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SAFFORD PROJECT  
PROPERTY PAYMENT SUMMARY  
WITH ILLUSTRATIONS

DECEMBER, 1974

REVISED MAY, 1975

SAFFORD PROJECT  
 ACCUMULATED SUMMARY OF EXPENSES  
 PERIOD OF AUGUST 20, 1971  
 THRU DECEMBER 31, 1974

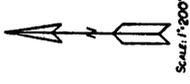
	<u>P.D. AREA "A"</u>	<u>KENNECOTT AREA "B"</u>	<u>S.J. AREA "C"</u>	<u>TOTAL</u>
GEOLOGICAL STUDY	40,000.00	16,000.00	3,099.24	59,099.24
BASE MAP	10,000.00	2,703.48	2,000.00	14,703.48
DRILLING	551,000.00	44,694.67	16,000.00	611,694.67
OFFICE EXPENSE	16,802.12	2,000.00	1,000.00	19,802.12
STOCK PURCHASE	-----	-----	-----	99,750.00
ASSAY	4,710.81	1,500.00	500.00	6,710.81
CONSULTING	7,309.03	2,000.00	1,000.00	10,309.03
LEGAL	<u>40,741.00</u>	<u>500.00</u>	<u>220,000.43</u>	<u>261,241.43</u>
TOTAL	<u>670,562.96</u>	<u>69,398.15</u>	<u>243,599.67</u>	<u>1,083,310.78</u>

## ESSEX PROPOSAL TO CHEVRON

Essex will sell its San Juan Agreement to Chevron for  
\$ \_\_\_\_\_, subject to:

- 1.. The Essex' San Juan Agreement with other owners is subject to PMC's and Scruggs' prior agreements.
2. The Essex' San Juan Agreement would include the 7 3/4% ownership now held by Essex.
3. Essex will have settled litigation with PMC and Scruggs.
4. A lease payment of \$150,000 (less 7 3/4%) is due the owners on February 25, 1976. This would be Chevron's expense.

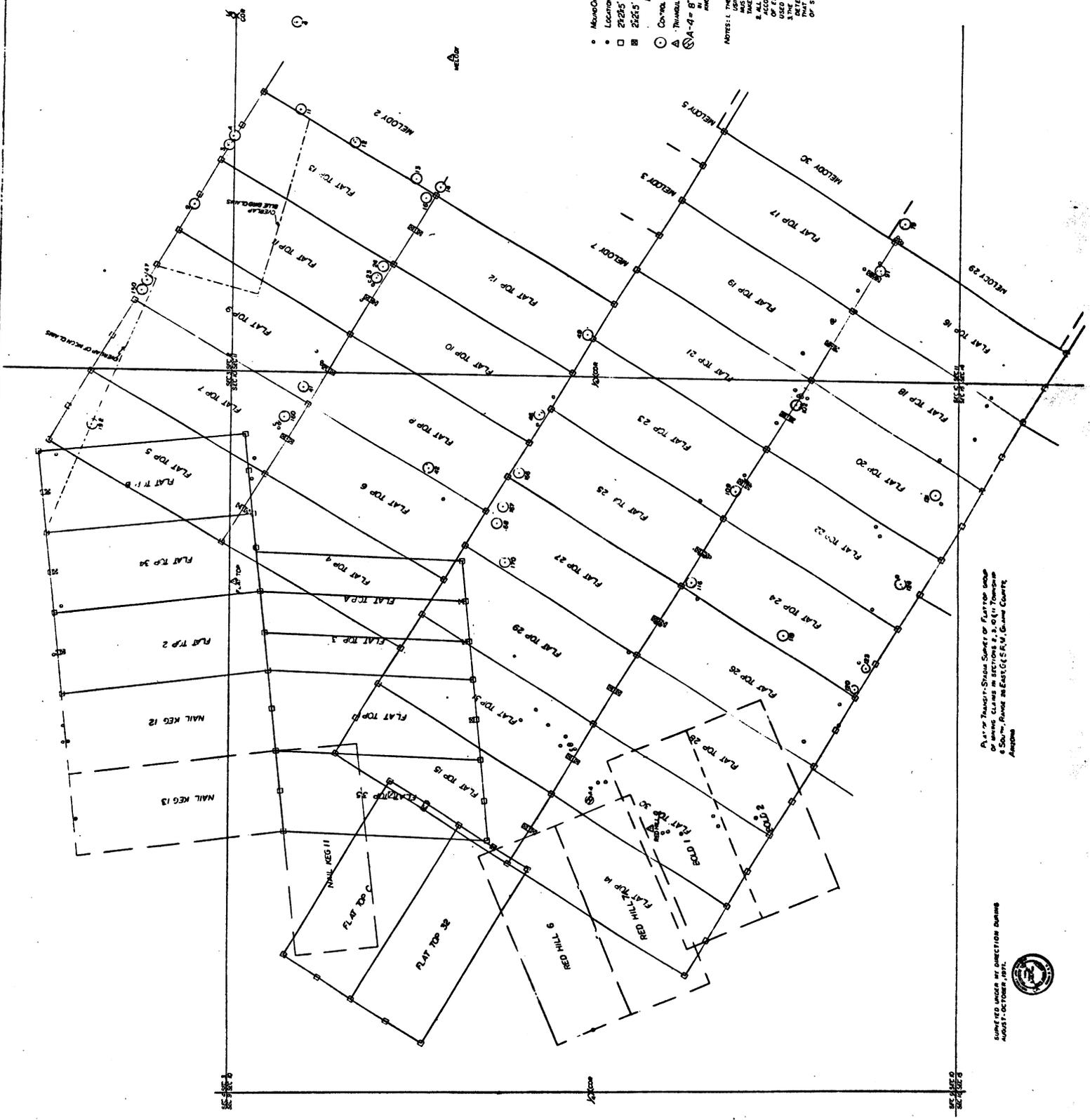
In addition to selling the San Juan Agreement, Essex would give Chevron the option to purchase Essex rights and data to the following Safford properties for \$ \_\_\_\_\_ as depicted on the attached map.



- Move of Stone or Post Hole Found
- Location of Stone Found
- 2125' Post in Mouth of Stone
- 2225' Post in Mouth of Stone
- Center Point - No. Map Lam
- △ Through Stone
- ⊙ A-4" 8" Cast Iron Bolt (specimens of size in hole depth of hole and subject not found)

NOTES: 1. THE SURVEY REPRESENTATION HEREON WAS MADE USING THE TRANSIT-TAPAS METHOD, THE ACCURACY MUST BE CONSIDERED WITH THIS INFORMATION.  
 2. ALL INFORMATION SHOWN ON THIS PLAN AND ACCOMPANYING FIELD NOTES IS THE PROPERTY OF THE UNITED STATES GOVERNMENT AND IS TO BE USED WITHOUT FURTHER PERMISSION OF THE UNITED STATES GOVERNMENT.  
 3. THE LOCATION OF PLATTOPS COULD NOT BE DETERMINED BY THE METHOD OF ADJUSTMENT THAT COULD BE USED IN THIS CASE BECAUSE OF THE PLATTOPS COULD BE FOUND.

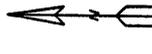
Surveyed at the request of Elmer Thompson, Jr., Tucson Arizona  
 ALGERSON - PENCION SURVEYING ANCHORAGE



PLAT TOP TRANSIT-STATION SURVEY OF PLATTOPS AND STONE CLUES IN SECTIONS 6, 9, 10, 11, TOWNSHIP 6 SOUTH, RANGE 18 EAST, GLENN COUNTY, ARIZONA.

WORKED UNDER THE SURVEYOR'S LICENSE AND REGISTERED AS A SURVEYOR IN ARIZONA, OCTOBER 1911.





SCALE 1"=200'

- Mound Or Stone Or Test Hole Foundation
- Location Of Marker
- 27245' Post Set In Mound Or Stone
- 27245' Post Set In Mound Or Stone With Location Number
- Inside Aluminum Cap Contains Top Of Post
- Control Point - Not Aged Limit
- △ Truss Station
- ⊙ (A-4) 8" Cast Iron Hole (Indications of water in hole depth of water and subject soil)

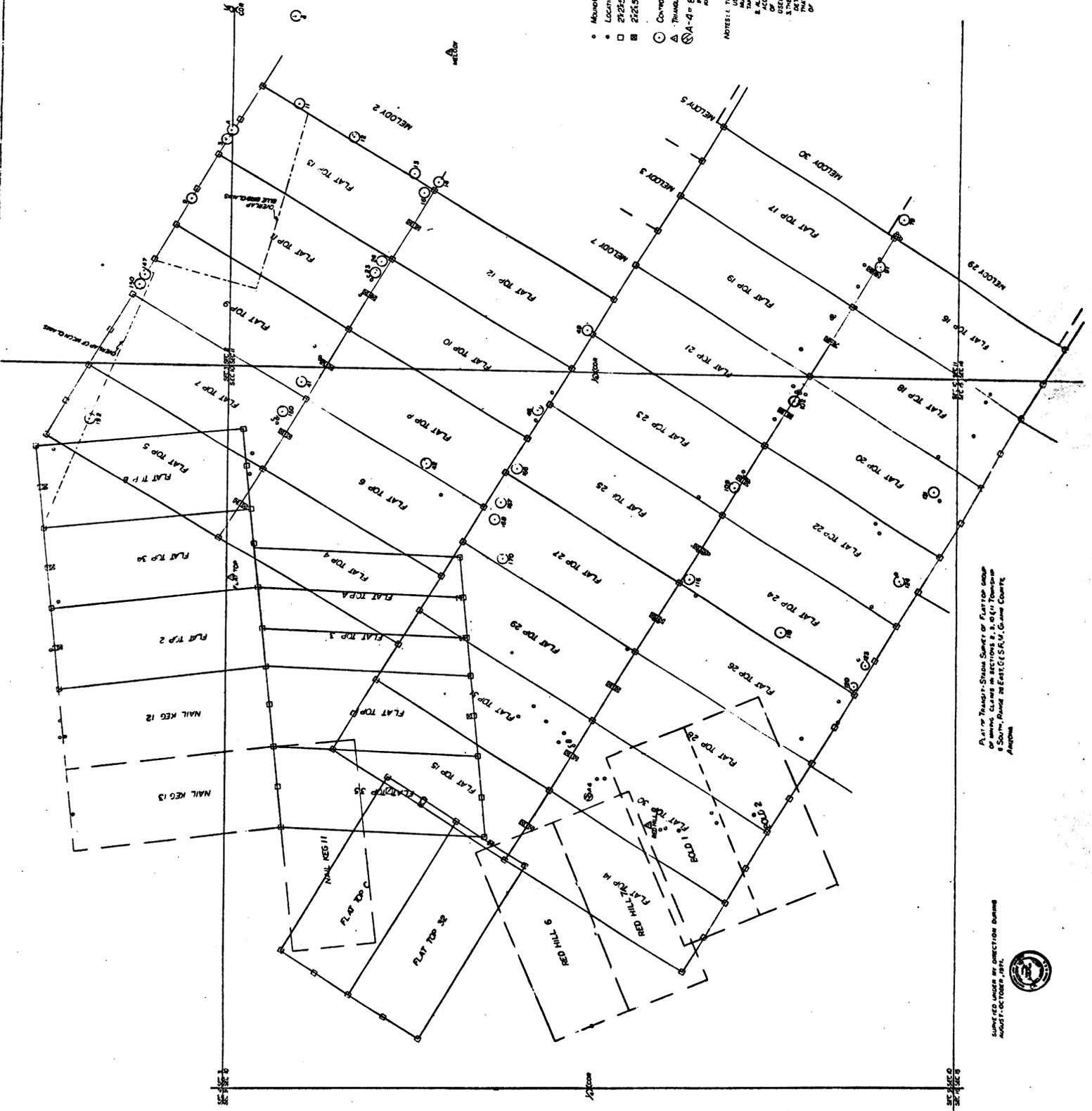
NOTES: 1. THE SURVEY AS REPRESENTED HEREON WAS DONE USING THE TRANSIT'S STATION METHOD. THE ACCURACY THEREOF IS THEREFORE SUBJECT TO THE ACCURACY OF THE TRANSIT'S STATION METHOD.

2. ALL INFORMATION SHOWN ON THIS PLAN AND THEREON IS THE PROPERTY OF THE SURVEYOR AND IS NOT TO BE USED WITHOUT HIS WRITTEN CONSENT.

3. THE LOCATION OF PLATTOPS COULD NOT BE IDENTIFIED AS BEING THOSE OF SAID PLATTOPS COULD BE FOUND.

Surveyed at the request of Elmer Anderson, Jr., Tucson Arizona

ALBERT W. HENSON  
SURVEYOR ARIZONA

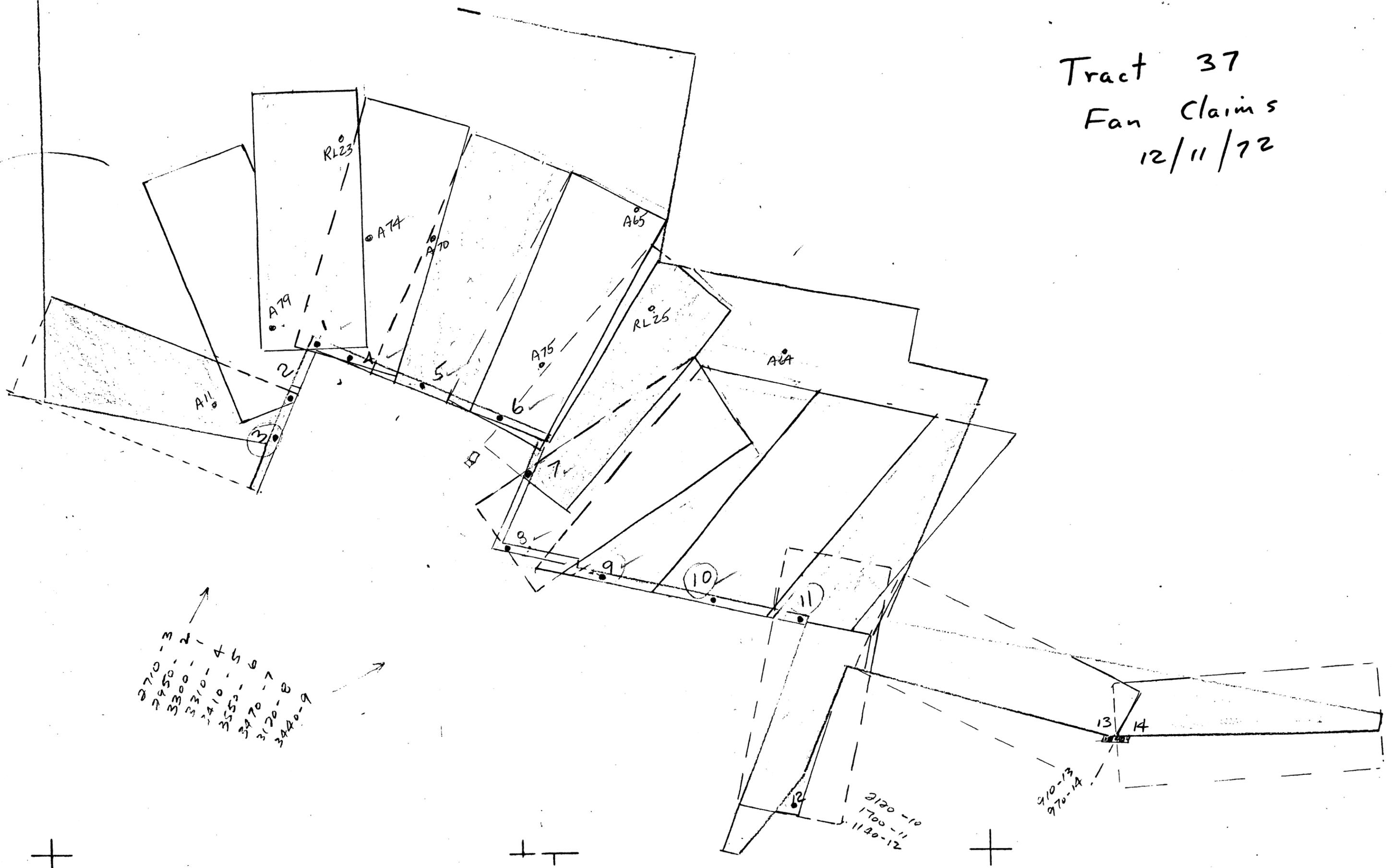


Plan of Transfer-Share Survey of Flat Top Group of Mining Claims in Sections 2, 3, 4, 11 Township 6 South, Range 20 East, Coconino County, Arizona

SURVEYED UNDER MY DIRECTION DURING AUGUST-OCTOBER, 1914.



Tract 37  
Fan Claims  
12/11/72

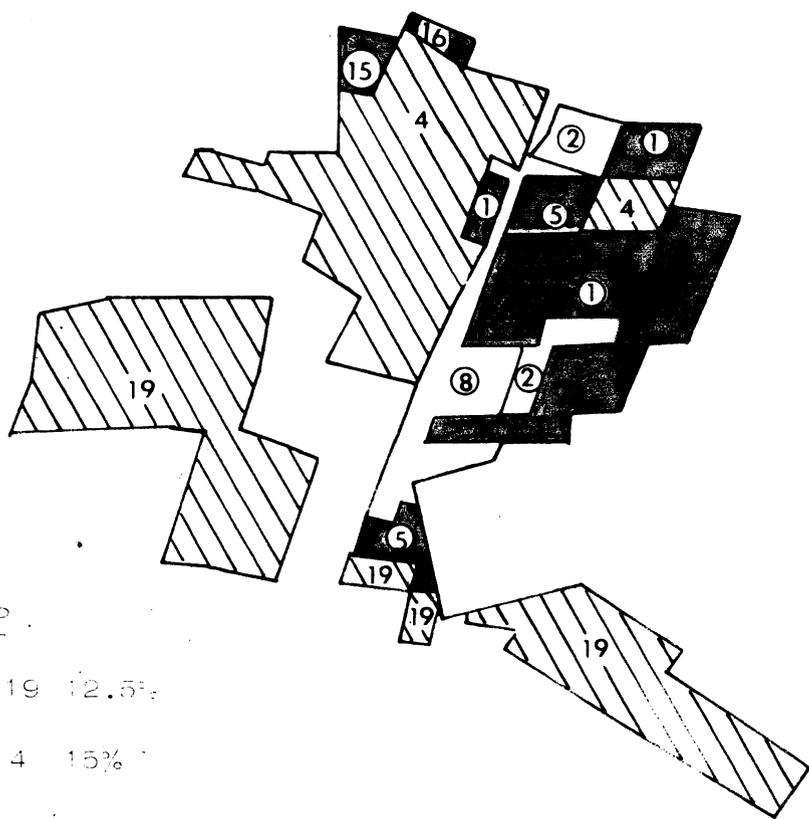


2710-3  
2950-2  
3300-1  
3310-4  
3410-5  
3550-6  
3470-7  
3120-8  
3440-9

3120-10  
1700-11  
1120-12

910-13  
970-14

ESSEX PARCELS NEAR THE PHELPS DODGE "DOS POBRES" OREBODY



ESSEX OWNERSHIP

-  PARCEL 19 12.5%
-  PARCEL 4 15%

Mineralization. Significant copper oxide mineralization occurs in the upper portions of holes ES-4 and ES-10. Chrysocolla was the only copper mineral visually identified in the oxide zone. There was not good correspondence between estimated grade and the actual assays because the samples were from mud-contaminated rotary drilling. An additional test of this oxide locus utilizing a more accurate sampling method is justified.

The depth of sulfides in these holes varies from 1000 to 1700 feet which is consistently much shallower than in the holes closer to the Phelps-Dodge deposit.

The most abundant sulfide mineral is pyrite which occurs as veins and disseminations. Copper sulfides, principally chalcopyrite with rare bornite and covellite, are scattered in trace amounts throughout the zone of sulfide mineralization. Spot assays taken every fifty feet below a depth of 2000 feet in ES-10 averaged 0.06 percent copper. The highest contained 0.19 percent copper. A strong trend of diminishing copper with depth was indicated.

Conclusions. The alteration-mineralization patterns in these holes represent fringe zone effects from the San Juan deposit. No evidence was seen that would indicate another mineralized center southwest of the Butte Fault in the area of these drill holes.

locally observed. Molybdenite was quite rare except in ES-20 where some obvious veinlets occurred. Highest molybdenum assay for a 5-foot drill run was 0.018 percent Mo.

Averaged assay intervals are posted on the geologic cross-sections and detailed assay sheets are included as Appendix I.

The correlation between alteration and mineralization is obvious in holes ES-1, ES-5, ES-9, and ES-20. Hole ES-3 does not exhibit good alteration-mineralization correlation because it is on the fringe of the alteration halo. The alteration sequence is from propylitic to biotite-chlorite to biotite. The 0.2 percent copper assay line in holes ES-5, ES-9, and ES-20 coincides very closely with the change from biotite-chlorite to biotite alteration and it is apparent that hole ES-1 penetrated only a short distance into the favorable locus. A progressive sequence from biotite-chlorite to biotite indicates proximity to a mineralized center and significant copper mineralization. Conversely, a regressive alteration sequence from biotite-chlorite to chloritic or propylitic indicates the hole is located on the fringe of the hydrothermal center. An excellent example of the latter is the SJ group of drill holes to be discussed below.

Conclusions. This group of drill holes has defined a zone of low grade copper mineralization on Essex property peripheral to the Phelps-Dodge orebody. Reasonable extrapolation of data confirms that at least a portion of the Phelps-Dodge orebody has been cut by the Butte Fault and displaced onto the unpatented parcel of land designated by the BLM as Tract 37.

#### SJ Drill Hole Group

The SJ group includes ES-2, ES-4, ES-6, ES-8, and ES-10. Generalized columnar sections of these holes are shown on Figure 4. Hole ES-4 was drilled as an assessment hole on the San Juan property.

Structure. Hole ES-10 did not intercept the Butte Fault thereby establishing that the fault retains a relatively steep dip. The difference in elevation of the upper and lower unit contacts in the pre-mineral volcanics across the fault indicates a fault plane displacement of approximately 3500 feet. Structure in this area appears simpler than to the west because the graben-like structure does not exist.

Alteration. The alteration zones are generally similar to those previously described except that a distinct chlorite zone was recognized in ES-6 and ES-10. Alteration patterns are inconsistent and this is interpreted as representing a fringe area of alteration some distance removed from the center of mineralization. Biotite-chlorite alteration encountered at a shallow depth in hole ES-4 may be related to intrusive material tentatively identified in the hole.

Biotite and chlorite are approximately equally abundant and tend to be mutually exclusive within the biotite-chlorite zone. Biotite has a distinct preference for the porphyry units while chlorite is better developed in the more aphanitic tuffaceous units. Bleached quartz-sericite alteration halos to veins are characteristic of this zone.

Mineralogy in the biotite zone is identical to the biotite-chlorite zone except that biotite is much the predominant mineral. Chlorite is stronger only very locally and generally in aphanitic tuffaceous rocks. Bleached halos to veins are much less common.

Typical vein minerals are quartz, calcite, chlorite, biotite sulfides with minor sericite, magnetite, epidote. Quartz, calcite, and sulfides are the principal gangue minerals with chlorite and biotite forming selvages.

Disseminated magnetite is abundant in all biotite altered volcanic rocks and typically varies from 2-5 percent. Its distribution in propylitically altered rocks is weaker and erratic. It is unknown how much of the magnetite is an original constituent of the rocks as compared to hydrothermal in origin. Magnetite is fairly common in veins with quartz and sulfides.

Close correlation between the appearance of biotite alteration and the upper-lower unit contact in the older volcanics is apparent but may reflect only the depth of mineralization rather than any stratigraphic control. The mushroom configuration of alteration and mineralization zones illustrated on the geologic cross-sections may reflect a damming effect by the agglomerate unit or the lessening of lithostatic confining pressure permitting the fluids to migrate laterally away from the principal fluid channels.

Mineralization. The sulfide mineralogy and distribution is relatively simple. The first indication of sulfides on the columnar sections is the depth at which sulfides were first noted in drill core and is not related to percentages which are sketched on the geologic cross-sections.

Total sulfides may attain 6-8 percent where pyrite occurs in veins and disseminations in the propylitic or biotite-chlorite alteration zones. Sulfide volumes average 2-4 percent below the disseminated pyrite zones. Copper assays tend to change rather abruptly from less than 0.1 percent to 0.2 percent or greater with a corresponding increase in chalcopyrite to pyrite ratio but with little change in total sulfide content. Virtually all significant copper mineralization in Essex holes is restricted to veins and occurs as chalcopyrite.

In contrast with the Phelps-Dodge deposit bornite is only a minor contributor of copper in Essex holes. Covellite and chalcocite are only

BIBLIOGRAPHY

Blake, David W., 1971, Geology, Alteration and Mineralization of the San Juan Mine Area, Graham County, Arizona: Unpubl. M.S. Thesis, University of Arizona, 85 p.

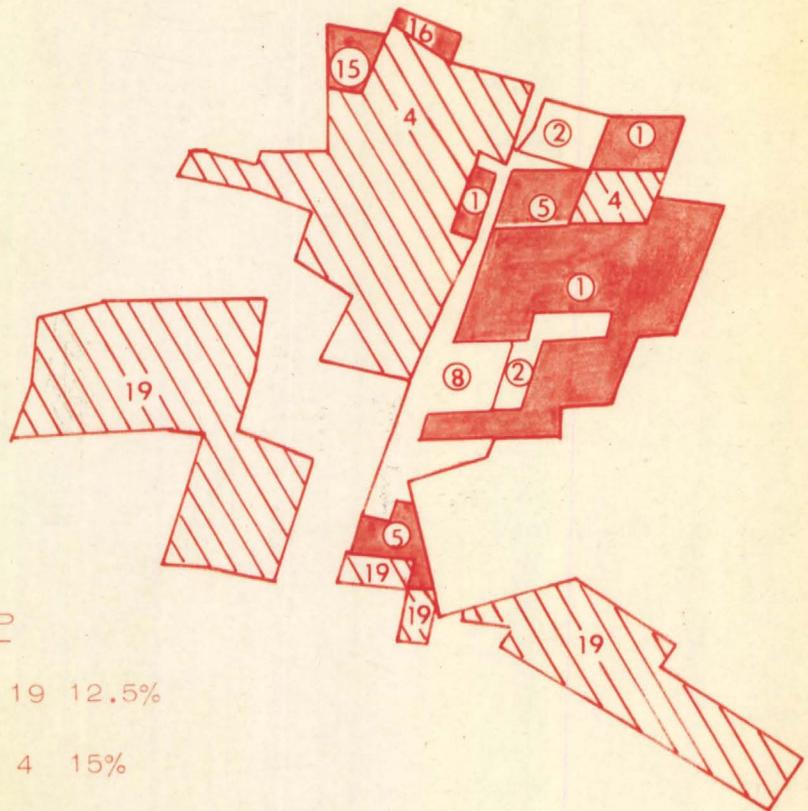
Phelps-Dodge Corporation, 1963, Mineral Patent Application AR-032595, Dos Pobres group of lode mining claims, Graham County, Arizona, 148 p.

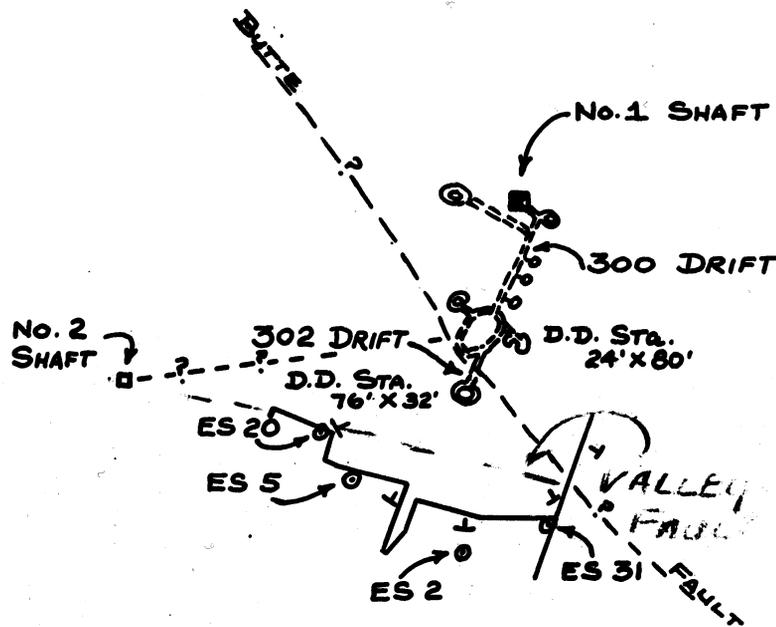
Phelps-Dodge Corporation, 1967, Mineral Patent Application A-828, Birthday group of lode mining claims, Graham County, Arizona, 24 p.

Robinson, R.F., and Cook, A., 1966, The Safford copper deposit, Lone Star mining district, Graham County, Arizona, in Geology of the porphyry copper deposits, southwestern North America, S.R. Titley and C.L. Hicks (eds.): Tucson, Arizona, University of Arizona Press, p. 251-266.



ESSEX PARCELS NEAR THE PHELPS DODGE "DOS POBRES" OREBODY





PHELPS DODGE  
 SAFFORD PROJECT  
 UNDERGROUND WORKINGS  
 DECEMBER 1974  
 SCALE 1" = 3900'  
 1 MILE = 1.3"

(12-15-72)

0537 A PD vehicle moves off pad, heads North out of area

0548 PD vehicle returns to pad above 14

6:30 P.D. MAN DENIED US ENTRY BY FORCE, HE HAD A GUN AND THREATENED US IF WE PROCEEDED TO PLANNED DRILL PAD.

= COMMUNICATION BY -

~~WAS~~ RADIO FROM GROWER. =>

THE P.D. (?) MAN SAID "I HAVE A GUN AND I KNOW HOW TO USE IT".

6:43 GUARD ORDERED THE RIGS NOT TO RAISE THE MAST.

0705 Second PD truck arrives at hilltop pad.

Guard, named "MANIK" walks uphill, fires pistol once into air. Second truck comes down hill, and a second guard gets off. Both vehicles blue pickup trucks

0708 Guard, HANK BRIGGS  
and second man, Clifford  
Willis, of O. B. Willis Co,  
order rig off property,  
by order of Phelps Dodge  
Co.

0712 Guards depart.  
Started engine of rig for  
purpose of raising mast

0717 White Dodge pickup  
arrives at rig, man gets  
out and approaches group.  
Man is Bill Bowen, PD  
geologist who wants to  
make sure we know that  
we are on Tract 37.

We assure him we are  
aware of that fact.

He then informs us of  
the existence of claim  
"Scorpion", which he  
says exists between  
Tract 37 and Essex  
claim "D+L"

0725 Pale green pickup  
approaches, man gets out  
and proceeds to rig.

1835

6:35 PM - (12/19) OBSERVED VEHICLE  
ON HILL TO THE NORTH ABOVE  
HOLE # 14.

~~1835~~ -

1930 - PD vehicle moved  
into site overlooking #17

1947 - PD vehicle leaves  
surveillance of #17, heads  
EAST.

1955 - PD vehicle seems to  
reappear near furthest +  
lowest Joy rig

2048 - Second PD vehicle  
approaches from North, starts  
down road to 14. I  
proceed to intercept, and  
he leaves, takes station  
on ridge between 14, 17.

On way down hill, see  
first PD vehicle traveling  
very slowly down up PD  
hiway past 16 -

2102 - Second vehicle leaves  
ridge to East, traveling  
with only parking lights  
Disappears.

2305 - First vehicle  
returns to pad above 14  
from above 17. Not  
seen going to 17  
initially Uses lights  
now.

0010 - PD vehicle moves  
about 1 car length on  
pad, turns slightly to  
left. Keeps lights off.

0100 PD vehicle still there

0140 PD vehicle still there  
as moon sets.

0200 PD vehicle no longer  
visible in dark.

0515 PD vehicle leaves  
spot above 14, travels  
to ridge between 14, 17,  
then to point on basalt  
above 17

0526. PD vehicle leaves  
site above 17 and returns  
to pad above 14.

Man is Skip Clark,  
Manager of PD operation,  
says he is moving a  
dozer in

\* 0715 - LATE ENTRY - MAST  
RAISED.

0745 Bulldozer and blue  
Ford pickup approaching

0750 Paul Eimon + Howard  
Lanier arrive

0805 - Bill Bowen, Skip Clark, ~~two others~~ Cliff Willis and one other ordered us off the property under threat of bringing dozer & front end loader down and give one warning and move rig into creek. In order to avoid damage to equipment, we are pulling back. Mast ~~to be~~ lowered @

08:15 am

Clark Hirschi of Boyles arrived to say that <sup>(by ph.)</sup> at 7:40 he was called by Bill Bowen who threatened to destroy the Boyles drive rig unless he ordered it off P.D. property.

Essex then moved drive rig to K1M 1 on the North of the Burns. As the drive mast was

Raising Bill Bowen,  
Cliff Willis & others  
began walking to  
the Essex Drill  
ahead of a P.D. Dozer  
advancing with its  
Blade down.

Bowen identified himself  
as P.D. agent  
and said the drill  
must be moved behind  
the burn in 15 minutes  
or he would order the  
dozer operator to push  
the rig into the wash.

He then informed  
P.I.E. Ken Jones &  
E.G.H. that ~~that~~ the  
land in dispute (Tract 37)  
was PART of the exchange  
and as P.D. Agent he  
was ordering us off.

~~and~~ He said the P.D.  
had old mineral rights  
and was exchanging this  
property. He stated "We  
claim mineral ownership  
of this ground, now.

He refused to say the burn  
was the boundary of  
Tract 37.

Time 8:30

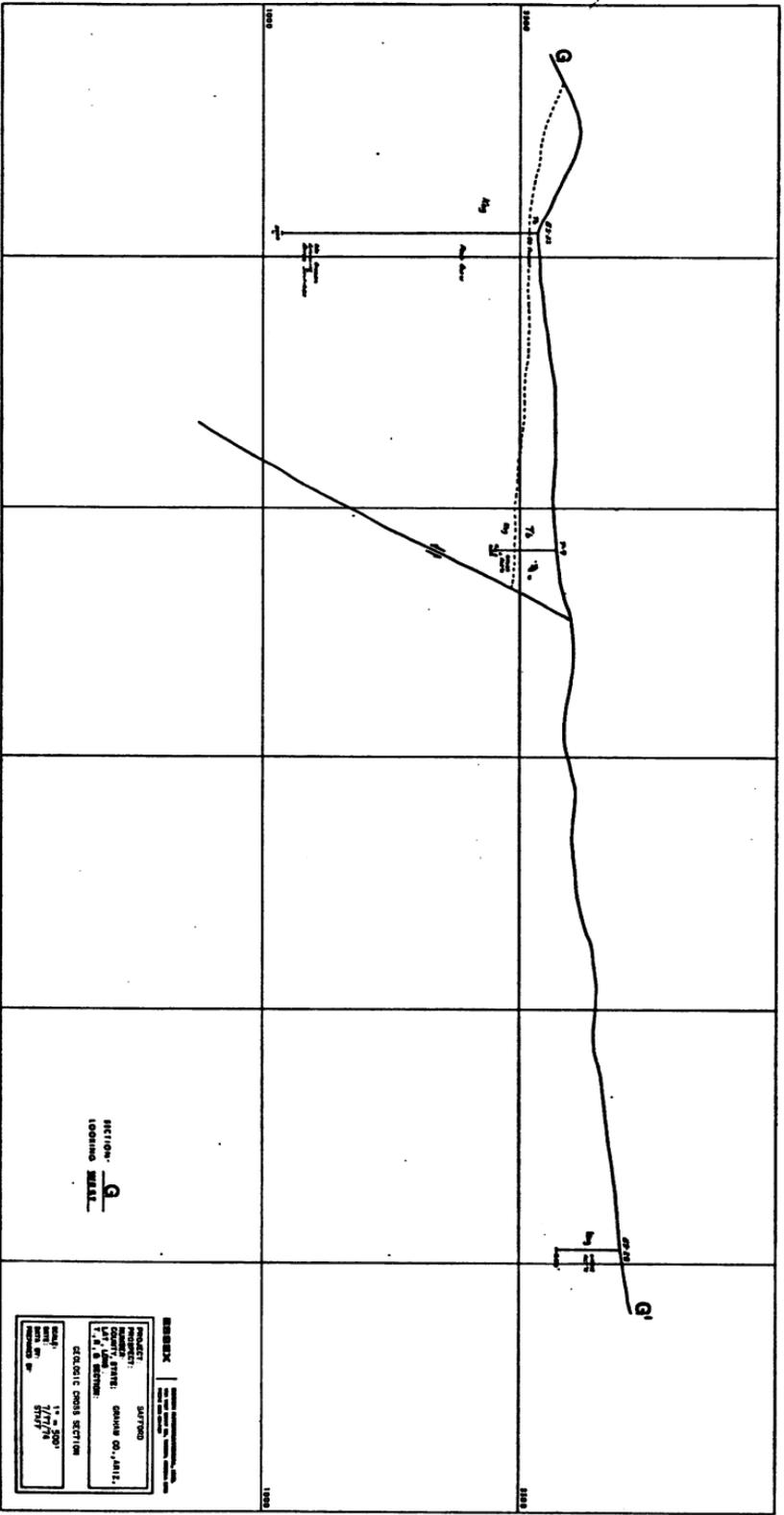
Bill Bowen

5

STATED that the Kim J  
was allocated yesterday  
& he further advised  
that we (Evan) should  
not explore the SHORMAN.

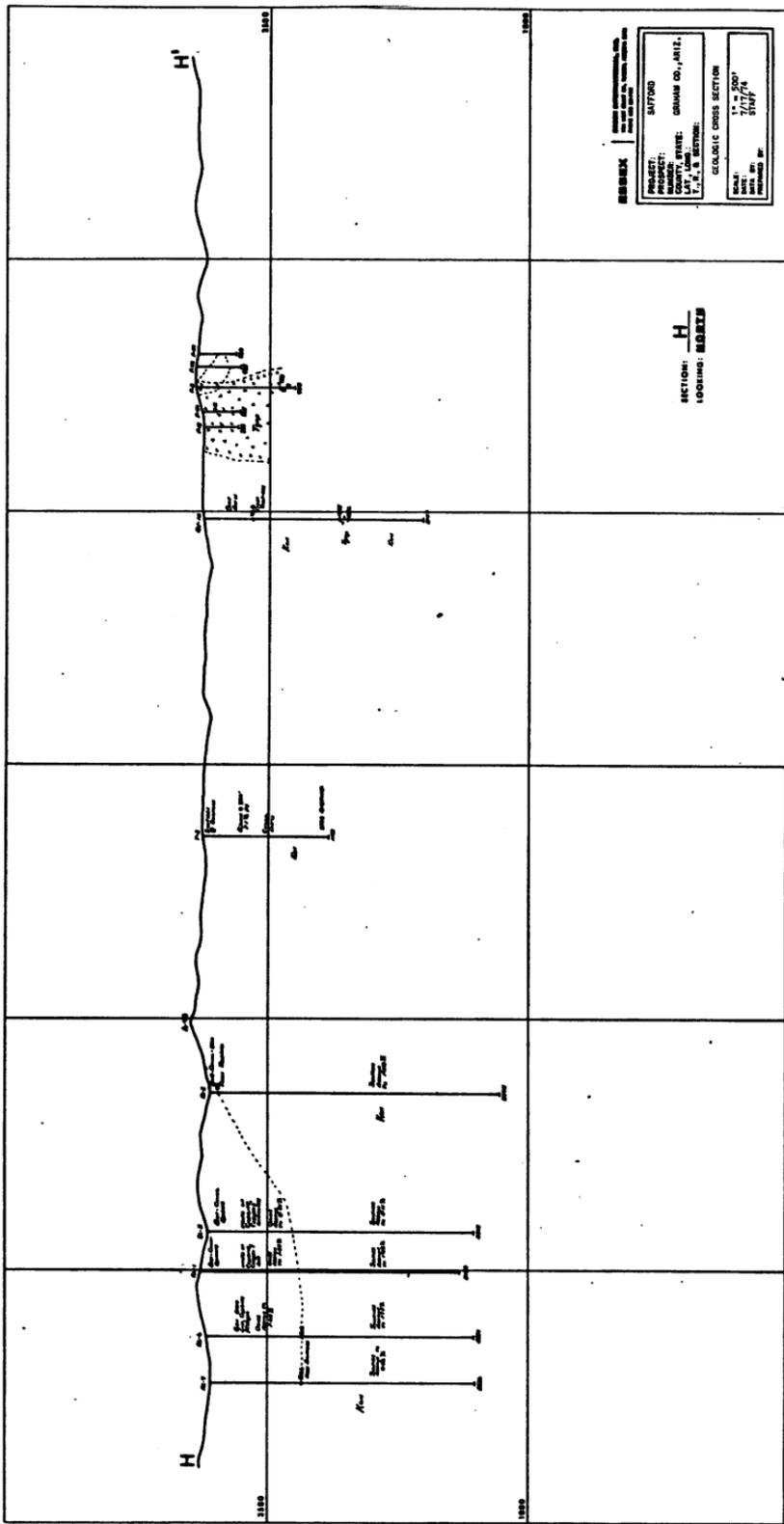






SECTION - G  
LOOKING WEST

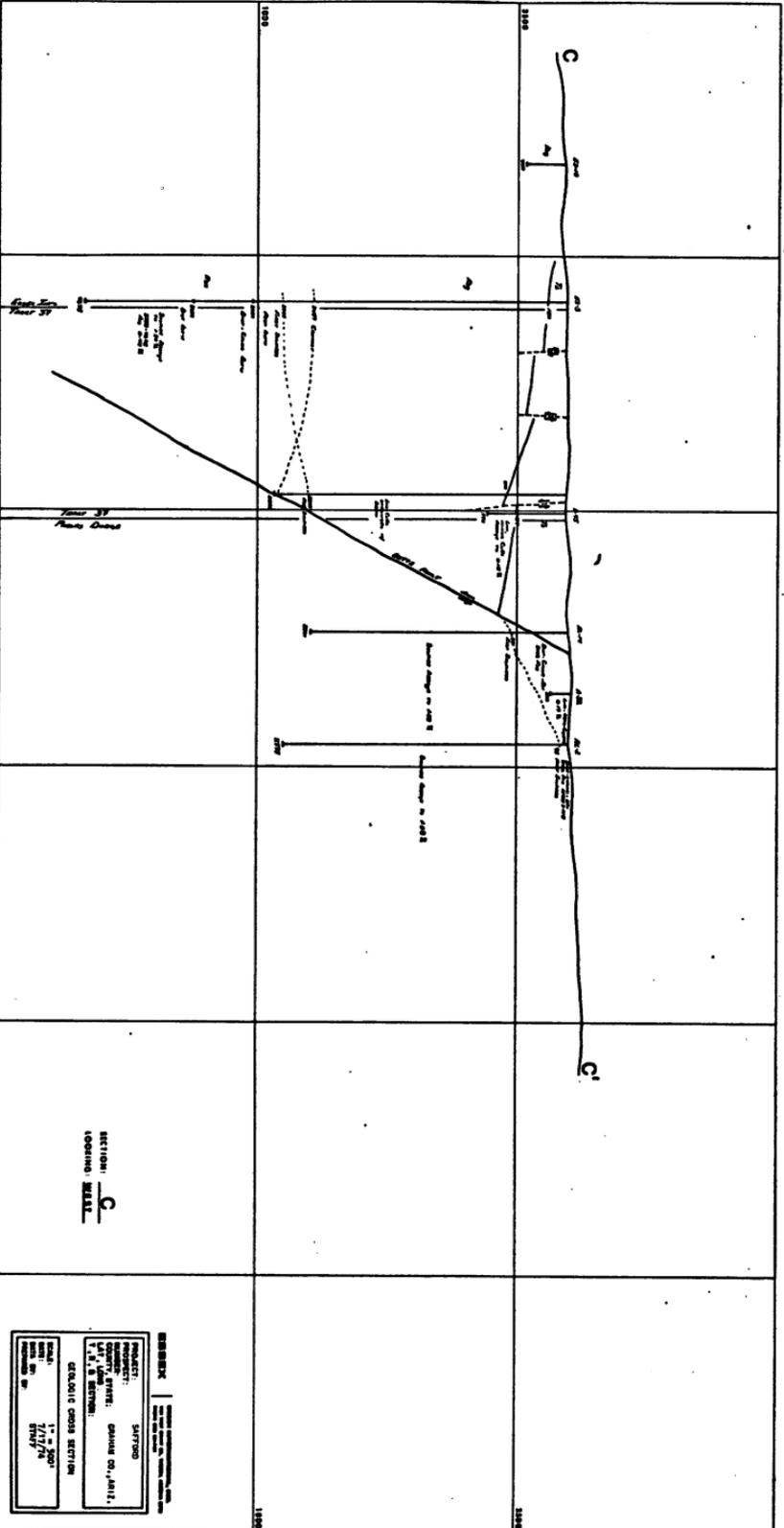
**REMARKS**  
 PROJECT: SURVEY  
 COUNTY: DENVER CO., A.M.T.  
 TOWN: 10TH  
 RANGE: 70TH  
 SECTION: 11  
 DATE: 11/17/78  
 DRAWN BY: [Signature]



**SECTION: H-H'**  
**LOOKING: NORTH**

**PROJECT: SUTTON**  
**COUNTY: GRAMM CO., W.V.**  
**U.S.G.S. SECTION: GEOLGIC CROSS SECTION**

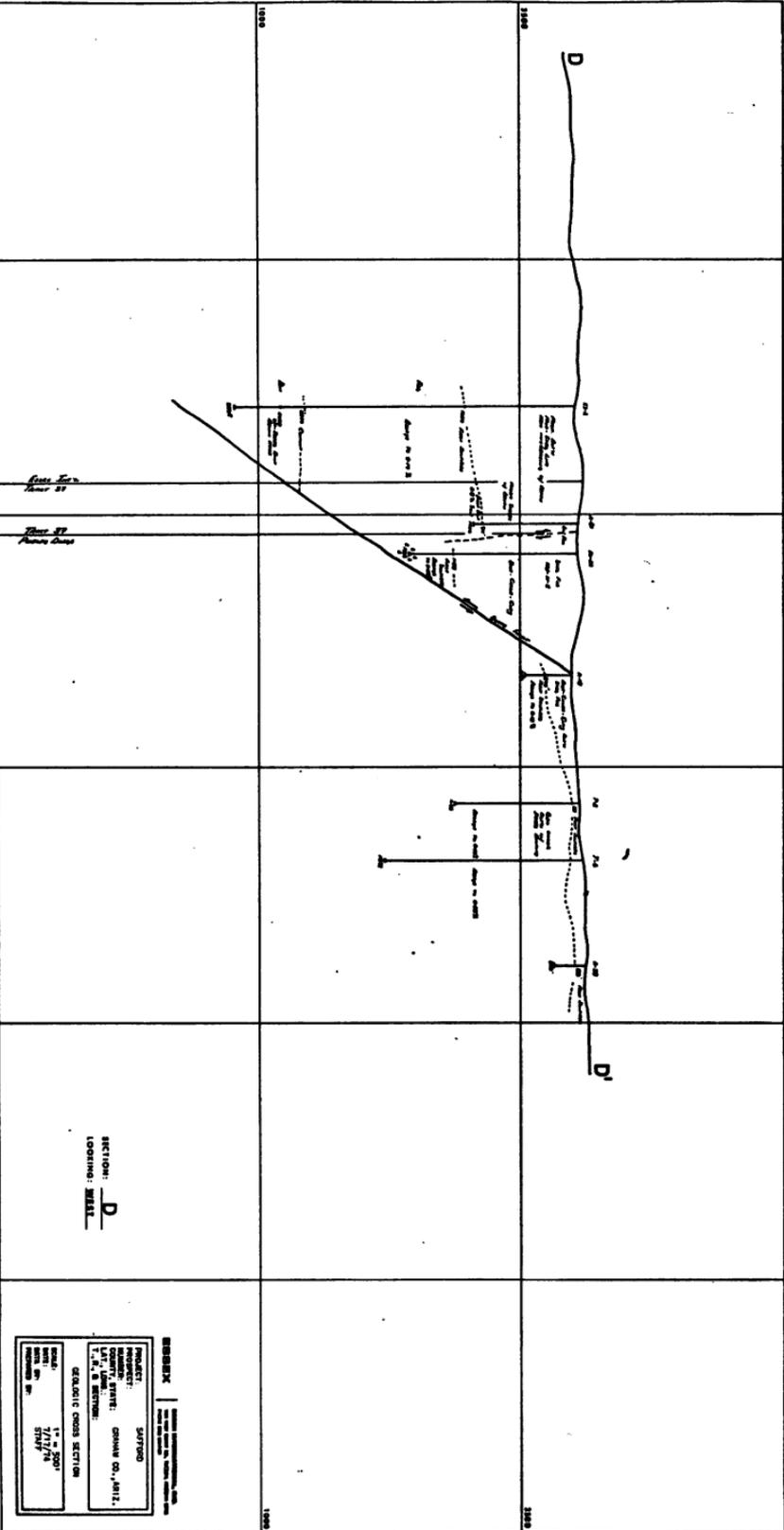
**DATE: 1/11/2007**  
**BY: [Signature]**  
**SCALE: 1" = 200'**



SECTION: C  
LOOKING WEST

**SYMBOLS**  
 PROJECT: SUTTON  
 CONTRACT NO.: SAHNE CO., A/E/C  
 DATE: 7/17/78  
 SHEET NO.: 11  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]

SCALE: 1" = 200'  
 DATE: 7/17/78  
 SHEET NO.: 11



Line 27  
 Line 28  
 Line 29

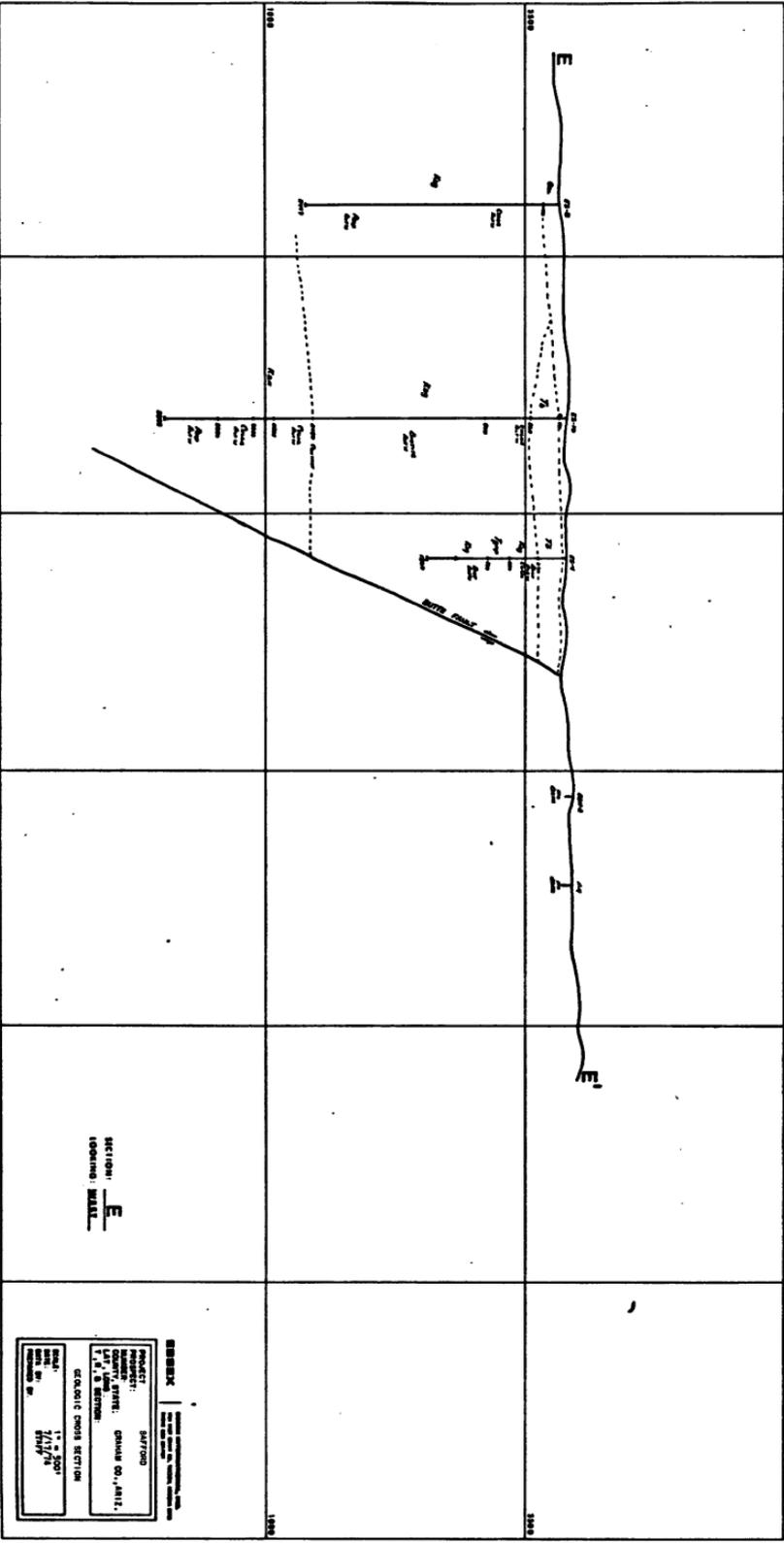
SECTION: D  
 LOOKING: WEST

**REMARKS:**  
 This map was prepared from the original field notes of the geologist who made the observations on which it is based.

**PROJECT:** SALTING  
**PROPERTY:** CONSUMERS SERVICE  
**COUNTY, STATE:** OSHAHO CO., ILL.  
**T. & R. SECTION:** 11, 6

**GEOLOGIC CROSS SECTION**

**SCALE:** 1" = 200'  
**DATE:** 1958  
**BY:** W. J. H. [unclear]



SECTION: **E-E**  
 LOCATION: **WATER**

**REFERENCE**

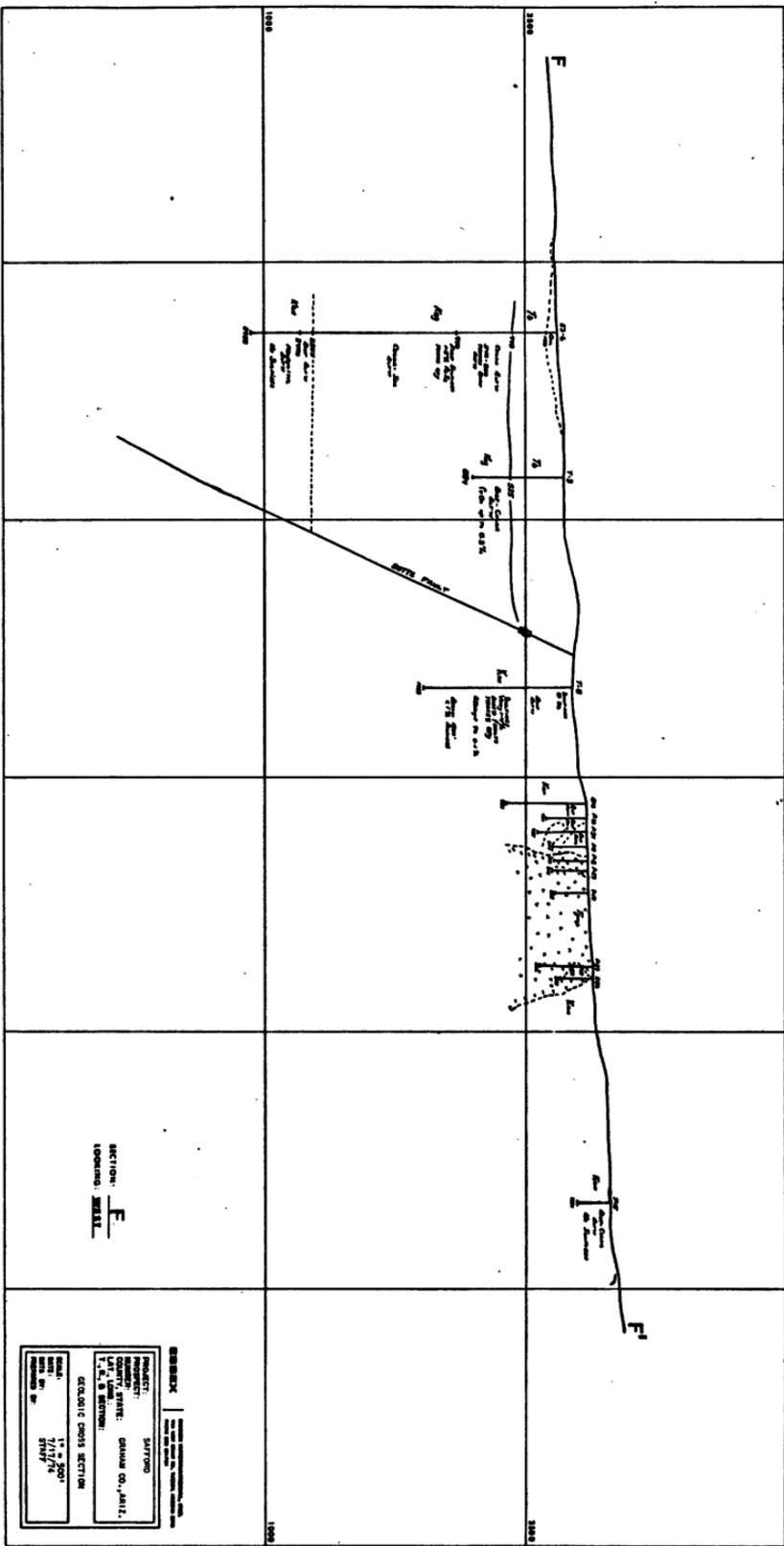
UNITED STATES GEOLOGICAL SURVEY  
 WATER RESOURCES DIVISION  
 TECHNICAL REPORT NO. 10

**PROJECT:** PART 700  
**CONTRACT:** G-1000  
**DATE:** 1960

**PREPARED BY:** G. W. BENTON  
**CHECKED BY:** J. W. BENTON

**SCALE:** 1" = 200'  
**DATE:** 1960

**SECTION:** G-1000  
**SECTION:** G-1000



SECTION: **F**  
LOOKING WEST

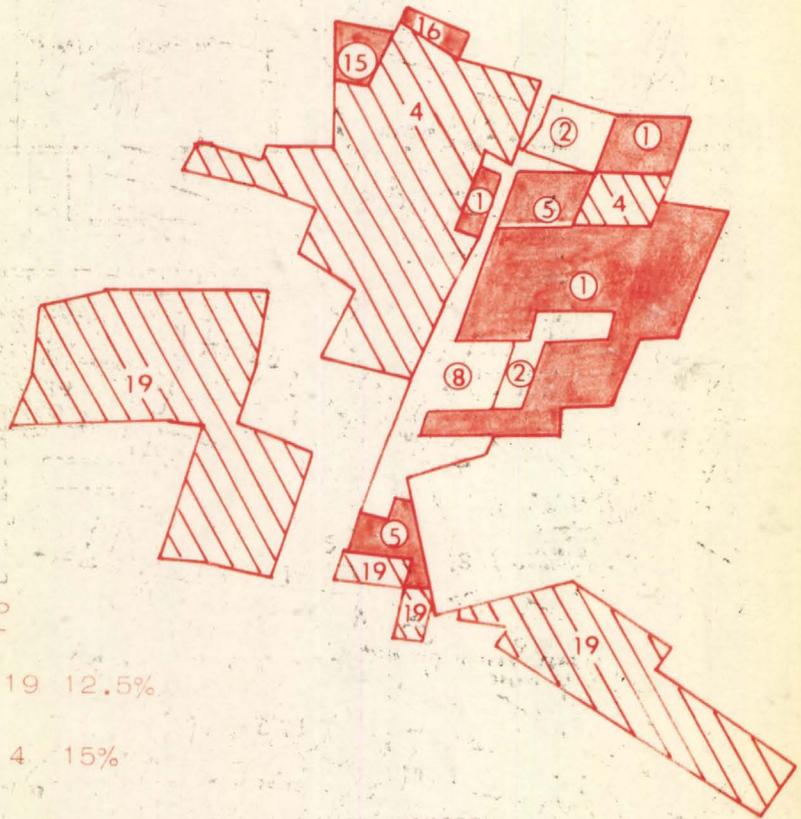
**REMARKS:** Section taken from station 1000 to 1005. The profile shows a road dipping to the right. The geological features are as follows:

**SYMBOLS:**

PROJECT: STATIONED  
 COUNTY: GALLUP CO., N.M.  
 COUNTY STATE: GALLUP CO., N.M.  
 DATE: 7/17/24  
 DRAWN BY: STAFF

SECTION: **F**  
 LOOKING WEST

ESSEX PARCELS NEAR THE PHELPS DODGE "DOS POBRES" OREBODY



ESSEX OWNERSHIP

-  PARCEL 19 12.5%
-  PARCEL 4 15%

ESSEX PARCELS NEAR THE PHELPS DODGE "DOS POBRES" OREBODY

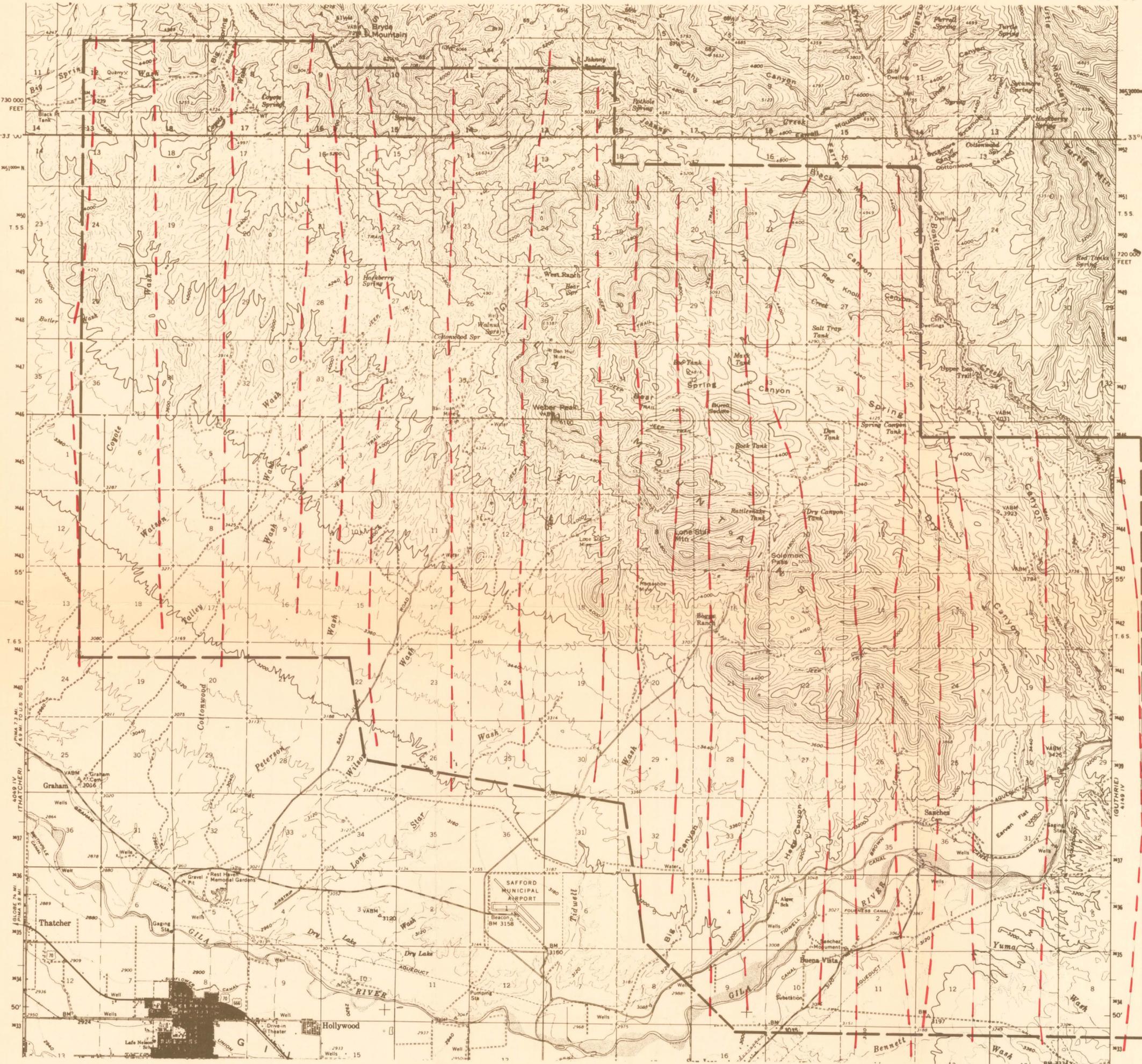
ESSEX PARCELS NEAR THE PHELPS DODGE "DOS POBRES" OREBODY  
QUINTANA ROO  
MAY 1968  
SCALE 1:50,000  
SHEET 1 OF 1

109°45'

109°30'

BRYCE MTN.  
QUAD. SHEET

SAFFORD  
QUAD. SHEET

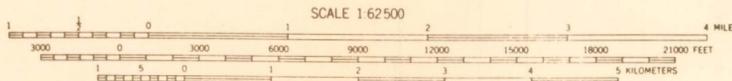


SURVEY  
BOUNDARY

AEROMAGNETIC SURVEY OF SAFFORD, ARIZONA, AREA - BY AMERICAN STEREO MAP CO.

SURVEY SPECS:

- (1) N-S FLIGHT LINES 1/2 MILE APART  
OVER 3 PORPHYRY DEPOSITS, ONE  
MILE APART IN OTHER AREAS.
- (2) MEAN TERRAIN CLEARANCE 1000 ft.
- (3) CONTOUR INTERVAL 20 GAMMAS
- (4) 180 LINE-MILES TOTAL



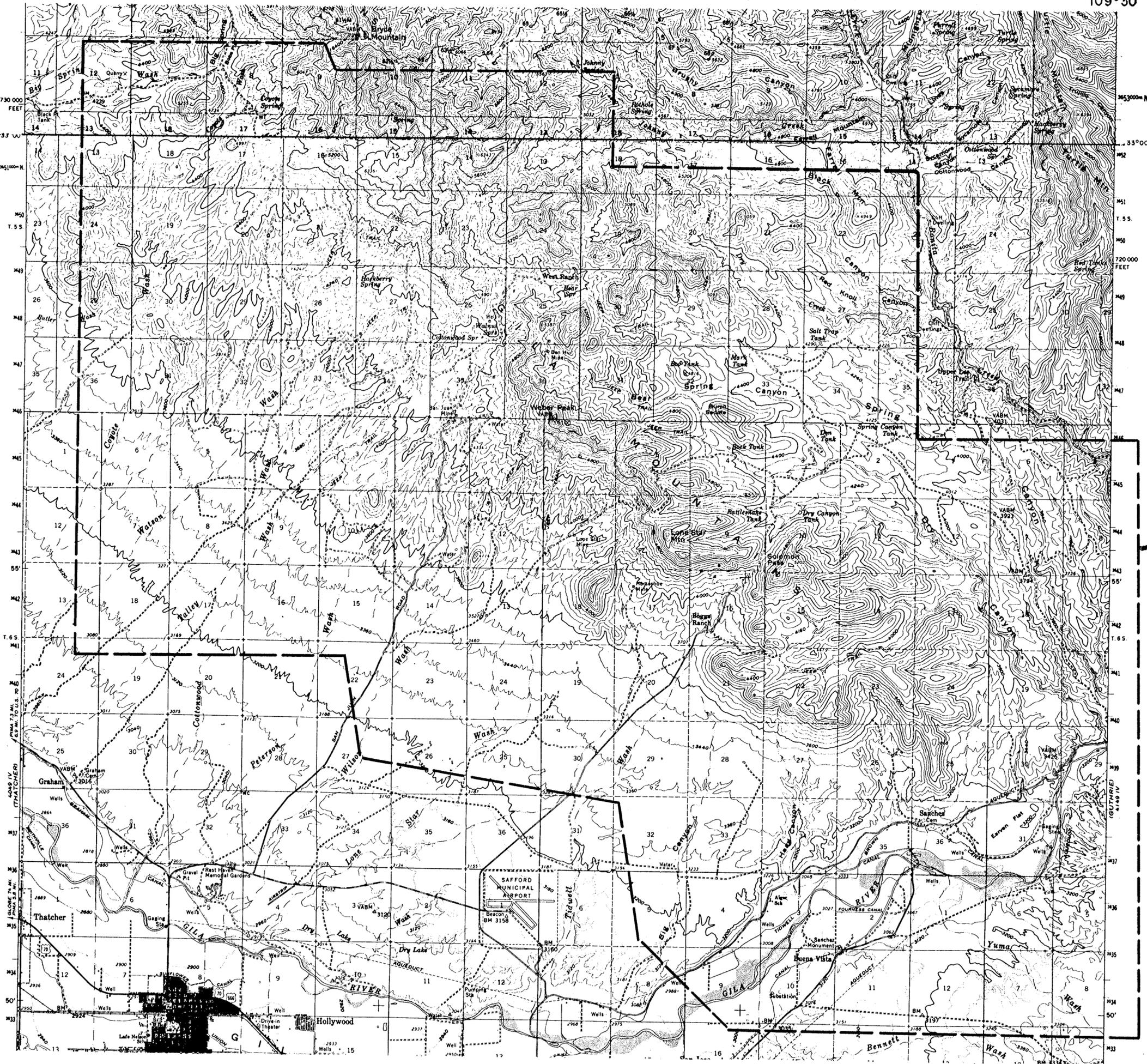
109°45'

109°30'

BRYCE MTN.  
QUAD. SHEET

SAFFORD  
QUAD. SHEET

SURVEY  
BOUNDARY

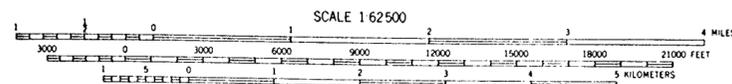


AEROMAGNETIC SURVEY OF SAFFORD, ARIZONA, AREA - BY AMERICAN STEREO MAP CO.

SURVEY SPECS:

- (1) N-S FLIGHT LINES 1/2 MILE APART OVER 3 PORPHYRY DEPOSITS, ONE MILE APART IN OTHER AREAS.
- (2) MEAN TERRAIN CLEARANCE 1000 ft.
- (3) CONTOUR INTERVAL 20 GAMMAS
- (4) 180 LINE-MILES TOTAL

*Parker GAY*



43441

Wash

PHILIPS DODGE - PATENTED CLAIMS

PHILIPS DODGE SURFACE - STATE MINERAL  
(RESTRICTED FROM MINERAL ENTRY,  
P.D. VERSES STATE OF ARIZONA.)

PHILIPS DODGE SURFACE - STATE MINERAL  
(RESTRICTED FROM MINERAL ENTRY,  
P.D. VERSES STATE OF ARIZONA.)

T 5 S

T 6 S

ORANGE DASHED LINE CLAIMS

REPRESENT MISSING CLAIMS

POSSIBLE LOCATION

NO. 75

NO. 76

NO. 77

NO. 78

NO. 79

NO. 80

NO. 81

NO. 82

NO. 83

NO. 84

NO. 85

NO. 86

NO. 87

NO. 88

NO. 89

NO. 90

NO. 91

NO. 92

NO. 93

NO. 94

NO. 95

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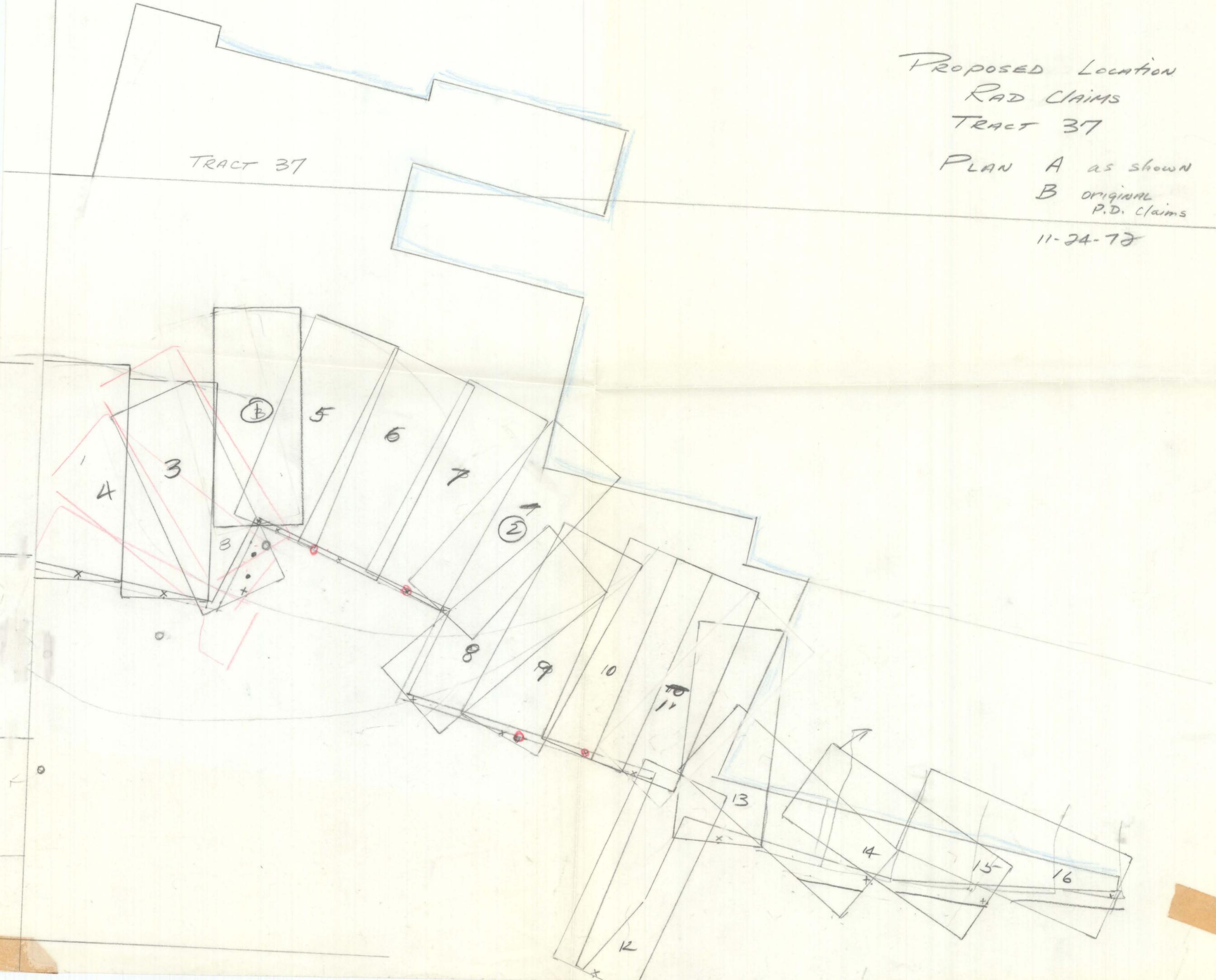
NO. 366

PROPOSED LOCATION  
RAD CLAIMS  
TRACT 37

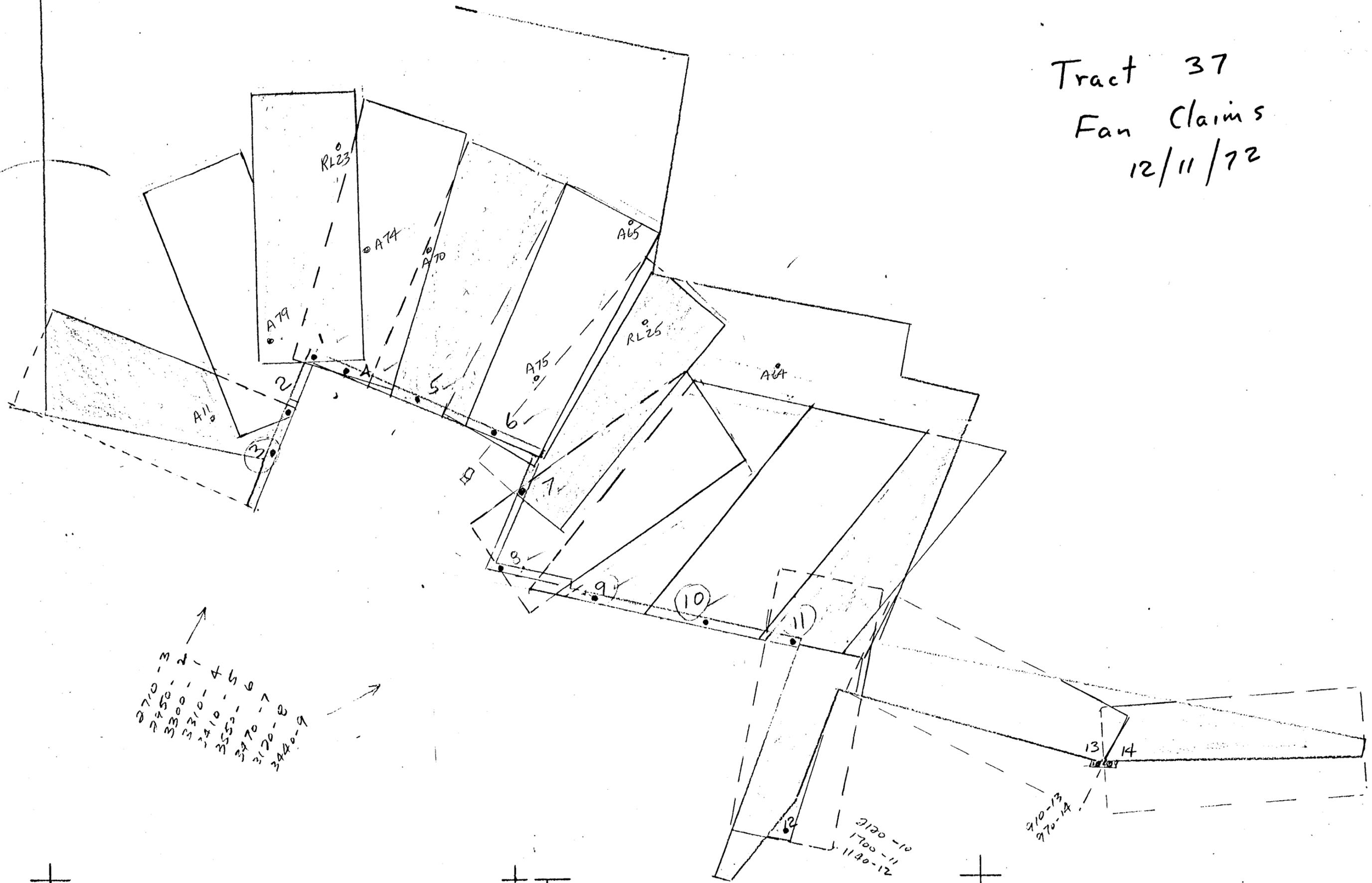
PLAN A as shown  
B ORIGINAL  
P.D. CLAIMS

11-24-78

TRACT 37



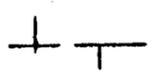
Tract 37  
Fan Claims  
12/11/72



2710-3  
2950-2  
3300-1  
3310-4  
3410-5  
3550-6  
3970-7  
3120-8  
3440-9

21-0711  
1700-11  
1140-12

910-13  
970-14



MINERAL AND WATER RESOURCES  
OF NEW MEXICO  
1965

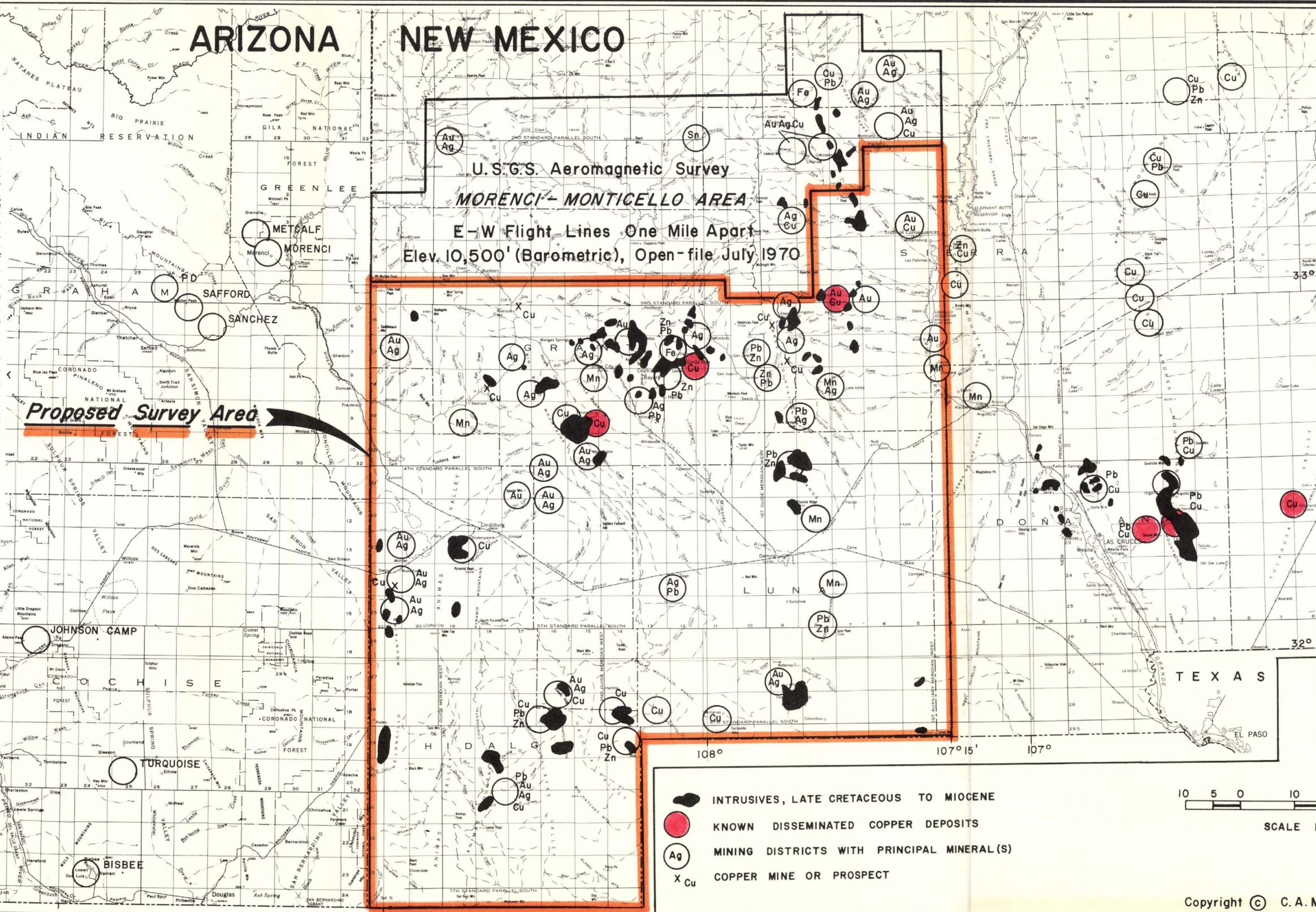
SUGGESTIONS FOR PROSPECTING p.175-176.

On the basis of past production, the southwestern corner of New Mexico, in the counties of Grant, Hidalgo, Luna, Dona Ana, and Sierra, clearly is the most likely area to contain other major copper deposits. This region lies along the eastern extremity of the Arizona copper province, which annually accounts for more than 50 percent of the copper mined in the United States. The most likely areas, concealed beneath pediments, should be prospected by geophysical and geochemical methods utilizing the gravimetric, magnetic, electric, seismic, and thermic properties of rocks and minerals. The projection of mineralized trends in the exposed areas of the mountains and pediments beneath young gravel or volcanic deposits should be given priority. In the prevailing climate the granitic host rocks of the disseminated copper deposits are generally less resistant to erosion than the carbonate rocks that contain the replacement deposits, thus low ground adjacent to all such replacement deposits should be systematically prospected, utilizing modern techniques.

J. R. Cooper pointed out (1956, written communication) that the major metal districts in southwestern New Mexico fall along a northeast trending line (fig. 41); two major copper districts, Bisbee, Ariz., and Cananea, Mexico, plus two minor districts, are points on the southwestern projection of this lineament. Although this distribution may be fortuitous, deep-seated flaws in the crust do exist over long distances in many parts of the world, and it is along such flaws that magmas and fluids are most likely to ascend. This belt deserves careful exploration.

Large, geologically young, northwest trending, basin- and range-type normal faults cross this alignment essentially at right angles and their possible effect on the localization of ore deposits must be considered in assessing the geologic possibilities of any particular area.

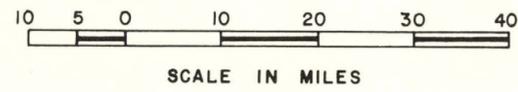
ARIZONA NEW MEXICO



U.S.G.S. Aeromagnetic Survey  
**MORENCI-MONTICELLO AREA**  
E-W Flight Lines One Mile Apart  
Elev. 10,500' (Barometric), Open-file July 1970

**Proposed Survey Area**

- INTRUSIVES, LATE CRETACEOUS TO MIOCENE
- KNOWN DISSEMINATED COPPER DEPOSITS
- MINING DISTRICTS WITH PRINCIPAL MINERAL(S)
- COPPER MINE OR PROSPECT



Proposed  
Subscription

Aeromagnetic Survey  
of  
S.W. NEW MEXICO  
by

AMERICAN STEREO MAP CO.  
SALT LAKE CITY, UTAH  
*S. Parker Gay, Jr.*  
*Charles A. Mardirosian*

Line Direction: North-South  
Line Spacing: 2 miles  
Flight Altitude: 8000 ft. MSL  
(Barometric)

Area: 11,000 sq. miles

Mapped area will be contiguous with Sumner's Aeromagnetic Map of Arizona on the west and US Geological Survey Open File Map on the north. USGS map will be included in the final compilation. Total area of combined USGS and ASMC MAPS = 14,200 sq. miles.

P.W. O'Malley  
E.G. Heinrichs  
Property Priorities  
Safford Project

Ft. Wayne, Ind.  
Tucson, Ariz.  
Dec. 19, 1975

R. Kelly  
D. Letizia

Because of the possibility of terminating certain selected properties in January 1976, I wish to outline my ideas as to the relative value or priority of the Safford properties and the reasoning involved.

Priority No. 1

Area 1

Regardless of the Phelps Dodge position or their future intentions, Parcels 1, 2, 4, 5, 8, 15, 16 - sixty-eight claims plus fractions - are a very valuable piece of ground to Essex and Phelps Dodge for the following reasons:

1. Its proximity to the Phelps Dodge Dos Pobres orebody, controls the depth of mining on the Dos Pobres, which will have increasing importance as time passes and future reserves become present reserves.
2. In our own right we have an ore intersection in Drill Hole ES-5. The significance of this is not completely understood at this time because more drilling is required to better define the zone. It could be an entirely new orebody or a southerly extension of the Dos Pobres. In any case, it is deep, and if it is an orebody, logically, it should be developed in concert with the Dos Pobres.

Essex's payment on this ground is due Feb. 20, 1976, in the amount of \$37,689, and to buy the property outright would cost Essex \$608,891, less an estimated 15% because of the acreage involved (the agreement calls for a prorated payment based on \$15,000/20.661 acre claim).

It is recommended that Essex commence to exercise its option to purchase initially the most northerly claims that join Tract 37, namely Parcels 15 and 16. This act would accelerate Phelps Dodge coming to the negotiating table to discuss the disposition on these properties.

There would be little effect to the on-going litigation between Essex and Producers by increasing our equity ownership to the west of the San Juan.

Priority No. 2

Area 2

Parcels 9, 10, 22, 12, 14, 17, 22

These parcels, because they are separate and isolated groups of claims, have a diminished value. Their primary value, currently is their proximity to the Kennecott in-situ leach project. If the current Kennecott discussions prove futile, it is recommended that these properties be returned to the owners, or traded off elsewhere, though the possibilities of this are quite remote.

Parcel 9, because it is the nearest claim group to the Kennecott leaching operation, is the most valuable of this group.

Parcels 10, 12, and 14 might have some effect on PMC and the litigation because these properties are contiguous to the San Juan. Actually the effect may work to Essex's advantage in a small way. In any case, it would tend to discount PMC's past charges that Essex was seeking to surround them.

Total number of claims in this group is 39; payments due Feb. 20, 1976 total \$16,800 + \$400.00/mo. for Parcel 22.

Priority No. 3

Area 1

Parcel 6 - Flat Top claim group.

Its primary value is for operating room and possible dump space for a potential operator of the San Juan (if the San Juan should ever be economic). This of course, is speculative. Therefore it is recommended that the Flat Top group be dropped, traded off, or otherwise disposed of so as to relieve Essex of any further burden.

Priority No. 4Area 1

Parcel 19 - Big Bird Group, unpatented mining claims  
Copper Flat Group, unpatented mining claims  
40 claims

Essex has a 12.5% equity ownership. These claims are peripheral to our other holdings in the district. Our cost to continue to hold ownership is the cost of the assessment work - \$100.00 per claim per year - \$4,000.00.

It is recommended this property either be included to whom ever assumes Essex' other holdings in Area 1 or simply dropped by renewal time, which is Sept. 1, 1976. In any case no further funds should be spent here.

FILE MEMO

June 21, 1971

CONVERSATION WITH JOHN SNELL  
PRODUCERS MINERALS CORP.  
ON JUNE 16, 1971

Oxide ore reserves at San Juan Mine are considered to be 30 million tons at 0.55% copper. However, current leaching operation is attempting to mine material averaging 0.8% copper in order to make a profit or perhaps only break even. Ore faces observed in bottom of pit are hard but apparently brittle rock. Ore in the quartz monzonite porphyry is chrysocolla soaking of clay altered feldspar. In andesite oxide copper minerals may occur mostly on seams, but no good exposures of this rock type were visited.

Snell showed me assay logs on 7 or 8 of the old Rare Metals Company holes and said that Producers had much of this core, and had re-assayed some of it. These logs were seen only briefly, but most holes were about 750 feet deep with one 2200 foot hole and one 1500 foot deep hole. The holes may average 0.5% Cu or a little better, to a depth of 350 feet, and may approach an average of 0.4% Cu or a little less to a depth of 750 feet. I did not see the log on the 2200 foot hole, but Snell said that spotty values continued to the bottom - "30 or 40 feet at 0.2%, shorter intervals of 0.3 to 0.4%, and occasionally 5 or 10 feet at 0.7% Cu." Chrysocolla with some (maybe considerable?) chalcocite extends to a depth of about 350 feet, below which mineralization consists mostly of chalcopyrite with some chalcocite.

Producers diamond drill holes and blast holes show only total copper. This includes some chalcocite but they think much of the chalcocite is recovered during the acid leaching process.

Snell has heard that Inspiration's Sanchez Mine has 200 million tons at about 0.4% Cu. Inspiration thinks this is marginal as stripping ratio may be in the range of 3:1, but will probably hold on to the property because of future need to dump acid.

J.K. Jones

JKJ:td

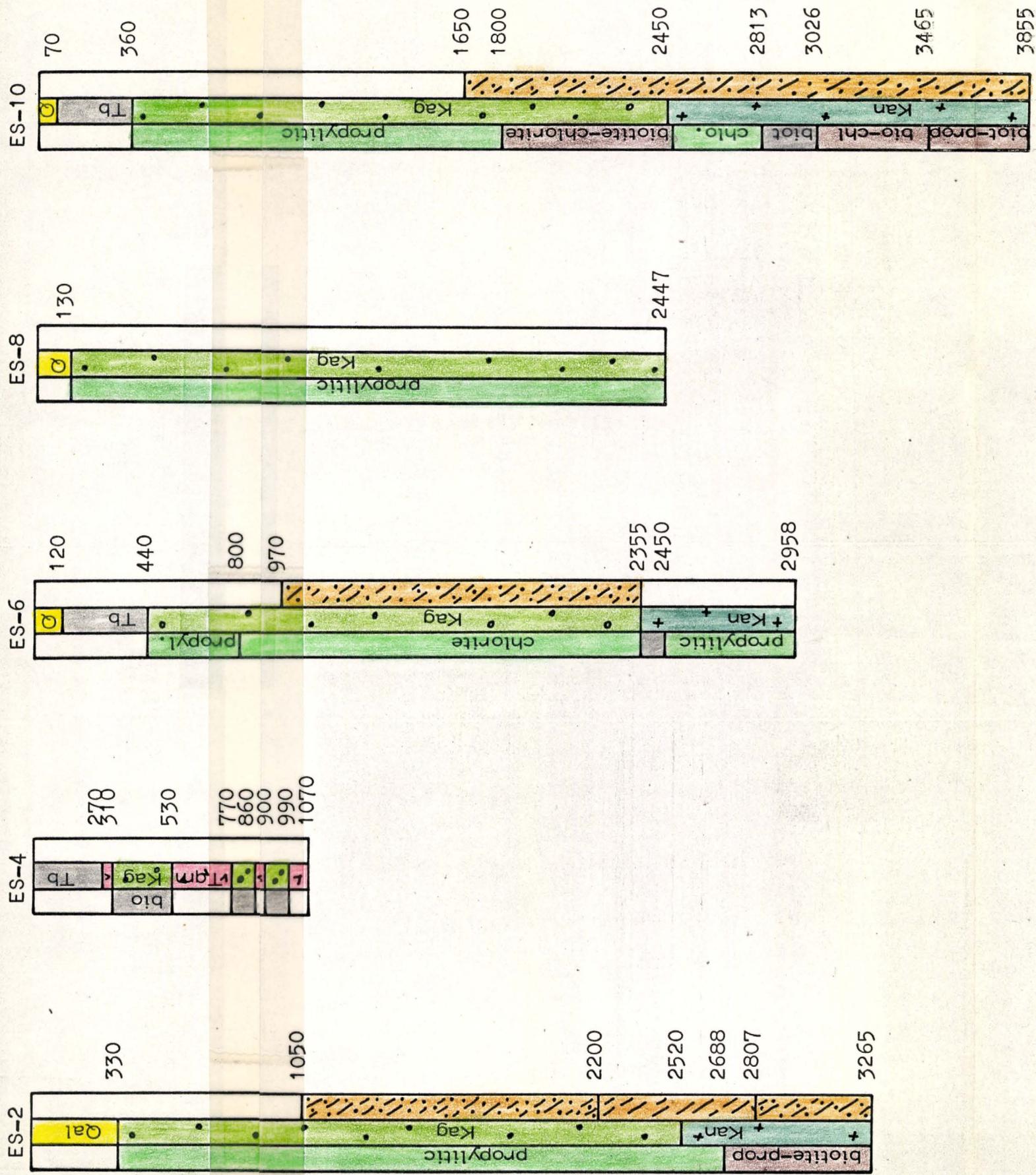


FIGURE 4

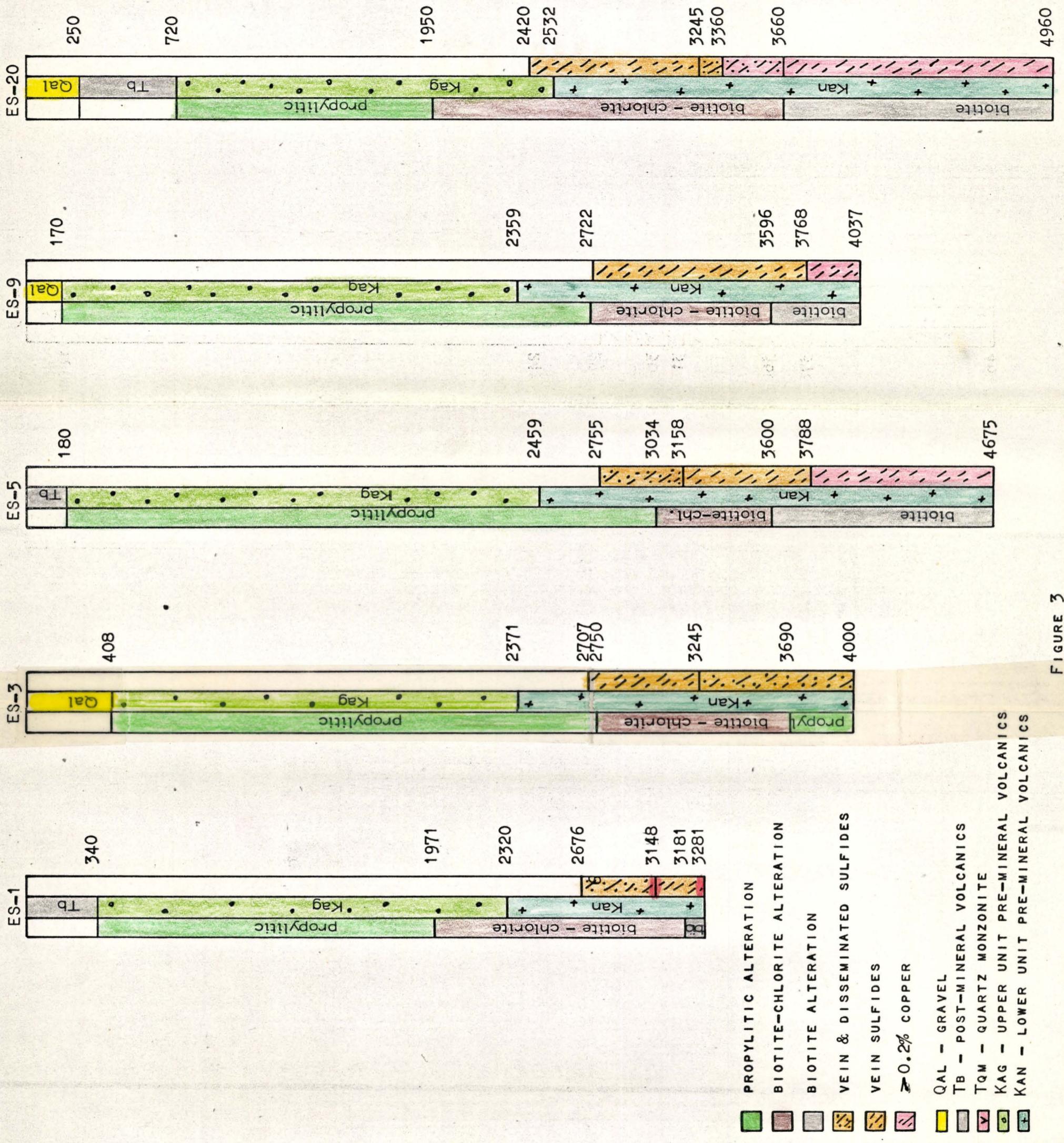


FIGURE 3

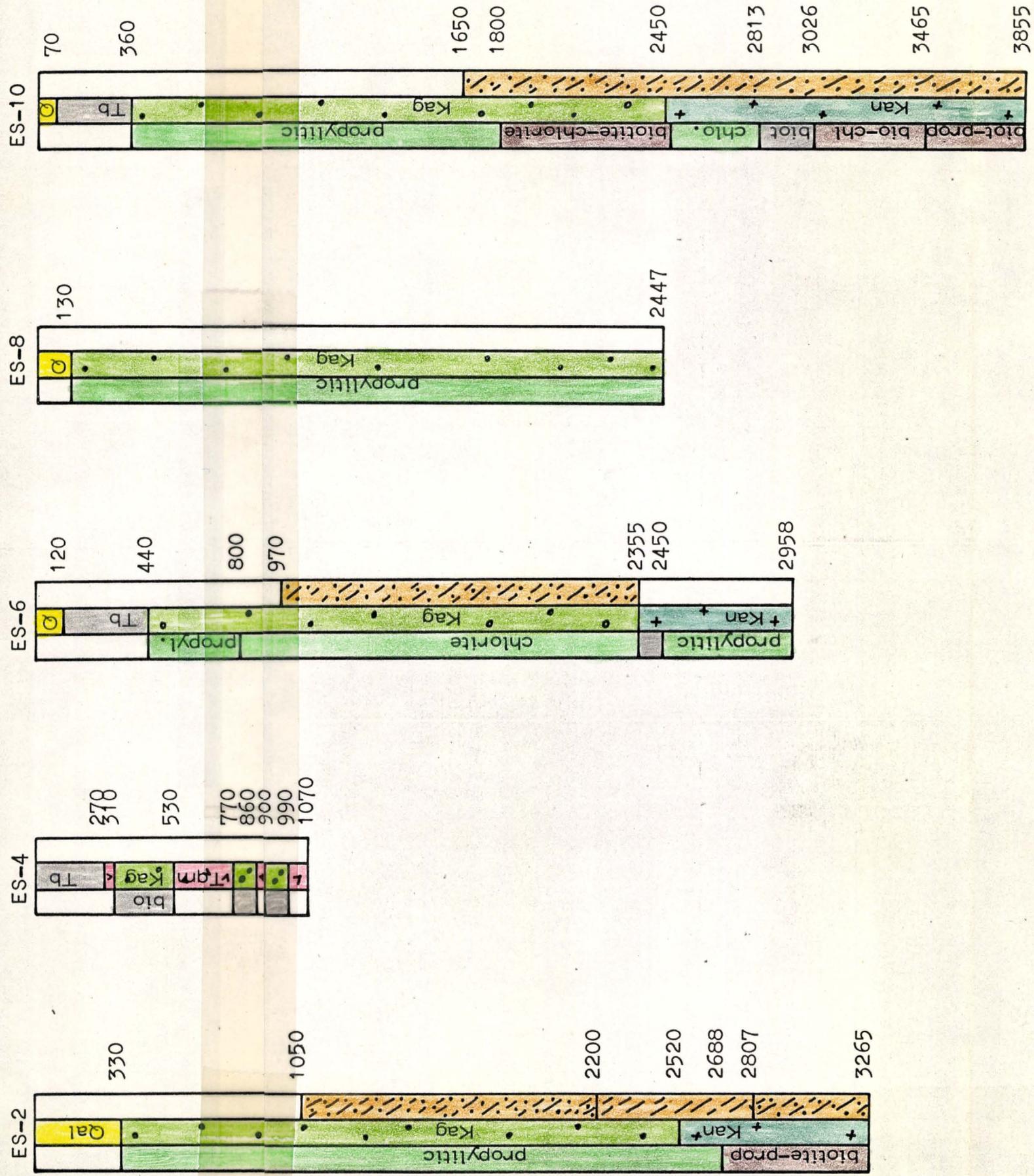
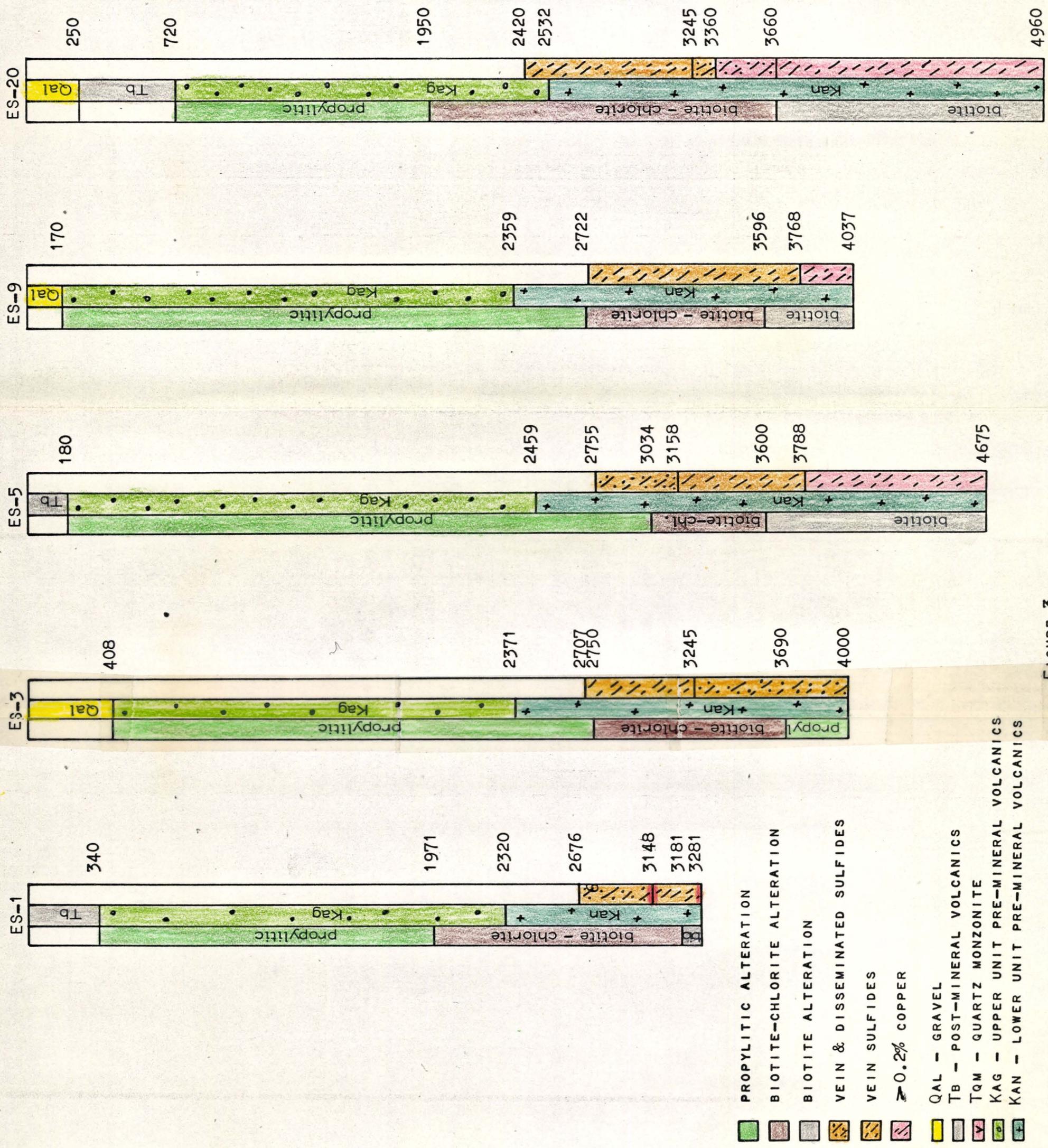
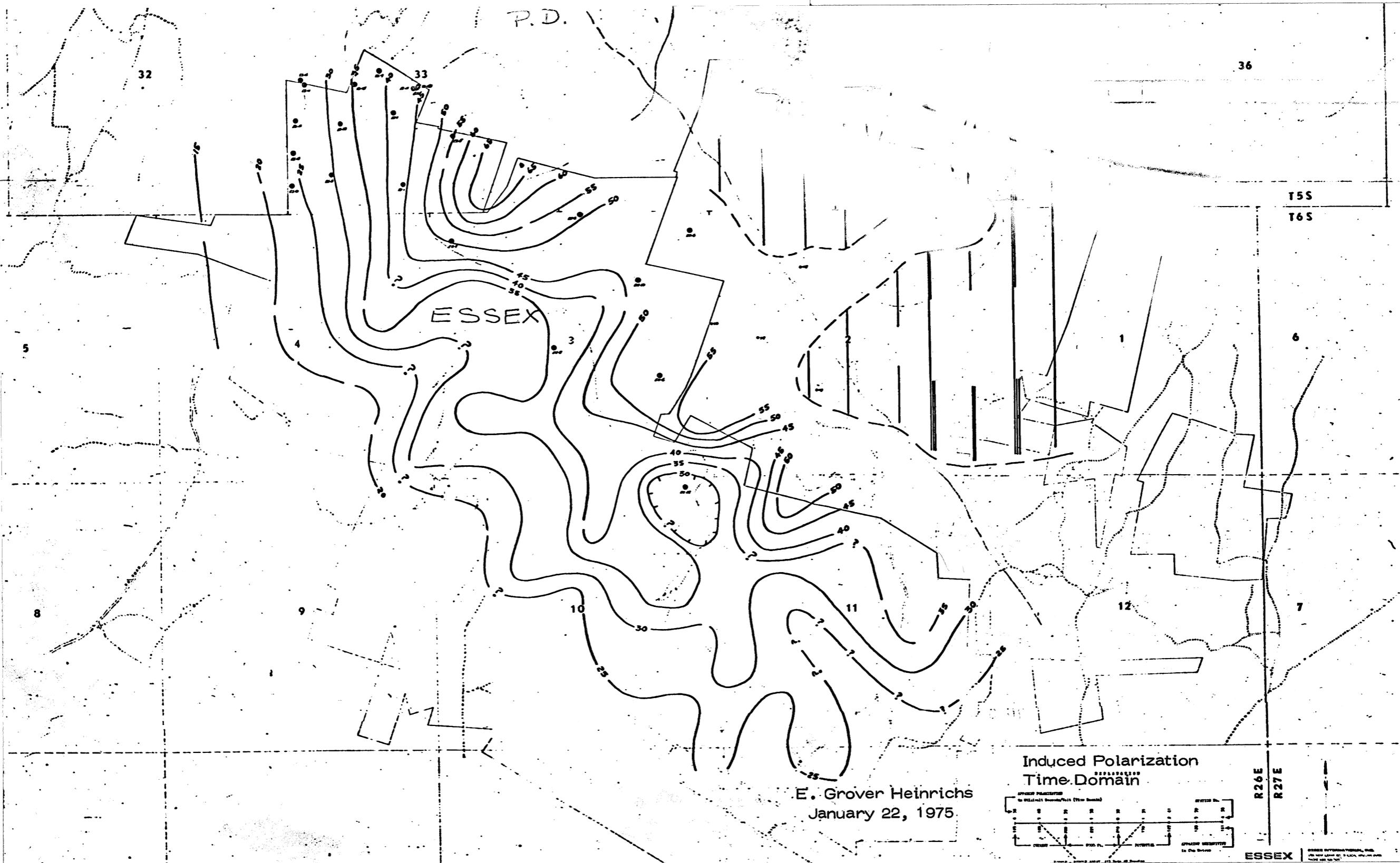


FIGURE 4



- PROPYLITIC ALTERATION
- BIOTITE-CHLORITE ALTERATION
- BIOTITE ALTERATION
- VEIN & DISSEMINATED SULFIDES
- VEIN SULFIDES
- 0.2% COPPER
- QAL - GRAVEL
- TB - POST-MINERAL VOLCANICS
- TQM - QUARTZ MONZONITE
- KAG - UPPER UNIT PRE-MINERAL VOLCANICS
- KAN - LOWER UNIT PRE-MINERAL VOLCANICS

FIGURE 3



P.D.

32

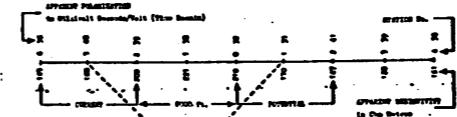
36

15S  
16S

ESSEX

E. Grover Heinrichs  
January 22, 1975

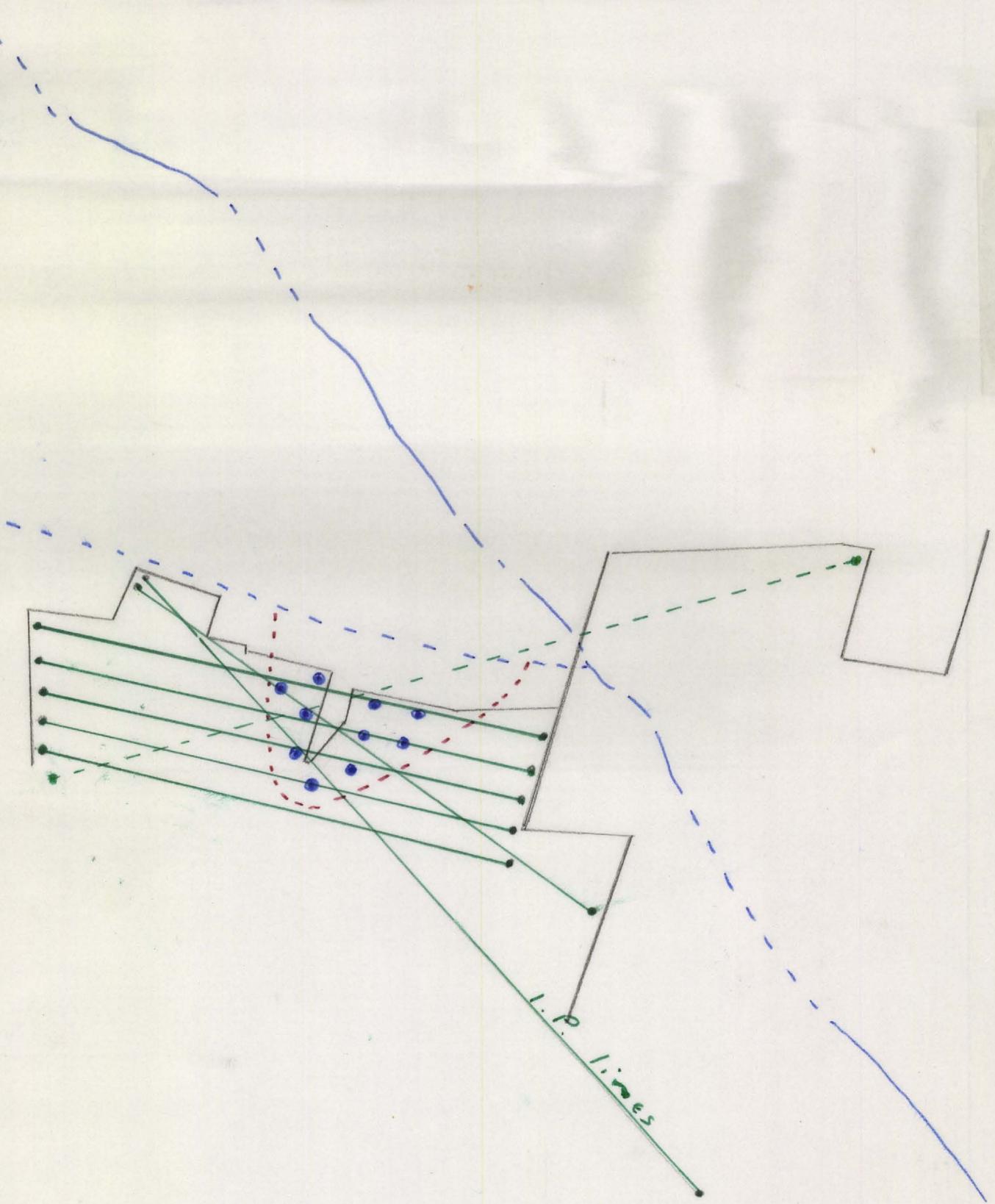
Induced Polarization  
Time Domain



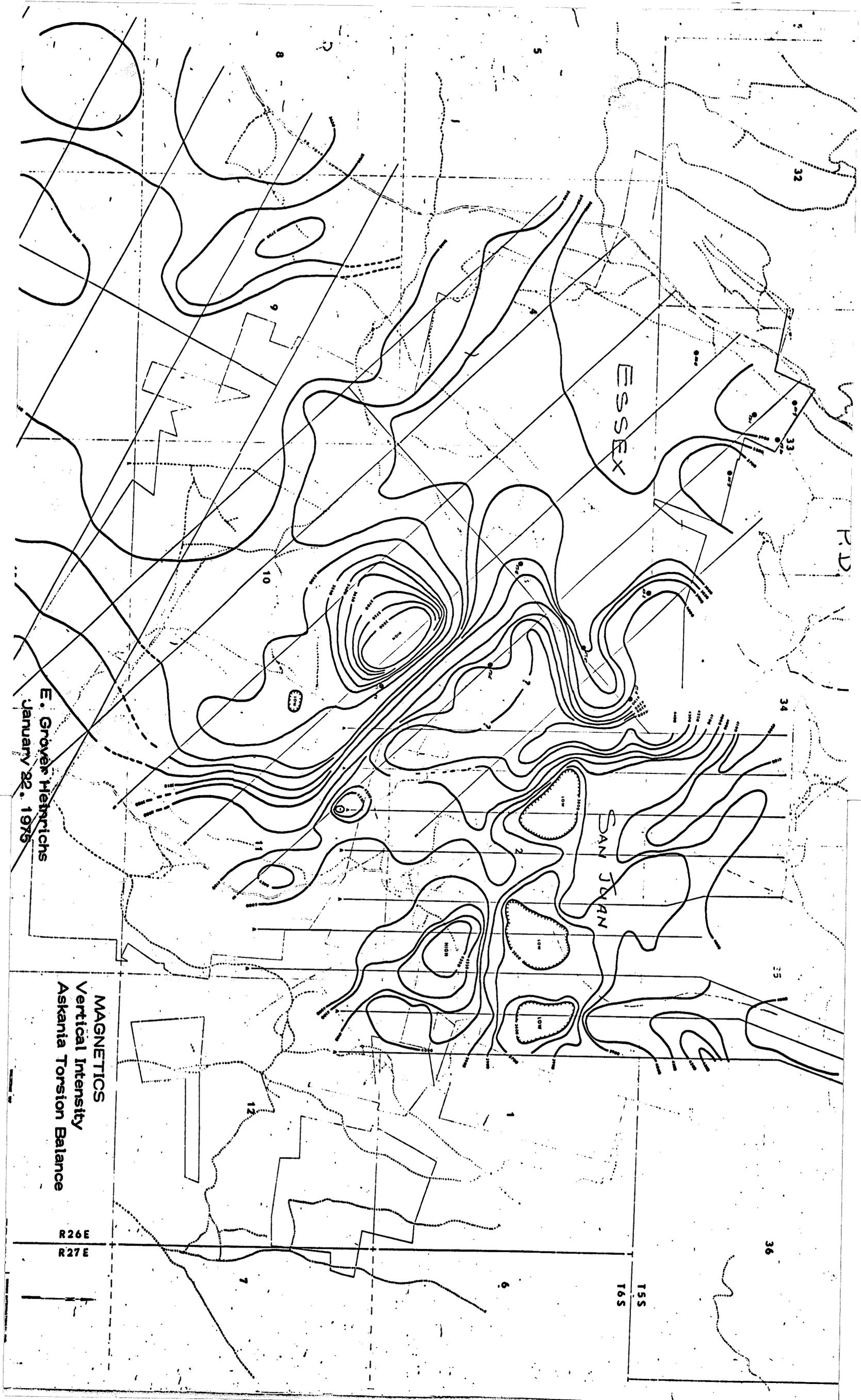
R26E  
R27E

ESSEX

ESSEX INTERNATIONAL, INC.  
100 WEST 10TH ST., SUITE 100, DENVER, CO 80202  
303-733-1111



Proposed Drill Holes  
and  
Induced Polarization Lines



E. Grover Heinrichs  
January 22, 1975

**MAGNETICS**  
Vertical Intensity  
Askania Torsion Balance

R26E  
R27E

T55  
T65



## DISTRICT GEOLOGY<sup>1</sup>

### General

The Gila Mountains are a northwest trending range composed of volcanic rocks of Cretaceous (?) and Tertiary age and Laramide and Tertiary age intrusives. Basin and range faulting combined with subsequent erosion to form the present rugged topography along the crest of the range.

The southwest flank of the range is composed of Cretaceous andesite volcanic rocks and various intrusive plutonic and volcanic rocks closely related to copper mineralization. The crest and northeast flank of the range consist of post-mineral Tertiary volcanic rocks dipping slightly to the north and northeast from 10 to 12 degrees. Tertiary volcanics crop out on Essex property only as erosional remnants capping small hills on the downfaulted side of the Butte Fault, the principal northwest trending basin and range structure in the district.

### Sedimentary Rocks

The oldest and youngest rocks in the area are sedimentary. Recent gravels which cover most of Essex<sup>1</sup> property southwest of the Butte Fault are the youngest rocks. Xenoliths of quartzite up to 150 feet in diameter occurring in the Lone Star stock may be of Cambrian age.

### Igneous Rocks

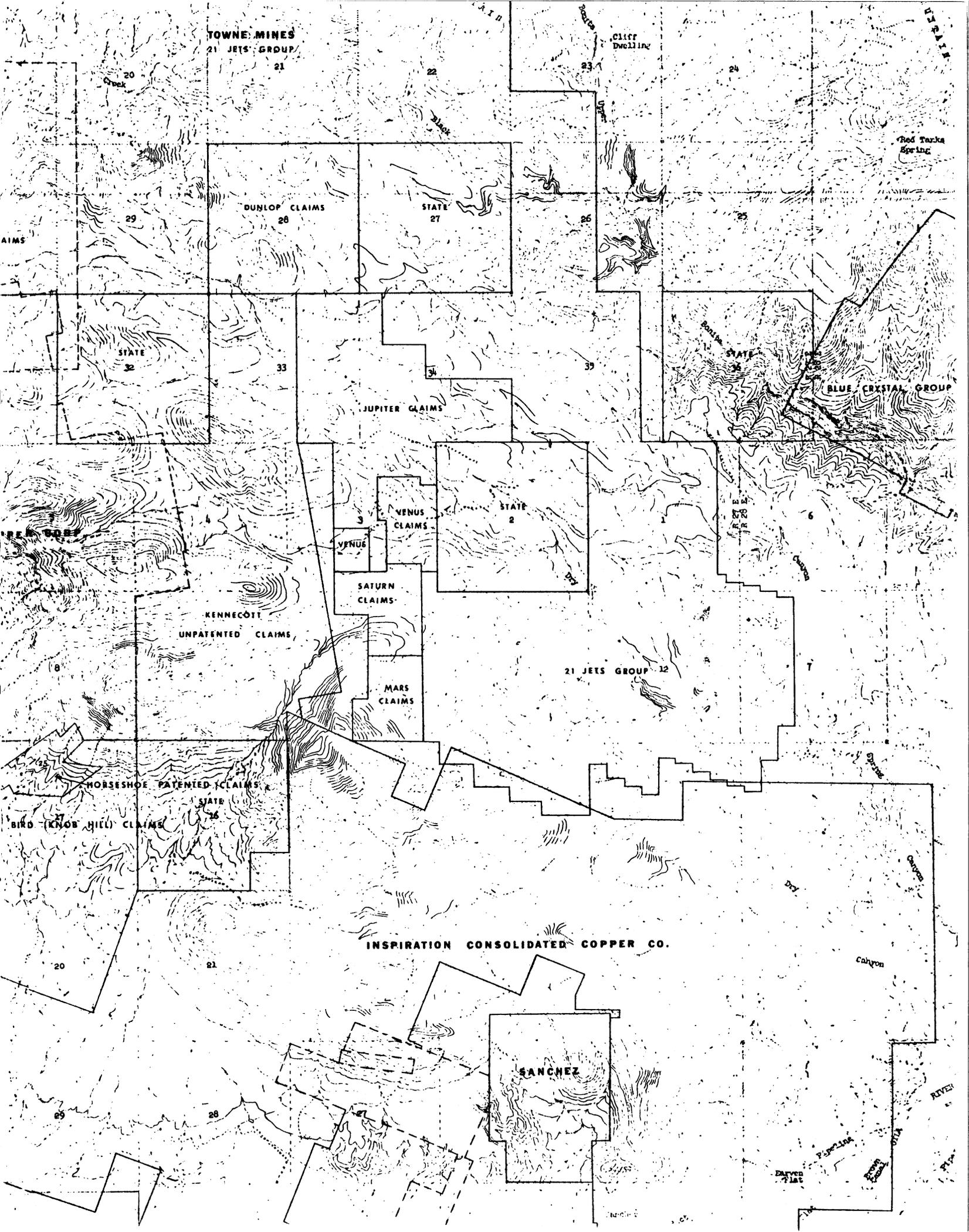
Extrusive Rocks. The Cretaceous older volcanic series is host rock for most of the economically important copper mineralization in the district. This series is divided by most observers into an upper and lower unit. The lower unit is predominantly dark gray andesite porphyry with tuffaceous and fragmental sections. The upper unit is green to gray andesite, similar in composition to the lower unit but distinctly fragmental in nature. The term agglomerate is used by Essex personnel, but on other maps the terms fragmental volcanic and flow breccia are seen. Generally these units are readily mappable but near the contact where intercalation occurs and fragmental character is weakly defined the rock types may be difficult to differentiate.

The older volcanic series is overlain by younger post-mineral volcanic rocks which Kennecott geologists have divided into intermediate and younger volcanic series. These younger rocks consist principally of

---

<sup>1</sup>Robinson and Cook, 1966





TOWNE MINES  
21 JETS GROUP

Cliff Dwelling

Red Tank Spring

DUNLOP CLAIMS  
28

STATE  
27

STATE  
32

JUPITER CLAIMS

BLUE CRISTAL GROUP

VENUS CLAIMS

STATE  
2

VENUS

SATURN CLAIMS

KENNECOTT  
UNPATENTED CLAIMS

MARS CLAIMS

21 JETS GROUP 12

HORSESHOE PATENTED CLAIMS

BIRD (KNOB HILL) CLAIMS

INSPIRATION CONSOLIDATED COPPER CO.

SANCHEZ

Barren Flat

RIVER



### The San Juan Claim Group

This group of claims is strategically located between the Phelps Dodge orebody and the Kennecott orebodies, and straddles the Butte fault.

No priority has been assigned this claim group because Essex and other owners are in litigation with PMC, the lessee, over the property.

However, from an exploration viewpoint, the San Juan represents an excellent though relatively unproved sulfide target area. Many exploration departments of major companies view the San Juan as a prime exploration possibility. These companies include Phelps Dodge, Kennecott, St. Joe Minerals, Cities Service, Newmont, and Standard Oil of California. Any one of these companies would be willing to put up \$250,000 to \$500,000 on a drilling commitment if the proper control could be acquired by them through Essex. If current discussions between Cicero and Shannon get nowhere, some alternative courses of action are hereby proposed for your consideration. The primary objective of any action would be to dismiss the PMC counterclaim and secondarily to recoup some of Essex's expenses spent on the property and in the district.

#### Proposal No. 1

Essex, through the owners, become very aggressive in the current litigation by the following:

1. Assist in a technical way the owners in filing a new complaint based on the degradation of the oxide ore and possibly a potential sulfide zone by the dumping of spent acid containing possible carcinogenic hydrocarbons and use of the property primarily as an acid dump and not as a profitable leach operation. The non payment of property taxes could also be part of this complaint.
2. In making the lease payment to the owners (\$150,000 due Feb. 25, 1976), pressure the owners use this sum for payment of the litigation (Essex's portion 7-3/4% only), and perhaps even remain aloof from the litigation to make it appear that the owners are running rampant.

3. It would seem that Chevron Oil has a great deal of liability in all this because of their involvement in the processing of the spent acid - on the defective car theory, i.e. the dealer (PMC) and manufacturer (Chevron) are both liable.
4. We know Chevron has advanced unusually large sums of capital to PMC (according to Williams in Denver) with little hope of any return. The only reasoning to justify these advances is because it is a cheaper way of spent acid disposal. This could be contrary to EPA and state health laws.
5. Depose many of the Chevron and PMC officials including Williams, Grider, Eimon, and the top Chevron men in El Paso, Denver, and maybe San Francisco, George Ward in NYC, Swartz in El Paso, etc.

Once some of the top Chevron men were subpoenaed for depositions, I think our negotiations with PMC would smooth out very quickly because of what might be revealed. At the moment we have no heat on PMC or Chevron and they feel confident of eventually driving Essex to the wall.

The owners of course are still threatening to file a new complaint and it is important for us to continue to maintain contact with them, in order to know their thinking.

If a settlement arrangement is ever made on the counter-claim between Essex, Producers Minerals which includes any third group, Essex should be cautious and not without specific approval of the other owners assign our present lease agreement on the San Juan property to Producers Minerals Corporation.

Claridge, who speaks for a 52% ownership in the San Juan, and Bud Jones who represents the balance of the owners have verbally warned us they definitely would be against such an arrangement and the lease agreement itself, says -

"Essex may assign its rights by giving prior written notice to the other owners of the transfer to a third party technically and financially capable of carrying on the covenants and agreements of Essex."

Claridge et al do not consider that Producer Minerals are such a third party. In fact, if a transfer is made to a third party without approval of the other San Juan owners, we risk having a suit filed against us for conspiracy with the third party to the detriment of the other owners, especially if the third party was Standard Oil.

However, if compensation was paid to the other owners for past royalties due and for their out of pocket expenses, they would probably agree to a transfer to Standard Oil.

The Essex Option agreement has an effective date of Feb. 25 and the next payment due to the owners is \$150,000 due Feb. 25, 1976. Essex has the right to terminate at any time with 30 days notice. Therefore the decision to terminate or not must be made by Jan. 23, 1976 since Jan 25, 1976 is a Sunday.

If you agree to pursuing the strategy as herein discussed, then we feel Cicero et al should allow us to have some voice in the pursuit, perhaps through Bud Jones and local attorneys, even though naturally Chicago would continue to control overall tactics.

These pages 4 through 7, because of their sensitive nature, are not being copied or sent to anyone but you. Please destroy them after you have finished with them.

#### Alternative Proposal No. 2

As a last resort approach to an equitable solution concerning the San Juan litigation, the following is suggested:

1. Essex approach Chevron with the following offer -
  - a) Chevron acquire the Essex lease on the San Juan.
  - b) If Kennecott fails to proceed with our offer in Area 2, throw those claims into the deal.
2. Chevron in return, persuades PMC to withdraw the counter-claim against Essex and the owners.
3. Chevron have a two year period to explore the properties during which time Chevron would make all property payments and assessment commitments.
4. After one year Chevron would have the option to -
  - a) Return to Essex all the properties
  - b) Proceed in their evaluation program

5. If Chevron proceeds, then Essex would accept -
  - a) Buy-out of the interest for \$10,000,000.
  - b) Retain a 20% interest in a joint interprise to develop the property with an option on 50% of the copper produced in a form acceptable to Essex at current U.S. producer price.
6. No part of the deal could be sold or transferred without Essex's permission.
7. All back compensation taxes due, etc., due owners and others by PMC, would be paid by Chevron. This would be necessary in order to get the owners agreement to Essex assigning the exploration option agreement to Chevron. PMC would be compensated by some arrangement strictly between Chevron and PMC.

We should start with Proposal #1 and at a proper time after possible damaging information has been obtained in depositions proceed with Proposal #2.

The foregoing is presented to you as a possible over all solution to our present dilemma which would -

1. Resolve to Essex satisfaction with a minimum capital outlay the present litigation.
2. Essex ideally could recoup some of its investment in the district.
3. The possibility of future litigation would be minimized because all groups would get something significant from these proposals.

September 14, 1970

To: E.G.H.

From: D.B.C.

Subject: Safford-Anderson Prospect Investigation - Interim Report

The Nail Keg and Blue Xtals Groups are in areas of good potential mineralization. The Nail Keg shows practically no mineral at the surface but P.D. and Producers Minerals are both developing mines near by. The Blue Xtal has an area of small veinlets with chrysocolla and chalcocite showing. These veinlets are not sufficiently large to be important at this time.

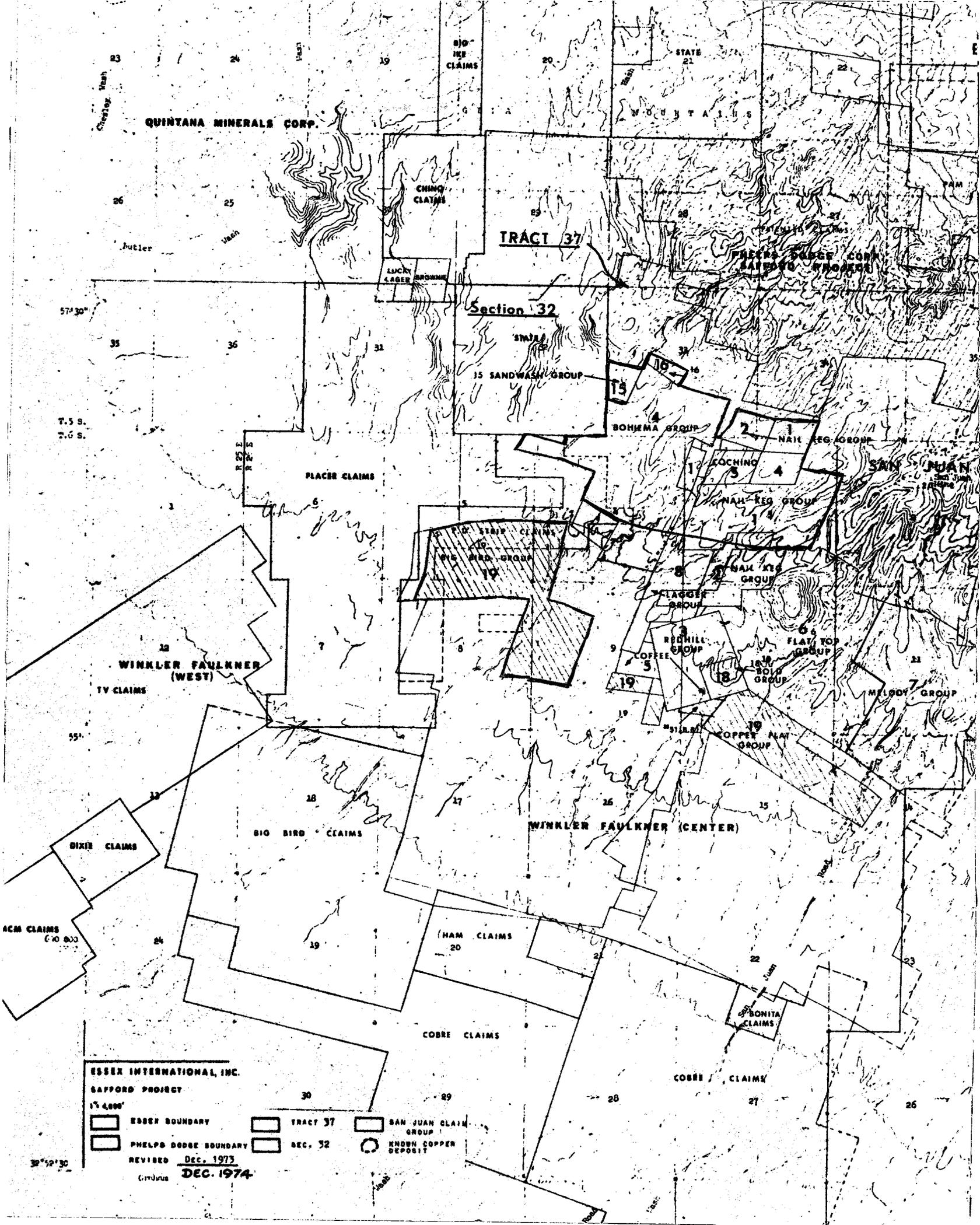
By reason of their physical location both of these properties probably deserve a reasonably thorough investigation. In both cases the target will be a blend ore body and probably between 1000' and 2000' deep. A strong carefully oriented and controlled geophysical program should be undertaken to locate the best possible drilling targets. An I.P. line that may have been responsible for drill holes A5 and A21 on the Nail Keg Group was found in the field. An old newspaper at one electrode was date 10 April 1969.

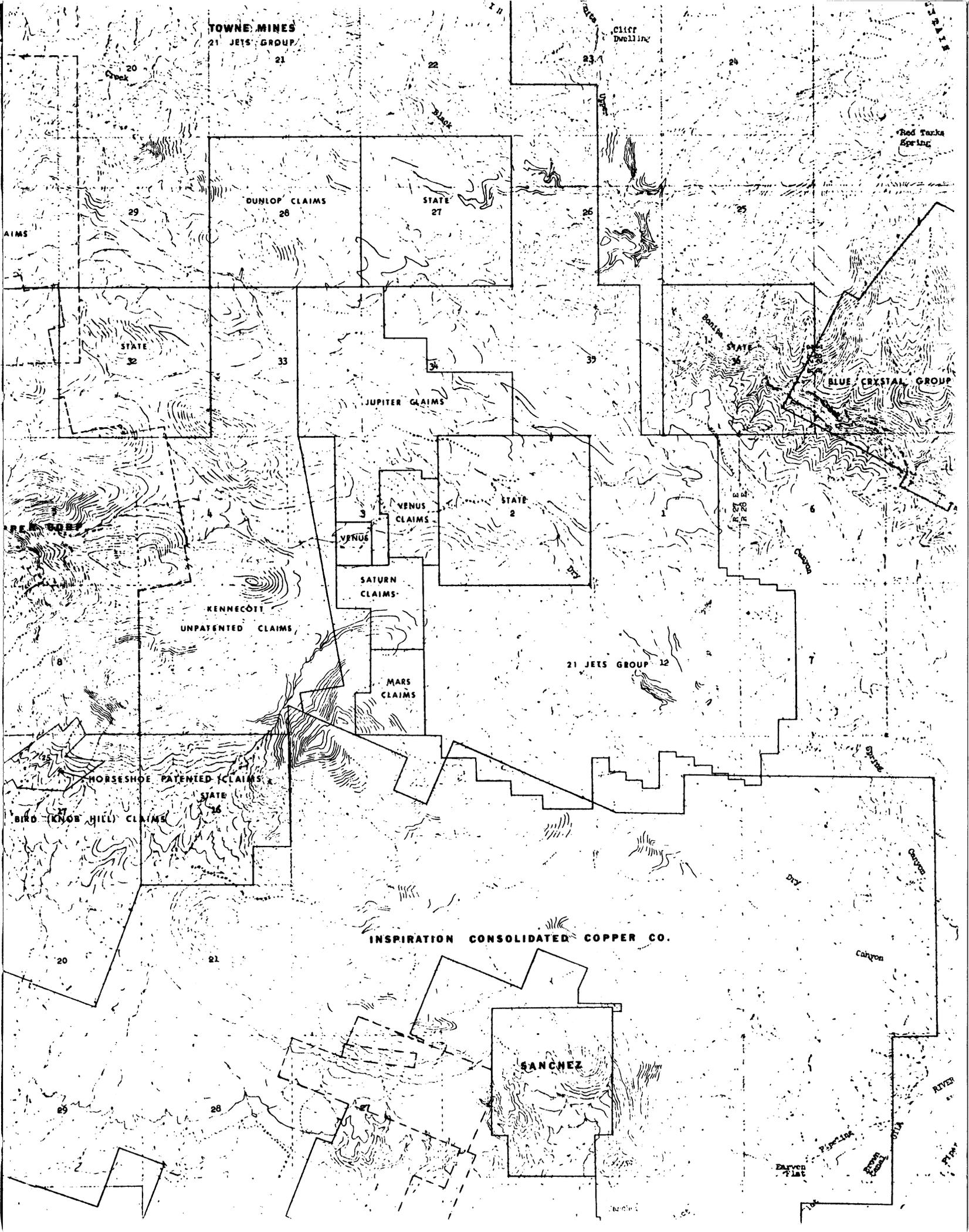
A couple of hours was spent on the Horseshoe area. The situation is approximately the same here. Some oxide copper is showing in the workings on this property. A notice on this property indicates that O.L. Hill and Producers Chemical (?) may have a lease on it.

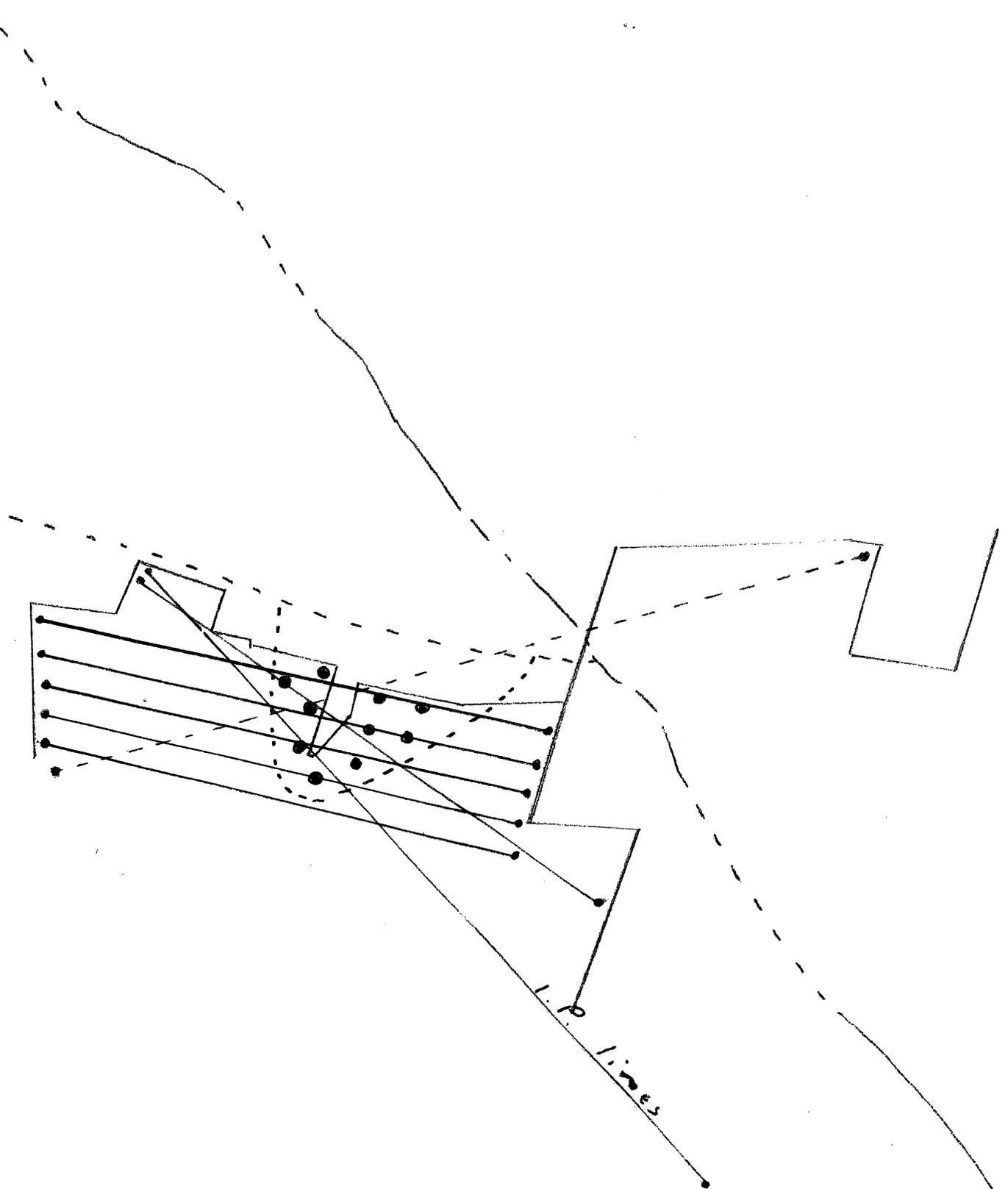
The man Anderson wants to send along with me is asking 5.80/hr. I'll check with you before taking him.

I'll be at the Sandra Motel in Safford and will be looking at the Cuprite and Yakie next week.

Don







Proposed Drill Holes  
and  
Induced Polarization Lines

P.W. O'Malley

Ft. Wayne, Ind.

R. Kelly

E.G. Heinrichs

Tucson, Ariz.

D. Letizia

Property Priorities  
Safford Project

Dec. 19, 1975

Because of the possibility of terminating certain selected properties in January 1976, I wish to outline my ideas as to the relative value or priority of the Safford properties and the reasoning involved.

Priority No. 1

Area 1

Regardless of the Phelps Dodge position or their future intentions, Parcels 1, 2, 4, 5, 8, 15, 16 - sixty-eight claims plus fractions - are a very valuable piece of ground to Essex and Phelps Dodge for the following reasons:

1. Its proximity to the Phelps Dodge Dos Pobres orebody, controls the depth of mining on the Dos Pobres, which will have increasing importance as time passes and future reserves become present reserves.
2. In our own right we have an ore intersection in Drill Hole ES-5. The significance of this is not completely understood at this time because more drilling is required to better define the zone. It could be an entirely new orebody or a southerly extension of the Dos Pobres. In any case, it is deep, and if it is an orebody, logically, it should be developed in concert with the Dos Pobres.

Essex's payment on this ground is due Feb. 20, 1976, in the amount of \$37,689, and to buy the property outright would cost Essex \$608,891, less an estimated 15% because of the acreage involved (the agreement calls for a prorated payment based on \$15,000/20.661 acre claim).

It is recommended that Essex commence to exercise its option to purchase initially the most northerly claims that join Tract 37, namely Parcels 15 and 16. This act would accelerate Phelps Dodge coming to the negotiating table to discuss the disposition on these properties.

There would be little effect to the on-going litigation between Essex and Producers by increasing our equity ownership to the west of the San Juan.

Priority No. 2

Area 2

Parcels 9, 10, 22, 12, 14, 17, 22

These parcels, because they are separate and isolated groups of claims, have a diminished value. Their primary value, currently is their proximity to the Kennecott in-situ leach project. If the current Kennecott discussions prove futile, it is recommended that these properties be returned to the owners, or traded off elsewhere, though the possibilities of this are quite remote.

Parcel 9, because it is the nearest claim group to the Kennecott leaching operation, is the most valuable of this group.

Parcels 10, 12, and 14 might have some effect on PMC and the litigation because these properties are contiguous to the San Juan. Actually the effect may work to Essex's advantage in a small way. In any case, it would tend to discount PMC's past charges that Essex was seeking to surround them.

Total number of claims in this group is 39; payments due Feb. 20, 1976 total \$16,800 + \$400.00/mo. for Parcel 22.

Priority No. 3

Area 1

Parcel 6 - Flat Top claim group.

Its primary value is for operating room and possible dump space for a potential operator of the San Juan (if the San Juan should ever be economic). This of course, is speculative. Therefore it is recommended that the Flat Top group be dropped, traded off, or otherwise disposed of so as to relieve Essex of any further burden.

Priority No. 4Area 1

Parcel 19 - Big Bird Group, unpatented mining claims  
Copper Flat Group, unpatented mining claims  
40 claims

Essex has a 12.5% equity ownership. These claims are peripheral to our other holdings in the district. Our cost to continue to hold ownership is the cost of the assessment work - \$100.00 per claim per year - \$4,000.00.

It is recommended this property either be included to whom ever assumes Essex' other holdings in Area 1 or simply dropped by renewal time, which is Sept. 1, 1976. In any case no further funds should be spent here.

FILE MEMO

June 21, 1971

CONVERSATION WITH JOHN SNELL  
PRODUCERS MINERALS CORP.  
ON JUNE 16, 1971

Oxide ore reserves at San Juan Mine are considered to be 30 million tons at 0.55% copper. However, current leaching operation is attempting to mine material averaging 0.8% copper in order to make a profit or perhaps only break even. Ore faces observed in bottom of pit are hard but apparently brittle rock. Ore in the quartz monzonite porphyry is chrysocolla soaking of clay altered feldspar. In andesite oxide copper minerals may occur mostly on seams, but no good exposures of this rock type were visited.

Snell showed me assay logs on 7 or 8 of the old Rare Metals Company holes and said that Producers had much of this core, and had re-assayed some of it. These logs were seen only briefly, but most holes were about 750 feet deep with one 2200 foot hole and one 1500 foot deep hole. The holes may average 0.5% Cu or a little better, to a depth of 350 feet, and may approach an average of 0.4% Cu or a little less to a depth of 750 feet. I did not see the log on the 2200 foot hole, but Snell said that spotty values continued to the bottom - "30 or 40 feet at 0.2%, shorter intervals of 0.3 to 0.4%, and occasionally 5 or 10 feet at 0.7% Cu." Chrysocolla with some (maybe considerable?) chalcocite extends to a depth of about 350 feet, below which mineralization consists mostly of chalcopyrite with some chalcocite.

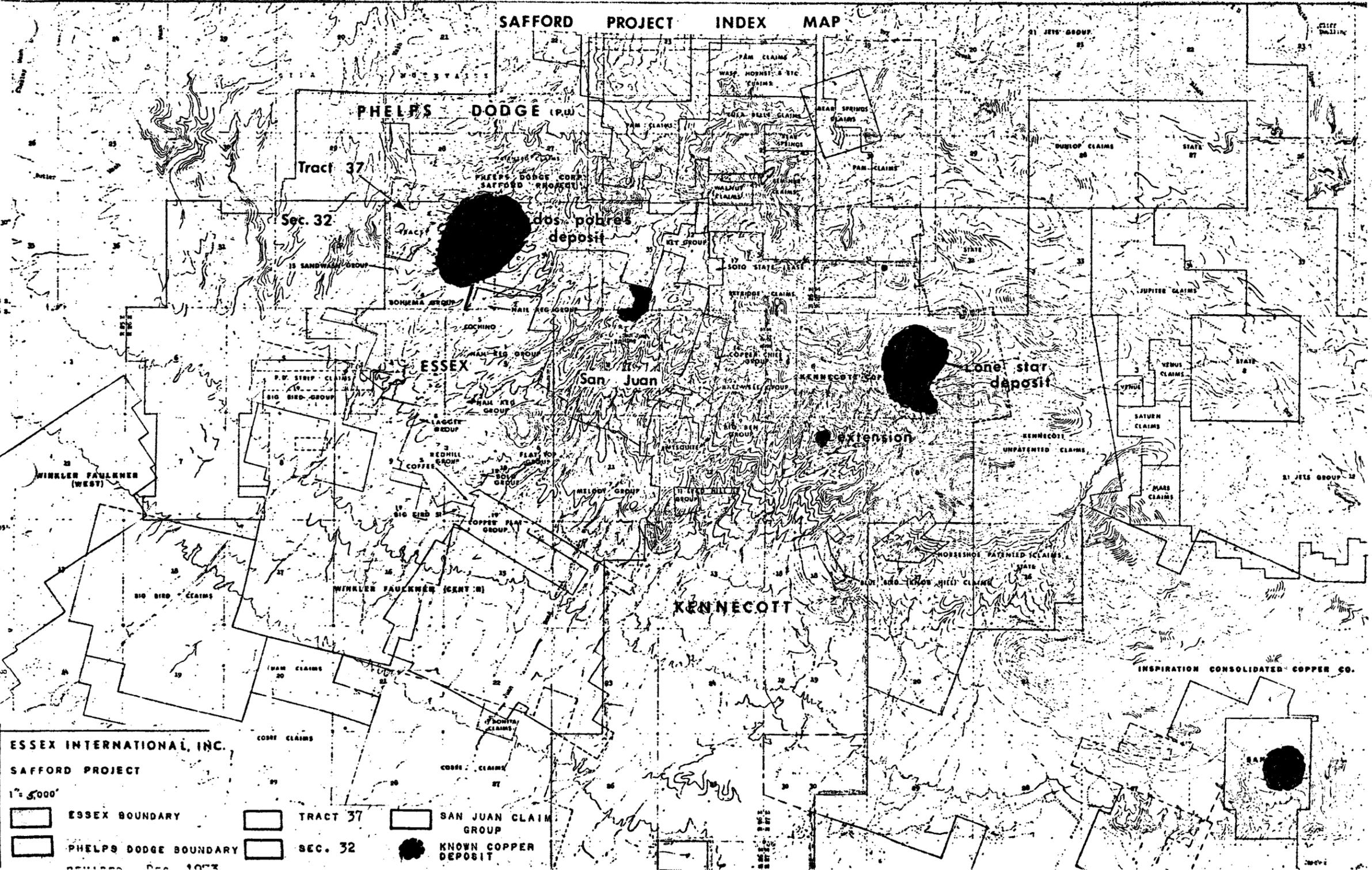
Producers diamond drill holes and blast holes show only total copper. This includes some chalcocite but they think much of the chalcocite is recovered during the acid leaching process.

Snell has heard that Inspiration's Sanchez Mine has 200 million tons at about 0.4% Cu. Inspiration thinks this is marginal as stripping ratio may be in the range of 3:1, but will probably hold on to the property because of future need to dump acid.

J.K. Jones

JKJ:td

SAFFORD PROJECT INDEX MAP



ESSEX INTERNATIONAL, INC.  
SAFFORD PROJECT  
1" = 5,000'

	ESSEX BOUNDARY		TRACT 37		SAN JUAN CLAIM GROUP
	PHELPS DODGE BOUNDARY		SEC. 32		KNOWN COPPER DEPOSIT

ESSEX SAFFORD PROJECT INDEX

TOWNE MINES  
21 JEIS' GROUP



ESSEX INTERNATIONAL, INC.

SAFFORD PROJECT

1" = 4,000'

ESSEX BOUNDARY

PHELPS DODGE BOUNDARY

TRACT 37

SEC. 32

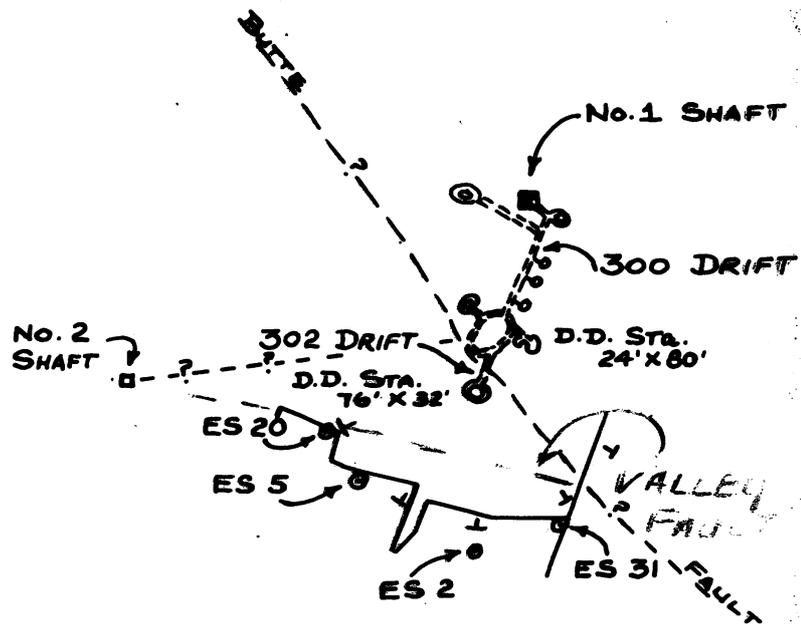
SAN JUAN CLAIM GROUP

KNOWN COPPER DEPOSIT

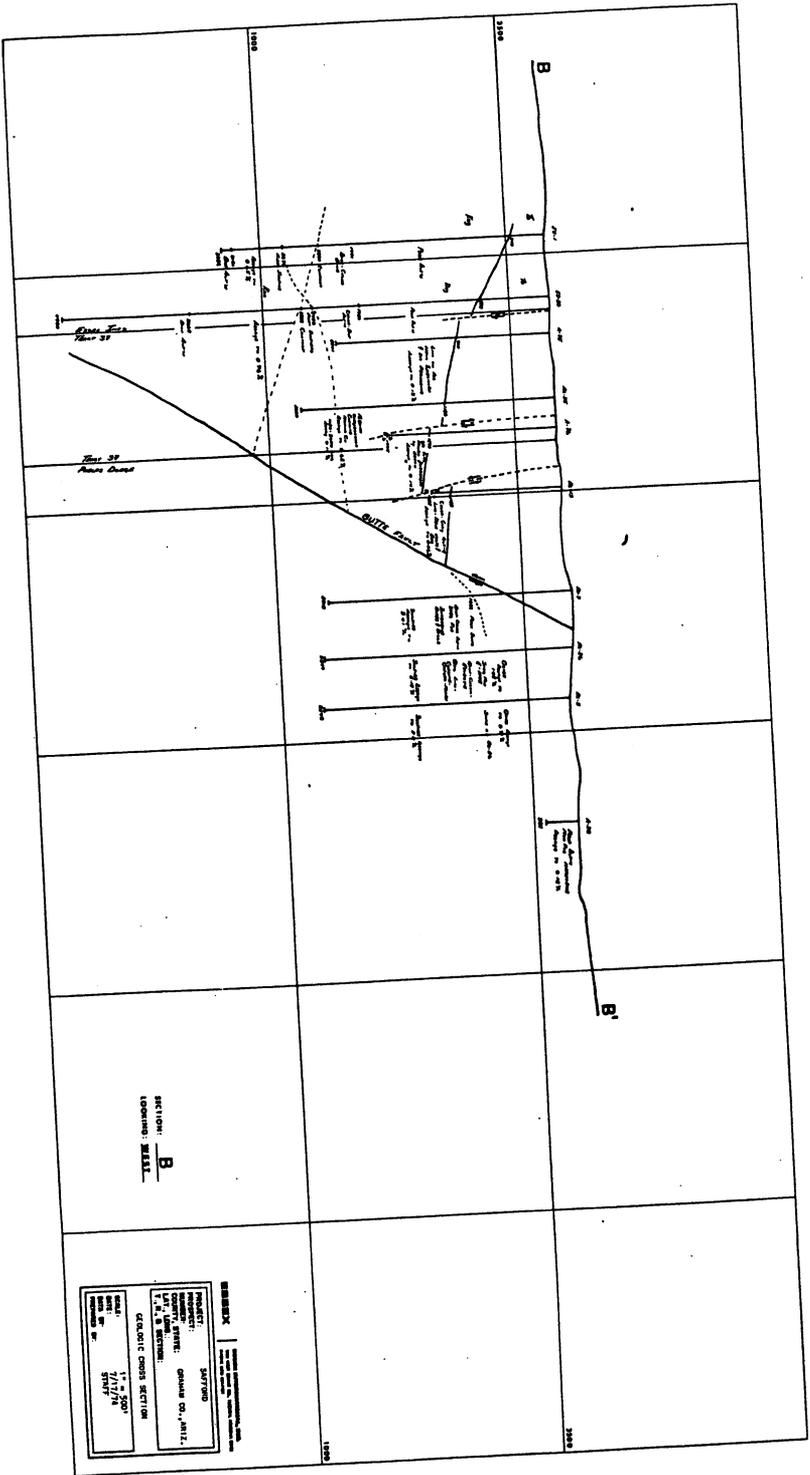
REVISED Dec. 1973

Grduva DEC. 1974

32°52'30"

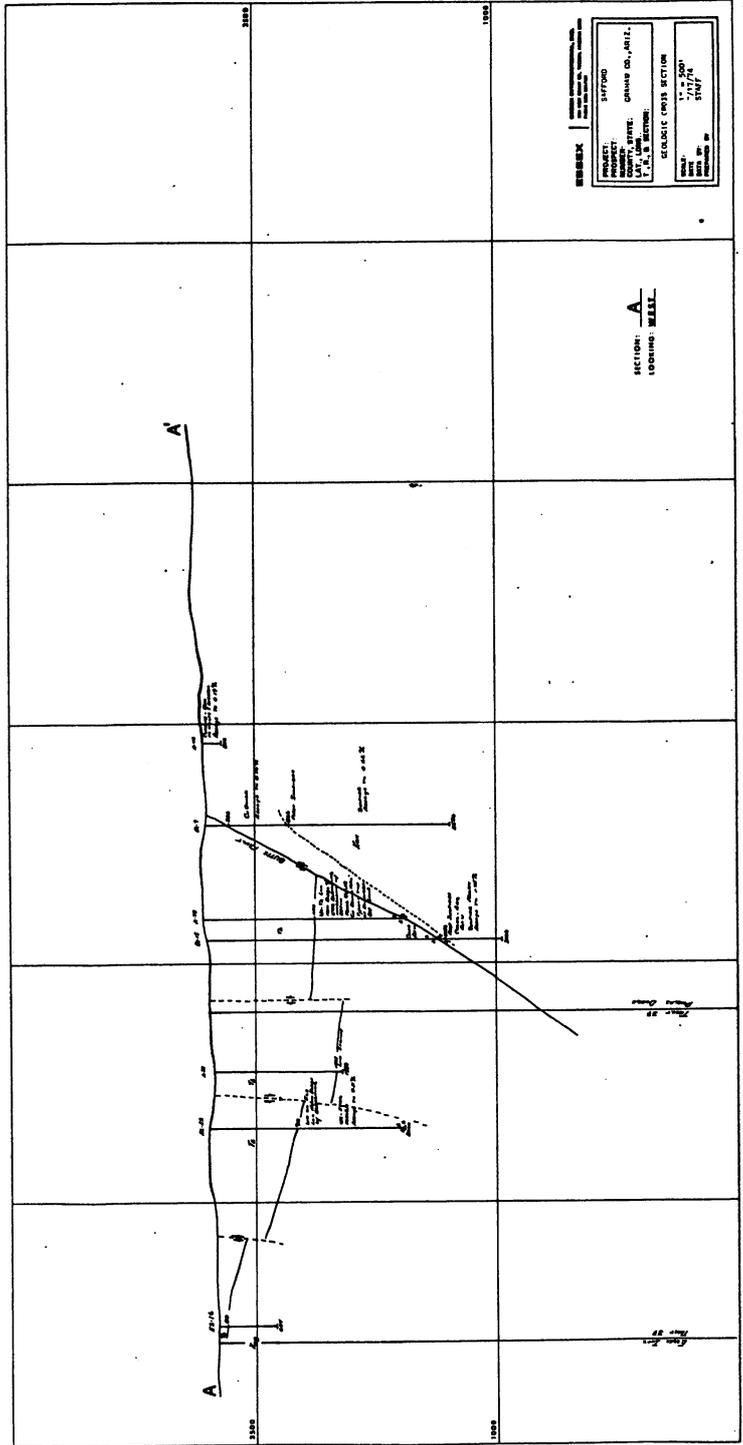


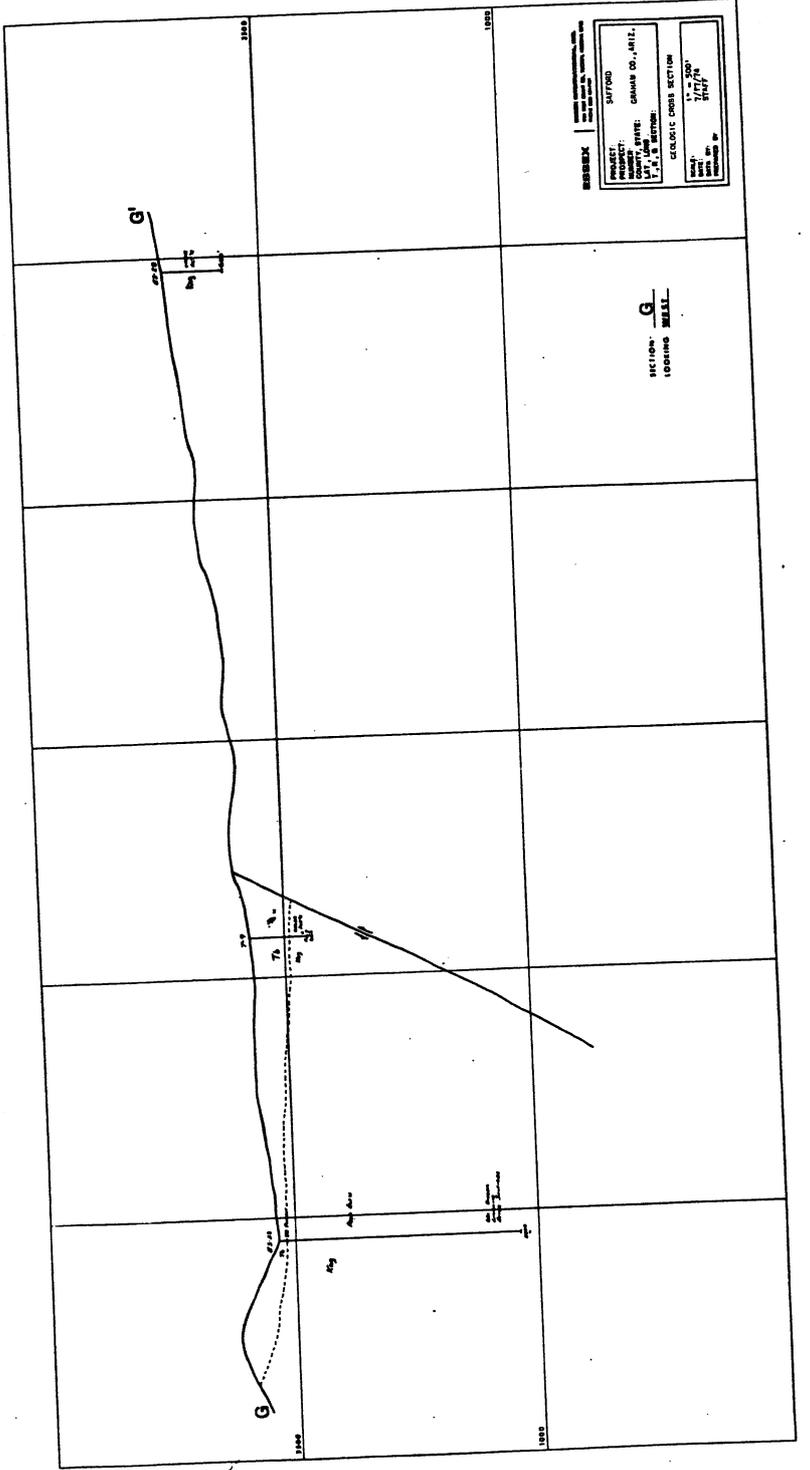
PHELPS DODGE  
 SAFFORD PROJECT  
 UNDERGROUND WORKINGS  
 DECEMBER 1974  
 SCALE 1" = 3900'  
 1 MILE = 1.3"



SECTION: B  
 (DRAWING: MEXE)

**REMARKS**  
 SECTION: B  
 PROJECT: GRAND OX. HILL  
 COUNTY: GRAND OX. HILL  
 T. 11 N. R. 8 E. SECTION: 11  
 GEOLGIC CROSS SECTION  
 SCALE: 1" = 200'  
 DATE: 7/17/78  
 DRAWN BY: [Signature]



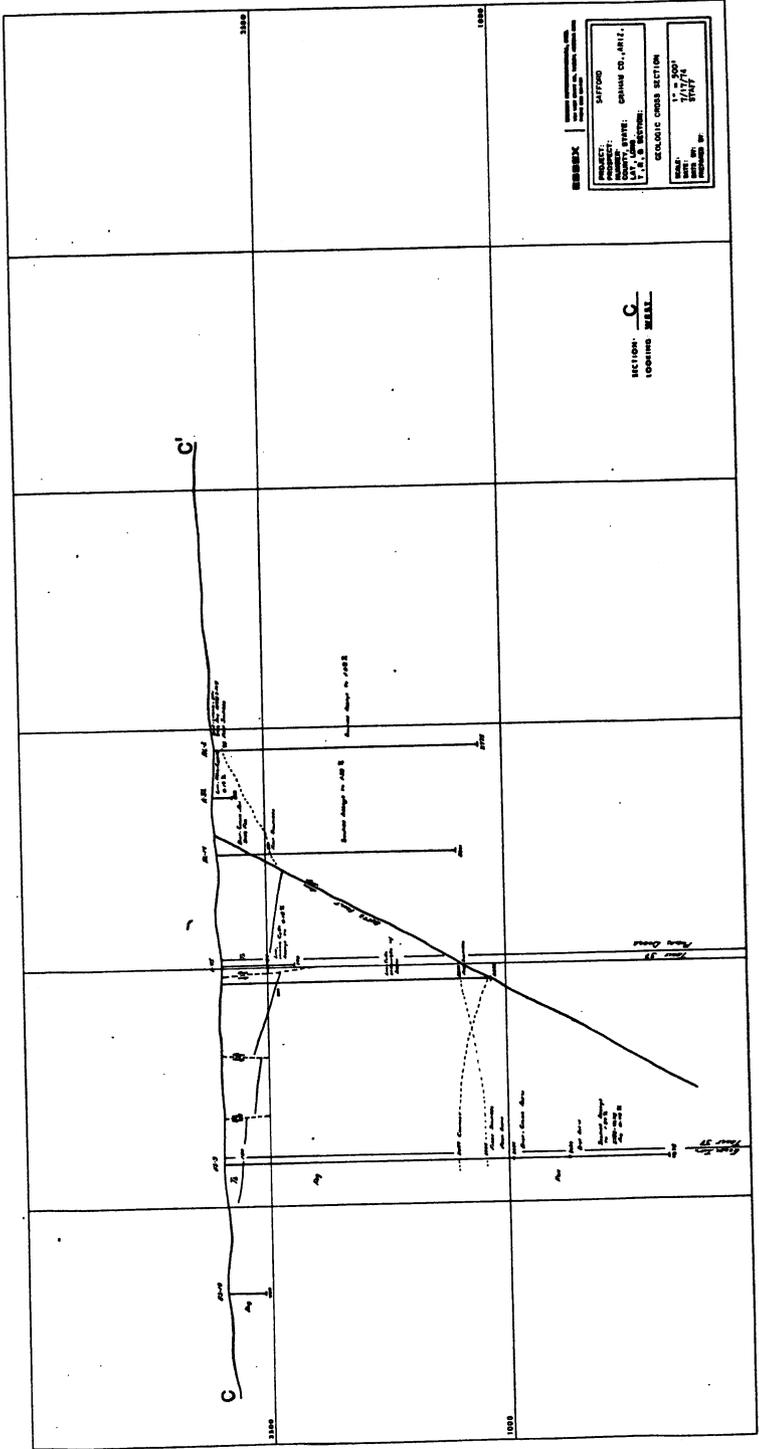


SECTION G - LOOKING WEST



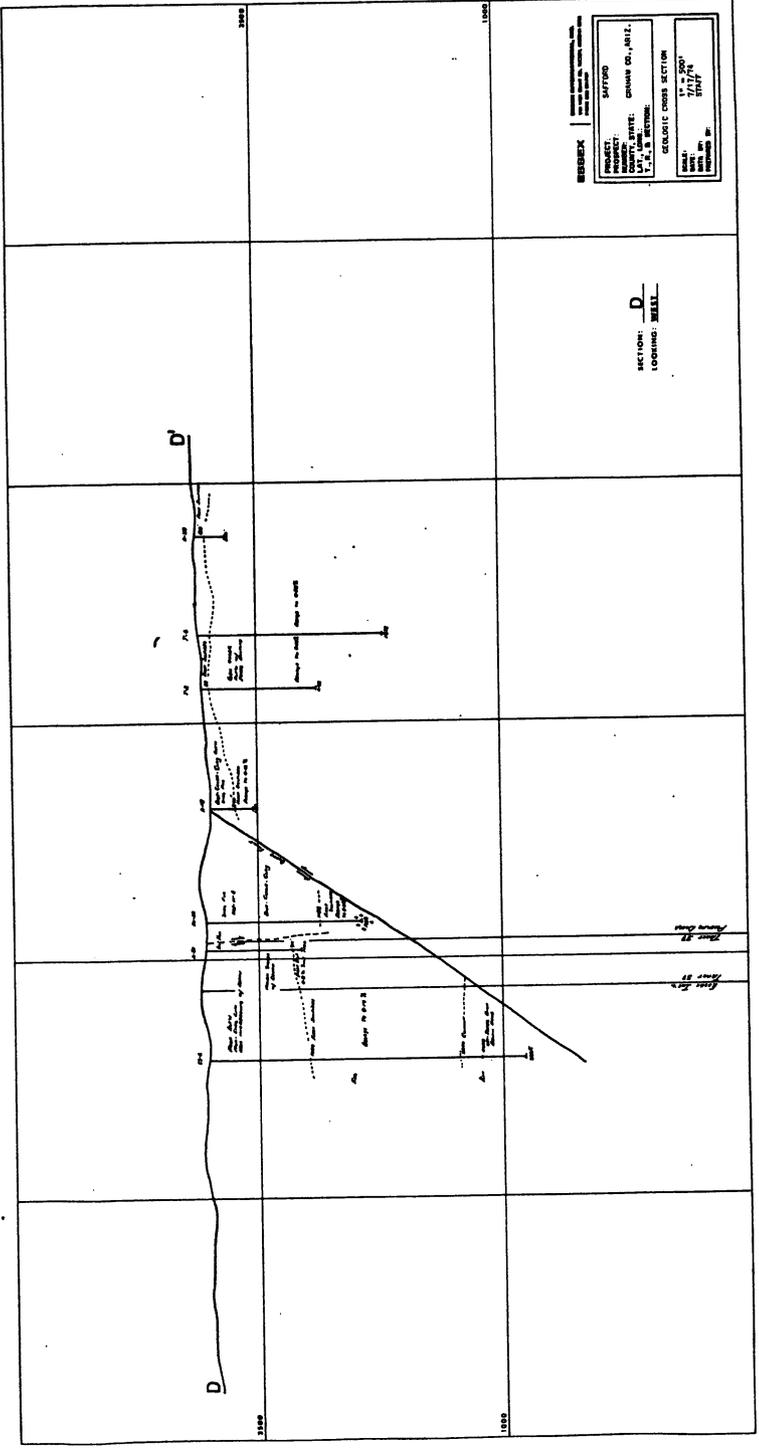
PROJECT: SAFFORD  
 COUNTY: GRIMM CO., NEB.  
 T. 12 N. R. 10 W. S. 23E.  
 GEOLOGIC CROSS SECTION  
 SCALE: 1" = 200'  
 DATE: 1957  
 DRAWN BY: [Name]

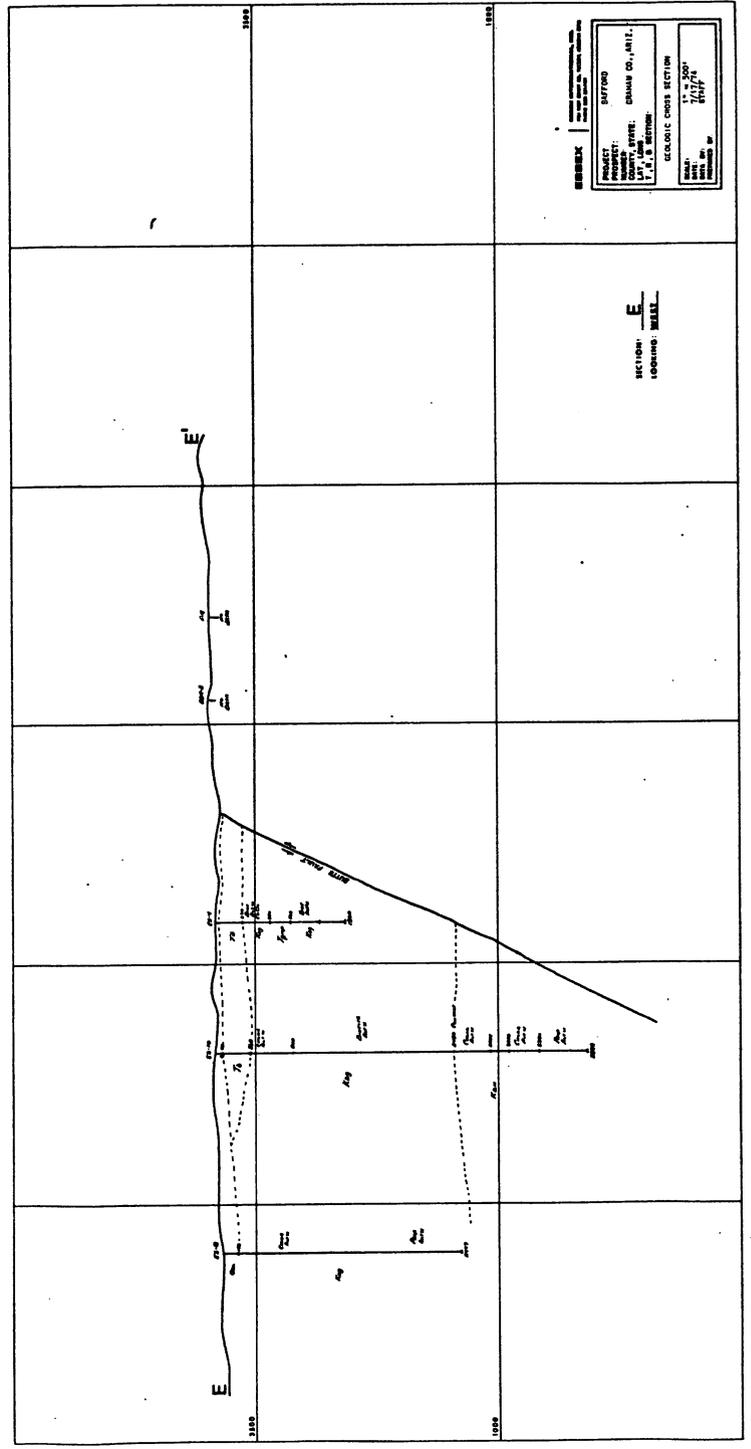
SECTION C-C  
LOOKING WEST



**RESSEX** | Geological Engineering, Inc.  
1000 West 10th Street, Suite 1000, Oklahoma City, Oklahoma 73106  
 STATION: CHAMAN CO., ARIZ.  
 PROPERTY: CHAMAN CO., ARIZ.  
 COUNTY, STATE: CHAMAN CO., ARIZ.  
 U.S. SECTION:  
 GEOLOGIC CROSS SECTION  
 DATE: 11-1-2001  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

SECTION: D  
 LOGGING: WELL



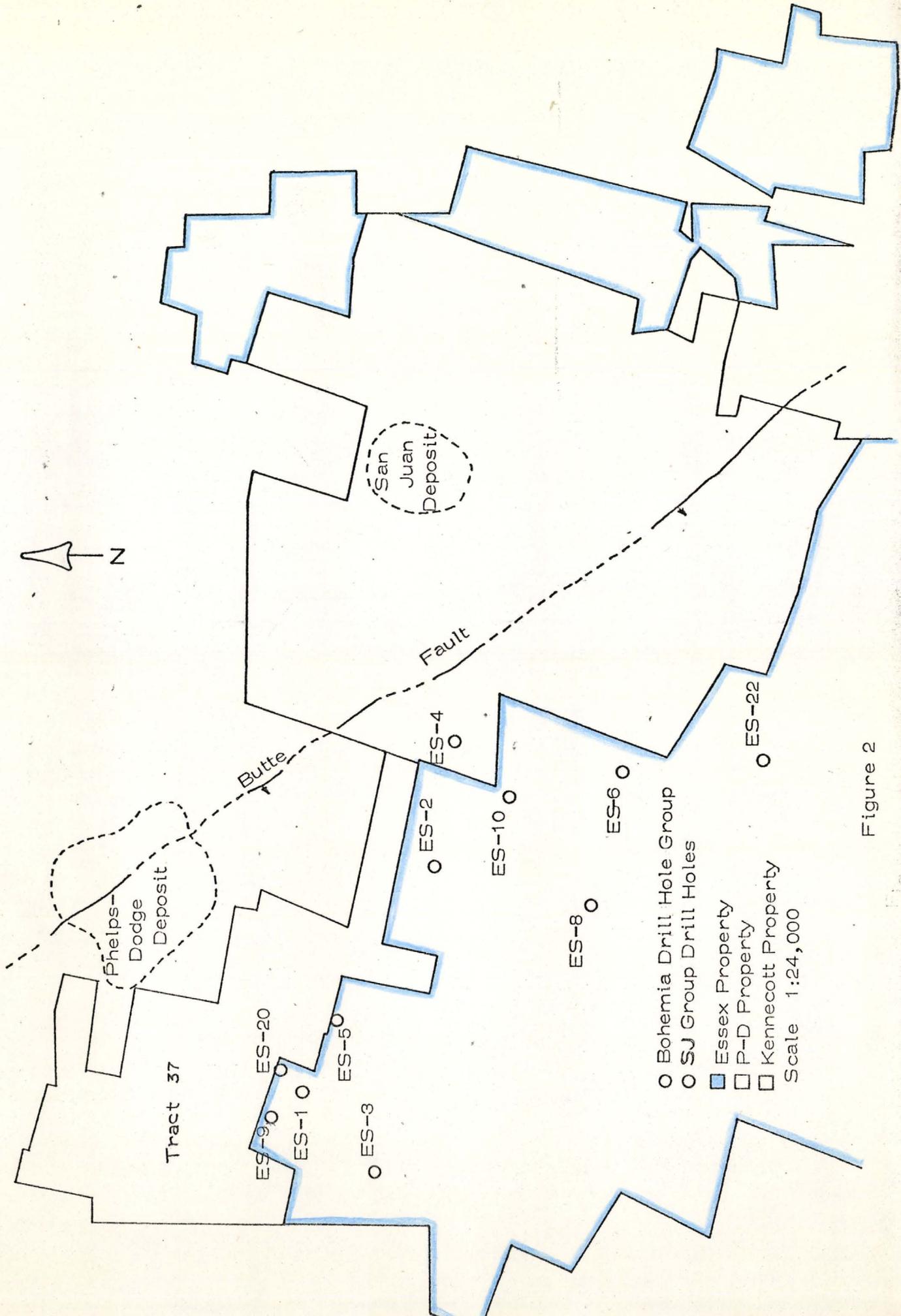
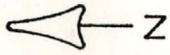


PROJECT: DAYTON  
 COUNTY: CHAMPAIGN CO., ILL.  
 PROJECT: CHAMPAIGN CO., ILL.  
 L.P. SECTION: 1/1/1914  
 SECTION CROSS SECTION  
 DATE: 7/17/14  
 DRAWN BY:

SECTION - E  
 EMBANKMENT



Phelps-Dodge Shaft



Phelps-Dodge Deposit

San Juan Deposit

Butte

Fault

Tract 37

ES-90

ES-10

ES-50

ES-3

ES-2

ES-4

ES-10

ES-8

ES-6

ES-22

Bohemia Drill Hole Group  
SJ Group Drill Holes

Essex Property  
P-D Property  
Kennecott Property

Scale 1:24,000

Figure 2

STAR  
10/20/73

(12-15-72)  
0537, a PD vehicle moving  
off pad, heads North  
out of area

0548 PD vehicle returns  
to pad above 14

6:30 P.D. MAN DENIED US  
ENTRY BY FORCE, HE HAD  
A GUN AND THREATENED US  
IF WE PROCEEDED TO  
PLANNED DRILL PAD.  
- COMMUNICATION BY  
~~WALKER~~ RADIO FROM GROWER -  
THE P.D. (?) MAN SAID " I HAVE  
A GUN AND I KNOW HOW TO  
USE IT".

6:43 GUARD ORDERED THE RIG  
NOT TO RAISE THE MAST.

0705 Second PD truck  
arrives at hilltop pad.  
Guard, named "HANK"  
walks uphill, fires pistol  
once into air. Second  
truck comes down hill,  
and a second guard  
gets out. Both vehicles  
blue pickup trucks.

0708 Guard. HANK BROWN  
and second man, Clifford  
Willis, of O. B. Willis Co.  
order rig off property  
by order of Phelps Dodge  
Co.

0712 Guards depart.  
Started engine of rig for  
purpose of raising mast

0717 White Dodge pickup  
arrives at rig, man gets  
out and approaches group.  
Man is Bill Bowen, PD  
geologist who wants to  
make sure we know that  
we are on Tract 37.  
We assure him we are  
aware of that fact.  
He then informs us of  
the existence of claim  
"Scorpio", which he  
says exists between  
Tract 37 and Essex  
claim "D+L"

0725 Pale green pickup  
approaches, man gets out  
and proceeds to rig.

1835

6:35 PM. (12/19) OBSERVED VEHICLE  
ON HILL TO THE NORTH ABOVE  
HOLE #14.

1835 -

1930 - PD vehicle moved  
to site overlooking #17

1947 - PD vehicle leaves  
surveillance of #17, heads  
EAST.

1955 - PD vehicle seems to  
reappear near furthest +  
lowest Joy rig.

2048 - Second PD vehicle  
approaches from North, starts  
down road to 14. I  
proceed to intercept, and  
he leaves, takes station  
on ridge between 14, 17.  
On way down hill, see  
first PD vehicle traveling  
very slowly down up PD  
hiway past 16 -

2102 - Second vehicle leaves  
ridge to East, traveling  
with only parking lights  
Disappears.

2305 - First vehicle  
returns to pad above 14  
from above 17. Not  
seen going to 17  
initially. Uses lights  
now.

0010 - PD vehicle moves  
about 1 car length on  
pad, turns slightly to  
left. Keeps lights off.

0100 PD vehicle still there

0140 PD vehicle still there  
as moon sets.

0200 PD vehicle no longer  
visible in dark.

0515 PD vehicle leaves  
spot above 14, travels  
to ridge between 14, 17,  
then to point on basalt  
above 17

0526. PD vehicle leaves  
site above 17 and returns  
to pad above 14

3

Man is Skip Clark,  
Manager of PD operation,  
says he is moving a  
dozer in

+ \$715 - LATE ENTRY - MAST  
RAISED.

0745 Bulldozer and blue  
Ford pickup approaching

0750 Paul Eimon + Howard  
Lanier arrive

4

0805 - Bill Bowen, Skip  
Clark ~~two others~~  
Cliff Willis and one  
other ordered w. off  
the property under threat  
of bringing dozer + front  
end loader down and  
give one warning and  
move rig into creek.  
In order to avoid  
damage to equipment,  
we are pulling back.  
Mast ~~to be~~ lowered @  
WAS

08:15 am

Clark Hirsti of Boyles  
arrived to say that <sup>(by radio)</sup>  
at 7:40 he was called  
by Bill Bowen who  
threatened to destroy  
the Boyles drive rig  
unless he ordered it off  
P.D. property.

Essex then moved drive  
rig to KIM I on the  
North of the Burn  
As the drive mast was

Raising Bill Bowen,  
Cliff Wilks, Grotto  
began walking to  
the Essex Drill  
ahead of A.P.D. Dozer  
advancing with its  
Blade down.

Bowen identified himself  
as P.D. agent  
and said the drill  
must be moved behind  
the burn in 15 minutes  
or he would order the  
dozer operator to push  
the rig into the wash.

He then informed  
P.I.E. Ken Jones &  
E.G.H. that ~~part~~ the  
land in dispute (TRACT 37)  
was PART of the exchange  
and as P.D. Agent he  
was ordering us off.

~~and~~ He said the P.D.  
had old mineral rights  
and was exchanging this  
property. He stated "We  
claim mineral ownership  
of this ground, now.  
He refused to say the burn  
was the boundary of  
Tract 37.

TIME 8:30

5  
Bill Bowen  
STATED that the Kim J  
was allocated yesterday  
& he ~~is~~ advised  
that we ~~can~~ should  
not ignore the ~~program~~

ESSEX SAFFORD PROJECT INDEX

TOWNE MINES  
21 JETS GROUP

QUINTANA MINERALS CORP.

TRACT 37

Section 32



ESSEX INTERNATIONAL, INC.

SAFFORD PROJECT

1" = 4,000'

ESSEX BOUNDARY

PHELPS DODGE BOUNDARY

TRACT 37

SEC. 32

SAN JUAN CLAIM GROUP

KNOWN COPPER DEPOSIT

REVISED Dec. 1973

DEC. 1974

GRUWA

R20E  
R27E



**EXPLANATION**

QUATERNARY	ALLUVIUM & GRAVELS
TERTIARY	BASALT & ANDESITE
	RYHOLITE, QUARTZ LATITE, ETC., DICES
	BRECCIA, P.A.F.C.
	QUARTZ MONZONITE PORPHYRY
CRETACEOUS	GRANODIORITE PORPHYRY
	QUARTZ DIORITE PORPHYRY
	ANDESITE DICES
	ANDESITE AGGLOMERATE
	ANDESITE PORPHYRY
	FISSURE VEIN
	MASSIVE QUARTZ-SERICITE ALTERATION
	FAULT

PROJECT: SAFFORD  
 COUNTY, STATE: GRAHAM, ARIZONA  
 U.S.G.S. SECTION: 10000  
 SCALE: 1" = 1 MILE  
 DATE: 1977  
 DRAWN BY: GARY STAFF  
 CHECKED BY: ALB-ANC

APPROXIMATE LIMIT  
 OF 0.45 TOTAL COPPER  
 ON 3900 LEVEL

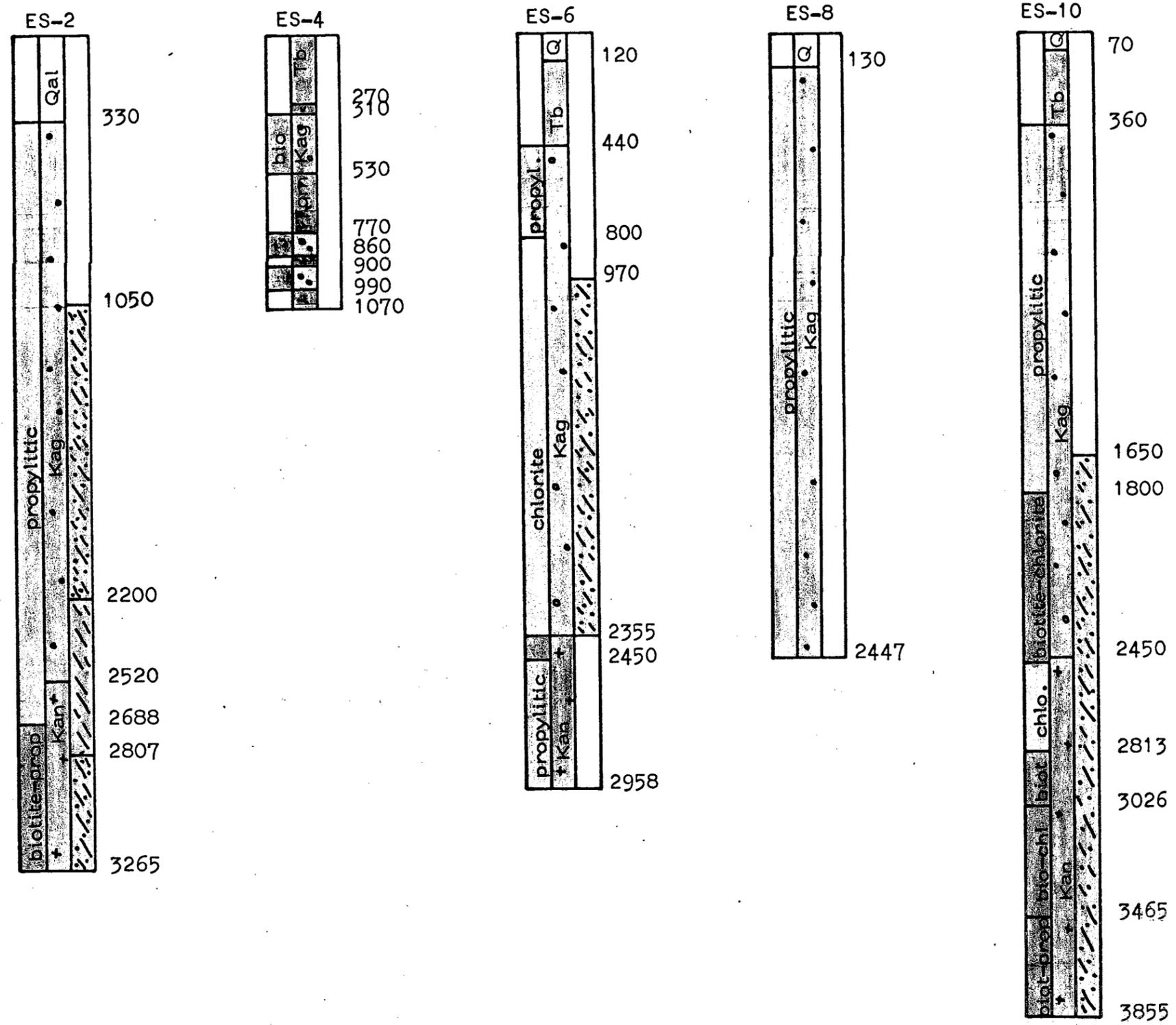


FIGURE 4

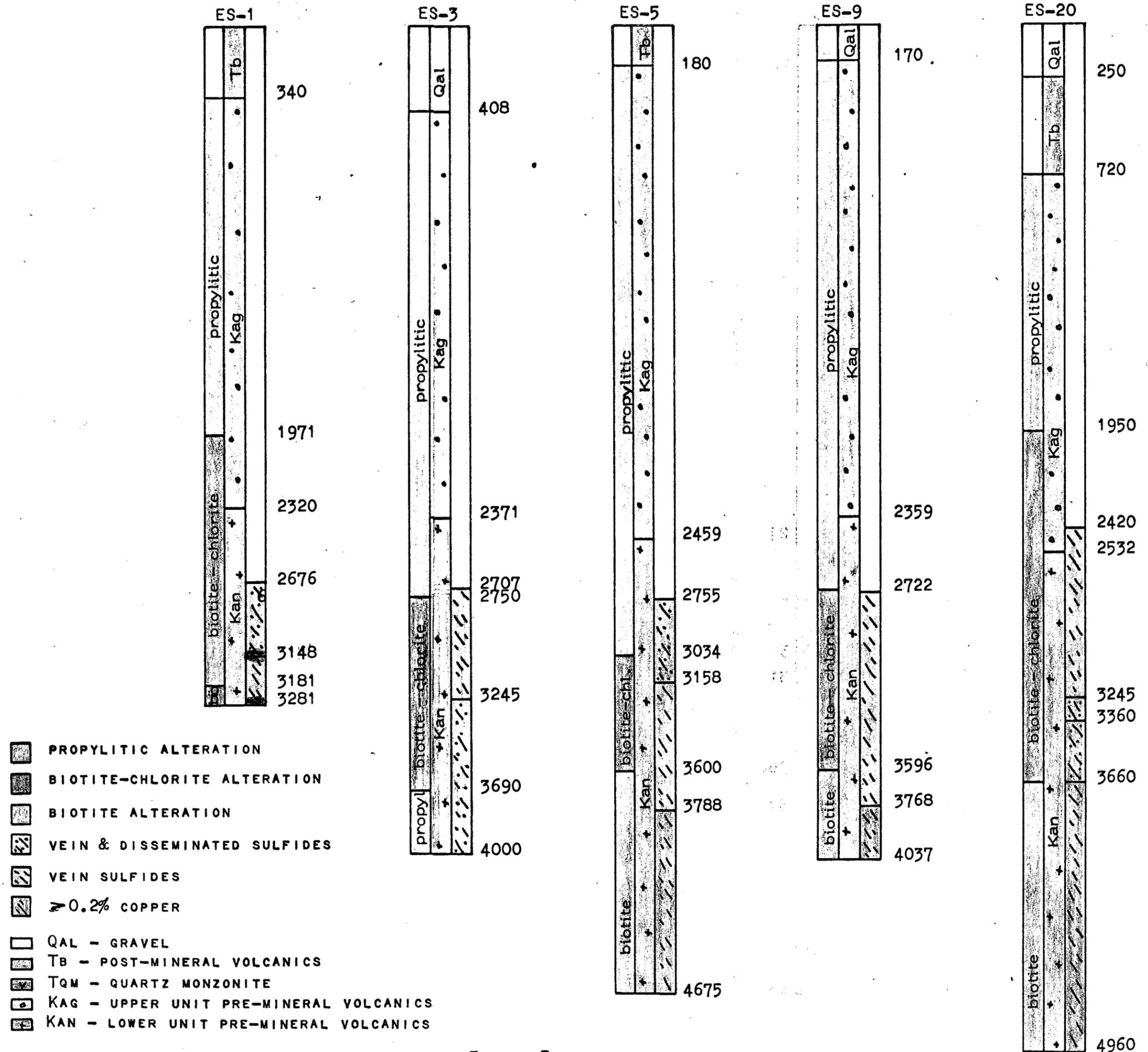


FIGURE 3

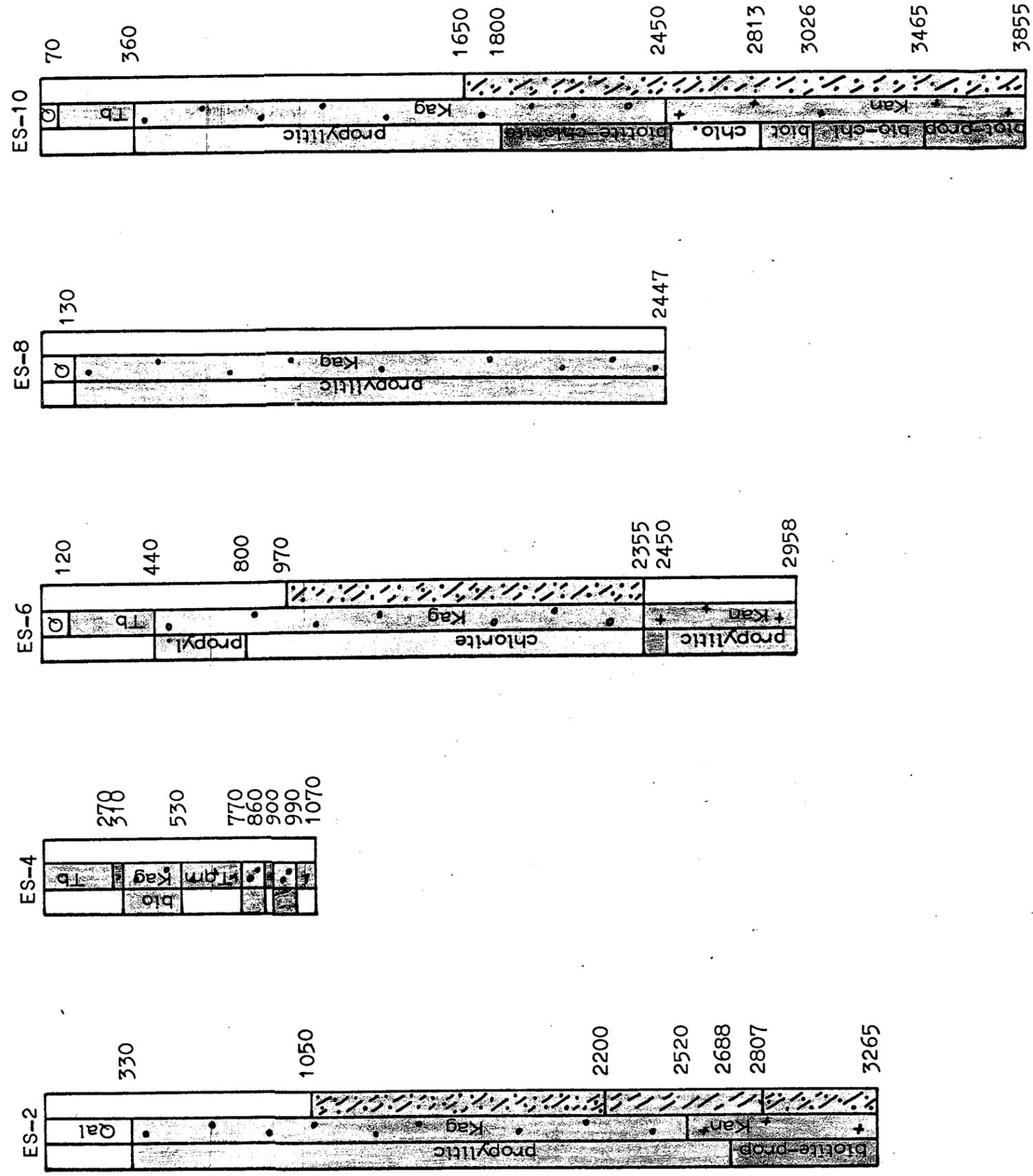


FIGURE 4

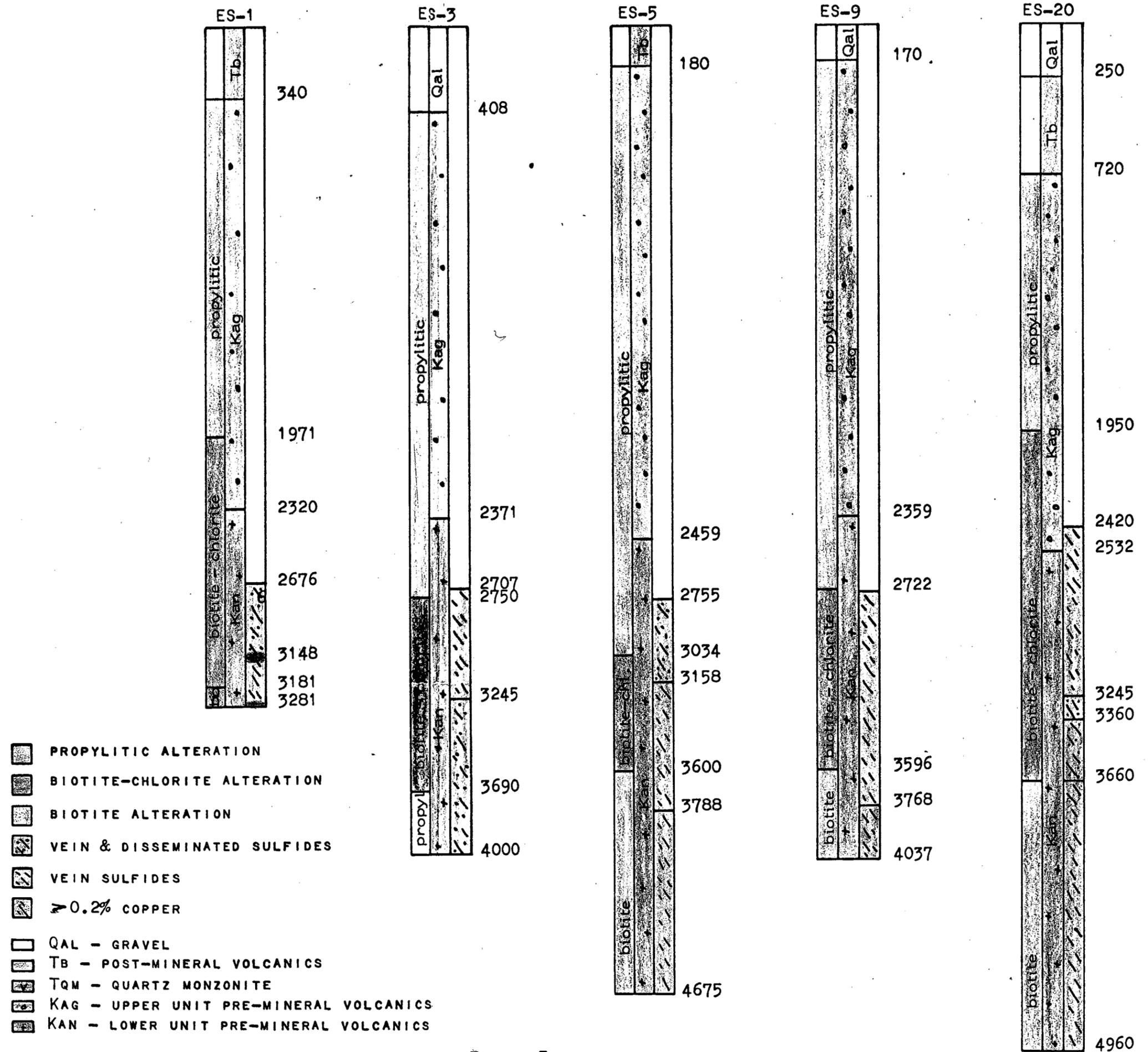
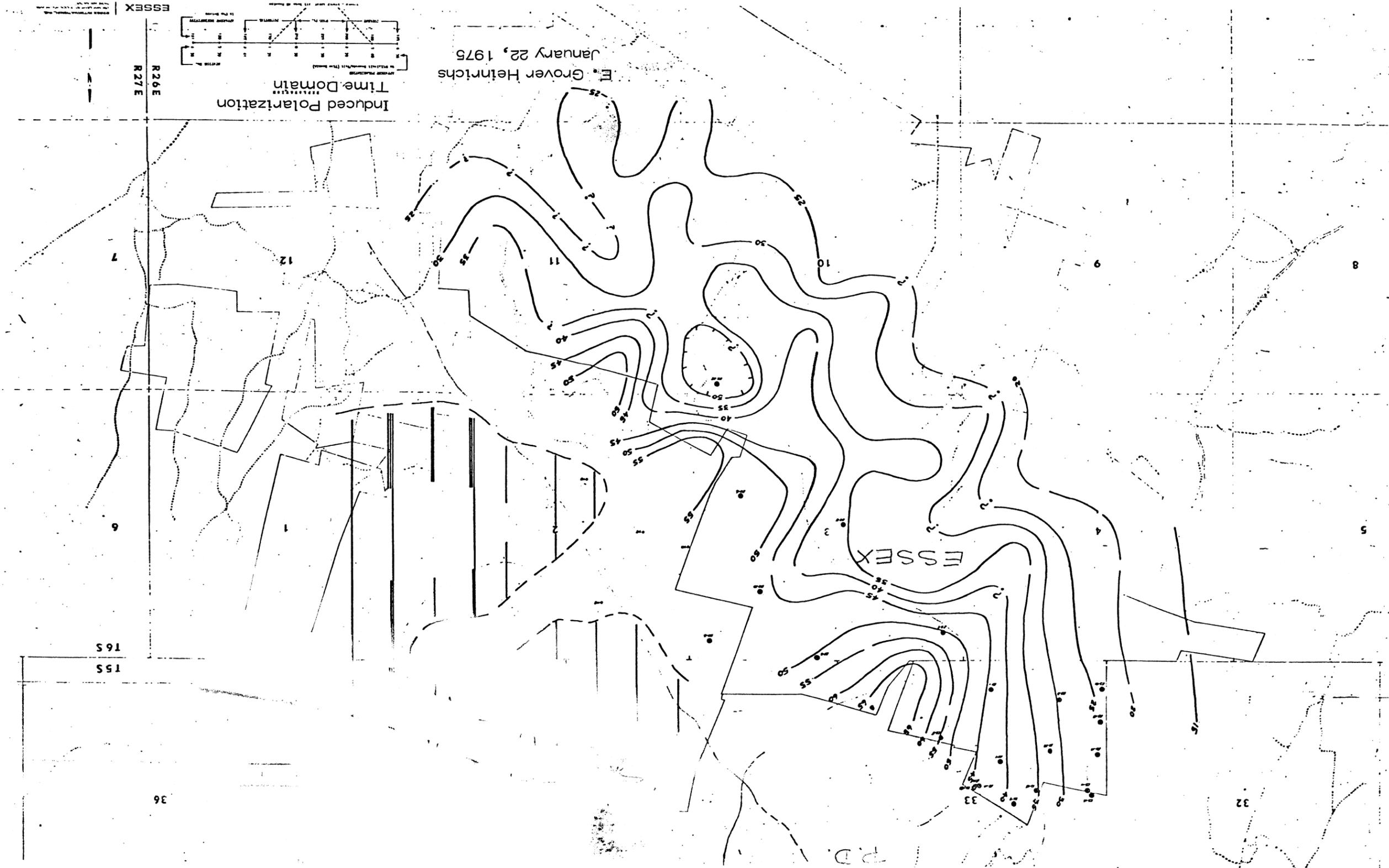
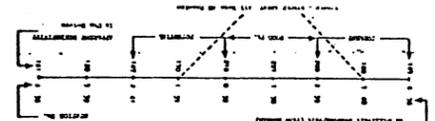


FIGURE 3



F. Grover Heinrichs  
January 22, 1975

Induced Polarization  
Time Domain



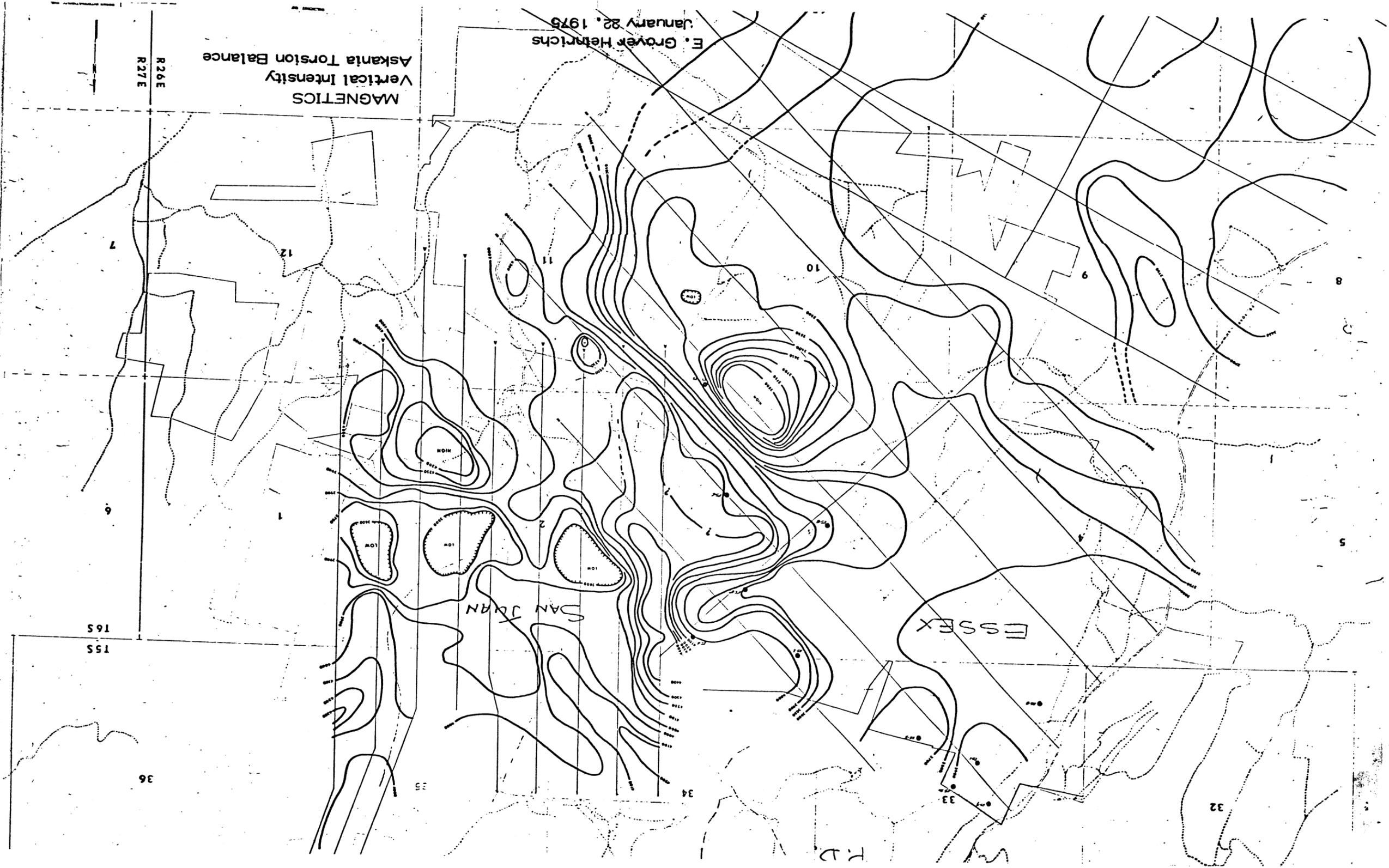
ESSEX  
R26E  
R27E

155  
165

36

32

P.D.



MAGNETICS  
Vertical Intensity  
Torsion Balance

E. Grover Heinrichs  
January 22, 1975

R26E  
R27E

155  
165

ESSEX

SAN JUAN

36

35

34

33

32

6

1

2

3

4

5

7

12

11

10

9

8

P.D.

SAN JUAN

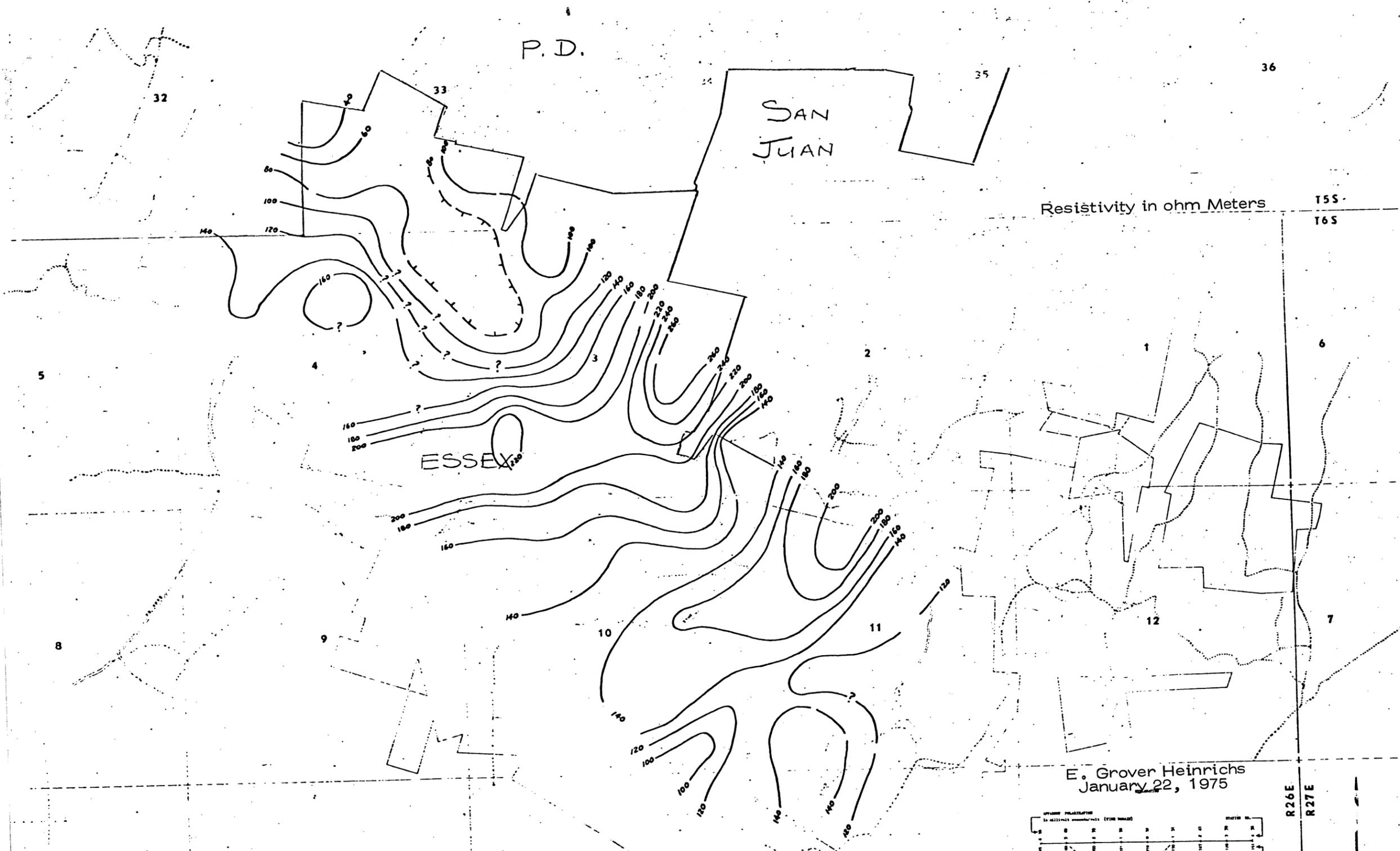
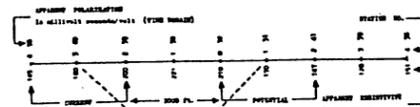
ESSEX

Resistivity in ohm Meters

T55  
T65

E. Grover Heinrichs  
January 22, 1975

R26E  
R27E



S-13

S-24

S-18

-71

P.D.

P.D.

P.D.

Blue  
Flotation

S-24

1 2 3 4 5 6 7

S-25

D1

Drill Hole  
K12

10

13

13

14

11

S-30

Jeep Claims

BEN HARR  
Etc Claim Group  
LES WEST

P.D. option 9-71

