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E X V E N C O

Ramsey Project

La Paz County, Arizona

1984

Exploration Ventures Co., Inc.
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Spokane, Washington 99218
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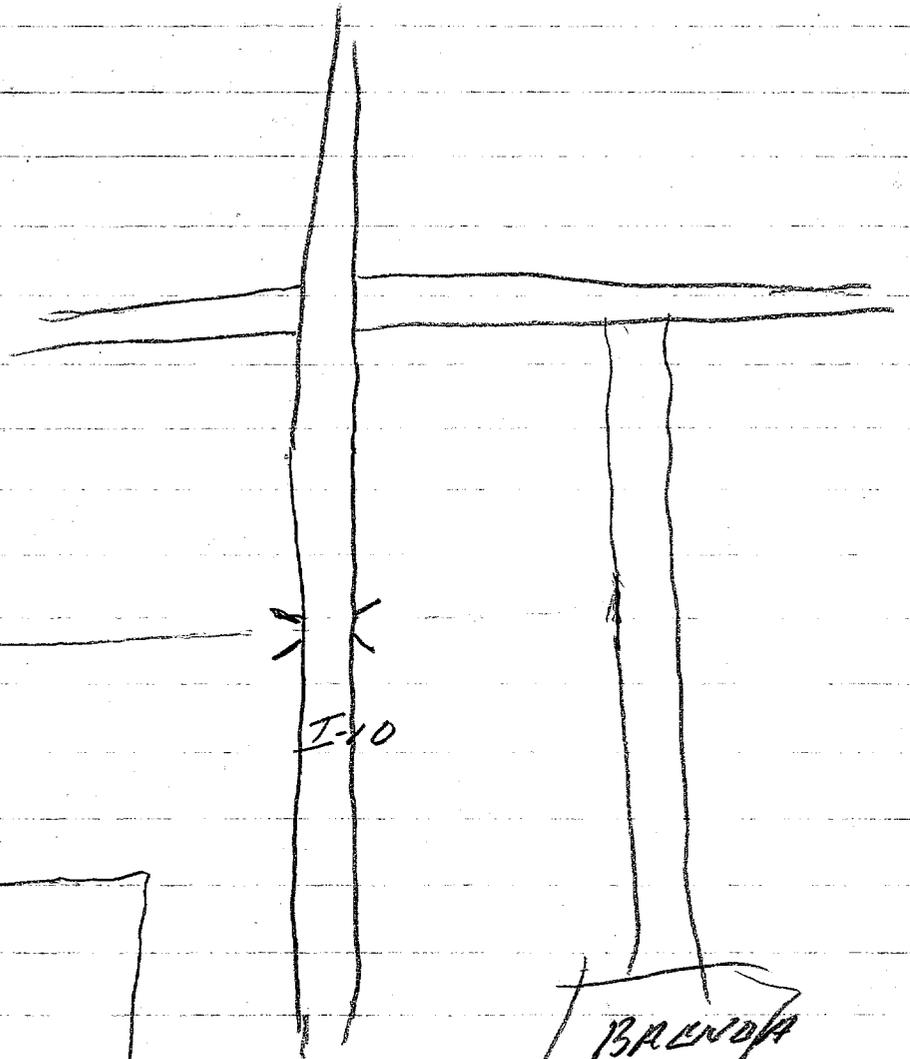
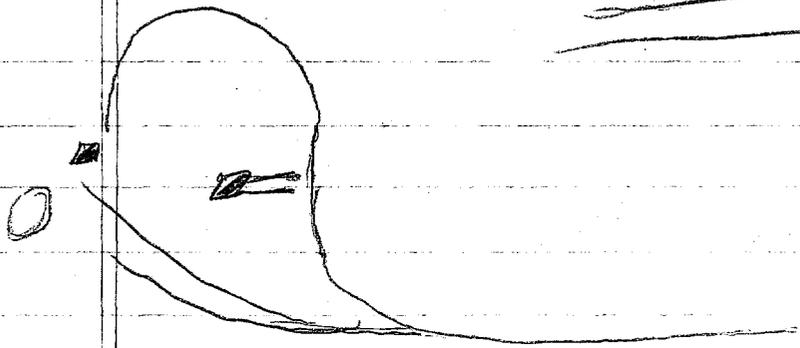
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BACUDA

To JDS
 Date 2/7 Time 11:00 AM PM
WHILE YOU WERE OUT
 M Marvin Houstad
 of _____
 Phone () 748-7555
 Area Code Number Extension

TELEPHONED	<input checked="" type="checkbox"/>	PLEASE CALL	<input checked="" type="checkbox"/>
CALLED TO SEE YOU	<input type="checkbox"/>	WILL CALL AGAIN	<input type="checkbox"/>
WANTS TO SEE YOU	<input type="checkbox"/>	URGENT	<input type="checkbox"/>

RETURNED YOUR CALL

Message _____

TM
Operator



REORDER #23-000

Monday
Feb 11

11 AM
4101 E Drwinster
South side of street
2 story bldg
1/2 story, white bldg
Moro

Go See
Data

Ramsey Mine

Report by: RC Baker & GA Baker, Oct. 1967

Ramsey Mine

R & A: Ramsey + Arizona

La Paz Co.

T3N, R17W (unassigned)

See 1, 2, & 12

16 miles E of Phoenix

I-10, Ramsey overpass, then 2 miles South.

Plomora Min. West.

2 patented claims: R & A, R & A 2

4 unpatented claims: R & A 3 thru R & A 6

Ramsey Shaft

strike N 20° W about 204'; N 25-45° W in degree ^{west}

4x8', inclined 53°-65° toward SE to depth of 448'.

1530' of drift & crosscut @ 30', 72', 125', 141', 244',

& 274' levels.

1 large stop on N of shaft

~~from~~ 5-7' wide, 70' long, extending from 30' (adit level) to below 244' level.

Smaller stops to S of 72', 141' & 244' levels.

Inaccessible shaft to South, may connect to 141 or 244' levels.

Creosote shaft

4x8', inclined 79°-89° southeast, dept 157 ft with 292 feet of drift on 7 levels.

Stop on N side 3-4' wide, 40' long extend from 70' vertically above the 113 level to the bottom (157').

Gold insignificant

Silver 1-2000 oz \pm 15-20 oz

Lead 1/2-4%

Zinc 1/2-3%

Mn 0.01%

1957 Shyobu (2) (max) 38 oz Ag - 1.2% Mn 50% SiO₂.

Crossed vn. greater Mn & red color; similar Ag vol%,
the generally lower.

red FeOx generally + 20% Ag

black MnO₂ general + 15% Ag.

Report for Exploration Venture Co, Inc (Bohannon, WA)
dated 1984

mine reached by turning south from US 60-70 one mile
west of Brendo, & following dirt road 3.5 mile SW to
property. The access road crosses I-10 but no access
to I-10 at this pt!

CK → Maybe in expanded Kofu Game Range

In 1968 MMS drilled 1,700 ft @ 16. oz Ag. to
dissimination.

MMS drilled 35 percussion holes from 141 & 242 level.
(See Table 1 & Fig 3. (184) (299)

Dissiminated & stockwork veining in FW of Rousey vn.

p. 11. The underground longhole drilling program outlines a broad zone of disseminated silver mineralization throughout the Rousey stages. This zone is 20 to 50 feet thick in the hanging wall shales & 100 to 150 feet thick in the footwall sedimentary rocks as shown in Table 1 and Figure 3. This work suggests a drill indicated tonnage of 1.5 million tons grading about 300 oz Ag/ton from the surface to the 300 level. Since mineralization continues past the limit of stoping, it is reasonable to expect that disseminated mineralization must also continue and the ore zone is open east to the north, south, and at depth. This project has a minimum open pit target potential of 5 to 10 million tons grading + 2.5 opt silver or an equivalent vein potential of perhaps 200,000 to 400,000 tons grading + 10 opt silver."

(2.5/1 to 3.0/1 therefore ratio on pit's design)

Still & Still for Skatich Deen April 12, 1962.

Stems centered in shoot w/ rhy/gt/etc centered. These veins increase dip & width shale in both walls - was much.

Reed Welch AS & R assay.

28-200 oz Ag, 2-37% Pb, 903-0.008% Cu

31-52% SiO₂, 1.4-6.2% Fe, 10-20% CaO, 1.4-2.8% ⁹Al₂O₃

RAMSEY MINE
La Paz County, Arizona

Summary and Recommendations

The Ramsey property comprises two patented and four unpatented mining claims. The underlying lease-option calls for \$1,000 per month lease payments beginning in 1985; a four year, \$375,000 cumulative work obligation; a 10% NSR Royalty; and a \$2,000,000 purchase price, less all prior royalty payments.

The area is underlain by Jurassic limestone, shale, arkosic quartzite, and conglomerate intruded by Cretaceous (?) dacite dikes and one small dacite plug. These rocks are overlain to the north by Tertiary rhyolite flows. The Ramsey vein occupies the faulted and brecciated contact between the Jurassic rocks and the rhyolite. The Creosote vein, a parallel structure, lies 500 feet to the northeast, hosted solely by rhyolite.

Underground drilling on the 184 and 299 levels of the Ramsey vein (Table 1 and Figure 3) outlines a zone 200 feet wide by 300 feet long averaging about 3.0 ounces silver per ton. This zone represents a probable 1.5 million ton deposit amenable to an open pit-heap leach mining plan. Mineralization is open at both ends and at depth. The total target potential may be as much as 10 million tons of similar grade.

Fire assay check sampling by EXVENCO (Table 2) verifies that mineable widths and grades extend beyond the limits of development. Two samples at the bottom of the parallel Creosote vein also show mineable values.

Our proposed exploration program for 1984 is to complete the surface mapping at a scale of 1:1200, carry out extensive trenching along the strike of the vein, and follow up with

5,000 feet of reverse-circulation rotary drilling. The total program including option payments is budgeted to cost about \$200,000.

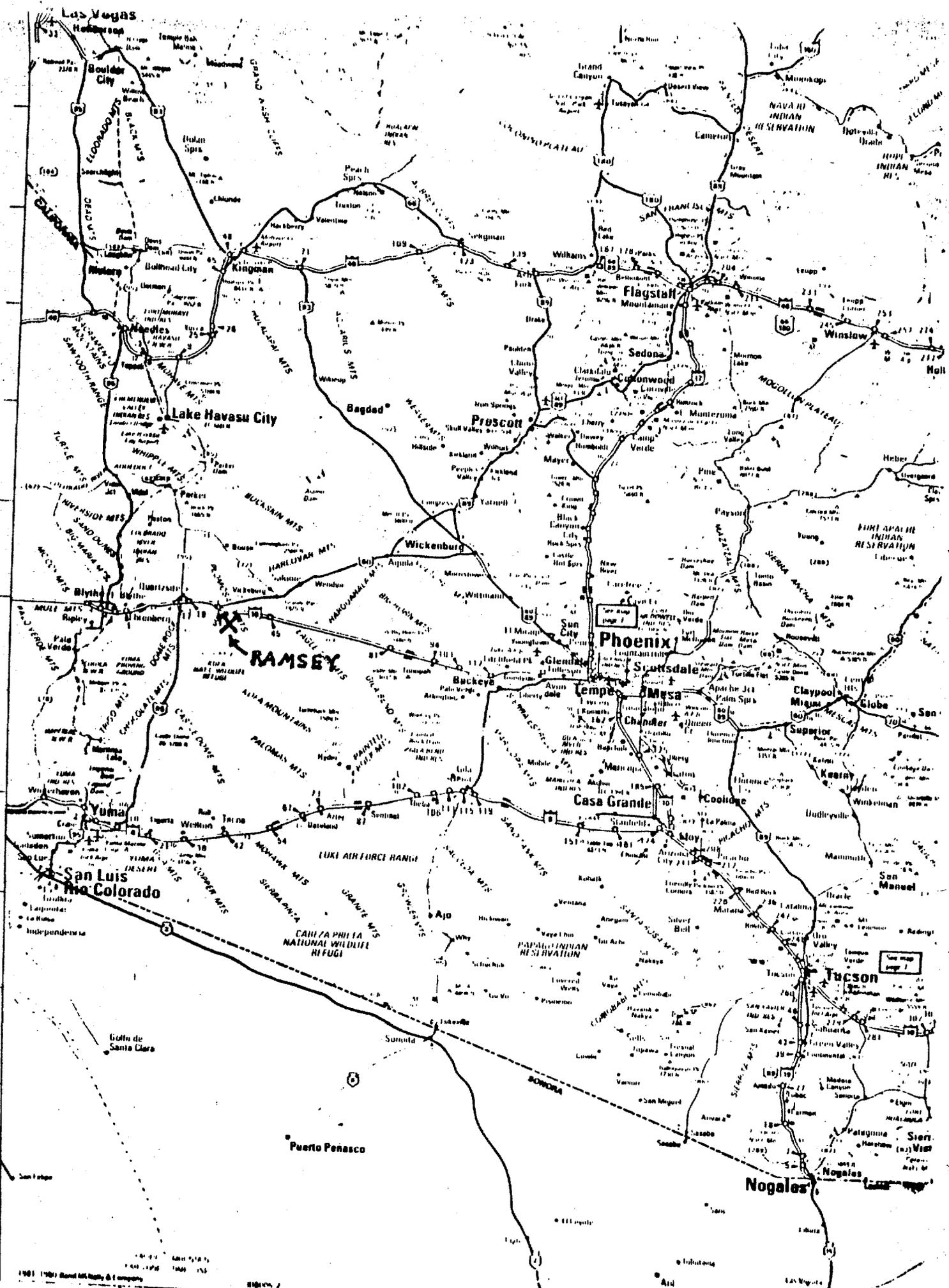
Location and Access

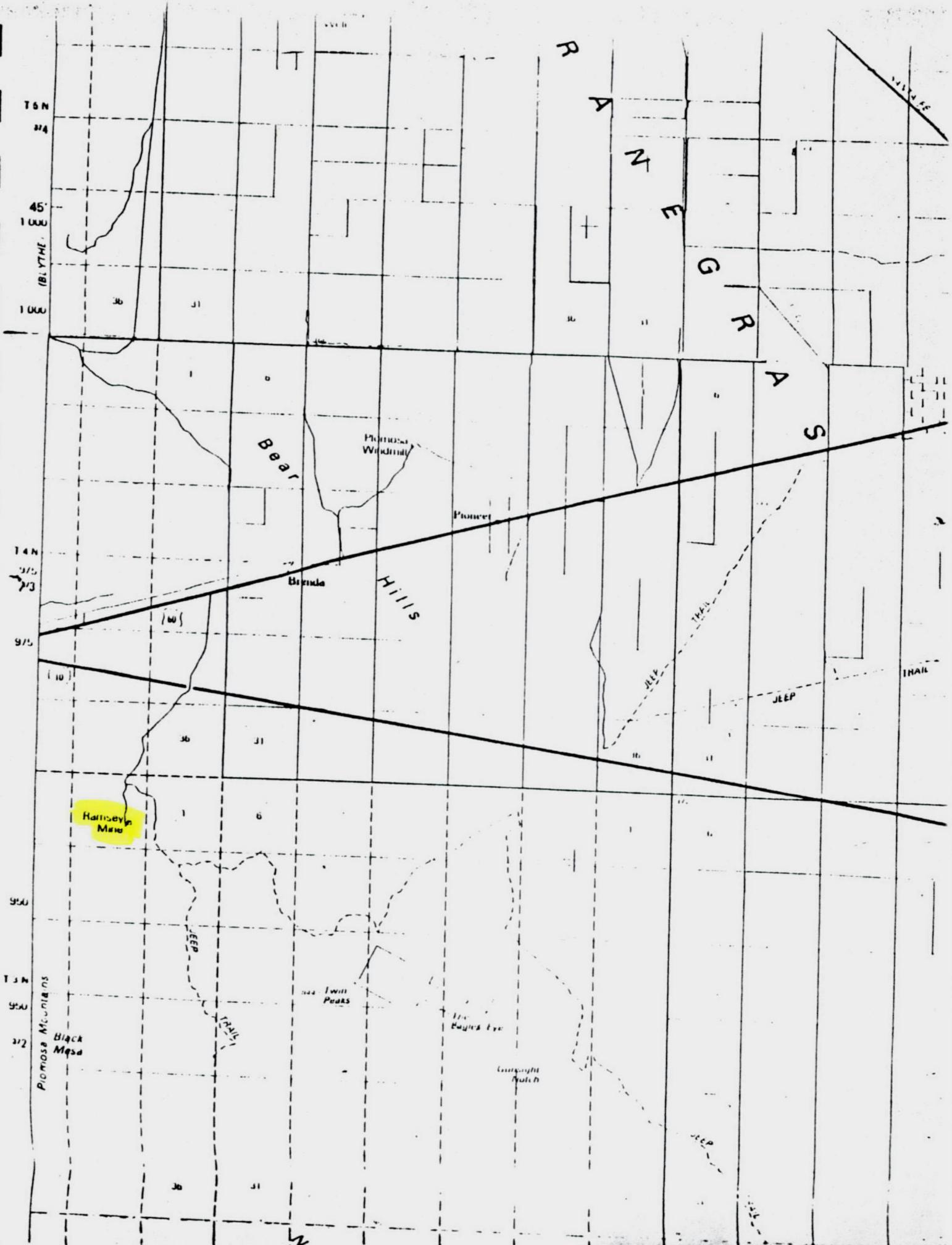
The Ramsey mine is located in portions of sections 1, 2, and 12, T. 3N., R. 17 W. S.R.M. (unsurveyed), La Paz County, Arizona. La Paz is a new county composed of what formerly was the north half of Yuma County, the new county seat is at Parker, Arizona. The project area is located 39 miles east of Blythe, California, and about 106 miles west of Phoenix. Figures 1 and 2 show the location and access.

The mine is reached by turning south from U. S. Highway 60-70 one mile west of Brenda, a small hamlet, and following an improved dirt road 3.5 miles southwest to the property. The access road crosses U. S. Interstate Highway 10 several miles south of the turnoff but there is no access to I-10 at this overpass.

Property and Ownership

Property comprises two patented claims and four unpatented claims. The surrounding area has been withdrawn from mineral entry for study as an inclusion to the Kofa Game Range. This withdrawal does not impact the rights of operation on the present property but does preclude staking additional claims. It is extremely likely that in the event a commercial operation is established a land trade can be effected with the BLM to enlarge the scope of operations.





The property is held by a four year lease-option. The general terms of the underlying agreement call for lease rental payments of \$5,000 in 1984 and \$1,000 per month commencing on 1 March 1985; annual work obligations of \$75,000 the first year and \$100,000 in subsequent years; a 10% net smelter royalty or \$3,000 per month whichever is greater; and a \$2,000,000 (two million) purchase price less all prior royalty payments.

Previous Development

The property was discovered by John Ramsey in 1921. Mr. Ramsey and subsequent lessees mined an estimated 8,000 to 14,000 tons of ore. A 1957 smelter settlement sheet on two car-load shipments of ore report 37.53 and 39.12 ounces of silver per ton. In 1968 the M. M. Sundt Construction Company shipped 1,669 tons grading 16.11 oz. Ag/T to the Inspiration smelter.

The present owners acquired the property in the mid-1960s and in 1968 the M. M. Sundt Co. drilled 35 percussion holes from the 161 and 242 levels (now designated the 184 and 299 levels); the results of this drilling are shown on Table 1, and Figure 3.

The property was leased by International Resource Development Corporation in 1979 and later transferred to Bonn Energy Corporation. Bonn set up a small heap-leach pilot plant operation to leach the dump and ore stockpile material. This program was terminated when silver prices plunged drastically in late 1980.

Franco-Nevada Mining Corporation leased the property in February 1983 and subsequently terminated their lease in June 1984 without carrying out any exploration.

TABLE 1

Underground Percussion Holes

Hole	Level	Wall	Inclin. (deg)	Length (ft)	Silver (oz/ton)
1	244	FW	0	104	2.94
2	244	FW	25	112	2.83
3	?	?	?	?	?
4	244	FW	0	120	3.55
5	244	FW	20	112	2.52
6	244	FW	30	152	4.60
7	244	FW	5	128	3.65
8	244	FW	44	152	9.86
9	244	FW	40	152	2.96
10	244	FW	0	120	3.07
11	244	FW	8	152	2.36
12	244	FW	25	56	7.80
13	244	HW	?	24	2.23
14	244	HW	20	24	1.90
15	244	FW	10	80	1.31
16	244	FW	22	128	1.41
17	244	FW	16	120	1.87
18	244	FW	31	80	1.90
19	244	FW	22	72	1.72
20	244	FW	8	72	1.77
21	244	HW	12	20	1.00
22	244	HW	39	-	-
23	244	HW	12	-	-
24	244	HW	15	32	1.42
25	244	HW	?	40	1.16
26	244	FW	17	64	9.88
27	244	FW	20	72	7.09
28	244	FW	17	56	7.84
29	244	HW	22	88	1.90
30	161	FW	39	136	4.01
31	161	FW	13	104	4.92
32	?	?	?	?	?
33	?	?	?	?	?
34	?	?	?	?	?
35	161	FW	12	32	1.20
36	161	FW	21	152	1.49
37	161	FW	23	152	1.49
38	161	FW	25	96	3.62
39	161	FW	22	-	-
40	161	FW	20	-	-
41	161	FW	12	56	2.13

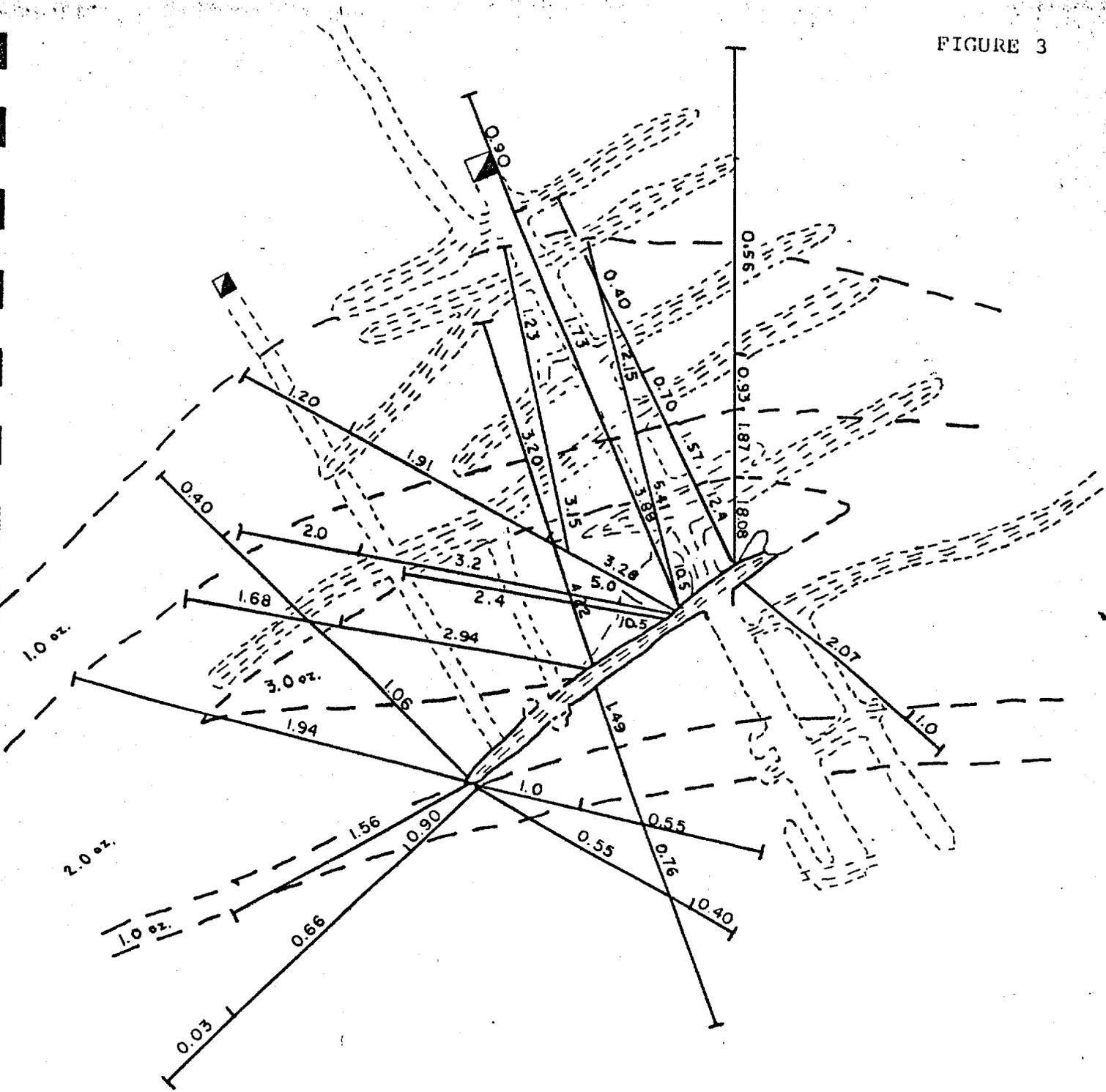
Holes marked (-) less than 1.00 oz/ton
Holes marked (?) details unavailable or
undecipherable

TABLE 2

RAMSEY CHECK SAMPLES

Sample	Level	Location	Width(in.)	Silver Grade(oz/T)
651D	35	Shaft pillar, S. side	43	12.16
652D	35	Shaft pillar, N. end	85	26.98
653D	85	Vein at N. end	84	130.46
654D	85	Vein 50' N. of shaft	160	9.22
655D	85	Vein at S. end	48	1.70
656D	85	Vein at E. split 30's	60	1.26
657D	139	Vein at S. end	48	0.26
658D	139	Vein at stope edge	96	4.66
659D	139	Vein at N. end	120	8.16
660D	184	135' E. on crosscut	24	0.16
661D	184	125' E. on crosscut	6	0.28
825D	299	W. vein at N. end	60	7.40
826D	299	W. vein at S. end	60	5.38
827D	299	Along crosscut to W. vein	120	3.26
828D	299	Shaft pillar 10' N. of shaft	60	22.22
829D	299	Pillar 55' S. of shaft	84	33.74
830D	299	Vein at S. end	108	1.46
831D	253	E. vein, 20' N. of shaft	60	1.28
832D	253	Wall of room 15' N. of shaft	144	1.26
833D	253	N. end of vein	72	1.88
834D	253	95' S. of 833	72	11.92
835D	253	S. end of vein, N. end	60	2.02
836D	184	Shaft pillar	72	16.84
837D	184	130' E. on crosscut	180	0.02
838D	184	185' E. on crosscut	84	<.01
839D	184	35' S. of 1st crosscut	60	151.30
840D	184	Along 2nd crosscut	180	0.96
841D	184	Along 2nd crosscut	180	1.00
842D	184	Near S. end of vein	60	1.14

FIGURE 3



RAMSEY MINE
PLOMOSA MINING DIST.
LA PAZ COUNTY, ARIZ.
299' LEVEL PLAN

SCALE: 1"=50'

APRIL 1979

AFTER STILL & STILL, MAR. 1962

Geology

The southwestern portion of the mine area is underlain by a thick sequence of intercalated and thinly bedded shales, siltstones, limestones, arkosic quartzites, and conglomerates. This assemblage is typical of the mid-fan facies of a deltaic environment and the rocks are tentatively identified as members of the Jurassic Livingston Hills Formation. The sedimentary rocks are generally flat lying to gently folded into open folds with dips less than 30 degrees.

The sedimentary rocks are intruded by several andesitic to dacitic dikes and by one small dacite plug located 1,000 feet due south of the Ramsey mine. Dacites are generally pale green to gray green in color, fine to medium-grained and comprise felty-textured plagioclase, chloritized mafic minerals, and rare K-feldspars (?). A narrow aureole of contact metamorphism around the dacite plug includes bleaching of siltstones and shales and recrystallization of limestone to marble.

The northeastern portion of the property is underlain by Tertiary (?) rhyolite flows and dikes. The rhyolite is generally light gray in color, strongly welded, and contains rare quartz and K-feldspar phenocrysts in a dense aphanitic groundmass. Occasional thin, platy flow foliations are present.

The sediment-rhyolite contact is a pronounced zone of faulting, brecciation, and shearing. This contact zone may be traced for over 4,000 feet to the southwest from the Ramsey shaft but is covered by alluvial gravels to the northwest. Rhyolite is pervasively brecciated along the contact; the breccia zone ranges from 50 to 100 feet thick.

Rhyolite is overlain to the north by a sequence of Quaternary-Tertiary gravels and conglomerates. These beds are weakly indurated and dip 4 to 6 degrees to the north.

Mineralization

Silver mineralization occurs in high grade epithermal veins up to 12 feet wide and in disseminated or stockwork veining in footwall rocks adjacent to the Ramsey vein. The veins are epithermal fissure fillings with banded, crustiform textures and comprise mixtures of goethite-hematite, manganese oxides, barite, gray to brown calcite, quartz, and minor amounts of wulfenite, vanadenite and silver oxides. Minor amounts of galena and sphalerite are reported but were not observed above the 299 level.

Stockwork quartz veinlets and minor Mn-oxide stained fractures are present in sparse outcrops and float adjacent to the Ramsey vein. Calcite veinlets containing anomalous amounts of silver are present in the rhyolite between the Creosote and Ramsey veins and may have some exploration significance. One to two miles southeast of the property the Ramsey structure contains sparse amounts of malachite stained fractures but silver values are uniformly low.

Ore Targets

Underground geologic mapping and sampling from the surface to the 299 level indicates that the Ramsey vein projects both north and south of the developed area over mineable widths. Table 2 summarizes samples taken at both ends of all accessible drifts and check samples of unmined areas. This work clearly indicates that ore grade mineralization extends beyond the stoped areas.

Mine workings below the 299 level are inaccessible due to dangerous ladders. Prior work suggest that the vein is narrow with only spotty mineralization on the 528 level, however, these workings only explore the more weakly mineralized hanging wall split of the vein and a well mineralized footwall split remains unexplored.

The Creosote workings are currently inaccessible. Samples taken by Baker and Barber (1967) show 3.0 feet at 9.88 ounces silver per ton and 20 inches at 32.92 ounces silver per ton on the bottom level.

The 1968 underground longhole drilling program outlines a broad zone of disseminated silver mineralization flanking the Ramsey stopes. This zone is 20 to 80 feet thick in the hanging wall rhyolite and 100 to 150 feet thick in the footwall sedimentary rocks as shown in Table 1 and Figure 3. This work suggests a drill indicated tonnage of 1.5 million tons grading about 3.0 oz. Ag/T from the surface to the 300 level. Since mineralization continues past the limits of stoping it is reasonable to expect that disseminated mineralization must also continue and the ore zone is open ended to the north, south, and at depth. This project has a minimum open pit target potential of 5,000,000 to 10,000,000 tons grading + 2.5 ounces silver per ton or an epithermal vein potential of perhaps 200,000 to 400,000 tons grading + 10 ounces silver per ton.

Exploration Program

Additional detailed sample mapping at a scale of 1:1200, backhoe or bulldozer trenching to expose the vein, and a detailed surface sampling program are recommended to test this target. Detailed sampling of fractures and veins in the rhyolite may aid to delineate targets in the underlying sedimentary rocks. This program will require one geologist and one sampler and can be completed in about 10 days at an estimated cost of \$15,000 to \$20,000.

Surface drilling utilizing a reverse-circulation drill will be required to delineate the present target as well as extensions. An initial 10 hole program aggregating 5000 feet is estimated to cost about \$100,000.

Metallurgical Testing

An undated bottle leach test of ore grading 9.22 ounces silver per ton shows recoveries of 65-70 percent of the silver from ore ground to -10 mesh.

Two 1967 bench tests by the Arizona Bureau of Mines on oxide ores indicate recoveries of 39.8 to 68.5 percent by standard flotation methods. In 1979, Bonn Energy ran a small test in a heap-leach facility in Tombstone, Arizona. Samples include stockpile ore grading up to 7.3 oz. Ag/T and waste dump material with grades averaging as low as 1.5 oz Ag/T. Extraction rates range from a low of 0.25 ounces of silver in 24 hours from lower grade material to a high of 0.91 ounces of silver in 48 hours from higher grade material. These are acceptable leach rates but additional, more sophisticated tests are required.

Manganiferous silver ores are frequently refractory to heap-leaching owing to Mn interference. The USBM has carried out experiments on ores similar to the Ramsey ore and show that pre-leaching with an aqueous SO_2 solution prior to NaCN leaching dramatically improves silver recovery and also produces a saleable manganese product. Copies of the metallurgical research are included as Appendix 1.

RAMSEY PROJECT

Preliminary Economic Models

Project Data

	<u>Open Pit - Heap Leach</u>	
	<u>Small Pit</u>	<u>Large Pit</u>
Ore Reserve (tons)	1,500,000	5,000,000
Waste: Ore ratio	2.5:1	3.0:1
Grade (oz Ag/T)	3.0	3.0
Mining Rate (5 day week)	2,000 tpd	4,000 tpd
Annual Rate	500,000	1,000,000
Recovery (%)	55	55
Mine Life (years)	3	5

Capital Requirements (\$000's)

Property Acquisition	0	2,200
Exploration	200	400
Feasibility and operating permits	100	100
Mine/mill plant	500	1,000
Pre-production development	200	500
Total depreciable capital	1,000	4,200
Working capital	500	900
 Total Capital	 1,500	 5,100

Operating Costs (\$/T)

Mining (open pit by contractor)	3.50	4.00
Milling and leaching	2.50	2.00
Administrative and General	.50	.50
Assays, refining, sales	.50	.50
Contingencies	1.00	.50
 Total	 8.00	 7.50

Notes

1. a) Hedging by selling silver futures will improve the revenue by \$1-3/oz i.e. if silver spot price is \$7/oz the economics could be improved to \$9/oz price by hedging.
- b) Revenue = price x grade x recovery.
2. a) Purchase price of \$2 million payable as 10% royalty.
- b) Large pit - purchase price capitalized.
3. Depletion is 15 percent of revenue, net to exceed 50 percent of taxable income.

Operating Statement (\$/T)

	Small Pit - Heap Leach		
	<u>\$7/oz</u>	<u>\$9/oz</u>	<u>\$12/oz</u>
Sales Revenue	11.55	14.90	19.80
Less Royalty	1.15	1.50	1.50
Less Operating costs	8.00	8.00	8.00
Less Depreciation	.70	.70	.70
Taxable Income before depletion	<u>1.70</u>	<u>4.70</u>	<u>9.60</u>
Less Depletion	.85	2.20	3.00
Net Taxable Income	<u>.85</u>	<u>2.50</u>	<u>6.60</u>
Less Taxes @ 40%	.35	1.00	2.60
Net Income	<u>.50</u>	<u>1.50</u>	<u>4.00</u>
Add Depreciation, Depletion	1.55	2.90	3.70
Cash Flow	<u>2.05</u>	<u>4.40</u>	<u>7.70</u>
Annual Cash Flow (\$000's)	1,025	2,200	3,850
DCI-ROI (%)	46	135	250
Payback (years)	1.50	.70	.40
Cost per oz silver	\$5.90		

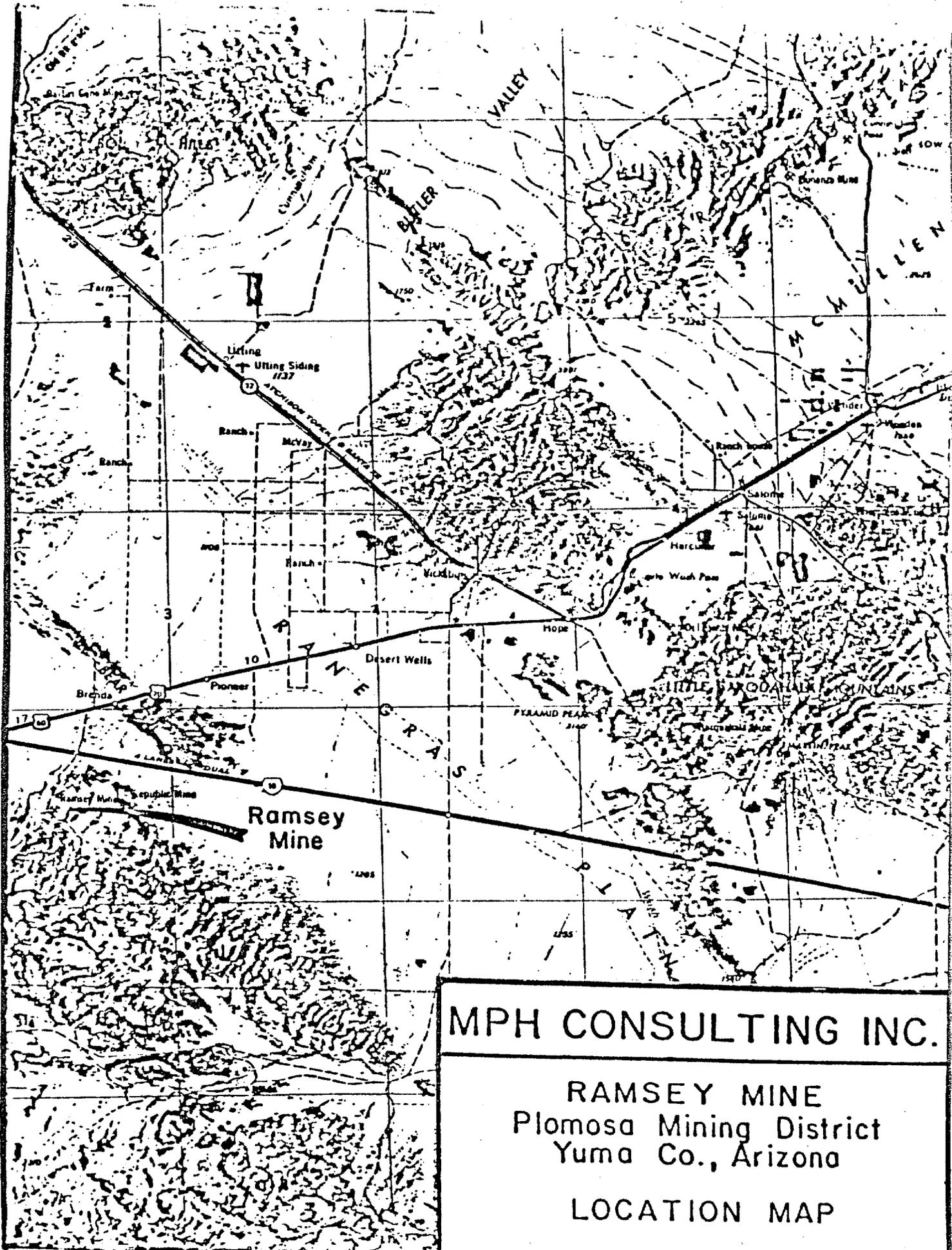
	Large Pit - Heap Leach	
	<u>\$7/oz</u>	<u>\$10/oz</u>
Sales Revenue	11.60	16.50
Less Operating Costs	7.50	7.50
Less Depreciation	.90	.90
Taxable Income before depletion	<u>3.20</u>	<u>8.10</u>
Less Depletion	1.60	2.50
Taxable Income	<u>1.60</u>	<u>5.60</u>
Less taxes @ 40%	.60	2.20
Net Income	<u>1.00</u>	<u>3.40</u>
Add Depreciation, Depletion	2.50	3.40
Cash Flow	<u>3.50</u>	<u>6.80</u>
Annual Cash Flow (\$000's)	3,500	3,800
DCI-ROI (%)	63	131
Payback (years)	1.5	.8
Cost per oz silver	5.10	

RAMSEY MINE

DATA & PROPOSAL

February 2, 1984

E.D. Black, P.Eng.

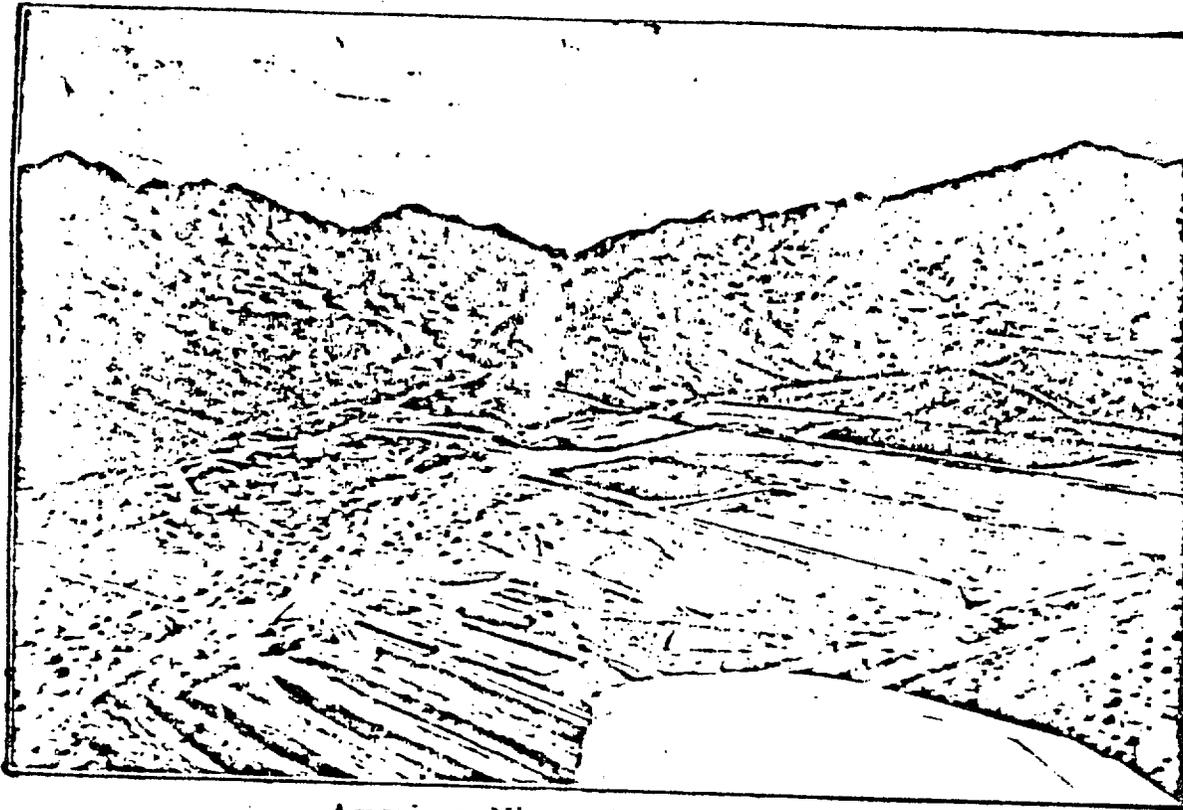


MPH CONSULTING INC.

RAMSEY MINE
Plomosa Mining District
Yuma Co., Arizona

LOCATION MAP

HEAP LEACHING OPERATION



American Mine - Amboy, California

A typical layout of a large tonnage heap leaching operation
Contemplated for the Ramsey Mine if reserves prove adequate

E.D. BLACK CONSULTING, INC.

10247 EAST APPLEWOOD DRIVE
PARKER COLORADO 80134

TELEPHONE (303) 841-0139
(303) 841-2053

RAMSEY SILVER MINE
Brenda, Arizona

February 2, 1984

STATUS

This Property was formally held and worked by an affiliated company, MPH Consulting, Inc., under a lease between the Owners and International Resource Development Corporation (IRD) of Cleveland, Ohio. The Owners are the Ramsey Mine Property Partnership of Tucson, Arizona, a group of individuals we have been acquainted with for years.

IRD funded a dump leaching R&D Project in 1980 which MPH managed. When silver dropped below the \$20.00 per ounce level, IRD and Partners dropped the lease. Approximately 400 ounces of silver dore (300 ounces .999 silver) was produced from a one month two-man operation.

Terms of the IRD Lease were:

- A. Lease: one year
- B. Royalty: 10% gross
- C. Royalty payments deductible from purchase price
- D. Purchase Price: \$2,000,000
- E. Residual Royalty: 5% of gross

Terms of E.D. Black Consulting Inc. Lease, Signed August 20, 1982:

- A. Lease: ten years @ \$10,000 down plus \$10,000 additional each year thereafter, all deductible from Purchase price.
- B. Royalty: 5% gross @ \$7/oz Ag, plus 0.25% gross per \$1/oz Ag above \$7/oz; to \$12/oz Ag, plus 1.00% per \$1/oz Ag to maximum of 10%
- C. Royalty payments deductible from purchase price
- D. Purchase Price: \$2,000,000 with no residual override to Owners

Project advances and consulting fees approximating \$150,000 have been made by E.D. Black Consulting Inc.

An agreement was entered into on February 1, 1983 between E.D. Black Consulting, Inc. (EDBC) and Franco-Nevada Mining Corporation Limited (Franco-Nevada), an Ontario corporation under which Franco-Nevada undertook the EDBC-Ramsey arrangements of August 20, 1981.

The Project is now available through EDBC. Franco-Nevada has terminated its agreement with EDBC as of January 13, 1984, and EDBC is now in a position to negotiate with other interested parties.

PROPOSAL:

Our proposal which is negotiable, is an option to take over our ten year lease with the Owners and the right to acquire 100% working interest, subject to the Owners' royalty.

The Buyer makes payments to us at the rate of payment due the Owner times two (x2). We make Owner payments therefrom.

An annual minimum work and/or cash commitment of \$100,000 per year in the first five years and \$200,000 per year in the 6th through 10th year of lease.

RAMSEY MINE

CONCEPT & POTENTIAL

Ramsey Mine Project-Broader Exploration Target

The surface extent of the Ramsey vein along its southerly strike is approximately 800 feet and intermittent exposures extend it for a further 1,600 feet south of the shaft; ie, 2,400 feet minimum total strike length. This magnifies the potential for open cut leaching ore if the wall rock proves equally well mineralized along strike from the main shoot.

Assuming the wall rock silver mineralization in the extensions proves to be comparable to the zone near the old Ramsey workings, the 800 foot strike length could create approximately 1.5 million tons to a depth of 300 feet. By the same token, a 2,400 foot strike length could represent 4.5 million tons of ore to the 125-foot depth or 13.8 million tons to a 300-foot depth.

It will be noted that neither of these projections contemplates northern continuity of the vein because of the lack of surface exposures (overburden covered) in that direction. From the underground workings we know that the vein does extend north of the shaft at least a few hundred feet so the potential is open in that direction and the 2,400 foot strike length is clearly conservative.

Obviously, the broader exploration target represents a much larger potential than the ore picture in the vicinity of the old workings contemplates. An exploration program could easily be laid out to test this larger target as well as confirm the localized ore zone and its leaching potential.

E.D. Black



OPEN PIT ORE RESERVES AND WASTE ESTIMATES
INDICATED RESERVES

Shallow Pit to '125' Level:

Ore Block 'A': 381,655.6 tons of 3.00 Ag/ton

Waste: 287,736.98 tons

Ore 1.32 tons
Waste 1.00 tons

Deep Pit to '299' Level:

<u>Ore Block</u>	<u>Reserves</u> (tons)	<u>Ratio</u>	<u>Grade</u> (oz/ton)
A	381,655.6		3.0
B	375,666.7		2.7
C	387,644.4		3.3
<u>Ore</u>	<u>1,144,966.7</u>	<u>0.53</u>	
<u>Waste</u>	<u>2,152,573.7</u>	<u>1.00</u>	

POTENTIAL RESERVES

Shallow Pit to '125' Level:

- @ 1,900 tons/horizontal foot
- 1,520,000 tons for 800' strike length
- 4,560,000 tons for 2,400' strike length

Deep Pit to '299' Level:

- @ 5,700 tons/horizontal foot
- 4,560,000 tons for 800' strike length
- 13,680,000 tons for 2,400' strike length



OPEN PIT ORE RESERVES AND WASTE ESTIMATES
INDICATED RESERVES

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1,520,000 tons for 800' strike length

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Deep Pit to '299' Level:

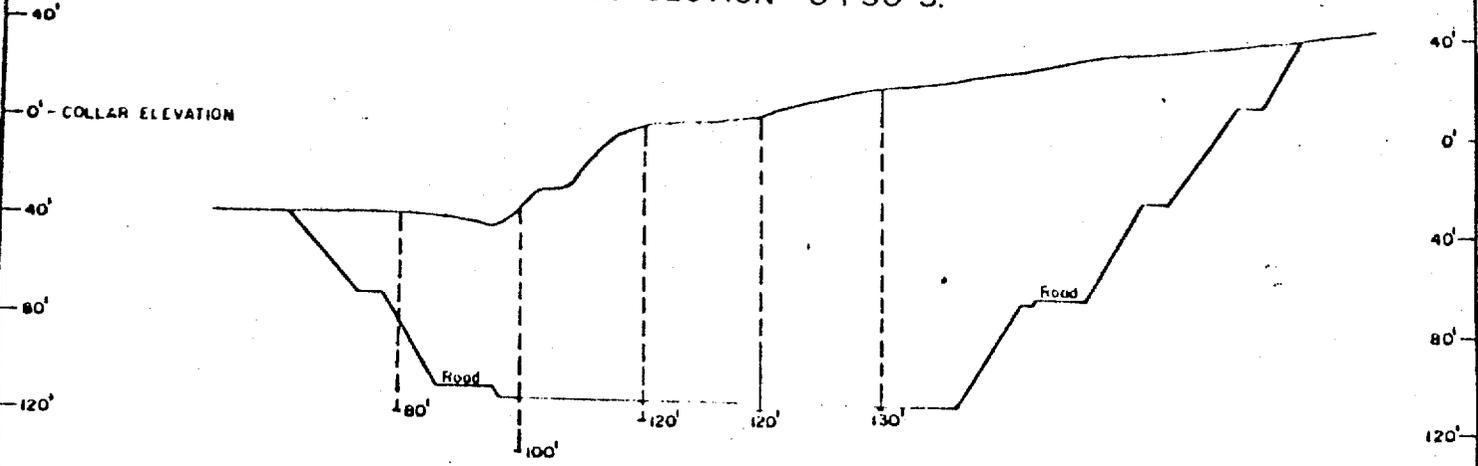
@ 5,700 tons/horizontal foot

4,560,000 tons for 800' strike length

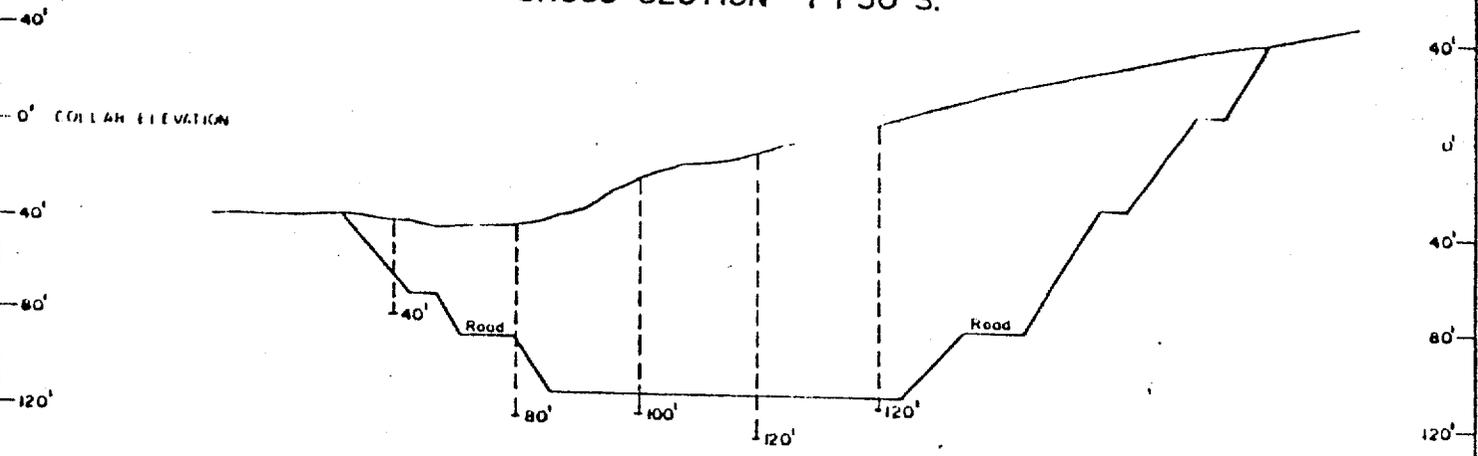
13,680,000 tons for 2,400' strike length

1+00 *
0+50 *
0+0
0+50
1+00

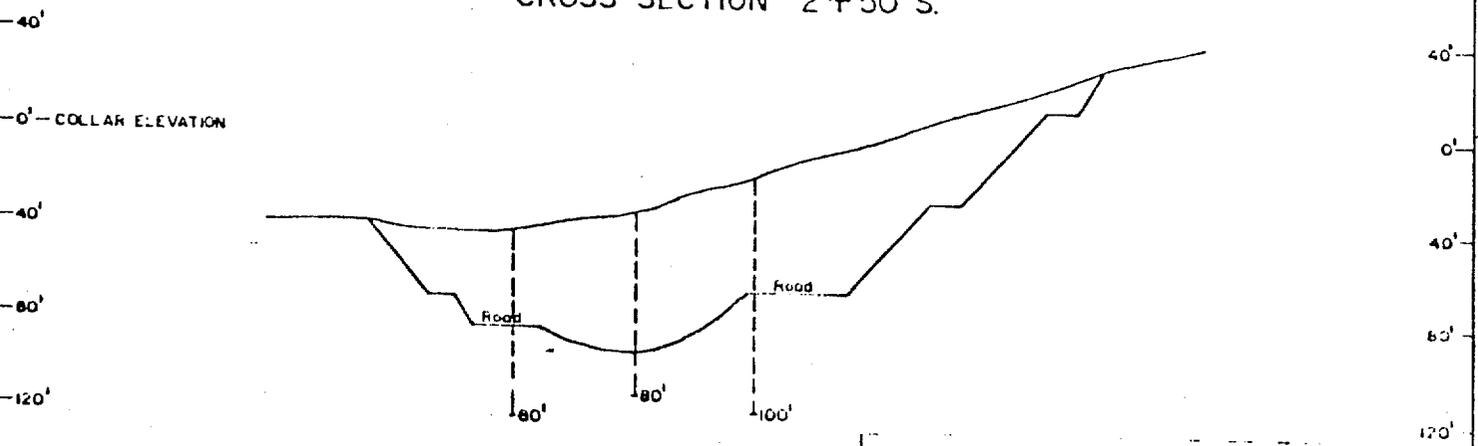
CROSS SECTION 0+50 S.



CROSS SECTION 1+50 S.



CROSS SECTION 2+50 S.

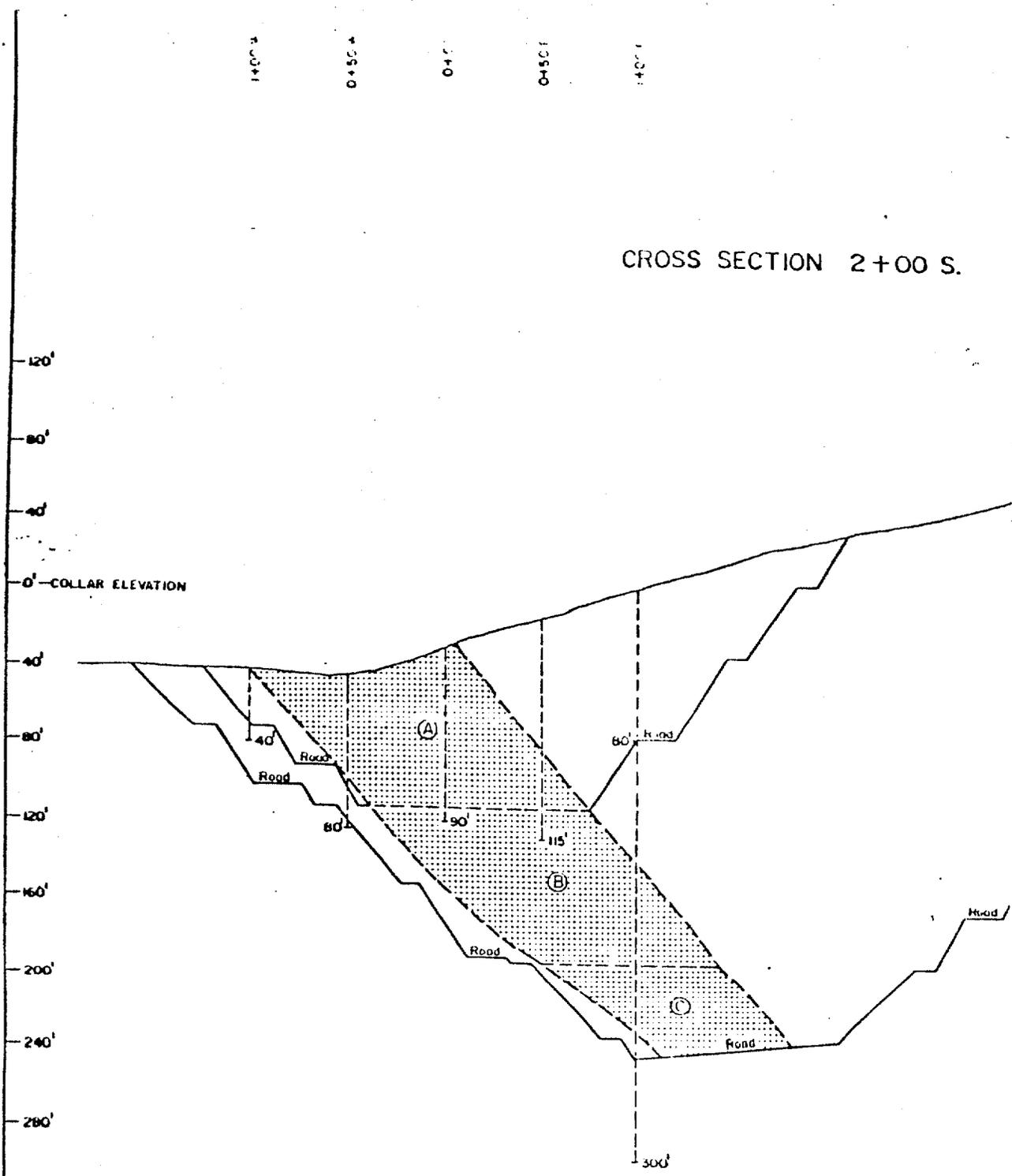


LEGEND
DRILL HOLE
(PLANNED)
1" = 80'



RAMSEY MINE
PROVISIONAL PIT
CROSS SECTIONS

CROSS SECTION 2+00 S.

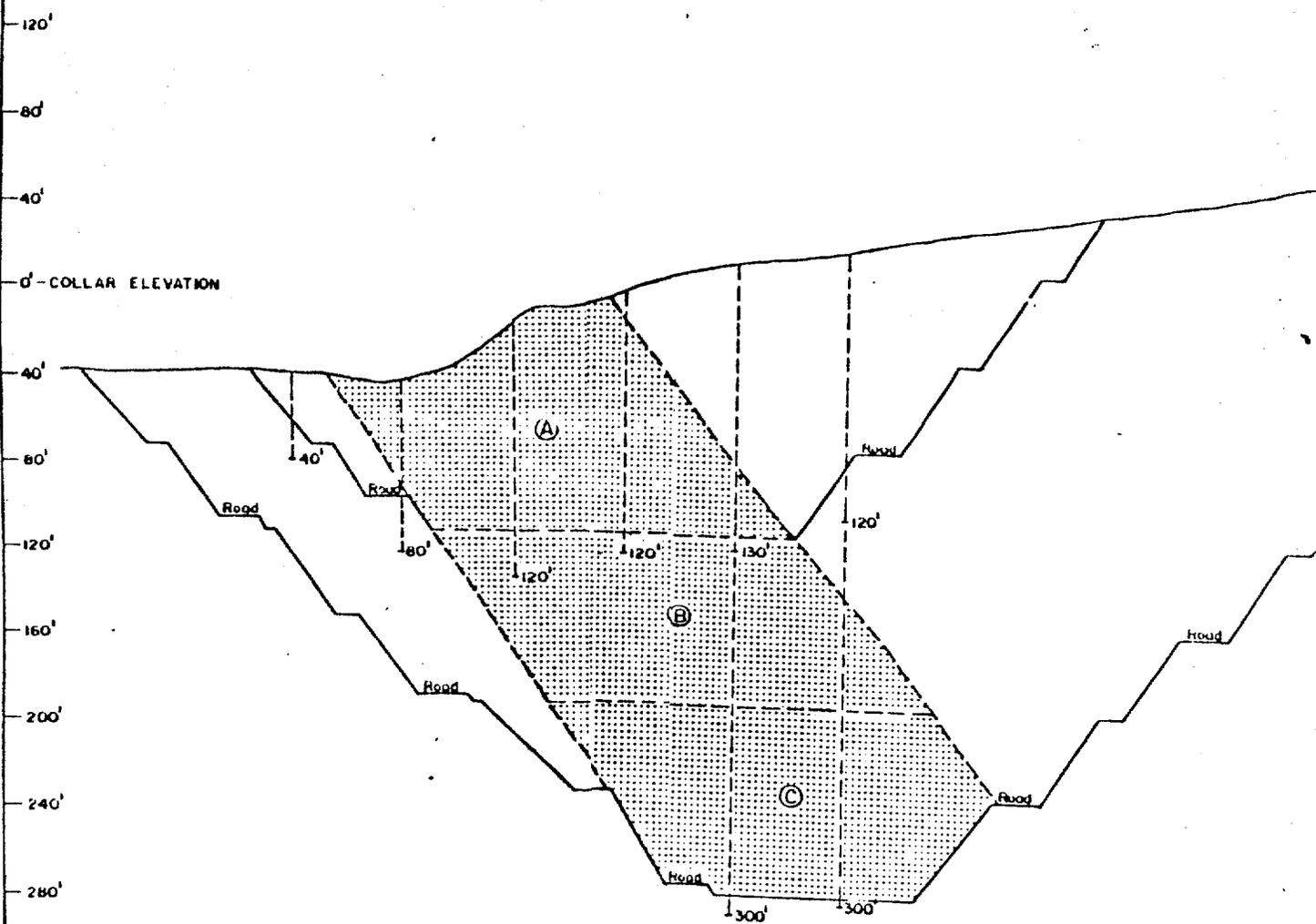


LEGEND

- ORE BLOCK 
 - DRILL HOLE (PLANNED) 
- 1" = 80'

1+00 # 0+50 # 0+00 0+50 F 1+00 F 1+50 F

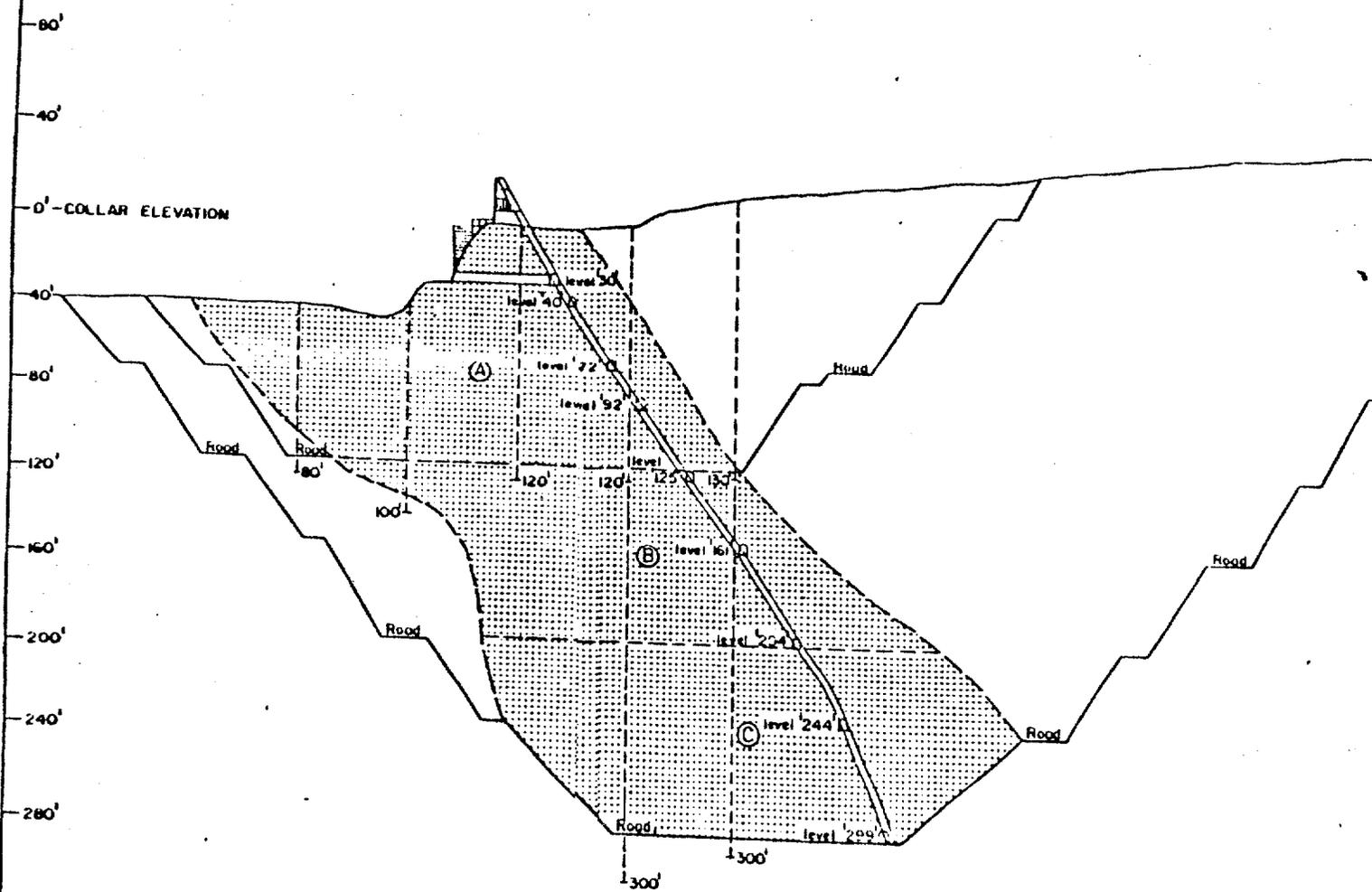
CROSS SECTION 1+00 S.



LEGEND

- ORE BLOCK 
- DRILL HOLE (PLANNED) 
- 1" = 80'

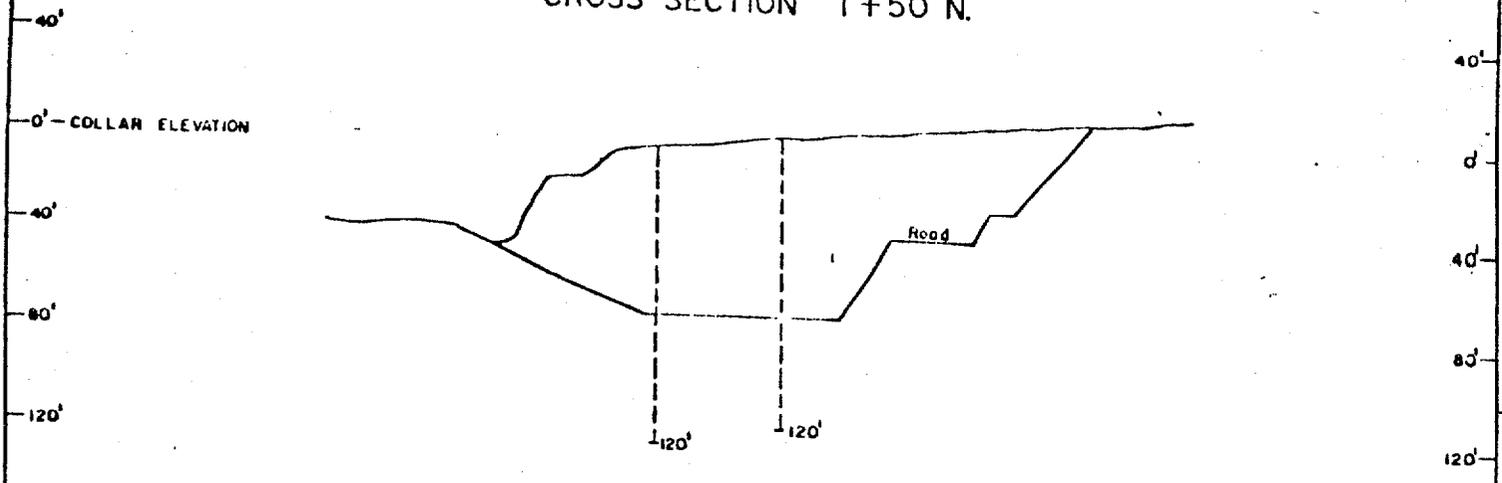
CROSS SECTION 0+00



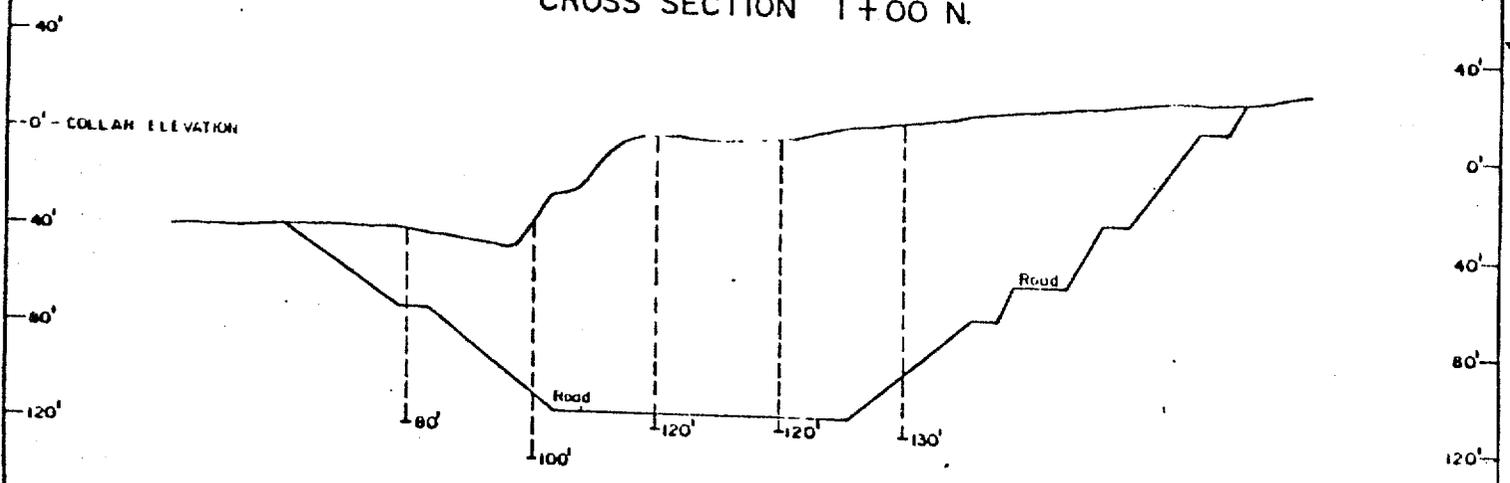
LEGEND
ORE BLOCK (A)
DRILL HOLE (PLANNED)
1" = 80'

1+00 0+50 0+C 0+50 1+00

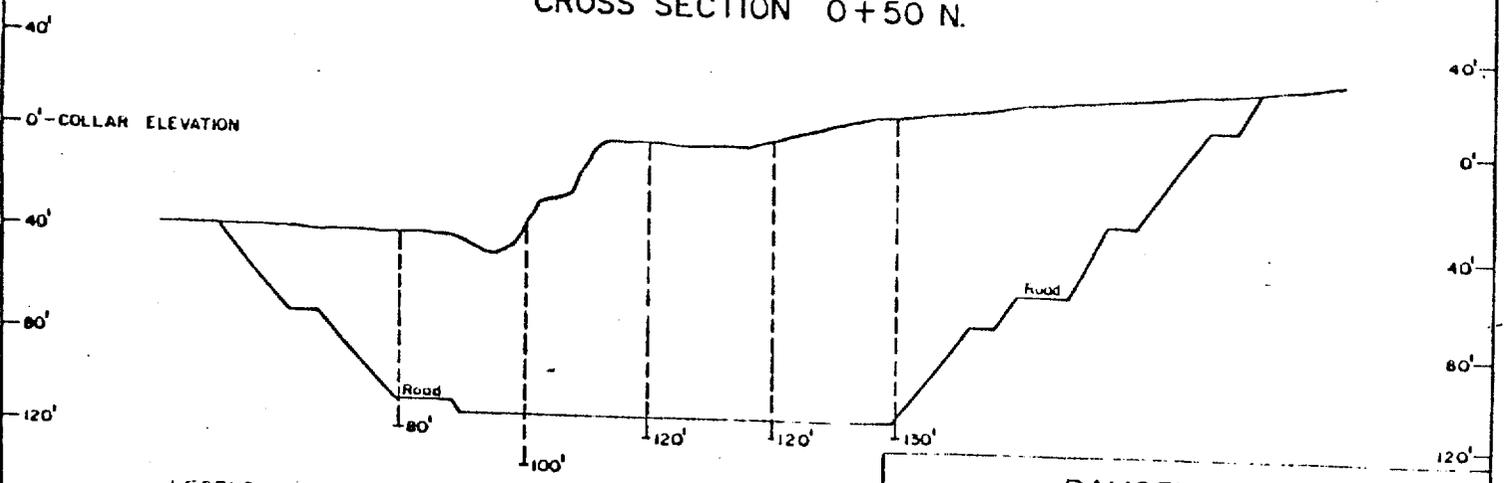
CROSS SECTION 1+50 N.



CROSS SECTION 1+00 N.



CROSS SECTION 0+50 N.



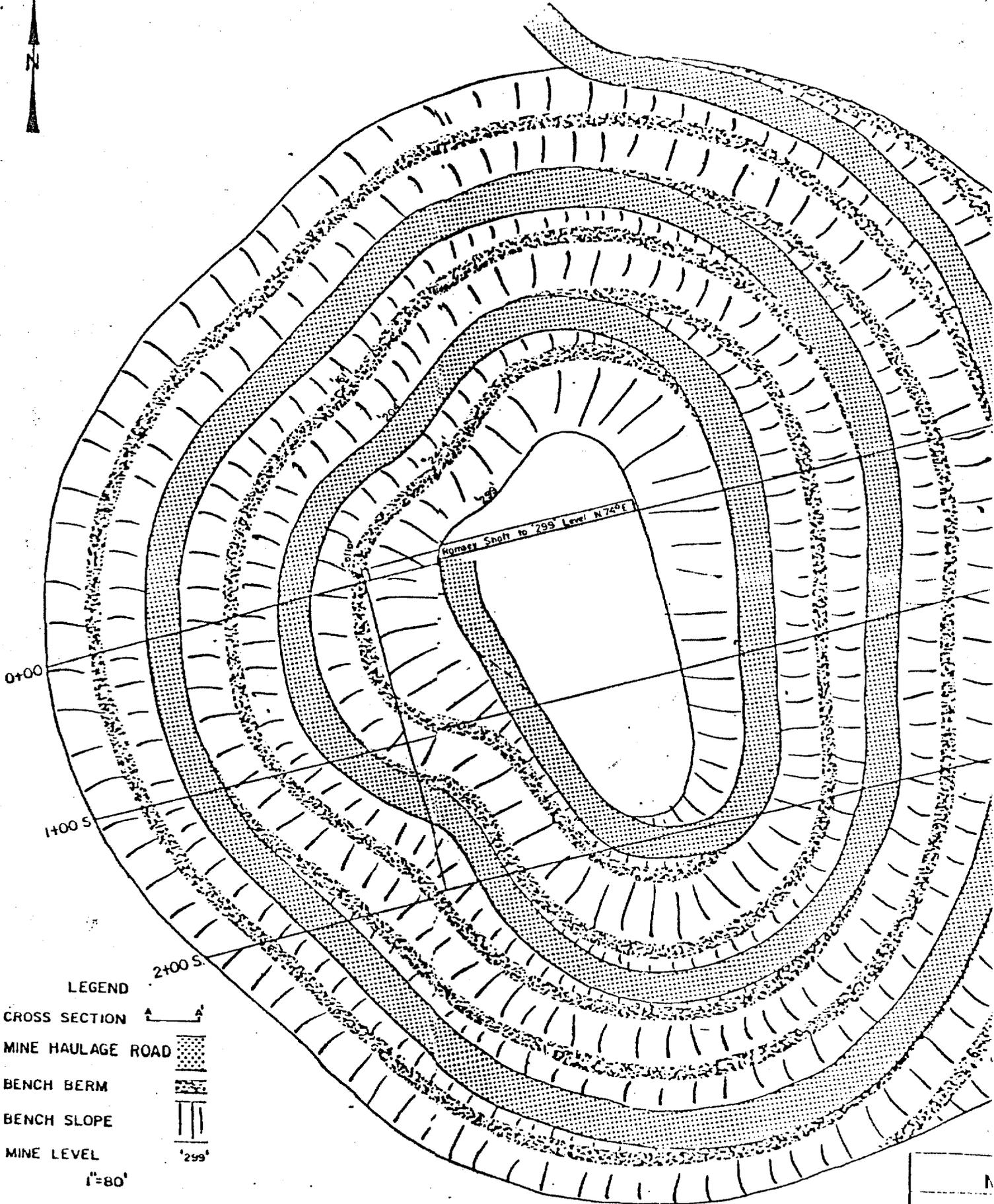
LEGEND

DRILL HOLE
(PLANNED)

1" = 80'



RAMSEY MINE
PROVISIONAL PIT
CROSS SECTIONS

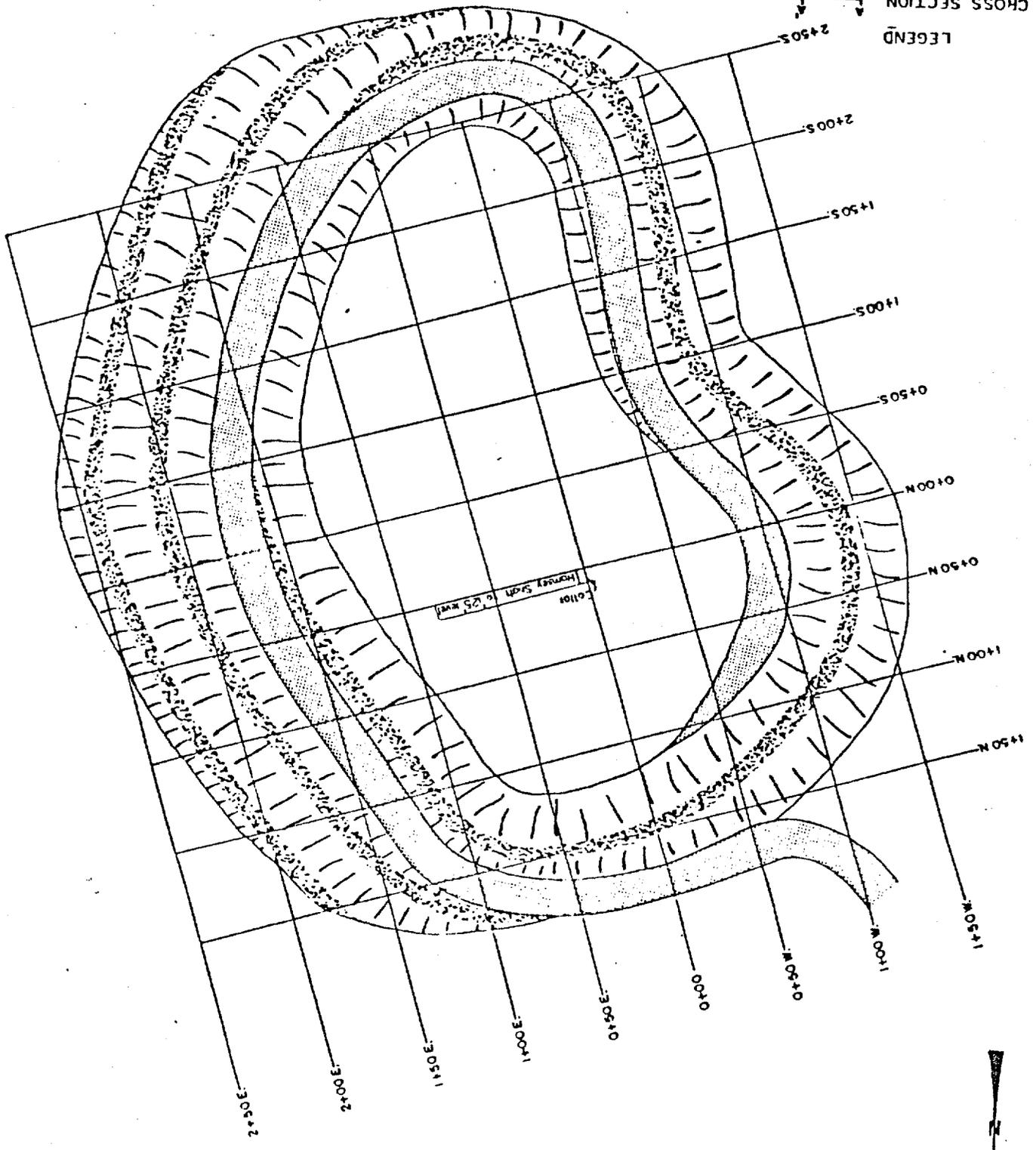


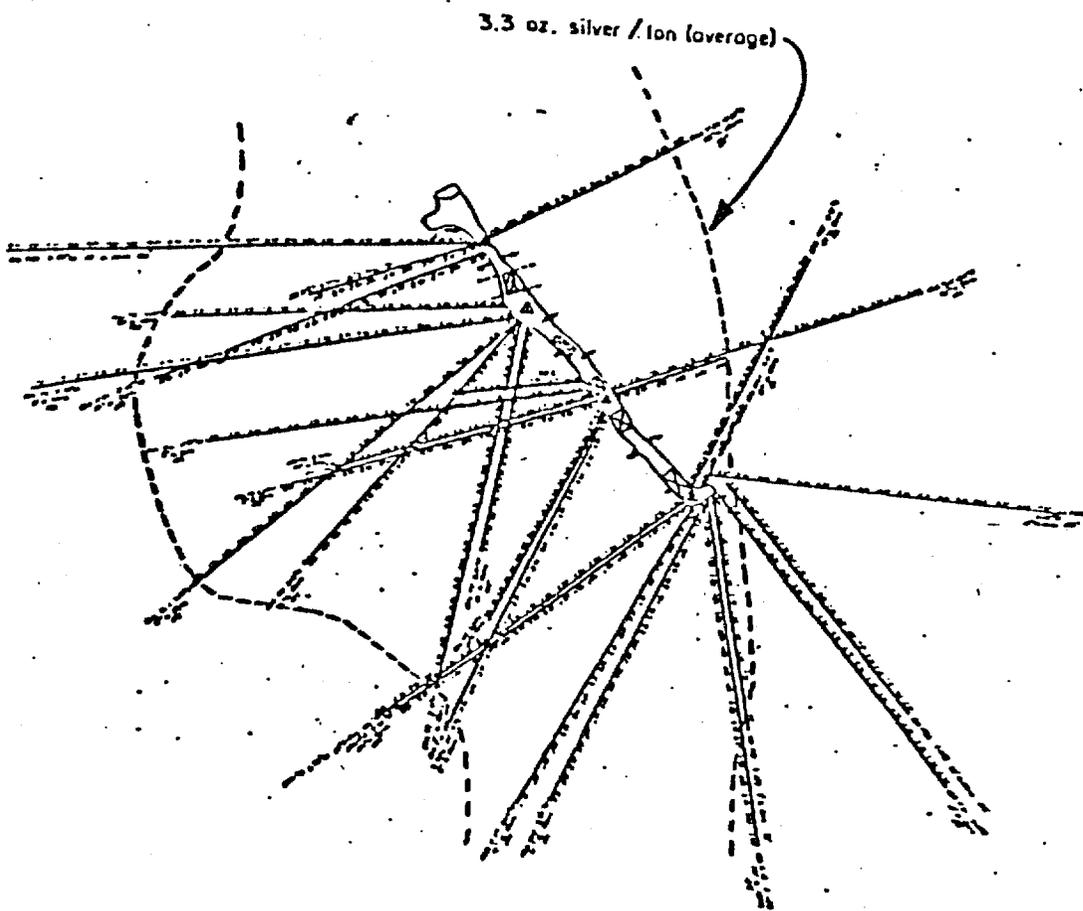
N
P1

1" = 80'

LEGEND

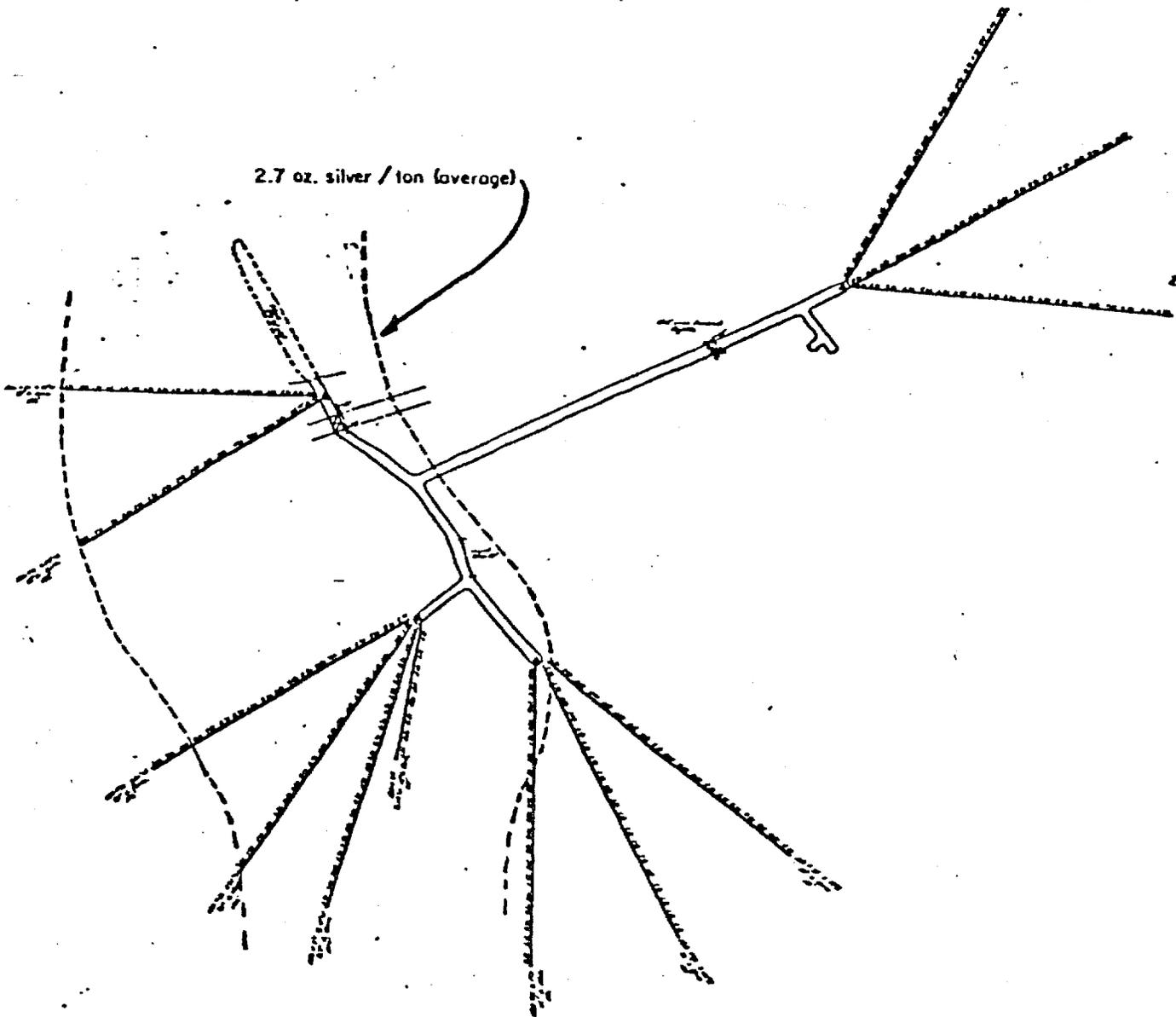
- CROSS SECTION
- MINE HAULAGE ROAD
- BENCH BERM
- BENCH SLOPE





Scale 1" = 80'

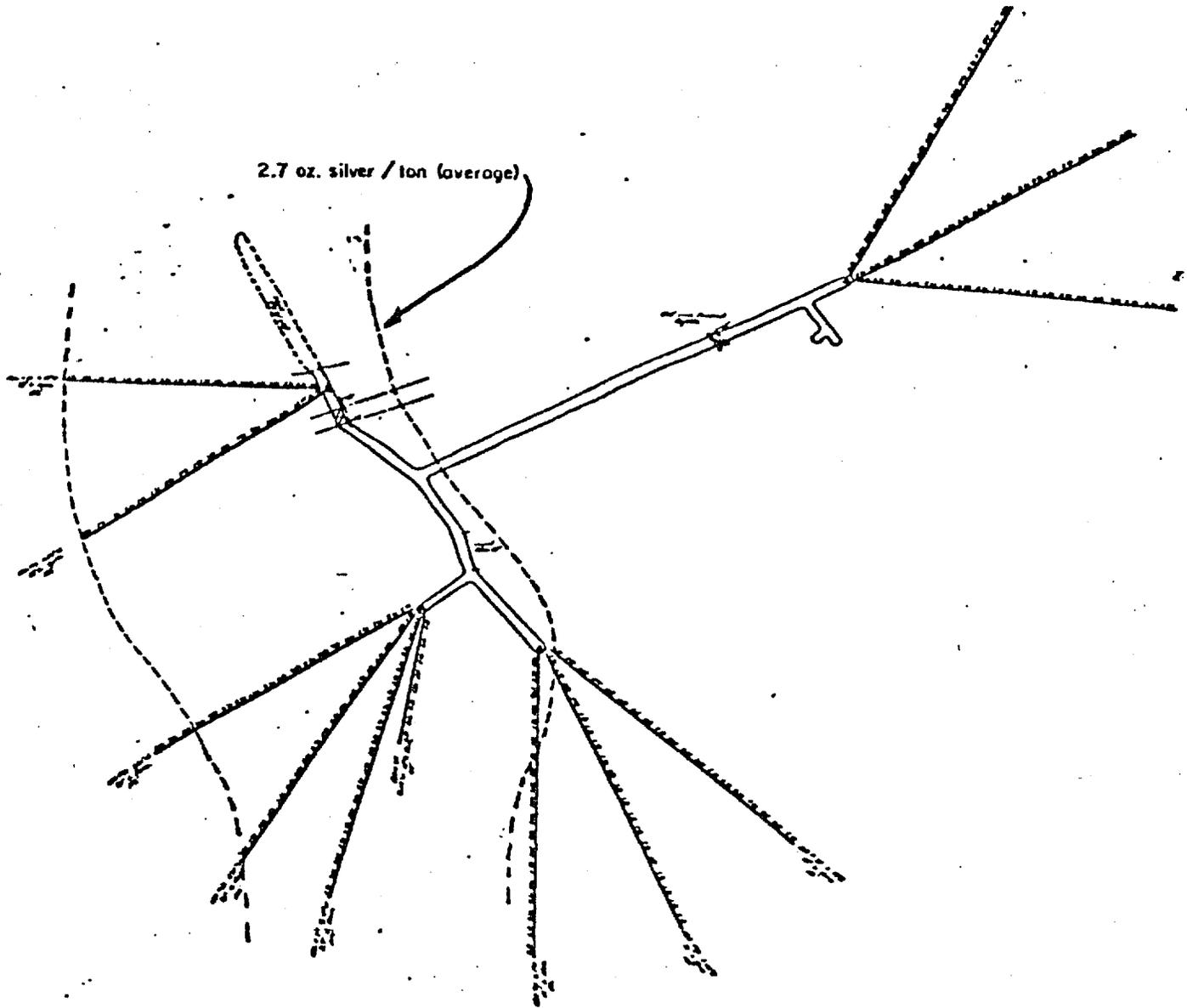
MPH CONSULTING INC.
LONG HOLE DRILLING RESULTS



MPH CONSULTING INC.

LONG HOLE DRILLING RESULTS

LEVEL '161'



MPH CONSULTING INC.

LONG HOLE DRILLING RESULTS

RECOMMENDED EXPLORATION DRILL PROGRAM

Open-pit Reserves Drilling-Shallow Orebody Definition:

LOCATION		PHASE I	PHASE II	PHASE III
N-S	E-W			
1+00N	1+00W	80		
1+00N	0+00	120		
1+00N	1+00E	130		
0+00	1+00W	80		
0+00	0+00	120		
0+00	1+00E	130		
1+00S	1+00W	40		
1+00S	0+00	120		
1+00S	1+00E	130		
2+00S	1+00W	40		
2+00S	0+00	90		
2+00S	1+00E	80		

SUBTOTAL: 1160

N-S	E-W	
1+00N	0+50W	100
1+00N	0+50E	120
0+00	0+50W	100
0+00	0+50E	120
1+00S	0+50W	80
1+00S	0+50E	120
1+00S	1+50E	120
2+00S	0+50W	80
2+00S	0+50E	115

SUBTOTAL: 955

N-S	E-W	
0+50N	1+00W	80
0+50N	0+50W	100
0+50N	0+00	120
0+50N	0+50E	120
0+50N	1+00E	130
0+50S	1+00W	80
0+50S	0+50W	100
0+50S	0+00	120
0+50S	0+50E	120
0+50S	1+00E	130
1+50S	1+00W	40
1+50S	0+50W	80
1+50S	0+00	100
1+50S	0+50E	120
1+50S	1+00E	120
1+50N	0+00	120
1+50N	0+50E	120
2+50S	0+50W	80
2+50S	0+00	80
2+50S	0+50E	100

SUBTOTAL: 2040

TOTAL, PHASES I-III: 4155

Open-pit Reserves Drilling-Deep Orebody Definition:
(Supplemental Deep Drilling)

LOCATION		TOTAL DEPTH	ADDITIONAL FOOTAGE
<u>N-S</u>	<u>E-W</u>		
1+00N	1+00E	300	
0+00	0+50E	300	170
0+00	1+00E	300	180
1+00S	1+00E	300	170
1+00S	1+50E	300	170
2+00S	1+00E	300	180
			220

TOTAL ADDITIONAL FOOTAGE: 1090

TOTAL, PHASES I-III: 4155

TOTAL ADDITIONAL FOOTAGE: 1090

TOTAL, FOOTAGE: 5245

July 10, 1968

Mr. Harry Dusell
M. M. Sundt Construction Company
440 South Park Avenue
Tucson, Arizona 85721

Dear Harry:

Mr. Byrd has suggested that I write to you and summarize our present thinking regarding the geologic possibilities at the Ramsey mine in the light of recent development work carried out by your company during the past few months. As we discussed at your office in June, the geologic conclusions summarized in our report of October, 1967, remain virtually unchanged.

Our recommendations to 1) extend the 294 drift south beneath block H with appropriate sampling; 2) prospect the footwall strand of the Ramsey vein on the 161-, 204-, 244-, and 294-foot levels; 3) to carry out additional sampling on the fringes of the main stope and on the 125- and 161-foot levels south of the shaft; and 4) investigate the surface trace of the Ramsey vein, likewise remain unchanged.

Although not emphasized in our report, the most logical approach would seem to be to first thoroughly sample the fringes of the old stopes. Our sampling was confined to the drifts, but indicated that a significant tonnage of higher grade material could be obtained from the margins of the main stope. If this is confirmed by further sampling and examination of the stopes, these areas would provide a small, but significant production which should more than cover the cost of the above described exploration south of the shaft. Of course this production would require that the shaft be put in operating condition.

Regarding the recommended exploration of the footwall strand of the Ramsey vein, the easiest place to do this would seem to be on the 244-level, where a 25-foot west crosscut south of the shaft should intersect this potentially important structure. If the structure is found but is low-grade at this point, other intersections should be made south of the shaft on the 204, 161, and 294-foot levels as recommended.

As recent development on the 72-foot level has shown, there is little to be gained by drifting along the main vein on the upper levels, unless some indication of another near-surface ore shoot can be located along the Ramsey vein or possibly along other unexposed structures on the claims. Such ore shoots could be most economically prospected for by surface geochemical sampling. As noted in our report, much of the surface of the property is covered by soil and residual overburden. Geochemical soil and bedrock sampling

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Our recommendations to 1) extend the 294 drift south beneath block II with appropriate sampling; 2) prospect the footwall strand of the Ramsey vein on the 161-, 204-, 244-, and 294-foot levels; 3) to carry out additional sampling on the fringes of the main stope and on the 125- and 161-foot levels south of the shaft; and 4) investigate the surface trace of the Ramsey vein, likewise remain unchanged.

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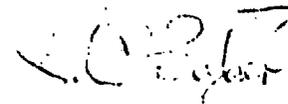
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on an appropriately spaced grid should detect any near-surface ore shoots which would be reflected by anomalous concentrations of silver in the soil above and adjacent to any commercially important near-surface silver mineralization. Particular attention should be given to close-spaced sampling along the surface projection of the main Ramsey vein. Any anomalous areas that develop can then be investigated by shallow surface excavation. If interesting widths of mineralization are found at the surface within a reasonable distance from the Ramsey shaft, drifting to prospect the vein at depth beneath these areas might then be justified.

I hope that this summary will be helpful to you.

With best regards,

Yours very truly,



R. C. Baker

RCB/jk

cc: Mr. A. R. Byrd