60001801

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Drill Proposal to the Rosebud Property, Pershing and Humboldt County, Nevada, for Hecla Mining Co, January 15, 1996
AUTHOR	Brady M; Mueller J
DATE OF DOC(S)	1996
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud property; Hecla Mining Co.; Short Shot; North Equinox; North Rosebud Peak; Chance; Target II; Valley; Degerstrom; Dreamland; White Alps; East Dreamland; West Degerstrom; North Dozer Hill; Crater; Target IV; Oscar; Wildrose South; Wildrose West; Wildrose East; School Bus Canyon; North Kamma; South Kamma,
COMMODITY If not obvious	gold; silver Chalcedony Lac Minerals (USA) Inc
NOTES	Property report; property map; handwritten notes; geologic map; geology; cross sections; assays; drillhole location maps; production NOTE: Seven dividers 224p

Keep docs at about 250 pages if no oversized maps attached
(for every 1 oversized page (>11x17) with text reduce
the amount of pages by ~25)

SS: DP 7/30/08 (Initials / Date)
DB: (Initials / Date)
SCANNED: (Initials / Date)

Revised: 1/22/08

60001801 4010

DRILL PROPOSAL FOR THE

ROSEBUD PROPERTY

Pershing and Humboldt County, Nevada

by MICHAEL W. BRADY, Consulting Geologist

for HECLA MINING CO.

January 15, 1996

Mike Brady
100 Lemming Dr.
Reno, Nevada 89523
1-702-345-2343

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* = Priority Target

CONCLUSIONS/RECOMMENDATIONS

A review of all available exploration data for the Rosebud Property indicates that 21 specific target areas have been identified either by myself or by others within the presently defined claim boundary. Most of the target areas have now been subjected to some exploration drilling and it appears that 7 should now be eliminated for further consideration based on negative results. Also, 4 areas (School Bus Canyon, North Kamma, South Kamma and Chalcedony) probably should be eliminated for consideration due to the lack of any available supporting exploration data. Therefore 10 targets remain with some untested exploration potential.

It should be emphasized that this study did not include a detailed review of the drill results at the Rosebud Mine except along the northern and western margin of Dozer Hill. The exploration potential within the actual Rosebud Mine area remains the responsibility of the mine geologic staff.

For those 10 exploration areas that reside outside of the main Rosebud Mine, 18 separate drill holes aggregating 15,200 feet of drill advance are now recommended. Ideally all of the proposed holes should be core but for cost considerations 10 of the holes could be drilled using reverse circulation techniques. Total expenditures for this proposed program are estimated at $323,600 as outlined below using the two drill rigs.

Estimated Costs

a. reverse circulation drilling
9,000 feet x $8.00/foot = $ 72,000

b. core drilling
6,200 feet x $30.00/foot = 186,000

c. road and site construction = 10,000

d. assays (Au, As, Hg)
15,200 feet x $3.00/foot = 45,600

e. reclamation + miscellaneous = 10,000

$323,600

Target Area Status

Area	Recommendation	Drill Footage
1. Short Shot	tested	0
2. North Equinox	1 core hole	1,000 ft - core
3. North Rosebud Peak	tested	0
4. Target II	1 core hole	1,000 ft - core
5. Valley	1 core hole	1,000 ft - core
6. Degerstrom	tested	0
7. Dreamland	3 RC holes 1 core hole	3,000 ft - RC 1,000 ft - core
8. White Alps	2 RC holes	1,800 ft - RC
9. Chance	3 RC holes	2,000 ft - RC
10. East Dreamland	tested	0
11. West Degerstrom	tested	0
12. North Dozer Hill	1 core hole	1,200 ft - core
13. Target IV	tested	0
14. Oscar	tested	0
15. Gator	1 RC hole	800 ft - RC
16. Wildrose South	1 core hole	1,000 ft - core
17. Wildrose West	1 RC hole	1,000 ft - RC
18. School Bus Canyon	?	0
19. North Kamma	?	0

20. Chalcedony	?	0
21. South Kamma	?	0
	6 core holes 10 RC holes	6,200 ft - core 9,000 ft - RC

The Wildrose East area of interest as well as the northern portion of the Rosebud Property north of the Wildrose area has been examined only in reconnaissance fashion. Although not specifically outlined in this report, this area should be considered for comprehensive rock chip, soil sampling and IP/resistivity surveys similar to those completed over the rest of the property. The result of this work could then be used to plan either additional drilling or a possible decision to drop the claims. The cost estimate for this work was not included in this report.

INTRODUCTION

Reconnaissance geologic mapping and sampling of the Rosebud Property was completed by myself on December 1, 1995. Subsequent discussions with Charles Muerhoff, Chief Mine Geologist at the Rosebud Project on December 10 yielded a request that I generate a drill proposal to test those exploration targets presently known on the property outside of the main Rosebud orebody. The proposal was to be submitted no later than January 20, 1996. This report is therefore a summary of the results obtained but specifically the following was completed:

1) Past exploration has included rock chip and soil sampling as well as IP/resistivity on a rough 100 ft x 200 ft, NW-SE oriented grid covering the central half of the property from Rosebud Canyon north to Wildrose Canyon. Local exploration on a similar tight grid was also conducted in the Oscar area in the southwestern portion of the property and at the Gator and Wildrose areas north of Wildrose Canyon. Based primarily on this information set, previous investigators identified at least 20 separate target areas. All of this information was examined and then compiled at 1"=200' scale for each of the separate identified target areas into a binder format that is included with this report.

2) to date +300 exploration holes have been completed on the Rosebud Property by Asarco, Homestake Mining (late 70's and early 80's), Freeport Exploration (1985-86), St. Joe (1981-82), USMX (1988-89), Lac (1988-94) and Hecla Mining Co. (1994-present). Possibly 200 of the holes have been completed in the Dozer Hill-Rosebud Mine general vicinity and only 10-30 of these were examined on an as needed basis for this study. The remaining holes were all plotted, the geologic/assay logs examined and the information then organized into the above target areas. At times the old geologic logs had to be re-interpreted in light of the now more complete understanding for the surface geology. Several times the logs were so vague that any geologic re-interpretation was impossible, but at no time was a complete re-logging of the hole attempted.

3) the surface exploration data and the drill hole data were then examined together in detail for each target area to determine what, if any exploration potential remained. Due to time limitations, none of the target areas that now appear valid were then re-examined or sampled in the field.

The results of this investigation were that 7 of the previously proposed target areas were found to have been tested with drilling that returned negative assay results and no further exploration interest now appears warranted (Short Shot, North Rosebud Peak, Degerstrom, East Dreamland, West Degerstrom,

Target IV and Oscar). It also appears that 4 of the originally proposed target areas were poorly based and therefore they were dropped from discussion by predecessor companies in later reports and/or memos (School Bus Canyon, North Kamma, South Kamma and Chalcedony). The remaining 10 areas are thought to contain some remaining exploration potential and they are the focus of this report.

One limitation to this review is that the volcanic stratigraphy has been subdivided at times along different stratigraphic horizons by past investigators and then each subdivision has been called a wide variety of formation names. The exploration drill holes outside of the main Dozer Hill-Rosebud Mine area were also poorly logged with little or no attempt to implement surface geologic terminology into the logs. This is an understandable problem with volcanic units that have subtle differences and reverse circulation drill cuttings that are difficult to log, but at Rosebud the confusion appears to have been exaggerated as a result of +6 separate companies working in the area over a short 10-15 year period.

Since this study was conducted in a very brief time, great liberty was taken in the re-interpretation of the drill logs using the formation breakdown as defined in the reconnaissance geologic mapping effort (Brady, 1995). One future project for the mine staff would be to formalize a re-logging effort going back to the original cuttings/core if still available.

Based on old reports and field sketch maps found in Hecla's files, the following appears to be a rough stratigraphic correlation chart for the various formation names presently in use.

Lac, 1990	Lac, 1991	Lac, 1992 at mine	Brady, 1995
Badger	Badger	Badger	Badger
Gator	"	"	"
welded tuff(Tct)	upper chocolate	chocolate volcanics	welded tuff (Tcw)
pyroclastics(Tcp)	lower chocolate	" "	nonwelded (Tc)
upper bedded(Tcb2)	genuine Bud	upper Bud	Tbs2
felsite sill(Ts)	Wildrose	marker bed(TMB)	Ta
lower bedded(Tcb2)	Bud light	lower Bud(LBT)	Tbs1
Dozer(Td)	Dozer(Td)	Dozer(Td)	Dozer(Td)

Chocolate Tuff

Chocolate Tuff

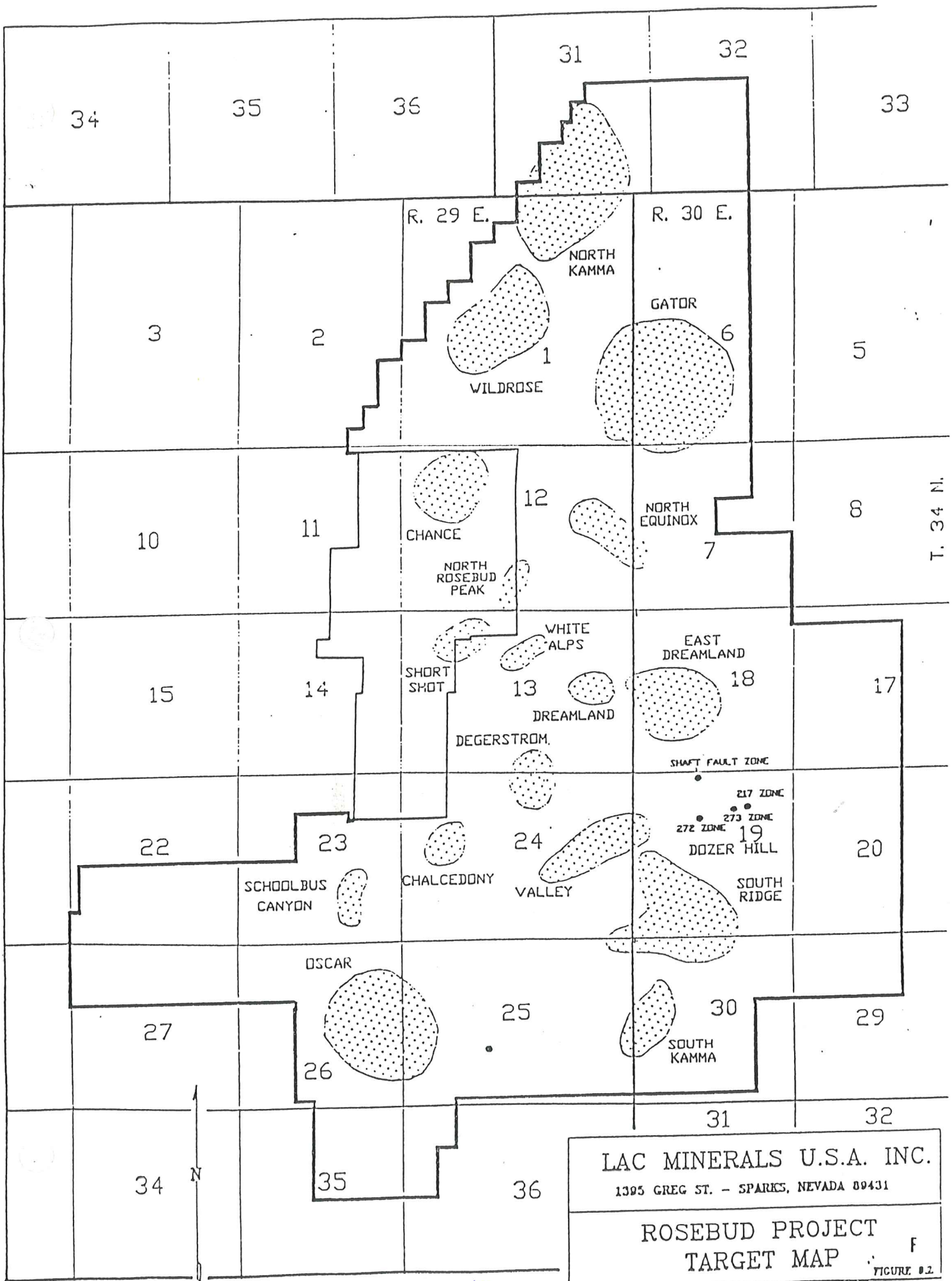
Notes: some of the logs refer to FGT (fine grained tuff), RBU (red brown ugly), tuff or just describe the unit by color. I could not place these descriptions into any stratigraphic connotation. When I briefly re-interpreted the drill logs based on surface mapping, I guessed in general the units intersected in the drill hole based on:

Ta = phenocrysts noted

Tbs1 or Tbs2 = no phenocrysts noted but usually breccia textures, graded bedding or other sediments textures noted in conjunction with a tint of green coloration (clay).

Tc = none of the above noted and too shallow to be Td

Td = none of the above noted and too deep to be Tc



10

LAC MINERALS U.S.A. INC.

1395 GREG ST. – SPARKS, NEVADA 89431

ROSEBUD PROJECT

TARGET MAP

FIGURE 8.2

NEVADA	PERSHING	1:48000	
			5/93

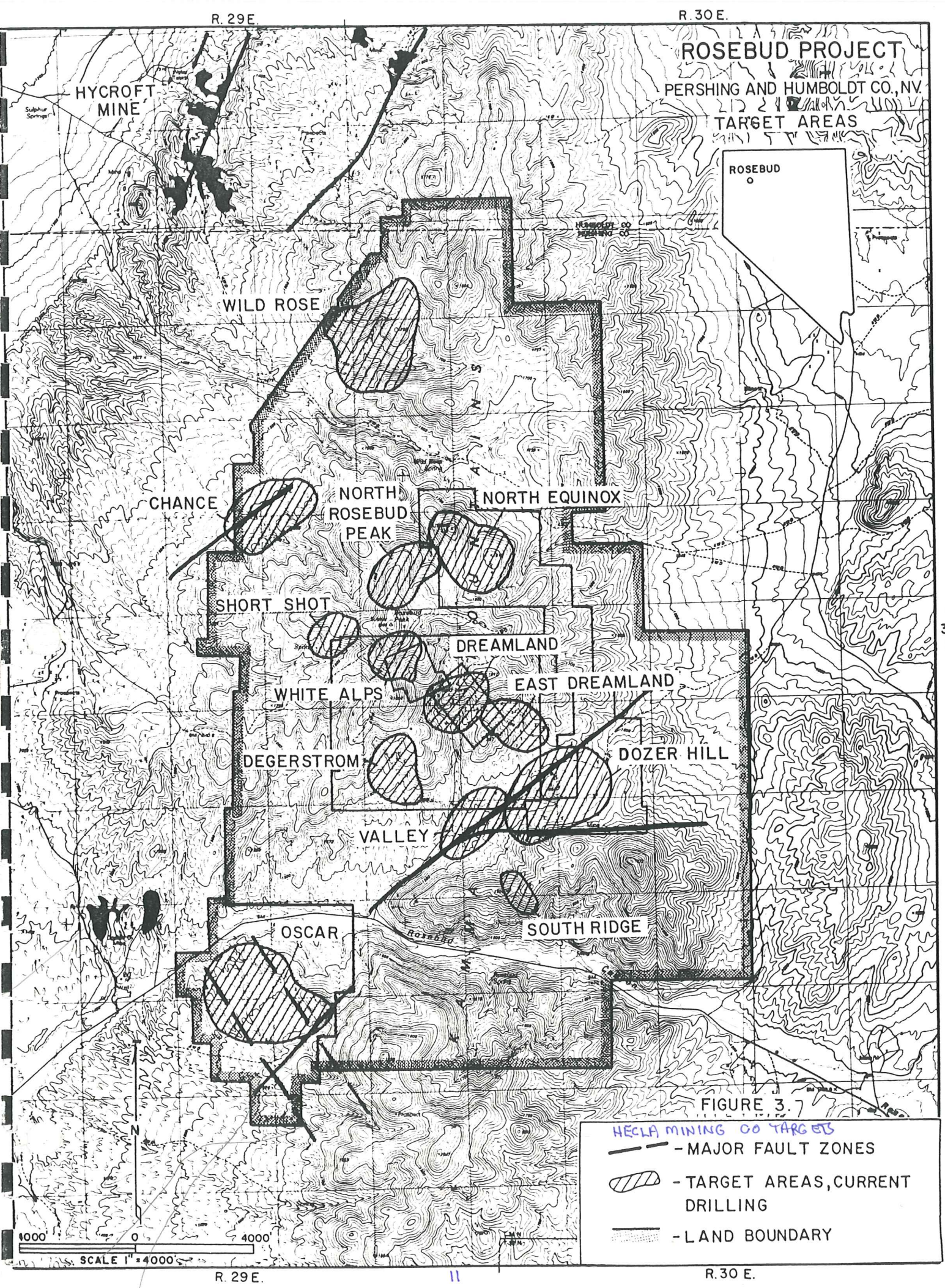
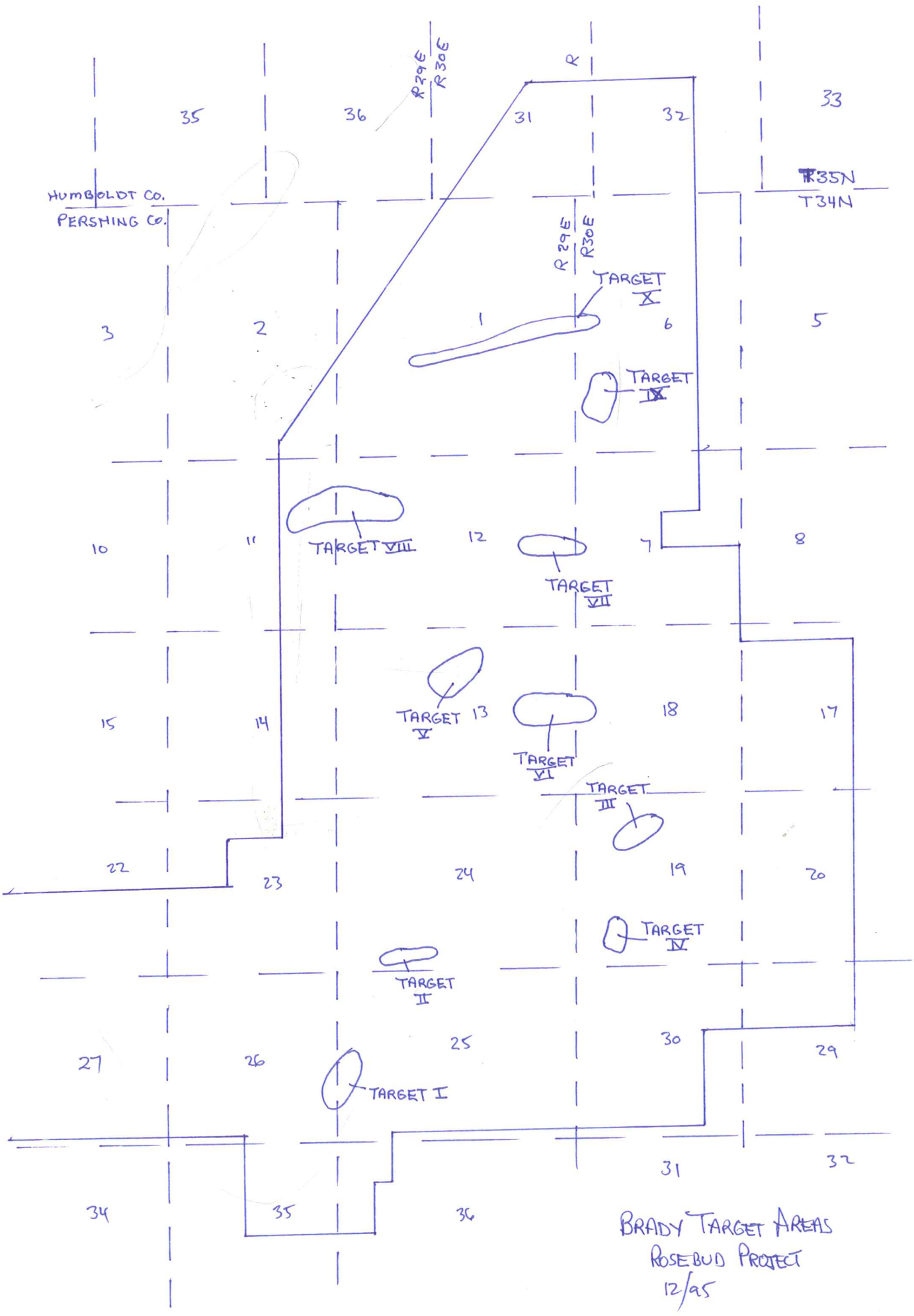

R. 29E.
R. 30 E.
ROSEBUD PROJECT
PERSHING AND HUMBOLDT CO., NV.
TARGET AREAS
ROSEBUD
HYCROFT MINE
WILD ROSE
CHANCE
NORTH ROSEBUD PEAK
NORTH EQUINOX
SHORT SHOT
DREAMLAND
EAST DREAMLAND
WHITE ALPS
DEGERSTROM
DOZER HILL
VALLEY
OSCAR
SOUTH RIDGE
T. 34 N.
HECLA MINING CO TARGETS
- MAJOR FAULT ZONES
- TARGET AREAS, CURRENT DRILLING
- LAND BOUNDARY
4000' 0 4000'
SCALE 1" = 4000'
R. 29 E.
R. 30 E.

FIGURE 3.7



BRADY TARGET AREAS
ROSEBUD PROJECT
12/95

TARGET DESCRIPTIONS

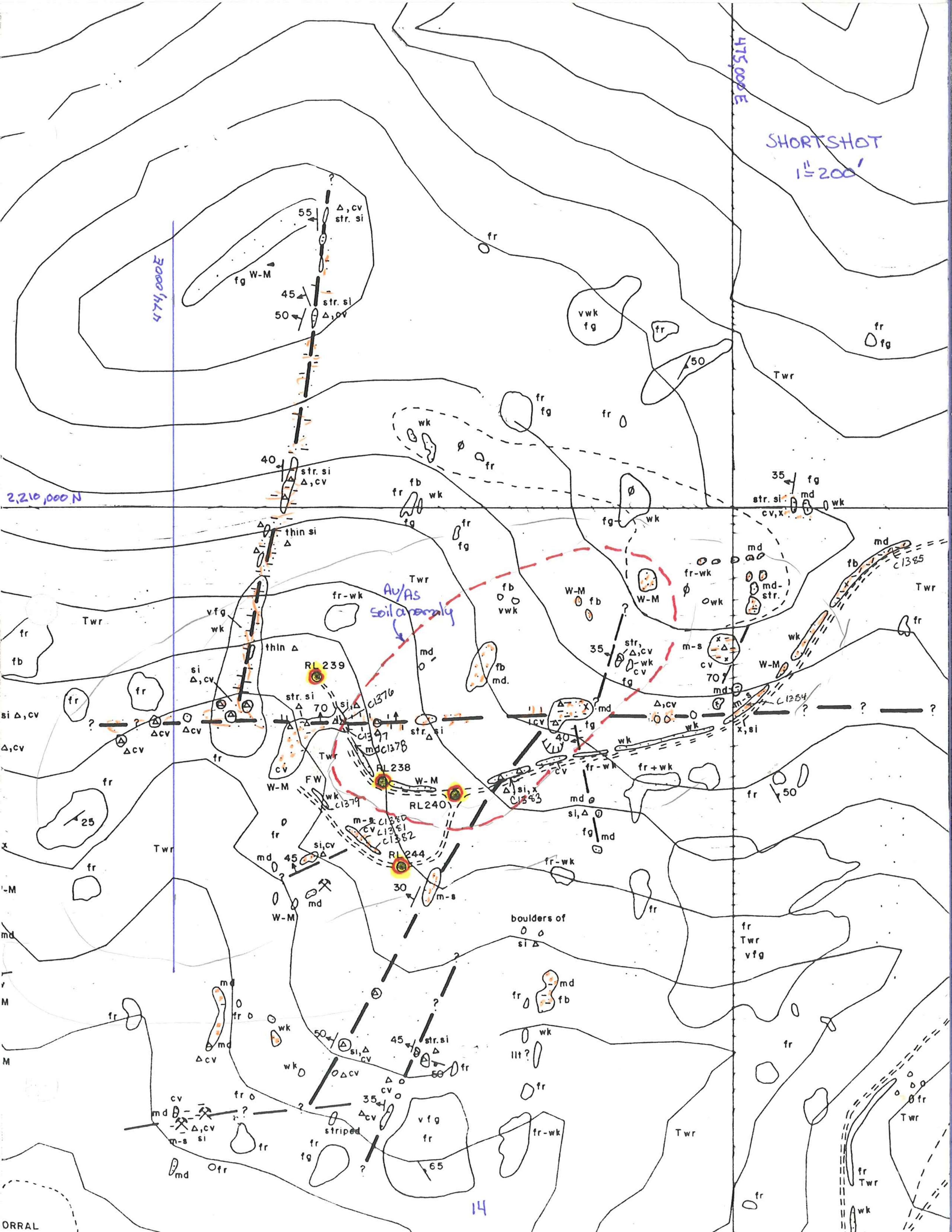
General

Exploration targets have been proposed by all of the companies that have worked at the Rosebud Property. Some of the targets have now been completely drill tested, others partially tested and yet some remain unexplored. Usually the target name persists from company to company but its location and boundaries may shift somewhat.

In this study I have attempted a complete compilation of all of the targets in their broadest aerial definition. The following discussion therefore pertains to areas of exploration interest that may have been recognized by one or all previous companies but not necessarily was the company's interest based on a similar set of criteria. It does appear to be correct that based on surface observations, no areas outside of those that follow appear to contain any exploration interest.

1. Short Shot

A large bleached area that is located 2,000 feet west of Rosebud Peak. Soil sampling revealed +50 ppb Au, +15 ppm As, low Sb and Se while the geophysics returned no IP/resistivity anomaly. The surface host for mineralization/alteration is the Tbf unit with the Tc unit suspected to underlie at shallow depth. Lac completed 4 vertical reverse circulation holes in 1991 on the southwestern perimeter of the geochemical anomaly and intersected no anomalous values (no logs available, only mention in a year end report summary). The only area left to test would be up-slope within the soil anomaly but it is not recommended except on a very low priority basis. The target is considered to have been essentially tested with no further exploration interest justified at this time.


SHORTSHOT
1" = 200'
475,000E
474,000E
2,210,000 N
Au/As soil anomaly
RL 239
RL 238
RL 240
RL 244
C1376
C1377
C1378
C1379
C1380
C1381
C1382
C1383
C1384
C1385
Twr
boulders of si Δ
striped
ORRAL

2. North Equinox

A large, east-west trending chalcedonic breccia zone hosted in the Tc unit that strikes across USMM 212 hill over a distance of 2,000 feet. A second N25-30W trending silicified fault zone appears to terminate the silicified breccia zone on its western extent. The main zone trends under Tb cover to the east. Surface rock chip sampling in the silicification records erratic 50-100 ppb Au, 20-60 ppm As and 20-40 ppm Sb with increasing values topographically lower on the hill. The non-silicified wall rocks appear to be essentially barren.

Lac drilled 4 angle reverse circulation holes in 1990 primarily to test the east-west trending silicified zone but only low grade erratic 0.01-0.03 opt Au values were intersected in the immediate hangingwall. The zone itself was found to be barren. Hole RL-87 was drilled on the western strike extent of the main zone and no silicification 650 feet below the present-day erosion surface was logged. This might imply that either the silicification is a surface feature or that it was faulted out at depth.

A well defined, north-trending IP anomaly is present on the hangingwall to the east-west silicified zone just north of hole RL-85. Interestingly the bottom portion of RL-85 also records strong silicification with erratic 0.01 opt Au. Outcrops are poor but a north-northeast trending, steeply west dipping silicified fault was mapped and rock chip samples returned consistent 80-120 ppb Au values from the area.

One core hole is proposed to test the IP/geochem anomaly. Coring rather than reverse circulation drilling is suggested to better understand the nature of the anomaly as well as to prospect for a favorable host that might be extrapolated south to intersect the main zone of silicification.

A second hole could be attempted where the east-west zone of silicification intersects the N25-30W silicified fault but it is not recommended due to the negative results obtained in RL-87. The area may justify additional interest in the future once the nature of the IP anomaly is established.

NORTH EQUINOX
1"=200'

▬ = silicification

▲ = +100ppb Au rock chip

N 2212500

2,212,000N

480,000W

IP ANOMALY

PROPOSED

+100ppm As soil

40ppb Au soil

RL-87 845.0'

RL-84 405.0'

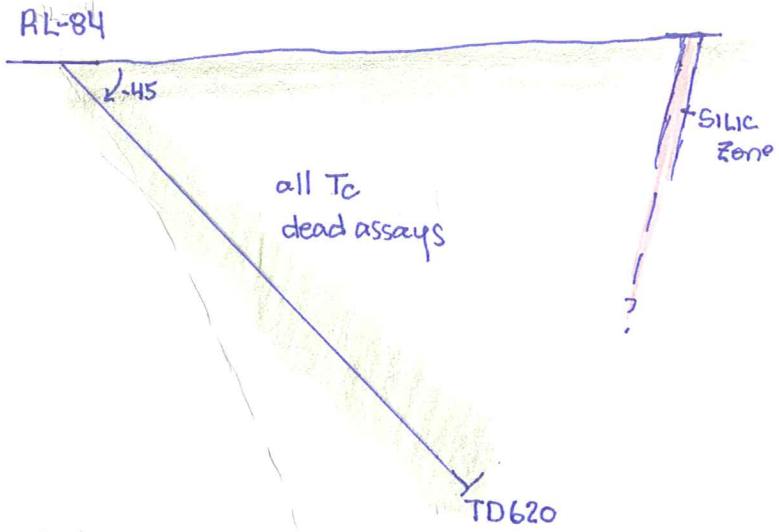
RL-86 665.0'

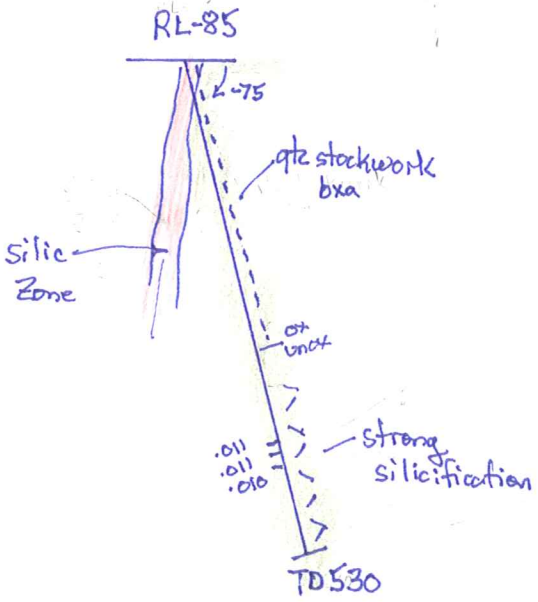
RL-85 530.0'

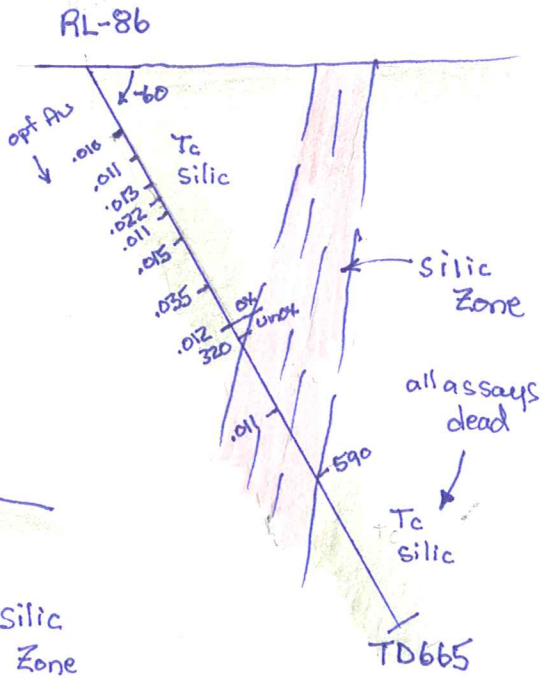
BADGER Fm

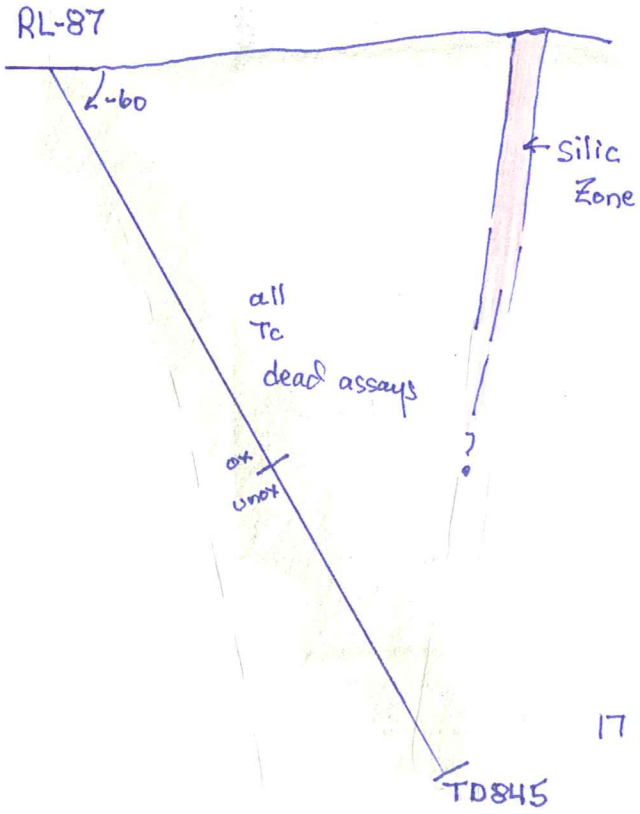
NORTH EQUINOX SADDLE

SOUTH FORK WILD ROSE CANYON









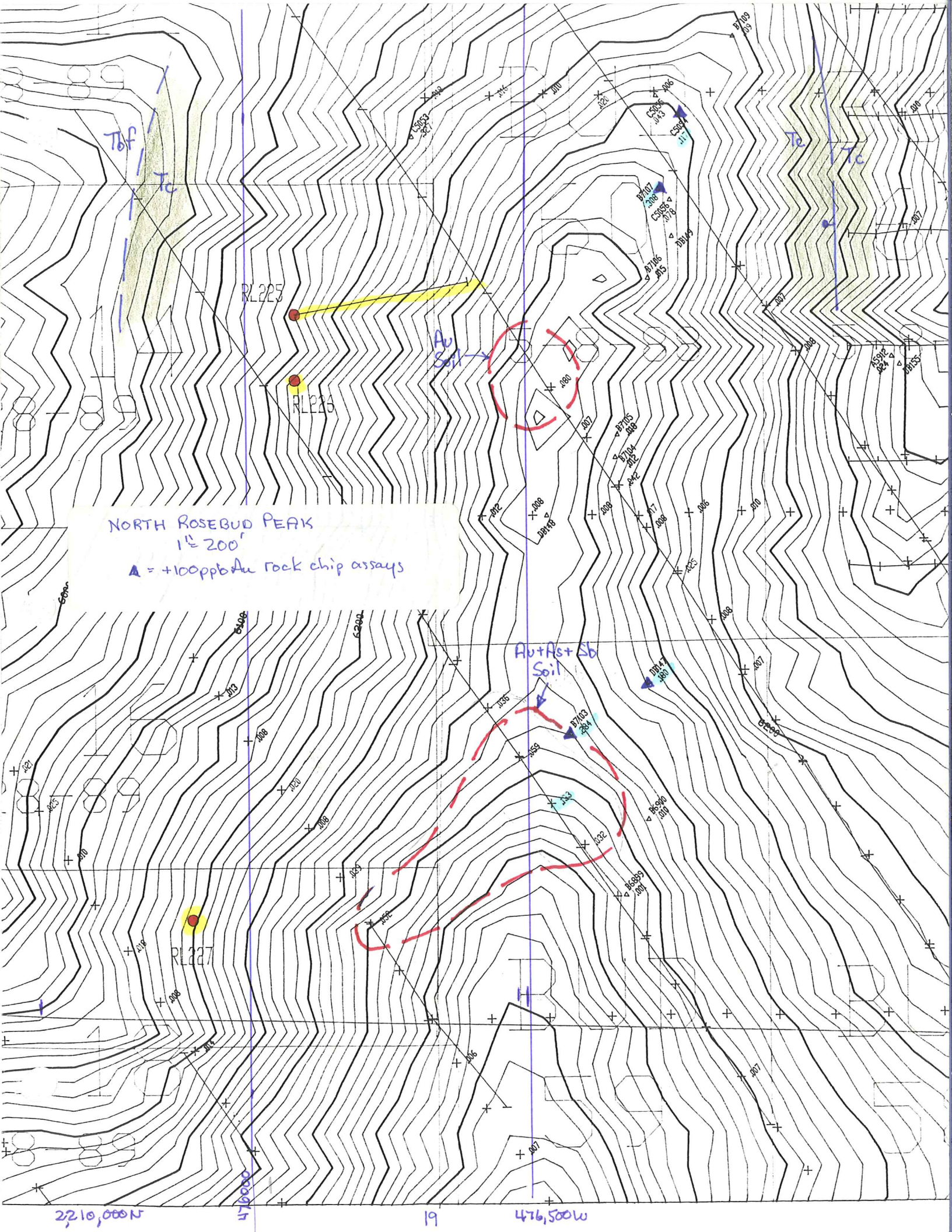
NORTH EQUINOX
1" = 200'

DRILLING CROSSECTIONS

3. North Rosebud Peak

Mapping revealed scattered silicified breccias along the north trending ridge that extends north from Rosebud Peak. The breccias are hosted in the Tc unit with Tbs suspected at relatively shallow depth. The geochemistry for the area is generally low and the IP/resistivity work revealed no anomaly. Lac completed 3 reverse circulation holes along the west side of the ridge in 1991 and none intersected anomalous mineralization. Based on my compilation, it appears that all of the holes were poorly located and that they failed to test even the weak surface geochemistry.

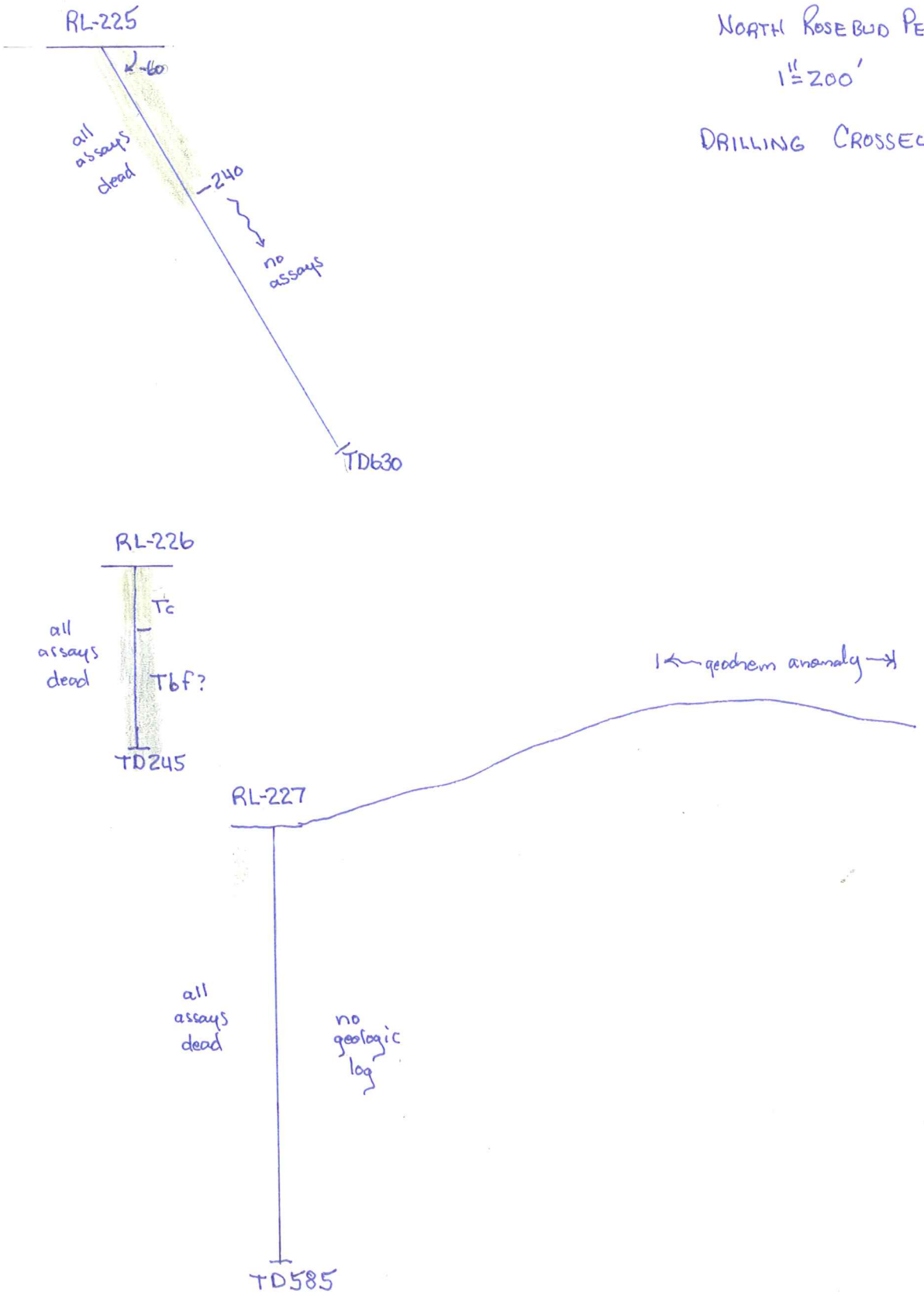
Just east of hole RL-227 a Au+As+Sb soil anomaly persists across two separate sample lines that remains untested. A base surge horizon (Tbs3) may trend into the area from the south, possibly sub-cropping under soil and talus cover between the anomaly and RL-227 (dipping to the east). Drilling on the geochemical anomaly looking for the Tbs unit at depth might be interesting but, since the three holes are dead and the IP/resistivity results flat, this area is suggested on a low priority basis for the future.


NORTH ROSEBUD PEAK
1" = 200'
▲ = +100ppb Au rock chip assays
Tbf
Tc
RL225
RL226
RL227
Au Soil
Au+As+Sb Soil
2,210,000N
19
476,500W

NORTH ROSEBUD PEAK

1" = 200'

DRILLING CROSSECTIONS



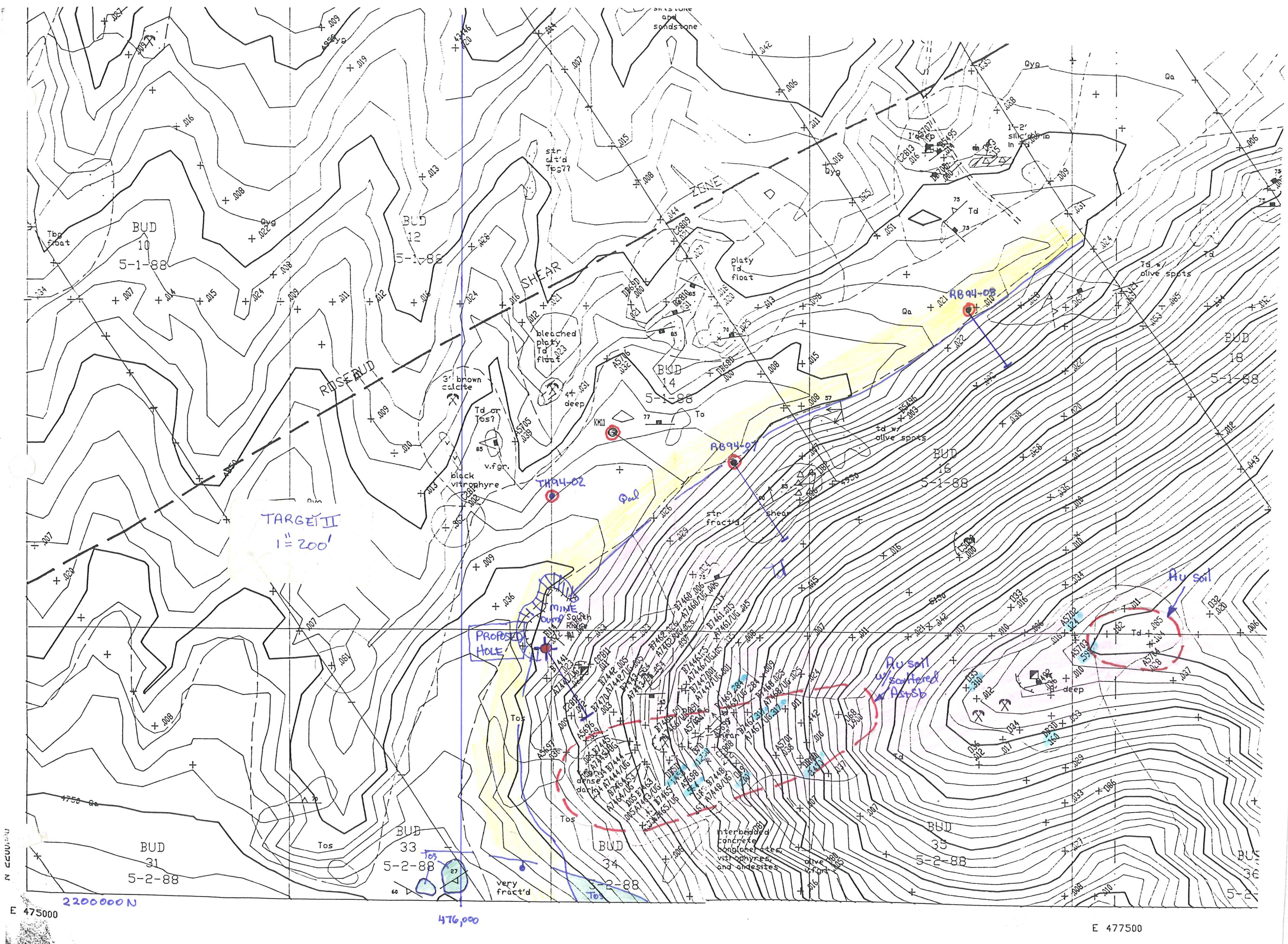
4. Target II

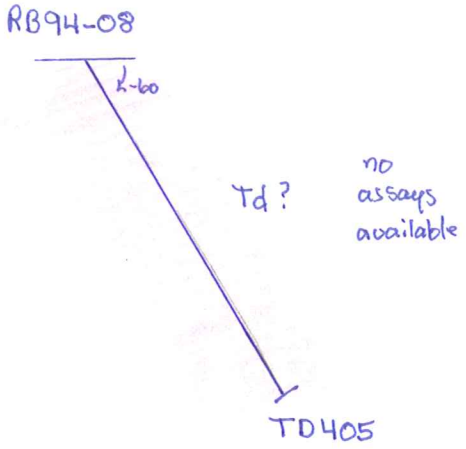
Located on the extreme western end of the prominent topographic ridge south of the Rosebud Mine. Numerous shallow surface pits and adits as well as one underground mine with +500 feet of workings explore a N70-75E oriented zone of fracturing hosted in the Td unit. Individual fractures vary from 0.25 up to 1.5 inches wide and they appear to persist over strike distances of only 10-50 feet but overall they are present within a laterally continuous zone that strikes roughly 1,600 feet. Strong gold (+1.0 ppm), arsenic (+100 ppm) and antimony (+10-20 ppm) are present in rock chip samples. Unfortunately this location is at the edge of the geophysical survey so reliable IP/resistivity information is not available.

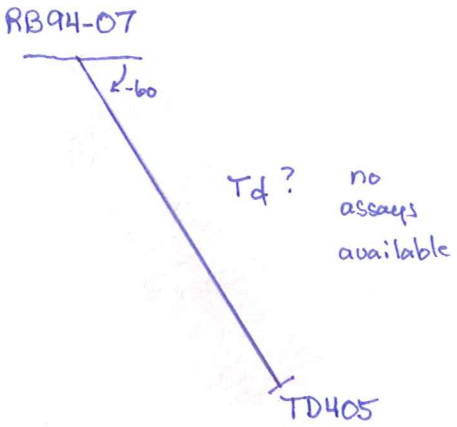
The stockwork/fracture zone averages only 50-100 feet in width and it therefore is not considered interesting for open-pit consideration. It is possible that the fractures coalesce with depth into a more discrete shear/vein that may have potential for underground mining. Such a character change would most likely occur below the Td unit at a formation change into the Tos or the JTra basement.

Past drilling in the area consists of hole KM-11 drilled by Freeport Exploration in 1985-86 and various condemnation holes drilled by Hecla in 1994-95. Although all were dead of any mineralization, none were positioned to test the downward projection of the zone of present interest.

At this time only one core hole is proposed to explore the downward continuation of the stockwork/fracture zone. The hole is positioned to hopefully penetrate below the Td unit but this is a difficult target since the elevation of the contact is unknown. Coring is the preferred drilling option since this hole also will be penetrating a poorly understood stratigraphic section below the Td unit and the information gathered might be of some interest elsewhere on the property.


TARGET II
1" = 200'
ROSEBUD SHEAR ZONE
BUD 10 5-1-88
BUD 12 5-1-88
BUD 14 5-1-88
BUD 15 5-1-88
BUD 18 5-1-88
BUD 31 5-2-88
BUD 33 5-2-88
BUD 34 5-2-88
BUD 35 5-2-88
RB94-08
RB94-07
TH94-02
KM11
PROPOSED HOLE
MINE Dump
South Ridge
Au soil
Au soil w/scattered As+Sb
siltstone and sandstone
Qyg
Qa
Qal
Td
To
Tos
Tbg float
str alt'd Tps??
platy Td float
bleached platy Td float
3' brown calcite
4' deep
Td or Tos?
v.fgr.
black vitrophyre
Td w/ olive spots
str fract'd
shear
1'-2' silic'd in
1' deep
dense dark
deep
very fract'd
interbedded concrete conglomerates, vitrophyres, and andesites
olive v.fgr.
E 475000
E 477500
2200000N
476,000

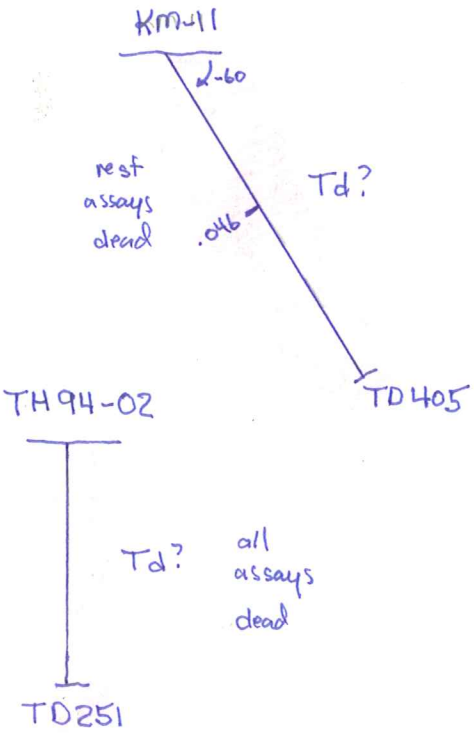




TARGET II

1" = 200'

DRILLING CROSSECTIONS



5. Valley

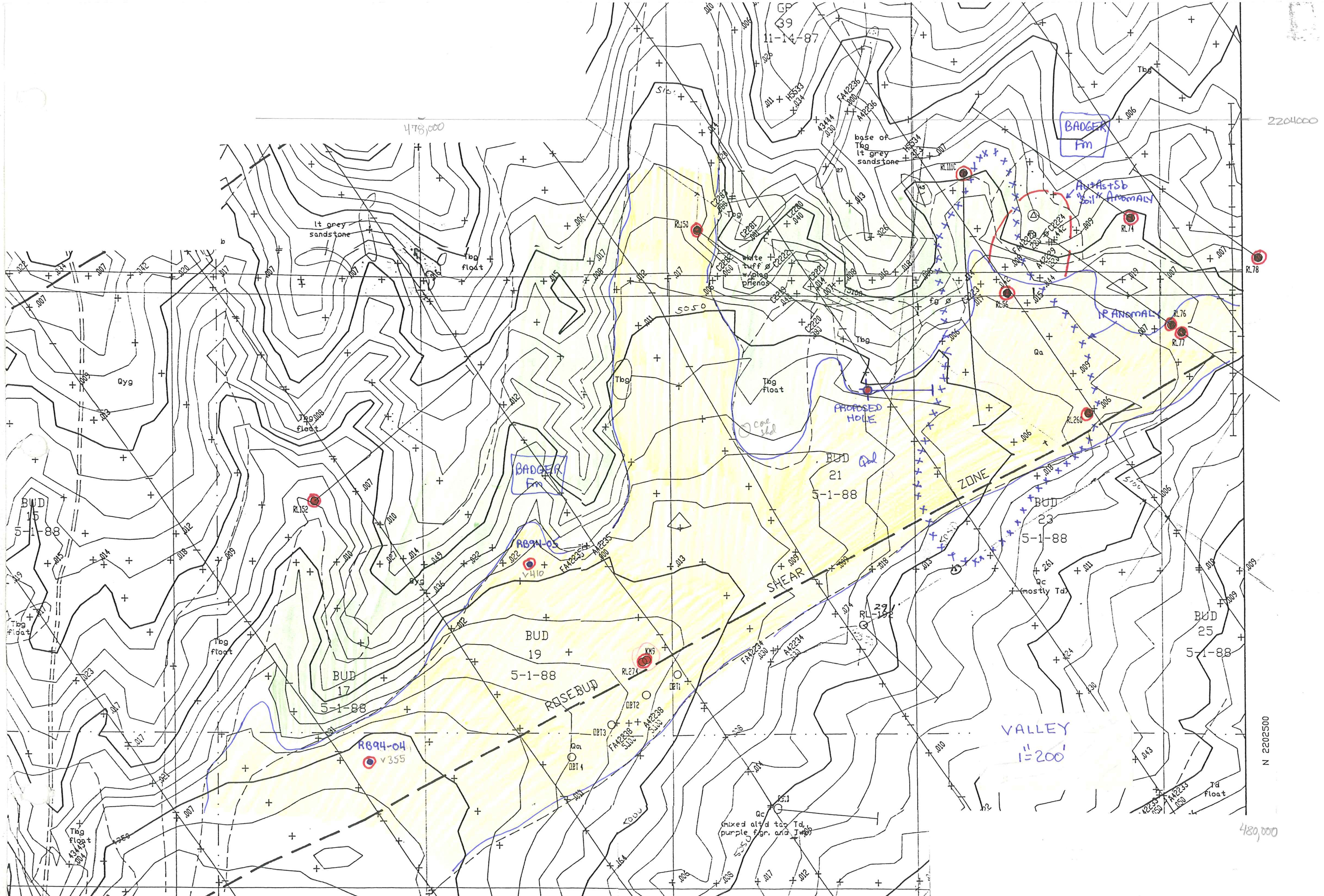
This area is located in the alluvial filled valley that parallels the Rosebud Shear approximately 2,500 feet west of Dozer Hill. Outcrops north of the Rosebud Shear are of the post-mineral Badger unit while outcrops to the south are exclusively of the Td unit. The target is blind, being defined by a persistent IP high that trends north-south under Badger cover but terminates at the Rosebud Shear projection. the Tc unit appears to underlie the area based on the drill logs..

Past drilling has been extensive but apparently the holes were directed to test postulated east-west trending features due to the hole locations and inclinations. Although oriented incorrectly to test the IP anomaly, the previous drilling was successful in the following anomalous intersections:

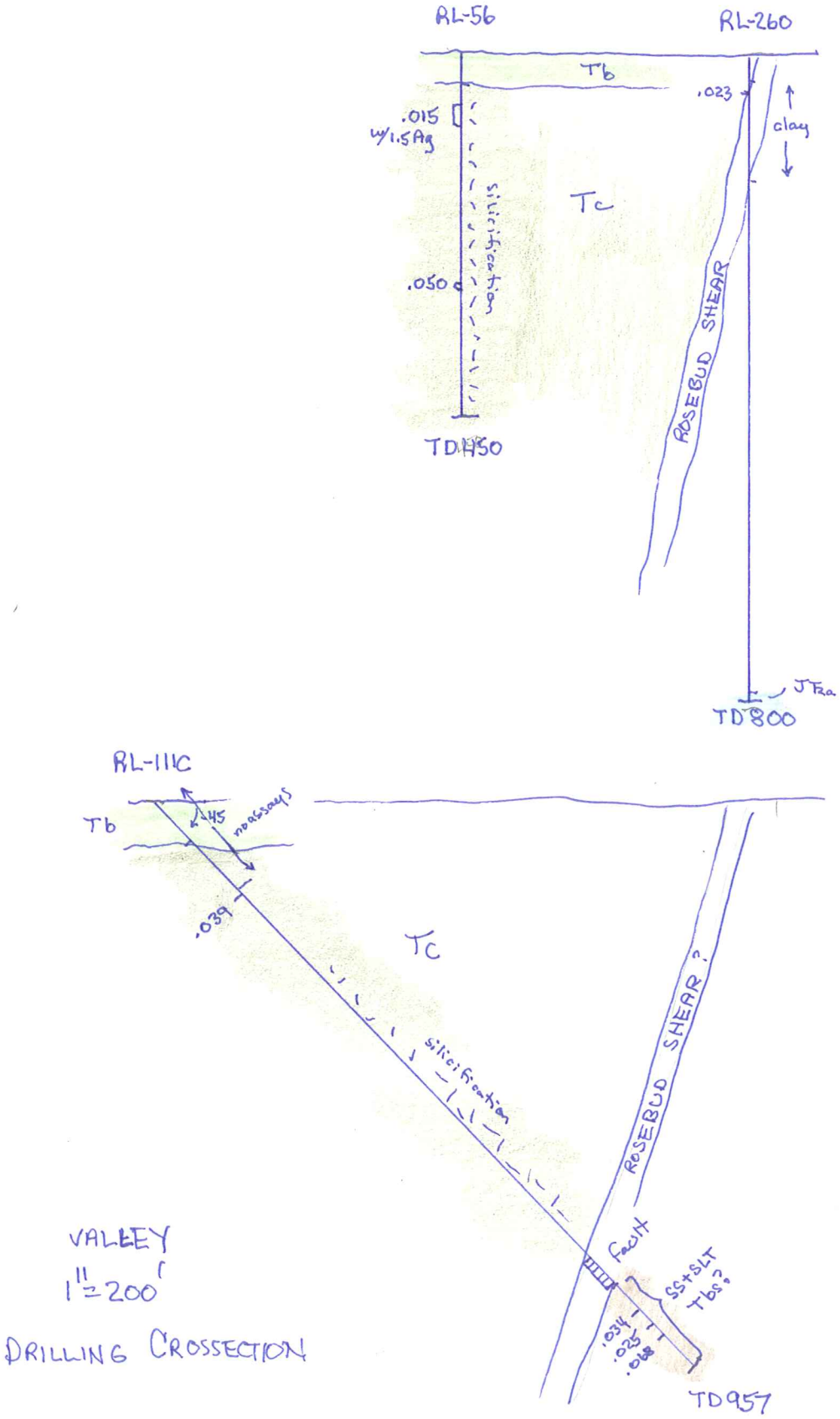
RL-56, 65-90 ft @ 0.015 opt Au/1.5 opt Ag and 285-295 ft @ 0.05 opt Au
RL-74, 320-325 ft @ 0.095 opt Au, 415-420 ft @ 0.053 opt Au and 525-530 ft @ 0.079 opt Au
RL-77, 235-240 ft @ 0.045 opt Au
RL-111, 252-257 ft @ 0.039 opt Au

Drilling perpendicular to the anomaly axis from west to east as is proposed is thought to be a more reliable test for the area. Again coring is preferred since the target is blind and any stratigraphic information at this location would be of interest.

Another curious feature based on the drilling results is that hole RL-111 appears to have penetrated the Rosebud Shear at 785-831 feet and then the hole penetrated volcanic sandstone and siltstone descriptively similar to the Tbs unit in the footwall. This intersection was also mineralized as follows: 879-884 ft @ 0.034 opt Au, 907-912 ft @ 0.025 ft and 922-927 ft @ 0.068 opt Au. Hole RL-260 300 feet to the northeast also penetrated the Rosebud Shear but the footwall was dead while hole RL-274, 1,000 feet to the southwest penetrated the Rosebud Shear and found considerable low grade 0.01-0.02 opt Au in the footwall interval 495-560 feet at the Td contact (possibly a Tbs unit). Based on this information several interpretations are possible but the Rosebud Shear may branch and form 2 parallel segments at this location. The interesting drill intersections might therefore be located between the two parallel branches within which some exploration may be justified at a future date on a lower priority basis.

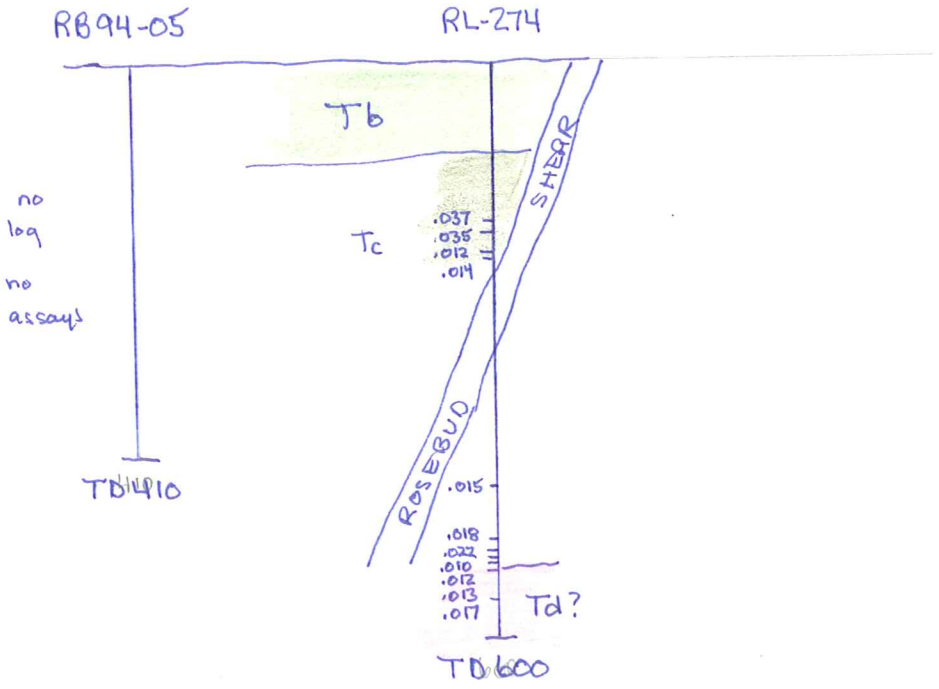


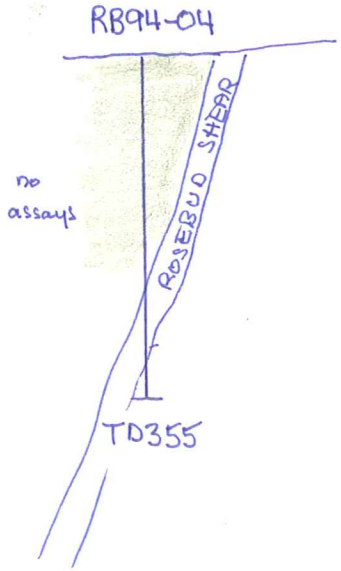
GP
39
11-14-87
478,000
2204000
BADGER Fm
Au+As+Sb "Soil" ANOMALY
IP ANOMALY
PROPOSED HOLE
base of Tbg lt grey sandstone
lt grey sandstone
white tuff ø w/plag phenos
Tbg float
Tbg
Qyg
Qa
fg ø
core shd
RL111C
RL150
RL74
RL78
RL56
RL76
RL77
RL260
RL152
RL274
KM5
RL-192
RB94-05
V410
RB94-04
V355
DBT1
DBT2
DBT3
DBT 4
BUD 15 5-1-88
BUD 17 5-1-88
BUD 19 5-1-88
BUD 21 5-1-88
BUD 23 5-1-88
BUD 25 5-1-88
ROSEBUD SHEAR ZONE
Qc (mostly Td)
Qc (mixed alt'd tan Td, purple f.gr. and Jms)
Td float
VALLEY
1" = 200'
N 2202500
480,000



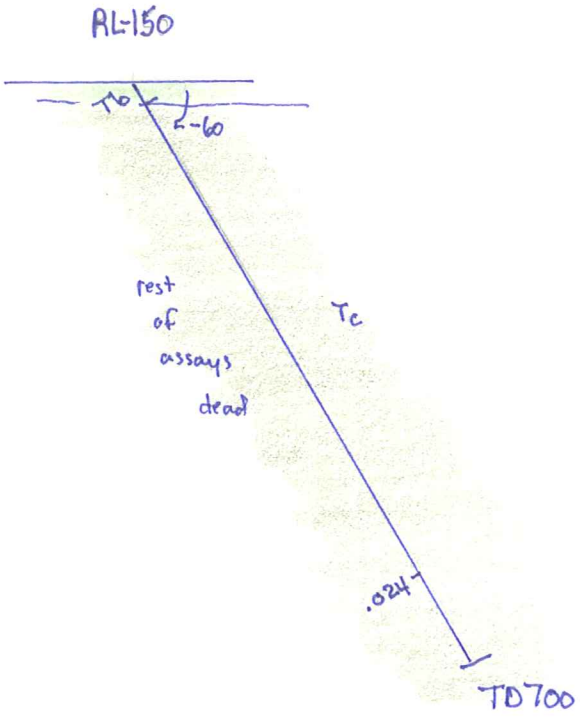
VALLEY
1" = 200'

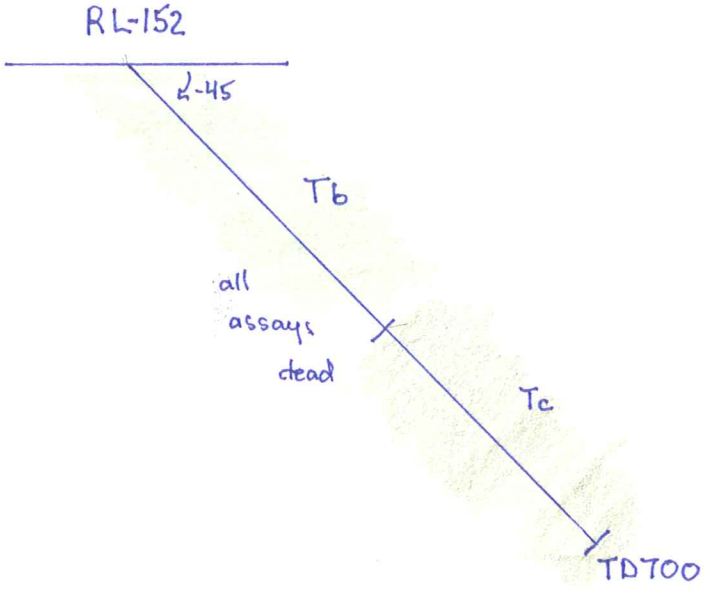
DRILLING CROSSECTION





VALLEY
1" = 200'
DRILLING CROSSECTION

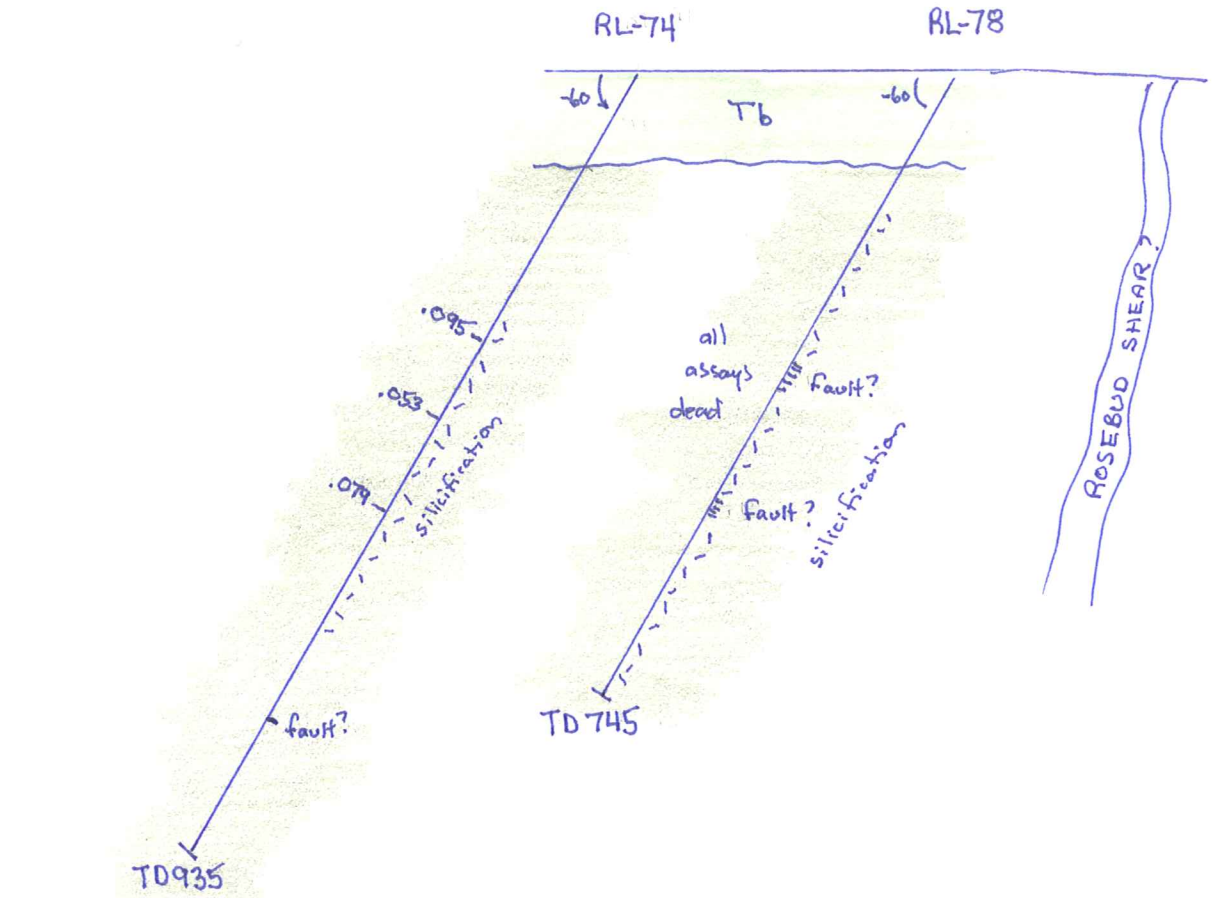


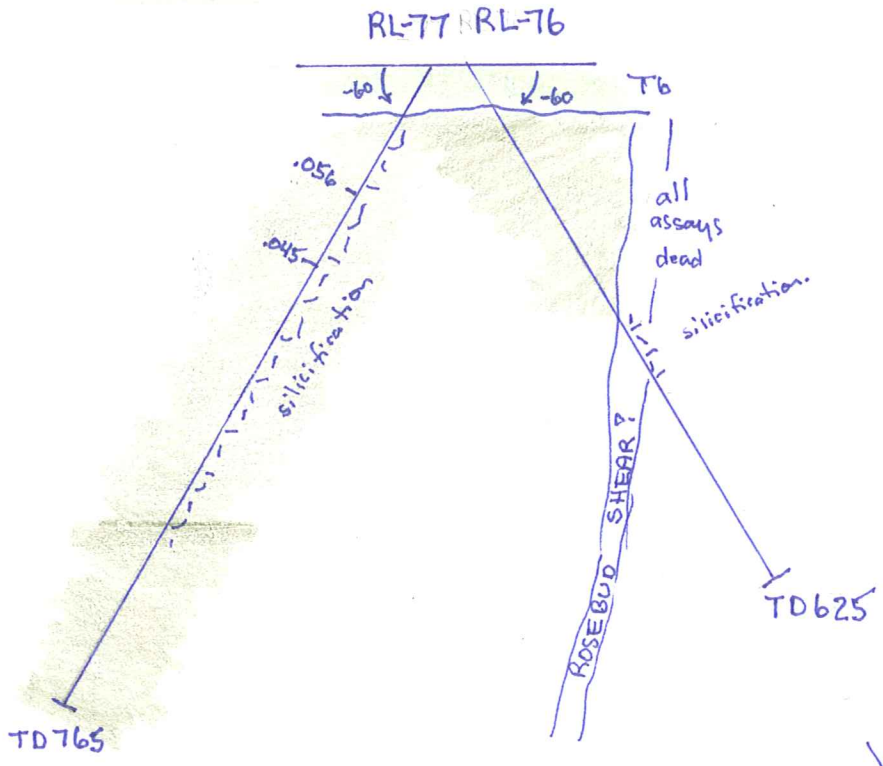


VALLEY

1" = 200'

DRILLING CROSSECTION





VALLEY
1" = 200'

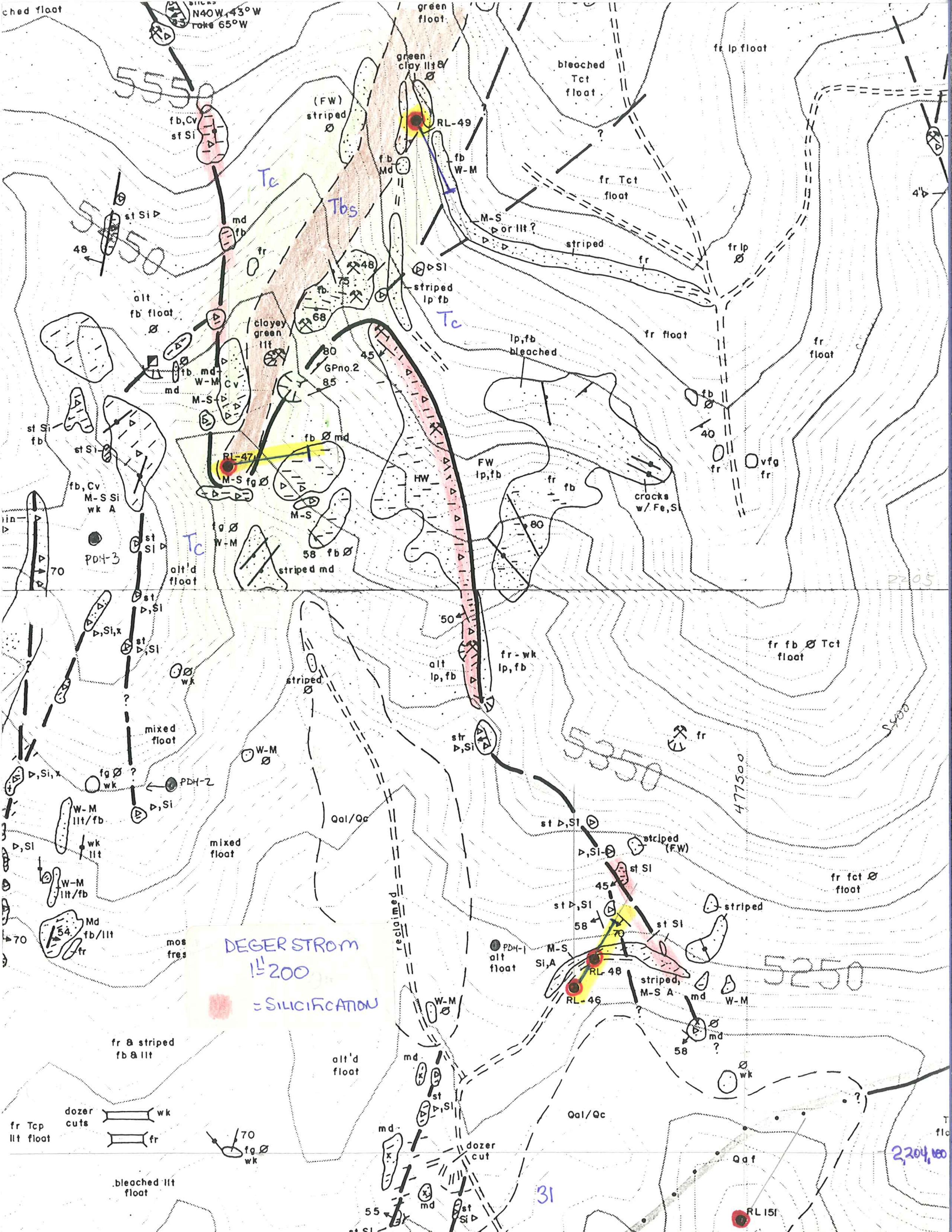
DRILLING CROSSECTION

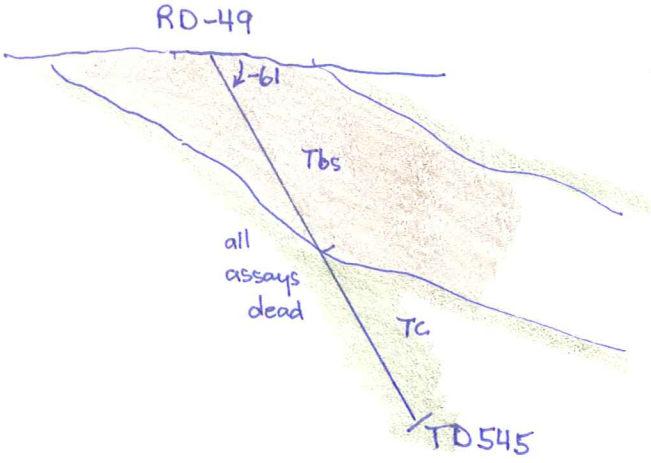
6. Degerstrom

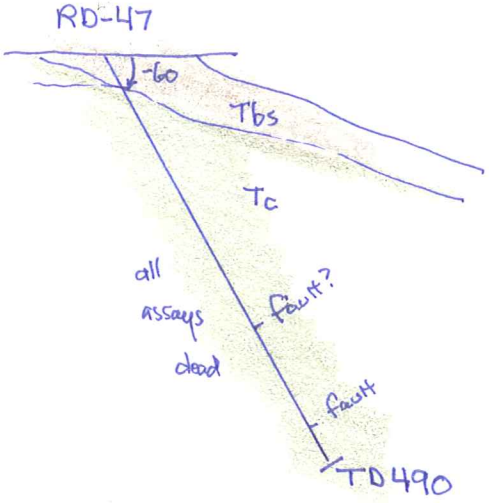
Located approximately 5,000 feet west of Dozer Hill, a silicified north-northwest trending low angle fault zone hosted in bleached Tc dips west at 50-55 degrees. The footwall units are both Tc and Tbs4. The zone of silicification varies from 5 up to 20 feet thick within which gold is uniformly low at 20-40 ppb Au.

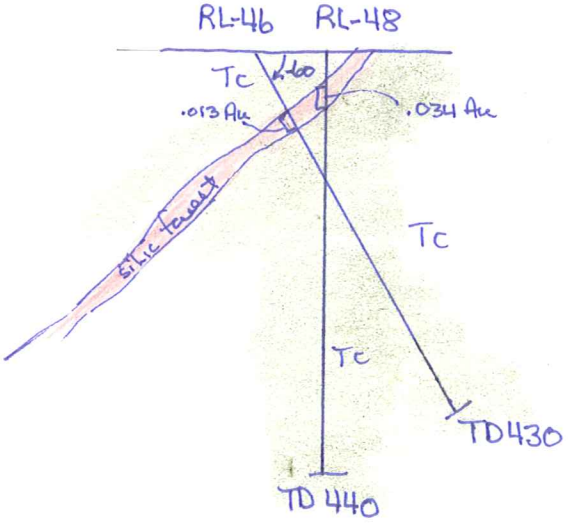
Soil geochemistry is essentially dead as was the IP/resistivity response. Lac drilled 4 reverse circulation holes in 1989 to test the fault plane and received only 15-20 feet @ 0.01-0.03 opt Au (RL-46 and 48). Two of the holes also penetrated into the footwall Tbs4 units with no anomalous mineralization detected.

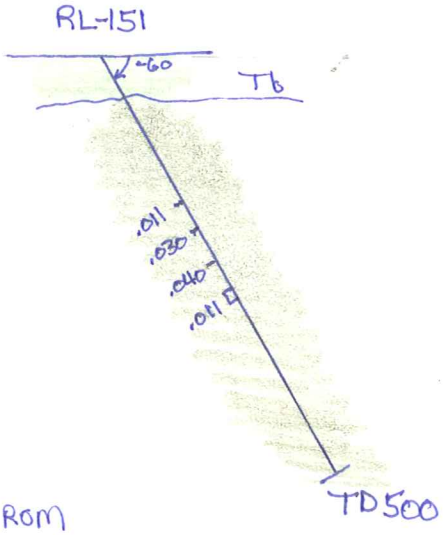
The area looks fully tested and no additional exploration interest appears warranted.


DEGERSTROM
1" = 200
= SILICIFICATION
RL-49
RL-47
RL-48
RL-46
RL 151
PDH-3
PDH-2
PDH-1
Tc
Tbs
5550
5350
5250
477500
2,204,000
31
fr lp float
bleached Tct float
fr Tct float
green float
green clay llt
(FW) striped
fb,Cv sf Si
clayey green llt
GPno.2
fb Ø md
HW
FW lp,fb
alt lp,fb
fr-wk lp,fb
mixed float
Qal/Qc
reclaimed
alt'd float
dozer cuts
dozer cut
fr Tcp llt float
bleached llt float
fr & striped fb & llt
fr fb Ø Tct float
fr fct Ø float
cracks w/ Fe,Si
lp,fb bleached
Qaf









DEGERSTROM

1" = 200'

DRILLING CROSSECTIONS

7. Dreamland

The Dreamland area is located northwest of Dozer Hill approximately 3,500 feet. It was the site of most of the past production from the Rosebud District with recorded production of roughly 3,700 ounces of gold and 116,000 ounces of silver (tons?) from several east-west trending clay rich shears. All mining was conducted underground with the deepest mine workings estimated at less than 500 feet.

Geologic mapping implies that all of the past production was from shears hosted in a rhyolite intrusive plug with overall surface dimensions of 2,000 feet east-west by 800 feet north-south. The north contact is mostly covered by post-mineral Badger Formation. The plug has intruded the Tc unit generating a tightly focused but intense zone of argillic alteration obscuring contact relationships. The west-central portion of the plug is also silica flooded in surface exposures.

Soil sampling reveals a strong Au+As+Sb+Se anomaly focused on the projected north intrusive margin over a strike distance of 1,000 feet north of hole RL-15 and west of hole RB-5. Since the anomaly is on the steep, south facing slope, some soil creep could be anticipated and an upslope source probably along the projected north intrusive margin is implied.

Rock chip samples from the intrusive returned consistent +100 ppb Au, 20-50 ppm As and 10-30 ppm Sb. The Tc outcrops contained erratic, only low anomalous values locally. Initially, it was felt that the intrusive itself was the primary target but Lac drill holes RL-223 and RL-224 were completed directly into some of the more attractive surface alteration and mineralization and both holes intersected only a few narrow low grade gold values. Also no increase in gold/silver was found at the sulfide interface so supergene enrichment is not a factor.

Drilling by Asarco, Freeport and Lac along the south intrusive margin appears to have been the major focus of past work in spite of the lack of any anomalous surface geochem or geophysical response. As might be suspected, all of the holes returned essentially barren assay results. One interesting feature was that the geologic logs for holes RB-2 and RD-16 both noted intervals of volcanic sediments at shallow depth which probably correlate to a Tbs horizon within the Tc sequence (probably Tbs4).

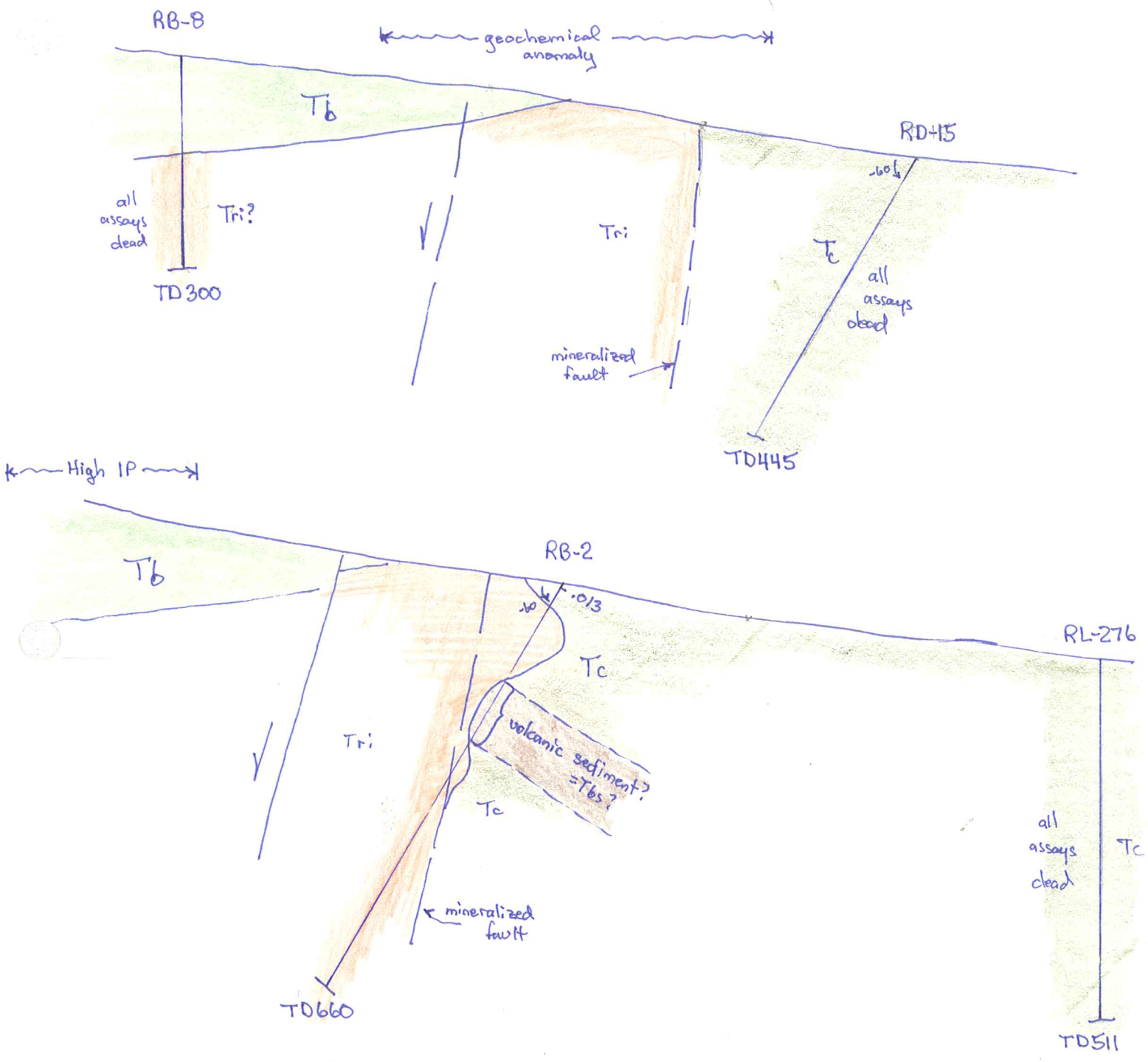
The remaining exploration target therefore appears to be along the north intrusive margin essentially blind under Badger cover. The soil geochem is focused on the area and there is a subtle IP high just to the north near hole RB-

8. Also, the only anomalous drill hole to date at Dreamland is RB-5 and it returned values of 5-10 ft @ 0.042 opt Au, 35-40 ft @ 0.010 opt Au, 110-130 ft @ 0.027 opt Au, 180-190 ft @ 0.014 opt Au and 205-270 ft @ 0.015 opt Au. RB-5 was drilled on the extreme eastern limit of the soil anomaly.

In the drill proposal, I have suggested that the anomaly be tested with 4 holes, one of which should be core. The core hole is recommended to be drilled first since the suspected Tbs unit on the north intrusive margin is of primary exploration interest. Based on the property data reviewed to date, the Dreamland Target appears to be one of the more attractive that remains untested. I would therefore suggest that if budget considerations become a limitation, at least this area should be drilled on a priority basis.

DREAMLAND
1" = 200'
= +100ppb Au rock chip

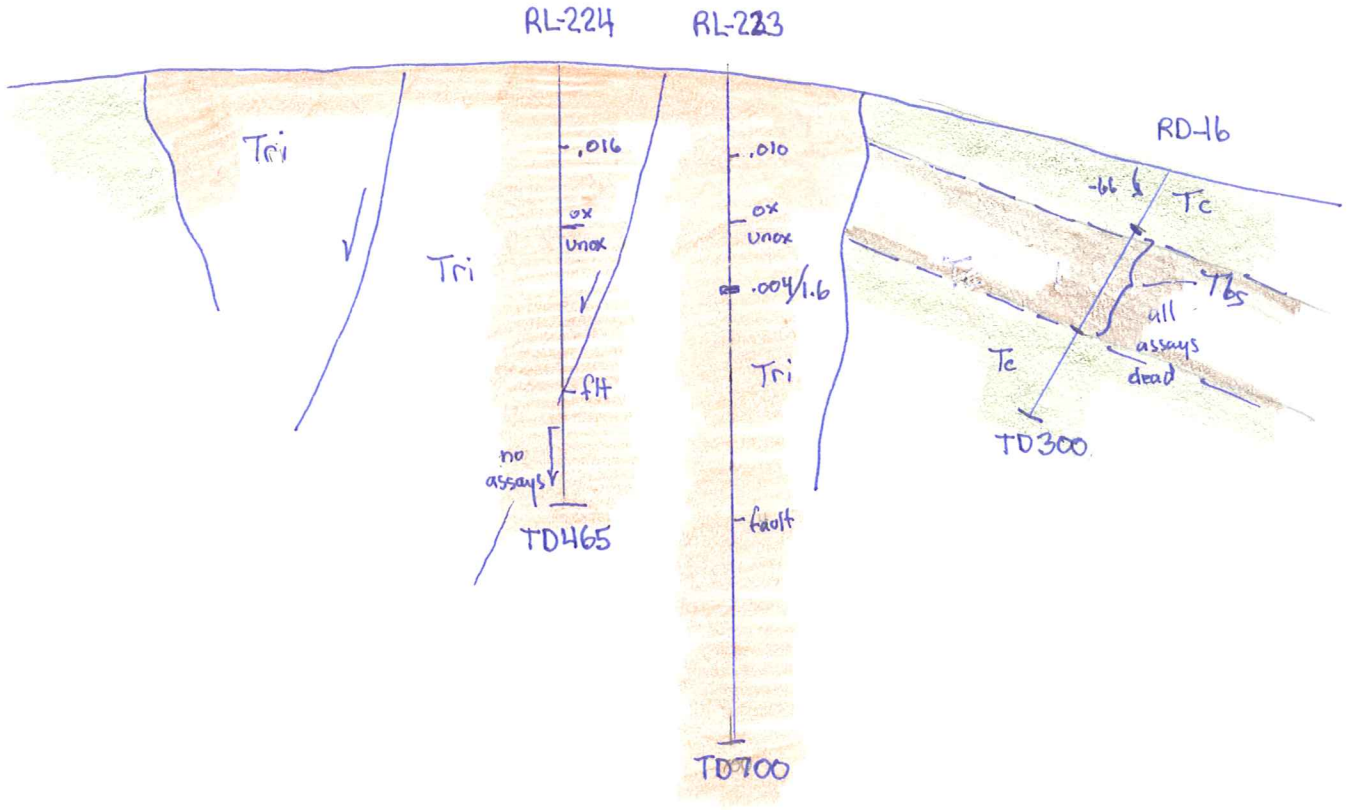
RB-6
RB6
RB-8
RB8
RB-5
RB5
RB-1
RB1
RB-2
RB2
RL-290
RL-144
RL16
RL15
RL-276
RD 15
478,000
2,208,000
BADGER fm
TRI
Tri
IP HIGH
PROPOSED HOLE RC
PROPOSED HOLE CORE
PROPOSED HOLE RC
PROPOSED HOLE RC
ANOMALOUS Au+Se in soil
ANOMALOUS As+Se in Soil

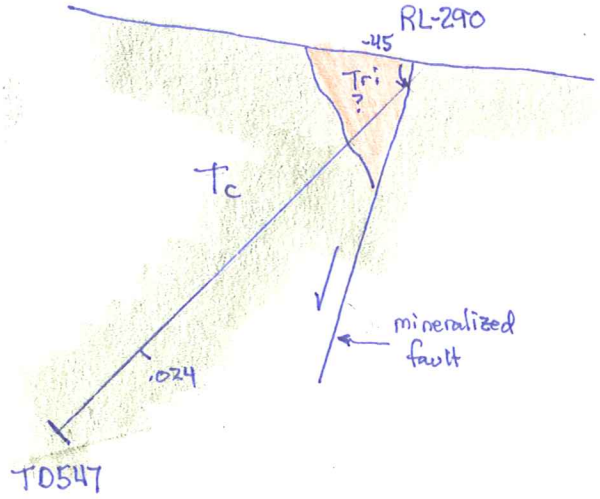


DREAMLAND

1" = 200'

DRILLING CROSSECTIONS

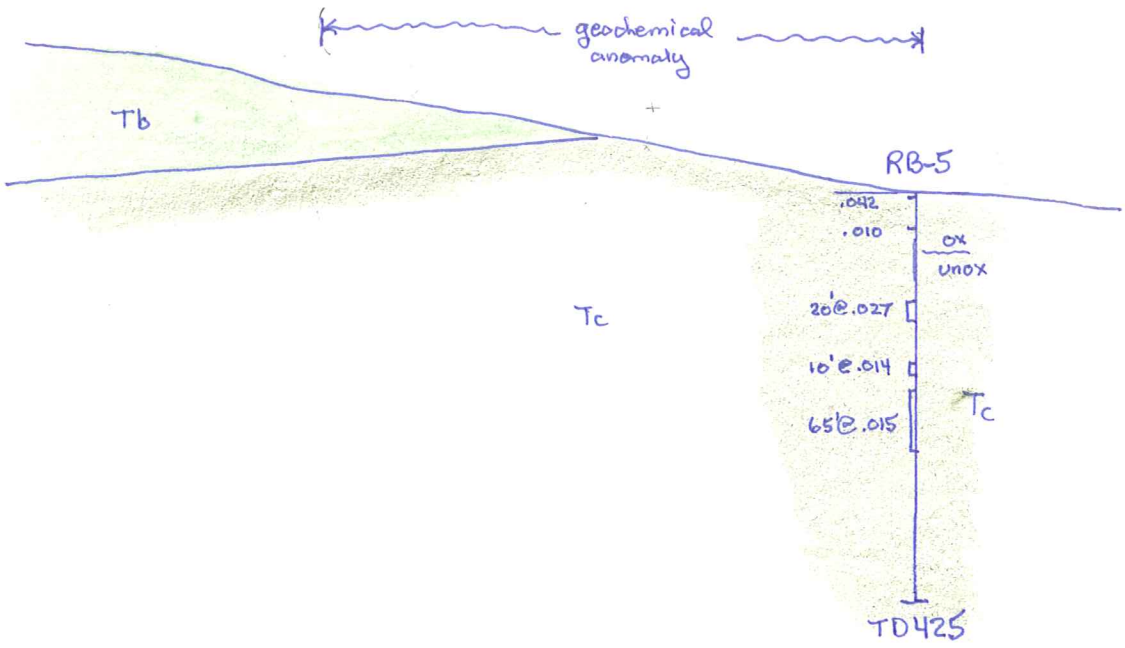


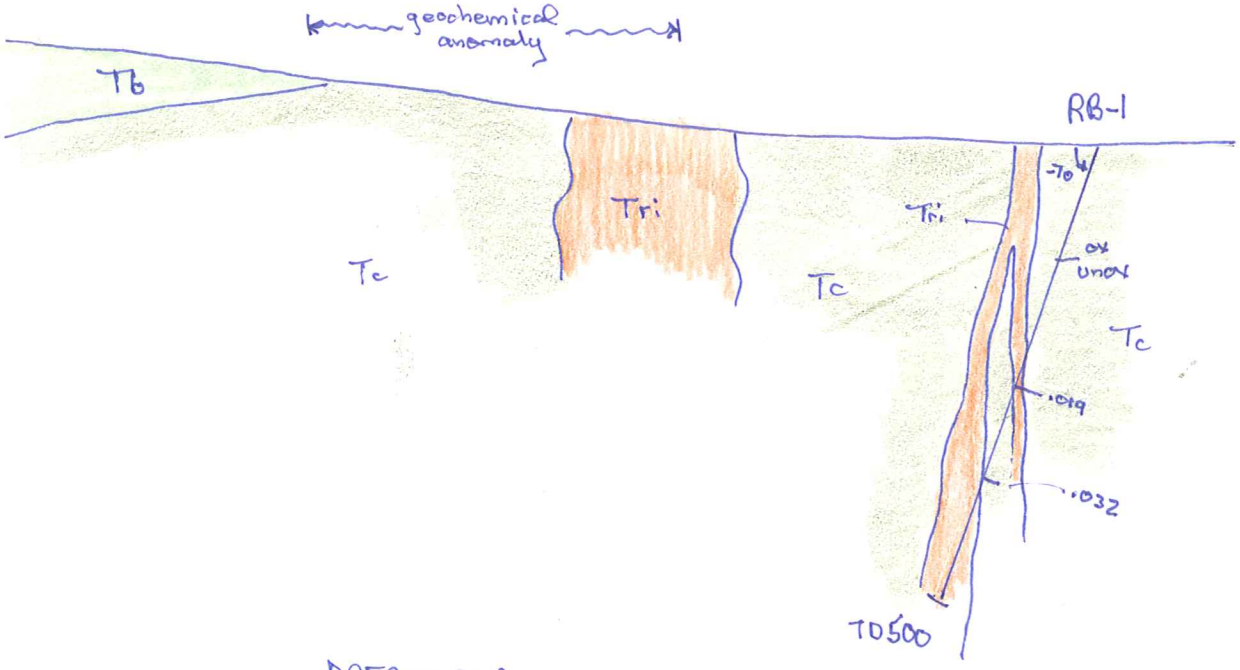


DREAMLAND

1" = 200'

DRILLING CROSSECTIONS





DREAMLAND

1"=200'

DRILLING CROSSECTIONS

8. White Alps

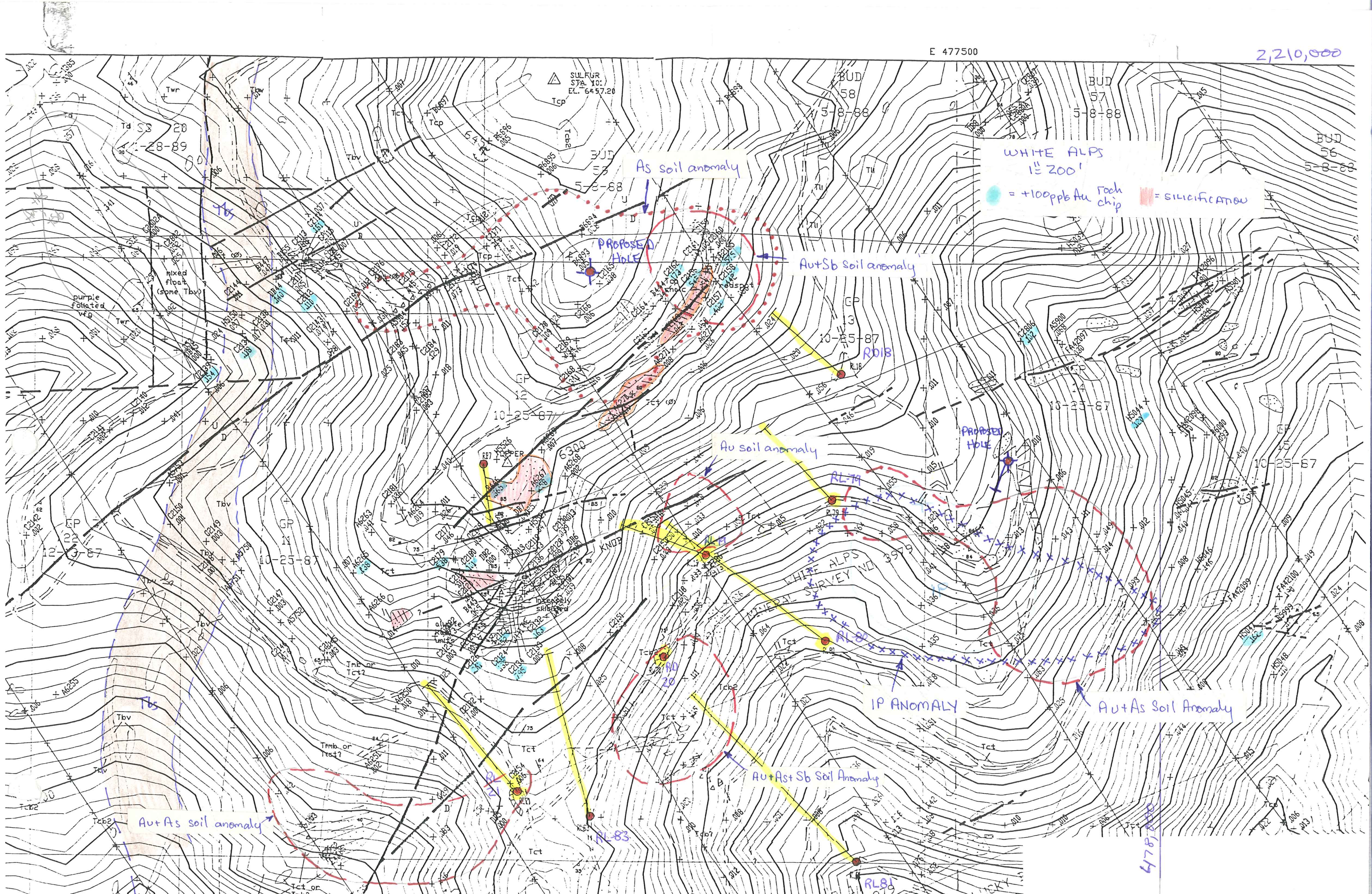
The White Alps area is located immediately northwest of the Dreamland Target. Along a south trending ridge south of Rosebud Peak, several irregular silicified breccia zones outcrop that have a visual similarity to silicification along the South Ridge Fault at the Rosebud Mine. Outcrop samples along the White Alps zone of silicification are essentially dead though.

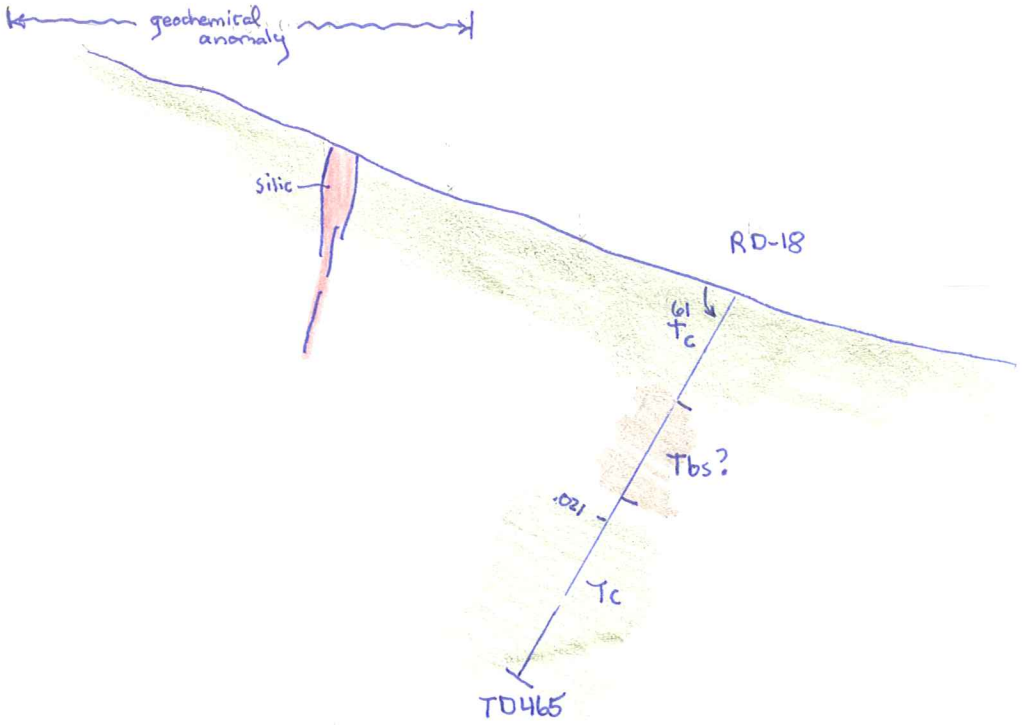
Lac completed extensive reverse circulation drilling along the east facing slope down from the White Alps in 1989-90. Almost all of this drilling was a disappointment since only a few narrow low grade mineralized fractures were intersected. Presumably Lac thought that the White Alps zone dipped to the east but it now appears that a near vertical or slightly west dip is implied, or that the silicification is only a shallow surface feature.

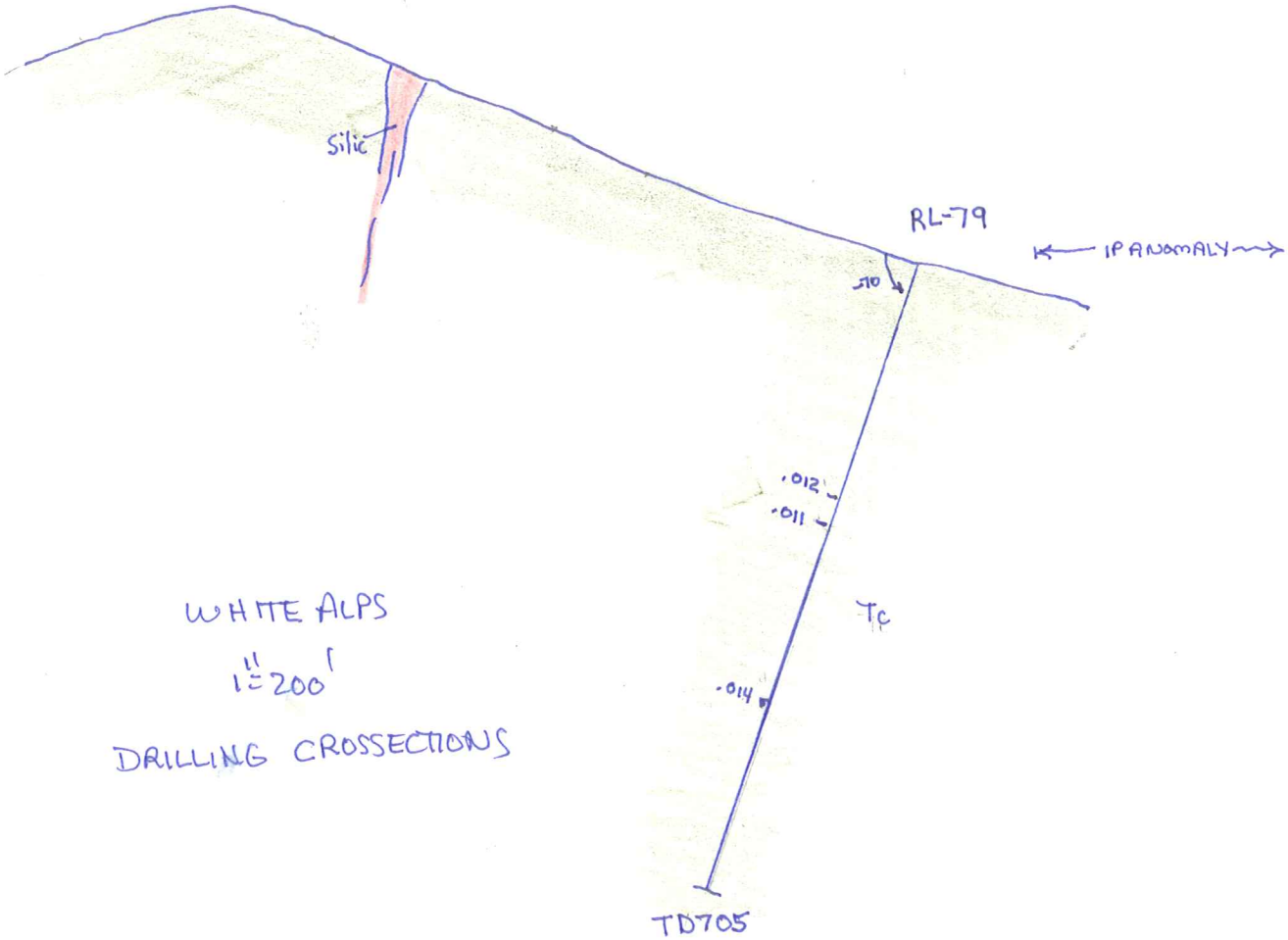
Soil sampling throughout the area revealed several relatively small Au+As anomalies. Most have now been drill tested with negative results and in hindsight, the anomalies now appear to be due at least in part to soil creep down the steep slope from the White Alps. Only two areas may deserve additional interest as described below:

a. on the west (hangingwall?) side of the White Alps up slope from hole RD-18, a small but persistent +50 ppb Au and +10 ppm Sb soil anomaly is present that is haloed by a larger +10 ppm As soil anomaly. Mapping previously revealed extensive northeast trending fractures and several shallow pits that appeared to have exposed a Tbs horizon. One reverse circulation hole is proposed to test the silicification/Tbs unit intersection under the geochem anomaly.

b. east of holes RL-79 and RL-80, a low level Au+As soil anomaly is present that overlies a prominent IP high and corresponding resistivity high. One reverse circulation hole is proposed to test this multiple anomaly even though the surface geochem could possibly be due to soil creep down from the White Alps.


E 477500
2,210,000
WHITE ALPS
1" = 200'
= +100ppb Au rock chip
= SILICIFICATION
SULFUR STA. NO. EL. 6457.20
As soil anomaly
PROPOSED HOLE
Au+Sb soil anomaly
Au soil anomaly
PROPOSED HOLE
IP ANOMALY
Au+As Soil Anomaly
Au+As+Sb Soil Anomaly
Au+As soil anomaly
BUD 58 5-8-88
BUD 57 5-8-88
BUD 56 5-8-88
BUD 59 5-8-88
GP 13 10-25-87
GP 12 10-25-87
GP 11 10-25-87
GP 15 10-25-87
GP 22 12-13-87
WHITE ALPS
MINERAL SURVEY NO. 3979
RD18
RL-79
RL-80
RL-83
RL81
purple foliated vfg
mixed float (some Tbv)
Tbs
Tbv
Tct
Tcp
Twr

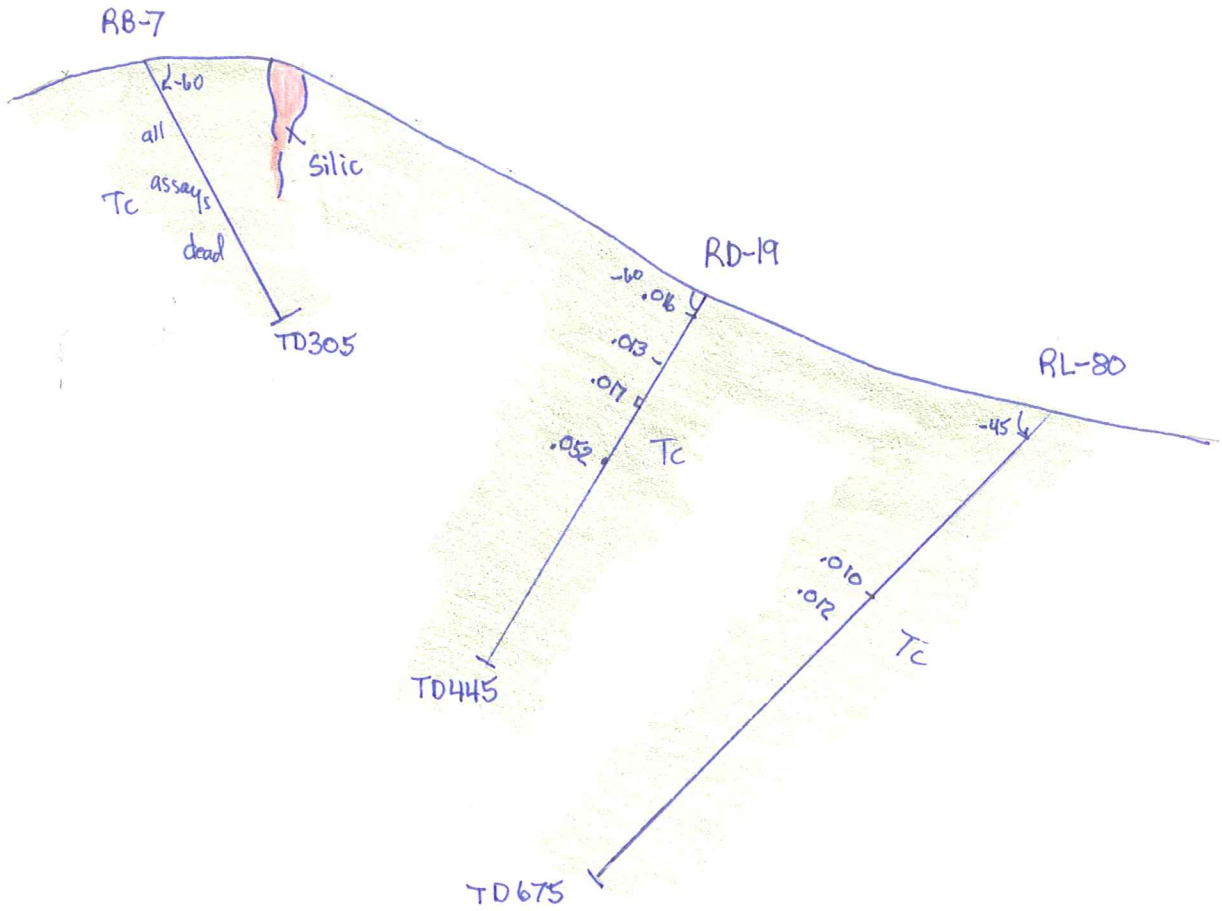


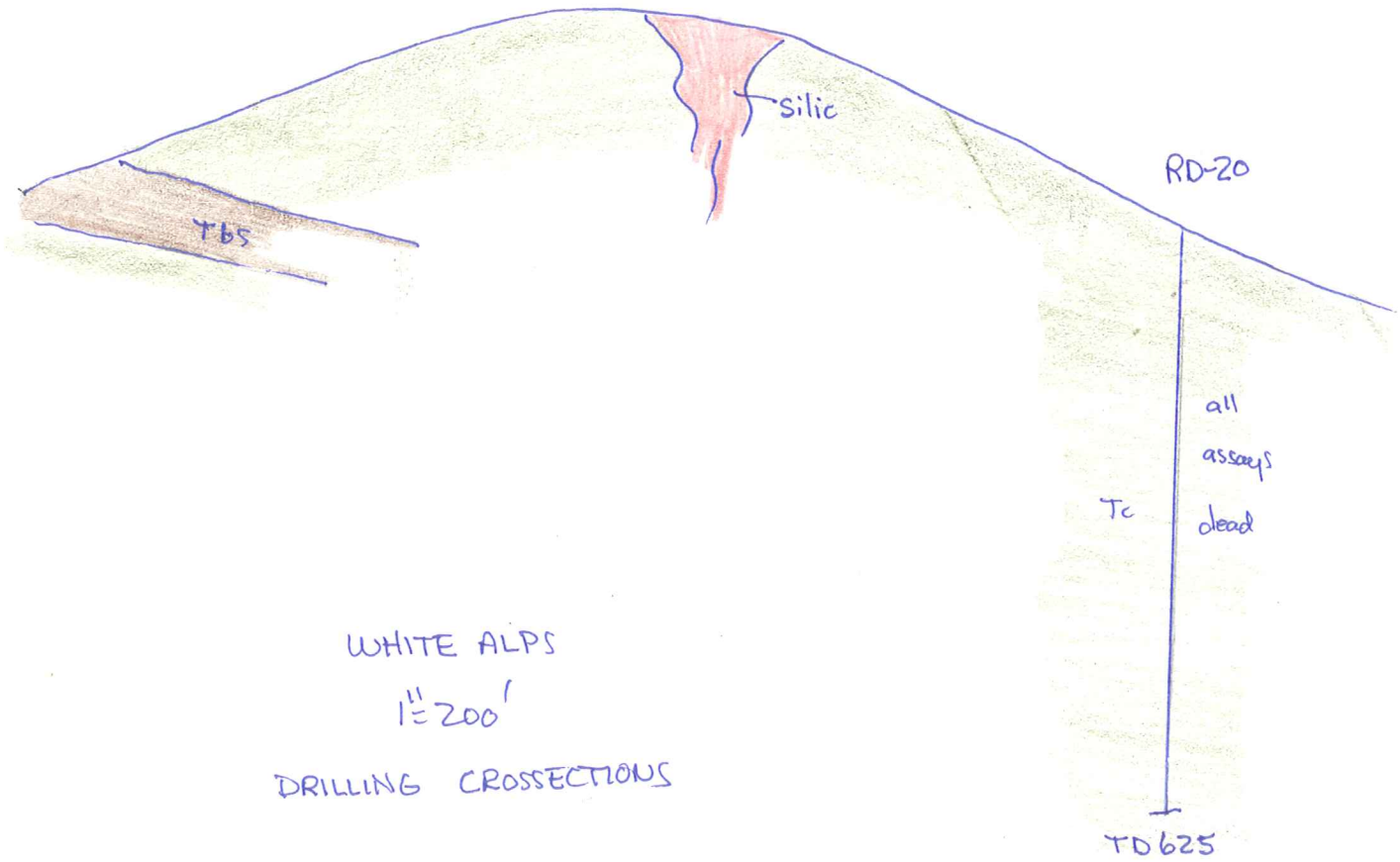


WHITE ALPS

1" = 200'

DRILLING CROSSECTIONS

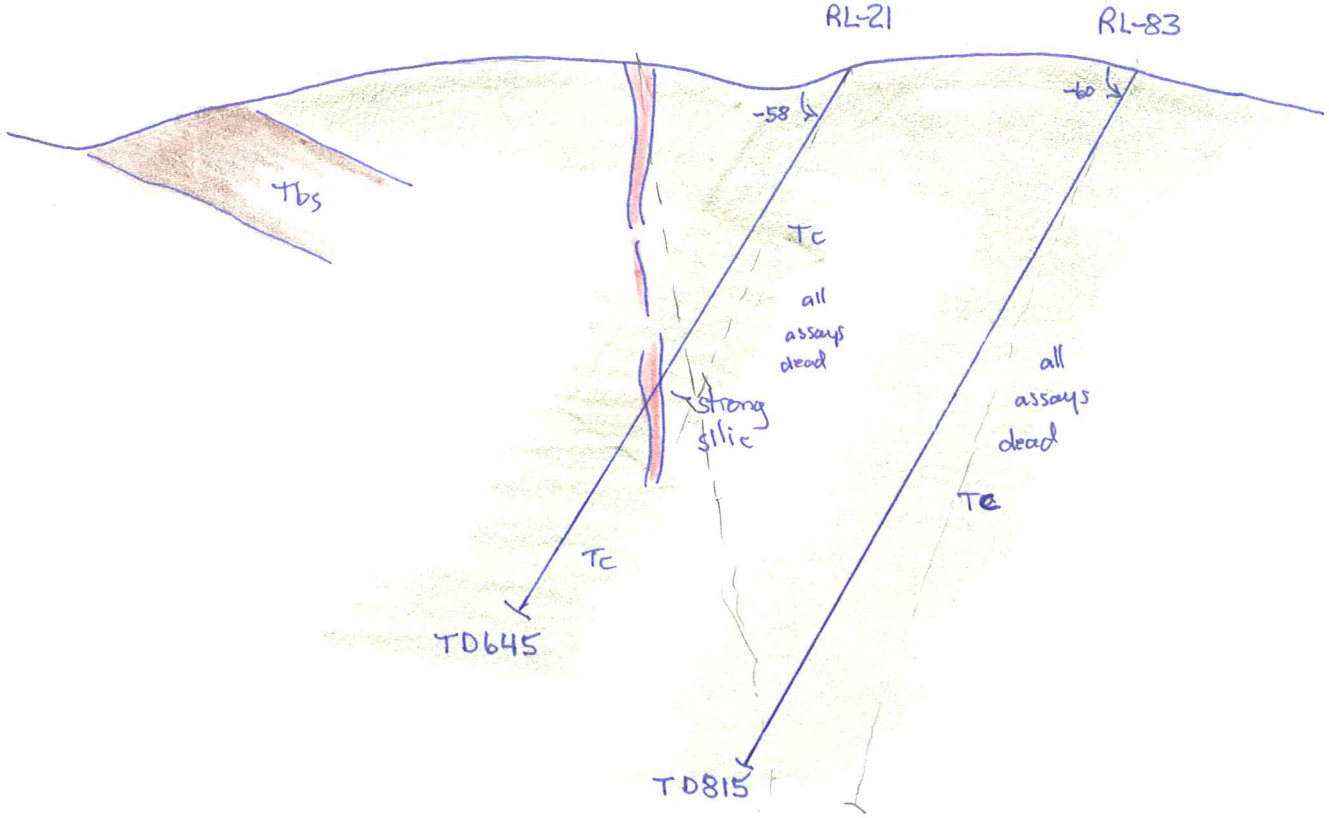


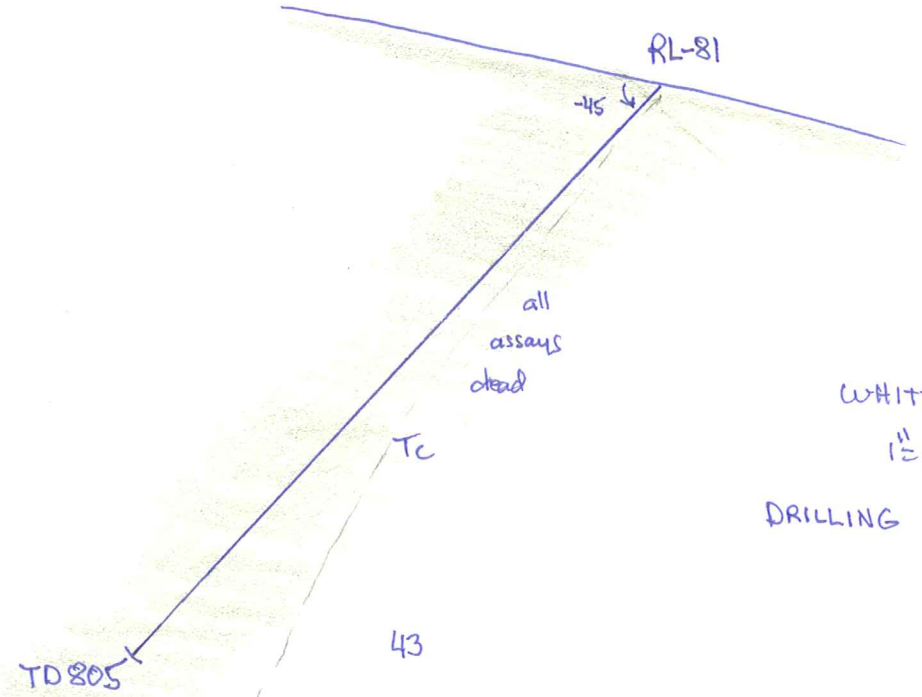


WHITE ALPS

1" = 200'

DRILLING CROSSECTIONS





WHITE ALPS
1" = 200'
DRILLING CROSSECTIONS

9. Chance

This area is located along the western margin of the Rosebud Property approximately 2,500 feet south of Wildrose Canyon. A large east-west trending bleached and argillically altered area in the Tbf unit is exposed over strike distance of 3,500 feet and a width of roughly 1,000 feet. Within the zone of alteration is a 20-30 foot wide silicified fault(?) that dips 35-45 degrees south and that can be traced in outcrop and float discontinuously +2,000 feet. Surface rock chip sampling reveals 0.01-0.02 opt Au within the silicification and local +100 ppb Au values in the immediate hangingwall. Soil sampling reveals erratic values for gold in roughly the same areas (As, Sb and Se values for the soil sample points not found). The IP/resistivity survey does not extend this far north into the target area.

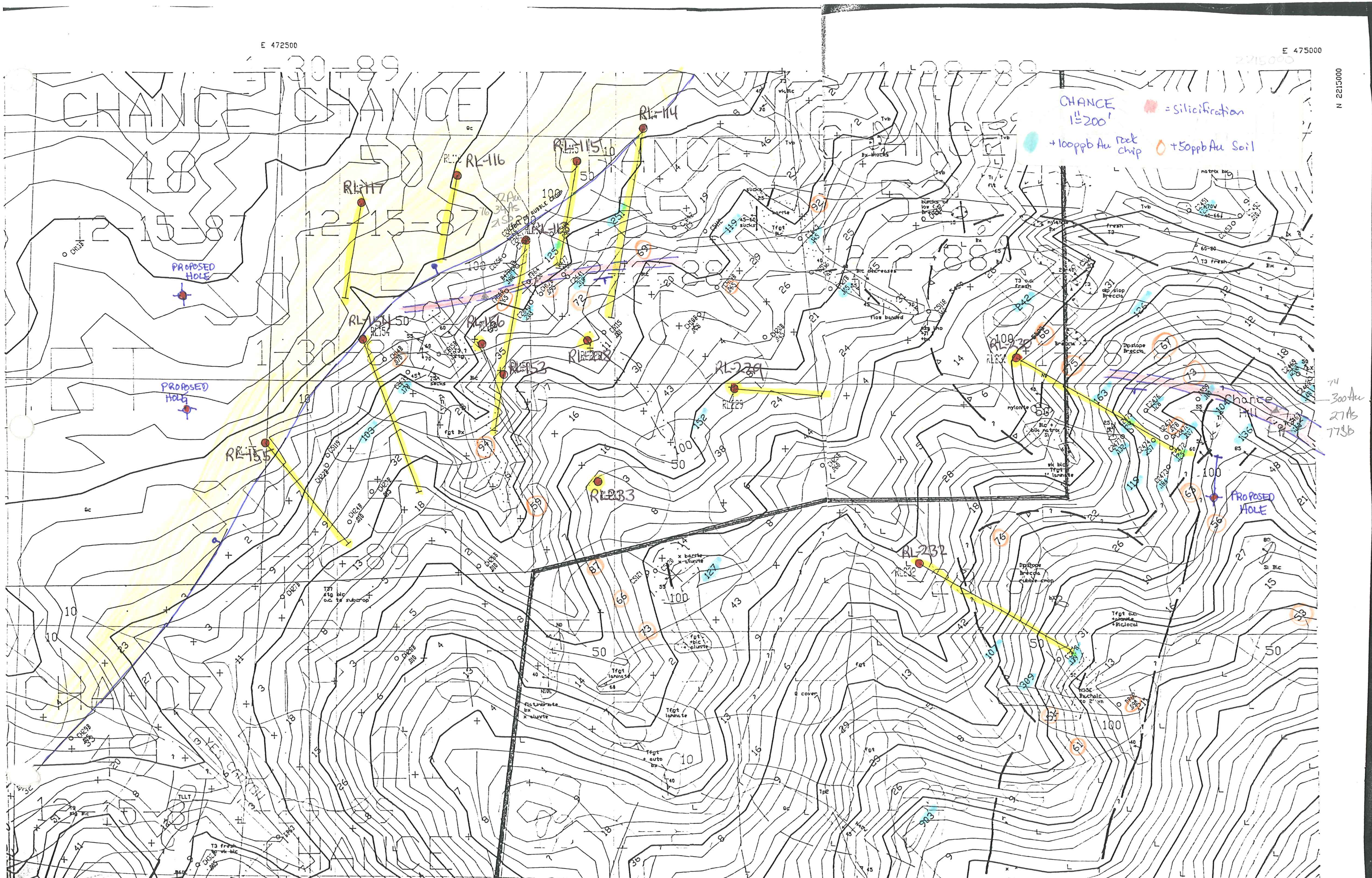
Past drilling has been extensive with 9 reverse circulation holes completed by Lac in 1990 and an additional 5 reverse circulation holes also completed by Lac in 1991. The first hole, RL-113 was the best with 305 feet @ 0.029 opt Au intersected from 395-700 feet. Follow-up offsets were successful only in RL-153 with 100 feet @ 0.036 opt Au from 410-510 feet. Present interpretations are that the wide drill intersection obtained in RL-113 was due to the hole being drilled nearly parallel to the south dipping silicified fault(?) zone. The true thickness of the mineralized interval as measured on the crossections is closer to 40-60 feet.

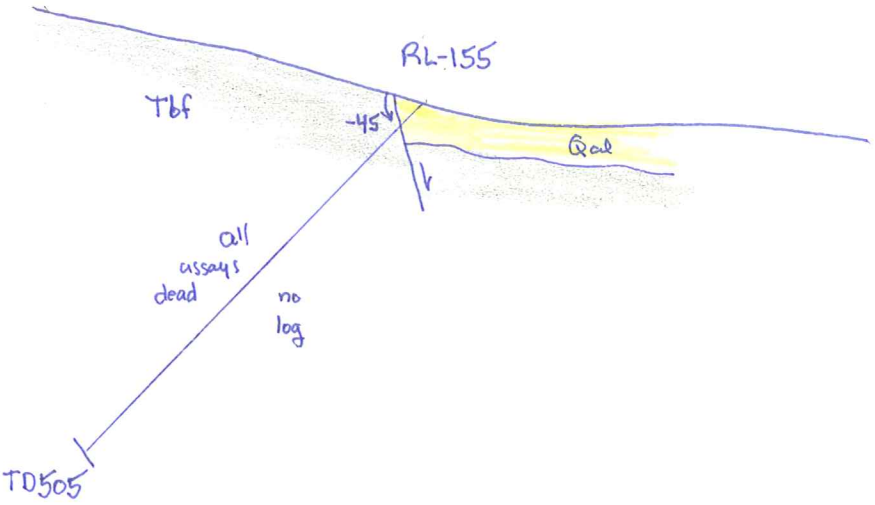
The silicified fault(?) zone has not been tested over its entire strike length reliably due to the previous holes' incorrect inclination, but the results of holes RL-113 and RL-153 due imply that only subeconomic grades are present at that above a depth of 500 feet. Therefore better areas need to be found either along strike or at greater depths.

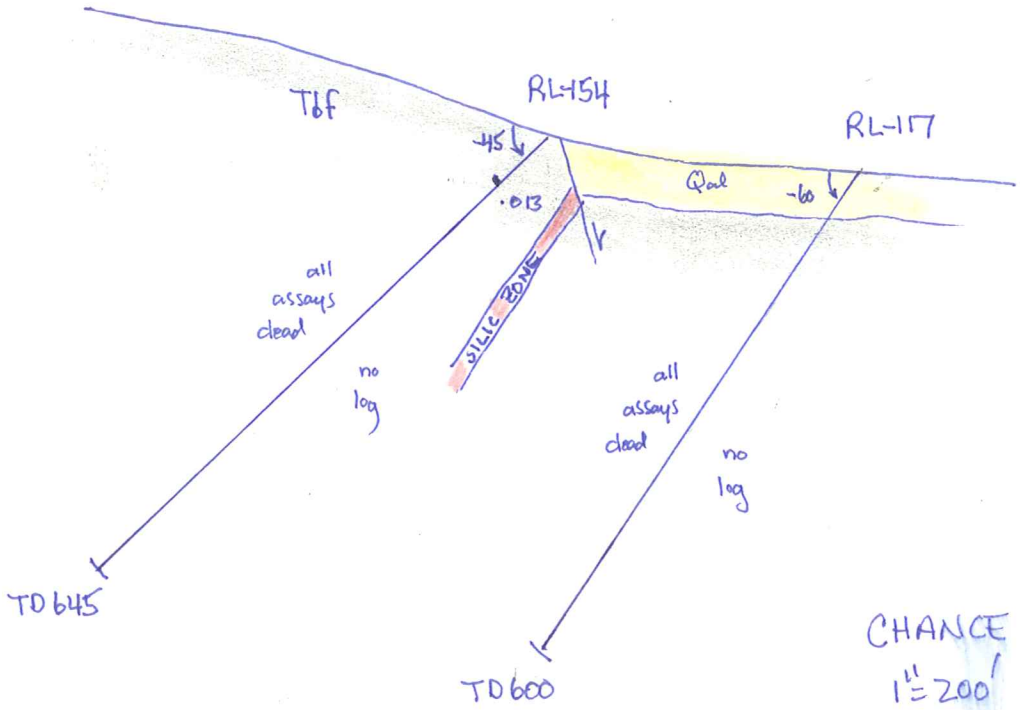
East of the main drill pattern, the silicification continues across a small ridge that Lac named Chance Hill. Lac and my rock chip samples increase slightly in gold values (up to 300 ppb) and gold appears to persist further into the hangingwall. One reverse circulation hole is therefore proposed to test the area.

West of the main drill pattern, the zone of silicification is offset into the valley by a range bounding fault that I presently assume to be normal with no lateral displacement. Two reverse circulation holes are proposed to test the higher level projection of the silicification where it possibly forms a wide stockwork of suitable widths for open-pit consideration.

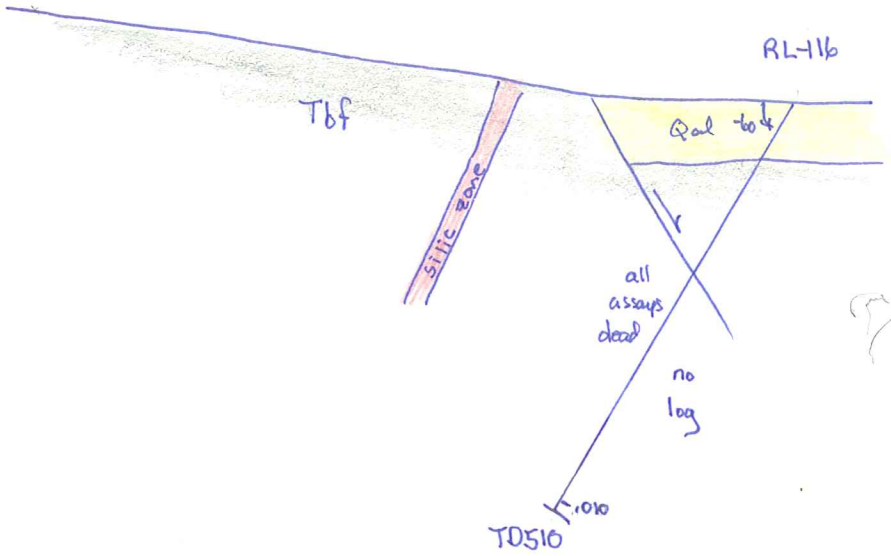
The remaining drill option is to test the down dip projection of the silicified zone below a depth of 500 feet. I believe this option to be valid but of a lower priority and therefore not recommended at this time.

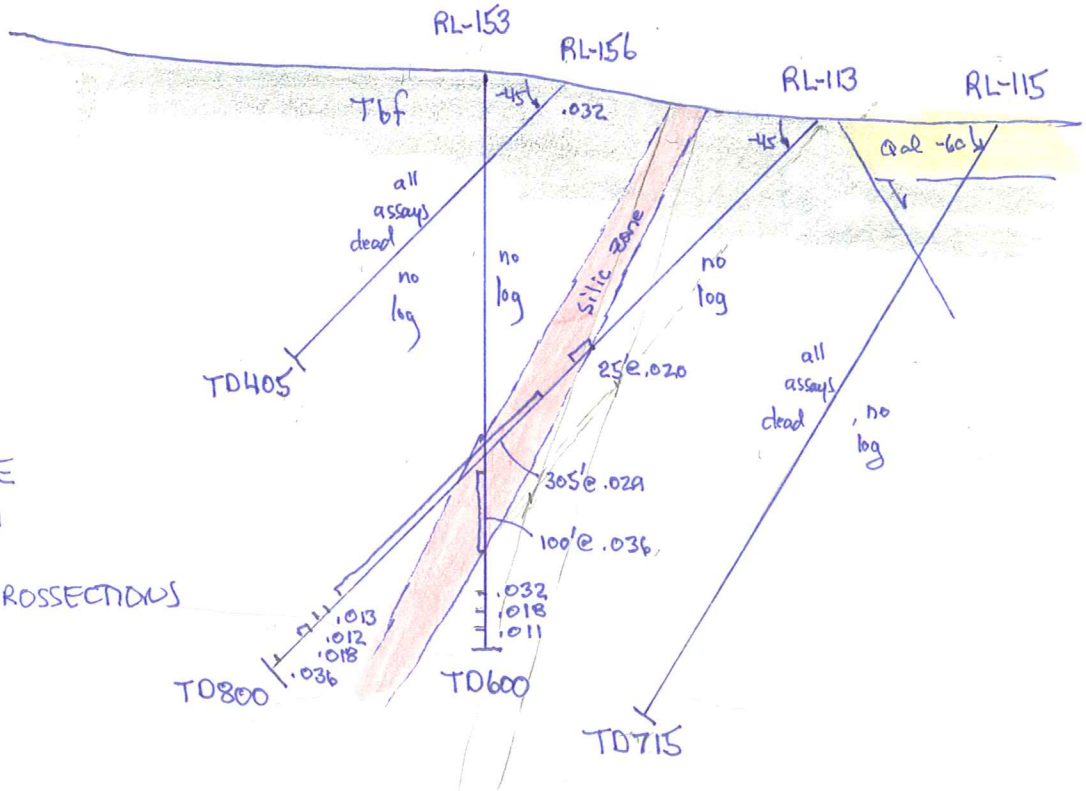

E 472500
E 475000
N 2215000
CHANCE
1"=200'
= Silicification
+100ppb Au rock chip
+50ppb Au Soil
RL-114
RL-115
RL-116
RL-117
RL-154
RL-155
RL-156
RL-153
RL-228
RL-229
RL-230
RL-232
RL-233
PROPOSED HOLE
PROPOSED HOLE
PROPOSED HOLE
72 Au
34 As
21 Sb
RUBBLE CROP
Chance Hill
300 Au
27 As
77 Sb
Tvb
Bx blocks
blocks of low < breccia
nylonite Bx
fresh T3
matrix bx
T3 fresh
T3 o.c. fresh
dip slop Breccia
Dipslope Breccia
Breccia
mylonite
Blc + blk matrix Si
wk blc Tfgt 1' laminate
flow banded
Blc decreases
Tfgt Blc
vk Blc
slicks
barite
45-60 slicks
fgt Bx
T37 stg blc o.c. to subcrop
x barite x alunite
fgt +blc + alunite
Tfgt laminate
Tfgt laminate
flat, laminate bx x alunite
Tfgt + auto bx
Q cover
fgt
Tpe
Dipslope Breccia rubble crop
Tfgt o.c. +alunite +Blc local
N35E Bx chalc to 2' vn
Si Blc
T3 stg Blc
T3 fresh to wk blc
TLLT
YES CANYON





CHANCE
1" = 200'
DRILLING CROSSECTIONS

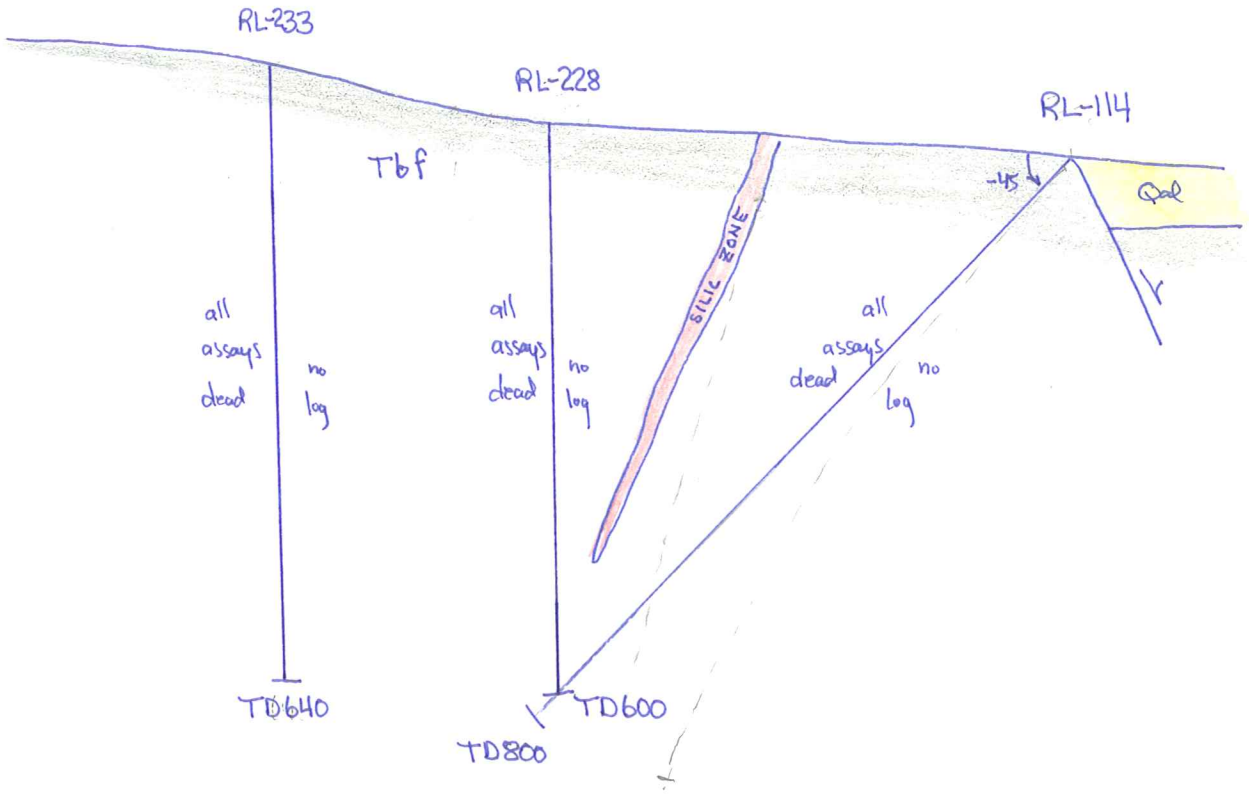


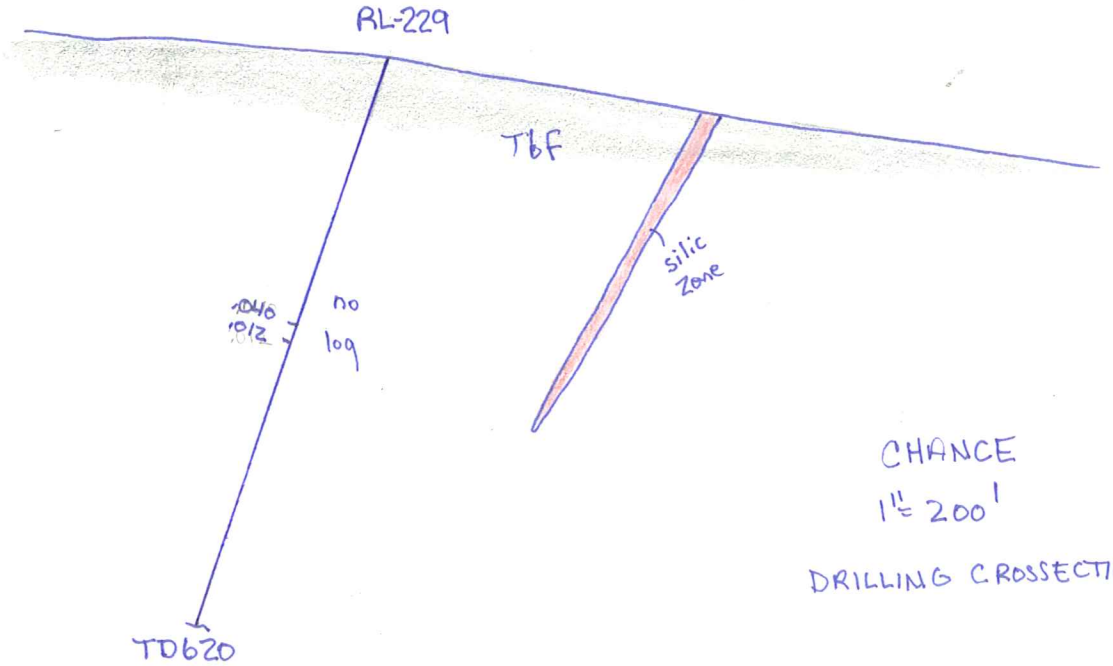


CHANCE

1" = 200'

DRILLING CROSSECTIONS

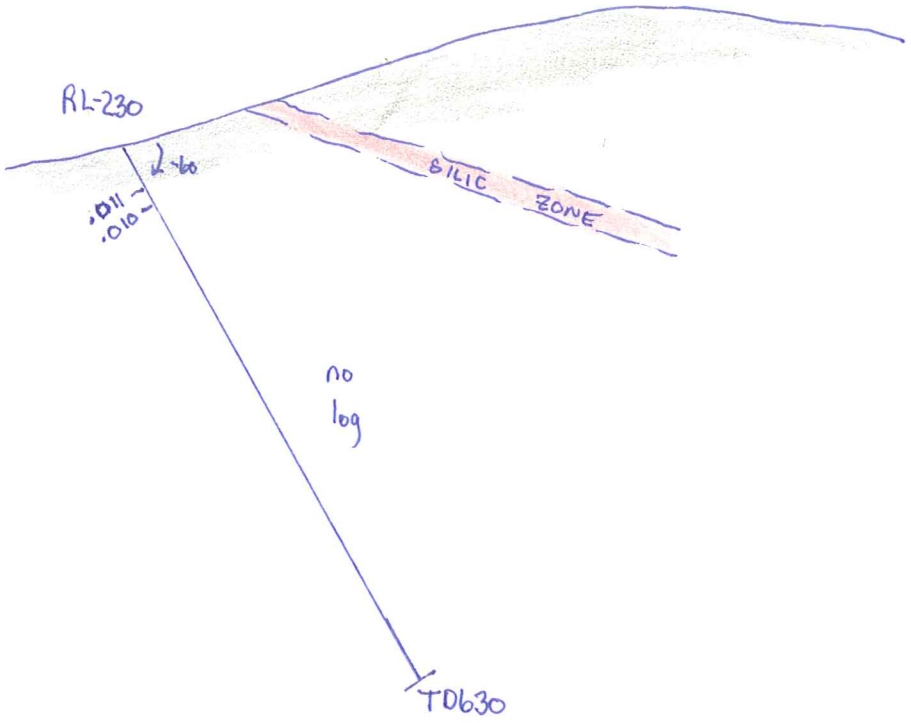


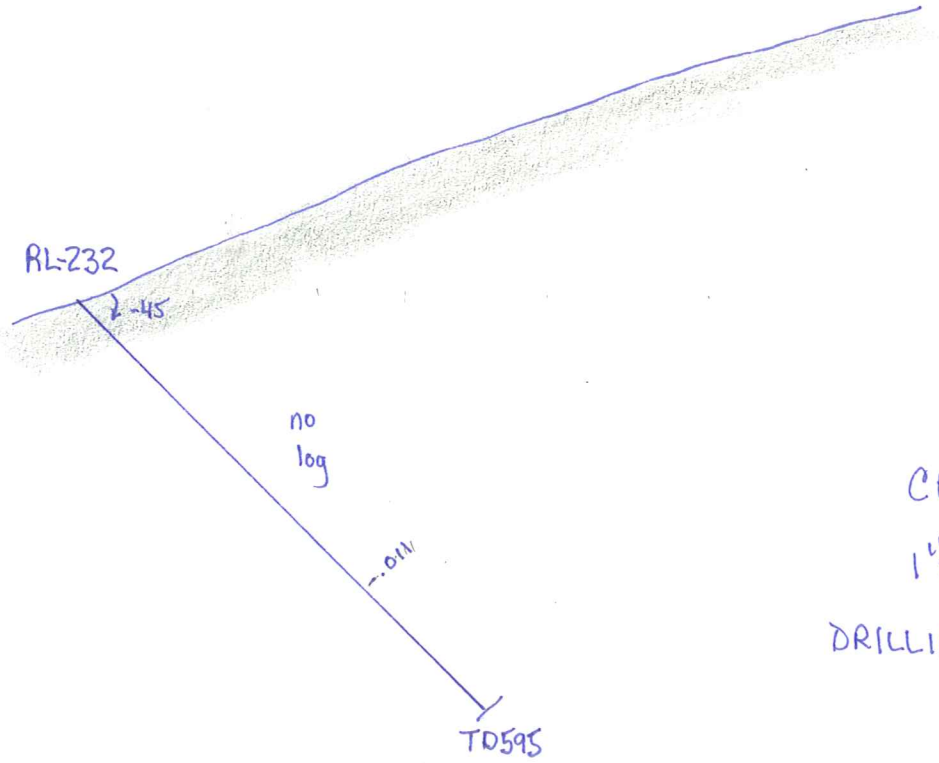


CHANCE

1" = 200'

DRILLING CROSSECTIONS





CHANCE

1" = 200'

DRILLING CROSSECTIONS

10. East Dreamland

This area is located contiguous to the Dreamland area on the east. Soil sample results and IP/resistivity results were all essentially flat throughout the area. Interest in East Dreamland was focused on two features - Asarco drilling in the late 1970's is reported to have intersected 25 ft @ 0.099 opt Au in hole RB-9 (Hecla does not have copies of the log) and past mining was conducted 1,000 feet to the southeast along a 1-3 foot wide vein. All of the completed drilling (a total of 15 known holes) was directed at an evaluation of these two areas.

Asarco hole RB-9 was drilled near a small, steeply dipping, east-west trending rhyolite dike and the intersected gold appears to be at the intrusive/volcanic contact which at this location is the Ta unit. Offset drilling both to the west (RL-135) and to the east (RL-132) was essentially dead. Drilling elsewhere in the general area returned similar negative results.

Four drill holes were also completed in the vicinity of the vein outcrop. The best (and essentially only) intersection returned 15 ft @ 0.015 opt Au/5.5 opt Ag in RL-122. The other three holes recorded no mineralization and/or quartz veining at the projected vein intersection. In the bottom of RL-122, the log stated an intrusive was penetrated and that 25 ft @ 0.019 opt Au was assayed at the intrusive/volcanic contact. This might be of some future interest but for now, the area looks fully tested and no exploration interest is recommended.

EAST DREAMLAND
1"=200'
+100ppb Au rock chip

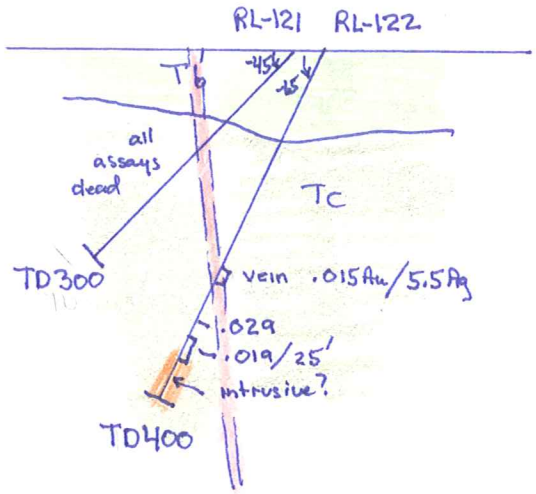
BADGER Fm

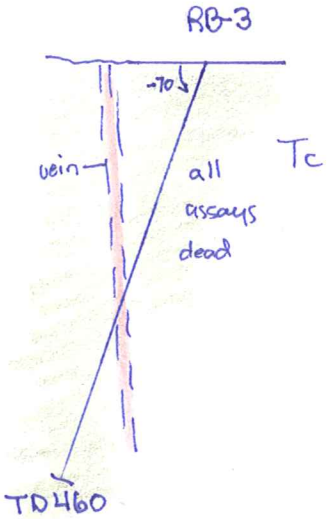
Ta
Tc
Tri

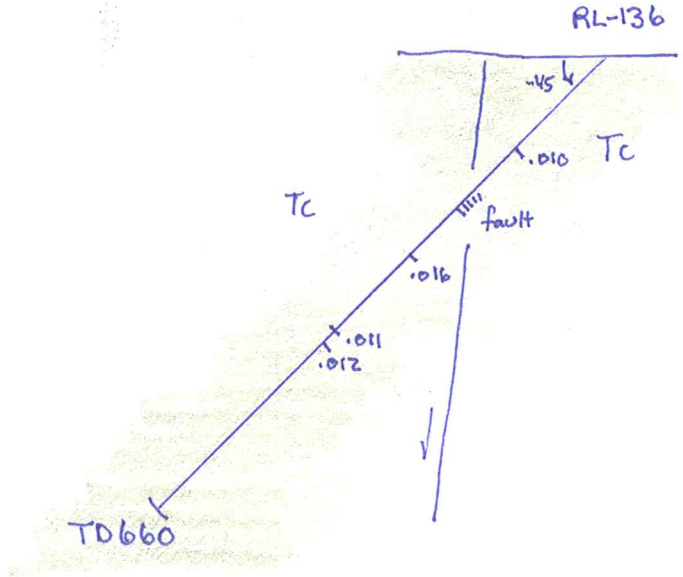
VEIN

RA4 ED ADIT RA3 RL133 RL134 RA2 RL14 RL13 RA1 RL12 RL135 RL132 RB3 RL121 RL122 RL136

489,800
482,000
2,206,000



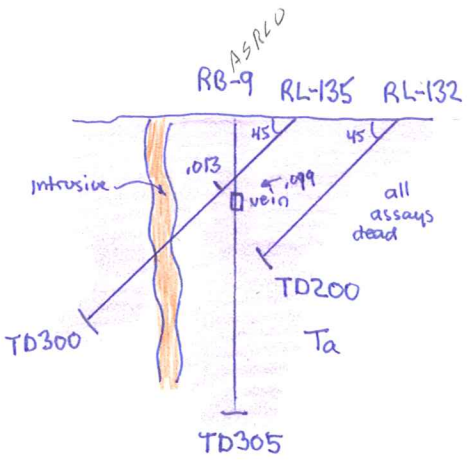


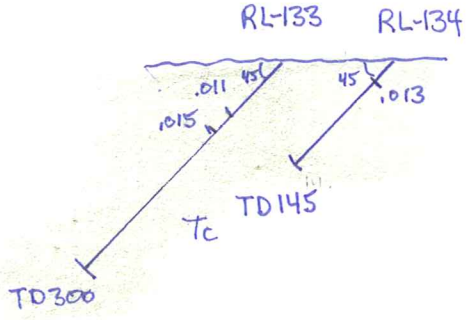


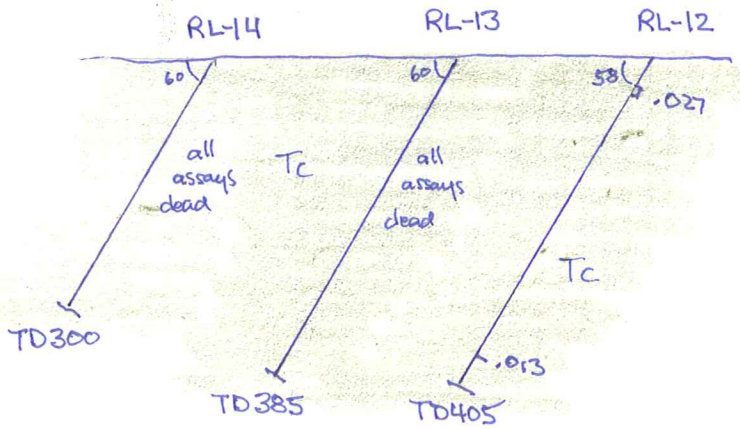
EAST DREAMLAND

1" = 200'

DRILLING CROSSECTIONS







EAST DREAMLAND
1" = 200'
DRILLING CROSSECTION

11. West Degerstrom

This area is contiguous to the west from the Degerstrom target area. Surface rock chip and soil geochemistry is all essentially dead as is the resistivity response. The IP survey outlined a focused, north-trending anomaly with no apparent structural control.

In 1992, Lac drilled two holes to test the IP anomaly (RL-235 and RL-236). The holes were well located yet both returned completely dead assays. No further exploration interest now appears to be justified in the area.

E 475000

E 477500

N 2205000

IP ANOMALY

DEGERSTROM AREA

WEST DEGERSTROM
1" = 200'

RL-235

RL-236

RL151

RL46

GP 27 11-14-87

GP 29 11-14-87

GP 31 11-14-87

GP 33 11-14-87

GP 35 11-14-

BMD 15 5-11-88

vfg lp,fb, ø striped float

M-W / striped

bleach minor stripes

striped float

lp,fb striped float

M-W striped fb ø

fb lp/llt striped

lp ø striped

lp ø wk striped

Talus

SLOPE TRAIL

dozer cut

fr Tcp llt float

dozer cuts

bleached llt float

striped llt

mixed float

mostly fresh float

fr & striped fb & llt

alt float

alt Tct float

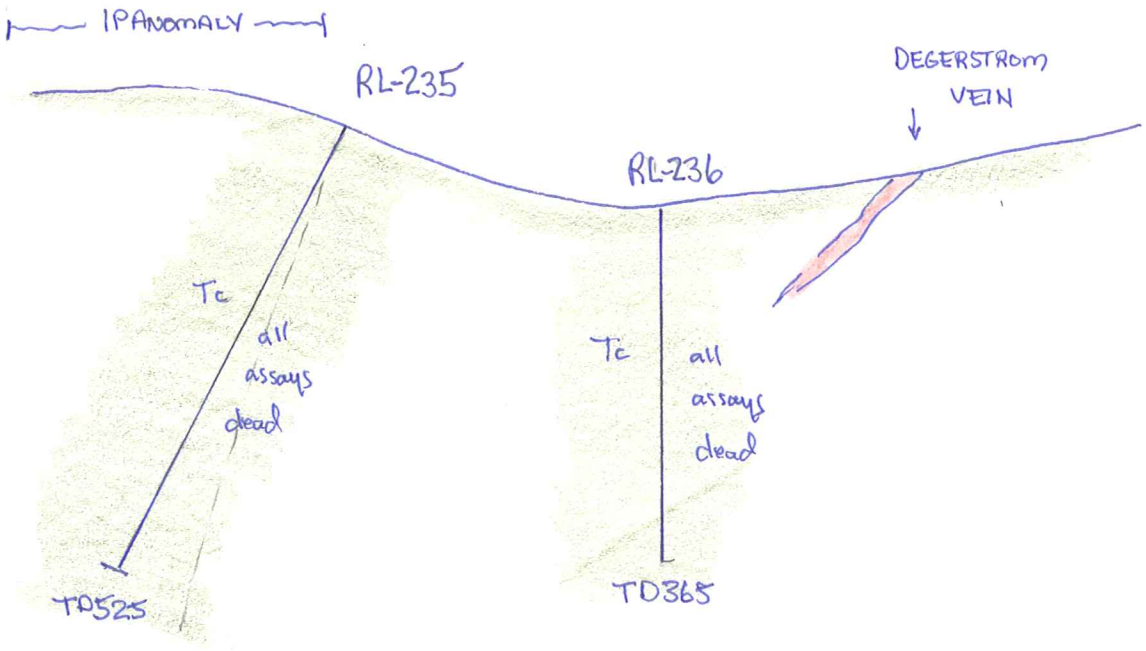
Tbo float

reclaimed

Qyg

Tb

fg-lithic, xtl tuff



WEST DEGERSTROM

1"=200'

DRILLING CROSSECTION

12. North Dozer Hill

This target includes the broad area immediately north of Dozer Hill including the talus covered valley north of the Rosebud Shear as well as the peripheral areas just south of the Rosebud Shear. Past drilling by Lac (1989-93) and Hecla (1994 - present) has been extensive primarily attempting to extend the higher grade mineralization on the hangingwall of the South Ridge Fault north from the main Rosebud Orebody.

The main focus of is based on speculation that the Tbs1 unit below the Ta flow (called TMB by mine staff) may not have been sufficiently explored up to the footwall of the Rosebud Shear. The area north of the Rosebud Shear is covered by surface talus and soil as well as post-mineral Badger yet due to its close proximity to Dozer Hill its exploration potential appeared intriguing. This review therefore required a re-logging of 33 of the previously completed drill holes attempting to develop a revised geologic interpretation for the area.

The re-logging effort successfully identified the Tbs1, Ta and overlying Tbs2 units in the mine area although local generalizations were required for ease of visual interpretations. Based on the crossections, the following observations appear correct:

1) the higher grade mineralization is hosted in the Tbs1 unit at or just above the South Ridge Fault. Mineralization within the Ta and overlying Tbs2 units is consistently low grade or absent implying a telescoping of gold+silver into the first available favorable host (either the fault zone or the Tbs1 unit).

2) high grade mineralization was intersected in holes RL-104, RL-93, RL-108, RL-100 and RL-106. Drill offsets to the east are extensive and the east boundary of the higher grade zone is well established. Drill offsets to the west essentially include only hole RL-91 and the west boundary appears poorly established.

3) drilling north of the Rosebud Shear found narrow 0.01-0.03 opt Au fracture controlled mineralization in the Tc unit. Holes RL-139, RL-176 and RL-92 did intersect one continuous vein(?) of a narrow 5-10 feet width that averaged 0.086 opt Au but additional drilling to establish its total extent does not appear warranted due to its sub-economic grade. A future target may be to prospect the vein's down dip projection for higher grade values.

In summary the west boundary of the higher grade mineralization needs additional drilling. Only one core hole is recommended now but additional drilling would be justified to explore the entire area between the Rosebud Shear and the Dozer Hill drill hole cluster - an area 500 feet x 1,000 feet in extent. I believe that this is an excellent location to expand the orebody reserves. As previously stated for the Dreamland Target, if budget limitations regarding this drill proposal become a consideration, this area should be drilled on a priority basis.

NORTH DOZER HILL
1"=200'
= +100ppb Au rock chip

BADGER Fm

ROSEBUD SHEAR

JFza ?

Tbs

Tct

Tcb

Tc

Qaf

Tbs+Ta

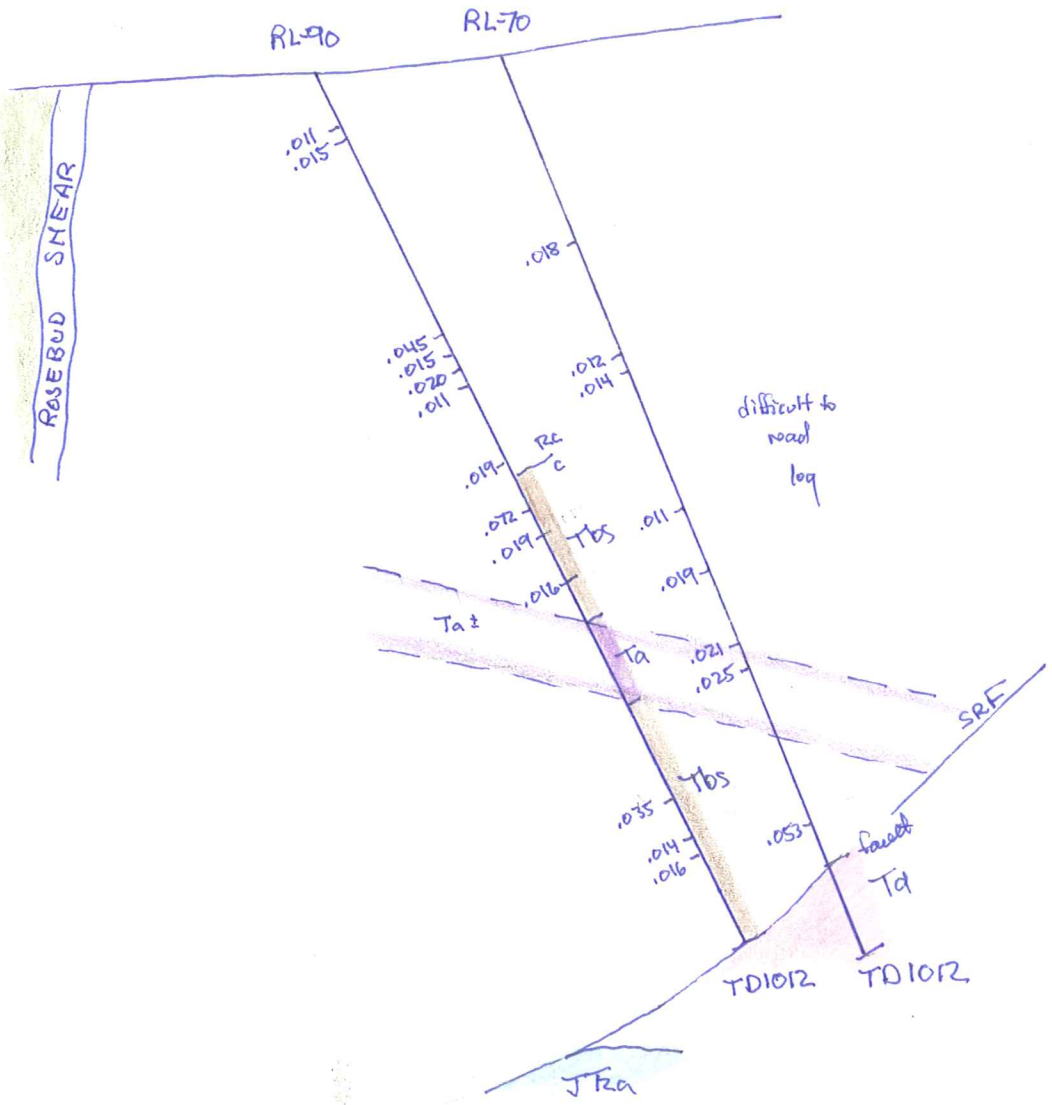
PROPOSED HOLE

RL136 RL167 RL164 RL139 RL250 RL138 RL251 RL177 RL176 RL92C RL148 RL91C RL262C RL103C RL102C RL90C RL107C RL17C RL165C RL75C RL97C RL99C RL109 RL104C RL93C RL100C RL106C RL108C RL101C RL112C KM8 DHA1 DHA2 RL252 RL110C KM6 RL140 RL96C RL166 KM5 RL143 RL95C RL197C KM4 RL141 RL184 RL264C RL222 RL185 RL89C RL199C

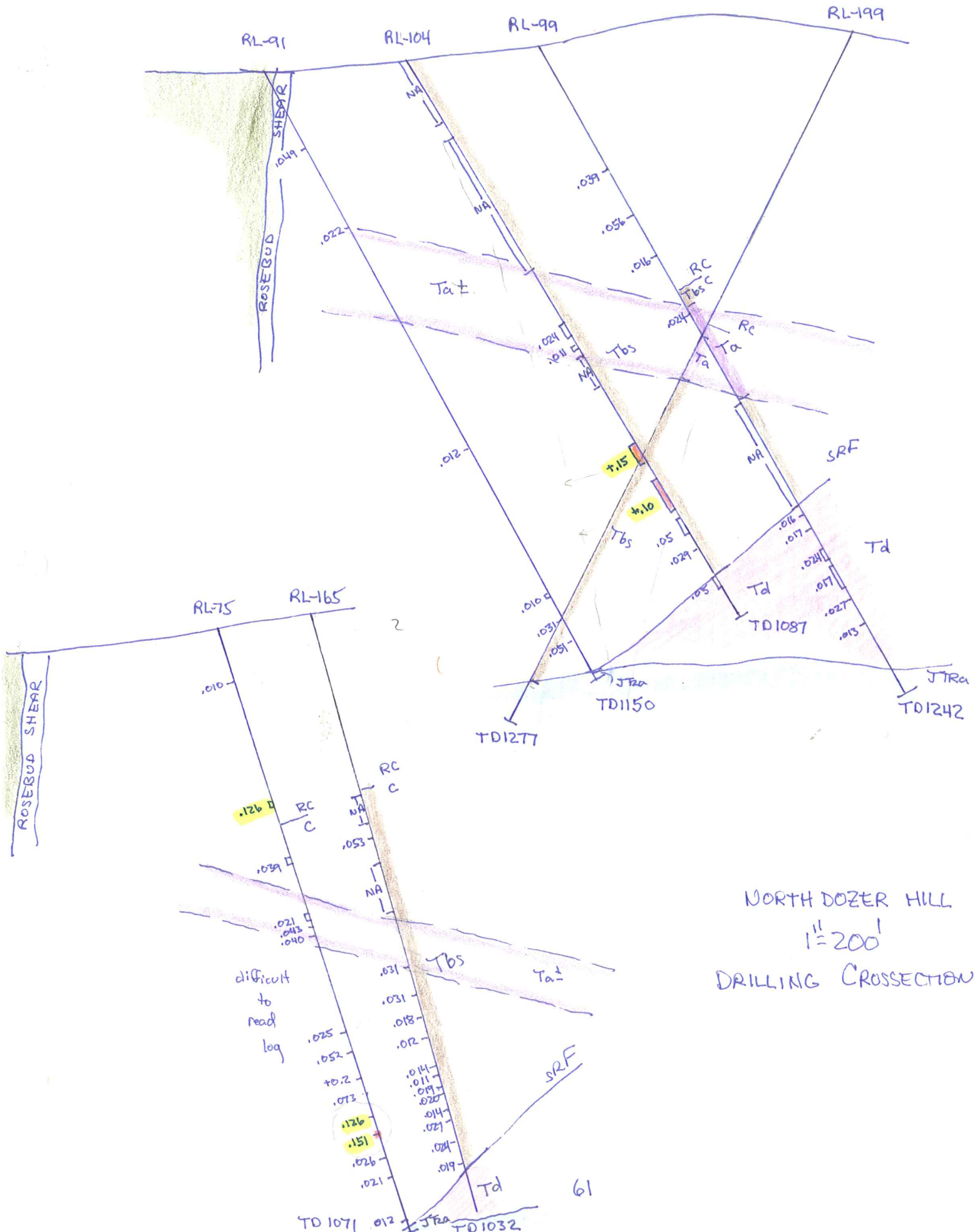
2205000

483000

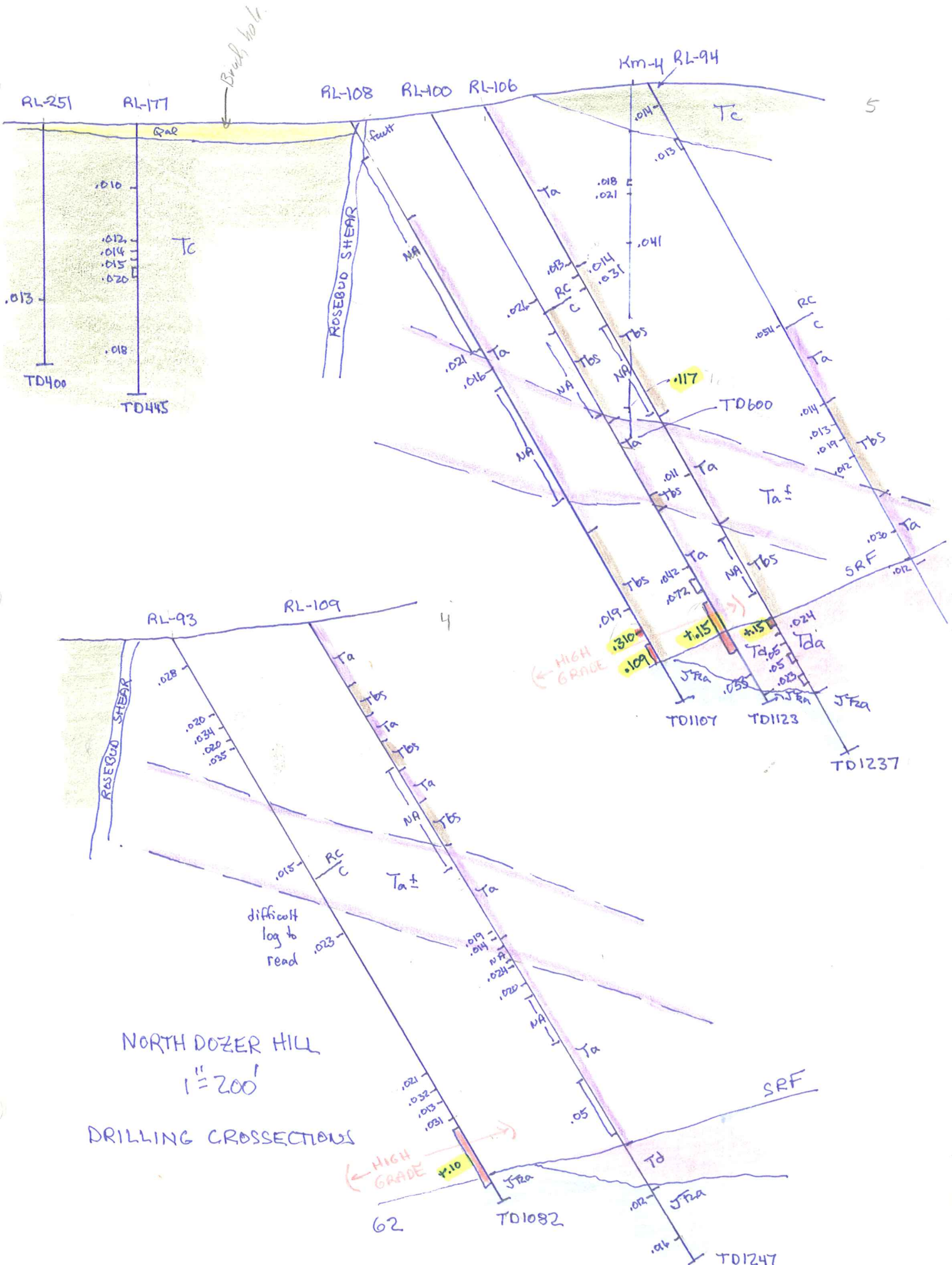
P.60

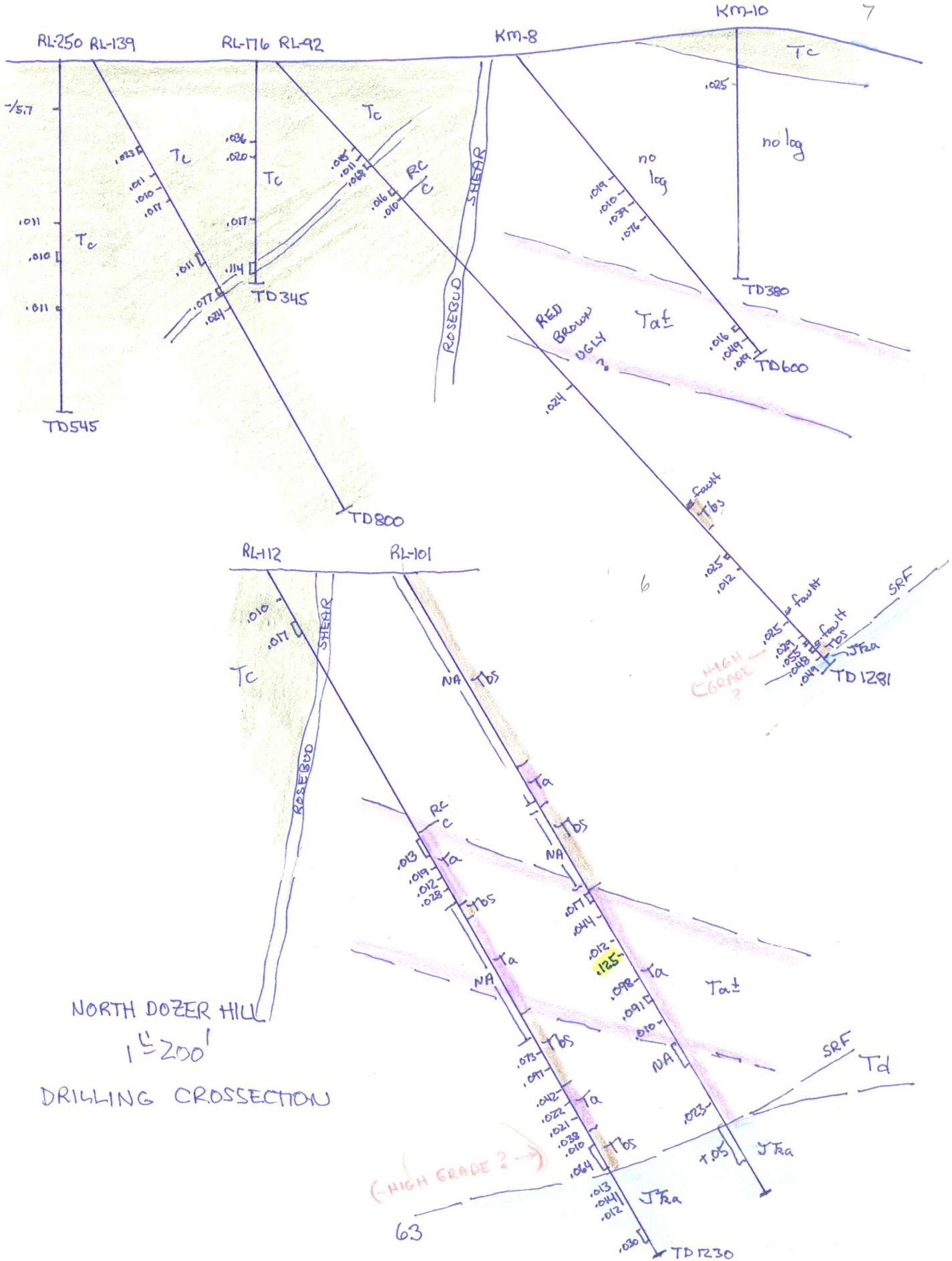


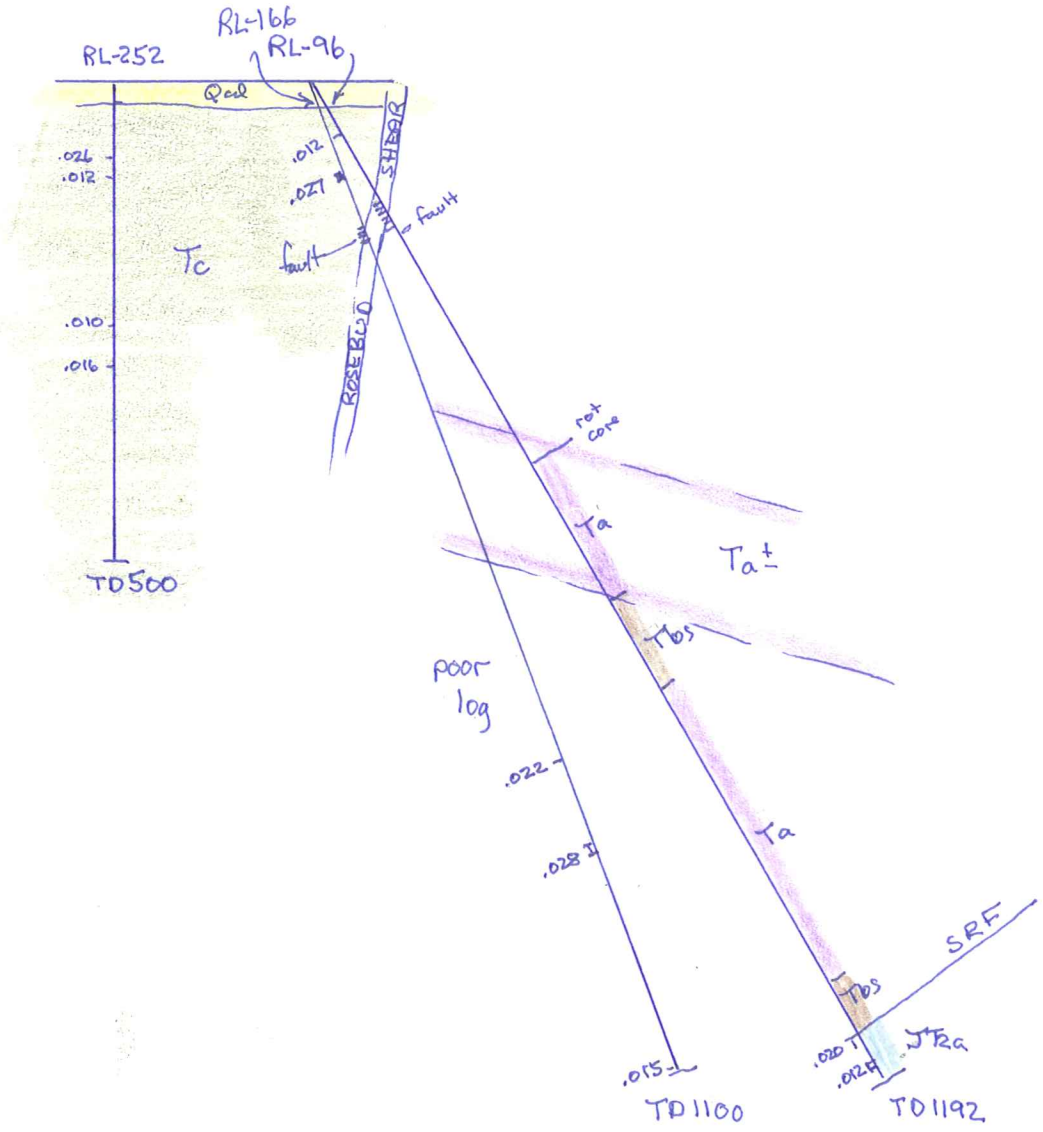
NORTH DOZER HILL
1"=200'
DRILLING CROSSECTION



NORTH DOZER HILL
1" = 200'
DRILLING CROSSECTION

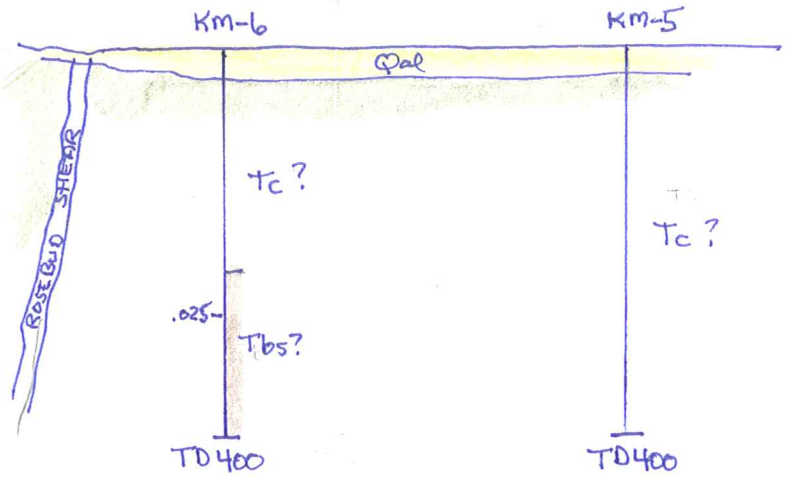

RL-251
RL-177
Brush hill
RL-108
RL-100
RL-106
Km-4
RL-94
Qal
fault
Tc
.010
.012
.014
.015
.020
.013
.018
TD400
TD445
ROSEBUD SHEAR
NA
.018
.021
.041
.013
.014
.031
RC
C
.026
Ta
.021
.016
Tbs
.117
TD600
.011
Ta f
.014
.013
.019
.012
.054
.030
SRF
.042
.072
.019
.310
.109
+.15
.024
Tda
Td
.05
.023
.055
JTra
TD1107
TD1123
TD1237
RL-93
RL-109
4
.028
.020
.034
.020
.035
.015
difficult log to read
.023
.019
.014
.024
.020
.021
.032
.013
.031
+.10
TD1082
TD1247
.08
.04
62
NORTH DOZER HILL
1" = 200'
DRILLING CROSSECTIONS
5

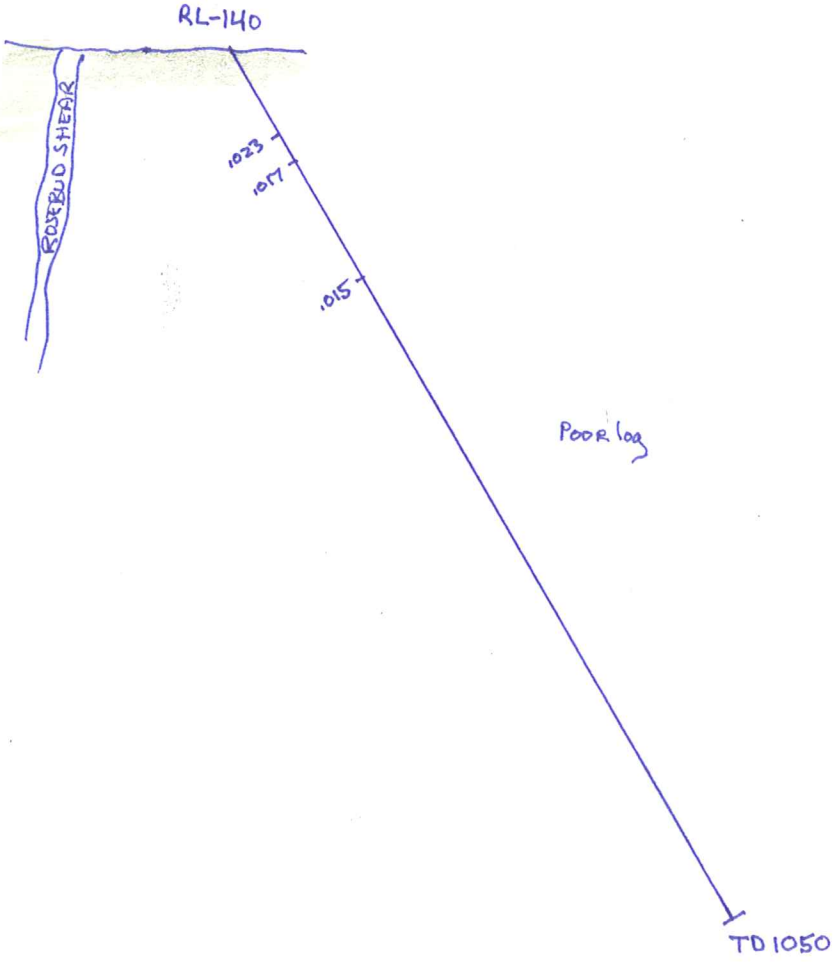

RL-250
RL-139
RL-176
RL-92
KM-8
KM-10
Tc
no log
TD545
TD345
TD800
TD380
TD600
SHEAR
ROSEBUD
RED BROWN UGLY ?
Taf
RC
C
fault
Tbs
SRF
HIGH GRADE ?
TD1281
RL-112
RL-101
NA
Ta
TD1230
NORTH DOZER HILL
1"=200'
DRILLING CROSSECTION



NORTH DOZER HILL
1" = 200'

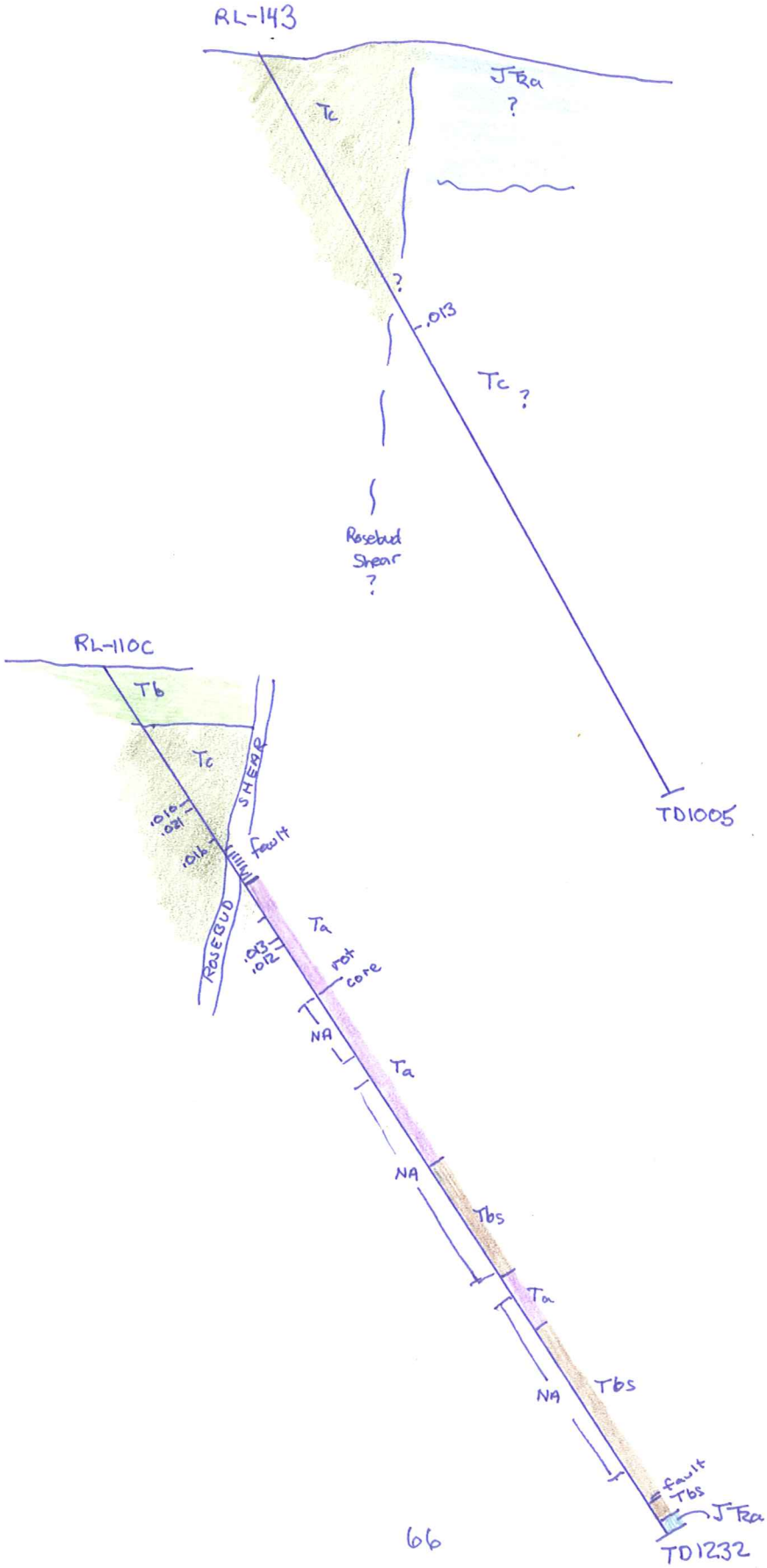
DRILLING CROSSECTIONS





NORTH DOZER HILL
1" = 200'
DRILLING CROSSECTIONS

ASSAY 110?



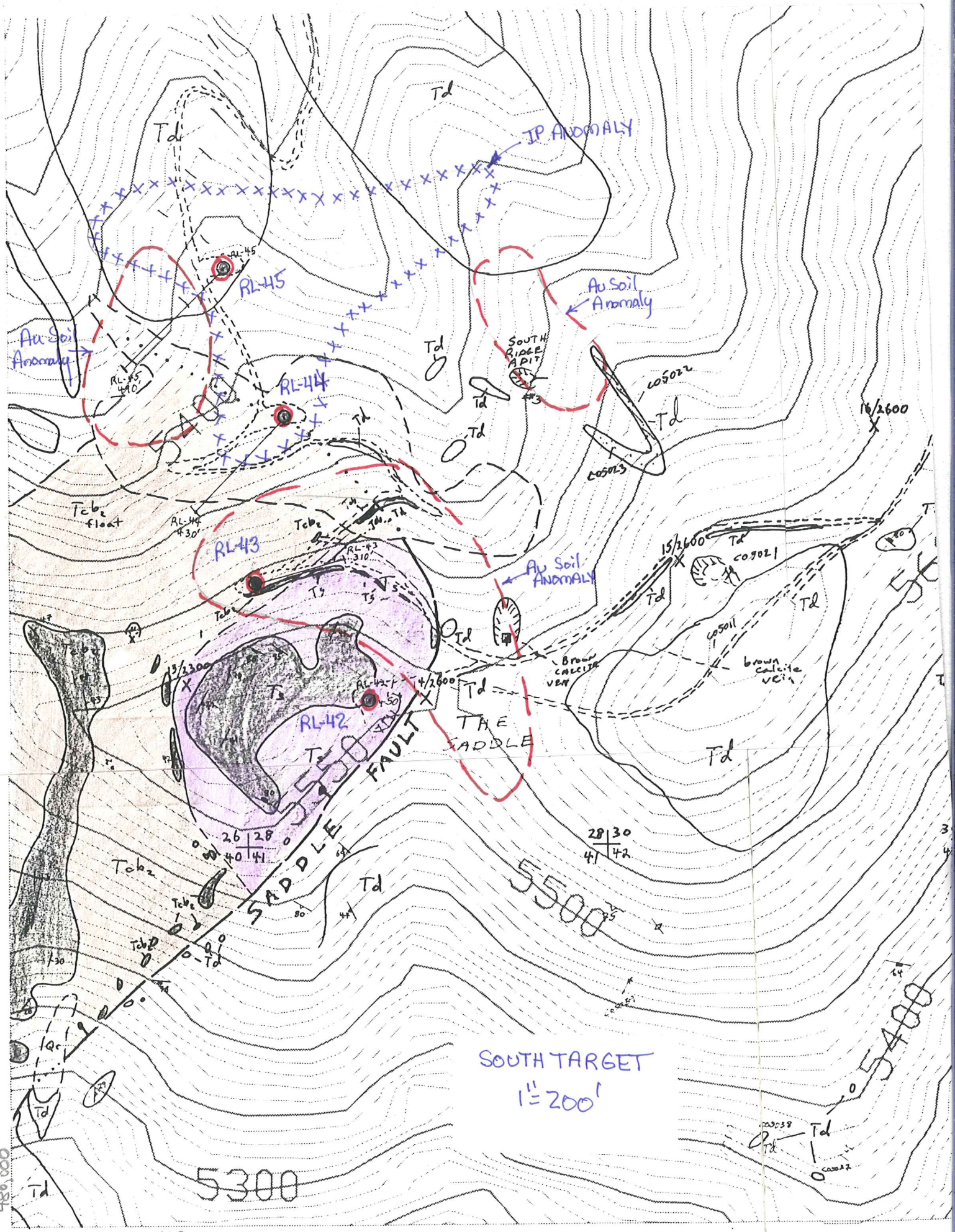
NORTH DOZER HILL
1" = 200'
DRILLING CROSSECTIONS

13. Target IV

This area is located on the topographic ridge just south of the Rosebud Mine. A major north-trending normal fault dipping to the west at 45-50 degrees juxtaposes the mine volcanic sequence (Tbs1+Ta+Tbs2) against Td on the footwall.

Soil geochemistry reveals several strong but relatively small +100 ppb Au anomalies with associated +10 ppm As focused primarily on the west dipping fault. An IP anomaly of moderate intensity is present in the footwall Td unit just north of the ridge top.

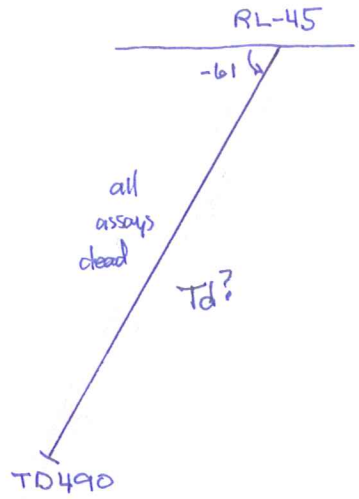
Lac drilled 4 reverse circulation holes in 1989 to test the best soil anomalies. The holes were well located yet the only anomalous gold values were intersected in RL-44, 20-80 feet @ 0.01 opt Au within the Ta unit. The underlying Tbs1 unit was found to be dead. I can envision no interesting areas to further test so no additional exploration interest appears warranted at this time.

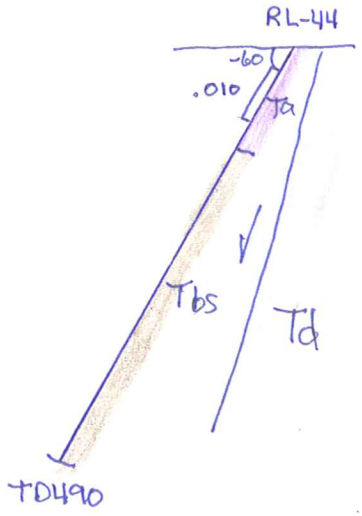

IP ANOMALY
Au Soil Anomaly
RL-45
RL-44
RL-43
RL-42
SOUTH RIDGE ADIT
#3
Tcb2 float
Brown calcite vein
THE SADDLE
FAULT
5500
5300
5400
SOUTH TARGET
1" = 200'
480,000
2,200,000

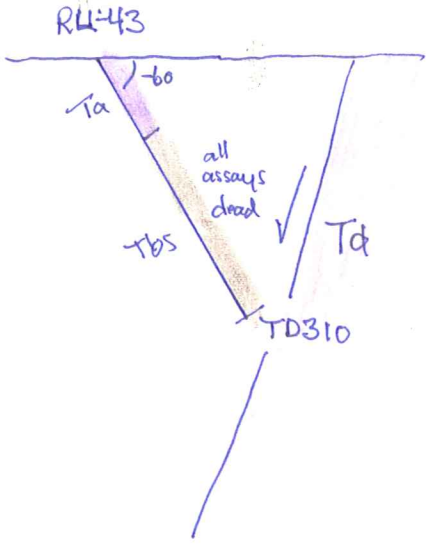
SOUTH TARGET

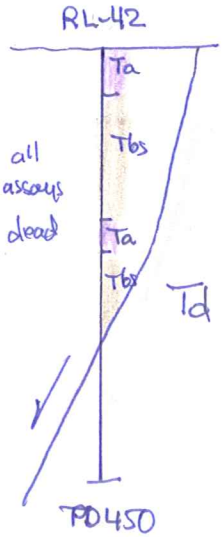
1" = 200'

DRILLING CROSSECTIONS









14. Oscar

The Oscar area is located in the extreme southwestern portion of the Rosebud Property. Past exploration has been extensive consisting of rock and soil sampling, geophysics and drilling by St. Joe Minerals (1981-82), USMX (1988-90) and Lac (1989-91). All of the claims but 4 presently held by USMX were subsequently dropped by the previous owners but then re-staked by Hecla recently.

Silicified talus overlying argillized and silica leached young lacustrine sediments (Ts) are exposed. A range bounding normal fault limits the system on the east and southeast. Interpretations imply a young hot springs system presently exposed at the paleo-surface. Sinter and passive silicified talus with anomalous Au+Hg is similar to the geologic setting postulated for the Sulphur District 8 miles to the north.

A review of all the past exploration data reveals the following:

1) a coincident Au+As+Sb soil anomaly approximately 700 feet in diameter is present that drapes over the top of the prominent hill. The soil anomaly is terminated to the east and southeast by the range bounding fault while it appears breached by erosion along its north and west margin.

2) a total of 8 reverse circulation holes have now been completed within the limits of the geochem anomaly and multiple intervals of 20-60 feet @ 0.01-0.02 opt Au have been intersected at shallow depth. A rough geologic estimate for mineralization on Oscar Hill now aggregates approximately 1,000,000 tons @ 0.015 opt Au. (this is my own general estimate and not a formal calculation)

3) isolated areas away from Oscar Hill also returned 0.01 opt Au intervals (example O-13, 65-130 ft @ 0.01 opt Au and 145-175 ft @ 0.01 opt Au: O-15, 405-445 ft @ 0.01 opt Au; O-14, 430-500 ft @ 0.02 opt Au and O-2, 125-150 ft @ 0.01 opt Au and 190-225 ft @ 0.01 opt Au) The tonnage potential for the area may be considerably larger than 1,000,000 tons but no increase in the average grade should be expected.

The only potential that I see is to conduct a general economic analysis of heap leaching the 1,000,000 tons @ 0.015 opt Au at Oscar with the pregnant solutions to be processed at the planned Rosebud Mill. If some encouragement is obtained in the analysis, Hecla should then first obtain the 4 USMX claims royalty free and then conduct a grid drilling program on Oscar Hill. With this report though, no drilling is proposed.

OSCAR
1" = 200'

4800
4950
5000
4900
5000
4900

O-2
+100ppb Au Soil

O-14

O-5

+50ppm As Soil

+100ppb Au Soil

O-19

O-15

O-1
O-9
O-7
O-8
O-6
O-12
O-11
O-10

2,197,000N

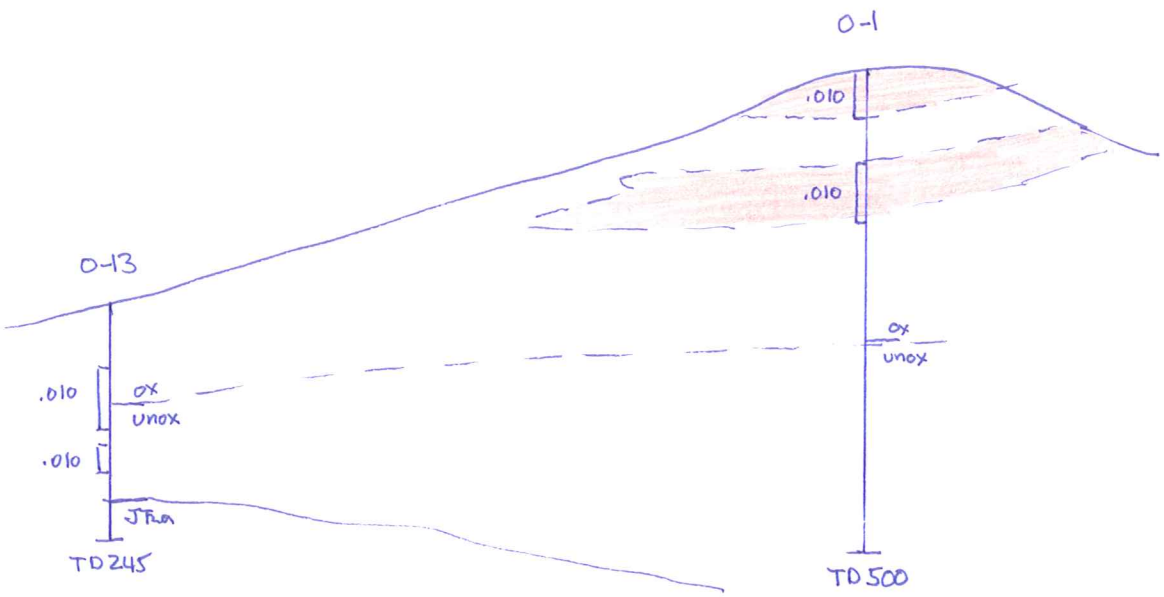
+100ppb Au Soil

O-13

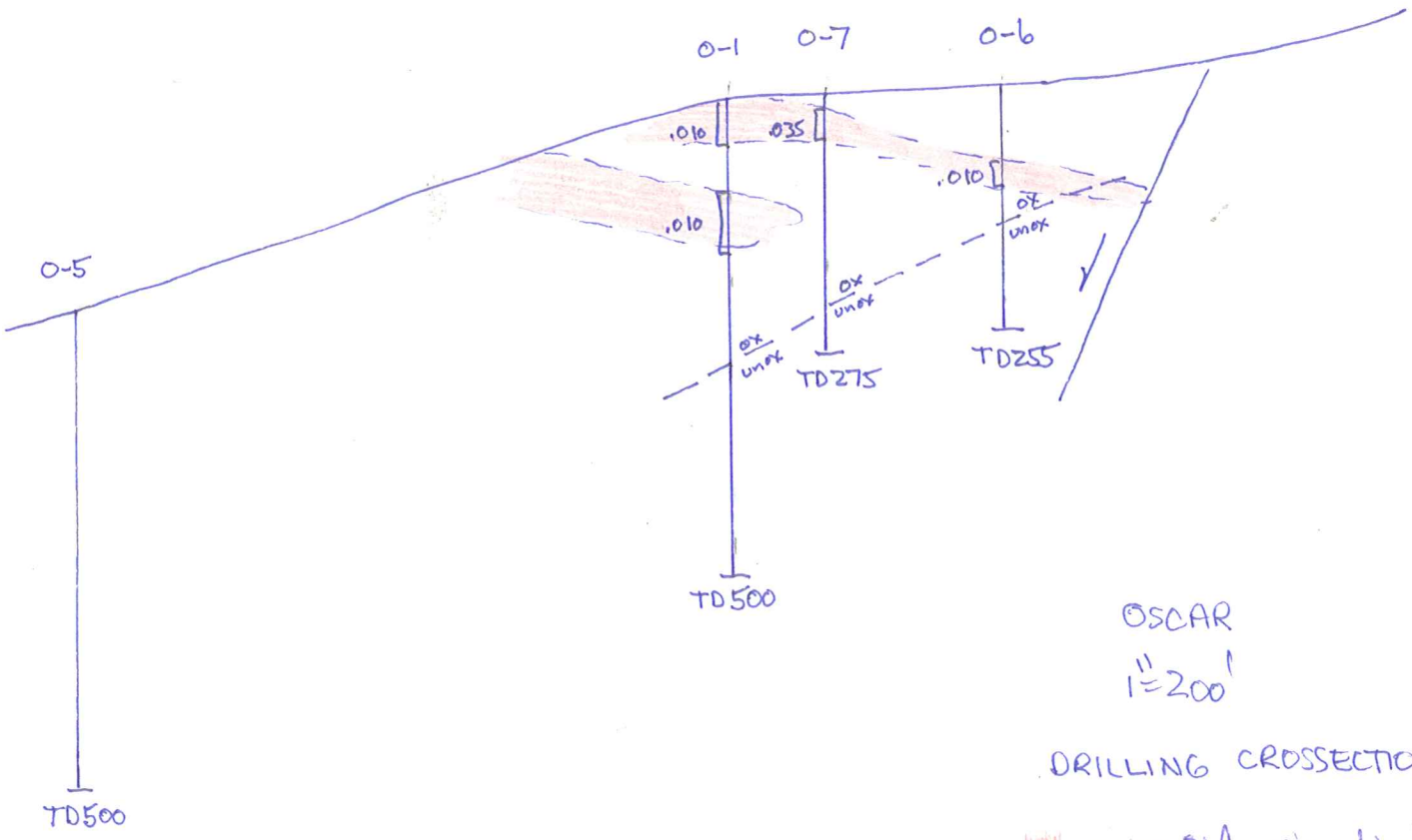
+50ppm As Soil

E 3000'

Oscar Hill



Oscar Hill

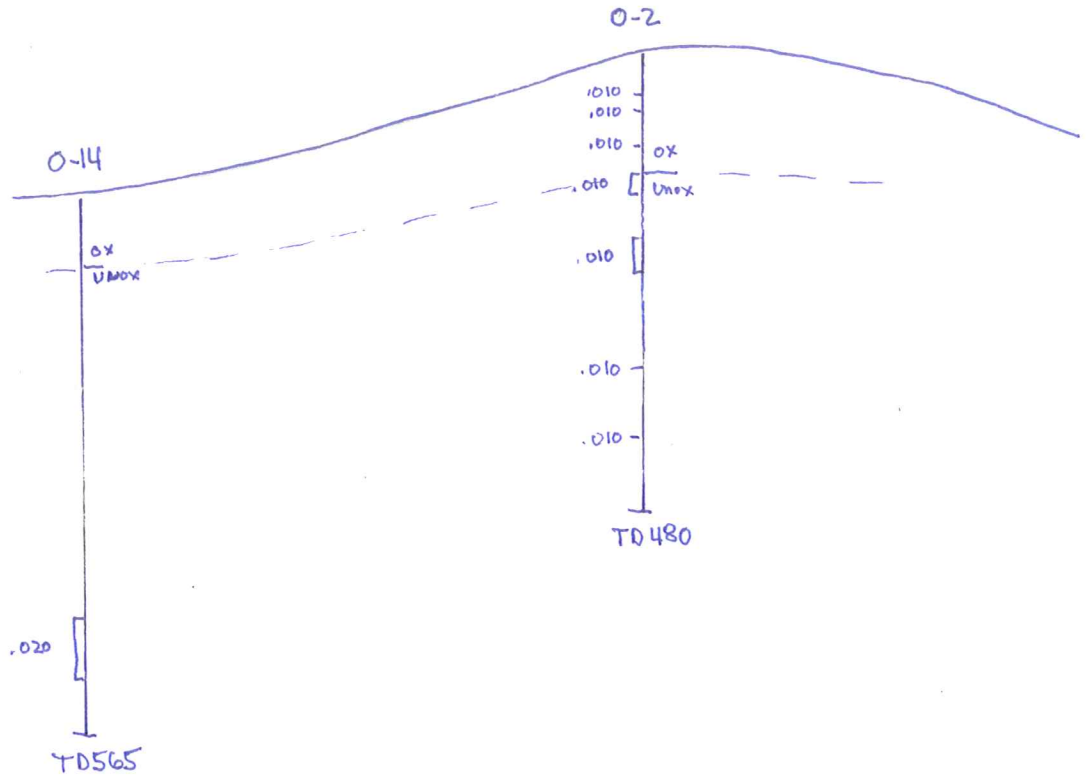


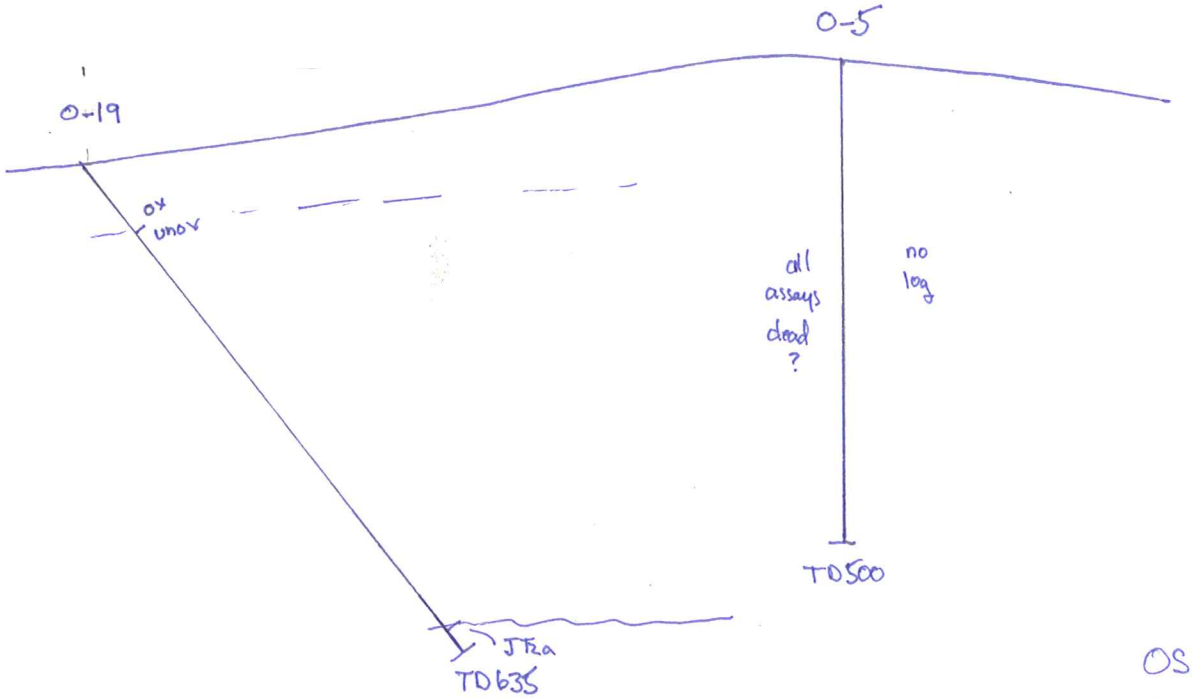
OSCAR

1" = 200'

DRILLING CROSSECTIONS

= +0.01 Au mineralization





OSCAR
1" = 200'

DRILLING CROSSECTIONS

15. Gator

The Gator area is located in the north-central portion of the property just north of Wildrose Canyon. Past work by Hecla has included mapping at 1"=200' scale and soil sampling on a rough 100 ft x 200 ft grid. No drilling has been attempted as of this writing.

Result of the soil sampling has revealed a narrow, north-northeast trending +12 ppm As anomaly that persists over a strike distance of 2,000 feet. Clustered along the arsenic anomaly are several smaller +30 ppb Au anomalies that reinforce the north-northeast control for mineralization.

The envisioned target is for a sub-cropping structure that hosts higher grade gold mineralization. Only one reverse circulation hole is proposed now to test the target due to the lack of an obvious favorable host at the site. This one hole should be sufficient to determine if additional holes might then be justified.

154

153

Jarosite

bleached, Jarosite on Frx.

GATOR 2

Jarosite

VEIN Qtz Py-Angular Frags.

bleached, Jarosite, barite angular matrix supported vein/brx

GATOR 3

+30ppb As Soil

+12ppm As Soil

LBT8

LBT8

+30ppb As Soil

Clay

Qal

SiO_2 silicks in plant

GATOR 4

Clay filled stockwork

LBT7

LBT9

LBT4

LBT2

PROPOSED HOLE

+30ppb As Soil

Welded tuff float

Flattened Vesicles

brx-chlor. frags. Matrix supp.

GATOR TARGET
1"=200'

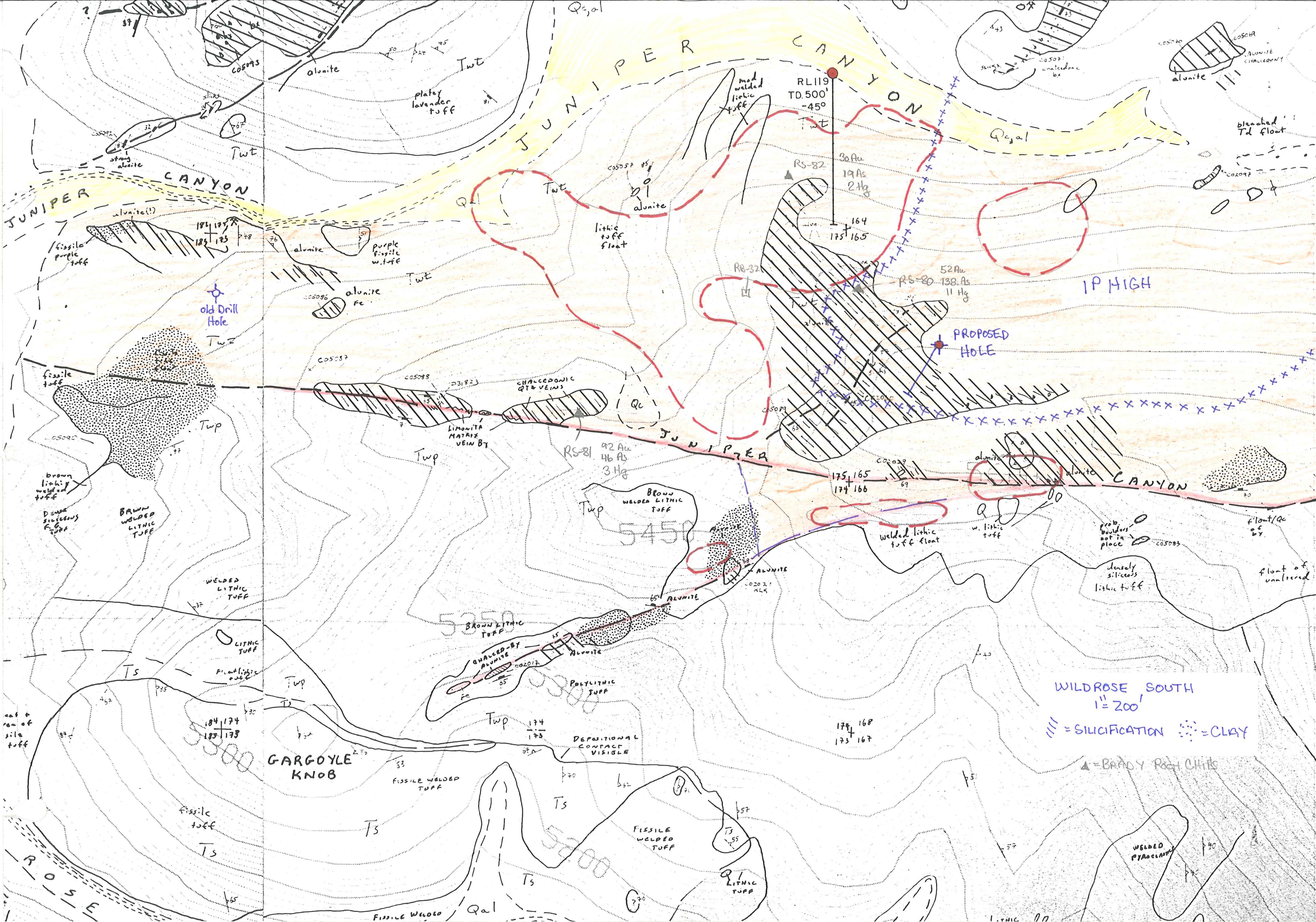
16. Wildrose South

This target is located in the northwestern portion of the property just north of Wildrose Canyon. Past work in the area has included soil sampling, IP/resistivity, rock chip sampling and one drill hole by Lac in 1990 and another hole by an unknown group but possibly Homestake in the early 1980's.

The target as presently envisioned is along an east-west striking fault that forms the contact between the Tbf unit and the Wildrose rhyolite intrusive. The fault branches into two sub-parallel segments on the ridge south of hole RL-119. At the intersection both fault segments are intensely silicified while the surrounding hangingwall and footwall units are altered argillically. Rock chip sampling reveals increasing Au, As and Hg values up the hill towards the branch area while multiple +50 ppb Au soil anomalies cluster throughout (no As, Sb, or Se assay results for the soil samples are available). The IP results also returned a broad high within the rhyolite intrusive reflecting probable disseminated pyrite at depth.

Hole RL-119 was drilled by Lac from the canyon bottom to the south presumably to test the branch area, but the terrain is very steep and Lac was apparently unwilling to construct the necessary access road to properly test the target. Therefore, even though the assay results for RL-119 were dead the results are also considered meaningless due to the improper hole location.

One core hole is now proposed to be drilled on the ridge top. Reverse circulation drilling could be substituted for coring but this will be a difficult and costly site and only the most reliable samples will be justified so that second hole later will not be necessary unless there is some drill encouragement.


WILDROSE SOUTH
1" = 200'
= SILICIFICATION
= CLAY
= BRADY ROCK CHIPS
JUNIPER CANYON
JUNIPER CANYON
JUNIPER CANYON
ROSE
GARGOYLE KNOB
RL119
TD. 500'
-45°
30 Au
19 As
2 Hg
RS-82
RB-32
RS-80
52 Au
138 As
11 Hg
RS-81
92 Au
46 As
3 Hg
IP HIGH
PROPOSED HOLE
old Drill Hole
Twt
Twp
Ts
Qal
Qc
Qc,al
alunite
alunite (!)
strong alunite
slicks
platey lavender tuff
mod welded lithic tuff
lithic tuff float
fissile purple tuff
purple fissile w. tuff
fissile tuff
brown lithic welded tuff
BROWN WELDED LITHIC TUFF
WELDED LITHIC TUFF
LITHIC TUFF
BROWN LITHIC TUFF
QUALCED-BY ALUNITE
POLYLITHIC TUFF
DEPOSITIONAL CONTACT VISIBLE
FISSILE WELDED TUFF
CHALCEDONIC QTZ VEINS
LIMONITE MATRIX VEIN BX
chalcedonic bx
ALUNITE CHALCEDONY
bleached Td float
welded lithic tuff float
w. lithic tuff
prob. boulders not in place
densely siliceous lithic tuff
float of unaltered T
float/Qc of bx
WELDED PYROCLASTIC
C05093
C05092
C05086
C05087
C05088
C05090
C05057
C05079
C05071
C05070
C05083
C02097
C02029
C02021
C02017
5450
5350
5300
175 165
174 166
184 174
183 173
174 168
173 167

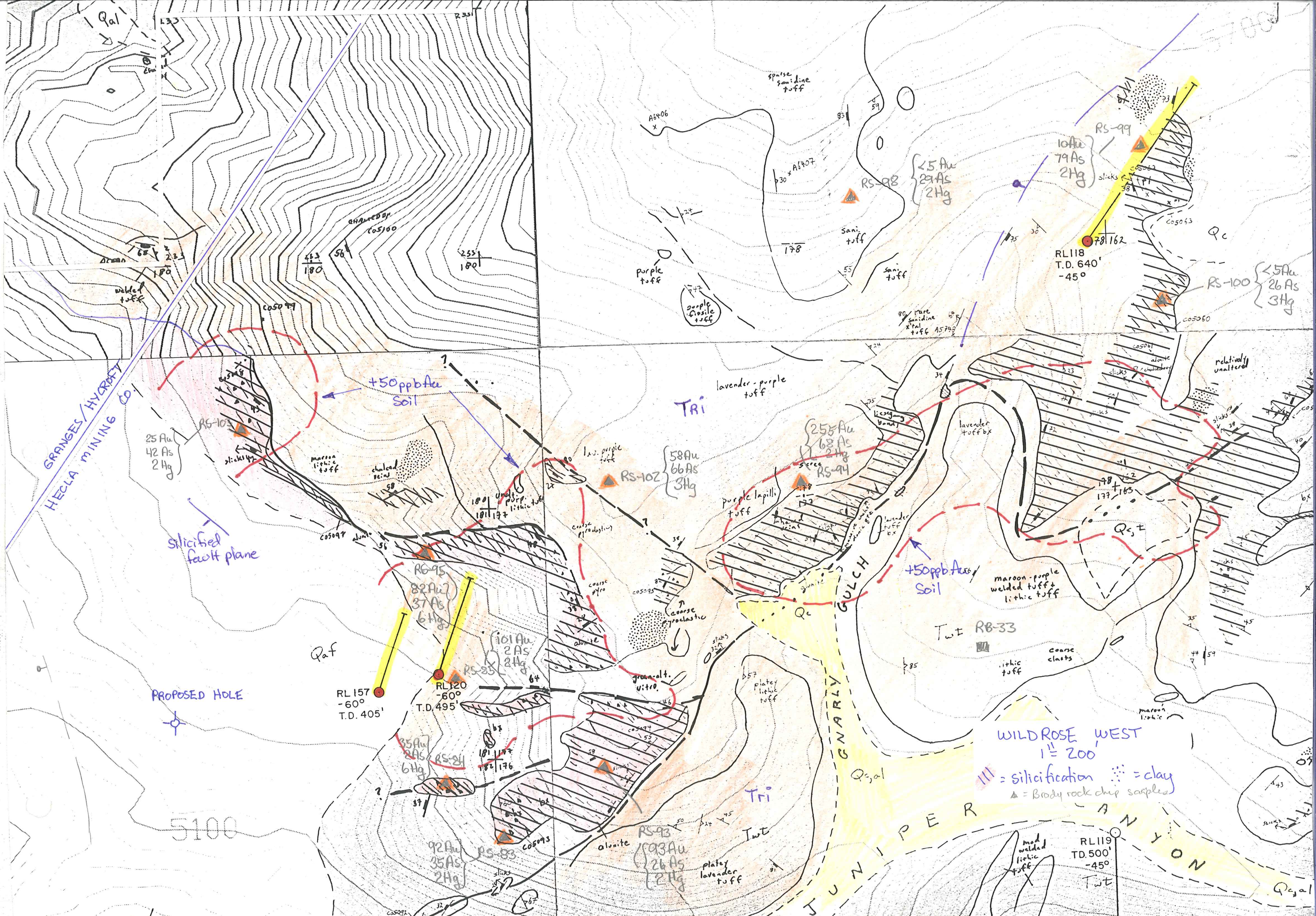
17. Wildrose West

This area is contiguous towards the northwest from the Wildrose South target. Most of the exposures are of the Wildrose rhyolite intrusive but along the west periphery the dip slope of a northwest trending, west dipping silicified fault outcrops along the south to southwest facing topographic slope. This fault is offset at a northeast trending extensional fault that trends through the area of old drill hole RL-118.

Soil sampling has delineated essentially two +50 ppb Au anomalies - one along the northwest trending fault and one roughly along the northeast trending fault. The As, Sb and Se values for this sample set were not available. The IP/resistivity response throughout the area is essentially flat.

The northwest trending silicified fault plane is of primary exploration interest since Au+Hg is highly anomalous along its strike extent (As is only low to moderate). Unfortunately both holes RL-120 and RL-157 were angled into the hill properly but they were collared in an area where erosion breached the fault plane and only footwall rhyolite intrusive was tested. Both holes returned essentially barren assays.

One reverse circulation hole is now proposed in the valley 500 feet west of RL-157 attempting to drill through the fault plane. I presently envision the silicified fault to be a feeder for hangingwall low grade stockwork/disseminated mineralization analogous to the Brimstone Deposit at the Sulphur District approximately 0.5 miles to the north. Higher grade mineralization might also be present along the fault itself.


WILDROSE WEST
1" = 200'
= silicification
= clay
= Brody rock chip samples
GRANGES/HYCROFT
HECLA MINING CO.
+50 ppb Au Soil
+50 ppb Au Soil
silicified fault plane
PROPOSED HOLE
RL157
-60°
T.D. 405'
RL120
-60°
T.D. 495'
RL118
T.D. 640'
-45°
RL119
T.D. 500'
-45°
RS-103
25 Au
42 As
2 Hg
RS-95
82 Au
37 As
6 Hg
RS-85
101 Au
2 As
2 Hg
RS-84
35 Au
8 As
6 Hg
RS-83
92 Au
35 As
2 Hg
RS-93
93 Au
26 As
2 Hg
RS-102
58 Au
66 As
3 Hg
RS-94
255 Au
68 As
RS-98
<5 Au
29 As
2 Hg
RS-99
10 Au
79 As
2 Hg
RS-100
<5 Au
26 As
3 Hg
RB-33
Tri
Twt
Qaf
Qc
Qc,al
Qc,t
Qal
GNARLY GULCH
JUNIPER CANYON
lavender-purple tuff
purple lapilli tuff
maroon-purple welded tuff & lithic tuff
maroon lithic tuff
sparse sanidine tuff
sani tuff
purple tuff
purple fissile tuff
platey lithic tuff
platey lavender tuff
lavender tuff bx
coarse pyroclastic
welded tuff
alunite
relatively unaltered
5100
5700

18. Wildrose East

This area is located just north of the Gator target and east of the Wildrose area. An east-west trending fault branches into two sub-parallel segments that is silicified along its entire strike length. Rock chip sampling from the reconnaissance mapping effort returned the following assays:

	Au(ppb)	As(ppm)	Sb(ppm)	Hg(ppm)
RS-86	63	137	112	29.0
RS-87	64	16	40	6.0
RS-88	50	104	43	5.0

These are considered to be extremely anomalous values especially for antimony and mercury. As previously stated, additional exploration work now needs to be completed prior to any drill recommendations. It is therefore suggested that the Gator soil grid be extended north to cover the Wildrose East area and soil sampling then conducted on a rough 100 ft x 200 ft spacing. Based on these results, a decision to complete IP/resistivity work, drilling or target rejection can then be made.

WILDROSE EAST TARGET

WILDROSE SOUTH TARGET

GATOR GEOCHEM ANOMALY

1"=500'

limit of ALTERED mudstone clay

Tc pit float

Tb float

Ta float

Ta float?

silica bxs

RS-80

RS-82

RS-86

RS-87

RS-88

RS-89

RS-78

RB 32

RB x 33

RB 99

RB 100

no otcp

5-10°

55°

SHORT SHOT

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC : Short Shot
HECLA : —
BRADY : —

GENERAL DESCRIPTION
Bleached area west of Rosebud Peak

GEOLOGY
bleached area in Tbf flow. Ta underlies and outcrops to the west. Only potential left is to target the structures but weak geochemistry

GEOCHEMISTRY
soil Au upto 100 ppb - drill tested
As 19 ppm - " " - same as gold
Sb 10 " " " " " "
Se 1.5 " " " " " "

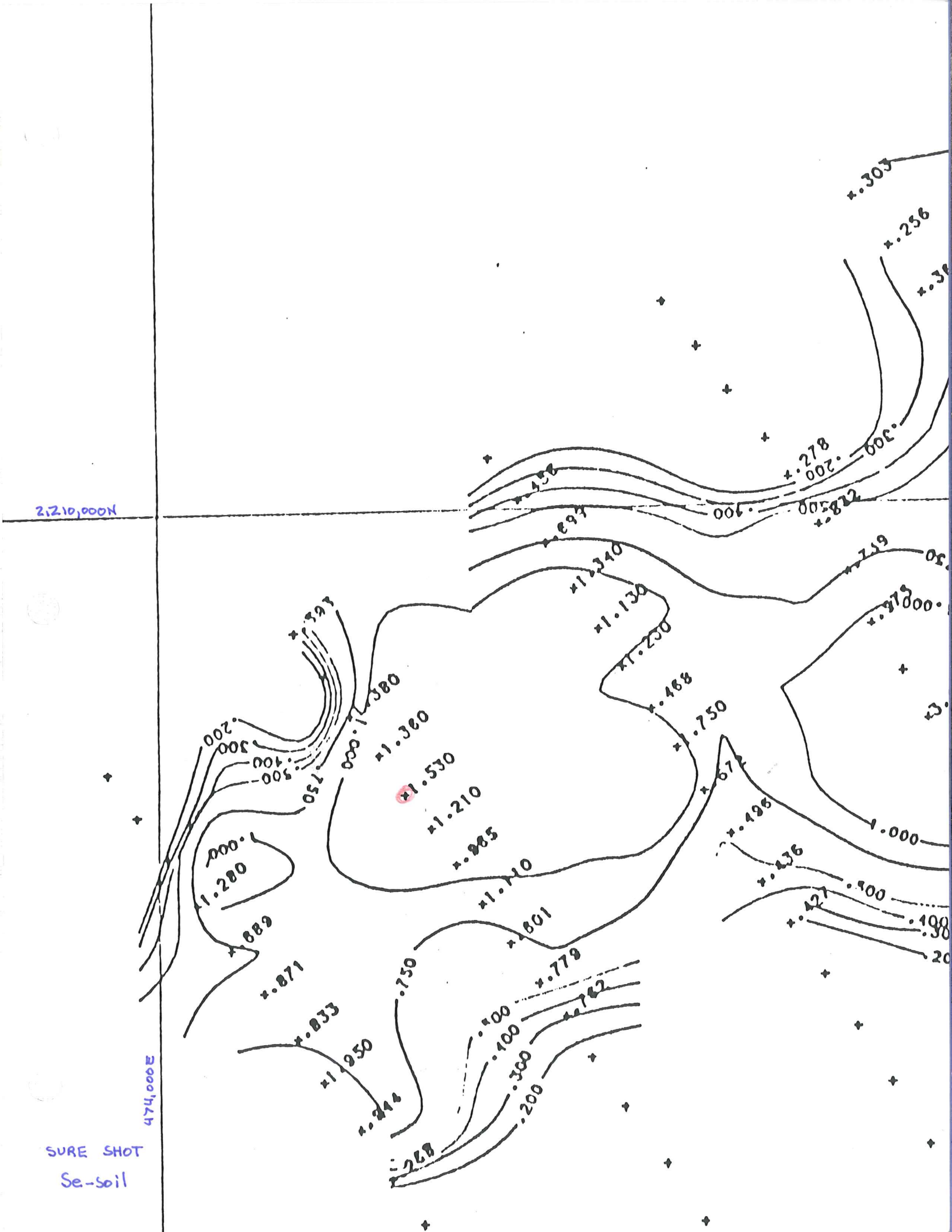
GEOPHYSICS
IP only partial coverage but increasing response to west of drilled area ± 500'

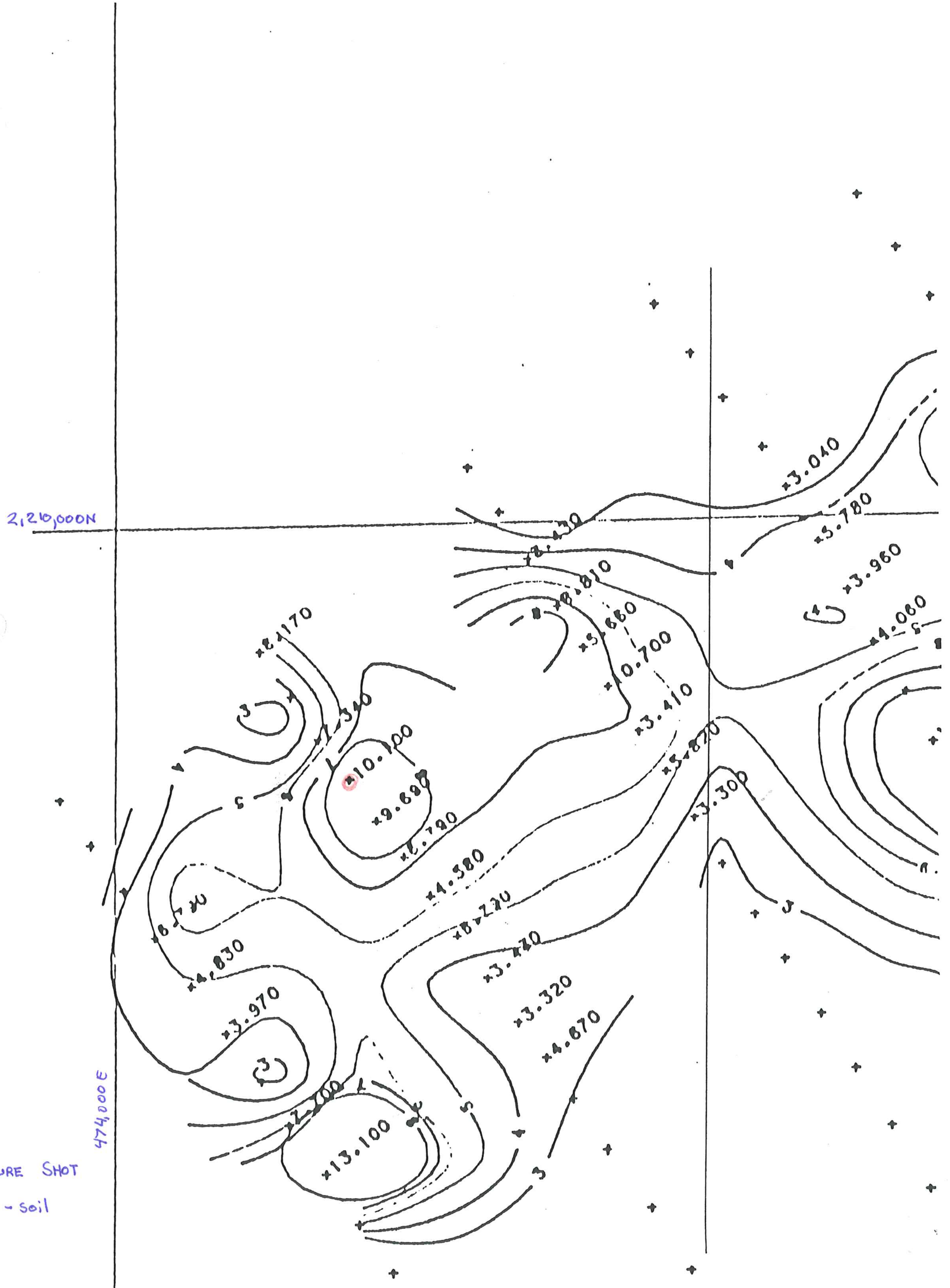
DRILLING

RL-238	TD 500	vertical	= dead
RL-239	TD 525	vertical	= dead
RL-240	TD 375	vertical	= dead
RL-244	TD 200	vertical	= dead.

no geologic and assay logs. just mention of results in an end of year project summary.

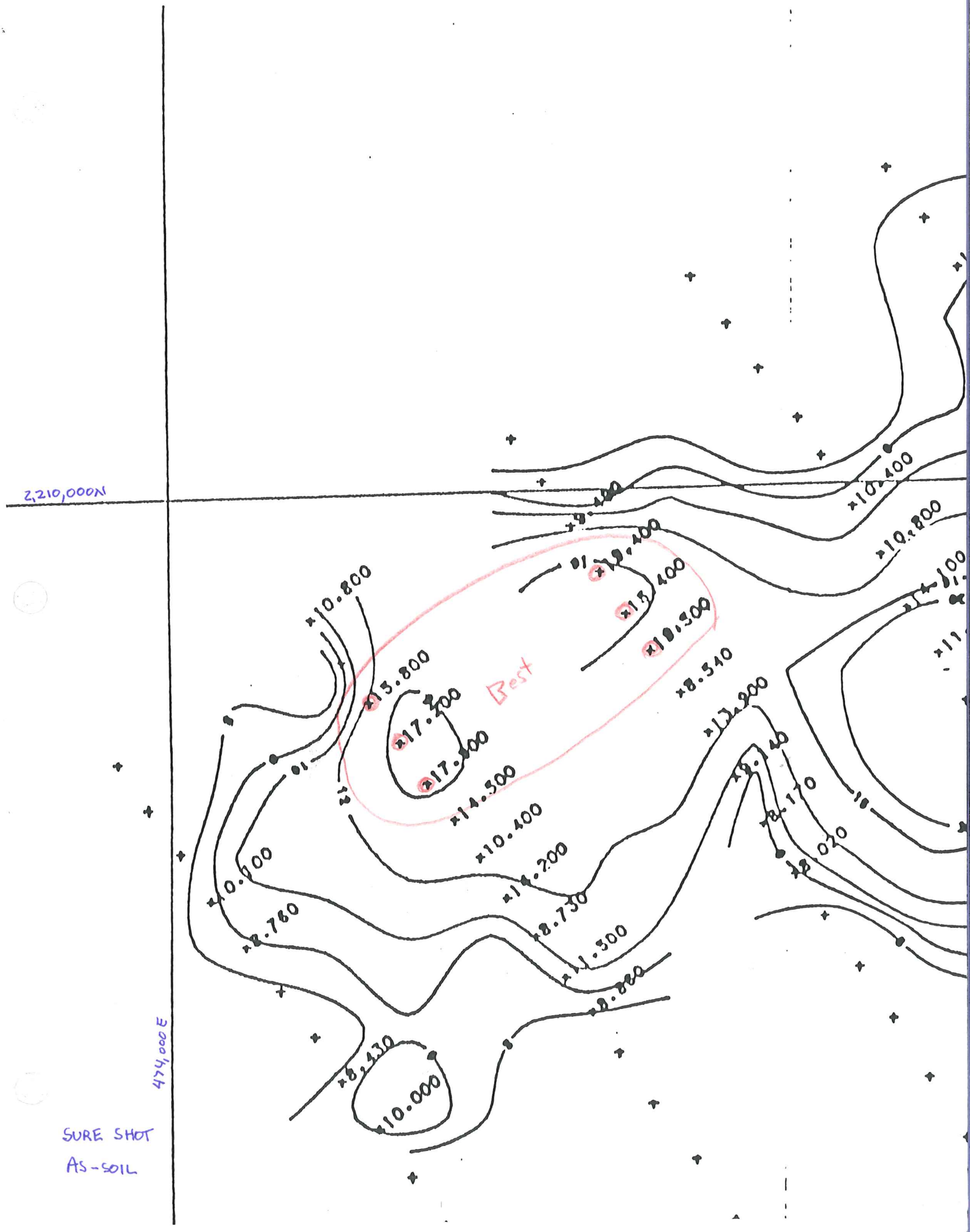
REMAINING POTENTIAL
Target tested with negative results. No remaining potential.

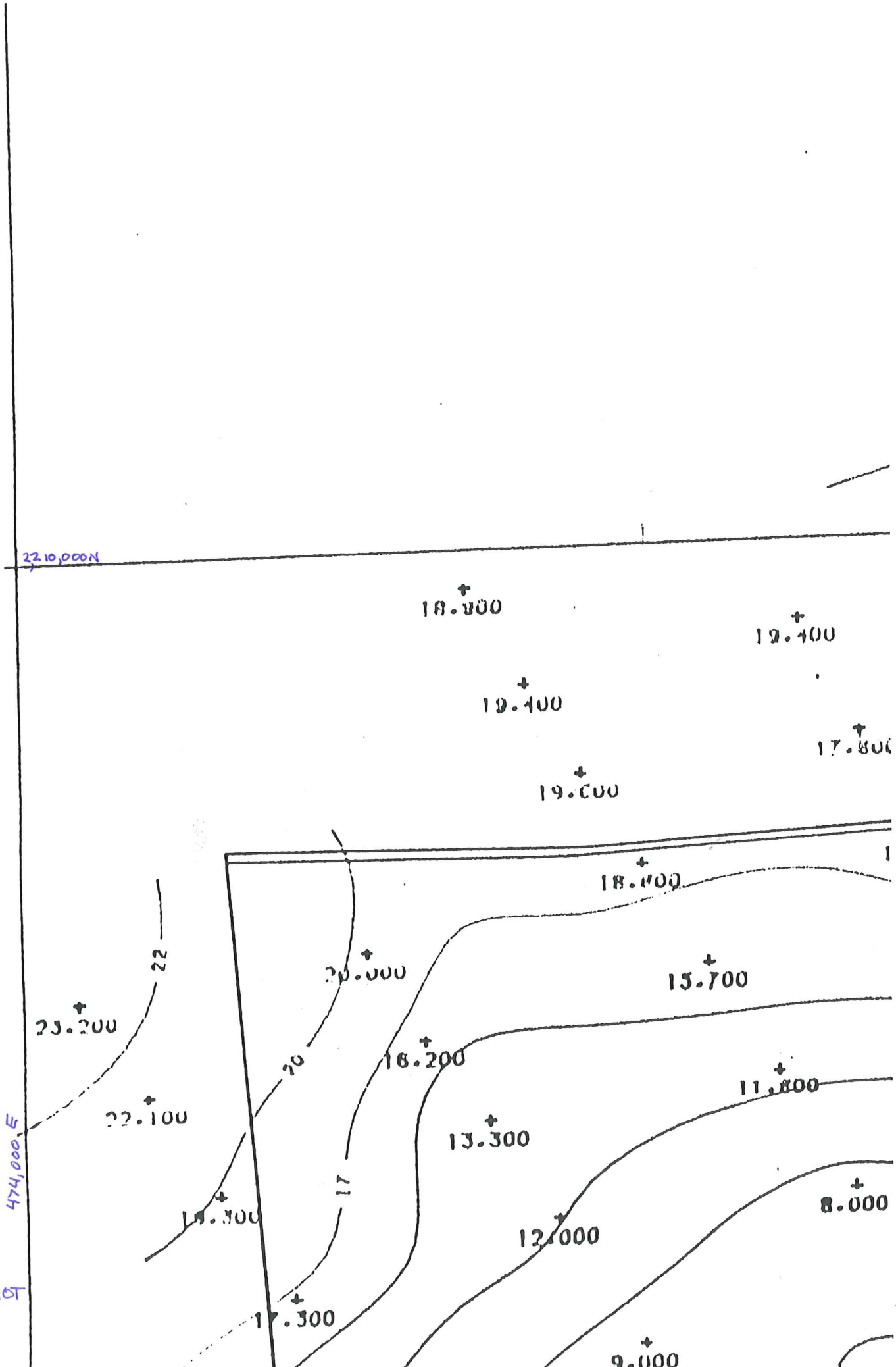

2,210,000N
474,000E
SURE SHOT
Se-soil

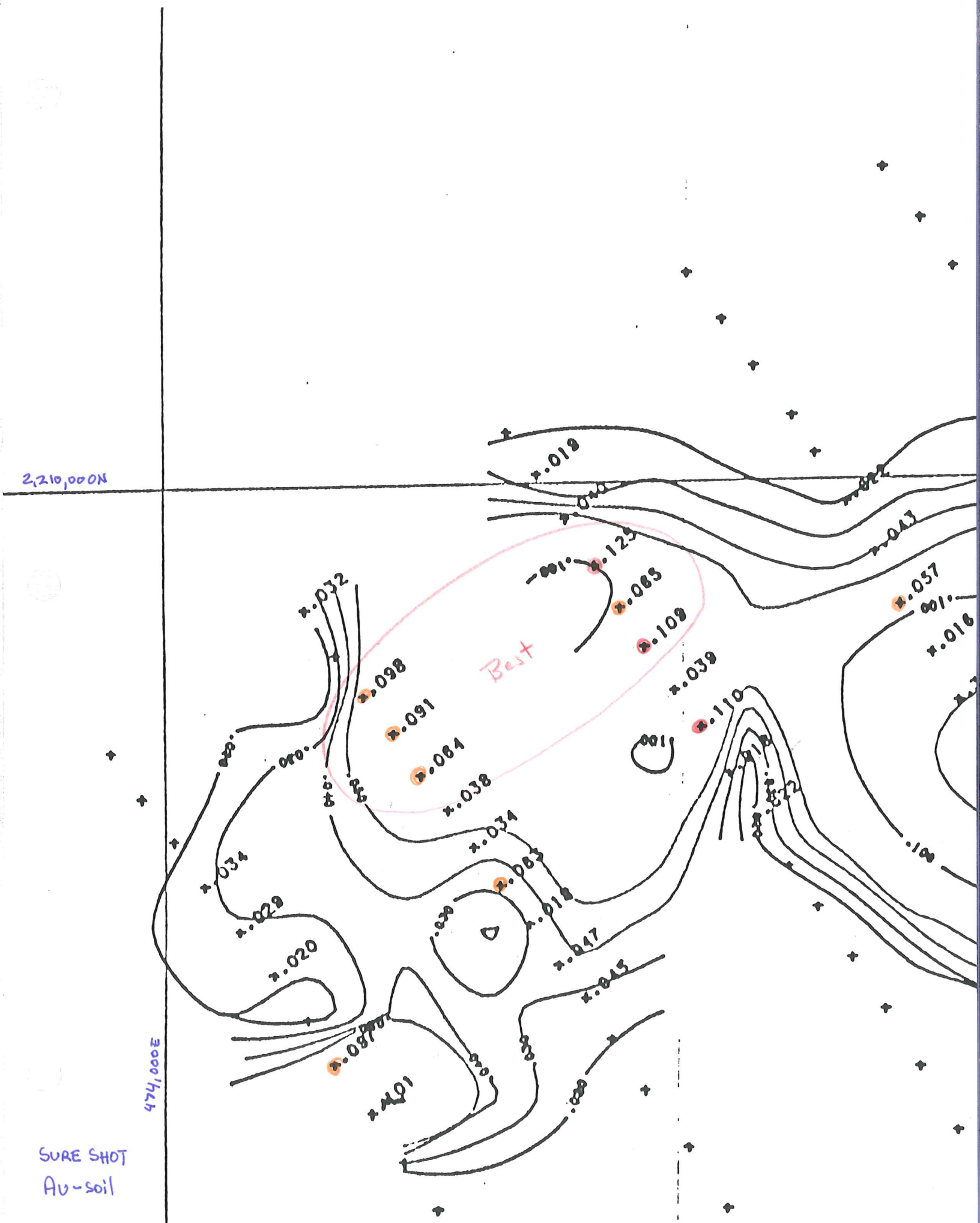


SURE SHOT

Sb - soil


2,210,000N
474,000E
Best
10.800
15.800
17.500
17.500
14.500
10.400
14.200
8.750
11.300
8.860
8.430
10.000
8.760
10.900
8.540
12.900
10.800
SURE SHOT
AS-SOIL


2210,000N
474,000E
18.800
19.400
19.400
19.000
18.400
15.700
16.200
11.800
13.300
8.000
12.000
9.000
22
20
17
22.200
22.100
17.300
SURE SHOT
1P



SURE SHOT
Au - soil

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC : North Equinox
HECLA : North Equinox
BRADY : Target VII

GENERAL DESCRIPTION

Large E-W trending chalcedonic quartz breccia zone in Chocolate Tuff.

GEOLOGY

all Tc

GEOCHEMISTRY (soil grid does not extend to intersection areas)

Soil Au essentially dead.
As scattered +10 ppm over main zone at top of hill
Sb +10 ppm intervals near intersection area.
Se curious lineated anomalies down sample line – assay problem?

GEOPHYSICS

Resistivity high under main hill

Good IP anomaly offset north of zone and dh RL-85

DRILLING

Drilling results mostly dead but did not test intersection areas adj RL-85 probably collared on zone and drilled overtop. RL-86 only hole that intersected zone and it was dead.

REMAINING POTENTIAL

large IP anomaly north of zone. RL-85 tail hit 0.003-0.011 beyond zone in IP area. Needs more drilling to test IP

North Equinox Lac, Hecla Target + mine. 84, 85, 86, 87

RL84 TD 620 N30E -45

0-620 TC no change wk silic throughout.

dead throughout didn't hit it.

RL-85 TD 530 N1W -75

405-410 @ .011 425-430 @ .010
415-420 @ .011

0-310 qtz stockwork breccia

310-530 TD strong silic — bottomed in it.

ox/unox 310

0-350 .001 or less

350-530 TD .003-.011 Au. should have gone deeper.

↑ lost hole

RL-86 TD 665 N7W -60

0-320 silic. 0-580 .003-.008

ox/unox 300

320-590 strong silic.

590-665 footwall TC? 580-665 dead .001

spikes @ 70-80 .010 Au 0.2 Ag

105-110 .011 —

140-155 .013 —

160-165 .022 —

170-175 .011 —

200-205 .015 0.2

265-270 .035 —

305-310 .012 —

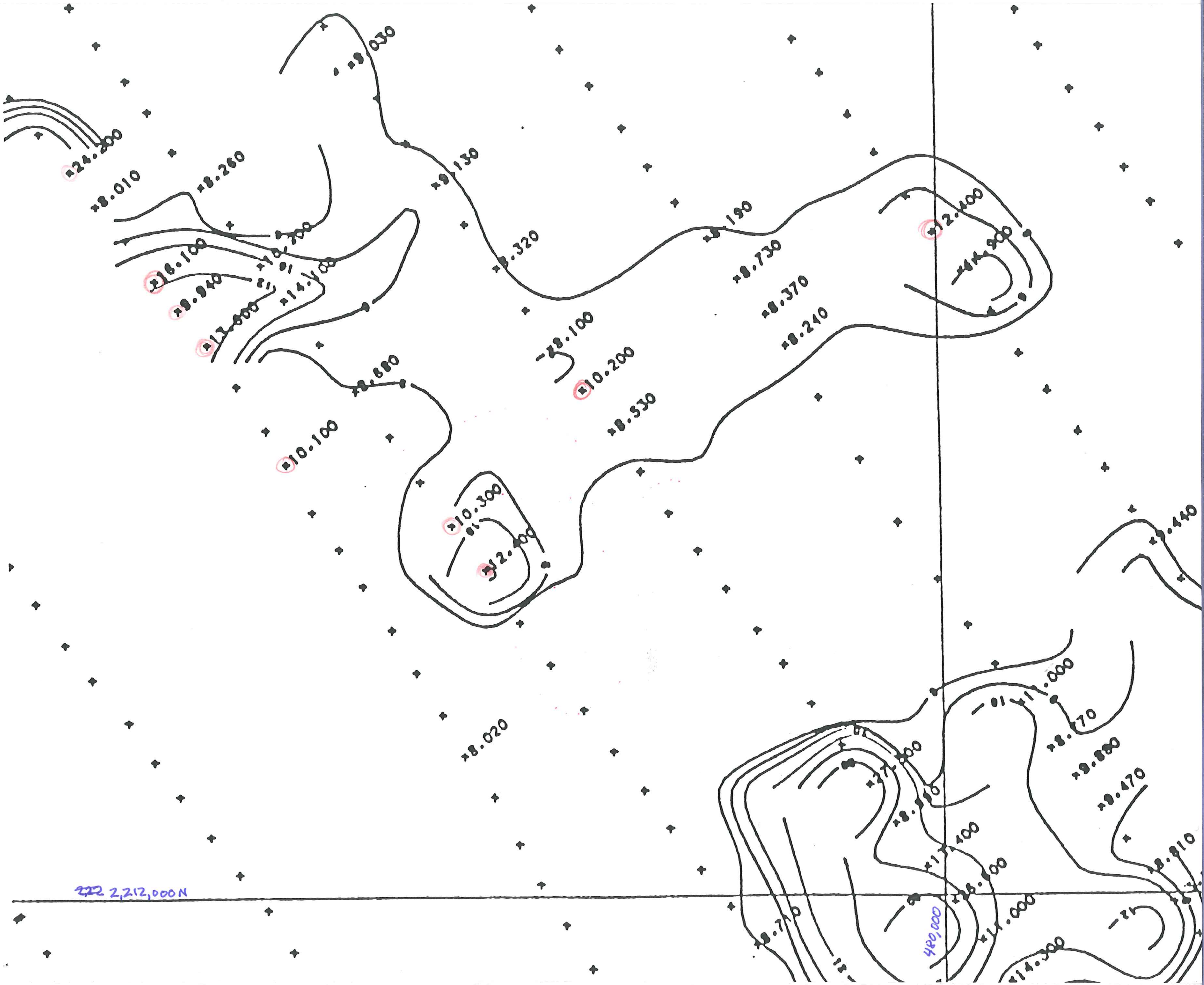
410-415 .011 —

RL-87 TD 845 N30W -60

0-845 Tc? all dead.

ox/unox 470

no strong silic.


24.000
8.010
8.260
8.030
9.130
8.320
8.190
8.730
8.370
8.240
8.100
10.200
8.530
8.680
10.100
10.300
16.100
12.400
8.020
2,212,000N
480,000

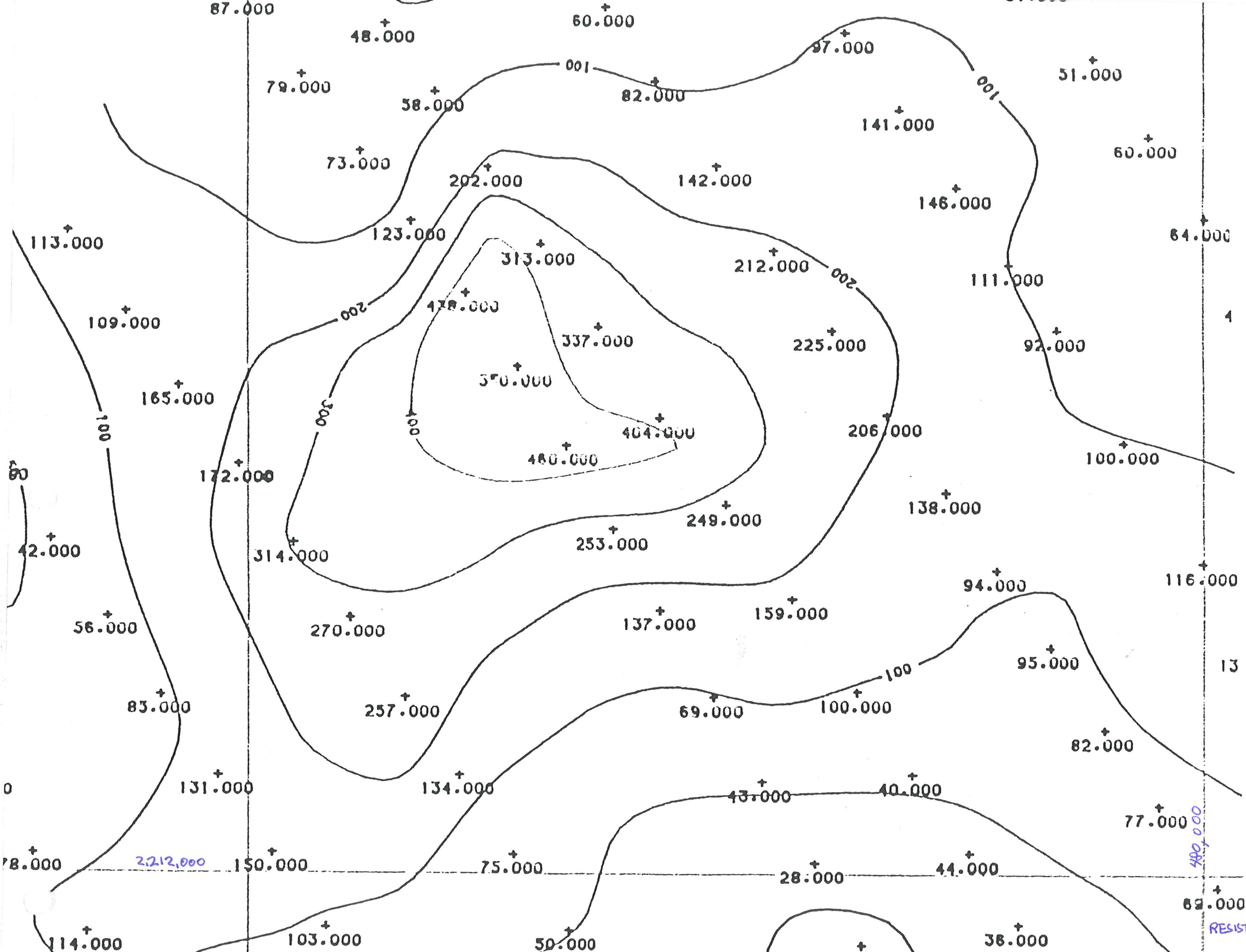
As(soil)

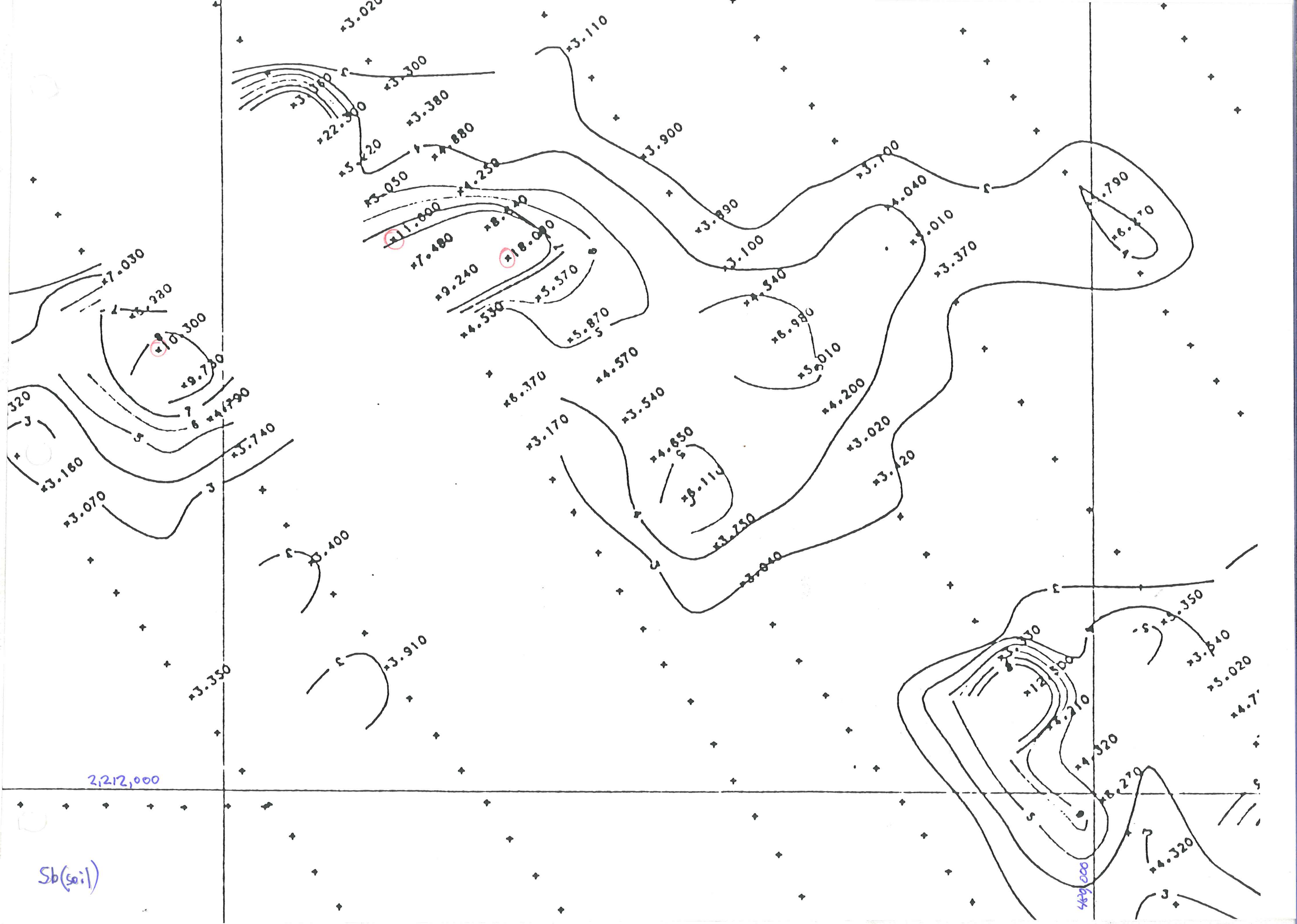
Au(soil

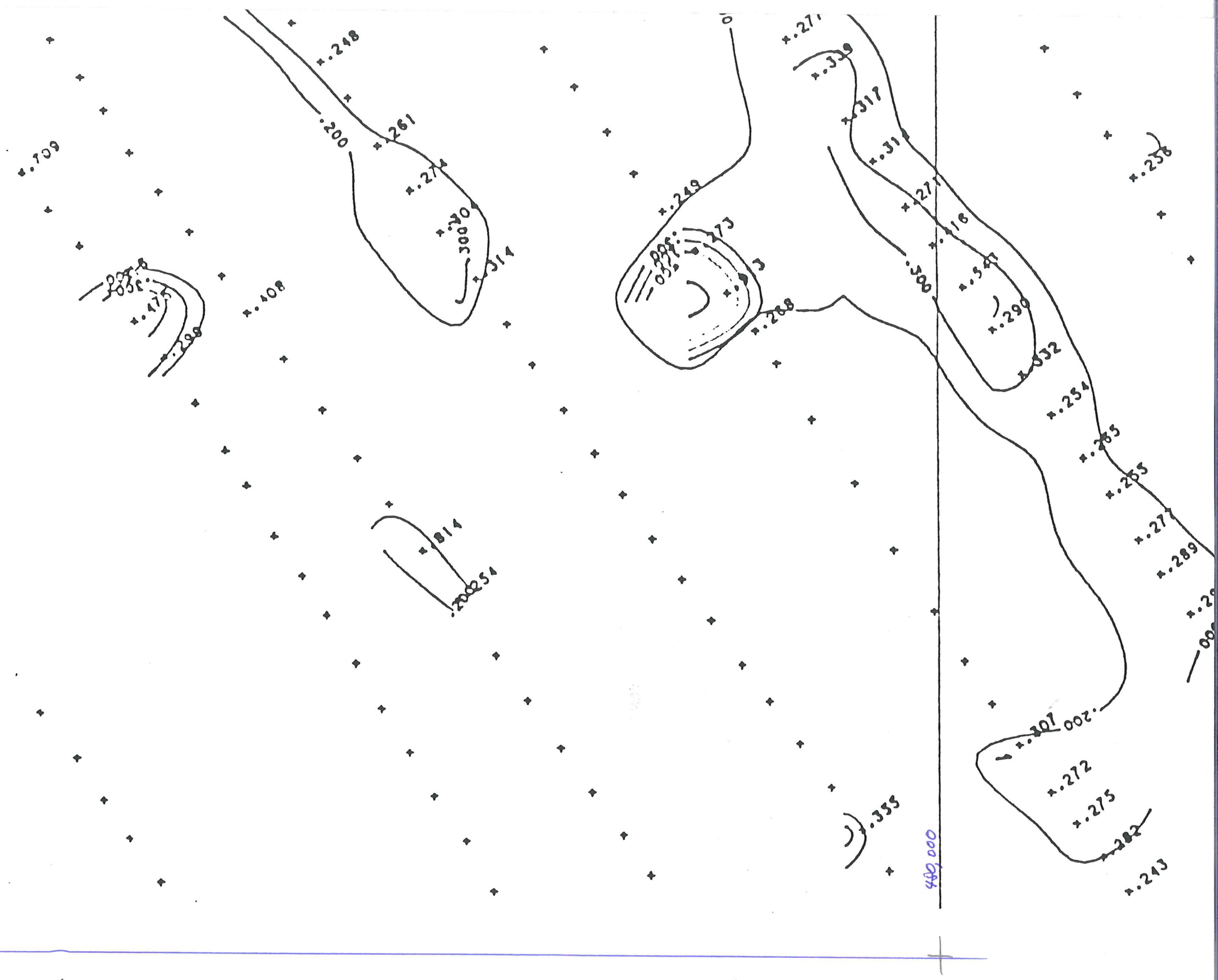
22,12,000N

480,000

.022
.016
.030
.015
.022
.41
.015
.021
.024
.015
.045
.017
.041
.017
.047


87.000
48.000
60.000
97.000
51.000
79.000
38.000
82.000
141.000
60.000
73.000
202.000
142.000
146.000
113.000
123.000
64.000
313.000
212.000
111.000
109.000
337.000
225.000
92.000
165.000
206.000
100.000
172.000
404.000
460.000
42.000
314.000
249.000
253.000
138.000
116.000
94.000
56.000
270.000
137.000
159.000
95.000
83.000
257.000
69.000
100.000
82.000
131.000
134.000
43.000
40.000
77.000
78.000
150.000
75.000
28.000
44.000
62.000
114.000
103.000
50.000
36.000
100
200
300
400
2,212,000
480,000
RESISTIVITY


3.020
3.110
3.300
3.360
3.380
22.300
4.880
4.252
3.900
3.700
3.050
11.000
8.
7.480
18.0
9.240
5.570
4.530
5.870
3.890
3.100
4.040
3.790
3.010
3.370
4.540
6.980
5.010
4.570
6.370
3.540
4.200
3.170
4.650
3.020
3.420
3.250
3.040
7.030
3.220
10.300
9.730
4.790
5.740
3.160
3.070
3.100
3.910
3.350
13.500
4.210
4.320
4.270
4.320
5.020
2,212,000
469,000
Sb(soil)


.248
.200
.261
.274
.300
.314
.709
.408
.175
.290
.814
.251
.271
.339
.317
.31
.277
.249
.273
.268
.306
.541
.290
.332
.254
.265
.255
.277
.289
.258
.301
.272
.275
.282
.243
.355
440,000
Se(soil)
2,212,000

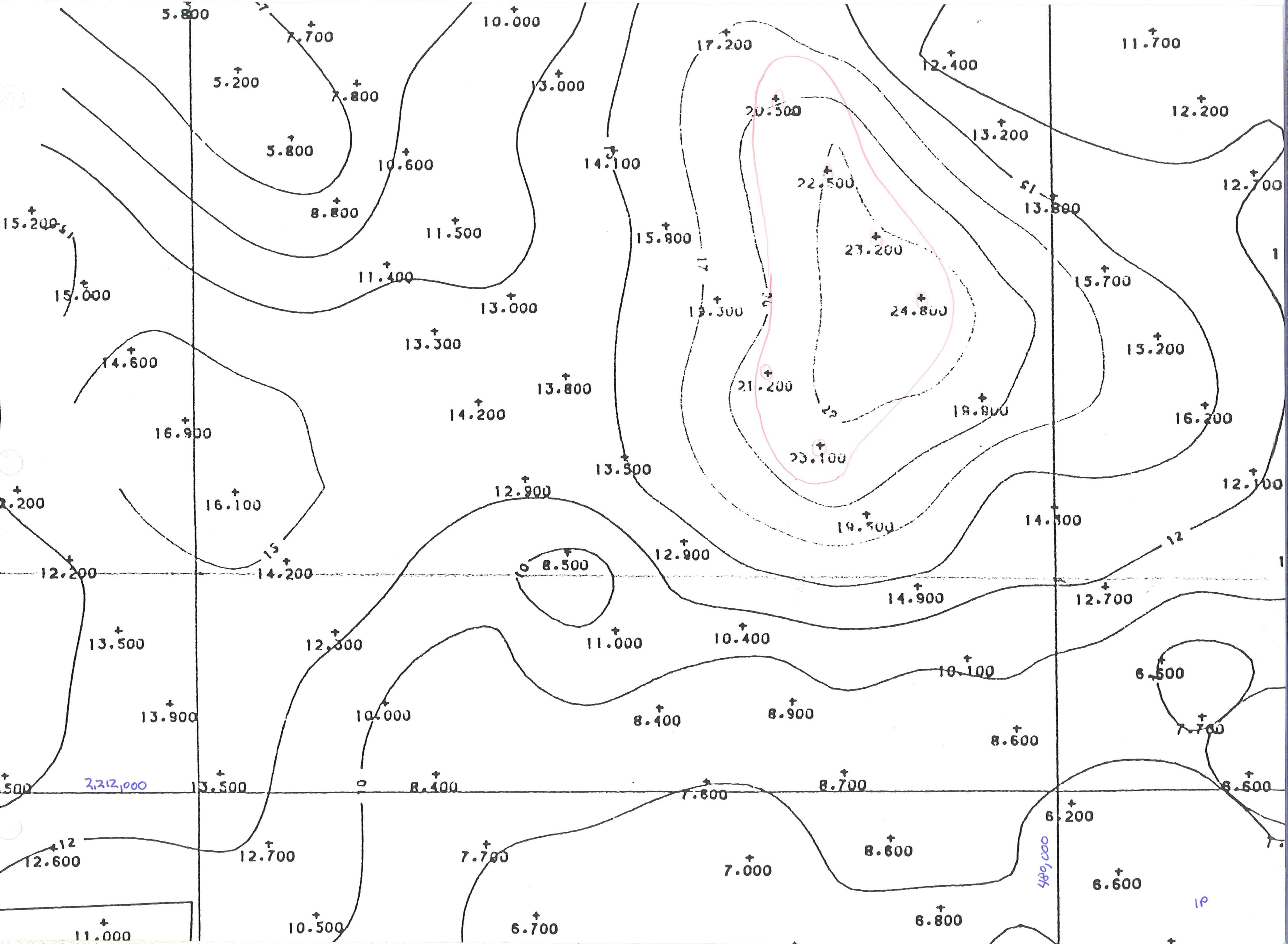
Rock Chip assays
ppm Au
=+100 ppb

N 2212500

450,000

2,413,000

STA 1SP
EL. 6169.60


5.800
7.700
10.000
17.200
11.700
5.200
7.800
13.000
12.400
20.500
12.200
5.800
10.600
14.100
13.200
22.500
12.700
8.800
13.800
15.200
11.500
15.800
23.200
11.400
15.700
15.000
13.000
19.300
24.800
13.300
13.200
14.600
21.200
13.800
18.800
14.200
16.200
16.900
23.100
16.100
13.500
12.900
12.100
12.200
14.200
8.500
12.900
19.300
14.300
14.900
12.700
13.500
12.800
11.000
10.400
10.100
6.500
13.900
10.000
8.400
8.900
7.700
8.600
13.500
8.400
7.800
8.700
6.600
6.200
12.600
12.700
7.700
8.600
7.000
6.600
11.000
10.500
6.700
6.800
2,212,000
480,000

ROSEBUD PROJECT

TARGET NAME
EQUINOX/LAC : North Rosebud Peak
HECLA : Rosebud
BRADY : —

GENERAL DESCRIPTION

N-S trending silicified breccias along ridge extending north from Rosebud Peak. West dipping low-angle structures in canyon on east side of ridge.

GEOLOGY

all Tc

GEOCHEMISTRY

Au - 1 +100ppb sample on south end of ridge near anom rock chip samples
As - +20ppm in same area.
Sb = +20 ppm " " "
Se = 0.5 ppm " " "

GEOPHYSICS

no IP anomaly
minor resistivity high on nose of ridge just east of RL-225

DRILLING

drill holes RL-225, 226 ad 227 all dead. but did not really test anything anomalous. The ridgetop just north of Rosebud Peak remains untested (soil Au, As, Sb) possible extension of Tbs unit(?) future target but not priority

REMAINING POTENTIAL

Some remaining potential but not priority.

Rosebud - Hecla
North Rosebud Peak - Lac.

RL-225 TD 630 N80E -60

D-630 Tc?

0-240 assays dead.
then no assays.

RL226 TD 245 vert.

0-85 Tc

85-245 fine grained tuff porphyry (poss Tbf)
all assayed / all dead.

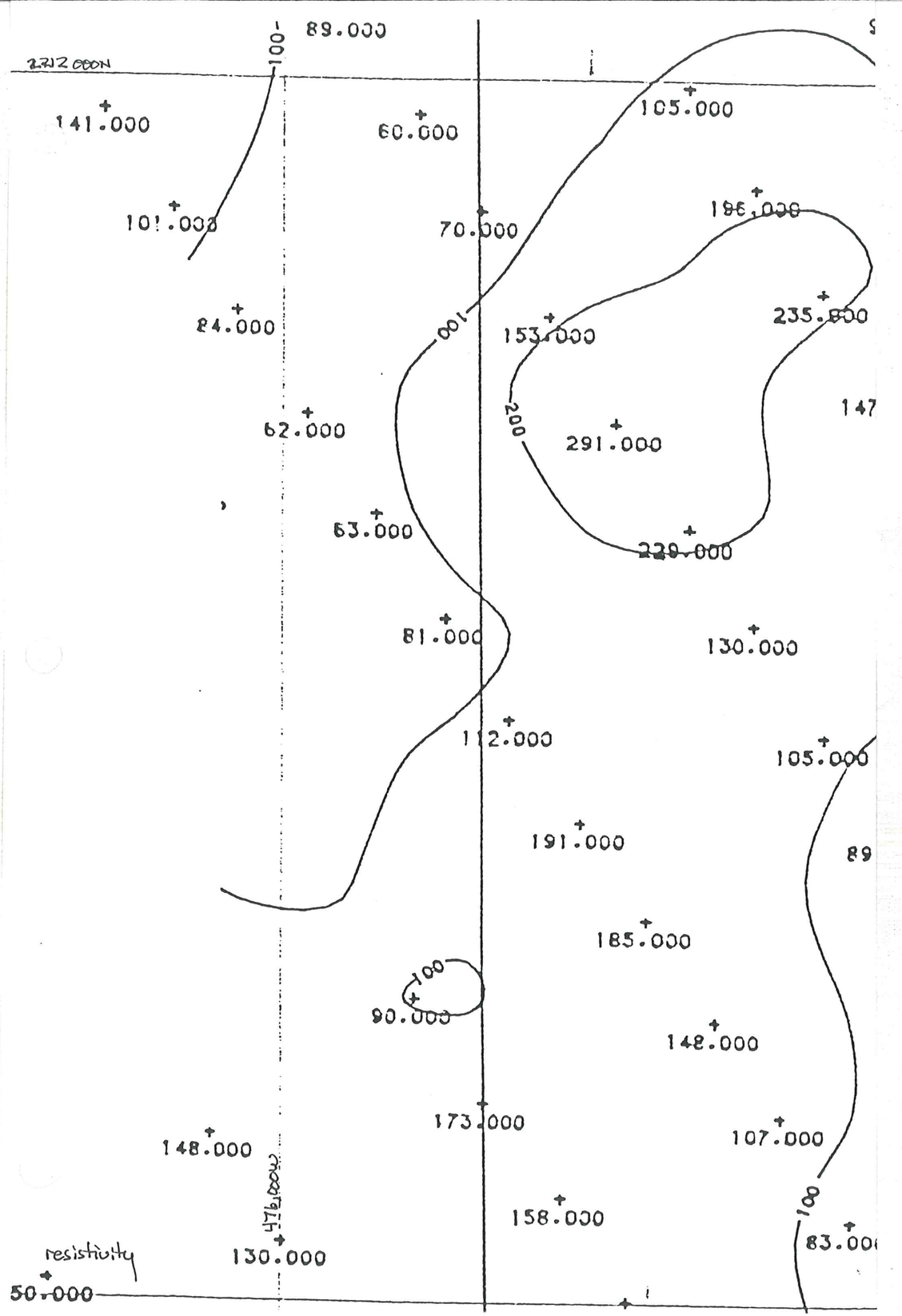
no log for RL-227

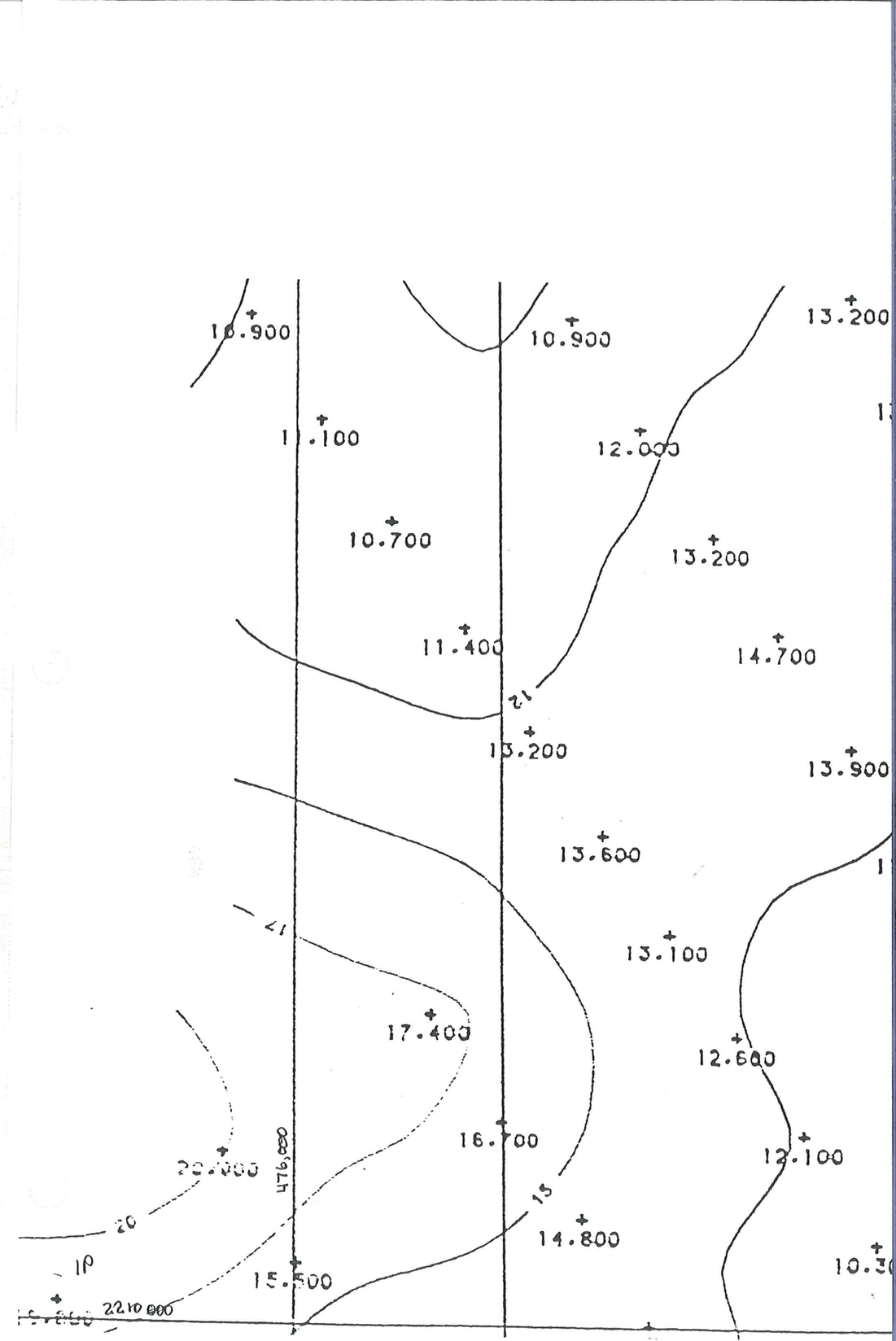
scattered anomalous rock (+soil) chip numbers for gold

no IP response in area.

doesn't appear to be any reason to explore more.

RL227 585 vert. dead.


2212 000N
89.000
141.000
60.000
105.000
101.000
70.000
186.000
84.000
153.000
235.000
100
200
62.000
291.000
147
63.000
229.000
81.000
130.000
112.000
105.000
191.000
185.000
100
90.000
148.000
173.000
107.000
148.000
158.000
83.000
130.000
resistivity
50.000


10.900
10.900
13.200
11.100
12.000
10.700
13.200
11.400
14.700
13.200
13.900
13.600
13.100
17
17.400
12.600
16.700
12.100
15
14.800
15.500
10.3
2210 000

476000

×17.300

×12.700

×9.880

×12.500

×9.570

×13.700

×11.400

×18.100

×9.920

×12.600

×8.890

×9.580

×8.470

×14.700

×12.400

×12.800

×11.500

×8.390

As

476000

×4.750

×3.450

×3.280

×4.540

×3.000

×5.730

×6.120

×3.890

×6.100

×3.930

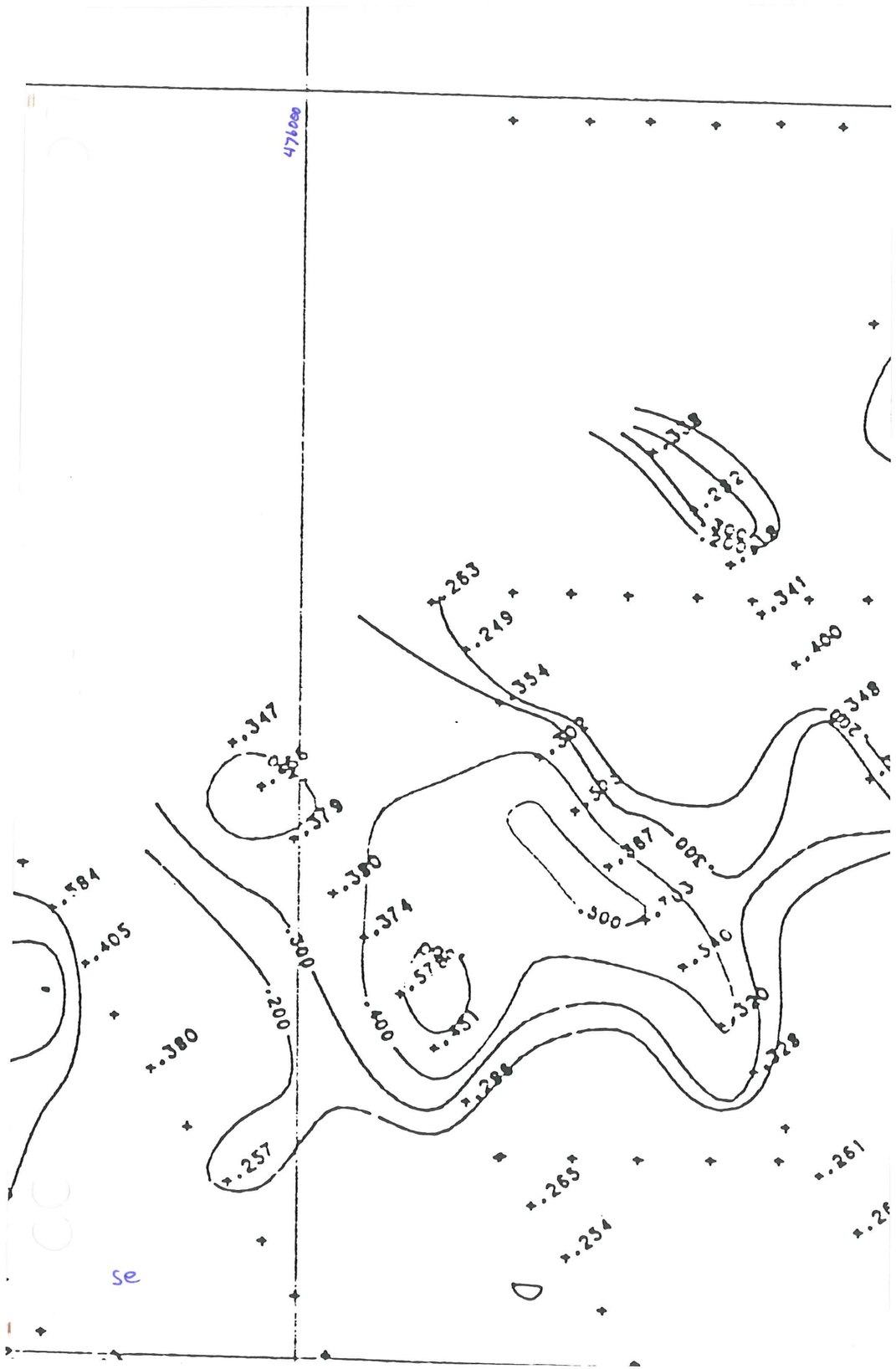
×4.590

×6.070

×5.330

×3.990

Sb


471000
.263
.219
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.341
.400
.347
.356
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.584
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.380
.300
.200
.400
.380
.374
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.261
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.320
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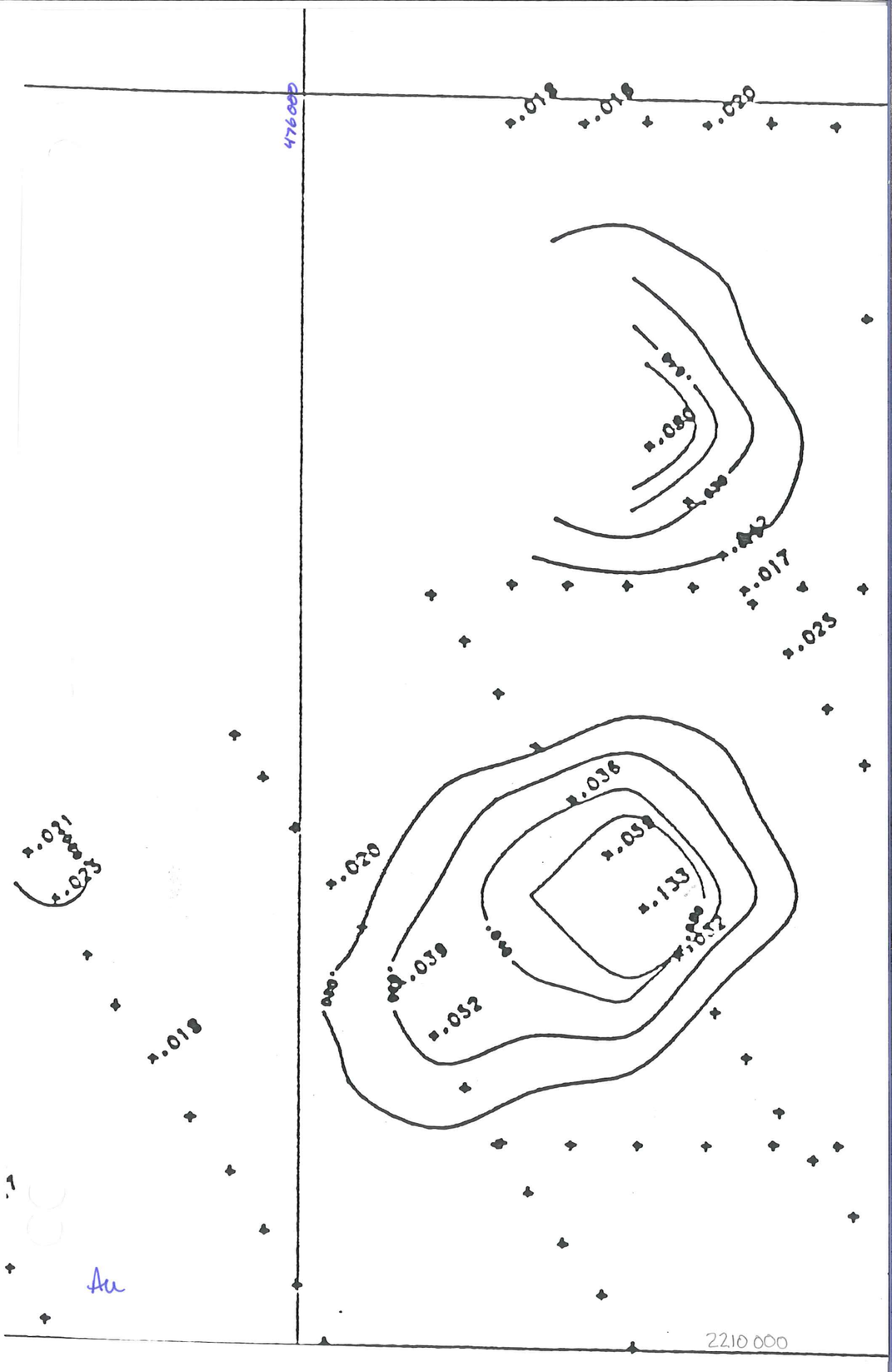
.348
se


476000
.018
.018
.020
.080
.017
.023
.036
.039
.052
.133
.021
.023
.018
Au
2210 000

TARGET IF

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC : —
HECLA : —
BRADY : Target II

GENERAL DESCRIPTION

fractures in Td w/ anom. Au + Barite. Old prospect working explore fracture controlled mineralization.

GEOLOGY

all Td

GEOCHEMISTRY

soil - scattered +100ppb Au
" 10-15 ppm As - generally same area as Au.
dead for Sb
" " Se

GEOPHYSICS

resistivity does not cover area.
IP " " " " but shows slowly increasing to WSW. into valley.

DRILLING

only shallow Km-11 w/ 5' @ 0.046 Au.

REMAINING POTENTIAL

Need more data.

Target II no Hecla Target

no Lac target although along Rowbed Shear in valley to north call it South West Valley

- no ground geophysics.

on 4/93 Lac map show only KM-11 dh. (no logs/assays in file)
Sb dead (<3ppm) Se dead <.2ppm.
As low throughout (10-30ppm)

Lac completed soil grid over area.

2 anomalies 700x500 +50ppb (no As, etc.) on west facing slope.

cd 600x250 +50ppb " " on ridge.

2 isolated soil samples below 362ppb cd 81 ppb.

rock chip anomaly interval

500x200 cd 400x100

+50 ppb Au/+150ppm As.

parallel to fractures.

all agree on geology as Td.

* need to get — underground
more drilling.

* condemnation hole 700' dep ⊀ South → in dozer/dead.

Target II

✓ RB94-08 TD ~~205~~ 405 -60 all Td? poor log N.A

✓ RB94-07 TD 405 -60 all Td? " "

Charlie remembers dead.

✓ RB94-04 hit Rosebud Shear @ 300 vert. hole.

05 on HW of Rosebud Sh.

N DR

Not Plot

✓ RL-98C -64 S55E 1061TD

0-965 rev circ.

465-570 Ta

570-756 Tbs

756-902 Ta

902-943 Tbs

943-960 fault

960-1035 Td

1035- JTRa.

270-275	.060
920-925	.014
930-945	.027
955-960	.010

rest dead.

27
3 82
82

Epithermal Zoning III

Jour beach Expl.
October ±
*
1
2
101
3

✓ RL-99 S55E -60 1242TD.

0-465 RC

465-496 Tbs

496-674 Ta

674-892 fault

892-1205 fine grained tuff

1205 JTRa

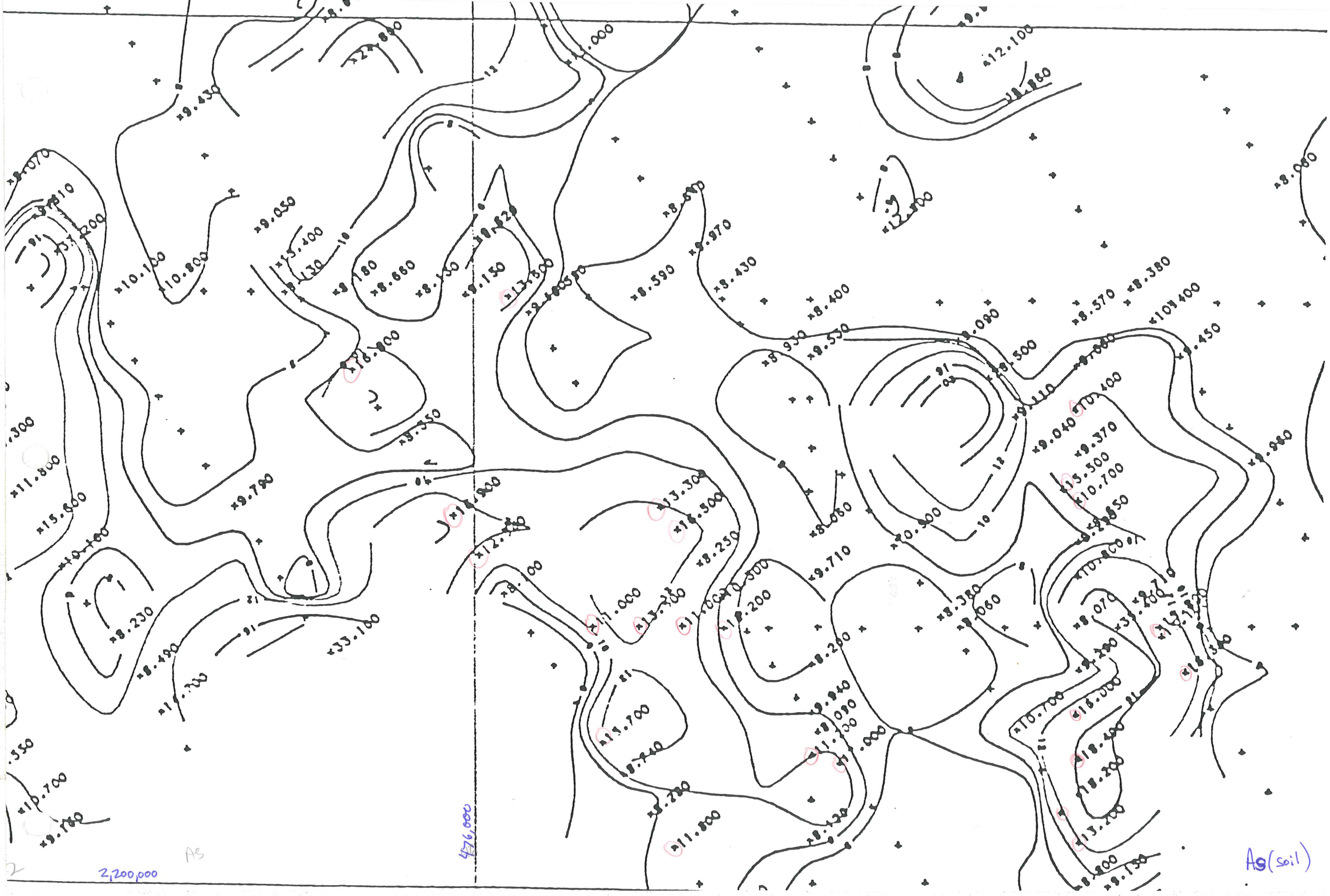
235-240	.037
320-330	.056
395-400	.016
512-517	.024
685-887	NA
892-902	.016
911-947	.017
965-989	.024
996-1042	.017
1052-1062	.027
1107-1113	.013

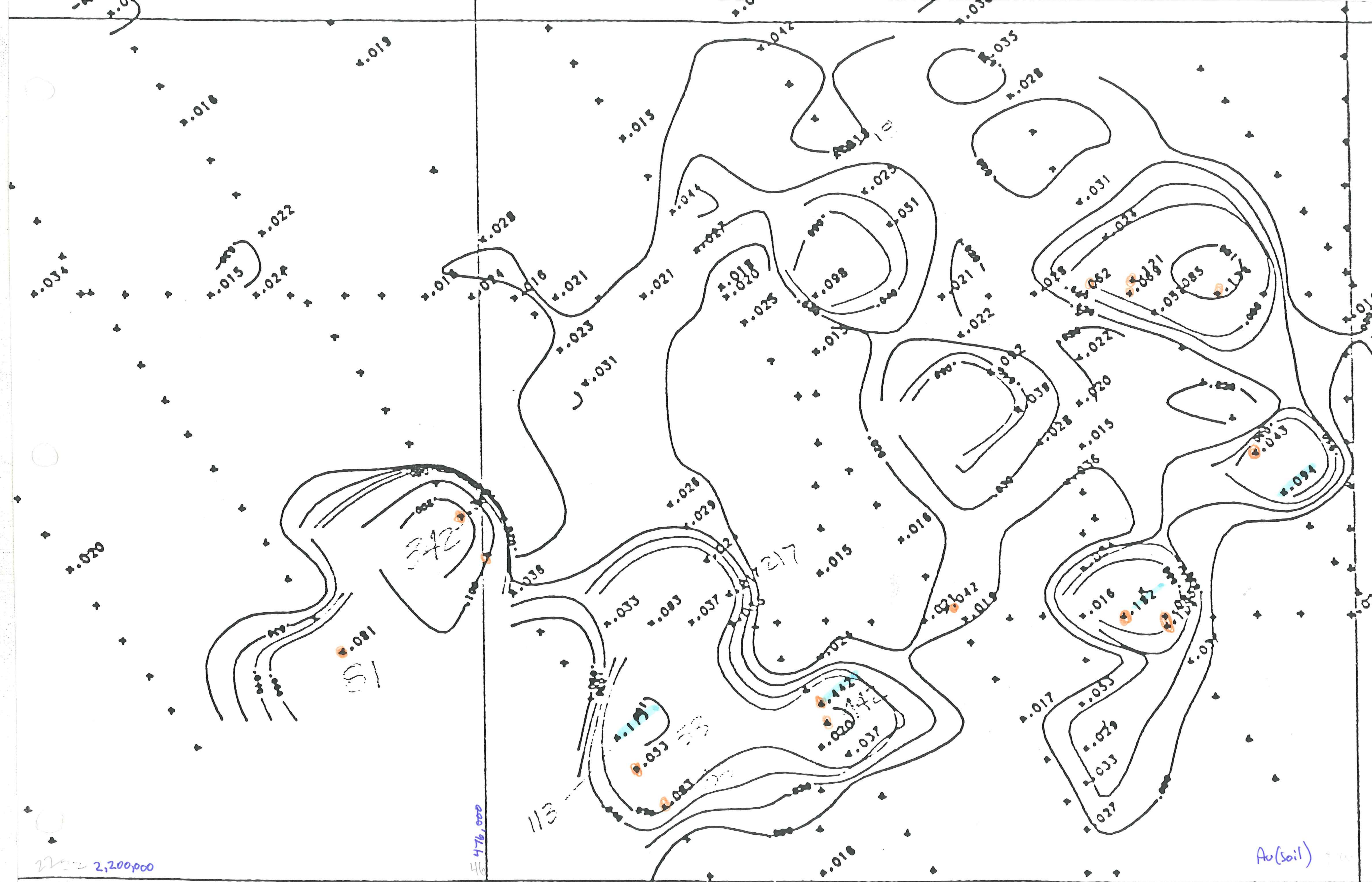
✓ RL-70 S55E -68 1012

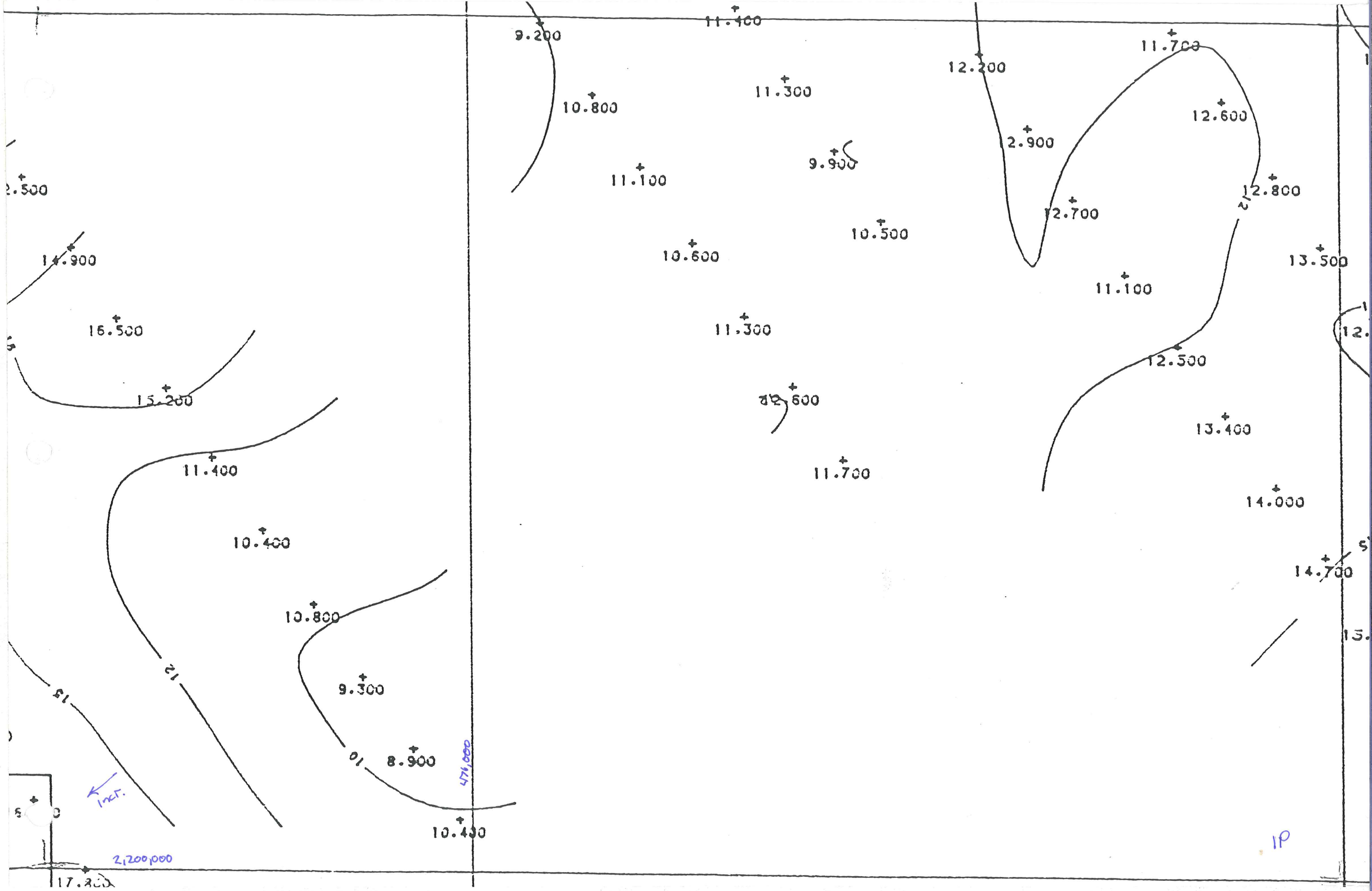
condm. Hop.

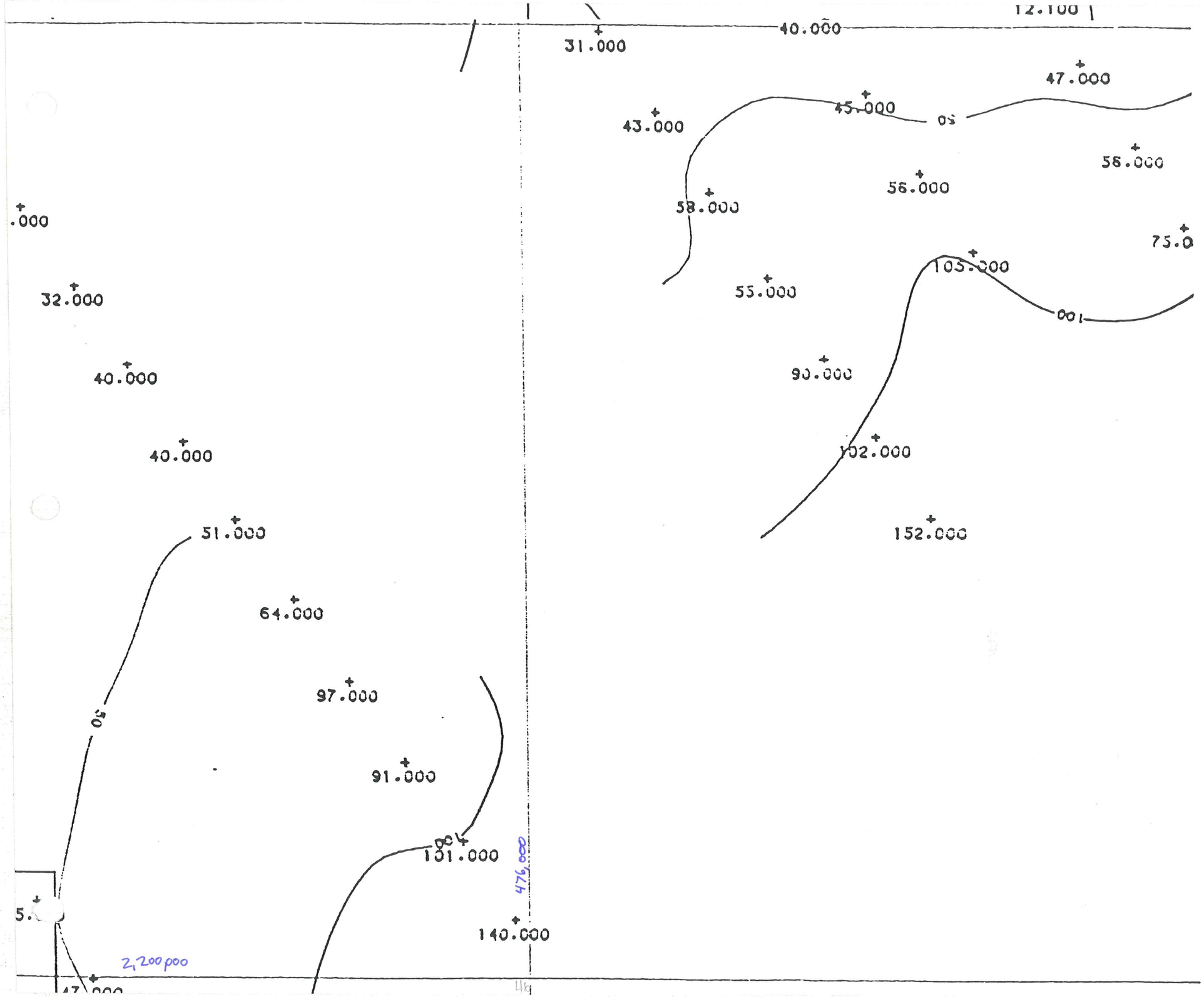
0-917 Tbs? difficult log

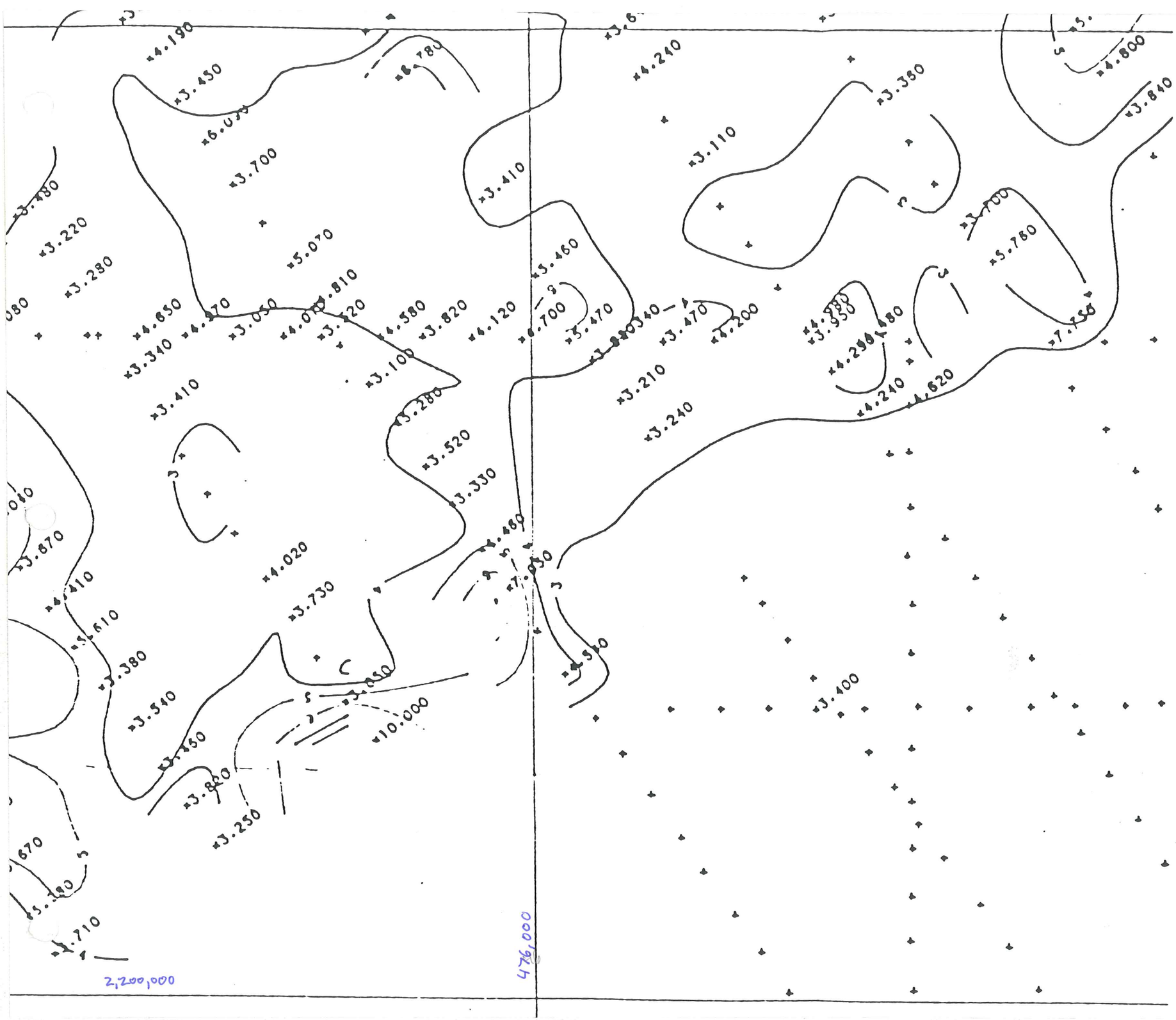
917-931 fault


2,200,000
476,000
Ag(soil)


Au(soil)
2,200,000
476,000
342
217
113
51


9.200
11.400
11.700
12.200
11.300
10.800
12.600
2.900
9.900
11.100
12.800
12.700
10.500
10.600
13.500
11.100
11.300
12.500
13.400
11.700
14.000
14.700
10.400
10.800
9.300
8.900
10.400
2,200,000
471,000
INCR.


12.100
40.000
31.000
47.000
45.000
43.000
56.000
56.000
58.000
75.0
105.000
55.000
90.000
102.000
152.000
64.000
97.000
91.000
101.000
140.000
476,000
2,200 poo
RESISTIVITY


×4.190
×3.450
×3.700
×3.480
×3.220
×3.280
×5.070
×4.650
×4.340
×3.340
×3.050
×3.820
×4.580
×3.820
×4.120
×3.100
×3.410
×3.460
×3.700
×3.470
×3.210
×3.240
×4.200
×3.350
×3.110
×4.240
×3.350
×4.620
×3.840
×5.760
×7.350
×4.800
×3.100
×3.280
×3.520
×3.330
×4.020
×3.730
×3.380
×3.510
×3.450
×3.820
×3.250
×10.000
×3.400
×3.670
×4.410
×3.610
×3.710
2,200,000
476,000

Sb(soil)

Se(soil)

2,200,000

474,000

VALLEY

ROSEBUD PROJECT

RGET NAME EQUINOX/LAC : VALLEY
HECLA : —
BRADY : —

GENERAL DESCRIPTION

North side of Rosebud shear under Tb cover. Possible offset area to Dozer Hill Zone. Write-up mentions "north-dipping E-W structures in Tb coincident w/ IP anomaly".

GEOLOGY

Valley covered by Qal + Tb

GEOCHEMISTRY

Soil – basically dead Au
" " As
" " Sb
" " Se

GEOPHYSICS

resistivity looks flat - could be viewed as a slight low

Broad IP high just south of RL-111C ad west of RL-260

DRILLING

11 holes and have all results. scattered values in RL-274, 74,77 ad 111C, ad 56 most interesting is in RL-111C where went through fault. 785-831 (Rosebud?) then. sandstone ad siltstone (Tbs) w/ good gold values. Under IP anomaly

REMAINING POTENTIAL

Looks interesting need more hole data.

Southwest Valley

no surface rock chip anomalies – Tb.
weak spotty soil gold 10-40 ppb.

Hecla condemnation drilling dead for tailings dam.

152; 274

Resistivity flat and featureless
IP flat and featureless

Valley.
Scattered rock chip samples in Tb w/ 100-400 ppb. Au.
soils mostly dead through area for Au.

RL-74 TD 935 N55W-60

0-110 Tb. grey brown.
110-935 Lt green.
poss flt @ 775

285-700 silicification + d-quartz. + 1% py + clay

dead to 270
270-935 .002-.004± Au w/ spikes @ Au → 320-325/.095 415-420/.053 525-530/.079 Ag < 0.4 opt

RL-77
TD 765 N55W -60

0-60 Tb
60-765 Lt. green.
60 ~~390~~ - 585 silicified.

Dead to 120
.002-.005 120-235-240/.045
w/ spikes @ 150-155/.056

Valley

? → 200 ft @ mw-~~4~~ 10'/.09 Au 17 Ag. offset 100' ww-1 200' 10' @ .12 Au 5 Ag.

RL-78 TD 745 N55W -60

all dead.

0-45 qal
45-110 Tb.
110-745
150-~~400~~ 745 silic.

Lt. green. 345-380 fault? w/ silic
510-525 fault?

Valley

RE 56

TD 450 vert. 0-40 Tb?

40-450 Tc?

46-450 silic

dead to 55 65-40 .015 Au/1.5 Ag. 285-295 .05 Au/— Ag

55-450 .004-.006 Au.

need 76, 111C, 260 150

RE-76

TD 625 S55E -60

0-50 Tb?

50— 625 Lt green.

305-355 silic 0-50 dead. 50-360 .002-.005

360-625 dead.

RL-111 COM TD 957 due south -45

core hole. 0-65 Tb

65-177 Tc tuff.

177-785 Tectonic bxa + Tuff.

785-831 fault.

300—TD silic.

785-831 - fault

831-957 TD SS+s/fst. Tbs unit

0-142 W.A.

dead to ~~142~~ 857 w/ spikes @. 252-257 .039 Au/0.2 Ag

879-884 .034 Au/— Ag

907-912 .025 Au/— Ag

922-927 .068 Au/.1 Ag

RL-150 TD 700 S55E -60

0-20 Tb

20— 700 Lt green. spikes @ ~~100-105 .04 Au/ Ag~~

585-590 .024 Au/0.5 Ag

dead.

RL-260

TD 800 vert.

0-30 Qal

30-155 clay

155— 790 Lt green. 525-790 poss J Fa frags in tuff.

790-800 J Fa.

240-385 silic. 40-45 . .023 Au/— Ag.

rest dead.

need more dh to NE

Valley RL-152

TD 700 N50E -45

0-385 Badger all dead.

385-700 Tc

RL 274 600TD vert.

0-90 Tb?

220 ft 90-220 Tc?

220-525 Tc?

525 fault

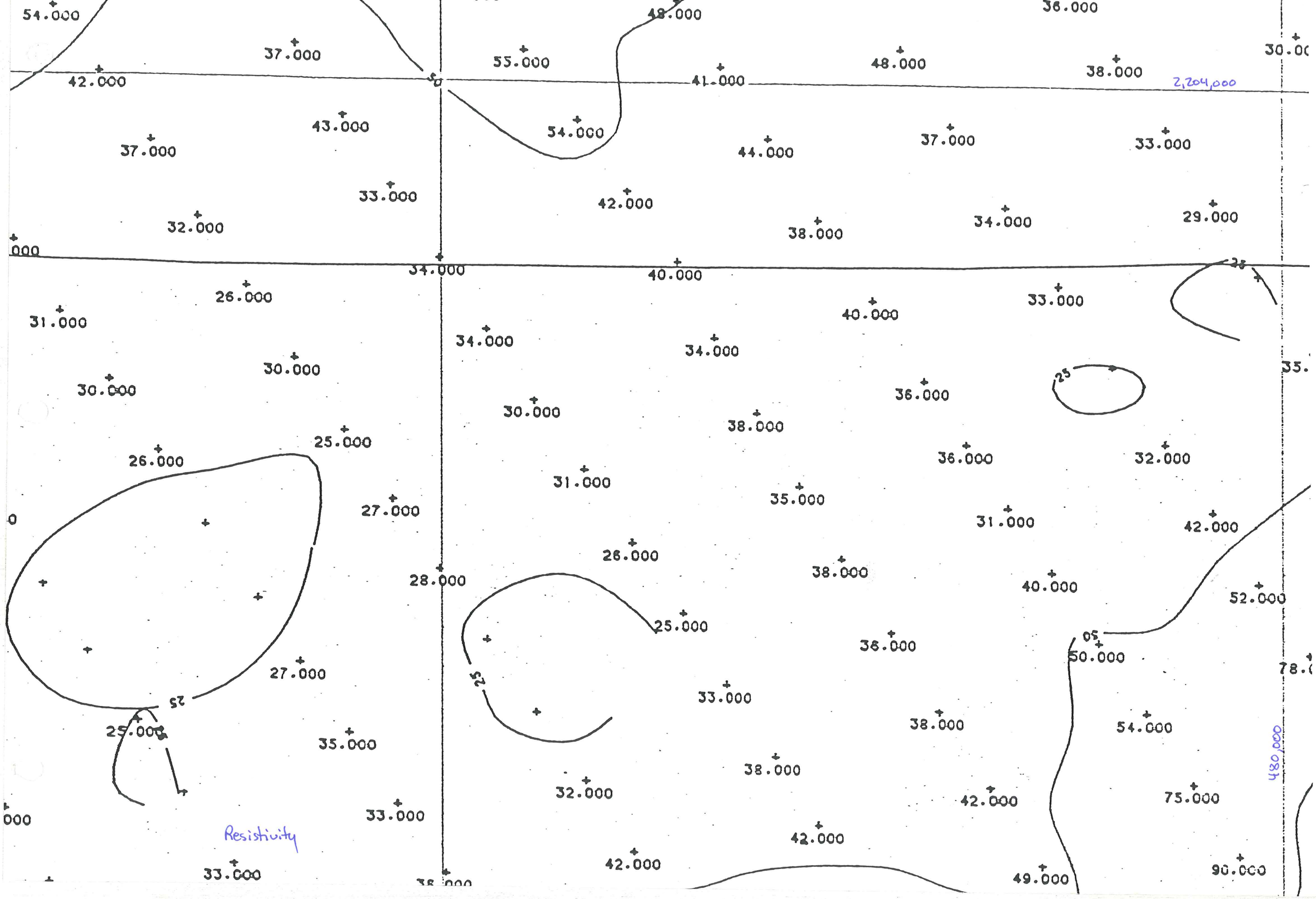
525-600 Tbd?

165-170	.037	0.1 Ag
175-180	.035	0.1
195-200	.012	—
200-205	.014	—
440-445	.015	0.1
495-500	.018	—
505-510	.022	0.1
510-515	.010	0.1
515-520	.012	—
525-530	.013	—
535-560	.017	—

Resistivity flat and featureless.

need copy. Good IP anomaly from DH 56 to 260 then west 500'

13.600
12.100
11.900
12.500
11.200
11.200
10.400
10.400
10.100
12.900
11.500
11.100
12.600
13.100
10.900
11.800
11.900
11.100
15.300
11.900
12.300
12.700
12.200
14.300
13.800
14.600
13.900
15.500
13.700
15.400
12.500
13.000
13.700
14.600
16.000
15.100
12.800
14.200
14.200
16.000
16.200
16.000
18.100
15
13.400
18.500
2,204,000
15.500
16.800
20.700
19.900
17.500
17.100
18.700
16.800
20.500
19.200
22
23.100
20.200
25.200
20.700
24.400
23.400
24.500
23.200
23.800
20.000
21.800
18.500
20.100
18.800
17
20.100
18.500
18.300
16.600
18.600
18.300
480,000
IP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42.000
43.000
37.000
33.000
32.000
000
26.000
31.000
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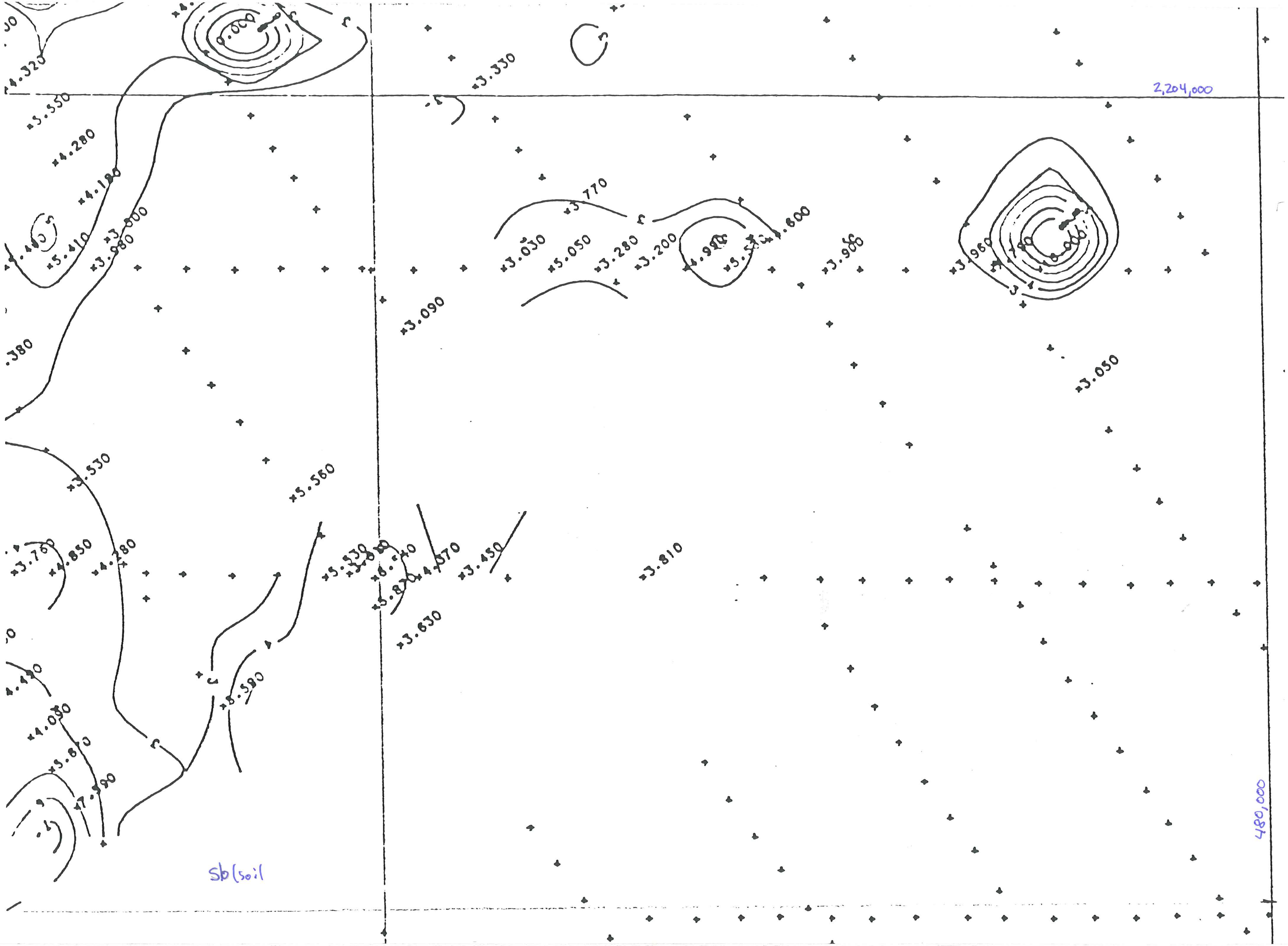
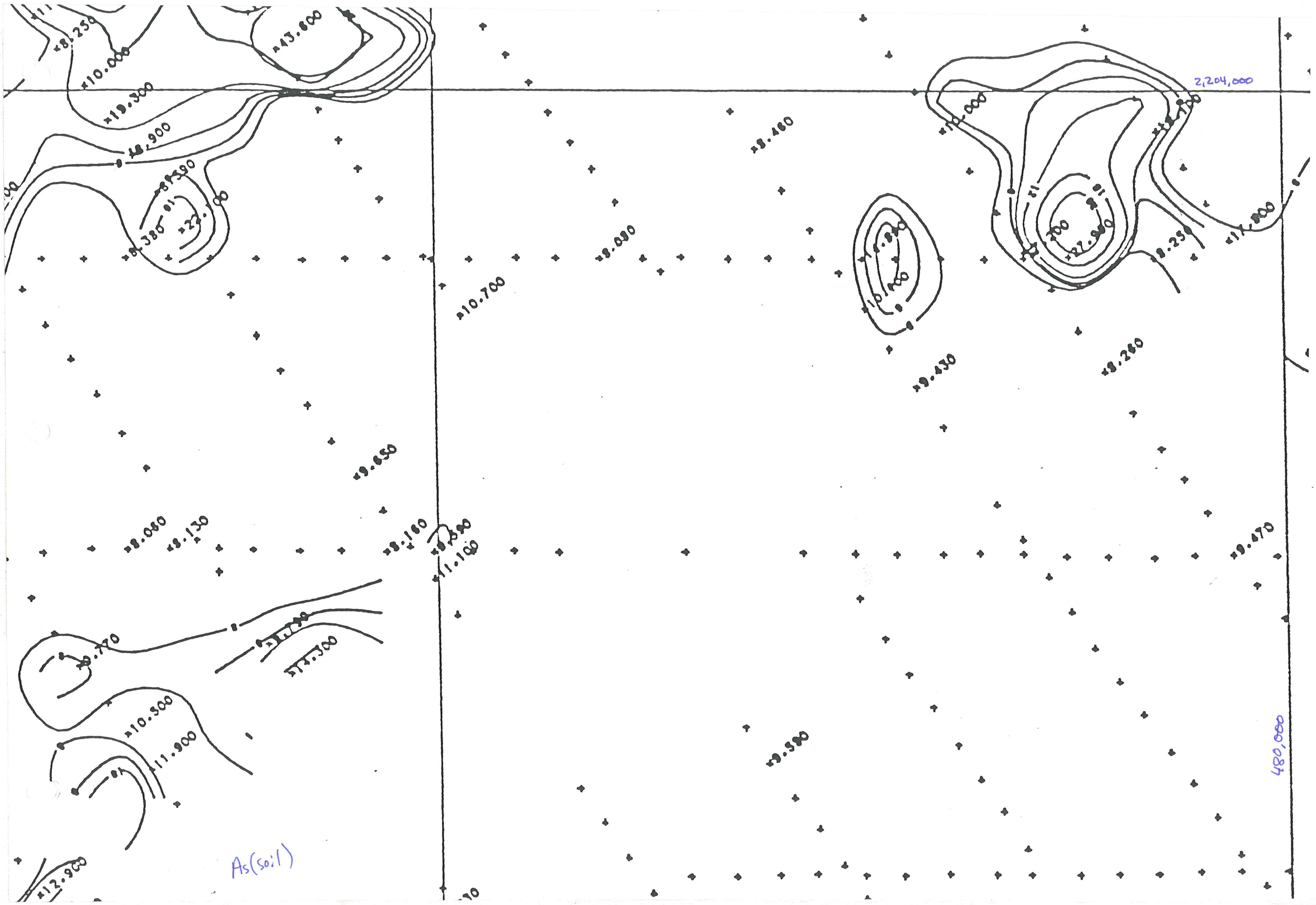
30.000
25.000
26.000
25.000
27.000
0
27.000
25
25.000
35.000
000
33.000
33.000
48.000
55.000
54.000
41.000
48.000
38.000
30.00
2,204,000
44.000
37.000
33.000
42.000
38.000
34.000
29.000
34.000
40.000
25
33.000
40.000
34.000
34.000
30.000
36.000
25
30.000
38.000
31.000
35.000
26.000
28.000
25.000
25
33.000
38.000
32.000
42.000
42.000
36.000
32.000
31.000
35.000
31.000
42.000
38.000
40.000
52.000
50
50.000
36.000
78.(
33.000
38.000
54.000
38.000
42.000
75.000
42.000
49.000
90.000
480,000
Resistivity



2,204,000
480,000
Sb (soil
3.330
3.550
4.280
3.090
3.050
3.810
3.630
3.450
5.560
3.530
3.580


2,204,000
480,000
As(soil)

2204000

480,000

Au(soil)

2,204,000

480,000

Se (soil)

Degerstrom

ROSEBUD PROJECT

TARGET NAME
EQUINOX/LAC : Degerstrom
HECLA : —
BRADY : —

GENERAL DESCRIPTION
silicified NNW fault, west dip ±50°

GEOLOGY
all Tc w/ Tri dikes

GEOCHEMISTRY
Soil Au dead.
As dead.
Sb "
Se " except along one soil line that looks like an assay error.

GEOPHYSICS
resistivity — featureless
IP - slight increase for hangingwall of fault but no anomaly.

DRILLING
RL-47, 48, 46, 49, 151 R46 + 48 hit fault → 20-25 ft @ .01 to .03
RL-151 hit several intervals 10-15 ft @ 0.01-0.04

REMAINING POTENTIAL
Tested, no further interest justified.

Degerstrom 46, 47, 48, 49, 157

RD-46 430TO N31E -60

0-430 Tc 70-90 @ .013 Au / .013 Ag 50 Hs.

RD-47 next dead.

TO 490 N81E -60

0-25 Tc

25-45 ~~fault~~ Tbs4?

45-327 Tc all dead

327 fault

327-445 Tc

445-455 fault

455-490 Tc

RD-48 TD440 vert. 30-55 @ .034 Au. / 0.1 Ag

0-440 Tc next dead.

RD-49 TD545 S25E -61

0-240 Tbs4 all dead

240-545 Tc

RL-151 TD500 N30E -60

0-50 Tb 0-310 bl+clay

50-500 Tc 175-185 / .011 Au 0.1 Ag

205-210 / .030 Au. 0.27 Ag

240-250 .040 Au 0.1 Ag

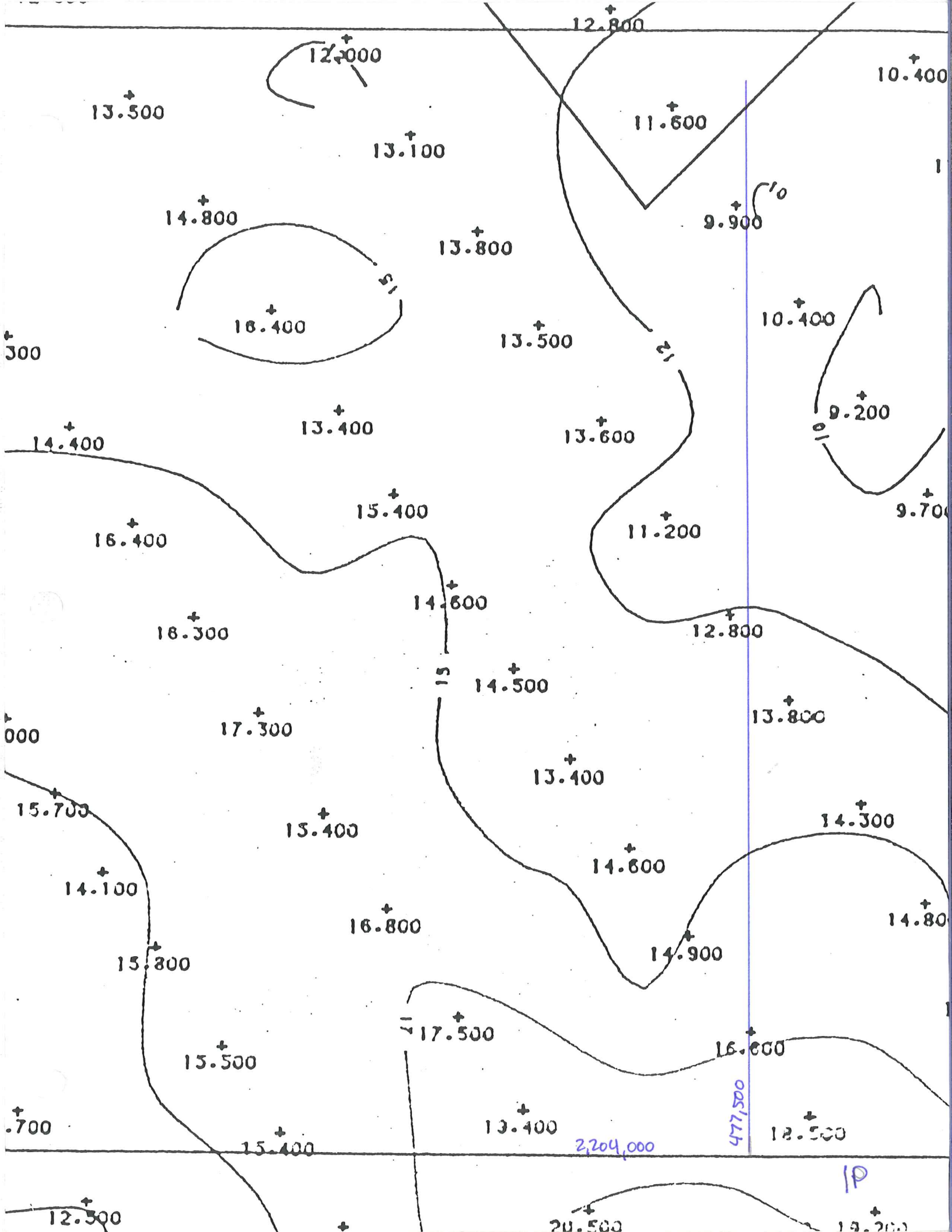
275-290 .011 Au. 0.24 Ag

next dead.

Resistivity flat and featureless

/Panomaly offset to west 800 ft

Tbs4 possibly underlie show Tri dike → bleached?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10.400
13.500
11.600
13.100
14.800
9.900
10
13.800
15
16.400
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13.500
15
300
13.400
9.200
13.600
14.400
10
15.400
9.70
16.400
11.200
14.600
16.300
12.800
15
14.500
13.800
17.300
000
13.400
15.700
15.400
14.300
14.600
14.100
16.800
14.80
15.800
14.900
17.500
16.600
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12.500
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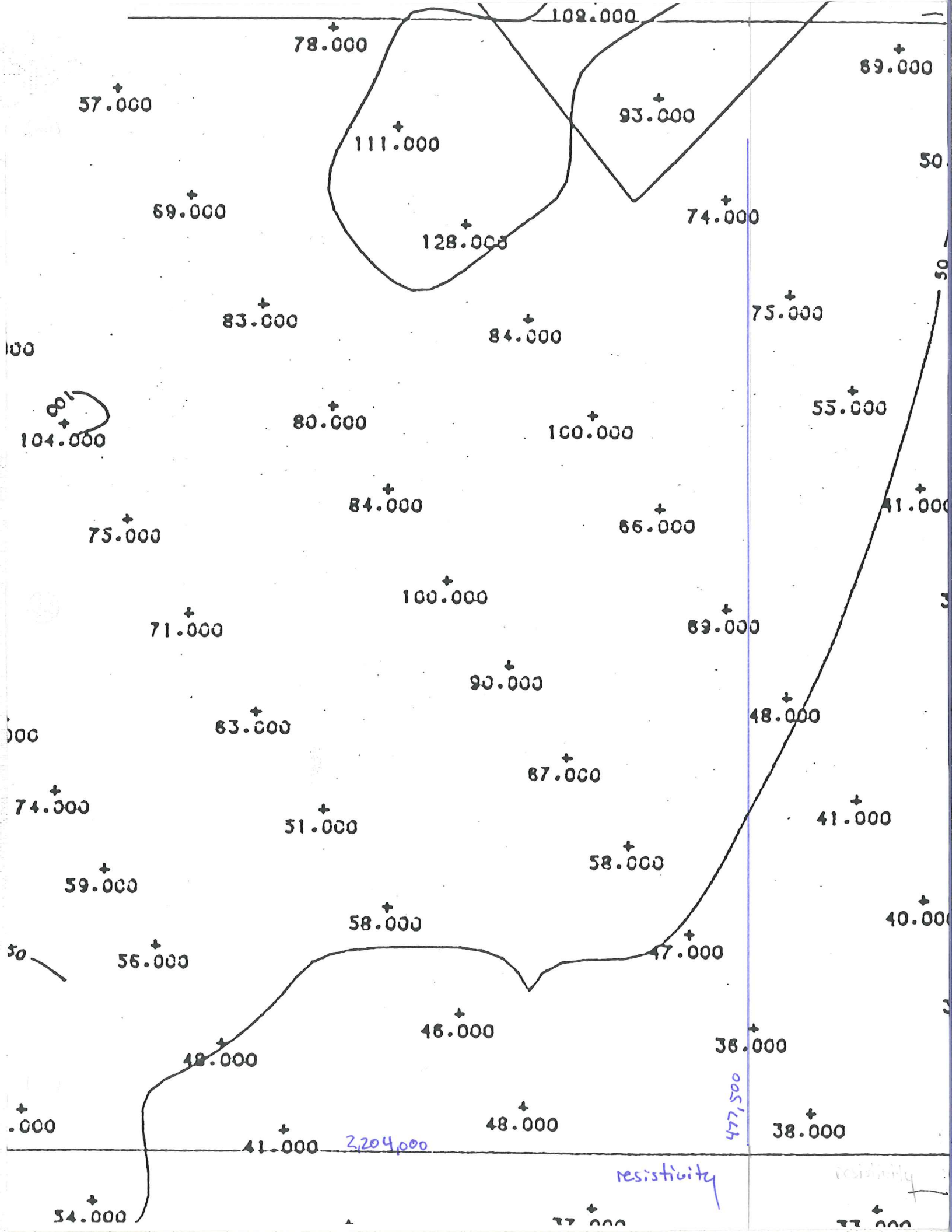
.700
2,204,000
477,500
IP
12.500
20.500
13.200


102.000
78.000
89.000
57.000
93.000
111.000
50
69.000
74.000
128.000
50
83.000
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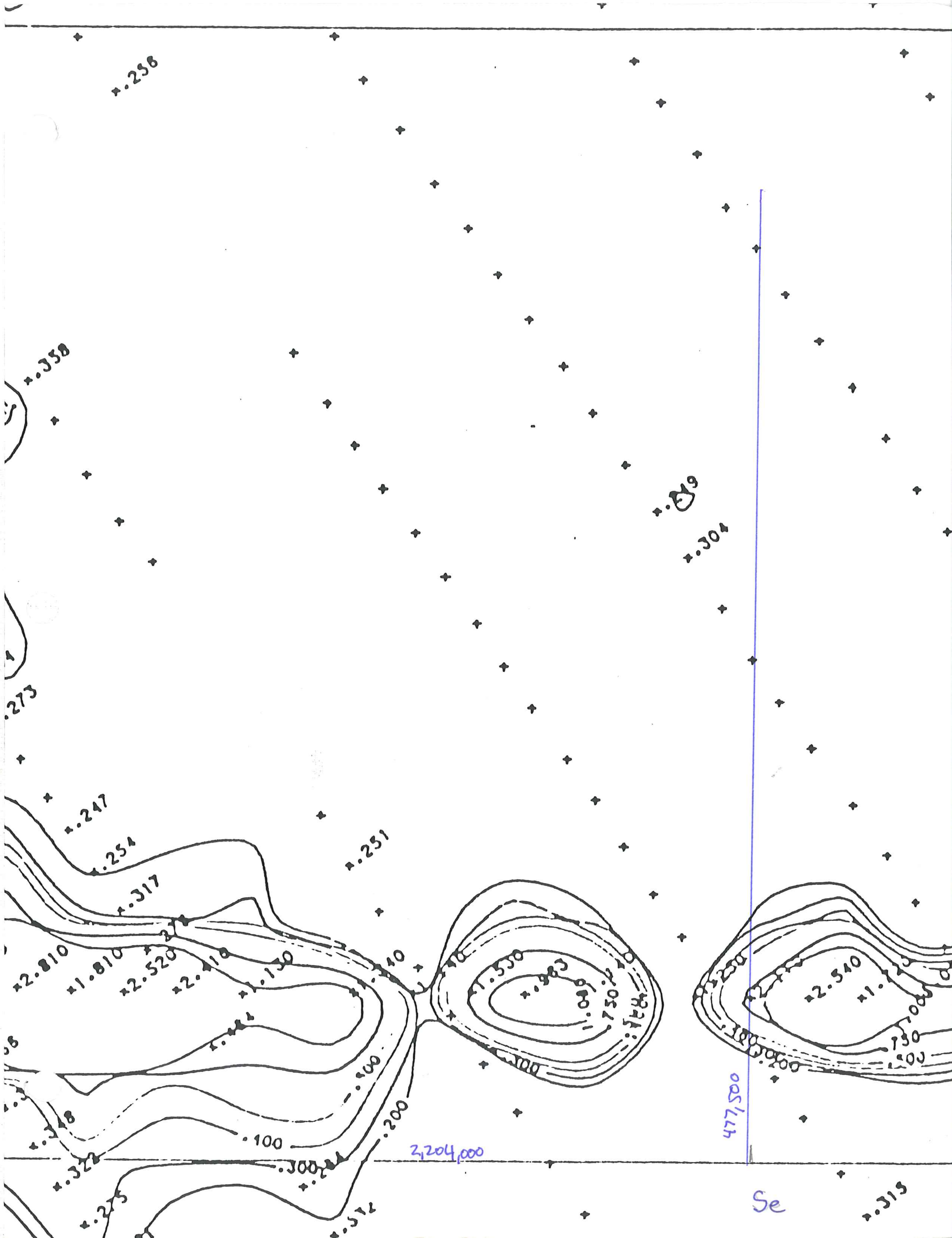
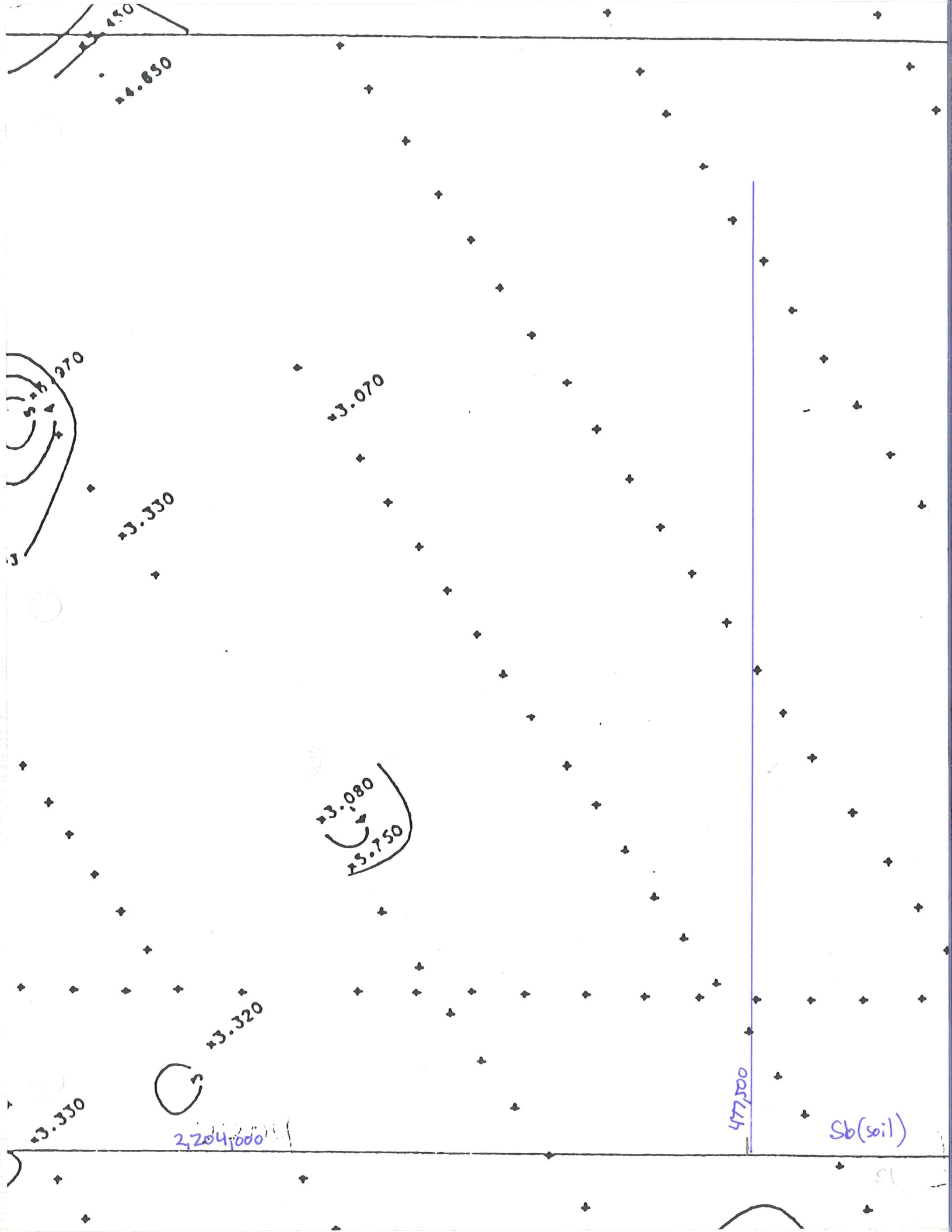
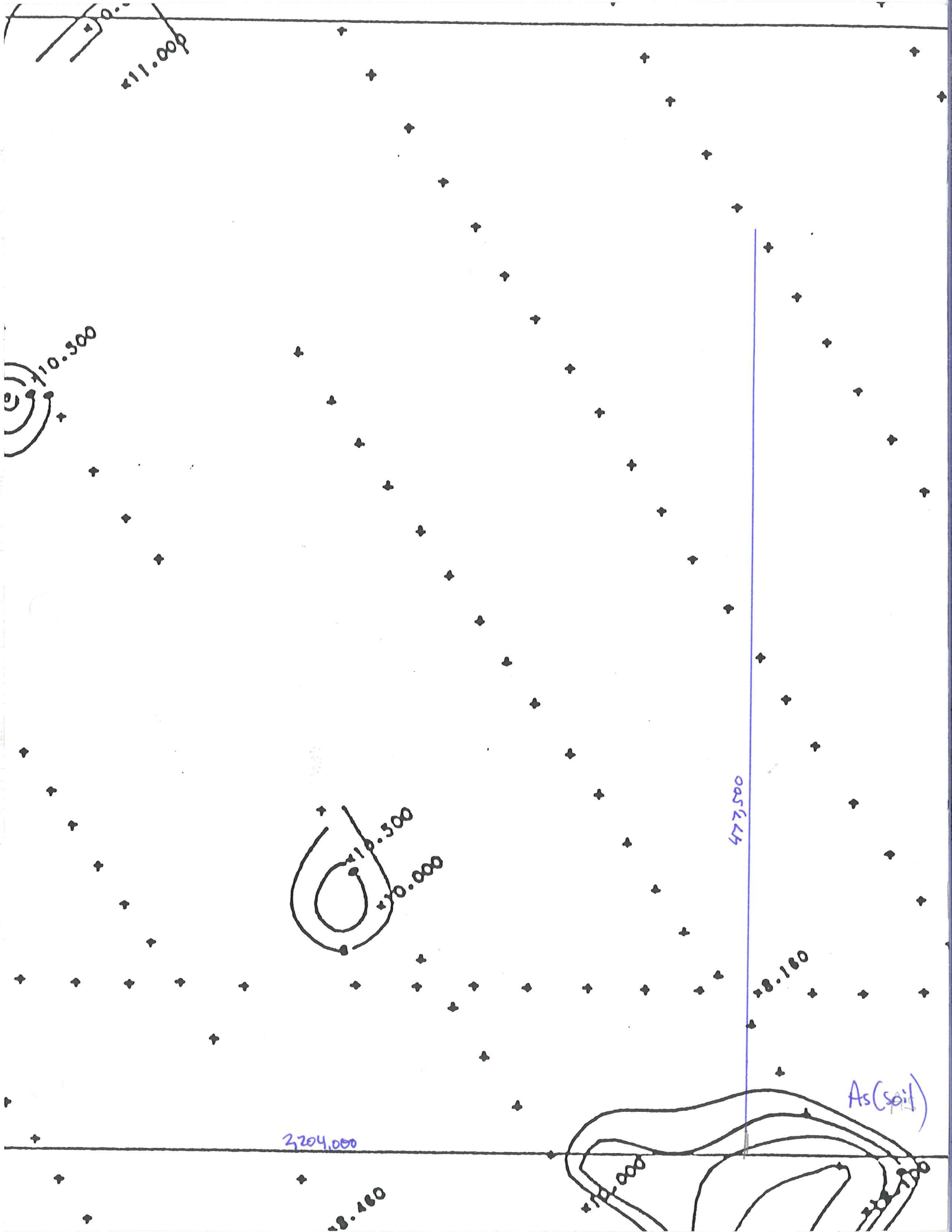
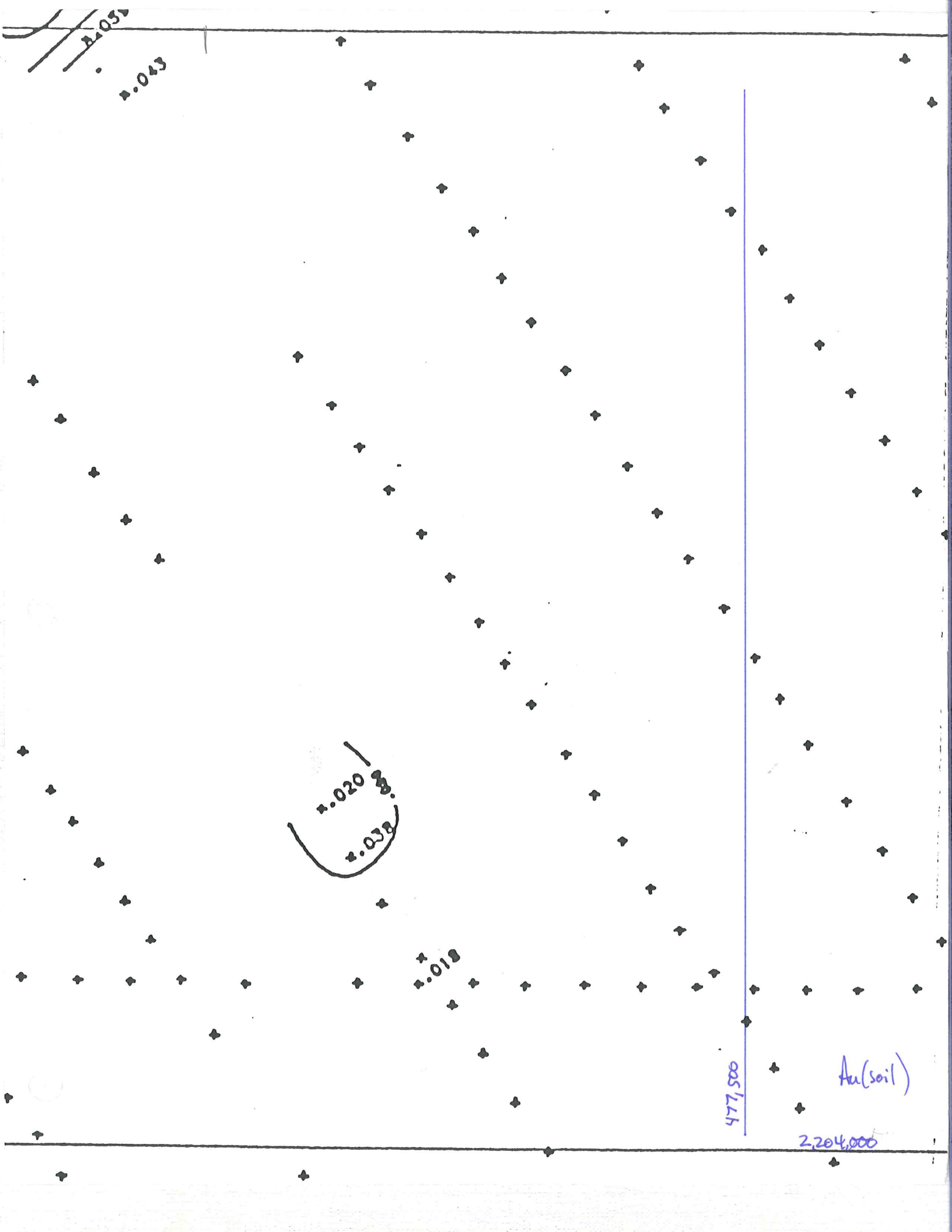
84.000
104.000
80.000
100.000
55.000
84.000
41.000
75.000
66.000
100.000
71.000
69.000
90.000
48.000
63.000
87.000
74.000
51.000
41.000
58.000
59.000
58.000
40.000
56.000
47.000
46.000
36.000
48.000
48.000
38.000
41.000
3,204,000
472,500
54.000
resistivity


.258
.358
.273
.247
.254
.317
.251
.304
2.810
1.810
2.520
1.530
2.540
.750
.300
.200
.100
.322
.275
2,204,000
477,500
Se
.315


3.450
3.650
3.970
3.070
3.330
3.080
3.750
3.320
3.330
2,204,000
447,500
Sb(soil)


11.000
10.500
10.500
10.000
8.180
As(soil)
3,204,000
8.180


.043
.020
.038
.018
977,500
Au(soil)
2,204,000

Dreamland

ROSEBUD PROJECT

TARGET NAME
EQUINOX/LAC: Dreamland
HECLA: Dreamland
BRADY: Target VI

GENERAL DESCRIPTION
Dreamland intrusive into the Tc unit. Both the intrusive and intrusive contacts look prospective.

GEOLOGY

GEOCHEMISTRY
Soil strong gold along N. intrusive ctc. (+ 100ppb)
" arsenic " " " " (+ 20ppm)
" antimony " " " " (+ 10ppm)
" selinium " " " " (+ 2ppm.

GEOPHYSICS
IP. weak high along N. intrusive ctc. w/ best just west of RB-8 where shafts in valley through Tb.
resistivity - both highs along N. intrusive ctc (clay?) ed lows South ctc + NW ctc Drill holes targeted on lows looking for silic(?)

DRILLING
need RL-223,224

REMAINING POTENTIAL
Very strong Au, As, Sb, Se along north intr ctc. only RB-5 drilled in area and it was the best hole. Need more drilling along ctc looking for Tbs unit in RD-16

4?

Hecla = Dreamland
hac = Dreamland.

RB6, RB8 RB2 RL15 RL16
RL276 RL290 RB1 RB5

need RB1,2,5,6 Asarco

RE-1 ~~TD 565~~ } many hac. (dozer hill area)
RE-2
RE 5
RE-6

RL-15 TD 445 N19W -60
0-445 TC wk alt (argillic) but essentially no silic.
all assays dead.

RD-16 TD 300 @N15E -66
0-60 TC
60-185? Tbs2 ← lower ctcm logs @225 but color change @ 185
185-300 TC
assays all dead.

RL-276 TD 511 vertical.
0-45 Qal. much sample caving, fault(?)s.
45-511 TC all assays dead.

RL290 TD 547 -45 N12W all dead except @410-415 @.024Au/-Ag
0-547 TC?
0-25 Qal 25-415 report abundant clay (green + brn to orange) and log it as clastic. (green)

Broad IP high from white dfp area extends SE through dreamland with less response then picks back up col treds SE to Dozer hill. → argillic destruction of py?

✓ 05-4 vert 340

0-340 volc. poss thy all dead → looks unmineralized.

✓ no log for 05-5

N. Dozer Hill

✓ Km-5 0-400 TC dead.

✓ Km-6 0-30 Qal 0-280 TC? 280-400 Tbs? dead.

✓ assays as shown. Km-4 0-80 Tc 80-245 Bud 245-365 fGT 365-470 Bud 470-600 fGT

340E-50 ✓ Km-8 0-125 TC 125-465 Bud 465-600 FGT assays as shown.

✓ Km-10 0-60 TC 60-150 Bud 150-240 Tbs 240-380 fGT assays as shown.

E Dreamland.

✓ N35W-70 RB-3 TD460 0-~~485~~460 FGT all dead.

~~115~~

White Alps

✓ RB-7 TD300? 150-300 Bud brx. all dead.

Dreamland

✓ RB-5 TD425 0-75 tuff w/alt. plag phenos 0-220 very anom throughout

0X to 60'± 75-425 Tc? then drops off to dead.

✓ RB-1 TD500 0-235 Tc

235-260 anom 0.2-0.6 Au possible?

0-125 ⊗X

4 260-380 Tc? assays as shown.

380-500 tuff intrusive — dead.

✓ RB-6 TD ~~400~~ 0-365 ~~all~~ Badger

365-400 tuff intr.? (ox) all dead.

✓ RB-8 0-145 Badger? 145-300TD tuff intr? (ox) all dead.

✓ RB-2 TD ~~660~~ 0-30 Tc? 30-150 intr tuff? * 150-250 volcanic sed

250-310 intr tuff? 310-3~~45~~ Tc? 340 → difficult to understand log

mostly dead. 0-35 ± 100 ppb Au.

Dreamland

RL-223 vertical TD 700'

no coordinates on logs

0-5 Qal

0-465 Tuff? w/p bkg phenos

465-700+D fine grained tuff pheno argillic

Tc

45-100 @ .010

235-245 @ .004 / 1.56 Aq.

35-160 silic ox / unox 165'

220-255 silic

300-470 silic 470-475 fault

rest dead for Au or Aq.

1.56

2312

RL-224 vert. TD 465

0-5 Qal

5-110 fine grained tuff

110-345 intrusive tuff?

345-400 Ct.

400-465 intrusive tuff?

90-95 @ .016 / .2

110-345 arg phenos noted. ox / unox 175'

0-110 silic

180-345 silic

400-465 silic

argilic

0-385 all dead

385 → TD no assays.

Oscar

St Joe logs. 10/82

OS-1 500 vert.

ox / unox ±280

0-70 tuff

70-140 Ls.

140-290 tuff

290-500 gray green tuff

0-50 .010 Au / 1.2 Aq / 100ppm As 20 Sb / 2 Hg

100-160 .010 Au / 0.2 Aq / 130 As / 155 Sb / 1 Hg

rest dead

210-260 <.001 / .1 Aq / 80 / 10 / 0.2

Tos or Tc?

ox / unox ± 120

300-350 <.001 / <0.05 / 15 / <5 / 0.01

400-450 <.001 <.05 / 15 / <5 / 0.03

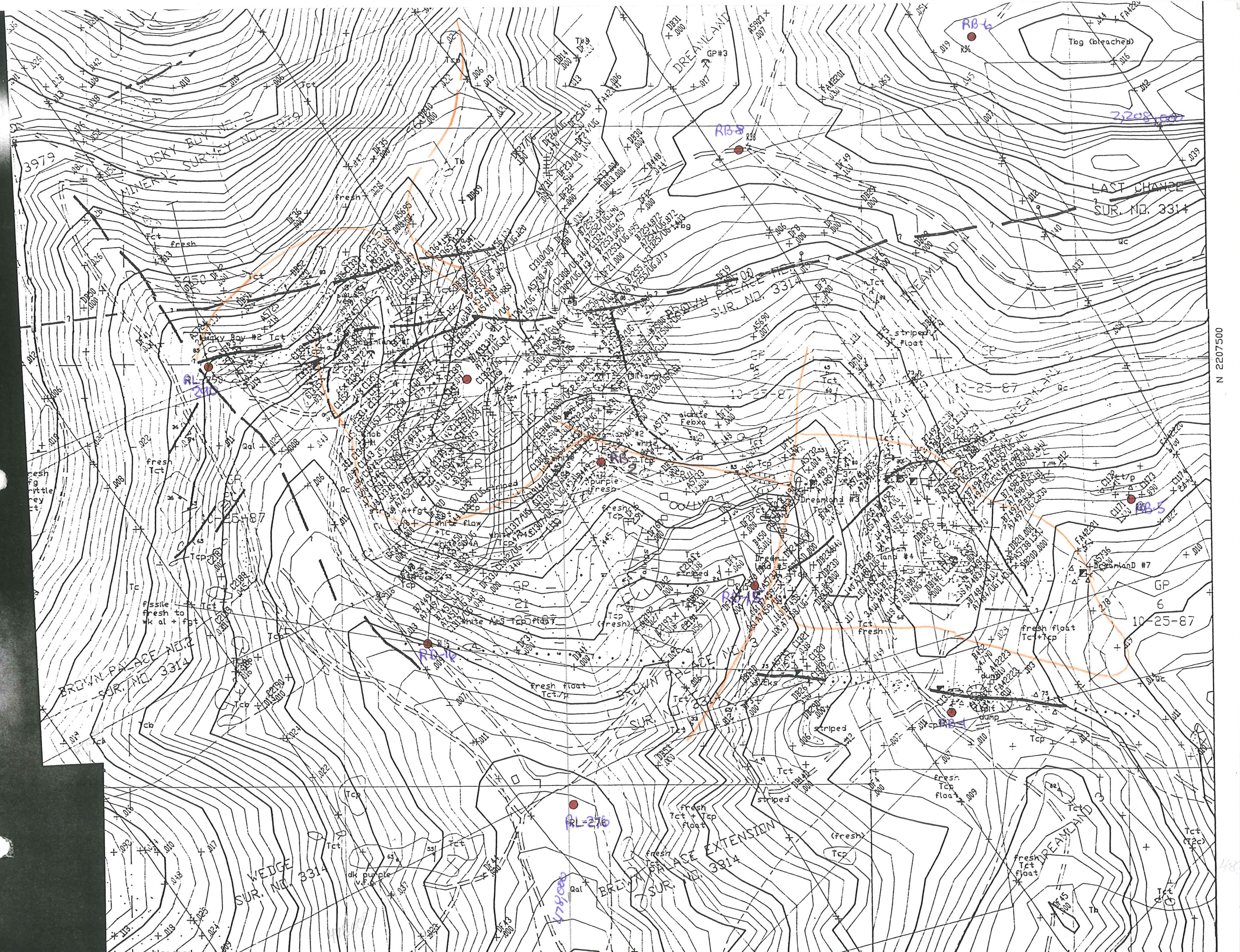
OS-2 TD 480 vert.

0-480 Tuff

30-40 .010 / – / 85 / 29 / 0.4

50-55 .010 / – / 55 / 60 / 0.7

94C



LUCKY BOY NO. 2
MINERAL SURVEY NO. 3979
LAST CHANCE
SUR. NO. 3314
BROWN PALACE NO. 2
SUR. NO. 3314
BROWN PALACE NO. 3
BROWN PALACE EXTENSION
SUR. NO. 3314
WEDGE
SUR. NO. 3314
DREAMLAND
DREAMLAND 3
Tbg (bleached)
GP#3
Lucky Boy #2
Dreamland #2
Dreamland #3
Dreamland #4
DreamlanD #7
GP
6
10-25-87
GP
21
striped float
fresh float
Tct+Tcp
fresh Tcp float
fresh Tct float
dk purple
purple
white flow
dump
striped
Qal
Qc
RB-6
RB-8
RB-5
RB-4
RL-276
RD-16
RL-210
N 2207500
2,208,000

2,208,000

478,000

Au(soil)

94.000
84.000
84.000
171.000
89.000
134.000
L
H
700
15.000
33.000
54.000
36.000
39.000
L
50
51.000
2,208,000
95.000
86.000
74.000
51.000
43.000
49.00
29.000
69.000
53.000
156.000
77.000
.000
300
113.000
55.000
65.000
76.000
52.000
400.000
66.000
65.000
66.000
184.000
117.000
4
574.000
77.000
84.000
128.000
61.000
157.000
100
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83.000
51.000
99.000
68.000
85.000
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600
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60.000
45.000
96.000
92.000
95
136.000
200
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44.000
113.000
459.000
99.000
91.000
41.000
58.000
97.000
110.000
50
72.000
168.000
100
55.000
61.000
101.000
111.000
159.000
154.000
Tesistivity
72.000
98.
66.000
94.000
187.000
82.000
478,000

15.300
17.800
19.300
10.000
7.400
16.800
8.900
7.100
12.100
16.700
13.500
2,208,000
13.800
8.600
8.10
11.600
16.600
22.400
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11.400
18.400
12.600
17.000
16.700
12.200
11.700
13.000
14.000
15.400
19.300
17.100
14.400
13.600
13.500
16.400
17.200
17.300
14.100
16.500
15.000
14.100
15.300
18.300
13.000
16.900
12.000
17.000
11.800
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13.000
13.700
16.700
9.700
17.300
10.600
14.600
10.100
8.300
14.700
14.400
10.800
13.700
10.500
11.900
13.100
IP
478,000
460
13.400
12.100
9.100
14.900
13.600
18.300

2,208,000

+20

478,000

As(soil)

2,208,000

478,000

Sb(soil)

2,208,000

478,000

Se(soil

+2

WHITE ALPS

ROSEBUD PROJECT

TARGET NAME
EQUINOX/LAC: White Alps (both sides)
HECLA: White Alps (west side)
BRADY: Target V

GENERAL DESCRIPTION

Tc cut by white alps silicification.

GEOLOGY

GEOCHEMISTRY

soil - scattered anomalies on steep slope. mostly tested w/completed drilling.

GEOPHYSICS

Resistivity - weak high east of RL+80 & weak low west of White Alps.
IP - broad high east of RL-80.

DRILLING

9 drill holes scattered east of white alps on questionable targets. None but old RB-7 (freeport) were drilled deep enough to test white Alps silic.

REMAINING POTENTIAL

IPanomaly east of RL-80 w/Au (+50ppb), As(+10ppm) and As anomaly west of white Alps w/Tbs below.

Hecla White Alps on West side
Lac White Alps both west + East side.

RB-7 don't have Asarco

RL-21

RD-21 TD 645 N41W -58 RB-7

Tc 0-645?

silic 0-60, 195-230, 270-305, 345-400 stay 350-375 455-580

all assays dead.

83, 20, 19, 79, 18 80 81?

RD-18 TD 465 N49W -61

0-135 TC silic. 285-~~345~~ 465

135-~~190~~ 250 Tbs? all dead except

~~190~~ 250- TC -465 275-285 .021 Au 1.8 Ag

RD-19 TD 445 N70W -60

0 - 445 TC 0-235 silic

spikes @ 20-25 @ .016/0.2 75-80 @ .013/0.5 ~~dead~~ 120-135 @ 0.017/1.1

195-215 @ .052/1.1 215 → TD dead. 0-215 0.002-0.006

RD-20 TD 625 vert. silic 0-55 120-150 195-320

0-625 TC 395-475

0-125 dead. 150-160 @ .009/1.5 ~~160~~ 125-160 .002-0.004 160-220 .005

220-365 dead 365-400 @ .006 400-625 dead.

RL-79 TD 705 N44W -70

0 - 705? TC silic. 75-~~610~~

0-220 dead. 220-520 .004-5 + 520-705 dead.

spikes @ 260-265 @ .012/0.1 290-300 @ .011/0.8 490-505 @ .014/1.5

RL-80 TD 675 N54W -45

0 - 675 TC silic 0-550

0-486 - dead. 180-475 .002-004 475-675 dead. spikes @ 265-270 @ 0.01/0.8

295-300 .012/1.1

RL-81 TD 805 N45W -45 no silic

0-805 TC — assays all dead —

RL-83 TD 815 N15W -60

0-815 Tc no silic

284

assays all dead.

IP anomaly slightly offset to east of holes 18, 79, 80

→ rock/soil geoch. anomalous @ surface but need to contour.

E Dreamland.

N35W-70 RB-3 TD460 0 – ~~345~~460 FGT all dead.

White Alps

RB-7 TD300? 150-300 Bud brx. all dead.

Dreamland

RB-5 TD425 0-75 tuff w/alt. plag phenos 0-220 very anom throughout
0x to 60 ± 75-425 Tc? then drops off to dead.

RB-4 TD500 0-235 Tc
235-260 anom 0.2-0.6 Au possidike?
260-380 Tc?
380 – 500 tuff intrusive — dead.

0-125 @ 0x
always as shown

RB-6 TD ~~400~~ 365 ~~all~~ Badger
365-400 tuff intr.? (ox) all dead.

RB-8 0-145 Badger? 145-300TD tuff intr.? (ox) all dead.

RB-2 TD ~~660~~ 0-30 Tc? 30-150 intr tuff? * 150-250 volcanic sed
250-310 intr tuff? 310-3~~4~~6 Tc? 340-> difficult to understand log.
mostly dead. 0-35 ± 100 ppb Au.

2,210,000

Au(soil)

478,000

+0.05

2,210,000

As(soil)

+10

478,000

2,210,000

Sb(soil)

2,210,000

Se(soil)

478,000

2,210,000

resistivity

130.000
150.000
208.000
83.000
41.000
69.000
47.000
132.000
102.000
134.000
154.000
128.000
55.000
39.000
88.000
89.000
130.000
40.000
46.000
135.000
77.000
44.000
85.000
43.000
40.000
147.000
56.000
48.000
109.000
43.000
43.000
117.000
85.000
56.000
85.000
177.000
94.000
129.000
151.000
54.000
58.000
145.000
176.000
167.000
195.000
199.000
71.000
130.000
63.000
167.000
205.000
162.000
260.000
80.000
58.000
161.000
119.000
196.000
215.000
58.000
53.000
112.000
64.000
117.000
128.000
222.000
76.000
50.000
53.000
84.000
171.000
94.000
39.000
76.000
89.000
44.000
84.000
134.000
106.000

3,210,000

18.400 16.000 13.000 12.700 10.000 7.700 7.100

17.800 12.700 13.300 12.700 12.300 H± 8.500 8.000

12.500 12.800 9.800

18.300 13.300 9.700 11.000

13.800 12.200 10.500

15.700 15.200 10.500 11.400

14.000 13.400 14.300

11.800 12.900 10.200 15.500 15.900 15.600

13.700 19.400

8.000 9.900 12.400 17.000 20.100

8.600 22.800 16.1

7.700 10.900 19.400 20.500

8.400 14.100 24.100

6.900 22.100

8.300 20.300 13.200 21.300

6.900 20.900

7.300 19.800 20.700

8.200 15.200

9.600 6.800 17.800 19.300

7.600 15.300

10.900 7.700 16.700

6.800 12.100 19.500

10.600

4780000

CHANCE

ROSEBUD PROJECT

need more geochem.

where is RL-231, 233

TARGET NAME EQUINOX/LAC : Chance

HECLA : C

BRADY : Target VIII

RL-113
114
115
116
117

RL-153
154
155
156

228
229
230
233

GENERAL DESCRIPTION

Silica breccia zone in Tbf unit.

GEOLOGY

GEOCHEMISTRY

main soil grid does not appear to extend into area. Separate grid only for gold shows 50-100 ppb Au. in the drilled area as well as on Chance Hill

GEOPHYSICS

none.

DRILLING

IH known holes with best in RL-113 that yielded 300'@0.029. followed by RL-153 that yielded 100ft @ 0.036 No. drill logs. offset RL-156 may not have been drilled deep enough.

REMAINING POTENTIAL

needs more drilling around RL-113 especially to west. Also on Chance Hill. My mapping shows structures dipping to the S and SW parallel to drill holes which may explain anomalous drill results My best (300ppb Au) was on Chance Hill and it remains undrilled.

1024.5 - 1102 South Ridge fault

1102-1139 Td.

need to assay

0-90 No assay.

455-953 " "

110 - 115 @ .013/.011

East Chance – Lac

Hecla – nothing.

RL, 113, 114, 115, 116, 117
153 154 155, 156, 158
228 229 230 232 233
231

all logs missing.

note. said

RL-228 vert 600' dead.

229	S85E	-70	TD 620	285-290 @ .040 305-310 .012
230	S60E	-60	TD 630	45-50 .011 60-65 .010
got ? 231	S90E	-45	dead TD 500	
232	S60E	-45	TD 595	415-420 .011
got ? 233	vert	640 TD	dead.	

Short Shot.

RL-238	500 TD	dead
239	525	"
240	375	"
244	200	

RL 153 offset ?

RL 113. TD 800 SLOW -45

325-350	.020 / 0.1
395-700	.029 / —
710-715	.013
720-725	.012
740-755	.018
785-795	.036

incl. 510-670 . .043
or 530-565 . .086

can't find hole location.

RL 114	TD 800	S10W	-45	dead.	
RL 115	TD 715	S10W	-60	"	
RL 116	TD 510	S10W	-60	500-505	.010/0.15
117	600	S10W	-60	dead.	

Wild Rose.

RL 118	TD 640	N35E	-45	dead.	
RL 119	500	S0E	-45	dead.	
RL 120	495	N19E	-60	40-45	.035
				110-125	.015
				155-175	.015
				265-270	.042/0.3

Chance.

RL 153	TD 600	Vert.		425-525	.036
				incl. 455-505	.059
				540-545	.032
				560-565	.018
				580-585	.011
RL 154	645	S20E	-45	55-65	.013
RL 155	505	S20E	-45	dead.	
156	405	S20E	-45	5-15	.032/0.2

Wildrose

RL 157	405	N20E	-60	60-65	.012	no hole location
				320-360	.010	

EAST DREAMLAND

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC: —
HECLA: East Dreamland
BRADY: —

GENERAL DESCRIPTION

RA1-4

nothing. As best that can be determined Asarco was reported to intersect 60ft@ 0.05 Au in one of the 4 holes Most. of the rest of the drilling was follow-up with essentially no success

GEOLOGY

Tc

GEOCHEMISTRY

basically dead all

GEOPHYSICS

basically flat all

DRILLING

Bombed out except RL-122 which hit intrusive (?)@ 355-400 Tc and anomalous assays. 325-350 @ .04 on etc. Might go somewhere but geophysics no help.

REMAINING POTENTIAL

Intrusive etc but low priority until more information available.

Hecla – East Dreamland.

Lac – no designation.

Asarco holes.

RB-5,9 (?), RA 1,2,3,4, RL 12,13,14 ~~do not load~~ 132, 133, 134, 135

RL-132 TD 200 N20E -45

0-200 Ta all assays dead.

RL-133 TD 300 ~~NES~~ NO° -45 cover says old ASARCO drillpad.

0-300 TC.? 20-100 silic.

all assays dead except 70-75 @ .011 Au/0.19 Ag

95-100 @ .015 Au/~~1~~ Ag

RL-134

TD 145 N20E -45 all dead except 10-15 @ .013 Au/0.5 Ag

0-145 TC?

RL-135 TD 300 N20E -45

0-170 TC all assays dead except

170-200 Tri intrusive 95-100 @ .013 Au/0.35 Ag

200-300 TC

RD-12 TD 405 N5E -58

0-405 TC 30-45 @ .027 Au/0.5 Ag.

365-370 .013 / —

rest dead.

3 151 RD-13 TD 385 N1E -60

0-385 TC. all dead assays

RD-14 N0E -60 TD 300

0-300 TC all dead assays

RB-3

RL-121, 122, 136, 164
167

East/East Dreamland.

no target for Lac or Hedda

RL-167 TD 800 vert,
0-40 Qal
40-800 Tc?

185-205 @ .017 Au/0.2 Ag
rest assays dead.

North Dozer

RL-136 N45W -45 TD 660
0-195 Tc
195-220 fault
220-660 Tc

135-140 @ .010 Au/0.2 Ag
295-300 @ .016 Au/—
360-445 = +.002
405-410 @ 0.01 Au/0.27 Ag
415-420 @ .012 / 0.28

rest assays dead.

RL-121 TD 300 N20W -45
0-300 shown as Tb. all.

all assays dead.

RL-122 N20W -65 TD 400
0-105 Tb.
105-245 Tc
245-265 vein.
265-355 Tc.
355-400 INTRUSIVE

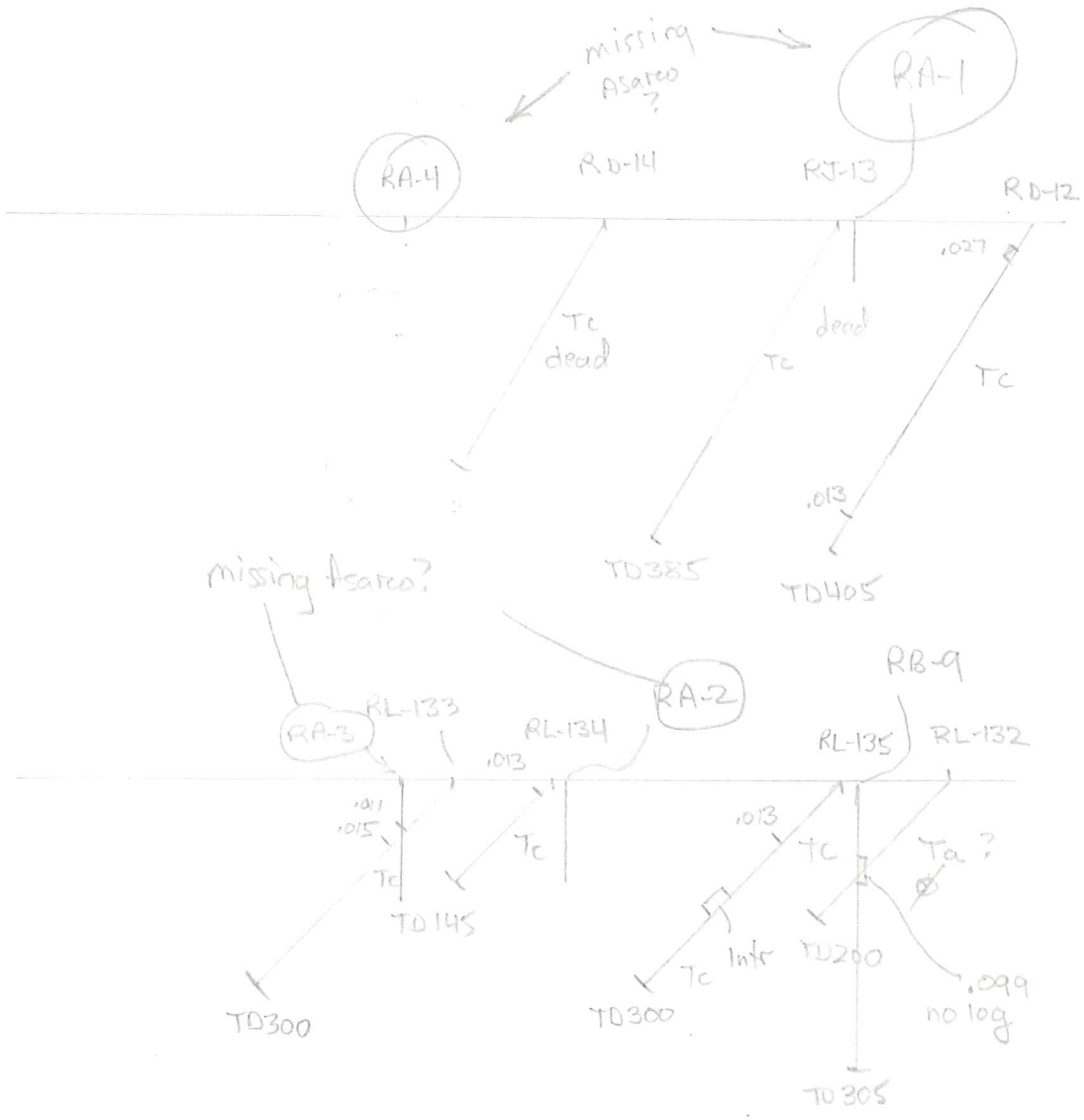
245-265 @ .015/5.5 Ag.
280-290 .003/2.9 Ag
310-315 .029/—
325 350 .019 /—
rest dead.

North Dozer

INTERESTING → ANOMALOUS VALUES ON INTR CTC

RL-164 TD 545 vert.
0-25 Qal
25-545 Tc

all assays dead.


missing Asarco ?
RA-1
RA-4
RD-14
RJ-13
RD-12
.027
Tc dead
dead
Tc
Tc
.013
TD385
TD405
missing Asarco?
RA-2
RB-9
RA-3
RL-133
RL-134
RL-135
RL-132
.013
.011
.015
Tc
Tc
.013
Tc
Ta ?
Tc
TD145
Intr
TD200
Tc
.099
no log
TD300
TD300
TD305

assays as shown. KM-4 0-80 Tc 80-245 Bud 245-365 FGT 365-470 Bud 470-600 FGT

S40E-50 KM-8 0-125 TC 125-465 Bud 465-600 FGT assays as shown.

KM-10 0-60 TC 60-150 Bud 150-240 Tbs 240-380 FGT assays as shown

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E Dreamland.

N35W-70 RB-3 TD460 0-460 FGT all dead.

White Alps

RB-7 TD300? 150-300 Bud brx. all dead.

Dreamland

RB-5 TD425 0-75 tuff w/alt. plag phenos 0-220 very anom throu

0x 0-60 ± 75-425 Tc? then drops off to dead.

RB-1 TD500 0-235 Tc

235-260 anom 0.2-0.6 Au poss. dike?

260-380 Tc?

380-500 tuff intrusive — dead.

0-125 @ X

assays as

4

RB-6 TD 0-400 365 all Badger all dead.

365-400 tuff intr.? (ox)

RB-8 0-145 Badger? 145-300TD tuff intr? (ox) all dead.

* RB-2 TD660 0-30 Tc? 30-150 intr-tuff? * 150-250 volcanic sed

250-310 intr tuff? 310-340 Tc? 340-> difficult to understand log

mostly dead. 0-35 ± 100 ppb Au.

TD 405

RB-4 0-25 Qal sketch log.

25-95 Bud w/ green. alt

45-145 Bud w/ jarosite

145-217 lavender gray flow banded. TC

217-300 Bud breccia w/ green.

300-405 Dozer.

no assays

RB-9 TD 305 vein? 75-90 @ +1.5 ppm Au. rest dead.

N. Dozer.

RL-166 -68 S55W 1100TD. @600 = 80° 850 = 85° @1100 = 89°

0-15 Qal

15-160 FGT TC?

160-175 fault

175-495 Lithic Lapilli tuff.?

495-1100 FGT Terrible log - generally only colors

80-85/.015 95-105/.027 750-755/.022 840-855/.028 w/0.3 Ag

1095-1100/.015 rest dead.

RL 108C S51E -60 1107 TD

0-67 fault zone → Rosebud Sheen?

185-785 porphyritic tuff Ta? 785-1035 possible Tbs?

1035-1059 fault SRF?

1059-1107 Jtza

assays 0-67.7 dead. 67.7-433 NA. 433-507 437-442/.021 472-477/.016

507-992 ~~N.A.~~ 992-1107 assayed. 992-1037/.109 w/.2 Ag.

↓ orange food

507-722 dead

722-932 NA → 937-942/.019 972-977.310/0.36 Ag

932-992

Resistivity

9.000
38.000
54.000
52.000
61.000
69.000
65.000
48.000
69.000
62.000
70.000
64.000
48.000
61.000
72.000
53.000
62.000
59.000
85.000
80.000
.000
80.000
66.000
76.000
52.000
59.000
59.000
72.000
52.000
57.000
63.000
45.000
58.000
55.000
89.000
40.000
35.000
46.000
51.000
39.000
45.000
38.000
42.000
38.000
55.000
35.000
H
65.000
45.000
26.000
52.000
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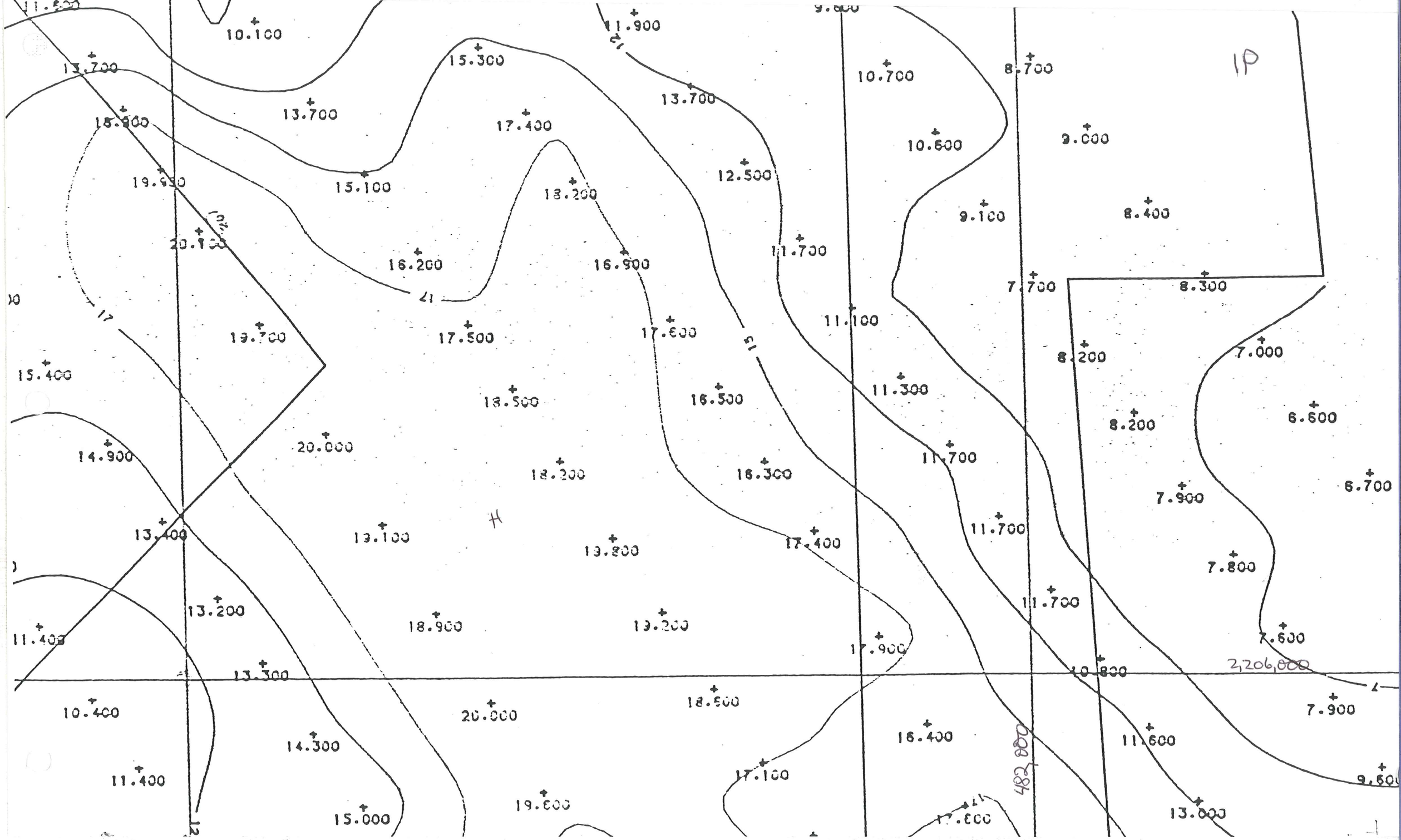
482,000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6.700
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13.100
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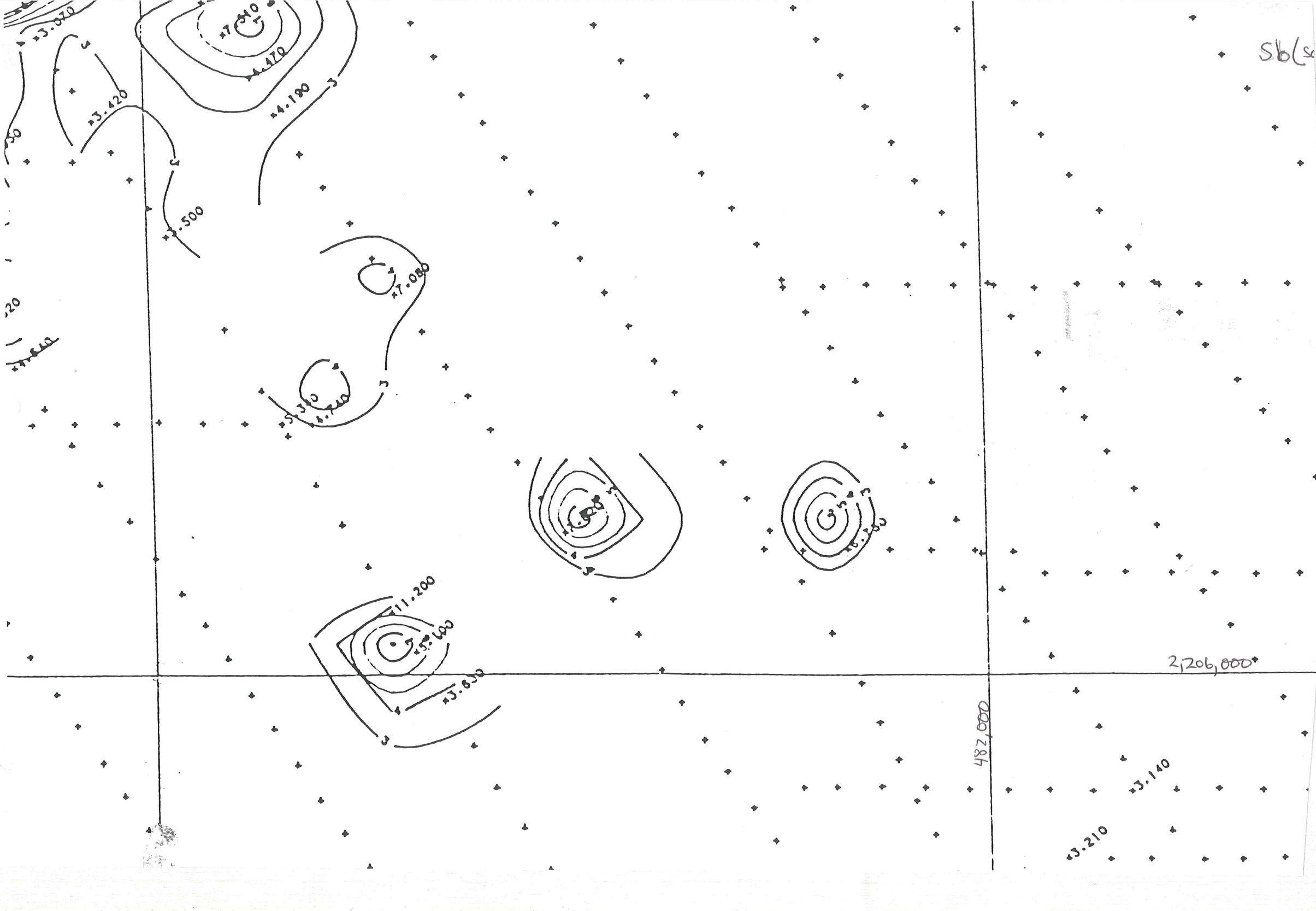
16.400
11.600
482,800
11.400
17.100
9.600
15.000
19.800
17.800
13.000
1P
H


Se(soil)
2,206,000
482,000
.307
.399
.262
.451
.549
.150
.356
3.690
.130
400
300
200
.372
.273
.276
.242
.268
.390


+3.020
+7.040
+4.470
+4.180
+3.420
+3.500
+7.080
+5.340
+4.200
+11.200
+5.400
+3.630
+3.140
+3.210
2,206,000
487,000
-20

As(soil

21.600

8.300

14.700

5.500

10.200

2,206,000

482,000

Au(soil)

.036

.022

.026

.031

.019

.030

2,206,000

482,000

WEST DEGERSTROM

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC : West Degerstrom
HECLA :
BRADY :

GENERAL DESCRIPTION

IP anomaly

GEOLOGY

Tc with high angle silicified fault bisecting area from north to south.

GEOCHEMISTRY

surface soil geochemistry essentially dead
rock chip sampling also dead to very low grade

GEOPHYSICS

unexplained IP anomaly
resistivity flat through area of anomalous IP response.

DRILLING

2 holes, RL-235 and 236 → both dead.

REMAINING POTENTIAL

none; target tested which could be due to coupling effect or mis-plotting but no mineralization.

West Degesstrom

RL-235 due west -63 TD 525

0-525 Tc all dead.

RL-236 vert. TD 365

0-365 Tc all dead.

N. Dozer.

RL-100 S55E -60 TD 1168.5

0-381 reverse circ.

381-395 Tbs

395-406 Ta

406-413 Tbs

413-421 Ta

421-593 Tbs

593-682 Ta

682-733 Ta?

733-758 Tbs

758-993 Ta?

993-1027 flt zone?

1027-1120 Td?

1120-1168.5 J Fza.

350-355 @ .026

416-572 NA

861-866 @ .042

~~887-892 @ .137~~

887-916 @ .072

930-1027 @ +0.15

1072-1087 @ .033

Not dead.

RL-101 S55E -60 1123 TD

0-44 Rev. circ.

44-351 Tbs

351-420 Ta

420-464 Tbs

464-473 Ta

473-570 Tbs

570-1008 Ta (?)

0-411 N.A

426-567 NA

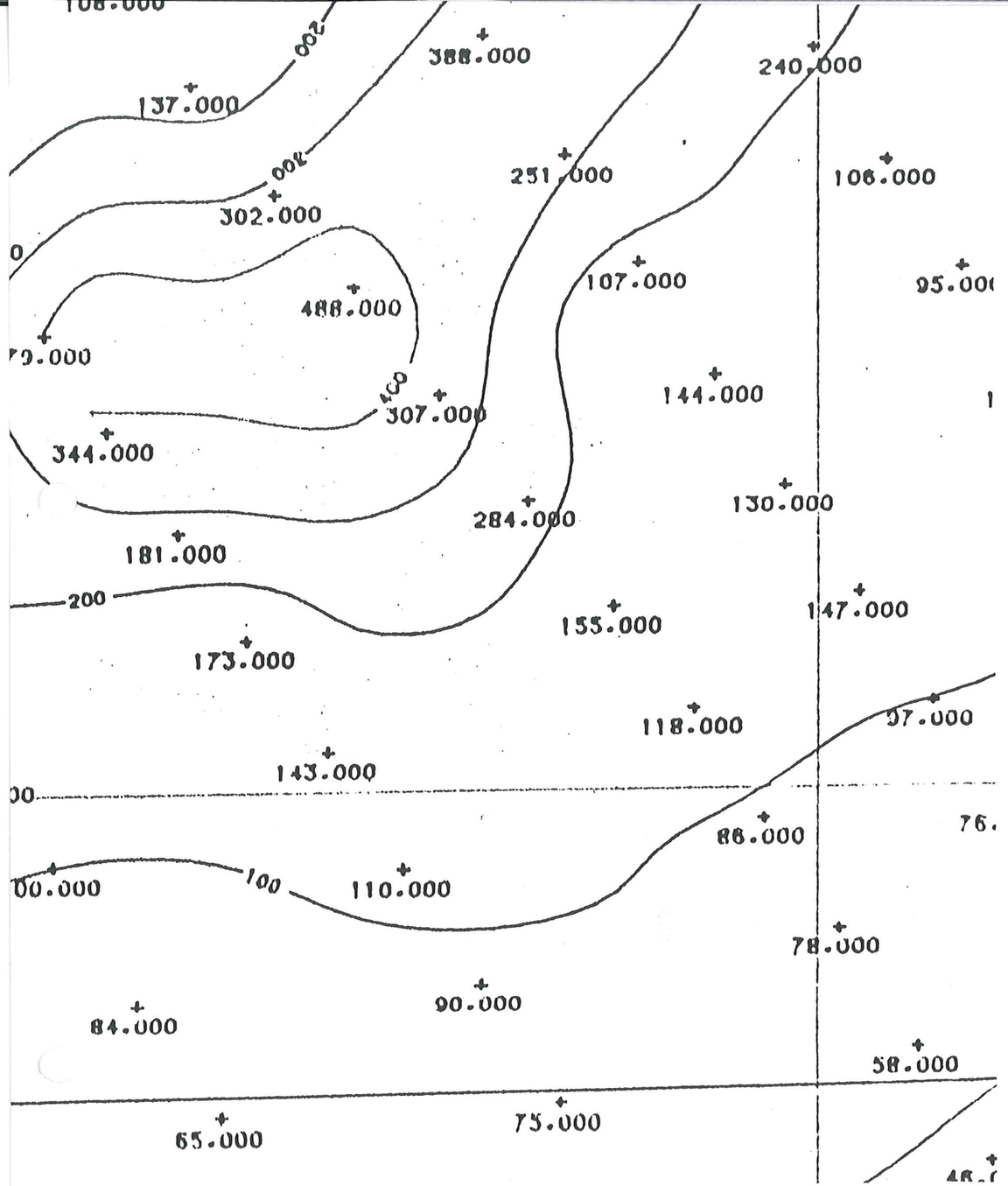
577-597 .017

612-617 @ .044

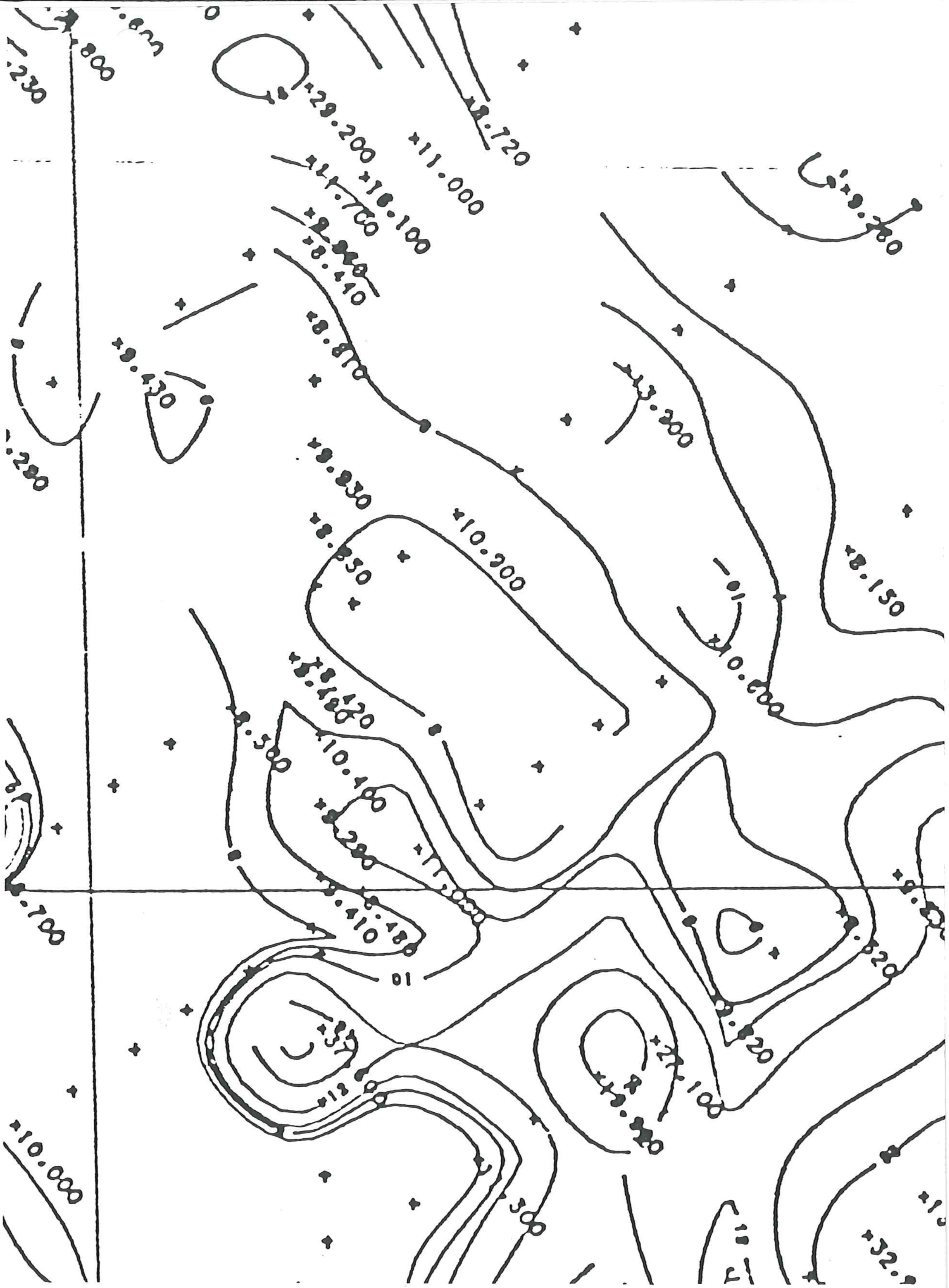
662-667 @ .012

687-692 @ .125

732.6-735.8 @ .098



resistivity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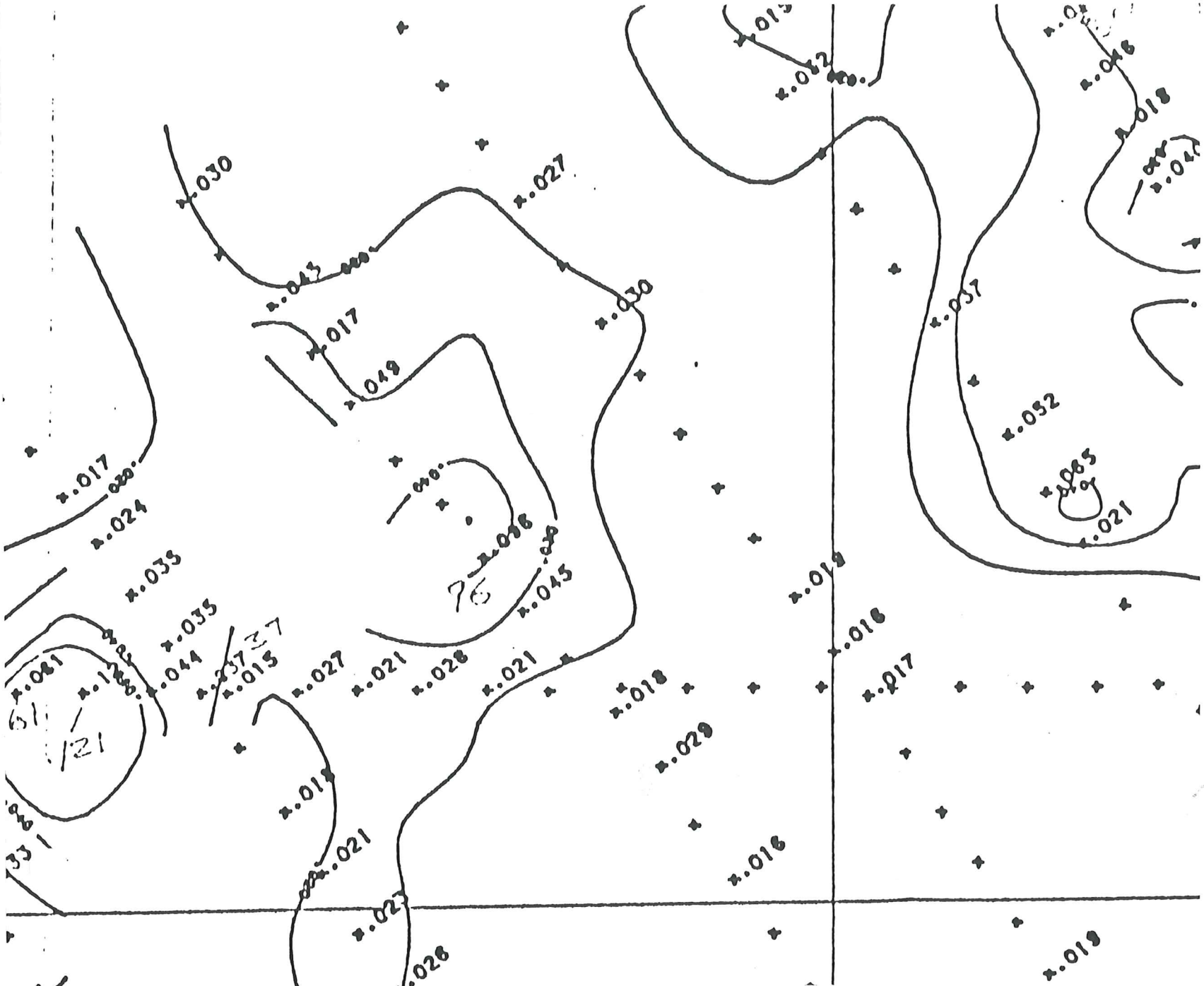
×10.200
×10.000
×8.150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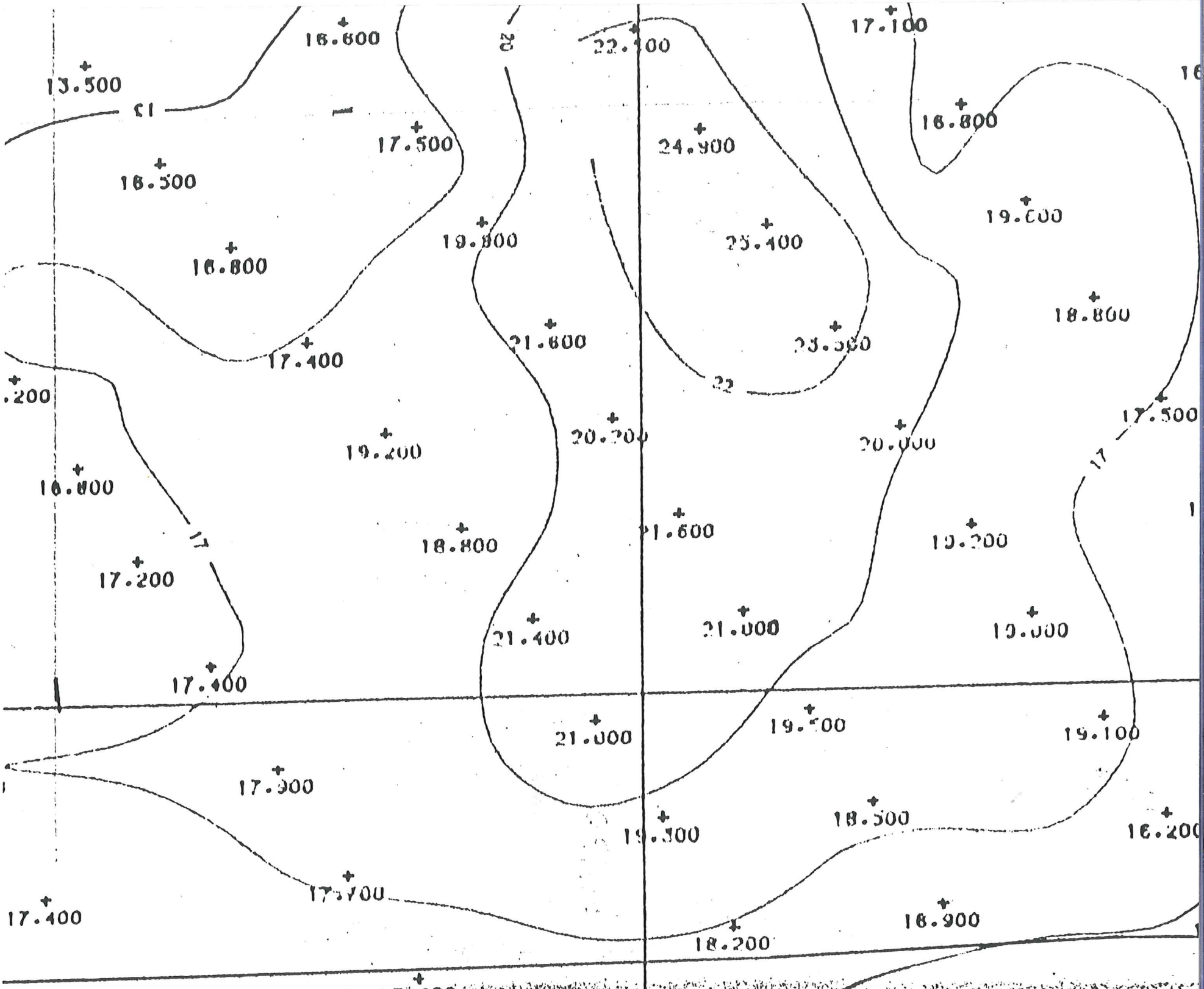
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21.400
21.000
19.000
17.400
21.000
19.500
19.100
17.900
19.300
18.500
16.200
17.400
17.700
16.900
18.200

N. DOZER HILL

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC :
HECLA :
BRADY : North Dozer Hill

GENERAL DESCRIPTION

area between the Dozer Hill drilling and the Rosebud Shear as well as the area along the immediate hangingwall of the Rosebud Shear.

GEOLOGY

Tc on the hangingwall of the Shear, Tc, Tbs1, Ta and Tbs2 on the footwall.

GEOCHEMISTRY

none ~~exp~~ examined

GEOPHYSICS

none examined

DRILLING

Re-interpreted the logs of 33 previously drilled holes.

REMAINING POTENTIAL

large area 500x1,000 feet on the footwall of the Rosebud Shear needs to be explored on a priority basis for higher grade mineralization

RL-91C TD 1150 S55E -60 0-465 rot.

0-30 Qal
30-964.3 Tc?
964.3-975.6 fault.
975.6-1037.2 Tc?
1037.2-1110 Tbs?
1110-1142.8 Td?
1142.8-1150 JTza

145-150 .049/0.1
295-306 .022/0.1
711-713.9 .012/—
985-995 .010/—
1033.5-1035.5 .021/—
1070-1075 .051/0.1
rest dead.

RL-96C TD 1192 S55E -60 0-465 rot

0-30 Qal
30-180 Tc?
180-185 fault?
185-680 Tc?
680-732 Tbs
732-1087 Tc? or Ta
1087-1149.5 Tbs
1149.5-1156.5 S. Ridge fault?
1156.5-1192 JTza

60-70 @ .012/—
145-175 @ .060/0.2
1147-1152 .020/0.7
1177-1182 .012/0.2

59
358
6
59

RL-110C TD 1232 S5TE -55 0-465 rot.

0-~~260~~ 85 T6?
85-260 Tc?
260-~~305~~ 305 fault
305-940 Tc
940-1180 Tbs.
1180-1193 fault
1193-1211 Tbs ← dep etc?
1211-1232 JTza

185-190 .010/—
195-200 .021/2.72
245-250 .016/0.4
355-360 .010/0.2
380-385 .013/0.1
390-395 .012/—
rest dead

465-555 no assays.
~~585~~-861 " "
894-1142 " "

RL-252 TD 500 vert.

0-20 Qal

20-500 Tc

rest dead

75-80 .026 fra/0.1

95-100 .012/0.1

250-255 .010/—

295-300 .016/—

RL-92C TD 1281 S56E -47 0-290 rotary 290 → core.

0-45 Tb.

45-944.6 Tc

944.6 - 948.5 fault.

948.5 - 1175 Tc

1175 - 1180.7 fault

1180.7 - 1237.6 Tc?

1237.6 - 1245.4 fault

1245.4 - 1257.5 arkosic ss (Tbs?)

1257.5 - 1281 JTra

175-180 .015/0.2

190-195 .011/0.2

210-220 .068/0.2

270-280 .016/—

285-290 .010/—

685-690 .024/—

1046-1055 .025/-0.1

1070-1075 .012/—

1180-1190 .025/0.1

1215-1220 .029/0.1

1235-1245.4 .055/0.4

1245.4-1257.5 .048/0.3

1265-1270 .049/0.2

need to plot

RL-176 TD 345 vert.

0-10 Qal

10-345 Tc

120-125 .036/0.1

140-145 .020/0.1

240-245 .017/0.1

310-330 .114/0.2 } no checks.

RL-177 TD 445 vert.

0-25 Qal

25-445 Tc

100-105 .010/0.1

195-200 .012/—

205-210 .014/0.1

220-225 .015/0.2

235-255 .020/0.1

375-380 .018/—

RL 138, 139, 148, 250, 251

Valley north of Dozer Hill

Lac/Hoola → no target

RL-138 TD 1040 S55E -60

0-65 Qal

65-~~505~~ 1040 TC

next dead.

50-55 @ .017 Au/—

70-75 @ .017/—

80-85 @ .012/—

220-225 @ .012/0.2

290-295 @ .010/—

380-385 .010/—

645-650 .020/—

915-920 .021/—

RL-139 TD 800 S55E -60

0-20 Qal

20-800 TC

145-370 sheared

next dead.

145-155 @ .023/—

195-200 @ .011/.1

215-220 .010/—

230-240 .017/0.17

335-360 .011/—

395-405 .077/.15

430-435 .024/.12

~~765-??~~

RL-148 TD 645 S55E -45

0-17 Qal

17-95 Tc

95-105 fault

105-230 Tc?

230-290 Tb? ← poss fault instead?

290-645 Tc

next dead.

125-130 @ .028/.18

525-530 .012/—

630-635 .012/.12

114

57

72

154

RL-251 TD 400 vert.

0-10 Qal

10-400 Tc?

290-295 .013/—

next dead.

RL-250 TD 545 vert.

0-15 Qal

15-545 Tc

next dead.—

65-70 — Au / 5.75 Ag

240-245 .011/—

290-305 .010/—

375-385 .011/—

RL-262C TD 1139 Vert.

0-28 gal

28-495 Tbs 2.

difficult to understand log called LBT to 1024.5

1024.5-1102 South Ridge fault

1102-1139 Td.

need to assay

0-90 No assay. 110-115 @ .013/.011

455-953 " "

East Chance - Lac

Hecla - nothing. RL, 113, 114, 115, 116, 117

153 154 155, 156, 158

all logs missing. 228 229 230 232 233

231

note. said

RL-228 vert 600' dead.

229 S85E -70 TD620 285-290 @ .040
305-310 .012

230 S60E -60 TD630 45-50 .011
60-65 .010

231 S90E -45 dead TD500

232 S60E -45 TD595 415-470 .011

233 Vert 640TD dead.

Short Shot.

RL-238 500 TD dead

239 525 "

240 375 "

244 200 "

RL 113. TD 800 Slow -45

325-350 .020 / 0.1

395-700 .029 / —

710-715 .013

720-725 .012

740-755 .018

785-795 .036

RL153 offset ?

incl. 510-670 . .043
or 530-565 . 086

can't find hole location.

RL-112 TD 1230 S 45E -58 0-465 rot

0-15 Qal

15-1058 Tc?

1058-1085.8 South Ridge fault ?

1085.8-1230 J Tza

602-847 no assays

35-40 @ .010/0.1

85-110 @ .017/0.3

475-508 @ .013/0.2

517-522 .019/0.3

522-527 .012/0.3

547-552 .028/0.1

857-862 0.073/—

891-895 .097/0.4

927-937 .042/0.4

947-952 .022/—

972-977 .021/0.2

997-1002 0.0038/—

1017-1022 0.01/—

1027-1069 .064/0.6

1069-1074 0.007/3.7

1085.8-1094.5 .013/6.8

1105-1130.5 .014/0.7

1145.5-1156 .012/2.3

1171.9-1199 .030/1.0

RL-137 TD 400

S 10E -45

0-400 Tb. all dead.

105-110 .021/—

135-140 .017/—

270-275 .015/—

~~1015-1050~~

RL-140 TD ~~1050~~ 1050 S 55E -60

0-1050 Tc?

all rest dead

RL-143 TD 1005 S 51E -60

0-1005 Tc.

370-375 .013/1.1

rest dead.

RL-107 -55 S52E 1030

0-465 Rev circ

N-Dor Not Plot

465 - 974 Tbs?

974-984 fault

984 -1030 Td

275-280 @.016

305-310 @.110

315-320 @.031

410-420 @ 0.10

465-552 NA

667-682 @.011

840-845 @.025

850-855 @.014

905-910 @.013

RL-93 S55E -60 1082

0-462 Rev circ.

462-1035 difficult to follow

1035-1053 SRF

1053-1082 JTza

~~25-30 @~~ 45-50 @.028

130-140 @.020

150-165 @ .034

180-185 @.020

195-200 @.035

425-430 @.015

560-563 .023

830-835 @.021

860-865 @.032

876-880 @.013

920-930 @. .031

940-1050 @ 0.10+

RL-90 -63 S55E 1012?D

0-465 Rev circ.

465-636 Tbs

636-732 Ta

732-1012 Tbs?

55-60 @.011

65-75 @.015

295-305 @.045

315-325 @.015

330-340 @.020

355-365 @.011

445-450 @.019

503-507 @.072

533-538 .019

583-587 @.016

839-846 @ .035

873-883 @ .014

897-906 @.016

RL-165 -75 S55E 1032

Rev Circ 0-300

300-953 Tbs

953-982 fault

982-1032 Td?

310-359 NA

384-389 .053

425-512 NA

603-608 @.031

649-655 @.031

685-690 @.018

727-731 @.012

777-782 @.014

787-797 .011

802-812 .019

816-829 @ .020

844-854 @.014

859-870 .027

906-911 @.024

937-947 @ .019

PL-194 895 ved.

0-355 RC 0-207 Tbs

207-322 Ta

322-796 Tbs

796-824 fault

824-Td

10-15 .016
115-150 .011
235-240 .010
355-563 DA
578-583 .016
598-603 .012
643-648 .010
683 688 .010
693-743 .020
763-778 .030
778-798 .15
798-820 .040

PL-195 ved 913

PC 355

0-115 Tbs

115-272 Ta

272-744 Tbs

744-849 Ta

849-858 fault

858-Td

10-15 .025
300-305 .011
310-315 .015
355-440 DA
480-485 .010
490-495 .010
593-618 .060
623-658 .2
658-663 .036
678-708 .028
713-743 .032
758-854 .045

171
203

RL-171 ved 860

all PC

0-60 Tbs
60-215 Ta
215-Tbs

bad log

315-320 .011
395-400 .1
425-455 .014
470-515 .012
520-535 .038
535-580 +.2
580-615 .040
620-655 .025
655-695 +.2
695-715 .080
730-750 .028
755-775 .040
775-785 +.2
785-840 .020

Confirmed location

RL105C -62 S55E 1062

0-465 RC
465-911 Tbs
911-930 fault
930 - Td

110-115 .017
120-125 .011
465-589 NR
599-599 .011
609-650 NR
672-710 NR

809-814 .029
823-828 .012
838-892 .012

92
159
199

RL-82 S54E -65 1065

0-463 RC
463-688 Tbs
688-728 Td?
788-842 Tbs
842-855 fault
855 - Td

570-575 .010
345-350 .019
370-375 .021
435-453 .018
507-512 .042
517-542 .036
527-531 .013
594-599 .012
648-682 +.20
698-703 .017
718-723 .014
723-798 .025
798-807 .35
807-817 .020

RL-159 852 -70 S53E

0-300 RC
300-417 Tbs
417-460 Td
460-777 Tbs
777-778 fault?
778 - Td?

392-397 .012
417-422 .013
432-437 .028
452-467 .018
502-527 .018
527-692 +0.2
692-782 ±.05

692-

170-175 .033
225-240 .018
260-270 .040
367-372 .038

639-715 NR
785-790 .010
830-835 .030
899-903 .022

RL199 1277 -65

0-340 RC
340-358 Tbs
358-638 Td
638-1205 Tbs
1205-1209 fault
1209 1221 Td

1221 → Td

155-160 .032
370-375 .026
385-390 .010
410-415 .018
455-470 .010
490-495 .010

939-943 .015
1028-1033 .18
1053-1055 .013
1090-1096 .014
1171-1176 .018

TD 405

RB-4 0-25 Qal sketch bg.

25-95 Bud w/ green. alt

45-145 Bud w/ jarosite

145-217 lavender gray flow banded. Tc

217-300 Bud breccia w/ green.

300-405 Dozer.

no assays

RB-9 TD 305 vein? 75-90 @ +1.5 ppm Au. rest dead.

N. Dozer.

RL-166 -68 S55W 1100TD. @600=80° 850=85° @1100=89°

0-15 Qal

15-160 FGT Tc?

160-175 fault

175-495 Lap Lithic Lapilli tuff.?

495-1100 FGT Terrible bg - generally only colors

80-85/.015 95-105/.027 750-755/.022 840-855/.028 w/0.3 Ag

1095-1100/.015 rest dead.

RL 108C S51E -60 1107TD

0-67 fault zone → Rosebud Sheen?

185-785 porphyritic tuff Ta? 785-1035 possible Tbs?

1035-1059 fault SRF?

1059-1107 Jka

assays 0-67.7 dead. 67.7-433 NA. 433-507 472-477/.016 437-442/.021

507-992 = N.A. 992-1107 assayed. 992-1037/.109 w/.2 Ag.

↓ assay bad

507-722 dead

722-932 NA → 937-942/.019 972-977.310/0.36 Ag

932-992

27
4 106
26
28
3 84
24

.02
.012
32
10 9
d 84
82
a 908
11 28
16
4 65
25
25
4 102
22
17
2 35
12
4 51
11

PDH #2 Dagerstown hole Mother Lode Area

RL-293 TD 607 N45E -50

0-10 Badger/Qal

10-185 Tc could be Tbs 165-185 fft?

185-230 Tc

230-360 Tbs?

360-607 Tc w/ phenos

20-40 @ .028 450-465 @ .011 Au

60-70 @ .015

85-95 @ .017

125-180 @ .083

260-280 @ .012

330-350 @ .011

360-380 @ .016

415-425 @ @ .016

Dor H

RL-102 556E -60 TD1092

0-441 Rev Circ.

441-902 Tbs?

902-926 fault.

926-1092 Td?

195-205 @ .013

270-275 @ .051

375-380 @ .023

430-458 @ .013

456-461 @ .017

492-497 @ .019

507-527 @ .026

532-542 @ .017

547-552 @ .027

567-582 @ .028

587-655 NA

760-766 @ .013

801-920 +0.05

26
4 104

Dor H

RL-103 water valve to 295/lost no core.

28
3 83
23

RL-104 555E-60 1087

core fm top.

0-1002 Tbs

1002-1040 fault

1040-1087 Td

0-120 NA

152-411 NA

572-587 @ .010 .024

547-567 .011

577-632 NA

742-782 @ +0.15

812-872 @ +0.10

887-922 @ 0.05 ±

937-954 @ .029

1007-1026 @ ±0.05

24
5 118
11
4 46

Dor H

RL262 vert. 1139

0-495 Rev Circ.

495-629-1012 Tbs

629 ~~Tbs~~ Ta?

1012-1024 Tbs?

1024-1102 SRF

1102-1139 Td.

0-495 NA

29
4 11 6

RL-106 -60 551E 1237

core fm top.

0-306 Ta

306-592 Tbs

592-796 Ta

796-978-939 Tbs

~~939-978 Ta?~~ 979-989 SRF?

989-1118 Tuffaceous SS

1118 — JTRu

302-307 @ .013

327-332 @ .014

347-352 @ .031

476-587 NA

702-707 @ .011

827-930 NA

983-992 @ .171

1007-1012 @ .024

1022-1027 @ .035

1047-1067 @ .050

1087-1102 @ .023

1162-1172 @ .080

1177-1212 @ .080

1800
930
1060
900
1010

171
2342

23
3 70
10

RL-109 S51E -60 1247TD

core from top.

0-128 Ta

128-182 Tbs

182-232 Ta

232-290 Tbs

290-352 Ta

352-437 Tbs

437-619 Ta

619-1022 Tbs

1022-1080 fault

1030-1108 Td?

1108 JTza

287-475 NA

595-601 @ .049

606-619 @ .014

629-654 NA

660-665 @ .024

697-703 @ .020

727-816 NA

889-995 @ +0.05±

1122-1132 @ .012

1201-1205 @ .016

RL-97 S55E -63 1252

0-465 Rev circ

465-493 Tbs

493-578 Ta

578-1114 Tbs

1114-1152 Td?

1152-TD JTza

240-245 @ .017

445-450 @ .011

770-775 @ .014

800-805 @ .012

833-860 @ .050±

870-995 @ +0.05±

1072-1075 @ .031

1111-1114 .016

1212-1217 .013

RL-75 -72

S55E TD1071

0-345 Rev circ.

345-1067 difficult to tell

1067-1071 JTza

45-100 .010

305-315 @ .126

400-415 @ .039

500-513 @ .021

516-520 .043

530-535 @ .040

705-715 .025

735-745 @ .052

775-785 @ +.20

805-820 @ .073

855-860 .026

880-892 @ .151

927-932 .026

952-962 .028

1047-1052 .012

1062-1067 .016

1170
940

RL-197 N. 1109

2204543

482266

0-565 Reucirc.

565-598 Ta

598-1061 Tbs?

1061-1070 SRF

1070-1109 JTza.

N. Dor
Not plot

0-15 .035

65-70 .020

120-125 .020

280-285 .085

570-585 @ .018

595-608 @ .022

630-645 @ .024

650-695 NA

706-705@ .023

845-875 @ .040

900-905 .012

935-945 .012

985-990 .010

1035-1040 . 040

1055-1090 .022

RL-94 1199

-66 S65E

2204457

482195

0-465 Reucirc.

465-~~526~~ 605 Ta

605-783 Tbs

783-911 Ta

911-948 Tbs

948-955 poss fault

955-1167 Td?

1167-1199 JTza

35-46 @.014

100-115 @ .013

450-455 .054

605-610 .014

635-640 .013

670-675 .019

695-706 .012

845-855 .030

890-903 .012

915-925 .033

930-965 @ 0.05 ±

995-1010 .042

1020-1025 .022

1045-1065 @ .050 ±

1075-1080 .023

1140-1145 @.075

Target II

✓ RB94-08 TD ~~205~~ 405 -60 all Td? poor log N.A

✓ RB94-07 TD 405 -60 all Td? " "

Charlie remembers dead. ...

✓ RB94-04 hit Rosebud Shear @ 300 vert. hole

05 on HW of Rosebud Sh.

RL98C -64 S56E 1061 TD

0-465 rev circ.

465-570 Ta

570-756 Tbs

756-902 Ta

902-943 Tbs

943-960 fault

960-1035 Td

1035- JTra.

N DR
Not Plot

270-275 @ .160

920-925 .014

930-945 .027

955-960 .010

vest dead.

27
3 82
82

RL-99 S55E -60 1242 TD

0-465 RC

465-496 Tbs

496-674 Ta

674-892 fault

892-1205 fine grained tuff

1205 JTra

Epithermal Zoning
Jourbeach Expl.
October ±
*

235-240 .037

320-330 .056

395-400 .016

512-517 .024

685-691 NA

892-902 .016

911-947 .017

965-989 .024

996-1042 .017

1032-1062 .027

1107-1113 .013

✓ RL-70 S55E -68 1012

cond. top.

0-917 Tbs? difficult log

917-931 fault

931 → Td

215-235 .018

340-345 .012

350-353 .014

516-521 .011

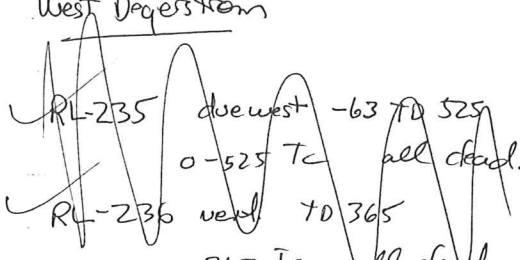
580-585 .019

635-660 .021

685-741 .025

855-865 .053

West Degasstram



RL-235 due west -63 TD 525
0-525 Tc all dead.
RL-236 vert TD 365
0-365 Tc all dead.

N. Dozer.

RL-100 S55E -60 TD 1168.5

0-381 reverse circ.
381-395 Tbs
395-406 Ta
406-413 Tbs
413-421 Ta
421-593 Tbs
593-682 Ta
682-733 Ta?
733-758 Tbs
758-993 Ta?
993-1027 flt zone?
1027-1120 Td?
1120-1168.5 J Fza.

350-355 @ .026
416-572 NA
861-866 @ .042
~~887-892 @ .137~~
887-916 @ .072
930-1027 @ ±0.15
1072-1087 @ .033
Not dead.

RL-101 S55E -60 1123TD

0-44 Rev. circ.
44-351 Tbs
351-420 Ta
420-464 Tbs
464-473 Ta
473-570 Tbs
570-1008 Ta (?)
1008-1018 fault
1018- J Fza

0-411 N.A
426-567 NA
577-597 .017
612-617 @ .044
662-667 @ .012
687-692 @ .125
732.6-735.8 @ .093
762-777 @ .091
807-813 @ .010
847-887.8 NA
977-982 @ .023
997-1063.8 @ ±0.05

OS-3 vert 500' ox ±155
0-500 Tcff. unox
all dead → looks like totally unmineralized.

OS-4 vert 340
0-340 volc. pass thru all dead → looks unmineralized.

no log for OS-5

N. Dorsey Hill
Km-5 0-400 Tc dead.
Km-6 0-30 Qal 0-280 Tc? 280-400 Tbs? dead.
assays as shown. Km-4 0-80 Tc 80-245 Bud 245-365 fGT 365-470 Bud 470-600 fGT
540E-50 Km-8 0-125 Tc 125-465 Bud 465-600 FGT assays as shown.
Km-10 0-60 Tc 60-150 Bud 150-246 Tbs 246-380 fGT assays as shown.

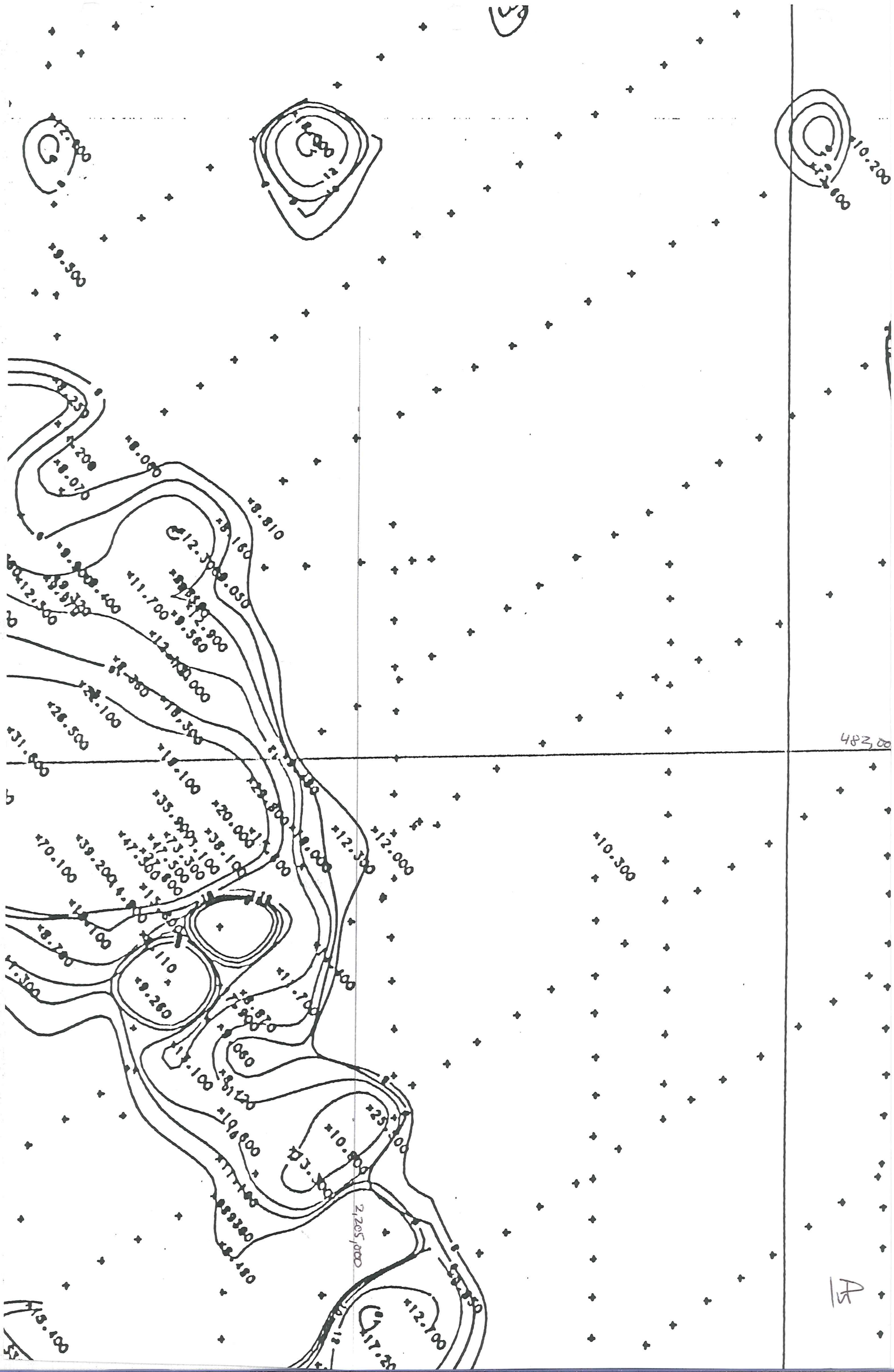
E Dreamland
N35W-70 RB-3 TD460 0-460 FGT all dead.

White Alps
RB-1 TD300? 150-300 Bud brx. all dead.

Dreamland
RB-5 TD425 0-75 tuff w/alt. plag phenos 0-220 very anom throughout
ox to 60'± 75-425 Tc? then drops off to dead.
RB-4 TD500 0-235 Tc
235-260 anom 0.2-0.6 Au possible?
260-380 Tc?
380-500 tuff intrusive — dead.
0-125 ox
assays as shown.

4

RB-6 TD400 0-365 Badger all dead.
365-400 tuff intr.? (ox)
RB-8 0-145 Badger? 145-300 tuff intr? (ox) all dead.
RB-2 TD660 0-30 Tc? 30-150 intr tuff? 150-250 volcanic sed
250-310 intr tuff? 310-346 Tc? 340-> difficult to understand log
mostly dead. 0-35 ±100 ppb Au.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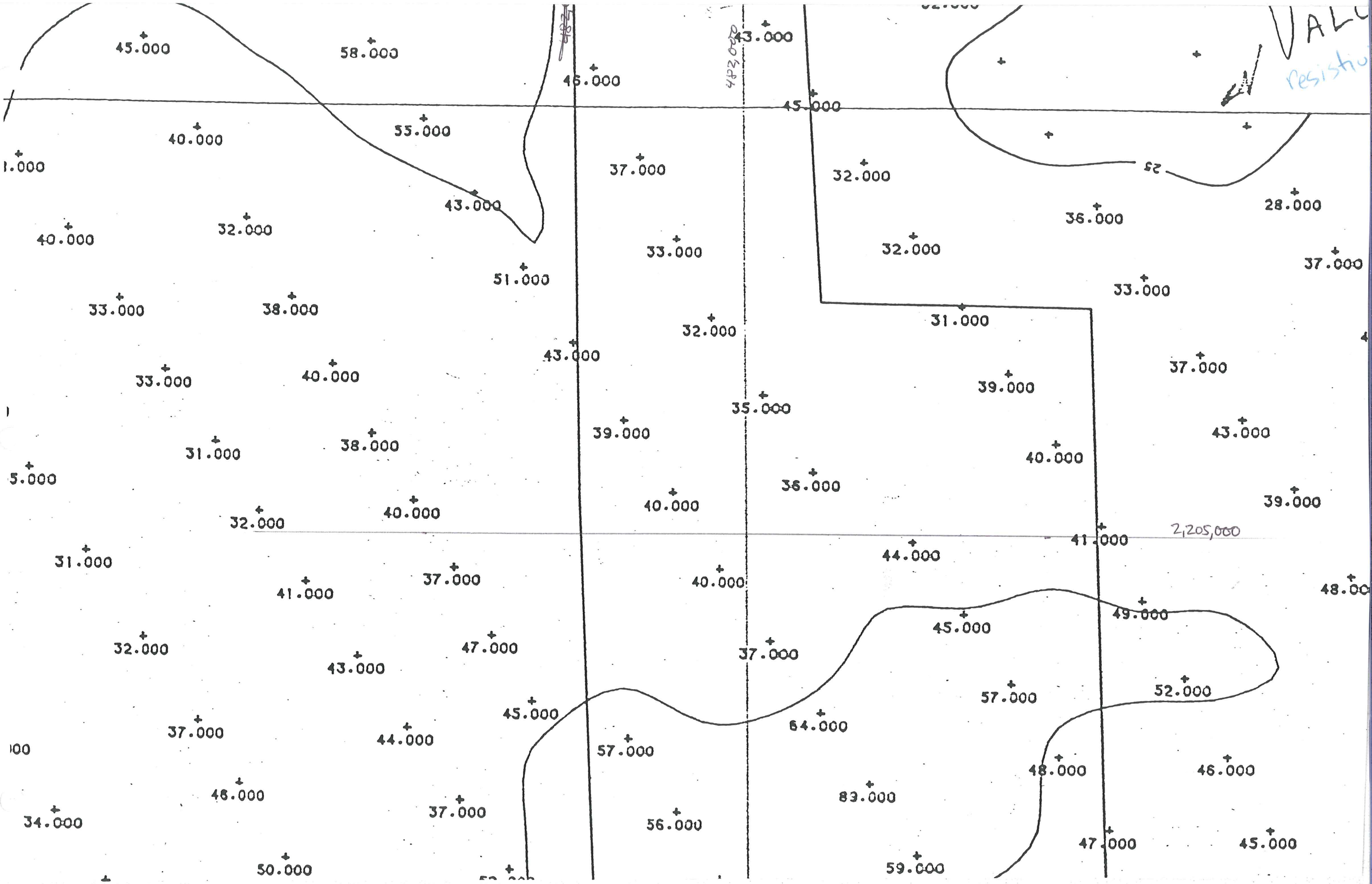
2,205,000


45.000
58.000
46.000
43.000
45.000
55.000
40.000
1.000
37.000
32.000
43.000
40.000
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33.000
51.000
33.000
38.000
32.000
43.000
33.000
40.000
39.000
35.000
31.000
38.000
39.000
43.000
5.000
40.000
36.000
39.000
32.000
40.000
41.000
44.000
31.000
37.000
41.000
40.000
48.000
49.000
45.000
32.000
47.000
37.000
43.000
52.000
57.000
45.000
64.000
37.000
44.000
57.000
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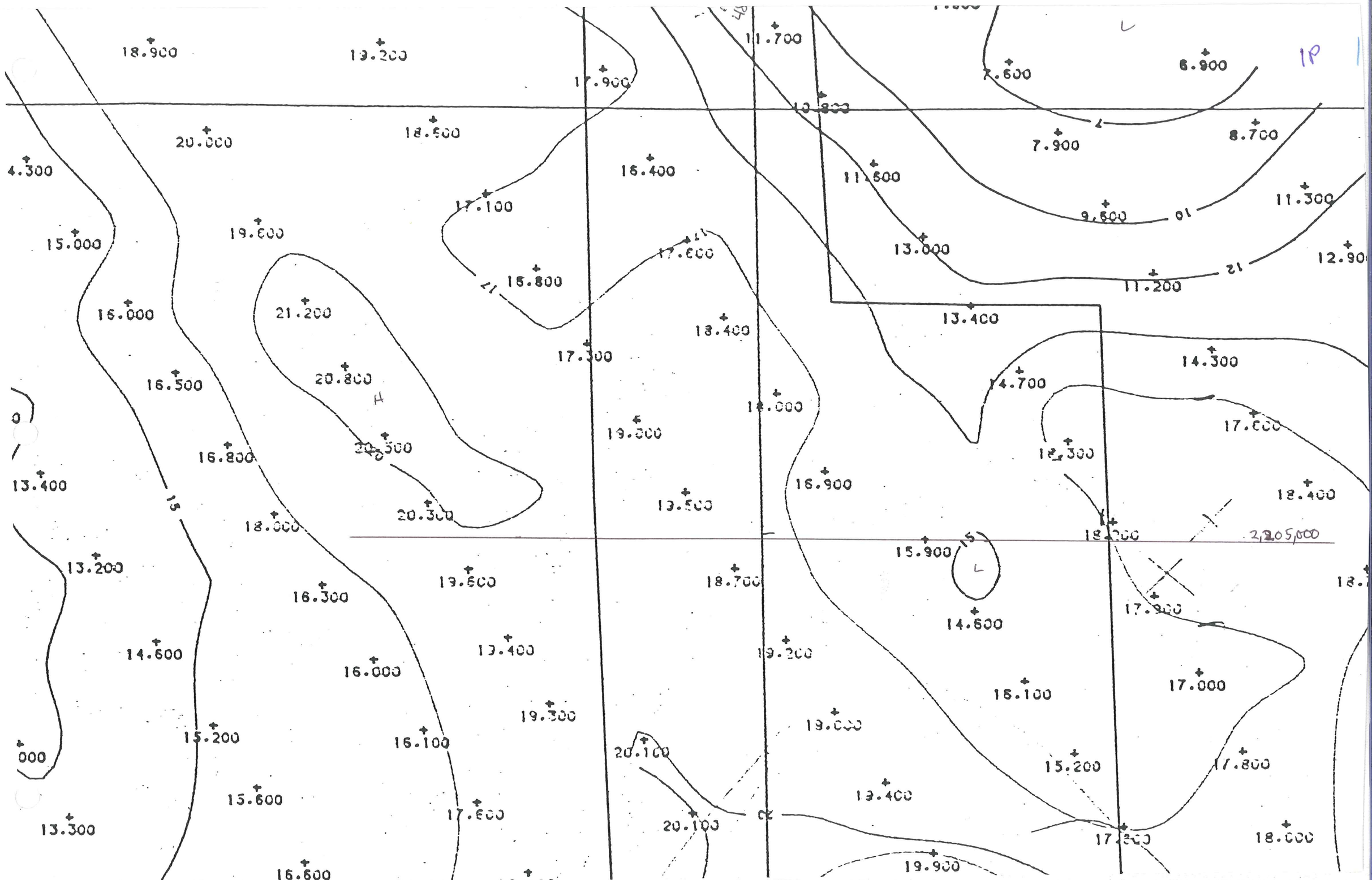
56.000
47.000
45.000
50.000
59.000
2,205,000


18.900
19.200
17.900
11.700
6.900
7.600
10.800
20.000
18.600
7.900
8.700
4.300
16.400
11.600
17.100
9.800
11.300
15.000
19.600
13.000
12.900
17.600
16.800
11.200
16.000
21.200
13.400
18.400
17.300
20.800
14.300
14.700
16.500
14.000
19.000
17.600
16.800
20.300
18.300
16.900
18.400
20.300
18.000
15.900
14.600
13.200
19.600
16.300
17.900
14.600
13.400
16.000
19.300
16.100
15.200
19.200
17.000
16.100
19.000
15.600
20.100
15.200
17.800
17.600
13.400
13.300
20.100
17.300
18.000
16.600
19.900

Au

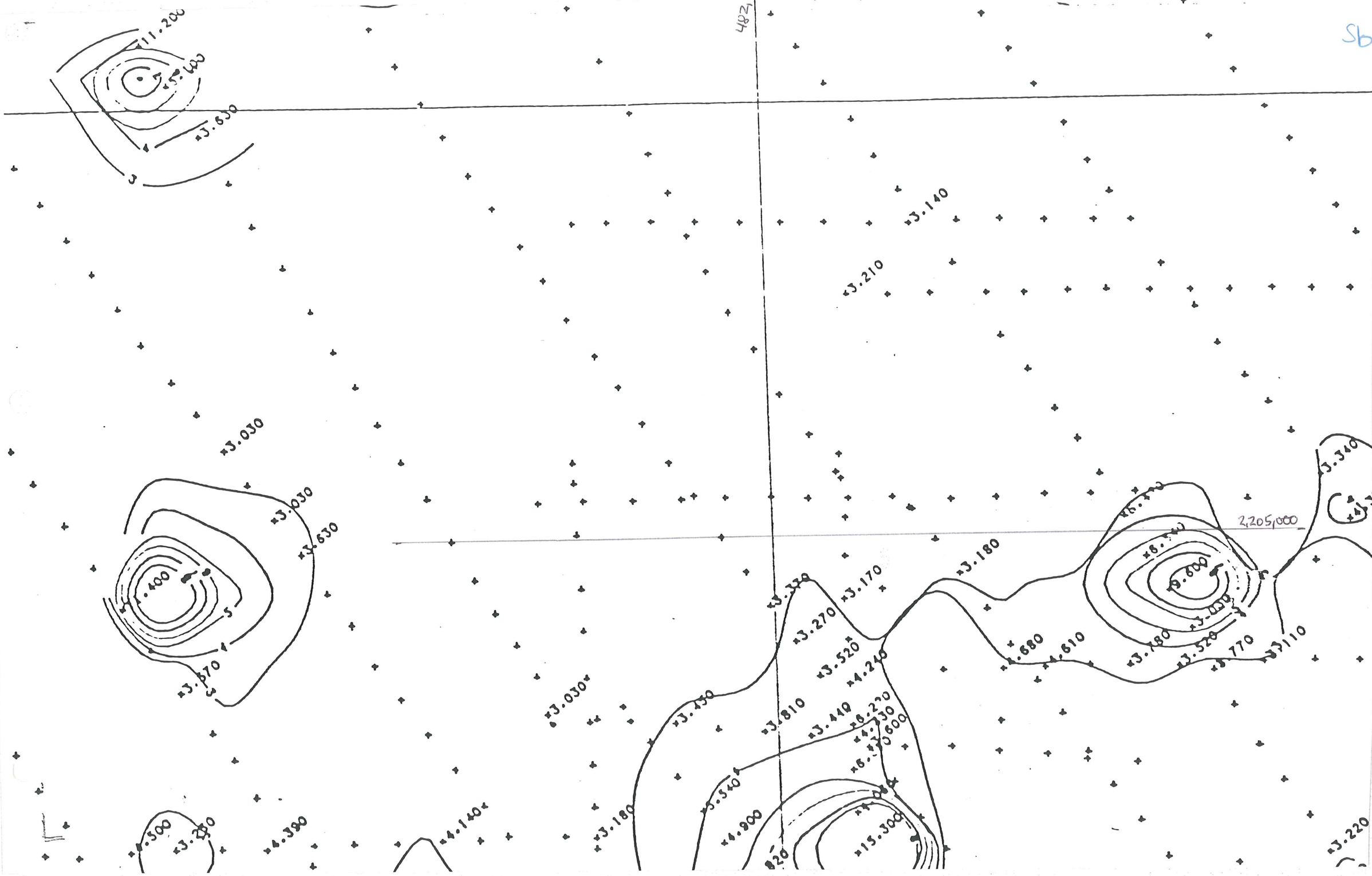
482,000

2,205,000

482,000

2,205,000

Se


Sb
4821
11.200
3.630
3.140
3.210
3.030
3.030
3.630
400
3.670
3.030
3.500
3.380
4.380
4.140
3.180
3.350
3.270
3.170
3.180
3.520
4.240
3.810
3.440
3.540
4.900
15.300
820
2,205,000
6.600
3.180
3.520
3.110
3.220

TARGET IV

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC: —
HECLA: SOUTH
BRADY: TArget IV

GENERAL DESCRIPTION

mine sequence of south Ridge w/ anomalous geochem

GEOLOGY

Ta + Tbs, in fault wedge against Tal.

GEOCHEMISTRY

Three strong +100ppb Au soil anomalies. As low as scattered
Se low. No Sb data.

GEOPHYSICS

Weak IP anomaly to north of geoch. Resistivity flat.

DRILLING

4 holes Rh.-42,43,44,45 - located ok. Tbs, unit essentially tested with negative results.

REMAINING POTENTIAL

Unknown. curious how such high Au(soil) has no obvious source.

need map

Target IV — Hecla South Target
Loc no target name.

Resistivity line over target → no response.
IP weak response offset to north where drilling.

RL-42 TD 450 vert. 0-45 Ta ∅

best As 50-150ppm. ↓ <10 rest

45-175	Tbs2	.001	called Dozer Tuff
175-210	Ta	∅	called Dozer Tuff marker. SGT Green tuff
210-283	Tbs1	∅	called Dozer Tuff
283-300	Tbs1	∅	called Bleached Dozer. (green)
300-450	Tbs1	∅	called Dozer. (green)

RL-43 TD 310 U76E -60

As <5-10all

0-95	Ta (?)	∅	called Bud bxa
95-310	Tbs2 (?)	∅	Dozer green.

RL-44 TD 430 S43W -60

20-85 As 50-150ppm. .01-.011 Au.

0-115	Ta ?	∅ .005-.020	called Dozer.
115-390	Tbs1	∅	Lt green. called Dozer
390-430	Tbs1	∅	green ~~purple~~. Dozers.

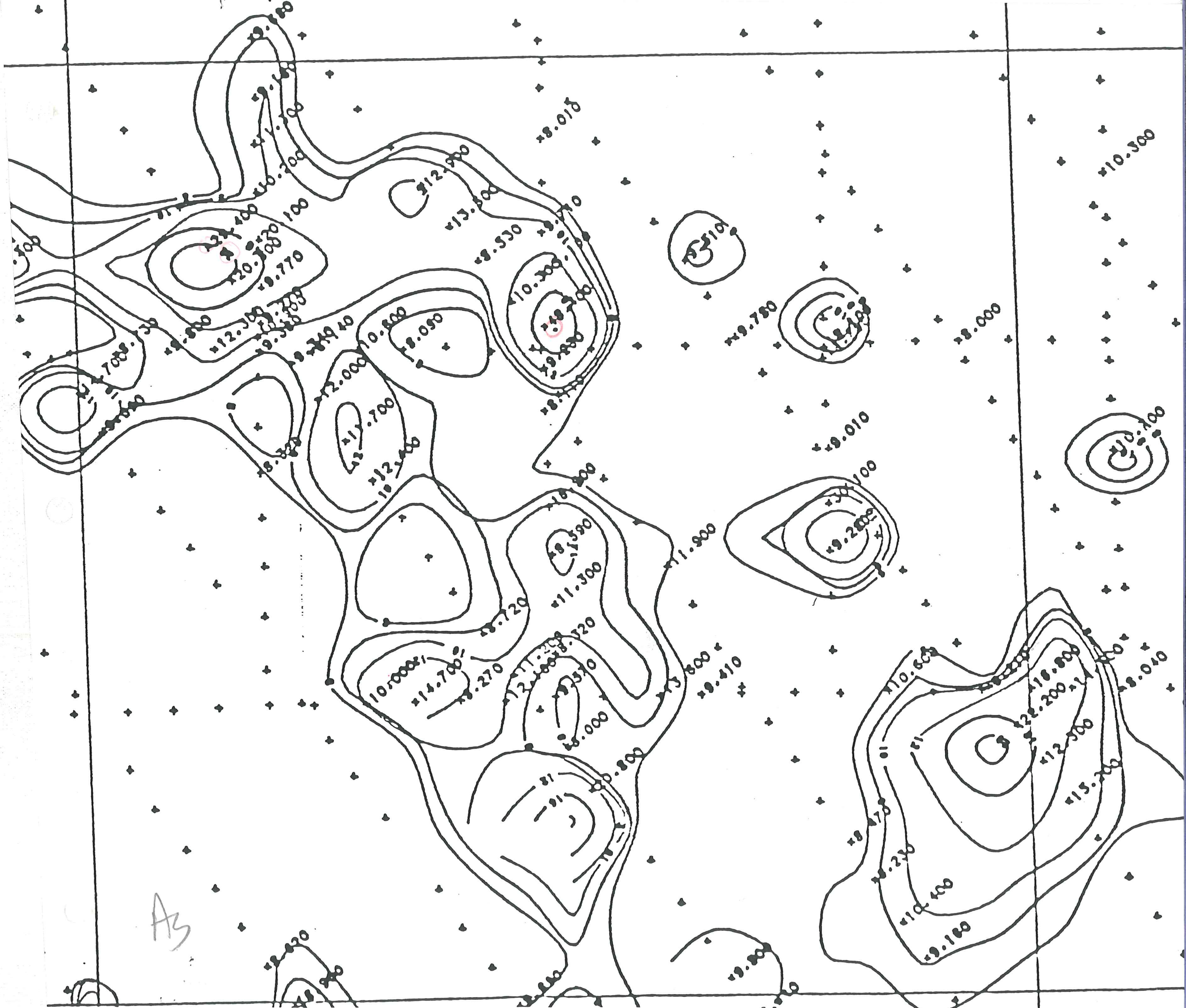
RL-45 TD 490 S46W -61

0-490	Td.	∅	fine grained tuff.

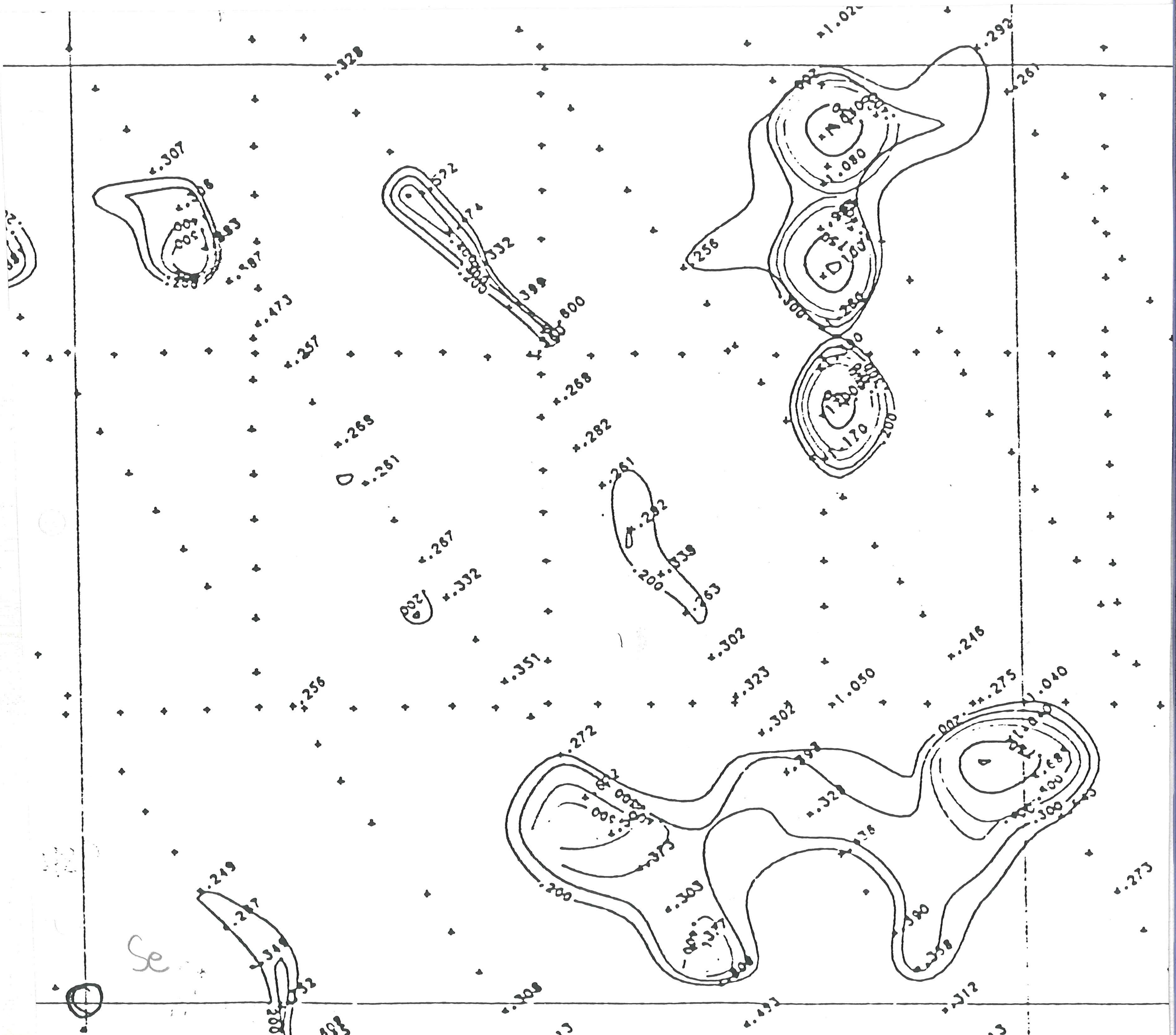
0-20 As 50ppm ↓ rest <10

soil geochemistry for Au focused on NW trending fault ± (50ppb) scattered to S + E along other features. As. weak (10-20ppm) Sb dead (<3ppm.) Se dead <.2ppm.

Interesting values in RL-44 but no place to take it → no good area.



10.300
8.000
9.010
11.900
8.530
13.500
12.000
11.300
10.800
14.700
12.300
15.200
10.400
9.180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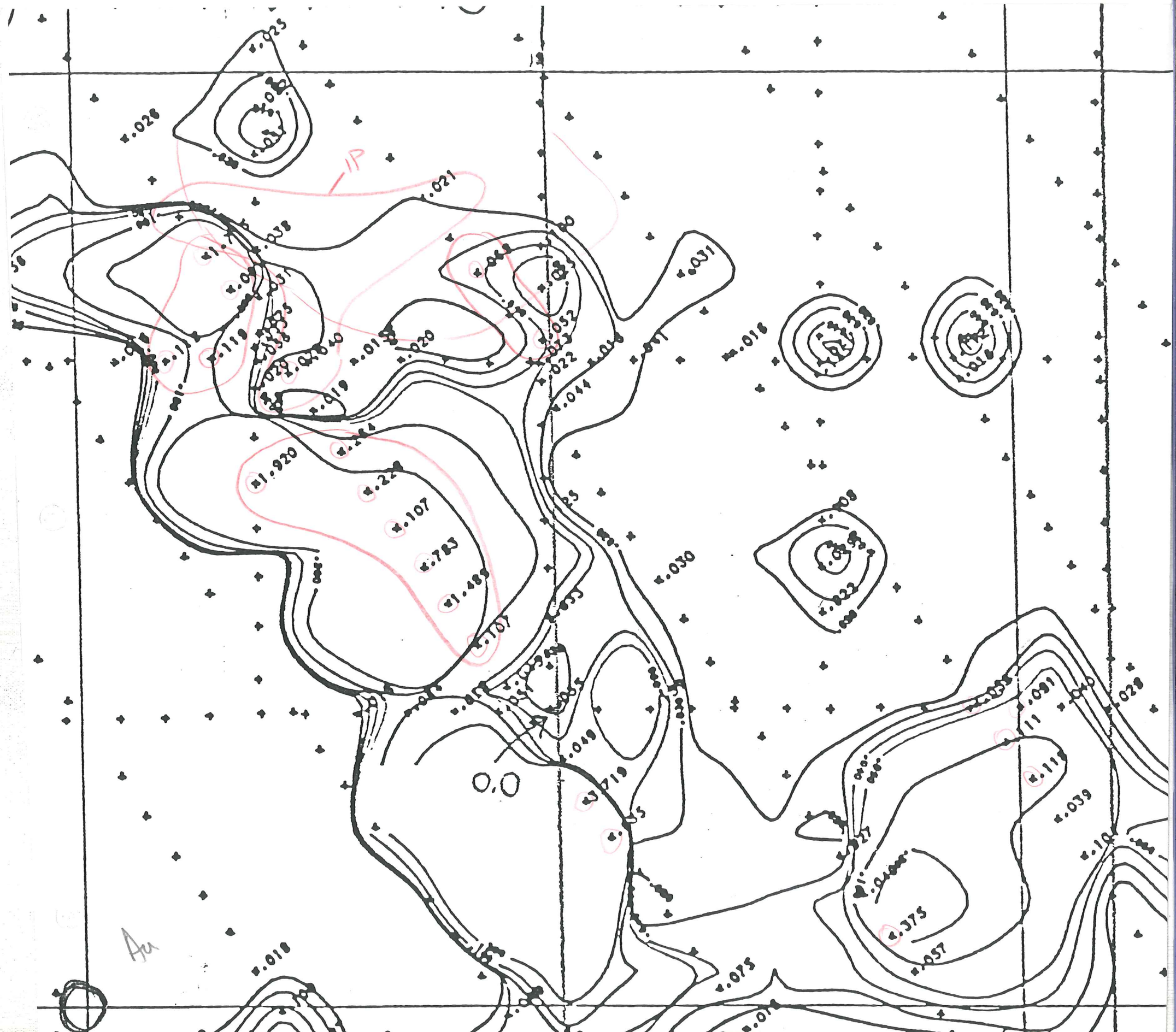
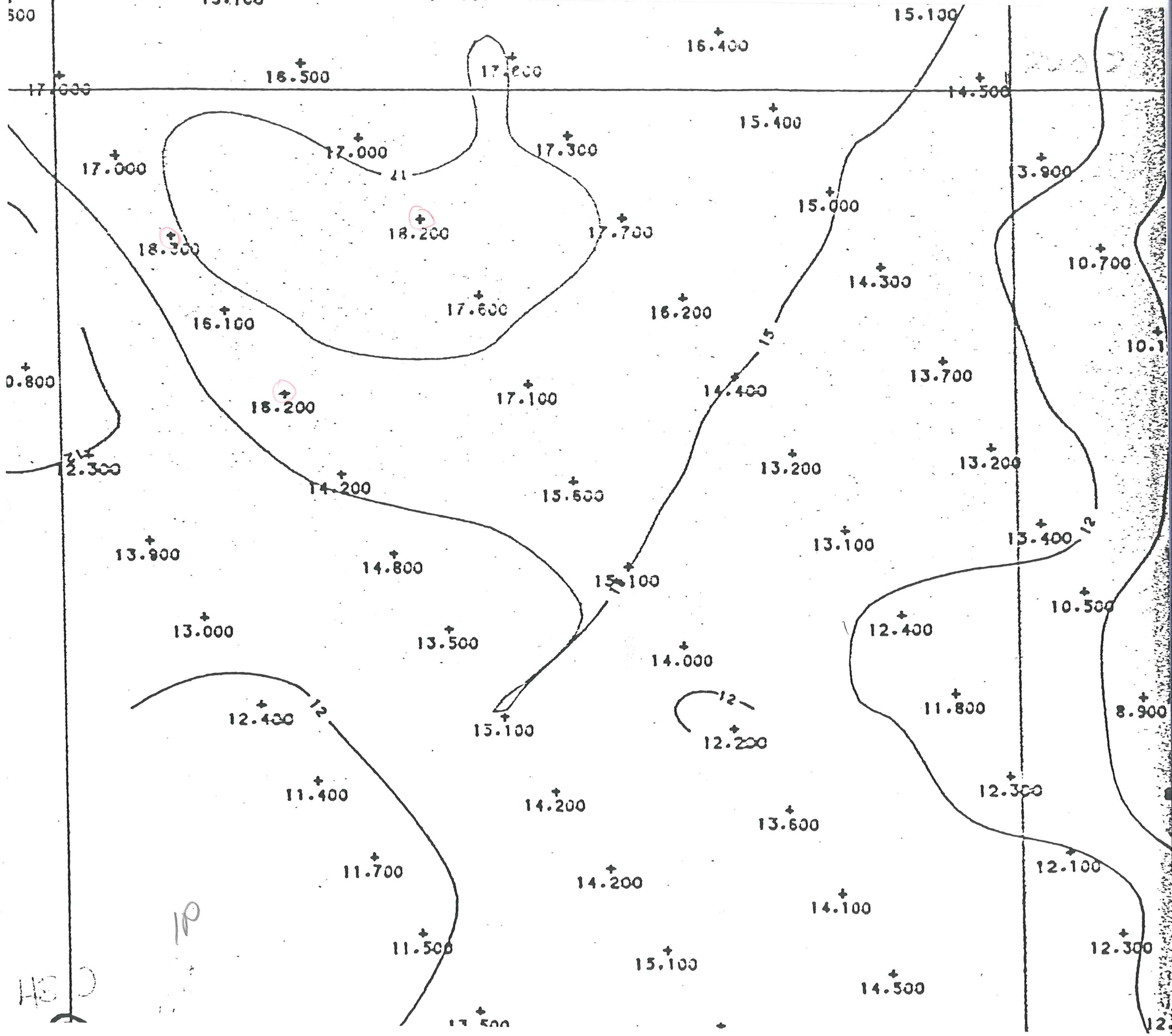
.323
1.050
.275
.040
.256
.302
.272
.249
.273
.308
.312
Se


IP
0,0
Au


500
15.100
16.400
16.500
17.000
14.500
15.400
17.000
17.000
17.300
3.900
15.000
18.200
17.700
18.300
10.700
14.300
17.600
16.200
16.100
15
0.800
13.700
17.100
14.400
18.200
2.300
14.200
15.600
13.200
13.200
13.900
14.800
15.100
13.100
13.400
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13.000
13.500
14.000
12.400
12
11.800
8.900
15.100
12.200
12.400
12
11.400
14.200
13.600
12.300
11.700
14.200
12.100
14.100
11.500
15.100
12.300
14.500

OSCAR

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC :
HECLA : Oscar
BRADY : TARGET I

GENERAL DESCRIPTION

Ts w/ hot springs mineralization.

GEOLOGY

Silicified fanglomerate cap, Ts underlies. Basin/Range fault to east. One hole hit JTKa at depth. Poor logs can't tell Tv unit below Ts

GEOCHEMISTRY

Strong geochem. on Oscar Hill → weak off.

GEOPHYSICS

High IP along range fault to north.

DRILLING

+8 holes on Oscar Hill show intervals of 0.01-0.02 Au. No higher grade. May want to ∫ one hole to see if grade increases. Possible test to NE to see if extends off hill but geochem not promising.

REMAINING POTENTIAL

Looks drill tested. Look for subcropping fault that may have focused mineralization – IP.? (no)

Target I = Oscar Target.

everyone agrees on name for area.

- past drilling needs to be compiled + summed up. w/ x-sections.
- best area has been drilled that outcrops with negative results.
- on geoph data seen by Inc.

on resistivity. main hill high resistivity shallow (+100 ohm-meters) and deep (+63 ohm meters)

deep Ls → while area in valley shows moderate resistivity shallow (40 ohm-meters) and low deep (less than 30 ohm meters)

shallow Tc? →

on IP. → entire area from main hill north to valley shows high shallow (+10 m rads) and deep (+20 m rads)

high sulfids?

* need geophysists to check data

surface geoch sparse but showing anomaly only over main hill and dead towards the north.

Rosebud.

USMX 88-89

OS-6 ✓ TD 255

0 – 10 Jasp.

10 – 35 calcite

35 – 140 acid leach, clay (ox)

140 – 255 TD unox lake seds

0-80 .006-.007 : 80-105 .010 : 105-145, .006-.007 : 145-255 <.003

OS-7 ✓ TD 275

0-3 Qal

3-15 argillic alt LS?

15-140 Ab feox + Alunite + silic volc. local.

40-225 silic sinter?

225-255 Volc w/ pyrite.

255-275 Volc? argillized

0-20 .006 : 20-50 .035 : 50-115 .006-.008 ; 115-230 .004 230-275 .001

OS-8 ✓ TD 145 0-95 ox no desc. poss LS?

95-145 unox

0-65 .005 : 65-75 .011 : 75-145 .001

OS-9 ✓ TD 225

0 – 15 Ab feox no description

15 – 50 Ab ~~silic~~ clay " "

50 – 85 Mod silic " "

85 – 100 acid leached?

100 – 135 Ab clay

135 – 180 ? ox

180 – 225 unox

0-5 .003 : 5-55 .011 : 55-120 .005-.006 120-175 .004 175- .001-.002

OS-10 ✓ TD 115 0 – 115 wk clay no desc.

0-5 .008 : 5-115 .001

OS-11 ✓ TD 135 0 – 135 wk clay no desc.

0-45 .003-.005 45-135 .001

OS-12 ✓ TD 165 0-80 clay + calcite (weak)
80-165 unox

0-30 .006 : 30-40 .011 : 40-90 .004-.006 90-165 .001

Lav

0-13 TD 245 0-65 Tv
65-95 fault zone
95-200 Tv
200-245 JTRa?

100 → unox

difficult to read log.

0-65 .001-.004 : 65-130 .010 : 130-145 .007 145-175 .010 175-200 .004 200-245 .001

0-14 TD 565 0-205 Tv 75 → unox.
205-500 pebble congl
500-565 Tv

0-125 .001 : 125-140 .009 ; 140-185 .002 : 185-275 .005-.006 : 275-310 .003 310-415 .001
415-430 .004 : 430-500 .020 : 500-530 .006 530-565 .001-.003

0-15 TD 500 0-460 Tv 60 → unox
460-500 JTRa

0-405 .001-.004 405-445 .010 445-460 .005 460-500 <.001

0-16 TD 475 0-95 Tconglomerate ox
95-475 " " unox

0-300 <.001 300-330 .006 330-360 .002 360-390 .005 390-475 .002

0-17 TD 500 0-55 Qal 220-?
55-220 Green Volcanic?

0-430 .001 or less 430-440 .018 440-475 .002 475-500 .006

0-18 TD 500 0-125 Tconglomerate (ox)
125-500 Tcongl (unox)

0-500 ✓

0-19 TD 635 0-85 ox
610-635 JTRa

anomalous assays

0-20

0-21

0-22

0-23

RDH St. Joe - 1982

RDH-1	0-50 @ 0.01 opt. Au		1.0 opt Ag,	±100ppm As.	±20ppm Sb	2ppm Hg
	100-160 @ 0.01		0.2	150	15	1
500 ~~390~~ TD - no geologic log.						
RDH-2	125-150	0.01	0.15	100	100	1.5
	190-225	0.01	<0.1	80	35	1.5
480 ~~260~~ TD - no geologic log						

RDH-3 no gold

420 TD - no geologic log

RDH-4 no gold.

340 TD

RDH-5 no gold.

500+ TD

OS-3 vert 500'

0-500 Tc ff.

ox ±155
unox

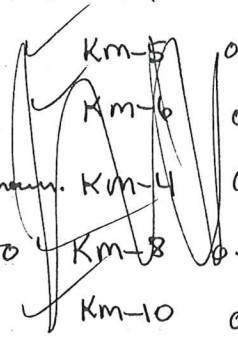
all dead → looks like totally unmineralized.

OS-4 vert 340

0-340 volc. poss thy all dead → looks unmineralized.

no log for OS-5

N. Dozer Hill



Km-5 0-400 Tc dead.

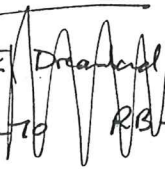
Km-6 0-30 Qal 0-280 Tc? 280-400 Tbs? dead.

assays as shown. Km-4 0-80 Tc 80-245 Bud 245-365 FGT 365-470 Bud 470-600 FGT

540E-50 Km-8 0-125 Tc 125-465 Bud 465-600 FGT assays as shown.

Km-10 0-60 Tc 60-150 Bud 150-240 Tbs 240-380 FGT assays as shown.

E. Dreamland

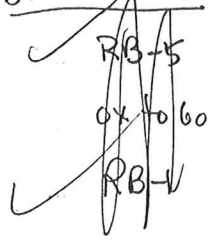


TD460 0-460 FGT all dead.

White Alps

TD300? 150-300 Bud bxa. all dead.

Dreamland



RB-5 TD425 0-75 tuff w/alt. plag phenos 0-220 very anom throughout then drops off to dead.

75-425 Tc?

RB-4 TD500 0-235 Tc

235-260 anom 0.2-0.6 Au possidike?

260-380 Tc?

380-500 tuff intrusive — dead.

0-125 ox assays as shown.

400-465 Intrusive tuff ↓ 400-465 silic ↓

90-95 @ .016/.2 0-385 all dead 385 → TD no assays.

Oscar

St. Joe logs. 10/82

OS-1 500 vert.

0-70 tuff

70-140 LS.

140-290 tuff

290-500 gray green tuff

ox ±280
unox

ox ±120
unox

0-50 .010 Au/1.2 Ag/ 100ppm As 20 Sb/2 Hg

100-160 .010 Au/0.2 Ag/130 As/155b/1 Hg

rest dead

210-260 <.001/.1 Ag/80/10/0.2

Tos or Tc?

300-350 <.001/<0.05/15/<5/0.01

400-450 <.001 <.05/ 15/<5/0.03

OS-2 TD 480 vert.

0-480 Tuff

94C
8C

rest dead.

Hg increasing gradually w/ depth to 2.0 ppm.

30-40 .010/–/85/29/0.4

50-55 .010/–/55/60/0.7

85-95 .010/0.2/100/160/1.7

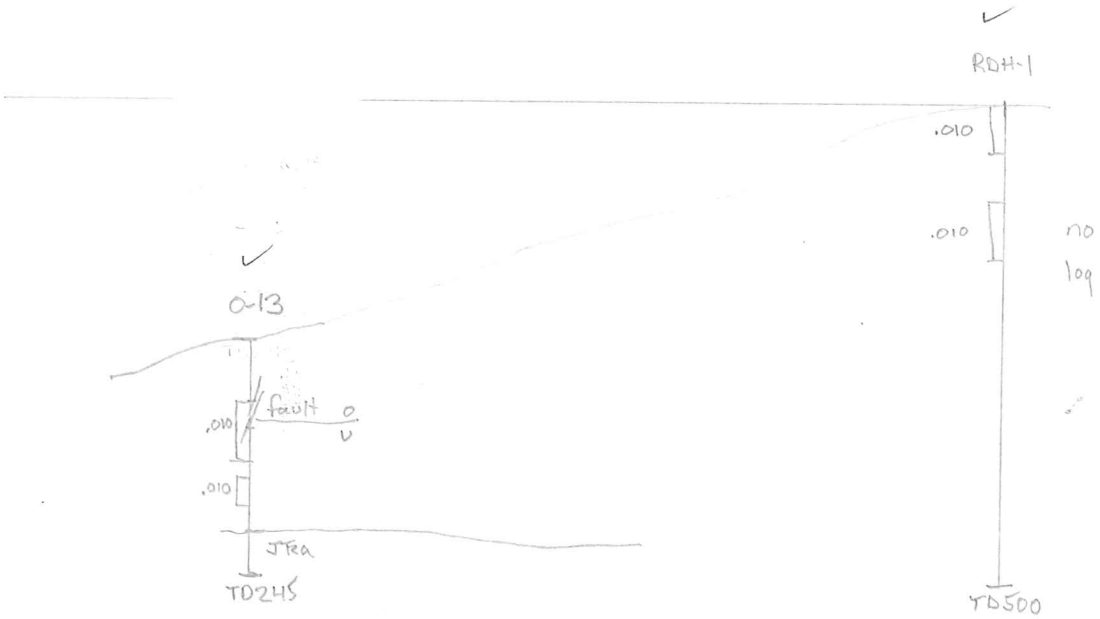
125-150 .010/.15/120/120/1.2

190-225 .010/0.1/90/40/1.8

325-330 .010/–/80/20/1.3

390-395 .010/.4/130/18/2.2


0-15
0
V
.010
JTag
TD500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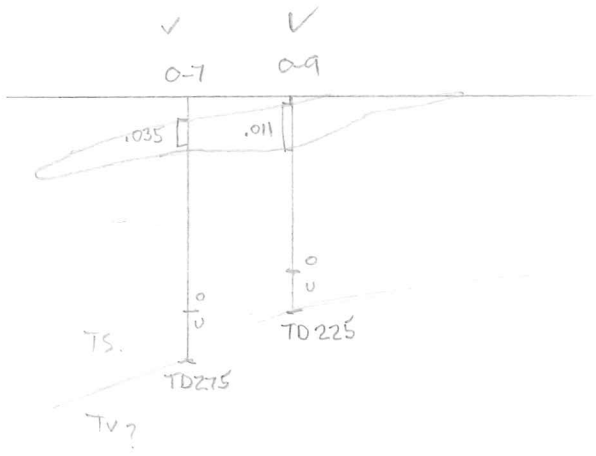
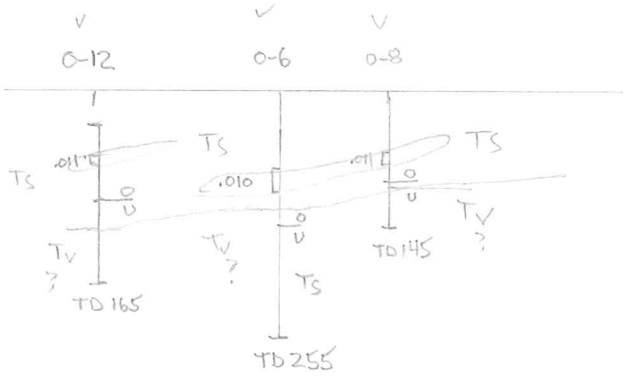
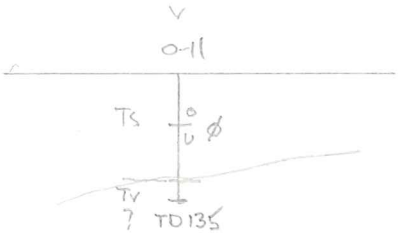
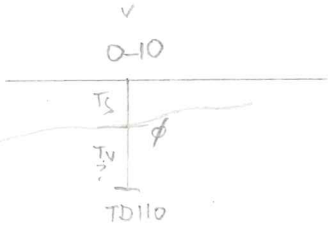
no
log
0-13
fault
0
V
.010
.010
JTag
TD245
TD500


0-7
0-9
.035
.011
U
U
TS.
TD225
TD275
TV ?


0-12
0-6
0-8
TS
TS
.011
.010
.011
U
U
U
TV
?
TV
?
TV
?
TD145
TD165
TS
TD255


0-11
TS
U
TV
?
TD135


0-10
TS
TV
?
TD110

GATOR

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC: Gator
HECLA: Gator
BRADY: Target VIII

GENERAL DESCRIPTION

NE Gooch anomaly

GEOLOGY

Tc over Tbf. No Tbs zones.

GEOCHEMISTRY

Weak Au/Ag → essentially no Sb/Se data.

GEOPHYSICS

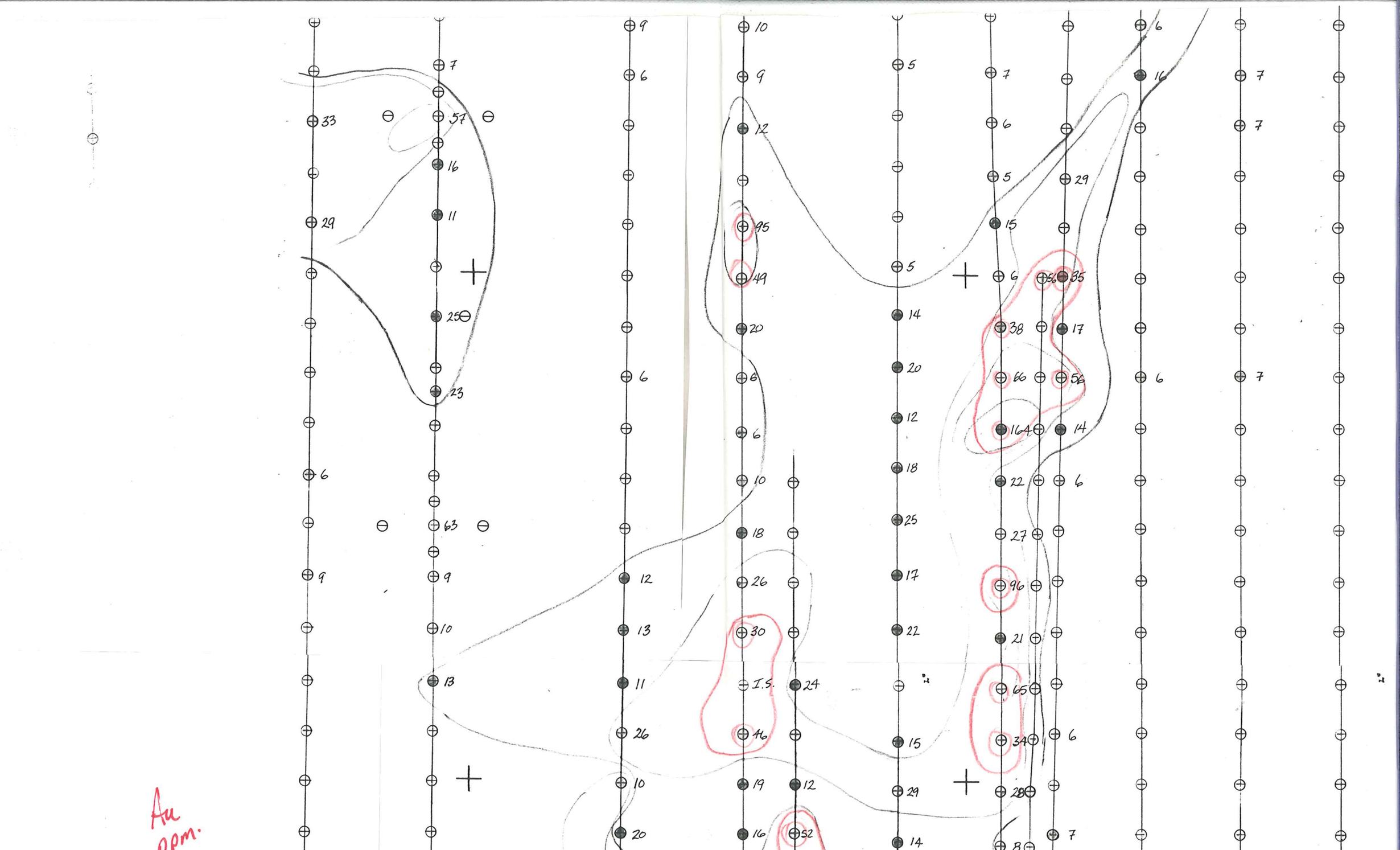
none.

DRILLING

none.

REMAINING POTENTIAL

Probable NE trending fracture zone. No favorable host only moderate anomalous geochem.


Au
ppm.

5.0 + G379
8.0 + G378
12.0 + G377
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10.0 + G375
8.0 + G357
10.0 + G356
10.0 + G355
9.0 + G354
7.0 + G358
6.0 + G359
11.0 + G360
3.0 + G361
5.0 + G362

9.0 + G335
64.0 + G334
4.0 + G333
5.0 + G332
7.0 + G331
11.0 + G330
5.0 + G329
12.0 + G328
8.0 + G327
8.0 + G326
9.0 + G325
8.0 + G324
6.0 + G323
8.0 + G322

6.0 + G416
5.0 + G417
5.0 + G418
4.0 + G419
3.0 + G420
4.0 + G421
2.0 + G422
4.0 + G423
6.0 + G424
6.0 + G425
2.0 + G426
2.0 + G427
7.0 + G428
7.0 + G429

11.0 + G284
4.0 + G285
9.0 + G286
9.0 + G287
20.0 + G288
8.0 + G289
7.0 + G290
6.0 + G291
8.0 + G292
12.0 + G293
15.0 + G294
5.0 + G295
11.0 + G296
11.0 + G297

2.0 + G247
5.0 + G246
6.0 + G245
2.0 + G244
5.0 + G243
4.0 + G242
4.0 + G241
6.0 + G240
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10.0 + G235
11.0 + G234

7.0 + G196
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4.0 + G198
8.0 + G199
6.0 + G200
6.0 + G201
23.0 + G202
22.0 + G203
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18.0 + G208
24.0 + G209

8.0 + G159
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13.0 + G155
21.0 + G154
30.0 + G153
30.0 + G152
22.0 + G151
8.0 + G150
7.0 + G149
7.0 + G148
7.0 + G147
7.0 + G146

10.0 + G108
16.0 + G109
10.0 + G110
13.0 + G111
9.0 + G112
9.0 + G113
10.0 + G114
10.0 + G115
7.0 + G116
8.0 + G117
10.0 + G118
7.6 + G119
8.0 + G120
11.0 + G121

8.0 + G020
11.0 + G021
9.0 + G022
7.0 + G023
10.0 + G024
11.0 + G025
6.0 + G026
6.0 + G027
8.0 + G028
8.0 + G029
5.0 + G030
9.0 + G031
7.0 + G032
8.0 + G033

6.0 + G064
4.0 + G065
4.0 + G066
9.0 + G067
7.0 + G068
6.0 + G069
8.0 + G070
8.0 + G071
10.0 + G072
7.0 + G073
7.0 + G074
6.0 + G075
8.0 + G076
7.0 + G077

8.0 + G363
10.0 + G364
5.0 + G365
9.0 + G366
6.0 + G367
2.0 + G368
6.0 + G369
5.0 + G370

9.0 + G321
9.0 + G320
9.0 + G319
5.0 + G318
6.0 + G317
5.0 + G316
2.0 + G315
5.0 + G314

2.0 + G430
5.0 + G431
5.0 + G432
7.0 + G433
5.0 + G434
5.0 + G435
2.0 + G436
4.0 + G437

17.0 + G298
9.0 + G299
10.0 + G300
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28.0 + G302
7.0 + G303
7.0 + G304
5.0 + G305

11.0 + G233
12.0 + G232
27.0 + G231
19.0 + G230
19.0 + G229
14.0 + G228
4.0 + G227
7.0 + G226

11.0 + G210
11.0 + G211
10.0 + G212
8.0 + G213
10.0 + G214
13.0 + G215
10.0 + G216
11.0 + G217

7.0 + G145
9.0 + G144
11.0 + G143
9.0 + G142
9.0 + G141
7.0 + G140
6.0 + G139
9.0 + G138

8.0 + G122
9.0 + G123
7.0 + G124
7.0 + G125
10.0 + G126
8.0 + G127
6.0 + G128
6.0 + G129

5.0 + G034
7.0 + G035
6.0 + G036
7.0 + G037
8.0 + G038
5.0 + G039
4.0 + G040
5.0 + G041

10.0 + G078
6.0 + G079
8.0 + G080
5.0 + G081
7.0 + G082
7.0 + G083
6.0 + G084
8.0 + G085

As ppm

ROSEBUD PROJECT

TARGET NAME EQUINOX/LAC :
HECLA :
BRADY :

GENERAL DESCRIPTION

GEOLOGY

GEOCHEMISTRY

GEOPHYSICS

DRILLING

REMAINING POTENTIAL