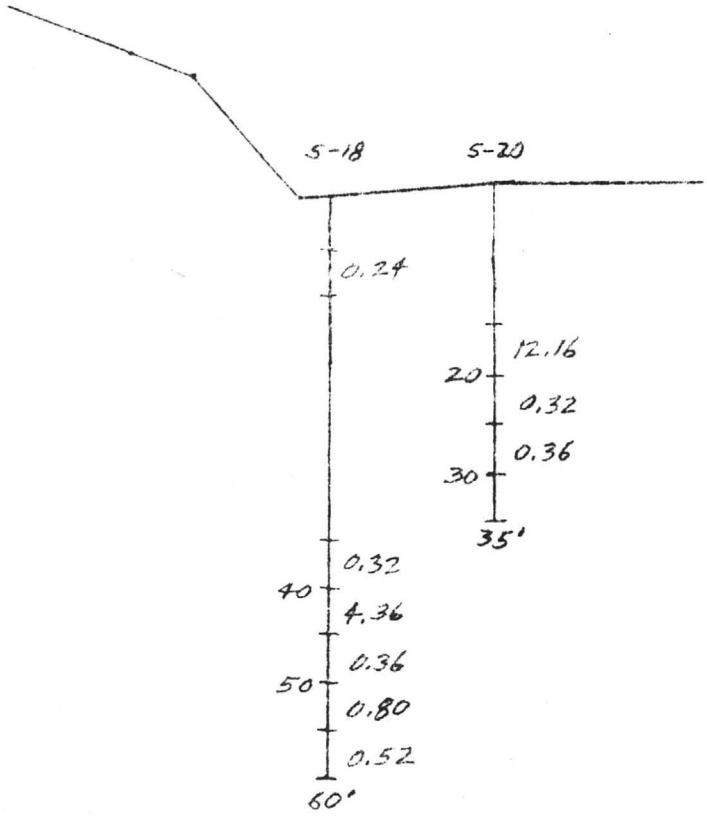
No. 2310


S-7
5
0.40
80'
S-3
0.24
0.16
10
0.28
0.32
20
0.24
0.20
30
70
0.12
0.20
80
S-4
0.32
0.28
10
0.32
0.40
20
0.48
2.96
30
2.60
1.04
40
0.64
0.88
50
2.56
0.96
60
0.40
65'
S-17
0.72
1.24
10
0.24
0.20
20
30'
4550


S-21
S-15
S-14
4550
5
2.56
0.16
30
26.40
35
7.52
36'
10
1.00
0.72
20
0.54
0.68
30
0.40
FINES 0.60
0.48
50
0.28
70
0.28
80'
0.24
20
0.28
60'

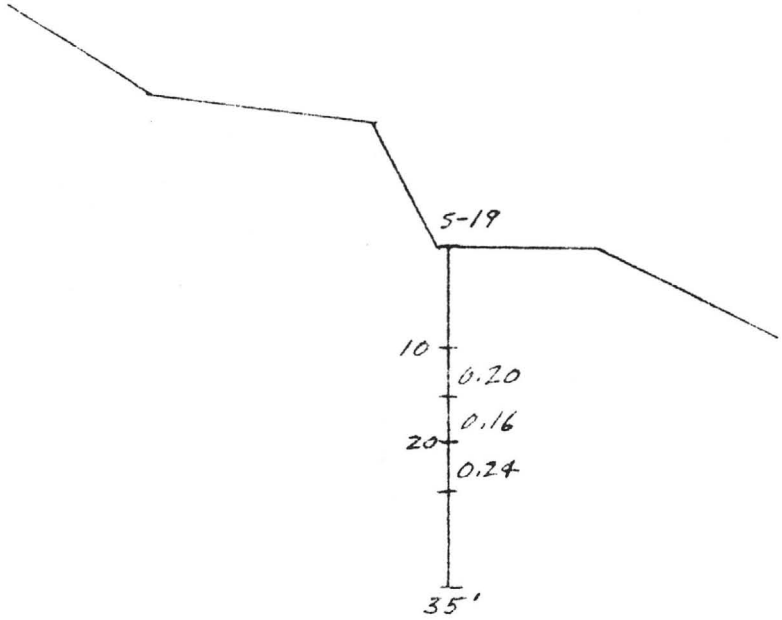
No. 2115


S-22
S-16
S-9
4550
5
0.64
20
7.92
22
0.52
10
1.44
1.68
20
2.72
1.24
30
0.44
1.00
40
0.40
0.44
0.32
10
0.56
0.64
20
0.72
0.40
30
0.64
0.72
50'



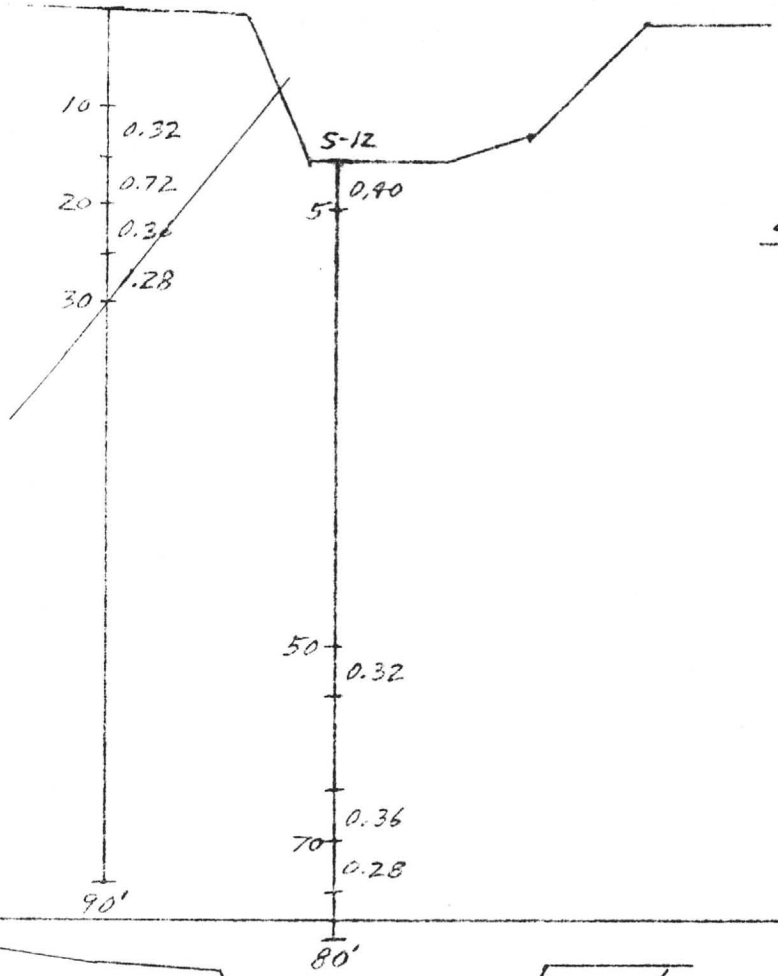
455

No. 1820



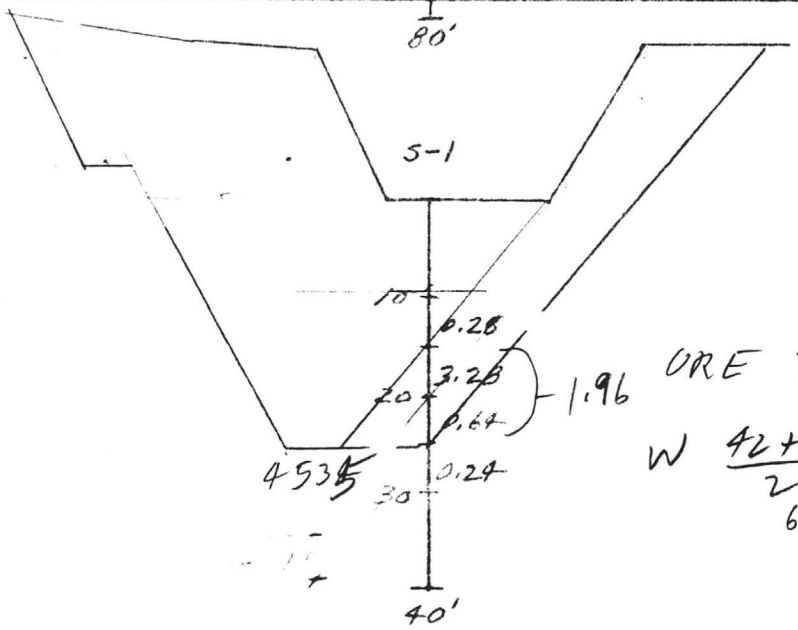
45

No. 0019



4550

No. 0612



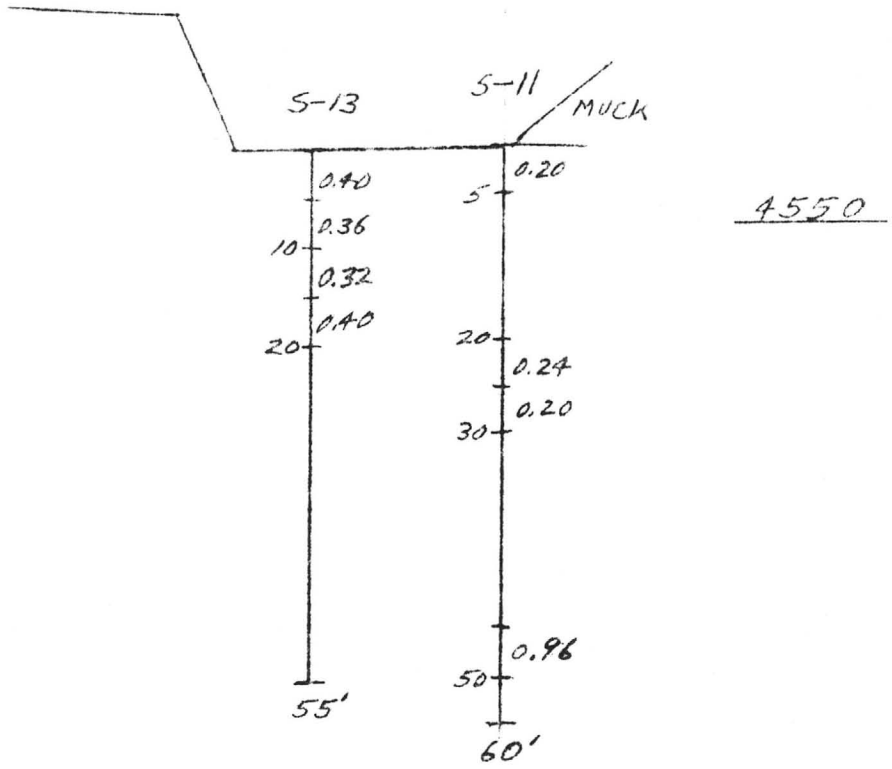
4550

ORE 7x54 = 378 ft² 1.96

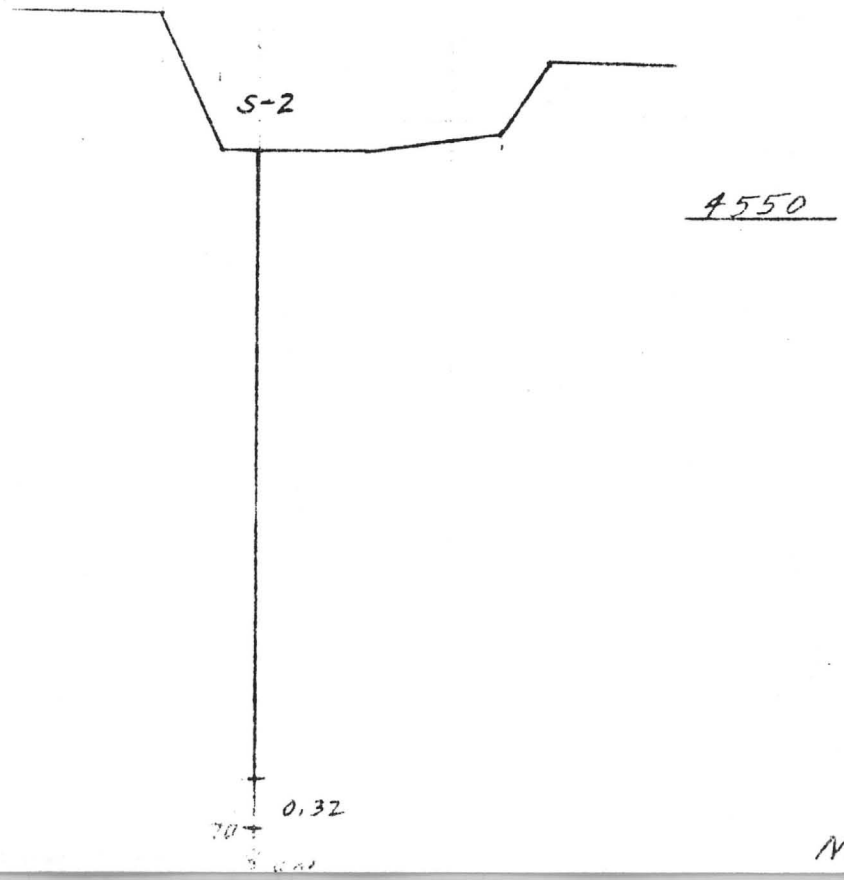
W $\frac{42+6}{2}$ x 25 + 28 x 15 1020
600 420

No. 0001

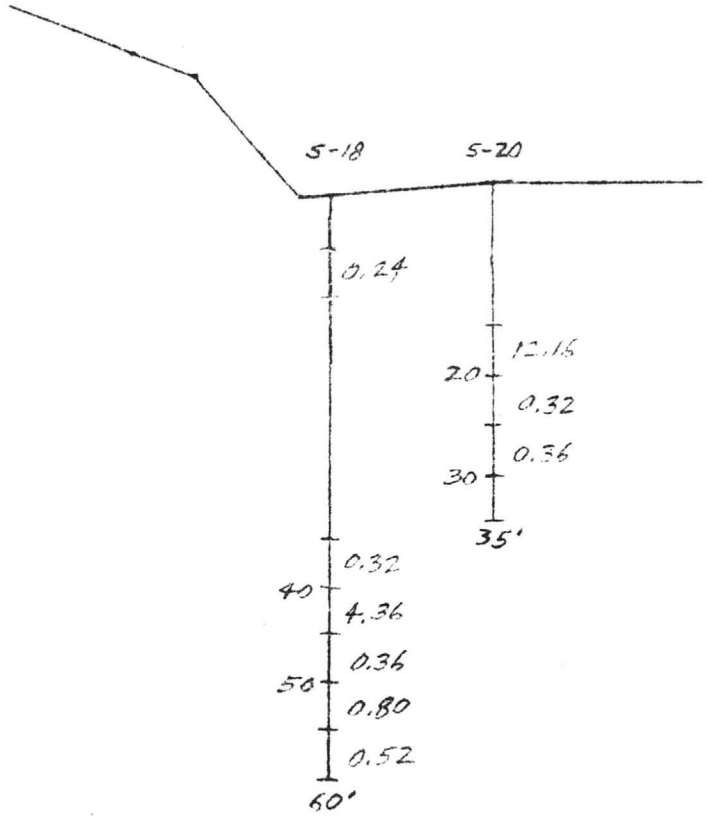
5.10 4.5 3.64 16.380
7.3 0.136 Fw 0.828
6.8 17.208
2.53


S-13
S-11
MUCK
0.40
0.36
0.32
0.40
10
20
55'
0.20
5
20
0.24
0.20
30
0.96
50
60'
4550

No. 13

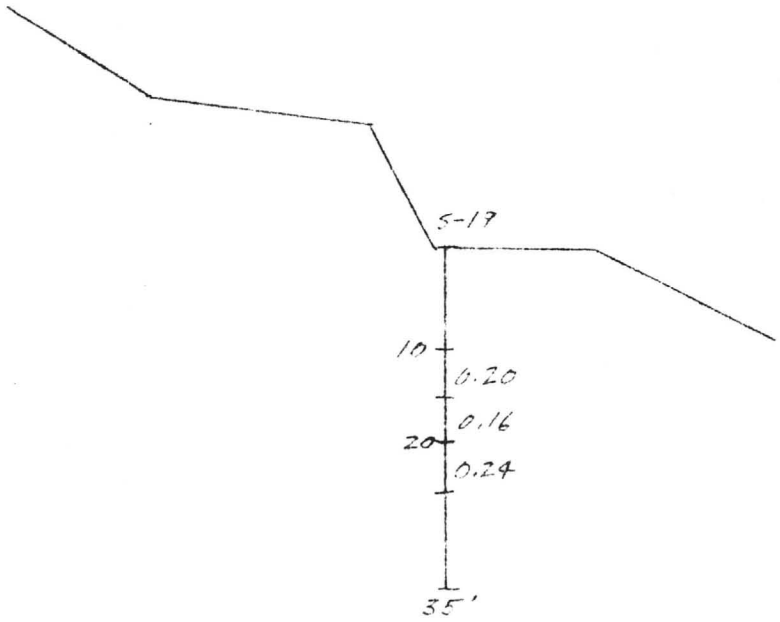

S-2
4550
0.32
70

No. 0



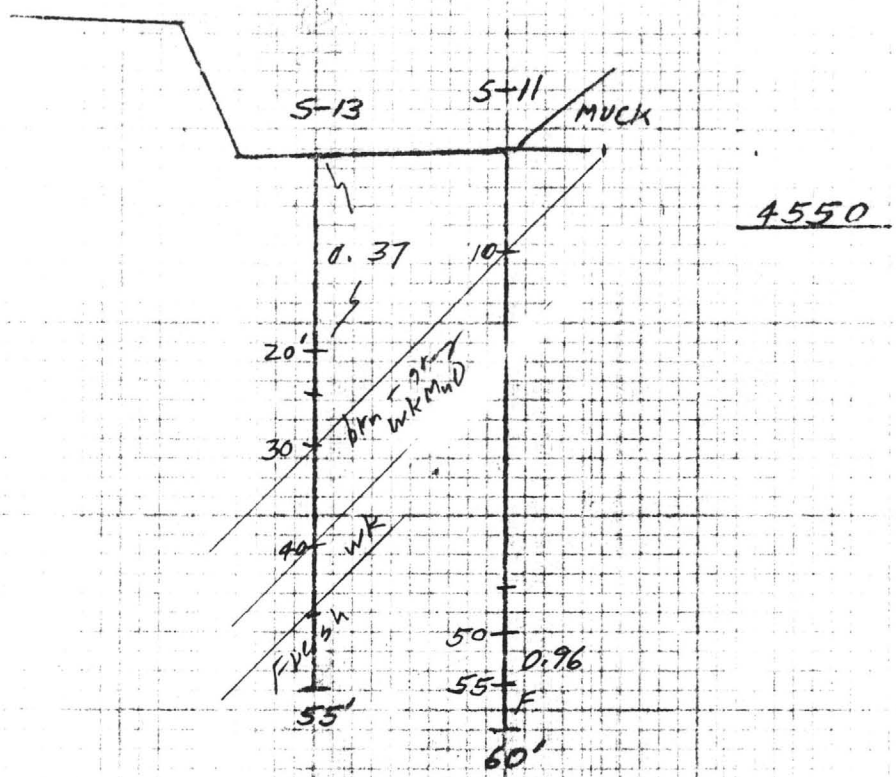
4550

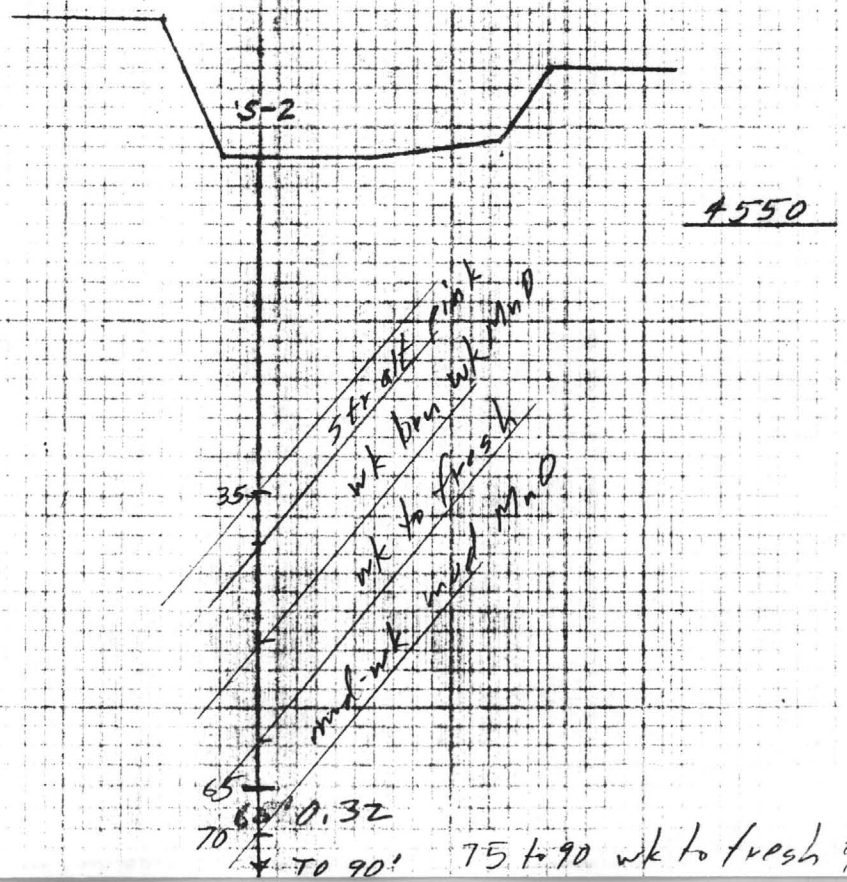
No. 1820

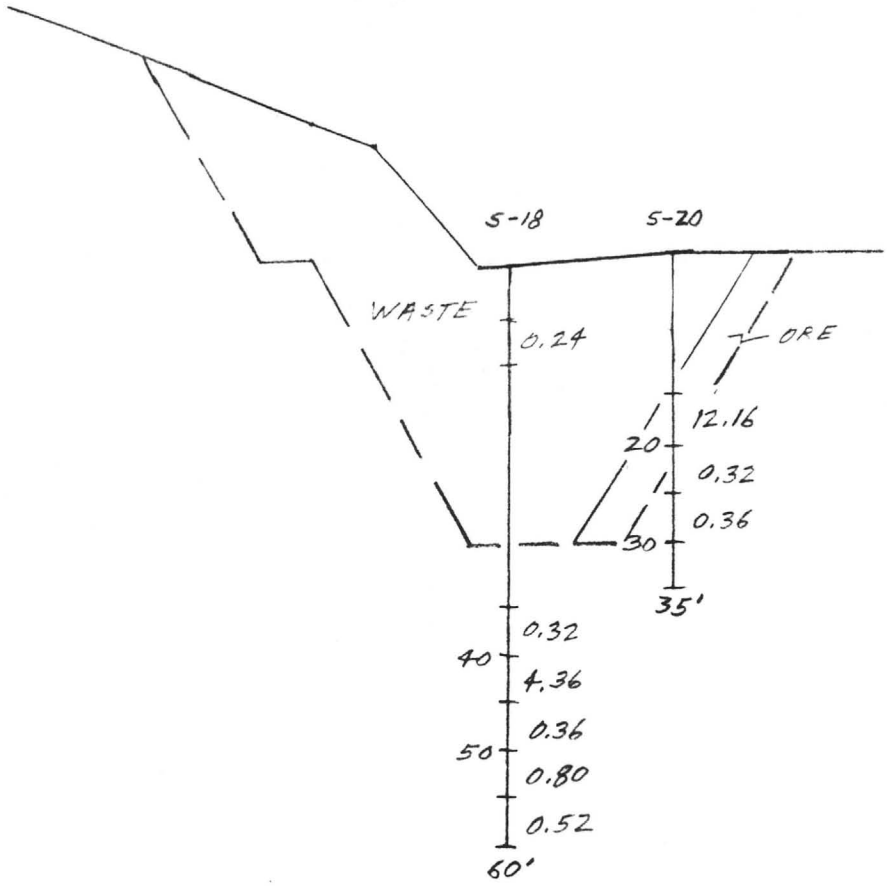


4550

No. 0019

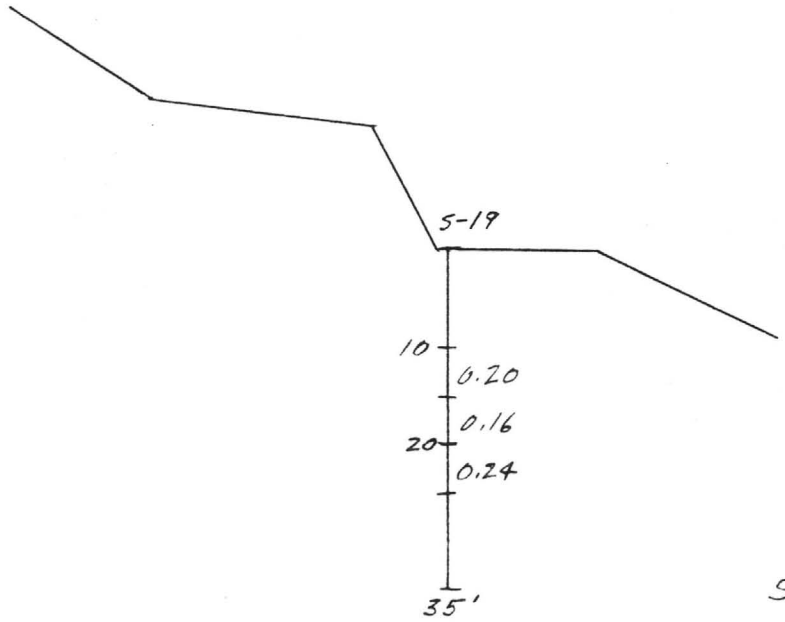

5-13
5+11
MUCK
4550
0.37
10
20'
brn
wk Mud
30
40
wk
fresh
50
0.96
55
F
55'
60'


5-2
4550
str alt pink
wk brn wk Mud
35
wk to fresh
mud
mud-wk
65
0.32
70
TO 90'
75 to 90 wk to fresh grn



4550

SECTION S-1820



4550

SECTION S-0019

5-1 40'

0-10	Typ	Mod Alt	Tan & Brn
10-15	"	Str "	lt gray
15-20		" "	pink & lav
20-25	"	wk "	Brn wk MnO
25-33	"	" "	" Mod. MnO
33-40	"	Fresh	gray-grn

5-2 90'

0-10	Typ	wk alt	Tan & Brn
10-25	"	" "	Brn & gray str MnO
25-35	"	mod "	" "
35-40	"	str "	lt gray wk pink
40-50	"	weak "	brn wk MnO (fractures)
50-60	"	v. wk to fresh	gray & brn
60-70	"	mod. ~~weak alt~~	" " mod to str MnO
70-75	"	~~mod~~ alt	brn ~~mod to str MnO~~
75-85	"	wk alt	brn & lt gray (5-3 ? 77-80)
85-90	"	wk to fresh	gray green

5-3

0-5	Typ	str alt	pink-lav
05-10	"	"	lt gray
10-30	"	mod to str	gray & tan
30-35	"	" alt	tan
35-40	"	" "	tan & gray mod MnO
40-45	"	wk "	[illegible]

45-50	Tup	mod alt	ptn : wk Mn O
50-65	Tup	wk & fresh	gray-gn w/ minor ptn
65-77	"	Fresh	gray gn
77-80	"	Mod alt	ptn
80-85		wk "	gray
85-90		wk "	Brn & gray
90-95		wk "	lt gray
95-100		mod "	lt gray & pink

5-4 (65')

0-5 Tvp str alt lav
5-10 " tan & pink
10-15 " pin & brn
15-20 " brn
20-27 " tan & gray
27-29 black infuse MnO
29-30 qtzite (or qtz vn)
30-35 Tvp " silicified pink minor brn
35-40 " " " " & light gray
40-45 " str alt " " & pink
45-50 " " dk gray Mod MnO (47-48 blk MnO)
50-55 " mod " tan & gray
55-60 " wk " tan
60-65 " Fresh dark gray

~~5-7 Fresh to brn 0-52'~~

5-5

0-5 Tvp mostly fresh
5-10 mod alt brn wk MnO
10-15 str " lav & lt. gray (30° Flt)
15-20 mod " tan
-25 wk gray & brn Mod MnOx
-30 wk & fresh gray gn & some brn

5-6 (90')

0-5	Tup	mostly fresh dk gray
5-10	mod alt	lt gray & tan Mod MnO
10-20	str "	lava w/ lt gray (30° FH) See DH 5-5 10-15
20-25	"	tan & lt gray
25-35	mod "	tan & gray str MnO
35-40	"	tan
40-50	Fresh & wk	gray & ~~tan~~ minor tan
50-55	Fresh	gray
55-75	Fresh & wk	gray w/ minor tan
75-80	mod & wk	~~ta~~ tan
80-90	Same	tan wk MnO

5-7 (80')

0-15	Tup	weak alt brn & tan
15-20	Same	wk MnO 5-3 0-5.1
20-30	" str alt	pink-lava (30° FH)
30-35	" "	lt. gray
35-40	mod "	tan mod MnO
40-45	wk "	tan & gray
45-52	Fresh	gray 5-3 65-77 ??
52-55	wk alt	gray & tan
55-75	mod "	tan minor lt gray
75-80	" "	tan & ~~gray~~ minor fresh gray

5-8 60'

0-10	Tvp	str alt	lav & pink	5-4 0-15'
10-30	"	"	pink & lt gray	
30-35	"	"	lt gray Intense MnOx	
35-45	mod	"	" " str "	
45-55	wk	"	tan & gray	
55-60	Fresh & wk		mostly gray minor tan	

5-9 (50)

0-5	Tvp	mod alt	tan
5-10		mod-wk	tan & lt gray minor pink
10-20		" "	lt gray minor pink
20-25		mod alt	tan lt gray minor pink
25-30		str "	lt gray minor pink
30-35		mod "	" " & tan wk MnO
35-40		str alt	" " str MnO
40-45		wk "	gray & tan
45-50		Mostly fresh w/wk	gray grn

5-10 60'

0-10	Tup	Str Alt	Lav & pink
10-25	"	"	Brn-light gray-minor pink
25-35	mod	"	" "
35-40	Same	Same	wk MnO
40-50	mod alt	gray & brn	wk MnO
50-55	wk "	"	" mod "
55-60	Fresh & wk	"	" Str "

5-11

0-5	Tup	Str alt	lav & pink
5-10	"	"	lt gray & pink 5-12 25-30?
10-18	mod	"	brn minor pink
18-25	"	"	~~brn~~ pink minor brn
25-35	"	"	lt gray
35-45	"	"	gray
45-55	wk	"	brn & gray wk MnO
55-60	fresh		gray

S-13 55'

0-5	Tup str alt.	lt gray & pink
5-10	mod "	& " & brn
-15	" "	"
-20	" "	brn
-25	" "	gray minor pink
-30	str "	lt gray " " (S-11. S-10?)
30-40	mod "	brn & light gray wk MnO
40-47	wk "	brn & minor gray
47-55	Fresh	gray

S-12 80'

0-10	Tup wk Alt	Brn mod MnO (S-20-25) S-2
10-25	mod "	" minor lt gray 25-30
25-30	str "	" lt pink
30-50	mod	lt gray minor tan
50-60	"	lt gray & brn
60-70	mod to str	" "
70-75	wk	brn & gray mod MnO
75-80	fresh	gray

S-21 Fwd 2' No Hole Stope @ 36' Gob 36-37

S-22 " " 22'

5-14

0-10	Top strait	~surface?	brn & tan - minor pink
10-25	"	"	pink & lav - minor tan
25-35	mod		lt gray
35-45	"	"	" " & ~~tan~~ brn
45-50	"	~~brn~~ "	" " " str MnOx
50-55	"	"	" " "
55-60	Fresh tuk		Orange

5-15 80'

0-5	Top strait	lt gray & pink ~~brn~~	brn clay (go)
-10	"	lav	
-15	"	pink-orange (+lt ??)	
-20	"	pink & lt gray	
20-30	mod	brn	" " wk MnO
30-35	wk	"	" mod "
-45	mod	"	"
-55	"	tan	"
55-65	strait	lt gray (gouda) w/ minor tan	
65-75	wk	brn w/ gray	wk MnO
75-80	wk to fresh	~~brn~~ gray w/ brn	

5-21

0-10 Tuf mod alt tan & lt gray
10-15 " " brn mod MnO
15-25 " " lt gray minor pink
25-30 str alt lavc & pink & lt gray
30-36 " " " " Holed U.G. @ 36

5-22

0-5 Tuf mod brn mod MnO
5-10 " tan
10-15 str tan & pink
15-22 " lav & pink Holed U.G. @ 22

5-23

0-5 Tuf fresh gray grn mod MnO
5-10 str alt pink orange
10-20 " " lt gray & pink
20-30 mod " " " " & brn
30-40 " " tan & lt gray
40-45 " " " mod MnO
45-60 " lt gray & tan
60-65 " tan
65-75 wk to fresh Brn to gray grn wk MnO

40
8008
188

5-16 70

0-5 Tup str alt opink-orange
5-20 " " pink & lt gray
20-40 mod " ~~Co~~ brn & lt gray
40-45 str " " " " Mod MnO
45-50 str pink & lt gray
50-55 " brn minor lt gray
55-60 mod wk MnO
60-70 wk to fresh gray & brn

5-17 30'

0-5 Tup mod alt brn
-10 fresh gray
-15 mod brn
15-25 wk gray & brn
25-30 fresh gray minor brn

S-18

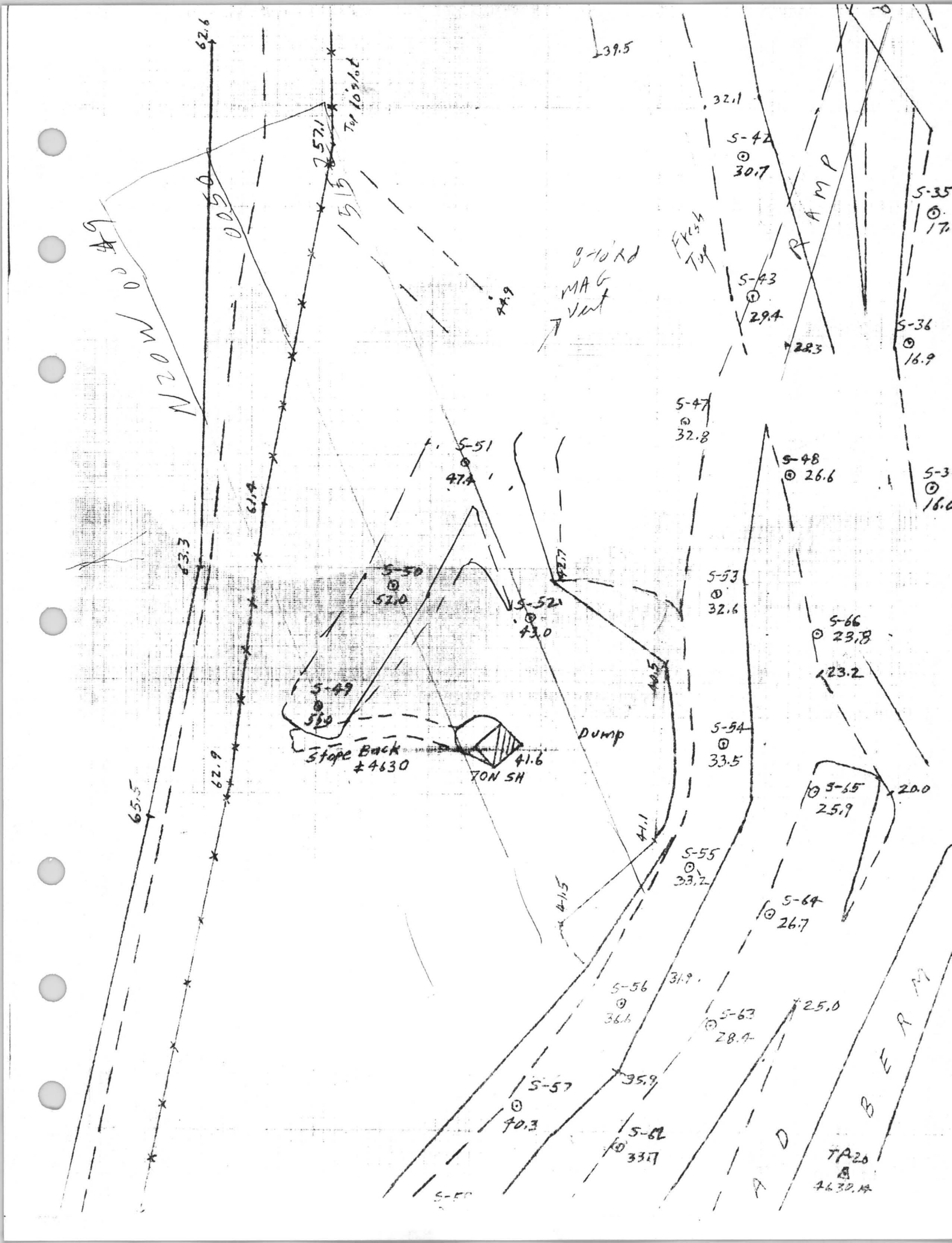
0-5	Tup str alt	pink & lav (flat fit)
5-15	mod	lt gray & tan
15-25	"	lt " & tan, minor pink
25-40	"	tan
40-45	str	lav & pink
45-55		tan, lt gray ~~[illegible]~~ wk Mn0
55-60	fresh	gray grn

S-19

0-5	Tup mod	lt gray
5-15	"	~~[illegible]~~ tan & lt gray
15-20	str	gray
20-30	mod	~~tan~~ minor gray mod Mn0
30-35	fresh	gray grn

S-20

0-10	Tup mod	lt gray some pink
10-15	str	tan & pink
15-20	"	pink minor lt gray
20-25	mod	lt gray & tan
25-30	wk	tan, mod Mn0
30-35	wk & fresh	~~tan~~ lt gray grn wk Mn0


62.6
39.5
32.1
S-42
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RAMP
S-35
17.
57.1
Top 10'x10'
S-43
29.4
28.3
S-36
16.9
44.9
8-10' Rd
MAG
Vent
Fresh
Top
N20W 0050
S-47
32.8
S-51
47.4
S-48
26.6
S-3
16.0
61.4
63.3
S-50
52.0
42.7
S-53
32.6
S-52
43.0
S-66
23.8
23.2
46.5
S-49
51.0
Dump
S-54
33.5
Stope Back
≠4630
41.6
70N SH
62.9
65.5
S-65
25.9
20.0
41.1
S-55
33.2
41.5
S-64
26.7
S-56
36.6
31.9
S-63
28.4
25.0
S-57
40.3
35.9
S-62
33.7
TA20
4630.14
S-58
BERM
ROAD

No Reserves

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 26, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification	Ag Oz/T	Au Oz/T	SHAKER			
S 27 5-10	0.12	trace	0.02			
10-15	0.16	trace	0.04			
15-20	0.12	trace	0.04			
20-25	0.12	trace	~~0.04~~	N.I		
25-30	0.08	trace	N.I			

Method of Analysis: Acid Digestion & MIBK Au

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 9-26-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

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September 26, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S 27	5-10	0.12	trace	0.02			
	10-15	0.16	trace	0.04			
	15-20	0.12	trace	0.04			
	20-25	0.12	trace	~~0.04~~	N.I		
	25-30	0.08	trace	N.I			

Method of Analysis: Acid Digestion & MIBK Au

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GARY ALVIN
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Date Signed 9-26-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 1, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

WG

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER	FIRE		
S 27	30-35	16.40	0.005	0.02	14.60	0.005	
S 28	0-5	1.84	0.003	0.06			
	5-10	0.16	trace	0.02			
	40-45	0.08	trace	0.02			
	95-100	0.12	trace	0.02			
S 29	0-5	0.40	0.003	0.14			
	5-10	0.08	trace	0.04			
	65-70	0.16	trace	0.02			
	90-95	12.80	0.015	8.80			
	95-100	2.20	0.003	1.70			
	100-105	1.12	0.003	0.42			
	105-110	0.20	0.005	0.06			
S 30	0-5	0.48	0.003	0.36			
	25-30	0.28	0.003	0.04			
	30-35	0.64	0.005	0.12			

Method of Analysis: Acid Digestion (MIBK Au)

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-1-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 1, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification	Ag Oz/T	Au Oz/T				
S 30 ✓35-40	0.36	0.003	0.20			
✓40-45	0.24	0.003	0.06			
✓45-50	0.32	0.008	0.08			
2 Level #1	0.44	0.011				
2 Level #2A	0.12	0.005				
2 Level #2B	0.08	trace				
2 Level #3	4.40	0.008				
2 Level #4	0.32	0.005		BEFORE PULV.		
Special (9-28-84) STANDARD	2.12	0.018		1.68	0.008	

31
392

Method of Analysis: Acid Digestion (MIBK Au)

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-1-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

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Phone: 457-3132

October 3, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification	Ag Oz/T	Au Oz/T	SHAKER			
S 31 45-50	0.04	trace	0.02			
S 32 ✓0-5	0.60	0.012	0.34			
5-10	0.08	0.004	0.04			
S 33 ✓0-5	0.20	0.016	0.04			
✓5-10	0.32	0.016	0.02			
S 34 ✓0-5	0.64	0.012	0.16			
✓5-10	0.52	0.008	0.08			
10-15	0.08	trace	0.02			
✓25-30	0.24	trace	0.02			
S 35 ✓0-5	0.32	trace	0.08			
✓5-10	0.24	0.004	0.02			
✓10-15	0.40	0.012	0.06			
S 36 0-5	0.08	trace	0.02			
✓5-10	0.52	0.008	Nil	FIRE		
S 27 ✓30-35 (Rerun)	16.04	0.005	0.04	14.60	0.005	

Method of Analysis: Acid Digestion (MIBK Au)

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed
ARIZONA, U.S.A.

LINDROOS LABORATORIES

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TOMBSTONE, AZ 85638
Phone: 457-3132

October 7, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S 37	✓45-50	0.62	0.008	0.20			
	50-55	0.18	0.003	0.10			
S 39	0-5	0.08	trace	0.02			
S 41	15-20	0.04	trace	Nil	FIRE		
S 42	✓20-25	1.68	0.018	0.76	2.30	Tr	
	30-35	0.16	0.005	0.04			
	50-55	trace	0.003	0.06			
	✓55-60	0.60	0.008	0.30			
	✓60-65	0.52	0.008	0.10			
S 43	✓5-10	1.12	0.005	1.66	1.14	Tr	
	10-15	0.16	0.001	0.12			
	15-20	0.12	0.001	0.12			
	20-25	0.12	trace	0.14			
	25-30	0.18	trace	0.08			
	30-35	0.04	trace	0.06			

Method of Analysis: Acid Digestion

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-7-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

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Phone: 457-3132

October 7, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T		FIRE		
S 43	45-50	trace	trace	0.02			
T 1	20-25	trace	trace	0.04			
	30-35	0.20	trace	0.04	0.18	Tr	
	35-40	0.16	trace	0.04			
	40-45	0.24	trace	0.04			
	60-65	0.16	trace	0.02			

Method of Analysis: Acid Digestion

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-7-84
ARIZONA, U.S.A.

S-24 10 -43

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
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Phone: 457-3132

October 18, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S-47	0-5 ✓5-10	0.16 0.44	0.004 0.008	0.06 0.16			
	10-15	0.12	0.004	0.04			
	45-50	0.04	trace	Nil			
SV-16	0-5	0.68	0.012	0.14			
	5-10	0.48	0.008	0.06			
	25-30	0.12	0.004	0.06			
	30-35	0.32	0.004	0.10			
SV-17	0-5	0.44	0.008	0.06			
	10-15	0.72	0.016	0.24			
	15-20	4.72	0.016	0.64			
	20-25	2.24	0.020	0.30			
	35-40	3.20	0.012	0.44			

Method of Analysis: _____

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Signed 10-18-84
ARIZONA, U.S.A.

Gary A. Lindroos

24

0-10	Top	mod alt	tan mixed pink	
10-15		str	lav & pink	
15-20		"	lt gray mix pink	Vn ??
20-25		"	lav	
25-30		"	pink & lt gray	
30-40		mod	lt gray	
40-45		"	" wk MnO	Fw
45-50		"	" & tan	
50-60		"	tan wk MnO	N 58 W MnO
60-70		wk to fresh	brn & mixed gr grn	mod MnO

5-25

0-10	Top	str alt.	pink & lt gray	Fit Fit
10-15		mod	lt gray	
15-30		mod	tan & " "	
30-35		str	" " " & pink	Vn
35-45		"	lav & pink	
45-50		mod	tan & lt gray	
50-55		wk	tan & mod MnO	Fw
55-65		fresh	brn	
65-70		"	brn & gray	

5-26

0-15	Tup	str alt	pink & lt gray	Flat Flt
15-20		mod "	lt gray & tan	
20-25		" "	tan wk MnO	
25-35		wk	lt gray " "	
35-45		" "	tan & " "	
45-50		str	pink & lt gray	(5-25 35-45) Vn
50-55		wk	brn mod MnO_2	Fw
55-65		wk	" & tan wk "	
65-70		Fresh	Brn & gray	

5-27

0-10	Tup	str	lt gray & pink	
10-15		"	pink w/ wg lt gray	
15-20		"	orange pink	Flat?? Flt??
20-27		"	pink & gray	
27-35		mod	tan	Mod MnO (Fw)
35-45		"	brn	V. wk MnO
45-70		wk & Fresh	Fresh gray gn & about one foot toes wk brn.	

5-28

0-15	Tup wk alt	tan & lt gray	
15-25	" " "	brn wk MnO	
25-38	" str "	tan lt gray	Flat fit
38-65	" Fresh	gray gn	
65-75	wk	tan	
75-80	Fresh	gray gn	
80-88	str	tan & lt gray	
88-90	Fresh	gry gn	
90-100	wk	tan	
100-115	wk	~~tan~~ brn minor gry gn	
115-120	Fresh	gray gn	

5-29

0-5	Tup str alt	lav & pink	Flat Fit
5-10	" "	Lt gry	
10-20	" "	" " & pink	
20-30	mod "	" " & tan wk MnO	
30-35	wk	tan & gray str "	
35-40	Fresh	gry gn minor brn	
40-50	wk	tan & gray	
50-60	mod	tan & lt gry	
~~[illegible]~~ 60-70	str	~~tan~~ " " pink	
~~[illegible]~~ 70-85	mod	lt gry & brn	
~~[illegible]~~	mod	lt gray	
85-90 ~~[illegible]~~	str	" " & pink	
90-105	wk	tan & brn wk MnO	
105-110	Fresh	lt gn	

5-30

0-5	Tuf	fresh	gray gn
5-10	"	"	" " minor brn wk MnO
10-15	"	Mod	tan
15-25		str	lav & pink
25-40		"	lt gray & pink
40-50		mod	tan lt " "
50-55		wk	tan wk MnO
55-100		Fresh	gray gn w/ minor brn

5-31

0-5	Tuf	Mod	brn & gray ~~str~~ Mod MnO
5-10		str	lt gray & tan Flat Flt brk go
10-22		wk to fresh	brn & gray gn wk MnO (10-15)
22-40		Mod	tan & lt gray
40-45		str	lt gray & pink
45-50		mod	brn w/ wk MnO
50-60		fresh	gray gn minor brn

5-32 17' Mag. Vent. hole

0-5	Tuf	fresh	gray gn
5-15		wk alt	tan
15-17		fresh	gray gn molded magazine

5-33 70'

0-5 Tup Mod alt tan
5-10 Str tan mod MnO F
10-15 " tan wk " Flat Fit
15-35 Mod Brn & tan
35-40 " " " wk MnO
40-55 Str tan, brn, min pink Vn
55-65 Fresh gray gn
65-70 wk gray & tan

(50') 0-5
5-34 Tup Str alt tan & pink) Flat Fit
25-15 " " tan, gray, brn)
15-30 Str-mod tan & gray wk MnO Vn ??
30-35 wk " " Mod MnO
35-45 Fresh gray gn
45-50 " & wk " " & brn

5-35 (70')

0-5	Tup	Mod Alt	tan		
5-10		"	"	tan & gray	wk MnO
10-15		"	"	"	"
15-20		"	"	"	" Mod MnO
20-30		Str	tan & brn		Flat Fit?
30-35		Mod "	~~tan~~ "	"	wk MnO
35-47		Fresh tank	gray grn	mi/or brn	
47-60		Str alt	tan, pink, & brn		Vn ?
60-70		Fresh	gray grn		

5-36 (70')

0-5	Tup	Mod Alt	gray, pink, tan		
5-10		"	"	" "	" Str MnO
10-20		Str "	tan & brn		Flat Fit??
20-37		Fresh	gray grn		
37-55		Fresh	" "	w/ Mod Alt brn	
55-65		Mod to Str	gray, tan, brn	wk MnO	Vn?
65-70		Fresh	gray grn		

5-37 70'

0-5 Tup Mod Alt gray tan Str MnO
5-15 Mod to Str " gray, tan & brn
15-20 wk brn
20-30 Fresh gray gn
30-35 " to weak " " & brn
35-45 " minor wk brn
45-50 Mod Alt brn Mod MnO
50-55 St " tan, gray, pink Vn ?
55-60 mod gray & brn
60-70 Fresh gray gn

5-38 20'

0-5 Tup Str lt gray tan brn
5-10 wk gray gn & tan
10-20 Fresh gray gn

5-39 25'

0-5 Tup wk to str lt gray minor brn wk MnO
5-15 Mod to wk tan brn
15-25 Fresh gray gn

5-40 30'

0-10 Tup Mod Alt lt gray & tan
10-20 " " brn, tan
20-30 Fresh gray gn

5-41 ~~55~~ (45' Re/09)

0-10 Tup mod alt lt gray tan brn wk MnO
15-25 str " " " " " " "
25-35 mod " " " " str "
35-40 str " " " " pink
40-50 mod " " " "
50-55 weak to fresh gray gn & tan mod MnO

5-42 75' (8' W to fresh)

0-10 Tup Mod Alt lt gray & tan wk MnO
10-20 " " tan
20-25 str " lt gray & pink str MnO
25-35 " " " "
35-55 mod gray minor tan
55-60 str lt gray & tan wk MnO
60-65 mod gray & tan mod "
65-75 Fresh & weak gray gn & brn 65-70 wk "

5-43 65' (3' W to fresh)

0-5 Tup Str Alt Brn & pink
5-10 " " lav & pink
10-25 " " tan & "
25-40 " " lt gray & tan
~~40-45~~ mod " " " wk MnO
45-50 " mod "
50-55 " brn
55-65 Fresh & wk " & gray gn

TP 4713.65
24
3289.9N
7946.1E
3300

TP-22 1
3334.1
7976.8

8000E

3400N

D-6
84.5

D-5
93.5

D-3
12.6

NE Cor Rs
4680

F
71.5

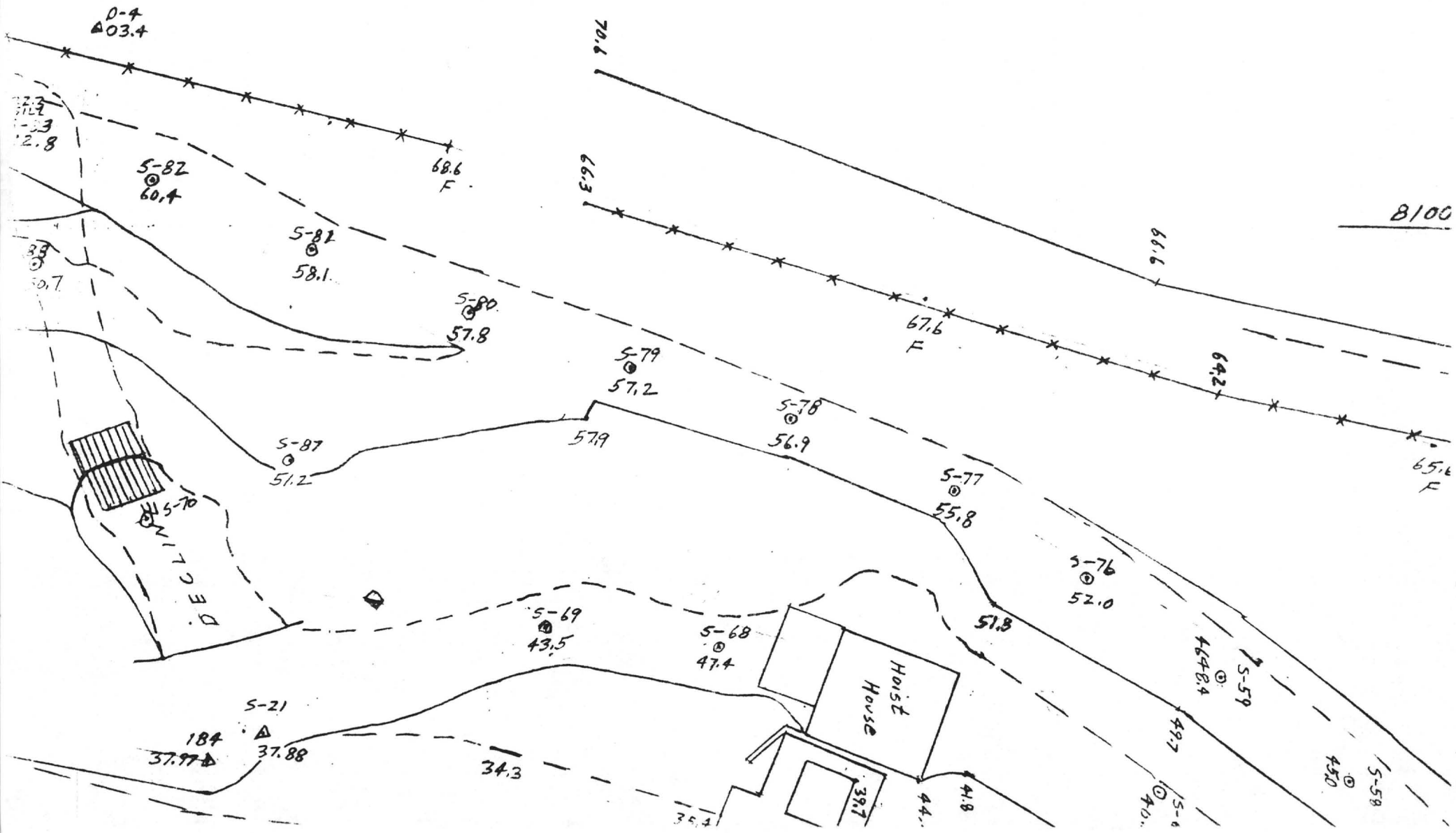
F
70.7

D-2
18.9

S-85
64.5

S-84
63.0

8100E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5-78
56.9
5-77
55.8
5-76
52.0
5-87
51.2
5-70
DECK
5-69
43.5
5-68
47.4
Hoist House
5-21
184
37.88
34.3
38.7
41.8
51.8
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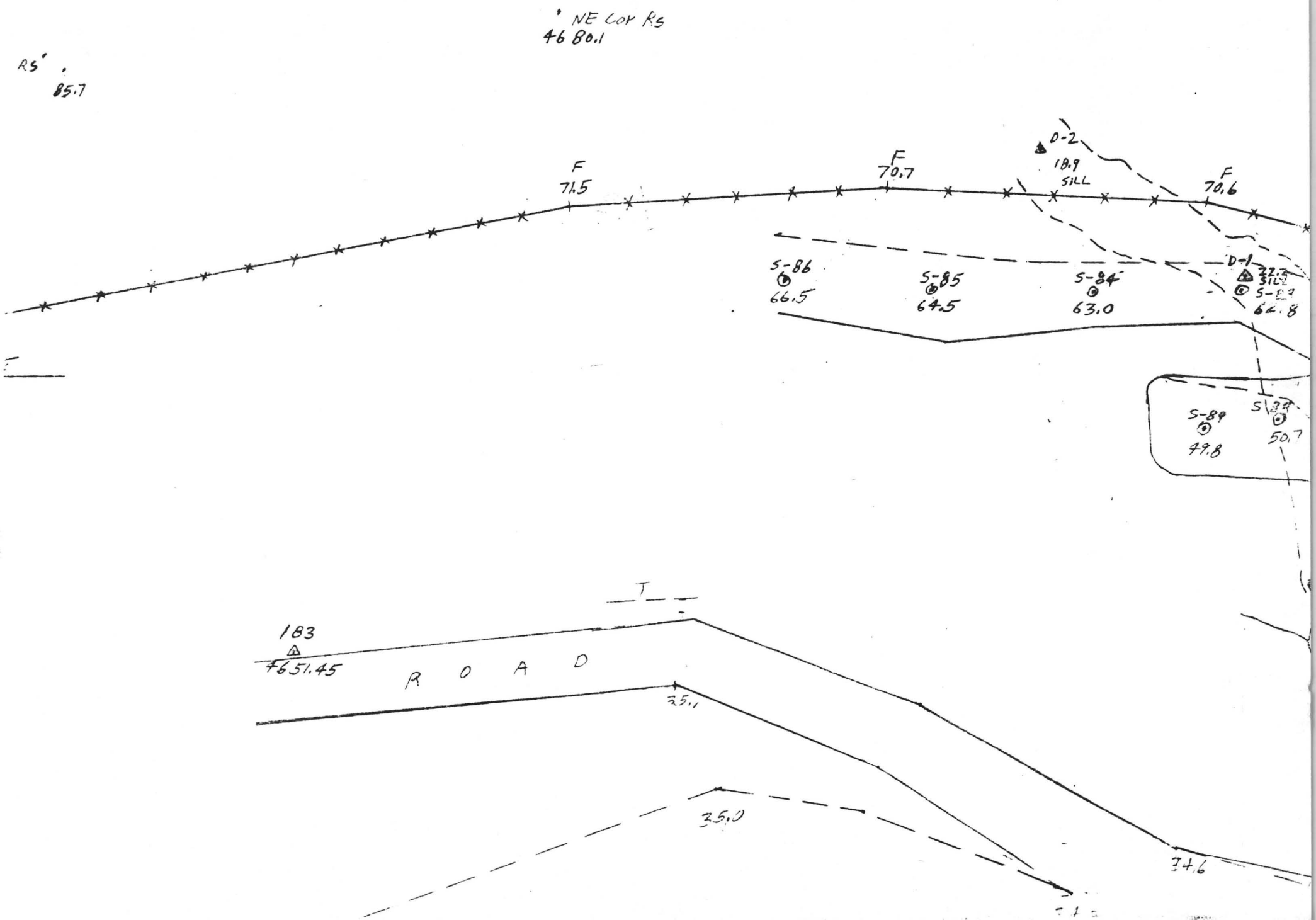
5-59
46.8.4
5-58
45.0
67.6
F
64.2
65.6
F
8100


NE Cor RS
4680.1
RS
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F
71.5
F
70.7
D-2
18.9
SILL
F
70.6
S-86
66.5
S-85
64.5
S-84
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S-89
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183
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R O A D
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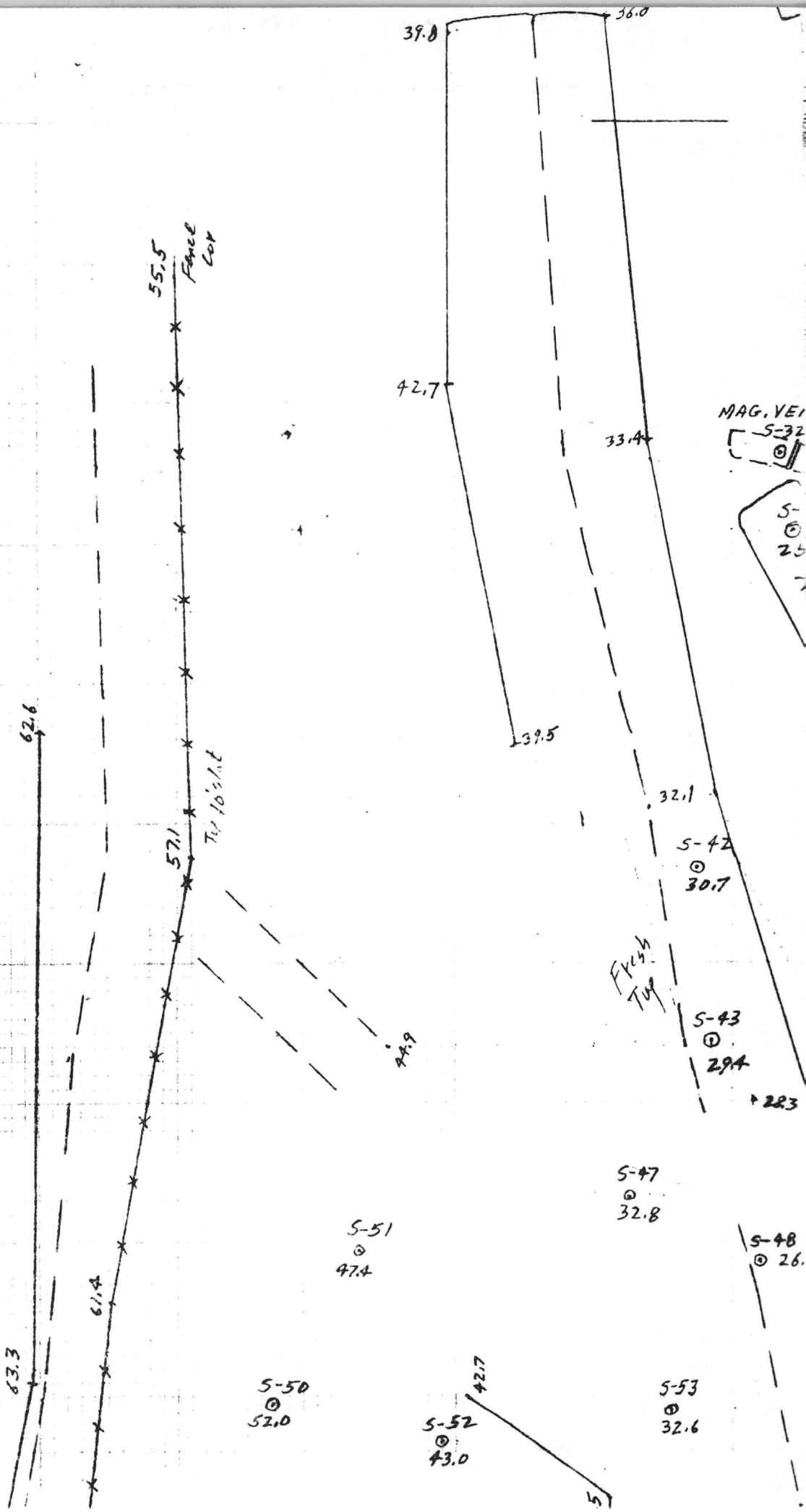
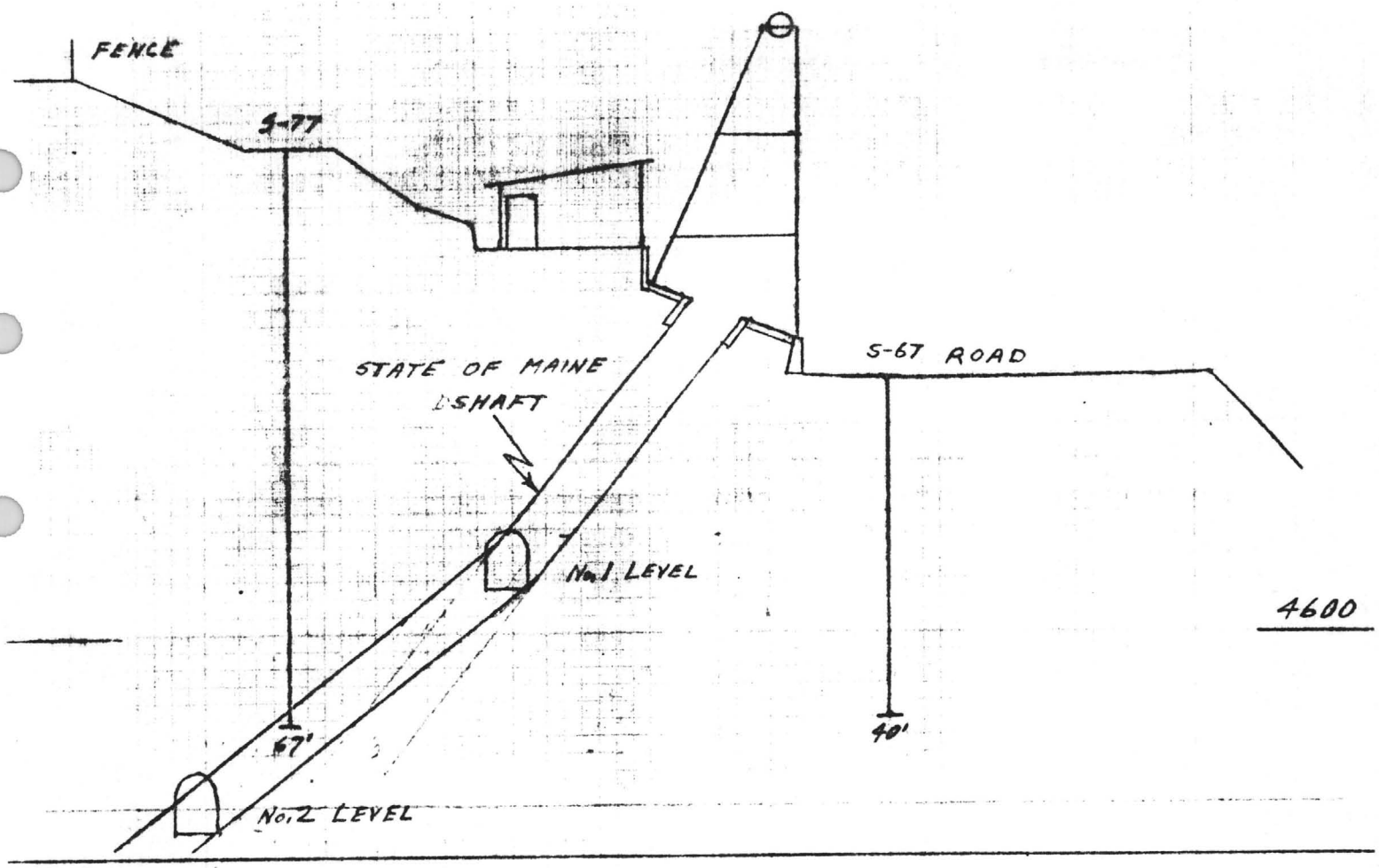
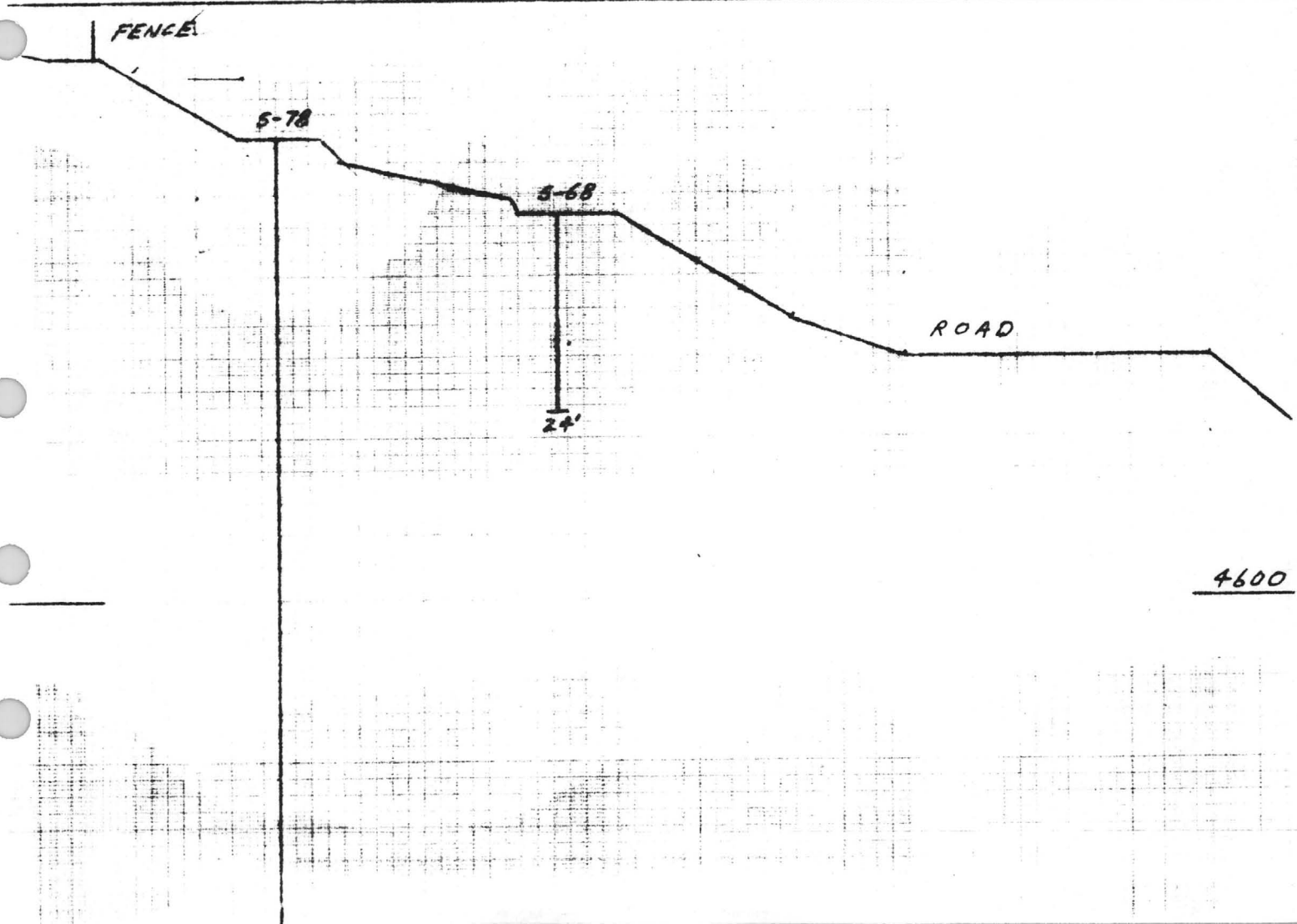
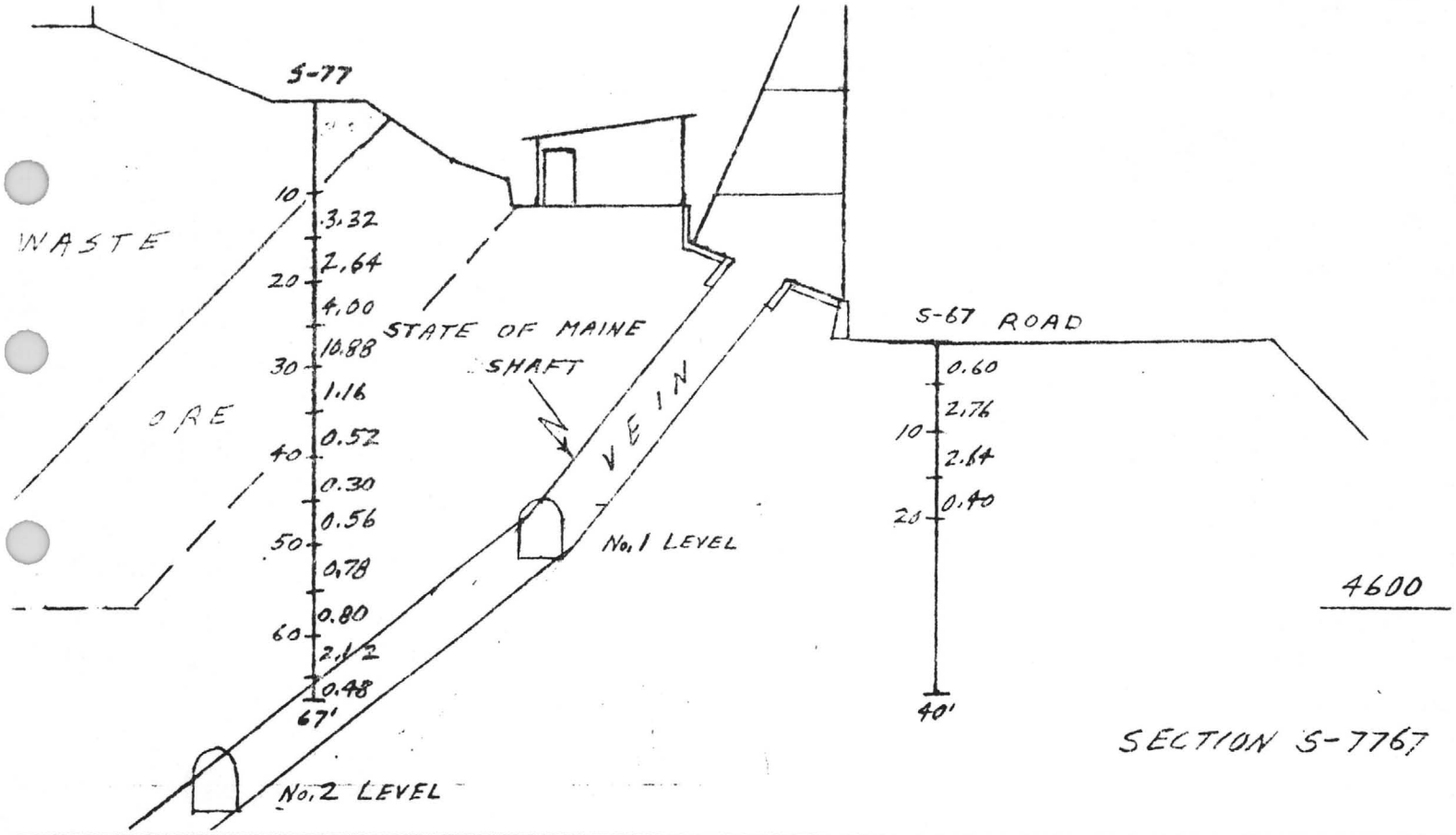
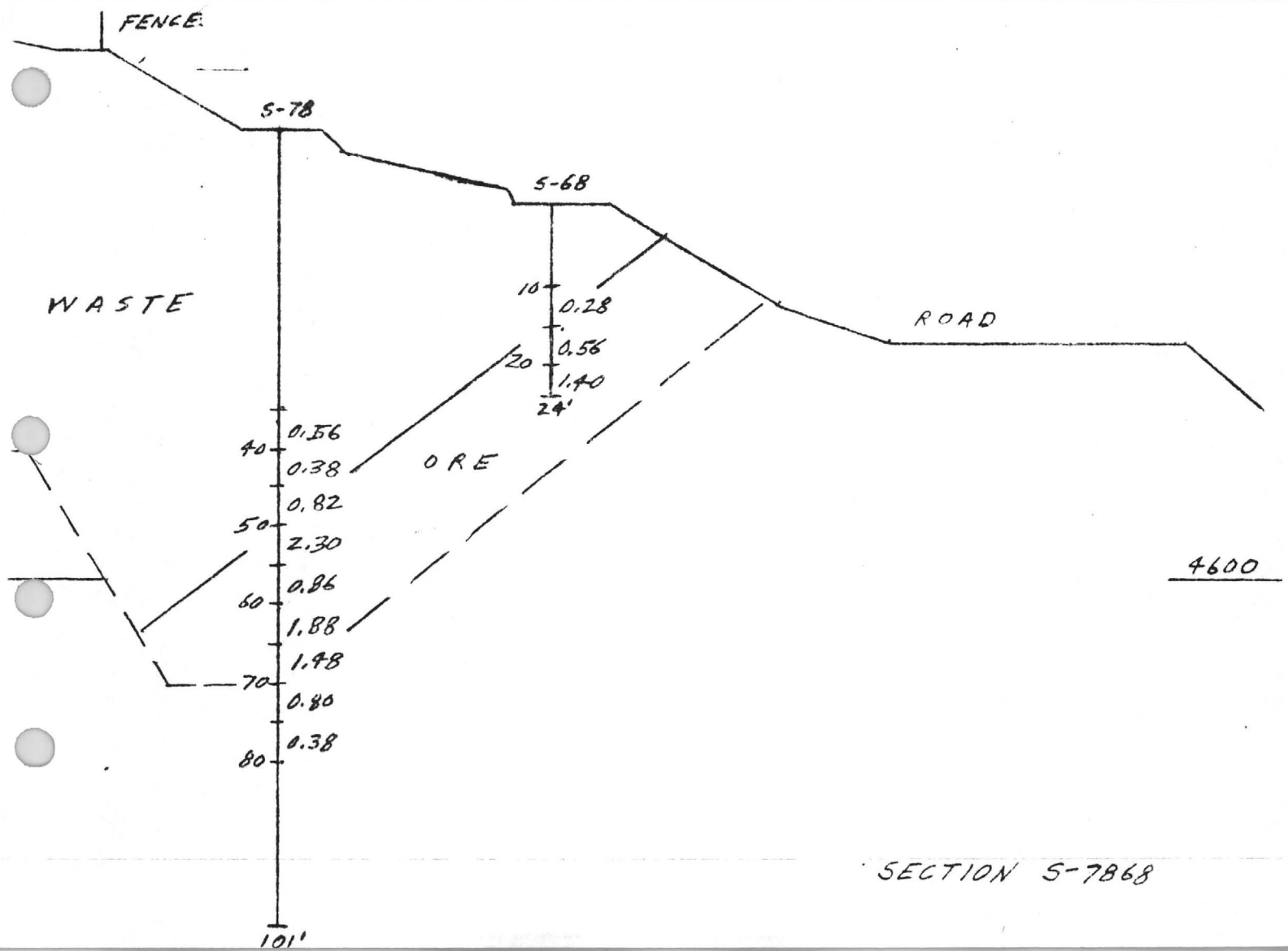
35.0
34.6


39.8
36.0
55.5
Fence Cor
42.7
MAG. VE
S-32
33.4
S-
25
62.6
Top 10'S.L.E
57.1
39.5
32.1
S-42
30.7
Fresh Top
S-43
29.4
28.3
44.9
S-47
32.8
S-51
47.4
S-48
26.
61.4
63.3
S-50
52.0
42.7
S-52
43.0
S-53
32.6


FENCE
S-77
STATE OF MAINE
SHAFT
S-67 ROAD
No. 1 LEVEL
4600
67'
40'
No. 2 LEVEL


FENCE
S-78
S-68
ROAD
24'
4600


S-77
WASTE
ORE
10
3.32
2.64
20
4.00
STATE OF MAINE
SHAFT
10.88
30
1.16
0.52
40
0.30
0.56
50
0.78
0.80
60
2.12
0.48
67'
VEIN
No. 1 LEVEL
No. 2 LEVEL
S-67 ROAD
0.60
2.76
10
2.64
0.40
20
40'
4600
SECTION S-7767


FENCE
S-78
S-68
WASTE
10
0.28
0.56
20
1.40
24'
ROAD
0.56
40
0.38
ORE
0.82
50
2.30
0.86
60
1.88
1.48
70
0.80
0.38
80
101'
4600
SECTION S-7868

November 12 1984

Sample	I.D	CN Shaken Test Ag	Acid Digestion Ag	Au
S-76	0-5	2.00	2.20	.006
	5-10	.60	.82	Tr
	10-15	1.16	1.62	.006
	15-20	6.56	8.62	.012
	20-25	7.68	10.38	.012
	25-30	.50	1.18	.006
	30-35	.38	1.12	.003
	35-40	.60	.94	.003
	40-45	.30	.76	Tr
	45-50	1.14	1.24	.006
	50-55	.12	.20	Tr
	55-60	.16	.32	Tr
	60-65	5.44	5.84	.016
	65-70	.34	.54	.003
	70-75	.10	.12	Tr
	75-80	.10	.14	Tr
S-77	10-15	1.66	3.32	.006
	15-20	1.88	2.64	Tr
	20-25	3.76	4.00	.008
	25-30	6.96	10.88	.024
	30-35	.88	1.16	.012
	35-40	.36	.52	Tr
	40-45	.14	.30	Tr
	45-50	.14	.56	.006
	50-55	.44	.78	.006
	55-60	.64	.80	Tr
	60-65	1.40	2.12	.017
S-78	35-40	.20	.56	.003
	40-45	.20	.38	Tr
	45-50	.50	.82	.006
	50-55	1.88	2.30	.012
	55-60	.50	.86	.014

73 N
74 N
79 N -.04
80 -.04
81 "
82 -.02
93 Tr
94 Tr
95
96

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

October 25, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S-51	35-40	3.12	0.016	2.68			
	40-45	11.12	0.012	7.10			
	45-50	1.16	0.008	0.30			
	50-55	0.40	0.008	0.14			
S-52	15-20	2.80	0.020	2.20			
	20-25	0.44	0.008	0.20			
	25-30	0.28	trace	0.08			
	30-35	0.36	0.004	0.10			
S-55	25-30	0.20	0.004	0.06			
S-56	0-5	0.36	0.008	0.18			
S-47 See Smelter							

Method of Analysis: Fire Assay

REGISTERED ASSAYER
CERTIFICATE NO.
14150
GARY ALVIN LINDROOS
Date Signed 10-25-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

Tombstone Silver Mines
10/27/84

CERTIFICATE OF ANALYSIS

Sample Identification		Ag	Au	SHAKER			
O.I.P.	# 1A	~~0.72~~	~~0.008~~	~~0.16~~			
	# 1B	0.52	0.008	0.28			
	# 2	0.88	0.004	0.14			
S-~~58~~55	40-45	0.24	0.004	0.06			
S-57	0-5	0.04	Tr	0.06			
	50-55	0.16	Tr	0.04			
S-58	0-5	0.24	Tr	0.06			
	45-50	0.36	Tr	0.18			
S-60	20-25	3.84	0.008	2.00			
	25-30	3.52	0.012	2.20			
	30-35	3.04	0.008	1.90	25'	5.08	0.007
	35-40	3.48	0.004	2.20			
	40-45	1.36	0.004	0.58			
S-59	0-5	0.48	Tr	0.32			
	5-10	0.36	Tr	0.14			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO. 14160
GARY ALVIN LINDROOS
Date Signed 10-27-84
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

Tombstone Silver Mines

10/27/84

CERTIFICATE OF ANALYSIS

Sample Identification		Ag	Au	SHAKER			
S-59	10-15	0.68	0.004	0.34			
	15-20	1.64	0.008	0.70			
	20-25	0.52	0.004	0.24			
	35-40	0.40	0.004	0.16			
	40-45	0.60	0.004	0.24			
	45-50	0.28	trace	0.12			
	50-55	0.12	trace	0.06			
	55-60	0.56	0.004	0.18			
	60-61	1.44	0.012	0.70			
S-61	20-25	1.24	0.004	0.42		20'	
	25-30	0.96	0.004	0.40	1.61	0.008	
	30-35	1.28	0.008	2.00			
	35-40	2.96	0.016	1.90			
	40-45	0.64	0.004	0.38			
S-56	60-65	0.56	0.004	0.08			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO. 14160
GARY ALVIN LINDROOS
10-27-84
Signature Signed
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

Tombstone Silver Mines
10/27/84

cont.

CERTIFICATE OF ANALYSIS

Sample Identification		Ag	Au				
S-62	30-35	0.40	0.004	0.12			
S-63	25-30	0.08	Tr	0.04			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO. 14160
GARY ALVIN LINDROOS
Date Signed 10-27-84
ARIZONA, U.S.A.

TOMBSTONE SILVER MINES, INC.

Laboratory Report

Gary L. Lindsay

Date: 11-14-84

Note: All Ag and Au are Ounces per Ton

ple Identification	Shaker		Acid		Fire		Remarks
	Ag	Au	Ag	Au	Ag	Au	
5-87 - 0-5 DH	.08	TR	.28	TR			
5-10	TR	TR	.12	TR			
10-15	.02	TR	.32	.009			
15-19	.82	TR	1.24	.006			
5-88 0-5	.04	TR	.80	.006			
5-10	.08	TR	.28	.003			
10-15	.74	.003	1.12	.006			
15-16	.56	.003	1.44	.003			
5 89 0-5	.40	.003	.72	.003	.72	.003	
5-10	.28	.003	.36	.003			
10-15	.34	TR	.64	.006			
15-20	.40	TR	.60	TR		.005	
20-25	.40	TR	.48	.003	.62		
25-30	.12	.003	.76	.012			
30-35	.16	TR	.28	.006			
35-40	.12	TR	.20	.006			S.O.M.
40-45	.04	TR					
45-50	.04	TR					
50-55	.02	TR					
55-60	.02	TR					
5-90 0-5	.04	TR					
5-10	Nil	TR					
10-15	TR	TR	.08	T			
15-20	Nil	TR					SMELTER
20-25	Nil	TR					
25-30	Nil	TR					
30-35	Nil	TR					
35-40	Nil	TR					

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Lindsay

Date: 12-4-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
S-67	0-5		✓	.60	.006			
	5-10		✓	2.76	.006			
	10-15		✓	2.64	.003			
	15-20		✓	.40	.003			
	20-25			.20	.003			
	25-30			.08	Tr			
S-68	0-5			.16	Tr			
	5-10			.16	Tr			
	10-15		✓	.28	.003			
S-69	0-5		✓	.36	.003			
	5-10		✓	1.64	.009			
	10-15		✓	.56	.003			
	15-20		✓	.32	.012			
	20-25		✓	.40	.006			
S-57	55-60			.16	Tr			
	60-63		✓	.68	.003			
S-58	50-55		✓	.20	Tr			
	55-60		✓	.20	.017			
	60-65		✓	.24	Tr			
S-59	25-30		✓	.16	.003			
	30-35		✓	.24	.003			
S-60	0-5		✓	.64	.006			
	5-10		✓	.36	.006			
	15-20		✓	.40	.003			
	45-50			.12	Tr			
	50-56			.08	Tr			
S-61	10-15			.08	Tr			
	15-20			.12	Tr			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Lindsay

Date: 12-4-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
S-61	45-50			.16	Tr			
N 70 Dump				.48	.003			
Upper Vein Dump				1.76	.006			
S-77	65-67		✓	.48	.003			
S-86	30-35			.20	Tr			
	35-40			.08	Tr			
	40-45			.08	Tr			
	45-50			.08	Tr			
	50-55			.12	Tr			
	55-60			.20	Tr			
S-55	45-50		✓	.24	Tr			
	50-55		✓	.16	Tr			
	55-60		✓	.60	.003			
S-57	60-63			.08	Tr			
S-70	35-40		✓	.52	.003			
	40-45		✓	.60	.006			
	45-50		✓	.60	.006			
	50-55		✓	.48	.006			
S-71	0-5		✓	2.84	.006			
	5-10			.12	.003			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Rodes

Date: 12-5-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
5-71	10-15			.04	Tr			
	25-30			.04	Tr			
5-72	0-5			1.32	.003			
	5-10			.20	.003			
	10-15			.16	.003			
	15-20			.08	Tr			
5-75	0-5			.04	Tr			
	5-10			.04	Tr			
	10-15			.04	Tr			
	15-20			.08	Tr			
R-1	0-4			.36	Tr			
	4-6			1.04	Tr			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Lindsay

Date: 12-4-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
S-67	0-5			.60	.006			
	5-10			2.76	.006			
	10-15			2.64	.003			
	15-20			.40	.003			
	20-25			.20	.003			
	25-30			.08	Tr			
S-68	0-5	.06		.16	Tr			
	5-10	.04		.16	Tr			
	10-15	.04		.28	.003			
S-69	0-5			.36	.003			
	5-10			1.64	.009			
	10-15			.56	.003			
	15-20			.32	.012			
	20-25			.40	.006			
S-57	55-60			.16	Tr			
	60-63			.68	.003			
S-58	50-55			.20	Tr			
	55-60			.20	.017			
	60-65			.24	Tr			
S-59	25-30			.16	.003			
	30-35			.24	.003			
S-60	0-5			.64	.006			
	5-10			.36	.006			
	15-20			.40	.003			
	45-50			.12	Tr			
	50-56			.08	Tr			
S-61	10-15			.08	Tr			
	15-20			.12	Tr			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Lindsay

Date: 11-30-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
S-79	25-30			✓ .20	.003			
	30-35			✓ .24	.003			
	35-40			.12	Tr			
	40-41			.08	Tr			
S-80	5-10			.04	Tr			
	10-15			.04	Tr			
	25-30			.16	Tr			
S-81	0-5			.08	Tr			
	5-10			.04	Tr			
	30-31			✓ .20	.006			
S-82	0-5			.08	.003			
	✓ 25-30			✓ .64	.006			
S-64	0-5			✓ .88	.012			
	5-10			✓ .36	.003			
	10-15			✓ .44	.006			
	15-20			✓ .32	.006			
	20-25			✓ .28	.003			
	35-40			✓ .24	.003			
	40-41			✓ .20	.006			
S-65	0-5			.24	.003			
	5-10			.12	Tr			
	10-15			.16	Tr			
	15-20			.12	Tr			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

Gary A. Linstrom

Date: 11-14 thru 11-15 84

Note: All Ag and Au are Ounces per Ton

ple Identification	Shaker		Acid		Fire		Remarks
	Ag	Au	Ag	Au	Ag	Au	
S-90 40-45	Nil	Nil					
45-50	Nil	TR					
S-91 0-5	.02	TR					
5-10	Nil	TR					
10-15	.02	TR					
15-20	Nil	TR					
20-25	Nil	TR					
25-30	Nil	TR					
30-35	Nil	TR					
35-40	Nil	TR					
40-45 ✓	.02	~~TR~~ .02	.08	T			
45-50 ✓	Nil	~~TR~~	.04	T			
50-55 ✓	.22	TR	.32	.003			
S-92 0-5	TR	.02					
5-10	TR	.02					
10-15	TR	.02					
15-20	TR	.02					
20-25	TR	TR					
25-30	TR	TR					
30-35	TR	.02					
35-40 ✓	.02	.02	.04	TR			
40-45	TR	.02					
S-93 0-5	TR	TR					
5-10	TR	TR					
10-15	TR	TR					
15-20	TR	TR					
20-25	TR	TR					
25-30	TR	TR					

TOMBSTONE SILVER MINES, INC.

Laboratory Report

Gary J. Linebrook

Date: 11-15-84

Note: All Ag and Au are Ounces per Ton

ıple Identification	Shaker		Acid		Fire		Remarks
	Ag	Au	Ag	Au	Ag	Au	
S 93 30-35	TR	TR					
40-45	TR	TR					
45-50	TR	TR					
50-55	TR	TR					
S 94 0-5	TR	TR					
5-10	TR	TR					
10-15	TR	TR					
15-20	TR	TR					
20-25	TR	TR					
25-30	TR	TR					
30-35	TR	TR					
35-40	TR	TR					
40-45	TR	.02	Tr	Tr			

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: [illegible] Date: 11-16-84

Note: All Ag and Au are Ounces per Ton

Sample Identification	Shaker		Acid		Fire		Remarks
	Ag	Au	Ag	Au	Ag	Au	
S 95 0-5	TR	TR					
5-10	TR	TR					
10-15	TR	TR					
15-20	TR	TR					
20-25	TR	TR					
25-30	TR	TR					
30-35	TR	TR					
35-40	TR	TR					
40-45	TR	TR					
45-50	TR	TR					
50-55	TR	TR					
S96 0-5							
5-10	TR	TR					
10-15	TR	TR					
15-20	TR	TR					
20-25	TR	TR					
25-30	TR	TR					
30-35	TR	TR					
35-40	TR	TR					
40-45	TR	TR					
45-50	TR	TR					
50-55	TR	TR					
55-60	TR	TR					

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: [illegible] Date: 11-19-84

Note: All Ag and Au are Ounces per Ton

Sample Identification	Shaker		Acid		Fire		Remarks
	Ag	Au	Ag	Au	Ag	Au	
S97 05 DH	TR	TR					
5-10	TR	TR					
10-15	.02	TR	.16	TR			
15-20	.04	TR	1.52	.016			
20-25	TR	TR	.16	TR			
25-30	TR	TR					
30-35	TR	TR					
35-40	TR	TR					
40-45	TR	TR					
45-50	TR	TR					
50-55	TR	TR					
S98 0-5	TR	TR					
5-10	TR	TR					
10-15	TR	TR					
15-20	TR	TR					
20-25	TR	TR					
25-30	TR	TR					
30-35	TR	TR					
35-40	TR	TR					
40-45	TR	TR					
45-50	02	TR	.64	.003			
50-55	.08	TR	0.40				
55-60	.08	TR	0.08				
60-65	TR	TR					

November 13, 1984

Location	Footage	Shaken Ag	Acid Digestion Ag	Acid Digestion Au
S-78	60-65	.90	1.88	.008
	65-70	1.26	1.48	.006
	70-75	.60	.80	.003
	75-80	.24	.38	Tr
	80-85	.04	.16	Tr
	85-90	.02	.12	Tr
S-83	20-25	Nil	.28	Tr
	25-30	.16	.68	.003
	30-32	.40	.72	Tr
S-84	20-24	.14	.24	Tr
S-85	0-5	.98	3.04	.012
S-86	0-5	1.22	2.08	.012
	5-10	10.40	15.60	.016
	10-15	.50	.66	.003
	15-20	.22	.32	Tr
	20-25	.08	.24	Tr
	25-30	.08	.32	Tr

TOMBSTONE SILVER MINES, INC.

Laboratory Report

By: Gary A. Lindstrom

Date: 12-4-84

Note: All Ag and Au are Ounces per Ton

Sample Identification		Shaker		Acid		Fire		Remarks
		Ag	Au	Ag	Au	Ag	Au	
S-61	45-50		✓	.16	TN			
N 70 Dump				.48	.003			
Upper Vein Dump				1.76	.006			
S-77	65-67		✓	.48	.003			
S-86	30-35			.20	TN			
	35-40			.08	TN			
	40-45			.08	TN			
	45-50			.08	TN			
	50-55			.12	TN			
	55-60			.20	TN			
S-55	45-50		✓	.24	TN			
	50-55		✓	.16	TN			
	55-60		✓	.60	.003			
S-70	35-40		✓	.52	.003			
	40-45		✓	.60	.006			
	45-50		✓	.60	.006			
	50-55		✓	.48	.006			
S-71	0-5		✓	2.84	.006			
	5-10			.12	.003			

5-44 60'

0-5 Tup Fresh gray qn

5-20 Fresh & wk " " & brn

20-25 mod tan & gray Mod MnO

25-30 Fresh & wk gray qn & brn

30-35 " " "

35-45 wk brn & gray

45-60 Fresh & wk gray qn & brn

5-45 60'

0-15 Tup Mod alt tan gray pink wk MnO

15-25 str " " " "

25-30 mod " "

30-35 Fresh & wk gray qn & brn

35-40 mod tan & gray

40-45 " " " mod MnO

45-50 " " "

50-60 Fresh gray qn

5-46

0-15 Tup Fresh - weak alt mostly brn w/ gray qn weak MnO

15-25 weak " brn & gray

25-30 mod " " " mod MnO

30-45 " " gray, minor brn wk MnO

45-50 str " brn & pink

50-55 mod " " Mod MnO

55-60 Fresh gray qn

N75W 82N

S-47 70'

0-5	Tup	mod alt	tan & lt gray	wk MnO
5-15		str "	pink lt gray tan	NO DE Vn
15-25		mod "	tan lit gray	~~Mod MnO (blk)~~
25-30		"	" " "	Mod MnO (blk)
30-40		str	pink " "	
40-45		"	" " "	Str MnO
45-55		wk	tan & gray brn "	"
55-60		wk	" "	
60-70		Fresh & wk	gray gn & brn	

S-48 50'

0-5	Tup	Str Alt	pink & lt gray	
5-15		" "	" "	
15-20		" "	" "	Mod MnO
20-25		" "	tan " "	N 20W Flt
25-30		" "	" "	mod MnO
30-35		" "	tan " "	
35-40		wk "	" " "	
40-45		Fresh & wk	gray gn & brn	
45-50		Fresh	" "	

5-49 31' holed stope

0-10	Tuf	Mod alt	gray & tan	wk MnO
10-15		Str "	" " "	Mod "
15-20		Mod	brn ltgray	
20-25		Str	pink light gray	
25-31		Str	lav lt gray	

5-50 20' lost hole - travely grd

0-10	Tuf	Fresh & wk	gray gn & brn	
10-20		"	" "	

5-51 90'

0-15	Tuf	Mod alt	brn & lt gray		
15-30		" "	tan " "	wk MnO	
30-35		Str	" " "	Mod MnO	N60E Vn
35-55		"	pink & " "		
55-70		"	tan " "	wk ~~Mod~~ MnO	
70-80		mod	brn " "	Str "	
80-85		wk	brn & gray		
85-90		Fresh	gray gn		

5-52 64' holed stope

0-10	Tuf	Mod alt	brn & lt gray		
10-15		Str "	tan " "		
15-25		" "	pink " " "		N60E Vn
25-35		" "	brn lt gray		
35-45		Mod "	" " "	wk MnO	

(OVER)

45-55 Top sh. alt tan & lt gray 5.0-M?
55-64 " " fav pink lt gray

S-54	80'			
0-10	Tup	Mod alt	brn & lt gray	
10-25		Str	lav pink " "	70N Vn
25-35		Mod	brn & lt gray	
35-50		Fresh & wk	gray gn wk MnO	
50-60		Mod	pink lt gray	
60-65		Str	" brn " wk MnO	S.O.M.
65-80		Freshwk	gray gn & brn	
S-53	5			
0-30	Tup	Mod Alt	Brn & light gray, min pink	
30-40		Str	lav pink " "	
40-45		Mod	brn " "	
45-50		wk	" " "	Mod MnO
50-		wk	" " "	
S-55	6	holed		
0-10	Tup	Mod Alt	Brn & light gray	HW Vn ??
10-15		Str	" " "	Str MnO (blk)
15-20		"	" " "	Mod "
20-50		Mod	Tan & " "	
50-60		Str	" " "	S.O.M. Vn
60-		"	pink " "	

5-56 90'

0-20 Tup ~~Fresh & wk~~ Brn ~~light~~ gray gn

20-25 Mod Tan & light gray str MnO (blk)

25-30 str lav & pink " " HW Vn?

30-40 " " " " "

40-60 Mod tan & light gray

60-65 str " " " S.O.M Vn

65-70 wk tan & brn ~~wk~~ MnO

70-80 Fresh & wk gray gn & brn

5-57 6

0-20 Tup Fresh gray gn min brn

20-25 Mod Alt tan & lt gray

25-40 Str pink " " " HW Vn? 30-35 lav (56-25-30)

40-55 Mod brn " " min pink

55-6 str tan pink " " S.O.M. Vn

5-58 6

0-5 Tup Fresh & wk gray gn & tan

5-20 Str alt lav pink, tan, lt gray HW Vn?

20-40 Mod tan, lt gray min pink

40-55 Str lav, pink tan lt gray some

55- Mod tan & lt gray

S-59 61 holed

0-5 Tup Mod Tan + pink

5-10 Str lt gray

10-20 Str lav pink lt gray) Hu Vu?

20-35 Mod tan " "

35-50 Str " pink " "

50-61 Str lav " " " S.O.M.

S-60 55 (3'+ To W alt)

0-20 Tup mod Alt Tan & lt gray

20-35 Str lav pink tan

35-40 mod ~~Tan~~ lt gray ~~mod~~

40-47 Tan " " Mod ~~Alt~~

47-55 1 fresh gr gn

S-61

0-5 Tup Fresh gr gn

5-10 mod pink & tan

10-20 Str lt gray

20-1 Str pink lav & lt gray

16'+

5

WM

5-62	80'			
0-5	Tup	Mod alt	pink lt gray	
5-10		St	" lt gray	
10-20		wk	tan " "	wk MnO
20-35		str	pink " "	
35-40		str	lav pink " "	
40-50		Mod	tan " "	Str & lt gray
50-60		str	pink " " "	5-60 35-40
60-75		wk	Tan & brn	61 10-20
75-80		fresh	gr gn	62 55-60
5-63				
0-5	Tup	ste Alt	Brn Tan	~~Str~~ Mod MnO
5-10		"	pink & lt. gray	
10-30		wk	Brn & lt gray	
30-35		mod	Tan " "	15-20 wk MnO
35-40		St	pink " "	
40-45		wk	Brn " "	
45-50		Fresh	Tan & gray gn	
5-64				
0-10	Tup	ste alt	pink lt gray	
10-20		mod	Tan " "	
20-30		mod	Brn " "	wk MnO
30-35		str	lav & pink " "	

5-65

0-20	Tup	Mod	Tan & lt gray	
20-30		Str	lt gray	
30-35		"	pink " "	
35-40		Mod	Brn " "	wk Mud
40-55		Mod	" " "	
55-65		wk	Brn " "	
65-75		Fresh	gray gn	

5-66 ~~Pop wk brn~~

0-10	Tup	wk	brn	
10-25		Fresh	gr. gn	
25-30		mod	brn lt gray pink	
30-35		str	lt gray	N Zone Flt
35-55		mod	tan " "	wk to mod Mud
55-60		wk	" " "	
60-70		Fresh	gray gn	

5-68 241

0-5	Tup	Mod Alt	Tan & lt gray	
5-15		Str	pink, lav, " "	
15-20			~~[illegible]~~ " "	min pink
20-24			" " " "	

5-68 40'

0-10 Top Str Alt pink lav lit gray

10-20 " " brn " "

20-25 " " Tan "

25-40 Fresh gr gn & min brn Wk MnO

5-70 65' " @ decline level

0-5 Top Mod Alt Lav pink Brn lt gray

5-20 Str " " " "

20-30 " " " " min pink

30-35 " " " " "

35-45 " " " " "

45-55 " " " " "

55-60 Mod Tan " " ~~Mod MnO~~

60-65 Wk Brn " " Mod MnO

65-70 Fresh gry gn

5-87 40' @ Head Scarp

0-5 Top Fresh - gr gn

5-15 wk alt brn Mod MnO (Fractures)

15-20 Fresh gr gn

20-30 weak " " & Tan

30-40 Mod wk " " Tan

5-71 30' Next to 5-67 E Rd

0-10 Top wk alt gray Tan brn pink (colors uncons.)

10-15 Fresh " gry gn

15-20 Mod brn & gray

20-30 Fresh gr gn

5-73 50 ??

0-10 Tup wk alt brn & gray wk Mag .69

10-50 Tup Fresh gr-y gn .70 .67

5-73 ST up wk brn lt gray .71

5-10 mod tan " "

10-15 wk & Fresh

15-25 Mod brn " " pink

25-30 " " Fresh " " gray gn

5-74 50

0-10 Tup wk brn & gray sorting alt?

10-30 Fresh gray gn

30-35 wk brn & gray

35-50 Fresh gr-y gn

5-75

0-5 Tup Fresh gr-y gn

5-15 " & wk " " brn

15-30 mod Tan lt gray

30-40 mod pink " " "

40-45 Fresh gr gn

4-76	80'			5-76	80
				77	67
0-10	Top	str alt	lav & lt gry	78	101
10-15		"	pink "	79	41
5-30			brn "	80	31
				81	31
				2	35
1 30-			lav & lt gr	3	32
10'			pink & lt gray	4	24
10' 75-75			brn wk wk MnO	5	5
5' 75-80	Fresh			6	60
				7	19
				8	16
5-77	67				
	0-5	Top	wk alt brn & lt gy	Wk MnO	
	5-10		Mod " tan " "	89	60
	10-15		str lav " "	90	50
	15-25		Mod pink " "	1	55
	25-35		str lav " "	2	45
	35-45		" pink " "	3	55
	45-60		Mod tan " "	4	45
	60-67		str lav " "	5	55
				6	60
				7	55
5-78	101'			8	65
	0-5	Fresh Top	gr gr		
	5-18		wk alt brn & lt gr	wk MnO	
	18-25		str " lav. " "		
	25-90		str	lav, pink, lt gray	
	90-95		mod "	tan lt gray	
	95-101		wk "	brn & lt gray	
15'				brn & lt gray	

5-79 41

0- Top Fresh other cuttings destroyed w/loader

5-80 31

0-20 Top Fresh

20-30 wk tan & gray

30-31 Mod " "

5-81 31'

0-10 Fresh Top

10-20 wk alt lt gray & tan

20-30 mod tan " " brn wk Mn O

30-31 str pink tan lt gr

5-82 35'

0-10 Top wk alt ~~tan~~ & lt. gray

10-20 Mod " tan " " wk Mn O

20-25 Str Brn " " "

25-35 str lav pink tan lt gr

5-83 32'

0-5 Top wk alt gray wk Mn O

5-20 " mod " brn & lt gray

20-25 " str " tan " " mod Mn O

25-35 " str " pink " " "

5-84 24'

0-20 Top Mod alt Tan, Brn, lt Gray wk Mn O

20-24 Str " pink " "

5-85 5' mod alt Tan Brn lt gray ~~wk~~ wk Mn O

5-86 (60') 0-10' Top Mod alt Brn tan lt gr wk Mn O

10-30 " wk alt tan gray gn " " Mod Mn O 45-50 wk alt

30-40 " mod " " " " 50-60 fresh

40-45 " str " Brn " " — " "

19
16
60

S-87 19'

0-10 Tup mod alt tan & lt gray wk MnO
10-15 " " Brn " "
15-19 str " pink " "

S-88 16'

0-10 Tup wk alt Tan & lt gray
10-15 str Brn & lt gray wk MnO
15-16 str pink " "

S-89 60'

0-5 Tup str alt lav lt gray
5-10 mod " pink " " wk MnO
10-15 str " lav lt gray
15-30 mod " tan " "
30-35 mod Brn " " mod MnO
35-50 wk tan & gray
50-55 mod Brn " mod MnO
55-60 Fresh gr gn

LINDROOS LABORATORIES

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TOMBSTONE, AZ 85638
Phone: 457-3132

June 9 1984

SURFACE PIT CHIP SAMPLES

CERTIFICATE OF ANALYSIS

	Sample Identification	Geochemical oz/per ton Ag	Au		Fire Assay Oz/Ton Ag	Au	
7.5	M1 0-7.5	.04	.003				
1.0	M1 7.5-8-5 PINK	.12	.005				
2.0	M1 8.5-10.5 PBrn	.35	.065		.32	trace	
2.0	M1 10.5-12.0 Blk	9.66	.029		9.70	.030	
1.5	M1 12.0-17.0 Pink	0.68 1.20	.008 .008				
	M1 17.0-25.0	0.50	.003				
	M2 0-7.5	6.02 2.90	.005 .008		6.18	trace	
	M2 7.5-12.5	0.72	.005				
	M2 12.5-15.3	0.10	.003				
	M2 15.3-19.3	0.08	trace				
	M3 0-4.5	1.42	0.003		2.52	trace	
	M3 4.5-6.1	0.14	trace				
	M3 6.1-6.6	1.18	.006		1.26	trace	
	M3 6.6-8.6	0.50	trace		0.62	trace	
	M3 8.6-12.3	0.06	trace				

Method of Analysis: As Above

M-3 Grab
Muck in Pit Bot 0.04 Tr

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June 9, 1984 (Page 2)

CERTIFICATE OF ANALYSIS

Sample Identification	Geochemical Ag	Geochemical Au		Fire Assay Ag	Fire Assay Au	
M3 10.3-11.3	0.62	.003				
M3 11.3-15.5	4.62	.014		4.86	.010	
M3 15.5-16.7	0.24	trace				
M3 16.7-22.7	0.04	trace				
M3 22.7-28.7	0.04	trace				
M3 28.7-30.0	0.02	0.009				
M3 Brown Spot	0.02	trace				
M3 Gob	9.40	.003		9.54	trace	
C1 0-8.0	0.66	trace				
C1 8.0-10.5	0.08	0.003				
C1 10.5-11.8	trace	trace				
C1 11.8-16.8	0.08	trace				
C1 16.8-23.8	0.10	trace				
C1 23.8-27.6	0.34	trace				
C1 27.6-29.1	0.36	trace		0.34	trace	

Method of Analysis: As Above

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June 9, 1984 (Page 3)

CERTIFICATE OF ANALYSIS

Sample Identification	Geochemical Ag	Geochemical Au		Fire Assay Ag	Fire Assay Au	
C1 29.1-30.3	0.32	trace				
C1 30.3-35.3	0.14	trace				
C1 35.3-38.7	0.06	trace		trace	nil	
C1 38.7-41.2	0.10	trace				
C2 0.0-1.7	0.22	trace				
C2 1.7-5.0	0.14	trace				
C2 5.0-9.3	0.52	0.003		0.56	trace	
C2 9.3-15.5	0.32	0.003				
C2 15.5-18.2	0.28	0.005				
C2 18.2-20.0	0.04	0.001				
C2 20.0-22.7	0.06	trace				
C2 22.7-25.2	0.02	trace				
C2 25.2-27.0	0.02	trace				
C2 27.0-31.0	trace	trace				
C3 0.0-3.0	trace	trace				

Method of Analysis: As Above

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June 9, 1984 **(Page 4)**

CERTIFICATE OF ANALYSIS

Sample Identification	Geochemical Ag	Au		Fire Assay Ag	Au	
C3 3.0-6.3	0.08	trace				
C3 6.3-12.6	0.06	trace				
C3 12.6-17.0	0.12	trace				
C3 17.0-19.3	0.26	trace				
C3 19.3-29.7	0.10	trace				
C3 29.7-31.9	0.08	trace				
C3 31.9-33.3	0.04	trace				
C3 33.3-35.5	0.02	trace				
C3 35.5-36.9	0.02	trace				
C3 36.9-40.9	0.02	trace				
C3 40.9-46.6	trace	trace				
C3 46.6-56.6	0.02	trace				
C3 56.6-59.6	trace	trace				
S1 0.0- 4.4	0.18	trace				
S1 4.4- 8.9	3.64	0.008	E-W	Foil		

Method of Analysis: As Above

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June 9, 1984 (Page 5)

CERTIFICATE OF ANALYSIS

Sample Identification	Geochemical Ag	Geochemical Au		Fire Assay Ag	Fire Assay Au	
S1 8.9-11.2	0.36	0.003	Vn (sh)			
S1 11.2-13.8	0.08	0.003				
S1 13.8-14.8	0.04	0.006				
S1 14.8-19.8	0.08	trace				
S1 19.8-22.5	0.06	0.003				
S1 22.5-27.9	0.10	0.003				
S1 27.9-30.4	0.06	0.001	Chg DIP			
* S1 30.4-31.4	0.02	0.003	Flate			
S1 31.4-34.7	0.04	trace				
S2 0.0- 3.3	0.06	trace		0.06	trace	
* S2 3.3- 4.3	0.08	trace				
S2 4.3- 8.3	0.05	trace		Wall		
S3 0.0- 4.6	0.06	trace	E-W			
* S3 4.6- 6.6	0.08	trace				
S3 6.6-13.1	0.04	trace				

Method of Analysis: As Above

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June 9, 1984 (Page 6)

CERTIFICATE OF ANALYSIS

Sample Identification	Ag	Au				
S4 0.0 - 7.0	trace	trace	E-W wall			
S4 7.0 - 11.5	0.02	trace				
* S4 11.5 - 13.3	0.10	trace				
S5 0.0 - 5.5	0.28	0.001				
S5 5.5 - 8.9	0.06	trace				
S5 8.9 - 11.2	0.04	trace				
S5 11.2 - 14.8	0.10	trace				
S5 14.8 - 16.6	0.02	trace				
S5 16.6 - 21.1	0.02	trace	Trench E. of M-A			
S5 21.1 - 25.1	trace	trace				
S6 0.0 - 3.5	0.04	trace				
S6 3.5 - 5.7	0.08	trace				
S6 5.7 - 7.5	0.06	trace				
S6 7.5 - 11.9	0.06	0.003				
S6 11.9 - 13.4	0.08	trace				

Method of Analysis: Geochemical

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June 14, 1984

Tombstone Silver Mines
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Geochemical

Sample Identification	Ag Oz/T	Au Oz/T				
S-3 Grab	3.76	0.003				
S-4 0.0 - 1.4	7.04	0.005	4.91	Surface		
S-4 1.4 - 4.0	3.84	0.003				
S-5 0.0 - 1.4	2.74	0.005				
S-5 1.4 - 4.0	2.48	trace	4.17	U.G.		
S-5 4.0 - 6.5	6.72	0.003				
S-6 0.0 - 2.0	1.88	trace	FACE	of		
S-6 2.0 --4.5	1.12	trace	sub-	level		
M-3A 0. 0 - 3.0	1.92	0.003				
M-3A 0.0 - 4.0	0.04	trace				
M-5 0.0 - 3.8	2.08	0.003	new	Vn		
T-4 Gob	3.92	0.003	Blank	below	light	

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date Expires
ARIZONA, U.S.A.

JUN 14 1984

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Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

September 13, 1984

CERTIFICATE OF ANALYSIS

Geochemical TSM SHAKER Fire Assay

Sample Identification		Ag Oz/T	Au Oz/T		Ag Oz/T	Au Oz/T	
S-1	0-5	0.12	trace	0.06	0.18	trace	
	5-10	0.20	trace	0.04			
	10-15	0.28	trace	0.06			
	15-20	3.28	0.005	1.40	3.14	trace	
	20-25	0.64	0.003	0.16			
	25-30	0.24	trace	0.10			
	30-35	0.16	trace	0.04			
	35-40	0.12	trace	0.04			
S-2	0-5	0.16	trace	0.08			
	65-70	0.32	0.003	0.02			
	80-85	0.16	0.005	0.06			
M-1	5-10	trace	trace	0.02			
M-2	10-15	0.32	0.004	0.12			
	15-20	0.08	trace	0.02			
	20-25	0.12	trace	0.04			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
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GARY ALVIN
LINDROOS
ARIZONA U.S.A.

SEP 13 1984

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September 17, 1984

Tombstone Silver Mines
P.O. Box 715
Tombstone, AZ 85638

CERTIFICATE OF ANALYSIS

Sample Identification	Ag	Au	TSM SHAKER Ag	LINDROS SHAKER Ag	Au	
Special 9-14-84	1.68	0.008	0. STANDARD			
S-3 0-5	0.24	0.003	0.10	0.11	Tr	
5-10	0.16	tr	0.08			
10-15	0.28	0.003	0.10			
15-20	0.32	0.003	0.12			
20-25	0.24	tr	0.10			
25-30	0.20	tr	0.02			
70-75	0.12	tr	0.06			
75-80	0.20	tr	0.06			
95-100	0.24	tr	0.04			
S-4 0-5	0.32	tr	0.20			
5-10	0.28	tr	0.08			
10-15	0.32	tr	0.12			
15-20	0.40	tr	0.20			
20-25	0.48	0.003	0.12			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO.
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GARY ALVIN LINDROOS
Signed
ARIZONA, U.S.A.

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September 17, 1984

Tombstone Silver Mines
(page 2)

CERTIFICATE OF ANALYSIS

Sample Identification		Ag	Au	TSM SHAKER Ag	LINDROS SHAKER Ag	Au	
S-4	15' 25-30	2.96	0.012	1.40	1.54	Tr	
	2.20 30-35	2.60	0.008	3.60			
	35-40	1.04	0.005	0.24			
35' 1.66	30' 1.78 40-45	0.64	tr	0.12			
	45-50	0.88	tr	0.12			
	50-55	1068 2.56	0.008	0.60			
	55-60	0.96	0.008	0.26			
	60-65	0.40	0.003	0.10			
S-6	10-15	0.32	tr	0.10			
	15-20	0.72	0.008	0.32			
	20-25	0.36	0.003	0.16			
	25-30	1.28	0.005	0.20			
S-7	0-5	0.40	0.003	0.04			
	30-35	0.16	tr	0.02			
	35-40	0.12	tr	0.04			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO.
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GARY ALVIN
LINDROOS
ARIZONA, U.S.A.

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September 17, 1984

Tombstone Silver Mines
(page 3)

CERTIFICATE OF ANALYSIS

Sample Identification			Ag	Au	TSM SHAKER Ag	LINDROS SHAKER Ag	Au	
S-8		0-5	2.88	0.003	1.60			
	20'	5-10	1.36	0.005	1.60			
	2.42	10-15	3.76	0.012	2.80			
35'		15-20	968 1.68	0.005	0.84			
2.23 2.45		20-25	0.80	tr	1.10			
		25-30	3.04	0.008	1.80			
		30-35	1720 3.68	0.023	0.28 ×	0.48	Tr	
		35-40	0.64	0.015	0.06			
S-9		0-5	0.32	0.003	0.06			
		5-10	0.56	0.003	0.04			
		10-15	0.64	0.005	0.12			
35' 0.57		15-20	0.72	0.003	0.16			
		20-25	0.40	0.003	0.08			
		25-30	0.64	0.005	0.12			
		30-35	0.72	0.008	0.14			

Method of Analysis: Geochemical

REGISTERED ASSAYER
CERTIFICATE NO.
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GARY ALVIN
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ARIZONA, U.S.A.

LINDROOS LABORATORIES

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September 24, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification		Geochemical Ag Oz/T	Geochemical Au Oz/T	SHAKER	Fire Assay Ag Oz/T	Fire Assay Au Oz/T	
S 10	0-5	1.76	0.005	1.20	1.84	0.005	
	5-10	0.40	0.003	0.18			
	10-15	0.44	0.003	0.20			
	15-20	0.48	0.003	0.32	0.41		
	20-25	0.32	trace	0.18			
	25-30	0.40	trace	0.20			
	30-35	0.24	trace	0.14			
	35-40	0.28	trace	0.08			
	45-50	0.56	trace	0.04			
S 11	0-5	0.20	trace	0.02			
	5-10	0.16	trace	0.06			
	10-15	0.12	trace	0.04			
	15-20	0.12	trace	0.04			
	20-25	0.24	trace	0.06			
	25-30	0.20	trace	0.04			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
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GARY ALVIN
LINDROOS
ARIZONA, U.S.A.

LINDROOS LABORATORIES

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September 24, 1984

Tombstone Silver Mines
Page 2

CERTIFICATE OF ANALYSIS

Sample Identification		Geochemical Ag Oz/T	Geochemical Au Oz/T		Fire Assay Ag Oz/T	Fire Assay Au Oz/T	
S 11	50-55	0.96	0.003	0.04	1.06	trace	
S 12	0-5	0.40	0.001	0.04			
	25-30	0.16	trace	0.02			
	50-55	0.32	0.003	0.08			
	65-70	0.36	0.003	0.06			
	70-75	0.28	trace	0.06			
S 13	0-5	0.40	trace	0.10			
	5-10	0.36	trace	0.16	0.37		
	10-15	0.32	trace	0.12			
	15-20	0.40	0.003	0.04			
S 14	0-5	0.24	trace	0.04			TSM
	15-20	0.28	trace	0.06			Acid
S 15	5-10	1.00	0.003	2.00	0.96	trace	2.25
	10-15	0.72	0.005	0.54			
	15-20	0.54	0.003	0.22			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 24, 1984

Tombstone Silver Mines
Page 3

CERTIFICATE OF ANALYSIS

Sample Identification		Geochemical Ag Oz/T	Geochemical Au Oz/T		Fire Assay Ag Oz/T	Fire Assay Au Oz/T	
S 15	20-25	0.68	0.005	0.36			
	25-30	0.40	0.001	0.24			
	30-35	0.48	0.003	0.06			
	45-50	0.28	trace	0.04			
	65-70	0.28	trace	0.02			
S 16	0-5	0.52	trace	0.50			
	5-10	1.44	0.003	0.46			
	10-15	1.68	0.005	0.16			
	15-20	2.72	0.011	0.30	2.80	trace	
	20-25	1.24	0.003	0.24			
	25-30	0.44	0.005	0.18			
	30-35	1.00	0.008	0.26			
	35-40	0.40	0.003	0.12			
	40-45	0.44	0.003	0.06			
S 17	0-5	0.72	0.008	0.22			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
ARIZONA, U.S.A.

LINDROOS LABORATORIES
GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 24, 1984

Tombstone Silver Mines
Page 4

CERTIFICATE OF ANALYSIS

Sample Identification		Geochemical Ag Oz/T	Geochemical Au Oz/T		Fire Assay Ag Oz/T	Fire Assay Au Oz/T	
S 17	5-10	1.24	0.011	0.20			
	10-15	0.24	trace	0.06			
	15-20	0.20	trace	0.08			
S 18	5-10	0.24	0.001	0.02			TSM
	35-40	0.32	0.003	0.16			ACID
	40-45	4.36	0.018	3.00	4.48	0.005	3.32
	45-50	0.36	0.003	0.10			
	50-55	0.80	0.005	0.08			
	55-60	0.52	0.005	0.06			
S 19	0-5	0.12	0.003	0.04			
	10-15	0.20	0.003	0.06			
	15-20	0.16	0.001	0.02			
	20-25	0.24	0.003	0.04			
S 20	0-5	0.20	0.005	0.10			
	5-10	0.12	0.001	0.04			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 24, 1984

Tombstone Silver Mines
Page 5

CERTIFICATE OF ANALYSIS

Sample Identification		Geochemical Ag Oz/T	Geochemical Au Oz/T		Fire Assay Ag Oz/T	Fire Assay Au Oz/T	
S 20	10-15	0.08	0.003	0.02			TSM
	15-20	12.16	0.020	11.20	14.30	0.010	Acid
	20-25	0.32	0.003	0.14			0.31
	25-30	0.36	0.003	0.04			
	30-35	0.12	0.003	0.06			
S 21	0-5	2.56	0.008	1.90			
	25-30	0.16	0.003	0.02			
	30-35	26.40	0.016	12.80	26.79	0.005	
	35-36	7.52	0.011	5.60			
S 22	0-5	0.64	0.008	0.10			
	15-20	0.16	0.003	0.14			
S 22 Stope	20-22	7.92	0.015	7.60			
S 23	10-15	0.24	0.001	0.08			
	20-25	0.24	0.001	0.02			
	30-35	0.84	0.005	0.08			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Signed
ARIZONA, U.S.A.

LINDROOS LABORATORIES
GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 24, 1984

Tombstone Silver Mines
Page 6

CERTIFICATE OF ANALYSIS

Geochemical

Sample Identification	Ag Oz/T	Au Oz/T				
S 23 40-45	0.28	0.003	0.02			
S 15 25-30 Fines	0.60	0.005	0.40			

Method of Analysis: As Above

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Signed
ARIZONA, U.S.A.

LINDROOS LABORATORIES

GARY A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

September 26, 1984

Tombstone Silver Mines
P. O. Box 715
Tombstone, Arizona 85638

CERTIFICATE OF ANALYSIS

Sample Identification		Ag Oz/T	Au Oz/T	SHAKER			
S 22	5-10	0.12	trace	0.10			
	10-15	0.16	0.003	0.02			
S 23	25-30	0.16	0.003	0.02			
	35-40	0.12	0.001	0.04			
	45-50	0.16	trace	Nil			
S 24	10-15	0.20	0.003	0.04			
	15-20	0.12	0.003	0.10			
	20-25	0.28	0.003	0.10			
S 25	0-5	0.24	0.001	0.04			
	45-50	0.32	0.005	0.14			
	50-55	0.32	0.003	0.08			
S 26	10-15	0.12	trace	0.02			
	45-50	0.12	trace	0.04			
	50-55	0.12	trace	0.04			
S 27	0-5	0.16	trace	0.20			

Method of Analysis: Acid Digestion & MIBK Au

REGISTERED ASSAYER
CERTIFICATE NO.
14160
GARY ALVIN
LINDROOS
Date 9-26-84
ARIZONA

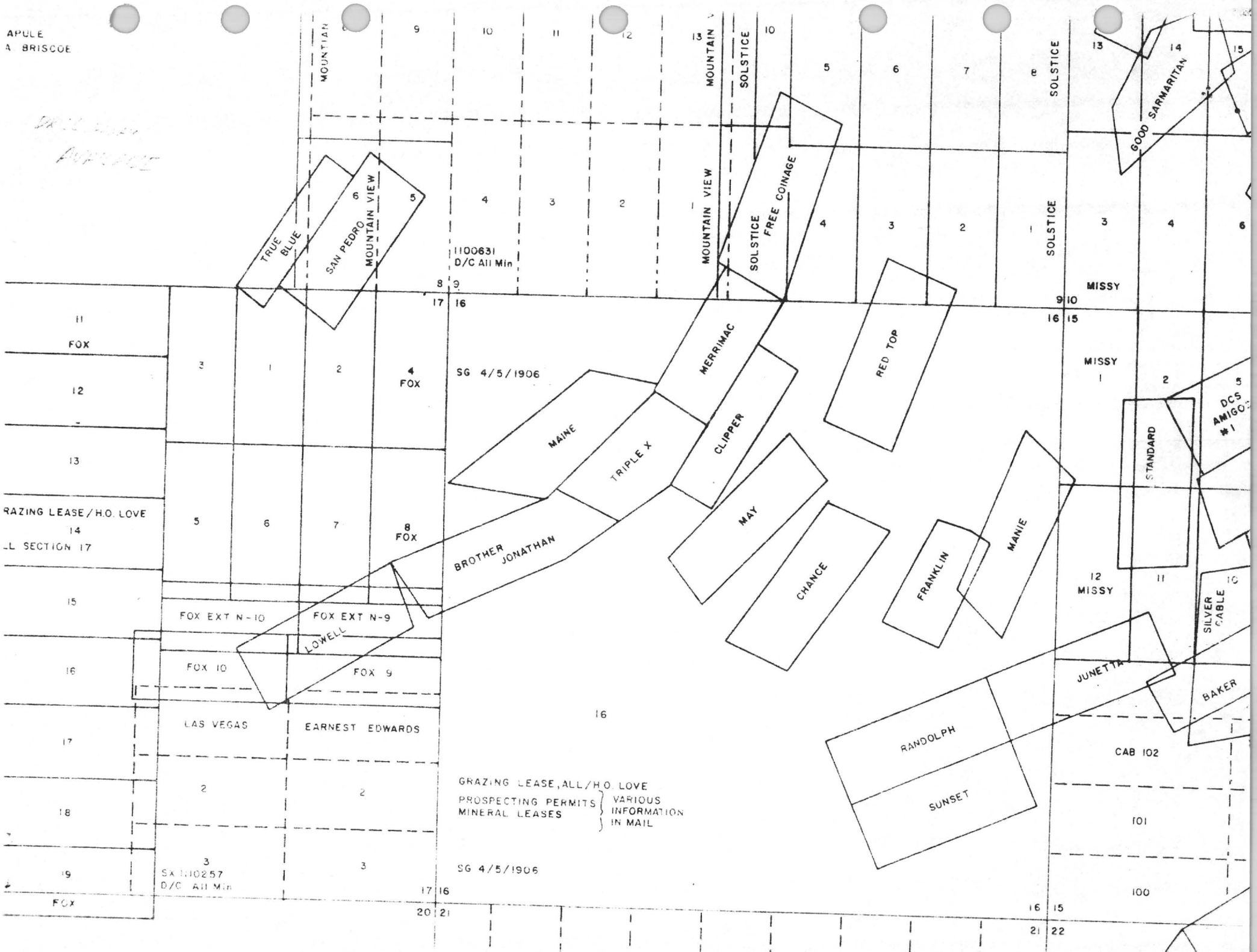
Mix. J.O. Maine
Production Data.

Composite Pad

Average of all pits

= 1.17 oz Ag/Ton

30,400 Tons


APULE
A. BRISCOE
MOUNTAIN
SOLSTICE
MOUNTAIN VIEW
SOLSTICE
GOOD SAMARITAN
TRUE BLUE
SAN PEDRO
MOUNTAIN VIEW
FREE COINAGE
1100631
D/C All Min
MISSY
FOX
SG 4/5/1906
MERRIMAC
RED TOP
MISSY
MAINE
TRIPLE X
CLIPPER
STANDARD
DCS AMIGO #1
RAZING LEASE/H.O. LOVE
LL SECTION 17
BROTHER JONATHAN
MAY
CHANCE
FRANKLIN
MANIE
MISSY
FOX EXT N-10
FOX EXT N-9
LOWELL
SILVER CABLE
FOX 10
FOX 9
JUNETTA
BAKER
LAS VEGAS
EARNEST EDWARDS
RANDOLPH
SUNSET
CAB 102
GRAZING LEASE, ALL/H.O. LOVE
PROSPECTING PERMITS
MINERAL LEASES
VARIOUS INFORMATION IN MAIL
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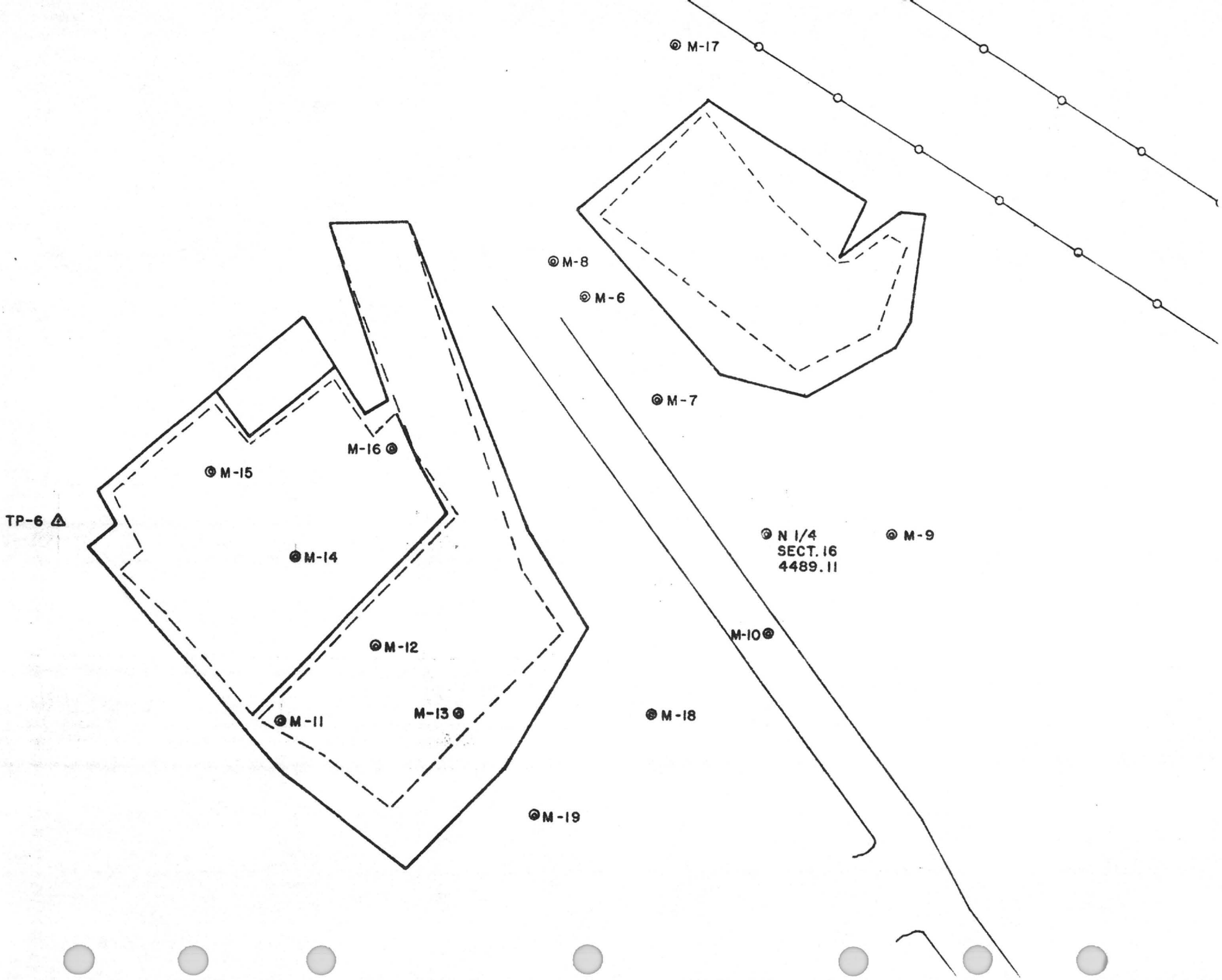
D/C All Min
SG 4/5/1906
100
FOX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M-8
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M-16
M-15
TP-6
M-14
N 1/4
SECT. 16
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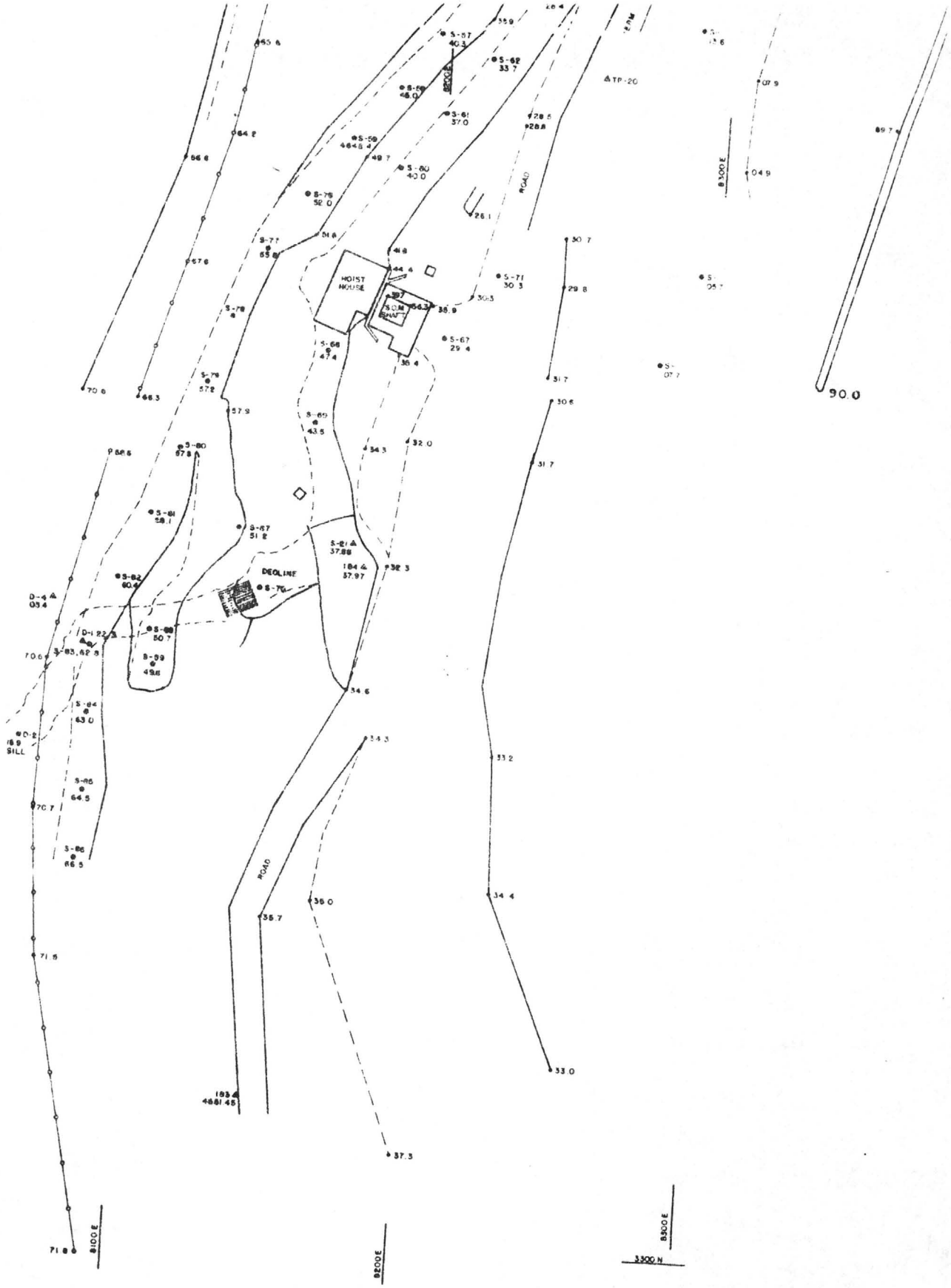
M-9
M-10
M-12
M-11
M-13
M-18
M-19

State of Maine 50N Vein

SECTION		ORE				WASTE	
Number	Distance Between	Square Feet	Ave. Oz/Ton	Grade Ag	Tons	Square Feet	Tons
Ramp		0	-		0		
	40 ft.						
S-7671		20	-	-			1200
	30 ft.		2.84			60	
S-7767		155	2.72		195		460
	100 ft.		2.70			350	
S-8187		100	2.86		940		3700
	25 ft.		3.10			650	
S-8288		225	2.52		300		2250
	95		2.26			1780	
S-0086		280	4.23		1770		10,380
			5.81			1170	
Totals			3.58		3205		17,990
W/20% Dilution			2.98		3850		17,345
Strip Ratio						4.5:1	

SOM 50 N. UN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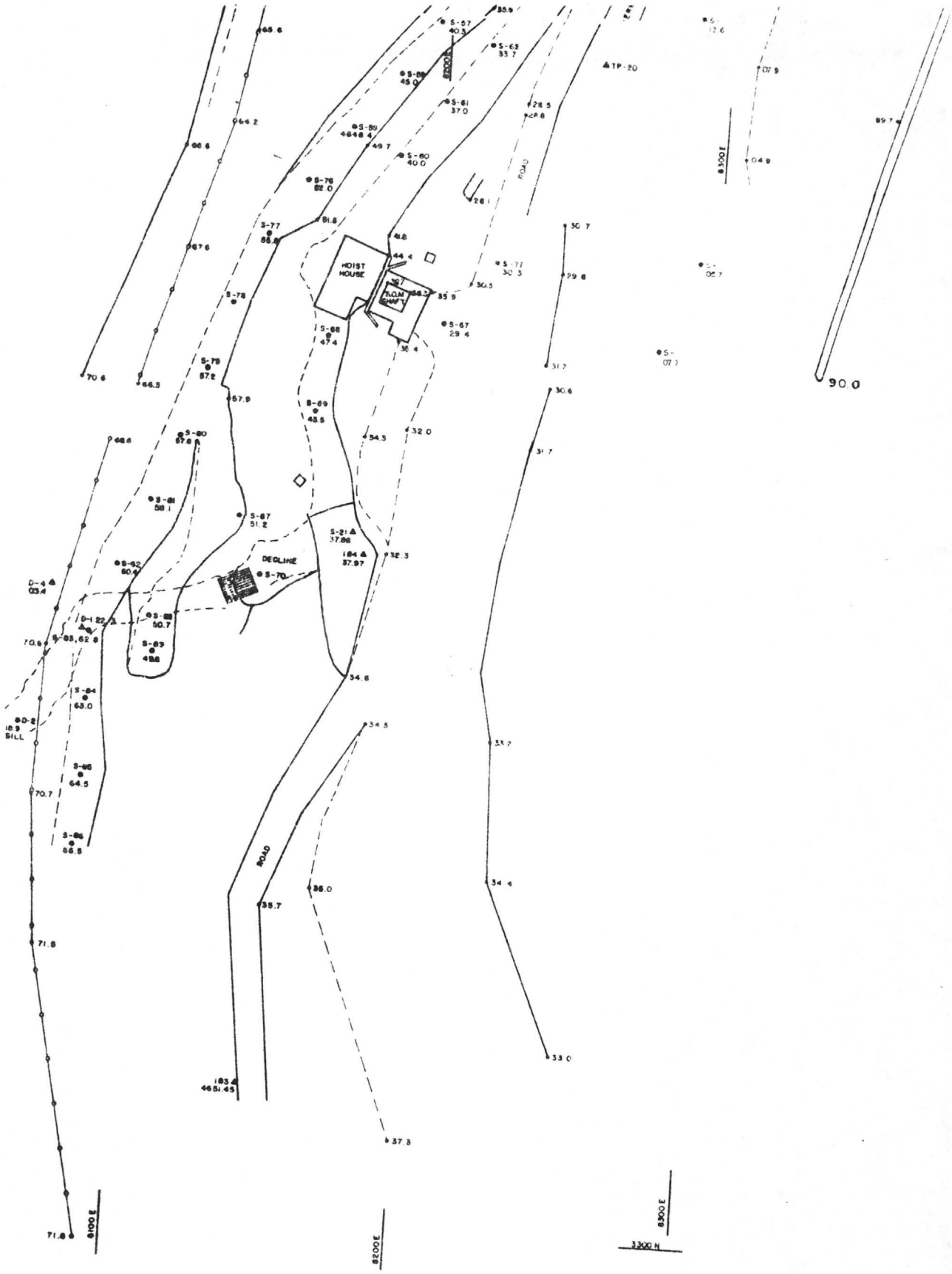
DECLINE
ROAD
ROAD
8100 E
8200 E
8300 E
3300 N
90.0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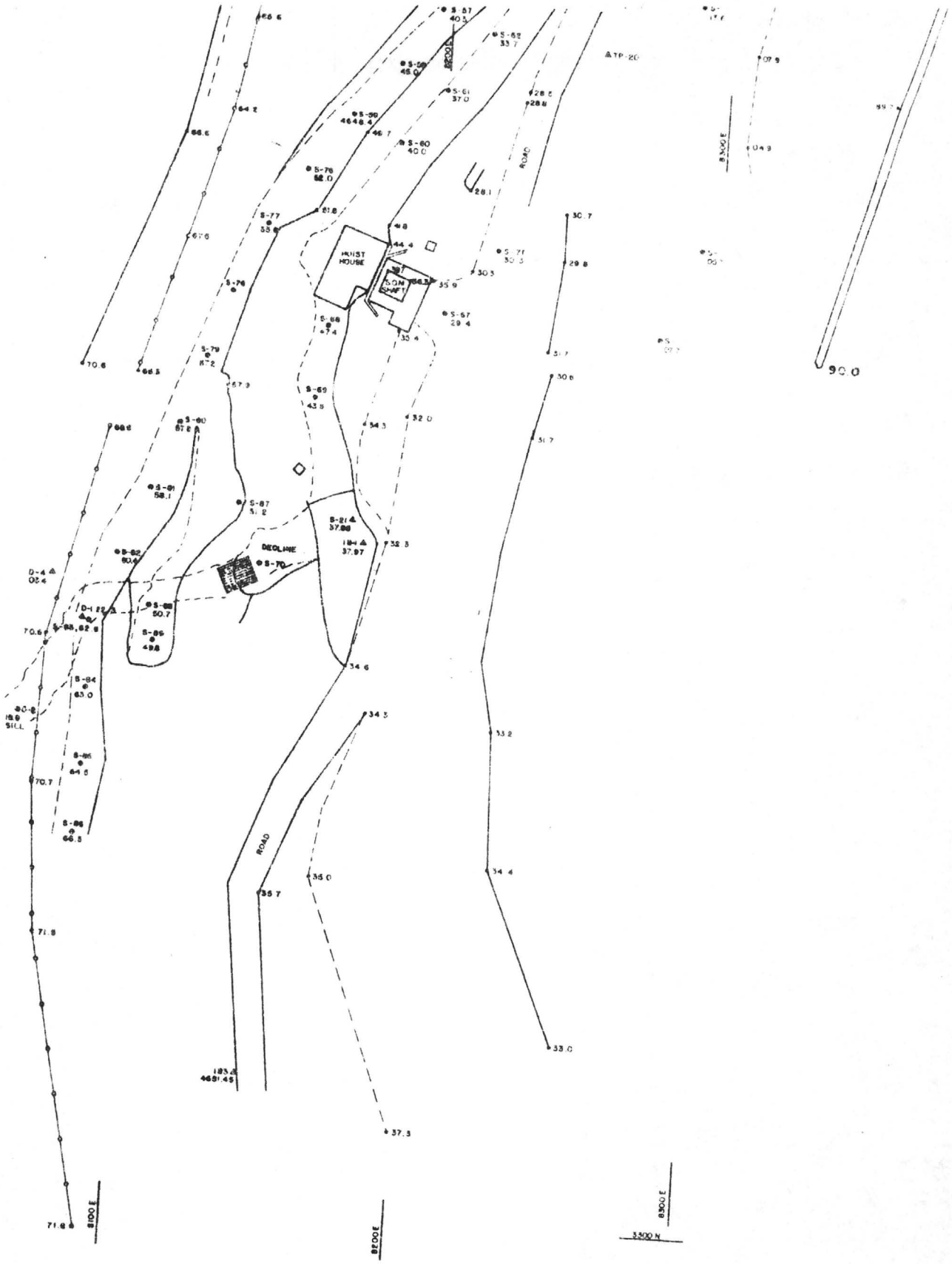
R.O.M. SHAFT
DECLINE
ROAD
ROAD
8100 E
8200 E
8300 E
3300 N
90.0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SHAFT
DECLINE
ROAD
ROAD
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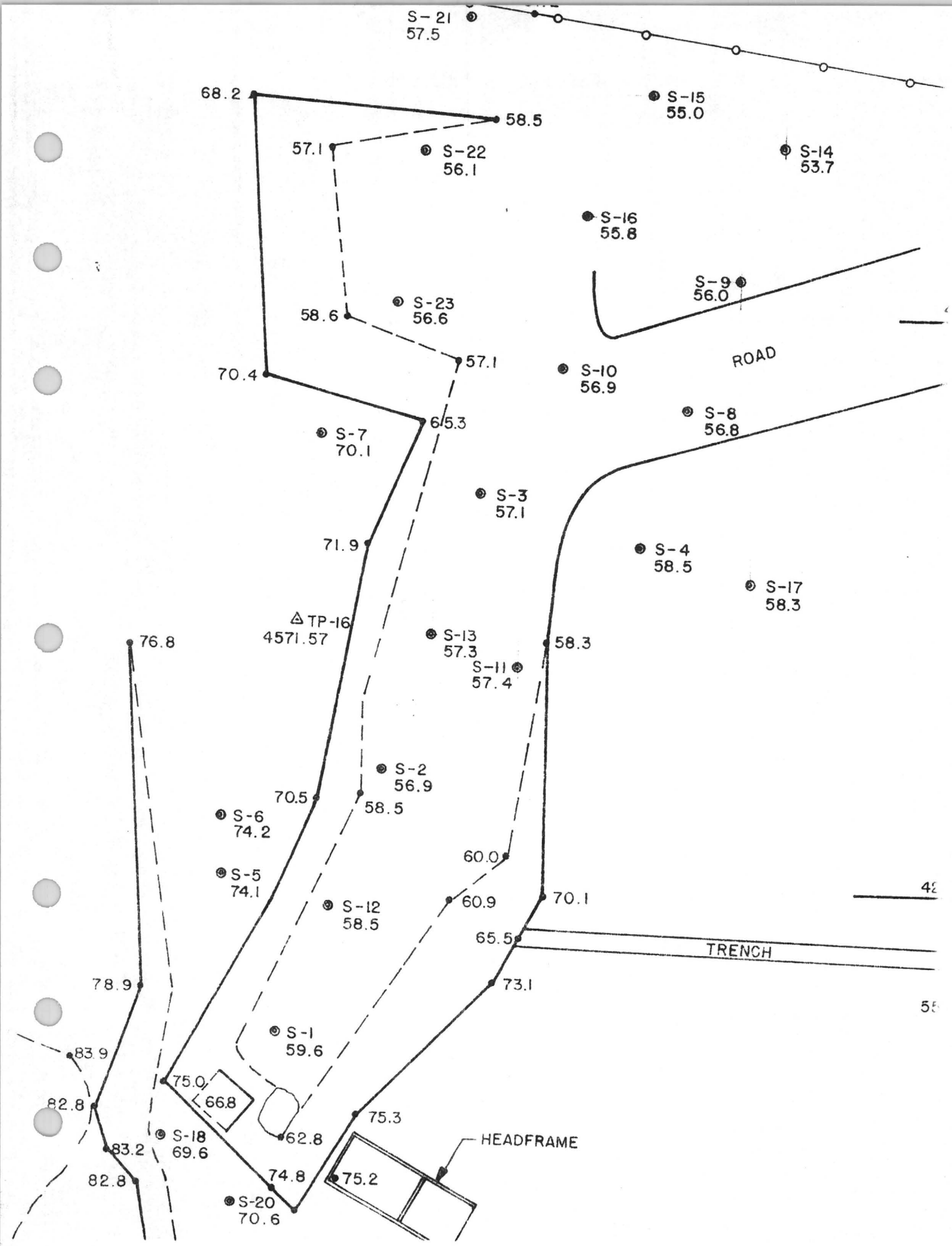
8300 E
8500 E
3500 N
90.0

S.O.M. #2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68.2
58.5
S-15
55.0
57.1
S-22
56.1
S-14
53.7
S-16
55.8
S-9
56.0
S-23
56.6
58.6
57.1
ROAD
70.4
S-10
56.9
S-8
56.8
65.3
S-7
70.1
S-3
57.1
71.9
S-4
58.5
S-17
58.3
TP-16
4571.57
76.8
S-13
57.3
58.3
S-11
57.4
S-2
56.9
70.5
58.5
S-6
74.2
60.0
S-5
74.1
S-12
58.5
60.9
70.1
65.5
TRENCH
78.9
73.1
S-1
59.6
83.9
75.0
66.8
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75.3
S-18
69.6
62.8
HEADFRAME
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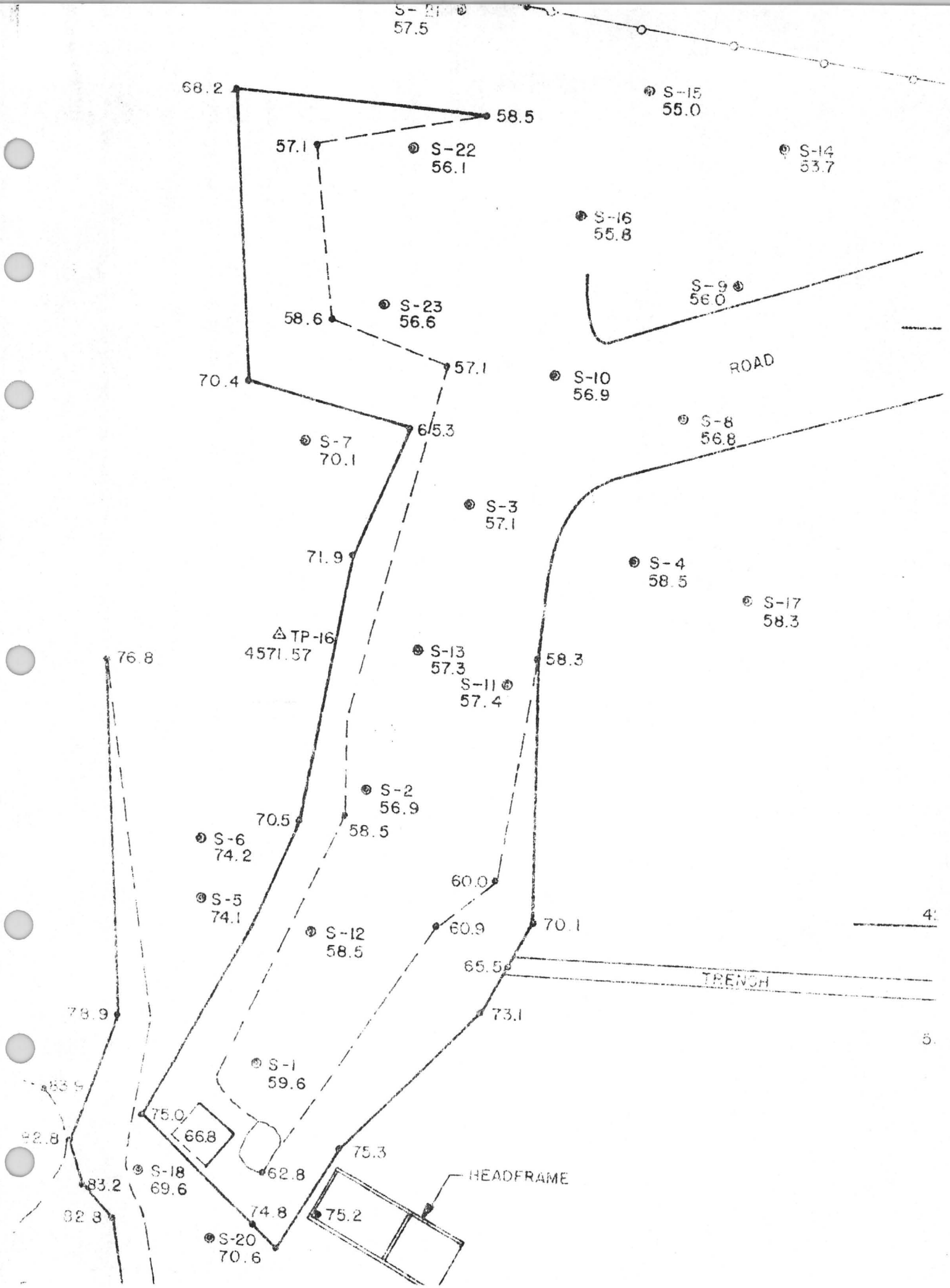
82.8
74.8
75.2
S-20
70.6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S-22
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S-16
55.8
S-9
56.0
58.6
S-23
56.6
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ROAD
70.4
S-10
56.9
S-8
56.8
65.3
S-7
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71.9
S-4
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S-17
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76.8
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70.5
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S-6
74.2
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70.1
65.5
TRENCH
78.9
73.1
S-1
59.6
83.5
75.0
66.8
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S-18
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HEADFRAME
82.8
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75.2
S-20
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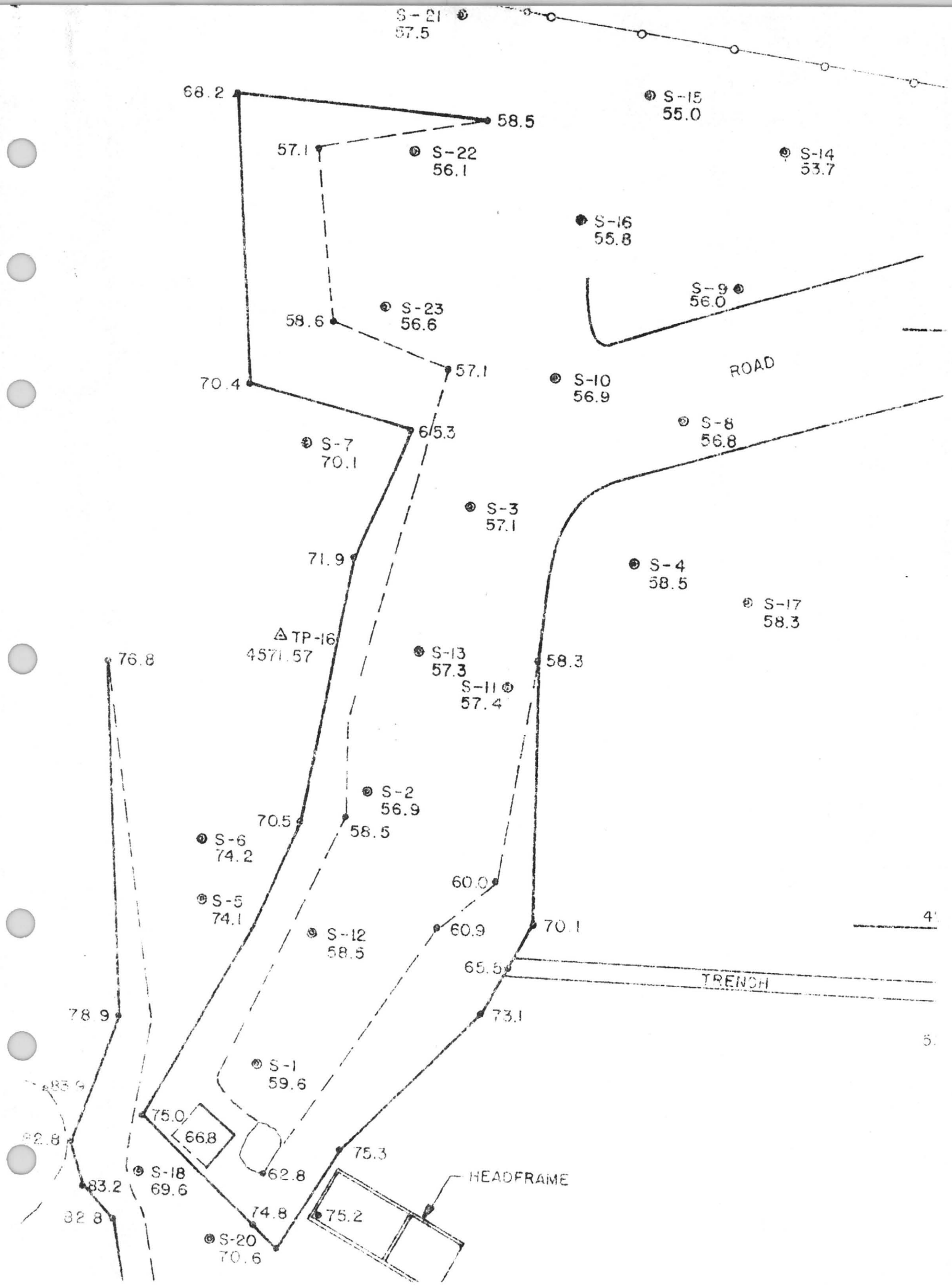
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S-23
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ROAD
70.4
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S-3
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58.5
S-17
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TP-16
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76.8
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58.3
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S-2
56.9
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60.0
S-5
74.1
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70.1
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TRENCH
78.9
73.1
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69.6
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HEADFRAME
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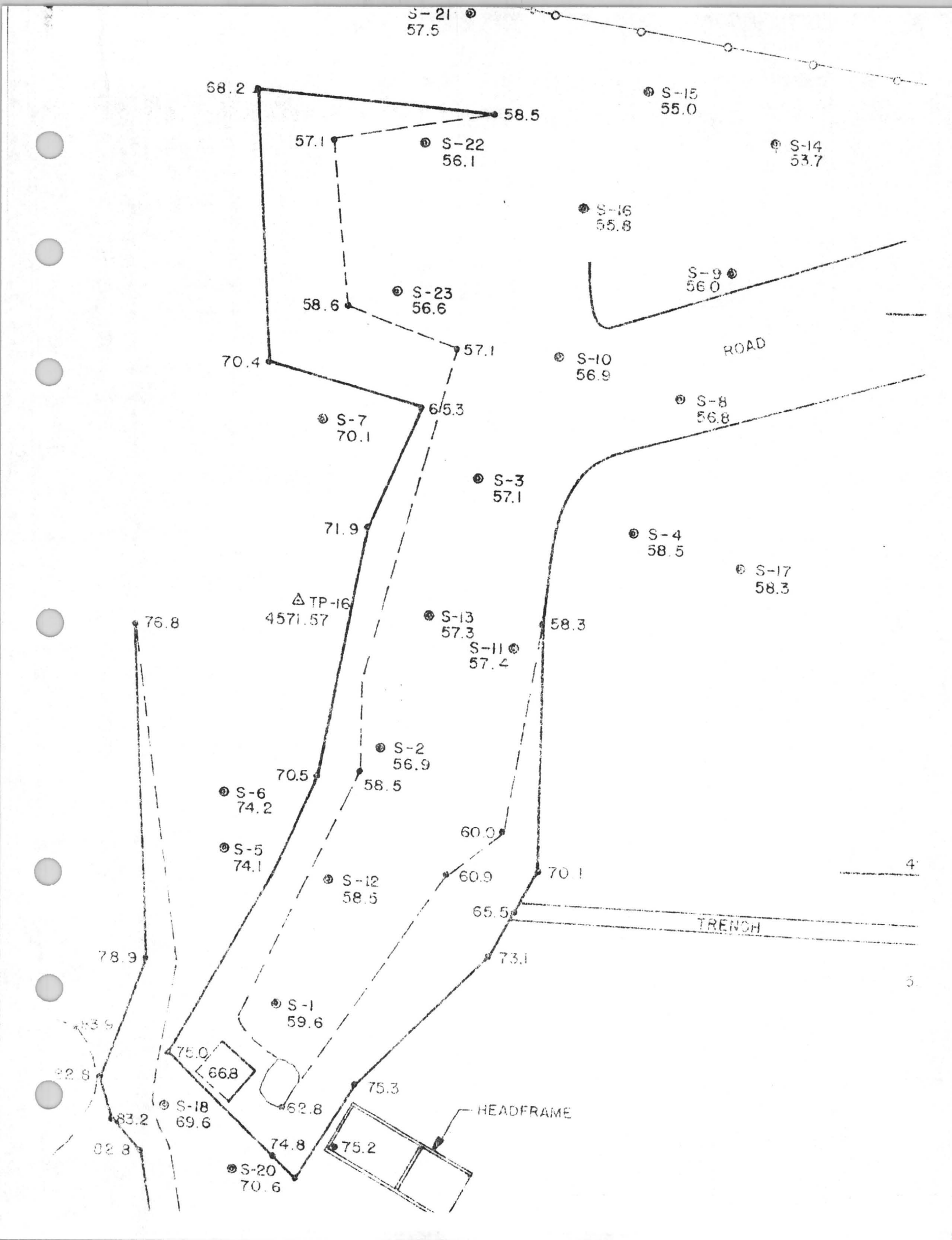
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S-22
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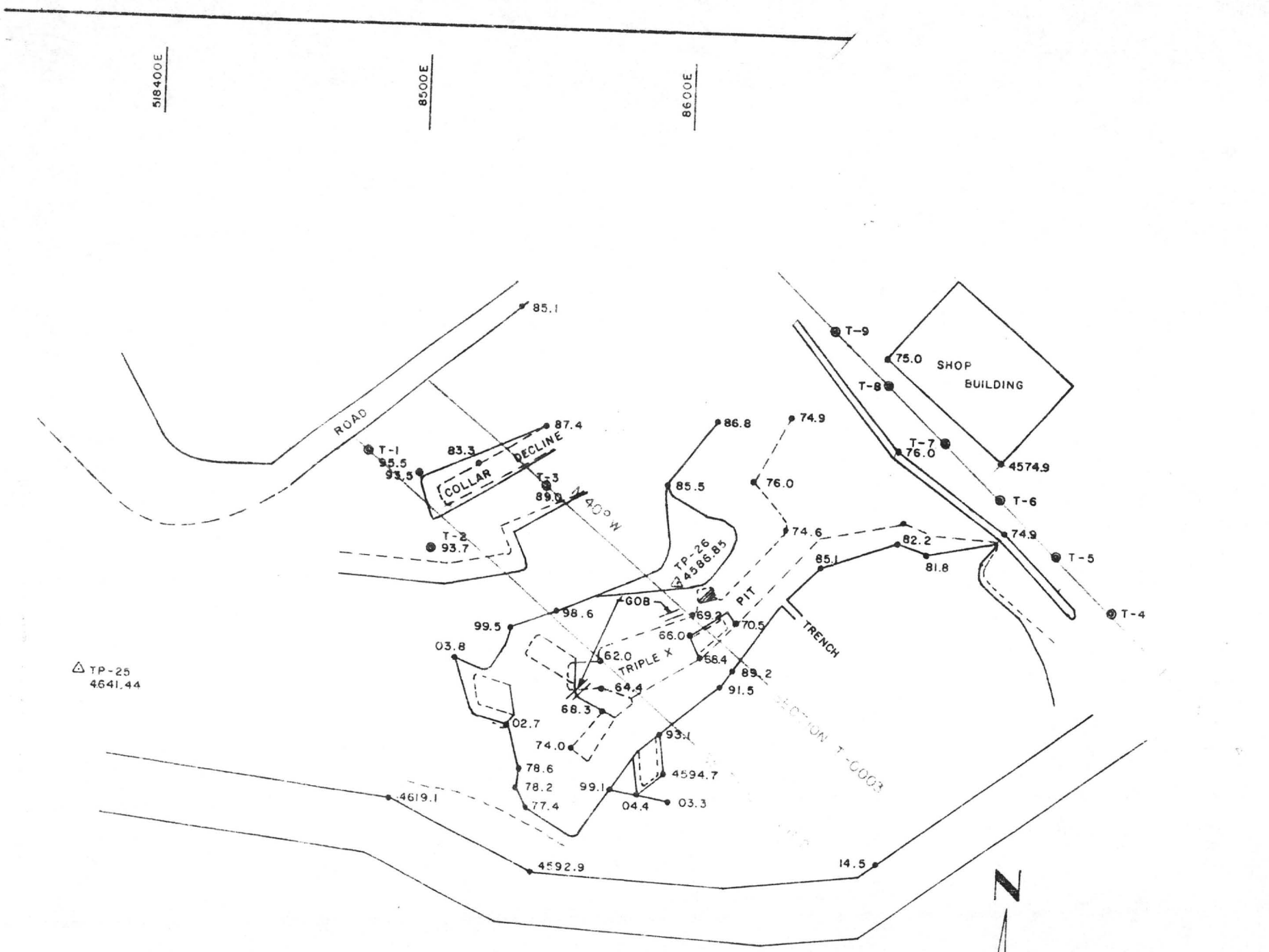
S-16
55.8
S-9
56.0
S-23
56.6
58.6
57.1
ROAD
70.4
S-10
56.9
S-8
56.8
65.3
S-7
70.1
S-3
57.1
71.9
S-4
58.5
S-17
58.3
TP-16
4571.57
76.8
S-13
57.3
58.3
S-11
57.4
S-2
56.9
70.5
58.5
S-6
74.2
60.9
S-5
74.1
S-12
58.5
60.9
70.1
65.5
TRENCH
78.9
73.1
S-1
59.6
75.0
66.8
75.3
62.8
S-18
69.6
83.2
74.8
75.2
HEADFRAME
S-20
70.6

State of Maine No. 2

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton	Ag Tons	Square Feet	Tons
Ramp		0	-	-	0	
	150 ft.		1.96	170		5670
S-0001		380	1.96		1020	
	12.5 ft.		2.25	290		1150
Face		240	2.53		1460	
	12.5 ft.		5.40	180		1540
S-1820		145	8.26		1860	
Totals			3.06	640		8360
W/20% Dilution			2.54	770		8230
Strip Ratio					10.7:1	
	12.5 ft.		11.67	580		2560
S-2115		630	23.25		2760	
	25 ft.		10.22	1550		4660
S-2216		1040	2.33		2270	
	12.5 ft.		2.33	960		2100
Totals			8.04	3090		9320
W/20% Dilution			6.70	3710		8700
Strip Ratio					2.4:1	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8500E
8600E
ROAD
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T-1
95.5
93.5
83.3
87.4
COLLAR
DECLINE
T-3
89.0
400 W
T-2
93.7
86.8
74.9
85.5
76.0
74.6
TP-26
4586.85
GOB
PIT
98.6
99.5
69.2
70.5
66.0
03.8
62.0
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89.2
64.4
91.5
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78.6
78.2
99.1
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04.4
03.3
4619.1
4592.9
14.5
TRENCH
SECTION T-0003
TP-25
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T-9
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BUILDING
T-8
T-7
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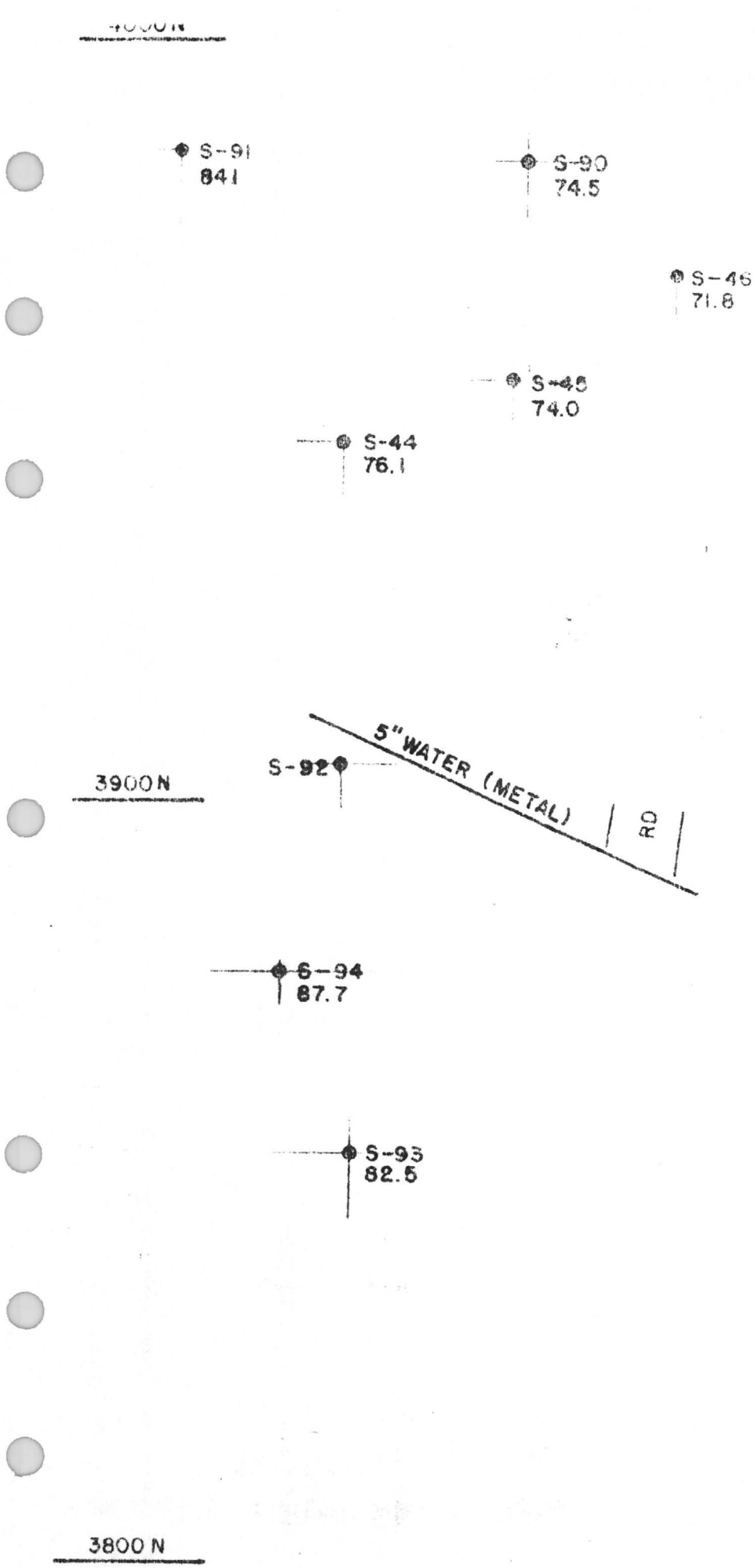
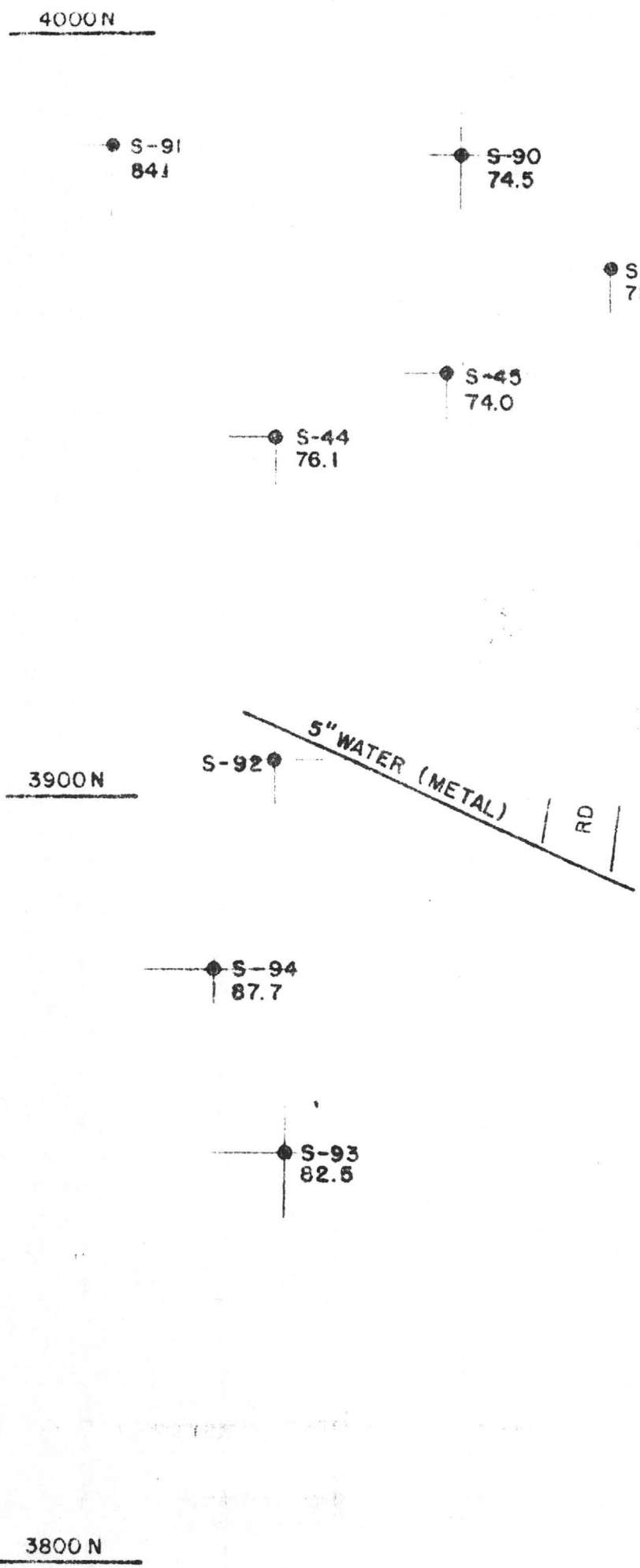
N

Triple X
No. 2

Smelters Vein


S-91
84.1
S-90
74.5
S-46
71.8
S-45
74.0
S-44
76.1
5" WATER (METAL)
RD
3900 N
S-92
S-94
87.7
S-93
82.5
3800 N


4000 N
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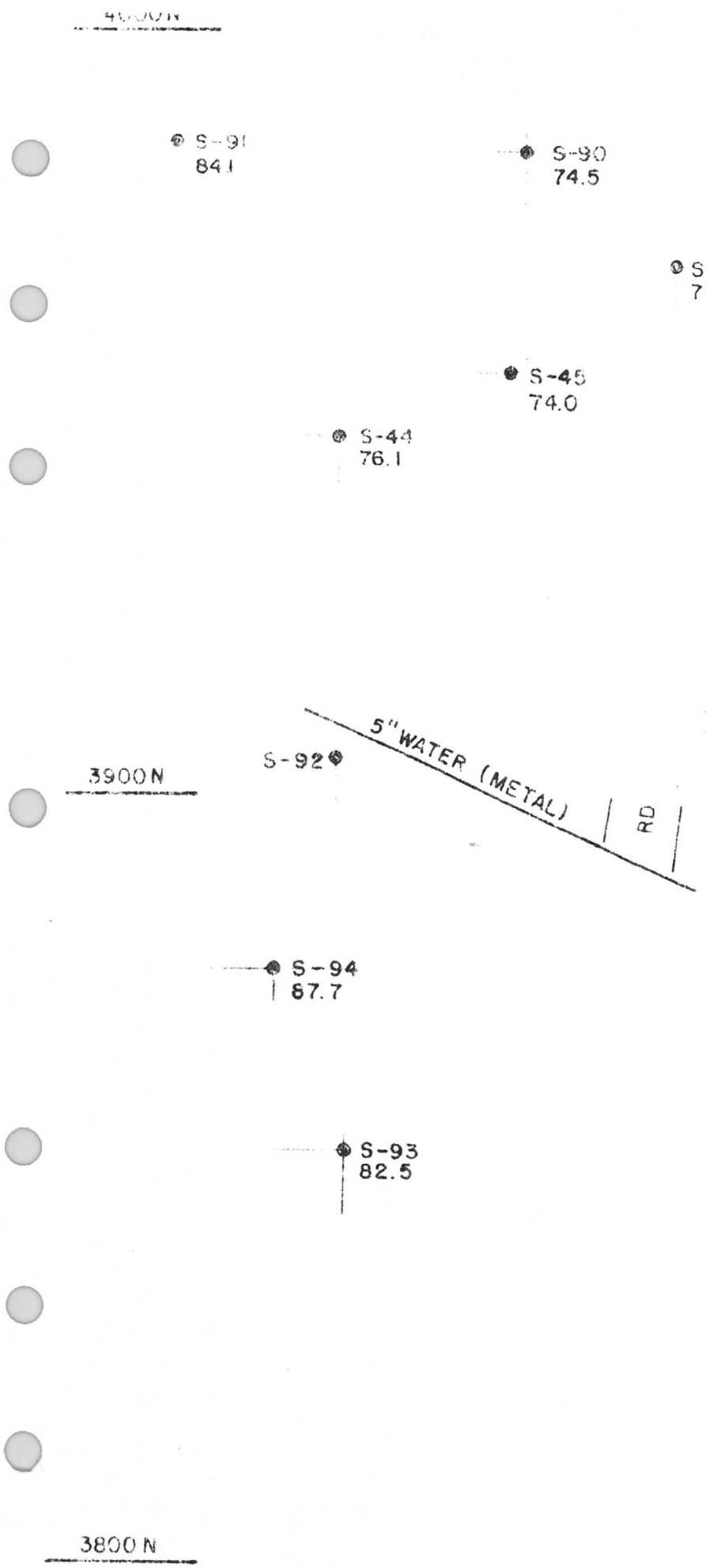
S-90
74.5
S-46
71.8
S-45
74.0
S-44
76.1
5" WATER (METAL)
RD
S-92
3900 N
S-94
87.7
S-93
82.5
3800 N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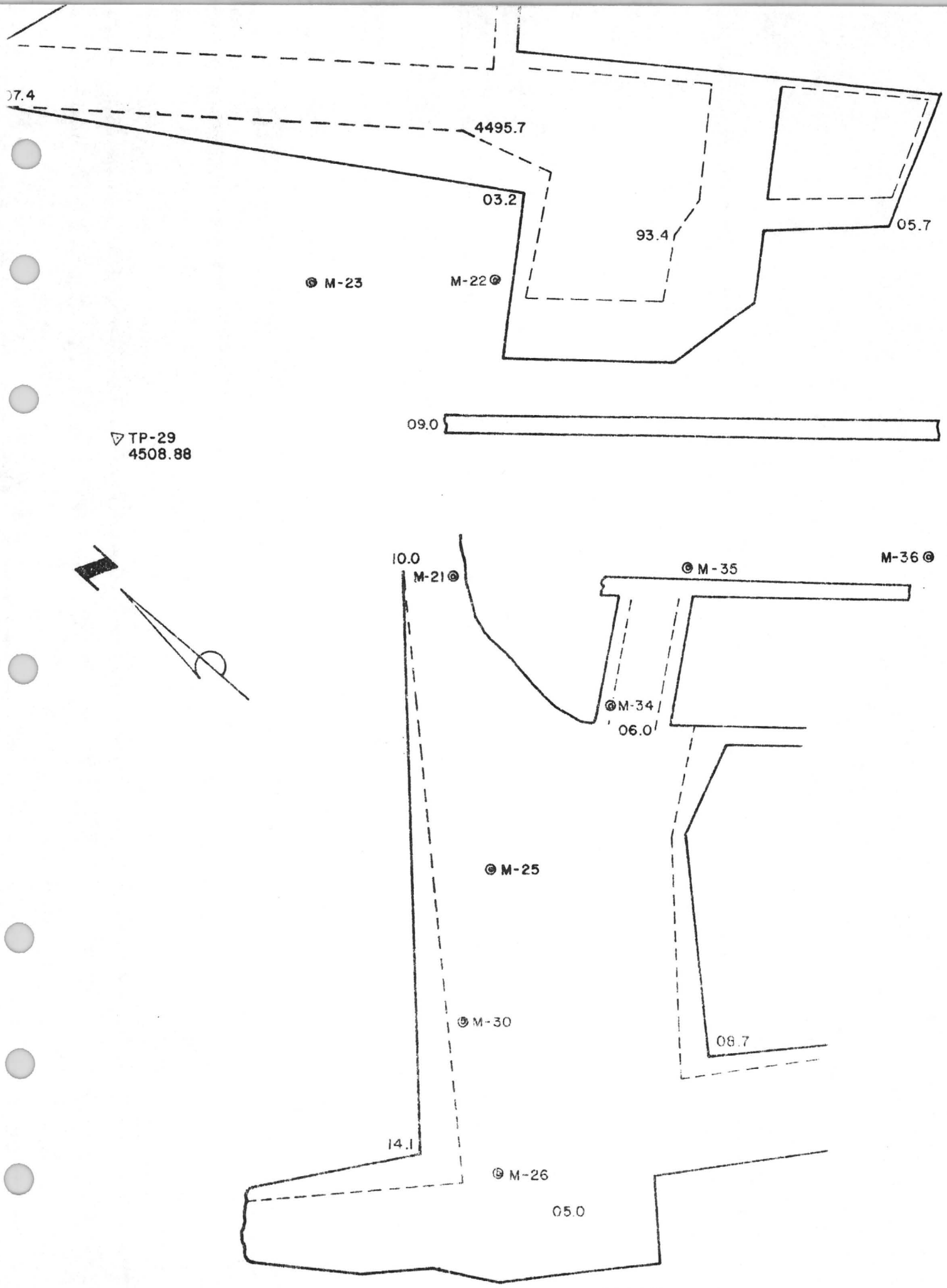
S-90
74.5
S-46
71.8
S-45
74.0
S-44
76.1
5" WATER (METAL)
RD
S-92
3900 N
S-94
87.7
S-93
82.5
3800 N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M-26
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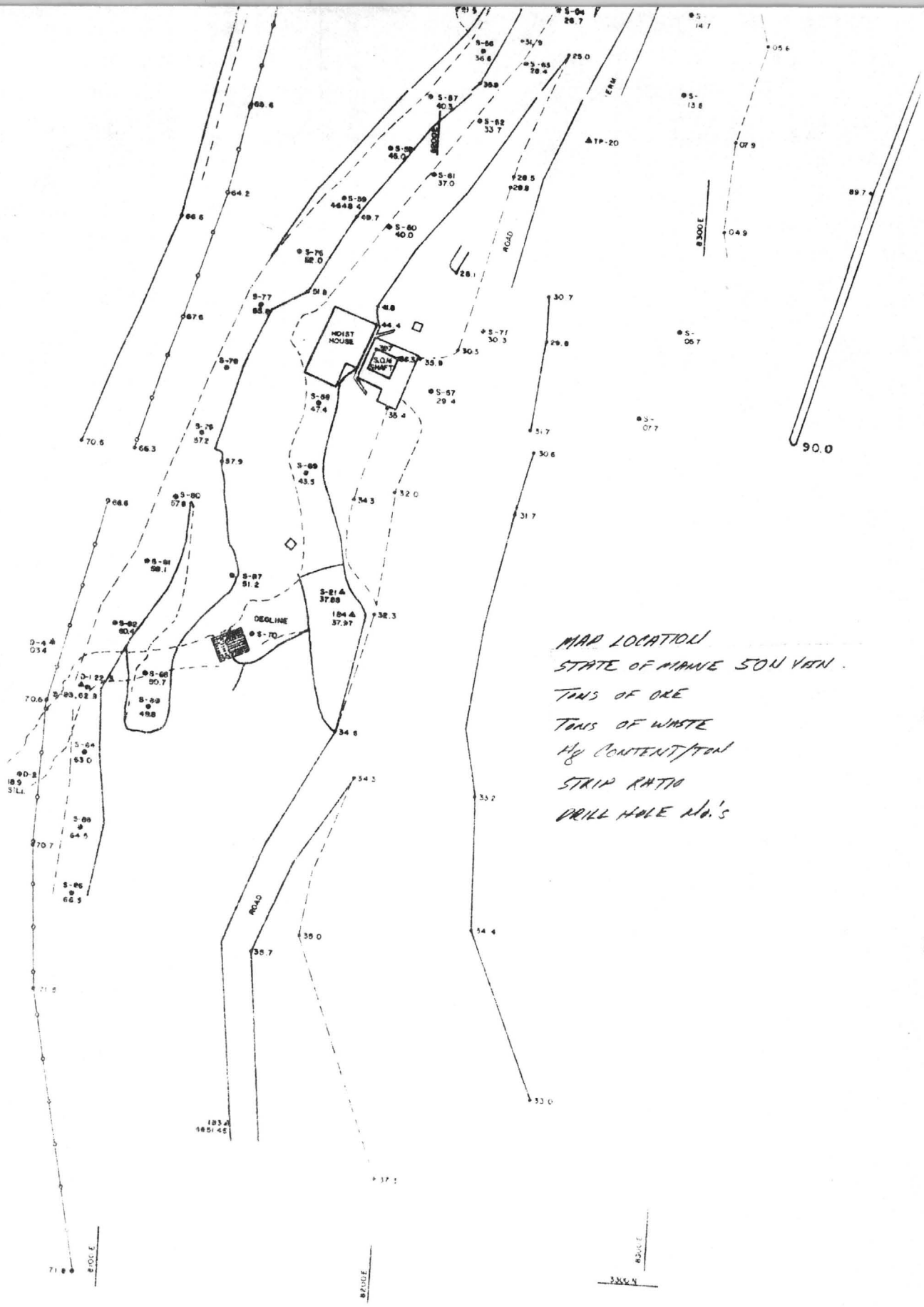
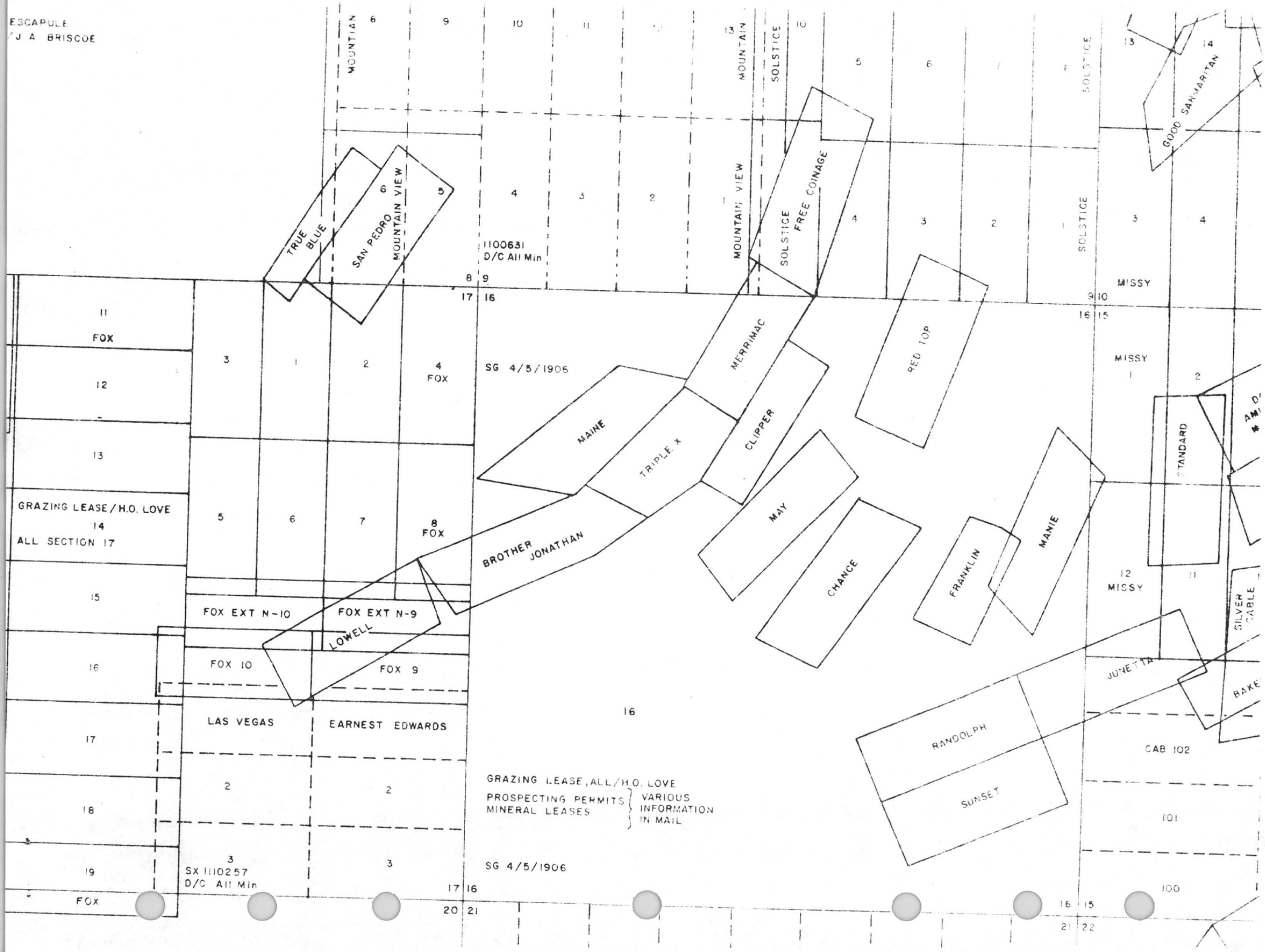


MAP LOCATION
STATE OF MAINE SON VAN.
TONS OF ORE
TONS OF WASTE
Hg CONTENT/TON
STRIP RATIO
DRILL HOLE No.'s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SAN PEDRO
MOUNTAIN VIEW
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SOLSTICE
FREE COINAGE
SOLSTICE
SOLSTICE
1100631
D/C All Min
MISSY
FOX
SG 4/5/1906
MERRIMAC
RED TOP
MISSY
MISSY
MAINE
TRIPLE X
CLIPPER
STANDARD
GRAZING LEASE/H.O. LOVE
ALL SECTION 17
BROTHER JONATHAN
MAY
CHANCE
FRANKLIN
MANIE
MISSY
FOX EXT N-10
FOX EXT N-9
LOWELL
SILVER CABLE
FOX 10
FOX 9
JUNETTA
LAS VEGAS
EARNEST EDWARDS
RANDOLPH
CAB 102
SUNSET
GRAZING LEASE, ALL/H.O. LOVE
PROSPECTING PERMITS
MINERAL LEASES
VARIOUS INFORMATION IN MAIL
101
SX 1110257
D/C All Min
SG 4/5/1906
100
FOX

Ore Reserve Summary

	ORE		WASTE	Strip Ratio
	Tons	Grade oz/ton Ag	Tons	
State of Maine Shaft	15,560	2.40	26,210	1.7:1
State of Maine Shaft 70N Vein	2080	2.62	24,550	11.8:1
State of Maine Shaft 50N Vein	3850	2.98	17,345	4.5:1
State of Maine Vein No.2	3710	6.70	8,700	2.4:1
Smelter Vein	1110	2.91	7,120	6.4:1
Triple X Vein No. 1	1990	1.33	9,150	4.6:1
Triple X Vein No.2	3330	1.67	14,880	4.5:1
Merrimac Vein	3960	3.11	13,290	3.4:1
Totals	35,590		121,245	3.4:1
Weighted Average		2.89		

The 70N vein design resulted in an excessive strip ratio. Additional drilling may change the tonnage and grade to allow a new design to reduce the strip ratio.

The Triple X No.1 is not a high enough grade to be classed as mineable ore. The reason this tonnage and grade is included is that it is also an access ramp for Triple X No.2.

Excluding these two areas would reduce to total tonnage by 11.4%.

ORE RESERVE CALCULATIONS

State of Maine Shaft Area

SECTION Number	Distance Between	ORE Square Feet	Ave. Grade Oz/Ton	Ag	Tons	WASTE Square Feet	Tons
Ramp		0	–	–	–	0	7730
	130 ft.						
S-5762		156	0.54			1815	
	12.5 ft.		1.08		420		1640
S-5861		750	1.61			1730	
	25 ft.		2.12		2230		4320
S-5960		1665	2.63			2920	
	20 ft.		2.66		3720		3590
S-7671		3360	2.70			1925	
	27 ft.		3.56		4530		4930
S-7767		1170	4.40			3005	
	23 ft.		3.00		2070		6590
S-7868		1260	1.59			4732	
Totals			2.88		12,970		28,800
W/20% Dilution			2.40		15,560		26,210
Strip Ratio						1.7:1	

State of Maine 70N Vein

Ramp		0	–			0	
	120 ft.	–	–		–		15,980
S-5152		585	3.15			3010	
	40 ft.		3.15		1730		8920
Totals			3.15		1730		24,900
W/20% Dilution			2.62		2060		24,550
Strip Ratio						11.8:1	

State of Maine 50N Vein

SECTION		ORE				WASTE	
Number	Distance Between	Square Feet	Ave. Oz/Ton	Grade Ag	Tons	Square Feet	Tons
Ramp		0	-		0		
	40 ft.		-	-			
S-7671		20	2.84				120
	30 ft.		2.72		195	60	
S-7767		155	2.70				460
	100 ft.		2.86		940	350	
S-8187		100	3.10				620
	25 ft.		2.52		300	650	
S-8288		225	2.26				4250
	95		4.23		1770	1780	
S-0086		280	5.81				10,380
						1170	
Totals			3.58		3205		17,999
W/20% Dilution			2.98		3850		15,347
Strip Ratio						4.5:1	

State of Maine No. 2

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton Ag	Tons	Square Feet	Tons
Ramp		0	- -		0	
	150 ft.		1.96	170		5670
S-0001		380	1.96		1020	
	12.5 ft.		2.25	290		1150
Face		240	2.53		1460	
	12.5 ft.		5.40	180		1540
S-1820		145	8.26		1860	
Totals			3.06	640		8360
W/20% Dilution			2.54	770		8230
Strip Ratio					10.7:1	
	12.5 ft.		11.67	580		2560
S-2115		630	23.25		2760	
	25 ft.		10.22	1550		4660
S-2216		1040	2.33		2270	
	12.5 ft.		2.33	960		2100
Totals			8.04	3090		9320
W/20% Dilution			6.70	3710		8700
Strip Ratio					2.4:1	

Smelter Vein

SECTION Number	Distance Between	ORE Square Feet	Ave. Grade Oz/Ton Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-		1190	
	120 ft.			-		5290
S-0045		470	4.52		720	
	23 ft.		3.81	650		1290
S-4490		300	2.70		780	
	12.5 ft.		2.70	280		720
Totals			3.48	930		7300
W/20%Dilution			2.91	1110		7120
Strip Ratio					6.4:1	

Triple X Vein No.1

Ramp		0	-		1505	
	80 ft.				-	4460
		375	1.60		1130	
	30 ft.		1.60	830		2510
T-0409		375	1.60		1130	
	30 ft.		1.60	830		2510
		375	1.60		1130	
			1.60			
Totals			1.60	1660		9480
W/20% Dilution			1.33	1990		9150
Strip Ratio					4.6:1	

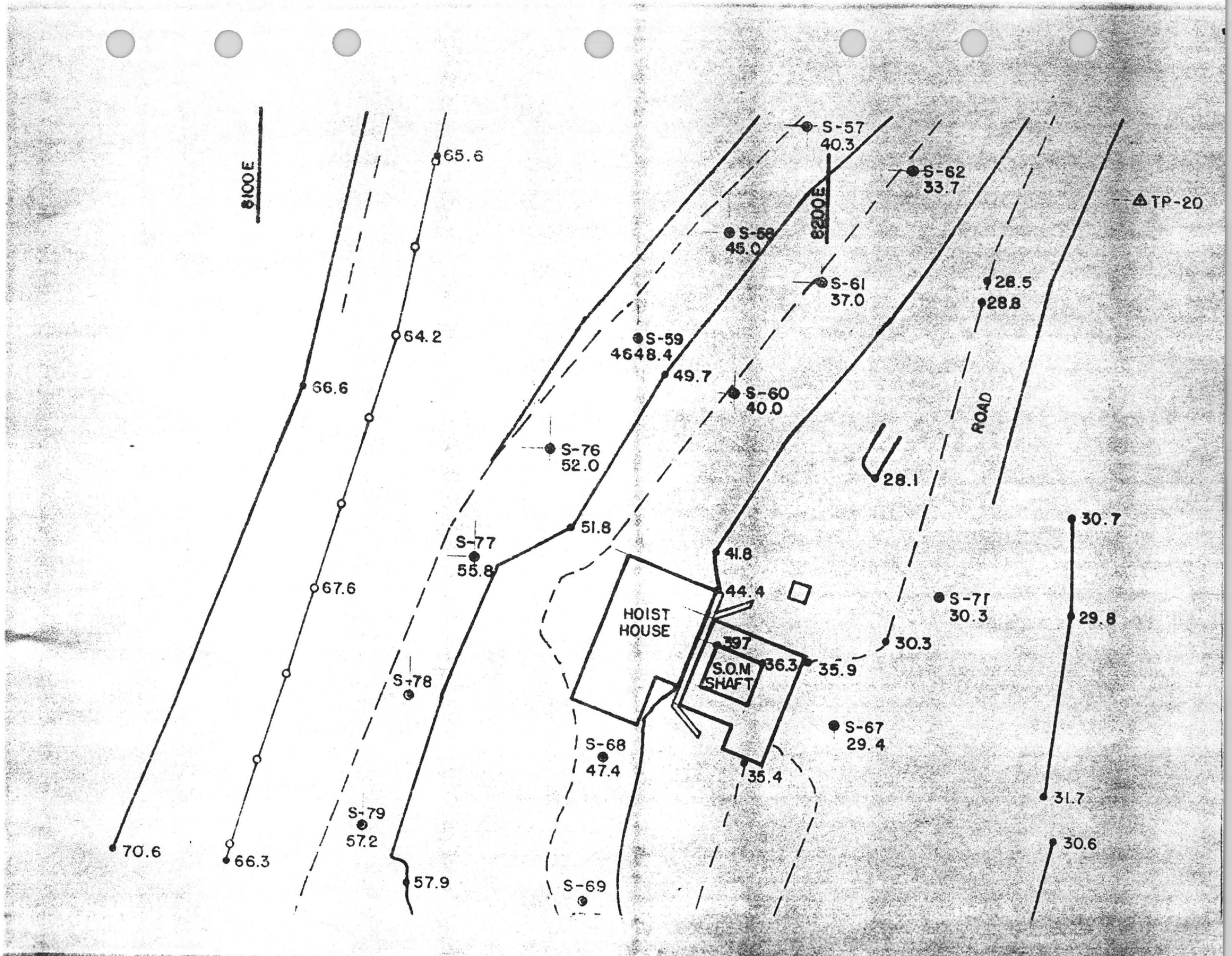
Triple X Vein No. 2

SECTION Number	Distance Between	ORE Square Feet	Ave. Oz/Ton	Grade Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-			-	
	80 ft.						5780
		470	1.74			1480	
	25 ft.		1.74		870		2740
T-0003		470	1.74			1480	
	50 ft.		2.06		1610		5720
T-0102		400	2.43			1610	
	10 ft.		2.43		300		1190
Totals			2.00		2780		15430
W/20% Dilution			1.67		3330		14880
Strip Ratio						4.5:1	

Merrimac Vein

Ramp		0	-			1110	
	120			-			4930
Fence		95	2.65			295	
	30		3.65		520		1140
Road		375	3.90			735	
	50		3.90		1380		2720
Road		375	3.90			735	
	60		3.89		1170		3750
Shaft		155	3.85			955	
	20		3.85		230		
		155	3.85			955	1410
Totals			3.73		3300		13950
W/20% Dilution			3.11		3960		13290
Strip Ratio						3.4:1	

SOM shaft area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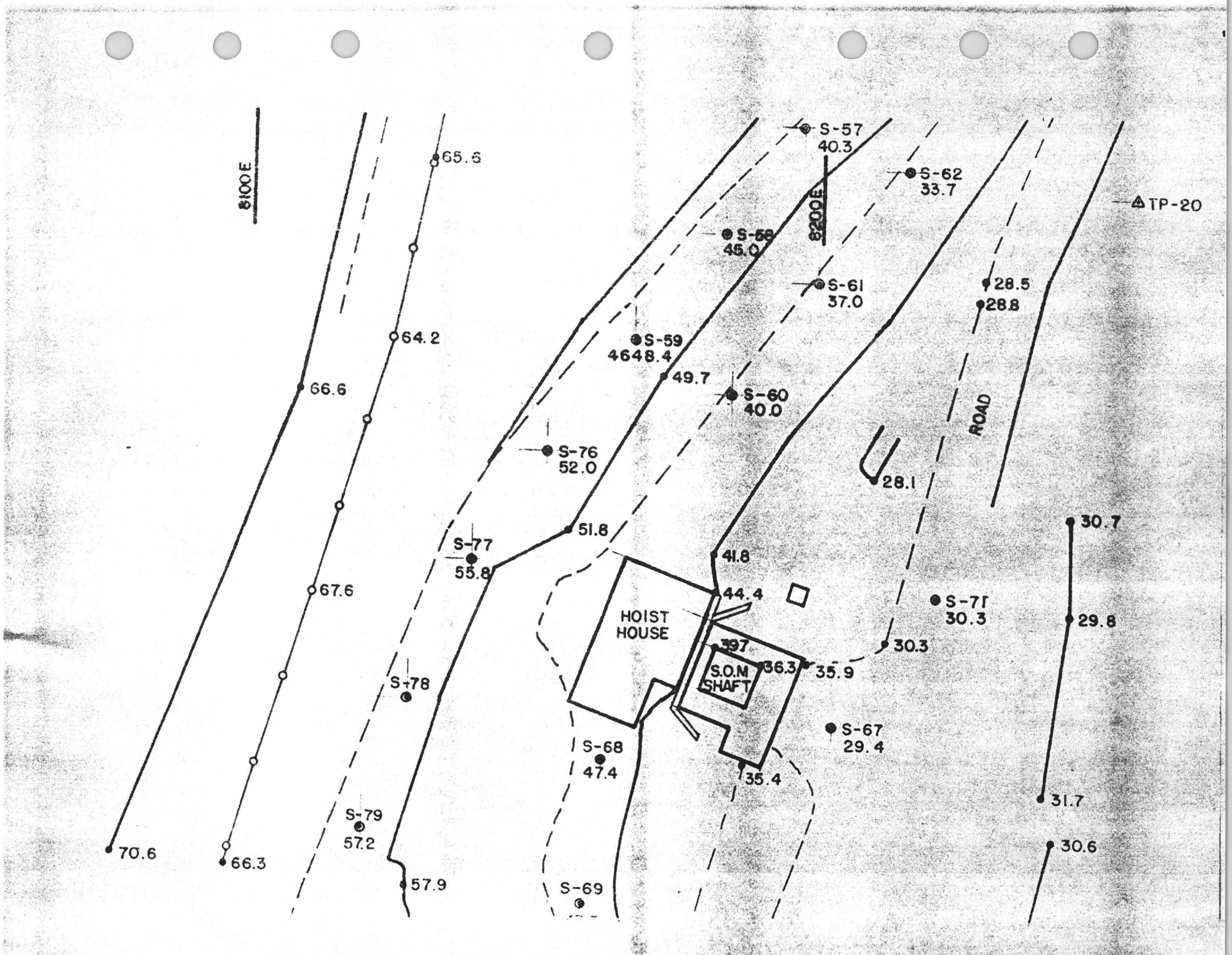
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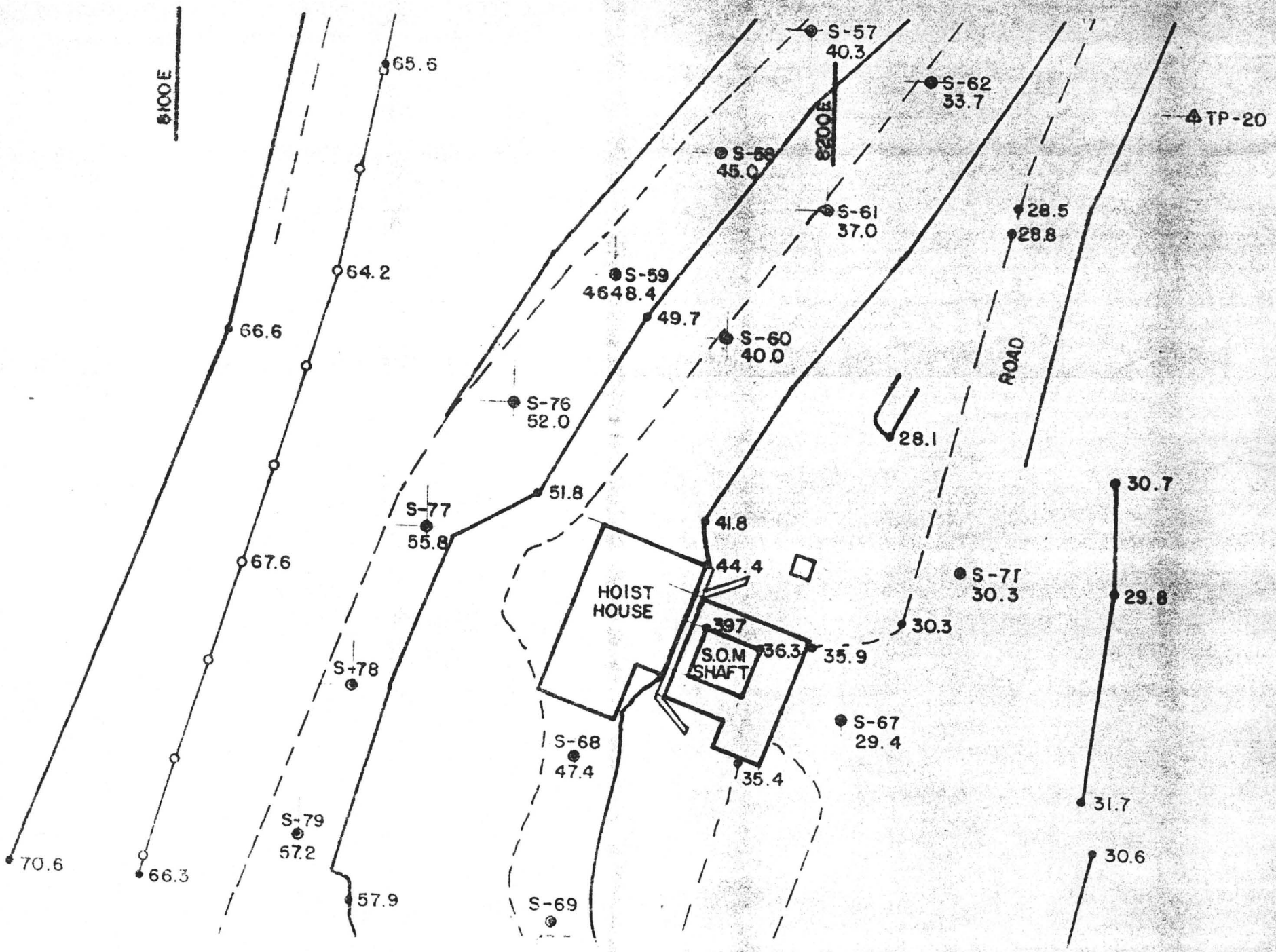
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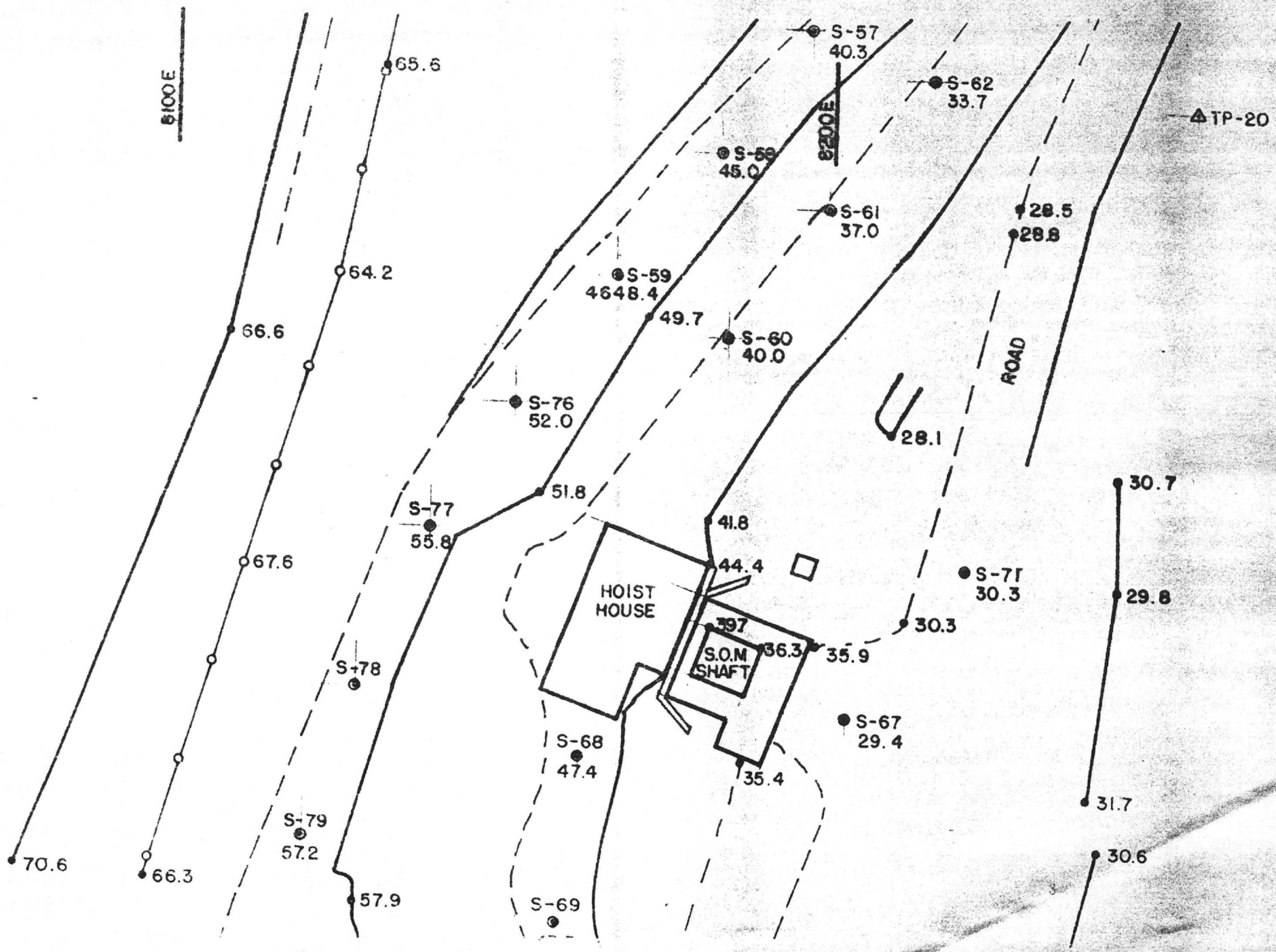
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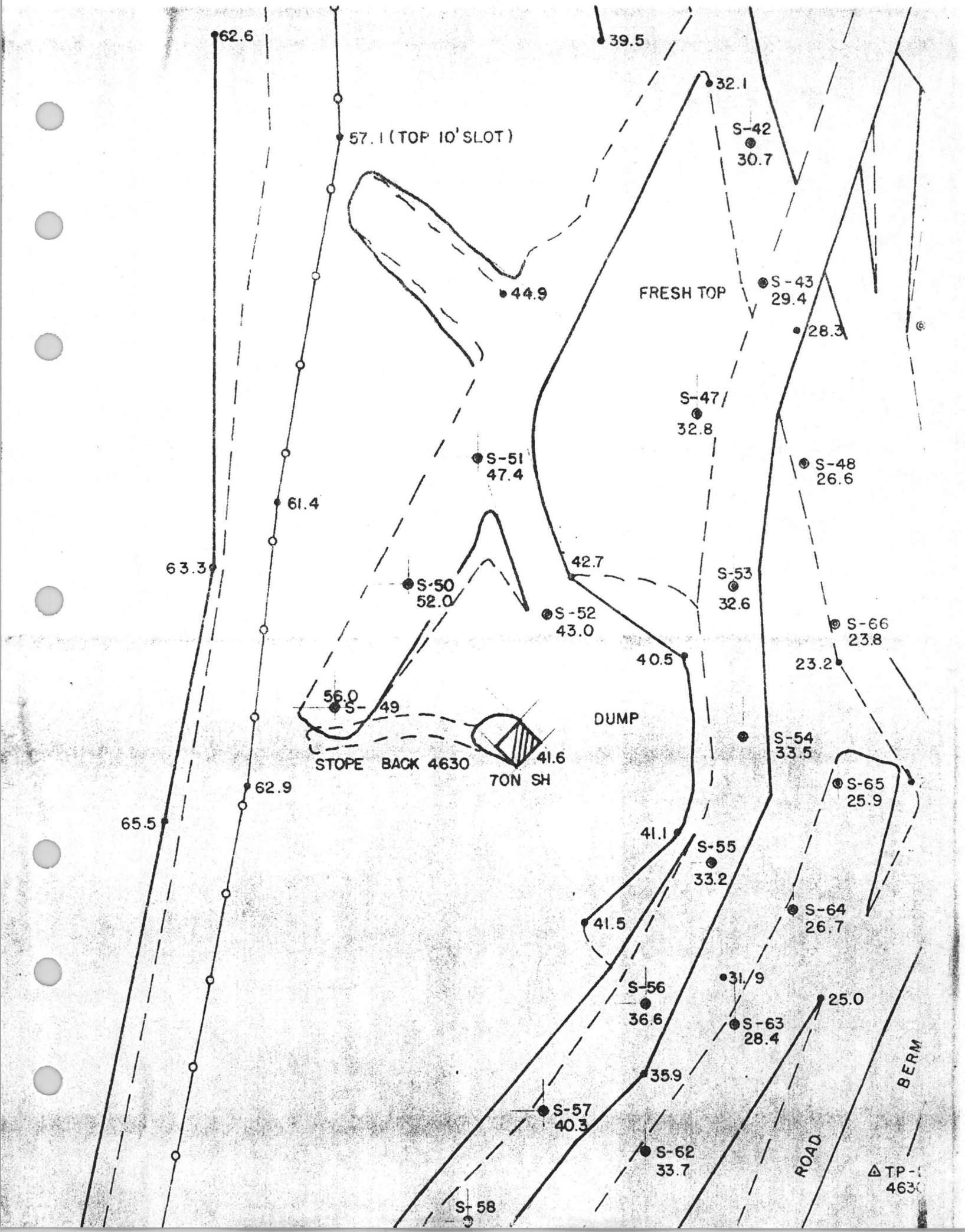
S-100E
S-200E

State of Maine Shaft Area

SECTION Number	Distance Between	ORE Square Feet	Ave. Grade Oz/Ton Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-	-	0	7730
	130 ft.					
S-5762		156	0.54		1815	
	12.5 ft.		1.08	420		1640
S-5861		750	1.61		1730	
	25 ft.		2.12	2230		4320
S-5960		1665	2.63		2920	
	20 ft.		2.66	3720		3590
S-7671		3360	2.70		1925	
	27 ft.		3.56	4530		4930
S-7767		1170	4.40		3005	
	23 ft.		3.00	2070		6590
S-7868		1260	1.59		4732	
Totals			2.88	12,970		28,800
W/20% Dilution			2.40	15,560		26,210
Strip Ratio					1.7:1	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39.5
32.1
57.1 (TOP 10' SLOT)
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30.7
44.9
FRESH TOP
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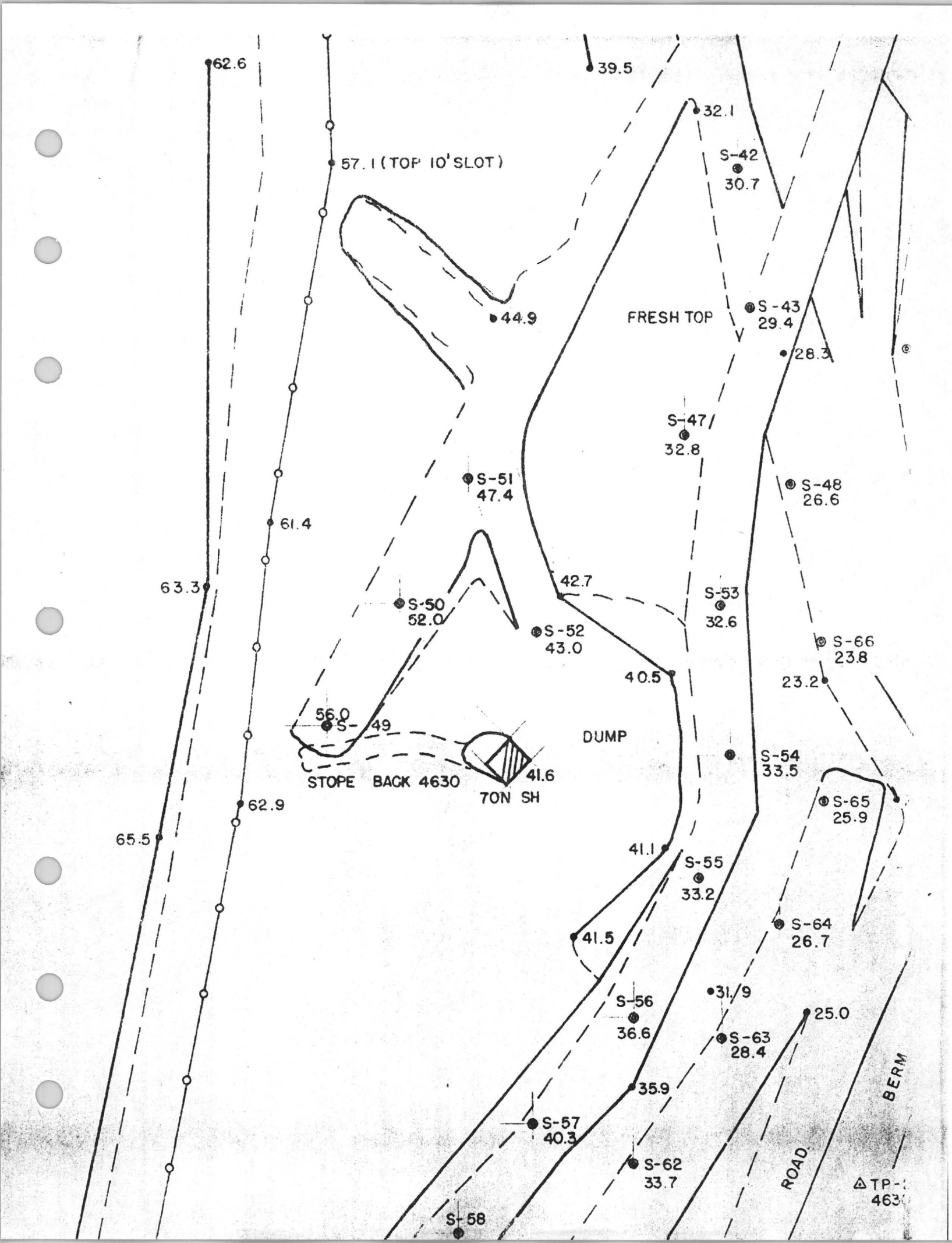
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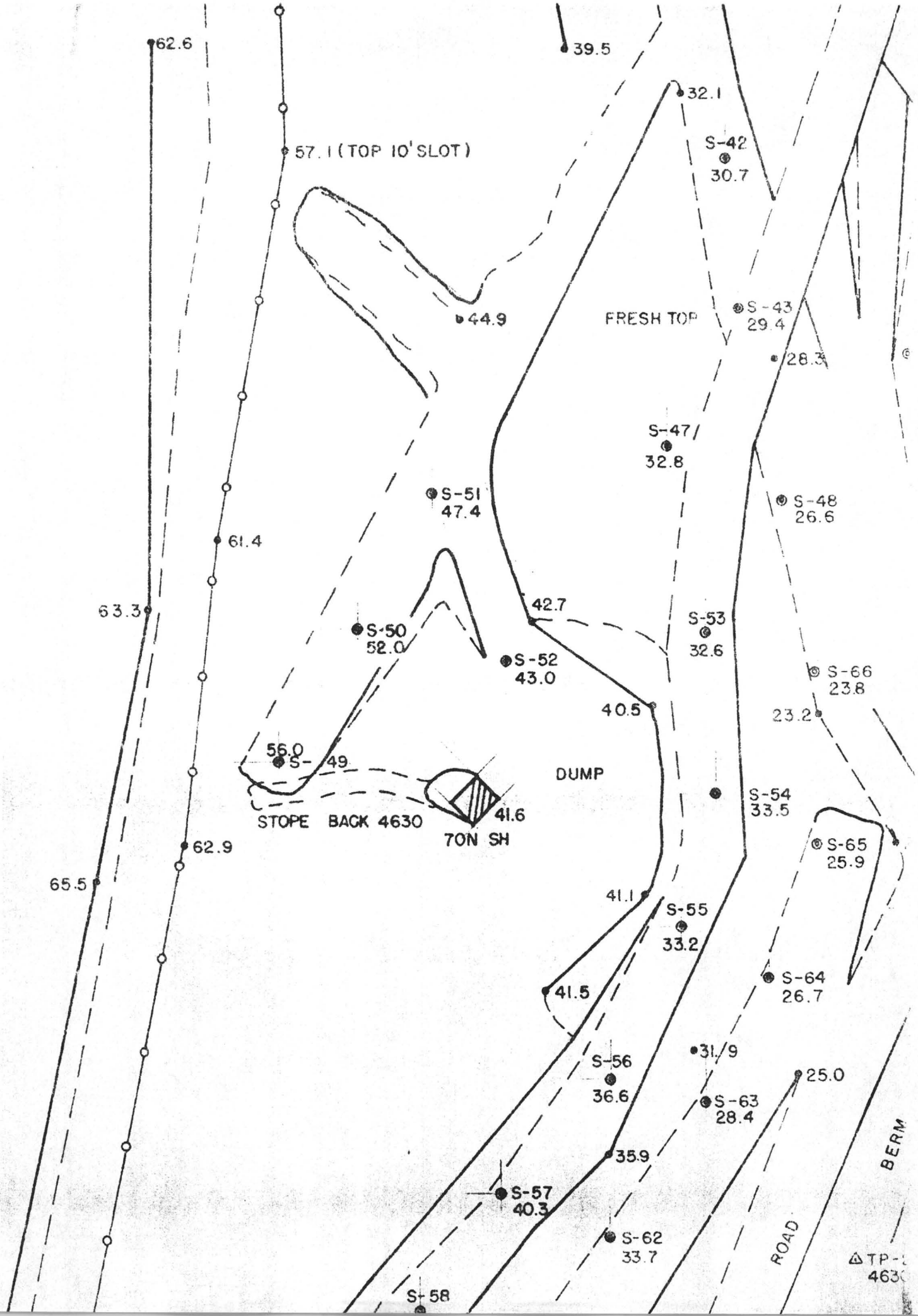
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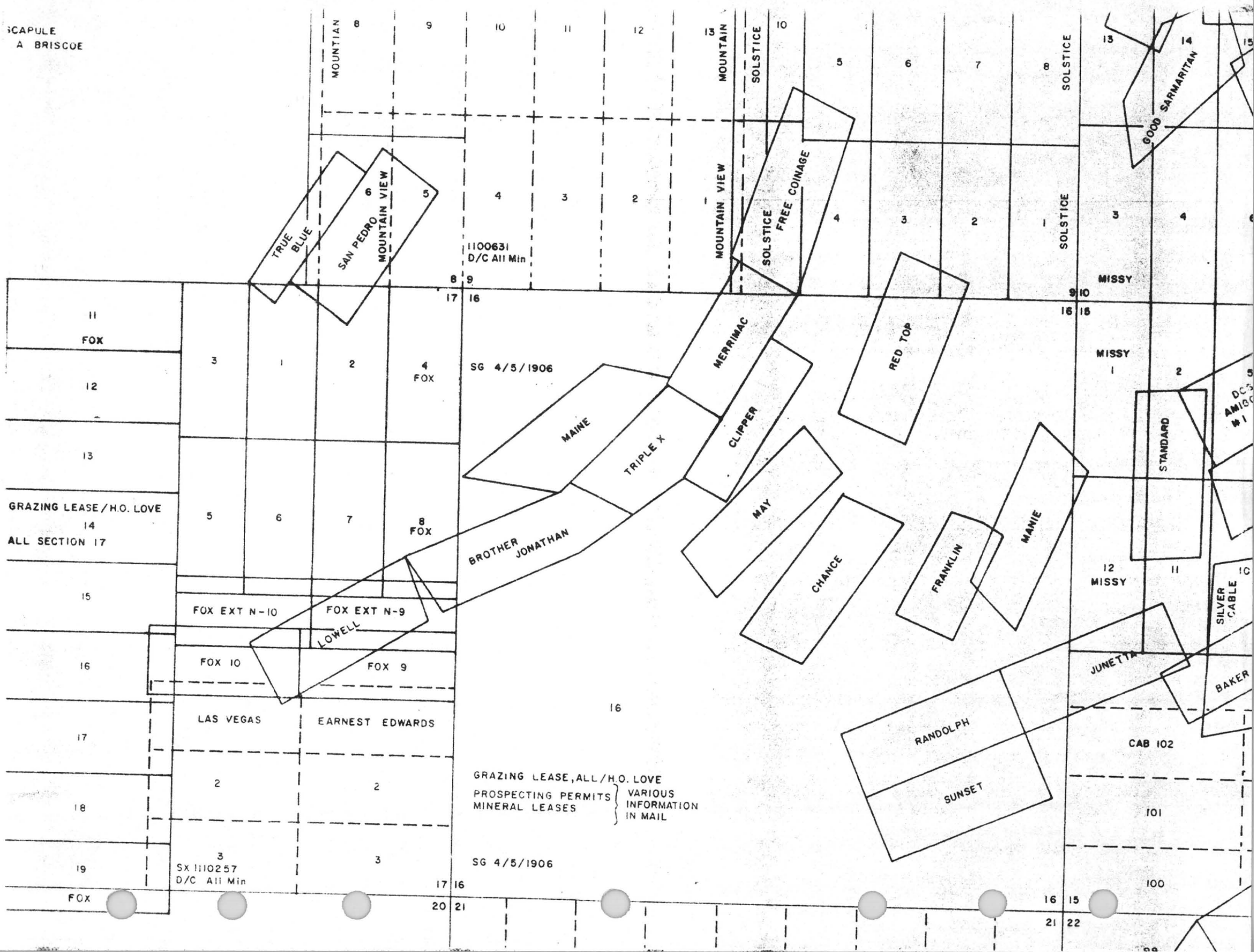
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GRAZING LEASE, ALL / H.O. LOVE
PROSPECTING PERMITS
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VARIOUS INFORMATION IN MAIL
SX 1110257
D/C All Min

ORE RESERVE CALCULATIONS

State of Maine Shaft Area

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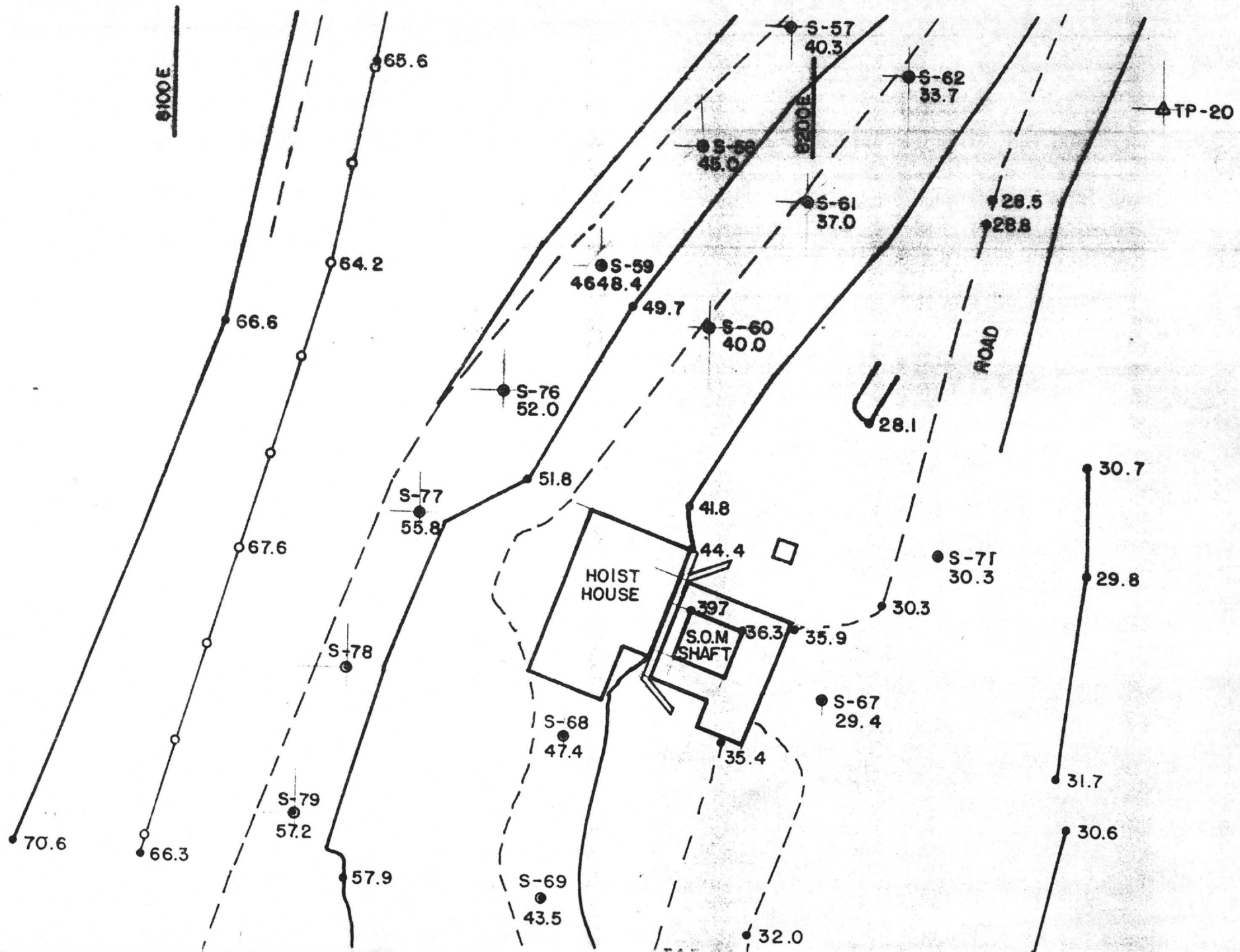
Strip Ratio						1.7:1	

State of Maine 70N Vein

Ramp		0	-			0	
	120 ft.	-	-		-		15,980
S-5152		585	3.15			3010	
	40 ft.		3.15		1730		8920
Totals			3.15		1730		24,900
W/20% Dilution			2.62		2080		24,550
Strip Ratio						11.8:1	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200 E
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67.6
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S-62
33.7
TP-20
S-58
45.0
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37.0
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28.8
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4648.4
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State of Maine 70N Vein

Ramp		0	–		0	
	120 ft.	–	–	–		15,980
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	40 ft.		3.15	1730		8920
Totals			3.15	1730		24,900
W/20% Dilution			2.62	2080		24,550
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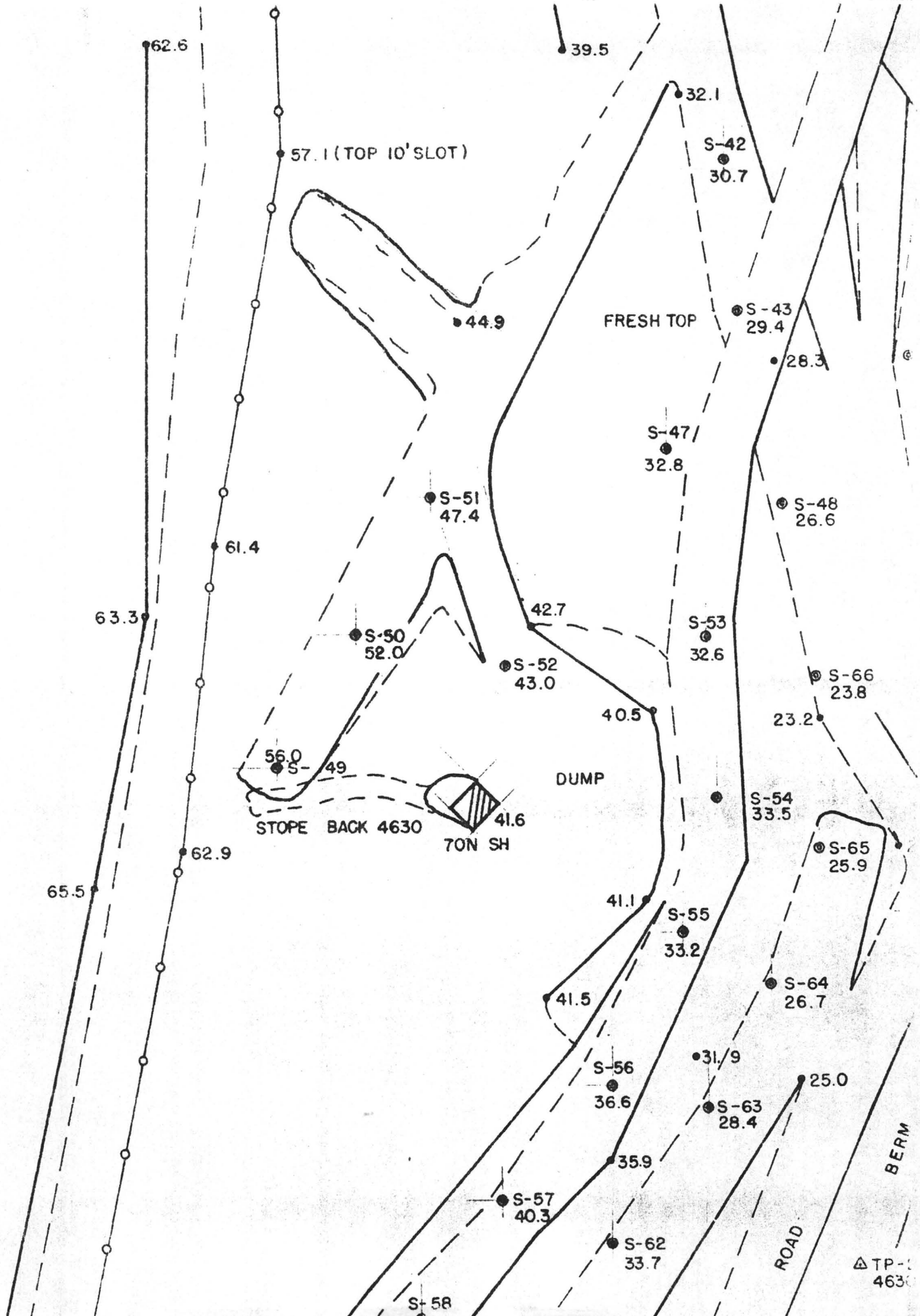
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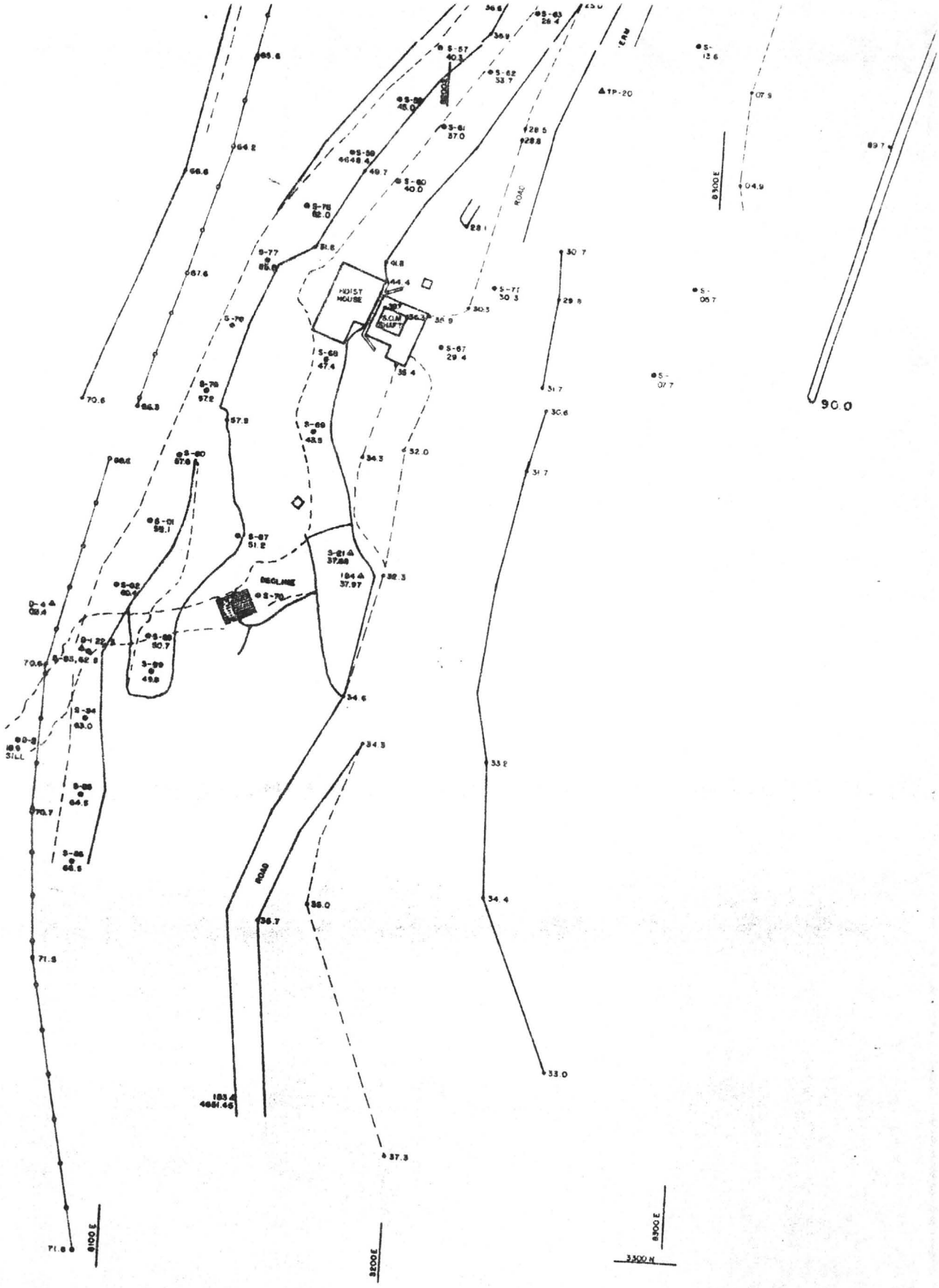
ROAD
TP-
463
S-58

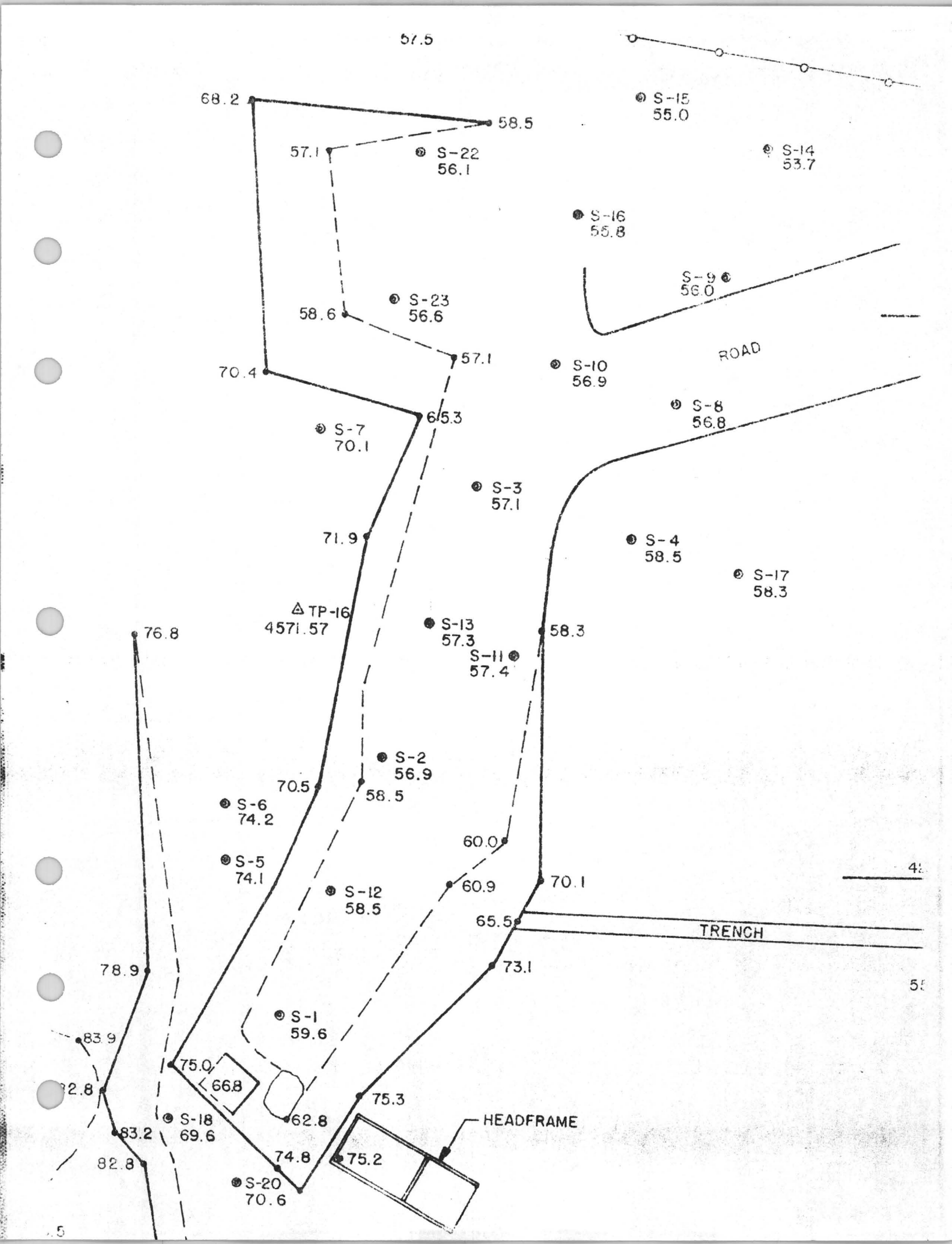
State of Maine 50N Vein

SECTION Number	Distance Between	ORE Square Feet	Ave. Oz/Ton	Grade Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-		0		
	40 ft.		-	-			1200
S-7671		20	2.84			60	
	30 ft.		2.72		195		460
S-7767		155	2.70			350	
	100 ft.		2.86		940		3700
S-8187		100	3.10			650	
	25 ft.		2.52		300		2250
S-8288		225	2.26			1780	
	95		4.23		1770		10,380
S-0086		280	5.81			1170	
Totals			3.58		3205		17,990
W/20% Dilution			2.98		3850		17,345
Strip Ratio						4.5:1	


HOIST HOUSE
S.C.M. SHAFT
DECLINE
ROAD
TP-20
3600N
3300N
3100E
3200E
3300E
90.0

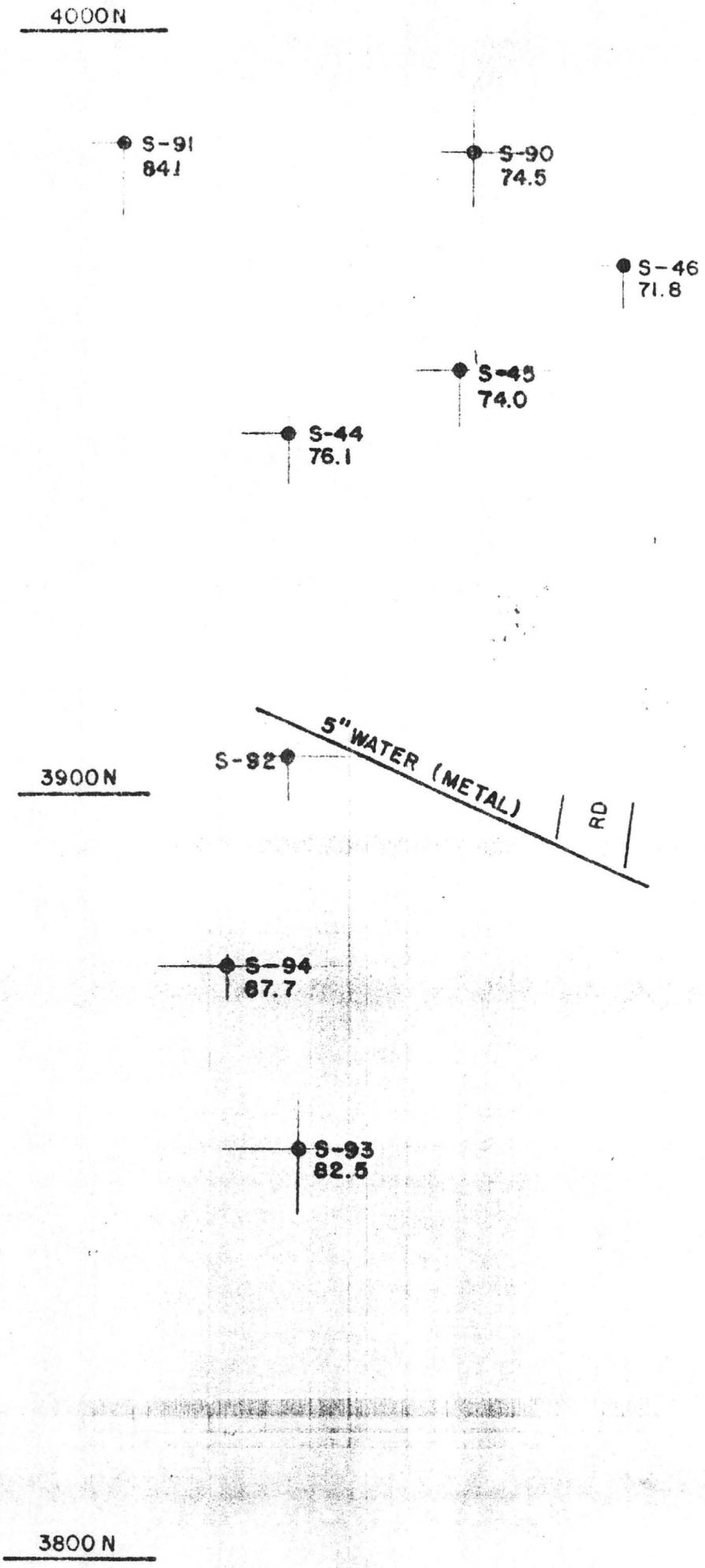
State of Maine No. 2

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton Ag	Tons	Square Feet	Tons
Ramp		0	-	-	0	
	150 ft.		1.96	170		5670
S-0001		380	1.96		1020	
	12.5 ft.		2.25	290		1150
Face		240	2.53		1460	
	12.5 ft.		5.40	180		1540
S-1820		145	8.26		1860	
Totals			3.06	640		8360
W/20% Dilution			2.54	770		8230
Strip Ratio					10.7:1	
	12.5 ft.		11.67	580		2500
S-2115		630	23.25		2760	
	25 ft.		10.22	1550		4660
S-2216		1040	2.33		2270	
	12.5 ft.		2.33	960		2100
Totals			8.04	3090		9320
W/20% Dilution			6.70	3710		8700
Strip Ratio					2.4:1	


57.5
68.2
58.5
57.1
S-22
56.1
S-15
55.0
S-14
53.7
S-16
55.8
S-9
56.0
S-23
56.6
58.6
57.1
ROAD
S-10
56.9
70.4
S-8
56.8
65.3
S-7
70.1
S-3
57.1
71.9
S-4
58.5
S-17
58.3
TP-16
4571.57
S-13
57.3
58.3
76.8
S-11
57.4
S-2
56.9
70.5
58.5
S-6
74.2
60.0
S-5
74.1
S-12
58.5
60.9
70.1
65.5
TRENCH
73.1
78.9
S-1
59.6
83.9
75.0
66.8
82.8
75.3
62.8
S-18
69.6
83.2
HEADFRAME
74.8
75.2
82.8
S-20
70.6

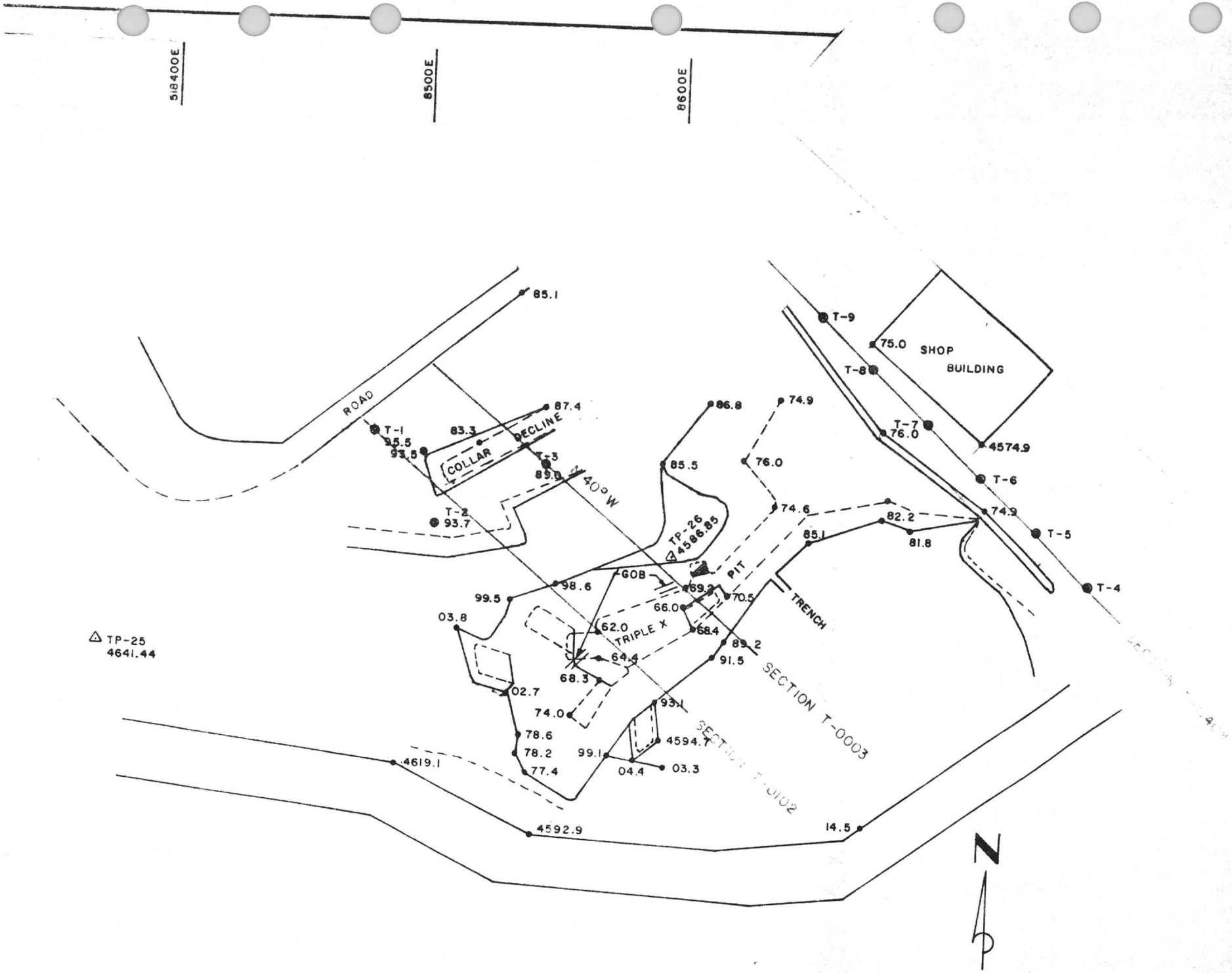
Smelter Vein

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton Ag	Tons	Square Feet	Tons
Ramp		0	-		1190	
	120 ft.			-		5290
S-0045		470	4.52		720	
	23 ft.		3.81	650		1290
S-4490		300	2.70		780	
	12.5 ft.		2.70	280		720
Totals			3.48	930		7300
W/20%Dilution			2.91	1110		7120
Strip Ratio					6.4:1	


4000N
S-91
84.1
S-90
74.5
S-46
71.8
S-45
74.0
S-44
76.1
5" WATER (METAL)
RD
S-92
3900N
S-94
67.7
S-93
82.5
3800 N

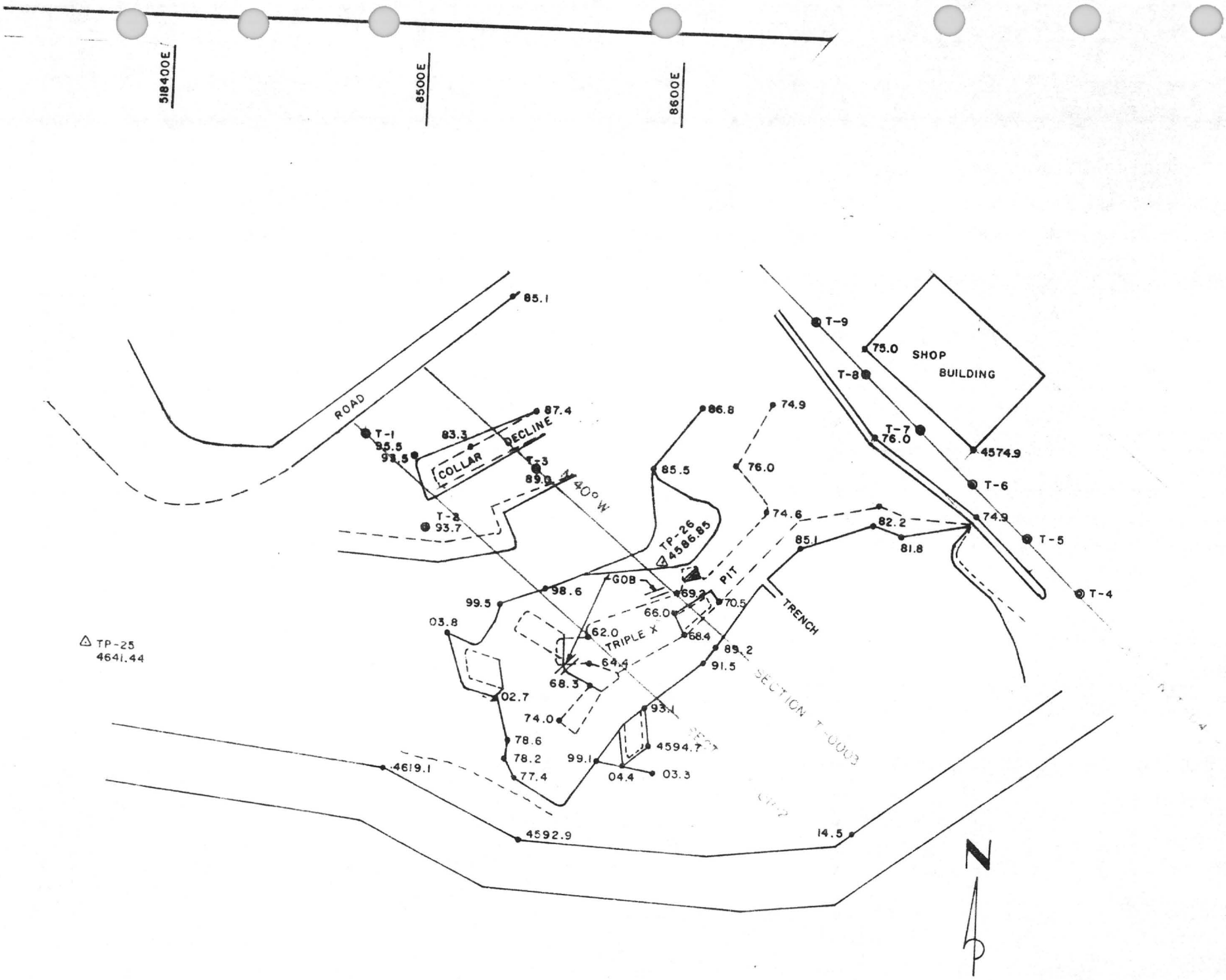
Triple X Vein No.1

Ramp		0	-		1505	
	80 ft.				-	4460
		375	1.60		1130	
	30 ft.		1.60	830		2510
T-0409		375	1.60	-	1130	
	30 ft.		1.60	830		2510
		375	1.60		1130	
			1.60			
Totals			1.60	1660		9480
W/20% Dilution			1.33	1990		9150
Strip Ratio					4.6:1	


8400E
8500E
8600E
ROAD
85.1
87.4
T-1
95.5
93.5
83.3
COLLAR
DECLINE
T-3
89.0
T-2
93.7
N 40° W
86.8
74.9
85.5
76.0
74.6
TP-26
4586.85
GOB
PIT
99.5
98.6
69.2
70.5
66.0
68.4
TRENCH
03.8
62.0
TRIPLE X
64.4
68.3
89.2
91.5
SECTION T-0003
TP-25
4641.44
02.7
74.0
93.1
78.6
78.2
77.4
99.1
4594.7
04.4
03.3
4619.1
4592.9
14.5
T-9
75.0
SHOP
BUILDING
T-8
T-7
76.0
4574.9
T-6
74.9
82.2
81.8
85.1
T-5
T-4
N

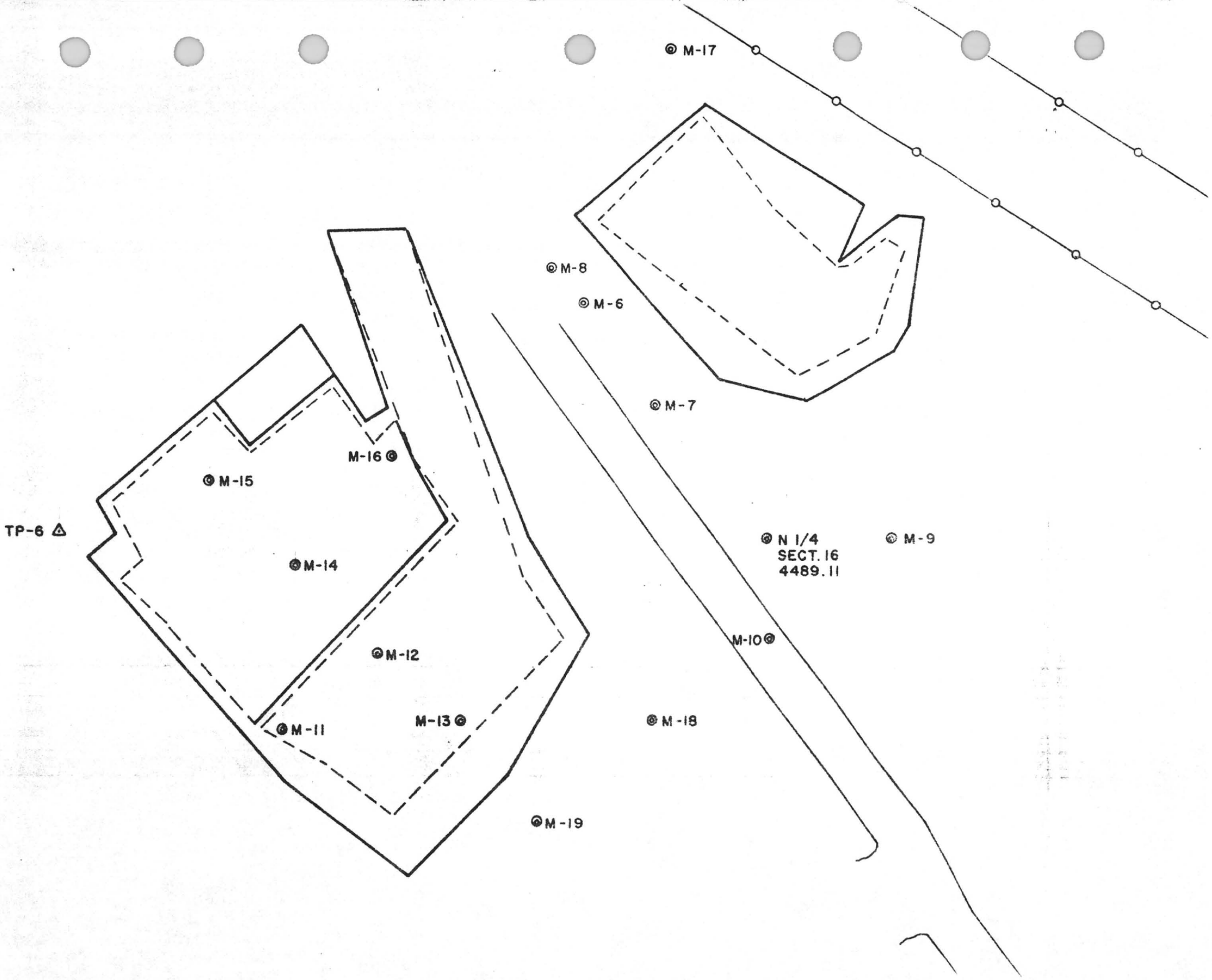
Triple X Vein No. 2

SECTION		ORE				WASTE	
Number	Distance Between	Square Feet	Ave. Oz/Ton	Grade Ag	Tons	Square Feet	Tons
Ramp		0	–			–	
	80 ft.						5780
		470	1.74			1480	
	25 ft.		1.74		870		2740
T-0003		470	1.74			1480	
	50 ft.		2.06		1610		5720
T-0102		400	2.43			1610	
	10 ft.		2.43		300		1190
Totals			2.00		2780		15430
W/20% Dilution			1.67		3330		14880
Strip Ratio						4.5:1	


518400E
8500E
8600E
ROAD
85.1
T-1
95.5
93.5
83.3
COLLAR
DECLINE
87.4
T-3
89.8
N 40° W
T-2
93.7
86.8
74.9
85.5
76.0
TP-26
4586.85
74.6
GOB
PIT
69.2
70.5
66.0
68.4
TRENCH
85.1
82.2
81.8
74.9
T-9
75.0
SHOP
BUILDING
T-8
T-7
76.0
4574.9
T-6
T-5
T-4
99.5
98.6
03.8
62.0
TRIPLE X
64.4
68.3
89.2
91.5
TP-25
4641.44
02.7
74.0
78.6
78.2
77.4
93.1
4594.7
99.1
04.4
03.3
4619.1
4592.9
14.5
SECTION
N

Merrimac Vein

Ramp		0	-		1110	
	120					4930
Fence		95	2.65		295	
	30		3.65	520		1140
Road		375	3.90		735	
	50		3.90	1380		2720
Road		375	3.90		735	
	60		3.89	1170		3750
Shaft		155	3.85		955	
	20		3.85	230		
		155	3.85		955	1410
Totals			3.73	3300		13950
W/20% Dilution			3.11	3960		13290
Strip Ratio					3.4:1	


M-17
M-8
M-6
M-7
M-16
M-15
TP-6
M-14
N 1/4
SECT. 16
4489.11
M-9
M-10
M-12
M-11
M-13
M-18
M-19

Tombstone Silver Mines Inc.

Tombstone:
P.O. Box 715
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Scottsdale:
8238 E. Indian School Rd.
Scottsdale, Az 85251

Corporate & Administration:
P.O. Box 11509
650 W. Georgia St.
Vancouver, V.C. Canada V 6B 4N7

2-13-85

MERRIMAC PIT NO. 1

A small pit is being developed on a vein in the area of the old Bishop mine. The vein and the pit are oriented N50°E along the vein strike (see attached plan and sections). Sample drill holes and sample trenches outline an orebody of about 5,000 tons of 2.0 oz. Ag/ton, to a 50 ft. vertical depth.

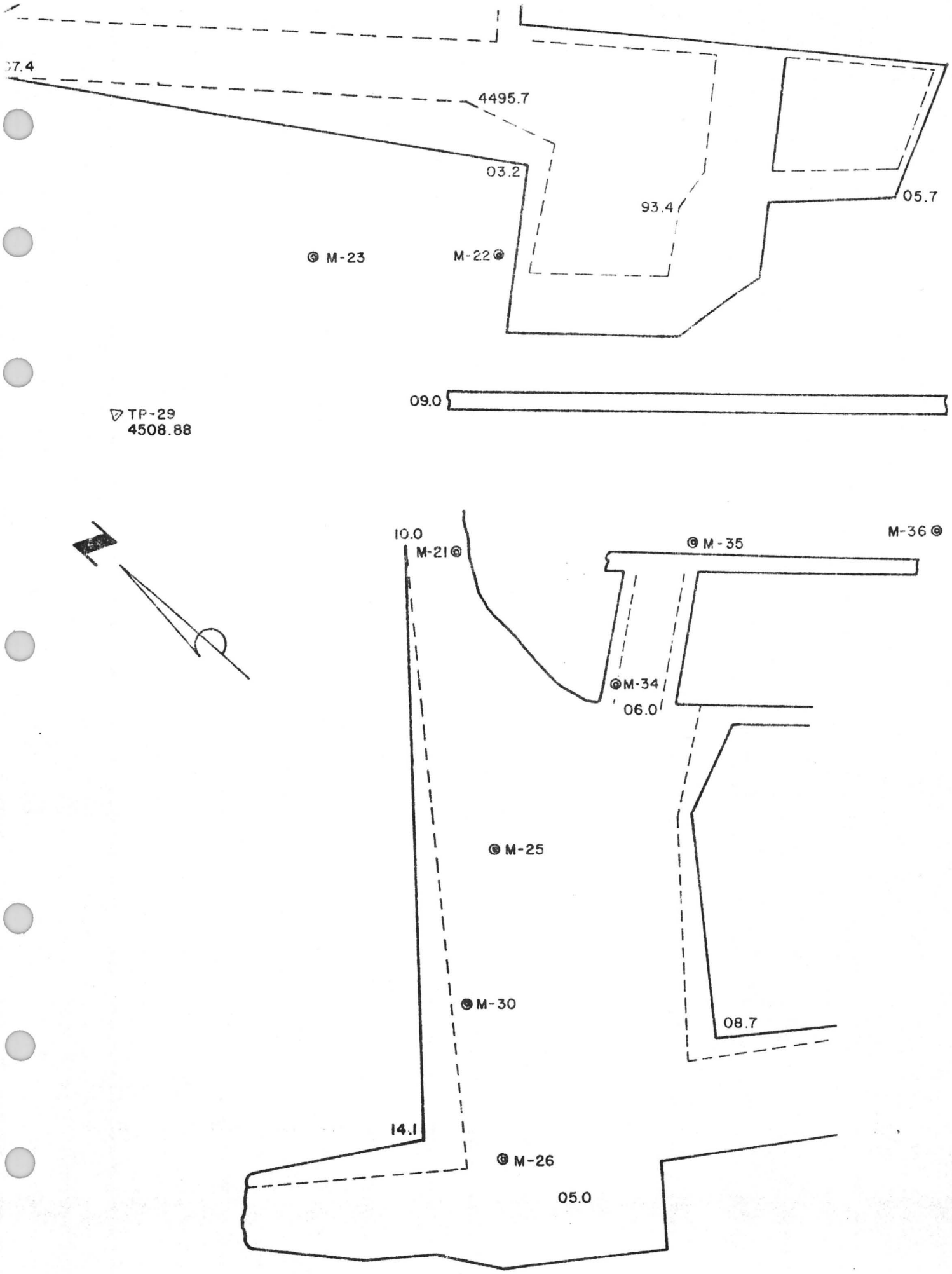
Ore from the pit is the footwall of the vein and the other wall has 0.5 to 1 slopes with five foot benches every 20 feet vertical. The overall slope of this wall is 0.8 to 1.

To the end of day shift 2-12-85, the calculated volume of the first pit dug is 2360 tons. The pit being dug presently is 1590 tons. These figures do not include a few feet of unconsolidated material that has been stipped from the surface between the two pits.

Using a 10 ft. depth, the material remaining between the blue stake line and the footwall of the ore and from the south pit wall to section M-2136 is 770 tons of ore estimated to be 2.0 oz per ton silver and 3510 tons of waste which is a 4.6:1 strip ratio.

Respectfully submitted,

Arthur J. Graves


7.4
4495.7
03.2
93.4
05.7
M-23
M-22
09.0
TP-29
4508.88
10.0
M-21
M-35
M-36
M-34
06.0
M-25
M-30
08.7
14.1
M-26
05.0

COMPOSITE PAD AVERAGES (Ag)

Pit 1	1.98
Pit 2	1.29
Pit 3	0.58
Pit 4	1.16
Pit 5	1.00
Pit 6	0.93
Pit 7	1.85
Pit 8	0.77
Pit 9	1.07
AVERAGE =	1.18

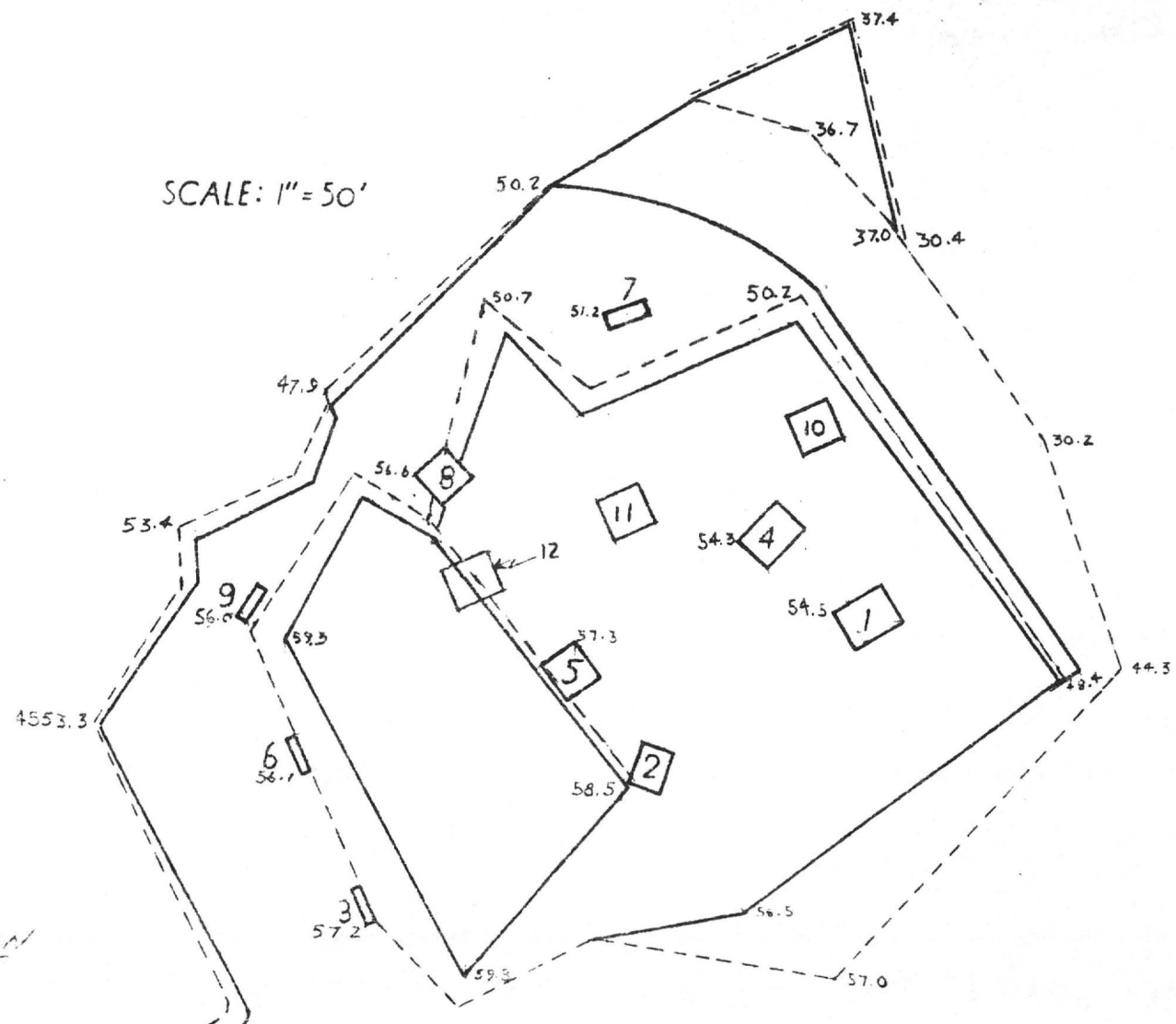
LEGEND:

- - - - - - TOE

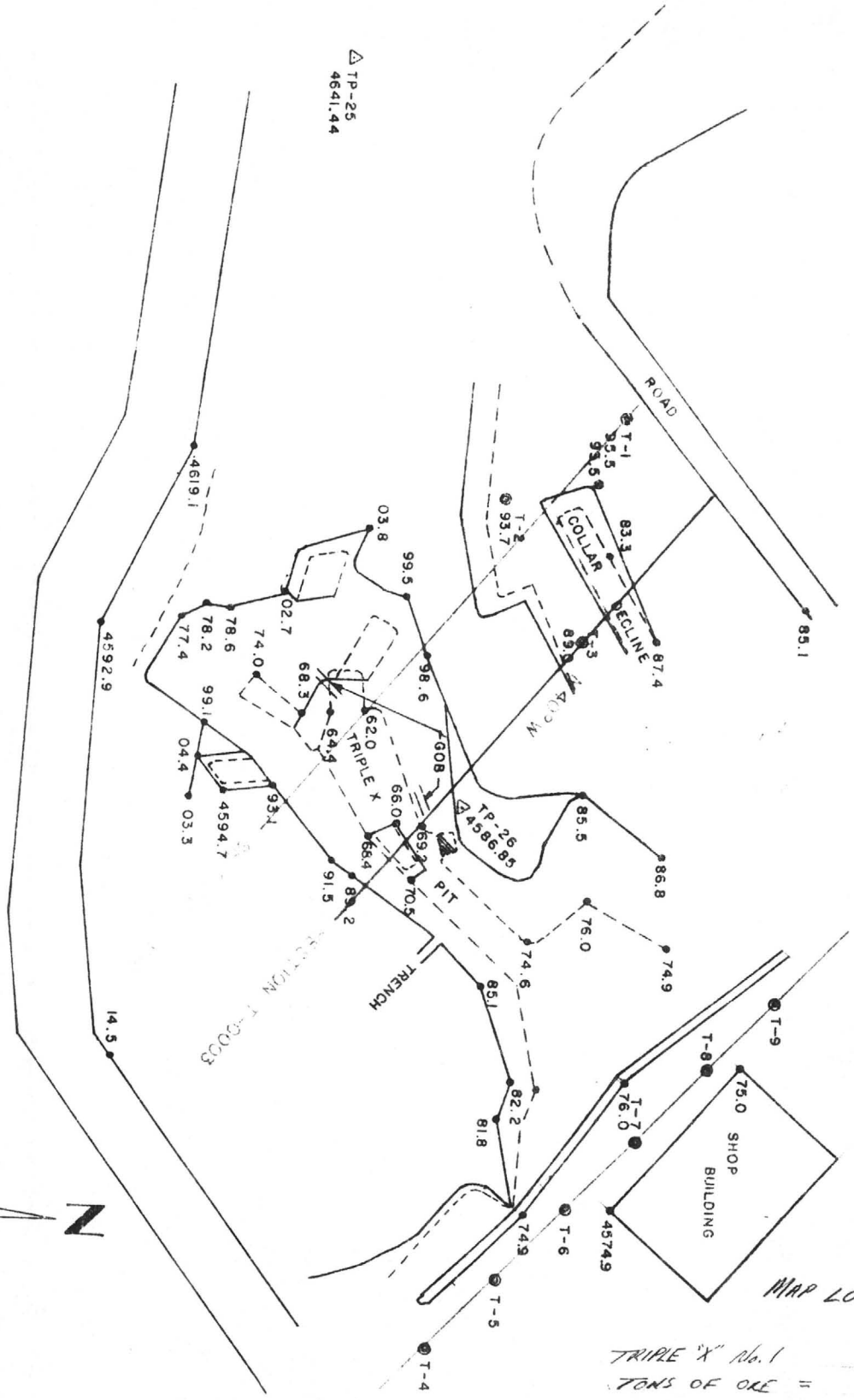
——— CREST

[8] 56.6 PIT

SCALE: 1" = 50'

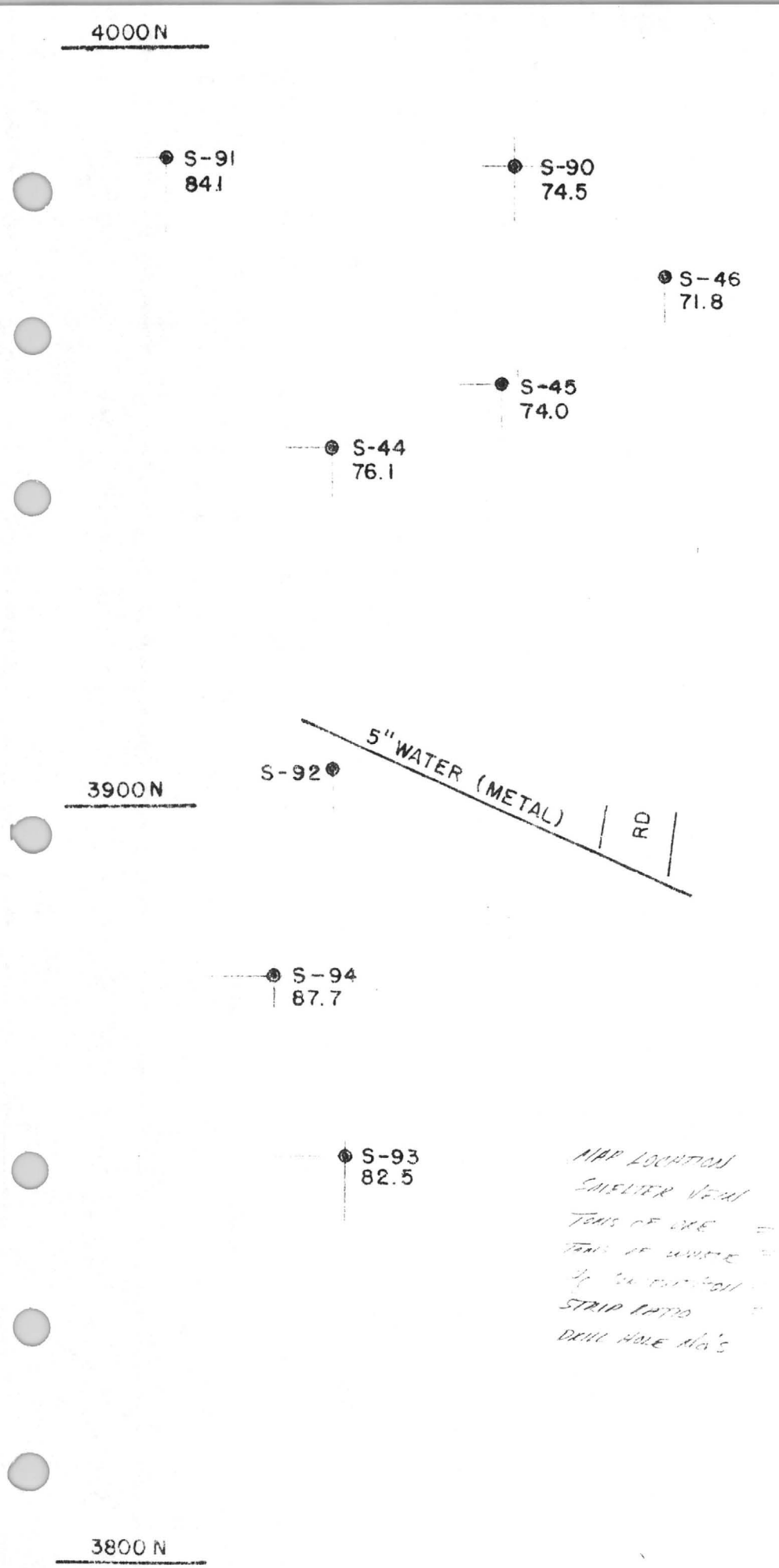


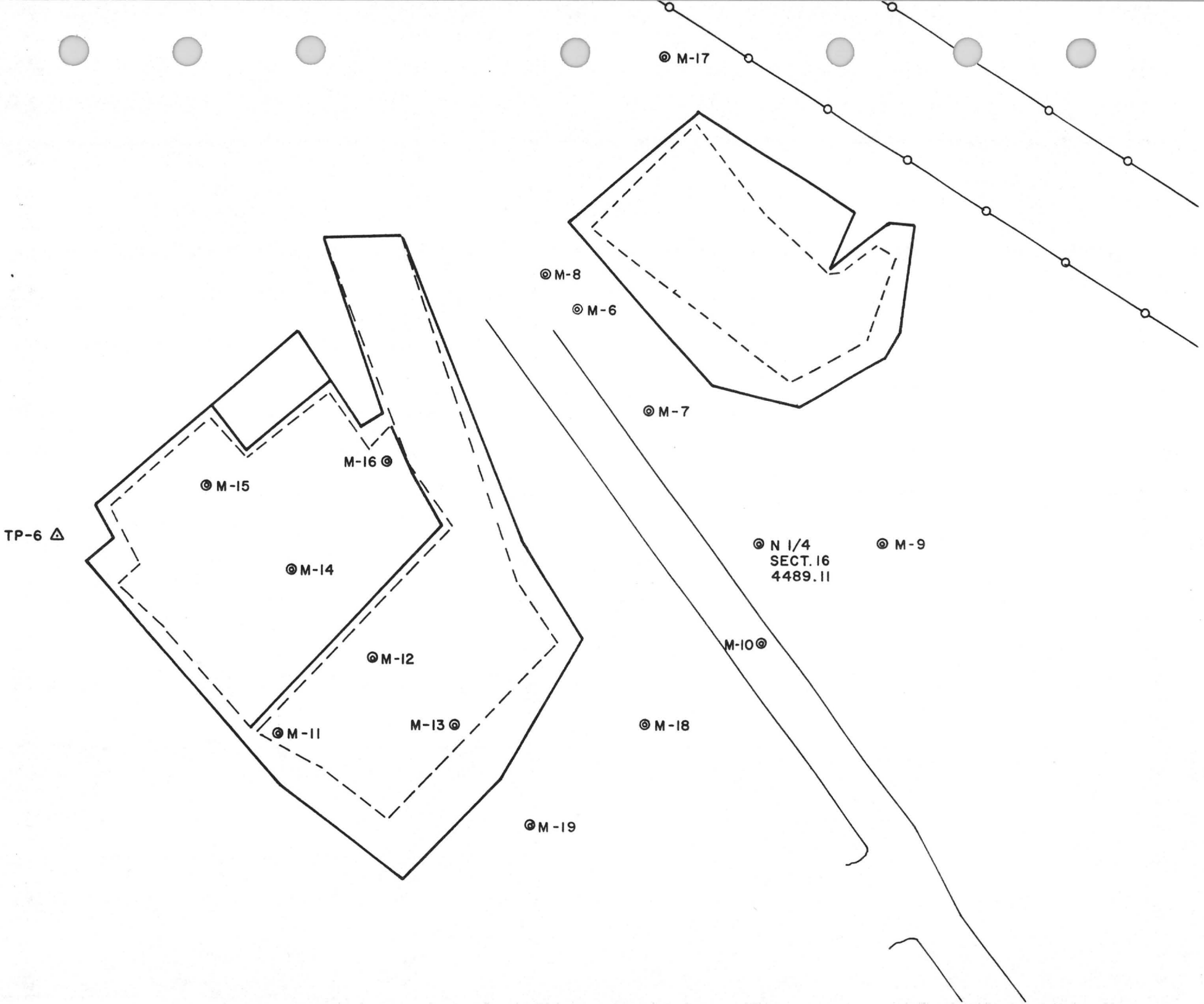
COMPOSITE PAD
TSM, AZ.

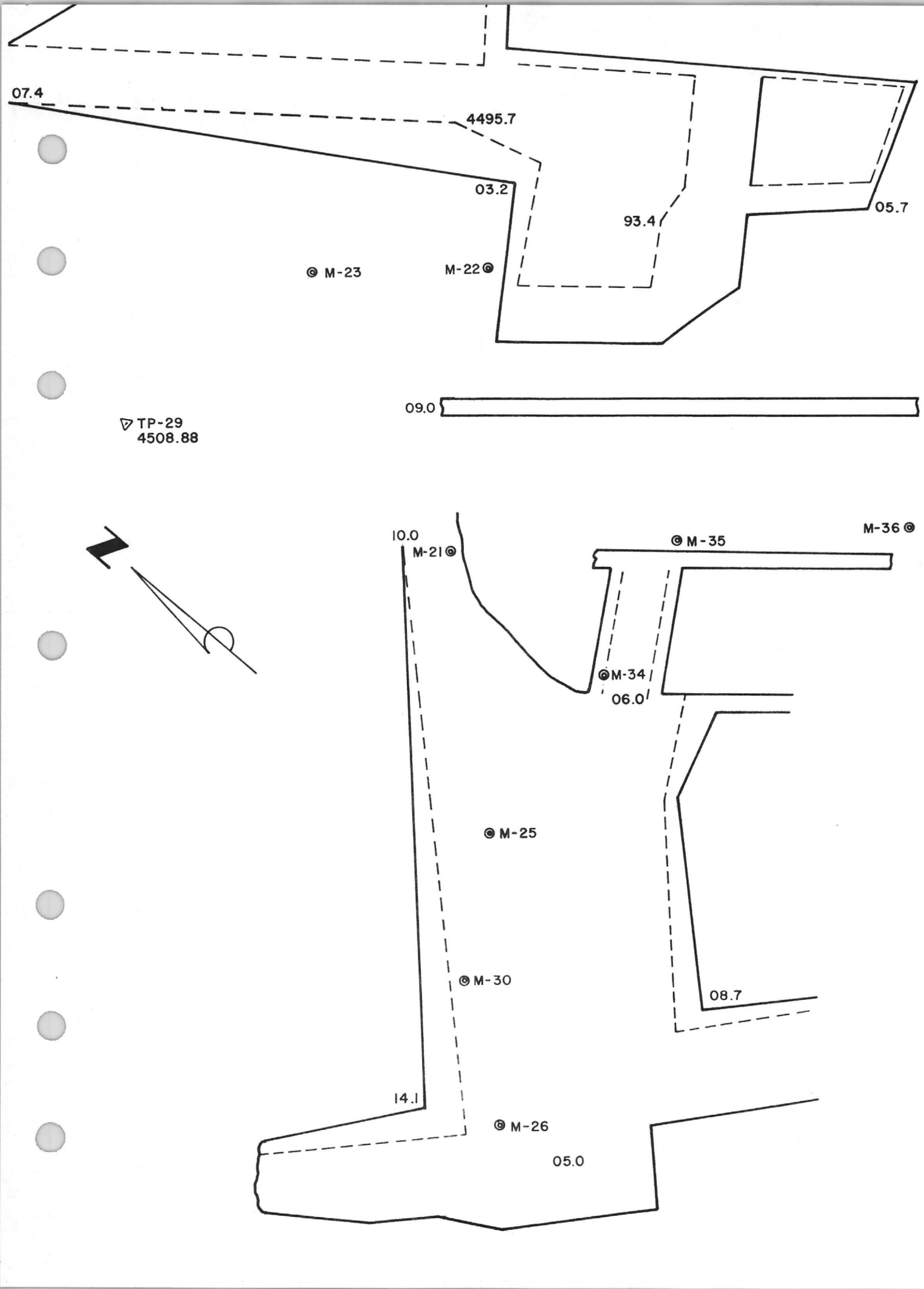


MAP LOCATION _____

TRIPLE "X" No. 1	TRIPLE "X" No. 2
TONS OF ORE =	TONS OF ORE =
TONS OF WASTE =	TONS OF WASTE =
Hg CONTENT/TON =	Hg CONTENT/TON =
STRIP RATIO =	STRIP RATIO =
DRILL HOLE No's	DRILL HOLE No's


4000 N
S-91
84.1
S-90
74.5
S-46
71.8
S-45
74.0
S-44
76.1
5" WATER (METAL)
RD
S-92
3900 N
S-94
87.7
S-93
82.5
MAP LOCATION
SHELTER VERIFY
TONS OF ORE
TONS OF WASTE
% IN EXPLORATION
STRIP RATIO
DRILL HOLE NO'S
3800 N


M-17
M-8
M-6
M-7
M-16
M-15
TP-6
M-14
N 1/4
SECT. 16
4489.11
M-9
M-10
M-12
M-13
M-11
M-18
M-19


07.4
4495.7
03.2
93.4
05.7
M-23
M-22
09.0
TP-29
4508.88
10.0
M-21
M-35
M-36
M-34
06.0
M-25
M-30
08.7
14.1
M-26
05.0

A.J. Graves (12/85)

Joe Graves Report

Dec. 1985

PURPOSE

Tombstone Silver Mines, Inc., has conducted exploration and a percussion drilling program, starting in June, 1984, to the present, to outline silver ore reserves in the State of Maine area. The current plan is to summarize the known reserves by this report, and then to continue exploration and drilling to add to the reserves while silver production is in progress.

Tombstone Silver Mines, Inc., has commissioned me, through my company, Cochise Mining Company, to direct and report on exploration and drilling programs starting in June, 1984, and continuing to the present.

INTRODUCTION

In June, 1984, this author reviewed and reported to Tombstone Silver Mines, Inc., on the geology and silver production potential together with recommendation's for outlining reserves in the area covered by this report (see attached references).

Since the June report, an engineering and geology program has been implemented and a sample drilling program has been in progress on the mineral lands owned or leased by Tombstone Silver Mines, Inc. in the western part of the Tombstone Mining District (figure 4).

The geology in this report is partly an abstract of papers by various authors on the subject of geology of the Tombstone District and from personal experience in the district. Four published reports are mentioned in the reference. These reports in turn mention, many sources of detailed information concerning the subject. The geology map of the district (figure 3) by James A. Briscoe for Tombstone Development Company is included with his permission.

LOCATION AND HISTORY

The Tombstone Mining District is located in Cochise County, Arizona, about 70 miles southeast of Tucson by highway (figures 1 and 2). The hills in the district vary from 4500 ft. to 5300 ft. in elevation. The climate is semiarid with a mean annual temperature of 63 degress F and an annual precipitation of about 14.5 inches. Outdoor work is seldom curtailed due to inclement weather.

The known precious and base metal production was and is from mines in an area that extends two miles south of and three miles west of the town of Tombstone. From 1879 to 1970 the district produced about 30 million ounces of silver, 240,000 ounces of gold, 45 million pounds of lead, and 3 million pounds of copper. Also, about 9,000 tons of manganese was produces, mostly as a war effort during the 1940's.

About 50% of the precious metal production was prior to 1890. Only about 20% of the total production was below the water table.

$ 20 mm @ $10 Ag

3/4 mm @ 400 Au

Since 1970, about 2,000,000 ounces of silver and about 10,000 ounces of gold have been produced by cyanide leaching of oxide ores. The ore was produced mostly by open cut mining with the remainder from mine dumps.

The mines in the western part of the district, including the State of Maine, have produced about 80,000 ounces of silver and about 600 ounces of gold since 1970. About 80% of this production was from mine dump material.

80,000 oz Ag
20%
16,000 oz Ag prod. from underground

600
20%
120 oz

450

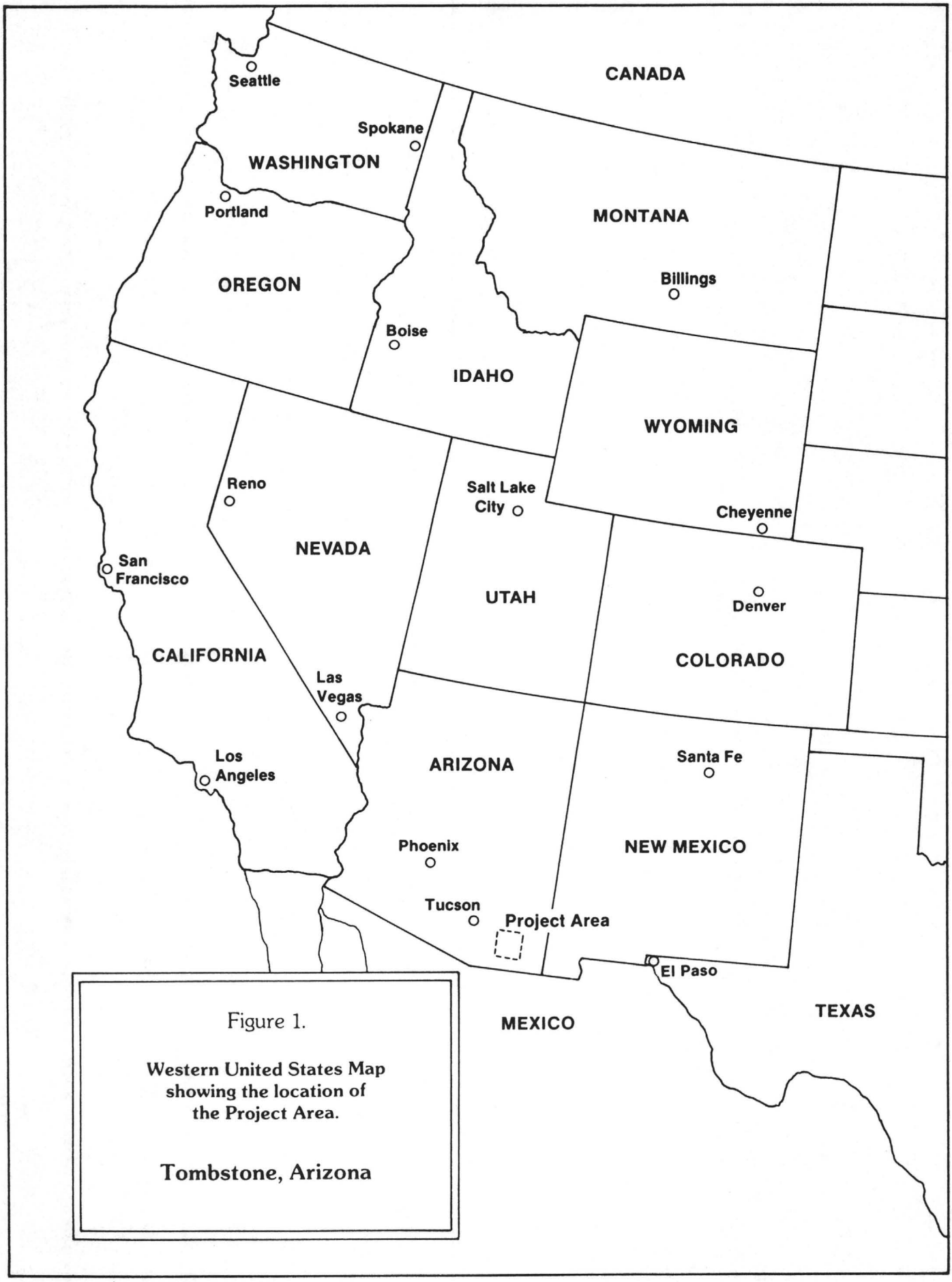


Figure 1.

Western United States Map showing the location of the Project Area.

Tombstone, Arizona

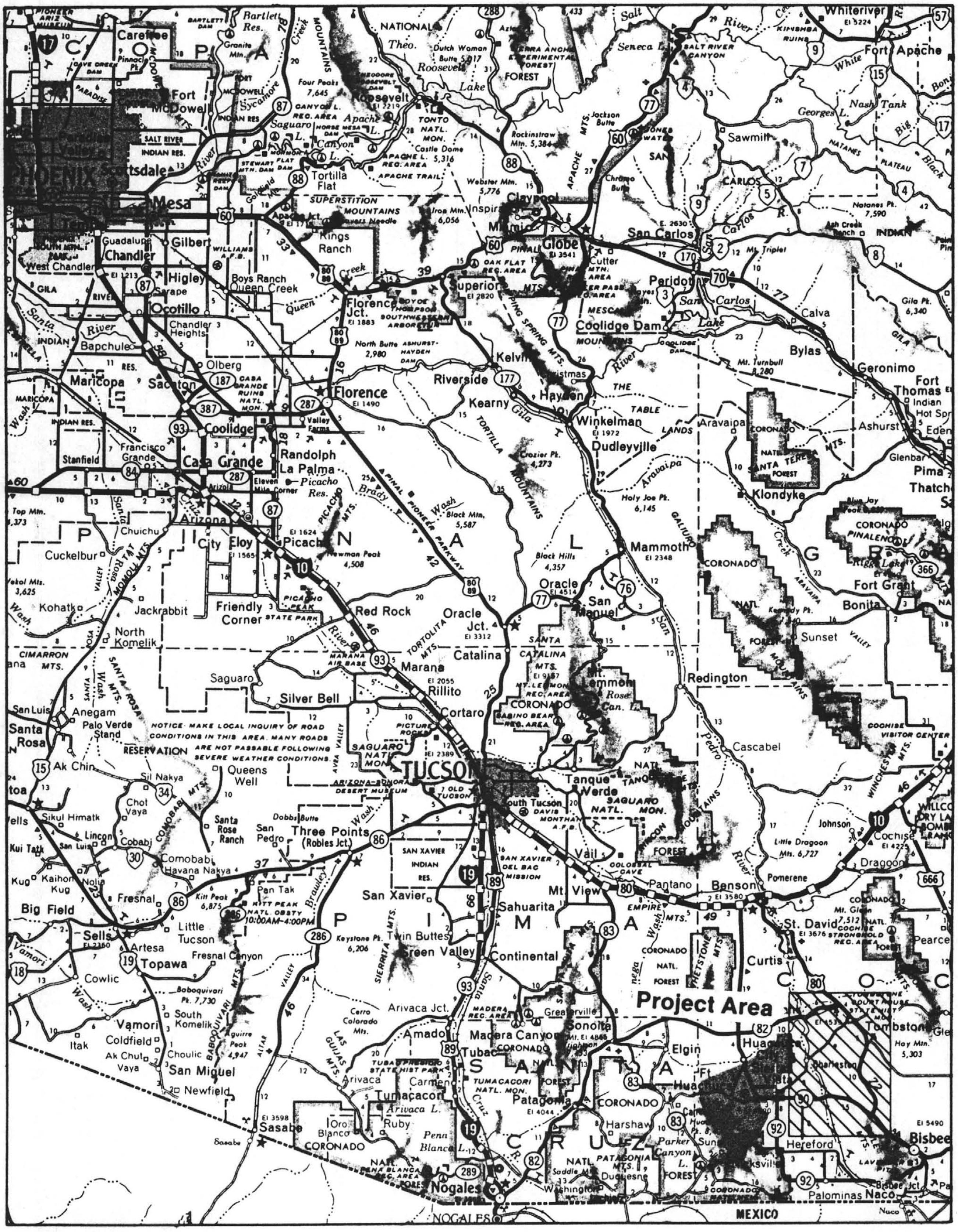


Figure 2. Highway map showing the location of the Project Area in relation to Tucson and Phoenix, Arizona

GEOLOGY

The Tombstone District is divided geologically into two areas. The eastern area is predominantely Paleozoic and Mesozoic sediments with minor small intrusive masses and dikes. The western area, the area of interest for this study, is mostly intrusive and extrusive igneous rocks of Mesozoic and Tertiary age with remmants of Mesozoic sediments. (figure 3).

Rock Types

The Pre-Cambrian Pinal schist and an intrusive granite are overlaid by about 7000 feet of Paleozoic limestones, quartzites, and minor shales.

The Cretaceous Bisbee group is slightly more than 3000 ft. maximum thickness in the Tombstone hills. This group is predominantly shales and sandstones with a few thin beds of limestone.

In the western most area of the district, near the San Pedro River, the Bronco volcanic series, a lower andesite and an upper rhyolite overlay and intrude the Bisbee group.

An andesite porphyry plug and related dikes intrude the Bronco volcanics. In the western part of the district there are two extensive exposures of late Cretaceous igneous rocks. These units are the Schieffelin grandiorite and the closely related but slightly younger Uncle Sam quartz latite porphyry. The Uncle Sam is referred to as a tuff by some authors and there is evidence that it is extrusive with a maximum thickness of a few hundred feet.

Three other igneous rock types have been recognized in the Tombstone District. They are late Cretaceous granophyre, rhyodacite, and hornblende andesite, all very limted in lateral extent.

The only Tertiary unit that has been indentified is rhyolite porphyry in the southern portion of the district. The Quaternary units are the Gila conglomerate and the recent gravels and alluvial deposits. A small basalt dome intrudes the recent sediments near Walnut Gulch, northeast of Tombstone.

Structure

The Tombstone District is in the southern part of the Basin and Range Province. The oldest structures are the east-west Prompter-Horquilla fault system with dips at 60 to 80 degrees south. These structures pre-date Cretaceous time but have moved just before extrusion of the Uncle Sam and again in tertiary time, probably just after the rhyolite porphyry intrusive.

Following the deposition of the Bisbee Group in early Cretaceous, the district was subjected to compressive forces in a northeast-southwest direction. The compression resulted in folding and faulting of the Paleozoic and Mesozoic sediments.

Next, the Ajax north-south to north 15 degrees east were developed with dips usually steeply to the west. Andesite porphyry dikes intruded these faults during early Cretaceous.

Northeast fissures developed in late Cretaceous, after the Schieffelin granodiorite intrusive and the Uncle Sam extrusive. Some of these fissures are occupied by hornbelnde andesite dikes.

There are two late, post, mineralization fault systems. One is north 20 degrees west and dips 60 to 70 degrees to the west and appears to be prevalent in the large igneous rock outcrops. The other is north 50 degrees west dipping about 50 degrees west, and is prevalant in the sediments. These two systems may have developed at the same time.

Mineralization

Mineralization in the district occured after the hornblende andesite dikes were intruded along the northeast fissures near the end of the Mesozoic Era. The dikes and host rocks along the fissures were strongly altered. It is apparent that the northeast fissures were one of the main channels for mineralization.

DRILLING PROGRAM

General

Three areas were sample drilled for precious metal values on the mineral lands of Tombstone Silver Mines, Inc., between August 15, 1984 to the present. The drilling program up to November 30, 1984, will be included in this report.

A total of 170 holes were drilled with a maximum depth of 120 feet for a total footage of 10,159. The first 7317 feet was drilled with a $4\frac{1}{2}$ inch button bit and the remainder was drilled with a $4\frac{1}{2}$ inch bit which is still in use.

The drill is on Atlas Copco ROC-601 air track with a COP-42 down-the-hole hammer on three inch drill pipe and a DRH-700 air compressor. A vacuum dust collector collects all the material from the drill hole. The samples are collected at five foot intervals maximum and are about 100 lbs. The sample splitter located at the drill site produces a sample that is about five lbs. for laboratory analysis.

The three areas drilled were the unpatented Horne claims, the State mineral lease in the south $\frac{1}{2}$ of section 16, and the state of Maine, Merrimac, Triple X, and Clipper patented claims.

Six sample holes were drilled across a northeast fractured and altered zone on the Horne No.112 claim for a total of 492 feet. The highest silver value was 0.06 oz/ton on one sample.

Another area drilled was the state prospecting permit in the south $\frac{1}{2}$ of section 16 where 17 holes totaling 1109 feet were drilled. This work was performed to gain information concerning silver mineralization along northeast zones and to satisfy the annual work obligation required to hold the state prospecting permit.

One surface sample in the area of drill hole SV-1 contains 1.16 oz/ton of silver over a three foot interval. None of the holes contained more than 0.25 oz/ton Ag except the following:

The strongest mineralization in the district is where the northeast fissures intersect north-south dikes (fissures), anticlines and rolls on the flanks of anticlines, and other faults.

There are only a few local occurences of primary hypogene minerals above the water table. The typical hypogene minerals produced from below the water table were quartz, pyrite, argentiferous galena and tetrahedrite, hessite, spalerite, chalcopyrite, and altaite.

The significant ore bearing minerals in the oxidizes above the water table are anglesite, cerussite, smithsonite, hemimorphite, covellite, malachite, silver halide minerals, predominantly bromyrite, with minor cerargyrite, embolite, argentite, and native silver. The silver to gold ratio is about 200:1.

The water table in the western part of the district is about 200 ft. below the surface.

MINERALS LANDS

Tombstone Silver Mines, Inc. has the following mineral lands (figure 4) by ownership or under lease:

1.	The Escapule patented mining claims including the State of Maine, Lowell, Brother Johnathan, Triple X, Merrimac, Clipper, May and Red Top	145.93 acres
2.	State prospecting permit No. 08-84591 in the south $\frac{1}{2}$ section 16.	220.79 acres
3.	State mineral leases Nos. 11-23058, 11-23057, 11-23056, 11-23055, in the north $\frac{1}{2}$, southeast $\frac{1}{4}$, section 16.	68.06 acres
4.	Horne unpatented lode claims Nos. 110 thru 117.	165.28 acres
	TOTAL	600.06 acres

Negotiations are under way between the owner of the Franklin unpatented claim and the company.

RECOMMENDATIONS

1. A few thousand tons of the uncrushed stockpile should be processed and additional samples be taken from the newly exposed material.

2. Sample drilling should continue during the above pilot test.

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Hole No.	Interval ft.	Ag oz.	Au oz.
SV-10	0-5	2.70	0.005
	5-10	2.92	0.003
	10-15	1.20	0.003
	15-20	0.48	0.005
SV-16	0-5	0.68	0.012
	5-10	0.48	0.008
	30-35	0.32	0.004
SV-17	0-5	0.44	0.008
	10-15	0.72	0.016
	15-20	4.72	0.016
	20-25	2.24	0.020
	35-40	3.20	0.012

Drill holes SV-10, 16, and 17 are located near the southeast corner of section 16.

Patented Claim Area

Four veins were drilled on the patented claims, each named for the claim name. Generally, the holes cross the veins on 25 foot centers normal to the vein (figures 5 and 6).

First, the 16 holes for a total of 1038 feet of hole was drilled on the Clipper vein, in 25 foot intervals along the vein. The following values were intersected in the vein by the indicated drill holes and one surface sample:

Sample No.	Interval	Oz/ton Ag
DH C-1	10-15	1.68
	15-20	1.44
	70-75	1.20
DH C-9	0-5	1.48
	35-40	5.28
Pit No. 2	0-5	2.12

Drilling was stopped in the Clipper area after a heavy rain saturated the brecciated vein which is located in a topographic low. Addittion drilling is planned when the area drains. No reserves are reported for the Clipper area.

The Merrimac vein is exposed for about 180 feet strike length at the northeast end of the claim. The outcrop is terminated at the south end by a major fault and at the north end by the claim end line which is also the property boundry. There is no doubt that the vein continues onto the property held by Cobb Resources of New Mexico. Ten holes totalling 365 feet were drilled in this area. The resulting reserves are reported in the reserve calculation.

The Triple-X vein was tested with 26 holes totaling 1714 feet. Three holes were drilled to intersect the vein down dip from the open pit which exposes the vein (figure 5). Next, the vein was followed to the northeast on erratic hole spacing. The reserve is reported and the attached cross-sections illustrate the drill hole intersections.

The largest drill footage was in the State of Maine vein area (figure 6) about 900 feet of the vein was drilled on 25 foot centers with 98 drill holes totaling 5477 feet. The holes were located to sample the veins at 25 foot intervals (cross section spacing) along the strike.

The strike of the State of Maine vein is N25E. This vein is offset by a N50E vein near the shaft and the decline. There is also a N70E vein about 150 feet north of the shaft and an isolated N50E vein about 750 feet northeast from the shaft on section S-4445.

The State of Maine vein continues to the north across the fence which is also the north end of the claim. The adjacent property is a state prospecting permit held under lease by the company known as Interstrat.

The attached cross sections illustrate the drill holes intersecting the veins and the planned open cut design. This design may change to include more ore tonnage with additional drilling which will give a more precise location, and grade to the cross veins. The open cut designs will interact with each other to make the most economical access from one area to the next and to eliminate some access ramps.

This type of open cut design will utilize a low strip ratio to produce the precious metals at the desired profit margin.

ORE RESERVE CALCULATIONS

State of Maine Shaft Area

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton Ag	Tons	Square Feet	Tons
Ramp		0	-	-	0	7730
	130 ft.					
S-5762		156	0.54		1815	
	12.5 ft.		1.08	420		1640
S-5861		750	1.61		1730	
	25 ft.		2.12	2230		4320
S-5960		1665	2.63		2920	
	20 ft.		2.66	3720		3590
S-7671		3360	2.70		1925	
	27 ft.		3.56	4530		4930
S-7767		1170	4.40		3005	
	23 ft.		3.00	2070		6590
S-7868		1260	1.59		4732	
Totals			2.88	12,970		28,800
W/20% Dilution			2.40	15,560		26,210
Strip Ratio					1.7:1	

State of Maine 70N Vein

Ramp		0	-		0	
	120 ft.	-	-	-		15,980
S-5152		585	3.15		3010	
	40 ft.		3.15	1730		8920
Totals			3.15	1730		24,900
W/20% Dilution			2.62	2080		24,550
Strip Ratio					11.8:1	

State of Maine No. 2

SECTION		ORE			WASTE	
Number	Distance Between	Square Feet	Ave. Grade Oz/Ton	Ag	Tons	Square Feet	Tons
Ramp		0	-	-		0	
	150 ft.		1.96		170		5670
S-0001		380	1.96			1020	
	12.5 ft.		2.25		290		1150
Face		240	2.53			1460	
	12.5 ft.		5.40		180		1540
S-1820		145	8.26			1860	
Totals			3.06		640		8360
W/20% Dilution			2.54		770		8230
Strip Ratio						10.7:1	
	12.5 ft.		11.67		580		2560
S-2115		630	23.25			2760	
	25 ft.		10.22		1550		4660
S-2216		1040	2.33			2270	
	12.5 ft.		2.33		960		2100
Totals			8.04		3090		9320
W/20% Dilution			6.70		3710		8700
Strip Ratio						2.4:1	

State of Maine 50N Vein

SECTION		ORE				WASTE	
Number	Distance Between	Square Feet	Ave. Oz/Ton	Grade Ag	Tons	Square Feet	Tons
Ramp		0	-		0		
	40 ft.						
			-	-			1200
S-7671		20	2.84			60	
	30 ft.		2.72		195		460
S-7767		155	2.70			350	
	100 ft.		2.86		940		3700
S-8187		100	3.10			650	
	25 ft.		2.52		300		2250
S-8288		225	2.26			1780	
	95		4.23		1770		10,380
S-0086		280	5.81			1170	
Totals			3.58		3205		17,990
W/20% Dilution			2.98		3850		17,345
Strip Ratio						4.5:1	

Ore Reserve Summary

	ORE		WASTE	Strip Ratio
	Tons	Grade oz/ton Ag	Tons	
State of Maine Shaft	15,560	2.40	26,210	1.7:1
State of Maine Shaft 70N Vein	2080	2.62	24,550	11.8:1
State of Maine Shaft 50N Vein	3850	2.98	17,345	4.5:1
State of Maine Vein No.2	3710	6.70	8,700	2.4:1
Smelter Vein	1110	2.91	7,120	6.4:1
Triple X Vein No. 1	1990	1.33	9,150	4.6:1
Triple X Vein No.2	3330	1.67	14,880	4.5:1
Merrimac Vein	3960	3.11	13,290	3.4:1
Totals	35,590		121,245	3.4:1
Weighted Average		2.89		

The 70N vein design resulted in an excessive strip ratio. Additional drilling may change the tonnage and grade to allow a new design to reduce the strip ratio.

The Triple X No.1 is not a high enough grade to be classed as mineable ore. The reason this tonnage and grade is included is that it is also an access ramp for Triple X No.2.

Excluding these two areas would reduce to total tonnage by 11.4%.

Smelter Vein

SECTION Number	Distance Between	ORE Square Feet	Ave. Grade Oz/Ton Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-		1190	
	120 ft.			-		5290
S-0045		470	4.52		720	
	23 ft.		3.81	650		1290
S-4490		300	2.70		780	
	12.5 ft.		2.70	280		720
Totals			3.48	930		7300
W/20%Dilution			2.91	1110		7120
Strip Ratio					6.4:1	

Triple X Vein No.1

Ramp		0	-		1505	
	80 ft.				-	4460
		375	1.60		1130	
	30 ft.		1.60	830		2510
T-0409		375	1.60		1130	
	30 ft.		1.60	830		2510
		375	1.60		1130	
			1.60			
Totals			1.60	1660		9480
W/20% Dilution			1.33	1990		9150
Strip Ratio					4.6:1	

Triple X Vein No. 2

SECTION Number	Distance Between	ORE Square Feet	Ave. Oz/Ton	Grade Ag	Tons	WASTE Square Feet	Tons
Ramp		0	-			-	
	80 ft.						5780
		470	1.74			1480	
	25 ft.		1.74		870		2740
T-0003		470	1.74			1480	
	50 ft.		2.06		1610		5720
T-0102		400	2.43			1610	
	10 ft.		2.43		300		1190
Totals			2.00		2780		15430
W/20% Dilution			1.67		3330		14880
Strip Ratio						4.5:1	

Merrimac Vein

Ramp		0	-			1110	
	120			-			4930
Fence		95	2.65			295	
	30		3.65		520		1140
Road		375	3.90			735	
	50		3.90		1380		2720
Road		375	3.90			735	
	60		3.89		1170		3750
Shaft		155	3.85			955	
	20		3.85		230		
		155	3.85			955	1410
Totals			3.73		3300		13950
W/20% Dilution			3.11		3960		13290
Strip Ratio						3.4:1	

CONCLUSIONS

The reserve calculations include conservative tonnage and grade figures. The total of 35,590 tons of 2.89 oz/ton silver is in an indicated catagory. The indicated reserve of tonnage and grade is computed partly from specific measurements, samples, and production data and partly from projection for a reasonable distance on the basis of geologic evidence.

An estimated 121,245 tons of waste must be moved which gives a strip ratio of waste ore of 3.4:1.

These figures can be adjusted to fit economic parameters by mining the most desireable areas to accomplish a given production schedule.

Two stockpiles of mined ore are at the crusher site. One pile is uncrushed ore which has been leached and contained about 35,000 tons of 4.85 oz/ton silver before 40% was extracted. The other pile contain's 2200 tons of 3.05 oz/ton silver. Both of these reserve piles can be processed or they can be used to blend with mined ore.

RECOMMENDATIONS

1. A few thousand tons of the uncrushed stockpile should be processed and additional samples be taken from the newly exposed material.

2. Sample drilling should continue during the above pilot test.

3. The base mapping and ore control plans and sections should continue to include the areas being drilled. The geology in the possible production areas should be plotted.

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2. Sample drilling should continue during the above pilot test.
3. The base mapping and ore control plans and sections should continue to include the areas being drilled. The geology in the possible production areas should be plotted.
4. The limits of the open cut to start mining should be ~~taken~~ identified in the field in and mining commence at the discretion of management.
5. The Randolph vein on the state mineral lease should be valuated by a study of work performed by previous leasors, and by mapping and sample drilling. The information gathered by a previous leasor is in our files. This program can start as soon as the drill is available. A week lead time to valuate previous work and to survey will be necessary.
6. The Horne claims need about 15 drill holes along the northeast mineralized structure~~, so a decision can be made whether or not the monthly payments to hold the claim should continue~~.
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updated 1-30-85

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