The next highest group of homogenization temperatures belonged to the quartz and amethyst samples from Six Mile Hill. These homogenization temperatures ranged from 150° C. to 236° C. with a mean of 183.2° C.

The highest temperature group of inclusions was found in the quartz from the Commonwealth Mine. These homogenization temperatures ranged from 171° C. to 266° C. with a mean of 220.5° C.

The salinities from the Commonwealth Mine seem to be in the lower range of values that have been reported for epithermal precious metal deposits.

Fluid inclusion data from the Pearce Mining District indicates that the vein material from north end of Six Mile Hill was deposited at a lower temperature than the veins in the Commonwealth Mine. Evidence of boiling is scattered throughout the samples from both Six Mile Hill and the Commonwealth Mine.

PHOTOGEOLOGY AND REMOTE SENSING INTERPRETATION

Photogeologic studies have been made of recent color aerial photography (1" = 500' scale), high altitude USGS aerial photos, and U-2 aerial photography. A photo linear interpretation and a blackline mosaic print of the Commonwealth Mine Hill and Six Mile Hill is included with this report. Work sheets of interpretation on other scales is in the Pearce Project files. This photointerpretation should be input into a continuing program of target selection.

A study has been made of circular and linear features on EROS Satellite Remote Sensing Imagery. The most striking features from this interpretation are a northeast trending linear crossing the Sulfur Springs Valley which passes through the town of Pearce, and a large circular anomaly in the area of the Sulfur Hills. These features are plotted on the 1" = 2000' scale composite geologic map in this report, and on overlays to the Imagery in the Pearce Project files.

EXPLORATION TARGETS

Geological mapping and interpretation; geochemical sampling and interpretation; and studies of drill hole cuttings and core, alteration patterns, mineralization values and zoning, geophysical data, photo interpretation patterns and regional structural studies give the following target areas for consideration:

1. The Commonwealth Mine Hill

The Commonwealth Mine Hill has been tested by mining, underground sampling by Platoro, rotary drilling by Platoro, diamond drilling and rotary drilling by Bethlehem Copper Corporation, rotary drilling by Western States Minerals Corporation, and one diamond drill hole by the Stephens Mineral Group. A restudy of all of this data gives the Commonwealth Hill a possible open-pittable tonnage of 3 to 5 million tons of 2½ ounces or greater of silver and .03 ounces of gold per ton. The commerciality of this area is dependent on Au - Ag prices, the willingness of the majority owner (Carl Thetford, et al) to agree to reasonable terms for development, and the results of further exploration and evaluation.

2. Six Mile Hill

Mapping, sampling, geophysical surveys and three diamond drill holes have shown Six Mile Hill to have strong epithermal mineralization intensifying at the north end of the hill. Two diamond drill holes were drilled at the north end of Six Mile Hill and one diamond drill hole was drilled in the center of Six Mile Hill. The holes at the north end cut strong quartz (and amethyst) - calcite mineralization with typical epithermal zoning, but did not have significant gold - silver values. This mineralization could be peripheral to a larger precious metal center.

3. Other Targets

a) Stephens Property Covered by Alluvium.

The bulk of the property controlled by the Stephens Mineral Group surrounds the Commonwealth Mine Hill and Six Mile Hill and is covered by relatively thin (50 to 200 feet) Quaternary alluvium. Evidence from data compiled

in this work and a study of the Epithermal Precious Metal Model indicates that other Ag - Au epithermal systems could be covered by this alluvium. Exploration for such centers would be by (1) continued data compilation and study, (2) acquisition of geophysical data showing possible mineralized structural features, and (3) reconnaissance drilling through the alluvial cover. This drilling could be very shallow (10 to 50 feet) to obtain geochemical samples or deeper (300 to 400 feet) to test bedrock.

b) Volcanic Hills in the Eastern Part of the Pearce Project Area.

A series of hills east of the Commonwealth Mine Hill show altered volcanics and some evidence of precious metal mineralization. These warrant detailed geologic mapping and further geochemical sampling. These include four main groups of hills:

Hill 1. The hill that centers between Sections 33 and 34, T.17S, R.25E, and is covered by the San Ignacio unpatented mining claims and currently under option to the Stephens Mineral Group.

Hill 2. The hill in the center of Section 35, T.17S, R.25E, and is covered by the Blue Jeep unpatented mining claims and currently under option by the Stephens Mineral Group.

Hill 3. Known as Township Butte in Section 1, T.18S, R.25E and Section 6, T.18S, R.26E, and is covered by three (3) patented mining claims and the San Manuel unpatented mining claims. The Section 6 portion is controlled by an Arizona State Prospecting Permit held by the Stephens Mineral Group.

Hill 4. Located in Section 36, T.17S, R.26E, and is controlled by an Arizona State Prospecting Permit held by the Stephens Mineral Group.

Respectfully submitted,

_____

Paul I. Eimon

_____

Arturo A. Ona

_____

E. Grover Heinrichs

July 9, 1981
Tucson, Arizona USA

REPORT

PEARCE PROJECT

PEARCE MINING DISTRICT

COCHISE COUNTY, ARIZONA

Prepared For John A. Stephens

By: Paul I. Eimon
Arturo A. Ona
E. Grover Heinrichs

July 9, 1981

TABLE OF CONTENTS

TEXT	PAGE
INDEX OF APPENDICES	i
SUMMARY	1
RECOMMENDATIONS	3
INTRODUCTION	4
HISTORY	5
PROPERTY	6
BACKGROUND DATA	8
GEOLOGY	9
MINERALIZATION AND ALTERATION	11
DRILLING	11
GEOCHEMISTRY	12
GEOPHYSICS	15
FLUID INCLUSION STUDY	15
PHOTOGEOLOGY AND REMOTE SENSING INTERPRETATION	16
EXPLORATION TARGETS Commonwealth Mine Six Mile Hill Other Areas	17

INDEX OF APPENDICES

Appendix A — Tectonic Map of Southeast Arizona by Drewes
Including index to Pearce Project Report Area
Map Locations at the following scales: 1"=2000'
1"=500'

1"=2000' Scale Maps:

Appendix B — Land Status with Attachment No. 1 showing name
And address of owners of record

Appendix C — Aerial Magnetics

Appendix D-1 — Regional Geologic Map

Appendix D-2 — Regional Geochemical Sample Location Map

1"=500' Scale Maps:

Appendix E — Land Status & Topography

Appendix F — Photo Mosaic

Appendix G — Photo Interpretation Overlay

Appendix H — Geology & Drill Hole Location

Appendix I — Geologic Sections
A - A'
B - B'
C - C'
D - D'
E - E'

Appendix J — Geochemical Maps
a) Silver - Mercury
b) Copper - Strontium
c) Nickel - Vanadium
d) Titanium - Zirconium - Lathanum
e) Barium - Manganese

Appendix K Generalized Surface Alteration

Appendix L Core Log
Showing rock type description and assay
Value of Au and Ag
1) PP-1
2) PP-2
3) PP-3

Appendix M Mercury and 31 Element Scan by Skyline Laboratories, Inc.

SUMMARY

After signing an initial option on properties at Pearce, Arizona in June, 1980, the Stephens Mineral Group has explored and compiled data on a 17,050-acre property surrounding the town of Pearce. The goal has been to find a silver - gold deposit similar to or larger than the Commonwealth Mine (one million tons production at 12.5 oz. Ag and .03 oz. Au) or extensions to the Commonwealth Mine.

Exploration during the past year has consisted of: aerial photography, geologic mapping, photogeology, geochemical and geophysical surveys, data compilation, four diamond drill holes (2,494 feet), and fourteen rotary drill holes (3,060 feet), totaling 5,554 feet of drilling. In addition to this, earlier drill data and geophysical information has been uncovered and made available to the Stephens Mineral Group. Combined with results of the above-described work and previous reports, an impressive body of data has been assembled.

The coordination and interpretation of this data has clarified the geology and mineralization patterns of the Pearce Mining District. The geology is detailed on the attached plan maps and sections and is described in the text of this report.

The geologic picture is one of volcanic blocks, lying above the Cretaceous Bisbee formation with complex post depositional faulting. Epithermal mineralization is related to strong structural features and is widespread over many square miles. Zoning of epithermal mineralization has been determined by fluid inclusion studies, geologic observations, and geochemical sampling.

Three exploration targets or target areas have emerged from this work. They are:

1. The Commonwealth Mine in which the Stephens Mineral Group has a crucial 11% ownership - has significant exploration-development potential. Our restudy of all drill data gives the Commonwealth Hill a possible open-pittable tonnage of 3 to 5 million tons of 2½ ounces or greater of silver and .03 ounces of gold per ton. When the majority owners are amenable to reasonable exploration-development terms, this should be further studied and explored.

2. Six Mile Hill. Mapping, sampling and geophysical surveys have shown Six Mile Hill to have strong epithermal mineralization intensifying at the north end of the hill. Three drill

holes confirmed this pattern of mineralization. These holes cut strong quartz (amethyst)- calcite mineralization to the north but did not have significant gold - silver values.

3. Other Buried Targets. The more complete geologic picture, improved structural knowledge, and geochemical indications reaffirm that other ore deposits - such as the Commonwealth - could lie under Quaternary alluvium or exposed volcanics in the Stephens-controlled blocks.

   It is recommended that a series of reconnaissance rotary holes be drilled to search for another epithermal system on the Stephens' ground. Re-assaying of previous drilling should be continued and more detailed gravity, plus magnetic data, could be acquired and interpreted.

RECOMMENDATIONS

1. Rotary Drilling for Another Epithermal System.

   A program of continued data study, geochemical sampling of shallow rotary holes, possible geophysical surveys, and 300 to 400-foot rotary holes should be planned and executed to test for silver - gold systems on the Stephens' Pearce Properties.

2. Renegotiation of Platoro Option.

   An attempt should be made to renegotiate the Platoro option to give time to logically explore the entire Project area.

3. Evaluation and Exploration of Commonwealth Mine Hill.

   If reasonable option terms can be obtained from Carl Thetford et al, a restudy of the potential of the Commonwealth Mine Hill is warranted.

INTRODUCTION

The Pearce Project area lies in the central western part of the Sulfur Springs Valley in Cochise County, Arizona. The ghost mining twon of Pearce is 50 miles north of Douglas, Arizona and 30 miles south of Willcox, Arizona. The area is shown on the Pearce, Arizona, USGS topographic quadrangle.

Pearce is one-half mile west of Highway 666 and is connected with Highway 666 by both a paved and a gravel road. The town of Pearce now consists of a few houses, the old Pearce store, and a school.

Elevations range from 4400 feet to 4900 feet in the Pearce Project area. The closest accommodations are at Sunsites, one mile north of Pearce.

The Stephens Mineral Group initiated work in the Pearce area in mid-1980 after John Stephens signed an option with L. A. Galyen (June 20, 1980) covering Six Mile Hill and other acreage contiguous to the Commonwealth Mine. Since that time an exploration program has been carried out to expand the property holdings, map the area, perform geochemical surveys, complete an initial group of diamond and rotary drill holes, and locate old and develop and compile new information.

A storage building has been built on the property to preserve, and have available for study, the drill and other samples that have been acquired from the Pearce area in the last few years.

This report is produced to summarize all the results and data produced and/or compiled by the Stephens Mineral Group on the Pearce area. For a complete review, it is necessary to examine the back up file and work sheet information in the Heinrichs Tucson office and the sample and drill core material stored in Pearce, Arizona. The project and this report is a joint effort directed by Paul Eimon. Most of the geologic mapping, logging, and writing of the geologic and geochemical part of this report has been done by Art Ona of Lowell & Pillar. Grover Heinrichs has done all of the property work on the project and has authored the property portion of this report. Bill Brown has directed the rotary drilling program.

HISTORY - PEARCE MINING DISTRICT

Pre-1895	Early prospecting on the north end of Six Mile Hill on quartz veining failed to find commercial Au-Ag values.
1895	Discovery of high grade float on Commonwealth Hill by John Pearce lead to development of the Pearce Mining District.
1895 - 1927	Productive period of the Commonwealth Mine. Early developers R. F. Penrose, D. F. Barringer, and John Brockman used profits to fund development of the Bingham Canyon Mine in Utah and the Broadmore Hotel in Colorado.
1927 - 1975	Dormant period with intermittent attempts to leach the tailings and mine the upper workings by lessees.
1975 - 1976	Examination and sampling of Commonwealth Mine by Platoro Mines with five (5) rotary holes drilled immediately southwest of Commonwealth workings.
1976 - 1977	Option and exploration of the Commonwealth Hill by Bethlehem Copper Corporation, including diamond drilling and rotary drilling.
1978 - 1979	Exploration of the Commonwealth Mine area by Western States Minerals with thirteen (13) rotary drill holes.
1980 - 1981	Acquisition of (1) rights on property surrounding the Commonwealth claims, (2) claims covering Six Mile Hill, and (3) Arizona State Mineral Leases covering several thousand acres surrounding the Commonwealth Mine by the Stephens Mineral Group. Mapping, sampling, and drilling are currently underway on this project.

PROPERTY

As of July 1, 1981, the Stephens Mineral Group controlled approximately 17,295 acres in the Pearce Mining District. Of these, 17,050 acres were 100% controlled and 245 acres are partially controlled.

The land controlled by the Stephens Mineral Group is divided into seven (7) categories. Each category is keyed to the property maps in this report at scales of one inch equals 500 feet and one inch equals 2000 feet. The seven categories are as follows:

I.

Patented Mining Claims, Galyen - Platoro
100% under option to purchase by Stephens Mineral Group
Arthur, Hornspoon, Silver Thread, Rainbow
65 Acres

II.

Patented Surface and Mineral Title
100% under option to purchase by Stephens Mineral Group
Galyen - Platoro lease option
680 Acres

III.

Unpatented Mining Claims
100% under option to purchase by Stephens Mineral Group
Galyen - Platoro lease option
Pan Claim Group: Pan 1 thru 7
Pan 16 thru 78
1010 Acres

IV.

Unpatented Mining Claims - Located and staked July, 1981
100% controlled by Stephens Mineral Group
Vi 1 thru Vi 15
220 Acres

In process of location:
Karen 1 thru 43
660 Acres

V.

Unpatented Mining Claims

100% under lease option by Stephens Mineral Group

San Ramon Group)
San Ignacio Group) Hernandez & Cartmell Brothers et al
Blue Jeep Group)

660 Acres

VI.

State Prospecting Permits

100% controlled by Stephens Mineral Group

Group 1 - Due date for renewal: August 13, 1981
12 Parcels - 5,603.5 Acres

Group 2 - Due date for renewal: August 20, 1981
11 Parcels - 4,165.83 Acres

Group 3 - Due date for renewal: September 3, 1981
11 Parcels - 3,935.86 Acres

Total: 13,705.19 Acres

As of July 1, 1981, the rotary drilling program has secured for renewal permits, 11 parcels, totaling 4,215.86 acres. These parcels are numbered as follows: 1, 2, 3, 4, 5, 6, 22, 24, 28, 29 and 30.

VII.

Patented and Unpatented Mining Claims

11% under option to purchase by Stephens Mineral Group

Thetford - Corgill Commonwealth Mine Area:

105 acres patented - less surface land to school district patented mining claims

140 acres unpatented

BACKGROUND DATA ON THE PEARCE MINING DISTRICT

As part of current investigations, previous reports, old drill core, sample cuttings, assay reports, maps, photos, remote sensing imagery, geochemical survey data, geophysical data, historic records and other data have been collected and assimilated. These are stored in the Heinrichs Tucson office and in a core - sample storage building being constructed in Pearce. These represent years of work and large expenditures, and should be maintained for continued exploration. They are of considerable value.

This report summarizes results of current work and a restudy of the older reports. For further information the reader is referred to the data base in Tucson and Pearce. Principal reports include:

Smith, L. A., 1927, The Geology of the Commonwealth Mine: MS Thesis, University of Arizona, 73 pages.

Eimon, P. I., May 1975, Report on the Commonwealth Mine, 9 pages, unpublished report.

Eimon, P. I., December, 1975, Commonwealth Silver Project Report, 10 pages, unpublished report.

Jorgensen, N. B., 1976, Summer 1976 Program, Commonwealth Mine Property, Au Ag, Sulfur Springs Valley, Arizona: Unpublished report for Bethlehem Copper Corporation, 116 pages (Note: Maps and sections from this report are in Tucson and the text is being requested.).

Bryant, D. G., 1979, Post Mortem -- 1978-1979 Exploration of the Commonwealth Mine, Pearce Mining District, Cochise County, Arizona, 6 pages plus machine copies of maps and notes.

Drewes, H., 1980, Tectonic Map of Southeast Arizona, USGS Map 1-1109.

GEOLOGY - REGIONAL

Regionally the Pearce area consists of tertiary volcanic rocks resting on Cretaceous sediments. The volcanic rocks are mostly extrusive rhyolite and andesite occurring as hills in the Sulfur Springs Valley. The extrusives are lava flows, andesites, and tuff. The Cretaceous sediments consist of fine to coarse grain sandstone, often intercalated with thin silty beds. Attitudes of flow layers in the extrusives suggest a regional NW to NNW strike and moderate northeasterly dip ranging from 45° to 30°. The Cretaceous sediments exhibit variable attitudes although the strike is fairly consistent. The limestone at the northern slopes of Township Butte strikes NE and dips 45° to the SE. The sandstone/siltstone beds also on the slopes of Township Butte, show a northerly strike but dip gently (15° - 25°) to the SE. The same is true of sandstone/siltstone attitudes taken from prospect pits between Township Butte and Pearce Hill.

GEOLOGY - DETAIL

The Six Mile Hill and Pearce Hill area consists of a sequence of tertiary volcanic rocks resting unconformably on Cretaceous Bisbee sediments. The individual members appear to be thicker in this area than in the Township Butte area toward the east. The tertiary rocks are feldspar quartz rhyolite porphyry, quartz rhyolite porphyry, andesite, agglomeratic tuff, and hornblende andesite porphyry.

The feldspar quartz rhyolite porphyry is a dense, fresh, light gray rock, with feldspar (15 - 20%) and quartz (5 - 10%) phenocrysts: occasional thin quartz veinlets cut through the rock in general, except at the northern end of Six Mile Hill where thicker quartz-calcite veins are exposed. Alteration in this rock type is very limited. At best, the observed alteration consists of "clouding" of feldspar phenocrysts and restricted argillization on both sides of quartz-calcite veinlets. This rock appears to be a capping over some of the older volcanic rocks at Six Mile Hill and Pearce Hill.

Quartz rhyolite porphyry is light gray, fine grained volcanic rock, which contains 10% to 15% quartz phenocrysts. Quartz-calcite veins are very rare in this rock type. This rock is slightly to moderately argillized especially at Six Mile Hill where it crops out extensively. A thin vitrophyre zone 2 to 5 feet in thickness appears to be at the base of quartz rhyolite porphyry. A common characteristic of this rock is the spherulitic texture where concentric bands of quartz and radiating fibrous feldspar predominate. Occasionally, agglomeratic texture is exhibited.

The andesite appears to be a thin member (15 to 40 feet) of the volcanic sequence and occurs conformably on top of a rock unit described below as the agglomeratic tuff unit. The andesite is generally dark gray, occasionally light green and light brown. This unit outcrops at the center of the two northwesterly ridges at Six Mile Hill and can be traced for a strike length of approximately a mile. The texture is generally fine grained but occasionally a vesicular texture is exhibited. The rock is generally weakly prophylitized.

Agglomeratic tuff is the thickest unit mapped in the area, probably more than 700 feet thick as observed in drill hole PP-1. The color is normally light gray but light brown and light pink are seen in drill hole core and in shaft dumps in the area. The texture is predominantly conglomeratic to sandy, with angular coarse fragments in a sandy matrix. Bedding is observed in the sandy portion. Surface attitudes show a strike generally NW and dipping 30° to 42° to the northeast. Dips in core appear to be in the same range. The fragments are mainly rhyolite, andesite, and quartz vein material. Rarely some fragments are carbonate rocks, wherein the cementing matrix is also slightly calcareous. Abundant quartz-calcite veins cut through this rock unit. A large portion of the silver mineralization in the Commonwealth Mine at Pearce Hill occurs in quartz-calcite veins in agglomeratic tuff. Alteration in this unit is predominantly argillic and silicified. This unit occurs at Six Mile Hill and at Pearce Hill apparently with younger rhyolite capping.

Hornblende andesite porphyry occurs as a unit below the agglomeratic tuff and appears to be the oldest of the tertiary volcanic rocks. Outcrops are found immediately south of Six Mile Hill and in two low hills 3/4 mile SE from Commonwealth Mine. This unit is generally dark gray with abundant hornblende phenocrysts. This unit is normally unaltered except for the destruction of the hornblende to clay and limonite.

The Cretaceous sediments are predominantly coarse sandstone interbedded with thin layers of siltstone. Normally there is no visible alteration or mineralization except abundant calcite veinlets sometimes forming stockworks in the thicker siltstone. Iron staining is noticeable in limited sections where destruction of hematite, sulfides (?), and ferro-magnesian minerals has occurred.

MINERALIZATION AND ALTERATION

Argillic alteration is probably the only mappable alteration at a scale of 1"=500' in the Six Mile Hill and Pearce Hill area. A generalized alteration map is included in this report, based on megascopic examination of unmineralized (without quartz-calcite veins or veinlets) hand specimens. The most intense argillic alteration occurs in two main parallel zones at the Commonwealth Mine - Pearce Hill area, one of which roughly overlies the mined silver deposit at Commonwealth. The other parallel zone is elongated in a north-south direction, located approximately 2000 feet east of Commonwealth Mine.

Minor silicification is observed mainly in core samples in PP-1 and at areas immediately adjacent to quartz veins.

Limonite is commonly found in almost all of the rocks at the Pearce Project area. They are primarily the secondary products of the alteration and oxidation of ferro-magnesium-like hornblende and biotite. Possibly a few of the occurrences are related to minor sulfide mineralization.

DRILLING

Three diamond drill holes (PP-1, PP-2 and PP-3) were completed in the Pearce Project area, and one diamond drill hole (PP-4) is in progress. Enclosed in this report are the summary logs which are self explanatory. The drill holes intersected quartz-calcite vein systems which appear to be part of an epithermal system. Although the gold - silver mineralization intercepts are low in values, the accumulated data suggests targets northwest of Six Mile Hill along the regional northwesterly strike of the vein system. The drilling data also confirmed the stratigraphic sequence originally postulated from surface geology.

Twelve shallow rotary holes are programmed to satisfy state lease requirements. These programs are in areas around Six Mile Hill and Pearce Hill in the alluvium covered valley. The program is almost completed and data are presently being assembled and corelated. Initial results show some interesting silver and gold intercepts which suggests the possible existence of blind epithermal systems under shallow alluvial cover.

In the early 1960's to early 1970, other companies conducted rotary drilling programs around the Pearce Project area. Pillar, Lowell & Associates drilled fifteen (15) rotary holes around Pearce, Bear Creek

(Kennecott) drilled nine (9) holes to the east around the Turkey Creek Ridge area, and Occidental Minerals drilled two (2) to three (3) holes in Section 3, east of Commonwealth Mine (exact location uncertain, but local residents confirm drilling in the general area). All of these drill holes are probably related to prophyry copper exploration. Results of most of these drill holes are now available to us and are presently being corelated with other geologic information which was obtained during the later phase of the Pearce Project.

GEOCHEMISTRY

In mid-1980 a geochemical program was completed at Six Mile Hill. Samples were collected at 100 ft. intervals along lines 300 feet apart. Several elements were analyzed. The following are the general interpretations of results:

Silver:

Most of the values are below 0.5 PPM Ag; only one sample showed 2.0 PPM; no pattern is apparent.

Gold:

Most values below 0.02 PPM; few isolated spots showed 0.04 PPM Au; no pattern or trend observed.

Mercury:

Two zones containing 100 to 200 PPM, occurring north and southeastern end of Six Mile Hill, separated by areas with less than 100 PPM Hg.

Arsenic and Antimony:

A few isolated zones of greater than 50 PPM As and 10 PPM; most values less than 10 PPM As and 2 PPM Sb; a definite east-west zone at middle of Six Mile Hill containing greater than 20 PPM As and 5 PPM Sb.

Other Elements:

Other elements show no contrast that may be used to guide exploration.

In 1981, a random geochemical sampling program was carried out at the Pearce Project area. The program was designed to calibrate the distribution of mercury and 31 other elements in unmineralized rock. Samples were taken from outcrops and cover all rock types. The analysis was done by Skyline Laboratory, mercury by a geochemical method, and the 31-element scan by an emission spectrographic method. Only the results from Six Mile Hill and Pearce Hill are available at the present time. Maps of the different elements that showed sufficient contrast are part of this report. The result of this program is as follows:

Mercury:

Most of values at Six Mile Hill are in the 0.05 - 0.10 PPM Hg range. At Commonwealth (Pearce Hill) area, an anomalous zone of greater than 0.20 PPM occurs between Commonwealth Mine and Metat Hill. A narrow zone of greater than 0.20 PPM is also observed immediately south of Commonwealth Mine and north of our drill hole PP-3.

Silver:

Only a few silver values exceeding 5 PPM Ag are found at the Commonwealth area. It probably reflects the presence of the major silver-bearing quartz-calcite vein system.

Barium and Manganese:

An area between Commonwealth Mine and Metat Hill showed high barium concentration in the 2000 to 3000 PPM range, and high manganese values in the 500 to 800 PPM range.

Nickel:

An anomalous zone is also located between Commonwealth Mine and Metat Hill and showed values greater than 40 PPM Ni. Andesite rocks at Six Mile Hill exhibit higher Ni values ranging from 100 to 150 PPM Ni.

Vanadium:

An anomalous zone exists east of the Commonwealth Mine with values greater than 80 PPM Ni and a moderately high zone with Ni values in the 40 - 50 PPM vanadium is found at the northern end of Six Mile Hill.

Titanium:

Titanium values reflect the occurrence of an andesite flow at

Six Mile Hill. A broad zone of greater than 2000 PPM is found east of Pearce Hill.

Strontium and Copper:

Strontium and copper values reflect lithologic differences: higher in andesites and lower in rhyolites.

GEOPHYSICS

The Sulfur Springs Valley has been surveyed magnetically and gravimetrically by various organizations during the past twenty (20) years. Some of those surveys have been acquired and are in the Pearce Project files. More of this data is being sought. A 1" = 2000' magnetic overlay is included as part of this report.

The gravity surveys acquired to date have been spotty. Detailed surveys with elaborate computer processing do exist and reportedly show strong structural features.

VLF, IP and MaxMin surveys have been run in the Six Mile Hill area by Excel-Minerals crews. Results from these surveys have been inconclusive but further interpretation and recommendations are to be done.

The data presented in this report is to be reviewed by David Smith of the Stephens Mineral Group.

It is to be noted that, based on present Pearce Project Target Concepts, the prime exploration potential outside of the Commonwealth Mine is for a epithermal Ag - Au system under alluvial cover within 300 - 400 feet of the surface that is non magnetic, with limited electrical conductivity contrast or rock density contrast, that is related to strong faulting or fracture zones.

FLUID INCLUSION STUDY

A number of Pearce Mining District samples of quartz and calcite were collected by R. Robinson in August, 1980, for fluid inclusion analysis.

These samples were prepared for fluid inclusion analysis at the New Mexico Institute of Technology and analyzed in their laboratories.

The results of this work showed temperatures of homogenization in three groups. The lowest homogenization temperatures were found in the calcite temperatures from Six Mile Hill. These temperatures ranged from 132° C. to 177° C. with a mean of 150° C. The calcite appeared to be the last mineral deposited in the vein structures.

The next highest group of homogenization temperatures belonged to the quartz and amethyst samples from Six Mile Hill. These homogenization temperatures ranged from 150° C. to 236° C. with a mean of 183.2° C.

The highest temperature group of inclusions was found in the quartz from the Commonwealth Mine. These homogenization temperatures ranged from 171° C. to 266° C. with a mean of 220.5° C.

The salinities from the Commonwealth Mine seem to be in the lower range of values that have been reported for epithermal precious metal deposits.

Fluid inclusion data from the Pearce Mining District indicates that the vein material from north end of Six Mile Hill was deposited at a lower temperature than the veins in the Commonwealth Mine. Evidence of boiling is scattered throughout the samples from both Six Mile Hill and the Commonwealth Mine.

PHOTOGEOLOGY AND REMOTE SENSING INTERPRETATION

Photogeologic studies have been made of recent color aerial photography (1" = 500' scale), high altitude USGS aerial photos, and U-2 aerial photography. A photo linear interpretation and a blackline mosaic print of the Commonwealth Mine Hill and Six Mile Hill is included with this report. Work sheets of interpretation on other scales is in the Pearce Project files. This photointerpretation should be input into a continuing program of target selection.

A study has been made of circular and linear features on EROS Satellite Remote Sensing Imagery. The most striking features from this interpretation are a northeast trending linear crossing the Sulfur Springs Valley which passes through the town of Pearce, and a large circular anomaly in the area of the Sulfur Hills. These features are plotted on the 1" = 2000' scale composite geologic map in this report, and on overlays to the Imagery in the Pearce Project files.

EXPLORATION TARGETS

Geological mapping and interpretation; geochemical sampling and interpretation; and studies of drill hole cuttings and core, alteration patterns, mineralization values and zoning, geophysical data, photo interpretation patterns and regional structural studies give the following target areas for consideration:

1. The Commonwealth Mine Hill

The Commonwealth Mine Hill has been tested by mining, underground sampling by Platoro, rotary drilling by Platoro, diamond drilling and rotary drilling by Bethlehem Copper Corporation, rotary drilling by Western States Minerals Corporation, and one diamond drill hole by the Stephens Mineral Group. A restudy of all of this data gives the Commonwealth Hill a possible open-pittable tonnage of 3 to 5 million tons of 2½ ounces or greater of silver and .03 ounces of gold per ton. The commerciality of this area is dependent on Au - Ag prices, the willingness of the majority owner (Carl Thetford, et al) to agree to reasonable terms for development, and the results of further exploration and evaluation.

2. Six Mile Hill

Mapping, sampling, geophysical surveys and three diamond drill holes have shown Six Mile Hill to have strong epithermal mineralization intensifying at the north end of the hill. Two diamond drill holes were drilled at the north end of Six Mile Hill and one diamond drill hole was drilled in the center of Six Mile Hill. The holes at the north end cut strong quartz (and amethyst) - calcite mineralization with typical epithermal zoning, but did not have significant gold - silver values. This mineralization could be peripheral to a larger precious metal center.

3. Other Targets

a) Stephens Property Covered by Alluvium.

The bulk of the property controlled by the Stephens Mineral Group surrounds the Commonwealth Mine Hill and Six Mile Hill and is covered by relatively thin (50 to 200 feet) Quaternary alluvium. Evidence from data compiled

in this work and a study of the Epithermal Precious Metal Model indicates that other Ag - Au epithermal systems could be covered by this alluvium. Exploration for such centers would be by (1) continued data compilation and study, (2) acquisition of geophysical data showing possible mineralized structural features, and (3) reconnaissance drilling through the alluvial cover. This drilling could be very shallow (10 to 50 feet) to obtain geochemical samples or deeper (300 to 400 feet) to test bedrock.

b) Volcanic Hills in the Eastern Part of the Pearce Project Area.

A series of hills east of the Commonwealth Mine Hill show altered volcanics and some evidence of precious metal mineralization. These warrant detailed geologic mapping and further geochemical sampling. These include four main groups of hills:

Hill 1. The hill that centers between Sections 33 and 34, T.17S, R.25E, and is covered by the San Ignacio unpatented mining claims and currently under option to the Stephens Mineral Group.

Hill 2. The hill in the center of Section 35, T.17S, R.25E, and is covered by the Blue Jeep unpatented mining claims and currently under option by the Stephens Mineral Group.

Hill 3. Known as Township Butte in Section 1, T.18S, R.25E and Section 6, T.18S, R.26E, and is covered by three (3) patented mining claims and the San Manuel unpatented mining claims. The Section 6 portion is controlled by an Arizona State Prospecting Permit held by the Stephens Mineral Group.

Hill 4. Located in Section 36, T.17S, R.26E, and is controlled by an Arizona State Prospecting Permit held by the Stephens Mineral Group.

Respectfully submitted,

Paul I. Eimon

Arturo A. Ona

E. Grover Heinrichs

July 9, 1981
Tucson, Arizona USA

ORIGINAL MAPS & SECTIONS FOR REPORT
JULY, 1981

1"=2000' Scale Maps:

A-10	Appendix B	Land Status with Attachment No. 1 showing name And address of owners of record (Sepia)
	Appendix C	Aerial Magnetics (Sepia)
	Appendix D-1	Regional Geologic Map (Mylar)
	Appendix D-2	Regional Geochemical Sample Location Map (Sepia)

ORIGINAL MAPS & SECTIONS FOR REPORT
JULY, 1981

1"=500' Scale Maps:

A-11	Appendix E	Land Status & Topography without Vi Claims (Sepia) E-1 (Vi Claims separate sepia not part of report)
	Appendix F	Photo Mosaic (Mylar)
	Appendix G	Photo Interpretation Overlay (Mylar)
	Appendix H	Geology & Drill Hole Location
	Appendix I	Geologic Sections (Mylar) A - A' " B - B' " C - C' " D - D' " E - E' "
	Appendix K	Generalized Surface Alteration (Sepia)

ORIGINAL MAPS & SECTIONS FOR REPORT
JULY, 1981

1"=500' Scale Maps:

A-12	Appendix J	Geochemical Maps - Master Map Sample Location (Mylar) a) Silver - Mercury (Sepia) b) Copper - Strontium " c) Nickel - Vanadium " d) Titanium - Zirconium - Lathanum (Sepia) e) Barium - Manganese (Sepia)

CONTENTS

REPORT ON PEARCE PROJECT
PEARCE MINING DISTRICT, COCHISE COUNTY, ARIZONA

Summary

Introduction

Property

History

Geology

Mineralization and Alteration

Geophysics

Geochemistry

Fluid Inclusion Studies

Photogeology

Exploration Target Potential

- Commonwealth Mine
- Six Mile Hill
- Surrounding Areas

Recommendations

APPENDIX

- Tectonic Map of Southeast Arizona showing Pearce Project Report Map Locations

1" = 2,000' Scale Maps

- Property
- Magnetics
- Geology - Drilling - Geochemistry

1" = 2,000' Scale Maps

- Property and Topography
- Photomosaic
- Photogeology
- Geology and Drill Holes
- Geologic Sections
- Geochemical Maps
- Alteration

General

Eimon Paper on Epithermal Au-Ag Deposits

SUMMARY REPORT FOR 1981

PEARCE PROJECT

PEARCE MINING DISTRICT

COCHISE COUNTY, ARIZONA

Prepared For

John A. Stephens

By

E. Grover Heinrichs & Associates
Paul I. Eimon
Arturo A. Ona
William G. Brown

December 30, 1981

TABLE OF CONTENTS

	PAGE
INDEX OF APPENDICES	i
INTRODUCTION AND SUMMARY	1
GEOLOGY & GEOCHEMISTRY SUMMARY AND RECOMMENDATIONS	2
PROPOSED EXPENDITURES JANUARY THROUGH APRIL, 1982	4
FISCAL SUMMARY 1980 - 1981	6
ARIZONA STATE PROSPECTING PERMIT EXPLORATION PROGRAM PHASE II	7
ARIZONA STATE PROSPECTING PERMIT DRILL HOLE SUMMARY PHASE II	8
DRILLING SUMMARY PHASE III (PLATORO-GALYEN AREA)	10
PLATORO-GALYEN AREA DRILL HOLE SUMMARY PHASE III	11
GRAVITY SURVEY (LETTER BY MGS, 11-24-81)	14
SKETCH MAPS PROPOSED DRILL HOLE LOCATIONS PHASE IV	16
SIGNATURES	20

INDEX OF APPENDICES

Appendix A	Update Dec. 1981, Land Status Map
Appendix B	" " " Depth to Bedrock " " " Photo Interpretation
Appendix C	" " " Regional Geology " " " Geologic Map of Six Mile Hill & Pearce Hill
Appendix D	Geologic Map of San Ignacio & Blue Jeep Areas Geologic Map of Township Butte Area Geologic & Sample Location Map of Township Butte North Area
Appendix E	Regional Geochemical Location Map Regional Composite Summary Six Mile Hill South Composite Summary
Appendix F	Regional Geochem Results - Gold " " " - Silver " " " - Mercury " " " - Arsenic
Appendix G	Geologic Sections F - F' G - G' H - H'
Appendix H	Gravity Survey Map by Mining Geophysical Surveys, Inc.
Appendix I	Geologic Core Log, PP-4, Phase I
Appendix J	AZ State Prospecting Permit Drill Program Phase II Geologic Rock Chip Logs Drill Holes SL Series SL-1-E, SL-1-W, SL-2 SL-2A, SL-3, SL-4 SL-5, SL-6, SL-10 SL-11, SL-13, SL-14 SL-22, SL-24, SL-28 SL-29, SL-30, V-6 Assay Results of Phase II

Appendix K — Platoro-Galyen Area Phase III
Geologic Rock Chip Logs
GH-1 thru GH-14

AZ State Prospecting Permit Program
GH-15 thru GH-17

Assay Results of Phase III

Appendix L — Pearce Geochemical Sample Program Assay Results
PGR Series
PAR "
GT "
BC "

Appendix M — South Six Mile Hill Area Geochem & Assay Results

INTRODUCTION AND SUMMARY

This report, in conjunction with the July 8, 1981 report, is intended to summarize and update the Pearce Project through 1981, and to outline plans and proposed expenditures for 1982.

Past work was focused on geological and geochemical mapping of Six Mile Hill, Six Mile Hill South, the Commonwealth Mine, the Arizona State Parcels, and the Platoro-Galyen Parcel, as well as reconnaissance geology and geochemical mapping of the general area. Drilling was confined to Six Mile Hill, the Arizona State Parcels, and the Platoro-Galyen Area.

The results to date have moved our interest easterly to the San Ignacio Claims, the Blue Jeep Claims, the Township Butte Area, and the Township Butte North Area, and the proposed drilling program is outlined on Page 4 of this report. A sketch map of the location of the proposed drill holes is attached to this report.

The exploration program has been staged as follows:

Phase I - Exploration, mapping and drilling, Six Mile Hill Area

Phase II - Exploration, mapping and drilling, Arizona Prospecting Permit Parcels

Phase III - Exploration, mapping and drilling, Platoro-Galyen Area and exploration and mapping of adjacent outcrop areas

Phase IV - Proposed drilling and exploration program

The project is under the overall direction of Paul Eimon, assisted on land and administrative matters by E. Grover Heinrichs, with field geology being done by Arturo Ona, and William Brown being responsible for the drilling and sampling programs. Occasional geophysical assistance and advice was given to the project by Dave Smith of Salt Lake City, and William Daffron gave occasional geological advice and assistance to the project.

GEOLOGY AND GEOCHEMISTRY SUMMARY AND RECOMMENDATIONS

I. San Ignacio Area

A. Two vein systems have been identified.

B. Two adits have been geologically mapped in detail.

C. Detailed geological mapping was completed on the surface.

D. A drilling program to test the vein system is being planned. (See Pages 4 & 16.)

E. Anomalous Hg, Ag and As areas have been recognized.

II. Blue Jeep Area

A. Two northwesterly fracture systems have been identified.

B. Two rotary drill holes have been programmed to test the two structures. (See Pages 4 & 17.)

C. Trace element geochemistry showed slightly anomalous Hg values at the NW part of Blue Jeep.

III. Township Butte Area

A. Detailed mapping has been completed.

B. A wide zone of argillic alteration has been observed.

C. Several Au-Ag anomalous zones have been recognized.

D. Eight drill holes are planned to test the area. (See Pages 4 & 18.)

IV. Township Butte North

A. Strong Au-Ag zones exist in the area.

B. A prominent East-West structure has been recognized.

C. Six drill holes are planned to test this area. (See Pages 4 & 19.)

In summary, the exploration work to date has identified a large epithermal system, and has narrowed the target area to three major vein systems in three separate areas that are very similar geologically and geochemically to the Commonwealth Mine (see map, Appendix E). They are:

1) San Ignacio Area

2) Township Butte Area

3) Township Butte North Area

The similarities of the three target areas to the Commonwealth Mine, and the comparison of trace element geochemistry to the ideal model epithermal system as defined in the paper by Berger and Eimon ("Comparative Models of Epithermal Silver-Gold Deposits", presented at the Commonwealth International, Inc. Epithermal Gold-Silver Field Seminar, Dec. 2-3-4, 1981) make these areas significant exploration target areas. The work outlined on Page 4 has been designed to test these vein systems.

The Blue Jeep Area, though of lesser interest, does show some anomalous mercury values and should be tested as outlined on Pages 4 & 17.

The details of the completed drilling program in the Platoro-Galyen Area and in Section 2, T18S, R25E, are described elsewhere in this report by W. G. Brown. Geologically, the results are summarized as follows:

I. A slightly anomalous Ag dispersion train is observed in gravels in the NE portion of the Platoro-Galyen property.

II. Bedrock shows very little geochemical activity.

III. A pyritic zone in calcareous siltstones has been intersected at the NE portion of Section 2, T18S, R25E.

With reference to the Six Mile Hill South Area, geological mapping has been completed. The geochemical survey results have a very similar pattern to the results of Six Mile Hill. A minor vein system was identified, but significant anomalous values in arsenic only were detected (see Appendix E), and appear to be unrelated to the veining. No follow-up work is recommended at this time.

ESTIMATED EXPENDITURES

PROPOSED PHASE IV DRILLING PROGRAM

PERIOD: JANUARY, 1982 THRU APRIL, 1982

SAN IGNACIO (Sept.-Dec. 81 Budget)

Target Drill Holes:

7 Holes @250'; 2 Holes @300'; 1 Hole @150':

10 Holes = 2250' @$12.00/Ft.	$ 27,000.00

BLUE JEEP (Sept.-Dec. 81 Budget)

Target Drill Holes:

3 Holes @250'/Hole = 750' @$12.00/Ft.	9,000.00

TOWNSHIP BUTTE NORTH (Proposed)

Target Drill Holes:

7 Holes @150'/Hole = 1050' @$12.00/Ft.	12,600.00

TOWNSHIP BUTTE (Proposed)

Target Drill Holes:

7 Holes @200'/Hole = 1400' @$12.00/Ft.	16,800.00
TOTAL, 27 Holes - 5450'@$12.00/Ft.	$ 65,400.00

ESTIMATED EXPENDITURES

PROPOSED EXPLORATION PROGRAM PHASE IV

PERIOD: JANUARY, 1982 THRU APRIL, 1982

Cost of Drilling:	
27 Holes - 5450' @$12.00/Ft.:	$ 65,400.00
Bulldozing, Support help, etc.:	2,000.00
Cost of Assaying (With Handling Costs):	
Au & Ag - 600 Samples @$10.00/Sample, (10 ft. samples):	6,000.00
Hg, As, Sb - 110 Samples @$12.60/Sample, (50 ft. composites):	1,386.00
SUB TOTAL	$ 74,786.00
Management, reports, geologic mapping, drill supervision, geochem sample acquisition, drafting:	32,000.00
Legal:	3,000.00
Property Payments:	14,666.67
TOTAL COST	$124,452.67

PEARCE PROJECT
FISCAL SUMMARY
TOTAL EXPENDITURES 1980 - 1981

	1980 Jun. thru Dec.	1981 Jan. thru Dec.	Total To Date (Est.)
Professional Services	$ 15,070.00	$ 75,990.00	$ 91,060.00
Outside Services	2,266.87	57,668.96	59,935.83
Property Payments	159,294.68	48,969.00	208,263.68
Geophysics	-	4,708.01	4,708.01
Vehicle Charges	775.80	937.26	1,713.06
Drill Site Preparation	-	6,380.00	6,380.00
Drilling	541.98	189,615.71	190,157.69
Hotel/Motel Expenses	309.99	2,722.95	3,032.94
Meals	294.89	3,391.91	3,686.80
Freight & Postage	46.44	205.41	251.85
Maps & Copy Expense	433.00	1,619.61	2,052.61
Materials & Supplies	48.26	2,295.22	2,343.48
Telephone	418.53	664.53	1,083.06
Transportation - Veh. Rental & Air Fares	460.95	15,456.70	15,917.65
Assaying & Lab.	129.00	13,964.17	14,093.17
Aerial Photography	-	2,296.20	2,296.20
Rent	-	7,010.79	7,010.79
Misc.	-	775.26	775.26
TOTALS	$180,090.39	$434,671.69	$614,762.08

Note: Some expenses are estimated. Some December, 1981, expenses not included.

ARIZONA STATE PROSPECTING PERMIT
EXPLORATION PROGRAM PHASE II

As part of the overall exploration effort for John A. Stephens in the Pearce, Arizona Area, a total of 34 Arizona Prospecting Permits were acquired in June and July of 1980 by E. Grover Heinrichs, acting as agent for Mr. Stephens. To hold these parcels, an expenditure of Ten Dollars ($10.00) per acre is required on each parcel. The 34 parcels totaled 13,755.28 acres, and an expenditure of $137,552.80 would be required if all parcels were to be retained.

Thus, an evaluation program was commenced to satisfy the State requirements and to acquire geologic data on a regional scale in order to "weed out" the unwanted parcels. Subsequent geologic and geochemical work eliminated nine (9) parcels and 4,137.21 acres from the program.

The State Prospecting Permit drilling program commenced on June 8, 1981, and was completed on June 28, 1981. A down hole rotary drilling method was utilized.

A total of 14 holes and 3,089 feet were drilled. Each hole was plugged and the collar cemented upon completion. A summary of each hole is included in this report. See Page 8 . Samples were taken every 10 feet and taken to the lab for assay. The results are tabulated in App. J of this report. The holes were logged by Art Ona, and the geologic information gained by this drilling was made part of the overall data base included in this report. All drill holes are plotted on the Pearce Regional Geologic Map.

Direct drilling cost for this program was $36,625.00.

ARIZONA STATE PROSPECTING PERMIT
DRILL HOLE SUMMARY PHASE II

SL-24 Collared hole 6-8-81 in post-mineral fill. Lost circulation at 150' (made water at 240' - about 2 gallons per minute). Stopped hole at 470'; still in post-mineral fill on 6-8-81.
Bottom of hole is 470'.

SL-22 Collared hole 6-9-81 in post-mineral fill. Encountered bedrock at 170' in med. grained sandstone. Continued in this unit to bottom of hole at 190'. Stopped hole 6-9-81.
Bottom of hole is 190'.

SL-3 Collared hole 6-11-81 in post-mineral fill. Drilled in bedrock at 60' in a porphyritic rhyolite. 90-160' is an agglomerate tuff. 160' to bottom of hole is sandstone. Stopped hole 6-11-81.
Bottom of hole is 210'.

SL-2 Collared hole 6-12-81 in post-mineral fill. Bedrock at 20' in porphyritic andesite. Changed to brown rhyolite at 70'. At 110' encountered an arkosic sandstone. No sample from 120' to 145'. Stopped hole 6-12-81.
Bottom of hole is 145'.

SL-4 Collared hole 6-13-81 in post-mineral fill. Hit bedrock at 60' in conglomeratic tuff. Stayed in this unit to bottom of hole. Stopped hole at 190' on 6-13-81.
Bottom of hole is 190'.

SL-5 Collared hole 6-13-81 in post-mineral fill. Did not encounter bedrock in hole. Stopped hole at 230' on 6-14-81, still in fill.
Bottom of hole is 230'.

SL-1 (West) Collared hole 6-15-81 in post-mineral fill. Encountered bedrock at 100' in agglomerate tuff. Stopped hole at 150', still in tuff, on 6-15-81.
Bottom of hole is 150'.

SL-6 Collared hole 6-16-81 in post-mineral fill. Fill is mostly clay. Stopped hole 6-16-81 in valley fill at 210'.
Bottom of hole is 210'.

SL-1 (East) Collared hole 6-16-81 in post-mineral fill. At 80' encountered bedrock in dark, shaly limestone with pyrite. Stopped hole at 110' on 6-17-81.
Bottom of hole is 110'.

SL-30 Collared hole 6-17-81 in post-mineral fill. No bedrock in hole. Stopped hole on 6-17-81 at 110'.

Bottom of hole is 110'.

SL-2-A Collared hole 6-22-81 in post-mineral fill. Hit bedrock at 20' in porphyritic andesite. Encountered rhyolite at 70'. Lost hole at 100' on 6-22-81.

Bottom of hole is 100'.

SL-29 Collared hole 6-23-81 in post-mineral fill. Stopped hole on 6-24-81, still in valley fill, at 400'.

Bottom of hole is 400'.

V-6 Collared hole 6-25-81 in post-mineral fill. Ended hole at 200', still in valley fill. Stopped hole 6-25-81.

Bottom of hole is 200'.

SL-28 Collared hole 6-26-81 in post-mineral fill. Very strong clay in hole. Stayed in valley fill to bottom of hole at 400'. Stopped hole 6-28-81.

Bottom of hole is 400'.

DRILLING SUMMARY - PHASE III

PLATORO - GALYEN AREA

E. Grover Heinrichs & Associates commenced a drilling program for John A. Stephens at Pearce, Arizona on November 10, 1981. The purpose of the program was as follows:

1. Gain sufficient additional geologic information on the Platoro-Galyen property in Section 4, T18S, R25E, to decide whether or not to meet a very large payment due on December 31, 1981.

2. To test geologic and geochemical projections on State land in Section 2 that permitted easy access.

The drilling was completed on November 23, 1981. A total of 3,265 feet and seventeen (17) drill holes were drilled on land in the east half of Section 2 and in Section 4, T18S, R25E.

Samples were taken every ten (10) feet and a split weighing approximately 12 lbs. was taken to the lab for assay, and an equal weight sample was tagged and stored at the Core Storage Building at Pearce, along with some random spot core that was taken as indicated in the drilling summary. All drill hole locations are plotted on the Pearce Regional Geologic Map included in this report.

Direct drilling cost for this program was $37,968.75.

PLATORO-GALYEN AREA

DRILL HOLE SUMMARY PHASE III

GH-1 Collared in post-mineral valley fill on 11/10/81. Lost air at 160'. No sample from 160' to 180'. Material is mostly clay with few rock chips. Bottomed hole at 275'. Still in valley fill. No core possible.

GH-2 Collared in post-mineral valley fill on 11/11/81. Lost air at 160'. Went to sludge at that point. Material is mostly clay with few rock chips with a few sandy zones. Went thru the clay zone at 210' into a sandy zone with mostly rock chips. Bottomed hole at 275'. Still in valley fill. No core.

GH-3 Collared hole in post-mineral fill on 11/12/81. Material is mostly clay with very few rock chips. Lost air at 140' in sandy-clay zone of 10'. 150' to 190' is clay with no rock. No sample 190' to 200'. Change at 200' to clay-sand. 210' to bottom of hole at 275' is normal valley fill. Mostly rock chips with sand. No core.

GH-4 Collared hole in post-mineral fill on 11/13/81. All clay to 60'. Lost air and went to water at 100'. Valley fill with mostly rock and little clay and sand. Encountered bedrock at 150' - grey andesite with quartz veins and numerous quartz "eyes". Quartz and sericite are replacing sulfide casts. No mineralization present. Stopped hole at 210'. 200' to 210' encountered a poorly indurated sandstone (Kb?). Cored 1' to 211'.

GH-5 Collared hole 11/16/81 in post-mineral fill. 0-20' is mostly clay. Went to water at 100'. Stopped hole at 200'. Still in valley fill. No core.

GH-6 Collared hole in post-mineral fill on 11/16/81. 0-20' is mostly clay with some rock fragments. Gravel bed at 20-30'. Losing air. 20' to 150' is mostly rock fragments with sand. Stopped hole at 150'. No core. Still in valley fill.

GH-7 Collared hole in post-mineral fill on 11/16/81. Clay 0-20'. Rock fragments with sand 20-60'. 70-150' is clay zone with some rock fragments. Quit hole at 150'. Still in valley fill. No core.

GH-8 Collared hole in post-mineral fill on 11/16/81. Clay 0-20'. Rock fragments with clay and sand to 90'. 90' to 150' is clay zone with few rock fragments. Quit hole at 150'. In valley fill. No core.

GH-9 Collared hole in post-mineral fill on 11/17/81. 0-20' is mostly clay. 20-60' is mostly rock fragments/sand and some clay. 60' to 140' is clay zone with minor rock fragment. Went to water at 130'. Quit hole at 150'. Still in valley fill. No core.

GH-10 Collared hole in post-mineral fill on 11/12/81. 0-10' is mostly clay. 10-70' is rock fragments with sand and some clay. 70' to 120' is mainly clay with minor rock fragments. Encountered bedrock at 130'. Bedrock is white argilleous tuff. No mineralization present. Minor quartz seams. No alteration is noted. Feldspars are fresh. No FE_2S. Quit hole at 200'. Still in white tuffaceous rock. 200 to 202' took core.

GH-11 Collared hole in post-mineral fill on 11/18/81. 0-120' is gravel with sand and some clay. Lost air at 100'. Went to water. Hit bedrock at 130' in a gray hornblende andesite. Remained in this unit to bottom of hole at 200'. Unit is cut by calcite and quartz seams. No significant min. Took 1 ft. of core.

GH-12 Collared hole 11/19/81 in post-mineral fill. Lost air at 60'. Went to water,at 110' went back to air. Hit bedrock at 110' in a fine grained tuff. Change in rock at 170' to a red, conglomeritic sandstone. Much FE_2 present and clay with calcite. No significant mineralization. Quit hole at 200'. Core 1'.

GH-13 Collared hole 11/20/81 in post-mineral fill. Mostly clay to 30'. At 30' hit bedrock in a highly argillized andesite. Feldspars altered by chlorite-clay-calcite. Decreasing alteration with depth. Feldspars becoming fresher. Quit hole at 150'. Core 1'.

GH-14 Collared hole in post-mineral fill on 11/20/81. Fill is mostly clay to 110' with small gravel interfingering. Bedrock at 110' in HAP. Small calcite veinlets appear. No quartz. Quit hole at 150'. 1' of core. No mineralization apparent.

GH-15 Collared hole 11/23/81 in post-mineral fill. Hit bedrock at 30' in poorly indurated sandstone. Sandstone is cut by calcite veins with some quartz present. Rock change at 90' to shaly limestone. Limestone changed at 140' to darker, shaly unit. This unit is cut by numerous calcite veins. Quit hole at 150'. 1' of core. No Ag mineralization in hole apparent, but have numerous pyrite molds altered by calcite. Encountered water at 120'.

GH-16 Collared hole 11/23/81 in post-mineral fill. Hit bedrock at 20'. Light and dark sandstone with interfingers of shaly limestone. Sandstone contains calcite veins with some quartz. 60-70' is a rhyolitic rock. Quartz veining starts at 100' with increasing quartz-sulfides (pyrite) noted at 120'. Quartz is green, waxy with possible Ag mineralization. Strongest sulfide at 150'. Pyrite decreases starting at 170'. Also at 170' rock changes to dark, shaly limestone. At 200' a small finger of a diabasic rock intrudes the limestone. This rock contains strong sulfides. Quit hole at 230' in dark, shaly limestone/calcite veins and no quartz and weakening pyrite. Encountered water at 160'. 1' of core.

GH-17 Collared hole in post-mineral fill on 11/24/81. 0-20' is fill with possibly some Ag min. in quartz float. Bedrock at 20' in sandstone (arkosic)-Kb? Sandstone contains quartz veins with calcite cement. 60-70' quartz veins in sandstone are greenish. Has possible Ag min. No sulfides. Sandstone continues to 140' with quartz veining and no pyrite noted. 140' rock changes to black limestone with white calcite veining. Little quartz. No sulfides noted in the hole. Water at 120'. Quit hole at 150'.

Note: All water encountered in Holes 15-16-17 is black, brackish and smells of sulfur.

mining
geophysical surveys inc

2400 EAST GRANT ROAD - TUCSON, ARIZONA 85719

TELEPHONE – 602 326-8619

November 24, 1981

Mr. David Smith
3589 MacIntosh Lane
Salt Lake City, UT 84121

Dear Dave:

Enclosed is a copy of the gravity map of the Pearce area. The data was reduced using elevations picked from topographic maps. The data quality looks very good.

The purpose of the survey is to determine the depth of Tertiary rhyolites and rhyodacites which contain precious metal mineralization. The difficulty in interpreting this depth from the data is that the volume of these rocks is small compared to other rocks that cause gravity anomalies.

The main gravity anomaly is a 20 mgal low on the southeast corner of the survey area. This anomaly is probably caused by a major alluvial basin that is down faulted on the east side. Minor faulting may also occur on the west side of the basin.

All of the drill hole information that we have indicates that the major density contrast occurs between the Cretaceous Bisbee formation and the Tertiary volcanics and alluvium. In all cases, gravity highs correlate with shallow Bisbee formation. Grover Heinrichs is going to provide us with more drill hole information to test this correlation in other areas, and if it holds up, the gravity data is showing the depth of Cretaceous and older rocks rather than the Tertiary volcanics.

There is a rough agreement between the Bouguer anomalies and the depth to bedrock map. Since bedrock is defined as Tertiary volcanics or Cretaceous Bisbee formation, whichever is intersected first by the drill, this agreement implies that the

depth to the Tertiary rhyolite and rhyodacite is controlled by the depth to the Bisbee formation. Therefore, the gravity data may provide an indirect indication of the depth of the Tertiary volcanics. The deep basin that extends to the southeast suggests that the depth to the Tertiary volcanics will continue to increase in this direction.

A detailed gravity survey with accurate elevation control will be required to directly detect the presence of the Tertiary volcanic rocks because of the small amplitude of their gravity effect. Grover estimates the thickness of the Tertiary volcanics at 300'. The maximum gravity anomaly from a 300' thick volcanic layer with a density contrast of 0.1 gm/cm^3 is only 0.4 mgal.

Grover is going to give us a suite of samples from the area to make density measurements on. This will help establish if a density contrast occurs between the Tertiary volcanics and other rocks. Another more direct test would be to run a detailed gravity profile where the depth of the volcanics changes and see if we can detect this change in the gravity data.

My present feeling is that the map we are sending you will probably be the major contribution of the gravity method to the exploration of this area. The complexity of the geology in the Pearce area make direct detection of the volcanics seem unlikely.

Regards,

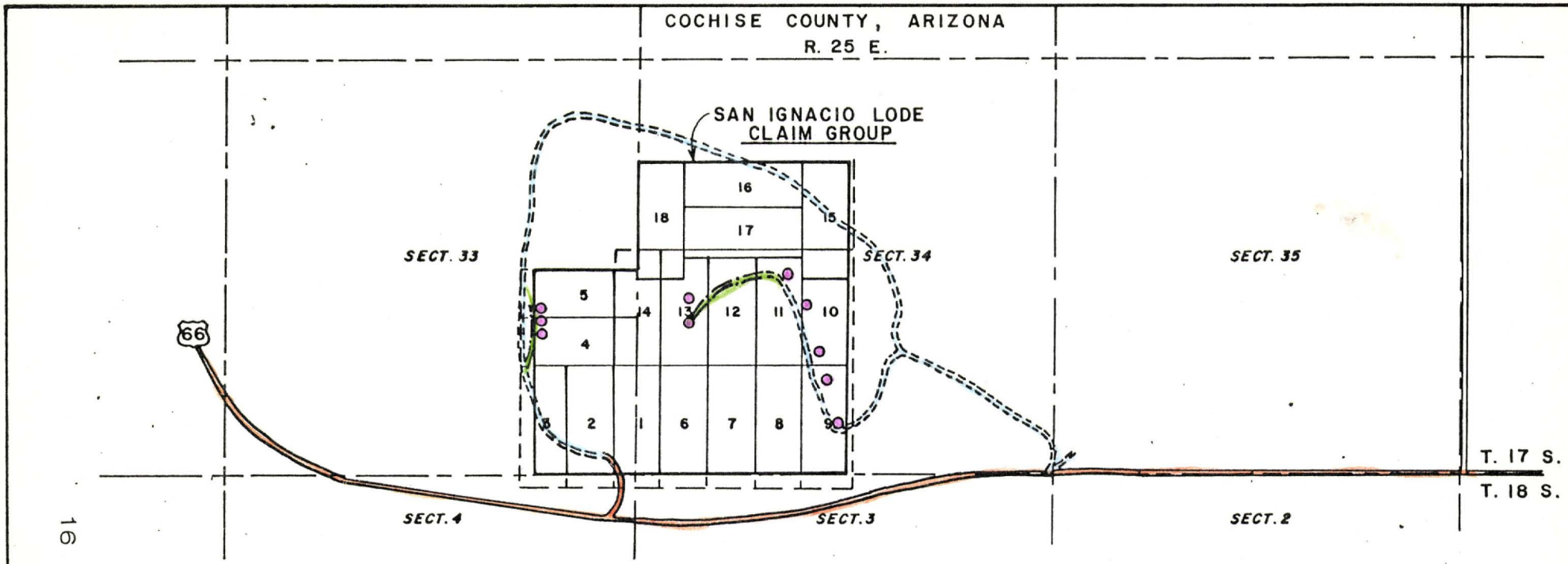
Bob

Robert E. West
Geophysicist

Enc.

cc: Grover Heinrichs, Tucson✓

MGS 1162



16

EXPLANATION

- INDICATES PROPOSED DRILL HOLE
- INDICATES EXISTING ROAD
- INDICATES NEW ROAD
- INDICATES ACCESS ROAD

SCALE: 1" = 2000'

DRILL HOLE LOCATION AND ACCESS PLAN

FOR

SAN IGNAGIO CLAIM GROUP

OF

PEARCE PROJECT

COCHISE COUNTY, ARIZONA

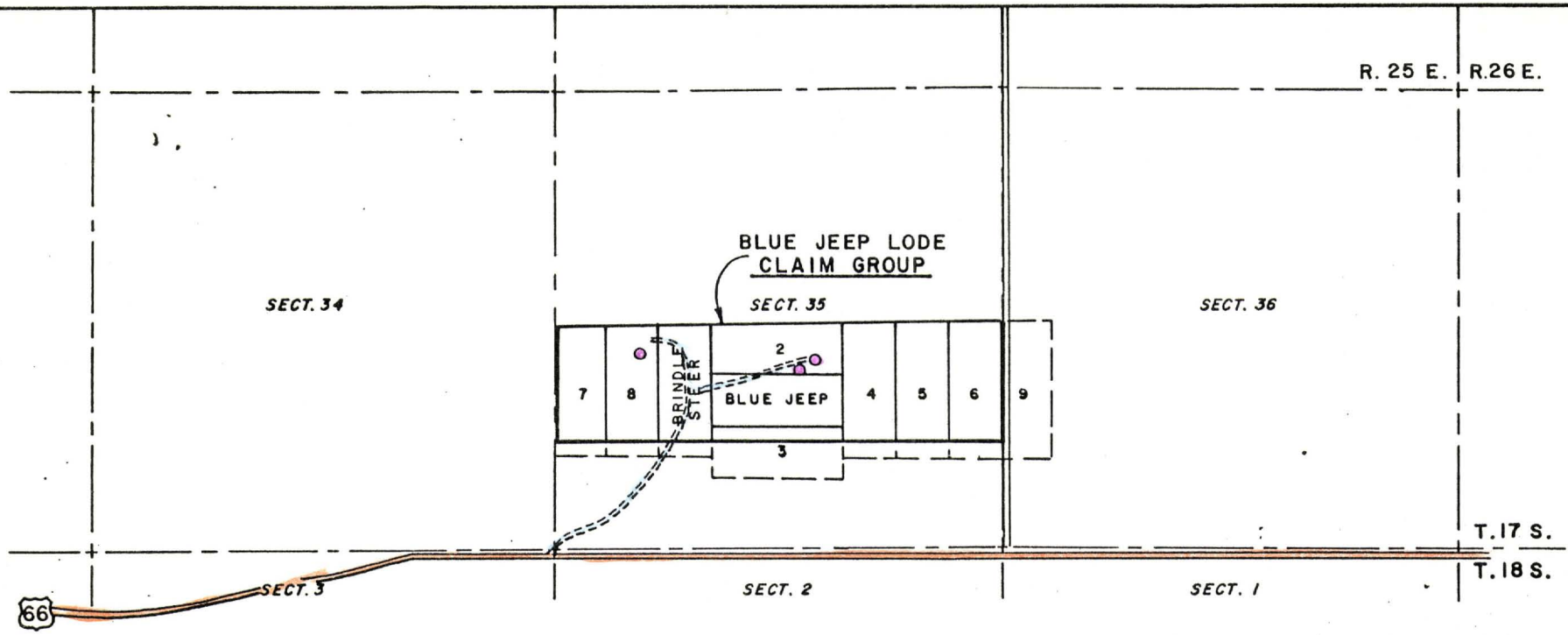
FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

DEC. 17, 1981



EXPLANATION

- INDICATES PROPOSED DRILL HOLE
- INDICATES EXISTING ROAD
- INDICATES NEW ROAD
- INDICATES ACCESS ROAD

SCALE:— N —1" = 2000'

DRILL HOLE LOCATION AND ACCESS PLAN

FOR

BLUE JEEP CLAIM GROUP

OF

PEARCE PROJECT

COCHISE COUNTY, ARIZONA

FOR

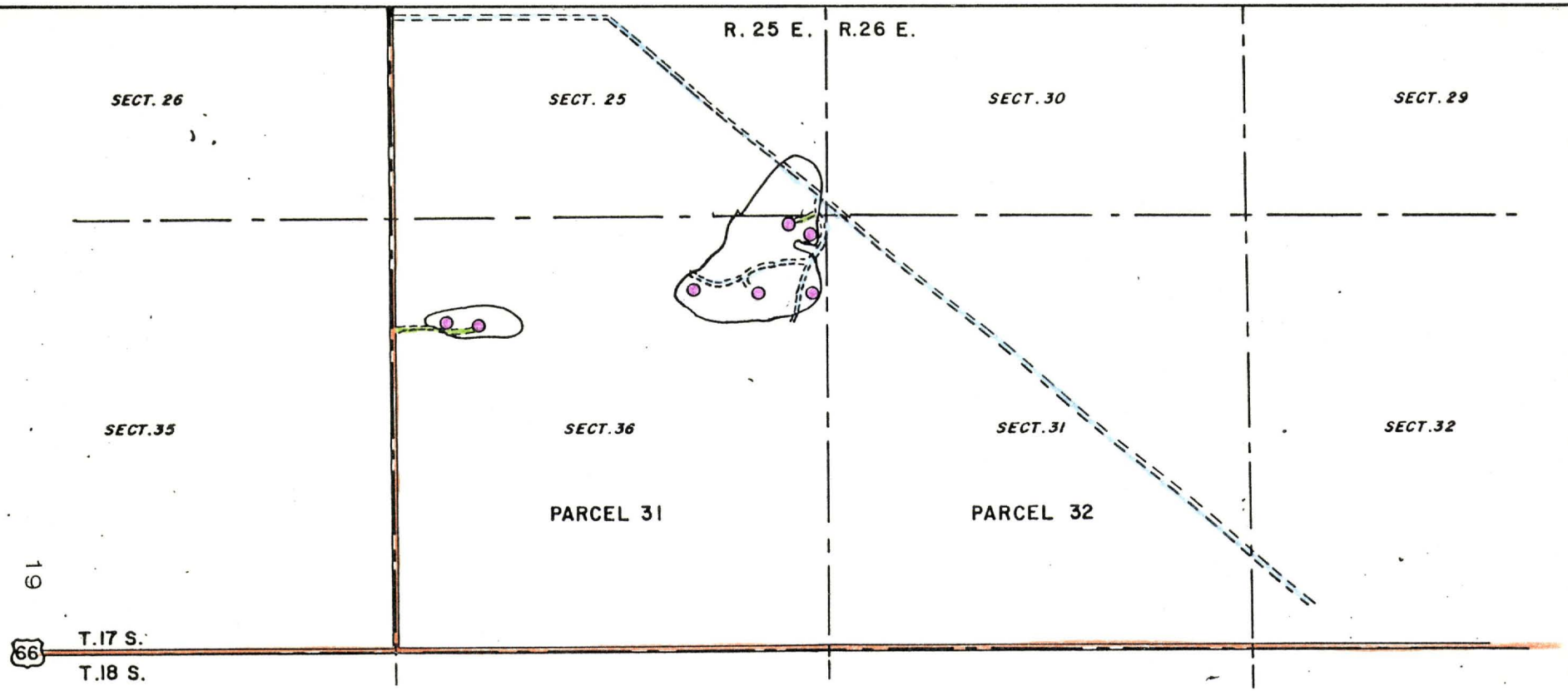
MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES

1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

DEC. 17, 1981



EXPLANATION

- INDICATES PROPOSED DRILL HOLE
- INDICATES EXISTING ROAD
- INDICATES NEW ROAD
- INDICATES ACCESS ROAD

SCALE: 1" = 2000'

DRILL HOLE LOCATION AND ACCESS PLAN

FOR

TOWNSHIP BUTTE NORTH
STATE LEASE PARCEL NO. 31, 32

OF

PEARCE PROJECT

COCHISE COUNTY, ARIZONA

FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES

1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

DEC. 17, 1981

Respectfully submitted,

Paul I. Eimon

Arturo A. Ona

E. Grover Heinrichs

William G. Brown

January 5, 1982
Tucson, Arizona USA

240 120 ACRES
THAYER BABINEAUX

227 80 ACRES
PAULINE CLARK

239 120 ACRES
JAMES R. CLARK

CEMETERY

229 440 ACRES
GEORGE M. LEVY

GRID SYSTEM BASE
BRASS CAP IN CATTLE GUARD = 20,000 N, 25,000 E

BM 4374

BM 4355

PEARCE

COMMONWEALTH MINE

SULPHER SPRINGS VALLEY

PEARCE HILL

4648

4400

4418

4600

VABM 4898

SIX MILE HILL

OLD RAILROAD GRADE

OCEAN WAVE

SILVER WAVE

COMMONWEALTH

ONE AND ALL

SILVER CROWN

NORTH BELL

ARTHUR

HORNSPOON

SILVERTHREAD

LYLE 1 LYLE 2 LYLE 3 LYLE 4 LYLE 5 LYLE 6

PAN 1 PAN 2 PAN 3 PAN 4 PAN 5 PAN 6 PAN 7 PAN 8 PAN 9 PAN 10 PAN 11 PAN 12 PAN 13 PAN 14 PAN 15 PAN 16 PAN 17 PAN 18 PAN 19 PAN 20 PAN 21 PAN 22 PAN 23 PAN 24 PAN 25 PAN 26 PAN 27 PAN 28 PAN 29 PAN 30 PAN 31 PAN 32 PAN 33 PAN 34 PAN 35 PAN 36 PAN 37 PAN 38 PAN 39 PAN 40 PAN 41 PAN 42 PAN 43 PAN 44 PAN 45 PAN 46 PAN 47 PAN 48 PAN 49 PAN 50 PAN 51 PAN 52 PAN 53 PAN 54 PAN 55 PAN 56 PAN 57 PAN 58 PAN 59 PAN 60 PAN 61 PAN 62 PAN 63 PAN 64 PAN 65 PAN 66 PAN 67 PAN 68 PAN 69 PAN 70 PAN 71 PAN 72 PAN 73 PAN 74 PAN 75 PAN 76 PAN 77 PAN 78

33 POST

Tower

PAT.

U.P.

CORNERS PAINTED WHITE
ENDS, CENTERS, AND LOCATIONS IN RED

N 89° E

N 90° E

22,000 E
24,000 E
26,000 E
28,000 E
30,000 E
32,000 E
34,000 E
36,000 E

22,000 N
20,000 N
18,000 N
16,000 N
14,000 N
12,000 N
10,000 N

SCALE: 1" = 500'

LAND CONTROLLED BY JOHN A. STEPHENS

I & II — PAT. — GALYEN/PLATORO LEASE OPTION PATENTED LAND SUBJECT TO TAXES. 680 AC. FEE SIMPLE & 65 AC. PATENTED CLAIMS.

V — SAN RAMON UNPATENTED CLAIMS M. HERNANDEZ, ETAL. 120 AC.

III — U.P. — UNPATENTED CLAIMS. GALYEN/PLATORO 1010 AC.

IV — J.A.S. — UNPATENTED CLAIMS. JOHN A. STEPHENS 250 AC. (PARTIALLY SHOWN)

V — S.I. — SAN IGNACIO UNPATENTED CLAIMS M. HERNANDEZ, ETAL. 360 AC. (PARTIALLY SHOWN)

VI — (3) — ARIZONA STATE PROSPECTING PERMITS PARCEL NUMBER & ACREAGE IN PARCEL.

PROPERTY CATEGORIES

OTHER LANDS

OTHER — MULTIPLE OWNERSHIP, SURFACE & MINERAL TITLE ALLOCATED ON A CITY LOT BASIS. SEE SUPPLEMENTAL LAND STATUS MAP I.

OTHER — (227) — PRIVATE SURFACE & PRIVATE MINERAL PARCEL NUMBER & OWNERS NAME APPEARS IN PARCEL.

VII — THETFORD/CORGILL UNPATENTED CLAIMS FROM GALYEN 105 AC.

VII — THETFORD 44% - CORGILL 44% - JESSUP 1% - JOHN A. STEPHENS 11% (OPTION TO PURCHASE) 140 AC.

P.P. RENEWAL DUE SEPT. 3, 1981
(2) 320 ACRES
SURFACE GRAZING LEASE:
RON SEARLES
expired

P.P. RENEWAL DUE SEPT. 3, 1981
(3) 320 ACRES
SURFACE GRAZING LEASE:
RON SEARLES
expired

P.P. RENEWAL DUE SEPT. 3, 1981
(4) 280 ACRES
SURFACE GRAZING LEASE:
ANDREW J. (JACK) BUSENBARK
expired

Work Sheet
4/84

T. 18 S., R. 25 E.

LAND STATUS MAP
OF
PEARCE PROJECT
COCHISE COUNTY, ARIZONA
FOR
MR. JOHN A. STEPHENS
BY
E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

JUNE 1981 J.C.D.

FILE A-11 APPENDIX E

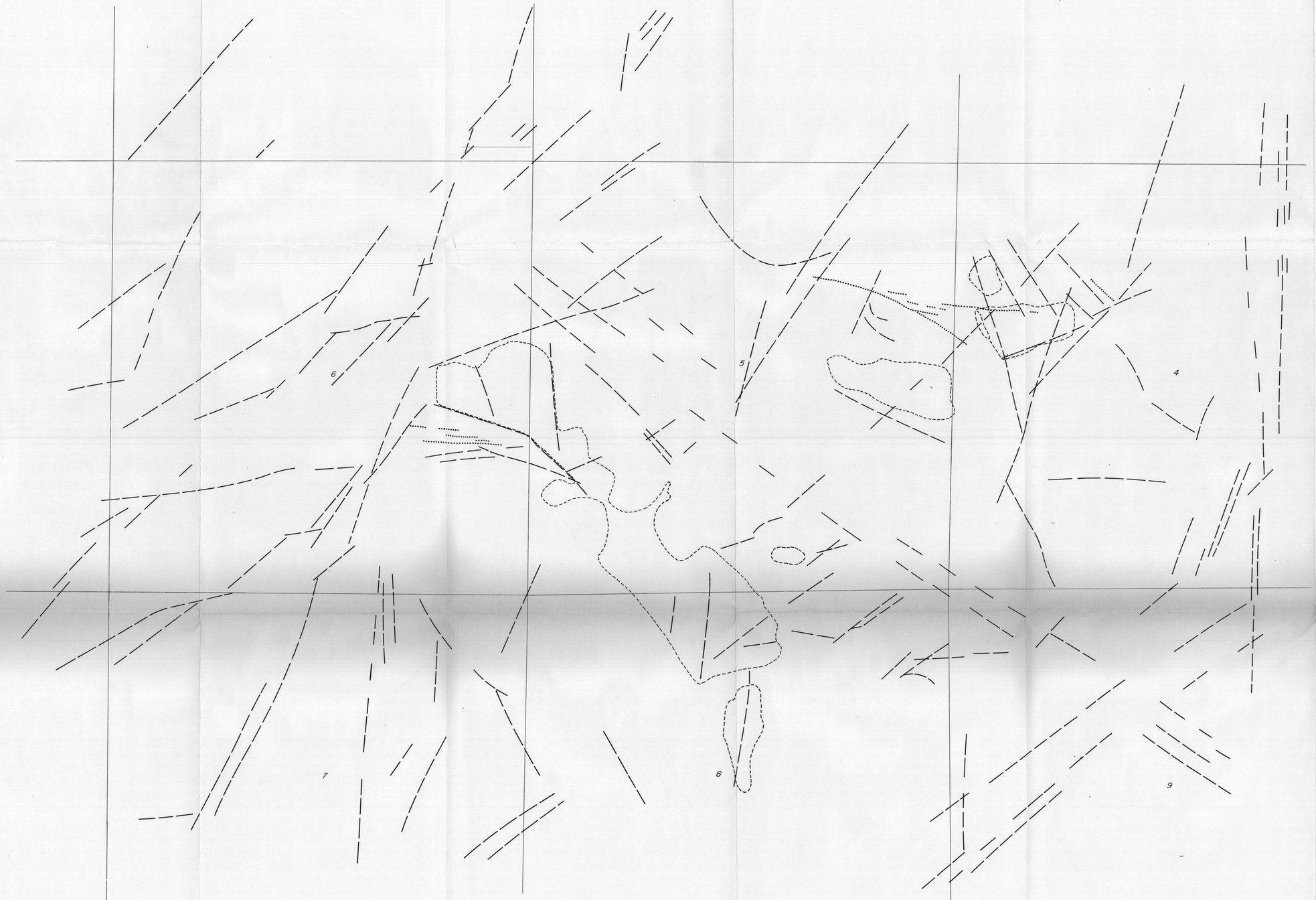


PHOTO LINEARS

MINERALIZED STRUCTURE

OUTLINE OF POSSIBLE BLEACHED ZONE

SCALE: 1" = 500'

PHOTOINTERPRETATION BY P. EIMON

J.C.D.

DEC. 1981
JUNE 1981

PHOTOINTERPRETATION OVERLAY

OF

THE PEARCE AREA

COCHISE COUNTY, ARIZONA

FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

FILE A-11 Appendix B

R. 24 E. | R. 25 E.

T. 17 S. / T. 18 S.

MAJOR REGIONAL LINEAMENT (FROM LANDSAT PHOTO)

POSSIBLE CALDERA FEATURE FROM LANDSAT PHOTO

SL-28 ● 0-400 Qal

SMH-1 ○ 0-630 Seds (Kb?) 630-800 Rhy/Da Porph (Tv) 800-830 And (Tv)

SL-29 ● 0-400 Qal

SMH-2 ○ 0-260 Qal 260-504 Ls

SMH-6 ○ 0-100 Qal 100-160 Claystone 160-325 Ls

SMH-3 ○ 0-60 Qal 60-485 Ls (Kb?)

SL-30 ● 0-110 Qal

BD-2 ○ 0-370 Qal 370-600 Tuff 600-1077 cgl (100-620 Ag ± 0.5 oz/T)

SL-24-2 ● SL-24, 0-470 Qal ● SL 24-3

V-6 ○ 0-200 Qal

GH-1 0-275 Qal GH-2 0-275 Qal GH-3 0-275 Qal

GH-4 0-150 Qal 150-210 Tv 210-215 Ss(Kb)

GH-5 0-200 Qal GH-6 0-150 Qal GH-7 0-150 Qal GH-8 0-150 Qal GH-9 0-150 Qal

GH-13 ○ 0-30 Qal 30-150 Tv

GH-12 ○ 0-110 Qal 110-200 Tuff (Tv)

GH-11 ○ 0-130 Coal 130-200 Farp

GH-10 ○ 0-130 Qal 130-200 Tuff (Tv)

GH-14 0-110 Qal 110-150 Hap

SL-4 ● 0-60 Qal 60-190 Ss (Kb ?)

SL-5 ● 0-230 Qal

SL-1W 0-100 Qal 100-150 Aggl Tuff

SL-1E 0-80 Qal 80-110 Ls

GH-15 ○ 0-30 Qal 30-90 Ss 90-150 Ls (shaly)

GH-16 0-20 Qal 20-170 Ss 170-230 Ls (shaly)

GH-17 ○ 0-80 Qal 80-140 Ss 140-150 Ls (shaly)

SMH-5 ○ 0-760 Qal 760-940 Rhyodacite (Tv)

SL-6 ● 0-120 Qal 120-140 Clay 140-210 Qal

SMH-4 ○ 0-450 Qal 450-503 Rhy Porph (Tv)

SL-2 ● 0-20 Qal 20-70 Hap(Tv) 70-120 Tuff

SL-3 ● 0-60 Qal 60-90 Rhy(Tv) 90-160 Tuff 160-210 Ss(Kb)

BD-7 ○ 0-100 Qal 100-230 clastics (Kb?)

SL-22 ● 0-190 Qal

BD-9 ○ 0-190 Qal 190-340 Quartzite; ss (Kb?)

BD-8 ○ 0-90 Qal 90-95 clastics (Kb?)

BD-4 ○ 0-80 Qal 80-100 Dacite (Tv?) 100-476 clastics (Kb)

SL-13 ● 0-110 Qal 110-290 Rhy Tuff

SL-21 ● 0-180 Qal 180-430 Farp (Tv)

SL-10 ● 0-290 Qal

BD-5 ○ 0-80 Qal 80-475 ss; Ms, Qtzte (Kb?)

SL-15 ● 0-260 Qal

SL-14 ● 0-130 Qal 130 Hap(Tv)

C-3 ○ 0-85 Qal 90-330 Kb ? 330-585 ls 585-675 vol 675-732 seds

C-1 ○ 0-75 Qal 75-500 Tv 500-750 Kb

C-2 ○ 0-725 Qal 725-750 Tv

LP-7 ○ LP-8 ○ LP-5 ○ LP-6 ○ LP-1 ○ LP-2 ○ LP-4 ○

P-1 (Bear Creek) ○ 0-100 Qal 100-350 K shale + dy 350-700 K shale

R. 25 E. | R. 26 E.

EXPLANATION

Qal	Gravel, Sand, Silt; Alluvium of flood plains, Valley, etc.
Tv	Rhyolite & rhyodacite extrusives, etc.
Ta	Andesite.
Tlc	Lower conglomerate, gravel & sand.
Kbu	Upper part Cretaceous Bisbee Formation

pp-2 ◉ Diamond drill hole (J. A. Stephens)

SL-2 ● Rotary drill hole (J. A. Stephens)

○ SMH BD Drill hole (Lowell)

○ LP P Drill hole (Bear Creek)

○ Drill hole (others)

X Prospect

◩ Shaft

Ref. – (Drewes, H., Tectonic map of Southeast Arizona, Map I-1109, U.S.G.S. Misc. Inv. Series 1980)

SCALE: 1" = 2000'

W.G.B. REV. DEC. 1981
J.C.D. REV. SEPT. 1981
J.C.D. JUNE 1981

REGIONAL GEOLOGIC MAP
OF
THE PEARCE AREA
COCHISE COUNTY, ARIZONA
FOR
MR. JOHN A. STEPHENS
BY
E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

FILE

EXPLANATION

- Qal — Alluvium (includes Talus)
- FQRP — Feldspar Quartz Rhyolite Porphyry
- QRP — Quartz Rhyolite Porphyry
- And — Andesite
- Agg Tf — Agglomeratic Tuff
- HAP — Hornblende Andesite Porphyry
- Kb — Cretaceous Bisbee sediments

- Lithologic boundary
- Fault
- 35° Strike and dip
- 70° Quartz / calcite vein
- PP-1 Drill hole & number for this project. Drill holes prefixed by "WC" drilled by Western States Minerals Corp. Drill holes prefixed by "P" or "DD" drilled by Bethlehem Copper Corp. Drill holes prefixed by "CS" drilled by Platoro Mines, Inc.
- GH-3 Drill holes (Rotary) prefixed by "GH" drilled by E.G. Heinrichs / J.A. Stephens, Nov. 1981

N

T. 18 S. R. 25 E.

DRAFTED BY A. URIZAR

GEOLOGY BY: ART ONA & S. MARKUSEN

JUNE 1981

REVISIONS		
NO.	DATE	BY
1	12/81	A.A.O.

PEARCE PROJECT

GEOLOGIC MAP OF SIX MILE HILL AND PEARCE HILL

COCHISE COUNTY, ARIZONA

FOR

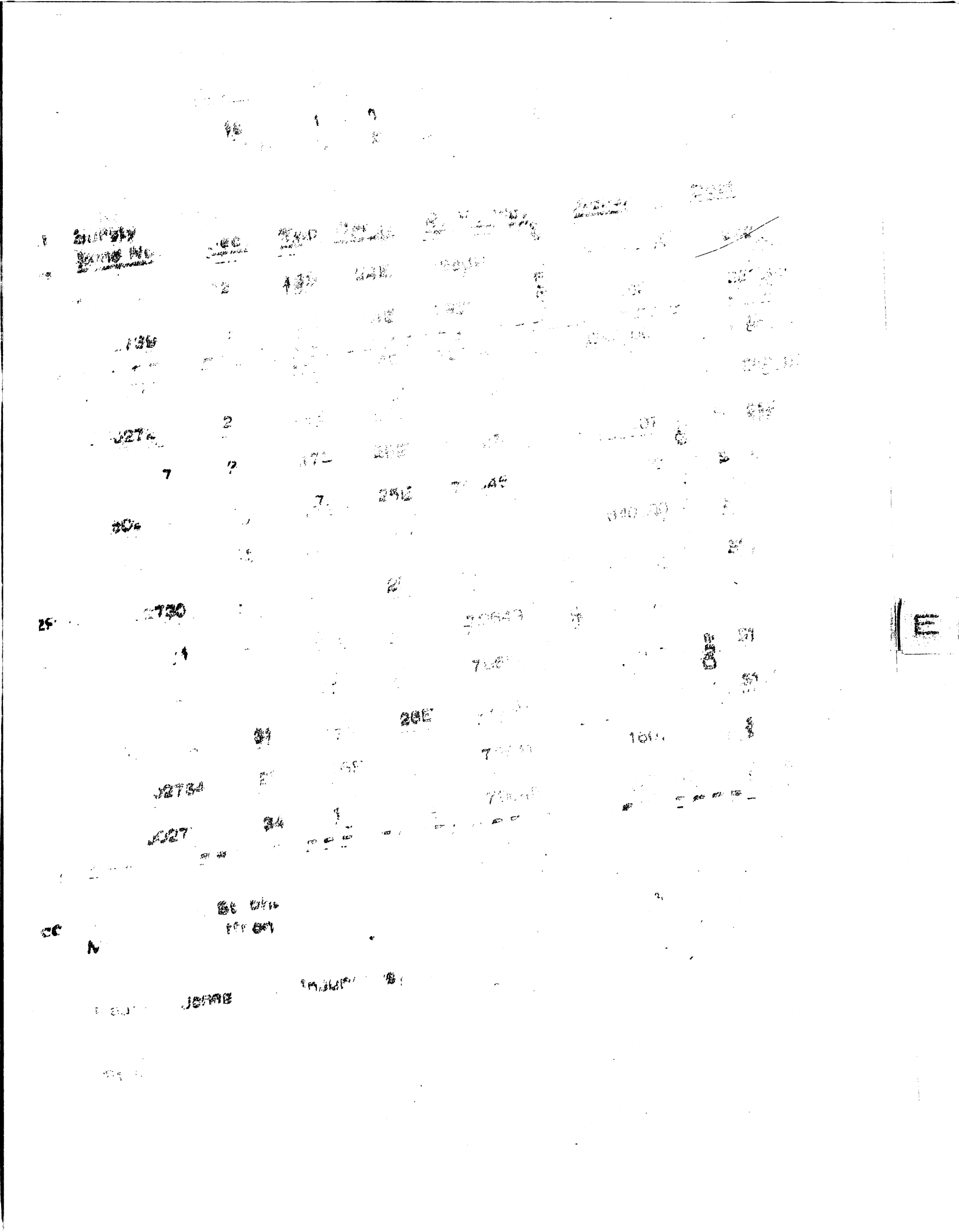
MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ. 85705

SCALE 1" = 500'

FILE Appendix C



SCALE: 1" = 2000'

•93 – SAMPLE LOCATION & NO. (PGR SERIES)

△74 – SAMPLE LOCATION & NO. (PAR SERIES)

△-·-△ – SAMPLING LINE
PAR 70-75

A.A.O. DEC. 1981
J.C.D. REVISED OCTOBER 1981
JUNE 1981

REGIONAL GEOCHEMICAL SAMPLE LOCATION MAP

OF

THE PEARCE AREA

COCHISE COUNTY, ARIZONA

FOR

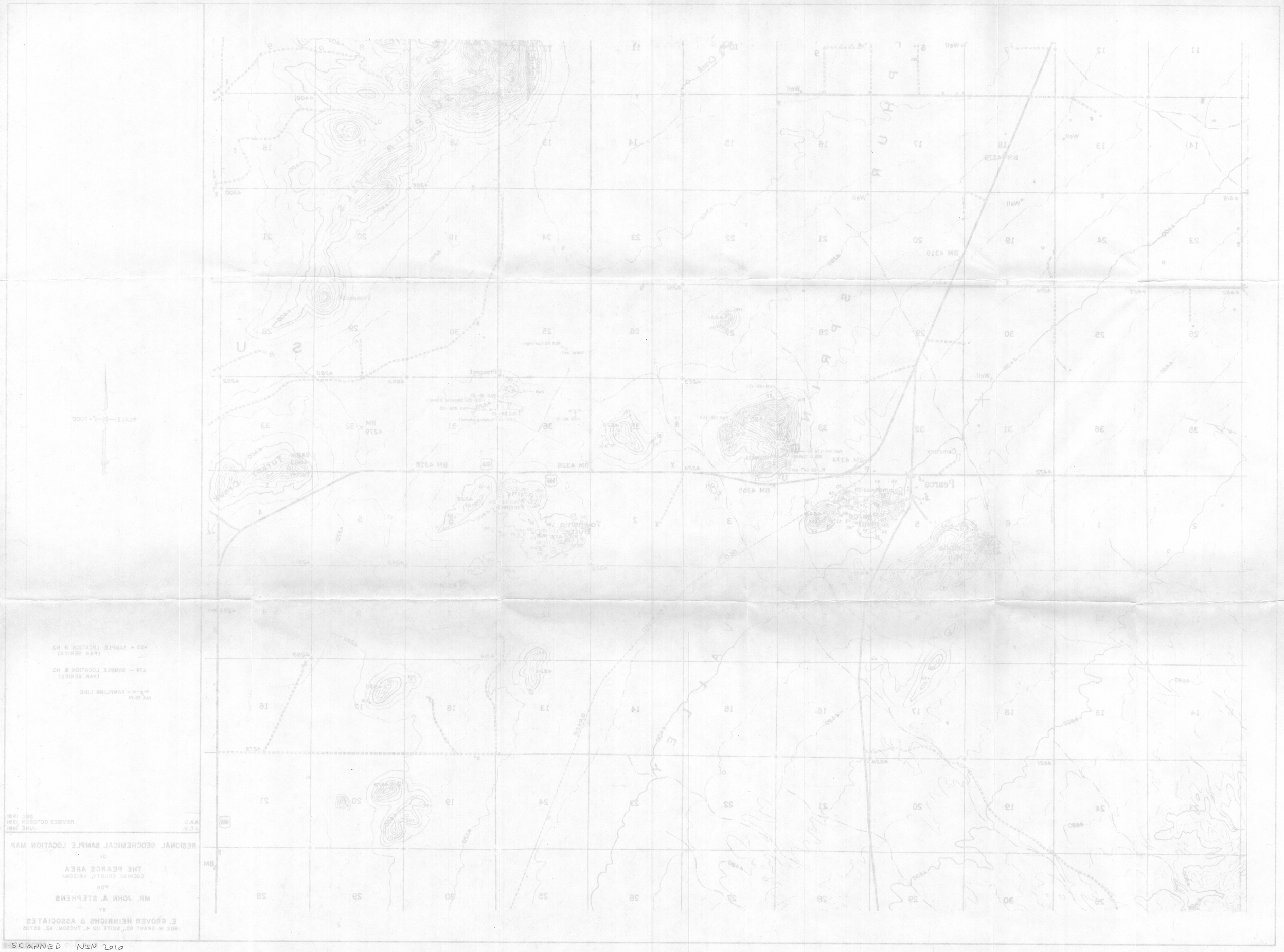
MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110 4, TUCSON, AZ. 85705

FILE

Appendix E



SCANNED NJN 2010

SEC. 8

1/4 Cor.

Line 1

Line 2

Line 3

Line 4

Line 5

Line 6

Line 7

Line 8

Line 9

Line 10

Line 11

Base Line 800 E.

Base Line 2400 E

Base Line 3000 E

300'

SEC. 17

R.25 E. T.18 S.

SCALE: - N - 1" = 500'

EXPLANATION

BEDROCK GEOCHEM SAMPLE LOCATION

Hg ≥ .07 ppm

As ≥ .50 ppm

Ag ≥ .2 ppm

NOTE : Sample locations are 100' apart.
Line 4 is in saddle no outcrop visible.
Sample locations on Line 5 and 6 are 66' apart.

W.G.B. DEC. 1981

COMPOSITE SUMMARY MAP OF GEOCHEM SURVEY

OF

SIX MILE SOUTH AREA

FOR

PEARCE PROJECT

COCHISE COUNTY, ARIZONA

FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110-4, TUCSON, AZ 85705

Appendix E

11 12
14 13

8 9
17 16

500ft.

100ft.

100ft.

500ft.

80

80

80

80

SCALE: 1" = 2000'

EXPLANATION

- Hg > .20 ppm
- As > 40 ppm
- Ag > 1 ppm
- Au > 130 ppb

Bedrock Geochem Sample

23 24
26 25

20 21
29 28

A.A.O. DEC. 1981

GEOCHEMICAL, STRUCTURAL COMPOSITE SUMMARY OVERLAY

OF

THE PEARCE AREA

COCHISE COUNTY, ARIZONA

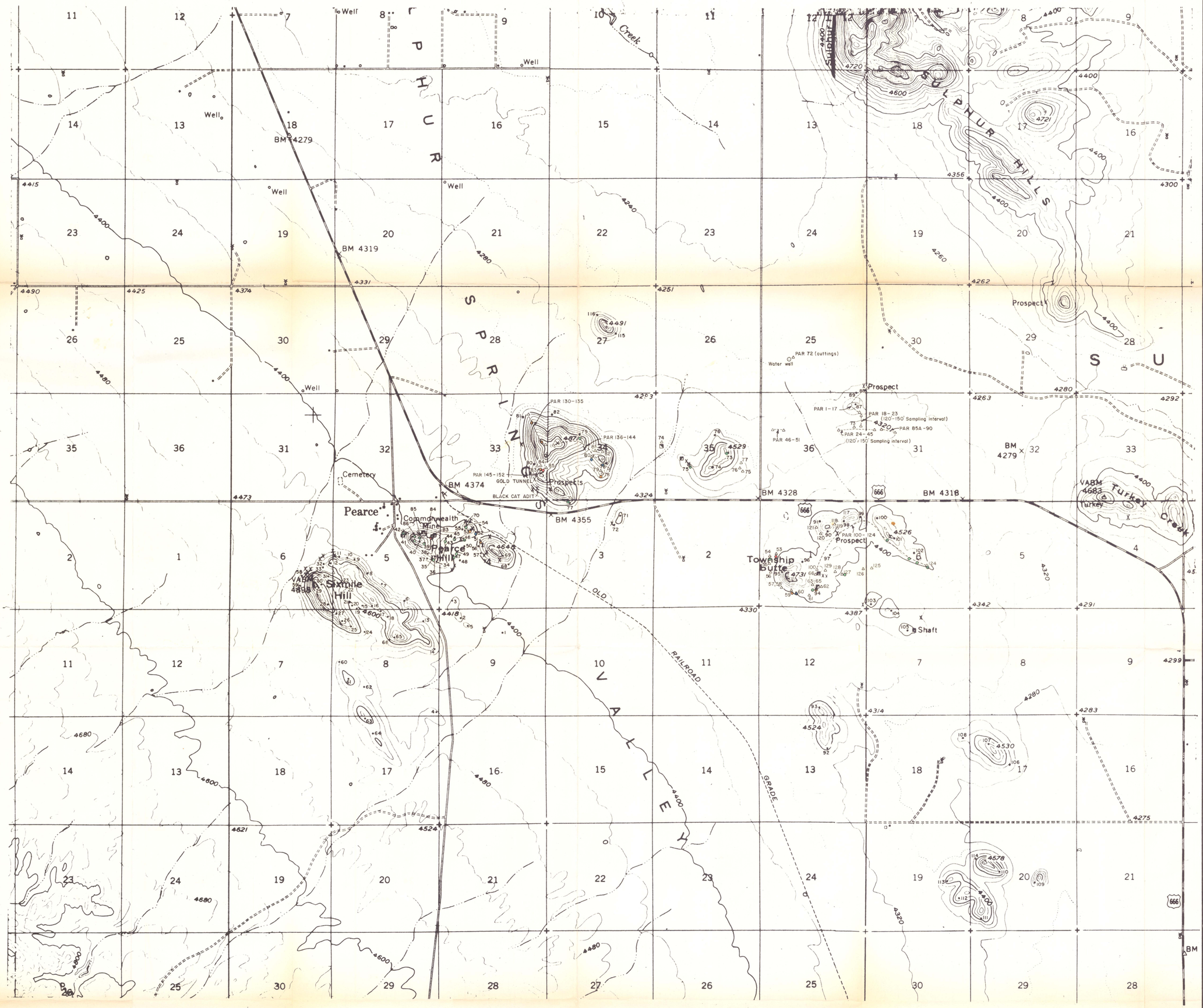
FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110 4, TUCSON, AZ. 85705

Appendix E



SCALE: 1" = 2000'

SILVER GEOCHEMICAL RESULTS

- 1 – 5 ppm
- 5 – 10 ppm
- 10 – 30 ppm
- > 30 ppm

•93 – SAMPLE LOCATION & NO. (PGR SERIES)

△74 – SAMPLE LOCATION & NO. (PAR SERIES)

△---△ – SAMPLING LINE
PAR 70-75

A.A.O.
J.C.D.

REVISED OCTOBER 1981
JUNE 1981

REGIONAL GEOCHEMICAL SAMPLE LOCATION MAP

OF

THE PEARCE AREA

COCHISE COUNTY, ARIZONA

FOR

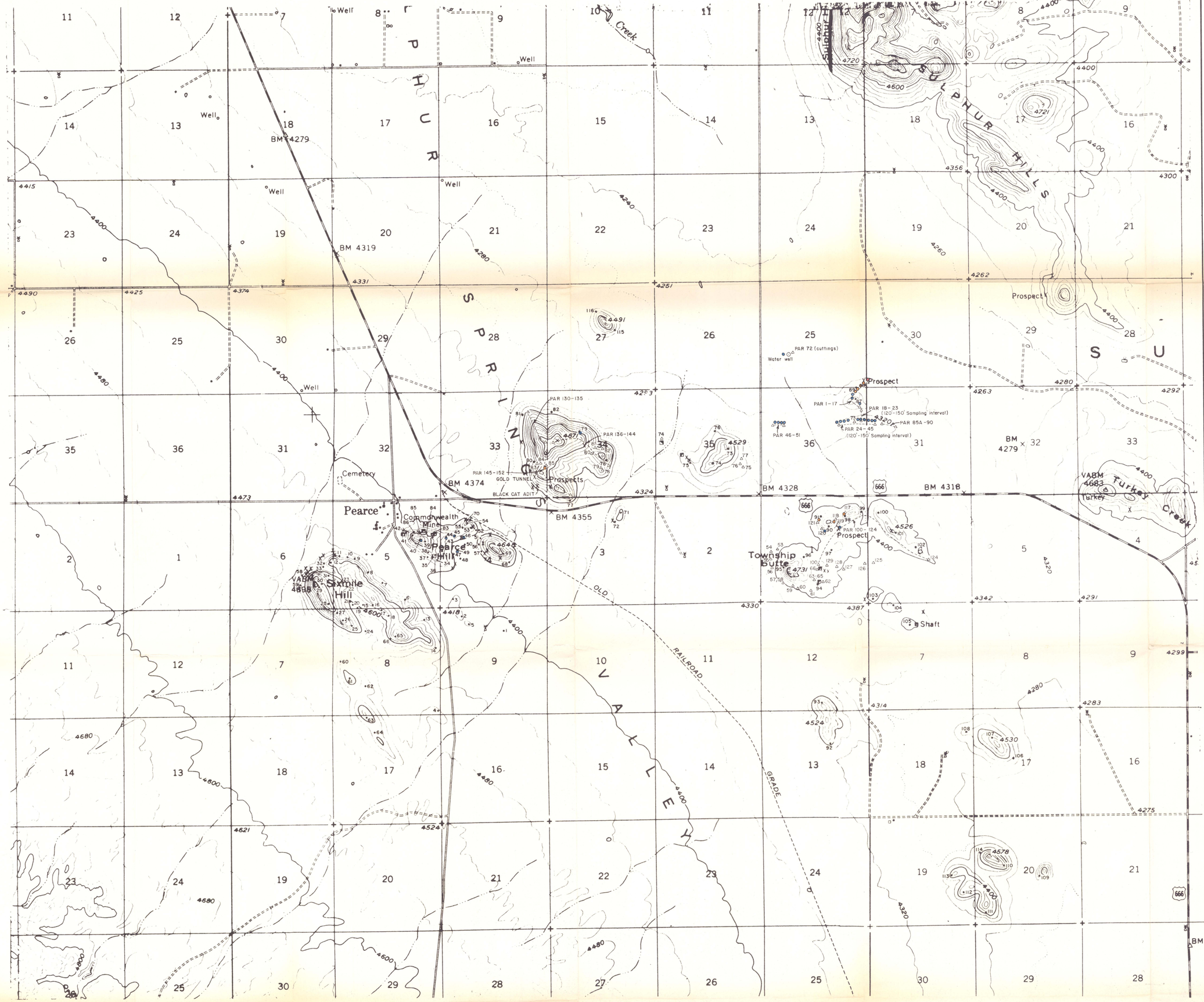
MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110 4, TUCSON, AZ. 85705

FILE

Appendix F



SCALE: 1" = 2000'

MERCURY GEOCHEMICAL RESULTS

- .05 – .20 ppm
- .20 – .50 ppm
- .50 – 1.5 ppm
- > 1.5 ppm

•93 – SAMPLE LOCATION & NO. (PGR SERIES)

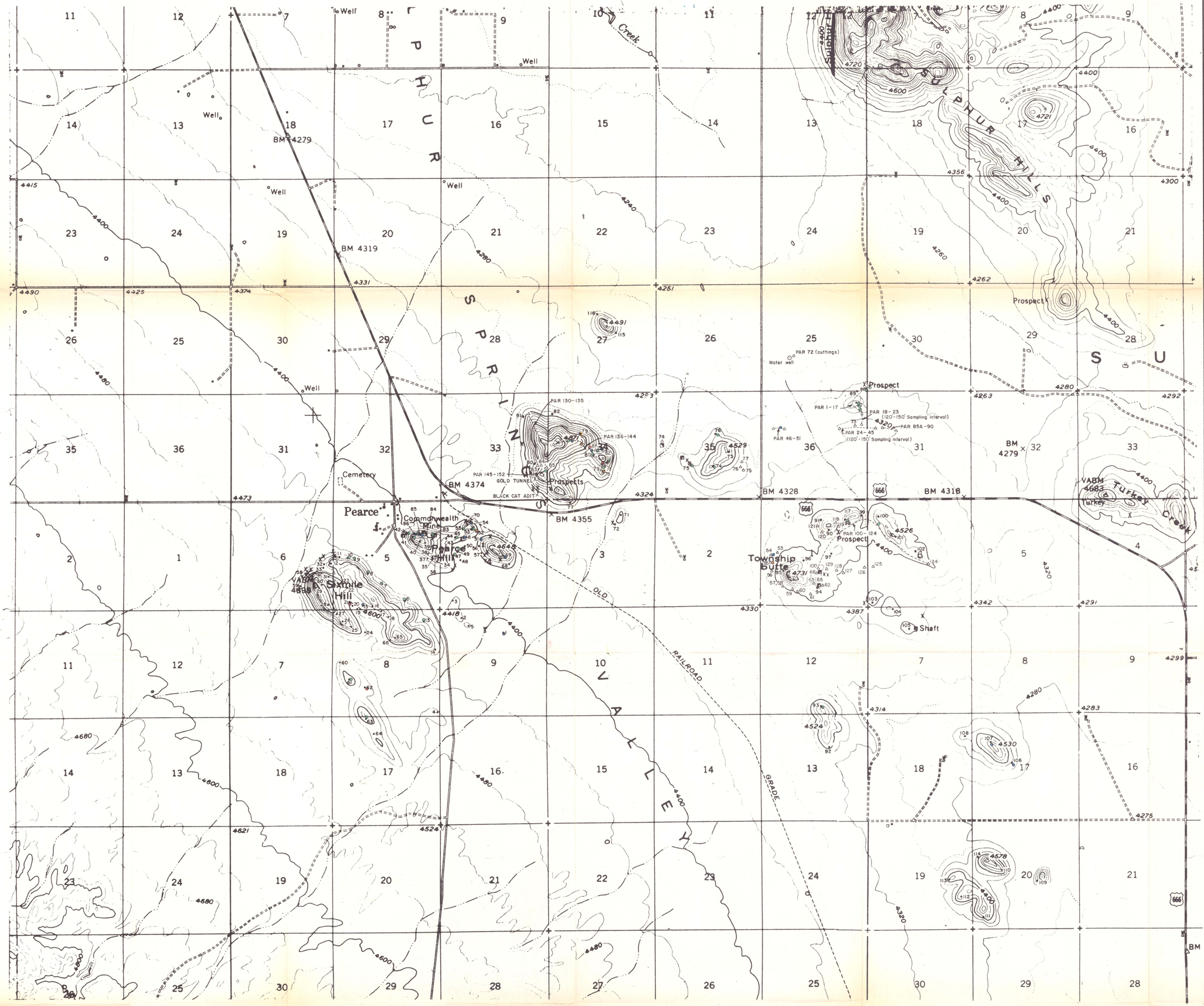
△74 – SAMPLE LOCATION & NO. (PAR SERIES)

△—△ – SAMPLING LINE
PAR 70-75

A.A.O. REVISED OCTOBER 1981
J.C.D. JUNE 1981

REGIONAL GEOCHEMICAL SAMPLE LOCATION MAP
OF
THE PEARCE AREA
COCHISE COUNTY, ARIZONA
FOR
MR. JOHN A. STEPHENS
BY
E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110 4, TUCSON, AZ. 85705

FILE Appendix F



ARSENIC GEOCHEMICAL RESULTS

- 40 – 80 ppm
- 80 – 150 ppm
- 150 – 200 ppm
- > 200 ppm

•93 – SAMPLE LOCATION & NO. (PGR SERIES)

△74 – SAMPLE LOCATION & NO. (PAR SERIES)

△-△ – SAMPLING LINE
PAR 70-75

A.A.O. REVISED OCTOBER 1981
J.C.D. JUNE 1981

REGIONAL GEOCHEMICAL SAMPLE LOCATION MAP

OF

THE PEARCE AREA

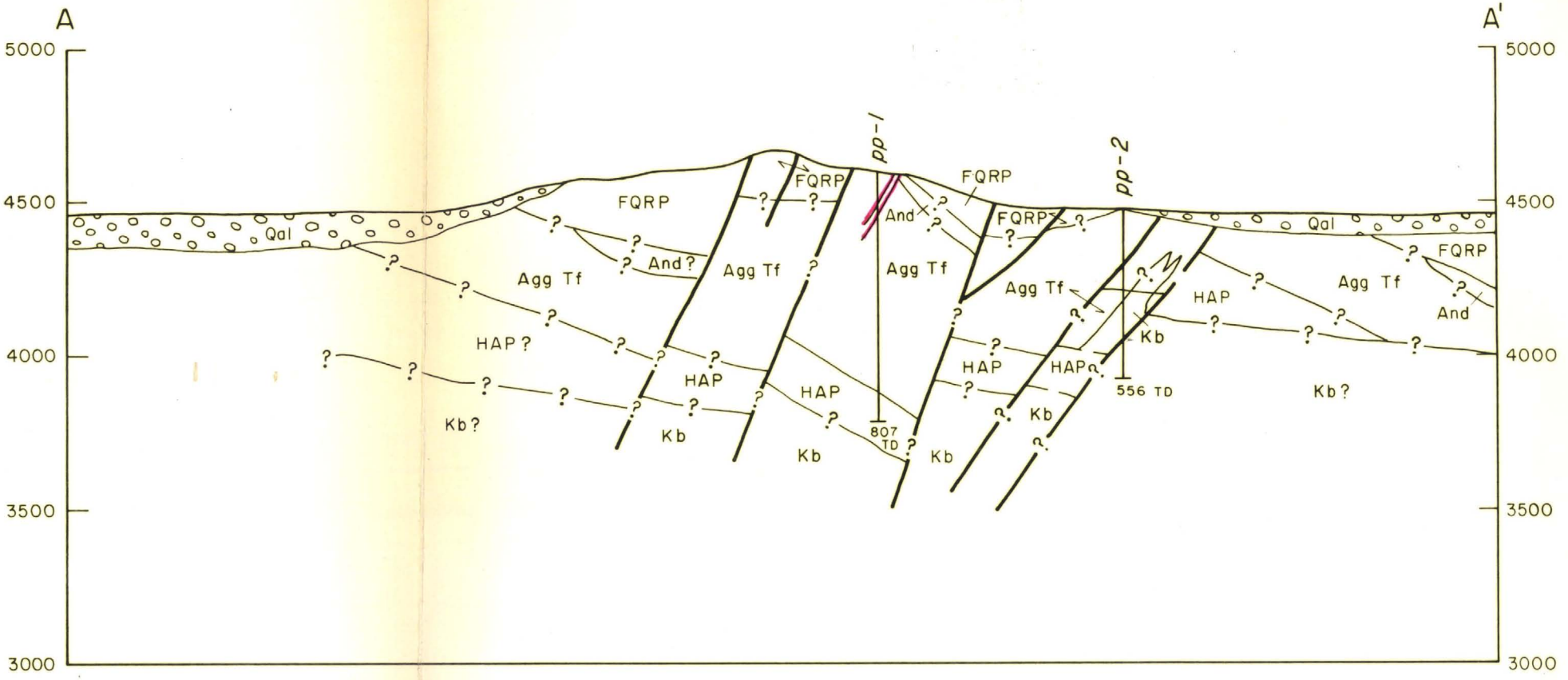
COCHISE COUNTY, ARIZONA

FOR

MR. JOHN A. STEPHENS

BY

E. GROVER HEINRICHS & ASSOCIATES
1802 W. GRANT RD., SUITE 110 4, TUCSON, AZ. 85705



EXPLANATION

Qal — Alluvium (includes Talus)	HAP — Hornblende Andesite Porphyry
FQRP — Feldspar Quartz Rhyolite Porphyry	Kb — Cretaceous Bisbee Sediment
QRP — Quartz Rhyolite Porphyry	Ag intercept
And — Andesite	Au intercept
Agg Tf — Agglomeratic Tuff	Qtz/Cal vein

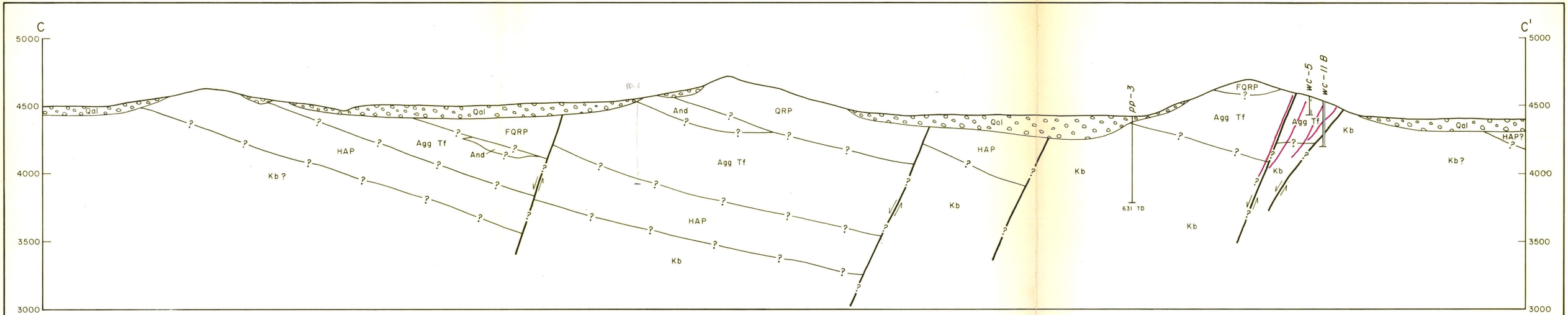
PEARCE PROJECT

SECTION A-A'

Looking NW

0 500 1000 1500

SCALE: 1"=500'



EXPLANATION

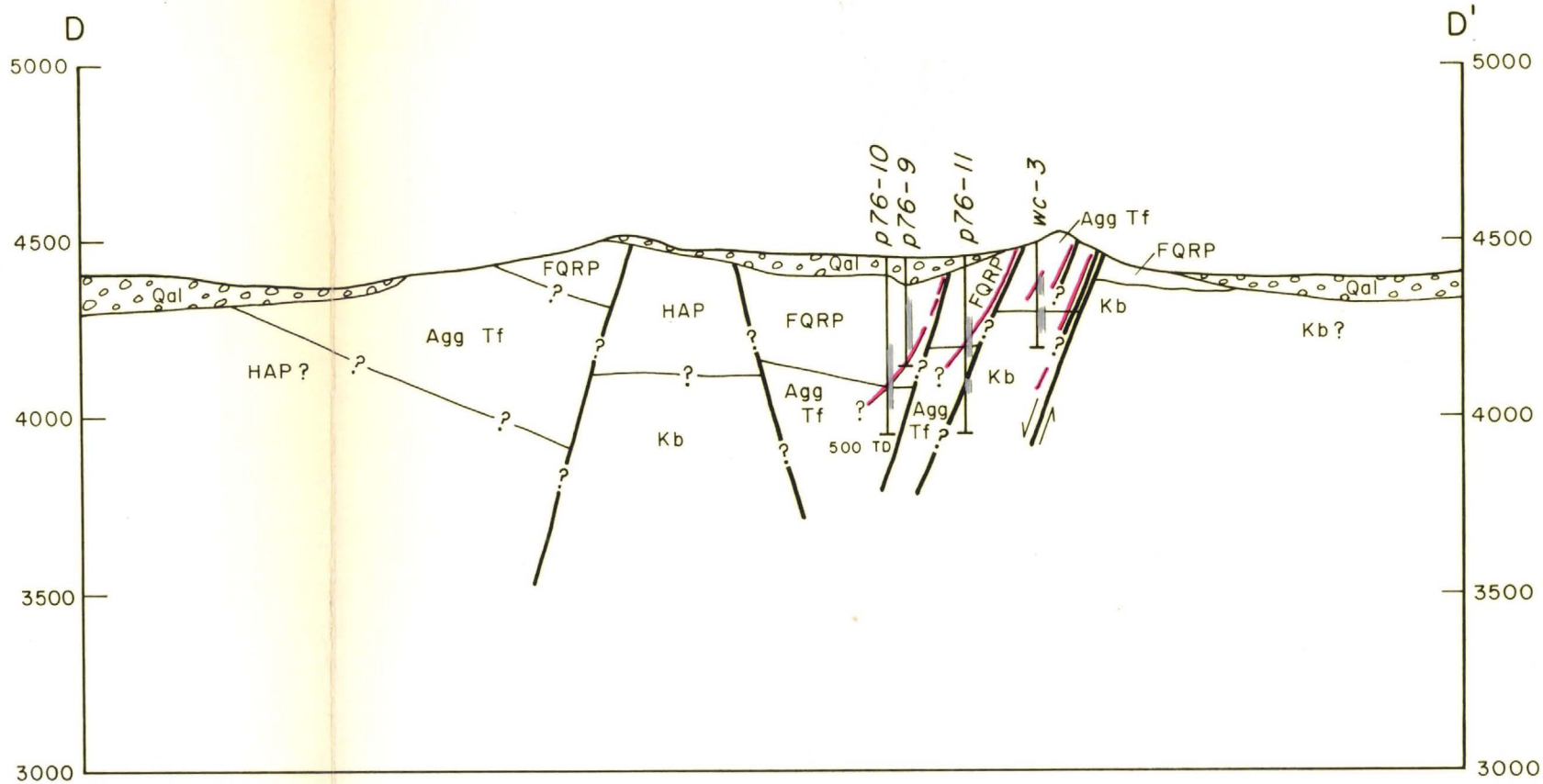
- Qal — Alluvium (includes Talus)
- FQRP — Feldspar Quartz Rhyolite Porphyry
- QRP — Quartz Rhyolite Porphyry
- And — Andesite
- Agg Tf — Agglomeratic Tuff
- HAP — Hornblende Andesite Porphyry
- Kb — Cretaceous Bisbee Sediment
- Ag intercept
- Au intercept
- Qtz/Cal vein

PEARCE PROJECT

SECTION C-C'

0 500 1000 1500

SCALE: 1" = 500'



EXPLANATION

- Qal — Alluvium (includes Talus)
- FQRP — Feldspar Quartz Rhyolite Porphyry
- QRP — Quartz Rhyolite Porphyry
- And — Andesite
- Agg Tf — Agglomeratic Tuff
- HAP — Hornblende Andesite Porphyry
- Kb — Cretaceous Bisbee Sediment
- Ag intercept
- Au intercept
- Qtz/Cal vein

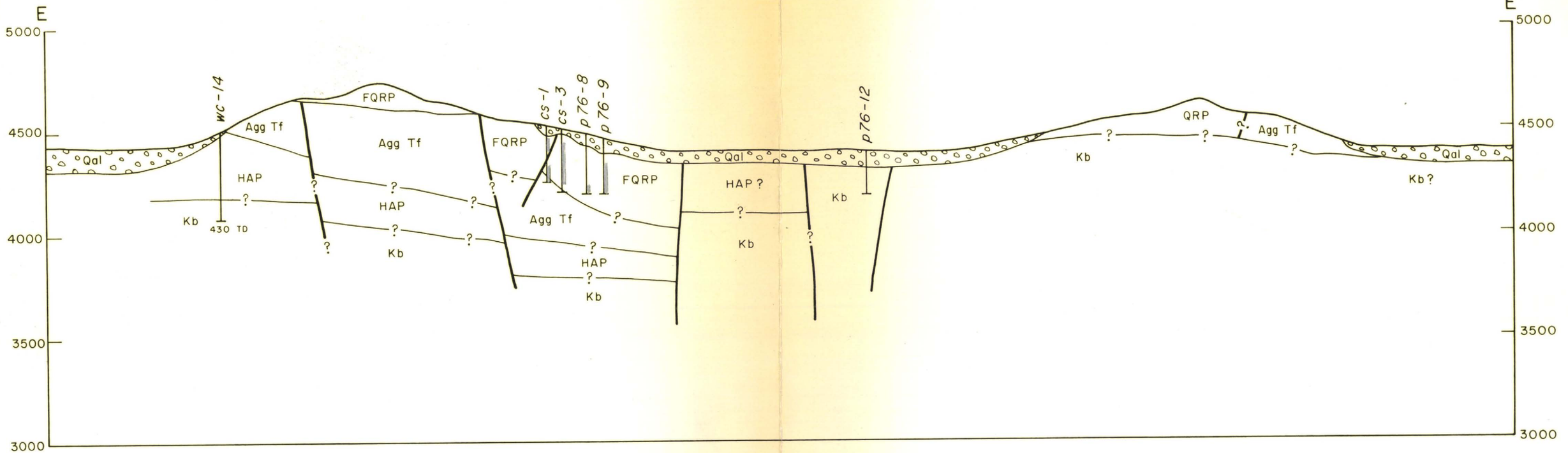
PEARCE PROJECT

SECTION D-D'

LOOKING NW

0 500 1000 1500

SCALE: 1"=500'



EXPLANATION

- Qal — Alluvium (includes Talus)
- FQRP — Feldspar Quartz Rhyolite Porphyry
- QRP — Quartz Rhyolite Porphyry
- And — Andesite
- Agg Tf — Agglomeratic Tuff
- HAP — Hornblende Andesite Porphyry
- Kb — Cretaceous Bisbee Sediment
- Ag intercept
- Au intercept
- Qtz/Cal vein

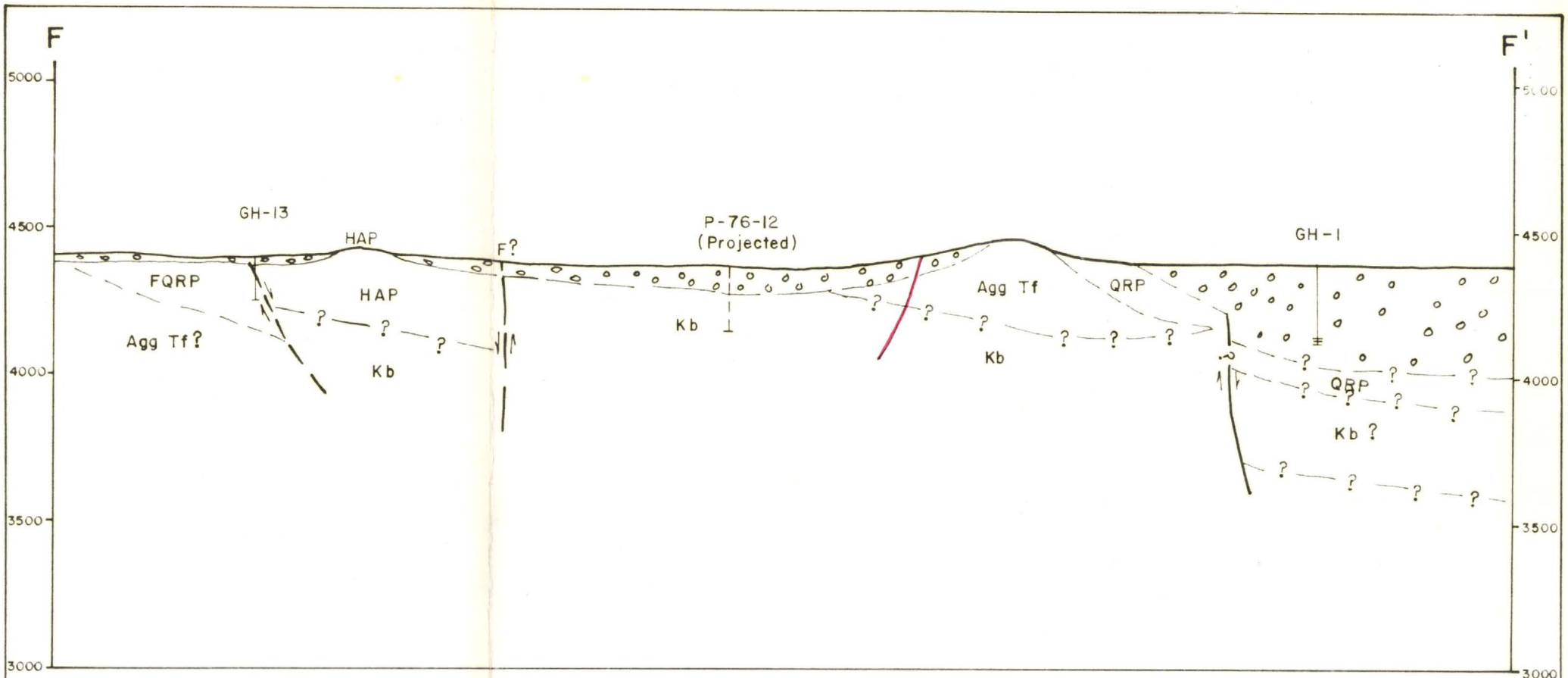
PEARCE PROJECT

SECTION E-E'

LOOKING NNE

0 500 1000 1500

SCALE: 1" = 500'



EXPLANATION

Qal — Alluvium (includes Talus)	HAP — Hornblende Andesite Porphyry
FQRP — Feldspar Quartz Rhyolite Porphyry	Kb — Cretaceous Bisbee Sediment
QRP — Quartz Rhyolite Porphyry	Ag intercept
And — Andesite	Au intercept
Agg Tf — Agglomeratic Tuff	Qtz/Cal vein

PEARCE PROJECT

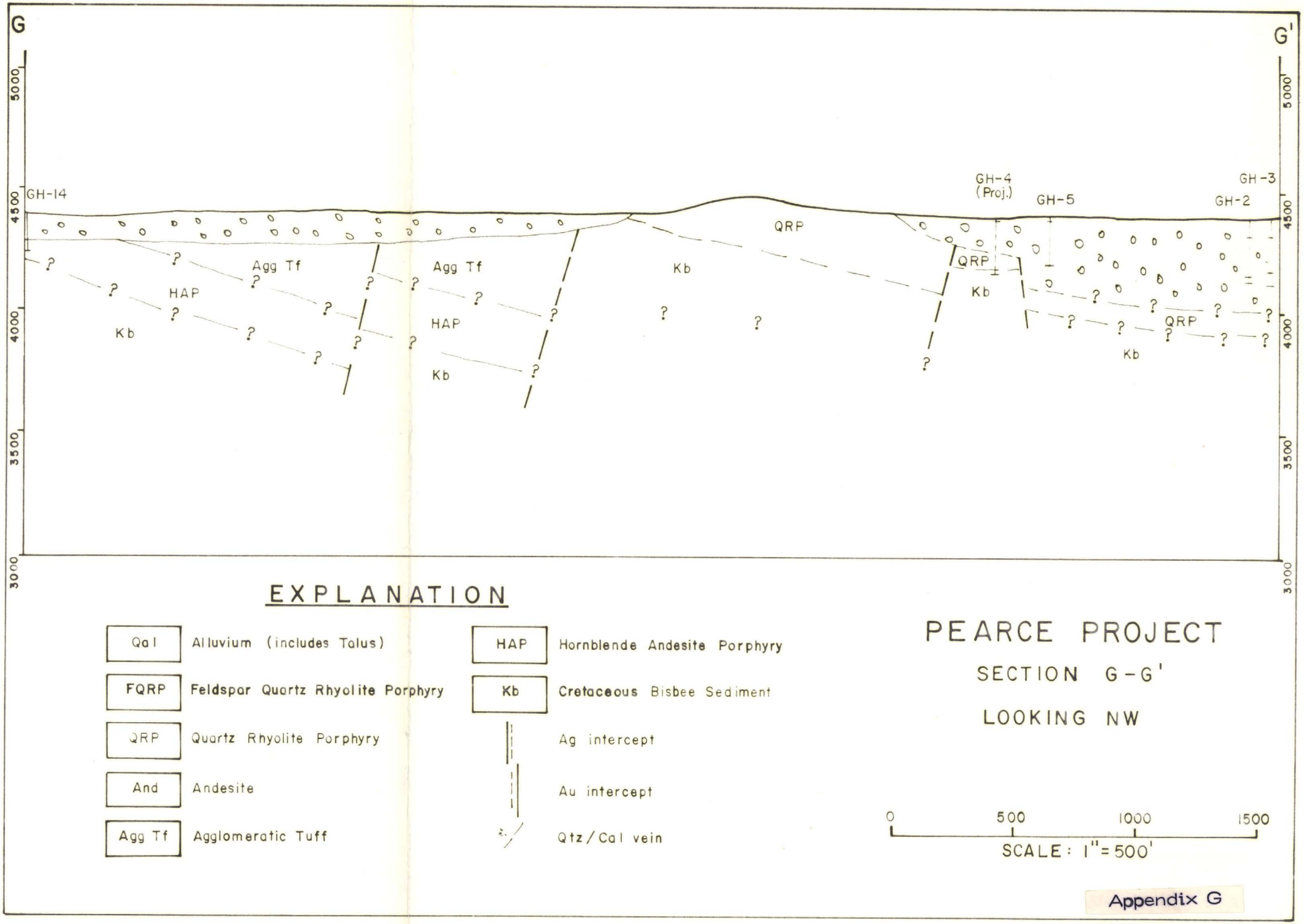
SECTION F - F'

LOOKING NW

0 500 1000 1500

SCALE: 1" = 500'

Appendix G



EXPLANATION

Qal	Alluvium (includes Talus)
FQRP	Feldspar Quartz Rhyolite Porphyry
QRP	Quartz Rhyolite Porphyry
And	Andesite
Agg Tf	Agglomeratic Tuff
HAP	Hornblende Andesite Porphyry
Kb	Cretaceous Bisbee Sediment
	Ag intercept
	Au intercept
	Qtz/Cal vein

PEARCE PROJECT

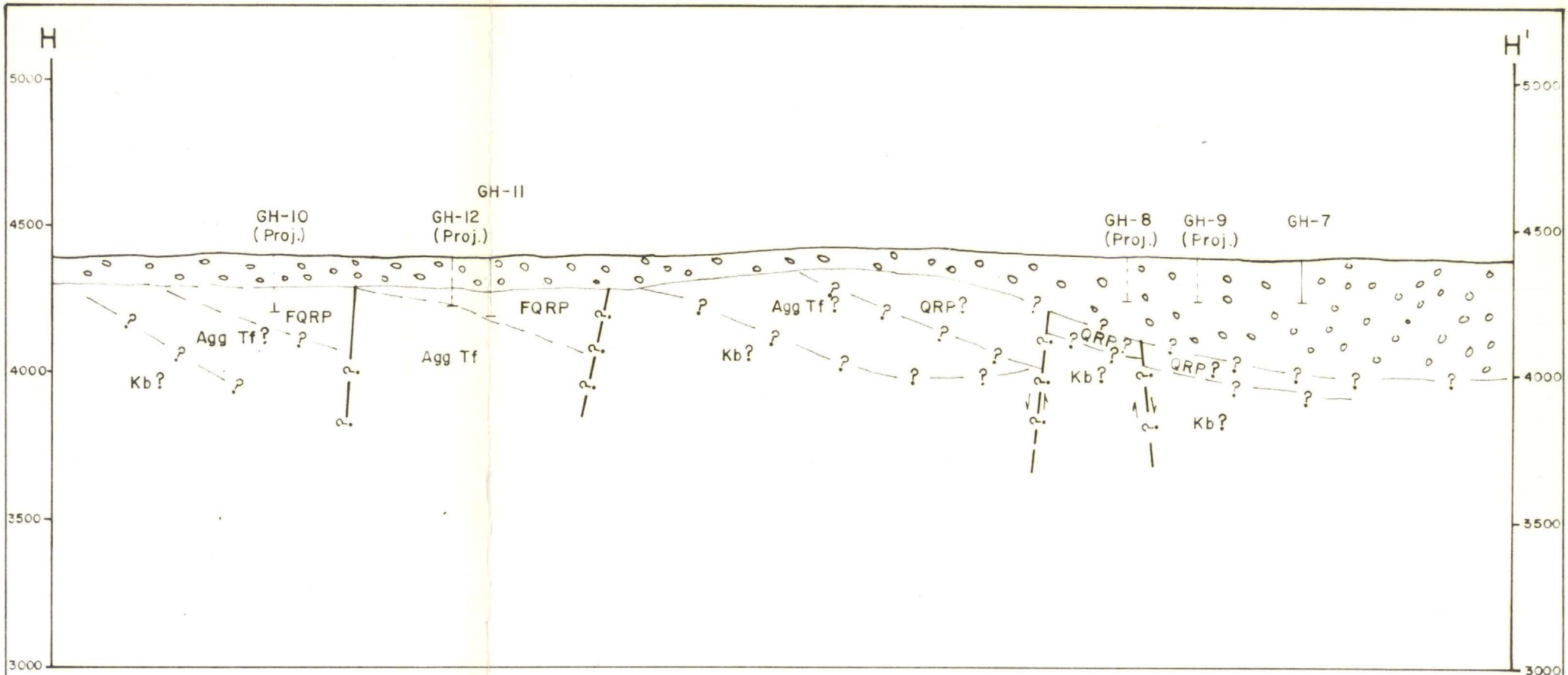
SECTION G-G'

LOOKING NW

0 500 1000 1500

SCALE: 1"=500'

Appendix G



EXPLANATION

Qal	Alluvium (includes Talus)
FQRP	Feldspar Quartz Rhyolite Porphyry
QRP	Quartz Rhyolite Porphyry
And	Andesite
Agg Tf	Agglomeratic Tuff
HAP	Hornblende Andesite Porphyry
Kb	Cretaceous Bisbee Sediment
	Ag intercept
	Au intercept
	Qtz/Cal vein

PEARCE PROJECT

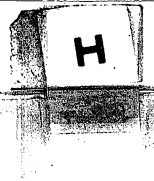
SECTION H-H'

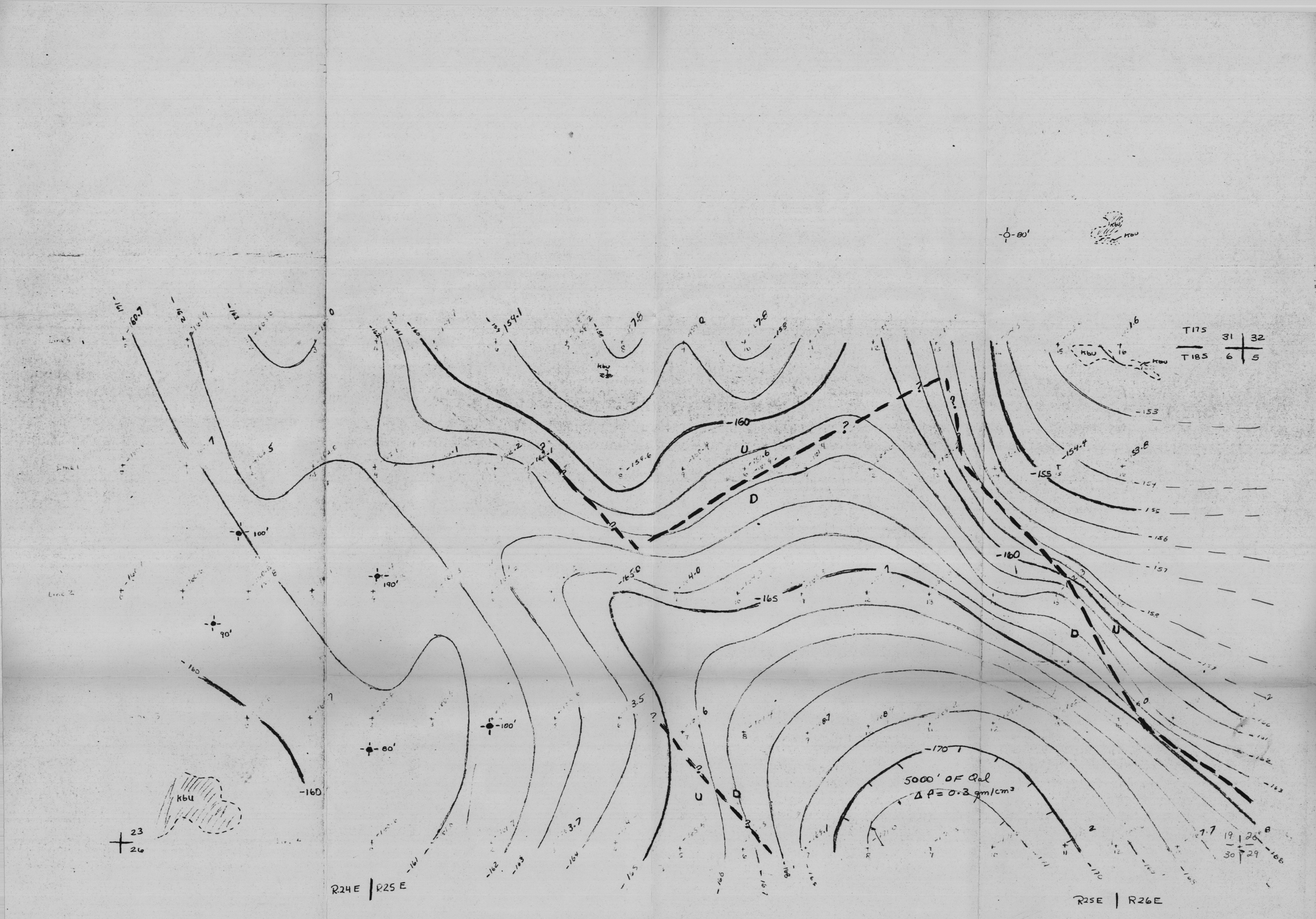
LOOKING NW

0 500 1000 1500

SCALE: 1"=500'

Appendix G


H



Explanation

Density for the Bouguer correction is 2.67 gm/cm³

Contour interval is 1mgal

Scale 1" = 2000'

(Kbu) ~ outcrop Cretaceous Bisbee formation

200' Drill hole that intersected Cretaceous Bisbee formation and depth.

U D Fault interpreted from gravity data

Scale 1" = 500'

GRAVITY SURVEY

SIMPLE BOUGUER GRAVITY ANOMALY MAP

THE PEARCE AREA

Cochise County, Arizona

for

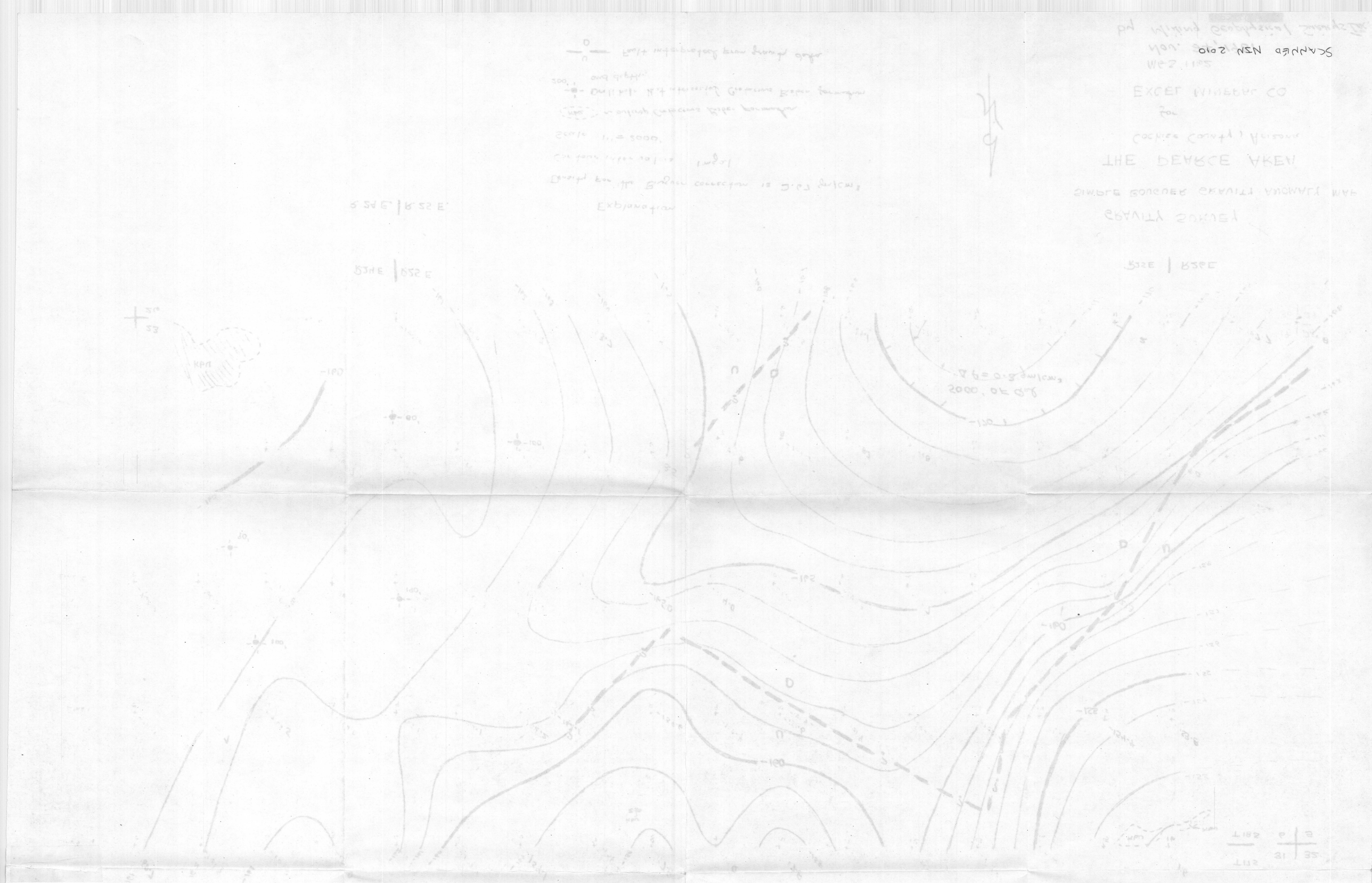
EXCEL MINERAL CO

MGS 1162

Nov. 24, 1981

by Mining Geophysical Surveys Inc.

Appendix H



SCANNED 2010 NJN

PROJECT PEARCE PROJECT PAGE 1

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL' _____ DATE 6/10/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type		
					0	0-14 No core (QAL + TALUS.)
					10	
90						14-31 REDDISH BROWN ANDESITE; INTENSE CLAY ALTERATION; CALCITE CLOTS AND VNLTS THROUGHOUT; NOTE GREEN COLORED CLAYS
100					20	
100			Cag	c/		
100			Cag	c/	30	
100			Cag	c/		31-69.5 LIGHT REDDISH BROWN TO GRAY ANDESITE; CALCITE VN AT 44.5-45.5; SOME SECTIONS ARE INTENSELY CLAY ALTERED, MOST SECTIONS MODERATE. RARE CALCITE VNLTS
100					40	
100						
100					50	

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	Mo	Au oz/T	Ag
15	20			.014	Tr
25	30			.001	Tr
42	45			.001	Tr

PROJECT PEARCE PROJECT PAGE 2

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL' _____ DATE _____

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type		CORE ASSAYS					
						INTERVAL		MINERAL		Oz/T	
						FROM	TO	Cu	Mo	Au	Ag
100					50						
100											
100			65		60						
100											
100					70						
110											
100					80						
100											
100					90						
100											
					100						

69.5 - 157

LT GREENISH GRAY ANDESITE; INTENSE TO MODERATE ARGILLIC ALTERATION; COMMON CLAY? MINERAL IS PALE YELLOW GREEN IN COLOR; MODERATE AMOUNT OF CALCITE VNLTS; RARE VN; THIN MANGANESE COATING ON SOME FRACTURES; VUGGY CAVITIES COMMON, FILLED WITH CRYSTALLINE CALCITE

FROM	TO	Cu	Mo	Au	Ag
80	85			.04	Tr

PROJECT _____ PAGE 3

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL' _____ DATE _____

% Core Recovery	Mineraliz'n	Alteration	Structure	Rock Type
100				
100				
100				
100				
100				
100				
100				
100				
100				
100				
110				
100				
100				
100				

100 110 120 130 140 150

CORE ASSAYS

INTERVAL		MINERAL oz/T			
FROM	TO	Cu	Mo	Au	Ag
110	115			.001	.05
130	135			.001	.01

PROJECT _____ PAGE 4

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL' _____ DATE _____

% Core Recovery	Mineralstn	Alteration	Structure	Rock Type		CORE ASSAYS					
						INTERVAL		MINERAL OZ/T			
						FROM	TO	Cu	Mo	Au	Ag
				/	150						
100				/		150	155			.002	.04
				/							
100				/							
					CONTACT APPEARS TO BE DEPOSITIONAL NOT STRUCTURAL (FAULT)						
100											
					160						
100					157 – 297						
					BROWNISH ORANGE TO LT BROWNISH GRAY SANDY CONGLOMERATE FRAGMENTS MOSTLY SANDY & PEBBLY; MOD AMT OF PEBBLY (>2" DIAM) FRAGS. FRAGS ARE AND. AND RHYOLITE, OCCAS HAP; VERY RARE CALCITE VNLTS.						
					DIP 30°						
90											
					170						
100											
					(EQUIVALENT TO AGGLOM TUFF IN PP-1 THRU 3 ?)						
100											
						175	180			.001	.05
					180						
110					DIP 30°						
					DIP 30°						
100											
					190						
100											
100											
100											
					200						

PROJECT _____ PAGE 5

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type		CORE ASSAYS				
						INTERVAL		MINERAL		
						FROM	TO	Cu	Mo	Au oz/
					200					
100										
					DIP 30°					
100										
					210					
100										
					DIP 20°					
100										
					220					
					DIP 20°					
100										
100										
					230					
100										
						230	235			.001
100										
100										
					240					
					DIP 25°					
100										
					← 244 - 248					
					SANDSTONE - SILTSTONE INTERCALLATED; AVE THICKNESS 1"-2"; DIPS 20°-25°					
100										
					250					

43' ore

PROJECT _____ PAGE 6

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type
100				
100				
100				
100				
100				
100				
110				
100				
100				
100				

250

260

DIP 20°-25°

270

280

DIP 25°-30°

290

CONTACT : GOUGY ; ABDT LIM STAIN ; 30° DIP ; APPEARS TO BE FAULT RATHER THAN AN UNCONFORMITY OR DEPOSITIONAL CONTACT

297 - 330
LT GRAY TO LT. BROWNISH GRAY (NEAR CONTACT)

300

CORE ASSAYS					
INTERVAL		MINERAL oz/T			
FROM	TO	Cu	Mo	Au	Ag
280	285			.001	.05
295	297			.001	.01
297	300			.001	Tr

PROJECT _____ PAGE 7

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type		CORE ASSAYS					
						INTERVAL		MINERAL Oz/t			
						FROM	TO	Cu	Mo	Au	Ag
100					300 FINE GRAIN TUFFACEOUS QTZ RHYLITE; QTZ GRAINS < 1% OCCURRING AS PHENOCRYSTS; VERY FINE MICROSCOPIC BLACK MINERAL DISSEMINATED (< 0.5% BY VOL)						
100											
100					310						
100											
100					320						
100					— 322 GRADUAL START OF "TIGER" ROCK: LT PINKISH RHYLITE TUFF MATRIX W/ MOTTLED DARK GRAY (W/ HAZY BOUNDARY) PORTIONS GIVING A "TIGER" COLOR SCHEME (END AT 330)	320	325			.001	.05
100											
100					330						
100			steep fit		330 - 491 (T.D.) GRAY FELDSPAR QUARTZ RHYOLITE PORPHYRY; TUFFACEOUS, MED GRAINED; EXHIBITS LOW (15°-25°) FLOW LAYER ATTITUDE; PRO-						
120					MINENT CHARACTER IS ABUND- ANT FELDSPAR PHENOCRYSTS (20% TO 30% BY VOL) WITH QTZ PHENOS ± 10%; ALL FELDSPARS CLOUDY (ALSO FRAG- MENTED OCCAS); ABUNDANT MICROSCOPIC BLACK MINERAL (Hb?, MAGNETITE/HEMATITE?) OCCAS OXIDIZED TO LIMONITE	335	340			.001	.06
100					340						
100											
					350						

PROJECT _____ PAGE 8

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineraliz'n	Alteration	Structure	Rock Type	Depth
100					350
100					
100				c	360
100					
100					
100				c	370
120					
100				c	380
100					
120					
100					390
100				c	
				c	400

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	MINERAL Mo	MINERAL Au oz/T	MINERAL Ag oz/T
370	375			.002	.06
385	390			.001	.02
390	395			.001	.04

PROJECT ______ PAGE 9

D.D.H. No. PP-4 SCALE ______ BY ______

LOCATION ______ COLLAR EL ______ DATE ______

% Core Recovery	Mineralzn	Alteration	Structure	Rock Type	Depth
100					400
100					
100					
100					410
100			STEEP FLTS.		
130					
100					420
100					
100					430
100					
100					440
100					
100					
100					450

CORE ASSAYS

INTERVAL		MINERAL oz/T			
FROM	TO	Cu	Mo	Au	Ag
405	410			.001	.04
420	425			.002	.08

D.D.H. No. PP-4 SCALE _____ BY _____

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralization	Alteration	Structure	Rock Type
110				
100				
100				
100				
100				
100				
110				
100				
100				

450

460

FLOW LAYER 15°-20°

470

480

FLOW LAYER 25°

490

T.D. 491'

500

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

Appendix J

SCANNED NJN 2010

PROJECT STEPHENS - PEARCE PAGE
D.D.H. No. SL-1E SCALE 1"=50' BY A.A.ONA
LOCATION COLLAR EL DATE

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0-80 LT YELLOWISH BROWN SEDIMENTS (Kb?) CONSISTS OF: SANDSTONE, SHALY SILTSTONE; ABUNDANT CALCITE VNLTS IN SANDSTONE

50

80-110 DARK GRAY MONOMINERALIC DIKE? CRYSTALS OF AMPHIBOLE?

100

110' T.D.

150

PROJECT STEPHENS-PEARCE PAGE 1

D.D.H. No. SL-1W SCALE 1"=50' BY A.A.DNA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0 — 0-30 LT. BROWN & GRAY FRAGMENTS (QAL) FRAGS ARE MAINLY RHYOLITE, HORNBLENDE AND PORPH, BASALT & QTZ VN MAT

30-100 LT BROWN SOIL + QAL

50 — FRAGS MAINLY RHYOLITE & QTZ VN. MAT, OCCAS LIMESTONE

100 — 100-140 LT GRAY AGGLOM TUFF; FERROMAGS ALTERED TO LIM; ARGILLIC ALTERED

150 — 140' T.D.

PROJECT STEPHENS - PEARCE PAGE 1

RDH
D.D.H. No. SL-2 SCALE 1"=100' BY A.A.ONA

LOCATION _____ COLLAR EL' _____ DATE 6/12/81

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

CORE ASSAYS

INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0 — 0-20 LT REDDISH BROWN MIXTURE OF SANDSTONE & RHYOLITE (QAL?)

20-70 BROWNISH GRAY HORNBLENDE ANDESITE PORPH. MOD ARG ALTN

100 — 70-120 LT GRAYISH BROWN, AGGLOM TUFF; ANGULAR Qtz, FELDS, RHYOLITE FRAGMENTS; INT ARG. ALTN

200

120' T.D.

PROJECT STEPHENS - PEARCE PAGE 1

D.D.H. No. SL-2A SCALE 1"=50' BY A.A. ONA

LOCATION Pearce COLLAR EL _____ DATE _____

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type

0 0-20 LT. BROWN QAL; FRAGS ARE RHYOLITE, QUARTZITE & QTZ VN MATERIAL; EPIDOTE IN ONE FRAGMENT

20-80 DARK GRAY TO BROWNISH GRAY HORNBLENDE AND. PORPHYRY

50

80-100 GRAY TUFF PROB. EQUIVALENT TO AGGLOM. TUFF OUTCROPPING AT SIX-MILE HILL

100

100' TD

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ RDH No. SL-3 SCALE 1"=100' BY A.A. ONA

LOCATION _____ COLLAR EL _____ DATE 6/12/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type		CORE ASSAYS					
						INTERVAL		MINERAL			
						FROM	TO	Cu	Mo		
					0	0-60	LT. BROWNISH RED SOIL; WEATHERED? (OR INT. ARG. ALT'D) RHYOLITE					
					100	60-90.	LT GRAY FELDSPAR QTZ RHYOLITE PORPH WITH DISTINCT FLOW TEXTURE; WK TO MOD ARG. ALTN.					
					200	90-110	LT. BROWN TO WHITE TUFF ARGILLACEOUS (INT. ARG ALT'D?) OCCAS BLACK/GRAY (MN?/HEM?) MIN.					
						110-160	LT. REDDISH BROWN SANDY TUFF? INT ARG ALTN (AGGLOM TUFF?)					
					300	160-210	LT. BROWNISH GRAY SANDY TUFF? INT. ARG. ALTN. (TUFFACEOUS SANDSTONE; 30° DIP)					
						SPOT CORE 208-210						
						210' T.D.						

PROJECT STEPHENS - PEARCE PAGE 1

RDH ~~D.D.H~~. No. SL-4 SCALE 1"=100' BY A.A. ONA

LOCATION _____ COLLAR EL' _____ DATE 6/12/81

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

CORE ASSAYS

INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0-60 LT. BROWN TO VERY LT GRAY MIXTURE OF SANDSTONE & RHYOLITE FRAGS. QAL?

100

60-190 LT BROWN TO YELLOWISH BROWN TUFFACEOUS SAND STONE

200

190' T.D.

300

400

PROJECT STEPHENS - PEARCE PAGE 1

D.D.H. No. SL-5 SCALE 1"=50' BY A.A.ONA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0-230 LT BROWN TO LT BROWNISH GRAY CONGLOMERATE. (Tert. Gila) (Gravel)

MIXTURE OF:

Tertiary volcs (Rhyolites)

Qtz vn mat., sandstone,

Agglomeratic tuff

50

100

150

200

230' T.D.

250

PROJECT STEPHENS-PEARCE PAGE 1

D.D.H. No. SL-C SCALE 1"=50' BY A.A. ONA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type	CORE ASSAYS INTERVAL FROM	TO	MINERAL Cu	Mo		

0

0-90 LT. BROWN
SOIL & ROCK FRAGMENTS (CGL)
RHYOLITE
SANDSTONE
QUARTZ/CALCITE VNS

50

100

120-140 ALL CLAY

150

140-210
FINE FRAGMENTS MAINLY QTZ
LARGER - RHYOLITE + BIO/CHLORITE

200

210' T.D.

PROJECT STEPHENS PEARCE PAGE 1

~~D.D.H.~~ ROT No. SL-10 SCALE 1" = 50' BY A.A. ONA

LOCATION _____ COLLAR EL _____ DATE 8/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0 – 130

Gravel, (valley fill); different volc, seds, & igneous lithologies; brownish color (water table possibly at 130'?)

100

130 – 290

Gravel, lithologies predominantly volcanics, less seds, rare igneous; light gray-brown

200

300

TD = 290'

% Core Recovery	Mineraltn	Alteration	Structure	Rock Type

PROJECT STEPHENS PEARCE PROJ PAGE 1
D.D.H. No. SL-11 SCALE 1" = 100 BY
LOCATION COLLAR EL DATE

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0 0-60 LT. BROWN TO LT. GRAY GRAVEL; FRAGS ARE QTZ RHY. PORP, FELDS QTZ RHY. PORP, SANDSTONE, SOIL & RARE GRANITE

60-100 LT. BROWN SOIL & GRAVEL; FRAGS ARE LIMESTONE, SANDSTONE, GRANITIC RXS, RHY.

100 100-190 LT PINKISH BROWN GRAVEL W/ GRANITIC FRAGS (ALASKITE) & AND. PORPH IN UPPER SECTIONS INCREASE IN S.S. FRAGMENTS TOWARD BOTTOM; ALSO INCREASE OF EPIDOTE BEARING FRAGS TOWARDS BOTTOM

200 190-250 PURPLISH BROWN FELDSPAR QTZ. RHY PORPH W/ OCCAS CALCITE VNLTS; FELDS PHENOS FRESH (START OF BEDROCK ± 180')

300

250-380 REDDISH BROWN FELDSPAR PORPHYRY W/ ABUNDT LIMONITE; MOD ARGILLIC ALT.; OCCAS HEM/MN OXIDES; OCCAS AGGLOM TUFF FRAGS PRESENT

400

380-400 VERY LT BROWN TUFF W/ CRYSTAL FRAGS OF QTZ, BT, HB, & FELDS.

400-430 T.D. LT. GRAY RHYOLITE SAME AS CRACKED ZONE AT BRP IN 6-MILE HILL; SPHERULITIC SILICA W/ CLAY IN VUGS

PROJECT _____ PAGE _____

Rot. ~~D.D.H.~~ No. SL-13 SCALE 1" = 50' BY A.A ONA

LOCATION _____ COLLAR EL _____ DATE 8/81

% Core Recovery	Mineralization	Alteration	Structure	Rock Type	Depth	Description	CORE ASSAYS INTERVAL FROM	TO	MINERAL Cu	Mo		
					0	0-110 BROWN GRAVEL, MAINLY RHYOLITIC COMPOSITION						
					100							
						110-210 GRAY RHYOLITIC TUFF; NOTE FINE GRAIN TEXT, APPEARS AS F.G. EQUIVALENT OF HORNBLENDE ANDESITE PORPHYRY						
					200							
						210-290 LT. BROWNISH GRAY RHYOLITIC TUFF						
					300	TD 290						

PROJECT STEPHENS-PENNCE PAGE 1

B.D.H. No. SL-14 (ROT) SCALE 1"=50' BY A.A. DNA

LOCATION _____ COLLAR EL _____ DATE 8/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type	CORE ASSAYS INTERVAL FROM	TO	MINERAL Cu	Mo

0

0-130

Gravel, orange-red color, with mod. limonite; almost all volcanic lithology.

100

130-330

Fine grained Hornblende Andesite porphyry (HAP); gray color

200

HAP

(NOTE ASSAYS)

200'-250' 0.015 Au oz/T; 0.01 Ag oz/T

250'-300' 0.010 " Trace Ag

300'-350' 0.010 " "

300

330-350 HAP, purple, argillic altered, fine grained

TD = 350'

400

PROJECT STEPHENS - PEARCE PAGE 1

D.D.H. No. SL-22 SCALE 1"=50 BY A.A.ONA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0-80 GRAVEL

FRAGS OF QTZ, QTZTE, GRANITE, & RHYOLITE

50

80 - 190

FRAGS OF MAINLY SANDSTONE & QUARTZITE; OCCAS CHERT & RHYOLITE

100

150

200

190' T.D.

PROJECT STEPHENS PEARCE PAGE 1

~~D.D.H.~~ RDH No. SL 24 SCALE 1" = 100' BY A.A. ONA

LOCATION _____ COLLAR EL' _____ DATE 6/13/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0

0 - 470 LT. BROWN TO GREENISH GRAY TO WHITE MIXTURE OF DIFFERENT LITHOLOGIES

100 (QTug) "Valley fill", Gila Cgl; Frags are rhyolite, andesite, Qtz vn mat; sandstone; calcite;

200 A few number of fragments contains steel gray to black submetallic (Hm?; Hem?) min; a larger number has chlorite & biotite.

300

400

470' T.D.

PROJECT _____ PAGE 1

D.D.H. No. SL-28 SCALE 1"= 50 BY A.A. ONA

LOCATION PEARCE, AZ COLLAR EL _____ DATE _____

% Core Recovery	Mineraliz	Alteratio	Structure	Rock Typ

CORE ASSAYS

INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0 — 0-60 VERY LIGHT BROWN ALLUV.

MIXTURE OF: (1) SOIL 80%.

(2) VOLCANIC ROCK FRAGS (RHYOLITE), 10% w/ OCCAS MANGANESE; RARE HEM.

(3) SEDIMENTS (SANDSTONE) ± 5%

(4) QTZ/CALCITE VN MAT

60-80 WHITE TO VERY LT GRAY MARLY SILTSTONE. W/ DARK GRAY (MN?) COATINGS; VERY RARE GRANITIC FRAGMENTS. (CALICHE?)

80-240 VERY LT BROWN TO LT. YELLOW ISH BROWN

100 — MAINLY CALICHE & SOIL (90%) w/ OCCAS QTZ/CALCITE MATERIAL, AND RARE SANDSTONE & RHYOLITE

200

240-400 LT GRAY TO REDDISH BROWN GRAVEL WITH FF:

1. Rhyolite & Rhyolite porphyry 70%
2. Sediments (mainly sandstone) 15%
3. Qtz/calcite vn material 10%

300

(DEFINETELY NOT BEDROCK)

400

400 T.D.

PROJECT _____ PAGE _____

D.D.H. No. SL-29 SCALE 1"=100' BY A.A.ONA

LOCATION PEARCE, AZ COLLAR EL _____ DATE _____

% Core Recovery	Mineraliz'n	Alteration	Structure	Rock Type

CORE ASSAYS

INTERVAL		MINERAL			
FROM	TO	Cu	Mo		

0 — 0 - 400 GRAVEL

0 - 90 CGL + SOIL

RHYOLITE, SANDSTONE, & QUARTZ VN MATERIAL

100

90 - 400 CGL -

RHYOLITE — 40%

Hb. And — 20%

Qtz VN — 10%

+ SCHIST, SILTSTONE, SANDSTONE AND GRANITIC FRAGMENTS.

200

ONLY NOTICEABLE ALTERATION:

Hb / BIOTITE → Fe Ox

RARE Mn.

300

400

400' T.D.

PROJECT STEPTENS-FERRIS PAGE 1

D.D.H. No. SL-30 SCALE 1"=50' BY A.A.ONA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type		CORE ASSAYS					
						INTERVAL		MINERAL			
						FROM	TO	Cu	Mo		
					0	0-110 GRAVEL (CGL = VALLEY FILL)					
						FRAGMENTS					
						QUARTZITE W/ QTZ VNLT; OCCAS EPID.					
						SANDSTONE W/ EPIDOTE					
					50	GRANITE W/ CHL-EPID (PROP)					
						BASALT					
					100						
						110' T.D					

D.D.H. No. V-6 SCALE 1"=50 BY A.M.ONA

LOCATION _____ COLLAR EL _____ DATE _____

% Core Recovery	Mineraliz	Alteratio	Structure	Rock Typ		CORE ASSAYS					
						INTERVAL		MINERAL			
						FROM	TO	Cu	Mo		
					0	0-30					

0-30 LT BROWNISH SOIL + LIMONITE COATED FRAGS OF SANDSTONE, ANDESITE AND QTZ VN. MATERIAL

30-200 LT BROWN CONGLOMERATE - VALLEY FILL PROBABLY TERTIARY GILA FRAGMENTS;

1. RHYOLITE - 20-30%
2. QTZ VN MAT - 20%
3. CALCITE VN. MAT - 10%
4. SANDSTONE - 10%
5. SERPENTINE - <5%
6. EPIDOTE - <5%
7. GRANITE RARE

50

100

150

200

200' T.D.

PROPERTY Pearce – State Lease Assay

SHEET NO. 1

MINERALIZATI

COMPLETE LOG OF ASSAYS ON STATE LEASES

Depth		Sample		% oz/T		Feet	%		Feet
From	To	No.	Length	Au ~~Assay~~	Ag ~~Est.~~	%	Assay	Est.	%
SL-24	0-50'	09101		.002	2.72				
"	50-100'	02		.001	0.04				
"	100-150'	03		.001	0.02				
"	150-200'	04		.001	0.09				
"	200-250'	05		.001	0.07				
"	250'-300'	06		.001	0.07				
"	300-350'	07		.001	0.04				
"	350-400'	08		.001	0.05				
"	400-470'	09		.001	0.06				
SL-3	0-50'	10		.001	0.02				
"	50-100'	11		.002	0.05				
"	100-150'	12		.050	0.02				
"	150-210'	13		.001	.06				
SL-2	0-50'	14		.010	.05				
"	50-100'	15		.001	.01				
"	100-120	16		.010	.06				
SL-4	0-50	17		.001	.05				
"	50-100	18		.001	.05				
"	100-150	19		.001	.04				
"	150-190	20		.001	.06				
SL-5	0-50	21		.001	.07				
"	50-100	22		.001	.06				
"	100-150	23		.002	.39				
"	150-200	24		.001	.04				
"	200-230'	25		.001	.08				
SL-1W	0-50	26		.001	.09				
"	50-100	27		.001	TR				
"	100-130	28		.001	.04				
SL-6	0-50	29		.001	0.05				
"	50-100	30		.001	.07				
"	100-150	31		.003	.41				
"	150-210	32		.001	.10				

PROPERTY · Deane State Lease

SHEET NO. 2

MINERALIZATI

Depth		Sample		% oz/T		Feet	%		Feet
From	To	No.	Length	Au Assay	Ag Est.	%	Assay	Est.	%
SL-1E	0-50	09133		.001	.02				
"	50-110	34		.016	2.19				
SL-22	0-50	35		.001	0.12				
"	50-100	36		.001	0.05				
"	100-150	37		.001	0.06				
"	150-190	38		.001	0.05				
SL-30	0-50	39		.001	0.03				
	50-110	40		.001	0.04				
SL-24	0-50	41		.001	T				
	50-100	42		.004	T				
SL-29	0-50	43		.001	0.05				
	50-100	44		.002	0.09				
	100-150	45		.001	0.03				
	150-200	46		.001	0.05				
	200-250	47		.002	0.06				
	250-300	48		.001	0.09				
	300-350	49		.002	0.08				
	350-400	50		.002	0.03				
SL-28									
	0-50	3455		.001	T				
	50-100	3456		.010	T				
	100-150	3457		.011	T				
	150-200	3458		.005	T				
	200-250	3459		.010	T				
	250-300	3460		.004	.06				
	300-350	3461		.006	.08				
	350-400	3462		.004	.04				

PROPERTY · PEARCE STATE LEASE

SHEET NO. 3

MINERALIZATI

V-6, SL-3, SL-5, SL-24

Depth From	Depth To	Sample No.	Sample Length	% Oz/T Au Assay	% Oz/T Ag Est.	Feet %	% Assay	% Est.	Feet %
V-6									
0'	50'	3451		.001	.04				
50'	100'	3452		.001	Tr				
100	150'	3453		.001	.02				
150	200	3454		.001	.02				
SL-3									
50	60	1561		.001	.05				
60	70	62		.001	.04				
70	80	63		.001	.06				
80	90	64		.001	.06				
90	100	65		.002	.07				
100	110	66		.001	.05				
110	120	67		.001	.03				
120	130	68		.001	.02				
130	140	69		.005	.03				
140	150	1570		.002	.05				
SL-5									
100	110	1571		.006	.04				
110	120	72		.001	.05				
120	130	73		.001	.12				
130	140	74		.002	.14				
140	150	1575		.001	.04				
SL 24									
0	10	1576	CUTTINGS FROM	.002	.05				
10	20	77		.001	.19				
30	30	78		.006	.15				
30	40	79		.004	.14				
45	50	1580		.001	.06				

ASSAY

2ND ASSAY

2ND ASSAY

PROPERTY REANCE - STATE LINE

SHEET NO. 4

MINERALIZAT

Depth From	Depth To	Sample No.	Sample Length	% AU Assay	% AG Est.	Feet %	% Assay	% Est.	Feet %
SL-15	0-50	3421		.001	.04				
"	50-100	22		.002	.05				
"	100-150	23		.002	.06				
"	150-200	24		.002	.08				
"	200-260	25		.001	.03				
"									
SL-13	0-50	3426		.001	.04				
"	50-100	27		.002	.06				
"	100-150	28		.001	.03				
"	150-200	29		.001	.05				
"	200-260	30		.001	.02				
"	250-290	31		.002	.02				
SL-10	0-50	3432		.002	.03				
"	50-100	33		.001	.05				
"	100-150	34		.002	.02				
"	150-200	35		.001	.07				
"	200-250	36		.003	.07				
"	250-290	37		.002	.06				
SL-24-1	0-40	3438		.001	.06				
"	40-75	39		.005	.17				
SL 24-2	0-40	3440		.002	.05				
	40-75	41		.003	.08				
SL 24-3	0-40	3442		.002	.05				
	40-75	43		.002	.06				

PROPERTY · PENNCE - STATE LEASE

SHEET NO. 5

MINERALIZAT

Depth		Sample		%		Feet	%		Feet
From	To	No.	Length	Au Assay	Ag Est.	%	Assay	Est.	%
SL-11	0-50	3405		.004	.03				
	50-100	06		.006	.04				
	100-150	07		.010	.05				
	150-200	08		.005	Tr				
	200-250	09		.003	Tr				
	250-300	10		.001	.04				
	300-350	11		.002	.09				
	350-400	12		.001	Tr				
	400-430	13		.002	.03				
SL-14	0-50	3414		.001	.02				
	50-100	15		.003	.05				
	100-150	16		.004	.03				
	150-200	17		.004	.04				
	200-250	18		.015	Tr				
	250-300	19		.010	Tr				
	300-350	20		.010	Tr				

PROPERTY SILVER - STATE LEASE

SHEET NO. 6 (CHECK ASSAYS)

ORIGINAL BAGS — COMPOSITES

MINERALIZATI

Depth From	Depth To	Sample No.	Sample Length	% oz/T Au Assay	% oz/T Ag Est.	Feet %	oz/T Au Assay	oz/T Ag Est.	Feet %
SL 1-E	50-60	3399		.001	0.06				
"	60-70	3400		.001	.05				
"	70-80	3401		.002	.08		0.016	2.19	
"	80-90	3402		.002	.08				
"	90-100	3403		.001	Tr				
"	110-110	3404		.001	.02				
							ORIGINAL ASSAYS		
SL-24	0-50	1601		.001	Tr		.002	2.72	
		1602		.001	Tr		.002	.05	
		1603		.001	Tr		.001	.19	
		1604		.001	Tr		.006	.15	
		1605		Tr	Tr		.004	.14	
		1606		.001	Tr		.001	.06	
SL-24		1607		.001	Tr		.05	.02	
SL 1E	50-100	1608		.001	.03		.016	2.19	
SL-24	0-50	09101		.005	.01				
	150-200	09104		.005	.01				
SL-3	100-150	09112		.005	.01				
	150-200	09113		.005	.01				
SL-2	0-50	09114		.005	.01				
	100-120	09116		.005	.01				
SL-4	50-100	09118		.005	.01				
SL-5	150-200 100-150	09124		.005	.01				
SL 1-W	100-130	09128		.005	.01				
SL-6	100-150	09131		.005	.01				
	150-210	09132		.005	.01				

PROPERTY PEARCE · STATE LEASE

SHEET NO. 7 (CHECK ASSAYS)

MINERALIZAT

Depth From	Depth To	Sample No.	Sample Length	% OZ/T AU Assay	% OZ/T AG Est.	Feet %	% Assay	% Est.	Feet %
SL 1-E	50-110	09133		.005	.01				
SL-22	0-50	09135		.005	.01				
	100-150	09137		.005	.01				
SL-30	0-50	09139		.005	.01				
	50-110	09140		.005	.01				
SL-2A	50-100	09142		.005	.01				
SL-29	50-100	09144		.005	.01				
	300-350	09149		.005	.01				
SL-28	50-100	3156		.005	.01				
	100-150	3157		.005	.01				
V-6	0-50	3451		.005	.01				
SL-15	150-200	3424		.005	.01				
SL-13	50-100	3427		.005	.01				
SL-10	150-200	3435		.005	.01				
	200-250	3436		.005	.01				
SL 24-1	0-40	3438		.005	.01				
SL 24-2	40-75	3441		.005	.01				
SL 24-3	40-75	3443		.005	.01				
SL-11	100-150	3407		.005	.01				
	300-350	3411		.005	.01				

PROPERTY · PEARCE · STATE LEASE

SHEET NO. 8 (CHECK ASSAYS)

MINERALIZAT

Depth		Sample		% OZ/T		Feet	%		Feet
From	To	No.	Length	AU Assay	AG Est.	%	Assay	Est.	%
SL-14	0-50	3414		.005	.01				
"	200-250	3418		.015	.01				
SL-24		09101		.005	.10				
		09104		.005	.10				
		1577		.005	.10				
		1578		.005	.10				
		1579		.005	.10				
SL-3		09112		.005	.10				
		1565		.005	.10				
SL-2		09114		.005	.10				
		09116		.005	.10				
SL-4		09119		.005	.10				
SL-5		09123		.005	.10				
		1573		.005	.10				
		1574		.005	.10				
SL-1W		09126		.005	.10				
SL-6		09131		.005	.10				
SL 1E		09134		.005	.10				
		3401		.005	.10				
SL-22		09135		.005	.10				
SL-30		09140		.005	.10				
SL 2A		09141		.005	.10				
SL-29		09144		.005	.10				
SL-29		09148		.005					

PROPERTY

SHEET NO. 9

MINERALIZAT

Depth		Sample		% Au TON	Ag	Feet	%		Feet
From	To	No.	Length	Assay	Est.	%	Assay	Est.	%
SL-11		3407		.005	.10				
		3411		.005	.10				
SL-15		3424		.005	.10				
SL-13		3427		.005	.10				
SL-10		3433		.005	.10				
		3436		.005	.10				
SL24-1		3439		.005	.10				
SL24-2		3441		.005	.10				
SL-24-3		3443		.005	.10				
V-6		3451		.005	.10				
SL-28		3456		.005	.10				
		3457		.005	.10				

Appendix K

SCANNED 2010 NJN

PROJECT STEPHENS - PEARCE PAGE 1

D.D.H. No. GH-1 SCALE 1" = 50' BY A.A. ONA

LOCATION SEC 4 T18S R25E COLLAR EL ____ DATE 11/81

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type
				o o o o o o o o o o

0 0-80 Gravel, Lt. grayish brown

Rhyolite - 40%

Qtz vn material - 30%

Silicified Rhy & seds - 20%

Sand & clay - 10%

80-150 Gravel Reddish brown abdt red clay (± 15%)

100

Volcs (Rhy) - 20%

Sil volcs + seds? - 50%

Oxidized (altered?) volcs - 10%

Qtz, epid, seds. - < 10%

150-275 Gravel

Lt brownish gray

Rhy - 50%

200

Bas? - < 10%

Silicified Rxs - ± 30%

Note: 170-275 occas frags of Rhyolite & sil. rocks w/ rare black metallic disseminations (hematite)

TD = 275

300

LOCATION: SEC 4 T18S R25E

2100'E - 500S of NW COR SEC 4

CORE ASSAYS					
INTERVAL		MINERAL		Oz	
FROM	TO	Cu	Mo	Au	Ag
				.005	
				.005	.04
				.005	.01

PROJECT STEPHENS- PEARCE PAGE 1

ROT
D.D.H. No. GH-2 SCALE 1"=50' BY AAO

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

0 0-190 Gravels; brown w/ abdt clay.

Rhyolite/dacite – 50%

with occas epid/chlor & Mn

Sil. Rocks – 50%

with occas Mn

100

190-275

200 Gravel; Lt. gray pebble-size

Rhy – 50%

Sil. Rocks + Qtz vn – 30%

sandstone/shale – 5%

Tuff – ±10% (occas sil f.g. crystal tuff)

occas Hewafite on fractures.

TD = 275'

300 LOCATION: SEC 4, T18S, R25E

3100'E - 500'S OF NW

COR SEC 4

CORE ASSAYS					
INTERVAL		MINERAL OZ			
FROM	TO	Cu	Mo	Au	Ag
			~~.00~~	.005	.01
70	80			.005	.14
				.005	.01
200	250			.005	.06
					.01
270	275			.005	.06

PROJECT PEARCE - STEPHENS PAGE 1

~~D.D.H. No.~~ ROT GH-3 SCALE 1" = 50' BY AAD

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

0

0-110 Gravel + clay (30 to 60%) ; Brown
mainly ss/qtzites? - 70%
Rhy tuff - 30%.

100

110-190 Gravel + clay ; Brown ;
ave pea-size gravel ;
fragments almost all silicified
rock fragments

200

190-275 Gravel Lt. brownish-gray
Sil. seds - 30%
Rhy - 20%
HAP - 30%
FORP - 10%
Others - rare granitic frags,
qtz/CO_3 vnlts, tuff

TD = 275'

300

LOCATION : SEC 4 T 18 S, R 25 E
3600' E, 500 S From NW
COR OF SEC 4.

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	Cu	Mo	MINERAL OZ Au	MINERAL OZ Ag
0	10			.005	.06
				.005	.01
70	80			.005	.12
80	90			.005	.18
				.005	.01
230	240			.005	.18
				.005	.01

PROJECT STEPHENS-PEARCE PAGE 1

~~D.D.H.~~ ROT No. GH-4 SCALE 1"=50' BY AAO

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL oz/t			
FROM	TO	Cu	Mo	Au	Ag
				L.005	L.01
10	20			L.005	.04
				L.005	L.01
210	211				

0 0-70 Clay 30% + Gravel 70%. Brown, pea size gravel, mostly sil seds & lesser Rhyolite

70-90 Red clay + pea size gravel; silicified seds (ss & siltst.) mostly

100 90-140 Brownish gray gravel; frags are
SS - 70%
Rhy/dac - 20%
HAP (argillic altd) - 5%
Note: at 110' f.g. Bxa (Tuff?) w/ clay in interstices

140-210 Gray Crystal Tuff (Rhyolitic Tuff)
Med. gn. shows occas text equiv. to crackle zone at 6-Mile Hill (spherulitic); mod amts of discrete black metallic minerals (hem.?); slight increase ss. frags at 200-210

200

210 - 211 SPOT CORE
very lt yellow sandstone w/ clay matrix, some parts w/ limonite; abdt hem on fract.

Geochem: (PPM)
Au - <.02
Ag - <.2
Hg - 0.07
As - 30
Sb - <1

LOCATION: SEC 4 T18S, R25E
2600'E, 1300S NW COR SEC 4

PROJECT STEPHENS-PEARCE PAGE 1

GH ~~D.D.H.~~ No. GH-5 SCALE 1"=50 BY A. A. ONA

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineraliz'n	Alteration	Structure	Rock Type

0-200

GRAVEL

NO CUTTINGS SEEN

100

200

LOCATION : SEC 4 T18S, R25E

3100'E & 1300'S from NW COR OF SEC 4

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL oz Cu	Mo	Au	Ag
					<.01
30	40				.08
				ALL <.005	<.01
120	130				.10
					<.01
140	150				.10
					<.01

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ ROT No. GH-6 SCALE 1"=50 BY A.A.D

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type

0 0-150

Brown clay (10%) + gravel (90%)

Frags

Sil. Rxs (Rhyolites ?) - 80%

sandstone - 10%

OCCAS - HAP

Note: occas hem in some frags i.e. 110'

100

200

LOCATION: SEC 4 T18S R25E

3600' E, 1300' S FROM NW COR OF SEC 4

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	MINERAL Mo	MINERAL Au oz	MINERAL Ag oz
				L.005	L.01
70	80				.04
					L.01
90	100				.04
					L.01
110	120				.06
					L.01
140	150			U	.08

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ ROT No. GH-7 SCALE 1"=50' BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	MINERAL Mo	MINERAL Au	MINERAL Ag
					< .01
50	60				.04
				< .005	< .01
80	90				.04
					< .01

0

0 - 150

Lt brown clay & gravel consisting of:

Qtz frags
Rhy
Calcite
HAP (fine grained)
Siltstone

100

Plus occas Mn dendrites
hematite
epid
} in some fragments

200

LOCATION : SEC 4 T 18S R 25E

4600' E, 1300 S from NW COR SEC 4

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ No. GH-8 SCALE 1"=50' BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL		OZ	
FROM	TO	Cu	Mo	Au	Ag
0	10			<.005	.14

0

0-90 very lt. brown gravel w/ some rare epid. frags; occas
- Qtz
- calcite
- sandstone
- Rhy
- rare f.g. HAP.

100

90-150 Lt brown clay & gravel; mainly Qtz vn mat, lesser Rhy; rare sandstone

200

LOCATION: SEC 4 T18S, R25E

4100'E, 1800S from NW

COR SEC 4.

PROJECT STEPHENS - PEARCE PAGE 1

D.D.H. No. ROT GH-9 SCALE 1" = 50' BY A. AO

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

0 0-20 BROWN CLAY + RHY, SANDSTONE, & QTZ FRAGS

20-50 LT BROWN GRAVEL, MAINLY FRPS & QTZ VN MAT

50-140 BROWN CLAY + ROCK FRAGS: MAINLY RHY OCCAS HAP, f.g.; most frags are argillic altered, occas limonitic, occas Hb → hem.

100

140-150 GRAVEL, MAINLY F R P + MOD CALCITE FRAGS

200

LOCATION: SEC 4 T18S R25E 5100'E, 1800'S from ~~NE~~ NW COR OF SEC 4

CORE ASSAYS					
INTERVAL		MINERAL			
FROM	TO	Cu	Mo		
				← .005 →	.017
20	30				.012
				← .005 →	.017
70	80				.014
				← .005 →	.017

PROJECT STEPHENS - PEARCE PAGE 1

ROT
D.D.H. No. GH-10 SCALE 1" = 50 BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type	CORE ASSAYS					
					INTERVAL		MINERAL Oz			
					FROM	TO	Cu	Mo	Au	Ag
									<.005	<.01

0

0-120 very lt. brown gravel to darker brown; clay + gravel zone at 80'-120'

Frags are
Feldspar Rhy
HAP
Calcite + Qtz abdt
Limonitic frags; rare epid, rare shale (limonitic)

100

120-200 Bed Rock; Lt grey Rhyolitic Tuff; slight argillic altn; rare limonite
Mod arg. altn 120'-140'.

200

LOCATION: SEC 4, T18S, R25E

1200'W, 500N from ~~SE~~ COR SEC 4

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ ROT No. GH-11 SCALE 1"=50' BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralztn	Alteration	Structure	Rock Type

0 0-120 Gravel section w/ Rhy, Qtz, calcite, occas siltstone & agglom Tf; note clay + gravel section from 50-120

100

120-180 Lt brownish gray crystall Tuff, feldspars slightly altd to clay; occas limonite

Bedrock

180-200 Lt gray feldspar Qtz rhyolite porph (Tf?)

200

SPOT CORE: 200-201 Brecciated FQRP w/ mod calcite vnlts, occas CO_3 cemented so/n bxa; occas vuggy; limonite mod as clots & along fractures

Geochem spot core: PPH

Au - <.02 Hg - .07

Ag - <.2 As - 30

Sb - <1

LOCATION SEC 4 T18S R25E

1280' W, 1300' N from ~~SEC~~ SE COR OF SEC 4

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	MINERAL Mo		
				<.005	<.01
40	50				.04
					<.01
60	70				.02
					<.01
120	130				.06
130	140				.08
					<.01

PROJECT STEPHENS-PEARCE PAGE
~~D.D.H.~~ ROT No. GH-12 SCALE 1"=50 BY A.A.O
LOCATION COLLAR EL DATE 11/81

% Core Recovery	Mineraliztn	Alteration	Structure	Rock Type

CORE ASSAYS					
INTERVAL		MINERAL Oz			
FROM	TO	Cu	Mo	Au	Ag
					<.01
10	20				.08
				<.005	<.01

0 0-40 Gravel very lt brown Qtz, CO_3 Rhy, rare green epid?, lim, s.s.

40-70 Gravel Lt purplish brown Rhy, Qtz, ss, CO_3

70-110 Gravel + clay Reddish brown Rhy, ss, Qtz, CO_3, HAP, lim.

100

110-170 Rhy Tuff? Lt gray, mod arg. altn abdt Hb dissem; int altn at 160-170 w/ lt green clay

170-200 Agglom Tuff? reddish brown; lim altered, sandy in some parts

200

200-201 SPOT CORE

Au - <.02 ppm
Ag - <.2 ppm
Hg - .07 ppm
As - 10 "
Sb - 2 "

SANDY TO PEBBLY TUFF (conglomeratic in part) shallow dip ±30° occas calcite vnlts at 40°. (ASH FLOW ??)

LOC: 1780'W, 1300N FROM ~~SE~~ COR.

PROJECT STEPHENS-PEARCE PAGE 1

ROT D.D.H. No. GH-13 SCALE 1"=50' BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type	CORE ASSAYS INTERVAL FROM	TO	MINERAL Cu	Mo		
				0	0	20				<.01
					20	40				.22
					40	60				<.01
					60	80			<.005	.04
				100						<.01
				200						

0 0-20 Brown Gravel & clay; mainly HAP

20-40 Bluish gray c.g. HAP; Hb → clay → lim; chlor present; calcite vnlts seen

40-60 Gray Sil Felds Rhy porph; m. gr; apparent silicification throughout; all Hb → ruggy pseudo morphs also lim rimmed

60-150 Lt gray/purplish FRP Abdt Hb "needles" (prisms; minute) abdt hem; felds crystal bdy serrated; mod to rare calcite vnlts; small amt of Limonite.

150-151 SPOT CORE FRP

Au - <.02 PPM Hg - .09 PPM

Ag - <.2 " As - 20 "

Sb - 1 "

Altered (int. argillized), abdt lim; microvnlts - calcite abdt forming stockworks; occas steep slickensided surfaces.

LOC. 4700' W 1650' N OF SE COR SEC 4 T18S, R25E

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ RDT No. GH-14 SCALE 1"=50' BY AAO

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

0 0-90 GRAVEL & CLAY LT Brown ; Fragments are:
HAP
Occas Rhy
Calcite
Qtz
rare epid & chlor

90-110 Red clay + Gravel: FRP + CO_3 + Qtz + HAP

100

110-150 Bed Rock
Hornblende And. Porph (HAP) slight arg, II
altn ; occas Hb → hem → clay

SPOT CORE 150-151
SLIGHTLY SILICIFIED HAP

Au - 2.02 PPM
200 Ag - 4.8 "
Hg - .08 "
As - 20 "
Sb - 5 "

LOC. 3450' W from SE COR OF
SEC 4 T18S, R 25E

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL Cu	MINERAL Mo	MINERAL Au	MINERAL As
60	70				.04
110	120				.22

Au < .005

PROJECT STEPHENS - PEARCE PAGE 1

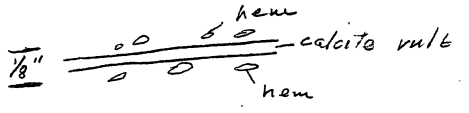
~~D.D.H.~~ ROT No. GH-15 SCALE 1"=50' BY A.A.O

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizm	Alteration	Structure	Rock Type

0 0-20 Rhyolite: lt yel brown, weathered, silicified; mod calcite vns; mod hem

20-80 sandstone: yel-gray; abdt lim; mod hem; clay common; occas calcite



80-130 shale: dark gray; sil; abdt calcite vnlts occas sandy frag

100

130-150 siltstone: gy-black, thin bedded w/ thin calcite vnlts; some sil. apparent; occas py seen

SPOT CORE: 150-151

Siltstone, probably calcareous; flat beds ± 5°, calcite vnlts near vertical

200

Au - <0.02 PPM
Ag - 0.6 "
Hg - .07 "
As - 10 "
Sb - <1 "

LOC: 1000's, 100W FROM THE NE COR OF SEC 2 T18S, R25E

CORE ASSAYS					
INTERVAL		MINERAL oz			
FROM	TO	Cu	Mo	Au	Ag
				<.005	<.01

PROJECT STEPHENS-PEARCE PAGE 1

~~D.D.H.~~ ROT No. GH-16 SCALE 1"=50' BY A.A.O.

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type

0 0-50 sandstone: gray to lt. gray; coarse, "dirty"; apparently partly recrystallized; abdt lim in matrix. Kb

(Kb = Cret. seds, Bisbee group)

50-60 Rhyolite flow? dike?

60-130 sandstone: gray to lt. gray; coarse, "dirty" & partly recrystallized; more clay & lim than 0'-50' above

100

130-170 sandstone: More recrystallized than above; clay in matrix; med. dk gray color; Dike? frags = calcite & Qtz vns in sandstone frags; abdt py at 160-170' (also abdt Qtz vnlts)

170-230 shale: thinly laminated, calcareous w/ mod. calcite vnlts

200

SPOT CORE 230-231

AS DESCRIBED ABOVE

Au - <.02 PPM
Ag - <.2 "
Hg - .06 "
As - 20 "
Sb - <1 "

LOC: 2000' S, 100 W from NE Cor of SEC 2, T18S, R25E

CORE ASSAYS

INTERVAL FROM	INTERVAL TO	MINERAL oz Cu	Mo	Au	Ag
20	30				.06
160	170				.02
210	220				.14
220	230				.02

Au <.005

PROJECT STEPHENS - PEARCE PAGE 1

~~D.D.H.~~ RDT No. GH-17 SCALE 1"=50' BY A.A.D

LOCATION _____ COLLAR EL _____ DATE 11/81

% Core Recovery	Mineralizn	Alteration	Structure	Rock Type		CORE ASSAYS INTERVAL FROM	TO	MINERAL Cu	Mo	Au	Ag oz
				Kb	0						
					0-80 sandstone: very lt. gray; coarse & dirty matrix w/ occas siltstone & rhyolite fragments; occas Qtz vnlts; common lim & clay in matrix						
				Kb	100						
					80-140 sandstone: yellowish-gray; high silicification (recrystallization?); abdt Qtz vnlts (stockworks?)					<.005	<.01
						130	140				.14
			Kb?		140-150 siltstone; black, calcareous; shows recrystallization; occas pyrite						<.01
					SPOT CORE: 150-151						
					pebble breccia (soln Bxa?) w/ carbonate cement; possibly this zone represent brecciated/fault zone in calcareous siltstone.						
					200						
					Au - <.02 PPM As - <10 PPM Ag - <.2 " Sb - <1 " Hg - .05 "						
					LOC: 3000'S, 100'W from NE COR of SEC 2, T18S, R25E						

ASSAYS - GH DRILL HOLES

Drill Hole No. GH - 1 Property PEARCE PROJECT

Type Hole ROTARY - CP Location SEC 4, T18S R 25E

Size Hole 5 1/4" Co-ord 2100' E - 500' S of SEC COR 32/33 5/4

Date Started 11-10-81 Date Completed 11-11-81

Depth	Sample No.	Cu	Mo	Au (OZ/T)	Ag (OZ/T)		Description
0-10	6001			.005	.01		0-80 LT GRAY TO BROWN
10-20	2						GRAVEL
20-30	3						VOL 40%
30-40	4						QTZ VN MATERIAL 30%
40-50	5						SILICIFIED RXS (RHY + SEDS) 20%
50-60	6						SOIL + (SANDY) 10%
60-70	7						
70-80	8						
80-90	9						80-150 - GRAVEL - REDDISH
90-100	10						BROWN
100-110	6011						SOIL (RED CLAY) 15%
110-120	12						VOL 20%
120-130	13						SILICIFIED 60%
130-140	14						QTZ, EPID, SEDS - 10%
140-150	15						150-275 - GRAVEL - LT BROWN TO GRAY
150-160	16						(LOST AIR - WENT TO WATER
160-170	17						
170-180	18	NO	SAMPLE				VOL (RHY) 50%
180-190	19						BXS 5-10%
190-200	20						SILICIFIED RXS 40%
200-210	6021						
210-220	22	NO	SAMPLE				
220-230	23						NOTE! 170-275 OCCS
230-240	24						FRAGS OF RHY + SIL
240-250	25						ROCKS W/ RARE BLACK
250-260	26				.04		METALLIC
260-270	27				.01		
270-275	6028						

Drill Hole No. GH-2 | Property PEARCE PROJECT

Type Hole ROTARY (CP) | Location SEC 4, T18S, R25E

Size Hole 5 1/4" | Co-ord 3100' E, 500' S - SEC COR 32/33 5/4

Date Started 11-11-81 | Date Completed 11-12-81

Depth	Sample No.	Cu	Mo	Au	Ag	Description
0-10	6029			.005	.01	0-190 BROWN HEMATITIC
10-20	30					GRAVELS - ABDT CLAY
20-30	31					RHYO/DACITE 50%
30-40	32					OCCAS EPID/
40-50	33					SIL RXS 50% OCCAS MN
50-60	34					1
60-70	35				↓	
70-80	36				.14	
80-90	37					
90-100	38					
100-110	39					
110-120	6040					
120-130	41					
130-140	42					
140-150	43					
150-160	44					
160-170	45					LOST AIR - WENT TO WATER
170-180	46					
180-190	47					
190-200	48					
200-210	49					190-275 - LT GRAY GRAVEL
210-220	6050					PEBBLE SIZE CUTTINGS
220-230	51					RHY 40%
230-240	52				↓	SAND / SIL SHALE? 5%
240-250	53				.06	SILICIFIED RX (QTZ VNS) 40%
250-260	54				.01	TUFF ± 10% SIL F.G.
260-270	55				"	CRYSTAL → SILICIFIED
270-275	6056			↓	.06	NOTE: OCCAS HEMATITE
						IN FRACTURES (ON FRAGS)

Drill Hole No. GH-3 | Property PEARCE PROJECT

Type Hole ROTARY (CP) | Location SEC 4, T18S, R25E

Size Hole 5 1/4" | Co-ord 3600'E, 500'S - SEC COR 32/33 / 4/5

Date Started 11-12-81 | Date Completed 11-13-81

Depth	Sample No.	Cu	Mo	Au	Ag	Description
0-10	6057			.005	.06	0-110 - BROWN CLAY +
10-20	58				.01	GRAVEL ZONE - 30% TO 70%
20-30	59				↓	SIL SEDS (MAINLY SS/QTZITE)
30-40	6060					70%
40-50	61					CRYSTAL TUFF 30%
50-60	62					
60-70	63					
70-80	64				.12	
80-90	65				.18	
90-100	66				.01	
100-110	67				↓	
110-120	68					110-190 BROWN CLAY +
120-130	69					PEBBLE ZONE 50-70-50%)
130-140	6070					(LOST AIR - WENT TO WATER)
140-150	71					
150-160	72					FRAG ARE MOSTLY SILICIFIED
160-170	73					ROCK FRAGS + OCCAS
170-180	74					QTZITE/SS
180-190	75					
190-200	76					190-275 - LT BROWNISH
200-210	77					GRAY GRAVEL; AVE SIZE OF
210-220	78					FRAGS ARE 1/4"
220-230	79				↓	SIL SEDS 30%
230-240	6080				.18	RHY 20%
240-250	81				.01	HAP 30%
250-260	82				↓	QTZ FRP 10%
260-270	83					OTHERS - 10% (GRANITIC
270-275	6084			↓	↓	FRAGS - QTZ/CO3 VNLTS, TUFF

Drill Hole No. GH-4 | Property PEARCE PROJECT

Type Hole ROTARY (CP) | Location SEC 4, T18S, R25E

Size Hole 5 1/4" | Co-ord 2600 E, 1300 S, SEC COR 32/33 5/4

Date Started 11-13-81 | Date Completed 11-13-81

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6085			.005	.01		0-70 CLAY + GRAVEL 30-70%
10-20	86				.04		SIL PCS (MOSTLY SEDS) 90%
20-30	87				.01		
30-40	88						
40-50	89						
50-60	6090						
60-70	91						
70-80	92						
80-90	93						
90-100	94					LOST AIR WENT TO WATER	80-90 RED CLAY + GRAVEL FOR SIZE 10-90% GRAVEL IS 90% SIL SS & LIST
100-110	95						90-140 BROWN-GRAY GRAVEL)
110-120	96						/ SS 70%, HAP 50%
120-130	97						
130-140	98						RHY/DAC 20% ARGILLIZED HB → LIM
140-150	99						OCCAS GRANITIC FRAG + CO_3
150-160	6100						140-210 CRYSTAL TUFF
160-170	01						(RHYOLITIC) SLIGHTLY OCCAS TEXTU
170-180	02						EQUIVILANT TO CRACKLE ZONE
180-190	03						IN 6-MILE HILL - MOD AMTS OF
190-200	04						DISCRETE GRAINS OF BLACK
200-201	6105						METALLIC MINERALS

Drill Hole No. GH-5 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 3100'E, 1300'S, SEC COR $\frac{32}{5}\frac{33}{4}$

Date Started 11-16-81 Date Completed 11-16-81

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6106			<.005	<.01		
10-20	07						
20-30	08						
30-40	09				.08		
40-50	6110			<.005	<.01		
50-60	11						
60-70	12						
70-80	13						
80-90	14						
90-100	15						
100-110	16						LOST AIR - WENT TO WATER
110-120	17				<.01		
120-130	18				.10		
130-140	19				<.01		
140-150	6120				.10		
150-160	21				<.01		
160-170	22						
170-180	23						
180-190	24						
190-200	6135			<.005	<.01		

Drill Hole No. GH-6 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T16S, R25E

Size Hole 5 1/4" Co-ord 3600'E, 1300'S of SEC COR 32/33 5/4

Date Started 11-16-81 Date Completed 11-16-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6126			<.005	<.01		0-150 - BROWN CLAY &
10-20	27						GRAVEL (10%-90%)
20-30	28						GRAVEL FRAGS MOSTLY SIL RYS 80%
30-40	29						SS - 10%
40-50	6130						HAM OCCOS
50-60	31						
60-70	32						(LOST AIR - WENT TO WATER)
70-80	33				<.01	60-70	
80-90	34				.04	70-80	
90-100	35				<.01		
100-110	36				.04		NOTE: OCCAS HEMATITE IN
110-120	37				<.01		SOME FRAGS (110'); ALSO SOME
120-130	38				.06		RARE AMTS OF BLACK MET MNRL
130-140	39				<.01		
140-150	6140			<.005	<.01		
					.08		

Drill Hole No. 81+-7 Property PEARCE PROJECT

Type Hole ROTARY (CCP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 4600'E, 1300'S, SEC COR $\frac{32\ 33}{5\ 4}$

Date Started 11-16-81 Date Completed 11-16-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6141			<.005	<.01		
10-20	42						
20-30	43						
30-40	44						
40-50	45				<.01		
50-60	46				.04		
60-70	47				<.01		
70-80	48				<.01		
80-90	49				.04		
90-100	6150				<.01		
100-110	51						
110-120	52						
120-130	53						
130-140	54						
140-150	6155			<.005	<.01		

Drill Hole No. GH-8 | Property PEARCE PROJECT

Type Hole ROTARY (CP) | Location SEC 4, T18S, R25E

Size Hole 5 1/4" | Co-ord 4100'E, 1800'S, SEC COR 32/33/5/4

Date Started 11-16-81 | Date Completed 11-17-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6156			L.005	.14		
10-20	57				L.01		
20-30	58						
30-40	59						
40-50	6160						
50-60	61						
60-70	62						LOST AIR - WENT TO WATER
70-80	63						
80-90	64						
90-100	65						
100-110	66						
110-120	67						
120-130	68						
130-140	69						
140-150	6170			L.005	L.01		

Drill Hole No. GH-9 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 5100'E, 1800'S, SEC COR 32/33 5/4

Date Started 11-17-81 Date Completed 11-17-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6171			<.005	<.01		
10-20	72				<.01		
20-30	73				.02		
30-40	74				<.01		
40-50	75				<.01		
50-60	76				<.01		
60-70	77				<.01		
70-80	78				.04		
80-90	79				<.01		
90-100	6180						
100-110	81						
110-120	82						
120-130	83						
130-140	84						
140-150	6185			<.005	<.01		

Drill Hole No. GH-10 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 1200'W, 500N, SEC COR 4/3 9/10

Date Started 11-17-81 Date Completed 11-18-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6186			L.005	L.01		
10-20	87						
20-30	88						
30-40	89						
40-50	6190						
50-60	91						
60-70	92						
70-80	93						
80-90	94						
90-100	95						
100-110	96						
110-120	97						LOST AIR - WENT TO WATER
120-130	98						
130-140	99						
140-150	6206						
150-160	01						
160-170	02						
170-180	03						
180-190	04						
190-200	05						
200-201	6206			L.005	L.01		

Drill Hole No. GH - 11 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 1280' W, 1300' N, SEC COR 4/3 9/10

Date Started 11-18-81 Date Completed 11-19-81

Depth	Sample No.	Cu	Mo	Au oz/T	Ag oz/T		Description
0-10	6207			<.005	<.01		
10-20	08						
20-30	09						
30-40	6210				<.01		
40-50	11				.04		
50-60	12				<.01		
60-70	13				.02		
70-80	14				<.01		
80-90	15						
90-100	16						LOST AIR - WENT TO WATER
100-110	17						
110-120	18				<.01		
120-130	19				.06		
130-140	20				.08		
140-150	21				<.01		
150-160	22						
160-170	23						
170-180	24						
180-190	25						
190-200	6226			<.005	<.01		

Drill Hole No. 84-12 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 1780'W, 1300'N, SEC COR 4|3 9|10

Date Started 11-19-81 Date Completed 11-19-81

02/T

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6227			<.005	<.01		
10 20	28				.09		
20-30	29				<.01		
30-40	6230						
40-50	31						
50-60	32						LOST AIR - WENT TO WATER
60-70	33						
70-80	34						
80-90	35						
90-100	36						
00-	37						WENT BACK TO AIR
10-120	38						
20-130	39						
30-140	6240						
40-150	41						
50-160	42						
60-170	43						
70-180	44						
80-190	45						
90-200	6246			<.005	<.01		

Drill Hole No. GH-13 Property PEARCE PROJECT

Type Hole ROTARY (CCP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 4700'W, 1650'N of SEC COR 4/3 9/10

Date Started 11-20-81 Date Completed 11-20-81

Depth	Sample No.	Cu	Mo	Au (oz/T)	Ag (oz/T)		Description
0-10	6247			<.005	<.01		
10-20	48				"		
20-30	49				.22		
30-40	6250				<.01		
40-50	51				"		
50-60	52				"		
60-70	53				"		
70-80	54				.04		
80-90	55				<.01		
90-100	56						
100-110	57						
110-120	58						
120-130	59						
130-140	6260						
140-150	6261			<.005	<.01		

Drill Hole No. BH-14 Property PEARCE PROJECT

Type Hole ROTARY (CP) Location SEC 4, T18S, R25E

Size Hole 5 1/4" Co-ord 3450'W, 0'E of SEC COR 4/13/10

Date Started 11-20-81 Date Completed 11-20-81

Depth	Sample No.	Cu	Mo	Au	Ag oz/T		Description
0-10	6262			<.005	<.01		
10-20	63			"			
20-30	64			"			
30-40	65			"			
40-50	66			"			
50-60	67			"	<.01		
60-70	68			"	.04		
70-80	69				.01		
80-90	6270						
90-100	71						
100-110	72						
110-120	73			<.005	.22		
120-130	74						
130-140	75				.01		
140-150	76						

Drill Hole No. DH-16 Property PEACE PROJECT

Type Hole ROTARY (CP) Location SEC 2, T18S, R25E

Size Hole 5 1/4" Co-ord 1000'S, 100'W of SEC COR 35-36 / 2-1

Date Started 11-23-81 Date Completed 11-23-81

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6277			.005	.01		
10-20	78						
20-30	79						
30-40	6280						
40-50	81						
50-60	82						
60-70	83						
70-80	84						
80-90	85						
90-100	86						
100-	87						
110-120	88						HIT WATER
120-130	89						
130-140	6290						
140-150	6291			V	V		

Drill Hole No. GH-16 Property PEARCE PROJECT

Type Hole ROTARY (CCP) Location SEC 2, T18S, R25E

Size Hole 5 1/4" Co-ord 2200'S, 100 W of Sec Cor 3T36 2T1

Date Started 11-23-81 Date Completed 11-23-81

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6292				.01		
10-20	93				"		
20-30	94			.005	.06		
30-40	95				.01		
40-50	96						
50-60	97						
60-70	98						
70-80	99						
80-90	6300						
90-100	01						
100-110	02						
110-120	03						
120-130	04						
130-140	05						
140-150	06						HIT WATER
150-160	07				"		
160-170	08				.02		
170-180	09				.01		
180-190	6310						
190-200	11						
200-210	12				"		
210-220	13				.14		
220-230	14			"	.02		

Drill Hole No. GH-17

Property PEARCE PROJECT

Type Hole ROTARY (LP)

Location SEC 2, T18S, R25E

Size Hole 5 1/4"

Co-ord 3000'S, 100'W of SEC Cor 35/36 2/1

Date Started 11-24-81

Date Completed 11-24-81

Depth	Sample No.	Cu	Mo	Au	Ag		Description
0-10	6315			.005	.01		
10-20	16						
20-30	17						
30-40	18						
40-50	19						
50-60	6320						
60-70	21						
70-80	22						
80-90	23						
90-100	24						
100-110	25						
110-120	26						
120-130	27						
130-140	28				.14		
140-150	6329				.01		

Drill Hole No. SPOT CORE, GH SERIES — Property PEARCE PROJECT

Type Hole ROT w/ SPOT CORES — Location

Size Hole — Co-ord

Date Started — Date Completed 11/81

Depth	Sample No.	PPM ~~Cu~~ Hg	PPM ~~Mo~~ As	PPM Au	PPM Ag	PPM Sb	Description
211'	GH-4-211	.07	30	<.02	<.2	<1	SPOT CORES
201'	GH-11-201	.06	10	↑	<.2	<1	
201'	GH-12-201	.07	10		<.2	2	
151'	GH-13-151	.09	20		<.2	1	
151'	GH-14-151	.08	20		4.8	5	
151'	GH-15-151	.07	10		0.6	<1	
231'	GH-16-231	.06	20	↓	<.2	<1	
151'	GH-17-151	.05	<10	<.02	<.2	<1	

SCANNED 2010 NJN

PEARCE GEOCHEMICAL SAMPLE PROGRAM

Master Sample List and Assays

See Appendix F for Sample Locations

SCANNED Depth 31-Elem.	Sample No.	PPM ~~Cu~~ 31-Elem Hg SCAN	PPM Mo Geochem As	Au oz/T	Ag oz/T		Description
/	PGR-1	.07	140				
/	2	.05	20				
/	3	.08	20				
/	4	.08	<10				
/	5	.05	20				
/	6	.06	40				
/	7	.05	40				
/	8	.04	40				
/	9	.05	50				
/	10	.05	60				
/	11	.03	20				
/	12	.06	30				
/	13	.05	50				
/	14	.05	30				
/	15	.07	✓80				
/	16	.06	<10				
/	17	—	—	—	—		
/	18	.08	<10				
/	19	.05	10				
/	20	.05	50				
/	21	.03	✓240				
/	22	.03	30				
/	23	.04	30				
/	24	.05	30				
/	25	.04	20				
/	26	.05	20				
/	27	.06	20				
/	28	.05	20				
/	29	.05	<10				

x Auer Analytic lab

SCANNED Depth 31-Elem	Sample No.	PPM ~~Cu~~ 31-Elem scan Hg	Geochem	PPM Mo A-	PPM Au	PPM Ag		Description
✓	PGR-30	.06		20	<.02			
✓	31	.05		10				
✓	32	.06		20				
✓	33	.05		10				
✓	34	.08		<10				
✓	35	.05		10				
✓	36	.05		20				
✓	37	.04		10				
✓	38	.11		10				
✓	39	.05		20				
✓	40	.23		20				
✓	41	.08		60				
✓	42	.09		60	.07			
✓	43	.09		<10				
✓	44	.22		20				
✓	45	.22		50				
✓	46	.34		100				
✓	47	.05		70				
✓	48	.08		20				
✓	49	.22		40				
✓	50	.12		20				
✓	51	.06		100				
✓	52	.05		180				
✓	53	.04		60				
✓	54	.13		100				
✓	55	.08		50				
✓	56	.06		30				
✓	57	.03		20				
✓	58	.05		30				

SCANNED Depth 31-Elem	Sample No.	PPM ~~Cu~~ Hg	ppm Mo As	Au	Ag		Description
✓	FGR-59	.03	20				
✓	60	.04	30				
✓	61	.05	✓ 50				
✓	62	.04	✓210				
✓	63	.03	✓ 40				
✓	64	.03	30				
✓	65	.05	20				
✓	66	.04	10				
✓	67	.05	✓ 40				
✓	68	.04	<10				
✓	69	.03	✓110				
✓	70	.06	30				
✓	71	.06	30				
✓	72	.06	10				
✓	73	.05	20				
✓	74	.05	✓40				
✓	75	.18	✓ 70				
✓	76	.06	✓40				
✓	77	.02	20				
✓	78	.05	✓70				
✓	79	.20	✓160				
✓	80	.07	20				
✓	81	.08	30				
✓	82	.03	20				
✓	83	.04	✓ 70				
✓	84	.03	20				
✓	85	.03	✓80				
✓	86	.04	✓110				
✓	87	.03	10				

× Amer. Anal

Depth	Sample No.	PPM ~~Cu~~ Hg	PPM ~~Mo~~ As	Au	Ag		Description
✓	PGR-88	.05	<60				
✓	89	.03	30				
✓	90	.07	20				
✓	91	.03	20				
✓	92	.05	30				
✓	93	.07	<70				
✓	94	.06	30				
✓	95	.04	20				
✓	96	.06	20				
✓	97	.06	20				
✓	98	.07	<40				
✓	99	.04	10				
✓	100	.04	20				
✓	101	.06	20				
✓	102	.10	20				
✓	103	.04	20				
✓	104	.04	20				
✓	105	.05	20				
✓	106	.05	<80				
✓	107	.03	90				
✓	108	.04	20				
✓	109	.04	<10				
✓	110	.04	20				
✓	111	.04	30				
✓	112	.04	<10				
✓	113	.04	20				
✓	114	.04	20				
✓	115	.04	10				
✓	116	.04	10				

Depth	Sample No.	ppb Hg	ppm As	(ppb) Au oz/T	(ppm) Ag oz/T		Description
	PGR-117	~.88	20	(750) ~.022	(3) .09		
	118	~.60	30	(343) ~.010	(2.5) .07		
	119	~.30	10	(300) .009	(2.5) .07		
	120	~.35	20	(273) ~.008	(3) .09		
	121	~1.40	20	(171) ~.005	(2.5) .07		

Depth	Sample No.	PPM Cu Hg	PPM ~~Mo~~ Ag	(PPB) Au oz/T	(PPM) Ag oz/T		Description
	PAR - 1	✓ 2.50	30	.001 x	(2.5) .07 x		Township Butte North
	2	✓ 1.20	20	.001 x	.02 x		PAR 1-51; TAF ESA-
	3	✓ .94	✓ 50	.001 x	(2) .04 x		
	4	✓ .52	30	.007 x	(2.5) .06 x		
	5	✓ .68	10	.001 x	(2) .04 x		
	6	✓ .52	10	.001 x	(2) .06 x		
	7	✓ .83	20	.010 x	(4) .11 x		
	8	✓ .88	20	(274) .008 x	(8) .21 x		
	9	✓ .65	10	(34) .001 x	(3) .08 x		
	10	✓ .55	10	(103) .003 x	(2) .05 x		
	11	.45	<10	(69) .002 x	(2.5) .07 x		
	12	.22	10	.001 x	(2) .05 x		
	13	.13	20	(171) .005 x	(3) .09 x		
	14	.16	30	(206) .006 x	(3.5) .10 x		
	15	.16	✓ 70	(171) .005 x	(3) .09 x		
	16	.15	✓ 40	(69) .002 x	(2) .06 x		
	17	.16	✓ 40	(137) .004 x	.01 x		
	18	.15	20	(274) .008 x	(4) .11 x		
	19						
	20						
	21						
	22						
	23	✓ .23	<10	.002 x	(2) .05 x		
	24	.11	<10	.012 x	(1) .03 x		
	25	.15	<10	(171) .005 x	(1) .04 x		
	26						
	27	✓ .22	<10	(240) .007 x	.02 x		
	28	✓ .25	<10	(343) .010 x	(1) .03 x		
	29	.19	<10	(137) .004 x	.01 x		

x Amer. Analytic

Depth	Sample No.	(PPM) Cu Hg	PPM Mo As	(PPB) Au Oz/T	(PPM) Ag Oz/T		Description
	PAR-30	.20	<10	(446) .013	(2) .05		
	31	.17	<10	(549) .016	.01		
	32	.18	10	(720) .021	.10		
	33	.27	<10	.001	(1) .03		
	34	.18	<10	(137) .004	(2) .06		
	35	.10	<10	(103) .003	.02		
	36	—					
	37	.13	<10	(206) .006	(1) .03		
	38	.06	<10	(69) .002	.02		
	39	.18	40	.001	.01		
	40	.16	<10	(69) .002	(1) .03		
	41	.17	10	(103) .003	(2.5) .07		
	42	.18	<10	(69) .002	.01		
	43	.21	<10	(240) .007	(2) .06		
	44	.22	10	(103) .003	(1) .03		
	45	—	—		—		
	46	.30	<10	(69) .002	.01		
	47	.20	<10	.001	(1) .03		
	48	.22	<10	(206) .006	(2) .06		
	49	.38	20	(343) .010	(3) .08		
	50	.25	90	(514) .015	(2) .06		
	51	.29	20	(823) .024	(2.5) .07		
	52	—	—	—	—		
	53	.18	<10	(4971) .145	(86) 2.52		Township 8 Title PAR-53 TO 66
	54	.11	90	(171) .005	(4) .12		
	55	.07	80	(171) .005	<.01		
	56	.06	<10	<.005	(1) .04		
	57	.10	<10	<.005	(2) .06		
	58	.06	<10	<.005	<.01		

Depth	Sample No.	ppm Cu- Ha	ppm Mo	(ppb) Au oz/T	(ppm) Ag oz/T		Description
	PAR-59	.06	40	<.005	(45) 1.32		
	60	.06	<10	<.005	(11) .32		
	61	.04	10	<.005	<.01		
	62	.07	<10	<.005	<.01		
	63	.07	<10	<.005	<.01		
	64	.06	<10	<.005	(23) .68		
	65	.04	<10	<.005	(9) .26		
	66	.06	20	<.005	<.01		
	67	.06	10	<.005	(4) .12		
	68	.07	<10	<.005	(2) .06		
	69	.07	<10	<.005	(4) .12		
	70	.07	<10	<.005	(7) .22		Noonan Canyon - Dragoon Mt Panel & Tab Tuff
	71	.03	50	<.005	(9) .26		
	72	.32	30	<.005	<.01		Township Butte North
	73	.19	10	<.005	<.01		
	74	.05	10	<.005	<.01		Bull Basin Blvd & Sr 186
	75	.06	20	<.005	<.01		
	76	.08	30	<.005	<.01		Blue Deep
	77	.09	20	<.005	<.01		
	78	.11	140	(30) .010	(13) .41		
	79	.07	60	<.005	<.01		San Ignacio (E)
	80	.05	70	<.005	(6) .18		
	81	.08	70	<.005	<.01		
	82	.05	110	<.005	.08		
	83	.05	10	<.005	<.01		San Ignacio (W)
	84	.11	20	(20) .010	(17) .49		
	85	.86	70	(85) .025	(41) 1.50		
85A-	85A	.13	30	<.005	<.01		85A, Township Butte South SE to 90
	86	.09	20	<.005	<.01		
	87	.07	20	<.005	<.01		

Depth	Sample No.	PPM Cu Hg	PPM Mo Ag	Au oz/T	Ag oz/T		Description
	PAR - 88	.07	20	<.005	<.01		
	89	[illegible]	10	<.005	<.01		
	90	.07	20	<.005	.06		〃
	91	.13	20	<.005	<.01		Ona rn area Rhyolite
	92	.10	30	<.005	<.01		〃 〃 〃
	93						
	94						
	95						
	96						
	97						
	98						
	99						
	100	.05	<10	<.005	<.01		
	101	.02	20				
	102	.05	10				
	103	.05	20				
	104	.03	<10				
	105	.07	10				
	106	.02	10				
	107	.07	10				
	108	.04	<10				
	109	.02	<10				
	110	.03	<10				
	111	.02	<10				
	112	.03	40				
	113	.03	20				
	114	.01	20				
	115	.03	✓50.				
PAR	116	<.01	<10	<.005	<.01		

Depth	Sample No.	~~Cu~~ Hg PPM	Mo As PPM	Au oz/t	Ag oz/t (PPM)		Description
	PAR - 117	<.01	10	<.005	<.01		
	118	.03	10		(2) .06		
	119	<.01	<10		<.01		
	120	.02	10		<.01		
	121	<.01	10		<.01		
	122	.02	<10		(5) .14		
	123	.02	10		(3) .05		
	124	<.01	<10		(3.5) .10		
	125	.02	<10		<.01		
	126	.02	10		.04		
	127	.02	<10		(3.5) .10		
	128	.01	10		<.01		
	129	.02	10		<.01		
	130	.05	20	<.005	<.01		
	131	.03	10		(14) .40		
	132	.04	10		<.01		
	133	.03	20		(12) .34		
	134	.02	20		<.01		
	135	.02	20		<.01		
	136	.03	30		<.01		
	137	.03	60		<.01		
	138	.05	130		<.01		
	139	.03	180		<.01		
	140	.03	290		.06		
	141	<.02	110		<.01		
	142	.03	290		(6) .18		
	143	.02	20		<.01		
	144	.02	20		<.01		
	PAR - 145	.02	30	<.005	<.01		

Depth	Sample No.	Cu PPM	Mo PPM	Au Oz/T	Ag Oz/T		Description
	PAR-146	.02	10	<.005	.06		
	147	.04	10	<.005	<.01		
	148	.03	10	<.005	<.01		
	149	.04	<10	<.005	<.01		
	150	.03	20	<.005	<.01		
	151	.04	20	<.005	<.01		
	152	.02	10	<.005	<.01		
GT-1		.09	30	<.005	<.01		GOLD TUNNEL SAN IGNACIO
2		.24	40	<.005			
3		.11	50	.170			
4		.08	50	<.005			
5		.09	50	<.005			
GT-6		.07	60	<.005	<.01		
BC-1		.42	30	<.005	<.01		BLACK CAT SAN IGNACIO
2		.45	50	.005			
3		.25	40	<.005			FQ Rhyolite
4		.43	30				
5		.50	320				
6		.27	30				
7		.90	20				
8		.24	20	<.005	<.01		

Depth	Sample No.	~~Cu~~ As (PPM)	~~Mo~~ Hg (PPM)	Au PPM	Ag PPM		Description
1	PAR - 153	110	.06	<.02	2.0	Flat dip 15° NE Str. NW	+ local Sil Ag Tf + CO_2 + lim + Mn 2'
2	154	130	.14	.07	5.6		in Bxd FQRP + lim; rare Mn CO_2 + Sil vn 2'
3	155	70	.04	<.02	.4	shear vn zone N70°E 80SE	, FQRP, + Mn, Sil rare CO3 [illegible]
4	156	230	.04	.09	2.2	sheared FQRP +	Ag Tf + CO_2 + Sil + FeOx
5	157	40	.05	<.02	3.4	shear EW 80 S	Black calcite 5' [illegible] Sil + CO_2 vn in FQRP [illegible]
6	158	50	.06	<.02	.2		Water well ? Drill cuttings. Sil FQRP + [illegible] lim

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

REPORT OF ANALYSIS

JOB NO. UBA 020
October 23, 1981

E. GROVER HEINRICH
1802 W. Grant Rd.
Tucson, Arizona 85705

Analysis of 88 Rock Chip Samples

ITEM	SAMPLE NO.	FIRE ASSAY Au oz/t	Ag oz/t
1	SMS 1	<.005	<.01
2	SMS 2	<.005	<.01
3	SMS 3	<.005	<.01
4	SMS 4	<.005	<.01
5	SMS 5	<.005	<.01
6	SMS 6	<.005	<.01
7	SMS 7	<.005	<.01
8	SMS 8	<.005	<.01
9	SMS 9	<.005	<.01
10	SMS 10	<.005	<.01
11	SMS 11	<.005	<.01
12	SMS 12	<.005	.06
13	SMS 13	<.005	<.01
14	SMS 14	<.005	<.01
15	SMS 15	<.005	<.01
16	SMS 16	<.005	<.01
17	SMS 17	<.005	<.01
18	SMS 18	<.005	<.01
19	SMS 19	<.005	<.01
20	SMS 20	<.005	<.01
21	SMS 21	<.005	<.01
22	SMS 22	<.005	<.01
23	SMS 23	<.005	<.01
24	SMS 24	<.005	<.01
25	SMS 25	<.005	<.01

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981

ITEM	SAMPLE NO.	FIRE ASSAY Au oz/t	Ag oz/t
26	SMS 26	<.005	<.01
27	SMS 27	<.005	<.01
28	SMS 28	<.005	<.01
29	SMS 29	<.005	<.01
30	SMS 30	<.005	<.01
31	SMS 31	<.005	<.01
32	SMS 32	<.005	<.01
33	SMS 33	<.005	<.01
34	SMS 34	<.005	<.01
35	SMS 35	<.005	<.01
36	SMS 36	<.005	<.01
37	SMS 37	<.005	<.01
38	SMS 38	<.005	<.01
39	SMS 39	<.005	<.01
40	SMS 40	<.005	<.01
41	SMS 41	<.005	<.01
42	SMS 42	<.005	<.01
43	SMS 43	<.005	<.01
44	SMS 44	<.005	<.01
45	SMS 45	<.005	<.01
46	SMS 46	<.005	<.01
47	SMS 47	<.005	<.01
48	SMS 48	<.005	<.01
49	SMS 49	<.005	<.01
50	SMS 50	<.005	<.01

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981
PAGE 3

ITEM	SAMPLE NO.	FIRE ASSAY Au oz/t	Ag oz/t
51	SMS 51	<.005	<.01
52	SMS 52	<.005	<.01
53	SMS 53	<.005	<.01
54	SMS 54	<.005	<.01
55	SMS 55	<.005	<.01
56	SMS 56	<.005	<.01
57	SMS 57	<.005	<.01
58	SMS 58	<.005	<.01
59	SMS 59	<.005	<.01
60	SMS 60	<.005	<.01
61	SMS 61	<.005	<.01
62	SMS 62	<.005	<.01
63	SMS 63	<.005	<.01
64	SMS 64	<.005	<.01
65	SMS 65	<.005	<.01
66	SMS 66	<.005	<.01
67	SMS 67	<.005	<.01
68	SMS 68	<.005	<.01
69	SMS 69	<.005	<.01
70	SMS 70	<.005	<.01
71	SMS 71	<.005	<.01
72	SMS 72	<.005	<.01
73	SMS 73	<.005	.06
74	SMS 74	<.005	<.01
75	SMS 75	<.005	<.01

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981

ITEM	SAMPLE NO.	FIRE ASSAY Au oz/t	Ag oz/t
76	SMS 76	<.005	<.01
77	SMS 77	<.005	<.01
78	SMS 78	<.005	.10
79	SMS 79	<.005	<.01
80	SMS 80	<.005	<.01
81	SMS 81	<.005	.06
82	SMS 81A	<.005	<.01
83	SMS 82	<.005	<.01
84	SMS 83	<.005	<.01
85	SMS 84	<.005	<.01
86	SMS 85	<.005	<.01
87	SMS 86	<.005	<.01
88	SMS 87	<.005	<.01

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981
PAGE 5

ITEM	SAMPLE NO.	As ppm	Hg ppm	Au ppm	Ag ppm
1	SMS 1	50.	.10	<.02	.2
2	SMS 2	40.	.07	<.02	<.2
3	SMS 3	30.	.05	<.02	.2
4	SMS 4	30.	.06	<.02	<.2
5	SMS 5	50.	.06	<.02	<.2
6	SMS 6	40.	.07	<.02	<.2
7	SMS 7	20.	.05	<.02	<.2
8	SMS 8	40.	.07	<.02	.2
9	SMS 9	620.	.06	<.02	<.2
10	SMS 10	80.	.06	<.02	<.2
11	SMS 11	60.	.05	<.02	<.2
12	SMS 12	80.	.06	<.02	<.2
13	SMS 13	40.	.05	<.02	<.2
14	SMS 14	20.	.07	<.02	<.2
15	SMS 15	20.	.05	<.02	<.2
16	SMS 16	20.	.07	<.02	.2
17	SMS 17	20.	.08	<.02	<.2
18	SMS 18	30.	.06	<.02	.2
19	SMS 19	100.	.33	<.02	<.2
20	SMS 20	60.	.05	<.02	<.2
21	SMS 21	30.	.05	<.02	<.2
22	SMS 22	20.	.05	<.02	<.2
23	SMS 23	10.	.05	<.02	.2
24	SMS 24	20.	.06	<.02	<.2
25	SMS 25	20.	.03	<.02	<.2

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981
PAGE 6

ITEM	SAMPLE NO.	As ppm	Hg ppm	Au ppm	Ag ppm
26	SMS 26	10.	.03	<.02	<.2
27	SMS 27	10.	.05	<.02	<.2
28	SMS 28	10.	.03	<.02	<.2
29	SMS 29	10.	.03	<.02	<.2
30	SMS 30	120.	.03	<.02	.2
31	SMS 31	30.	.05	<.02	<.2
32	SMS 32	20.	.04	<.02	<.2
33	SMS 33	10.	.05	<.02	<.2
34	SMS 34	20.	.06	<.02	<.2
35	SMS 35	10.	.05	<.02	.2
36	SMS 36	10.	.08	<.02	<.2
37	SMS 37	10.	.05	<.02	<.2
38	SMS 38	30.	.06	<.02	<.2
39	SMS 39	10.	.05	<.02	<.2
40	SMS 40	20.	.04	<.02	<.2
41	SMS 41	10.	.07	<.02	<.2
42	SMS 42	30.	.05	<.02	.2
43	SMS 43	20.	.06	<.02	<.2
44	SMS 44	10.	.07	<.02	<.2
45	SMS 45	10.	.04	<.02	.2
46	SMS 46	10.	.04	<.02	<.2
47	SMS 47	10.	.06	<.02	<.2
48	SMS 48	10.	.05	<.02	<.2
49	SMS 49	10.	.09	<.02	<.2
50	SMS 50	20.	.09	<.02	<.2

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981
PAGE 7

ITEM	SAMPLE NO.	As ppm	Hg ppm	Au ppm	Ag ppm
51	SMS 51	10.	.06	<.02	.4
52	SMS 52	10.	.05	<.02	.2
53	SMS 53	10.	.04	<.02	.2
54	SMS 54	10.	.05	<.02	.2
55	SMS 55	10.	.07	<.02	<.2
56	SMS 56	10.	.06	<.02	<.2
57	SMS 57	10.	.04	<.02	<.2
58	SMS 58	10.	.06	<.02	<.2
59	SMS 59	10.	.13	<.02	<.2
60	SMS 60	10.	.07	<.02	<.2
61	SMS 61	20.	.05	<.02	.2
62	SMS 62	70.	.04	<.02	<.2
63	SMS 63	40.	.04	<.02	<.2
64	SMS 64	30.	.05	<.02	<.2
65	SMS 65	50.	.06	<.02	<.2
66	SMS 66	40.	.06	<.02	.2
67	SMS 67	80.	.07	<.02	.2
68	SMS 68	30.	.08	<.02	<.2
69	SMS 69	40.	.05	<.02	.2
70	SMS 70	60.	.05	<.02	.2
71	SMS 71	30.	.05	<.02	.2
72	SMS 72	50.	.05	<.02	.2
73	SMS 73	30.	.05	<.02	<.2
74	SMS 74	30.	.04	<.02	.2
75	SMS 75	110.	.04	<.02	<.2

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122

SKYLINE LABS, INC.
P.O. Box 50106 • 1700 West Grant Road
Tucson, Arizona 85703
(602) 622-4836

JOB NO. UBA 020
October 23, 1981
PAGE 8

ITEM	SAMPLE NO.	As ppm	Hg ppm	Au ppm	Ag ppm
76	SMS 76	20.	.06	<.02	.2
77	SMS 77	70.	.05	<.02	.4
78	SMS 78	30.	.06	<.02	<.2
79	SMS 79	40.	.05	<.02	<.2
80	SMS 80	30.	.06	<.02	<.2
81	SMS 81	40.	.05	<.02	<.2
82	SMS 81A	20.	.04	<.02	.2
83	SMS 82	20.	.04	<.02	.2
84	SMS 83	30.	.03	<.02	.2
85	SMS 84	20.	.04	<.02	.2
86	SMS 85	30.	.04	<.02	.2
87	SMS 86	30.	.05	<.02	.2
88	SMS 87	20.	.05	<.02	.2

Charles E. Thompson
Arizona Registered Assayer No. 9427

William L. Lehmbeck
Arizona Registered Assayer No. 9425

James A. Martin
Arizona Registered Assayer No. 11122