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① To pit is 565W

② Tunnels
Faulting
Cc & Chryp in Db.
Bwh

Rk is Pioneer or DS?

③ Cc Bwh, Py Bwh, & Chryp
in fract, DS (or Pioneer
on E side Main fl^{??})

+ 575W to pit

④ Sed. with Chy & Cc & Py Bwh

⑤ 560W to Pit

No croppings - Db?

GREGORY CLAIMS
NEAR RAY
PINAL COUNTY, ARIZONA
May 10, 1958

E. N. PENNEBAKER
CONSULTING GEOLOGIST
SCOTTSDALE, ARIZONA

E. N. PENNEBAKER
CONSULTING GEOLOGIST
P.O. BOX 817
SCOTTSDALE, ARIZONA

May 10, 1958

Mr. W. H. Gregory
3502 N. 27th Street
Phoenix, Arizona

Dear Mr. Gregory:

On May 7, 1958, I examined your five unpatented mining claims situated about one mile east of Ray, Pinal County, Arizona. Your instructions were for me to set a valuation on this block of ground as a basis for your negotiations with Kennecott Copper Corporation for the sale of this property.

These claims occupy parts of sections 12 and 13, T3S, R13E, and are named as follows:

Sunset #1
Sunset #2
Sunset #4
Sunset #5
Consolation

The claims are contiguous and arranged side-to-side to form a block of ground that is about 3,000 feet long in a north-south direction and 1,500 feet wide in an east-west direction. The center of the block is about 6,500 feet distant in a direction N60E from the east edge of Kennecott's open pit copper mine. The latter is one of the major copper producers of Arizona. At present the ore body is still being explored and presumably extended, because Ray Mines Division of Kennecott Copper Corporation is presently undertaking a great program of expansion of plant and facilities.

Your mining claims are in an area of considerable geological complexity because of faulting and diabase intrusion. This has developed a mosaic of fault blocks, with fault boundaries running north-east, east-west, northwest, and north. Most of these faults are probably pre-mineral in age, with possibly resumption of movement during and after mineralization.

Northeast of a diagonal line approximately connecting the northwest and southeast corners of your ground, the formation exposed at the surface is Troy quartzite. This diagonal line represents a fault, southwest of which is a complex arrangement of diabase and older rocks such as Pioneer shale, Barnes conglomerate, Dripping Spring quartzite, Mescal limestone, and Troy quartzite.

Host rocks containing ore in Kennecott's open pit are Pinal schist, diabase and porphyry. From the character of the leached croppings on your property, it is possible that additional formations may also be ore-bearing here at depth.

Mineralization exposed at the surface on your claims consists of iron and copper staining along and near faults, and it is also evidenced by general rock alteration of a type locally associated with copper mineralization. Copper is shown by green, oxidized minerals and by residual iron oxide after chalcocite and chalcopyrite that have been leached and removed from the surface rocks. Exploration in search of ore is confined to near-surface tunnels and to shallow shafts and cuts. On the southerly half of your block of ground there are numerous showings of copper mineralization, and some small production has been made. There has been no exploration by drilling on these claims.

Immediately west of your property are mining claims owned by Kennecott Copper Corporation. Exposures on this ground are mostly of Pioneer shale, Dripping Spring quartzite, and diabase. Surface mineralization seems to be comparable to that on your claims, in kind and in intensity.

Immediately west of the two southerly claims of your group (Sunset #2 and Consolation) and abutting their westerly end-lines, Kennecott has drilled a group of holes and has carried the exploration pattern of drilling up to within a few hundred feet of the end-lines of these two claims.

Although we are not advised of the results of this drilling, the pattern and frequency of the holes implies that ore has been found and followed to near your property-line. Inasmuch as the same group of formations occurs on your ground, and evidence of sulfide mineralization appears in some of the leached croppings there displayed, the inference is strong that ore continues at depth into your property and that the mineralization observed there along faults is an upward "leak" from ore. Furthermore, there are exposures of a N60E fracture pattern on and between your claims and the pit, and such fractures commonly mark the trend of mineralization in southern Arizona.

Consequently your claims, particularly those on the south, have a high potential value as ore-bearing ground.

It will be necessary for Kennecott to excavate pit benches on your ground in order to mine by open cut any ore this company may own adjacent to your west property line. Inasmuch as we do not

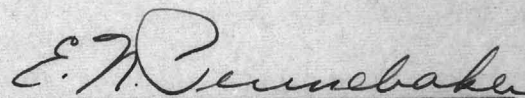
possess engineering data on the depth below surface and the thickness of such ore as may have been discovered nearby by Kennecott, we do not know how far east on your property they might need to carry benches to mine such ore. Nevertheless the need to come on to your claims appears assured.

The logical party to purchase your ground is Kennecott, and it is unlikely that an outside company would contemplate an operation on this property unless this outside company acquired other holdings nearby. However, Kennecott may not need your ground in the near future, and the price fixed by you should consider the time that Kennecott might hold the property before it would be used by them. Also, if you sell these claims soon, you will be relieved of doing the annual assessment work prior to patenting, and some concession in asking price is warranted because of this savings to you.

Inasmuch as your ground has not been drilled and we do not know the details of such ore discoveries as Kennecott may have made nearby, it is not possible to set up any precise calculations in assessing the value of this block of claims. Nevertheless we can observe that ore appears to have been followed up to very close to the property line; that your ground, because of its geological character, is most favorably situated and is potentially ore-bearing; and that Kennecott will very probably need part of your ground to construct an open pit to mine its own ore.

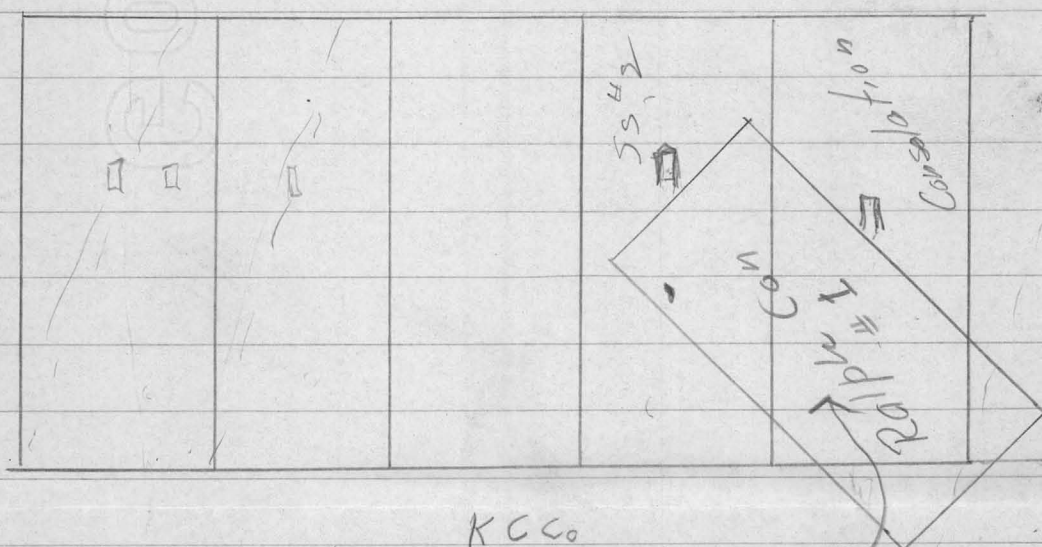
With all of the foregoing points in mind I believe that \$125,000 is a fair and proper price for the sale of a 100% interest in the entire block of claims.

Respectfully submitted


E. N. Pennebaker

Say ore is $\pm 500'$
thick at KCC line.

Ore in Db ($\pm 400'$) & in
overlying Pioneer



KCCo

Gregory has 1/2 acre interest in this

FIRST

DRAFT

T25

T35

R13E

R14E

T25

T35

3

2

1

MINERAL CREEK

10

11

12^K

15

14

13

K

K

K

K

R13E

R14E

Jack V. Lee
A real estate broker
(name?) called on
phone morning of
May 22 re Gregory
claims

Said he had a
client who was interested
& might purchase & had.
Wanted me to discuss
deal with this client.

I said:

① No conference, all
info. is in my report, &

② Said principal
risk to client is in
K.C.C. sitting on ground
for many years.

③ Kenneth does not necessarily agree with my value.

SUNSET 5

900' ± to KCC
Drill

← 5

60' Placer
④

SUNSET 4
Banner

1" = 500'

SUNSET 1

CABIN

SUNSET 2

②

→ 45

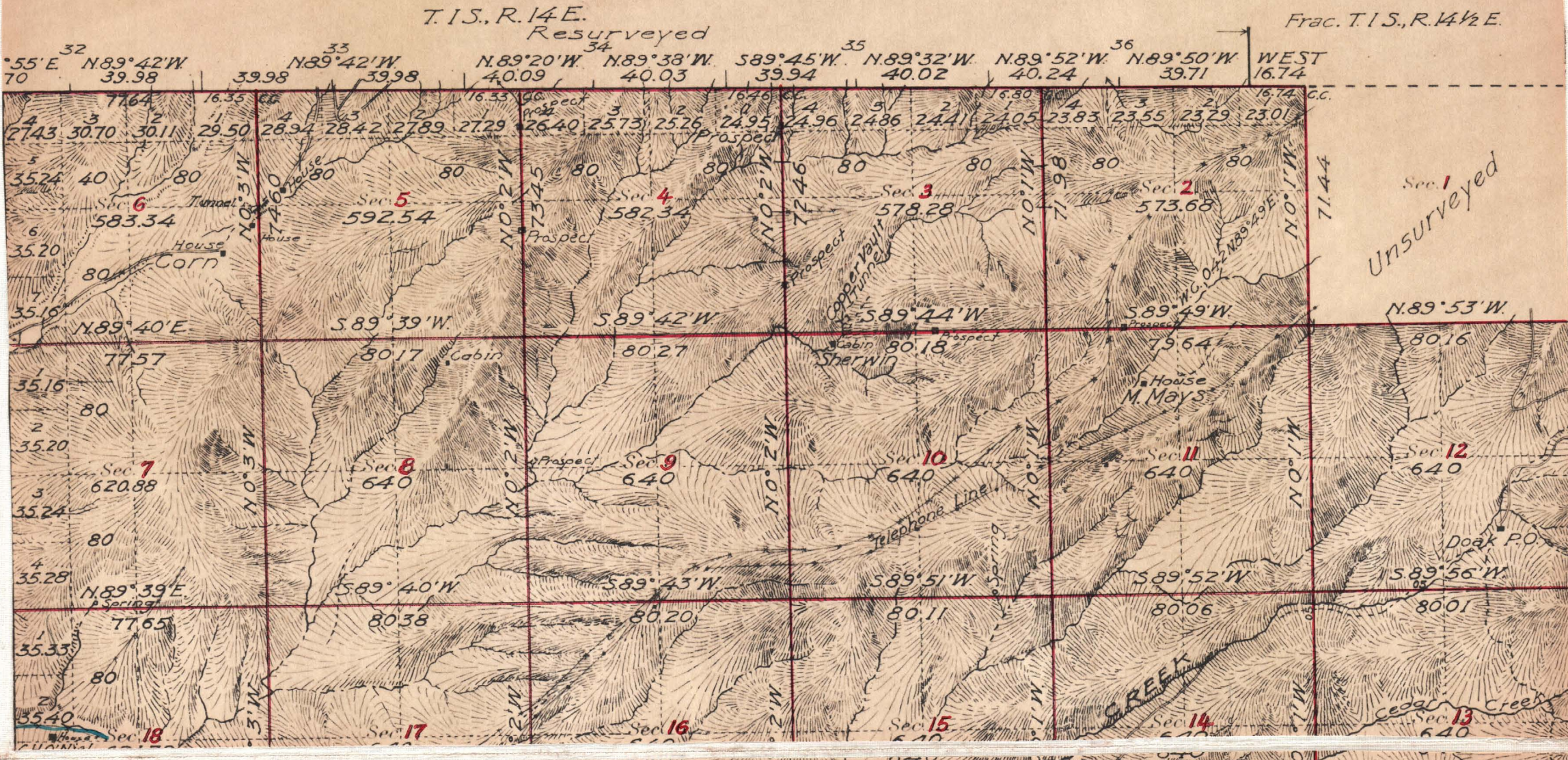
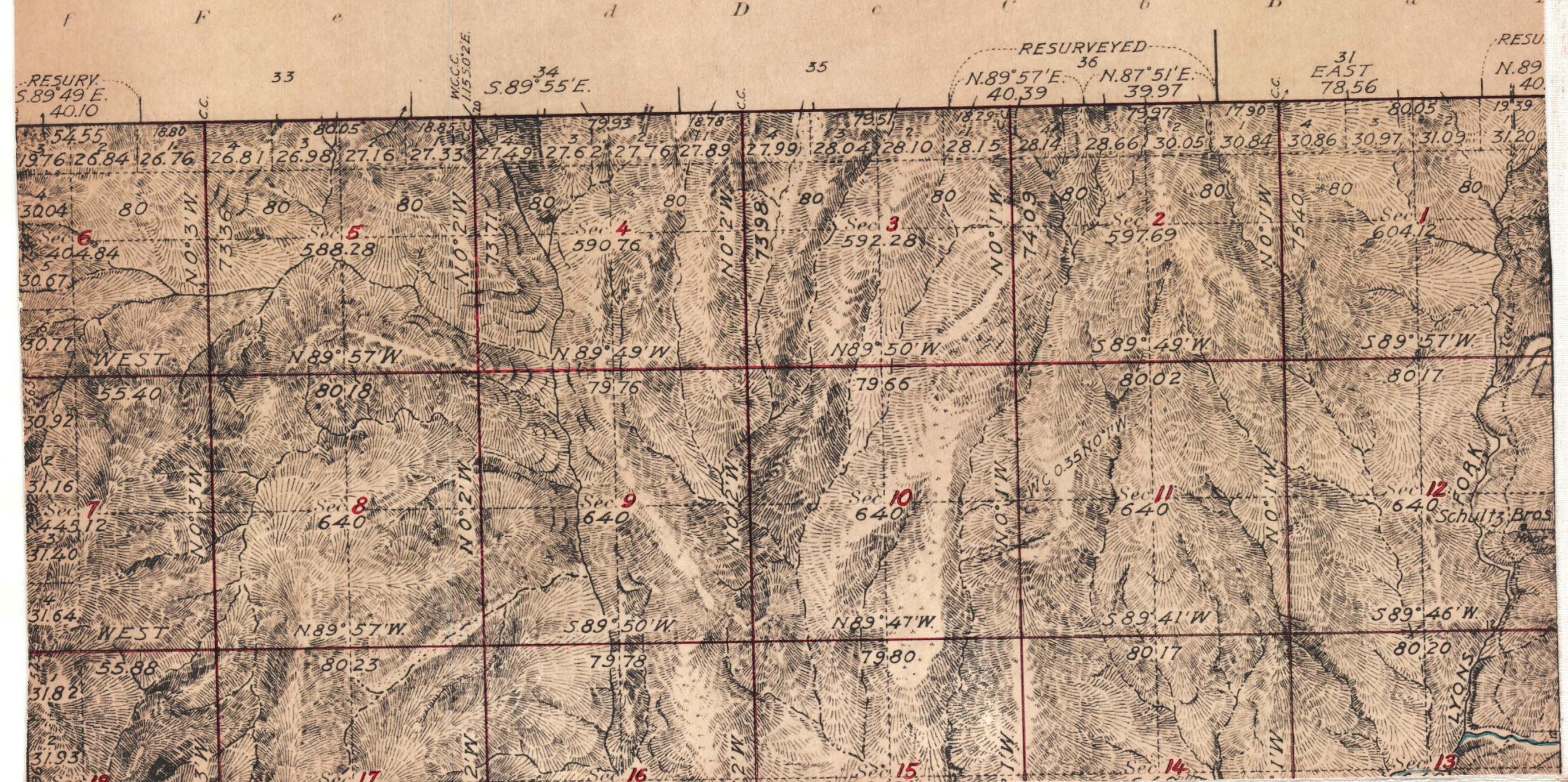
①
+ 500' Cor.

TRAIL
MISCAL

CONSOLATION

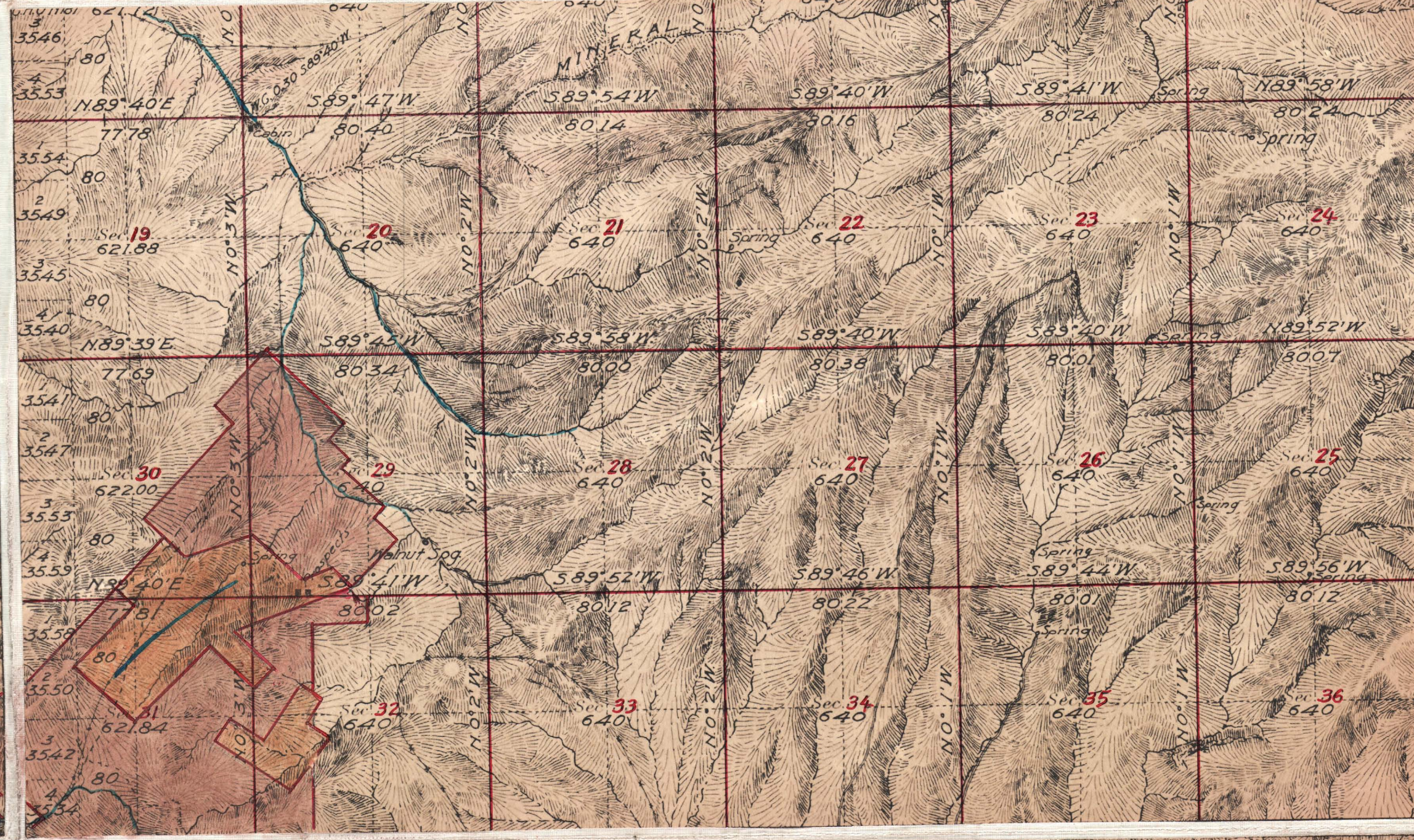
③ Bulk

→ 60



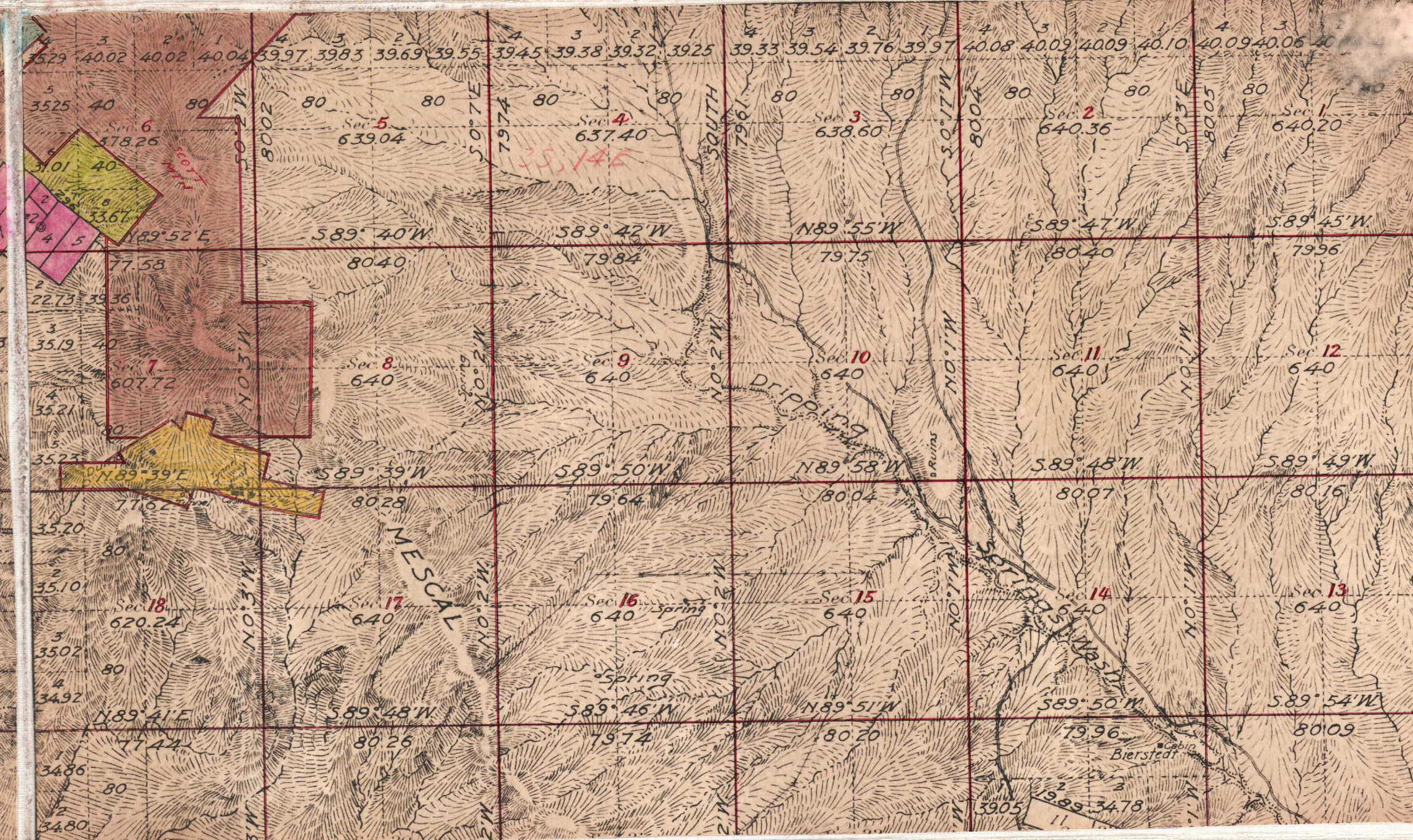
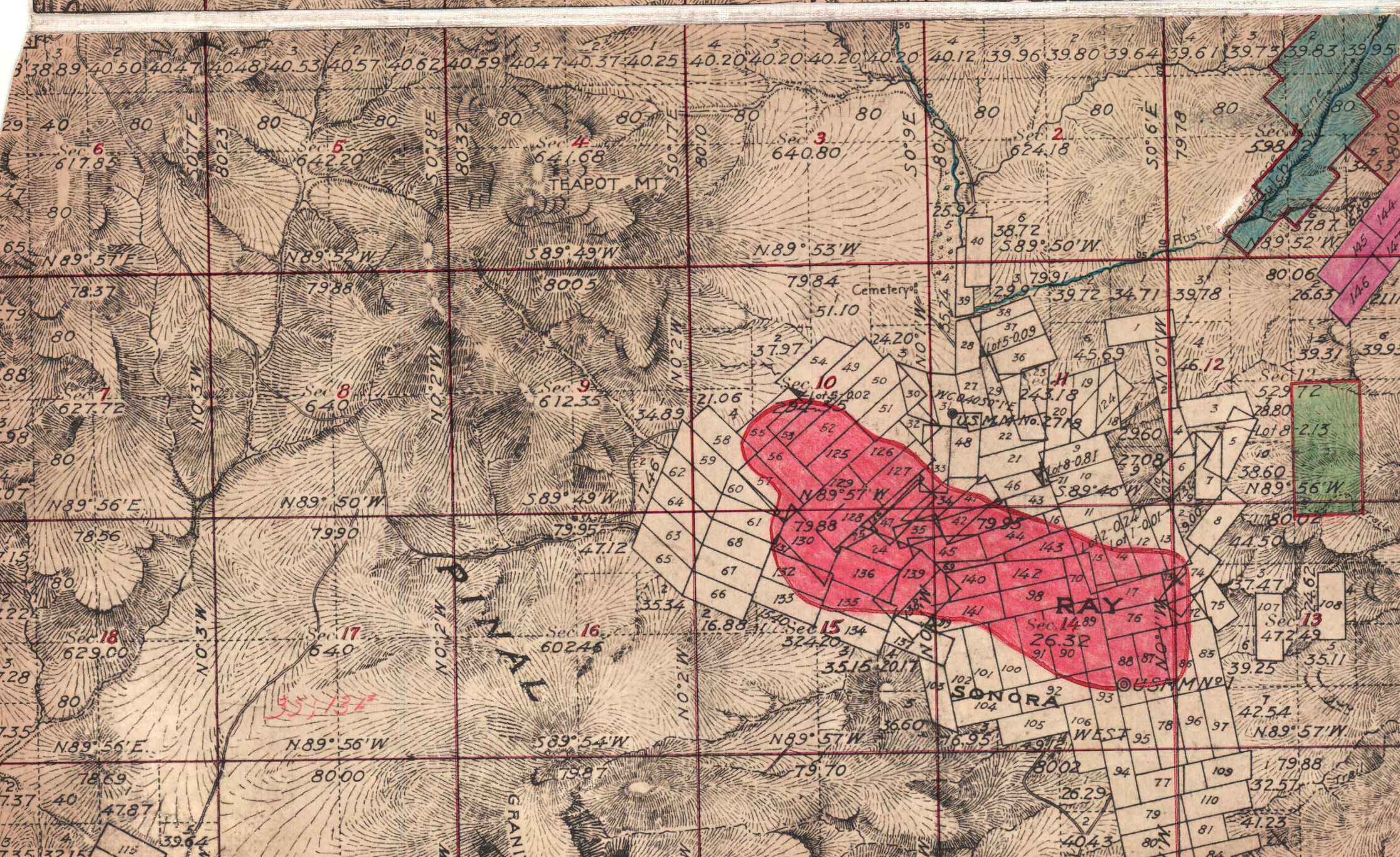
UNPATENTED, UNCLAIMED

2572	GRANITE	2573	GRANITE
2573	GRANITE	2574	GRANITE
2574	GRANITE	2575	GRANITE
2575	GRANITE	2576	GRANITE
2576	GRANITE	2577	GRANITE
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2587	GRANITE	2588	GRANITE
2588	GRANITE	2589	GRANITE
2589	GRANITE	2590	GRANITE
2590	GRANITE	2591	GRANITE
2591	GRANITE	2592	GRANITE
2592	GRANITE	2593	GRANITE
2593	GRANITE	2594	GRANITE
2594	GRANITE	2595	GRANITE
2595	GRANITE	2596	GRANITE
2596	GRANITE	2597	GRANITE
2597	GRANITE	2598	GRANITE
2598	GRANITE	2599	GRANITE
2599	GRANITE	2600	GRANITE



UNPATENTED, UNCLAIMED

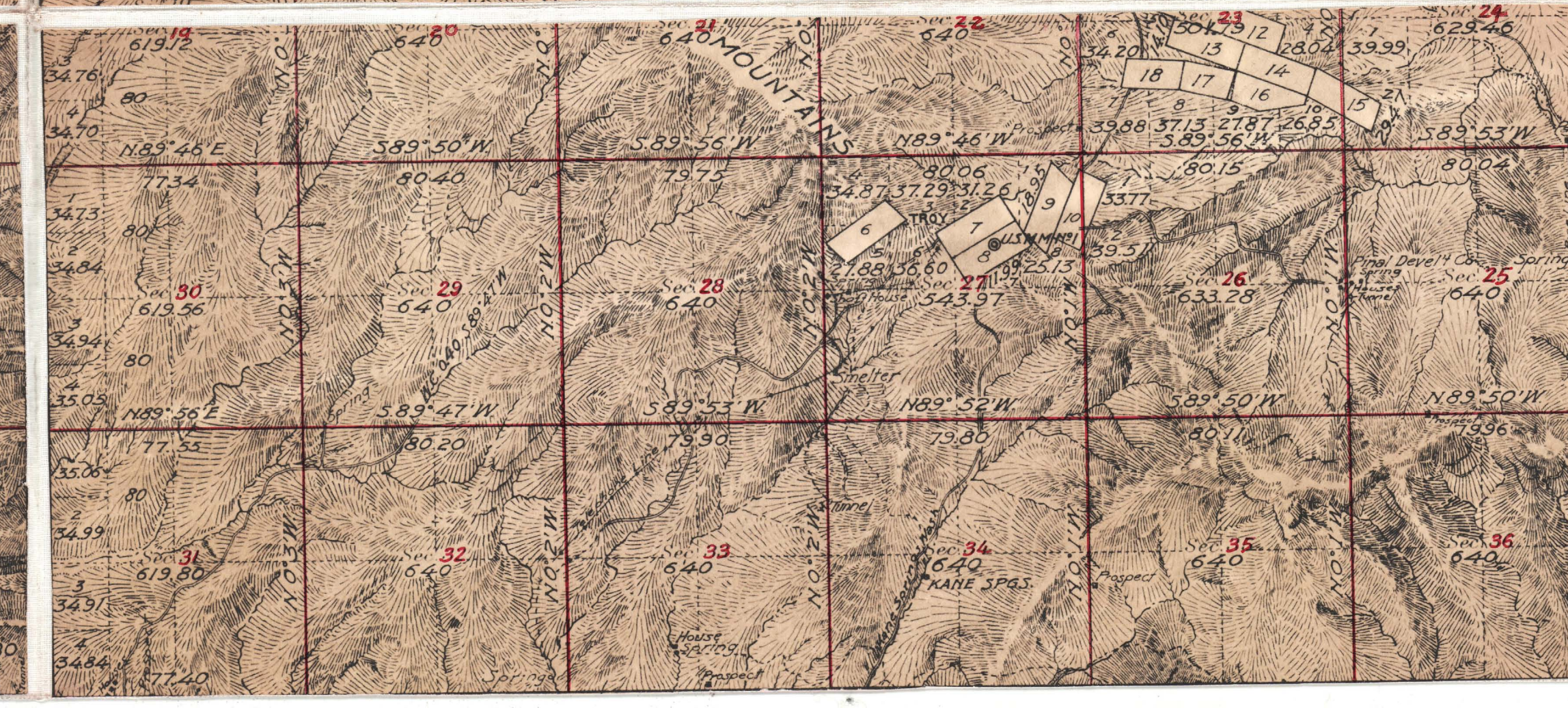
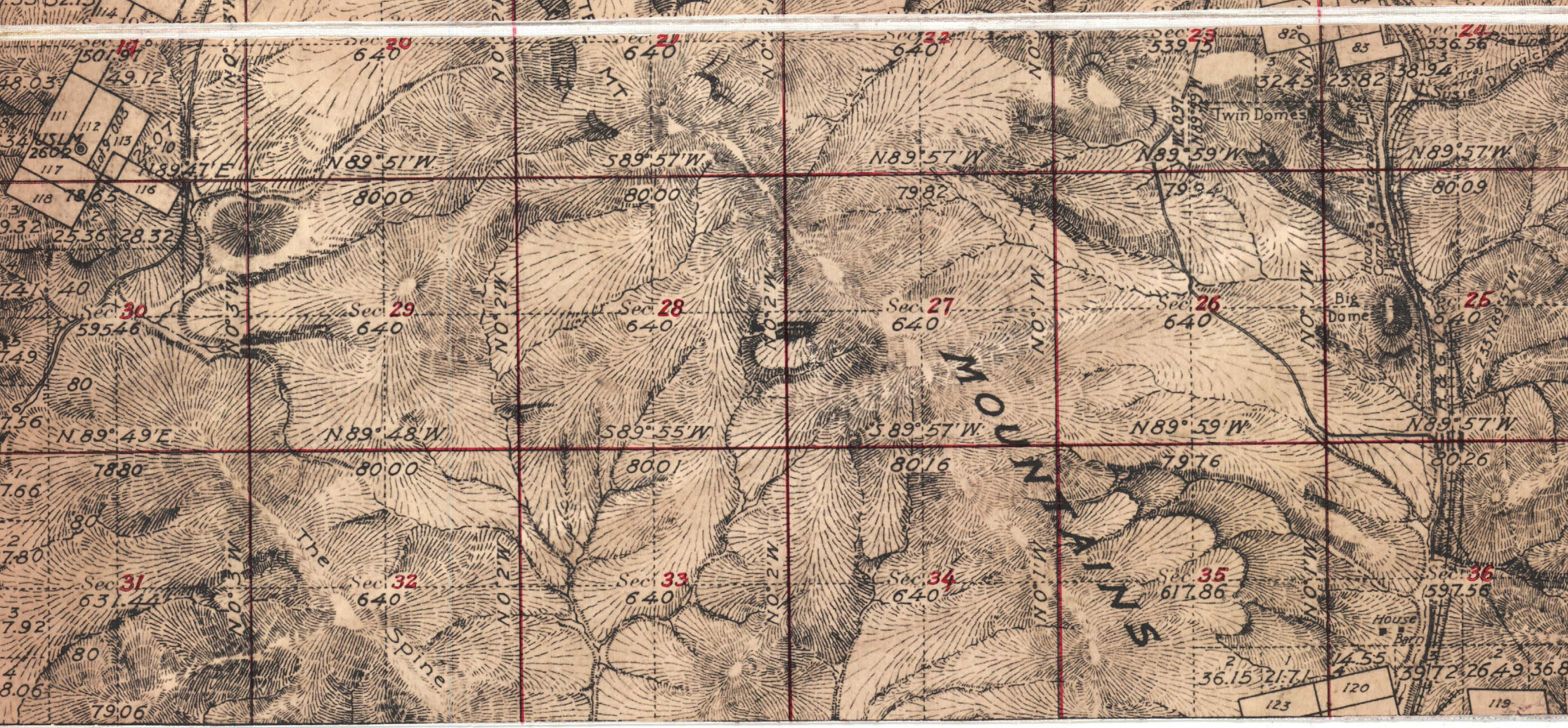
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2593	GRANITE	2594	GRANITE
2594	GRANITE	2595	GRANITE
2595	GRANITE	2596	GRANITE
2596	GRANITE	2597	GRANITE
2597	GRANITE	2598	GRANITE
2598	GRANITE	2599	GRANITE
2599	GRANITE	2600	GRANITE



35
14E

Patented Mining Claims

INDEX NO.	Name of Claim	Sur.No.	Area
1	Tunnel Eight	2273	2.91
2	Chicago	2273	6.21
3	Golden	2273	6.06
4	Walter Scott	2273	19.99
5	Centipede	2273	20.66
6	Climax Copper Mine No 3	1622	20.40
7	Troy	1621	20.66
8	Homestead	1621	20.66
9	Newport	2446	20.37
10	Amended Well	2446	20.66
11	Iron King	2447	20.66
12	Copper King	2447	20.66
13	Hoosier Boy	2447	20.66
14	Antelope	2447	20.66
15	New Century	2447	20.22
16	Atlas Number Three	2447	15.28
17	Copper Dept 2	2447	15.28
18	Copper Depot	2447	15.35
Total Area			307.33



Areas in Acres

Public Land	22,608.80
Indian Reservation	
Indian Allotments	
Mineral Claims	307.33
Water Surface	
Total Area	22,916.13

Lat. 33° 07' 03" N
Long. 110° 51' 16" W
Scale 40 Chains to an inch

RAY-MONITOR AREA
TOWNSHIP PLATS

RAY-MONITOR AREA
TOWNSHIP PLATS