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05/12/87

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: DIVES MINE

ALTERNATE NAMES:
SAXON MINE
PADRE KINO

LA PAZ COUNTY MILS NUMBER: 298

LOCATION: TOWNSHIP 3 S RANGE 23 W SECTION 36 QUARTER S2
LATITUDE: N 33DEG 06MIN 59SEC LONGITUDE: W 114DEG 35MIN 09SEC
TOPO MAP NAME: PICACHO - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
LEAD
SILVER
ZINC
IRON
MANGANESE
BERYLLIUM
STRONTIUM

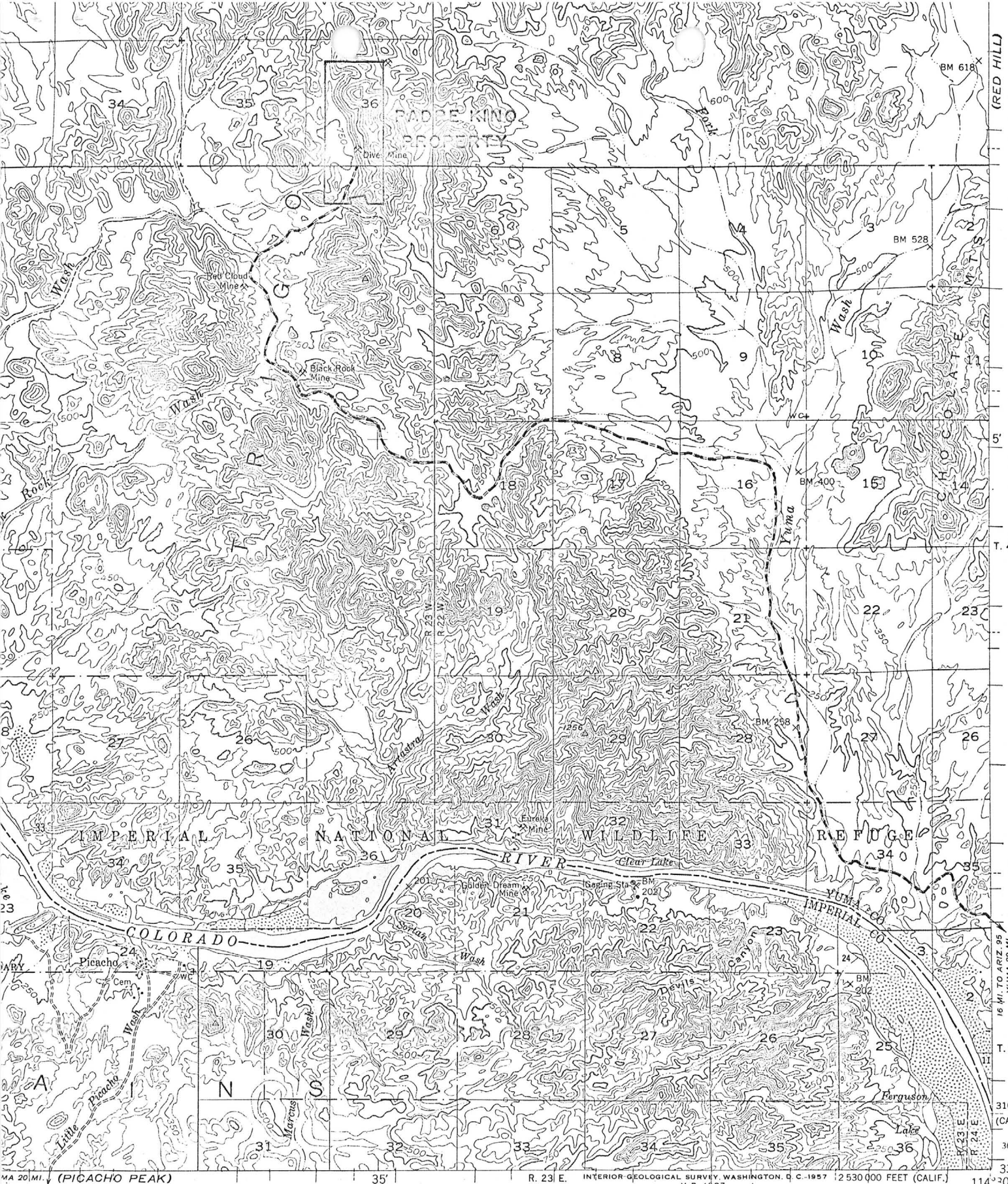
BIBLIOGRAPHY:
KEITH, S.B., 1978, AZBM BULL. 192, P. 178
ADMMR DIVES MINE FILE
AZBM BULL 134, P 62-63

ABM Bul. 192 p. 178

ABM Bul. 134, P. 62-63

MILS Sequence number 0040271354

See: (Geology File) Author: Parker, Frank Z., "The Geology and Mineral Deposits of the Silver District, Trigo Mtns. Yuma County, Az." in reference to the Padre Kino, Pg. 141.


PADRE KINO PROPERTY
Dive Mine
Red Cloud Mine
Black Rock Mine
Eureka Mine
Golden Dreamy Mine
Gaging Sta.
Clear Lake
IMPERIAL NATIONAL WILDLIFE REFUGE
COLORADO RIVER
YUMA CO.
IMPERIAL CO.
Picacho
Cem.
Little Picacho Wash
Marcus Wash
Devils Canyon
Ferguson Lake
Yuma Wash
Arrastra Wash
Dorian Wash
Rock Wash
Park Wash
BM 618
BM 528
BM 400
BM 268
BM 202
(RED HILL)
T. 4 S.
T. 5 S.
R. 22 W.
R. 23 W.
R. 23 E.
R. 24 E.
16 MI. TO ARIZ. 95
YUMA 39 MI.
310 000 FEET (CALIF.)
3654000m N.
33°00'
114°30'
2 530 000 FEET (CALIF.)
732000m E
(PICACHO PEAK)
35'
INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D. C.-1957
M R-4807
SCALE 1:62500
4 MILES
21000 FEET
5 KILOMETERS
CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL
ROAD CLASSIFICATION
Heavy-duty
Medium-duty
4 LANE 6 LANE
Light-duty
Unimproved dirt
U. S. Route
State Route
Maps of Picacho NW, Picacho SW, and Picacho quadrangles, scale 1:24 000, from later (1954) and more detailed surveys of this area, are available
PIMA BLUEPRINT CO.
4655 E. BROADWAY
PICACHO, ARIZ.-CALIF.
N3300—W11430/15

PADRE KINO PROPERTY
Clip Mine
Dives Mine
Red Cloud Mine
Black Rock Mine
Eureka Mine
Golden Dream Mine
Gaging Sta.
Clear Lake
Picacho
Cem.
Little Picacho Wash
Arrastra Wash
Sonian Wash
Devils Canyon
Marcus Wash
Yuma Wash
Black Rock Wash
West Park
Ferguson Lake
IMPERIAL NATIONAL WILDLIFE REFUGE
COLORADO RIVER
YUMA CO.
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BM 618
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M R-4807
SCALE 1:62500
1 2 3 4 MILES
ROAD CLASSIFICATION
Heavy-duty
4 LANE 2 LANE
Light-duty

Date Printed: 10/01/96

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION SUMMARY

Information from:	**P. E. Fox, President and CEO**
Company:	**Silverspar Minerals, Inc.**
Address:	**409 Granville Street, Suite 1409**
	Vancouver, BC CANADA V6C 1T8
Phone:	**604-669-5737**

MINE FILE:	**Dives**
County:	**La Paz**
AzMILS Number:	**298**

SUMMARY

I called the number for Silverspar Minerals in the Canadian Mines Handbook to obtain current information from the company on their interest in the Eureka (Silver) District of La Paz County. The phone was answered by Mr. P.E. Fox, listed as President and CEO of Silverspar Minerals. He did not identify the company over the phone until I asked if I had reached Silverspar Minerals, to which he answered yes. He explained the current status of the properties as having received recent "exciting inquiries regarding silver and continued interest in fluorspar". Further he is "expecting some venture funding soon"... on the project. No work was done on the Arizona properties last year except review and analysis. This comment has been abstracted to the following ADMMR mine files: Blaine, Black Rock, Dives, Geronimo North & South, Hamburg, Mendevil, New Jersey Zinc company file, Papago, and State

Ken A. Phillips, Chief Engineer Date: September 13, 1996

DIVES MINE
(Saxon)

YUMA COUNTY
SILVER EUREKA DIS

Lyman Wall continues to expand his tailings mill at Castle Dome. GW WR 2/18/72

Lyman Wall has increased the capacity of his mill in the Castle Dome district in an attempt to recover a saleable fluorspar product. GW QR 2/72

Went to Lyman Walls' tailings mill in the Castle Dome district but no one was there. It didn't look as though much had been done since the last visit. GW WR 4/21/72

MG/WR 4/1/79 - Visited the Dives Mine where there is no current activity. 4/31/79 a.p.

DIVES MINE
(Saxon)

YUMA COUNTY
SILVER EUREKA DIST.

The Dives Claim formerly known as the Saxon and now held by the Neal Mining Company, is about $1\frac{1}{2}$ miles northeast of the Red Cloud Mine. This claim has produced one or two car loads of high-grade silver ore.

In this vicinity, a fault zone separates andesitic and rhyolitic lavas, breccias, and tuffs on the west from schist and granite on the east. The main fault, which strikes N 20°W. and dips 60° SW is joined near the center of the claim by a branch fault that strikes N 10° W. These faults contain veins of similar character but the main one is wider, longer and more strongly mineralized. This vein which is traceable southward for some 2000 feet is about ten feet wide in the vicinity of the intersecting vein but narrows southward. It is a few feet from the schist and granite in tuff and breccia which show considerable chloritization and carbonatization. The vein consists mainly of limonite, hematite pyrolusite, barite, and manganiferous calcite, finely chrystalline quartz, together with minor amounts of gypsum. Crystalline to sandy cerussite and smithsonite, locally with yellow lead oxide, occur in vugs and irregular masses. The richer portion, which is some 300 feet long and from a few inches to $1\frac{1}{2}$ feet wide, occurs near the hanging wall of the wider portions of the vein. It is notably limonitic at the surface, and the mined portions of it were probably rich in silver chloride.
Workings on the Dives claim consist of an 86-foot vertical shaft with a 45-foot crosscut and several pits and short tunnels. The shaft and crosscut did not reach the main vein. All of the ore mined was from shallow surface cuts.

Taken from ABM 134 p62

MAILED Lyman Wall 3/28/67

FILED
MAR 17 1967

DIVES MINE

YUMA COUNTY
SILVER - Eureka Dist

Conference with Lyman Wall at Castle Dome 2/8/67.

Lyman Wall reported that the Dives is now owned by Carl Self of Yuma, who recently made several fairly large near surface cuts. He did not know what was uncovered.

MEMO LAS 2/8/67

Sec 36, T 3S, R 23W

GEOLOGIC EXAMINATION
of the
PADRE KINO PROPERTY

Silver Mining District
Yuma County, Arizona

Summary

The Padre Kino mining property, consisting of Padre Kino No. 1 - 16 unpatented Federal lode mining claims located principally within Section 36, T 3 S, R 23 W, Silver Mining District, Yuma County, Arizona, was examined by the writer during the month of June, 1965. The property is owned by Carl Self & Associates, 2431 Fourth Avenue, Yuma, Arizona. It is situated in the Trigo Mountains, approximately 10 miles east of the Colorado River and 52 miles north of Yuma, Arizona.

The Silver District was first developed in 1862, and saw its greatest production during the period 1879-1889; intermittent production is recorded through 1949. The district is credited with a production value of $1,757,194, including 1,559,201 oz. Ag, 2,329,059 lbs. Pb, and 14,200 lbs. Zn. Most of the production was derived from two mines, the Clip (1,087,000 oz. Ag) and the Red Cloud (341,501 oz. Ag, 2,324,714 lbs. Pb). The Clip was developed to 120-foot depth, and the Red Cloud to 503-foot depth.

In the district, an older complex of schist and granite was buried by andesite flows and bedded rhyolitic tuffs in Cretaceous time. During the Laramide interval, the formations were subjected to NE-SW compression, with moderate folding and faulting of the volcanic beds and flows, followed by intrusion of granodiorite. Renewed faulting, dominantly on NW trends, with subsidiary NE and N trends, resulted in a horst-graben relationship in which the volcanics are down-dropped in relation to the adjacent schist-granite complex and the granodiorite. Silver-lead-zinc mineralization was introduced within the strong NW fault structures bounding the graben block, and in the N-trending Clip structure. Erosion, oxidation, and vein enrichment then followed.

The Padre Kino mine is located on the vein-fault zone bounding the graben block on the east side; the Red Cloud mine is on a similar fault structure bounding the graben on the west. The Padre Kino fault structure is a strong zone, traceable for some 1700 feet, with prominent fault planes which dip steeply west. Epithermal quartz-calcite-barite vein mineralization with accompanying oxidized silver-lead-zinc minerals is intermittently exposed along the length of the structure, and hematite indicative of former pyrite is present.

Shallow development on the Padre Kino No. 2 claim reveals a nine-foot width of the vein zone which averages 24.1 oz. Ag and 7.06% Pb a few feet beneath the surface. Mineralization of lesser grade extends into the walls.

Based on the similarity of geological environment to that of the Red Cloud mine, the presence of hematite indicating former pyrite in the outcrop, and, therefore, possible downward enrichment, and the proven presence of silver-lead mineralization, it is thought that ore bodies comparable to those of the Red Cloud may be developed on the Padre Kino property.

A diamond drilling program to test the structure is outlined, involving 12 holes totalling 3090 feet and a cost of $28,420.00. In addition, it is suggested that the vein be tested below the best showing by an inclined shaft entry, drifting, and cross-cutting.

General

At the request of Mr. Carl Self, 2431 Fourth Avenue, Yuma, Arizona, a geologic examination of the Padre Kino property was made by the writer during the periods June 4-6 and June 19-20, 1965; a part of the time was spent in making a transit-stadia survey for topographic control. Elevations are relative but approximately correct in relation to sea level, an elevation of 900 feet being assigned to Station 4 on the Upper Shaft dump in accordance with its location on the Geological Survey 7½-minute Picacho, Arizona-California topographic quadrangle sheet.

Property and Location

The Padre Kino group consists of sixteen unpatented Federal lode mining claims located by Carl Self and Associates and recorded in Yuma County, Arizona. The claims lie within Section 36, T 3 S, R 23 W, and Section 1, T 4 S, R 23 W (unsurveyed), Silver Mining District, Yuma County, Arizona, and center about the old Dives Mine shown on the Picacho 7½ and 15 minute quadrangle sheets. The claims are full size except for a small portion of Padre Kino No. 15 which is covered by the patented Princess lode, Survey No. 161, of other ownership.

The area is a part of the relatively low but ruggedly dissected and arid Trigo Mountains, the north-south range bounding the Colorado River on the east in the southern part of Yuma County. The claim group is situated in the eastern portion of an intermontane basin near the headwaters of Red Cloud Wash, which drains westerly to the river ten miles distant.

Access is via paved Highway 95 for 24 miles north from Yuma, thence NW'ly for 10 miles on the paved Fisher's Landing highway, thence NW'ly for 3 miles on graded gravel road, thence W'ly 18 miles on fair dirt roads to the claims area.

The nearest surface source of water for drilling purposes is the Colorado River, 11.5 miles road distance from the property. A water line tapping the water table at 450 foot depth in the Red Cloud Mine is reportedly open, and may provide a source of drilling water only two miles distant from the Padre Kino property.

The nearest rail shipping point is at Dome on the Southern Pacific, 37 miles from the property. Supplies are available at Yuma (Pop. 10,000), 52 miles distant.

History

Mineralization was first developed in the Silver District in the early 1860's, but the principal production was derived during the period 1879-1889; intermittent production is recorded through 1949. The district is credited with a total production of $1,757,194, including 1,559,201 oz. silver, 2,329,059 lbs. lead, and 14,200 lbs. zinc. Although a number of mines and prospects are shown on Wilson's district map, Arizona Bureau of Mines Bulletin No. 158, Part II, 1951, consideration of his Production Table indicates that all but $162,219 of the recorded production can be credited to two mines, the Clip (Blaine) with 1,087,000 oz. silver, and the Red Cloud, with 341,501 oz. silver and 2,324,711 lbs. lead.

The Padre Kino Mine, formerly named the Dives or Saxon Mine, is described by Wilson (Arizona Bureau of Mines Bull. 134) as having produced one or two car loads of rich silver ore from shallow near-surface workings.

District Geology

As described by Wilson and shown on Map A, following page, the outcropping rocks in the Silver District consist of schists, schist and granite, Cretaceous andesite flows and rhyolite tuffs, and granodiorite.

The schist-granite complex appears older than the volcanic sequence, as the writer found a small mass of bedded rhyolite tuff to comprise the peak of the 1308-foot mountain northeast of the Dives Mine; the tuffs lie in flat contact with underlying schist-granite, which may be Precambrian in age. Metamorphism of this zone is dated on the Yuma County Geologic Map (Arizona Bureau of Mines) as Mesozoic. The granodiorite intrusive, a medium-grained gray crystalline rock which weathers readily, is dated on the same map as Laramide, presumable upon the basis of intrusive contacts with the Cretaceous volcanics.

The district has been strongly faulted on NW and NE trends, with subsidiary fractures on N-S trends. The NW'ly striking faults appear dominant and control the topography; thus, the resistant metamorphosed schist-granite complex between the Padre Kino (Dives) Mine and the Mendevil is a horst block (Wilson), the volcanic block between the Padre Kino and the Red Cloud is a graben, and the granodiorite west of the Red Cloud is another horst.

The silver-lead mineralization is most strongly localized along the NW-striking faults, perhaps in part controlled by intersections with N and NE-striking structures. The silver mineralization at the Clip Mine is localized on a N-ly trending fracture zone.

Moderate folding on NW trends is apparent in the volcanic sequence.

The geologic history is interpreted as follows:

1. Deposition of sediments (schist) and invasion by granite at an indeterminate but probably early time.

2. Eruption of andesite flows and deposition of bedded rhyolitic tuffs in Cretaceous time.

3. NE-SW compression, moderate folding and faulting, and intrusion of granodiorite in Laramide time.

4. Renewed faulting (Tertiary?) on NW, NE, and N trends, followed by silver-lead-zinc and silver mineralization.

5. Erosion, oxidation, and enrichment.

The mineralization is epithermal in nature, with a vein gangue of quartz, calcite, barite, and fluorite. Most of the ore produced was oxidized, consisting of cerussite, smithsonite, anglesite, and cerargyrite in an iron and manganese stained gangue.

Adjacent Properties

The Clip Mine, about 3½ miles north of the Padre Nino, yielded a recorded production of 1,087,000 oz. of silver from two relatively short ore shoots reaching about 100 feet in depth; grade ranged from 20 to 140 oz. Ag per ton.

South of the Clip, on the same general structure, substantial open stopes on the Amelia-Revelation group indicate a fair but unrecorded production. Ore from the Clip and the Revelation properties contained mostly silver, with little or no lead.

The Red Cloud Mine, two miles SW of the Padre Nino, has been developed to about 420 feet vertical depth; it is fully described in Arizona Bureau of Mines bulletin 158. It has yielded 341,501 oz. Ag and 2,324,714 lbs. Pb from two ore shoots, one 25 to 100 feet long and 410 feet deep, and the other 35 to 110 feet long and 300 feet deep; vein widths ranged from 1.5 to 6.0 feet. Wilson notes that sampling of unmined parts of the vein above 360-foot inclined depth averaged 10.0 oz. Ag and 6.0% Pb. The ore is localized in the hanging wall part of the faulted contact zone forming the west flank of the graben block of andesites and tuffs between the Padre Nino and the Red Cloud; granite and granodiorite are in the foot wall.

Padre Kino Mine Area

General

The Padre Kino claims occupy the low, eroded upper basin of Red Cloud Wash and the steep, strongly dissected schist-granite complex separating the Padre Kino and Mendevil mines; elevations range between 750 and 1350 feet. Silicified andesite flows form low resistant hills within the basin, and the schist-granite complex forms a bold steep ridge outcrop; the rhyolitic tuffs weather more readily, and the lower slopes of the ridge and the basin are partially covered by a thin mantle of alluvium. See Map A for the claim locations and their relationship to the district geology.

Local Geology

Geology of the faulted contact zone between the schist-granite complex forming the foot wall (east) and the andesite-tuffs comprising the hanging wall (west) has been mapped for a length of approximately 1700 feet in the area of principal interest, and is shown on Map B (pocket).

The schist-granite complex consists of a dark micaceous schistose rock comingled with masses of a medium pinkish gray medium grained granitoid rock; no attempt was made to separate the units.

The volcanics consist of a series of thin-bedded buff to white rhyolitic beds with occasional thin bands of purple and occasional thin beds of small pebbles; the tuffs are iron-stained in the vicinity of the Padre Kino workings. Intercalated with the tuffs are flows of dense reddish andesite. Relationships are obscure, but mapping suggests that the tuff sequence is underlain by a rather thick flow of the dense brown-weathering andesite. Bedding attitudes in the tuffs indicate that the volcanics have been moderately folded into a weak anticlinal-synclinal sequence in the Padre Kino area; the underlying andesite outcrops as the core of the weak anticlinal fold.

The flanking complementary syncline in the tuffs to the east is cut by the main Padre Kino fault zone, trending N 20 W and dipping about 70° W'ly. The zone separates the two principal rock types, schist-granite and volcanics, but is complex, with several strongly pronounced iron-stained fault planes, and in places, intervening silicified iron and manganese stained brecciated wall rock. Branching fault-vein zones trend southerly and northwesterly from the main structure, and less apparent, unmineralized faults of NE trend have resulted in irregular off-sets of the schist-granite-volcanic contact. The principal faulting is normal, with the hanging wall off-set downward at least 450 feet as indicated by the elevation of the rhyolite tuff beds on Shave Peak, NE of the mine, and that of the base of the beds in the basin west of the mine.

Epithermal quartz-calcite-barite mineralization with accompanying former sulfides of silver, lead, zinc, and iron has been introduced into the brecciated fault contact zone and is intermittently exposed for a length of about 1300 feet along the main structure (see sampling, Map B). The vein has been oxidized and sulfides are not now present; hematite staining where the structures are intersected by Drill Section Lines 1, 2, 3, and 5 indicate the former presence of pyrite and an environment for enrichment. In the vicinity of the Upper Shaft workings (Map B), sampling shows a mineralized width of 24 feet averaging 3.02 oz. Ag, while the 890 level of these workings (Map C, following page) shows 9.0 feet of the hanging wall part of the structure to average 24.1 oz. Ag and 7.06% Pb for a length of 30 feet (Samples S-6, S-7, S-8).

Development

There has been only minor development on the Padre Pino property, consisting of the shallow Upper Shaft workings (Map C), and the lower Shaft workings, consisting of an 86 foot vertical shaft with 15 foot cross-cut (see Shaft Section A-A', next page), a 50-foot shaft on the Padre Pino No. 16 claim, and a few small pits and cuts. The one or two car loads shipped undoubtedly came from the Upper Shaft workings; Wilson states, in Arizona Bureau of Mines Bulletin 131, that the Lower Shaft cross-cut did not reach the main vein, and this is indicated by Shaft section A-A'. No drilling has been done on the property.

Sampling

Sample locations and assays are shown on Maps B and C. The S-samples were taken under Mr. Self's direction, the PK-samples by H. S. Chessner, Jr., representing Siskon Corporation, Reno, Nevada, and the CSB samples by the writer. The S-samples and CSB samples were assayed by Jacobs Laboratory, Tucson, Arizona; the PK-samples were apparently assayed by a Siskon assayer, and some variation is apparent.

The sampling indicates local enrichment in the 890 level area and relatively weak silver-lead mineralization in the surface outcrops. However, the presence of hematite in the outcrops indicates the former presence of pyrite, and suggests the probability of leaching and downward enrichment within the vein.

Conclusions

Low grade silver-lead mineralization is intermittently exposed within a strong fault structure for a length of some 1300 feet, and local enrichment of silver is present. The fault structure bounds a graben block of Cretaceous volcanics on the east; in a similar fault structure bounding the graben block on the west, and in an essentially similar geological environment, is the Red Cloud Mine,

which has yielded a substantial production of silver and lead. Evidence of former pyrite in the outcrops of the Padre Nino structure indicates a probability of leaching and downward enrichment of the silver mineralization, and the possibility that ore shoots comparable to those of the Red Cloud may be developed along the structure. The most favorable sites for development of such shoots, based on iron-staining and sampling, are the points where the main structure is crossed by Drill Section Lines 2 and 5, Map B.

Economics

In a letter dated April 6, 1965, Mr. Reed F. Welch, ore buyer for American Refining and Smelting Company, Tucson, Arizona, states to Mr. Self that Padre Nino ore with a grade of 24.1 oz. Ag and 7.06% Pb would yield a net smelter return, El Paso lead smelter, including freight costs, of $22.15 per ton, Yuma. Trucking costs, mine to rail-head, are estimated at $3.75 per ton, including road maintenance. Thus, with $18.40 net value at mine, such ore should yield a substantial profit to the owner after deducting mining and amortization costs.

Recommendations for Exploration

While there is no assurance that economic ore shoots will be found, the alteration and mineralization in the Upper Shaft workings of the Padre Nino mine suggest this may be the top of such a shoot; similarly the iron stain and mineralization in outcrop at Drill Section 5 suggest the possibility of underlying ore. It is recommended that the structure be diamond-drilled at approximate 200 foot intervals, as shown on Map B and Drill Sections 1 through 5, with the objective of cutting the vein-fault at depths ranging between 150 and 350 feet below the outcrop. In addition, one hole is recommended to test the structure near the water table at Drill Section 2. Such a program would involve 12 short holes, totalling 3090 feet of drilling. Direct drilling cost, including water haul, is estimated at $8.00 per foot, and total direct drilling cost then would be $24,720.00; an additional 15%, or $3,700.00, should be added for supervision, assaying, and contingencies. If successful in indicating an ore body of 25,000 tons of the grade described in the Welch letter, the ore body would have a net smelter return value, f.o.b. mine, of $460,000, and a gross value of $1,343,750.00.

As a corollary to the drilling exploration, it is suggested that the downward extension of the ore on the 890 Level be explored 110 feet below that level by driving an inclined shaft 150 feet to intersect the bottom of the 86-foot Lower Shaft, utilize the existing 45-foot cross-cut, extend that cross-cut some 45 feet across the vein structure, and drift 100 feet in each direction on the most favorable portion of the vein, with cross-cuts across the structure

at 50-foot intervals. The suggested exploration is shown on Shaft Section A-A'; such procedure will yield simple access to the vein at a favorable location and depth.

Respectfully submitted,

J D Bell

J Douglas Bell
Geologist

JDB:jan

Dated 2 July 1965

Note: The writer is a graduate of the University of Arizona, B.S., Mining Geology, 1949, and has been continuously employed in mining and exploration for the past sixteen years.

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA
LA PAZ COUNTY
TRIGO MTNS.
PADRE KINO MINE

MILS # 298
DIVES MINE (file)
2 - AKA's

Card # 1
MM K831 Tocornalite

PURCHASES REPORT

MONTH OF _____

SUPPLIER	DATE	P. O. No.	AMOUNT	DEPARTMENT TO BE CHARGED	ACCOUNT No.	AUTHORIZED BY

STATUS REPORT

WEEK ENDING_____

EMPLOYEE'S NAME	HOURS WORKED	HOURS BILLABLE	AMOUNT EARNED	AMOUNT BILLABLE	PRODUCTIVE PERCENTAGE (%) AMOUNT BILLABLE ÷ AMOUNT EARNED

Drill Section 30 N of upper shaft
" " 60' S of lower shaft

Padre Kino - 2

30' N. Drill Section #2 - At south cut, 850 Level is that cutting south cut (MMPC)

60' S shaft Section A-A' - Northeast south cut

south cut begins at 850 contour and is driven at steep slope 15 cut by drift off upper shaft.

Samples

	Ft	As.	Units As.
PK-1	5'	6.14	30.70
PK-2	6'	12.43	74.58
PK-3	6'	50.14	300.84
PK-5	5'	10.84	97.56
PK-4	6'	5.88	35.28
PK-7	6'	12.08	72.48
PK-6	6'	3.28	20.28
PK-8	6'	6.99	41.94
PK-9	5'	3.18	15.90
	55'		689.56

6.12' wide

$\frac{689.56}{55} = 12.537$ oz As / Ton

49' $\frac{388.72}{49} = 7.933$ oz As / Ton with 50.14 out

6.13' Wide

3050' proposed diamond drilling 12 holes

Drill at south cut

Padre Kino

86' shaft and 45' to

Upper shaft

Schist - Sericite Complex Footwall

Andesite dyke Hanging wall

HOTEK
HAUL:
11.5 miles
23 miles
Round Trip
from river.

Upper shaft is about 30' deep. Connects to south cut. Samples contain Ag and sparsely Pb. Would cute up drill - either here or in south cut.

Would rehabilitate lower shaft and drill out of face. Also out of bottom of 86' shaft to prospect below.

I - Drill Upper Shaft

II - Drill Lower Shaft and Crosscut

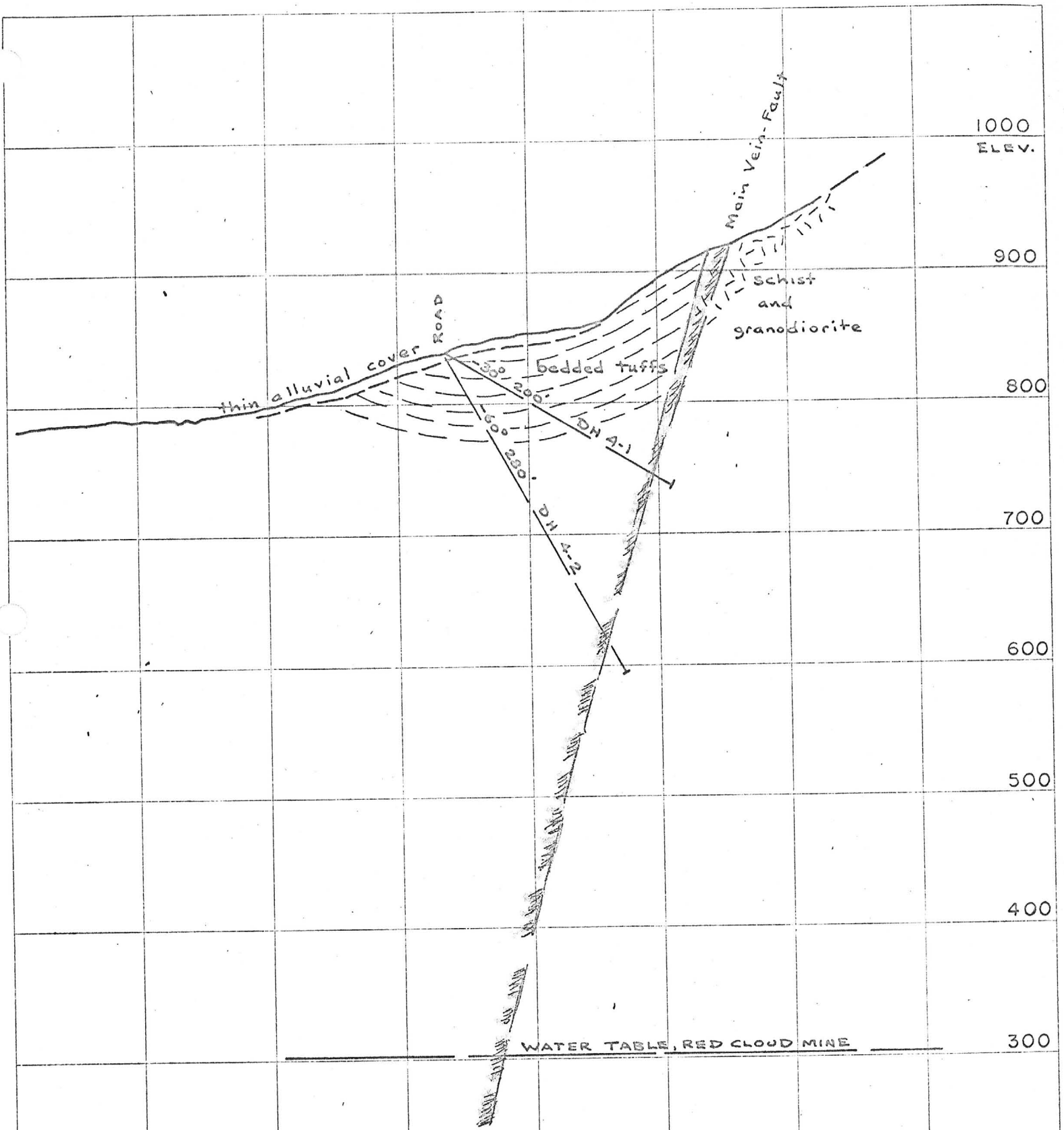
(a) Across Vein

(b) Angle to Vein.

Could be done with windlass or gin hoist for initial work

Selective estimate
24.1 oz Ag. 21.69 @ $1.29 = $27.98
7.06 % Pb 141.20# - 10 = 131.20# x 13¢ = $17.06
$45.04 Gross

Equipment required - Drill rig, tripod
pump - rig.
Water tank



DRILL SECTION NO. 4

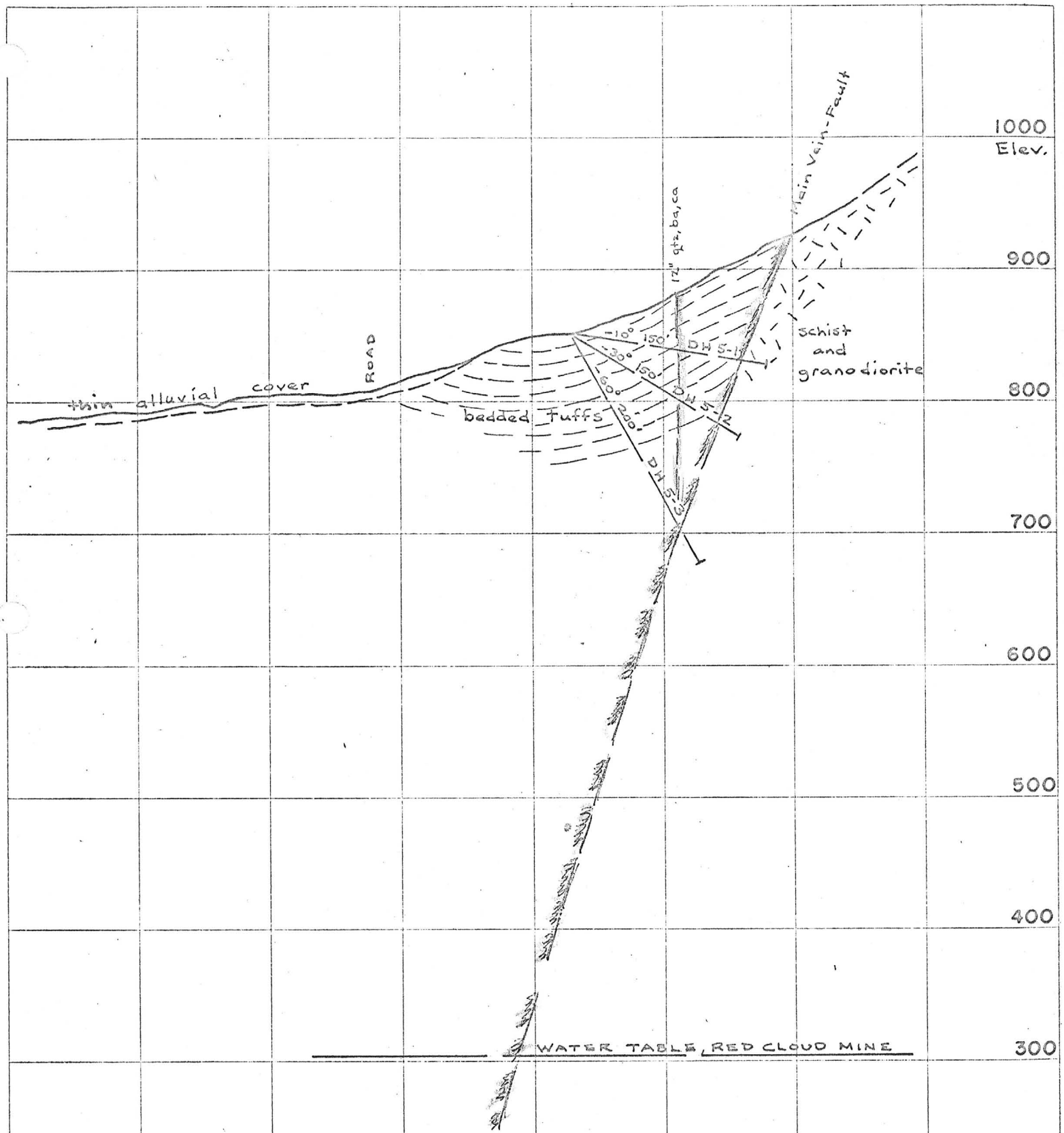
PADRE KINO MINE

LOOKING NORTH

SCALE: 1" = 100'

Prepared 4/80

"ALBANENE" No. 196M K&E CO., N.Y.
REG. U.S. PAT. OFF.



DRILL SECTION NO. 5
PADRE KINO MINE
LOOKING NORTH
SCALE: 1" = 100'

Proposed.

500'

"ALBANENE" No. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF

10. Renegotiation:

It is anticipated that the materials to be penetrated by the drill holes will consist mainly of Naco, Escabrosa, Martin, and Abrigo limestones, rhyolite, granite and monzonite porphyries. However, it is recognized that ground classification, size of hole required to be drilled, or other structural or physical conditions to be encountered

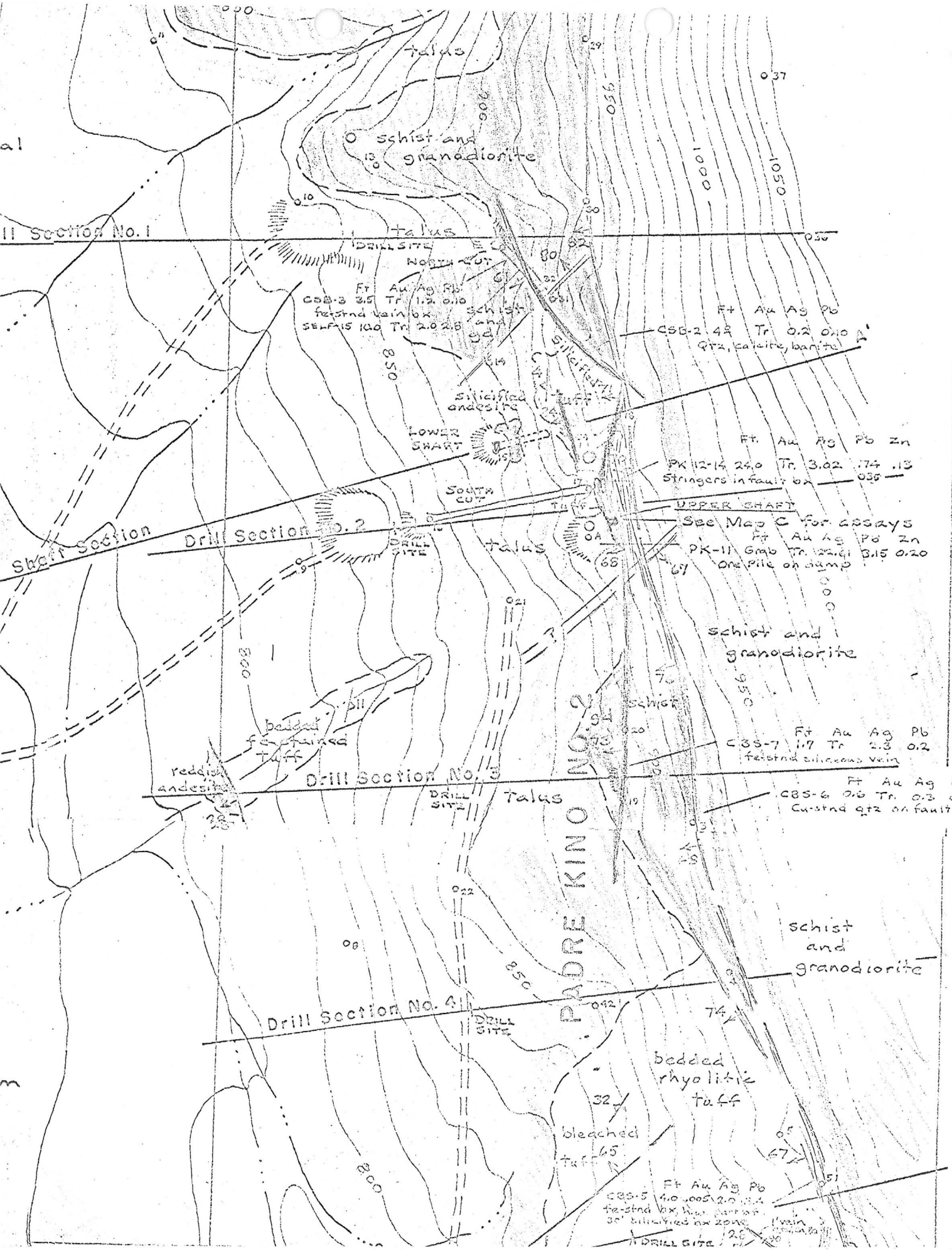
in drilling will affect the Contractor's cost of operations and that if these factors should be different than anticipated at the time of execution of this agreement, equitable adjustment either upward or downward in the contract price will be in order. Accordingly, after completion of the first hole, either party may request renegotiation of the contract price applicable to that hole and to the additional holes to be drilled hereunder, and the parties shall in good faith endeavor to adjust the contract price payable with respect to the first hole and the additional holes. If the parties fail to agree, then either party may terminate this agreement insofar as it applies to drilling additional holes and the price to be paid for drilling the first hole shall be submitted to arbitration under paragraph 11 hereof. Owner shall not be charged for time or delay occasioned by or incident to such renegotiation.

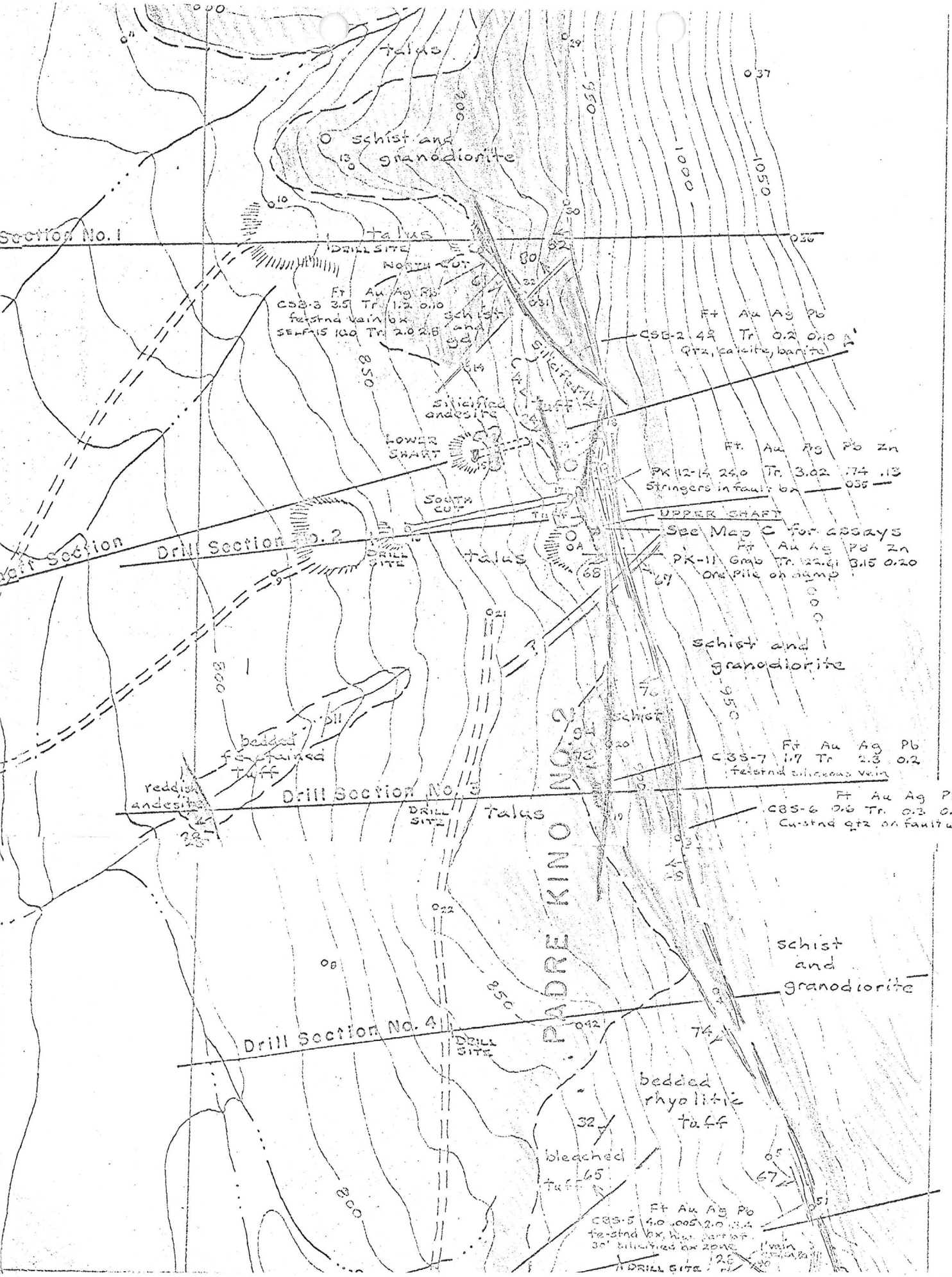
11. Settlement of Disputes:

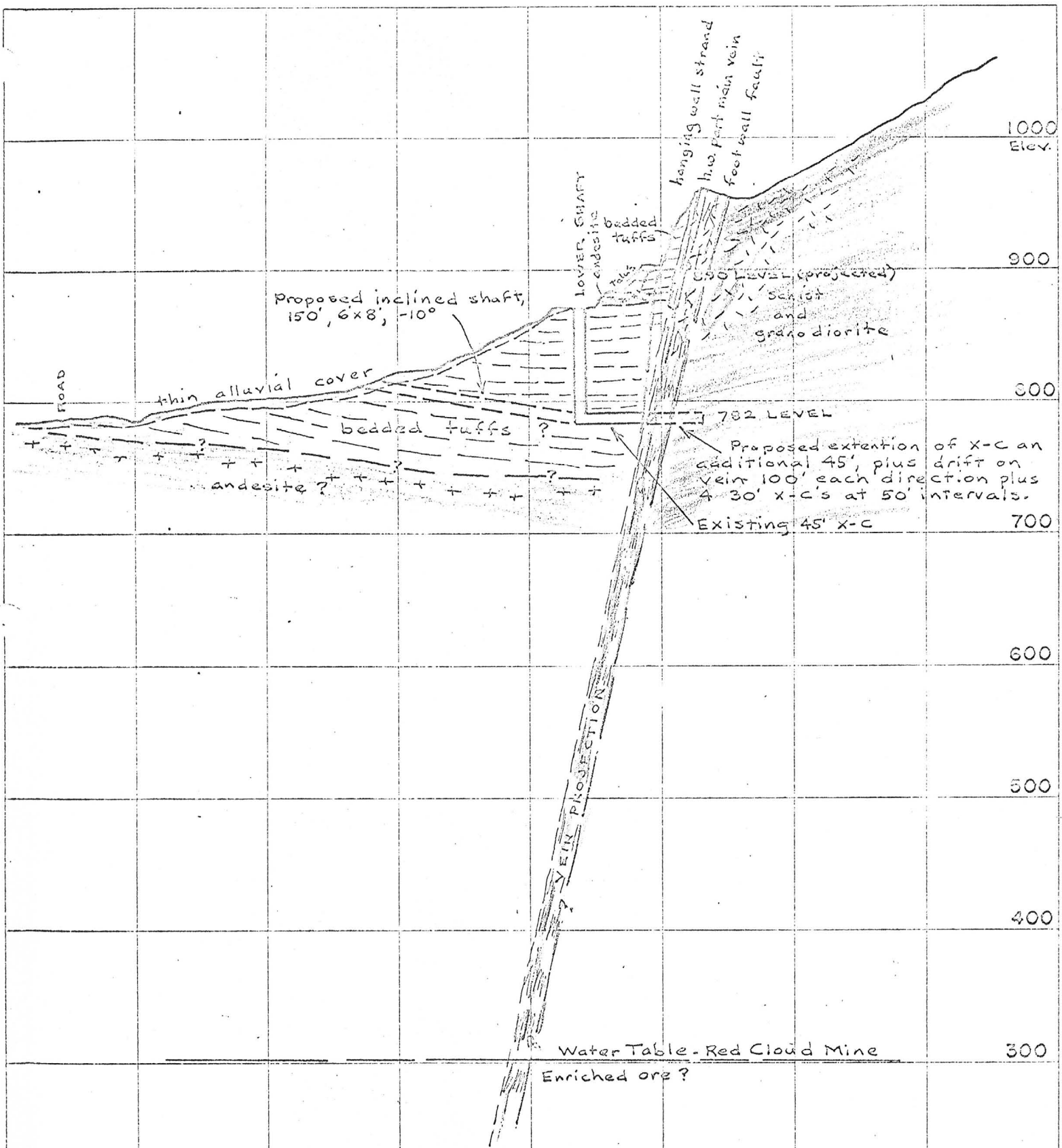
Any controversy arising under or in connection with this agreement shall be submitted to the decision of a competent person to be agreed upon by Contractor and Owner, as referee, and his decision shall be final. In case of failure to agree upon such referee, such controversy shall be submitted to the decision of three arbitrators, one to be chosen by Owner, one by Contractor, and the third, by the two so chosen, and the decision of any two of such arbitrators shall be final. The referee or arbitrator shall determine which party shall pay the cost of the reference or arbitration, or the manner in which such costs shall be divided between the two parties. Contractor shall, if required by Owner, proceed with all work pending the result of any such reference or arbitration, but final settlement for work done or materials furnished under this agreement need not be made until the final decision of the referee or arbitrators has been rendered.

IN WITNESS WHEREOF, the parties have caused this agreement to be executed by their respective authorized representatives as of the date first herein written.

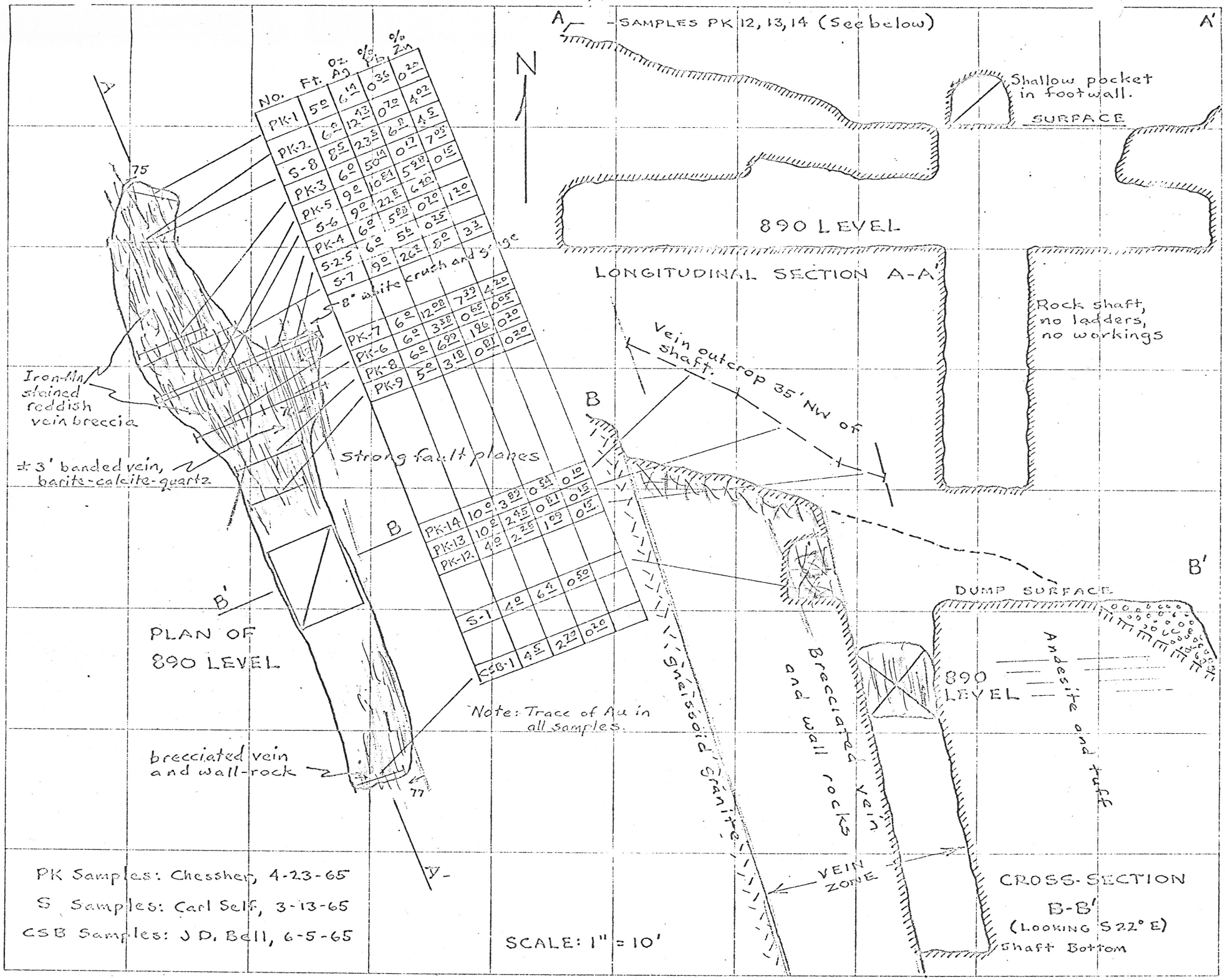
PHELPS DODGE CORPORATION


talus
schist and granodiorite
Drill Section No. 1
DRILL SITE
NORTH CUT
Ft Au Ag Pb
CSB-3 2.5 Tr 1.2 0.10
fe-stnd vein bx
SELF-15 1.00 Tr 2.0 2.8
schist and gd
silicified
Ft Au Ag Pb
CSB-2 4.2 Tr 0.2 0.10
Qtz, calcite, barite
A'
silicified andesite
tuff
LOWER SHAFT
Ft. Au Ag Pb Zn
PK 12-14 24.0 Tr 3.02 .74 .13
Stringers in fault bx
SOUTH CUT
UPPER SHAFT
See Map C for assays
Ft Au Ag Pb Zn
PK-11 Grab Tr 22.4 3.15 0.20
Ore Pile on dump
Drill Section No. 2
Shaft Section
DRILL SITE
talus
schist and granodiorite
schist
bedded fe-stained tuff
Ft Au Ag Pb
CBS-7 1.7 Tr 2.8 0.2
fe-stnd siliceous vein
reddish andesite
Drill Section No. 3
DRILL SITE
talus
Ft Au Ag Pb Cu
CBS-6 0.6 Tr 0.3 0.1 .02
Cu-stnd qtz on fault wall
PADRE KINO NO. 2
schist and granodiorite
Drill Section No. 4
DRILL SITE
bedded rhyolitic tuff
bleached tuff
Ft Au Ag Pb
CBS-5 4.0 .005 2.0 0.4
fe-stnd bx
35' silicified bx zone
DRILL SITE

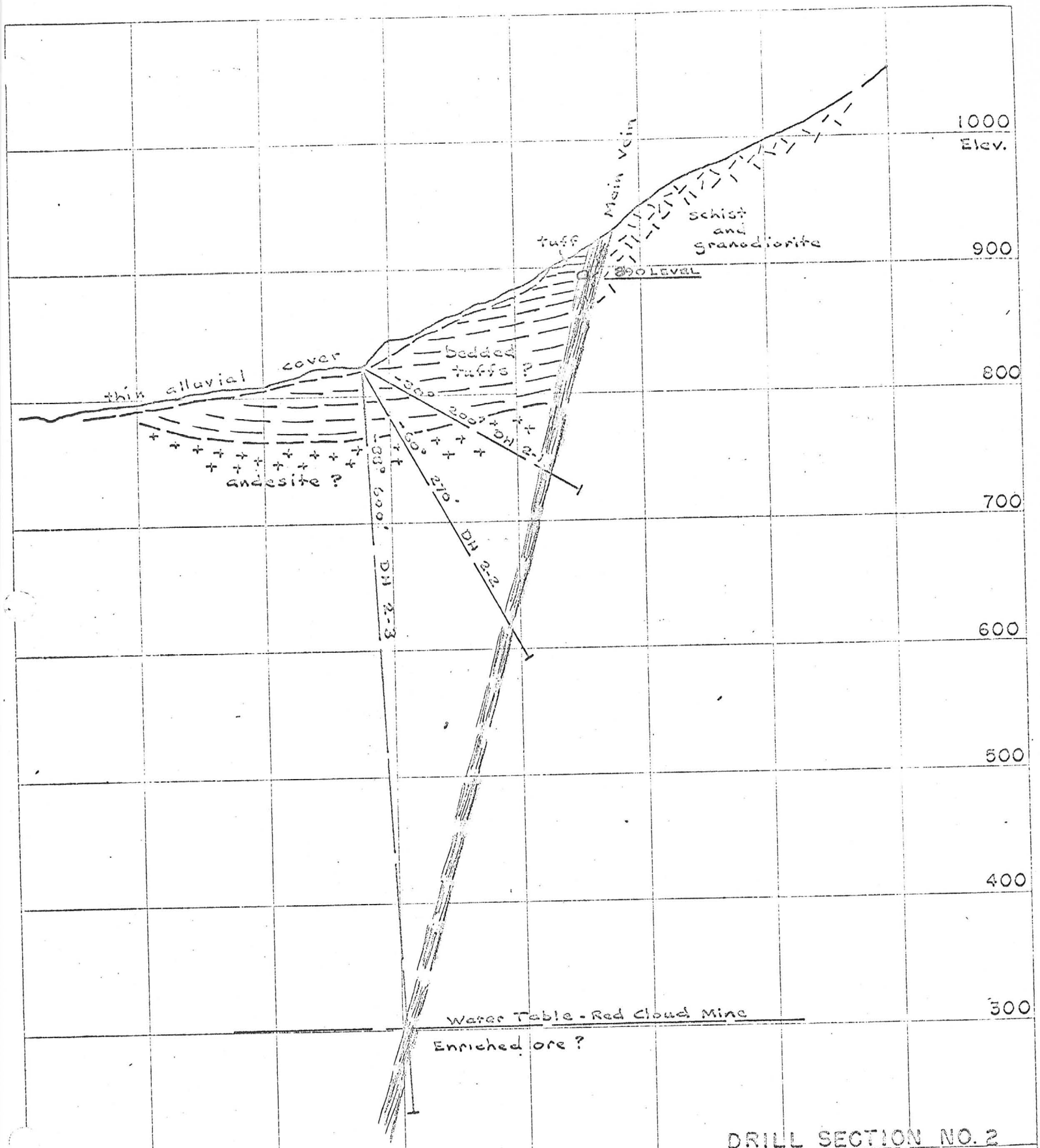

talus
schist and granodiorite
Section No. 1
talus
DRILL SITE
NORTH CUT
Ft Au Ag Pb
CSB-3 3.5 Tr 1.2 0.10
fe-stnd vein bx
SELF-15 10.0 Tr 2.0 2.6
schist and granodiorite
Ft Au Ag Pb
CSB-2 4.9 Tr 0.2 0.10
Qtz, calcite, barite
A'
silicified tuff
silicified andesite
LOWER SHAFT
Ft. Au Ag Pb Zn
PK 12-14 24.0 Tr 3.02 .74 .13
Stringers in fault bx
SOUTH CUT
UPPER SHAFT
See Map C for assays
Drill Section No. 2
DRILL SITE
talus
Ft Au Ag Pb Zn
PK-11 Gmb Tr. 22.41 3.15 0.20
ore pile on dump
schist and granodiorite
bedded feldspathic tuff
reddish andesite
Ft Au Ag Pb
CBS-7 1.7 Tr 2.3 0.2
fe-stnd siliceous vein
Drill Section No. 3
DRILL SITE
talus
Ft Au Ag Pb Cu
CBS-6 0.6 Tr. 0.3 0.1 .02
Cu-stnd qtz on fault wall
PADRE KINO
schist and granodiorite
Drill Section No. 4
DRILL SITE
bedded rhyolitic tuff
bleached tuff
Ft Au Ag Pb
CBS-5 4.0 .005 2.0 0.4
fe-stnd bx, hw part of 30' silicified bx zone
DRILL SITE



SHAFT SECTION A-A'
PADRE KING MINE
LOOKING NORTH
SCALE: 1" = 100'



No.	Ft.	oz. Ag	% Pb	% Zn
PK-1	5.0	6.14	0.36	0.20
PK-2	6.0	12.43	0.70	4.02
S-8	8.5	23.3	6.0	4.5
PK-3	6.0	50.14	0.17	7.05
PK-5	9.0	10.84	5.98	0.15
S-6	9.0	22.8	6.40	
PK-4	6.0	5.83	0.70	1.20
S-2.5	6.0	5.6	0.35	
S-7	9.0	26.3	5.0	3.3
PK-7	6.0	12.08	7.39	4.20
PK-6	6.0	3.38	0.65	0.05
PK-8	6.0	6.99	.196	0.20
PK-9	5.0	3.18	0.81	0.20
PK-14	10.0	3.82	0.54	0.10
PK-13	10.0	2.45	0.81	0.15
PK-12	4.0	2.25	1.09	0.15
S-1	4.0	6.4	0.50	
CSB-1	4.5	2.70	0.20	



DRILL SECTION NO. 2

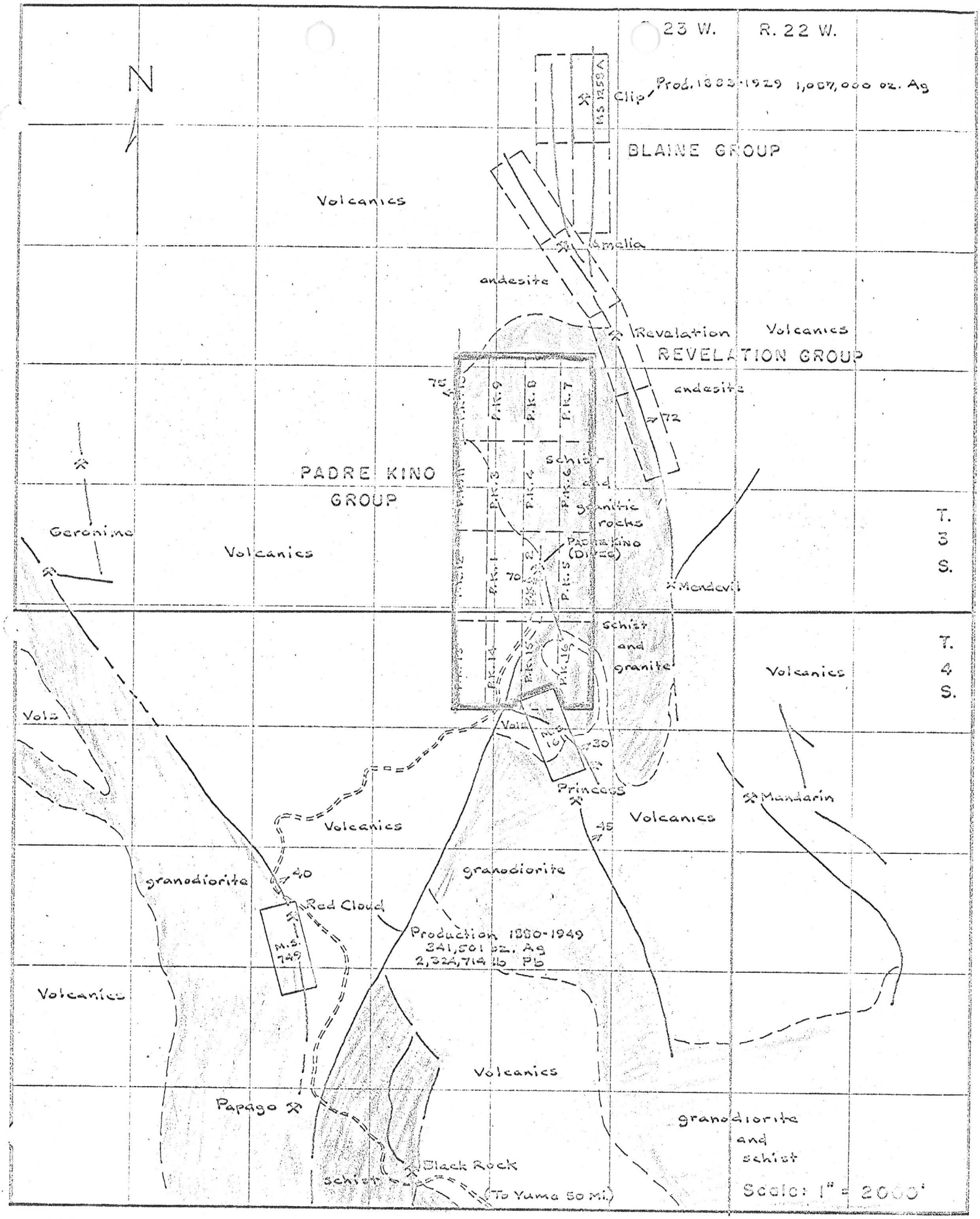
PADRE KINO MINE

LOOKING NORTH

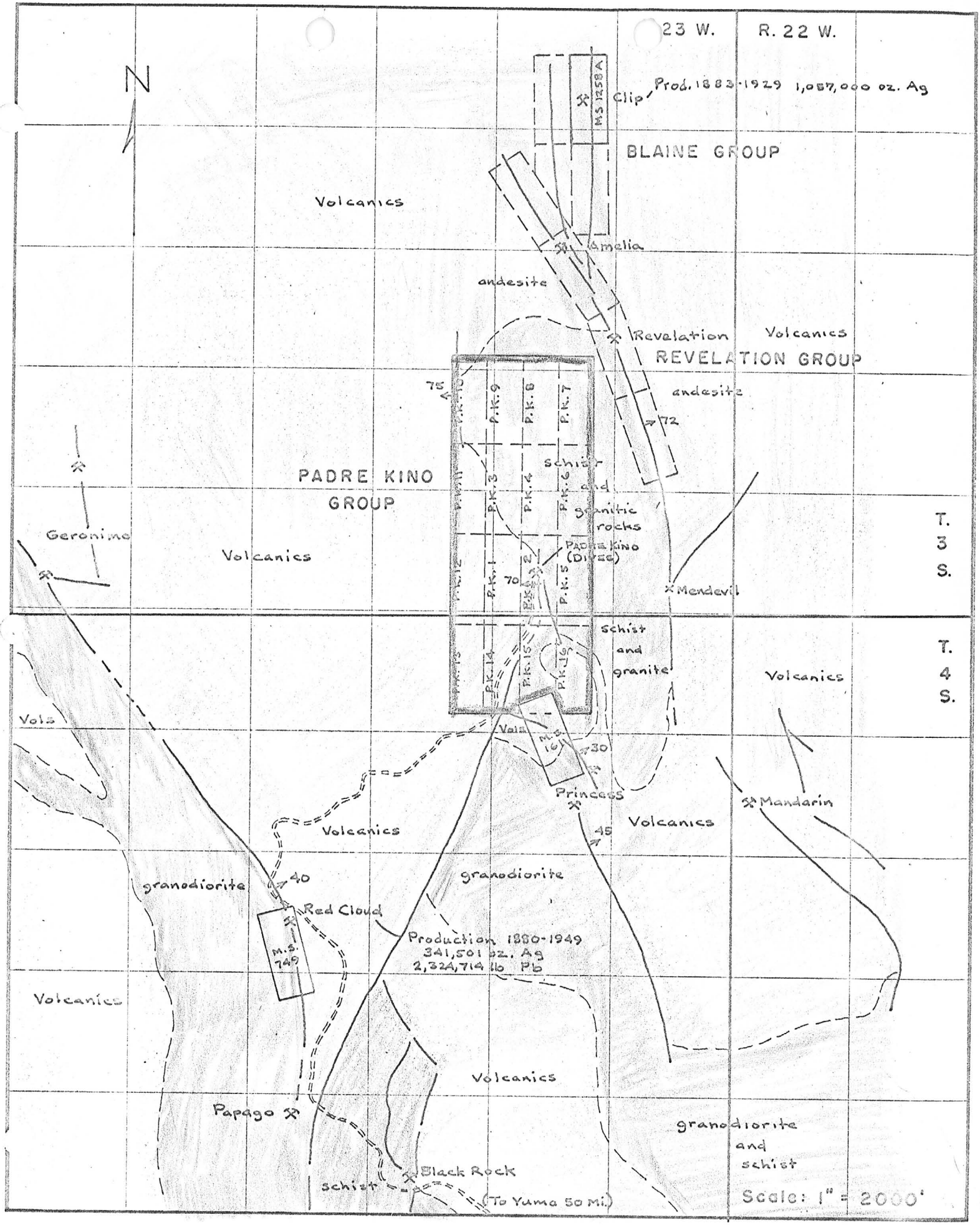
SCALE: 1" = 100'

Proposed DD 1070'

"ALBANENE" No. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF.

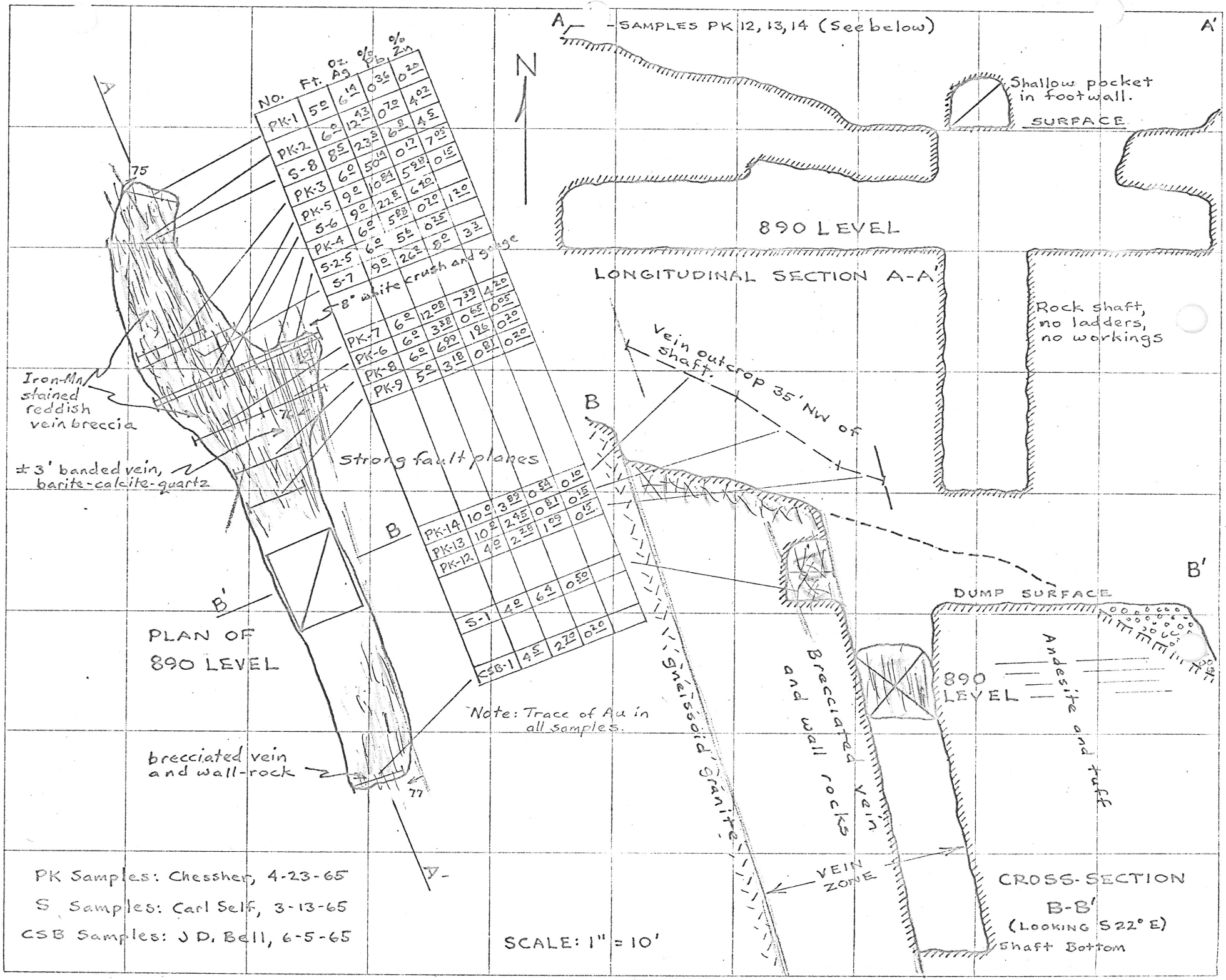


MAP A – GENERAL GEOLOGY, SILVER MINING DISTRICT, YUMA CO., ARIZ.
(from Wilson, Ariz. Bur. Mines Bull. No. 158)

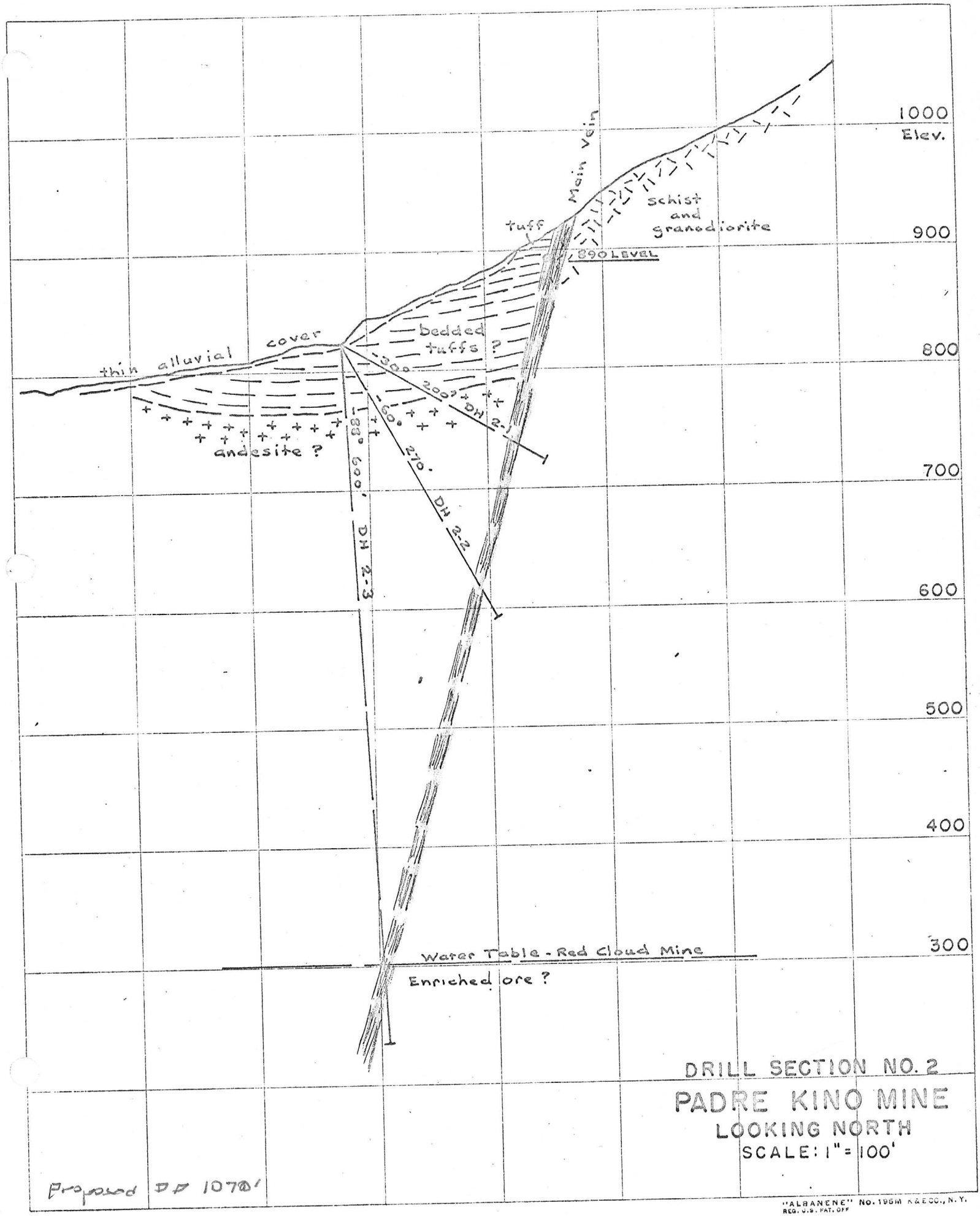


MAP A – GENERAL GEOLOGY, SILVER MINING DISTRICT, YUMA CO., ARIZ.
(from Wilson, Ariz. Bur. Mines Bull. No. 158)

MAP C - UPPER SHAFT WORKINGS, PADRE KINO MINE



No.	Ft.	oz. Ag	% Pb	% Zn
PK-1	5.0	6.14	0.36	0.20
PK-2	6.0	12.43	0.70	4.02
S-8	8.5	23.8	6.8	4.5
PK-3	6.0	50.14	0.17	7.05
PK-5	9.0	10.84	5.98	0.15
S-6	9.0	22.8	6.40	
PK-4	6.0	5.88	0.70	1.20
S-2-5	6.0	5.6	0.25	
S-7	9.0	26.2	5.0	3.3
PK-7	6.0	12.08	7.39	4.20
PK-6	6.0	3.88	0.65	0.05
PK-8	6.0	6.92	1.96	0.20
PK-9	5.0	3.18	0.81	0.20
PK-14	10.0	3.82	0.54	0.10
PK-13	10.0	2.45	0.81	0.15
PK-12	4.0	2.28	1.05	0.15
S-1	4.0	6.4	0.50	
CSB-1	4.5	2.70	0.20	



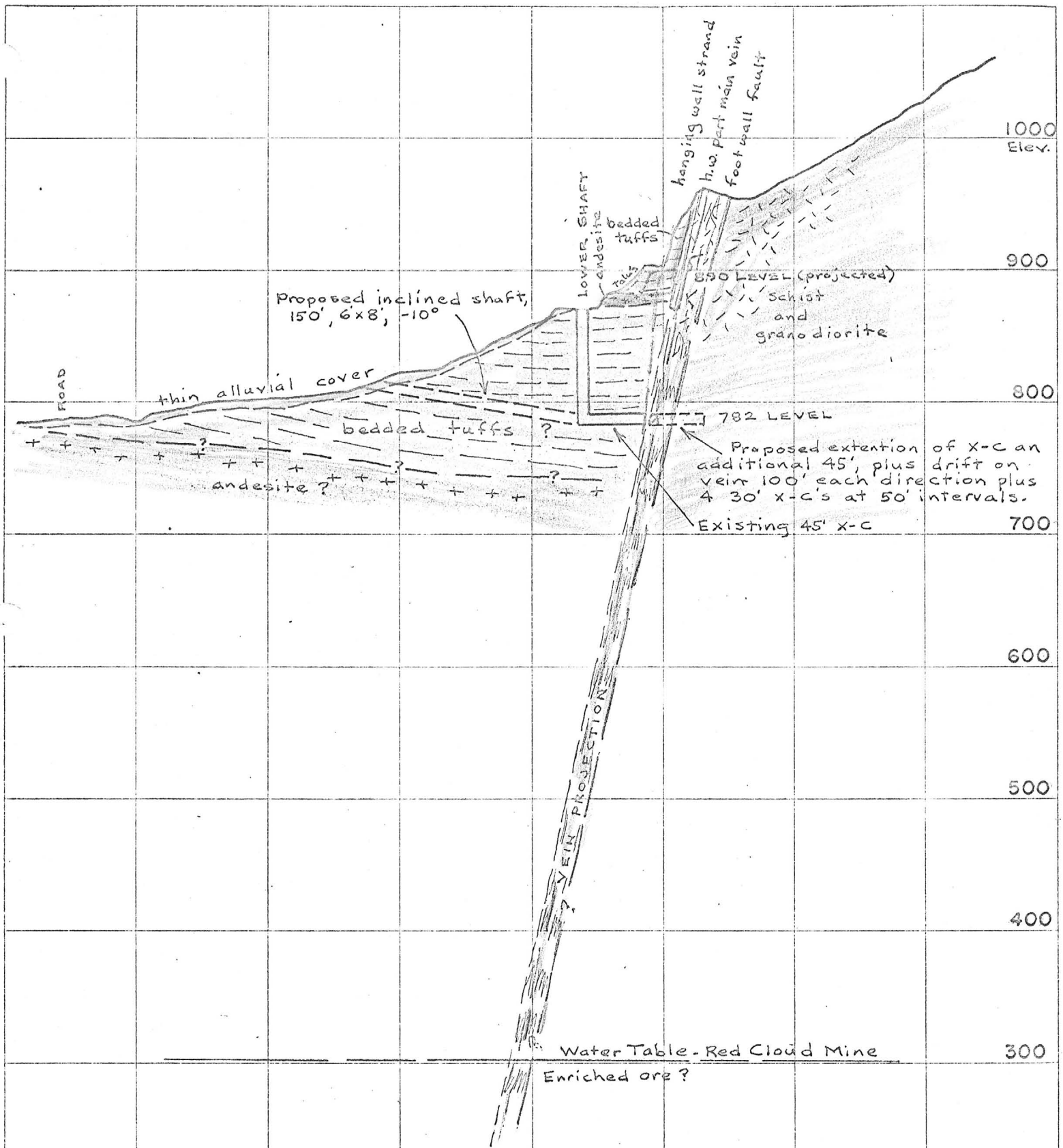
DRILL SECTION NO. 2

PADRE KINO MINE

LOOKING NORTH

SCALE: 1" = 100'

"ALBANENE" No. 195M A&E CO., N.Y.
REG. U.S. PAT. OFF.



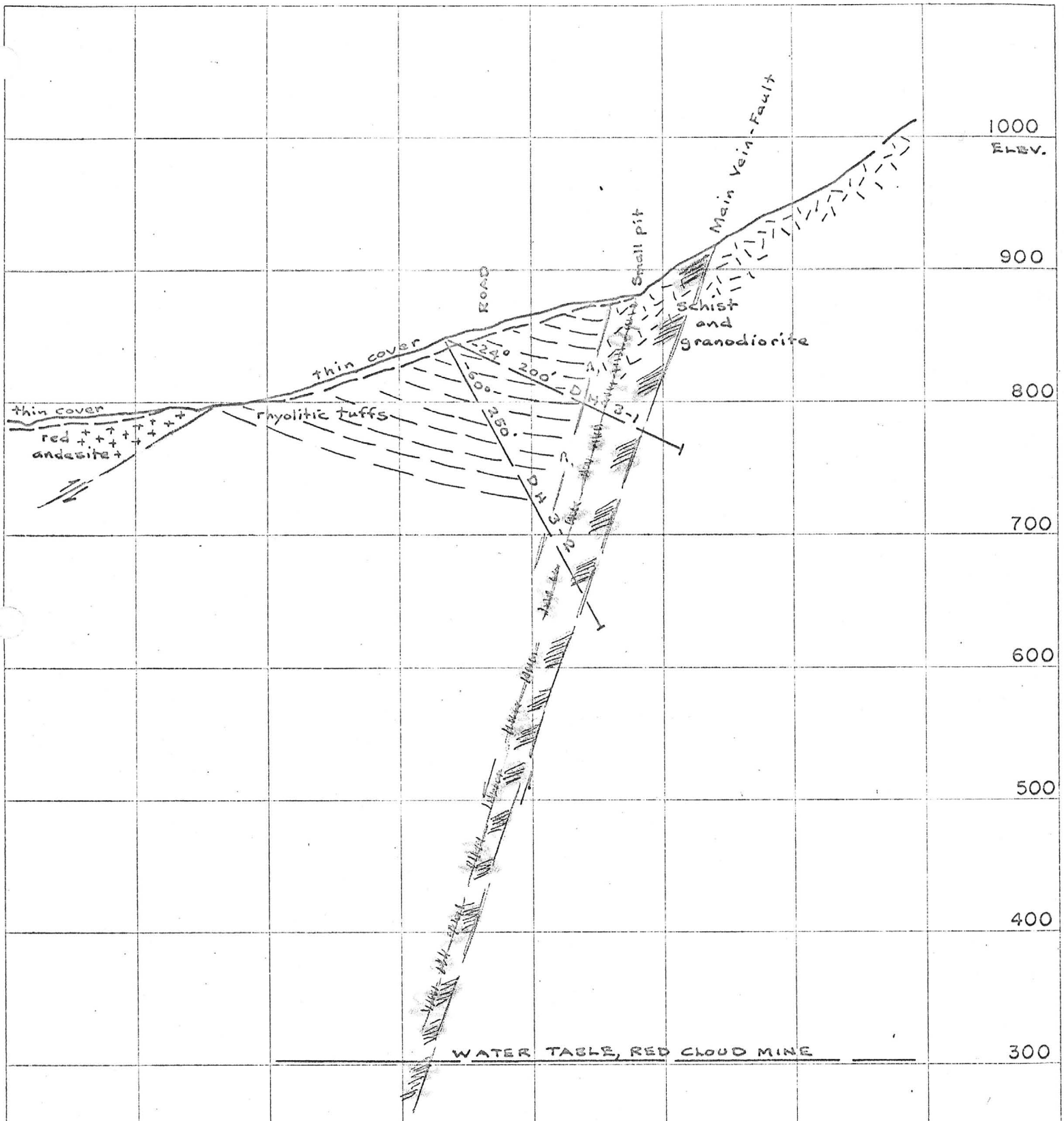
SHAFT SECTION A-A'

PADRE KINO MINE

LOOKING NORTH

SCALE: 1" = 100'

"ALBANENE" No. 196M K&E CO., N.Y.
REG. U.S. PAT. OFF.



DRILL SECTION NO. 3

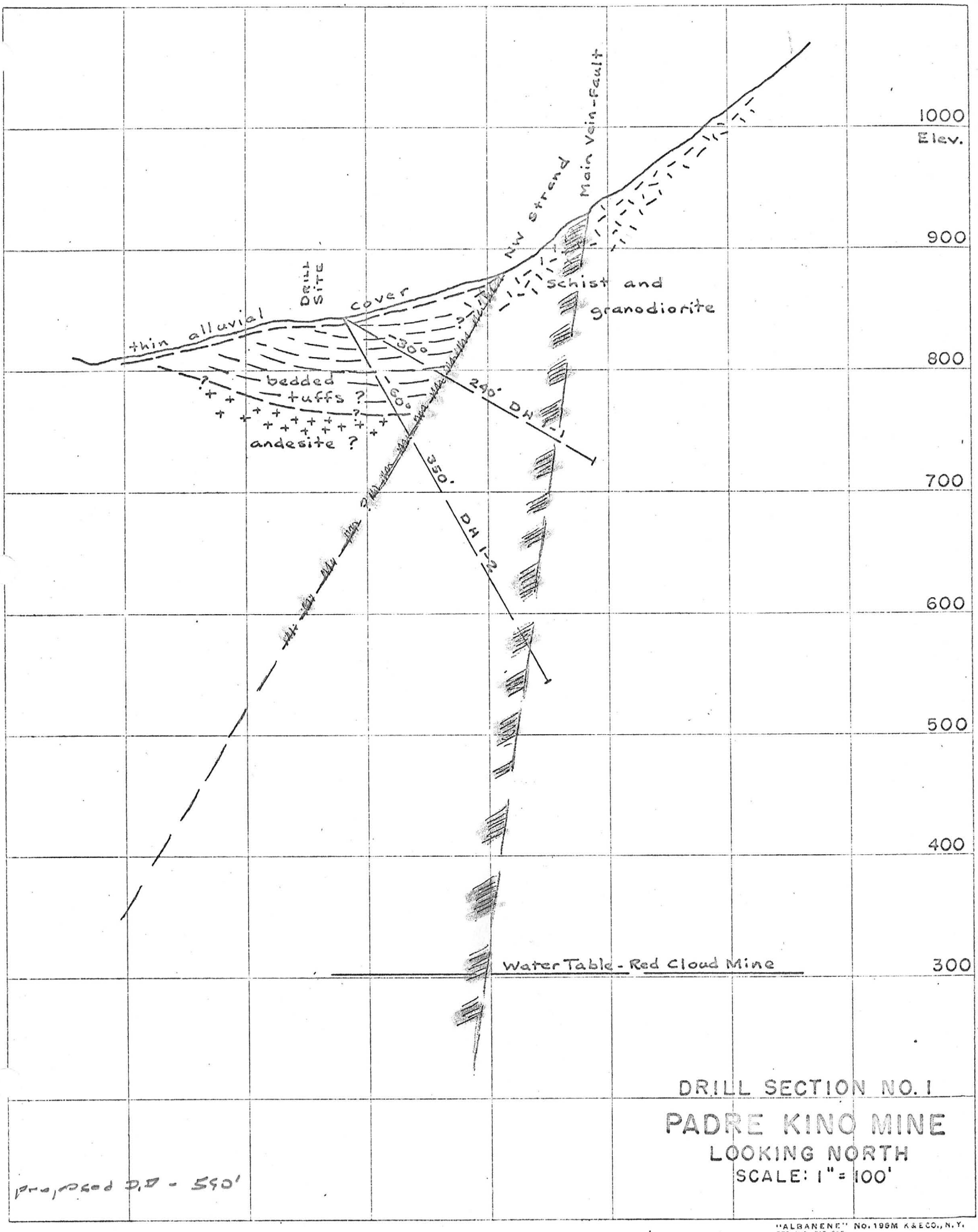
PADRE KINO MINE

LOOKING NORTH

SCALE: 1" = 100'

Proposed D.D.H. 450'

"ALBANENE" No. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF



DRILL SECTION NO. 1

PADRE KINO MINE

LOOKING NORTH

SCALE: 1" = 100'

"ALBANENE" No. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF.

Dives

Silver Glance Resources Inc.
1409 - 409 Granville Street
Vancouver, B.C. Canada V6C 1T8
Telephone (604) 669-2428

LETTER TO SHAREHOLDERS

Erosion of the Ozone layer by chlorine-bearing fluorocarbons has sparked new restrictions on the use of chlorofluorocarbons (CFC's) and has accelerated phase-out deadlines. This is good news for shareholders of Silver Glance Resources Inc. Two years ago the Company decided to exploit it's reserves of fluorite-bearing rock in its Silver District property near Yuma, Arizona to take advantage of increasing environmental concerns regarding CFC's. The cry over CFC's and the depletion of the Ozone layer has now reached the crisis stage. The Company's decision to switch to fluorite is proving to be a good one. The stock has moved to the $3.50 to $4.00 range and interest in the Company continues to grow.

The Significance of Fluorite

Fluorite is the chief feedstock for the new Ozone benign products, hydrofluorocarbons (HFC'S) and hydrochlorofluorocarbons (HCFC's). A three-fold demand for fluorite and its immediate product hydrofluoric acid is anticipated with the shift from CFC-based products to HFC's. In addition, some two tons of acidspar is required to produce one ton of hydrofluoric acid. There is thus a five-fold multiplier in effect on acidspar production. The Company's Silver District property near Yuma, Arizona is the only open-pittable acidspar deposit in the United States and is potentially the only domestic producer to supply fluorite to consumers on the U.S. market. Deposits in the Silver District Mining District have the potential to be low cost producers because of their low mining and processing costs, nearby transportation and proximity to end-users.

Reserves

Current reserves are four million tons grading five ounces per ton silver which include 1.8 million tons of acidspar quality rock grading 14% fluorite. Recent work has resulted in an increase in over-all grade and quality along with the discovery of a new zone in which early drill results returned 14% fluorite over a true width of thirty feet. This zone, accessible by open pit mining, is open along strike and to depth and could add a significant component to the reserve base. On-going work will exploit this reserve and develop final processing requirements to produce 50,000 tons of acidspar and one million ounces silver per year.

Recent Developments

The United States recently passed a measure to accelerate the elimination of CFC's in refrigerants, solvents, insulating processes and other applications. Production of CFC's had been slated for extinction by the year 2000. The U.S. is now considering moving that date five years closer. DuPont Co. and Allied-Signal Inc., two of the largest CFC producers, have spent about $600 million to develop and produce CFC alternatives. DuPont has authorized construction of the world's largest facility to produce non-ozone-depleting HFC's. The Company said that the $100 million worldscale plant at Corpus Christi, Texas, will have an annual capacity of about 70 million pounds to produce HFC-134A and HCFC-124. Coupled with an existing facility at the same site and a plant under construction in Chiba, Japan, DuPont said that by 1993 it will have capacity to produce up to 75 million pounds annually of HFC-134a and 50 million pounds of HCFC-124. Design is under way for a fourth facility in Dordrecht, the Netherlands, which is projected for completion by 1994.

HFC-134a is now targeted to replace all CFC products in new automobile air conditioning systems, commercial and industrial refrigeration equipment and home refrigerators. HCFC-124 will be a component of DuPont's products for servicing existing and new systems in home refrigerators, automobiles, refrigerated transport and some supermarket applications.

Outlook

All in all, the Company is well-positioned to capitalize on the accelerating demand for new, environment-friendly fluorocarbon products. Our growing resource base coupled with low production costs, by-product credits, access to the U.S. market and proximity to transportation all enhance the future potential of the Silver District project.

Philip J. Rogers
President
February 11, 1992

Schedule B: Supplementary Information - Silver Glance Resources Inc.

Securities Issued during the Second Quarter Ended January 31, 1992

Date	Type of Security	Type of Issue	Number	Price	Total Proceeds	Type of Consideration	Commission
Nov. 22, 1991	Common	Shares for Debt	9,200	2.50	$ 23,000	Royalties	0
Dec. 12, 1991	Common	Options	50,000	1.10	$ 55,000	Cash	0
Dec. 12, 1991	Common	Options	45,000	1.60	$ 72,000	Cash	0
Jan. 31, 1992	Common	Options	10,000	1.60	$ 16,000	Cash	0

Options Granted During the Second Quarter Ended January 31, 1992

Security	Number or Amount	Exercise or Convertible Price	Expiry Date
Option	160,000	$ 3.60	December 12, 1993

Authorized and Issued Share Capital at as January 31, 1992

Class	Par Value	Authorized Number	Issued Number	Issued Amount
Common	N.P.V.	20,000,000	1,621,848	11,176,615

Options, Warrants and Convertible Securities Outstanding as at January 31, 1992

Security	Number or Amount	Exercise or Convertible Price	Expiry Date
Options	160,000	$ 3.60	December 12, 1993
Warrants	125,000	$ 1.50	July 17, 1992

There are no flow-through shares or shares in escrow or subject to pooling as at January 31, 1992.

Schedule C: Management Discussion

PROPERTIES

The second quarter was highlighted by the announcement of a new fluorite discovery on the Silver District Property near Yuma, Arizona. The 1991 drill program produced significant fluorite assays from the Princess area, a vein system mined for silver in the 1870's. Three of the eight reverse circulation holes (#287, 288 and 290 at the extreme north end) returned assays averaging 5.6% fluorite over 10 feet, 14.9% fluorite over 30 feet and 14% fluorite over 30 feet respectively. The zone remains untested for a further 1,000 feet north as far as the Old Hamburg Mine. The Company believes considerable tonnage could be added to the over-all fluorite inventory between the Old Hamburg Mine and holes 288 and 290.

Subsequent to the quarter-end, the 1992 drill program was commenced on the Silver District. The program will consist of approximately 8,000 feet of reverse circulation drilling in over 30 holes and has three objectives - (1) define the Princess zone; (2) firm-up reserves on the Black Rock deposit; and (3) test possible extensions of the Silver King, Maxie #2 and Padre Keno zones all of which are currently open.

With the completion of the 1992 program, the Company will have fulfilled the $500,000 expenditure requirement to earn a 100% interest in the Silver District Property, subject to a 1.5% net smelter return.

FINANCING

The Company received $143,000 from the exercise options for 105,000 common shares by two directors and two employees. Regulatory authorities approved the issue of 9,200 common shares to settle 1990 property payments totalling $20,000 U.S. on certain claims within the Silver District.

Subsequent to the quarter end, the Company has received $426,800 from the exercise of options for an additional 118,000 common shares by three directors and three employees.

OUTLOOK

The Company received invaluable assistance in January when the earth's Ozone Layer attracted worldwide headlines. The U.S. National Aeronautics and Space Administration announced startling findings from atmospheric studies which showed record-high concentrations of chlorine monoxide over the skies of the Northern Hemisphere. Chlorine monoxide is a chemical by-product of the chlorofluorocarbons (CFC's) known to be the chief agents of Ozone destruction. This announcement has motivated governments in developed countries to review the timetable for the total phase-out of the production of CFC's. Total phase-out which was scheduled for the year 2000 is now being considered for the mid 1990's. Germany has announced total phase-out by the end of 1993.

The shift from CFC's to Ozone-benign products, hydrofluorocarbons (HFC's) and hydrochlorofluorocarbons (HCFC's), is expected to at least double the worldwide demand for acid grade fluorite (acidspar) the chief feedstock of HFC's and HCFC's.

The Company's Silver District Property is the only open-pittable acidspar deposit in the United States and is potentially the only domestic producer to supply fluorite to consumers in the U.S. market.

Upon the completion of the 1992 drill program, the Company is planning to proceed with a development process that will result in a feasibility report by January, 1993. The financing for this development process will be indirectly assisted by the worldwide concerns about Ozone depletion.

Philip J. Rogers, CA
President
March 31, 1992

Directors of the Company

Philip J. Rogers North Vancouver, B.C. President/Director	President of the Company; Self-employed Chartered Accountant (1983 to present).
Peter E. Fox Vancouver, B.C. Director	Consulting geologist, Fox Geological Consultants Ltd. (a non-reporting British Columbia company) 1971 to date.
John W. Fisher Delta, B.C. Director	Chemical Engineer, Metallurgist; Rea Gold Corporation.
Jan Van Der Weij North Vancouver, B.C. Director	Businessman.

Province of British Columbia

BRITISH COLUMBIA SECURITIES COMMISSION

QUARTERLY REPORT

FORM 61

INSTRUCTIONS

This report is to be filed by Exchange Issuers within 60 days of the end of their first, second and third fiscal quarters and within 140 days of the end of their fourth fiscal quarter. Three schedules (typed) are to be attached to this report as follows:

SCHEDULE A: FINANCIAL INFORMATION

Financial information prepared in accordance with generally accepted accounting principles for the fiscal year-to-date, with comparative information for the corresponding period of the preceding fiscal year. This financial information should consist of the following:

For the first, second and third fiscal quarters:

An interim financial report presented in accordance with Section 1750 of the C.I.C.A. Handbook. This should include a summary income statement (or a statement of deferred costs) and a statement of changes in financial position. A summary balance sheet is also to be provided.

For the fourth fiscal quarter (year end):

Annual audited financial statements.

SCHEDULE B: SUPPLEMENTARY INFORMATION

The supplementary information set out below is to be provided when not included in Schedule A.

1. *For the current fiscal year-to-date:*
   Breakdown, by major category, of those expenditures and costs which are included in the deferred costs, exploration and development expenses, cost of sales or general and administrative expenses set out in Schedule A. State the aggregate amount of expenditures made to parties not at arm's length from the issuer.

2. *For the quarter under review:*
   (a) Summary of securitites issued during the period, includng date of issue, type of security (common shares, convertible debentures, etc.), type of issue (private placement, public offering, exercise of warrants, etc.) number , price, total proceeds, type of consideration (cash, property, etc.) and commission paid.
   (b) Summary of options granted, including date, number, name of optionee, exercise price and expiry date.

3. *As at the end of the quarter:*
   (a) Particulars of authorized capital and summary of shares issued and outstanding.
   (b) Summary of options, warrants and convertible securities outstanding, including number or amount, exercise or conversion price and expiry dates.
   (c) Total number of shares in escrow or subject to a pooling agreement.
   (d) List of directors.

SCHEDULE C: MANAGEMENT DISCUSSION

Review of operations in the quarter under review and up to the date of this report, including brief details of any significant event or transaction which occured during the period. The following list can be used as a guide but is not exhaustive:

Acquisition or abandonment of resource properties, acquistion of fixed assets, financings and use of proceeds, management changes, material contracts, transactions with related parties, legal proceedings, contingent liabilities, default under debt or other contractual obligations, special resolutions passed by shareholders.

ISSUER DETAILS

NAME OF ISSUER	ISSUER TELEPHONE NO.	FOR QUARTER ENDED	DATE OF REPORT (Y M D)
SILVER GLANCE RESOURCES INC.	669-2428	January 31, 1992	92 03 31

ISSUER'S ADDRESS	PROVINCE	POSTAL CODE
1409 - 409 Granville Street, Vancouver, B.C.		V6C1T8

CONTACT PERSON	CONTACT'S POSITION	CONTACT TELEPHONE NO.
Philip Rogers	President	980-8604

CERTIFICATE

The three schedules required to complete this Quarterly Report are attached and the disclosure contained therein has been approved by the Board of Directors. A copy of this Quarterly Report will be provided to any shareholder who requests it.

DIRECTOR'S SIGNATURE	PRINT FULL NAME	DATE SIGNED (Y M D)
	Philip J. Rogers	92 03 31
DIRECTOR'S SIGNATURE	**PRINT FULL NAME**	**DATE SIGNED (Y M D)**
	Peter E. Fox	92 03 31

FIN 2061 Rev. 89/1/18

Engineers Testing Laboratories, Inc.
2525 E. Indian School Road - 264-4781 - Phoenix 16, Arizona

SOUTHWEST MINING CORPORATION
301 PIONEER BANK BUILDING
PRESCOTT, ARIZONA

23 SEPTEMBER 1965

ATTN: MR. DONALD J. BARRETT, PRESIDENT

RE: MINING PROPERTY SURVEY

IN RESPONSE TO OUR RECENT TELEPHONE CONVERSATIONS AND GENERAL UNDERSTANDING OF THE PROPOSED SURVEY, WE (E.T.L.) HAVE DRAWN A PROPOSED CONTRACT OUTLINING THE SCOPE OF SERVICES AND THE COSTS FOR PERFORMING THESE SERVICES.

A DRAFT OF THE CONTRACT IS ATTACHED HEREWITH FOR YOUR PERUSAL. WE WILL WELCOME THE OPPORTUNITY TO FURTHER DISCUSS THE PROPOSAL AT YOUR CONVENIENCE.

OUR PRESENT WORK LOAD IS SUCH THAT WE CAN BEGIN WORK IMMEDIATELY.

ENGINEERS TESTING LABORATORIES, INC.

W. P. CRAWFORD
MINING ENGINEER
/LW
ENCLOSURE

Engineers Testing Laboratories, Inc.
2525 E. Indian School Road - 264-4781 - Phoenix 16, Arizona

I

OWNER-ENGINEER AGREEMENT

THIS AGREEMENT MADE THIS DATE_____

BETWEEN

HEREINAFTER DESIGNATED OWNER, AND ENGINEERS TESTING LABORATORIES, INC.

HEREINAFTER DESIGNATED ENGINEER, TO WIT:

WITTNESSETH, THAT WHEREAS THE OWNER IS UNDERTAKING TO LOCATE AND APPRAISE SUCH MINERALS THAT MAY BE FOUND ON THAT PROPERTY KNOWN AS

NOW, THEREFORE,

THE OWNER DOES RETAIN THE ENGINEER AND THE ENGINEER DOES ACCEPT THE COMMISSION TO SERVE AS THE OWNER'S PROFESSIONAL CONSULTANT IN SUCH PHASES OF THE PROJECT AS HE SHALL HAVE BEEN RETAINED AS HEREIN SPECIFIED AND SHALL GIVE CONSULTATION AND SERVICES TO THE OWNER AS HEREIN DESCRIBED AND THE OWNER AGREES TO PAY THEREFOR TO THE ENGINEER A PROFESSIONAL FEE IN MANNER AND TIME AS HEREIN PROVIDED, AND EACH PARTY ASSUMES THE DUTIES AND RESPONSIBILITIES TOWARD THE OTHER AS HEREIN SET OUT.

THIS AGREEMENT IS AGREED BY BOTH PARTIES TO CONSIST OF 7 PAGES, ALL OF WHICH ARE HEREUNTO ATTACHED AT TIME OF EXECUTION, WHICH CONSTITUTE THE COMPLETE CONTRACT BETWEEN THE PARTIES RELATIVE TO THIS PROJECT.

DONE AND EXECUTED, ON THIS THE_____DAY OF _____, 19_____.

OWNER

_____

BY_____

ENGINEER

_____

BY_____

II

SPECIFIC DUTIES UNDERTAKEN BY ENGINEER

A. OWNER AND ENGINEER AGREE THAT IN THE RETENTION OF THE ENGINEER FOR THE DUTIES HEREINAFTER DESCRIBED, THE OWNER IS RETAINING PROFESSIONAL COUNSEL AND ASSISTANCE FOR THE PROJECT, AND THE DUTIES OF THE ENGINEER ARE LIMITED TO ADVICE AND GUIDANCE OF THE OWNER TO THE BEST OF ENGINEER'S PROFESSIONAL ABILITY. THE OWNER AND ENGINEER AGREE THAT ENGINEER IS IN NO WAY A GUARANTOR THAT THE PROJECT FOR WHICH HE IS RETAINED WILL BE TECHNICALLY OR ECONOMICALLY FEASIBLE OR SUCCESSFUL; IT BEING UNDERSTOOD THAT THIS IN NO WAY LIMITS ENGINEER'S DUTY TO USE HIS BEST EFFORTS TO ADVISE AND GUIDE THE OWNER.

B. THE SPECIFIC DUTIES OF THE ENGINEER SHALL BE AS FOLLOWS:

BASIC APPRAISAL - THE ENGINEER SHALL FAMILIARIZE HIMSELF WITH THE REQUIREMENTS OF THE PROJECT AND THE GENERAL SURROUNDINGS IN WHICH THE PROJECT IS TO BE PERFORMED. THE WORK SHALL INCLUDE A GENERAL COMPILATION OF KNOWN REGIONAL GEOLOGY, A STUDY OF KEY AREAS WITH THE AID OF AERIAL PHOTOGRAPHS AND ALL OTHER AVAILABLE RECORDS. A REGIONAL APPRAISAL SHALL BE MADE RESULTING IN SELECTION OF THE APPARENTLY FAVORABLE AREAS FOR MORE DETAILED STUDY.

SURFACE RECONNAISSANCE - UPON RECEIVING AUTHORIZATION FROM THE OWNER AND WITH RIGHT OF ENTRY TO THE PROPERTY, THE ENGINEER SHALL PROCEED WITH A SURFACE RECONNAISSANCE. THE SURFACE RECONNAISSANCE SHALL INCLUDE SUCH MAPPING AND SAMPLING AS FEASIBLE WITHOUT THE USE OF DRILLING OR TRENCHING. THE ENGINEER SHALL HANDLE, STORE AND OTHERWISE TRANSFER THE SAMPLES TO THE ASSAYERS AND CAUSE SUCH ASSAYS TO BE MADE AS REQUIRED. THE DATA THUS OBTAINED AND COMPILED WITH THAT PREVIOUSLY COLLECTED DURING THE BASIC APPRAISAL SHALL BE ANALYZED AND USED TO PREPARE A PRELIMINARY REPORT. THE REPORT SHALL INCLUDE ALL FINDINGS AND PROFESSIONAL OPINIONS CONCERNING THE PROPERTY BASED ON ALL INFORMATION COMPILED TO THIS TIME.

THE REPORT SHALL ALSO INCLUDE ANY OUTLINE OF SUB-SURFACE EXPLORATION THAT MAY BE DEEMED FEASIBLE ON THE FAVORABLE AREAS FOR MORE DETAILED STUDY. PRELIMINARY COST ESTIMATES FOR PERFORMING THE WORK WILL ALSO BE INCLUDED IN THE REPORT.

NOTE: THE ENGINEER SHALL FURNISH THE NECESSARY EQUIPMENT AND SUPPLIES AS REQUIRED TO PROVIDE SERVICES AS OUTLINED IN THE BASIC APPRAISAL AND SURFACE RECONNAISSANCE, AND SHALL CONSULT WITH THE OWNER IN ALL PHASES PERTINENT TO THE SERVICES CONTRACTED FOR HEREIN.

SUB-SURFACE EXAMINATION - UPON RECEIVING AUTHORIZATION FROM THE OWNER AND NECESSARY PERMISSION TO BUILD ROADS, EXCAVATE AND/OR DRILL ON THE PROPERTY, THE ENGINEER SHALL PROCEED WITH THE SUB-SURFACE EXAMINATION. THE ENGINEER SHALL PROVIDE THE FOLLOWING SERVICES:

1. FURNISH EQUIPMENT AND SUPPLIES AS REQUIRED TO DEVELOP ACCESS, ADVANCE TEST HOLES AND HANDLE MATERIAL RELATIVE TO THE PROGRAM.

2. FURNISH ENGINEERS, TECHNICIANS, OPERATORS AND OTHER PERSONNEL AS REQUIRED.

3. ADVANCE TEST HOLES, PREPARE LOGS, AND MAINTAIN DRILLING AND SAMPLING RECORDS.

4. CONSULT WITH OWNERS IN ALL PHASES PERTINENT TO THE PROPERTY.

5. FURNISH AN ENGINEER'S REPORT SUBMITTING A COMPILATION OF THE RESULTS OBTAINED AND INTERPRET AND OTHERWISE RENDER HIS PERSONAL OPINION OF THE PROPERTY.

NOTE: IT APPEARS THAT DIAMOND DRILLING WILL BE THE MOST EFFECIENT METHOD OF PERFORMING THIS PHASE OF THE PROJECT. HOWEVER, IF GEOPHYSICAL OR OTHER METHODS NOT PROVIDED FOR HEREIN ARE REQUIRED, NEGOTIATIONS WILL BE CONDUCTED FOR THIS WORK PRIOR TO COMMENCEMENT.

III

PAYMENTS TO ENGINEER

A. ALL CURRENT CHARGES WILL BE INVOICED TO THE OWNER THROUGH THE LAST DAY OF EACH WORK WEEK, WITH STATEMENTS BEING MAILED THE FOLLOWING MONDAY. PAYMENTS WILL BE MADE WITHIN 10 DAYS UPON OWNER'S RECEIPT OF STATEMENT.

B. OWNER SHALL PAY THE ENGINEER THE FOLLOWING UNIT PRICES FOR PROFESSIONAL SERVICES:

1.	ENGINEER - PER 8 HOUR DAY	$100.00
	ENGINEER - OVERTIME/HOUR	15.00
2.	TECHNICIAN - PER 8 HOUR DAY	68.00
	TECHNICIAN - OVERTIME/HOUR	10.00
3.	ASSAYS - OWNER TO PAY DIRECT OR	COST + 10%

C. OWNER SHALL PAY THE ENGINEER THE FOLLOWING UNIT PRICES FOR FURNISHING EQUIPMENT AND OPERATION OF SAME RELATIVE TO THE PROJECT:

1.	DODGE POWER WAGON - OPERATION PER MILE (MINIMUM $20.00 PER DAY)	$ 0.20
2.	ONE HALF TON PICK UP - OPERATION PER MILE (MINIMUM $10.00 PER DAY)	0.12
3.	CORE DRILLING RIG	
	A. MOBILIZATION/DEMOBILIZATION - PER MILE	0.50
	B. DRILLING - ALL OPERATIONS - PER HOUR (2 MAN CREW)	20.00
	C. DRILLING - ALL OPERATIONS - PER HOUR (2 MAN CREW) OVERTIME	24.00
	D. STANDBY TIME NECESSITATED BY OTHERS AND STANDBY FOR CEMENT SETTING - PER HOUR	15.00

NOTE: ALL DRILLING EQUIPMENT, SUPPLIES, DRILLERS' EXPENSES AND MAINTAINANCE ARE INCLUDED IN THE PRICES QUOTED ABOVE EXCEPT THOSE NOTED IN (4) BELOW. AX SIZE AND HOLE DEPTHS LESS THAN 500' ANTICIPATED.

4.	ACCESSORY EQUIPMENT	
	A. BIT COST LESS SALVAGE	COST + 10%
	B. DRILL MUD, CEMENT & OTHER ADDITIVES	COST + 10%
	C. CASING LEFT IN HOLE BY REQUEST OF OWNER	COST + 10%
	D. CAT OR DOZER FOR ROADBUILDING	COST + 10%
	E. WATER TRUCK OR TRAILER - PER MILE (MINIMUM $20.00 PER DAY)	0.20
	DRIVER - PER HOUR, IF REQUIRED	4.00
	DRIVER - PER HOUR, OVERTIME	6.00
	F. BACKHOE - DIGGING TEST HOLES	COST + 10%
	G. CORE BOXES - OWNER TO FURNISH OR	COST + 10%

5. TRAVEL - OTHER THAN MOBILE/DEMOBILE

A. TRAVEL TIME FOR ALL PERSONNEL IS CHARGED AT STRAIGHT TIME RATE FROM BASE OF OPERATIONS TO JOB SITE AND RETURN.

B. MILEAGE IS CHARGED AT THE RATES SHOWN HEREIN FOR THE VARIOUS VEHICLES.

6. SPECIAL EQUIPMENT

ALL OTHER SPECIAL EQUIPMENT OR SUPPLIES NOT INCLUDED HEREIN PURCHASED FOR THE PROJECT WILL BE CHARGED TO THE OWNER AT THE ENGINEER'S COST PLUS 10%. ENGINEER MUST HAVE OWNER'S AUTHORIZATION PRIOR TO ALL PURCHASES OR RENTALS. ENGINEER'S TIME INVOLVED IN MAKING SUCH PURCHASES WILL BE CHARGED AT RATES SHOWN HEREIN.

IV

MISCELLANEOUS PROVISIONS

A. IT IS UNDERSTOOD THAT THE OWNER HAS DESIGNATED _____ _____ TO ACT AS OWNER'S REPRESENTATIVE WITH RESPECT TO THE WORK TO BE PERFORMED UNDER THIS AGREEMENT. THE OWNER'S REPRESENTATIVE SHALL BE THE SOLE AND UNRESTRICTED AGENT TO TRANSMIT INSTRUCTIONS, RECEIVE INFORMATION, INTERPRET AND DEFINE OWNER'S POLICY AND DECISIONS WITH RESPECT TO ALL OPERATIONS AND SYSTEMS OF THE PROJECT.

B. THE ENGINEER AGREES TO CARRY WORKMAN'S COMPENSATION COVERAGE BY THE ARIZONA STATE INDUSTRIAL COMMISSION FOR ALL PERSONNEL EMPLOYED BY THE ENGINEER FOR THE PROJECT. IN ADDITION, THE ENGINEER WILL MAINTAIN $500,000.00 LIABILITY AND $300,000.00 PROPERTY DAMAGE INSURANCE.

C. 1. IN THE EVENT THAT THE ENGINEER SHALL HAVE COMPLETED HIS SERVICES HEREUNDER AND SHALL NOT HAVE BEEN PAID THE COMPENSATION DUE UNDER THIS CONTRACT THE OWNER AGREES THAT HIS INTEREST AND THE INTEREST OF HIS ASSIGNS, TRANSFEREES, MORTGAGEES, CREDITORS AND ALL OTHER PARTIES HOLDING AND CLAIM BY AND THROUGH THE OWNER IN THE REALTY INTENDED TO

C. 1. CONTINUED...

BE IMPROVED BY THIS PROJECT SHALL BE ENLIENED FOR THE AMOUNT OF THE FEE OWING. THE ENGINEER SHALL HAVE THE RIGHT FOR THREE YEARS FROM COMPLETION OR TERMINATION OF THE ENGINEER'S SERVICES UNDER THIS CONTRACT TO BRING ACTION TO FORECLOSE SAID LIEN, SELL SAID REALTY, AND AFTER PAYING ALL COSTS, ATTORNEY FEES, AND EXPENSES, APPLY THE PROCEEDS TO OWNERS INDEBTEDNESS TO THE ENGINEER, IN THE SAME MANNER AS PROVIDED IN THE FORUM HEREIN CHOSEN FOR THE FORECLOSURE OF TRUST DEEDS AND MORTGAGES.

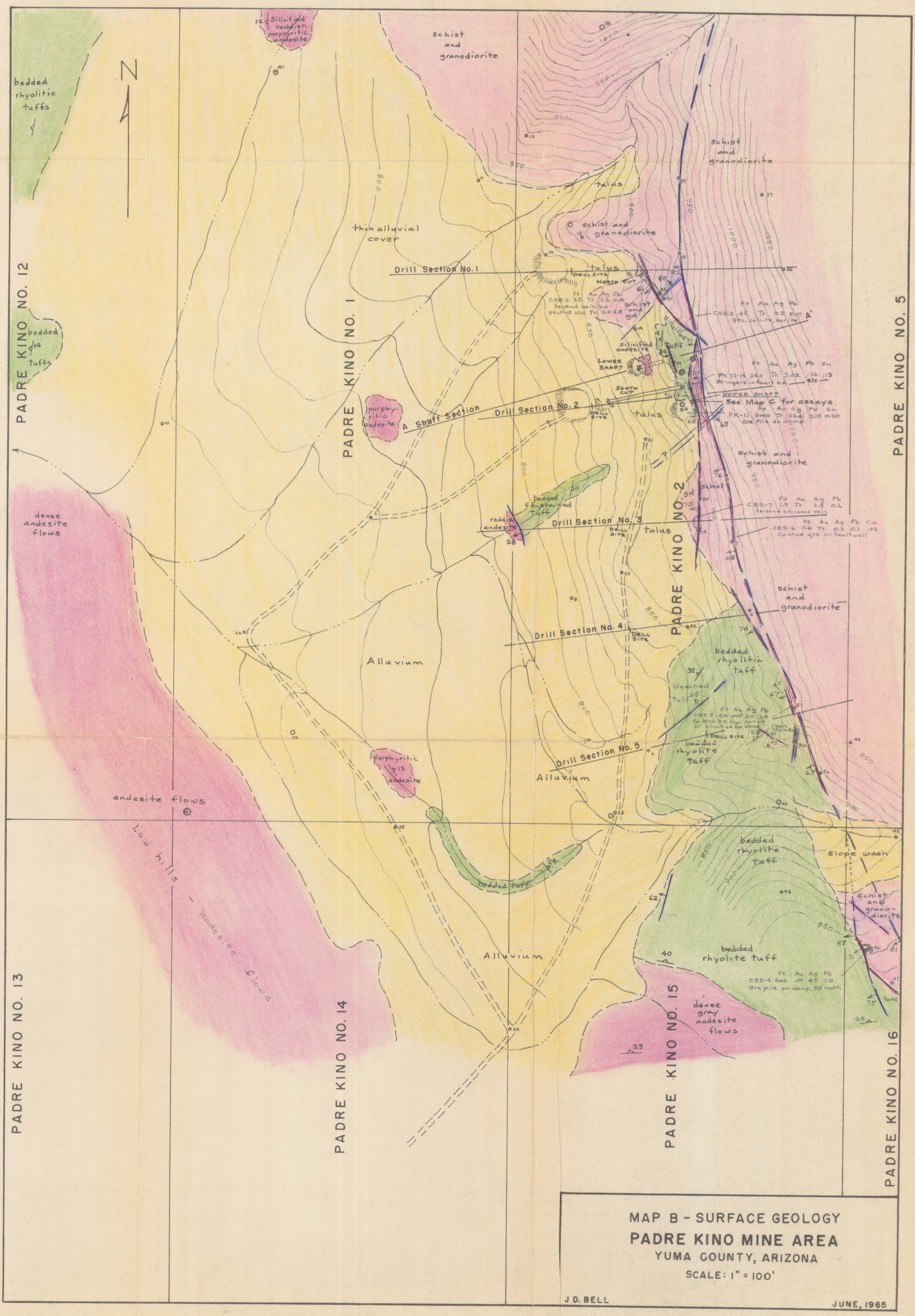
2. IT IS FURTHER AGREED THAT THE ABOVE REMEDY IS IN ADDITION TO ALL OTHER REMEDIES IN CHANCERY OR AT LAW OR OF ANY OTHER INSTANCE THAT MAY NOW OR HEREAFTER EXIST IN FAVOR OF THE ENGINEER; PROVIDED, HOWEVER, THAT THE ENGINEER SHALL SECURE ONLY ONE RECOVERY AS A RESULT OF ALL THE ACTIONS TAKEN, WHICH RECOVERY SHALL INCLUDE ALL COSTS OF COURT AND A REASONABLE ATTORNEY'S FEE.

3. SHOULD THE ENGINEER CAUSE ANY ACTION TO BE BROUGHT TO COLLECT HIS FEES HEREUNDER, OWNER AGREES TO PAY ALL COSTS OF COURT AND A REASONABLE FEE FOR ENGINEER'S ATTORNEY.

D. THE OWNER SHALL HAVE THE RIGHT TO TERMINATE THE DUTIES OF THE ENGINEER AT ANY TIME ON WRITTEN NOTICE PAYING TO HIM AS COMPENSATION THE TOTAL FEE FOR THE FULL AMOUNT OF WORK PERFORMED AT THAT TIME, PLUS ANY OBLIGATORY RENTALS AND COMMITMENTS MADE BY THE ENGINEER IN ANTICIPATION OF CONTINUED WORK.

E. THIS AGREEMENT AND THE PERFORMANCES HEREUNDER IS AGREED BY BOTH PARTIES TO BE GOVERNED BY THE LAWS OF THE STATE OF ARIZONA, AND BOTH PARTIES AGREE THAT THE VENUE FOR THE BRINGING OF ANY ACTION HEREUNDER SHALL BE THE COURT OF PROPER JURISDICTION IN MARICOPA COUNTY, STATE OF ARIZONA.

oOo



MAP B - SURFACE GEOLOGY

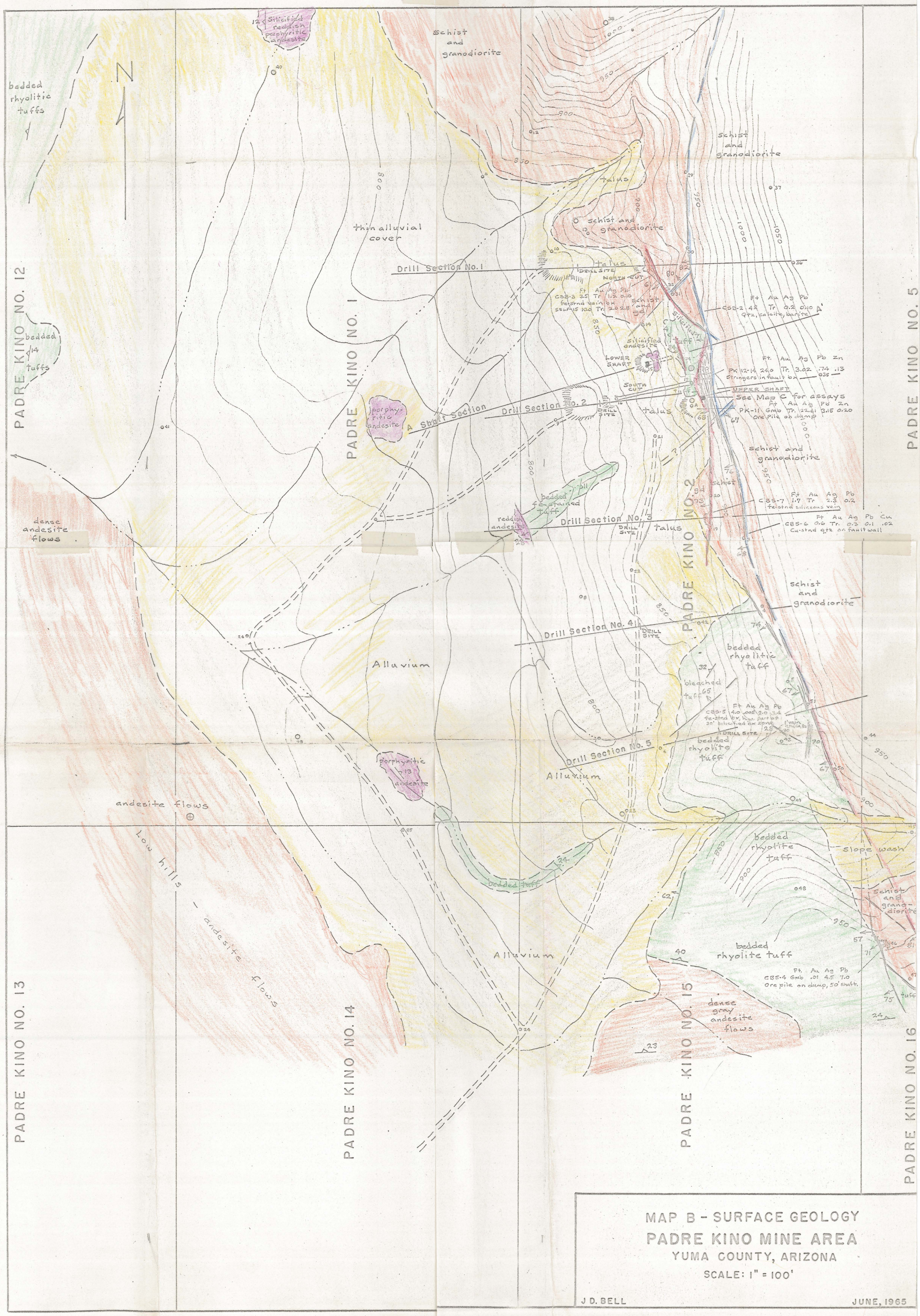
PADRE KINO MINE AREA

YUMA COUNTY, ARIZONA

SCALE: 1" = 100'

J D. BELL

JUNE, 1965



MAP B - SURFACE GEOLOGY

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YUMA COUNTY, ARIZONA

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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DEPARTMENT OF THE ARMY
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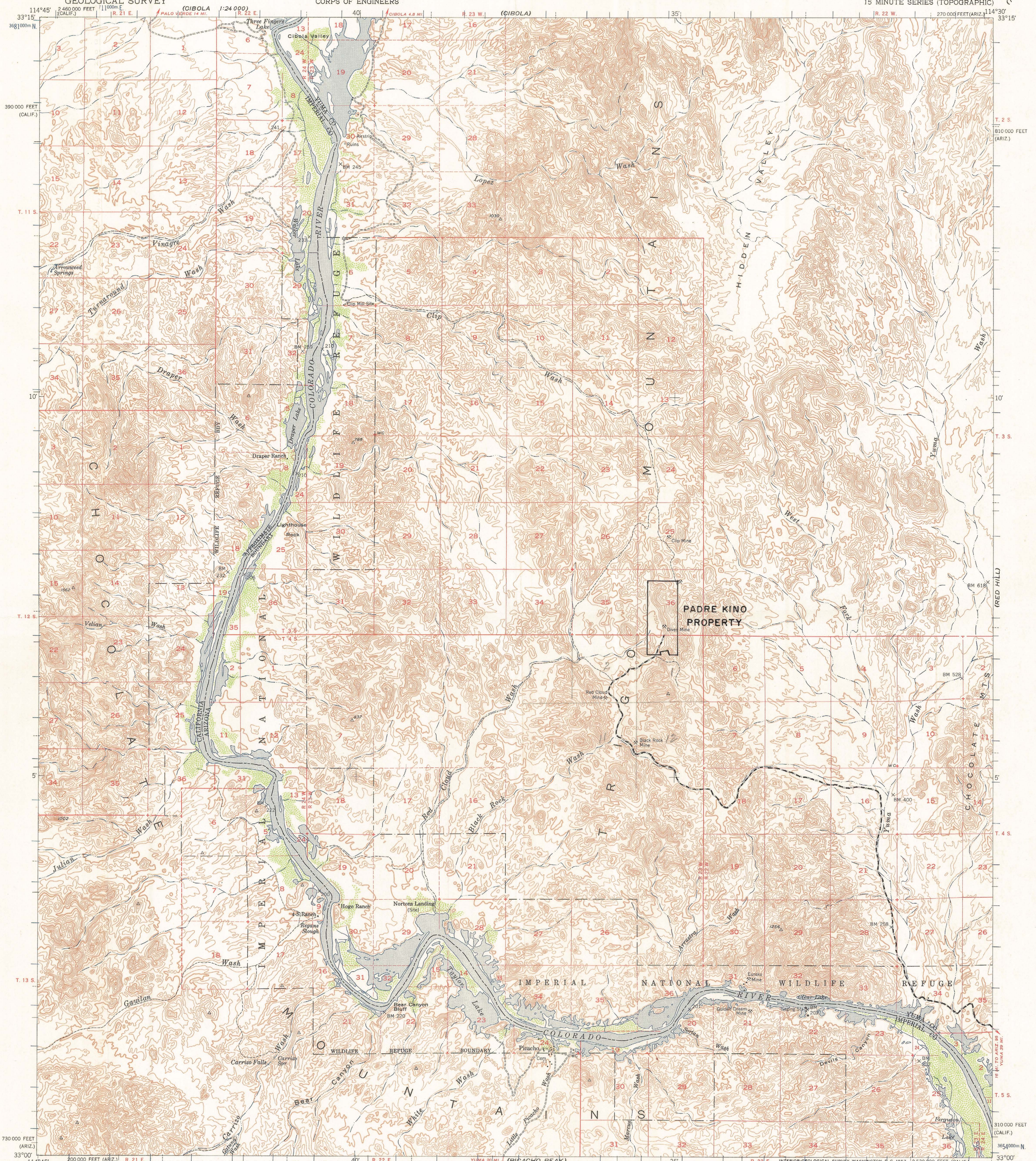

Mapped by the Army Map Service

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Topography from aerial photographs by multiplex methods 1943
Aerial photographs taken 1940. Culture and drainage
revision by USGS 1951

Polyconic projection. 1927 North American datum
10,000-foot grids based on Arizona coordinate system, west zone
and California coordinate system, zone 6

California-Arizona boundary shown from best available information

Dashed land lines indicate approximate location

1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue

TRUE NORTH
MAGNETIC NORTH
15°
APPROXIMATE MEAN DECLINATION, 1951

SCALE 1:62500

1 ½ 0 1 2 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION

Heavy-duty — 4 LANE | 6 LANE
Medium-duty — 4 LANE | 6 LANE
Light-duty
Unimproved dirt
U. S. Route
State Route

Maps of Picacho NW, Picacho SW, and Picacho quadrangles, scale 1:24 000, from later (1954) and more detailed surveys of this area, are available.

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PICACHO, ARIZ.-CALIF.
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1951