(134)
Item 27

Great American
Industry Co.

Keegel, Clyde
geologist

702
329-5128
Las Vegas
Home
702
382-4542
735 8526
Home

355 Gross
Beegin apt
201

Silver
Yeild

702
382-4542
Home

Great American Industries

Crofoot

(134)
Item 27

McDermit

532-8700

Home 873-2575

Find out
Majà
Potential

C. P. KEEGEL ENGINEERS

MINERAL APPRAISAL
PRODUCTION MANAGEMENT
METALLURGICAL DESIGN

C. P. KEEGEL

TELEPHONES: 735-8526
4542 382-1358
1830 PEYTON DRIVE
LAS VEGAS, NEVADA

Phone 1.01
Postage 2.10

starter cards Josefa prospect sent 4

(134)
Item 27

JOSEFA

slacking and phone call 12

			hrs	day
August	20	office	8	1
	30	McDermitt		
		with Keegel	13	1
	31	office	9	1
Sept	1	"	4	
	9	"	8	2
	10	"	4	

7.50
5
37.50

Josefa Prospect near Calderwood Mine, McDermitt, Nevada

37.50 / 6 = 6.25

(over.)

expenses

9-9-	68	Reno Blue Print	4.40
		Cordero Thesis copying.	12.60
		typing	

From a Thesis by Donald Lee Curry.
University of Oregon June 1960
Geology of the Cordero Quicksilver Mine.

55
134
Item 27

3450 0024

CONCLUSIONS

The series of Miocene rhyolite pyroclastics, which are now apparently restricted in distribution to the McDermitt basin, have so far been the only rocks in the Cordero mine area from which there has been any significant cinnabar ore production. Farther to the north, cinnabar ore at the Opalite and Bretz mines was mined from Miocene lake beds (Yates, 1942). In the Cordero mine area, lake beds appear to be very limited in their distribution, and may even be younger than those to the north. Therefore, the most favorable rocks for the development of cinnabar ore deposits are the rhyolite pyroclastics.

The rhyolite pyroclastics crop out locally in an alluvium-covered strip about one mile wide northwest of the south-marginal basin fault zone (see plate 1), which extends at least two or three miles in both directions from the Cordero mine. The known cinnabar mineralization is largely confined to this strip. This strip is probably the most favorable part of the area for future exploration.

The search for ore has been a continuing phase of the Cordero Mining Company operation, and much drilling has been done, both with churn and core drills. Much of their exploration drilling has been confined to the main mine, where the best ore has so far been found. Underground exploration is done by driving exploratory headings, usually following a determination of the most favorable ground by

VEYS

core drilling. Surface resistivity and magnetometer traverses have also been used to delimit areas of favorable ground.

The Cordero Mining Company has undoubtedly drilled below the deepest workings (presently about 700 feet) to determine the characteristics of the deeper ore, but they may not have drilled deep enough to determine the bottom of the ore. The bottom of the permeable pyroclastic rocks will determine the maximum depth at which tuffaceous-type ore deposits may exist. Permeability was necessary at the time of ore deposition, both to allow penetration by the ore solutions and to enable the pressure release believed necessary for ore deposition. Permeability could have been low if rhyolite flows or welded tuffs are predominant at greater depths. As neither the thickness of the deep pyroclastic rocks nor their permeability are known, the depth at which the ore may bottom is not predictable. It is possible that the ore deposits may change from their present characteristics in the deep mine workings to different types of occurrence at greater depth. Deeper deposits might also occupy different rock types. However, the ultimate depth limitation is where the temperature and pressure of the hydrothermal solutions was too great to allow cinnabar mineralization.

The M rhyolite is reportedly not located at its expected position south of the M fault in the northeastern extremities of the 511 drift (see plate 3). It is believed that this rhyolite may have been displaced about 375 feet southward along the B fault. (See page 32.) Additional ore deposits might be found in the tuffaceous rocks of this area, especially if the porphyritic andesite presently exposed in the Harper pit formed a barrier over the rhyolitic rocks at the

time of the hydrothermal activity. Resistivity or magnetometer traverses may help determine the most favorable part of this area for further drilling.

Another area at the Cordero mine that justifies further exploration is immediately southwest of the underground workings. (See page 33 and plate 3.) The northwesterly trending fault shown at the southwestern end of the 400 to 600 levels has offset the rocks of this area, but it is possible that tuffaceous rocks similar to those in the mine workings will be found in this area. This could be a post-mineral fault; if this is so, a small ore body just east of the fault, on the 600 level, may be offset. The most probable area to explore for the displaced rocks in the area of this ore body is downward and/or southward.

The cinnabar-mineralized areas of the Cordero mine northeastern workings and the Josefa prospect are favorable areas for further exploration (see plate 2). The porphyritic andesite exposed at the northeastern workings may be underlain by rhyolite pyroclastics. The Josefa prospect has some low-grade cinnabar mineralization in the tuffaceous rocks at the eastern end of the workings. The faults and the thin tabular silicified zone at the prospect are nearly vertical, which has not allowed sufficient impounding of ascending quicksilver-bearing solutions. However, the area is sufficiently complicated by faulting to make at least local changes to favorable structures possible.

Yates (1942) has emphasized prospecting of the areas adjacent to silicified rock exposures. This is appropriate advice. However, silicified rock outcrops have undoubtedly been prospected many times

in the past, and most other forms of simple surface prospecting, such as panning of the sediments in stream washes, have likely been exhausted in the more favorable area. Geophysical prospecting and exploration drilling are methods that will be more likely to result in the future discovery of ore deposits.

Some areas in which geophysical methods might prove productive are locations of probable fault intersections, especially in the known mineralized area from the Josefa mine to the ridge southwest of the Cordero mine (see plate 1). It is also possible that there may be some silicified knobs buried by alluvium just to the east, or down-faulted side of the reverse fault east of the Josefa mine. Conversely, erosion could have removed silicified outcrops from the western, or upthrown side of this fault; thus, hydrothermally mineralized, but unsilicified material could underlie the present alluvial mantle. It is possible that the Josefa prospect typifies this situation.

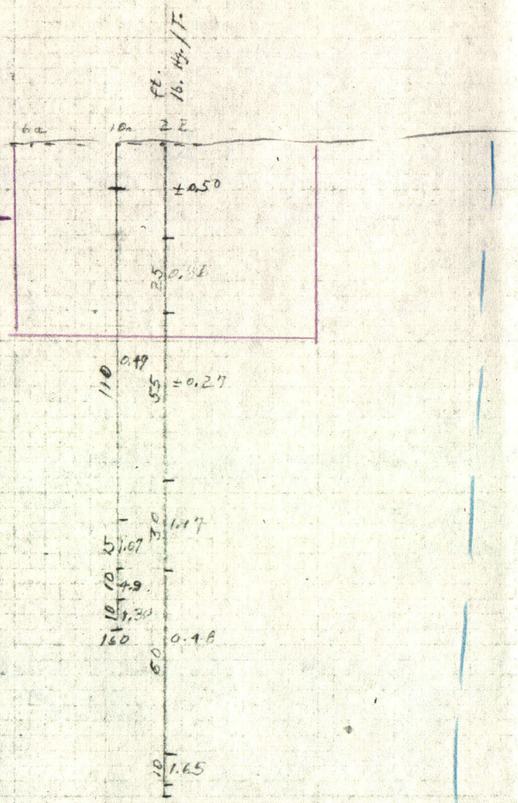
The belt of pyroclastic rocks exposed northwest of the south-marginal fault zone is promising with regard to the possibilities for the discovery of good ore deposits, especially due to the existence of cinnabar mineralization in a broad area from the Josefa prospect to the Cordero mine. However, the fact that the only significant production came from the main Cordero mine workings may not be coincidental, because the mine is close to the probable main channelway through which the hydrothermal solutions ascended.

134
Item 27

A

4700'

4600'



Looking N 8°E

A

G

JOSEFA
SECTION G-G'
1" = 50'

G'

(134)
Item 27

A

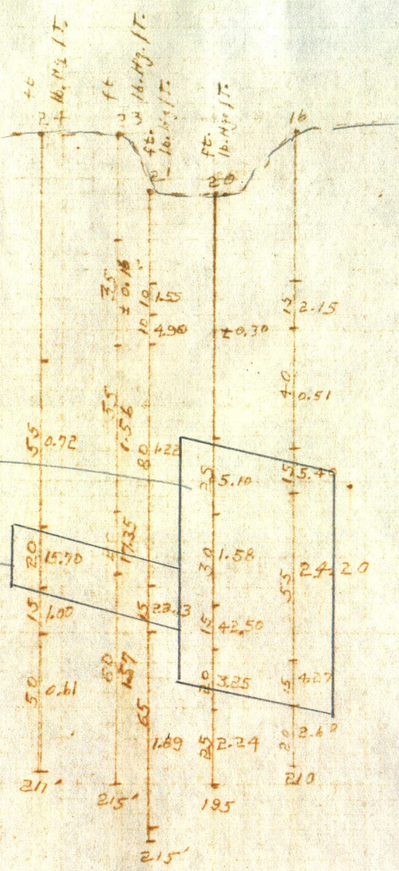
4700'

4600

50 x 80 = 4000 sq ft

55 x 20 = 1100 " "

4100 sq ft



F

Looking N 8° E

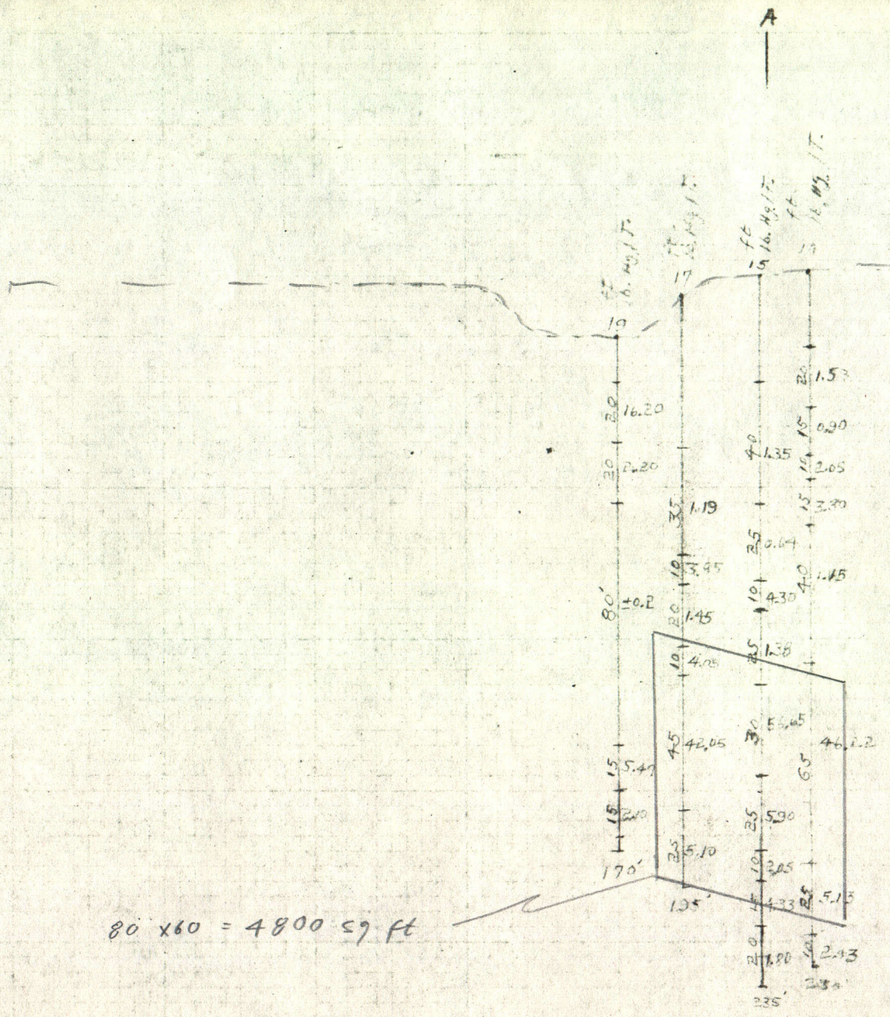
A

SECTION F-F'

1" = 50'

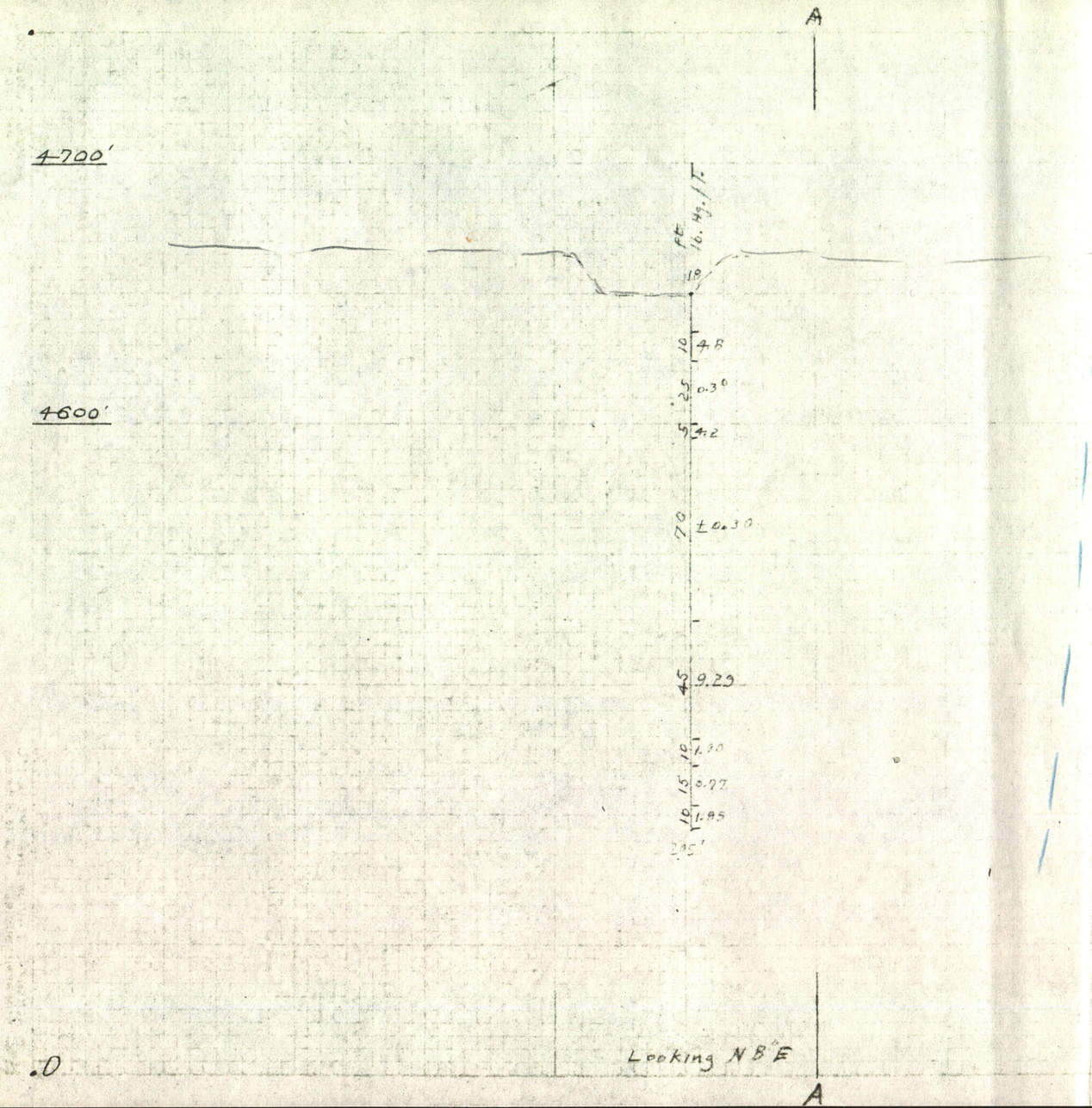
F'

(134)
Item 27



JOSEFA
SECTION E-E'
1" = 50'

E'



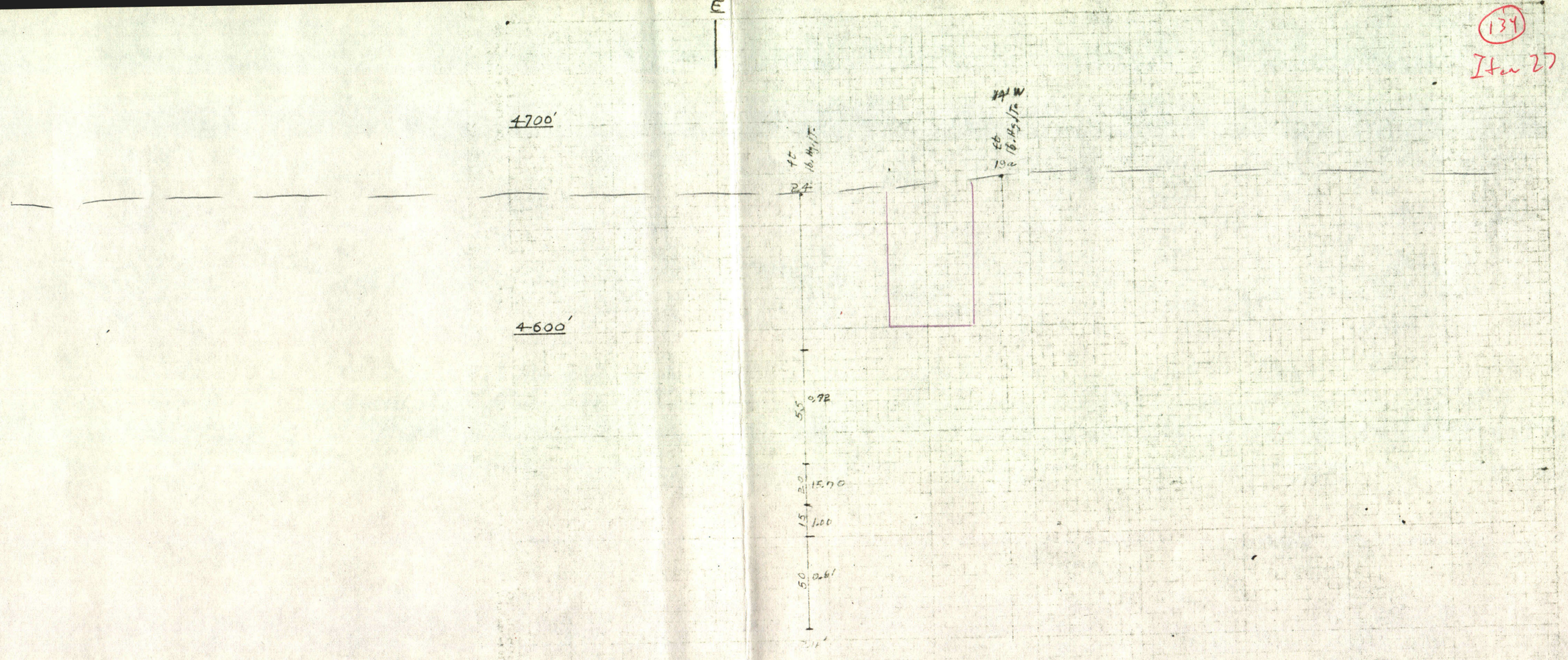
Projected Incline fault

JOSEPH
SECTION D-D'
1"=50'

D'

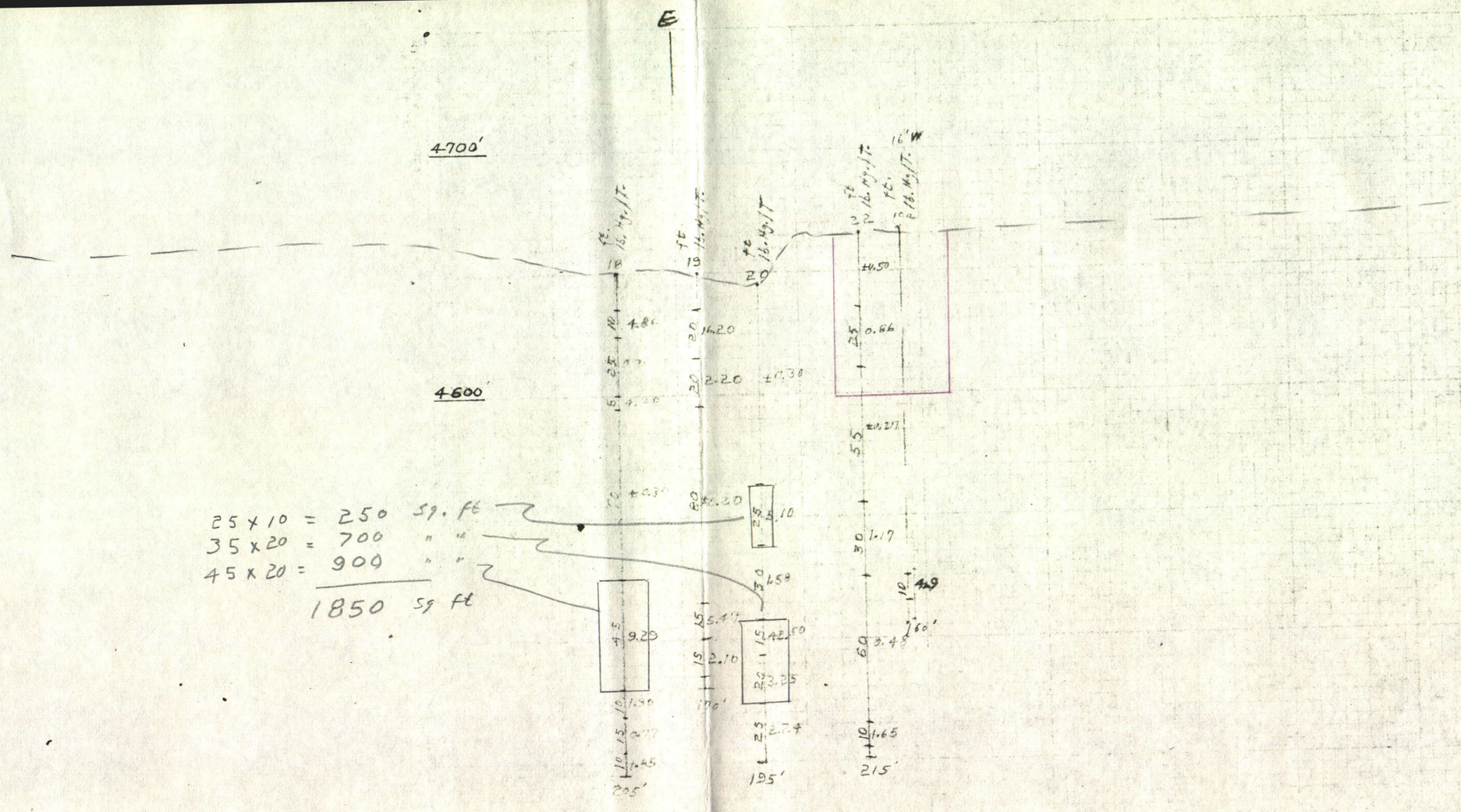
(134)

Item 27



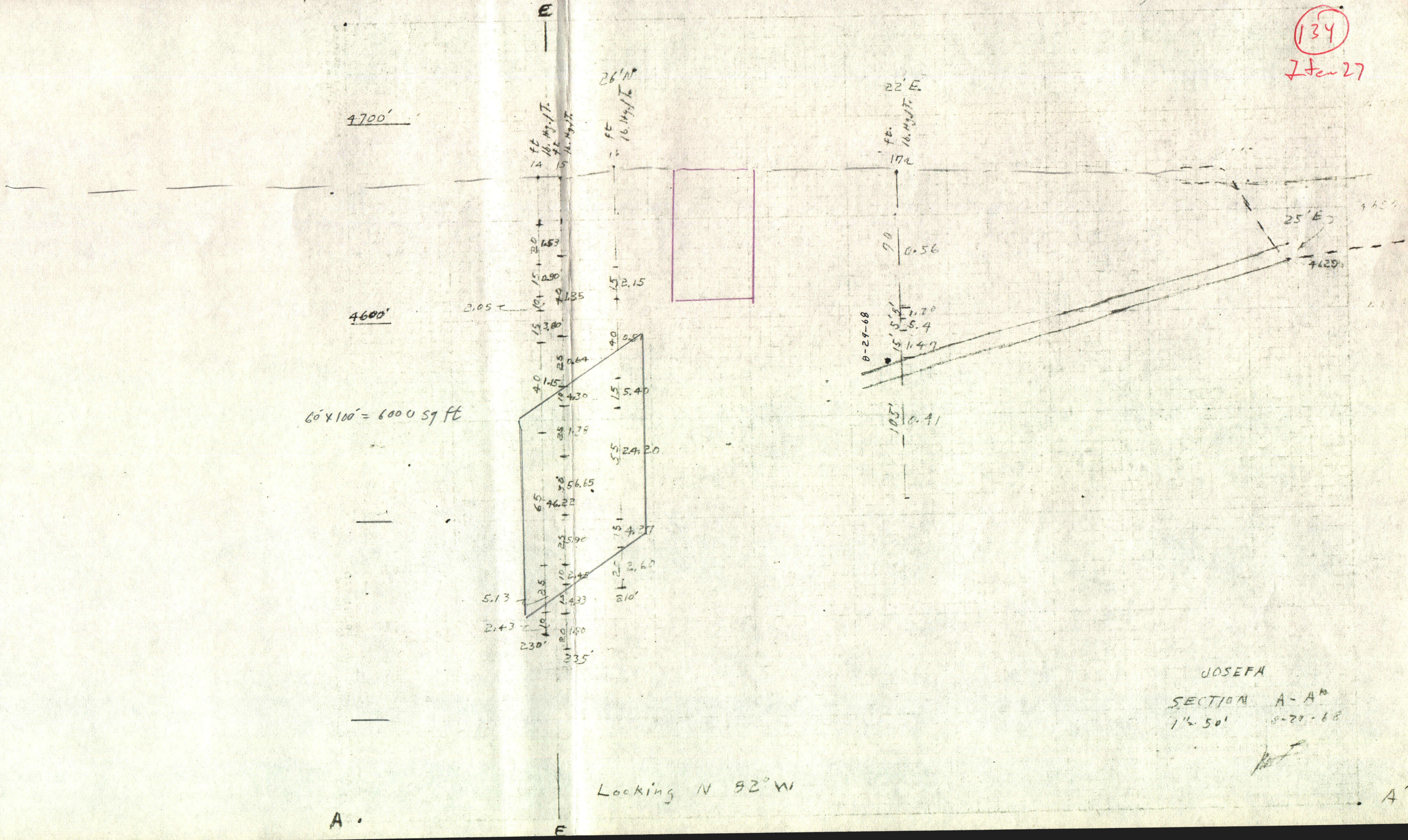
JOSEFA
SECTION C–C'
1" = 50'

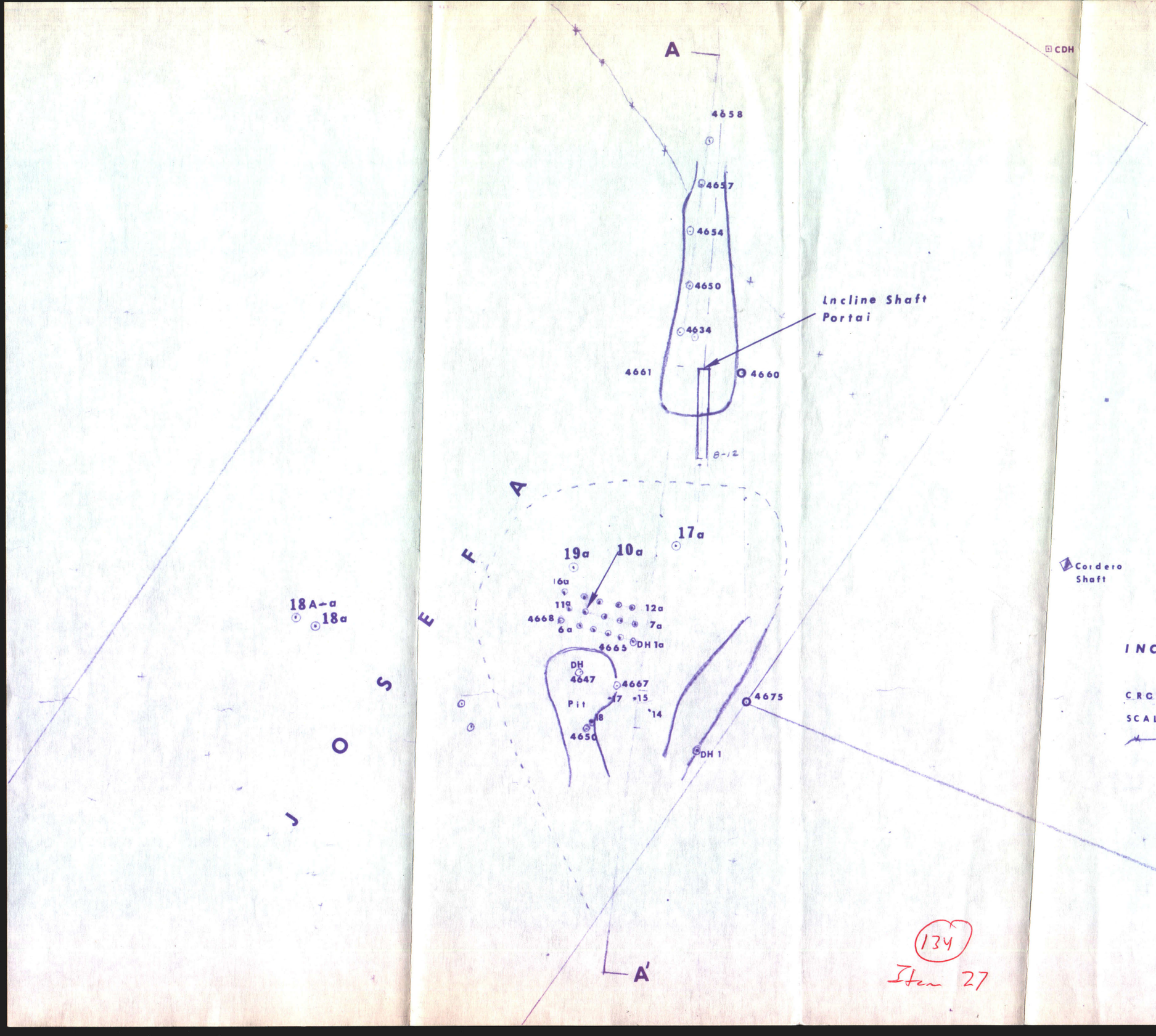
(134)
Item 27



JOSEFA
SECTION B-B
1" = 50' 5/24/68

B


134
Item 27
4700'
4600'
26' N
22' E.
25' E
60' x 100' = 6000 sq ft
Looking N 52° W
JOSEFA
SECTION A - A'
1" = 50'
8-29-68
A
A'
E
E



PLAN

INCLINE SHAFT SITE JOSEA MINE

CROFOOT PROJECT — MCDERMIT NEV

SCALE 100'±1" 7/68

Restivity Limit

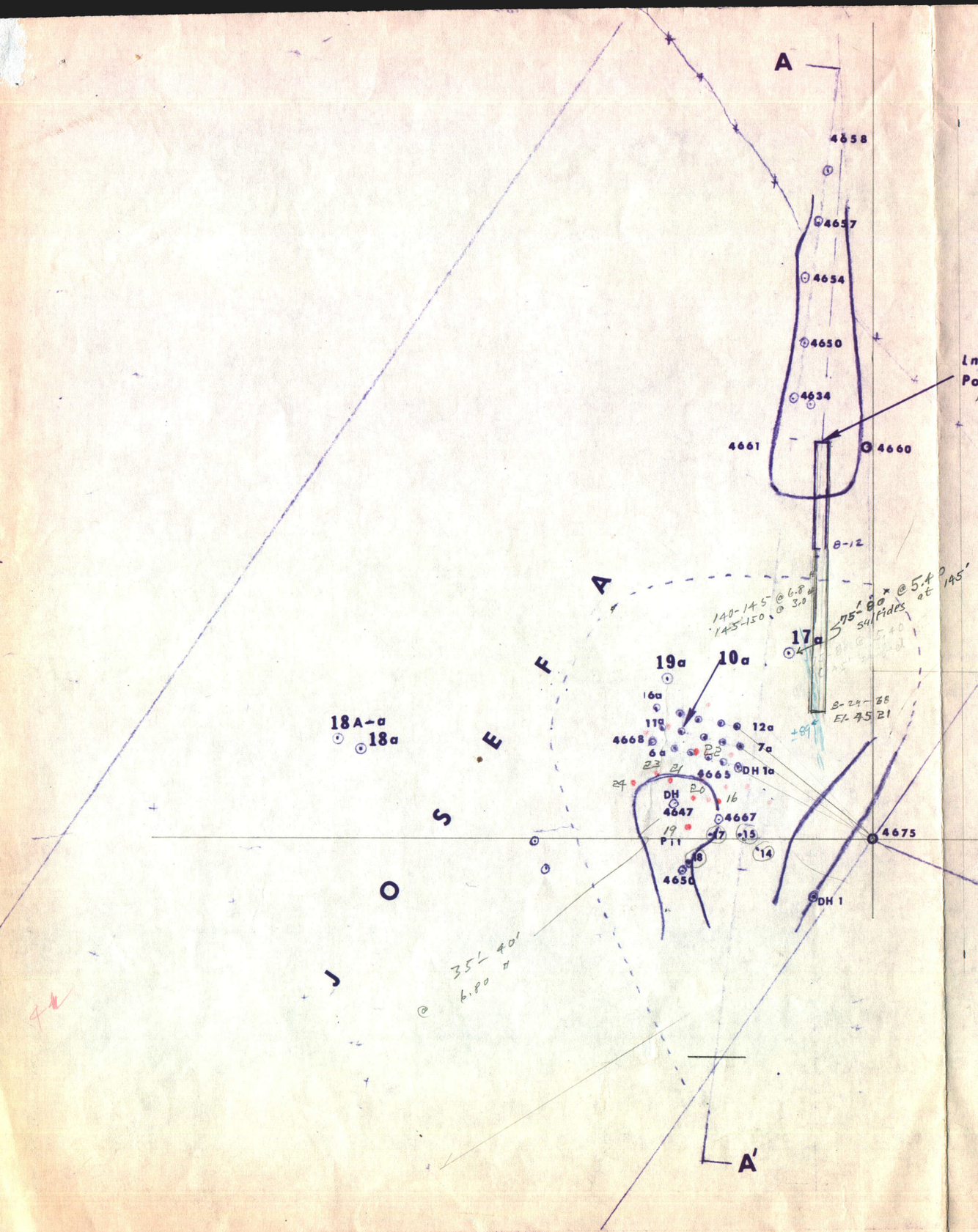
C. P. KEGEL ENGINEERS
1721 South 14th Street
Las Vegas, Nevada

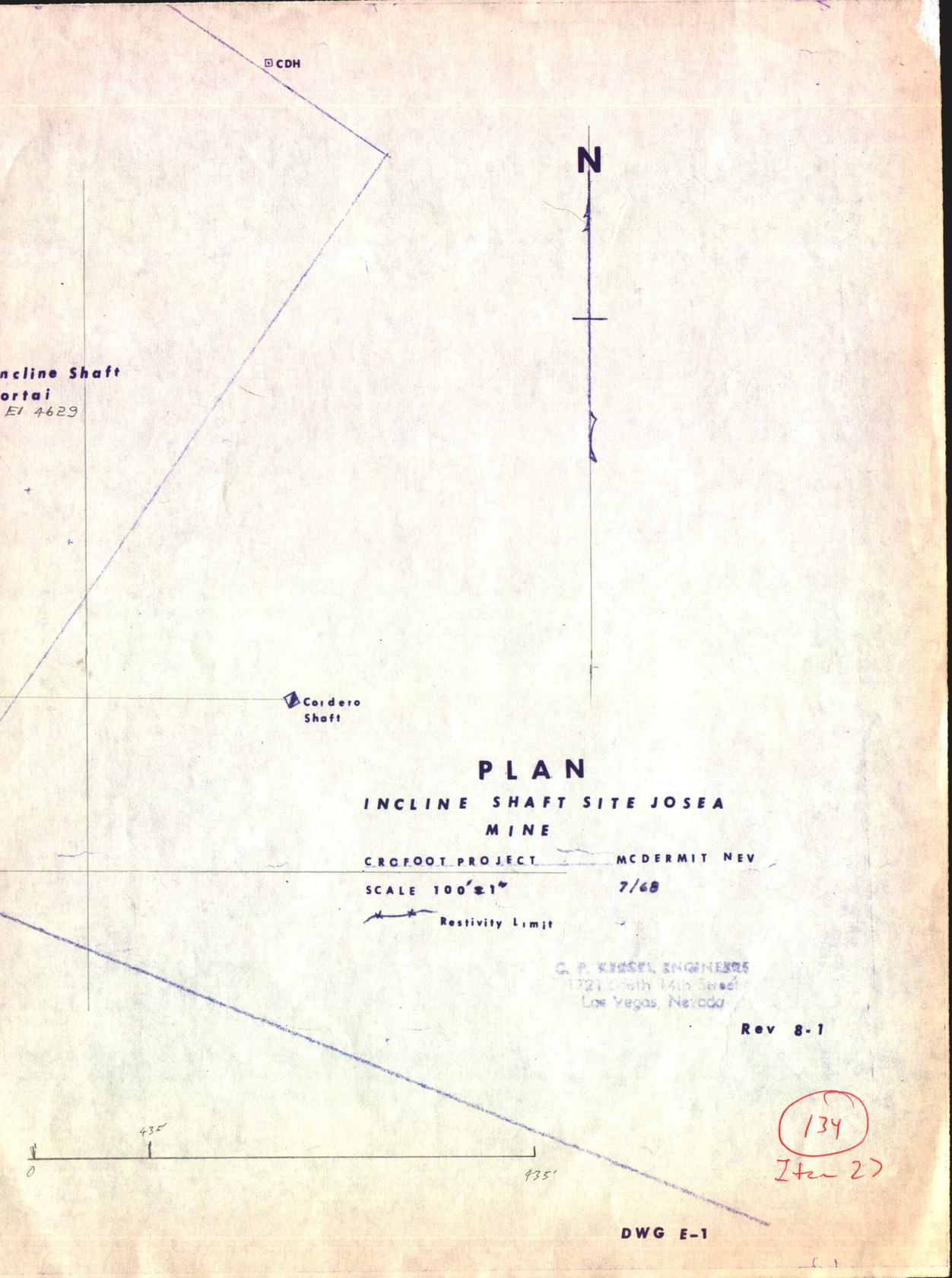
Rev 8-1

DWG E-1

134

Item 27





PLAN

INCLINE SHAFT SITE JOSEA MINE

CROFOOT PROJECT — MCDERMIT NEV

SCALE 100'±1" — 7/68

Restivity Limit

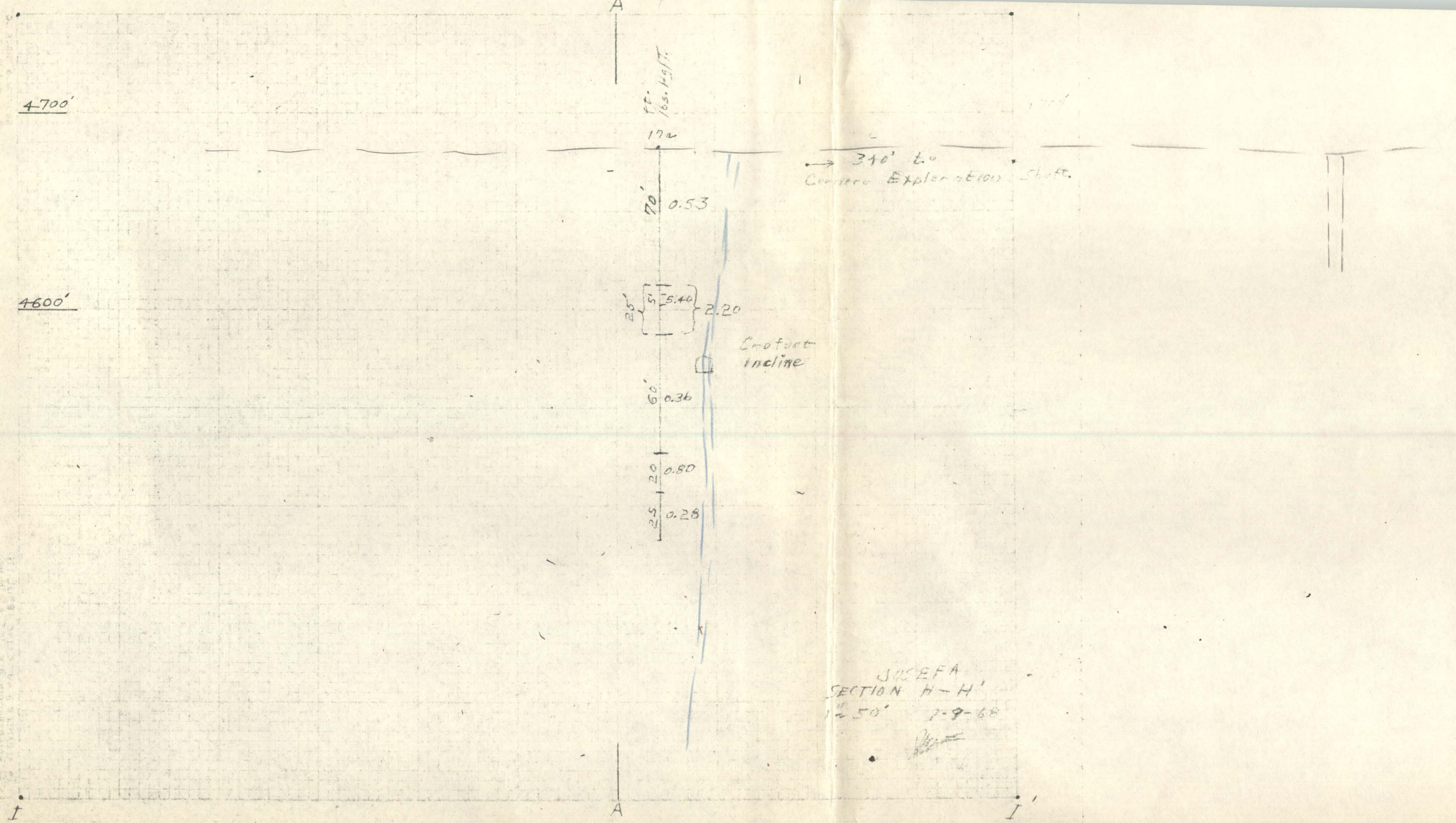
C. P. KIESEL ENGINEERS
1721 South 14th Street
Las Vegas, Nevada

Rev 8-1

134

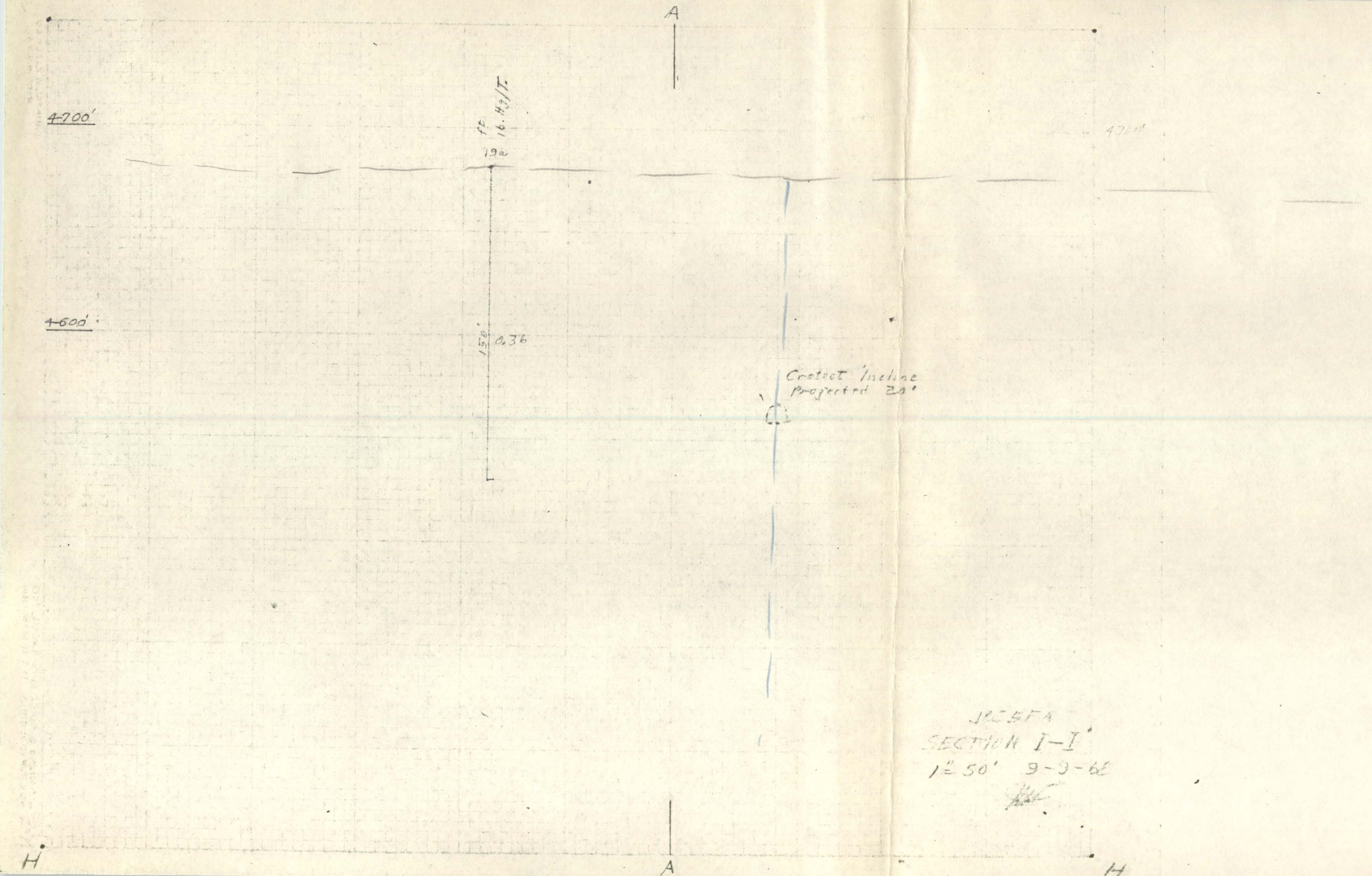
Item 27

DWG E-1


4700'
4600'
A
17a
→ 340' to
Exploration Shaft
70' 0.53
25' 5' 5.40 2.20
Crofoot incline
60' 0.36
20 0.80
25 0.28
JOSEFA
SECTION H-H'
1" = 50' 7-9-68
I
A
I'

134
Item 27

(134)
Item 27



JCC5FA
SECTION I-I'
1" = 50' 9-9-65

C. P. KEEGEL, ENGINEERS
Mineral Appraisal - Production Management - Metallurgical Design

1721 South 14th Street
Las Vegas, Nevada, 89105
702 - 735-8526
702 - 382-4542

134
Item 27

August 14, 1968

Mr. J. McLaren Forbes
2275 Mueller Drive
Reno, Nevada, 89502

Dear Mr. Forbes;

You will please find enclosed one set of logs, a complete duplicate of my file, on drilling previously done on the Josefa Claims, the Manera report on a resistivity survey, drawing S-1, showing the claims and the location of the drill holes as shown by Mr. Bottemly, a plan showing the topography in the area, and sketches E-1 and E-1b.

Plan E-1 shows the position of some of the prior holes (numbers without letters); the drill holes with small numbers followed by "a" are holes intended to explore only the upper horizon and were drilled to 60' for possible open pit ore. The larger numbers are recent holes directed to contact the main or lower ore.

Drill holes 18 could not be completed by the driller due to top ravel and are only about 20' in depth. Drill hole 10 entered the sulfide zone at about 140 showing 6.8 lbs./ton 140-145, and 3 lbs/ton 145-150. It was only carried to 160' due to pressure to complete the remaining short (60') holes. Drill hole 17 showed ore at 75-80; 5.40 lbs./ton but nothing more to completion at 165'. We have not recieved reports on hole 19. I may mention that hole 17 entered the sulfide zone at about 145'.

As I stated, because I was not satisfied with the way drilling was done, I decided to discontinue further work until such time as we have proper equipment and a good operator.

Returned logs and data 2-30-68

The holes intended to explore locally for open pit sources showed little mercury. The hole in the pit indicated 6.80 lbs./ton 35'to 45'. Drill hole 1 in this group resulted in 9.2 lbs/ton 0-5 and an average of 3.6 lbs/ton 0 to 30'; the remainder of the 16 holes in this pattern were under 1 lb./tom.

Logs of these holes have not been prepared since I am awaiting assay reports on drill hole 19 before a log is presented. I will be very glad to forward these data to you when complete if you desire.

Mr. Crofoot advises that his furnace operation from the small pit is recovering about 2 lbs./ton or better.

Unfortunately, they did not have prints made of the sections which I made from the prior drilling. You can, of course, quickly construct your own from the logs and in the meantime, I will have prints made to morrow and forward them to you.

If I can supply any further data, please advise.

Very sincerely yours,

C.P.Keegel

CPK:ar

(134)
Item 27

September 10, 1968

Mr. L.H. Hart
Vice President
Guggenheim Exploration Company, Inc.
120 Broadway
New York, N.Y. 10005

Dear Mr. Hart:

SUBJECT: Josefa Prospect near the Cordero Mine.

Attached are work sheets showing:

1-

1. The projection of the Incline fault.
2. Outlines of the mineralized zones from which the tonnages and grades were calculated.
3. Projections showing a possible extension of the ore zone, from the drilled area to the Incline fault.

The above, together with the explainations I gave you by telephone, should explain my reasons for assuming that the better mineralization could extend eastward toward the Incline fault.

I gathered from Curry's thesis that some of the Cordero ore was adjacent to the M fault, and that some of it was a short distance away. If I remember correctly, his section shows one of the larger stopes as being near the fault but not against it. Such varying locations of ore bodies, with respect to the fault, could cut down on the chances of mineralization extending all the way to the Incline fault.

Holes 14, 15, and 16 do have good intercepts, as shown on section A-A'. Although we have no further information, to the east, one would expect the mineralization to grade off as it does on the west, or be stopped by some structure such as the Incline fault.

There is a map (DWG, S-1, 1"=100') enclosed that shows drill holes along the Josefa-Josefa # boundary, in or near the cut shown on the surface map, and near the projection of the Incline fault. We have no data regarding these holes. Probably they were shallow. This map also shows drilling on the Josefa #, around the Josefa 3 shaft and to the north to the north side line, extending toward the Cordero exploration shaft. Mr. Keegel informed me that these holes were shallow and low grade, probably below 2 pounds Hg. per ton

I have revised my tonnage calculations and now have for and average, calculated on both sections and plan, the following:

27,800 tons at 23.18 lbs. Hg/ton with a value of

$3,866,400 using Hg at $6/ton.

As you say, regarding the northerly low restivity area, "it would be utterly impossible to predict the merits of this prospect". I'm afraid that drilling is the only way to determine its merit.

Very truly yours,

J.McLaren Forbes

(134)

Item 27

September 1, 1968

Mr. Lyman H. Hart
Guggenheim Exploration Co.
120 Broadway
New York, N.Y. 10005

Dear Bill:

I am enclosing data that I have gathered together regarding the mercury property next to the Cordero mine at McDermit, Nevada.

The geophysical report indicates two areas of low resistance. One area covers the drill holes on the Josefa claims, where Crofoot has his inclined shaft, and the old furnace.

The other area of low resistance is north of the Cordero mine. It was considered to be the best prospect, according to the geophysist. Mr. Keegel tells me that they are planning on drilling this anomaly at once.

I have made some additions to the geophysical maps which may at least clarify prospect locations, etc.

I am including a plan and set of sections I have made up for the Crofoot project which is on the Josefa claim. I am also putting in Crumy's thesis on the Cordero mine area, and have made some notations of my own, on his maps.

As you will see the Crofoot project is in an zone of faulting which is related to, or is possibly an offset portion of, the Cordero fault system.

The best intercepts are on the drill holes to the east, 14, 15, 16, and 17. The good values could continue eastward to the projection of the fault exposed in the face of the Crofoot incline shaft. More drill holes are certainly needed to see how far the mineralization developed by these good intercepts extends to the east.

Mr. Keegel was not too happy regarding how the samples were taken for these drill holes. However I feel that he thinks the values indicated are somewhere within reason. Certainly a check hole or two should be drilled to prove or disapprove the sampling.

The Crofoot project inclined shaft will come in on top of the better mineralization. This will not be too good from a mining stand point. Mr. Crofoot has a nice looking furnace set up. Two small Gould typperotarys, 45 and 55 feet in length, with a total capacity of about 80 to 90 tons per 24 hours. His condensing system appears to be made of mild iron or steel and may not stand up too well as soon as he starts running ore with much suffide. The drill logs indicate that the good ore contains considerable pyrite. To-date his small surface operation has been recovering about 2 pounds Hg. per ton.

You will note that on my Josefa surface map I have averaged the intercepts below 90 feet, that carried more than 3 pounds per ton mercury. The grade for all of these intercepts averages, over a length of 520 feet, 22.7 pounds per ton mercury.

Very rough tonnage calculations (not checked) have been made using both east-west and north-south sections. The results are as follows:

SECTIONS	TONNAGE	GRADE lbs. Hg/ton.	$ at $6.00/lb.of Hg.
N-S	25,200	23.14	3,498,700
E-W-	36,560	23.22	5,091,300
Average	30,880	23.18	4,285,000

I would say that with careful planning this deposit might be mined with a 5-1 or greater stripping ratio.

If the grade can be proven to hold up, that indicated above, this deposit is worth going after.

I am writing this Sunday morning and will get it in the mail this afternoon, hoping that you will get it Tuesday. I shall telephone Wednesday morning.

I had only about one hour to look over the property with Mr. Keegel. When we got there the Crofoot incline had been shut down by the mine inspector. This was because they were using a diesel powered loader underground, without obtaining proper approval.

Sincerely,

J.McLaren Forbes

(134)
Item 27

GUGGENHEIM EXPLORATION COMPANY, INC.
120 BROADWAY
NEW YORK 5, N.Y.

LYMAN H. HART
VICE PRESIDENT

September 3, 1968

Mr. J. McLaren Forbes
2275 Mueller Dr.
Reno, Nevada 89502

Dear Mr. Forbes:

This is to acknowledge receipt of your letter of September 1st with attachments, all with reference to the mercury property near the Cordero Mine, which was presented to us by Mr. Walter Mack, and which you have recently visited.

I note that you have averaged out a grade to apply to what you consider to be reasonably sure mineralization. I would appreciate, however, some further comments as to what you consider the chances are for substantially increasing the ore resource. You do mention that good values could extend eastward to the Crofoot inclined shaft. I gather you do not feel that extensions in other directions are very promising. Also, I am wondering why you feel the trend is east-westerly.

From a preliminary look at the data available, it would appear that the mineralization in the main Cordero Mine is related to a series of northeasterly faults. The other area of activity by Cordero to the northeast appears to be along the projection of this same trend. There does not seem to be any visible exploration for the placement of the Cordera exploration shaft within the acute angle between the Josefa claims, but you do show a strong fault trending northwesterly within close proximity to the northeast area and the exploration shaft area.

On a structural basis, if faults mean anything, I would be more inclined to jump to the conclusion that exploration northerly and southerly from the Josefa discovery area would represent the best prospecting targets. I am sure you have some reason for your comments, but I am not able to recognize the features behind your reasoning.

If the northerly low resistivity area held by the Mack group has any value, it would seem to be related to the intersection of quite a combination of major faults and at this point I suppose it would be utterly impossible to predict the merits of this prospect.

Very truly yours,

L. H. Hart

LHH:ES

A

4700'

4700'

ft. 165.49/T.

17a

→ 340' to
Cordero Exploration Shaft.

70' 0.53

4600'

25' 5' 5.40 } 2.20

Crofoot
Incline

60' 0.36

20 0.80

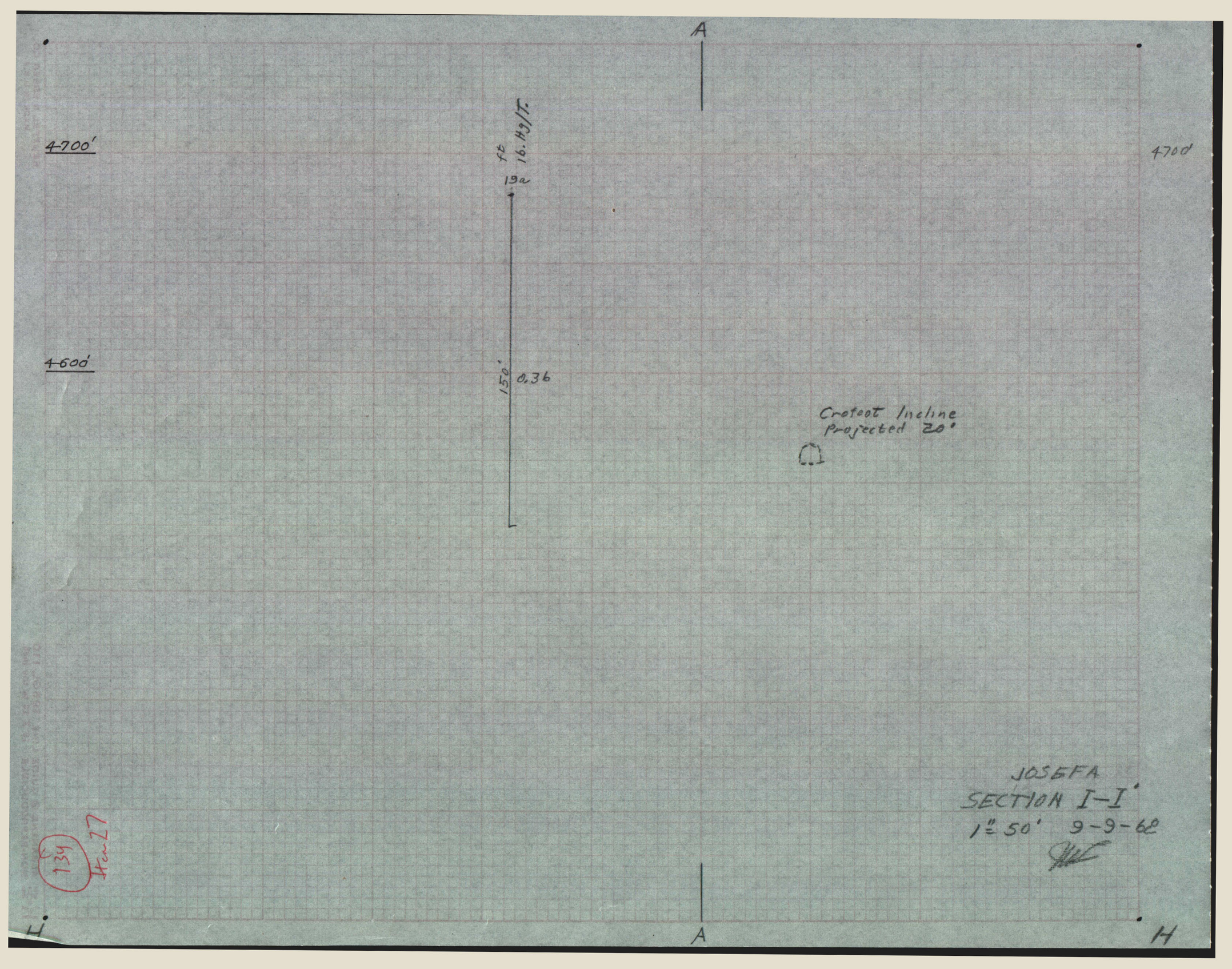
25 0.28

JOSEFA
SECTION H-H'
1"=50' 9-9-68

(134) Item 27

A

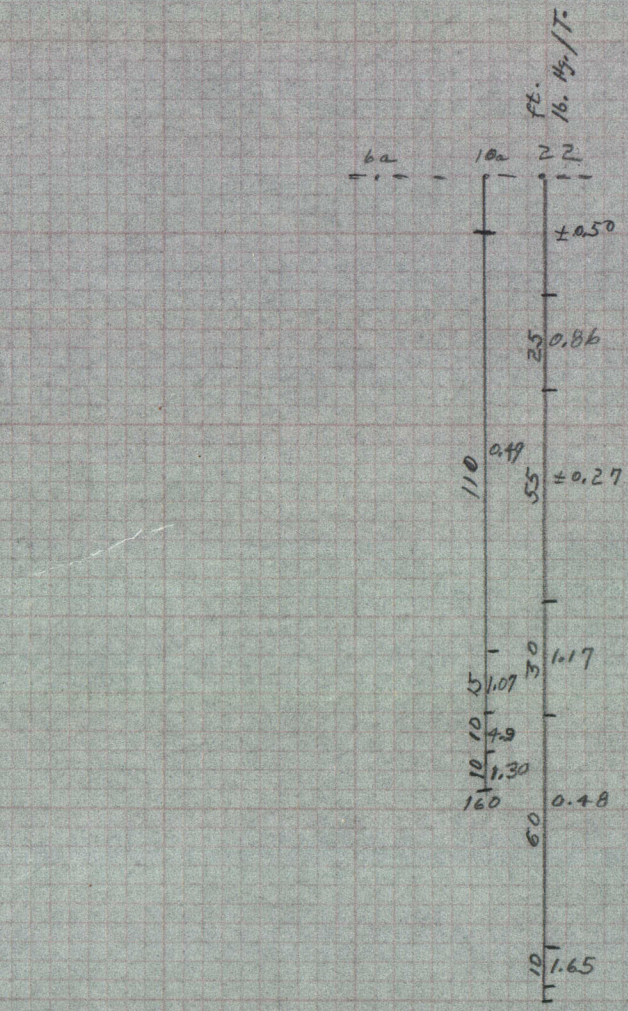
I'


A
4700'
4700'
ft
16. Hg/T.
19a
4600'
150'
0.36
Crotoot Incline
Projected 20'
JOSEFA
SECTION I-I'
1" = 50'
9-9-62
A
H
H
134
Item 27

A

4700'

4600'



Looking N 8°E

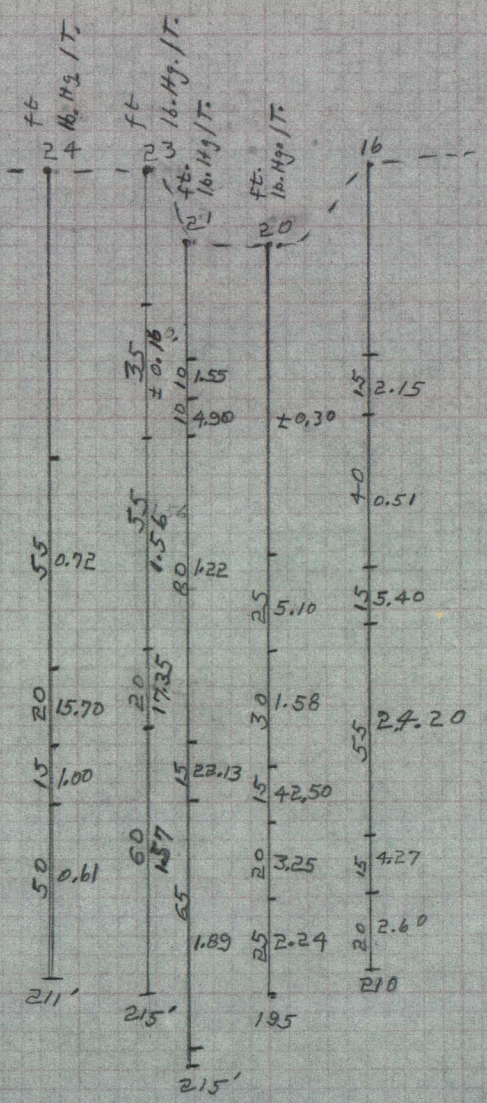
A

G

G'

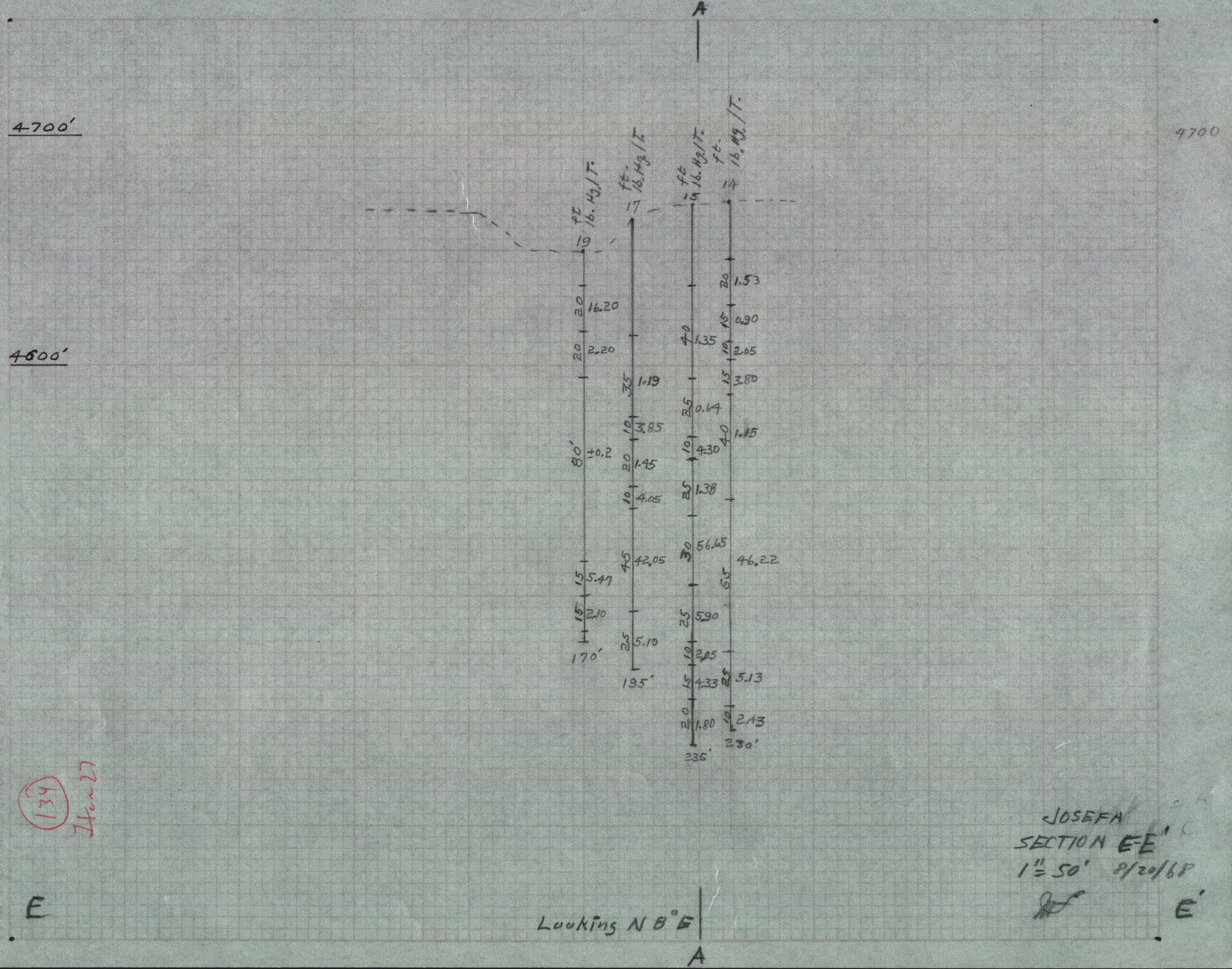
JOSEFA
SECTION G-G'
1" = 50' 8-20-68

(13)
Item 27



(134) Item 27

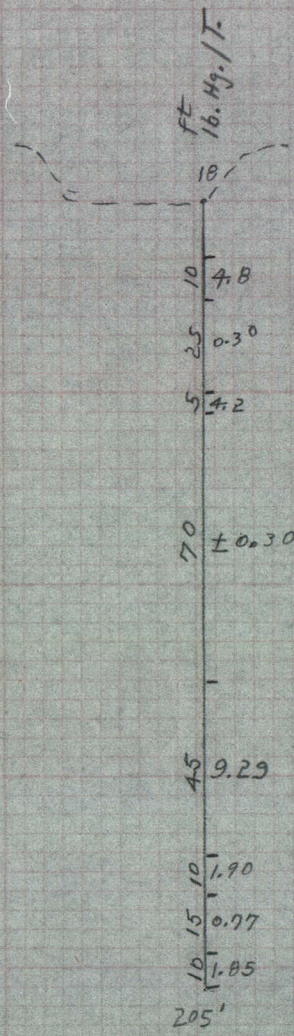
JOSEFA
SECTION F-F'
1" = 50' 8/20/68


A
4700'
4700
4600'
ft. lb. Hg/T.
19
17
15
14
20 16.20
20 2.20
80' ±0.2
15 5.47
15 2.10
170'
35 1.19
10 3.85
20 1.45
10 4.05
45 42.05
25 5.10
195'
40 1.35
35 0.64
10 4.30
25 1.38
30 56.65
25 5.90
10 2.05
15 4.33
20 1.80
235'
20 1.53
15 0.90
10 2.05
15 3.80
40 1.15
65 46.22
25 5.13
10 2.43
230'
134
Item 27
JOSEFA
SECTION E-E'
1" = 50' 8/20/68
E
E'
Looking N 8° E
A

A

4700'

4600'



4700

4650

4600

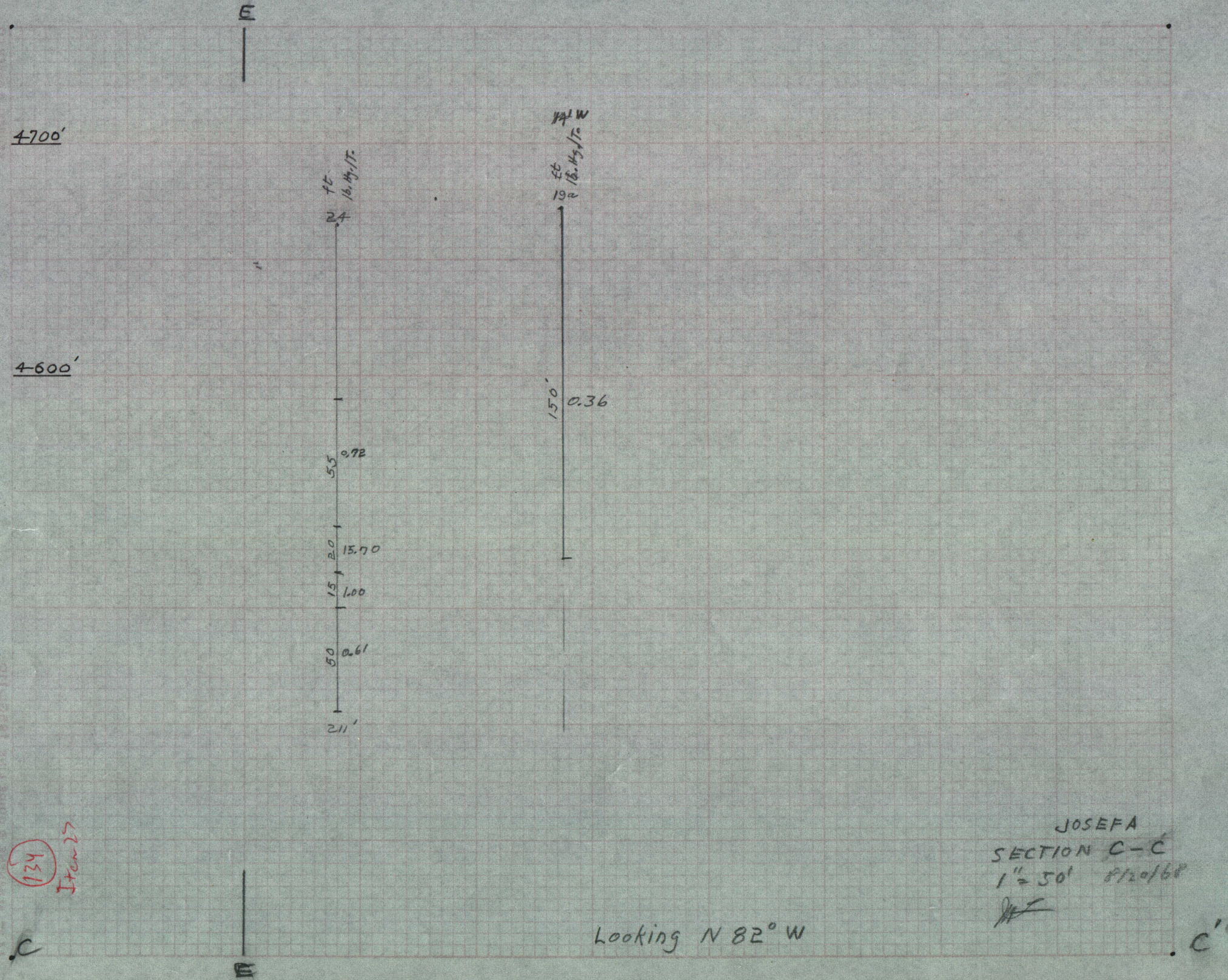
JOSEPHA
SECTION D-D'
1"=50' 8/20/68

Looking N 8° E

D'

.0

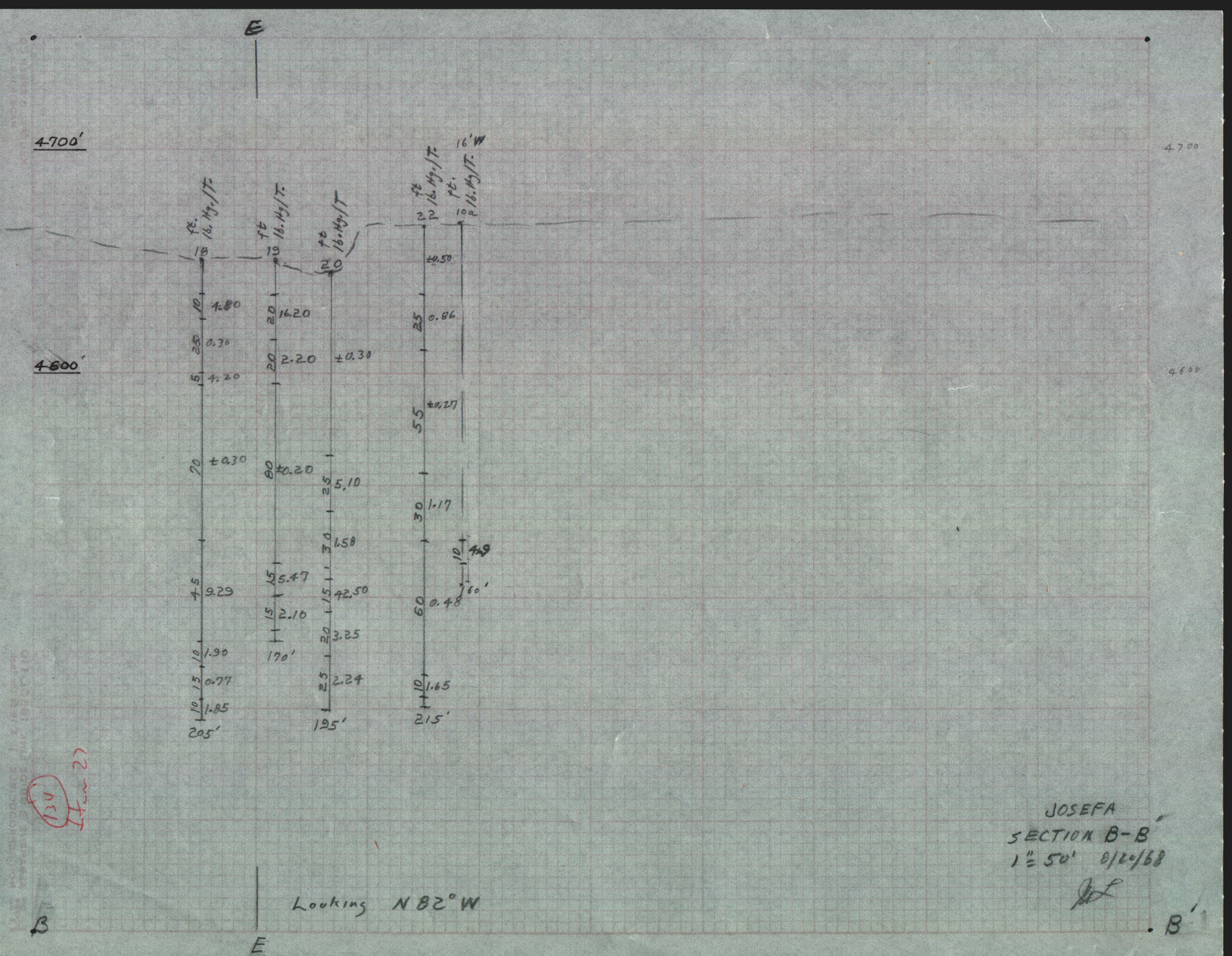
(134)
Ithaca 27

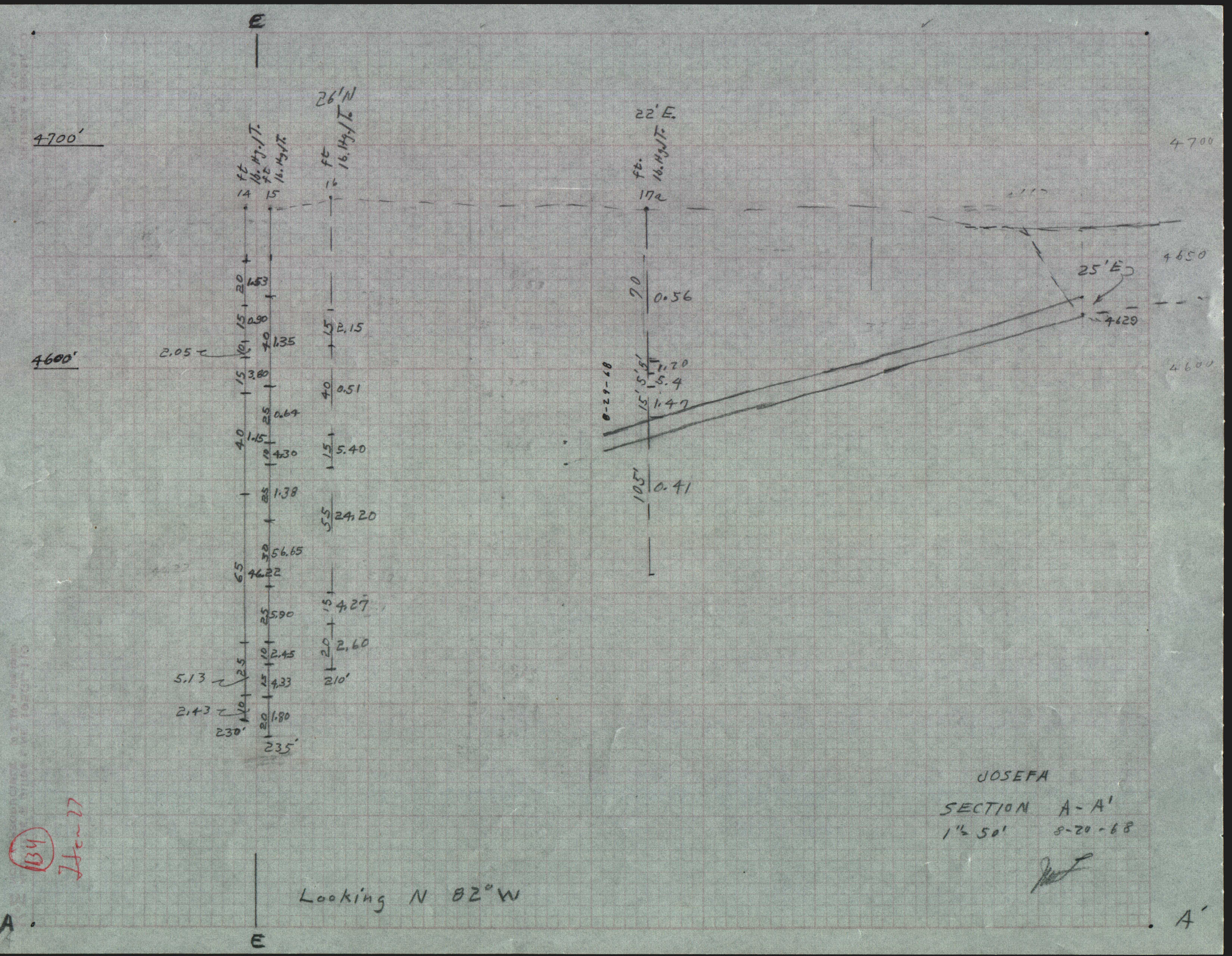


(134) Item 27

JOSEFA
SECTION C-C'
1" = 50' 8/20/68

Looking N 82° W


E
4700'
4600'
ft. 16. Mg./T.
18
19
20
22
10
16'W
±0.50
0.86
±0.27
1.17
1.49
0.48
1.65
4.80
0.76
4.20
±0.30
±0.20
5.10
1.58
5.47
42.50
2.10
3.25
2.24
9.29
1.90
0.77
1.85
205'
170'
195'
215'
60'
Looking N 82° W
B
E
B'
JOSEFA
SECTION B-B'
1" = 50' 8/20/68



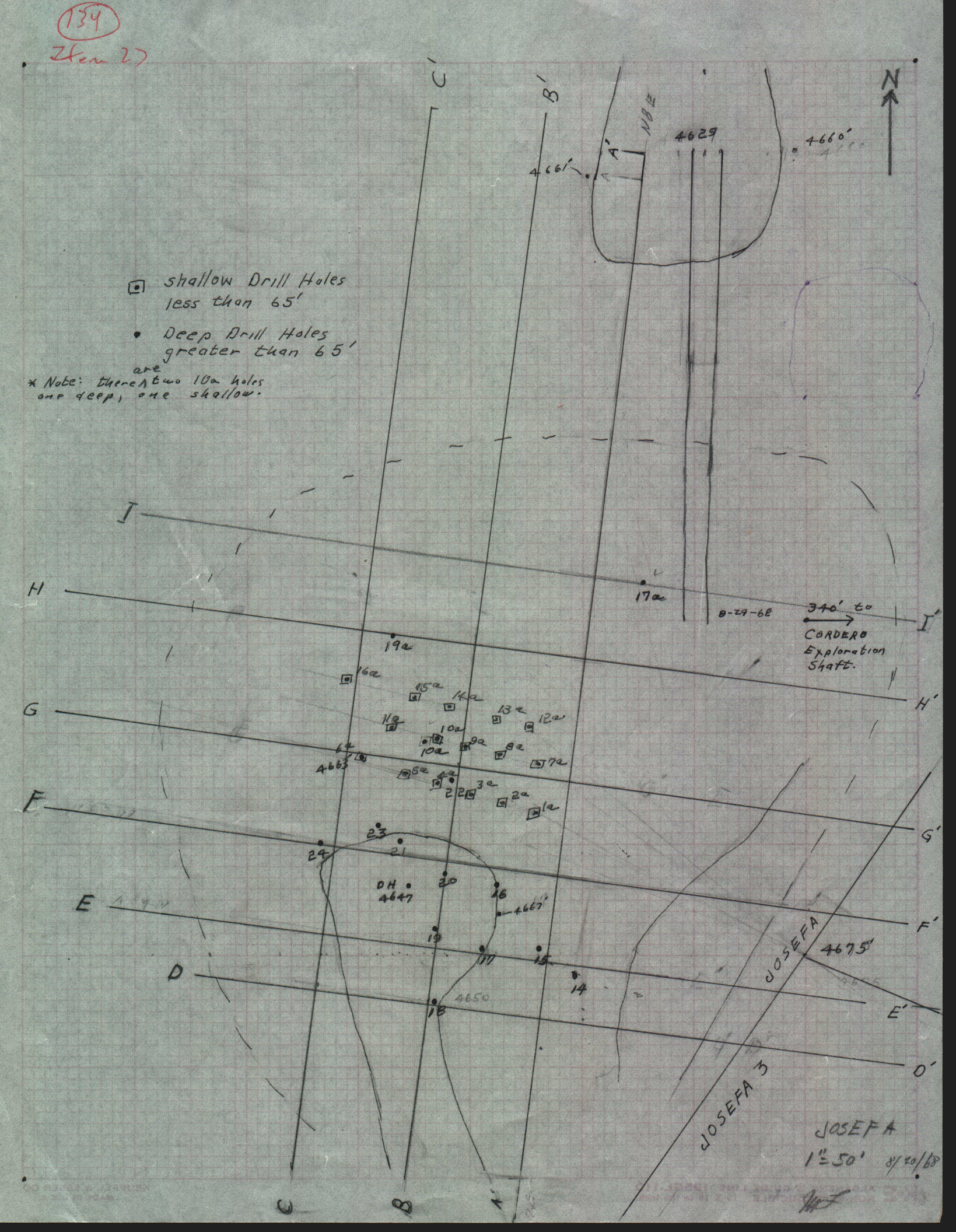
JOSEFA

SECTION A-A'

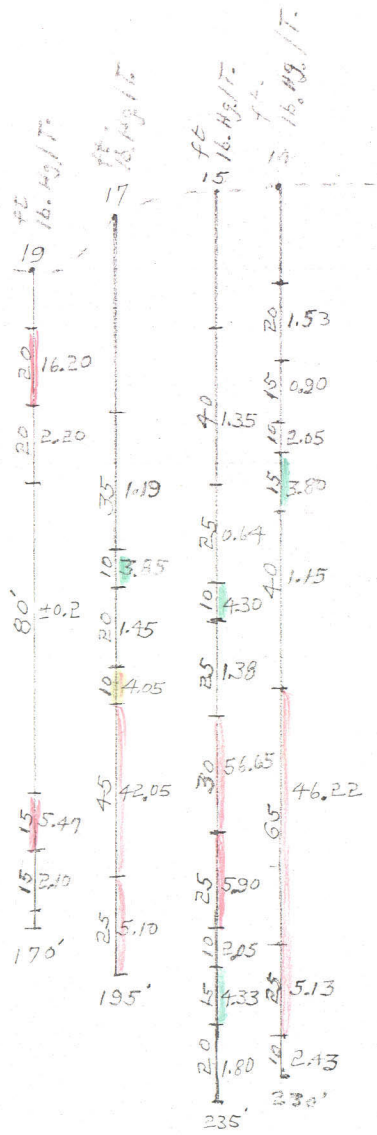
1" = 50' 8-20-68

(B4) Jfc-27

(134)
Item 27


C'
B'
A'
N18E
4629
4660'
4661'
N
shallow Drill Holes less than 65'
Deep Drill Holes greater than 65'
* Note: there are two 10a holes one deep, one shallow.
I
H
G
F
E
D
C
B
A
I'
H'
G'
F'
E'
D'
17a
19a
16a
15a
14a
13a
12a
11a
10a
9a
8a
7a
6a
5a
4a
3a
2a
1a
4663
8-29-68
340' to CORDERO Exploration Shaft.
23
24
21
DH 4647
20
16
4667'
19
17
15
14
18
4650
JOSEFA
4675
JOSEFA 3
JOSEFA
1"=50'
8/20/68

A



80 X 60 = 4800

717130 = 255

(134) It~2)

JOSEFA

SECTION E-E'

1" = 50' 8/30/16

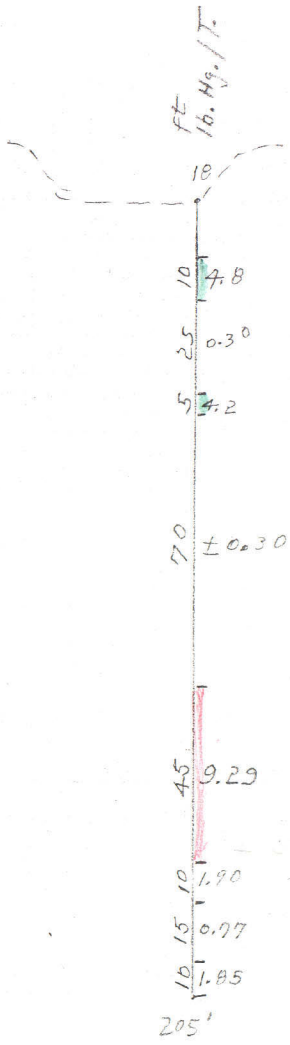
E

E'

Looking N 0° E

A

A



10 x 45 = 450

418.05 = 45

(134) Item 27

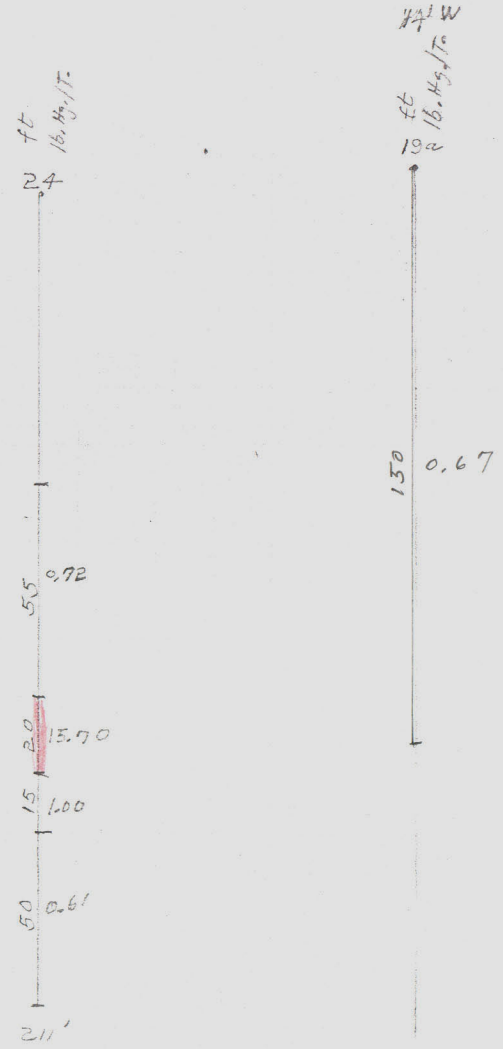
JOSEPHA
SECTION B-D'
1" = 50'

D

Looking N 8° E

A

D'



(134) Ic-27

JOSEFA

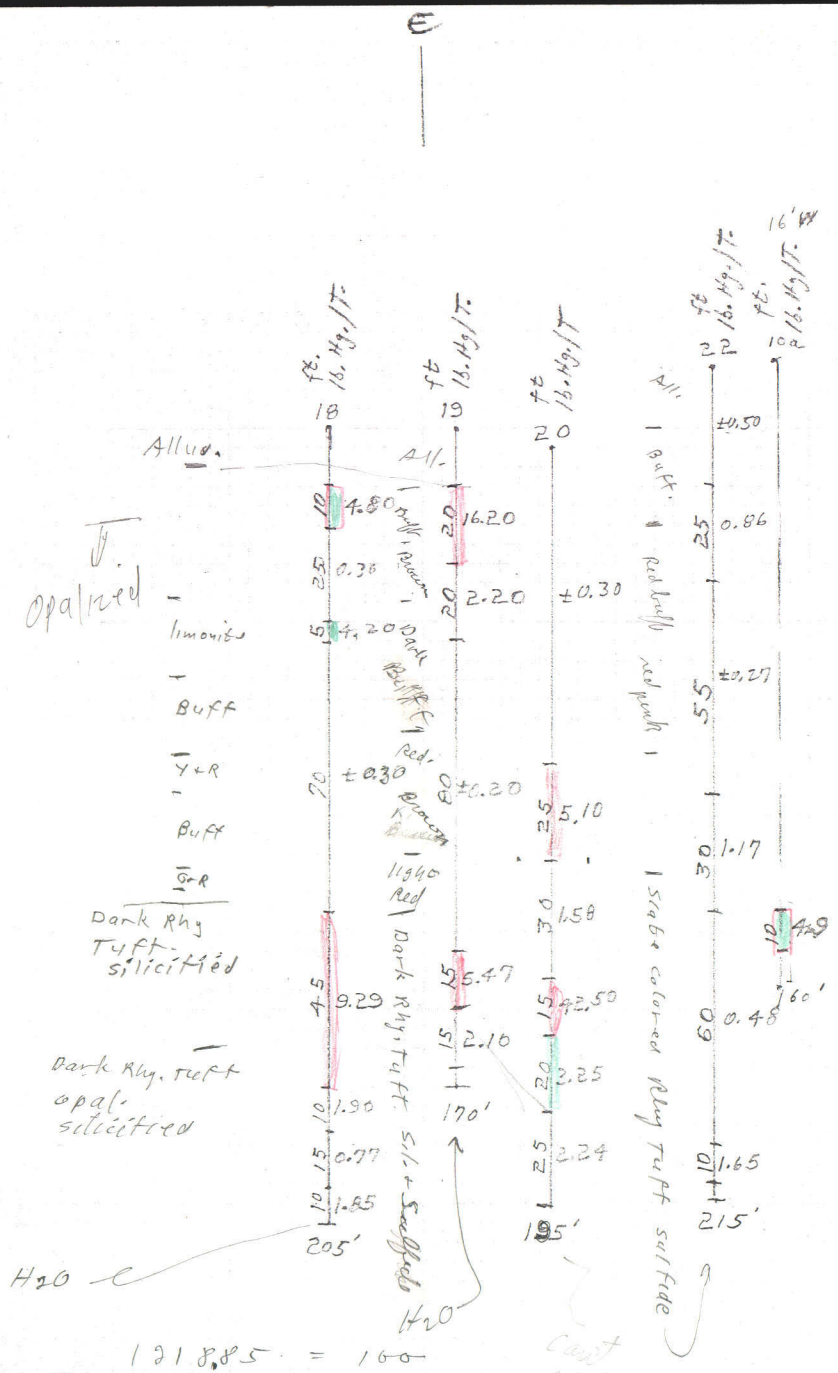
SECTION E-E'

1" = 50'

E

LOOKING N82°W

E'



25 x 10 = 250
45 x 20 = 900
35 x 20 = 700

1850 ft²
6000
7850

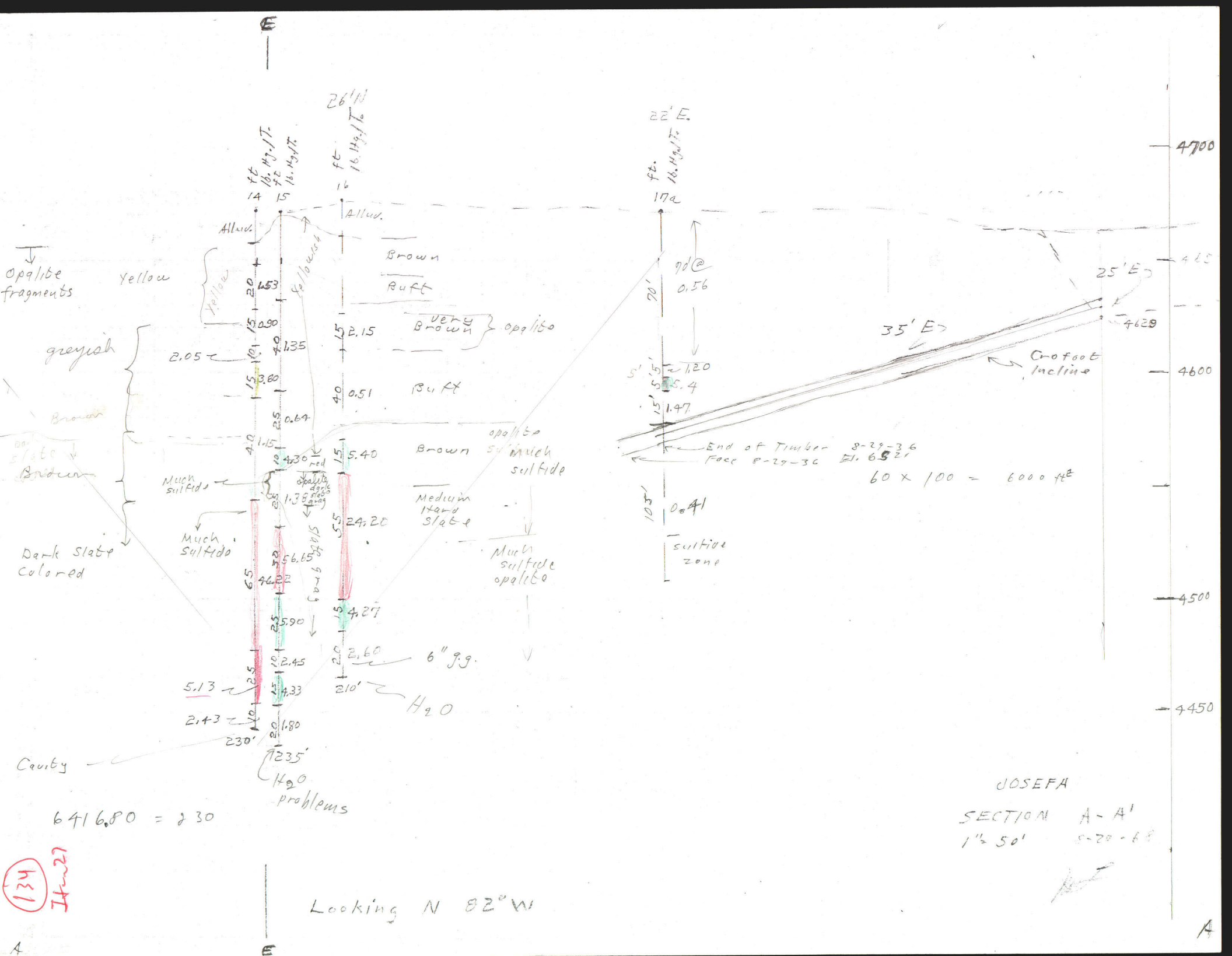
1850 x 40 = 74,000
6000 x 40 = 240,000
314,000 ÷ 12.5 = 25,200 Tons

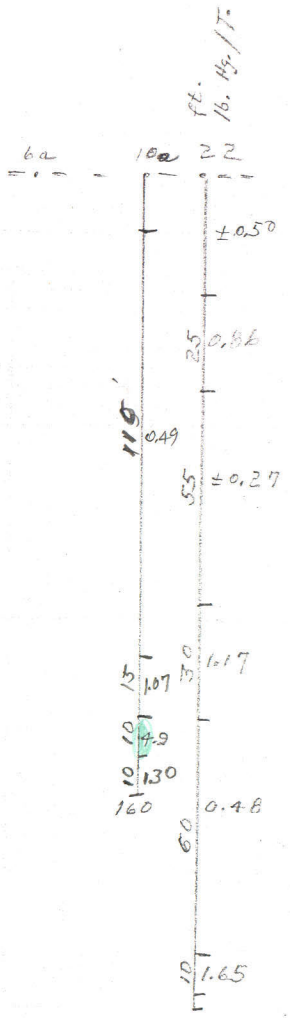
7635.65 ÷ 330 = 23.14

23.14 16 Hg/T.
6
$ 138.84 / ton

@

$ 3,498,768.00


E
26'N
22' E.
Opalite fragments
Yellow
greyish
Brown
Dark Slate Colored
Bridum
Much sulfide
Much sulfide opalite
Allud.
Brown
Buff
Very Brown
opalite
Medium Hard Slate
Much sulfide opalite
sulfide zone
End of Timber 8-29-36
Face 8-29-36 El. 6521
60 x 100 = 6000 ft²
35' E
Crosscut Incline
25' E
Cavity
6" g.g.
H2O
H2O problems
6416.80 = 230
Looking N 82° W
4700
4600
4500
4450
JOSEFA
SECTION A-A'
1" = 50'
8-28-36
(134)
A
E
A



(134) Ifm 21

JOSEFA
SECTION G-G'
1" = 50'

Looking N 65° E

A

6

6

Grade and Tonnage Calculations from El. 4500 + El. 4550' plans.
It is assumed that the grade and mineralization extends to:
10' above and 25' below El. 4550'
17' below and 25' above El. 4500'

Elevation	sq. ft.	× Vertical Extent	= Cu. ft.
4550'	4900	× 35'	= 171,500
4500	4800	× 42'	= 201,600
			373,100

373,100 ÷ 12.5 = 29,848 Tons

29,848 × #139.06/T Coverage grade from Vertical sections = 23.18 lbs/Hg/T.
= #4,150,662.00 = #139.06/T @ #6.00 Hg/T.

⊡ Shallow Drill Holes less than 65'

• Deep Drill Holes greater than 65'

* Note: there are two 10a holes one deep, one shallow.

134
Item 27

N

B

A

4629

4660'

4661'

17a

8-29-68

340' to CORDERO Exploration Shaft.

J

H

19a

G

F

E

D

4663

El. 4500'
80×60 = 4800 sq. ft.

El. 4550'
70×70 = 4900 sq. ft.

DH 4647

4667'

4675'

JOSEFA

JOSEFA

SURFACE
4550' El.
4500' El.

JOSEFA
1" = 50'
9/10/68

I'

H'

G'

F'

E'

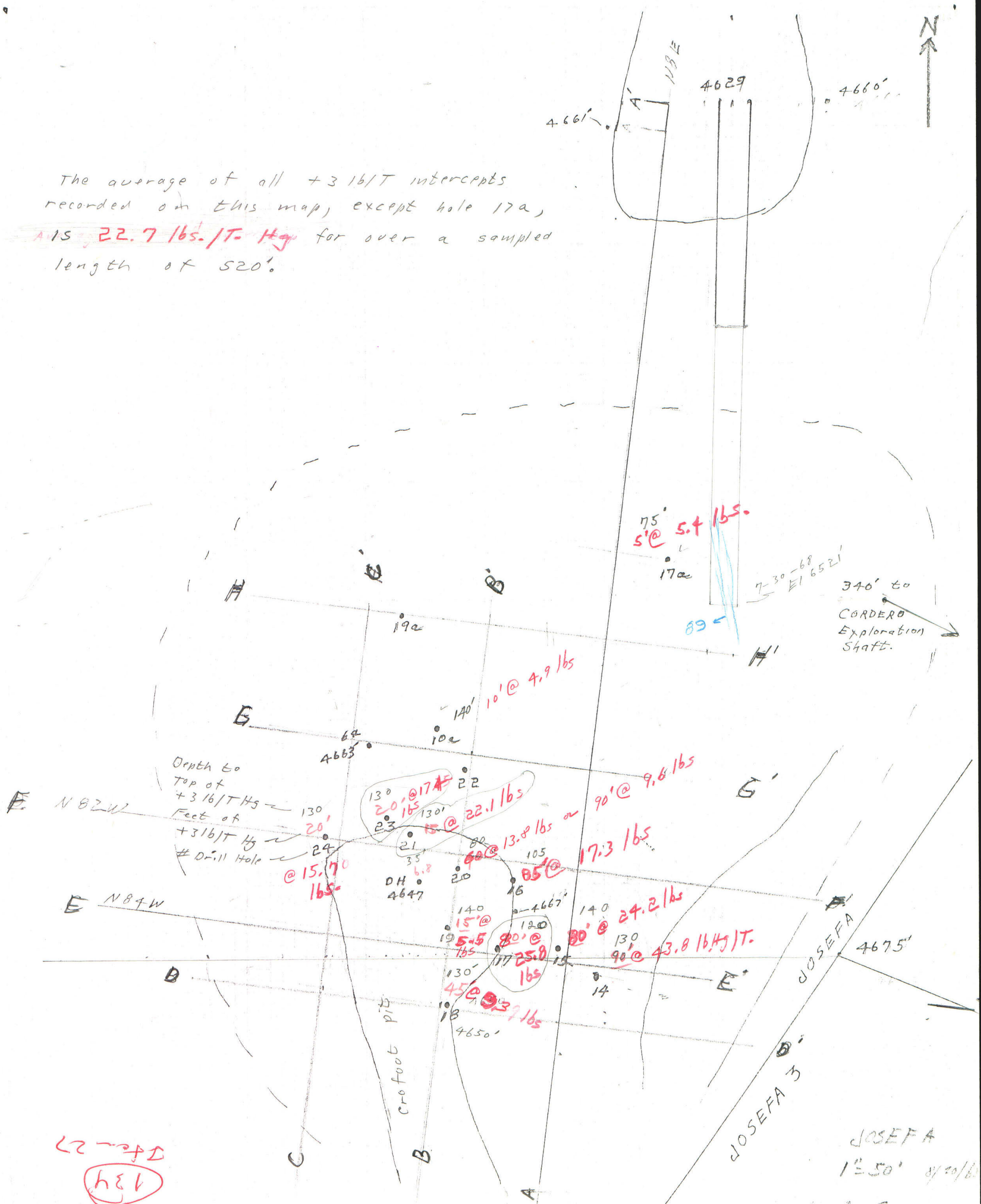
D'

C

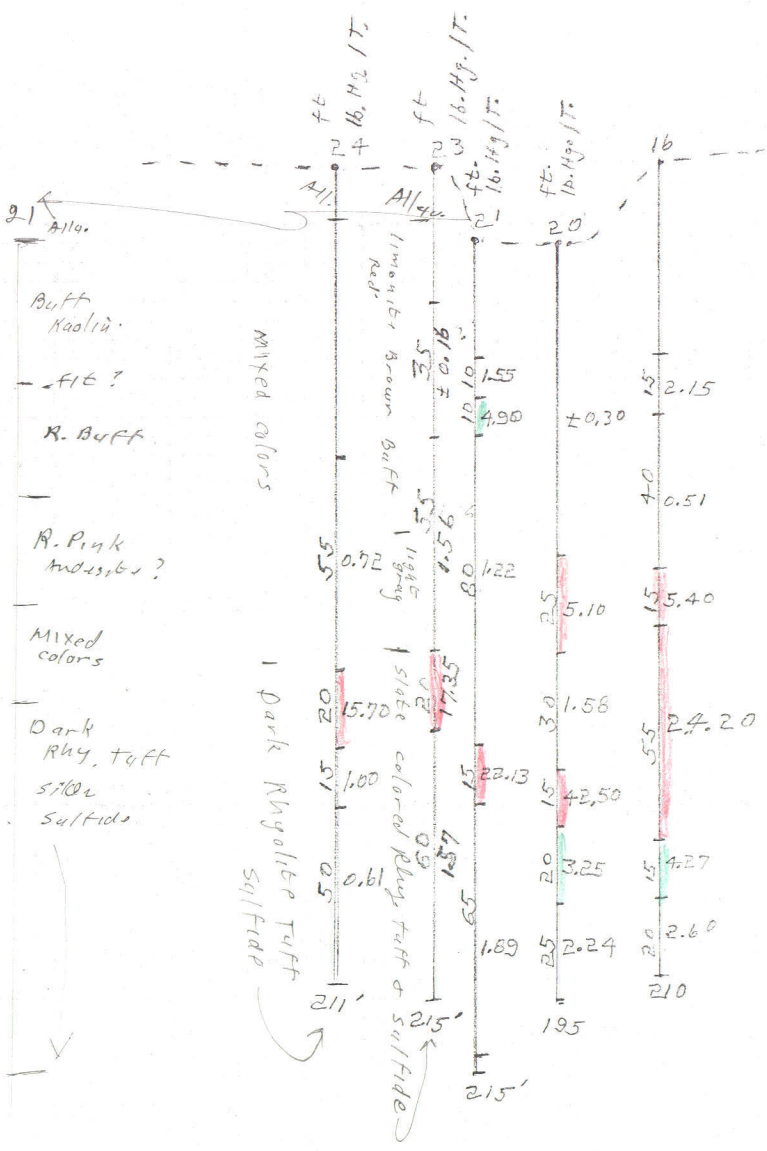
B'

A'

The average of all +3 lb/T intercepts recorded on this map, except hole 17a, is 22.7 lbs./T. Hg for over a sampled length of 520'.



134
If-27



3548.00 = 190

11237.35 ÷ 190 = 23.21 lbs/T
149/T

23.21
6
$139.26

50 × 80 = 4000
20 × 55 = 1100
5100 × 40 204000
450 × 20 9000
4800 × 30 144000
357,000

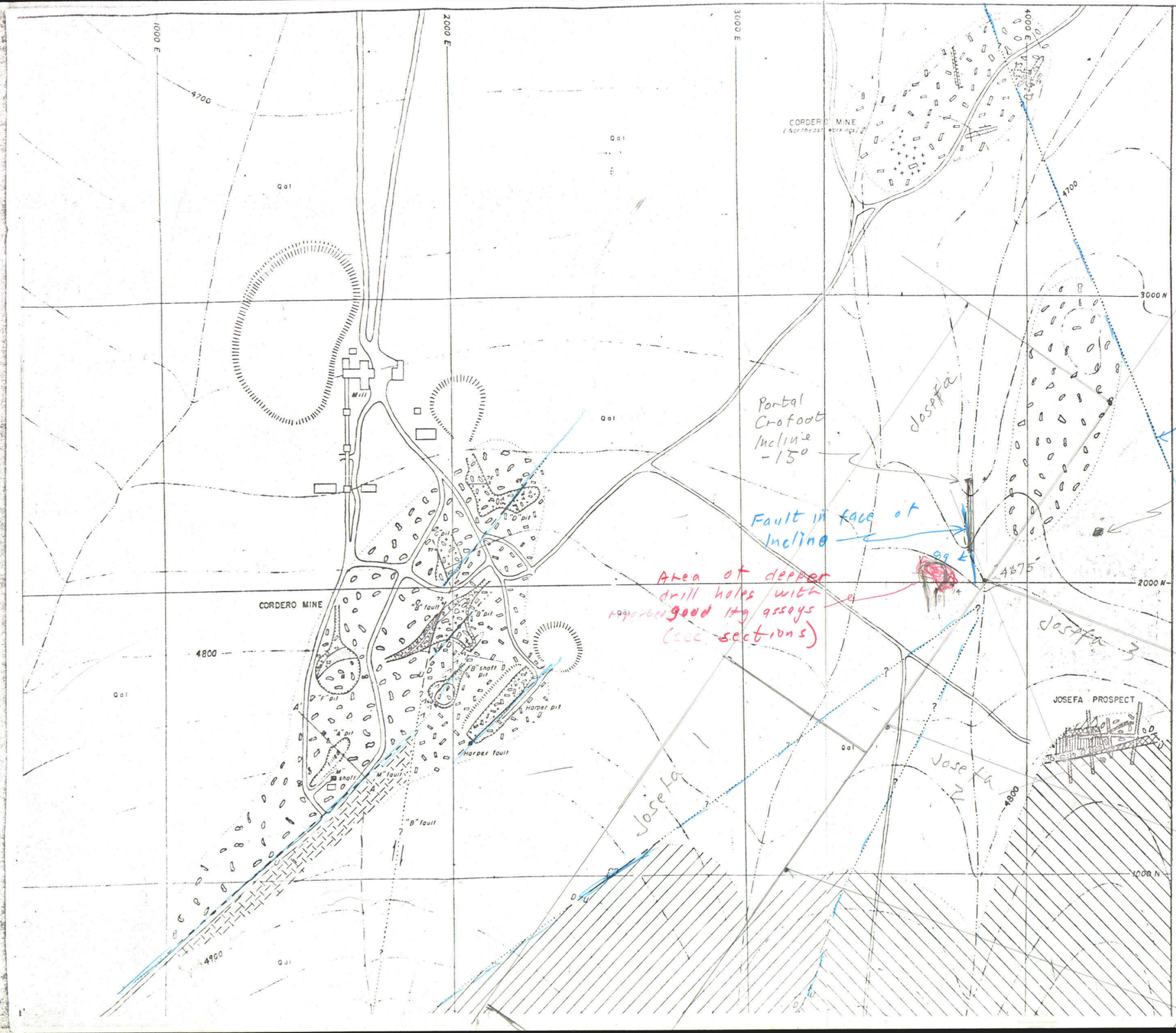
357000 ÷ 12.5 = 28,500

X 139.26 = $3,968,910.00

JOSEFA
SECTION E-F'
1" = 50'

PLATE 2

134
Item 27



EXPLANATION

QUATERNARY
Recent

Qal — Alluvium and talus

TERTIARY
Miocene

- Porphyritic andesite flows
- Rhyolite pyroclastics, commonly tuff or breccia; Obsidian dike
- M rhyolite
- Rhyolite (?) flows
- Pumice and obsidian
- Basalt flows
- Porphyritic andesite flows
- Andesitic-basalt flows; very vesicular

- Intensely argillized rock; circles indicate clay nodules or spherulites
- Intensely silicified rock, locally opalitized
- Brecciated or intensely fractured rock (excludes volcanic breccias or agglomerates)

Contact, showing dip
(Dashed where approximately located; dotted where inferred)

Fault, showing dip and relative movement
(Dashed where approximately located; dotted where covered)

Trace of nearly horizontal fault in pit

Vertical dip

1" = ± 435'

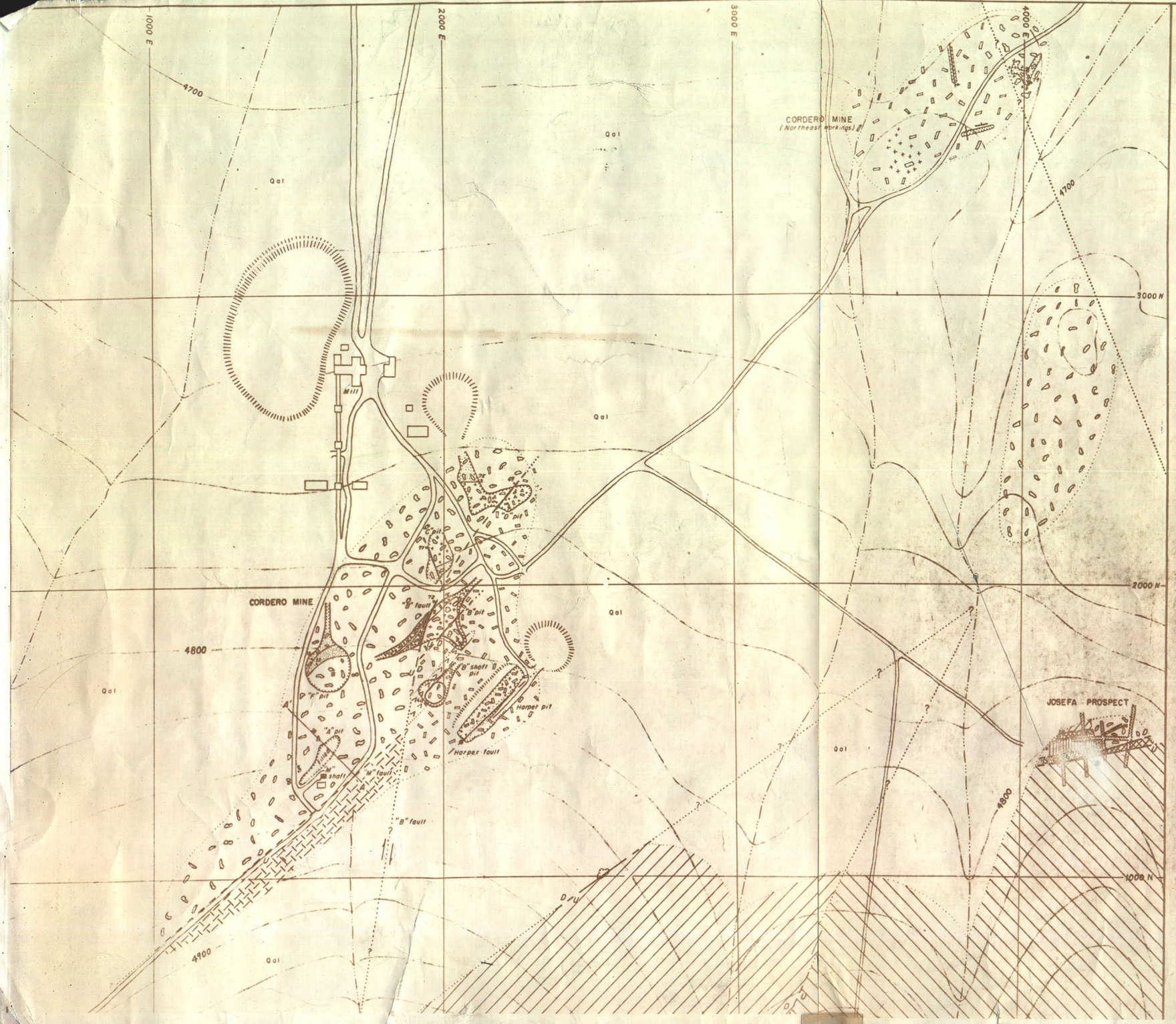
Shear zone

Map from Curry's THESIS

PLATE 2

134

Item 27



EXPLANATION

QUATERNARY — Recent

- Qal — Alluvium and talus

TERTIARY — Miocene

- Porphyritic andesite flows
- Rhyolite pyroclastics, commonly tuff or breccia; Obsidian dike
- M rhyolite
- Rhyolite (?) flows
- Pumice and obsidian
- Basalt flows
- Porphyritic andesite flows
- Andesitic-basalt flows; very vesicular

- Intensely argillized rocks; circles indicate clay nodules or spherulites
- Intensely silicified rock, locally opalitized
- Brecciated or intensely fractured rock (excludes volcanic breccias or agglomerates)

N

Contact, showing dip
(Dashed where approximately located; dotted where inferred)

Fault, showing dip and relative movement
(Dashed where approximately located; dotted where covered)

Trace of nearly horizontal fault in pit

Vertical dip

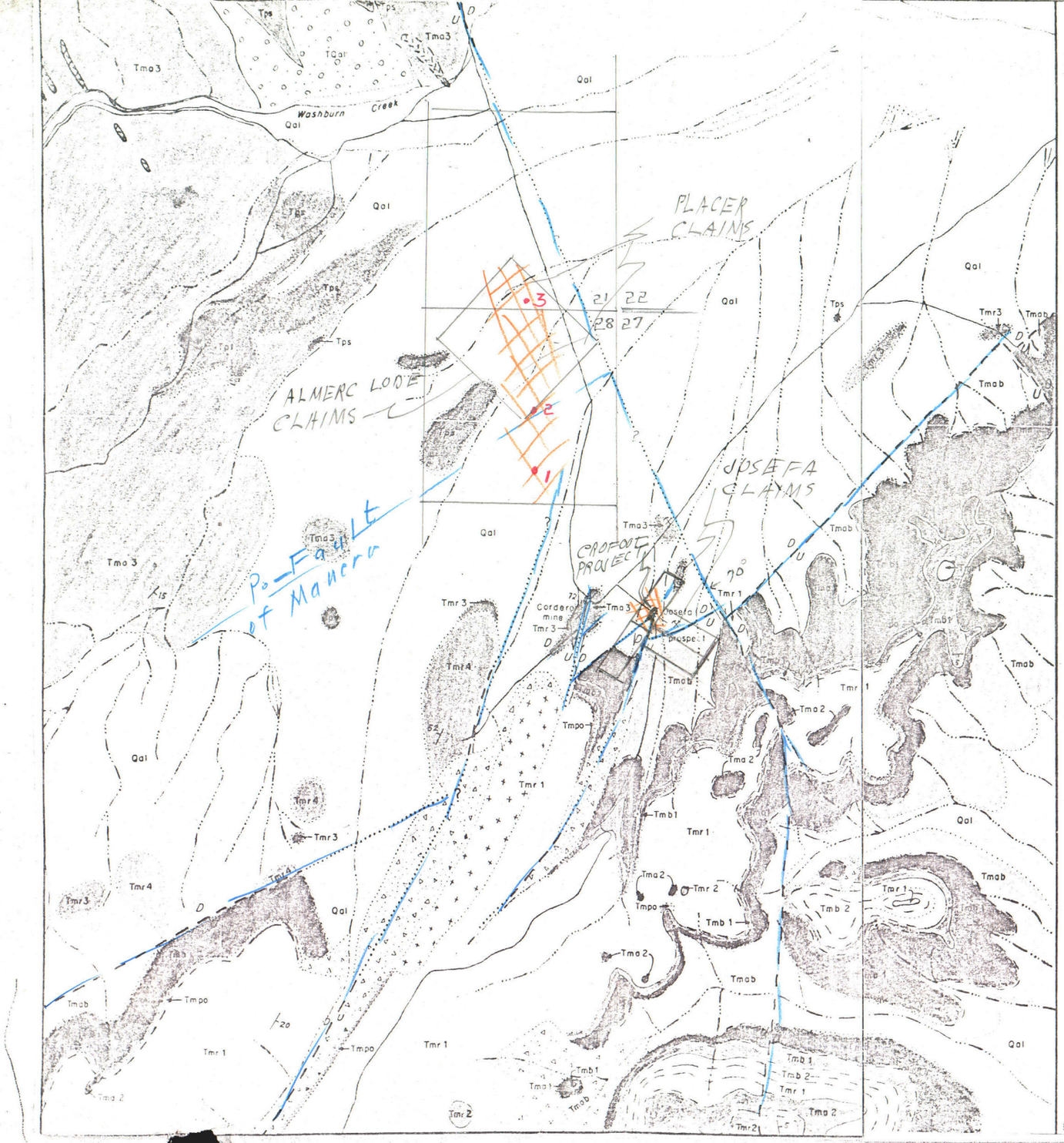
1" = ± 435'

Shear zone

PLATE I

134

Item 27



EXPLANATION

QUATERNARY	Recent	Qal — Alluvium and talus or landslide debris
	Pleistocene(?)	TQal — Old alluvium; includes older gravels
	Pliocene(?)	Tps — Silicified lake beds; includes some opalite
		Tpl — Volcanic ash and tuff; may be in part reworked
TERTIARY	Miocene	Tmr4 — Uncorrelated rhyolitic rock
		Tma3 — Porphyritic andesite; includes flows and dikes
		Tmr3 — Rhyolitic flows and pyroclastics
		Tmr2 — Rhyolite flows; exhibits flow banding
		Tma2 — Porphyritic andesite; includes flows and small dike
		Tmr1 — Rhyolite, includes flows and large dike or neck
		Tmpo — Pumice and obsidian
		Tmb2 — Basalt flows; upper flow is vesicular
		Tmb1 — Basalt flows
		Tma1 — Porphyritic andesite flows
		Tmab — Andesitic basalt flows, very vesicular

Contact
(Dashed where approximately located; dotted where inferred)

Fault, showing dip and relative movement
(Dashed where approximately located; dotted where covered)

Strike and dip of bedding

Location of mine workings

•? Reccomended Drill sites, (geophysicist)

Areas of low resistivity

Stream
(Dashed where intermittent)

Access road

Base map compiled from aerial photographs, uncorrected

Geology by D. L. Carr.

PLATE 1

134

Item 27

EXPLANATION

QUATERNARY — Pleistocene — Recent

- Qal — Alluvium and talus or landslide debris
- Tqoj — Old alluvium; includes older gravels

TERTIARY — Pliocene (?)

- Tps — Silicified lake beds; includes some opalite
- Tpt — Volcanic ash and tuff; may be in part reworked
- Tmr4 — Uncorrelated rhyolitic rock
- Tma3 — Porphyritic andesite; includes flows and dikes
- Tmr3 — Rhyolitic flows and pyroclastics
- Tmr2 — Rhyolite flows; exhibits flow banding
- Tma2 — Porphyritic andesite; includes flows and small dike

TERTIARY — Miocene

- Tmr1 — Rhyolite, includes flows and large dike or neck
- Tmpo — Pumice and obsidian
- Tmb2 — Basalt flows; upper flow is vesicular
- Tmb1 — Basalt flows
- Tma1 — Porphyritic andesite flows
- Tmab — Andesitic basalt flows, very vesicular

Contact
(Dashed where approximately located; dotted where inferred)

Fault, showing dip and relative movement
(Dashed where approximately located; dotted where covered)

Strike and dip of bedding

Location of mine workings

Stream
(Dashed where intermittent)

Access road

Base map compiled from aerial photographs, uncorrected

Geology by [illegible]

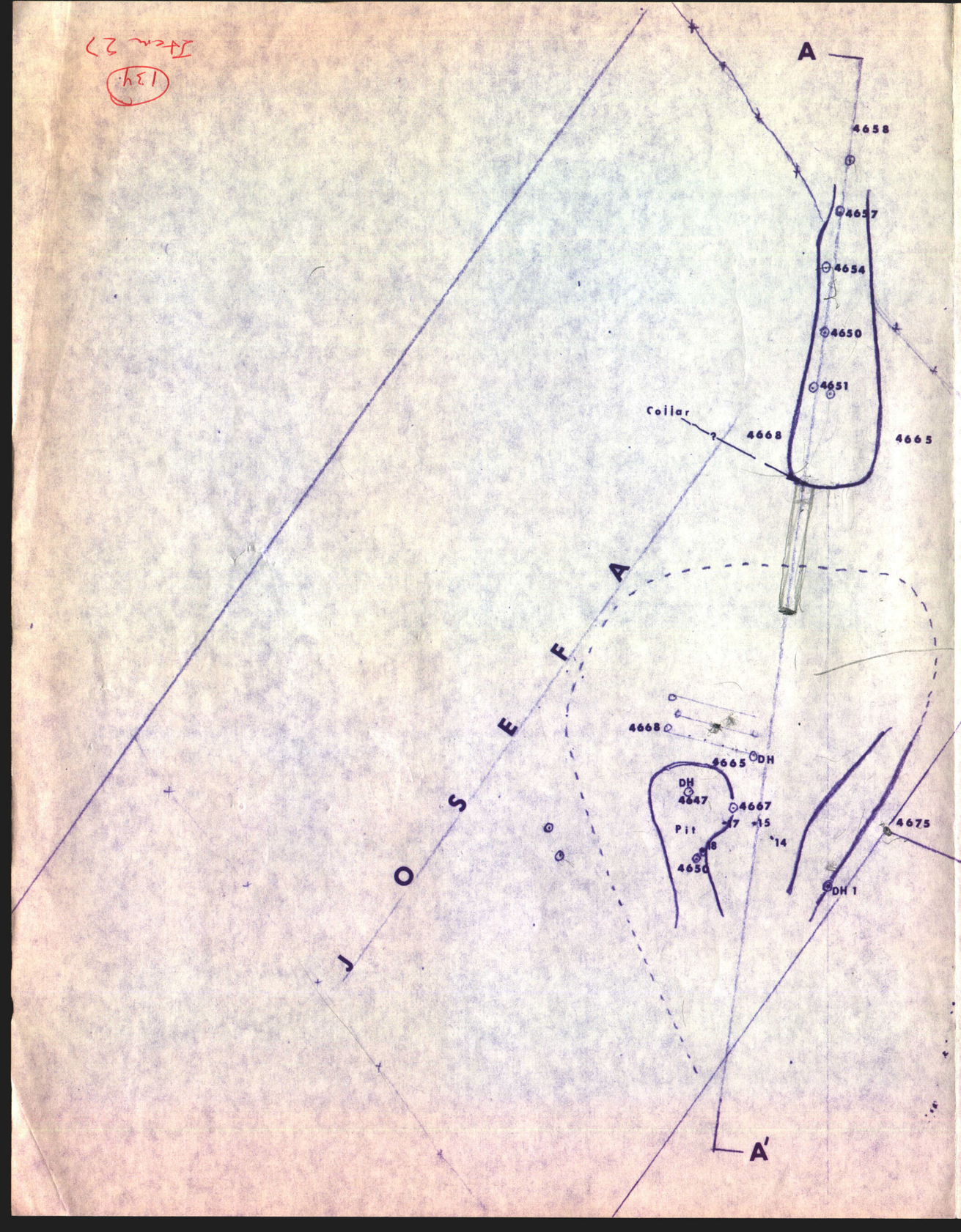
PLATE 2

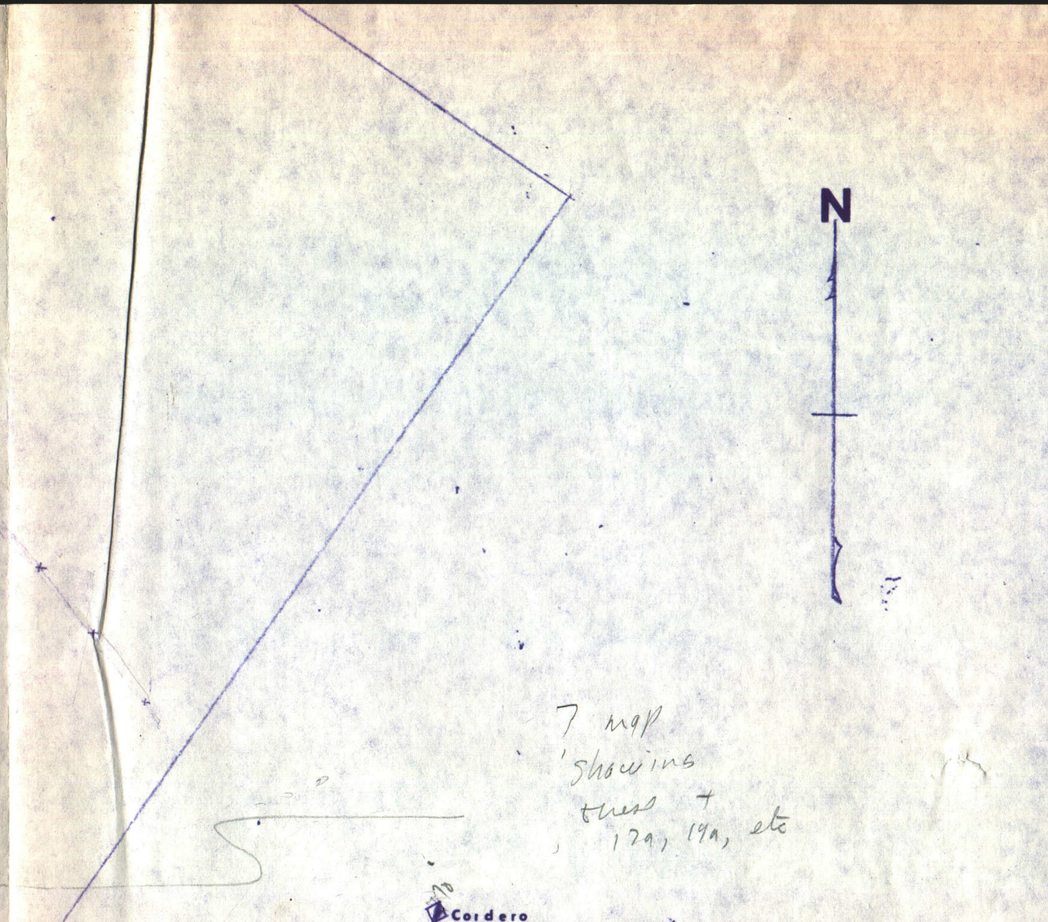
134

Item 27

Item 27

(13)





7 map showing trees + 17a, 19a, etc

PLAN

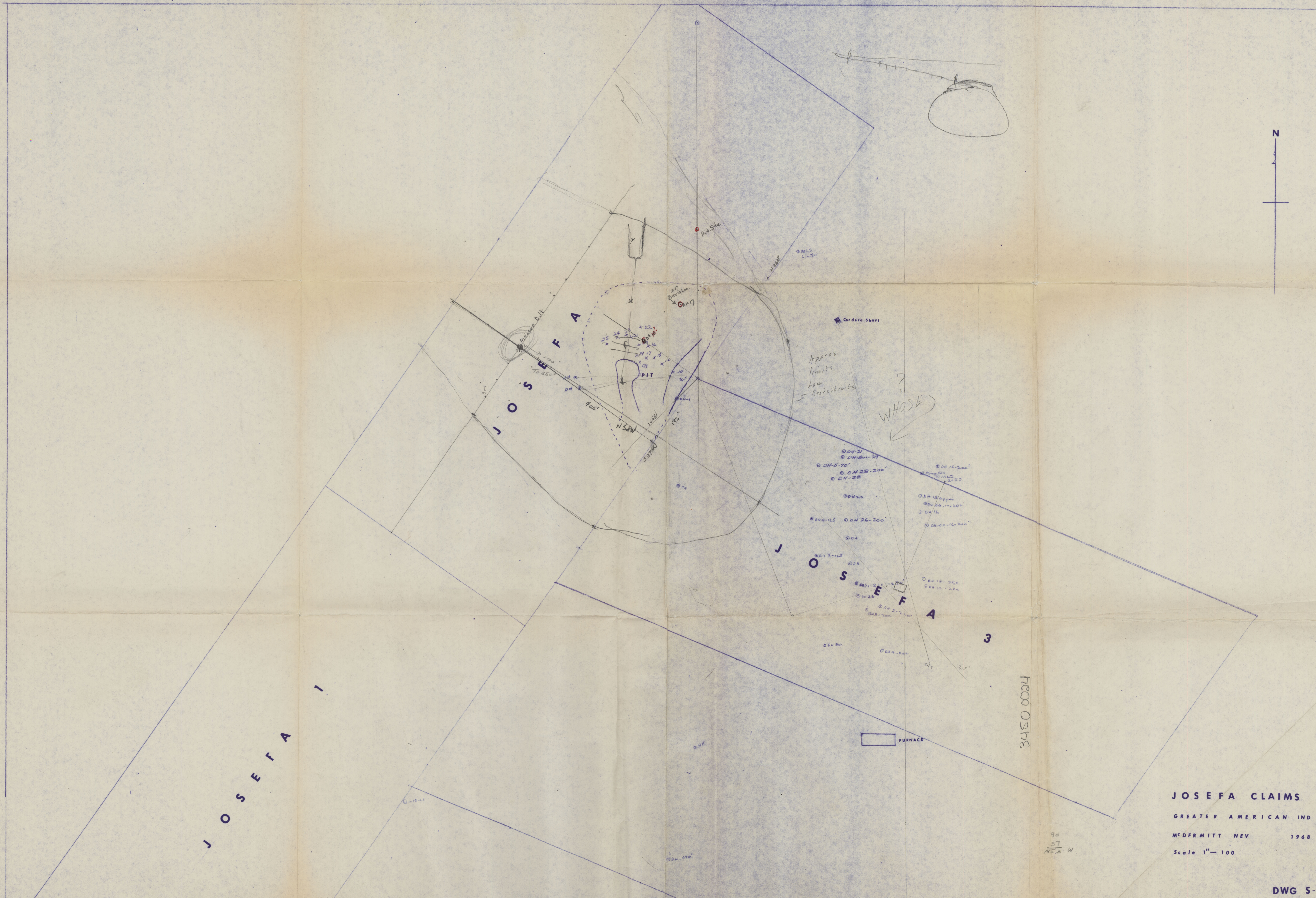
INCLINE SHAFT SITE JOSEA MINE

CROFOOT PROJECT _____ MCDERMIT NEV

SCALE 100'±1" 7/68

Restivity Limit

DWG E-1


JOSEFA CLAIMS
GREATEP AMERICAN IND
McDFRMITT NEV 1968
Scale 1"— 100
DWG S-1
JOSEFA 1
JOSEFA
JOSEFA 3
N
PIT
FURNACE
Cardero Shaft
Approx limits Low Resistivity
WHOSE ?
3450 0034

134
Item 27