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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CROSSROADS CLAIMS

ALTERNATE NAMES:

YAVAPAI COUNTY MILS NUMBER: 1300

LOCATION: TOWNSHIP 9 N RANGE 2 W SECTION 25 QUARTER SW
LATITUDE: N 34DEG 05MIN 17SEC LONGITUDE: W 112DEG 25MIN 30SEC
TOPO MAP NAME: COPPEROPOLIS - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD
SILVER

BIBLIOGRAPHY:
ADMMR CROSSROADS CLAIMS FILE
ALSO IN SEC. 26 & 35

CROSSROADS CLAIMS

YAVAPAI COUNTY

NJN WR 2/14/86: Nick Carouso (c) visited and donated reprot on the Crossroads Claims (f) and Acquisition 1-5 (f), both located in Yavapai County.

PRELIMINARY ECONOMIC EVALUATION
OF THE
CROSSROADS MINING CLAIM GROUP
SILVER MOUNTAIN MINING DISTRICT
YAVAPAI COUNTY, ARIZONA

GEO-PROCESSING, INC.

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December 20, 1984

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PRELIMINARY ECONOMIC EVALUATION
OF THE
CROSSROADS MINING CLAIM GROUP
SILVER MOUNTAIN MINING DISTRICT
YAVAPAI COUNTY, ARIZONA

INTRODUCTION

The CROSSROADS MINING CLAIM GROUP, consists of twenty-four (24) unpatented lode mining claims situated in the Silver Mountain Mining District, Township 9 North, Range 2 West, Sections 25, 26 and 35, G&SRBM, Yavapai County, Arizona.

The claim group is at an elevation of approximately 3600 feet, about 1 1/2 miles northeast of Copperopolis, and is accessible by road.

Historical information is lacking, however, there are several development openings on the property. Two shafts, and three adits.

The ore from this property was used as a control during the development of the Thiosulfate leaching process by Thiotech Incorporated. Gold recoveries of 95% were obtained within two (2) hours leaching time. Silver recoveries of 94% were also possible within two (2) hours leaching time.

Very Low Frequency Electromagnetic Geophysical surveys indicated strong conductive structural highs over the mineralized zones.

The property has the potential of being worked initially as an open pit type operation, as the attitude of

the vein system and the topography favor this option. However, to fully exploit the economic potential of the property, surface and underground mining should be considered.

ECONOMIC GEOLOGY

The prevailing rocks are schist, rhyolite and strong quartz pegmatite dikes. The pegmatite dikes, which can be followed for at least two (2) miles along their strike length, attain widths of several feet and bear generally North 30 degrees East and dip approximately 50 to 60 degrees northwest.

The mineralized zone appears to have the same attitude as the pegmatite dikes, and are adjacent to the west side of the dikes. The mineralized zone is at least 200 feet in width and has a strike length, intermittenly, of at least 2000 feet.

The major ore minerals are gold and silver with minor values of lead and copper (0.39% lead and 0.16% copper, assayed by ASARCO). Preliminary sampling has given interesting economic results. From a shallow shaft and adit in the northcentral area of the claim group where an ore face is visible, a five (5) foot channel sample across the vein, gave an assay of 0.78 oz/ton gold and 5.5 oz/ton silver. In the same area, a 14 inch quartz vein, with strongly altered sulfides, was sampled and gave 1.7 oz/ton

gold and 10.0 oz./ton silver. Other assay values from this same area are as follows: 0.615 oz./ton gold and 19.27 oz./ton silver (assayed by ASARCO); 0.34 oz./ton gold and 38.0 oz./ton silver; 0.74 oz./ton gold and 15.0 oz./ton silver; two (2) samples taken about 2000 feet to the southwest along the strike of the mineralized zone, gave assays of 0.34 oz./ton gold and 2.3 oz./ton silver, and 1.078 oz./ton gold and 9.65 oz./ton silver. These samples were taken by the owner and also by unbiased professionals. It should be mentioned that in this same area, economic values of Beryl mineralization are found in the adjacent quartz pegmatite dike.

A geologist from a major mining company sampled across the above mentioned shallow shaft and adit area and obtained the following results: 2.0 oz./ton gold across 18 inches, and about 80 feet to the north of the shallow shaft area, an assay of 13.5 oz./ton gold across four (4) feet of the altered quartz vein, and the sample was reassayed, with the same result. However, it is felt this is a nugget effect.

Another geologist from a major mining company during a recent evaluation, obtained across 1 1/2 inches in the shallow shaft area, 1.012 oz./ton gold and 7.6 oz./ton silver. He also sampled across three (3) feet of an oxidized iron quartz zone on the north side of a shaft, approximately 3500 feet to the southeast of the shallow shaft area, which gave an assay value of 0.899 oz./ton gold. On this same

structure, to the south, he sampled ten (10) feet across the road and normal to the strike of the structure and got 0.044 oz/ton gold. It should be mentioned that in this same area, the writer, from a grab sample along the surface of this structure, had an assay value of 0.30 oz/ton gold and 11.6 oz/ton silver. The geologist recommended the acquisition of the property to his company, however, due to the writers' partners at that time, a negotiated agreement could not be made. This situation has been corrected, as the property is now solely owned by the writer of this report.

Data furnished by interested parties along with data developed by the writer is available for review.

VERY LOW FREQUENCY ELECTROMAGNETIC SURVEY

PRINCIPLE OF OPERATION

The U.S. Navy VLF-transmitting stations operating for communications with submarines at sea, have a vertical antenna system. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. The instrument used for this type of survey, the EM-16, is simply a sensitive receiver covering the frequency bands of the VLF-transmitting stations with means of measuring the vertical field components.

The receiver has two inputs, with two receiving coils

built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the instrument. The tilt-angle is calibrated in percentage of electromagnetic response. The remaining signal in this coil is finally balanced out by a measured percentage of signal from the other coil (horizontal coil), after being shifted (electronically) by 90 degrees. This coil is normally parallel to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $\pi/2$ -signal from the horizontal coil is a measure of the quadrature vertical signal. In other words, the vertical real-component (In-Phase reading) indicates the structure and the Quadrature indicates how conductive the structure is.

VERY LOW-FREQUENCY EM SURVEY RESULTS AND INTERPRETATION

Recently three (3) Very Low Frequency Electromagnetic Geophysical survey lines were run to initiate a program to grid the main areas of the property using survey line spacings of 100 foot and data stations of 100 foot intervals. Mathematical filtering could then be use to transform zero-corssings into peaks, and also to reduce noise which would assist in the interpretation of the contourable data and the design of an effective drilling

program.

LINE 7, originated near the northwest corner of Crossroads No. 4 and the northeast corner of Crossroads No. 5, and was run to west with a survey line bearing of N60W. Both U.S. Navy VLF Station NAA and NLK coupled well, indicating an excellent conductive structural high over the altered zone.

LINE 8, originated 100 feet southwest of LINE 7 from the same baseline as LINE 7. This line which is roughly in the center of the draw, indicated the same excellent conductive structural high.

LINE 9, originated 100 feet southwest of Line 8 again from the same baseline. The excellent conductive structural high is also present along this line.

LINE C, a previous survey, originated at the east end of Crossroads No. 17, and was run west. The line covered an altered mineralized zone and indicated an interesting conductive structural high.

The Very Low Frequency Electromagnetic Geophysical survey data indicated that the depths of the conductive structures are in excess of 200 feet.

ORE PROCESSING

Ore from the Crossroads property was used as a standard for the development of the Thiotech "Thiosulfate Recovery Process". The Crossroads ore was compared to other ores

taken from worldwide properties, as the extraction rate standard. The Crossroads ore consistently gave favorable recovery results.

The following results were obtained from a two (2) hour agitated leach, using the Thiotech recovery process:

Heads (oz/ton)		Recovery (%)	
Au	Ag	Au	Ag
1.58	21.74	92.60	84.8
0.33	2.67	94.47	93.97
1.08	2.28	93.73	79.68
0.45	11.70	72.67	90.97

Extraction of gold and silver from the pregnant solutions using a proprietary method extracted 100% of the gold and 99.8% of the silver in solution within 10 minutes. Using activated carbon, 86% of the gold was extracted in 10 minutes and 94.5% in 60 minutes, whereas, 7.7% of silver was extracted in 10 minutes and 13.5% in 60 minutes. This indicates that the proprietary method, which is simple to use and less costly than activated carbon is the preferred method of extracting the gold and silver from the pregnant leach solution.

CONCLUSIONS

The Crossroads unpatented lode mining claim group has the potential of being a moderate sized economic gold and silver operation.

The ore zones are exposed at the surface which would facilitate the exploration and exploitation of the property.

The Very Low Frequency Electromagnetic Geophysical survey indicated that the mineralized zones have favorable conductivity with an expected depth in excess of 200 feet.

Economic values of gold and silver are present that can be beneficiated with high recoveries. Water should be sufficient for milling operation and camp.

Although premature, without drilling information, it could be realistically assumed that reserves of at least 200,000 tons, with economic precious metal values that could average 0.50 oz/T gold and 10.0 oz/T silver, could be expected from this property. Even with the present depressed price of gold and silver, the ore could have a gross dollar value of \$217 per ton, and with the estimated cost of mining and milling at \$55 per ton, a net dollar value of \$162 per ton could be expected. If the above assumptions are accepted, the gross dollar potential could be \$32,000,000.

Cash flow financial analysis spreadsheets based on the above data and assumption are included in the APENDIX.

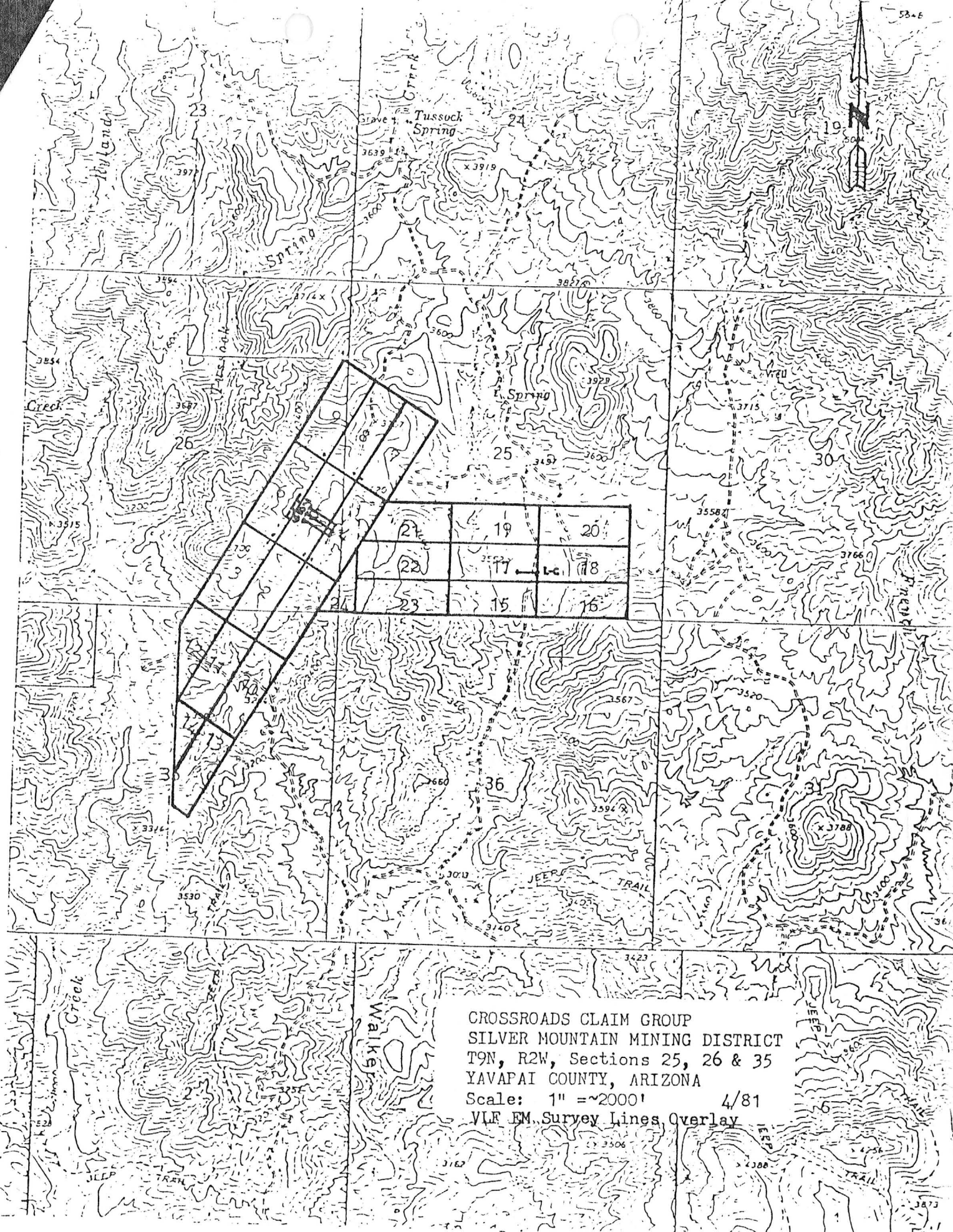
APPENDIX

PLAT OF CLAIM GROUPS WITH OVERLAY OF VLF EM SURVEY LINES

GRAPHS OF VLF EM SURVEY GEOPHYSICAL DATA

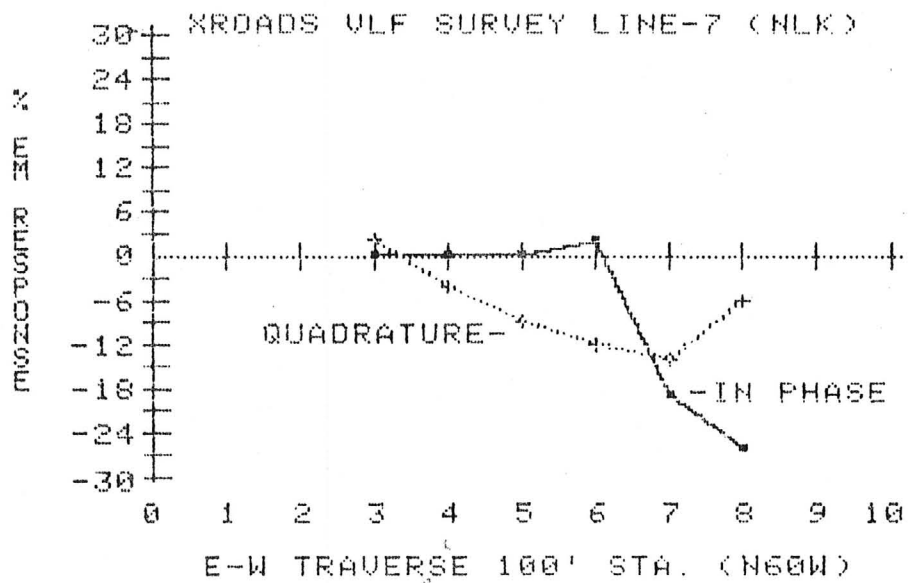
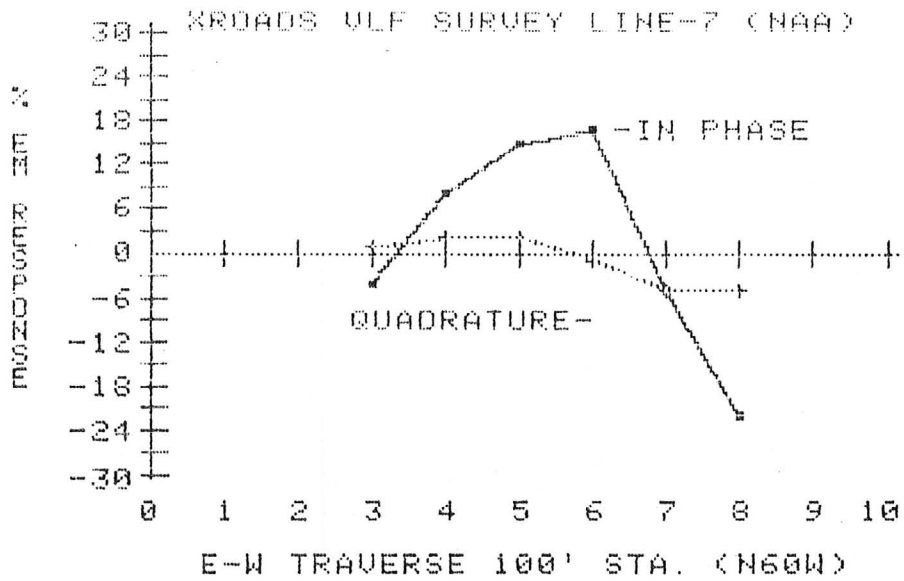
EXHIBIT OF THE CROSSROADS UNPATENTED LODE CLAIM GROUP

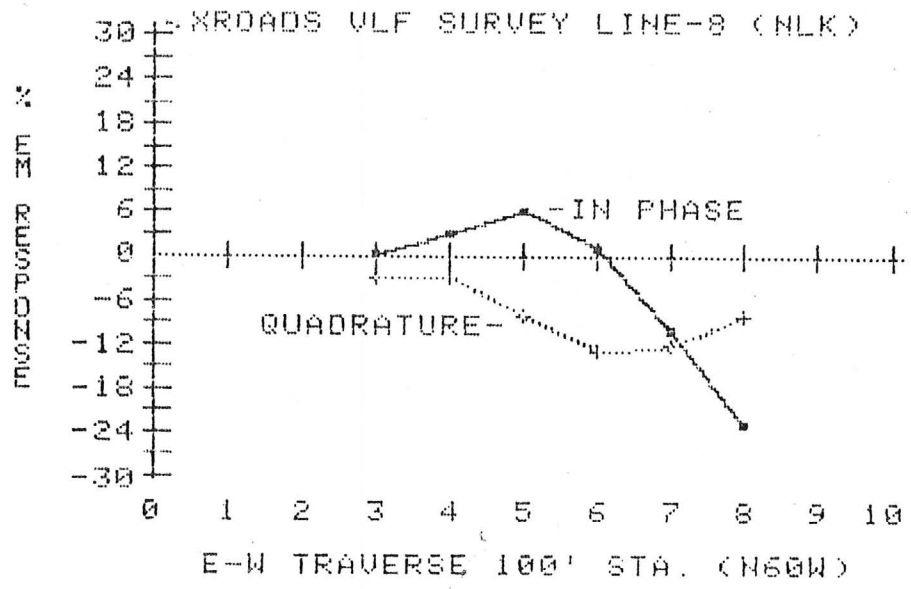
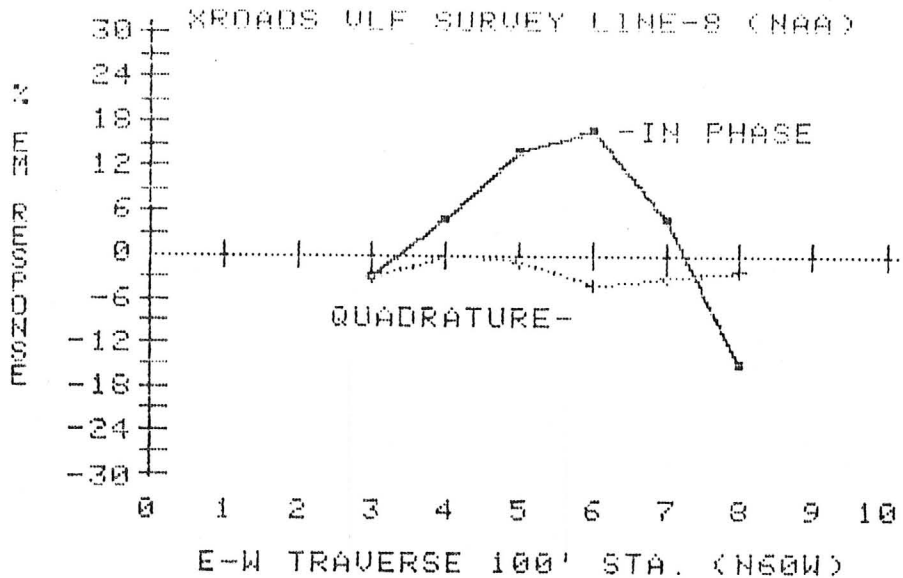
CASH FLOW FINANCIAL ANALYSIS SPREADSHEETS

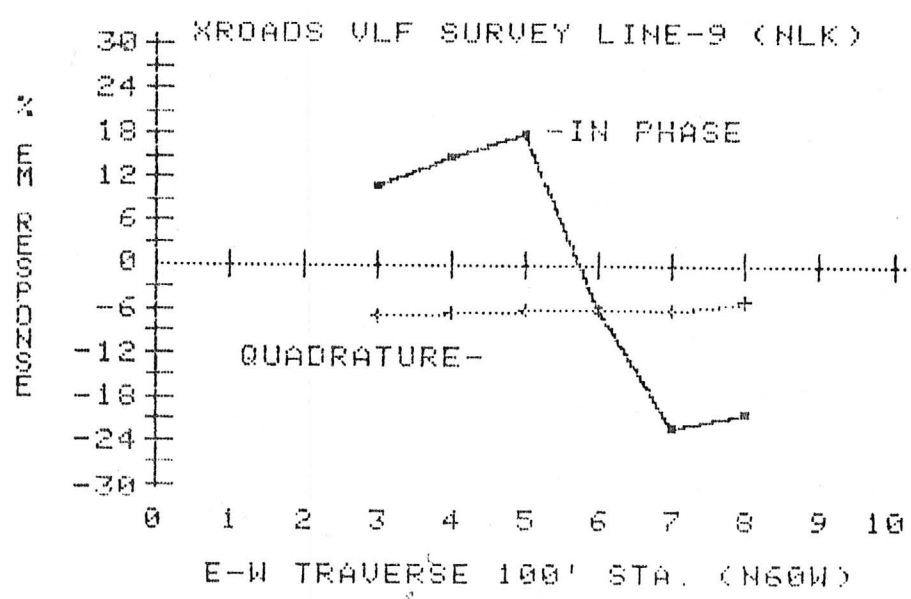
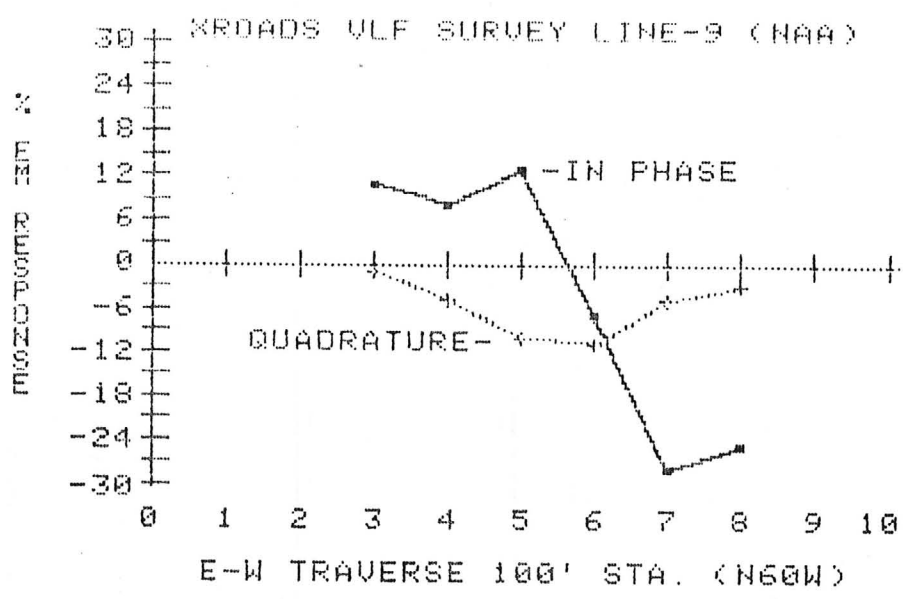


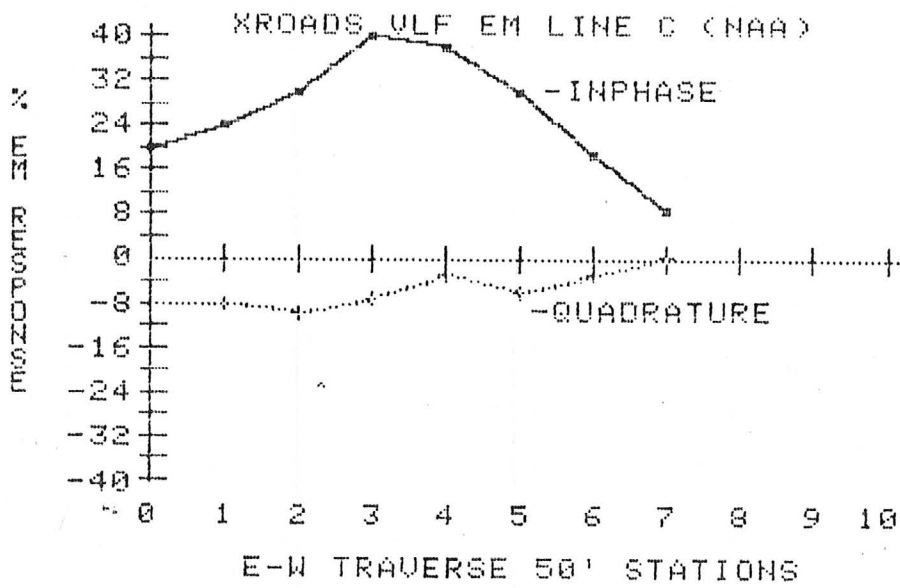
21	19	20
22	17	18
23	15	16

CROSSROADS CLAIM GROUP
 SILVER MOUNTAIN MINING DISTRICT
 T9N, R2W, Sections 25, 26 & 35
 YAVAPAI COUNTY, ARIZONA
 Scale: 1" = ~2000' 4/81
 VLF EM Survey Lines Overlay









EXHIBIT

CROSSROADS UNPATENTED LODE MINING CLAIMS

The Crossroads unpatented lode mining claims are situated Sections 25, 26 and 35, Township 9N, Range 2W, G&SRM, Silver Mountain Mining District, Yavapai County, Arizona, and are recorded in the Official Records of Yavapai County, Arizona, as follows:

CLAIM No.	DATE LOCATE	DATE RECORD	BOOK	PAGE	BLM SERIAL	DOC. No.
No. 1	1/30/81	2/4/81	1357	426-427	AMC 121470	4141
No. 2	1/30/81	2/4/81	1357	428-429	AMC 121471	4142
No. 3	1/30/81	2/4/81	1357	430-431	AMC 121472	4143
No. 4	1/30/81	2/4/81	1357	432-433	AMC 121473	4144
No. 5	1/30/81	2/4/81	1357	434-435	AMC 121474	4145
No. 6	1/30/81	2/4/81	1357	436-437	AMC 121475	4146
No. 7	1/31/81	2/4/81	1357	438-439	AMC 121476	4147
No. 8	1/31/81	2/4/81	1357	440-441	AMC 121477	4148
No. 9	1/31/81	2/4/81	1357	442-443	AMC 121478	4149
No. 10	4/5/81	4/10/81	1373	566-567	AMC 127865	12545
No. 11	4/5/81	4/10/81	1373	568-569	AMC 127866	12546
No. 12	4/5/81	4/10/81	1373	570-571	AMC 127867	12547
No. 13	4/5/81	4/10/81	1373	572-573	AMC 127868	12548
No. 14	4/5/81	4/10/81	1373	574-575	AMC 127869	12549
No. 15	10/4/81	10/5/81	1415	353-354	AMC 141655	34594
No. 16	10/4/81	10/5/81	1415	355-356	AMC 141656	34595
No. 17	10/4/81	10/5/81	1415	357-358	AMC 141657	34596
No. 18	10/4/81	10/5/81	1415	359-360	AMC 141658	34597
No. 19	10/4/81	10/5/81	1415	361-362	AMC 141659	34598
No. 20	10/4/81	10/5/81	1415	363-364	AMC 141660	34599
No. 21	12/1/84	12/21/84	1686	916-917	AMC 232373	44476
No. 22	12/1/84	12/21/84	1686	918-919	AMC 232374	44477
No. 23	12/1/84	12/21/84	1686	920-921	AMC 232375	44478
No. 24	12/1/84	12/21/84	1686	922-923	AMC 232376	44479

CROSSROADS MINE FINANCIAL ANALYSIS

=====	
OPERATING DAYS/MO.	20
TONS MINED/DAY	200
TONS MINED/MO.	4,000
OPERATING DAYS/MO.	30
TONS PROCESSED/DAY	133
TONS PROCESSED/MO.	4,000
GRADE OF ORE (OZ/T):	
GOLD	0.500
SILVER	10.000
SPOT PRICE (\$ U.S.):	
GOLD	310.00
SILVER	6.25
GROSS \$/TON	217.50
GROSS \$/DAY	26,100.00
(90% RECOVERY)	
GROSS \$/MONTH	783,000.00
COST/TON	55.45
(MINING & MILLING)	
EXPENSES:	
SURFACE OPERATION:	775.00
EQUIP. OPERATOR	125.00
EQUIP. OPERATOR	125.00
EQUIP. OPERATOR	125.00
EQUIP. OPERATOR	100.00
EQUIP. OPERATOR	100.00
EQUIP. OPERATOR	100.00
EQUIP. OPERATOR	100.00
UNDERGROUND OPERATION:	900.00
MINER	125.00
MINER	125.00
MINER	125.00
MINER	125.00
HELPER	100.00
HELPER	100.00
HELPER	100.00
HELPER	100.00

MILL OPERATION:	1,340.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	100.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
MILL OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
EQUIP. OPERATOR	80.00
GENERAL:	1,130.00
ENGINEER	125.00
GEOLOGIST	125.00
LAB. TECHNICIAN	100.00
LAB. TECH. ASS'T.	80.00
MECHANIC	125.00
MECHANIC HELPER	100.00
ELECTRICIAN	125.00
COOK & HELPER	100.00
COOK & HELPER	100.00
SUPERINTENDENT	150.00
NUMBER OF EMPLOYEES:	42
TOTAL LABOR COST/MO.:	96,300.00
OVERHEAD (PAYROLL):	33,705.00
INSUR. WORK/COMP/MO.:	7,704.00
CAPITAL EQUIP. COSTS:	
SURFACE MINING EQUIP.:	
DOZER--D8L	342,000
LOADER--988B	340,000
LOADER--980C	247,000
GRADER--CAT 12	150,000
TRUCK--35 TON	75,000
TRUCK--35 TON	75,000
LOADER/BACKHOE	45,000
AIR TRACK DRILL	100,000
ATD COMPRESSOR (825 CFM)	60,000
WATER TRUCK	25,000

UNDERGROUND MIN. EQUIP.:

LHD 1 CU. YD.	50,000
VENTILATION FACILITIES	15,000
DRILL--JACKLEG	3,100
DRILL--JACKLEG	3,100
DRILL--JACKLEG	3,100
DRILL--JACKLEG	3,100
DRILL--STOPER	2,600
DRILL STEEL, ETC.	15,000
SERVICE LINES	5,000
SAFETY EQUIPMENT	5,000
COMPRESSOR (335 CFM)	26,000
COMPRESSOR (750 CFM)	42,000
GENERATOR (75 KW)	15,000

GENERAL EQUIPMENT:

GENERATOR (150 KW)	22,000
GENERATOR (150 KW)	22,000
GENERATOR (15 KW)	8,000
WELDER AND TORCH	4,400
LABORATORY FACILITIES	25,000
HOUSING	200,000
SERVICE BLDGS.	50,000
MILL FACILITIES	300,000
LEACH PAD FACILITIES	150,000

CAPITAL EQUIPMENT COST:	2,428,400
ENGINEERING & CONSTR.	97,500
CONTINGENCY 20%	505,180
WORKING CAPITAL	757,770

TOTAL EST. CAP. INVEST.: 3,788,850

OPERATING SUPPLIES:

MINING:	
SURFACE	800.00
UNDERGROUND	800.00
MILLING:	800.00
GENERAL:	1,470.00

COST/DAY SUPPLIES:	3,870.00
COST/MO. SUPPLIES:	84,100.00
CONTINGENCY 15%	12,615.00

TOTAL EXPENSES/MO.: 221,809.00
 TOTAL EXPENSES/YR.: 2,661,708.00

DEPLETION ALLOW./MO.:	117,450
DEPRECIATION ALLOW./YR.:	242,840
ESTIMATED RESERVES (TONS)	200,000

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CASH FLOW

=====

GROSS REVENUE	9,396,000
OPER. COSTS	2,661,708
NET REVENUE	6,734,292
DEPRECIATION	242,840

	6,491,452
DEPLETION (15% GROSS)	1,409,400
PRE-TAX NET	5,082,052
STATE TAX (10%)	508,205

	4,573,847
FED. TAX (50%)	2,286,923

	2,286,923
DEPRECIATION	242,840
DEPLETION	1,409,400

ANNUAL CASH FLOW	\$3,939,163.40

CROSSROADS MINE FINANCIAL ANALYSIS

MINE PRODUCTION: 200 TPD
 GRADE OF ORE: 0.05 OZ/T GOLD; 10.0 OZ/T SILVER
 SPOT PRICE: \$310/OZ GOLD; \$6.25/OZ SILVER
 NET ANNUAL CASH FLOW: \$3,939,163

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OPERATING DAYS/MO.	20
TONS MINED/DAY	200
TONS MINED/MO.	4,000

OPERATING DAYS/MO.	30
TONS PROCESSED/DAY	133
TONS PROCESSED/MO.	4,000

GRADE OF ORE (OZ/T):	
GOLD	0.500
SILVER	10.000
SPOT PRICE (\$ U.S.):	
GOLD	310.00
SILVER	6.25

GROSS \$/TON	217.50
GROSS \$/DAY	26,100.00
(90% RECOVERY)	
GROSS \$/MONTH	783,000.00

COST/TON	55.45
(MINING & MILLING)	

=====

CASH FLOW

=====

GROSS REVENUE	9,396,000
OPER. COSTS	2,661,708

NET REVENUE	6,734,292
DEPRECIATION	242,840

	6,491,452
DEPLETION	
(15% GROSS)	1,409,400

PRE-TAX NET	5,082,052
STATE TAX (10%)	508,205

	4,573,847
FED. TAX (50%)	2,286,923

	2,286,923
DEPRECIATION	242,840
DEPLETION	1,409,400

ANNUAL CASH FLOW	\$3,939,163.40
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CROSSROADS MINE FINANCIAL ANALYSIS

MINE PRODUCTION: 200 TPD
 GRADE OF ORE: 0.05 OZ/T GOLD; 10.0 OZ/T SILVER
 SPOT PRICE: \$400/OZ GOLD; \$9/OZ SILVER
 NET ANNUAL CASH FLOW: \$5,606,953

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OPERATING DAYS/MO.	20
TONS MINED/DAY	200
TONS MINED/MO.	4,000
OPERATING DAYS/MO.	30
TONS PROCESSED/DAY	133
TONS PROCESSED/MO.	4,000
GRADE OF ORE (OZ/T):	
GOLD	0.500
SILVER	10.000
SPOT PRICE (\$ U.S.):	
GOLD	400.00
SILVER	9.00
GROSS \$/TON	290.00
GROSS \$/DAY	34,800.00
(90% RECOVERY)	
GROSS \$/MONTH	1,044,000.00
COST/TON	55.45
(MINING & MILLING)	

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CASH FLOW

=====

GROSS REVENUE	12,528,000
OPER. COSTS	2,661,708
NET REVENUE	9,866,292
DEPRECIATION	242,840
DEPLETION	9,623,452
(15% GROSS)	1,879,200
PRE-TAX NET	7,744,252
STATE TAX (10%)	774,425
FED. TAX (50%)	6,969,827
	3,484,913
DEPRECIATION	3,484,913
DEPLETION	242,840
	1,879,200
ANNUAL CASH FLOW	\$5,606,953.40

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CROSSROADS MINE FINANCIAL ANALYSIS

MINE PRODUCTION: 300 TPD
 GRADE OF ORE: 0.05 OZ/T GOLD; 10.0 OZ/T SILVER
 SPOT PRICE: \$310/OZ GOLD; \$6.25/OZ SILVER
 NET ANNUAL CASH FLOW: \$6,332,848

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OPERATING DAYS/MO.	20
TONS MINED/DAY	300
TONS MINED/MO.	6,000
OPERATING DAYS/MO.	30
TONS PROCESSED/DAY	200
TONS PROCESSED/MO.	6,000
GRADE OF ORE (OZ/T):	
GOLD	0.500
SILVER	10.000
SPOT PRICE (\$ U.S.):	
GOLD	310.00
SILVER	6.25
GROSS \$/TON	217.50
GROSS \$/DAY	39,150.00
(90% RECOVERY)	
GROSS \$/MONTH	1,174,500.00
COST/TON	40.30
(MINING & MILLING)	

=====

CASH FLOW

=====

GROSS REVENUE	14,094,000
OPER. COSTS	2,901,708
NET REVENUE	11,192,292
DEPRECIATION	242,840
DEPLETION	10,949,452
(15% GROSS)	2,114,100
PRE-TAX NET	8,835,352
STATE TAX (10%)	883,535
FED. TAX (50%)	7,951,817
DEPRECIATION	3,975,908
DEPLETION	242,840
	2,114,100
ANNUAL CASH FLOW	\$6,332,848.40

=====

CROSSROADS MINE FINANCIAL ANALYSIS

MINE PRODUCTION: 300 TPD
 GRADE OF ORE: 0.05 OZ/T GOLD; 10.0 OZ/T SILVER
 SPOT PRICE: \$400/OZ GOLD; \$9/OZ SILVER
 NET ANNUAL CASH FLOW: \$8,834,533

OPERATING DAYS/MO.	20
TONS MINED/DAY	300
TONS MINED/MO.	6,000
OPERATING DAYS/MO.	30
TONS PROCESSED/DAY	200
TONS PROCESSED/MO.	6,000
GRADE OF ORE (OZ/T):	
GOLD	0.500
SILVER	10.000
SPOT PRICE (\$ U.S.):	
GOLD	400.00
SILVER	9.00
GROSS \$/TON	290.00
GROSS \$/DAY	52,200.00
(90% RECOVERY)	
GROSS \$/MONTH	1,566,000.00
COST/TON	40.30
(MINING & MILLING)	

=====
 CASH FLOW
 =====

GROSS REVENUE	18,792,000
OPER. COSTS	2,901,708
NET REVENUE	15,890,292
DEPRECIATION	242,840
DEPLETION	15,647,452
(15% GROSS)	2,818,800
PRE-TAX NET	12,828,652
STATE TAX (10%)	1,282,865
FED. TAX (50%)	11,545,787
	5,772,893
DEPRECIATION	5,772,893
DEPLETION	242,840
	2,818,800
ANNUAL CASH FLOW	===== \$8,834,533.40

CROSSROADS MINING CLAIM GROUP

PRELIMINARY REPORT

INTRODUCTION

The CROSSROADS MINING CLAIM GROUP, consists of twenty (20) unpatented lode mining claims situated in the Silver Mountain Mining District, Township 9 North, Range 2 West, Sections 25, 26 and 35 G&SRM, Yavapai County, Arizona.

The claim group is at an elevation of approximately 3600 feet, about 1 1/2 miles northeast of Copperopolis, and is accessible by road.

Historical information is lacking, however, there are several development openings on the property. Two shafts, and three adits.

The property has the potential of being worked as an open pit type operation. The attitude of the vein system and the topography favors this option.

GEOLOGY

The prevailing rock is granite with inclusions of schist and strong quartz pegmatite dikes. The pegmatite dikes, which can be followed for at least two (2) miles along their strike length, attain widths of several feet and bear generally North 30 Degrees East and dip approximately 50 to 60 Degrees Northwest.

The deposit appears to have the same attitude of the pegmatite dikes, and are adjacent to and west of the dikes. This mineralized zone, is several hundred feet in width and has a strike length of at least two thousand (2000) feet.

The major ore minerals are gold and silver with minor values of lead and copper. Preliminary sampling have given interesting results. From a shallow shaft in the central area of the claim group where an ore face is visible, a five (5) foot channel sample across the vein, gave an assay of 0.78 oz/ton gold and 5.5 oz/ton silver. In the same area, a 14 inch quartz vein, with strongly altered sulfides, was sampled and gave 1.7 oz/ton gold and 10.0 oz/ton silver. Other assay values from this same area are as follows: 0.615 oz/ton gold and 19.27 oz/ton silver (assayed by ASARCO); 0.34 oz/ton gold and 38.0 oz/ton silver; and 0.74 oz/ton gold and 15.0 oz/ton silver. Two samples taken about 2000 feet southwest of the above mentioned zone, gave assays of 0.34 oz/ton gold and 2.3 oz/ton silver, and 1.078 oz/ton gold and 9.65 oz/ton silver.

Recent sampling by a geologist from a major mining company, in the shallow shaft area mentioned above, gave 2.0 oz/ton gold across 18 inches, and across a four foot zone, about 80 feet to the north of the shallow shaft area, gave 13.5 oz/ton gold.

The claim group has been expanded to twenty (20) unpatented lode mining claims, from the previous group of fourteen (14) unpatented lode mining claims. The newly located Crossroads No. 15 through 20, are to the east of the main group and expands the potential ore reserves. A grab sample of the vein material, at the surface, gave an assay of 0.30 oz/ton gold, and 11.6 oz/ton silver.

SUMMARY

The CROSSROADS lode claim group offers the potential of being a moderate sized gold and silver producer. The topography favors an open pit type of operation. The vein system crops out near the top of the ridge and dips to the west with a slightly steeper dip than the slope of the ridge.

A preliminary Very Low Frequency Electromagnetic survey was conducted across several hundred feet of the first described zone, and indicated an interesting conductive structural high. A detailed survey is contemplated for the near future to assist in developing a drilling, or excavation program.

Recent laboratory testing with the newly developed Ammonium Thiosulfate process, indicates that the ore from the Crossroads claim group, can be processed with comparable recoveries and in a fraction of the time that the cyanide process requires, with the added benefit of a non-toxic reagent system.

It is believed by the writer, that water could be available for milling and camp use, by drilling a shallow well.

The opinion of the writer, is that sufficient ore reserves exist to make this an economically feasible operating property.

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