CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 12/18/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CHAKA VERDE

ALTERNATE NAMES:

PINAL COUNTY MILS NUMBER: 187A

LOCATION: TOWNSHIP 2 S RANGE 11 E SECTION 28 QUARTER SE
LATITUDE: N 33DEG 13MIN 28SEC LONGITUDE: W 111DEG 12MIN 57SEC
TOPO MAP NAME: MINERAL MTN - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD

BIBLIOGRAPHY:
ADMMR CHAKA VERDE FILE
SEE: ADMMR OKLAHOMA GROUP FILE (SILVER BAR MINE REPORT, P. 11)

CHAKA VERDE PINAL COUNTY

NJN WR 5/2/87: Bill Randel, 2131 W. Grant, Phoenix, Arizona 85009, 257-0478, reported that the Chaka Verde (file) Pinal County is for sale and that they have not had any production attempts since 1983.

STATE MINE INSPECTOR

MAR 20 1984

CHAKAVERDE (1)

Office of State Mine Inspector

705 West Wing, Capitol Building
Phoenix, Arizona 85007
602-255-5971

NOTICE TO ARIZONA STATE MINE INSPECTOR

In compliance with Arizona Revised Statute Section 27-303, we are submitting this written notice to the Arizona State Mine Inspector, 705 West Wing, Capitol Building, Phoenix, Arizona 85007 of our intent to ____ start or V stop a mining operation.

COMPANY NAME CHAKAVERDE MINING Co.

CHIEF OFFICER LEROY H FAIREY

COMPANY ADDRESS 2131 W GRANT ST PHOENIX AZ 85009

COMPANY TELEPHONE NUMBER 257-0478

MINE OR PLANT NAME CHAKAVERDE MINING Co.

MINE OR PLANT LOCATION (including county and nearest town, as well as directions for locating by vehicle)

FLORENCE JNT. ARIZ. MINERAL HILLS 5 mile East of Florence Jont, 4½ Miles South & East of Superior Hwy

TYPE OF OPERATION OPEN PIT PRINCIPAL PRODUCT GOLD

STARTING DATE AUG 1981 CLOSING DATE MAR 1984

DURATION OF OPERATION 3 yrs

PERSON SENDING THIS NOTICE LEROY FAIREY

TITLE OF PERSON SENDING THIS NOTICE PARTNER

DATE NOTICE SENT TO STATE MINE INSPECTOR 14 MAR 1984

PLEASE NOTE: Any operation found operating, without having sent this notice to the Arizona State Mine Inspector, will be charged with a petty offense.

12/83

CHAKAVERDE MINE (File)
PINAL Co.

CHAKAVERDE Mine 1-5
MINERAL HILL MINING DISTRICT
PINAL COUNTY
T2S-R11E- Secs. 27 & 28

Evaluation
Coreing
Geologic Mapping

Surveys
Research
Exploration

Minerals Exploration Co.

P.O. Box 1523
Mesa, Arizona 85201

DAVID L. TAYLOR
Field Engineer

REPORT ON
CHAKAVERDE MINE

MINERAL HILL MINING DISTRICT

PINAL COUNTY, ARIZONA

Prepared and Submitted

by: David L. Taylor
Mining and Field Engineer
Mesa, Arizona

July 1, 1983

Revised copy of April 1, 1983

This Property For Sale
Contact
Gene Wegner
1681 S Meridian Dr
Apache Jct, AZ 85220
(602) 983-2801

REPORT ON

CHAKAVERDE MINE

MINERAL HILL MINING DISTRICT

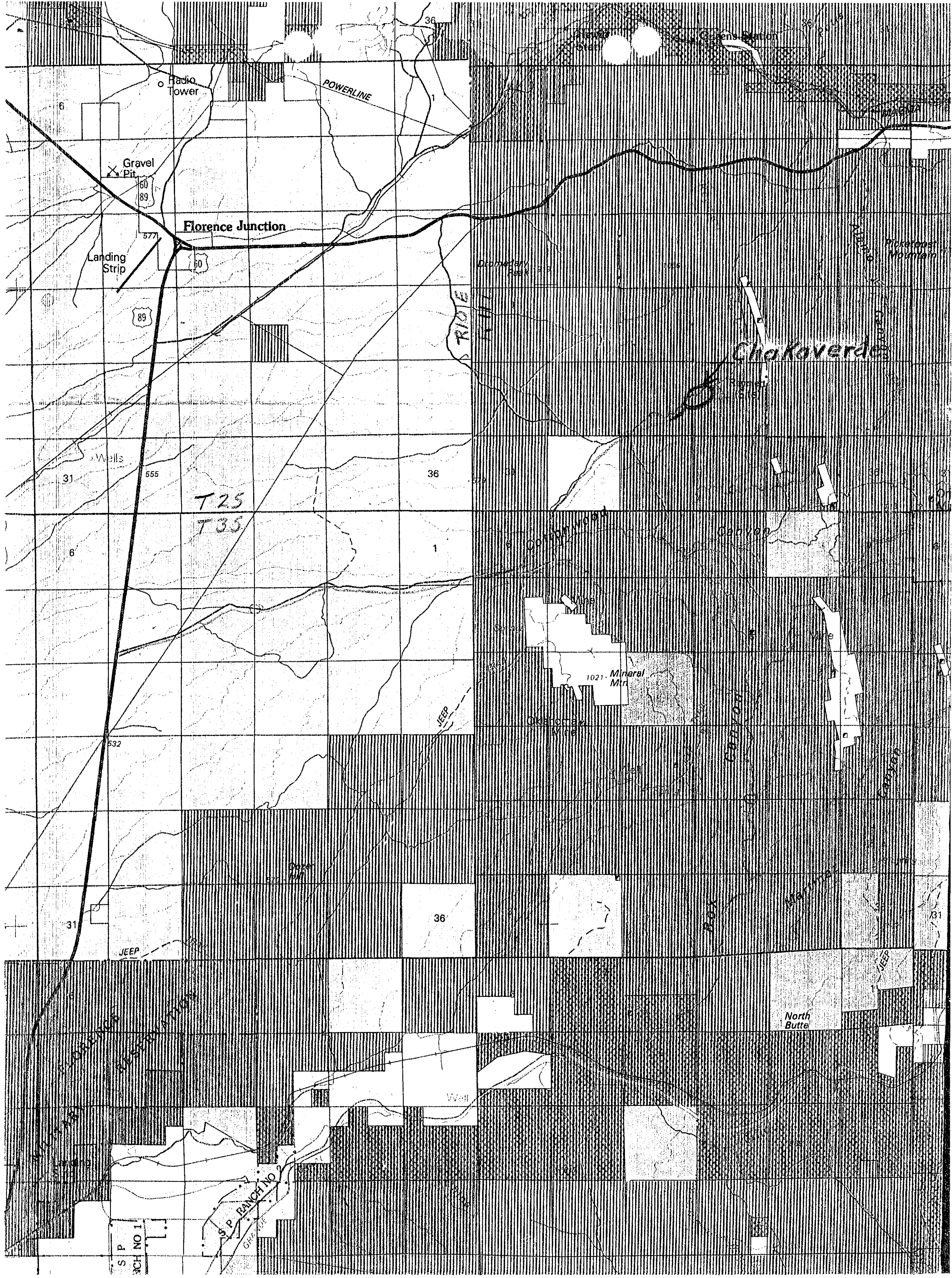
PINAL COUNTY, ARIZONA

Prepared and Submitted

by: David L. Taylor
Mining and Field Engineer
Mesa, Arizona

July 1, 1983

Revised copy of April 1, 1981



Radio Tower
POWERLINE
Gravel Pit
60
89
Florence Junction
577
Landing Strip
Dromedary Peak
Pickett Post Mountain
Wells
31
555
36
T2S
T3S
6
1
Cottonwood
Canyon
Mineral Mtn
1021
Oklahoma Mine
532
JEEP
Rock
Canyon
Martinez
North Butte
Well
S P RANCH NO 2

TABLE OF CONTENTS

FOREWORD

The following report is from the original field report of April 1, 1981. Since the time of the original draft,new information and development of the project has been obtained and entered into the old report as UPDATE pages.

Since the old information of the April 1, 1981 report is still needed to obtain basic information regarding the project extremes there has been no subtractions from the old report, but only new data injected into these pages.

As of original intent, this report does not constitute a mining engineering/geological representation, but only to serve as a basic guide and information history as the project now stands. Further detailed project information can be obtained on the mine site for inspection by interested parties and/or their engineers/geologists.

David L. Taylor

July 1, 1983

CHAKAVERDE MINING PROPERTIES

Property and Locations

The properties hereafter described are:

CHAKAVERDE MINING CLAIMS 1-5

All filed and recorded in Pinal County Courthouse, Florence, Arizona. Also filed and recorded with Bureau of Land Management, Arizona State Office, 2400 Valley Bank Center, Phoenix, Arizona.

These properties are located on BLM land situated in the Mineral Mtn. Quad., Sec. 27 and 28, T2S, R11E G&SRB&M, Mineral Hill Mining District, Pinal County, State of Arizona.

The properties are reached by 6 miles of County maintained dirt road, and then 1 mile of good claim maintained, dirt road from a point on highway 60 and 70, 20 miles southernly by paved highway from the Magma Copper Co. in Superior, Arizona, and approximately 29 miles easterly from Mesa, Arizona, the nearest major supply point. All roads are passable at all seasons of the year.

Chakaverde #1----Doc. 761 Pg 569	BLM--AMC 70950
Chakaverde #2----Doc. 761 Pg 570	BLM--AMC 70951
Chakaverde #3----Doc. 985 Pg 269	BLM--AMC 93521
Chakaverde #4----Doc. 994 Pg 872	BLM--AMC 98900
Chakaverde #5----Doc. 994 Pg 874	BLM--AMC 98901

DESCRIPTION, TOPOGRAPHY & GEOGRAPHY

This property is situated in the region of semi-mountainous country which lies between Superior, Arizona, and the Gila River.

The claims lay in a range of low mountains of elevation to 3957 feet above sea level. The general elevations of the properties are 2400 feet to 3000 feet. Vegetation consists of Palo Verde and Ironwood trees, heavy growths of Cholla cactus and other desert growths.

PAST HISTORY AND DEVELOPMENT

The veins on the claims and surrounding areas have been worked on and off by several Mexican families prior and since the early 1870's. The area surrounding these claims have been extensively prospected and worked for the silver lodes, but no major operations have been conducted on the gold veins in the area. All work done on these veins has been on a limited scale by a few independents who were hampered by the extreme desert location and the lack of well derived water.

The general mining and milling method employed was to cut shallow trenches or run short drifts into the exposed outcrops, hand sort the lesser value quartz and screen grade all oversize to 1 inch minus. The resulting head ore was then transported by burro to a small spring about 1 mile east and reduced in burro operated arrastras and then inside amalgamated or hand panned for cleanup. The underground sections of the properties have been worked on a very limited scale. Four drifts were driven on exposed showings with a total workings around 300 to 375 feet. Several surface trenches and a few pits were also excavated along the vein structures.

All of the old workings have been reopened and all show and assay values in the face, ribs, and backs.

PRESENT DEVELOPMENT AND IMPROVEMENTS

The main mining development within these claims has been restricted to the Chakaverde #1, 2 and 3. The Chakaverde #2 has two main drifts which have been opened for access. The upper drift strike has been exposed by cat work and some limited shallow drilling to estimate structural character of the ore body. A access haulage road on the south portion of the property has been cut along a major transverse fault dike for further detailing of the structural bounds and potential post mineral bodies.

The Chakaverde #3 has been developed by an access road to allow easy exploration of structures favorable for future development noticed along a ridge in its southern area. This section also shows untraced silver float.

The main present mining is being conducted on the Chakaverde #1. This area has been developed by surface and underground methods. The surface work consists of major excavation into the hillside to remove about 150 feet of old tunnel and to open this area for an open strip operation. This open "cut" has opened the hill to an approximate depth of 30 feet to continue the underground more efficiently. The underground section of the mine has been developed by a main haulage drift of about 30 feet and being intersected by a crosscut tunnel opening to the south at about 30 feet from mid drift. (underground map of Chakaverde #1 is contained within this report) A continuation of the main drift is being advanced along the vein headed west. A raise is being developed along a massive anticline within the vein that shows high gold values. A small coyote drift has been advanced along the vein to the north along main drift level.

Surface improvements on the properties consists of the following:

The Chakaverde #2 has full livein camp facilities; consisting of a small rock cabin, domestic water tank, domestic and mill water (see section on water), wooden storage building,

large building with kitchen, mobile trailer, wooden outhouse, to the north of the camp two leach pads with fencing around, constructed for a one acre mill site and equipment storage lot.

UPDATE

7/1/83

Development at the mine site has been extensive in regard to the removal of the top underground sections to the present stage of a large open pit of rough dimension of 50 feet deep by over 300 feet long and 60 feet wide. The ore shoots and underground sections described by map #1 and page 4, of the April 1, 1981 mine report have been partially removed and processed. During this preliminary development work several new ore zones have been exposed and new information on the structural extent have been obtained in regard to the mineral penetration of the wall rock.

The old report based its ore reserve projections on narrow quartz veins of an average width of 1½ feet with mineral wall penetration of about 1 foot. New information found during pit development is showing a large mineral channel between 15 to 30 feet, an average value of .16 to .26 ounce gold per ton. This has substantially increased the ore reserves 20 fold.

GEOLOGY AND MINERALIZATION

Local area is massive structure of pre-cambrian shists with junctures of later Pinal shists. Area is cut by Diabase intrusives and numerous heavy iron stained quartz veins. Properties lie in structural folds of pre-cambrian, Pinal shists interrelated with a large vein (transverse fault dike) of iron quartz, epidote amphibole variety rock. A large Diabase stock cuts the properties near midpoint (by surface detail the Diabase may be a sill cutting the bedding plains of the shist) and has created a channel for solution flow along the folds and shears of the host shist.

The iron quartz-amphibole dikes have also caused intense folding near these contacts and have formed areas of well defined mineral activity.

The vein structure or structures as they exist are trending with the western dip of the shist and are associated with a highly fractured, low temperature quartz. The mineral bearing veins appear to be of epithermal nature with all of the gold (and silver) occurring in a free state.

The vein structures may best be described as a semi-horizontal blanket with numerous ore shoots and surface outcrops.

The vein composition is basically limonite and manganese that has filled a fractured and pebble like quartz structure. A small amount of basic copper carbonate is found in small isolated masses along with some native copper along some portions of the veins.

The gold and silver is highly divided and occurs the highest in the Fe-Mg mixtures, although the quartz itself contains values, with high accumulations of precious metals in areas of major and minor vugging within the quartz. The vein is very soft

(Fe-Mg section are minus 3 on the Mohs scale) and the quartz is fractured to as low as 100 mesh. The vein in many places will "run" like sand in an hour glass when bumped with a drill steel.

The width of the veins vary from 6 inches to 2½ feet and often wider in areas of vein intersections.

All of the gold and silver values as previously stated are free milling and respond to simple gravity concentration and/or amalgamation. A sample cut from any portion of the vein can be panned, as is, to a concentrate where the gold can be seen and removed. If a sample is crushed and then panned all values can be obtained easily and removed (gold liberation is generally around 20 to 28 mesh). The gold size is generally 80 to 100 mesh with pieces upwards to one-eighth of an inch not uncommon.

DEVELOPED WATER SUPPLY AND STORAGE

Developed water on these properties consists of a hand dug well, blasted into a spring seepage, to a depth 15 feet. Water capacity of this well is aroung 1750 to 2000 gallons a day with little to no change during any portion of the year.

All excess water, both from seepage and well overflow are contained by a concrete and rock retaining pond of a full capacity of around 8000 gallons. This pond retains full water for about 9 months of the year and during the other 3 months contains a much lower volume of water.

All well water has been tested by the State of Arizona and shows to be of excellent quality for domestic use.

About 150 feet upstream of the well and pond a large earth damn has been constructed to catch and hold any rain water that may accumulate during the year.

All developed water on these claims is fully controlled by the properties.

UPDATE

7/1/83

In August 1981, a six inch (6) well was drilled to a depth of 93 feet and is currently producing around 15 gallons per minute. Well is equiped with electric subpump and is fully plumbed to all storage tanks, kitchen facilities, and mill site. The drilling of this well has not changed the water flow of the older hand dug well, and there seems to be no shortage of water at any time of year.

PROJECTED ORE RESERVES

Due to the blanket formation of this ore deposit and the fact that several areas within the claim group show surface outcrops, this section on Ore Reserves will be classified into two units:

Unit #1--all outcropped ore areas based defined by a three side block.

Unit #2--areas projected by surface and/or underground excavations in relation to predominant structural features.

UNIT #1 Chakaverde #1 and 2 See map #3

Estimated blockage from surface cropping starting from location drift of Chakaverde #2, running 150 feet south to transverse dike, from this point 300 feet east to a point 150 feet east of Chakaverde #1 main haulage drift,from this point 125 feet north to outcrop trace on mountainside, then about 300 feet west back to a point 65 feet north of Chakaverde location drift #2. This boundary allowing irregularities in the general topography. Base vein width being 1½ foot.

UNIT #2 Chakaverde #1 and 2 See map #3

Estimated blockage starting from a drift near camp level on Chakaverde #2 with a base dip of 54 deg. to the south-west. Allowing dip to extend and terminate to the south at transverse dike, projected structural distance of 105 feet. Starting from drift portal and advancing upward to Chakaverde location drift #2, projected structural distance of 125 feet. Starting from the extreme back face of camp level drift (drift length is 89 feet) and projecting on an angle upwards of 123 feet to the location drift of Chakaverde #2. This plot forms a rough semi-triangle with a base vein width of 24 inches.

UNIT # 2 Chakaverde #1 adn 4 See map #4

In about the eastern third of the Chakaverde #1, and western half of the Chakaverde #4, another major ore structure is exposed. This vein structure is dipping towards the south on a near vertical and feathering out more horizontal as it advances to the east. From a starting point at a shallow vertical shaft on the Chakaverde #1 and running about 575 feet east along outcrops and traces to a series of shallow trenches and an oldcollapsed drift on the Chakaverde #4. Starting from beginning shaft to a depth of 35 to 40 feet, (this depth can be correlated by a crosscut drift driven from the south side of the hill to the north to intersect the vein as it feathers to the east for 575 feet. This plot also forms a rough triangle cross section with a base vein width of 14 inches.

General weight units of 101 pounds ore per cubic foot, or 20 cubic feet per ton.

Summarizing the above ore estimates:

UNIT AREA NO. 1 Unit Type	UNIT AREA NO. 2 Unit Type	PROJECTED TONNAGE
CVM # 1&2	---------	3,825 TONS
	CVM #1&2	645 TONS
	CVM #1&4	667 TONS
TOTALS		5,137 TONS

There are other vein structures on the properties other than the blockages discussed, but due to the unusual way these veins lay further mapping would be necessary to prove extent.

UPDATED PROJECTED ORE RESERVES

7/1/83

Reference to Unit #2 of page 10.

Allowing a new horizontal distance of 300 feet, and a vertical depth of 123 feet.

Working with new information obtained during exploration allowing a new vein structure width of 15 to 30 feet, average of new data vein width, low base 22 feet.

Cubic weight of ore body, 101 pounds per cubic foot, or 20 ciboc feet per ton.

PROJECTED ORE RESERVE FORMULA:

(Length x Width x Depth) = 811,800 cubic feet

(Cubes per foot) = 20 cubic ft. per ton

Tonnage reserve = 40,590 tons, first main ore block (SAFETY). Allowing low essay average of .16 oz. gold per ton. Projected number of ounces of mineable gold;

6,494.4 OUNCES GOLD

All above projections are low based to allow for irregularities in the structure, but can be considered as safe calculations.

ORE VALUES AND ASSAYS

All of the following assay values are a general standard of the vein values. Since there is no one spot on any of the veins throughout the properties that assay any better than the other, the following is to be considered as an average value.

	IN GOLD	
LOW ASSAYS	.038	VEIN
	.044	WALL ROCK
AVERAGE ASSAYS	.16	VEIN
	.18	VEIN
	.32	VEIN
	.54	VEIN
	.73	VEIN
HIGH ASSAYS	2.432	VEIN
	4.320	VEIN*
	4.540	VEIN
	10.465	VEIN*

*Samples taken from high grade pockets encountered during mining operations within the Chakaverde Mine #1.

All samples were 90 deg. channel cuts.

RECOMMENDATIONS

Barrel cyanide test were conducted on these ores in 1979 with an extremely profitable return. As over 98% of the gold values are over 80 mesh and the ore enclosing vein material and wall rock (schist) is very porous, the penetration time for the cyanide to react is minimal. A potential problem with sliming due to the schist may be encountered but could be eliminated by giving the leach pads a lower drainage angle. It is my recommendation that a cyanide leach pad circuit should be considered.

UPDATE

7/1/83

For the past two years the construction of a dual unit leach pad system, a fifty ton per day aglomeration plant, a 100 ton zinc precip, unit and mixing facilities has been constructed.

These new facilities are capable of processing around 2000 tons of ore per month. This pad system was designed so as one pad is being leached the other pad is being loaded or stripped as lift cycle is progressing. This system allows the leaching cycle to progress without shutdown, and allows the leach pads the ability of close quality control.

Pertinent project engineering for the heap leach is contained in the back of this report.

CONCLUSIONS

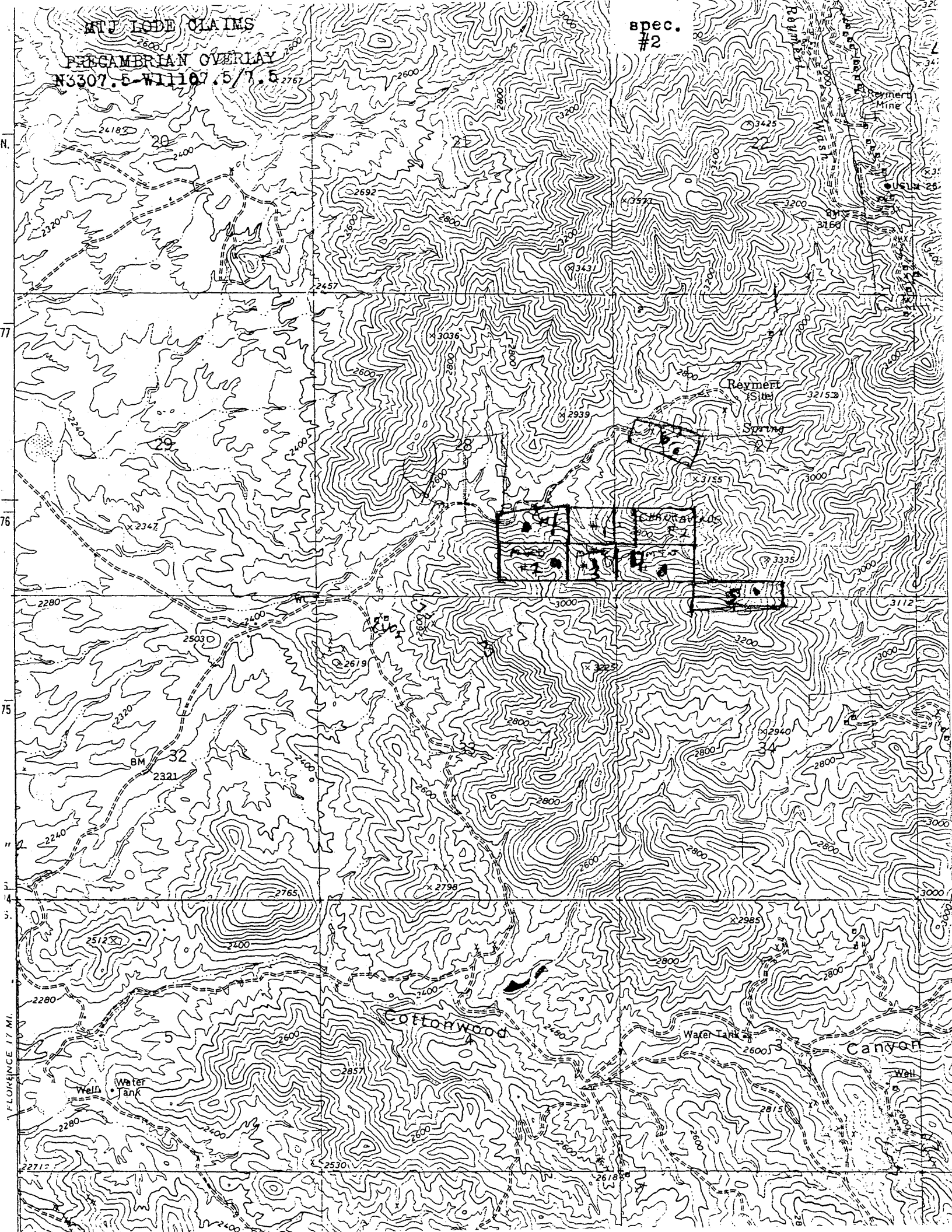
The location of these properties together with the fact that they have never been exploited to their full potential allows a favorable situation for a high profit potential. The ore veins are running well within economic bounds, and with the developed water source, the ease of mining procedure, the high amendability of metals recovery by gravity, amalgomation, or cianide, make these properties totally selfsufficient and allow a very quick setup and production delivery. Altogether then, the properties should well be considered to hold very attractive possibilities for developing into a great profit producer.

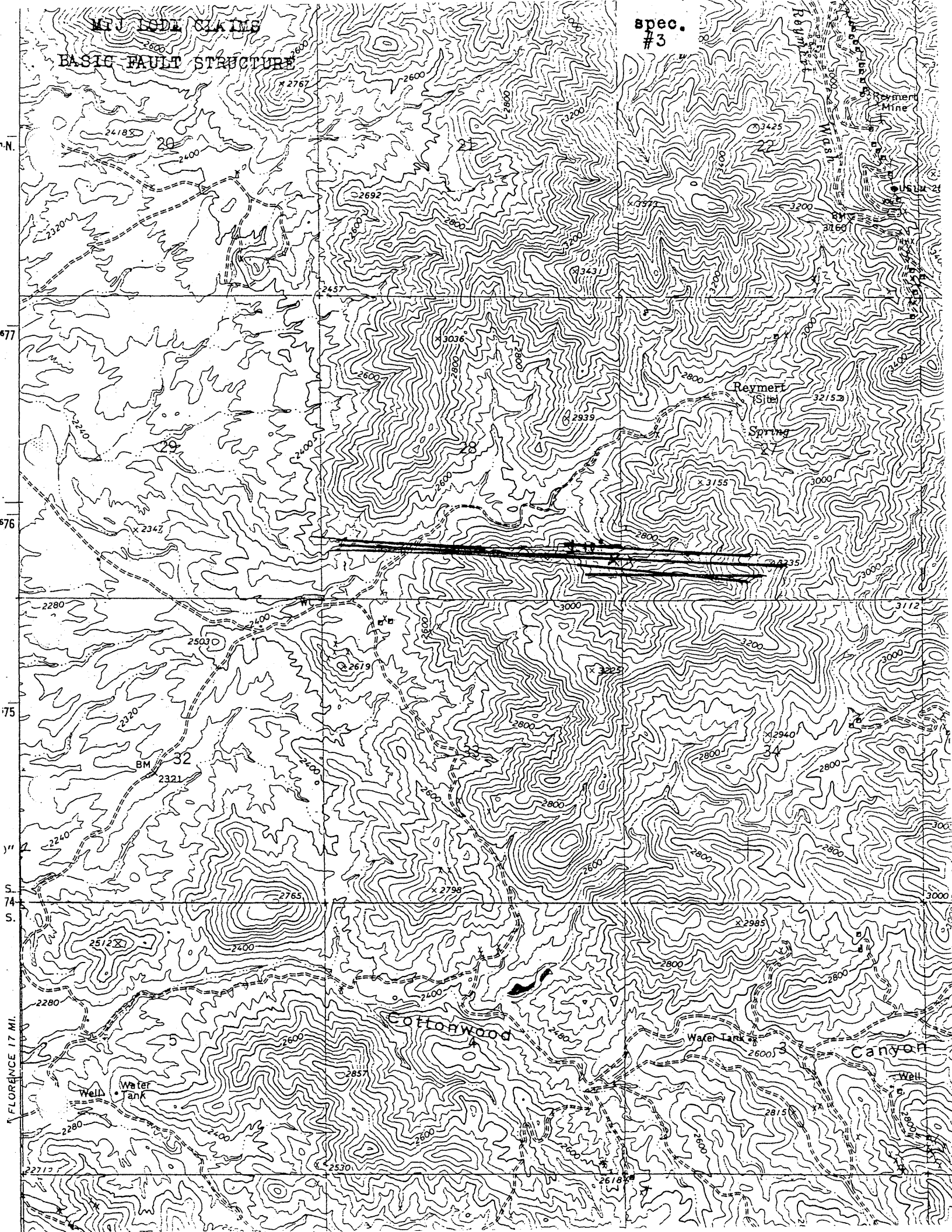
David L. Taylor

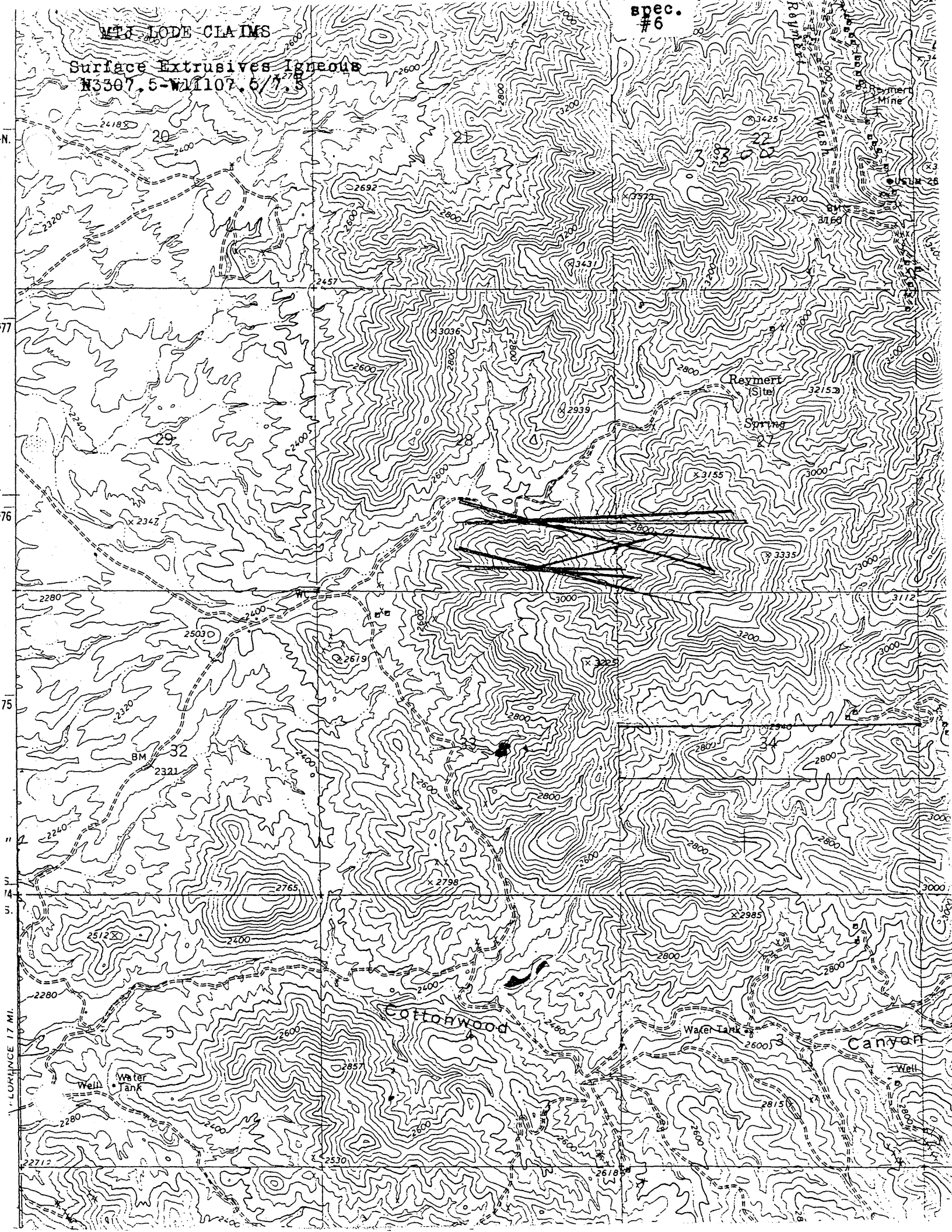
April 1, 1981

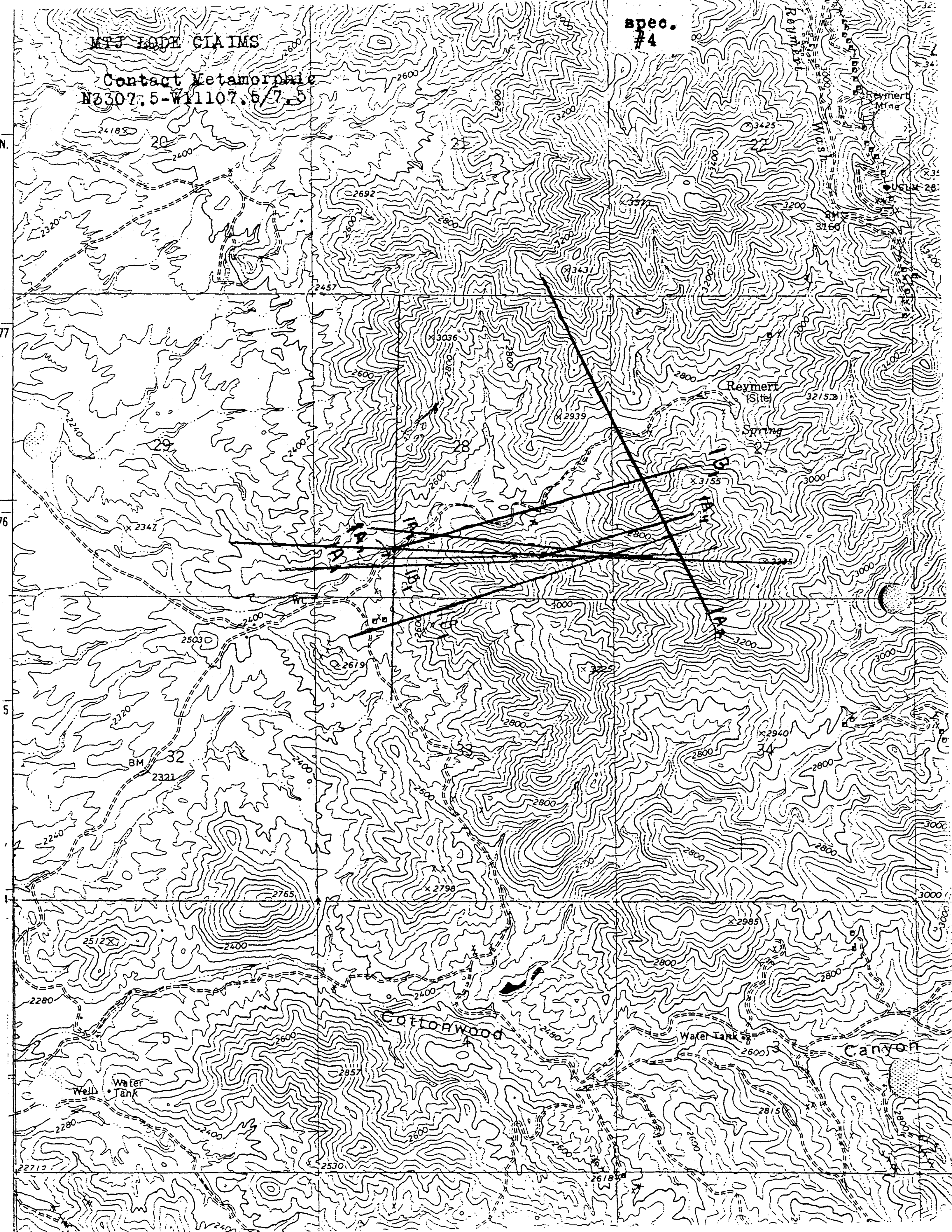
copy

DLT/MFE


MTJ LODE CLAIMS
PRECAMBRIAN OVERLAY
N3307.5-W11107.5/7.5
spec.
#2
Reymert Mine
Reymert (Site)
Spring
Cottonwood
Canyon
Water Tank
Well
Water Tank
Well
FLORENCE 17 MI.


MJ LODE CLAIMS
BASIC FAULT STRUCTURE
spec.
#3
Reymert Wash
Reymert Mine
Reymert (Site)
Spring
Cottonwood
Canyon
Water Tank
Well
Water Tank
Well
FLORENCE 17 MI.
BM
BM
20
21
22
29
28
27
32
33
34
4
5
3


MTG LODE CLAIMS
Surface Extrusives Igneous
N3307.5-W11107.5/7.5
spec.
#6
Reymert Wash
Reymert Mine
Reymert (Site)
Spring
Cottonwood
Canyon
Water Tank
Well
BM 3160
BM 2321
20
21
22
23
27
28
29
32
33
34
5
4
3


MTJ LODE CLAIMS
Contact Metamorphic
N3307.5-W11107.5/7.5
spec.
#4
Reymert Wash
Reymert Mine
Reymert
(Site)
Spring
Cottonwood
Canyon
Water Tank
Well
Water Tank
20
21
22
27
28
29
32
33
34
3
4
5
BM 2321
BM 3160
2418
2692
3431
3036
2939
3155
3225
2619
2503
2347
3425
2940
2798
2765
2512
2985
2857
2815
2618
2530
2457

MAP # 1

CHAKAVERDE MINE # 1 UNDERGROUND

= STABLE GROUND

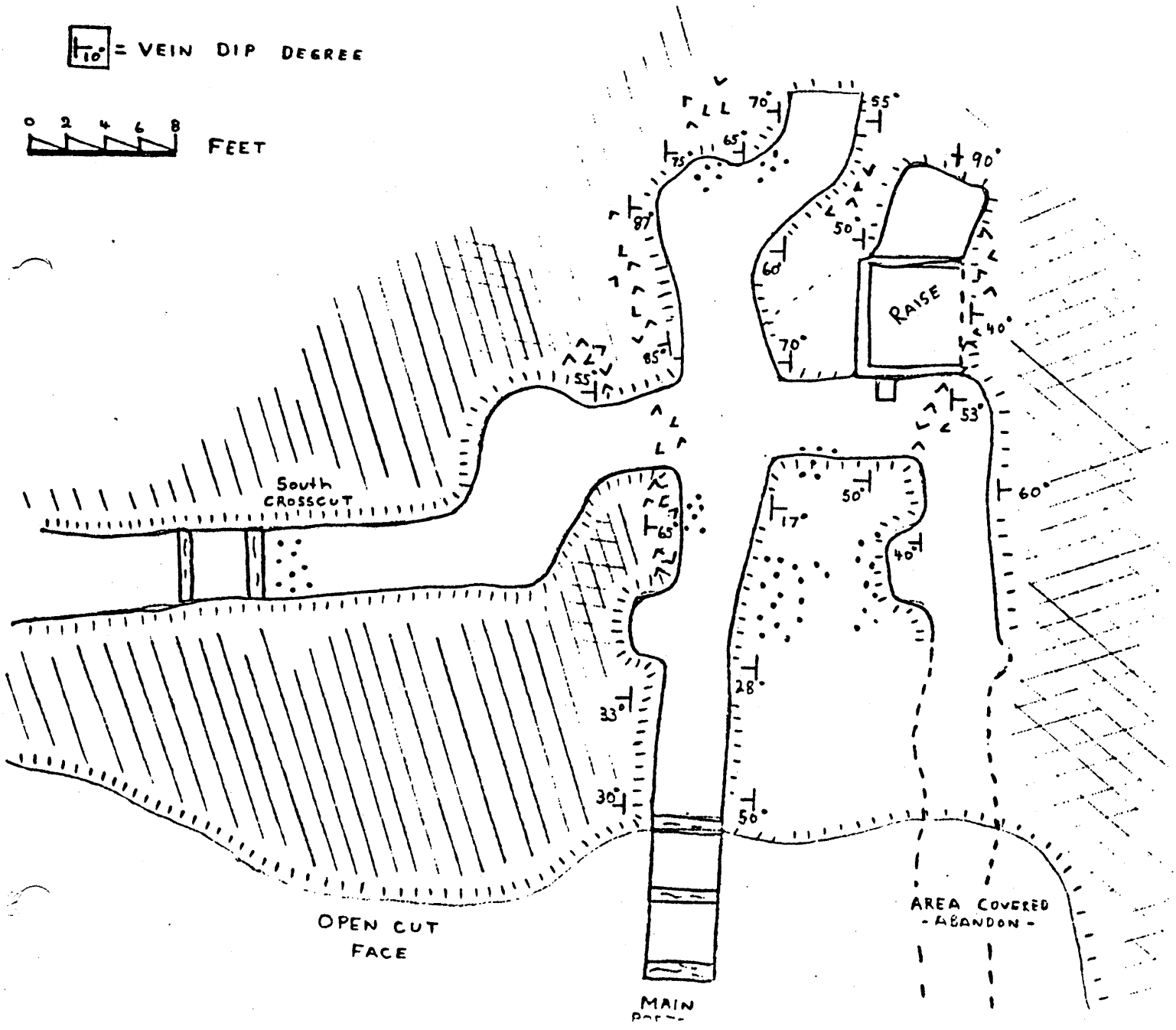
= HIGH FRACTURE WALL ROCK

= MAIN ORE CHANNELS

= ORE SHOOTS

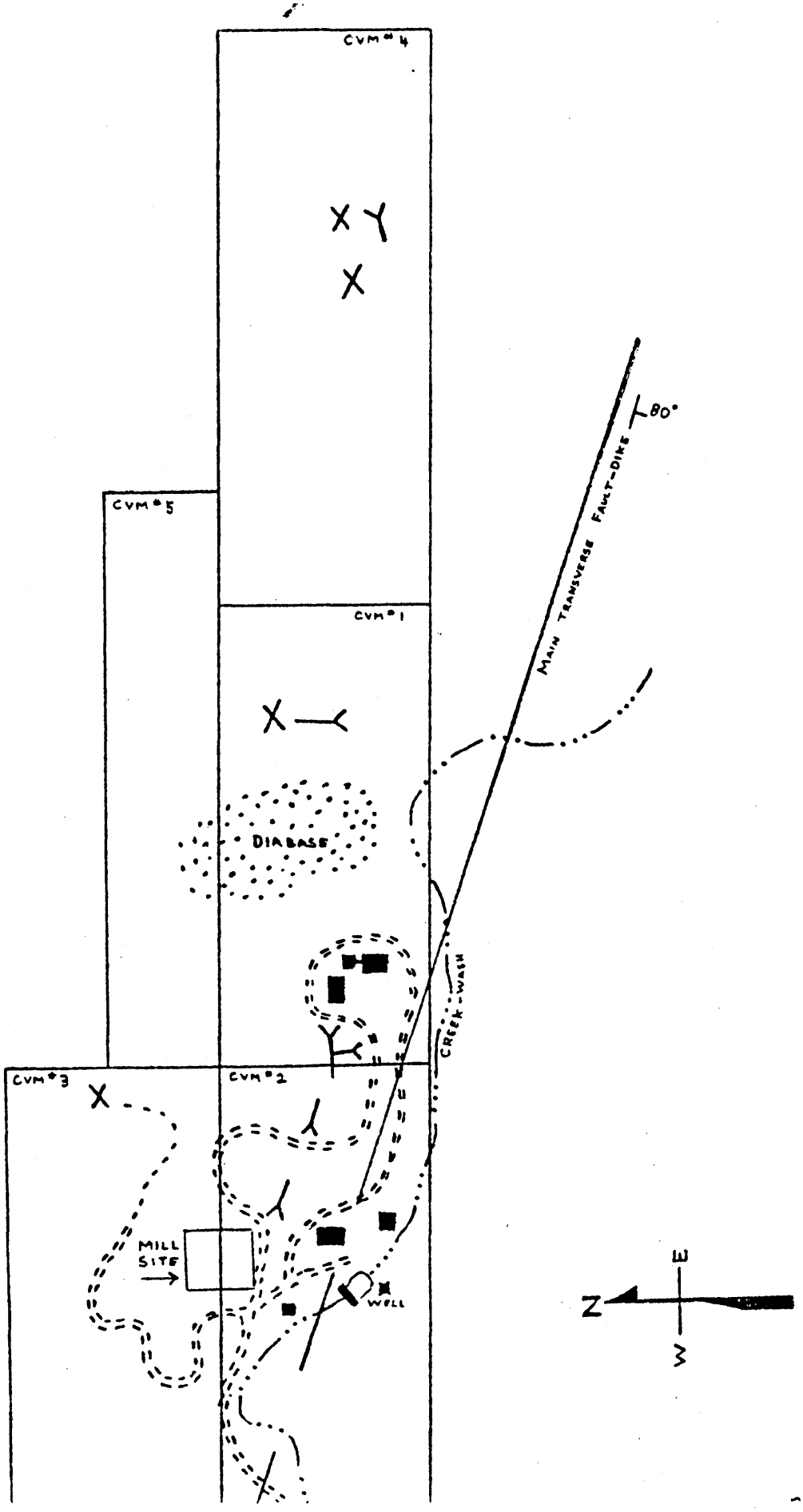
= VEIN DIP DEGREE

0 2 4 6 8 FEET



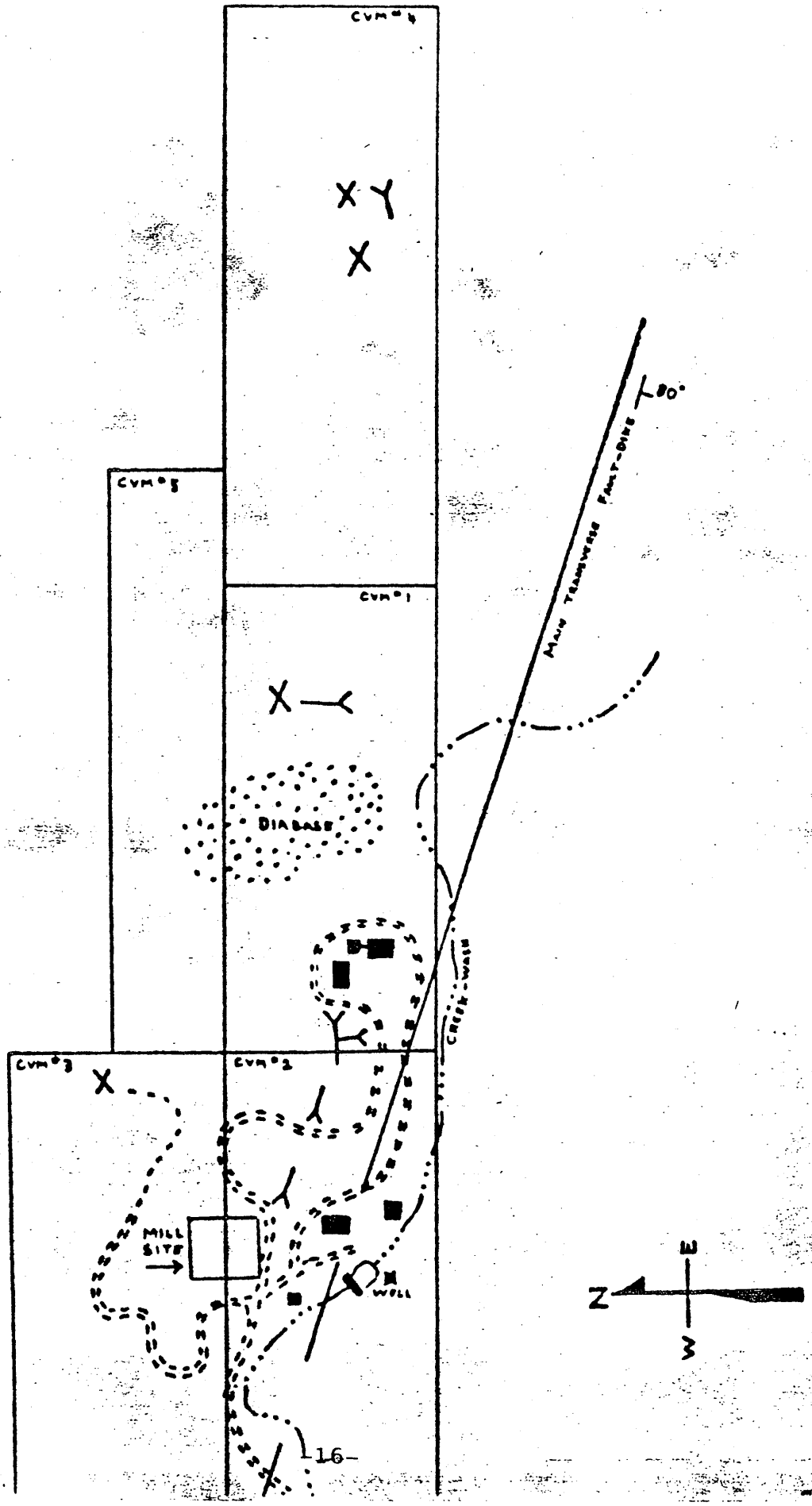
MAP # 2

GENERAL CLAIM POSITION LAYOUT WITH MAJOR STRUCTURE



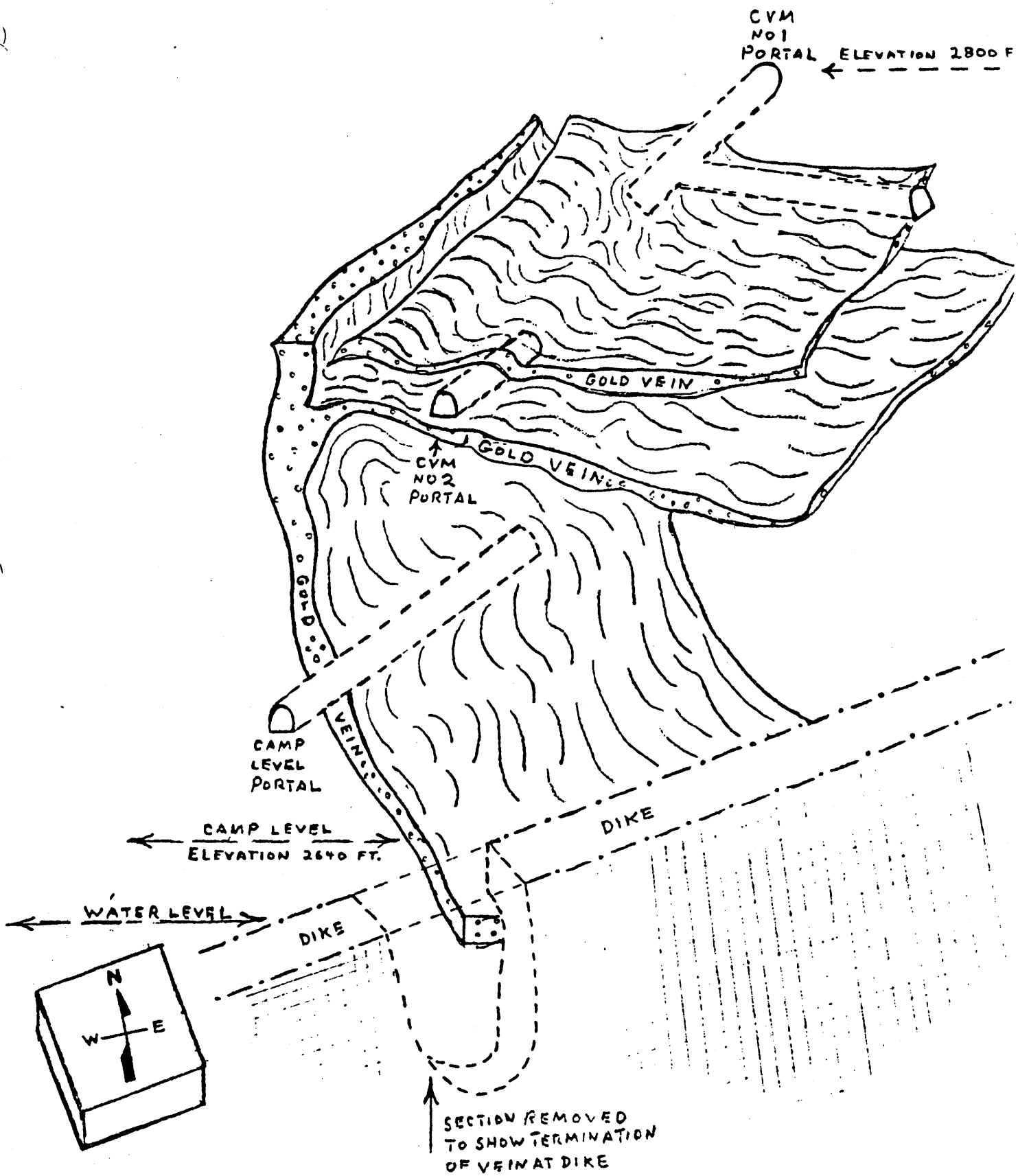
MAP # 2

GENERAL CLAIM POSITION LAYOUT WITH MAJOR STRUCTURE



MAP # 3

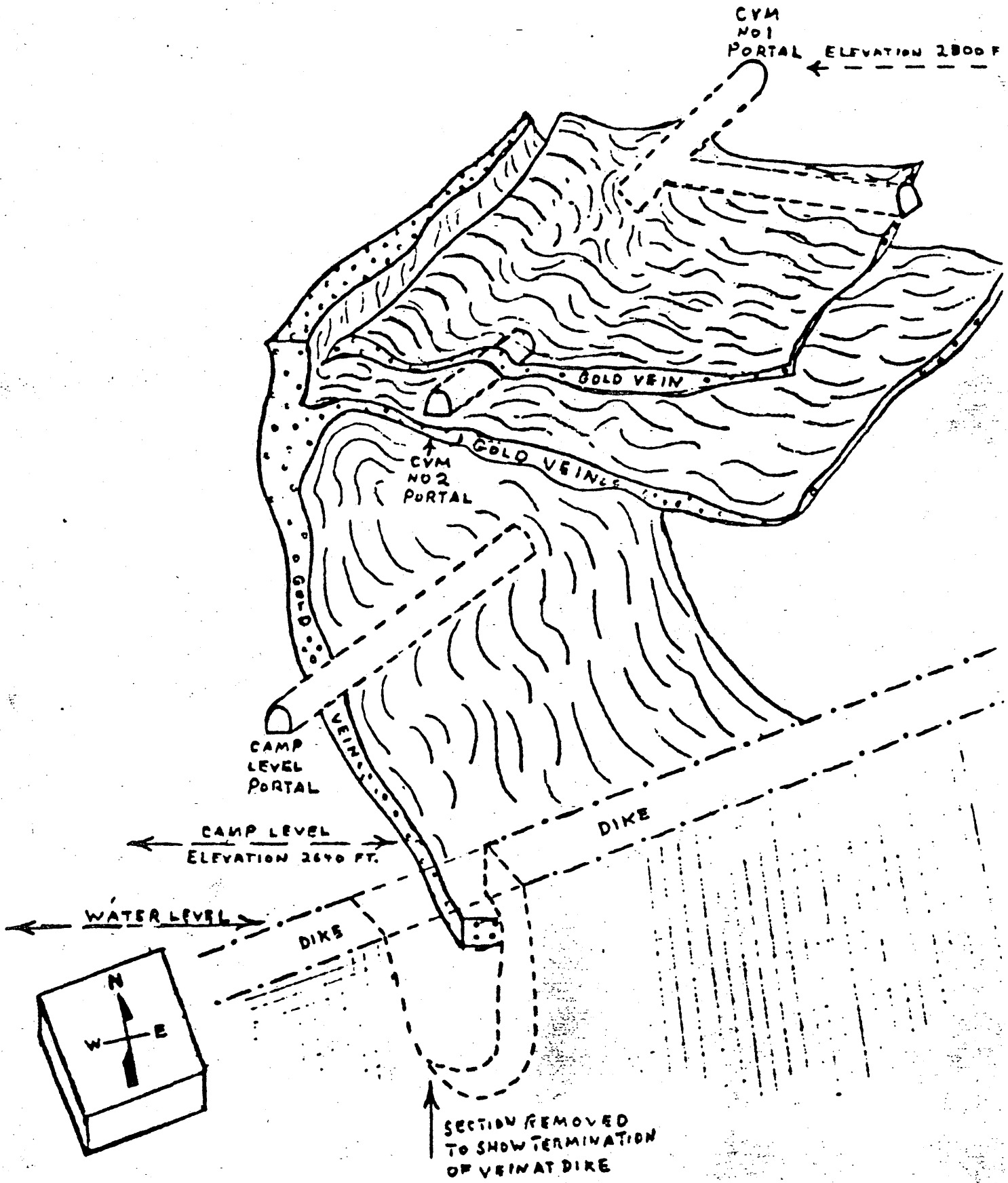
PROFILE VEIN STRUCTURE FOR CHAKAVERDE # 1 & 2



GLT

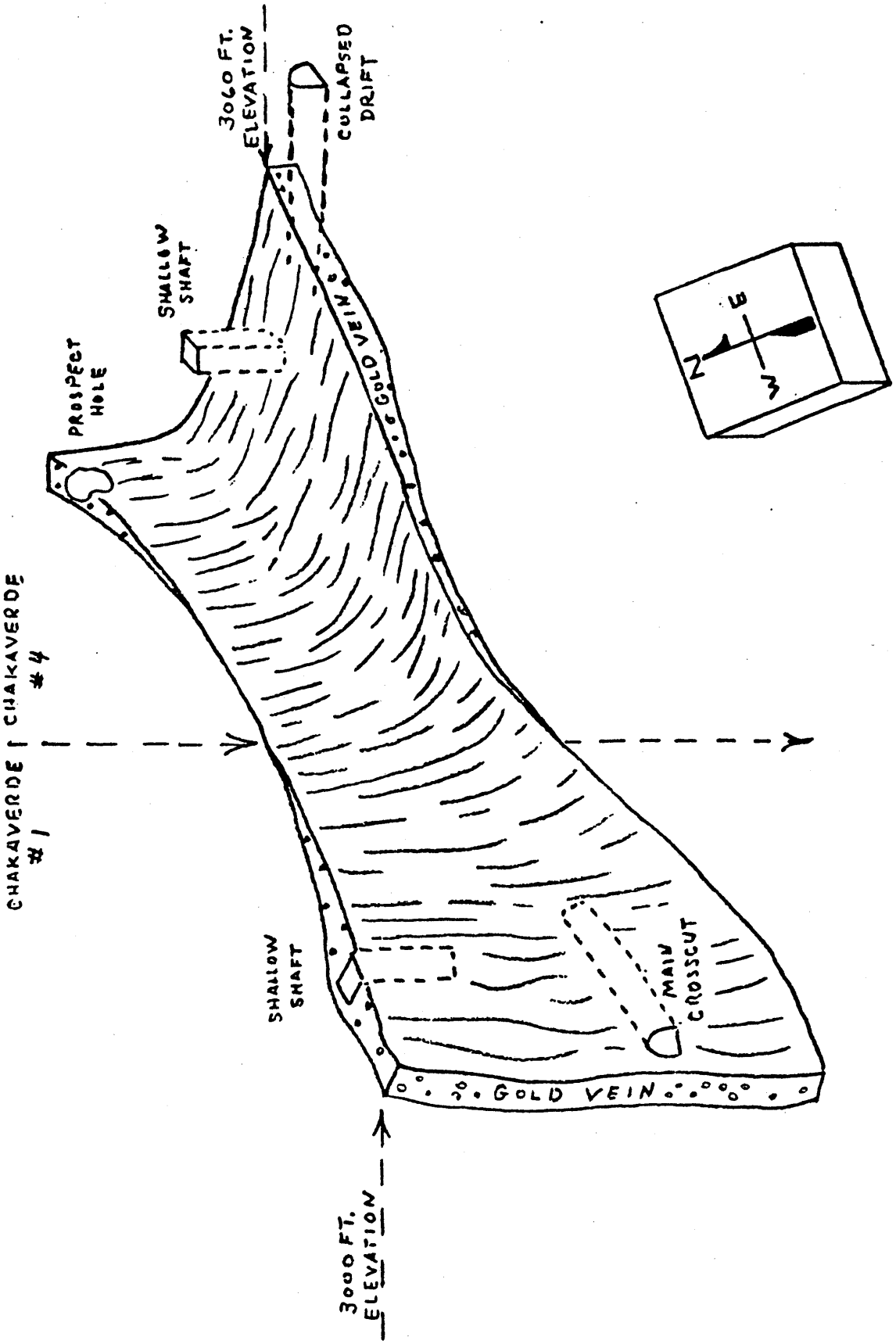
MAP # 3

PROFILE VEIN STRUCTURE FOR CHAKAVERDE # 1 & 2



MAP # 4

PROFILE VEIN STRUCTURE FOR CHAKAVERDE # 1 & 4



ELT

CHAKAVERDE MINE 1-5

Mineral Hill Mining District

Pinal County

T2S-R11E-Secs 27 & 28

MinX Minerals Exploration Company

Engineering • Exploration
Mine & Mill Design

(602) 632-9218

David L. Taylor
Mining Field Engineer

PO Box 1052
Mayer, AZ 86333

PROJECT ENGINEERING

FOR

CHAKAVERDE MINE

HEAP

LEACH

CYANIDATION PROJECT

Submitted by:

David L. Taylor
Field Engineer
Mesa, Arizona
August 19, 1981

For: Mr. Leroy H. Fairey

PURPOSE OF PROJECT FLOW SHEET

The main purpose of the following information within this report is to base a milling cost and construction plan for the full construction of a Heap Leach Cyanidation opperation.

This report is to be used as a format in conjunction with set up and training program to be obtained in Tombstone from the Escapule Brothers.

Since the precipe plant will be obtained in Tombstone, all technical information regarding the plants opperation has been omitted. The full details of the pads construction in regard to its design/shape should be obtained during the training in Tombstone, as with all mixing and chemical transfer input.

IMPORTANT:

It has to be understood that the Leach pad size and capacity must be rigidly adhered to, as the flow sheet I am submitting is custom designed for the size and quality control of the project. It must also be understoon that the recovery of the metals from these pads must be done with the zinc system, as the type of rock from the property is custom made for this type of recovery.

Project Base Flow Sheet
Submitted by:

David L. Taylor
August 19, 1981

4 DAY LEACH CYCLE RECOVERY BREAKDOWN ON SAMPLE TESTS

Sample #1

DAY	AU (Gold)	AG (Silver)
1	.532	.01
2	.287	.01
3	.168	.02
4	.093	.02
	98.2% Recovery	50.0% Recovery

Sample #2

Day	AU (Gold)	AG (Silver)
1	.446	.02
2	.172	.01
3	.098	.02
4	.094	.02
	81.8% Recovery	50.0% Recovery

Lead acetate at 10% solution on index of 1 drop per 30 seconds directly into the Zinc conditioner feed line.

CYANIDATION — FIRE ASSAYS
ESTING FOR GOLD & SILVER ORES
Pb, Cu, Zn, etc.

LINDROOS LABORATORIES
GARY A. & NAOMI R. LINDROOS
P.O. BOX 672
TOMBSTONE, AZ 85638 457-3132

OOS LABORATORIES
' A. & NAOMI R. LINDROOS
P.O.BOX 672
TOMBSTONE, AZ 85638
Phone: 457-3132

July 27, 1981

Mr. R. K. Warren
1500 N. Markdale, Villa #53
Mesa, Arizona 85201

Dear Mr. Warren:

Following are results of test work conducted on your ore samples.

COLUMN TESTS

Sample I. D.	Ag	Au
#1 (Head Sample)	0.14	1.100
(Precipitate)	0.07	1.080
Percent Recovery	50.0%	98.2%

Leach Cycle: 96 Hours

Reagent Information: NaCN used 3 pounds/ton of solution.
NaCN consumed 1.2 pounds/ton of solution.
Lime used 10 pounds/ton of ore.

#2 (Head Sample)	0.14	0.985
(Precipitate)	0.07	0.806
Percent Recovery	50.0%	81.8%

Leach Cycle: 96 Hours

Reagent Information: NaCN used 3 pounds/ton of solution.
NaCn consumed 1.2 pounds/ton of solution.
Lime used 10 pounds/ton of ore.

If you have any questions concerning this test work please feel free to contact me at any time.

Gary A. Lindroos

TEST RESULTS FROM LINDROOS LABORATORIES

@ Sample I.D. #1 (vein rock no pad) (all areas of mine)
(head sample)

	Silver	Gold
	0.14 oz. per ton	1.100 oz. per ton

(precipitate)

	0.07 oz. per ton	1.080 oz. per ton

Percent Recovery

	50.0 %	98.2%

Leach Cycle Time, 4 DaYS (96 Hours)

@ Sample I.D. #2 (wall rock schist) (all wall areas of mine)
(head sample)

	Silver	Gold
	0.14 oz. per ton	0.985 oz per ton

(precipitate)

	0.07 Oz. per ton	0.806 oz. per ton

Percent Recovery

	50.0%	81.8%

Leach Cycle Time: 4 Days (96 Hours)

Phone conversation with Gary Lindroos - August 17 & 18, 1981:

Cycle time could be increased to 6 days with recovery of better than 98% on the combined assay units. It is my suggestion (D.L.T.) that the cycle time be run the extra 2 days.

4 DAY LEACH CYCLE RECOVERY BREAKDOWN ON SAMPLE TESTS

Sample #1

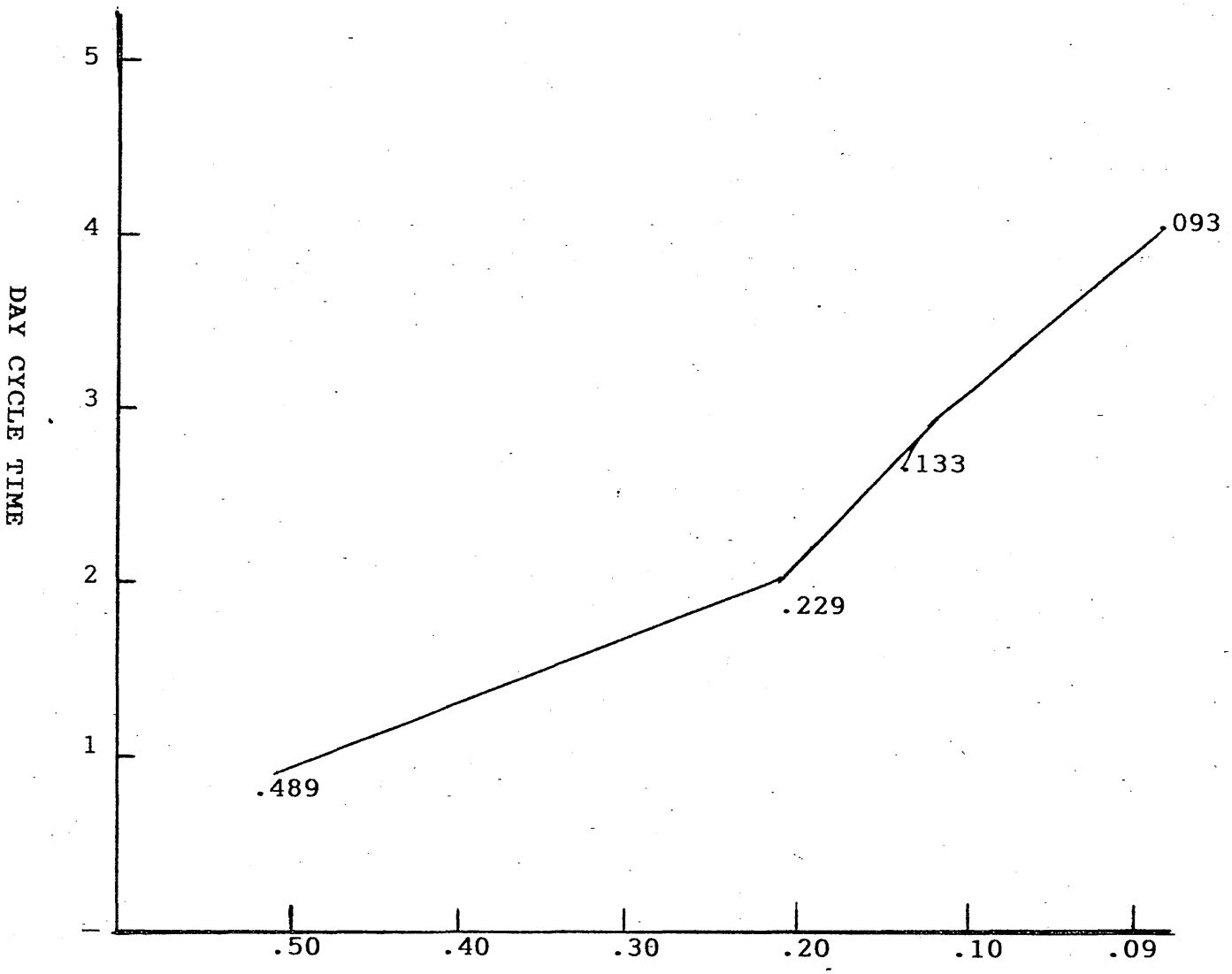
DAY	AU (Gold)	AG (Silver)
1	.532	.01
2	.287	.01
3	.168	.02
4	.093	.02
	98.2% Recovery	50.0% Recovery

Sample #2

Day	AU (Gold)	AG (Silver)
1	.446	.02
2	.172	.01
3	.098	.02
4	.094	.02
	81.8% Recovery	50.0% Recovery

Lead acetate at 10% solution on index of 1 drop per 30 seconds directly into the Zinc conditioner feed line.

DAY RECOVERY LEACH CURVE



This curve is an average of gold leach results

(see page #6)

USE OF LEAD ACETATE TO STIMULATE ZINC

The introduction of Lead Acetate into the Zinc precipitation plant has been recommended for high recovery gold precipitation units. A 10% solution of this chemical is slowly added to the Zinc feedbox on the precip plant at a rate of 1 drop every 30-45 seconds. The purpose of this addition is to stimulate the cycle time for the dropout rate of the gold. The Zinc dust is chemically "popped" by the lead acetate forming a larger surface area for contact for the gold in the cyanide solution without changing the spicific gravity of the Zinc dust.

A simple and inexpensive liquid drip tank could be designed and installed into the precip plant with no major alterations to the system. Further information in regard to this process should be obtained from Lindroos Laboratories in Tombstone. From a telephone conversation with Gary Lindroos the use of Lead Acetate can increase recovery time by as much as 50-75%.

AMOUNT AND COST OF CHEMICALS

Reagent Information: NaCN used 3 pounds/ton of solution
NaCN consumed 1.2 pounds ton of solution
Lime used 10 pounds/ton of ore

NaCN	200 lbs. at $145.30	@ 73¢ per pound
Zinc	100 lbs. at $ 72.85	@ 73¢ per pound/4.5¢ per ounce
Lime	50 lbs. at $ 4.25	@ 8.5¢ per pound

Water used for pad leach is base ratio of 2-1 or 1 ton ore requires ½ ton of water (120 gallons per ton of ore)

Estimation base of 150 tons of ore would need 75 ton/18,000 gallons of water.

Amount of startup NaCN would be 225 pounds ($164.25)

Amount of NaCN to replace per each new lift of 150 ton would be 90 pounds ($65.70).

Amount of lime for startup of pad would need 1500 pounds ($127.50)

Full gost of reagents for first pad startup would be $291.75.

Cost for each new lift would be $193.20.

CHAKAVERDE MINE

PINAL COUNTY
Mineral Mountain

Prospector & Miner Jan. 1979

7/23/81: Chakaverde
Mining Company
2131 W. Grant Street,
Phoenix, AZ.
Bill Randall - partner
Bob Baker - Mine Super
and partner

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Chakaverde T2S R11E Sec. 27, 28 Date February 2, 1982

District Mineral Hill Engineer Richard Beard

Subject: Field Visit

Owner, Operator: Chakaverde Mining Co.
2131 West Grant Street
Phoenix, AZ 85009

Phone 257-0487

Contacts: Bill Randall 7 to 9:30 a.m.

Interviewed Bob Baker, resident foreman.

Mr. Baker reports that the claims totaling approximately 90 acres were bought from Dave Taylor. They were previously owned by Pete Villaverde. They had leaching tests run in Tombstone, by a former employee of the Escapules, on the dumps and they got 98% recovery in column tests. Based on that they built two small leach pads and bought an Escapule unit and then discovered that the dumps were mostly barren. They have since found a small quartz vein (about 1" thick) and have an unknown amount of high grade ore (3/4 to 1 ounce Au/ton) "blocked out". Some drilling was done with inconclusive results.

The quartz vein is iron stained and vuggy with remains of sulfides. The wall rock is pinal schist and reportedly carrys high gold values near the quartz veins.

They have now set up a small hammer mill feeding a drum amalgamator and then a sluice type shaker called a Steven Concentrator manufactured by C & W Mfg. Co. Inc., Mesa, Arizona, but have not yet been able to fully test because of insufficient water supply. They are now constructing a holding and settling pond so water can be recirculated.