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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CONGRESS

ALTERNATE NAMES:
- CONGRESS MINE, PATENTED 878
- FRACTION, PATENTED 883
- NIAGARA
- NIAGRA
- GOLDEN KEY
- HERSKOWITZ PROPERTY
- QUEEN OF THE HILLS
- OHAHA
- PLANET MIER
- JAQUAYS
- B AND M
- PATENTED CLAIMS MS 2888 & 3523

YAVAPAI COUNTY MILS NUMBER: 440C

LOCATION: TOWNSHIP 10 N RANGE 6 W SECTION 23 QUARTER N2
LATITUDE: N 34DEG 12MIN 05SEC LONGITUDE: W 112DEG 50MIN 54SEC
TOPO MAP NAME: CONGRESS - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
- GOLD
- SILVER
- COPPER SULFIDE
- FELDSPAR

BIBLIOGRAPHY:

- ADMMR CONGRESS MINE FILE
- ADMMR CONGRESS COLVO FILE
- ADMMR NIAGARA MINE & MILL FILE
- ADMMR GOLDEN KEY FILE
- REPORT OF THE GOVERNOR OF AZ 1899 P 54-56
- WILSON, E.D. ETAL. AZ LODE GOLM MINES AZBM
- METZGER, O.H. GOLD MINING & MILLING IN THE WICKENBURG AREA USBM IC 6991 1938 P 45

CONTINUED ON NEXT PAGE

CONGRESS (F. YAVAPAI
MIAGRA (F. YAVAPAI

A STATUS REPORT
ON
THE CONGRESS MINE, ARIZONA
FOR
REPUBLIC GOLDFIELDS INC.

Toronto, Ontario
May 29, 1992

Watts, Griffis and McOuat Limited
Consulting Geologists and Engineers

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1. SUMMARY

Watts, Griffis and McOuat Limited was requested by the management of Republic Goldfields Inc. to review the status of its Congress Mine property in Arizona. More specifically, we were requested to assess the gold mineral potential of the Niagara vein system, recently in production by Republic, and other veins systems known to occur on the property.

Republic Goldfields Inc. acquired the Congress Mine in 1989, from Echo Bay Mines Ltd., and began producing gold from the mine in mid-1990. Mining operations were suspended at the end of April, 1992 due to depressed gold prices and an onerous gold loan debt burden. After the first month of production, the Congress Mine experienced only three months of negative operating profits, prior to repayment of debt. The last month of mining operations produced a positive operating profit.

The Congress Mine was undercapitalized at the start of production and insufficient ore reserves were delineated to carry the mine over shortfalls in gold production. These shortfalls occurred due to the disappearance of some reserves, when unforeseen faulting disrupted the geometry of the mineralized zone. As a consequence of the requirement to service the debt burden, reserves were mined without being replaced by sufficiently advanced development and exploration.

A limited drill program, as well as surface mapping and sampling, has indicated that there are more than forty veins underlying the property, most of which have significant gold mineralization. It is Watts, Griffis and McOuat's opinion that the Congress Mine property has excellent potential for the development of additional reserves readily accessible from the recent underground workings. In addition, it is our opinion that there is every opportunity to delineate a new gold deposit on one or more of the other veins systems known to occur on the property.

Prior to the resumption of mining, sufficient+ reserves will have to be outlined to repay debt and cover the cost of the required exploration and development expenditures. An aggressive drill program is required to delineate reserves accessible from the current workings as well as the delineation of deposits from other veins underlying the property. It is Watts, Griffis and McOuat's opinion that the Congress Mine property merits the requisite exploration expenditures.

2. INTRODUCTION

Republic Goldfields Inc. (Republic) requested **Watts, Griffis and McOuat Limited** (WGM) to review the status of its **Congress Mine** property (the **"Property"**), specifically to assess the potential for the discovery of additional mineralization underlying the Property. In this regard WGM has relied on the reports, plans, sections and other data that have been supplied to us by Republic. In addition, WGM has drawn upon its own knowledge of the area, internal reports, and government publication.

A WGM representative visited the Property from May 3 to May 4, 1992. While there, the reviewed the data relevant to the assignment and inspected the minesite. The data consisted of internal reports, memoranda, plans and sections, etc. in addition to discussions with the mine/mill staff and exploration staff.

The Property has had a long history of mining, primarily on two vein systems, namely the Congress and Niagara veins. Recent mining (late 1980s-1992) has been confined to the Niagara vein system.

Exploration in the past has concentrated on the Congress and Niagara veins with a modest amount of work being applied to veins readily accessible to the mill and current mine workings. These veins include the Top of the Hill and Queen of the Hills as well as subsidiary offshoots of these veins.

There has been an effort by Republic to identify, sample and map veins throughout the Property. These exploration efforts have identified a number of vein systems with significant gold mineralization. To WGM's knowledge none of these veins have been sampled at depth by underground workings or drilling. The exploration program traced a number of these vein systems over significant lengths comparable to or greater than surface exposures of the Congress or Niagara veins.

In order to assess the potential of known workings, as well as vein systems identified by Republic's exploration effort, WGM reviewed the geometry of the veins and the results of past mining and exploration in order to estimate the potential for additional mineralization.

3. PROPERTY DESCRIPTION

3.1 LOCATION

The Property is located in the southeastern portion of Yavapai County, Arizona, approximately 65 miles northwest of the city of Phoenix (Figure 1). It occupies parts of Sections 10-11, 14-15 and 22-24 in Township 10N, Range 6W and Section 18 in Township 10N, Range 5W.

3.2 ACCESS

The Property lies three miles north of the town of Congress and is accessible by paved and well maintained gravel roads (approximately 2 miles). The nearest larger community is the town of Wickenburg, some 23 miles southeast of the Property and may be reached by U.S. Highways 89 and 60.

3.3 INFRASTRUCTURE

The Property has an ample supply of water from a number of sources including flooded old workings, a water well and access to the water supply of the town of Congress. Power is supplied by diesel generators located at the mine site. There is an abundance of skilled local labor derived from nearby communities, including Congress and Wickenburg. Due to Arizona's healthy copper mining industry, mine and mill equipment parts and supplies are readily accessible.

3.4 LAND STATUS

The Property covers an area of approximately 2,800 acres, with a long axis of four miles in an east-west direction and two miles in a north-south direction (see Plate 1, in pocket)

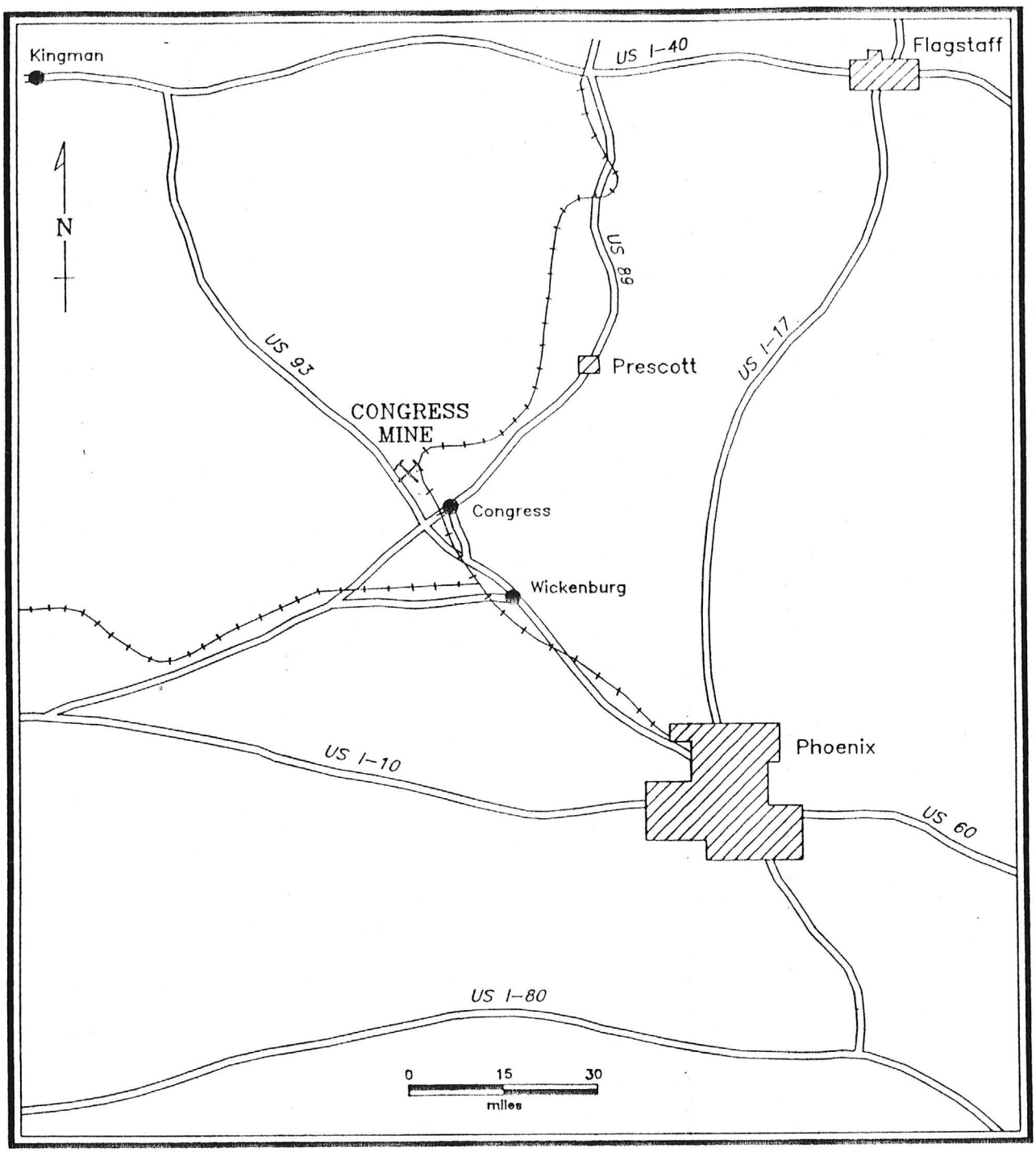


FIGURE 1

Property Location Map

The Property is subject to four separate lease/royalty agreements which are:

Magic Circle: An original vendor, which received $3 million in cash from Echo Bay Mines Ltd. in 1984, receives a 10% royalty based on the "operating cash flow" less various deductions. Republic has accrued a "pool" of more than $500,000 from which royalty entitlements may be drawn down before payment from production.

Dubois: This lease calls for an annual advance royalty payment ($150,000 due in 1992) and a sliding scale net smelter return (NSR) ranging from 3.5% to 12% depending on the price of gold (4.5% @ $350/oz Au). A "pool" of approximately $450,000 exists from which NSR royalty payments may be drawn down.

Golden Wave: The agreement includes an annual advance royalty of $3,000 and a sliding scale NSR royalty ranging from 2.0% to 5.0% (2.5% @ $350/oz Au). The agreement has a buyout clause for $450,000 less any royalties paid.

Deck: Requirements include an annual advance royalty of $3,000 and 10% NSR royalty. There is also a buyout clause for $150,000 less any royalties paid.

Republic has also been negotiating the acquisition of four other properties adjacent to the Property. Current property owners have expressed an interest in optioning their properties to Republic. See Figure 2 for leased parcels comprising the Property.

4. HISTORY

The Property has a long history of mining, specifically from the Congress and Niagara veins with lesser production from the Queen of the Hills vein. Gold was first discovered at the site of the Congress Mine in 1884 and production began in 1887 and continued until 1891. A second period of production began in 1894 and lasted until 1910. During the period 1911 to 1941, production came from various lessors processing dumps (156,500 tons) and tailings (276,200 tons). Echo Bay Mines Ltd. (Echo Bay) began production in 1988 after a program of underground exploration and development in 1987. Republic acquired the property in 1989 and proceeded to build a mill facility and modified mining methods to increase efficiency.

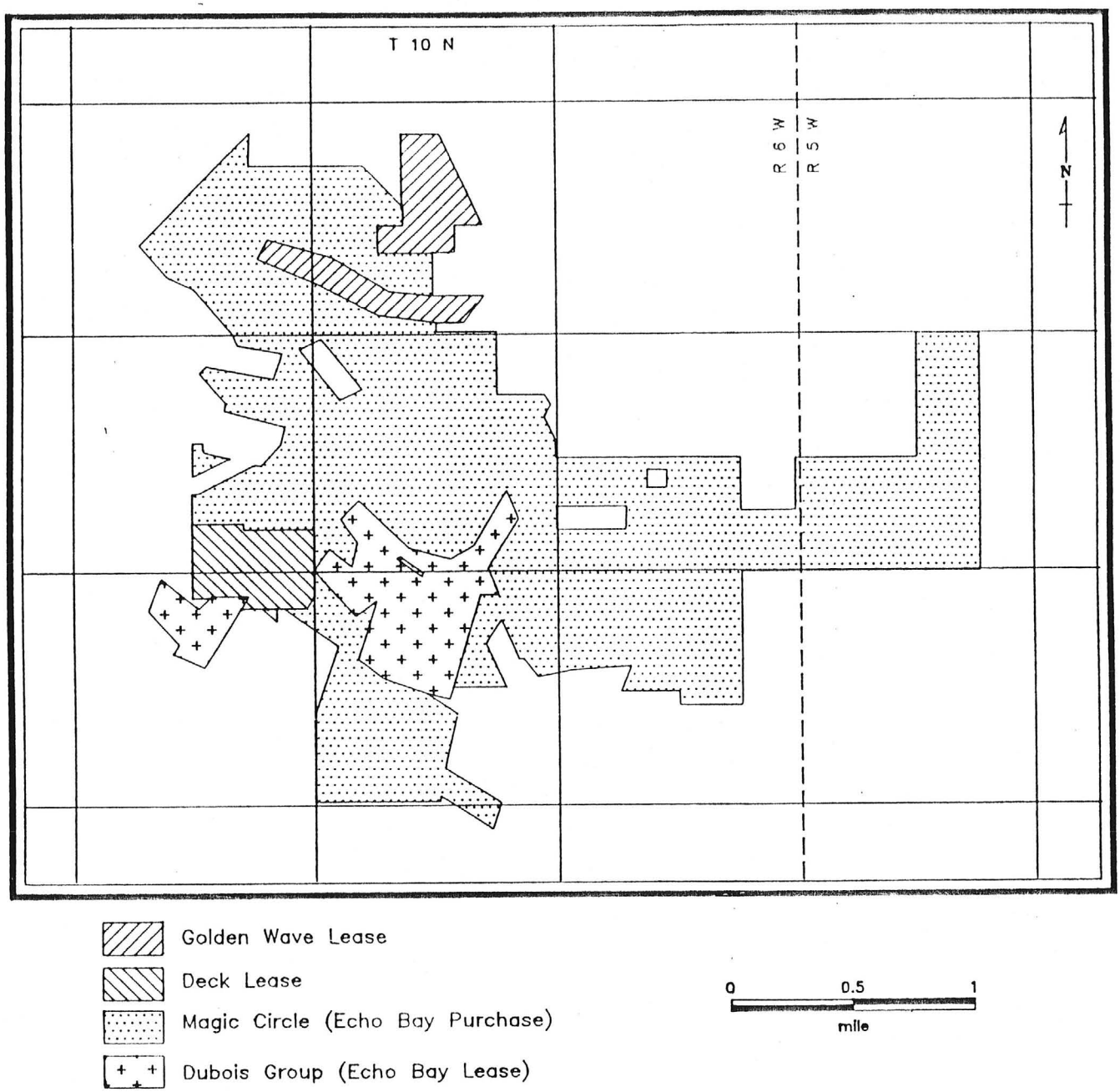


FIGURE 2

Property Status Map

During the period 1899 to 1910, ore was produced from, in decreasing order of gold production, the Congress, Niagara and Queen of the Hills vein systems. The Congress vein system has been the most productive vein system to date. It produced some 370,022 tons grading 0.70 oz Au/ton. Approximately 293,200 ton of ore grading 0.42 oz Au/ton were mined from the Niagara vein system during this period. Some 20,000 tons grading 0.40 oz Au/ton were recovered from the Queen of the Hills vein. No significant gold production has been reported in the literature for other veins on the property.

The first modern exploration program began in 1982 with a program of rotary and diamond drilling by Congress Consolidated Gold Mining Corporation, a subsidiary of Magic Circle Energy Corporation (Magic Circle). The results of this program outlined a new ore zone in the previously worked Niagara vein system.

Echo Bay subsequently acquired Magic Circle's property, for $3 million in cash and a royalty agreement, and the adjacent Dubois property (in 1987) which included the major portion of the old Congress Mine workings (all included in the Property). Echo Bay started a decline ramp to access the ore shoot in 1987 and development work was sufficiently advanced to begin production in 1988. Echo Bay shipped the run-of-mine ore directly to the Hidalgo smelter in New Mexico for flux. Transportation costs, combined with a low net smelter return, made the operation marginally viable.

In 1989 Republic, then Malartic Hygrade Gold Mines (Canada) Ltd., acquired the mine from Echo Bay. Based on a project review study (Derry, Michener, Booth and Wahl Inc., Nov. 1989), indicating that there were proven and probable reserves of approximately 462,700 tons grading 0.30 oz Au/ton, Republic proceeded to build on site processing facilities. Republic felt that the estimated reserves combined with processing on site would produce an operation generating a reasonable rate of return at the prevailing gold price. Republic also believed that there was significant potential to discover other ore deposits from vein systems within the Property. Acquisition of the Property, and subsequent production, enhanced Republic's entree to the U.S. mining industry. Under Republic's management, the mine was in full production until the end of March, 1992, when the underground operations were suspended; the processing facilities are currently treating old tailings at 800 tons/day throughput.

5. GEOLOGY

5.1 GENERAL

The Congress Mining District, and the surrounding Date Creek Mountains, is underlain by the southwest portion of the central Arizona Proterozoic belt of rocks. This belt trends in a northeasterly direction. The predominant lithologies underlying the Property are Early Proterozoic granitic intrusive rocks ranging in composition from coarse grained biotite granite to granodiorite. These intrusive units contain swarms of coeval pegmatitic and aplitic dikes which may comprise up to 15% of the intrusive rock.

Older metavolcanic and metasedimentary rocks, of the Yavapai Series, occur locally as roof pendants and inliers in the granitic rocks. Yavapai Series units, trending to the northeast, have been identified on the northwest portion of the Property.

Granitic rocks underlying the Property have been intruded by younger dikes of different ages and composition. Four dike systems of various lithologies and differing ages have been recognized on the Property. One of the dike system lithologies has been referred to as "greenstone" but is likely diorite in composition.

The "greenstone" dikes may be economically significant in that they appear to have some relationship with the occurrence of gold mineralization, specifically they host part of the productive section of the old Congress Mine. They also seem to be closely associated with gold mineralization in the Queen of the Hills and Top of the Hill vein systems. Emplacement of these dikes may have only taken advantage of structurally weak zones that later provided channel ways for fluids carrying gold mineralization.

5.2 CONGRESS VEIN

This vein system, which supplied more than half of the historical gold production at a recovered grade of 0.7 oz Au/ton, is comprised of narrow veins varying up to several tens of feet wide but averaging 3 feet wide. This vein system dips to the northeast at approximately 25°. The ore zone exhibits a fairly constant plunge to the north. Veins are generally comprised of light gray to white quartz with varying amounts of pyrite and lesser base metal sulphides.

Ore grade mineralization is generally located along the footwall of the Congress "greenstone" dike, although veins were known to have crossed the dike in an irregular fashion. Several splay veins, extending from the main structure, were also mined.

The Congress vein system was mined as, more or less, one continuous ore zone extending from surface down dip to 3,100 feet along dip and to a maximum strike length of 1,800 feet along the 650 level. Additional production came from the 3,900 foot level, the lowest level developed.

5.3 NIAGARA VEIN

The Niagara vein system is comprised of mineralized quartz veins which dip approximately 45° northeast and strike east-southeast and are hosted by granite. The vein system is sub parallel to, and crops out approximately 250 feet south of, and dips beneath, the Congress vein system. Historical (pre-1911) production from this vein system is approximately 293,200 tons grading 0.42 oz Au/ton.

Mineralization along the Niagara structure varies from quartz vein material, up to 14 feet thick in unaltered granite, to broader altered zones containing lower grade stockwork mineralization. Quartz is generally light gray in color and contains scattered pyrite, ankerite and lesser amounts of base metal sulphides. Native gold is associated with pyrite and occurs as very fine grained coatings on pyrite crystals and cracks.

Recent work by Republic has shown that the mineralized zone is confined by a band defined by a relatively strong footwall fault and a variably weak to strong hangingwall fault. Near surface, this band is relatively narrow and contains the ore bearing quartz vein. At a vertical depth of approximately 650 feet (in the current workings) the hanging wall flattens to 30°.

The divergence of the hangingwall and footwall faults has the effect of creating a wider band containing alteration and stockwork and low grade mineralization. Within this wider band, minable ore grade mineralization is confined to quartz veins more commonly associated with the footwall structure.

6. MINING OPERATIONS

6.1 MINING

The Congress Mine is a partially mechanized underground gold mining operation. Stoping is by modified end slicing/raise and pillar method. Current operations are contained in the Niagara vein system, east of the old No. 6 shaft workings. See Plate 2 (in pocket) for plan of underground workings.

Access is via an 11′ by 15′ ramp, which is generally driven in the footwall of the vein system, at a 15% grade. The ramp is driven utilizing a single boom jumbo, 3.5 cubic yard LHDs (load-haul-dump) for mucking and 25 ton trucks for rock haulage to surface.

Sublevels are cut at 55 foot vertical intervals. Crosscuts are driven from the ramp to approximately the central portion of the vein system. Sublevels are then driven in both directions along the strike of the vein to define and sample the vein. Sublevels are driven using jackleg drills and are mucked by LHDs. The capacity of the LHD employed varies with the vein width. For sublevels measuring 5′ by 9′ a 1 1/4 cubic yard LHD is used while 8′ by 9′ sublevel uses a 3 1/2 cubic yard LHD for mucking.

A raise is driven along each end of the sublevel, after defining the lateral extent of ore grade mineralization along the sublevel, to break through to the upper sublevel.

Stoping uses the raises and is carried out using jackleg drills to drill slices of the stope and, depending on the dip of the veins, is either blasted down to the lower sublevel or, if the vein is dipping less than 40°, is scraped down using air powered slusher to be mucked by LHDs. Rib pillars are left for ground support and when a stope is completed most of these are recovered.

Ground control in development headings use split set rock bolts with strapping and screening, where required. Initially wooden stulls were employed exclusively in stopes for ground support. Recently Republic has replaced wooden stulls with small, generally less than 8′ by 12′, post pillars. These pillars, generally containing relatively little of the ore reserves, have decreased dilution and enhanced productivity.

The mine is ventilated by 230,000 cubic feet per minute of air forced down through vertical raise bore holes to the 700 level which then connects with ventilation raises from sublevel to sublevel. The main decline is used for the exhaust flow of air.

Electrical power requirements, for both the mine and processing facilities, are generated on site by a power plant containing three 1,450 kVA Caterpillar diesel powered generators and associated switching equipment.

6.2 PROCESSING

The Congress processing facility is a carbon in leach (CIL) gold cyanidation plant with a design capacity of 350 tons per day. Coarse ore is dumped into a bin equipped with a 14" grizzly screen and a pneumatic rock breaker. Ore is then fed through a 24" by 36" jaw crusher set at 4 inches. The ore is then conveyed to screen where -3/8" product is transferred to the fine ore stockpile while +3/8" product is fed through a 4 1/4" Symons shorthead cone crusher. This closed circuit system crushes approximately 50 tons of ore per hour, enough to satisfy the mill requirements in on operating shift per day.

Fine ore is drawn from an approximate 750 ton "live load" stockpile though a 12 foot long slot feeder and conveyed to a 9 1/2 foot by 11 foot Norberg primary ball mill. Calcium cyanide and lime solution are added to the ball mill feed. The primary ball mill discharge is passed through cyclones where the overflow reports to a 30 foot diameter high rate thickener while the underflow reports to an 8 foot by 10 foot Allis Chalmers secondary ball mill for regrinding. The mills produce a product of approximately 80% passing -200 mesh.

Thickener underflow slurry, at approximately 50% solids, is pumped to the first of a series of seven 25 foot diameter by 17.5 foot high leach tanks where the slurry is agitated. These tanks provide a 72 hour residence time for the ore after which the tailings slurry is pumped to a zero discharge, lined tailings pond.

Activated carbon is introduced into the No. 7 tank and flows in counter current to the ore slurry to tank No. 2, where the gold loaded carbon enters the gold stripping and recovery building. The loaded carbon is acid washed and stripped using concentrated sodium cyanide and caustic solution. The pregnant elute is then pumped through an electrowinning circuit, where the

precious metals are precipitated on to steel wool cathodes. The precious metal sludge is then melted in a Wabi type blast furnace to produce a gold/silver bullion.

The Congress processing plant was constructed by Republic and completed in May, 1990 on schedule and within budget. A permitting delay resulted in the plant being commissioned in July, 1990. By October, 1990 the plant was operating at its design capacity and has been operating satisfactorily since that time.

6.3 PRODUCTION STATISTICS

The first full month of ore processing, in the newly commissioned plant, began in September, 1990. Table 1 lists some relevant production and financial statistics for each month that the mine has been in production.

Republic has a gold loan, payable to the Bank of Nova Scotia on a quarterly basis, of which less than U.S. $2 million remains. Repayment of the gold loan is indicated in the following financial statistical tables as a percentage of the operating profit (cash flow). Although the loan payment is made in ounces, the percentage is calculated by prorating the payment, on a monthly basis back to the prior payment. The cost of the gold payment is based upon the number of ounces times the gold price required by the terms of the loan during the period. This repayment is included to indicate the impact of the debt burden in reducing the cash flow available to Republic for development and exploration expenditures.

It is apparent, from examination of Table 1, that the Congress Mine was undercapitalized. The servicing of the debt burden and the steady decline in gold price combined to inhibit Republic from pursuing recommended exploration and development programs. In its effort to maintain production, after encountering some tonnage/grade disappointments, Republic processed lower grade ore readily accessible to rapid development.

Had sufficient higher grade ore been developed early in the mine life, there would have been greater opportunity for more rapid repayment of the gold loan. Lacking higher grade ore reserve blocks, a greater developed tonnage would have had the effect of rapid replacement of shortfalls in tonnage and/or grade from other areas in the mine.

The optimum developed reserves would have to be balanced against the capital required for development. A careful study of the operating history of the mine, since Echo Bay began mining, might indicate just what developed tonnage would be required to sustain the mine during shortfalls in recovered ounces of gold.

It is noteworthy that cost of servicing the gold loan debt, in terms of percentage of operating profit, has exceeded 100% since Republic commenced production. This is obviously an untenable situation when insufficient reserves are developed to eventually eliminate the debt.

Table 1

Production Statistics

Month	Tons	Recovered (oz Au)	Rec. Grade (oz/ton)	Calc. Rec.(%)	Production TPD	Op. Profit ($)	Loan (% of Profit)
1990							
Jul	NA	NA	NA	NA	NA	NA	NA
Aug	NA	NA	NA	NA	NA	NA	NA
Sep	8,443	757	0.090	85.9	360	(184,732)	NA
Oct	11,158	1,759	0.158	88.1	330	15,740	1,700
Nov	9,906	1,798	0.182	97.6	328	71,360	400
Dec	10,180	2,202	0.216	87.7	339	287,659	100
Totals	39,687	6,516	0.162	89.8	339	$374,759	733
1991							
Jan	12,493	1,950	0.156	85.4	403	174,688	118
Feb	9,863	2,605	0.264	87.3	352	306,664	67
Mar	10,635	2,762	0.260	91.9	343	402,669	51
Apr	11,051	2,890	0.262	91.5	368	203,266	101
May	10,881	2,115	0.194	90.0	351	120,012	171
Jun	8,993	2,100	0.234	89.0	300	223,464	92
Jul	10,849	2,389	0.220	89.4	350	272,179	76
Aug	9,385	2,641	0.281	92.0	303	221,318	93
Sep	10,161	2,722	0.268	93.1	339	283,073	73
Oct	10,468	2,462	0.235	91.0	338	216,599	95
Nov	8,909	1,973	0.221	91.9	297	112,699	105
Dec	11,337	1,926	0.170	89.9	366	(12,793)	NA
Totals	125,025	28,535	0.230	90.2	343	$2,523,838	95
1992							
Jan	9,996	1,744	0.174	88.9	654	(104,467)	NA
Feb	9,894	1,575	0.159	91.2	356	(48,228)	NA
Mar	9,305	1,883	0.202	92.8	300	58,508	776
Apr	NA	NA	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA	NA	NA
Jun	NA	NA	NA	NA	NA	NA	NA
Totals	29,195	5,202	0.178	91	437	($94,187)	776

7. ORE RESERVES

Mining operations were suspended at the end of March, 1992 when it became clear that insufficient capital was being generated to develop enough ore reserves in order to maintain daily production requirements. Although the operation has generally had a positive cash flow, several factors have contributed to under-capitalization, including the decline in gold price; the priority repayment of debt (gold loan); and some disappointing results in several reserve blocks.

The ore reserves, estimated by the mine staff, remaining at the time of the suspension of mining are shown in Table 2 below:

TABLE 2

Niagara Vein -Estimated Ore Reserves

Category	Tons	Grade (oz Au/ton)	Contained Oz Au
Proven	15,902	0.251	3,991
Probable	62,004	0.208	12,897
Possible	75,764	0.187	14,168
Total	153,670	0.205	31,056

In addition to the reserves tabulated above, approximately 500,000 tons of tailings from the old Congress Mine remain on the Property. The tailings are classified in Table 3 based on their economic viability. Those tailings classified as reserves are currently being processed at a rate of approximately 800 tons per day by Republic.

TABLE 3

Tailings Reserves/Resources

Category	Tons	Grade (oz Au/ton)	Contained Au (oz)
Reserves	120,525	0.077	9,280
Resource	355,400	0.060	21,324
Total	475,925	0.064	30,604

Gold mineralization has been identified by Republic from other sources but, due to current economic conditions, is classified as a resource. Table 4 tabulates this mineralization.

TABLE 4

Estimated Gold Resources

Source	Tons	Grade (oz Au/ton)	Contained Au (oz)
Congress "Gob" Ore	91,800	0.107	9,823
Queen of the Hills	14,000	0.183	2,562
Niagara East Offset	21,158	0.264	5,586
Total	126,958	0.142	17,971

From a summary literature research, and partial confirmation by investigation of readily accessible workings, Republic estimates that there are several hundred thousand tons of "gob" (broken rock) material of an undetermined grade remaining in the old Congress and Niagara workings.

Reconciliation, as of March 11, 1992, of the ore reserves by the mine staff is shown in Table 4. For stopes in the proven reserve category that were mined out, the tonnage produced averaged 92.3% while contained ounces of gold averaged 98.6% of the expected production.

TABLE 5
Ore Reserve Reconciliation

JAN 1, 91 ORE RESERVES				1991 PRODUCTION			JAN 1, 92 ORE RESERVES			AU
STOPE	TONS	GRADE	OZS AU	TONS	GRADE	OZS AU	TONS	GRADE	OZS AU	(+/-)
PROVEN RESERVES										
1-2	0	0.000	0	674	0.086	58				58
1-3	2,453	0.358	878	1,842	0.191	352				(526)
1-4	4,173	0.284	1,185	4,787	0.223	1,068				(117)
1-5	3,932	0.263	1,034	2,503	0.395	989				(45)
3-H-O	1,257	0.391	491	1,502	0.256	385				(106)
4-W	803	0.293	235	189	0.123	23	803	0.293	235	23
3-0-W	1,366	0.171	234				1,366	0.171	234	0
3-2-E	5,278	0.239	1,261	2,541	0.425	1,080				(181)
3-3-E	8,734	0.278	2,428	8,258	0.284	2,345				(83)
3-3-W	3,828	0.230	880	4,099	0.366	1,500				620
3-4-W 1	12,866	0.246	3,165	15,248	0.274	4,178				1,013
4-0-W	11,341	0.234	2,654	13,946	0.226	3,152	936	0.231	216	714
3-W-1	1,456	0.178	259	848	0.143	121	682	0.158	108	(30)
500 LEV **				1,273	0.164	209	6,327	0.237	1,499	1,708
3-H-X **				2,300	0.216	497	1,097	0.280	307	804
SUBTOTAL	57,487	0.256	14,704	60,010	0.266	15,957	11,211	0.232	2,599	3,852
PROBABLE RESERVES										
3-H-1 *	10,218	0.496	5,068	4,397	0.197	866	1,600	0.184	294	(3,908)
3-H-2	9,003	0.460	4,141				1,083	0.252	273	(3,868)
LOWER W	5,901	0.208	1,227							(1,227)
4-1-E *	9,953	0.208	2,070	16,463	0.208	3,424	2,232	0.220	491	1,845
4-1-W	22,733	0.242	5,501	8,442	0.185	1,562				(3,939)
4-2 *	26,624	0.221	5,884	18,682	0.313	5,847	4,459	0.276	1231	1,194
4-3 *	19,394	0.277	5,372	10,561	0.198	2,091	10,618	0.267	2835	(446)
4-4 *	16,304	0.286	4,663	619	0.031	19	3,124	0.265	828	(3,816)
5-0	17,377	0.224	3,892				11,817	0.157	1855	(2,037)
BELOW 5-0	74,495	0.275	20,486				73,429	0.268	19679	(807)
600 LEV							2,800	0.209	585	585
1200 LEV							2,933	0.273	801	801
4-3 GOB							4,000	0.110	440	440
CONG GOB ***							7,200	0.120	864	864
SUBTOTAL	212,002	0.275	58,304	59,164	0.233	13,809	125,295	0.241	30,176	(14,319)
POSSIBLE RESERVES										
#6 SHAFT	96,786	0.198	19,164							(19,164)
#6 SH A							25,287	0.234	5,917	5,917
#6 SH B							40,142	0.204	8,189	8,189
OFFSET	21,158	0.264	5,586							(5,586)
CONG GOB	91,800	0.107	9,823							(9,823)
TAILS				651	0.091	59				59
SUBTOTAL	209,744	0.165	34,573	651	0.091	59	65,429	0.216	14,106	(20,408)
BROKEN	6,624	0.287	1,901	5,199	0.297	1,542	1,425	0.130	185	(174)
TOTAL	485,857	0.225	109,482	125,024	0.251	31,367	203,360	0.231	47,066	(31,049)

Notes: * January 1, 92 Ore Reserves are in Proven category

** Formed part of Jan 1, 1991 #6 SHAFT Possible Ore Reserves

*** Formed part of Jan 1,1991 Congress Gob Possible Ore Reserves

8. MINERAL POTENTIAL

8.1 GENERAL

In our opinion, the potential to increase reserves on the Property is considered to be excellent. As noted previously, the lack of capital due to depressed gold prices and servicing the debt burden has precluded current management for pursuing an aggressive exploration drilling strategy, both on the Niagara vein system and other gold bearing veins underlying the Property.

8.2 UNDERGROUND

The primary exploration targets readily accessible from the current workings (see Plate 2, in pocket) are, in order of priority:

1) the Niagara down plunge extension (Niagara DP);
2) the No. 6 Shaft A and B zones; and
3) the convergence of the plunge of the recently worked Niagara ore zone with that of the No. 5 shaft ore zone (Convergence zone).

The Niagara DP lies just below the lowest level in the mine. Based on drilling to date and the down plunge trend of the ore zone, the Niagara DP has been classified by mine staff as probable ore reserves. This reserve block also has a greater potential for significantly higher tonnage than the No. 6 Shaft A and B zones.

The No. 6 Shaft A and B zones occur above the 3 Level and to the east of the current workings (see Plate 3, in pocket). Based on drill hole date these reserves have been classified as possible and, due to their location between mined out areas, have a limited tonnage potential.

The Convergence zone contains the greatest potential to contain tonnage in the order of magnitude of the tonnage that has been mined since 1988. The occurrence of this tonnage will depend on the potential for ground preparation, at the projected juncture of the two ore zones, allowing gold bearing mineralizing fluids to precipitate in a relatively large volume of host rock.

It is not unreasonable to expect an increase in tonnage at the juncture of these ore zones but the magnitude of such a tonnage and grade is unknown. As the lowest levels will permit access by minimal advance of the bottom of the ramp, such a target is attractive. Delineation of this zone will require underground drilling as well as some surface drilling. Approximately 9-11 drill holes will be required to estimate drill indicated reserves in this zone.

The probable reserves of the Niagara DP zone and the upper portion of the Convergence zone will also require additional underground drilling to better delineate the tonnage and grade potential prior to advancing the decline. Unless a significant orebody is discovered on a new (not previously developed) vein system located elsewhere on the Property, the mineralization within reach of the current workings represents the greatest opportunity to develop sufficient reserves to resume mining.

A limited surface drill program was initiated by Republic to delineate the mineralization below the Sublevel three. Both drill holes encountered the mineralized structure and contained values of 0.145 oz Au/ton over 3.2′ and 0.028 oz Au/ton over 4.2′. Additional drill holes, to be collared from underground, were recommended to further delineate this area of the Niagara vein.

A drill program, designed to test the deep extension of the Niagara vein, was initiated in late 1991. The recommended drill program was not completed due to lack of funding. Two of the holes completed (92-04, 05) during this program intersected economical interesting mineralization grading 0.145 oz Au/ton over 3.2 feet and 0.028 over 4.2 feet respectively.

Although capital for continued exploration should be predominately allocated to developing reserves within reach of the current workings, a significant portion should be allocated to exploration on veins other than the Niagara vein.

8.3 SURFACE

In 1990 Republic undertook a surface mapping and sampling program in order to confirm the presence of economically interesting mineralization hosted by other vein systems occurring on the property. The results of this program were encouraging as a number of veins had significant gold values (see Plate 1 in pocket).

The surface expression of the veins were traced as far as practicably possible. Sample locations and geology were plotted at two map scales. All veins are located on maps at a scale of 1"=20' (detailed) while the central and west central portion of the Property was mapped at a scale of 1"=200' (reconnaissance). The samples were restricted to grab samples of veins with the width of the outcropping vein noted at the sample location. Detailed chip or channel sampling was not employed in this reconnaissance type of program. Table 6 lists the results of the surface sampling.

TABLE 6

Surface Vein Sampling Summary

Vein System	Exposed Length (ft)	Au Values (oz Au/ton)
Congress	3,500	0.233/12" 0.446/12"
Niagara	1,200	0.997/18"
Queen of the Hills	700	0.207/12"
S. Queen of the Hills	200	0.290/12"
Deadhorse	550	0.087/12"
Pondview	700	0.910/12"
Valley	300	0.678/12" 0.235/3"
Niagara Slay	230	1.126/1" 0.135/8"
S. Niagara	750	0.500/1"
Arrowhead	500	1.266/2" 0.351/6"
Running Deer	4	0.970/1"
Top of the Hills	700	1.151/2"

TABLE 6
(Continued)

Vein System	Exposed Length (ft)	Au Values (oz Au/ton)
Blowout	1,200	0.523/12"
East Office	100	0.027
Saddle	1,000	0.046
Hillside	700	0.123/1"
Muleshoe	1,700	0.170
North Dike	10	0.880/1"
Millview	450	0.435/24"
N. Congress	50	0.111/1"

In January of 1992 a limited diamond drill program, comprising 4,200 feet in 14 holes, was conducted to determine the subsurface mineral potential of several vein systems in close proximity to the mine/mill complex. A summary tabulation of the drill program is shown below.

TABLE 7
Surface Drill Hole Summary

DDH No.	Vein System	Results
92-01 to 03	Queen of the Hills	Mineralized structure encountered and ranged from 1.8'-4.6' wide with grades from 0.010-0.024 oz Au/ton
92-04 to 05	Niagara	Encountered new zone between the Congress dike and the Niagara vein approx. 4.2' wide with intense alteration and low grade Au. below Sublevel 3 in the Niagara structure 92-04 intersected low grade Au over 6.0' while 92-05 intersected 0.167 oz Au/ton over 2.4'.

TABLE 7

(Continued)

DDH No.	Vein System	Results
92-06 to 08	Top of the Hill	Drilled in the upper portions of the vein. 92-06 intersected 2.2′ grading 0.356 oz Au/ton, 92-08 intersected 2.4′ grading 0.601 oz Au/ton.
92-09	Rattler	Intersected 3.5′ of low grade gold mineralization.
92-10 to11	Valley View	92-10 intersected pegmatitic vein material grading 0.041 oz Au/ton over 3.2′. 92-11 intersected stringer mineralization and weak alteration over a length of 31.3′. A large fault that may offset the vein was inferred from the drill results.
92-12 to 14	Top of the Hill	Intersected zones of subeconomic mineralization below holes 92-06 to 08. Intersected a new zone in the footwall of the Suprise dike grading 2.091 oz Au/ton over 2.0′.

Based on the results of the drill program, additional drilling was recommended for the Sublevel 3 area as well as the Top of the Hill vein. These areas offer exploration potential for the discovery of economically significant tonnages of ore grade mineralization. The results of the drilling confirm the operating experience on the Niagara vein as these veins are erratic, in both width and grade, at the scale of the drill hole spacing. Stope size volumes of mineralization could be adjacent to or surrounding the drill hole intersections.

As noted in Table 6, there is ample evidence of a major mineralizing event that has affected the area underlying the Property. Limited surface sampling can only indicate whether mineralized structures exist. A program of surface trenching and closely spaced drilling would be required to assess the merits of an underground exploration program. There is no reason to believe that the Congress and Niagara vein systems host the only economically interesting gold mineralization, nor even the largest of the deposits that may underlie the Property.

The consistent vein geometry and orientation for a large part of the known veins indicate that the same tectonic event prepared the channel ways for the emplacement of mineralization at a later time.

WGM is of the opinion that exploration of vein systems that have not had a history of production offers a exciting opportunity to develop additional reserves which may be treated by the current processing facilities. Development of any such reserves on "new" veins will enhance the long term viability of the Property and the processing facilities. Capital costs will largely be allocated to access, development and mining facilities. The processing facilities will have been amortized and will enhance the balance sheet for any new mining operation.

9. CONCLUSIONS

The cessation of mining activities on the Property was the result of a number of factors which contributed to the undercapitalization of the Congress Mine. The gold loan debt burden assumed by Republic became onerous as shortfalls in ounces produced and the lack of sufficient developed reserves combined to defer ongoing exploration and development. As a result, ore reserves were not replaced and the repayment of the debt forced mining to diminish the delineated reserves. The declining price of gold also contributed to reducing the margin of profitability of the mine.

Excluding the debt repayment, the operating history of the mine, since it was acquired by Republic, has been one of profi+tability. After the first month of startup, the mine experienced only three months of negative operating profit. Debt repayment consumed almost all of this profit with little or no excess cash available to sustain the replacement of reserves or to cushion potential shortfalls in production.

It is WGM's opinion that the Property has excellent potential for the addition of economically viable reserves, both within the current mine and elsewhere on the Property. Mineralized veins are prevalent throughout the Property and there appears to be no technical reason why lenses of orebody size and grade would not be hosted by one or more of these veins.

On the basis of past mining operations, the recently mined Niagara vein system should contain additional reserves of economic merit. The past production from both the Congress and the Niagara vein systems indicated remarkable continuity of the mineralized structures along the strike and plunge of the mineralized zones.

Historical mined grades are significant in that, overall, shortfalls from any single stope appear to have been more than compensated by higher grade stopes. The average mined grade, from 1990 to 1992, of the Niagara vein system was weighted to the low side as some of the expected probable reserves were decreased or disappeared during development. This was due in large part to unrecognized faults that displaced the mineralized structure and contributed to the local overestimation of reserves. On the positive side, there were some stopes whose grade and tonnage managed to keep the mine profitable.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

ROSE MOFFORD, GOVERNOR
RANDOLPH WOOD, DIRECTOR

NOTICE

Thank you for participating in the department of Environmental Quality's Public Hearing on the proposed installation permit for Malartic Hygrade U.S., Inc. Based upon the input received at the hearing and during the comment period, the Installation Permit conditions were revised and Permit No. 55025 was issued on July 1, 1990.

Enclosed for your information is a copy of the summary of the meeting held in Congress, Arizona on July 2, 1990. Your participation at this hearing was appreciated.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Inter-Office Memorandum

To: Nancy Wrona, Assistant Director
Office of Air Quality

From: Steven Pawlowski SP
Rule Development Section

Date: July 5, 1990

Re: Malartic Hygrade Installation Permit Public Hearing
Hearing Officer Memorandum

A public hearing was held on July 2, 1990 at Congress, Arizona to take public comment on whether an installation permit for the Malartic Hygrade, Inc. gold recovery facility should be issued. This general public hearing was conducted pursuant to procedures outlined in A.A.C. R18-1-402.

Mr. Bill Jasper and Mr. Prabhat Bhargava represented the Arizona Department of Environmental Quality (ADEQ).

The public meeting was called to order at 7:00 p.m.

Mr. Bill Jasper gave a brief presentation on the installation permit process.

Mr. Robert Stoughton, representing Malartic Hygrade, Inc., gave a presentation on the on-site ore crushing and cyanide leaching process facilities and the pollution control equipment at the facility to control air emissions. A copy of Mr. Stoughton's comments is attached.

The remainder of the public hearing was devoted to taking public comments and questions. In general, there was strong community support for the Malartic Hygrade, Inc. facility. No one spoke in opposition to the facility at the public hearing. A petition was circulated which requested that ADEQ expedite the permitting process so the Malartic Hygrade, Inc. facility could begin operations as soon as possible. A copy of this petition is attached to this memorandum.

The following responsiveness summary is a compilation of all issues contained in written comments submitted to ADEQ or oral comments made at the public hearing and the ADEQ response to those issues.

Responsiveness Summary:

1. Issue: The Malartic Mine will emit pollutants, including flourocabons that will hurt the ozone layer.

Response: No Class C installation permit may be issued unless the permit applicant can demonstrate that the source will not violate applicable standards of performance, visible emission standards and nonpoint emission standards.

Under A.A.C. R18-2-308, the installation permit must contain permit conditions which are necessary to assure compliance with air quality requirements.

There are no flourocarbons in the emissions from the facility.

2. Issue: The Malartic Mine will provide needed employment.

Response: ADEQ does not consider employment as a factor in making its determination on whether an installation permit should be issued. Relevant factors in making the installation permit decision relate to air quality impacts from the gold recovery facility.

3. Issue: The Malartic Mine will have smokestacks that will emit toxic materials that will drift over Congress, Arizona.

Response: The gold recovery facility has two major emission points. One emission source is from the ore crusher and ball mill operations which process ore for the gold recovery process. The second emission source is from the power generators for the facility. Power for the operation will be generated by three on-site diesel electric generators. Both of these emission sources have been evaluated and permit conditions established to control emissions.

All conveyors and ore crushing operations will be covered. Dust control towers will capture fugitive emissions at key ore transfer points. All ore will be kept wet to minimize fugitive emissions.

The facility has a number of stacks. Stack data on the crusher circuit stack, carbon regeneration area stack, cyanide hopper stack, melting furnace stack, the acid wash unit stack, and the stack for diesel generator sets is summarized in the Malartic Hygrade, Inc. project description memorandum from Bill Jasper to Prabhat Bhargava, dated April 9, 1990.

Permit conditions have been established to set limits on the emission of particulate matter and gases from the stacks. The facility is prohibited from emitting in excess of 0.05 grams per dry standard cubic meter of particulate matter from any stack. The facility is prohibited from emitting gases from any stack which exhibit an opacity of 7 percent or greater. Specific permit limits are established for particulates for each emission point for the

facility. In addition, maximum allowable emission rates are established on volatile organic compounds, nitrogen oxides, sulfur dioxide, and carbon monoxide from the diesel generators and mine truck exhaust.

4. Issue: Carbon monoxide and other chemical gasses will poison the air in the Congress, Arizona vicinity.

Response: An installation permit cannot be issued unless it can be demonstrated that the facility will not violate applicable air quality standards. State regulations require that installation permits contain permit conditions which will assure compliance with applicable standards. The installation permit prescribes maximum allowable emission rates for carbon monoxide, nitrogen oxides, sulfur dioxide and volatile organic compounds. ADEQ is prohibited from issuing an installation permit which would allow the "poisoning" of the air in the Congress, Arizona vicinity.

It should be noted that, under state regulations, the gold recovery facility is classified as a minor source. That is, the source will emit less than 250 tons per year of any pollutant subject to regulation.

5. Issue: Toxic air emissions from the mine will impact sensitive individuals, such as children and persons suffering from emphysema. Air-borne contaminants from the facility will cause severe health problems for local residents.

Response: No SARA Title III toxic compounds are projected to be emitted by this facility.

6. Issue: The dust that is stirred up by trucks going to and from the mine is a nuisance.

Response: The installation permit requires the permittee to maintain all roads and trafficked areas to minimize dust in accordance with A.A.C. R18-2-405. In past mining operations, raw materials from the Congress Mine were trucked to New Mexico for processing and refining. The proposed on-site gold recovery facility will replace truck hauling and eliminate 100 truck trips per week on Ghost Town Road. This reduction in truck trips will bring a corresponding reduction in vehicle emissions, road dust and noise.

7. Issue: A public hearing should be organized so local residents can comment on whether the installation permit should be issued.

Response: ADEQ conducted a general public hearing on July 2, 1990 at the Congress Community Center in response to written requests for a public hearing. The public hearing was held at the community center in the evening to facilitate attendance by members of the community. The public hearing was well-attended and local residents were given the opportunity to comment on whether the installation permit should be issued.

8. Issue: Emissions from the Malartic Mine will affect the Yarnell and Wickenburg areas.

Response: The Malartic Hygrade, Inc. gold recovery facility is classified as a minor source. Because the facility is a minor source, it is the permit engineer's best professional judgment that emissions from the source will not have an adverse impact on air quality in the Wickenberg and Yarnell areas.

9. Issue: The Malartic operation may cause ground water contamination.

Response: The installation permitting process is for an air quality permit. There is a separate permitting process which addresses discharges from the facility that may affect groundwater. An Aquifer Protection Permit (APP) is required for the facility. An APP has been issued by ADEQ. Permit conditions in the APP are designed to protect groundwater quality.

10. Issue: Are there any regulations that the mine has to meet in order to get a permit?

Response: Yes. The installation permit regulations are found in the Arizona Administrative Code at A.A.C. R18-2-301. The facility must meet applicable standards of performance for new stationary sources as prescribed by R18-2-801.1 and R18-2-801.38 of the Arizona Administrative Code. The facility must comply with standards of performance applicable to stationary rotating machinery found at A.A.C. R18-2-519. The facility also must meet visible emission standards found at A.A.C. R18-2-501. Finally, the mine must not violate nonpoint source emission standards found in Title 18, Chapter 2, Article 4.

11. Issue: How often will emissions be monitored?

Response: The installation permit includes monitoring requirements. After 180 days after initial start-up, the facility must demonstrate that its emissions are within permit limits. On-going compliance monitoring will be conducted by Yavapai County on at least an annual basis. In addition, ADEQ will respond to citizen complaints about air emissions from the facility.

12. Issue: Does ADEQ have to make a decision on the installation permit within 10 days of the public hearing?

Response: No. There is a 10 day period to appeal a decision to deny an installation permit. However, there is no prescribed time frame for making the decision on issuance of an installation permit. The close of comment period on the installation permit is July 3, 1990. ADEQ must allow enough time for public comments that are postmarked on July 3 to reach the Department. However, ADEQ will make its determination as soon as possible.

13. Issue: Are written transcripts of the public hearing available?

Response: A written transcript is not available. The tape of the public hearing is available upon request.

MALARTIC HYGRADE
AIR QUALITY HEARING PRESENTATION
July 2, 1990
Congress, Arizona

Good evening, ladies and gentlemen.

I am Bob Stoughton, Manager of the Congress Mine. I would like to take just a few minutes to tell you a little bit about Malartic Hygrade, owner of the mine, and give you details of what we have been doing to put the mine back into operation.

The Congress Mine began production in 1887 -- over 100 years ago. Although it has not been in continual operation all these years, it has provided employment to more people in Congress than any other business. We want to continue to be an important economic influence here.

Malartic Hygrade, based in Toronto, Canada, bought the mine from Echo Bay in June of 1989. After careful consideration, a lot of studies and expense, we decided that putting in an on-site processing plant was the key to making the mine operation successful again. We talked with the appropriate government agencies to determine the federal, state, and local requirements for our mill.

What I want to do now, with the help of these charts and photographs, is to tell you exactly how the plant will operate, what environmental safeguards we have taken, and explain the many pollution control devices we have installed.

- It is important to note that this is an underground mine and that there are no plans for surface or open pit mining at this time.

- The ore deposit consists of a narrow vein which is currently defined between the surface and 1,000 feet.

- Underground access is by an inclined ramp; in other words, you can walk or drive down, and mining is carried out using conventional equipment.

- The coarse ore is trucked to the surface by two trucks and will be stockpiled for future processing or dumped directly into the coarse ore bin, the beginning of our processing operation.

MH

CHART #1

- On the screen is the crushing end of our mill flow sheet.

- The coarse ore will be fed into a jaw crusher that will crush the ore to material smaller than four inches.

- The feed from the jaw crusher will be discharged into a cone crusher where the ore will be further reduced to less than 5/8 of one inch.

- The dust from the fine ore stockpile will be controlled by our innovative design of a dust control tower, an idea we developed from the dust control technology used in loading the hulls of merchant ships. What may look like a smoke stack is, in fact, the hollow tube which will eliminate most of the dust associated with a 40-foot free fall.

- The fine ore is again fed by conveyor to a primary ball mill; two mills are set in stages to grind the ore to a fine powder. The ore is mixed with water before grinding, and no dust will be generated from this point on.

MH

CHART #2

- To reduce dust throughout the process, we have covered the conveyor belts and added water sprays at each of the major emission points. On the screen now is the processing end of our mill flow sheet.

- The ore now enters the thickener and agitator tanks where the gold is leached from the rock into a liquid solution. Again, this is a totally wet process and there will be no air emissions.

- The gold in solution will be absorbed onto carbon chips and later will be separated from the carbon and poured to produce a gold-silver bar on site to be delivered to commercial refiners for final processing. As you can see later, by looking at the photos on the poster boards, the refining operation is small, and air emissions will be minimal.

- The ground rock which has had the gold removed will be pumped into our lined tailings impoundment which has been recently completed according to environmental regulations. Again, there will be no air emissions from this step.

Power for the operation is generated from our diesel power plant. We worked closely with Caterpillar, the manufacturer of our diesel engines, to have their engineers make adjustments to reduce the emissions on the engines they installed for us without affecting the performance.

MH

CHART #3

The Arizona Department of Environmental Quality classifies operations with air emissions as either a "major source" or a "minor source" depending on the amount of emissions. As you can see by the comparison on this overhead, we are a minor source.

CHART #4

In achieving this minor source designation, we have incorporated several safeguards to reduce air emissions. These are:

- County and mine haul roads are treated to control dust.
- All conveyors and transfer points are enclosed in covered chutes.
- Scrubber unit recovers dust from high generation points.
- Water spray nozzles are strategically located to keep ore wetted throughout crushing plant.
- Innovative dust control tube minimizes dust generation from stockpile loading.

MH

- o Bulk chemical storage tank equipped with filter dust collection system.

- o Diesel generator emissions reduced through use of retardation.

- o Eliminated 100 truck trips per week on Ghost Town Road.

CHART #5

Standards of performance that established allowable emissions from any diesel generator have been set by the Arizona DEQ. A comparison of our emissions to these standards are shown on this chart. During operations, our generator emissions will be at these lower levels.

In the past, ore from the Congress Mine has been trucked to New Mexico for processing and refining. Trucks left the mine on a daily basis for a 750-mile round trip. Operation of these trucks produced air emissions as do all motorized vehicles. Our new operation will replace the truck hauling and eliminate 100 truck trips per week and associated road dust and noise.

MH

CHART #6

We had an environmental consulting firm study the effect of running our generators and trucks on air quality in the Town of Congress. The results indicate that the effect on air quality are small fractions of the standards set by both state and federal agencies.

In Canada, Malartic operations have not only been successful economically but have also been excellent examples of responsible mining in terms of worker health, safety, and environmental responsibility. We are also long-term miners who recognize that our most valuable asset is our people. I might add that I'm a third generation miner myself, and have been in mining for 35 years and that all of our employees at Congress are safety trained.

We are very proud of the Congress Mine, which is a "state-of-the-art" plant employing the best available technology. We have a vested interest in ensuring the health of all our employees and protecting the environment. Our operation will be safe, not only for those who work at it but also for those people who live nearby.

My senior staff and myself are available to answer any questions along with our vice president of operations, Mr. Sullivan, who is from the Toronto office.

Thanks for your time.

MH

THIRD QUARTER REPORT

TO OUR SHAREHOLDERS :

On November 19, 1993 Republic completed a private placement financing with European institutional investors for gross proceeds of U.S. $1.575 million. Seven hundred thousand units were sold at a price of U.S. $ 2.25 each, with each unit consisting of one common share and one-half of one common share purchase warrant exercisable at $2.625 for two years. The Company can require that the investors exercise the warrants early in the event that the shares trade above U.S. $4.00 on the American Stock Exchange for 20 consecutive trading days.

With the completion of this financing, Republic's financial restructuring is complete and the Company is now positioned to move forward with the aggressive development of all of its major assets.

At the Congress Mine in Arizona, an extensive reserve drilling program is now underway and is focusing on a recently discovered zone of gold mineralization located approximately 4,500 feet north of the Company's milling facilities. The new zone has been exposed by a series of trenches for a strike length of 1,200 feet, with one of the trenches averaging 0.253 ounces gold per ton over a zone width of 15 feet. Numerous old trenches and shafts along this structure suggest a potential strike length in excess of 3,000 feet. The objective of the current program is to define an open-pit deposit which will warrant a resumption of gold production at the Congress Mine as soon as possible.

In Cuba, the Company has secured a tie-on property to its Gaspar project, bringing the total land package secured by Republic to nearly 600,000 acres. This land package is comprised of two separate joint-venture contracts which are expected to be ratified by the Cuban Council of Ministers in December. Regional compilation and initial exploration work could then get underway in January, and will include at least some confirmatory diamond drilling on one of the properties ("the Eleccion property") where previous drilling financed by the Russians in the 1980's identified the potential for a large, near surface copper/gold deposit.

ON BEHALF OF THE BOARD

Marc C. Henderson
President

November 19, 1993

REPUBLIC GOLDFIELDS INC.

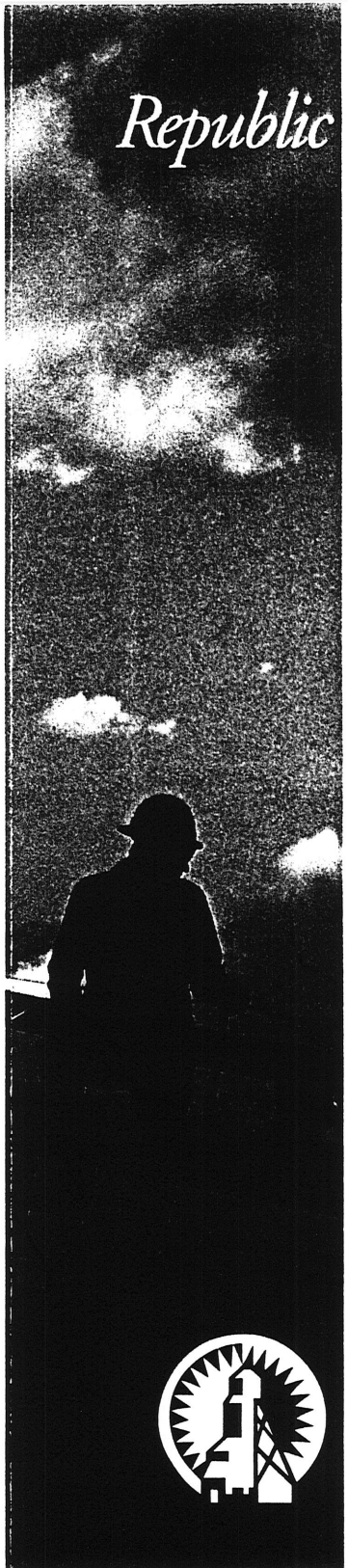
1 Dundas Street West, Suite 2402

Toronto, Canada

M5G 1Z3

Republic Goldfields Inc.

Primary Listing: American Stock Exchange
Symbol: "RGF"



Republic Goldfields Inc.

Third
Quarter
Report
1993

CONSOLIDATED STATEMENTS OF EARNINGS

For the Nine Months ended September 30 (unaudited)

	1993	1992
Total Revenues	$ 507,814	$ 4,319,236
Operating Costs	352,869	4,247,667
	154,945	71,569
Expenses		
Administration	567,952	478,816
Exploration	-	18,313
Interest	102,217	134,657
Mining Taxes	-	40,267
Depreciation	123,554	859,357
	793,723	1,531,410
Loss from Operations	(638,778)	(1,459,841)
Gain on Restructuring of Debt	1,152,879	125,543
Loss on Sale of Assets	(418,969)	-
Earnings (Loss) before Taxes	95,132	(1,334,298)
Income Tax Recovery	-	568,115
Earnings (Loss) before dividends	95,132	(766,183)
Dividends on Preference Shares	80,750	21,250
Earnings (Loss)	$ 14,382	$ (787,433)
Earnings (Loss) per Common Share	$ -	$ (0.17)
Weighted average shares outstanding	4,976,436	4,538,304

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

For the Nine Months ended September 30 (unaudited)

	1993	1992
Cash derived from (applied to):		
OPERATING		
Loss from Operations	$ (638,778)	$(1,459,841)
Items not affecting cash:		
Depreciation	123,554	859,357
	(515,224)	(600,484)
Net change in Non-cash working capital compontents	(935,619)	1,286,960
	(1,450,843)	686,476
INVESTING		
Investments	52,604	7,811
Plant & Equipment, Net	898,290	(61,749)
Loss on Sale of Plant & Equipment	(418,969)	-
Mining Properties & Deferred Expenditures	(945,954)	(298,400)
	(414,029)	(352,338)
FINANCING		
Gain on Restructuring of Debt	1,152,879	125,543
Long-term Debt	(1,338,909)	(1,487,548)
Preferred Stock	400,000	1,000,000
Common Stock	1,517,502	-
Dividends	(80,750)	(21,250)
Foreign Currency Translation adjustment	(232,944)	(192,511)
	1,417,778	(575,766)
Decrease in Cash for the period	(447,094)	(241,628)
Cash and Equivalents, Beginning of period	496,111	507,160
End of period	$ 49,017	$ 265,532

CONSOLIDATED BALANCE SHEETS

(unaudited)

	As at September 30 1993	As at December 31 1992
Assets		
Current		
Cash & Equivalents	$ 49,017	$ 496,111
Receivables	30,802	231,457
Inventories	-	67,526
Prepaid Expenses & Mining Supplies	399,765	296,528
	479,584	1,091,622
Investments	26,602	79,206
Plant & Equipment, Net	8,169,619	8,554,423
Mining Properties & Deferred Expenditures	3,547,128	2,573,144
	$ 12,222,933	$12,298,395
Liabilities		
Current		
Payables & Accruals	$ 850,037	$ 1,048,280
Bank Indebtedness	-	902,320
Current portion of Long-term Debt	300,000	2,238,909
	1,150,037	4,189,509
Long-term Debt	600,000	-
	1,750,037	4,189,509
Shareholders' Equity		
Capital Stock		
Preferred Stock	1,400,000	1,000,000
Common Stock	14,421,955	12,904,453
Foreign Currency Translation Adjustment	880,516	448,390
Deficit	(6,229,575)	(6,243,957)
	10,472,896	8,108,886
	$ 12,222,933	$12,298,395

CONGRESS (P) YAUARI

TO OUR SHAREHOLDERS

Much of our focus during the quarter related to the implementation of our Cuban exploration programs - a major logistical undertaking.

In February, Republic established a field office in Santiago de Cuba, the country's second largest city, and an ideal base from which to carry out the large-scale exploration programs planned for this summer. Staffing has now been completed and a re-processing and reinterpretation of existing geophysical data is underway. In early May, field work began which includes extensive geochemical testing on both concessions to better delineate drill targets. Drilling is scheduled to begin late June.

To assist in the financing of the Cuban exploration programs, the Company arranged a private placement with Altamira Management Ltd. of 300,000 shares at $4.40 per share. This financing, which was completed subsequent to the end of the quarter, further strengthens our financial position which continued to improve substantially during the first quarter.

At Congress, the Company has completed a second phase reverse circulation drilling program, where two near surface gold zones are being tested. A follow-up program has been recommended which includes further diamond drilling as well as leach testing to determine the suitability of heap leach gold recovery methods.

A resumption of production at Congress remains a near-term priority and will likely require a combination of open-pit and underground mining to support adequate throughput to the mill. To date, our exploration efforts have focused entirely on open-pit targets but this effort will be broadened in the next phase of exploration to include diamond drilling of selected underground targets.

ON BEHALF OF THE BOARD

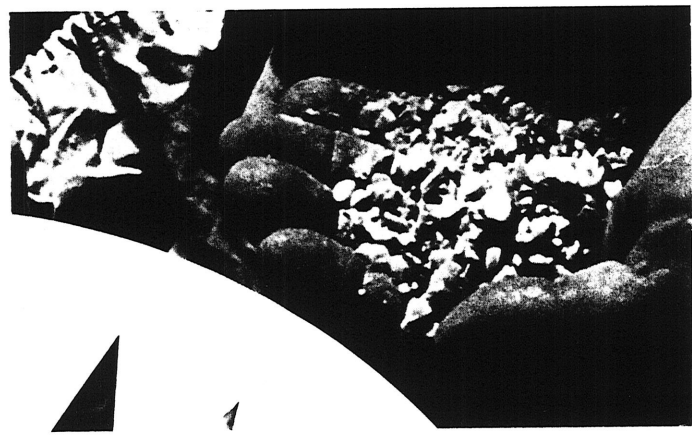
Marc C. Henderson
President

May 20, 1994

REPUBLIC GOLDFIELDS INC.
1 Dundas Street West, Suite 2402
Toronto, Canada
M5G 1Z3

Republic Goldfields Inc.

First Quarter Report, 1994



Republic Goldfields, Inc.

Primary Listing: American Stock Exchange
Symbol: "RGF"

CONSOLIDATED STATEMENTS OF OPERATIONS AND DEFICIT

Three months ended March 31 (unaudited)

	1994	1993
Income		
Investments	$ 111,403	$ 68,083
Royalty and Other	53,454	1,195
	164,857	69,278
Expenses		
Operating expenses	46,433	126,163
ministration	173,261	188,323
Exploration	1,012	-
Interest	17,180	63,440
Depreciation and depletion	12,375	73,636
Loss on sale of assets	-	405,313
	250,261	856,875
Loss before extraordinary item	(85,404)	(787,597)
Gain on debt restructuring	-	1,024,077
Net (loss) income for the period	$ (85,404)	$ 236,480
Deficit, beginning of period	(6,403,913)	(6,243,957)
Dividends - preferred shares	(12,750)	(21,250)
Deficit, end of period	$ (6,502,067)	$ (6,028,727)
ss) income per share	$ (0.01)	$ 0.05

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

Three months ended March 31 (unaudited)

	1994	1993
Cash provided by (used in):		
OPERATING ACTIVITIES		
Net loss before extraordinary item	$ (85,404)	$ (787,597)
Items not affecting cash:		
Depreciation and depletion	12,375	73,636
	(73,029)	(713,961)
Net change in non-cash working capital components	(208,256)	409,909
	(281,285)	(304,052)
INVESTING ACTIVITIES		
Investments	24,394	25,177
Capital Assets	(4,122)	845,545
Loss on sale of equipment	-	(405,313)
Mining properties and deferred expenditures	(315,150)	(3,784)
	(294,878)	461,625
Financing		
Gain on restructuring of debt	-	1,024,077
Long-term debt	-	(2,241,229)
Preferred shares	(300,000)	400,000
Common shares	1,349,905	358,847
Dividends	(12,750)	(21,250)
Foreign currency translation adjustment	(306)	(135,771)
	1,036,849	(615,326)
Increase (decrease) in cash for the period	460,686	(457,753)
Cash and short-term investments, Beginning of period	1,247,343	496,111
End of period	$ 1,708,029	$ 38,358

CONSOLIDATED BALANCE SHEETS

as at March 31 (unaudited)

	1994	1993
ASSETS		
Current		
Cash and short-term investments	$ 1,708,029	$ 38,358
Receivables	133,354	158,538
Inventories	-	5,049
Prepaid expenses and mining supplies	354,579	376,810
	2,195,962	578,755
Investments	14,750	54,029
Capital Assets	8,425,585	7,725,953
Mining properties and deferred expenditures	4,403,517	2,548,116
	$ 15,039,814	$ 10,906,853
LIABILITIES		
Current		
Payables and accruals	$ 507,095	$ 997,762
Current portion of long-term debt	900,000	-
	1,407,095	997,762
Long-term debt	-	900,000
	1,407,095	1,897,762
Shareholders' Equity		
Capital stock	18,924,173	14,663,300
Foreign currency translation adjustment	1,210,613	374,518
Deficit	(6,502,067)	(6,028,727)
	13,632,719	9,009,091
	$ 15,039,814	$ 10,906,853

CONGRESS CONSOLIDATED
GOLD MINING CORPORATION, LTD.
(A COMPANY IN THE DEVELOPMENT STAGE)
UNAUDITED FINANCIAL STATEMENTS
JUNE 30, 1977

ARIZONA CORPORATION COMMISSION
RECEIVED
AUG 15 1977
SECURITIES DIV.

DISCLOSURE DOCUMENT

CONGRESS CONSOLIDATED GOLD MINING CORPORATION

1219 SOUTH 19th AVENUE

PHOENIX, ARIZONA

(An Arizona Corporation)

Incorporated March 11, 1974

ARIZONA CORPORATION COMMISSION
RECEIVED
AUG 15 1977
SECURITIES DIV.

Offering: $200,000 worth of Common Stock, No-Par Value

The shares of Common Stock offered hereby are shares being sold by the Company and the use of the proceeds will be as stated herein under "Use of the Proceeds."

THESE SECURITIES MUST BE REGARDED AS SPECULATIVE

THESE SECURITIES ARE THE SUBJECT OF AN EXEMPTION UNDER SECTION 44-1846 OF THE SECURITIES ACT OF ARIZONA, BUT THE FACT OF THE GRANTING OF SUCH EXEMPTION IS NOT TO BE DEEMED A FINDING BY THE ARIZONA CORPORATION COMMISSION NOR THE DIRECTOR OF SECURITIES THAT THIS DISCLOSURE DOCUMENT IS TRUE OR ACCURATE, NOR DOES SUCH GRANT OF EXEMPTION MEAN THAT THE COMMISSION OR THE DIRECTOR HAS PASSED UPON THE MERITS OF OR OTHERWISE APPROVED THE SECURITIES DESCRIBED HEREIN. THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION.

THERE WILL BE NO REMUNERATION TO ANYONE FOR SALES UNDER THIS OFFERING

A Copy of this Disclosure Document Must Simultaneously Accompany an Oral Offer to Sell These Securities.

The Securities Division, Arizona Corporation Commission may establish minimum standards of Net Worth, Annual Income, and Tax Bracket for investors in the securities offered by this Disclosure Document.

The Date of this Disclosure Document is July 15, 1977.

No person is authorized to give any information or to make any representation other than those contained in this Disclosure Document, and if given or made, such information or representations must not be relied upon as having been authorized. This Disclosure Document does not constitute an offer to sell or an solicitation of an offer to buy any securities other than the shares offered by this Disclosure Document or an offer to sell or a solicitation of any offer to buy such shares in any jurisdiction to any person to whom is is unlawful to make such offer or solicitation in such jurisdiction. Neither the delivery of this Disclosure Document nor any sales made hereunder shall, under any circumstances, creat any implication that there has been no change in the affairs of Congress Consolidated Gold Mining Corporation since the date hereof, or that the information herein is correct as of any time since the date hereof.

THE COMPANY

Congress Consolidated Gold Mining Corporation was incorporated in Arizona March 11, 1974, for the principle purpose of exploring, acquiring, developing, and operating gold and other mineral properities, and to otherwise deal in mines, mineral enterprieses, and investments of all discription. Unless the context otherwise requires, references herein to the "Company" means the Congress Consolidated Gold Mining Corporation.

At present the Company is engaged in development of mineral property at Congress, Arizona, Yavapai County for heap leaching of mine dumps deposited by previous mining operation on the surface of property now owned or leased by the Company. To accomplish this the dump rocks containing gold and silver will be crushed, placed on a prepared site, and a chemical solution will be perculated

through the heaps of crushed material. As the solution moves through the heaps the precious metal will be dissolved and held in the solution. The solution will be collected in holding tanks temporarily and then processed to recover the gold and silver.

In furtherance of this objective the Company has developed a water source, purchased earth moving equipment, prepared a 300' by 400' site for placement of ore to be leached, constructed collecting sumps for temporary storage of the solution as it runs off the heaps, constructed a 40' by 50' building, installed three 25' by 8' tanks for processing of the mineral bearing solution and purchased equipment for precipitation of the solution. (For additional details see assets of the company and enclosed balance sheet.)

The Company is currently developing the property and has not realized any income from its operation. The securities offered by this Disclosure Document must be regarded as speculative.

REAL PROPERTY. The real property owned or controlled by the Company is located at Congress, Arizona approximately 16 miles North of Wickenburg, Arizona and 75 miles Northwest of Phoenix, Arizona. The Company owns in fee simple 4 twenty acre patented mining claims and 30 twenty acre unpatented mining claims. Additionally the surface to 40 feet, including all of the dumps thereon, on 14 patented mining claims has been leased by the Company from D. W. Jaquays, on a 10% royalty on gross recovery with a minimum of $100.00 per month.

Patented claims are those in which the United States has delivered a title in fee simple to a party that has met certain prerequisites. "Unpatented claims" are those which the United States as owner of the public domain has fee simple title. As a matter of law a person complying with the Statutes and Regulations may claim mineral ground and have exclusive right, subject to the rights of the United States, to prospect, explore, mine and remove ores and

minerals from the claim. By compliance with the Statutes and Regulations and by making a satisfactory showing to the United States a claimant may secure a patent, a deed in fee simple, from the United States.

With respect to the several unpatented claims referred to herein, Officers of the Company have reasonably satisfied themselves that the claims comply with the requirements for a valid claim. However, in the absence of a survey and the issuance of patents, title to a mining claim can not be said to be guaranteed or assured.

Counsel for the Company has not rendered any opinion as to the validity of title to the unpatented mining properties described in this Disclosure Document.

HISTORICAL DATA:

Past production of the Congress Mine as reported by the University of Arizona Bulletin, Volume V, Number 6 of August 15, 1934 (1880 through 1911??) was as follows:

Vein	Tons of Ore	Value
Congress	379,022	
Niagara	293,215	
Queen of the Hills	20,125	
Total	692,362	$7,649,497.64

It is noted the above value was based on gold at $20.67 per ounce and silver at $.60 per ounce.

The dumps deposited on the surface at the mouth of the 7 shafts as a result of the mining operations, according to reports written as a result of their investigations by George M. Colvocoress, Registered Mining Engineer and Gerald Sherman, Mining Engineer contain approximately 302,000 tons of ore that average (.07 to 0.10) ounce of gold per ton.

OPERATIONS 1938 1 2

During 1938 - 1942 a portion of the dumps and tailings were remilled. Mill reports from these operations indicate the following results:

YEAR	MOS	TONS MILLED	OUNCES AU RECOVERED	AVERAGE RECOVERED	REMARKS
1938	7	49,727	3,110.76	0.0626	All tailings
1939	12	102,808	4,932.05	0.0480	Started milling dumps in November
1940	12	93,990	5,380.87	0.0572	60% tailings 40% dumps
1941	12	97,778	7,383.57	0.0755	50% tailings 50% dumps
1942	5	41,587	3,060.70	0.0736	50% tailings 50% dumps
Total	48	385,890	23,867.95		

Estimated Silver Recovery 0.10 ounce per ton or 38,589 ounces

Average Gold Recovery Total Tonnage 0.0615 ounces per ton

Value Gold @ $150.00/oz $ 9.23

Value Silver @ $ 4.50/oz $ 0.45

$ 9.68/Ton

The above data provides guidance for an estimated recovery by milling the remaining dumps and tailings left when the operation was terminated by World War II.

DUMPS AND TAILINGS:

The following data has been compiled from reports written by George M. Colvocooresses, Registered Mining Engineer and Gerald Sherman, Mining Engineer, and personal observations and testing by D. W. Jaquays, Registered Mining Engineer.

DUMP AND TAILING ORE POSSIBILITIES AT CONGRESS MINE
With Gold @ $150.00/oz

No. 1 Dump	55,000	tons @	0.10 oz x	$150 =	$ 825.000
No. 2 Dump	90,000	tons @	0.10 oz x	$150 =	1,350.000
No. 3 Dump	80,000	tons @	0.07 oz x	$150 =	840,000
No. 4 Dump	4,000	tons @	0.10 oz x	$150 =	60,000
No. 5 Dump	50,000	tons @	0.10 oz X	$150 =	750,000
No. 6 Dump	8,000	tons @	0.12 oz x	$150 =	144,000
Queen of Hills	15,000	tons @	0.10 oz x	$150 =	225,000
TOTAL ROCK DUMPS	302,000	tons			$4,194,000
Old Tailings	150,000	tons @	0.07 oz x	$150 =	$1,575,000
Sub-soil	20,000	tons @	0.10 oz x	$150 =	300,000
TOTAL TAILINGS	170,000	tons			$1,875,000
TOTAL ALL DUMPS	472,000	tons	Gross Value	=	$6,069,000
			Less 50% estimated recovery	=	$3,034,500
From All Dumps			Estimated Recovery	=	$3,034,500

(1) As of the effective date of this statement, gold closed at _____ per ounce on the London Market. Silver was quoted at _____ on the _____ market. Fluctuation in the price of gold will change the estimated recovery from the dumps and tailings.

(2) Based on tests conducted by Mountain States Engineering Corporation it is estimated that 50% of the gold in the dumps may be recovered.

It is not planned at this time to retreat the 170,000 tons of old tailings. However, after the 302,000 tons of rock dumps are processed, consideration may be given to reprocessing the tailings.

ASSETS OF THE COMPANY

A 40' by [illegible] steel building has been constructed to serve as an office, laboratory, precipitating plant, and refinery. Near the building three 25,000 gallon capacity steel tanks have been constructed to serve as solution storage.

The following is a list of the equipment acquired to date and the cost of construction:

Quantity	Description	Model Number	Serial Number	Cost
3	20' x 30' Agitators Mechanisms	Wemco		$ 5,466.00
2	70' Dorr Thickner Mechanisms			7,000.00
7	Agitator & Thickner Tanks			26,752.13
2	Fuel Tanks			6,566.70
1	Cedar Rapids Crusher with 363 Diesel Cat Engine & Feeder Hopper		35363	137,046.65
1	Cat Dozer	D-8	14A7818	8,000.00
1	Cat Dozer	D-8-46	46A3784	20,000.00
1	Cat Carryall	DW-21	13C2733	7,650.00
1	Cat Carryall	DW-21	13C7826	7,605.00
1	Cat Carryall	DW-21	13C3857	7,650.00
1	Insley Crane w/GMC Truck		11488	5,000.00
1	Leaching Pad 140,000 Sq Ft.		1364H1196	15,237.89
2	Catch Basins			14,735.03
	Water & Solution Pipe			8,295.11
2	Shriver Presses	36 x 36	28158	18,924.24
4	Water & Solution Tanks		28160	7,814.50
3	P H Indicators			2,100.00
1	Crowe Vaccumm Tank 5' x 12'			1,774.83
1	Pump for B&M Well			360.15
1	40' x 50' Steel Building			18,435.91
	Total assets purchased to-date			$326,459.14

OFFICERS AND DIRECTORS OF THE COMPANY

D. W. Jaquays — President and Director

132 West Granada Road

Phoenix, AZ 85003

With over 45 years of experience in the mining industry Mr. Jaquays, a registered Mining Engineer, has extensive experience in the mining and milling of gold, copper, and asbestos. After six years as a laborer and supervisor in various Canadian gold mines., he served for two years as Mine Manager of the Park View Mining Company, Phoenix, Arizona, a gold mining operation, until that mine was closed as a result of World War II. During World War II, Mr. Jaquays was employed by the U. S. Bureau of Mines as Safety Engineer. In 1946 Mr.Jaquays organized the D. W. Jaquays Mining and Contractors Equipment Corporation. Currently he is the principal stockholder and President to that Corporation. With Headquarters in Phoenix, the company provides the mining and construction industry with equipment and is the exclusive dealer of Worthington compressors and track drills for that area.

Since 1952 when Mr. Jaquays organized the Jaquays Mining Corporation, that enterprise has provided American and Foreign industry with over$11,000,000.00 of Arizona asbestos. This operation has survived the vicissitudes of the asbestos industry and with mines in Gila County, Arizona and a 20 ton per day mill in Globe, Arizona the Corporation is the only producing asbestos operation in Arizona and one of the few in the United States. Mr. Jaquays is the President and principal stock holder of that concern.

D. R. Lindsay — Vice President & Director

14219 N. 93rd Drive

Phoenix, Arizona 85023

For the past 26 years, Mr. Lindsay has been associated with the mining and construction trades in the sales department of two business houses in Texas and Arizona. For 21 of these years he has been Sales Manager for the D. W. Jaquays Mining and Contractors Equipment Company and in this position Mr. Lindsay has assisted Mr. Jaquays in many of the facets of the Jaquays Mining Corporation.

Ethelyn Jaquays — Secretary-Treasurer and Director

132 West Granada Road

Phoenix, AZ 85003

Mrs. Jaquays has served as Secretary-Treasurer of both D. W. Jaquays Mining and Contractors Equipment Company and Jaquays Mining Corporation for the last 25 years.

G. A. Jaquays — Director

14055 Tumblebrood

Sun City, Arizona

For 25 years President and principal owner of MacFaddyn Corporation, Lansing, Michigan. MacFaddyn Corp. was one of the major suppliers of school equipment and Wayne buses in Michigan.

CAPITAL STRUCTURE

The Company has an authorized capital of 3,000,000 shares of Common stock having no par value. This is the only class of stock authorized. There are 843,900 shares of the common stock issued and outstanding.

SECURITY OWNERSHIP OF OFFICERS, DIRECTORS AND 10% OR MORE OWNERS

Name	Shares Owned	Position
(1) D. W. Jaquays	548,000	President, Director
(2) D. R. Lindsay	10,000	Vice President, Director
(3) G. A. Jaquays	26,000	Director
(4) H. R. & Jacquelyn Gannan, JT w/ROS	104,000	10% or more owner
(5) Nelson & Patricia Muncy JT w/ROS	102,000	10% or more owner

(1) Mr. D. W. Jaquays obtained 700,000 shares of the Company stock in consideration for the transfer of 30 unpatented claims and the lease of the surface and dumps on 14 patented claims. He received 48,000 shares as a distribution from Jaquays Mining Corp.

(2) Mr. D. R. Lindsay was granted 10,000 shares for his service in organization of the Company.

(3) Mr. G. A. Jaquays received 16,000 shares of the Company stock from a distribtion of Jaquays Mining Corporation and purchased additional 10,000 shares.

(4) Mr. H. R. Gannan received 2,000 shares of the Company stock for exploration, development and consulting services provided to the Company. Mr. & Mrs. Gannan received 100,000 shares as gift from Mr. Jaquays' 700,000 shares. Mr. Jaquays is Mrs. Gannan father. Mrs. Gannan received 2,000 shares of the Company stock as a distribution from the Jaquays Mining Corporation.

(5) Mr. & Mrs. A. N. Muncy received 100,000 shares of the Company stock as a gift from Mr. Jaquays' 700,000 shares. Mr. Jaquays is Mrs. Muncy' father. Mrs. Muncy received 2,000 shares as a distribution from Jaquays Mining Corporation.

Except as stated above there have been no securities issued or to be issued for options, contracts, leases, patents, assignments, services, or expenses, good will or other intangible assets.

USE OF PROCEEDS

Proceeds from the sale of stock subject to this offering will be used to complete development and start operation of the Company's heap leaching project. While the Company cannot be certain of the exact amount of expenditures for each item, it is anticipated that the proceeds will be used as follows:

Completion of Water System	
Purchase of 5 mill solution pumps at $2,000.00 ea.	$10,000.00
Installation of pumps at 4 water wells	20,000.00
Crushing and Movement of Dump Material (3 months supply)	75,000.00
Electrical	
Wiring of Mill, Pumps, Laboratory	20,000.00
Rental of Generating Equipment (two mos.)	5,000.00
Reagents (Cyanide, Lime, Zinc) (3 months supply)	20,000.00
Operating Capital	50,000.00
	$200,000.00

MATERIAL CONTRACTS

The Company has not entered into any contracts for the procurement of labor, supplies, or services. Neither has it made any contracts to sell any of the metals that will be produced.

In conjunction with the financing of operations of the Company to date, and in the procurement of certain items of Capital Equipment the Company has made certain agreements with the Valley National Bank to cover costs of equipment purchases, preproduction setup costs and development labor costs. The interest rate on the loan is 2% over the prime rate and repayment schedule is to start after production is started.

LITIGATION

The Company is not a party to any litigation. The Principals of the Company are not aware of any fact that would cause the Company to become a party to any action regarding the Company's heap leaching operation.

CONGRESS CONSOLIDATED GOLD MINING CORP.
1219 SOUTH 19TH AVENUE
PHOENIX, ARIZONA 85009

254-6494

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Heap Leach at Congress Mine

100,000 Tons per year at 0.04 ozes Recovery
0.04 X $125.00/oze = Gross Recovery $5.00/Ton = $ 500,000.00
Cost per ton Crushed and Leached $2.00 200,000.00
Profit/Year $ 300,000.00

There are enough dumps to operate heap leach at 100,000 tons/year for three years or more at 0.04 ozes gold recovery.

Secondary leach after three years on 300,000 tons in heap could recover an additional $1.25/ton /year or $ 375,000.00
Cost only heap leaching $0.75 ton 225,000.00
Profit fourth year $ 150,000.00

Total possible profit
First three years at 100,000 tons per year into heap $ 900,000.00
Fourth year on secondary leach of 300,000 tons 150,000.00
Fifth " " " " " " 100,000.00
Total possible profit in Five years heap leaching $1,150,000.00

The above program is predicted on placing 100,000 tons of dump material per year on the leach pads. However, if the need arises all of the dumps could be crushed and placed within 18 months. If this is done the net profit would be such that the profits tax would be higher than if the dumps were rationed out over a three year period.

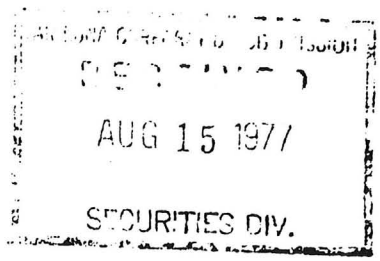
Set Up Costs for Congress Heap Leach

Crushing and Leach Costs 100,000 tons one year	$ 200,000.00
Site Preparation	15,000.00
Percipitation Plant	50,000.00
Pumps & Piping	20,000.00
Tanks	25,000.00
Building for PPT Plant -	16,000.00
Water Supply	20,000.00
Power Plant to be rented included in operations	
	$ 346,000.00
To Be charged to operating costs	$ 200,000.00
To Be charged to set up	$ 146,000.00

Prepared by

D. H. Jaquays
Registered Mining Engineer
#1078 - 1944

CONGRESS CONSOLIDATED
GOLD MINING CORPORATION, LTD.
(A COMPANY IN THE DEVELOPMENT STAGE)
UNAUDITED FINANCIAL STATEMENTS
JUNE 30, 1977



SAM GALLANT, C.P.A.
WILLIAM G. FARROW C.P.A.
ZANE GREENE, C.P.A.
WILLIAM F. CAVANAGH III, C.P.A.

GALLANT, FARROW & GREENE, P.C.
CERTIFIED PUBLIC ACCOUNTANTS
3603 NORTH SEVENTH AVENUE
PHOENIX, ARIZONA 85013

AREA CODE 602
TELEPHONE 263 8810

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Exhibit A — Balance Sheet, June 30, 1977 and December 31, 1976

Exhibit B — Statement of Loss and Accumulated Deficit, For the Six Months Ended June 30, 1977 and the Year Ended December 31, 1976 and From Inception, March 11, 1974 to June 30, 1977

Exhibit C — Statement of Changes in Financial Position, For the Six Months Ended June 30, 1977 and the Year Ended December 31, 1976 and From Inception, March 11, 1974 to June 30, 1977

DISCLAIMER OF OPINION

The accompanying balance sheet of Congress Consolidated Gold Mining Corporation, Ltd. (a company in the development stage) as of June 30, 1977 and December 31, 1976 and the related statements of loss and accumulated deficit and changes in financial position for the periods then ended and from inception, March 11, 1974 to June 30, 1977 were not audited by us and accordingly we do not express an opinion on them except as follows.

An accumulated deficit from operations of $136,839 is indicated on the accompanying balance sheet and continuing net losses are indicated on the accompanying statement of loss and accumulated deficit. Because of the foregoing, the company's ability to continue as a going concern depends on the attainment of profitable operations in the immediate future, or the securing of additional financing to meet current operating expenditures and debt retirement obligations, or both.

July 29, 1977

Gallant, Farrow & Greene, P.C.

Congress Consolidated Gold Mining Corporation, Ltd.
(A Company in the Development Stage)

Exhibit A

BALANCE SHEET
JUNE 30, 1977 AND DECEMBER 31, 1976
(UNAUDITED)

	June 30, 1977	Dec. 31, 1976
Assets		
Cash	4,292	20,573
Mining claims, patented and unpatented - notes 2 and 3	60,150	60,150
Property and equipment, at cost, net of accumulated depreciation - 1977, $5,268; 1976, $2,165 - notes 3 and 4	321,191	127,050
Unamortized organization expense	246	295
Total Assets	385,879	208,068
Liabilities and Stockholders' Equity		
Liabilities		
Accounts payable and accrued expenses	41,504	3,504
Due to officer	2,100	
Due to related companies	8,864	
Note payable - note 5	250,000	200,000
Notes payable to affiliated company - note 6	135,000	
Total liabilities - note 2	437,468	203,504
Stockholders' equity		
Common stock, 3,000,000 no par shares authorized; 840,900 shares issued and outstanding - note 3	85,250	85,250
Deficit accumulated during the development stage - note 1	(136,839)	(80,686)
Total stockholders' equity (deficit)	(51,589)	4,564
Total Liabilities and Stockholders' Equity	385,879	208,068

The notes to financial statements are an integral part of these statements.

Compress Consolidated [illegible] Corporation, Ltd.
(A Company in the Development Stage)

Exhibit C

STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE SIX MONTHS ENDED JUNE 30, 1977 AND THE YEAR ENDED DECEMBER 31, 1976
AND FROM INCEPTION, MARCH 11, 1974 TO JUNE 30, 1977
(UNAUDITED)

	Six Months Ended 6-30-77	Year Ended 12-31-76	From Inception, 3-11-74 to 6-30-77
Sources of Cash			
Sale of common stock - note 3		1,400	11,900
Loans from affiliated companies	143,864	130,000	284,244
Loans from officer-stockholder	2,100		3,800
Loans from bank - note 5	50,000	200,000	250,000
Total sources of cash	195,964	331,400	549,944
Applications of Cash			
To operations (a)	15,001	55,673	88,622
Construction of facilities and equipment acquisition	197,244	113,894	314,459
Repayment of loan from officer-stockholder		1,700	1,700
Organization expenses			491
Repayment of loans from affiliated companies		140,380	140,380
Total applications of cash	212,245	311,647	545,652
Increase (decrease) in cash	(16,281)	19,753	
Cash, beginning of period	20,573	820	-0-
Cash, End of Period	4,292	20,573	4,292
(a) Cash applied to operations			
Net loss	(56,153)	(51,380)	(136,839)
Add: Expenses not requiring outlay of cash during period			
Depreciation	3,103	2,165	5,268
Amortization of organization expense	49	98	245
Increase (decrease) in accounts payable and accrued expenses	38,000	(6,556)	41,504
Management fees paid for by issuing common stock-note 3			1,200
Cash Applied to Operations	(15,001)	(55,673)	(88,622)

The notes to financial statements are an integral part of these statements.

Congress Consolidated Gold Mining Corporation, Ltd.
(A Company in the Development Stage)

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 1977 AND DECEMBER 31, 1976
(UNAUDITED)

Note 1: Significant accounting policies not stated elsewhere in the financial statements

The activities of the corporation since inception, March 11, 1974, have been limited to exploration, drilling, and testing at the mining site. All of these exploration and development costs have been expensed. The corporation has also purchased equipment, and is constructing facilities, necessary to process the minerals at the site.

Note 2: Mining claims, patented and unpatented

Certain of these mining claims are subject to a royalty to the transferors of 10% of all ores and/or proceeds from the sale thereof derived from the claims. See note 3 (b).

Note 3: Common stock outstanding at the end of each period since inception consists of shares issued as follows:

	No. of Shares			
	6-30-77	12-31-76	12-31-75	12-31-74
For cash	16,900	16,900	15,500	13,500
For services	12,000	12,000	12,000	12,000
For mining claims, patented and unpatented (b)	800,000	800,000	800,000	800,000
For equipment	12,000	12,000		
	840,900	840,900	827,500	825,500

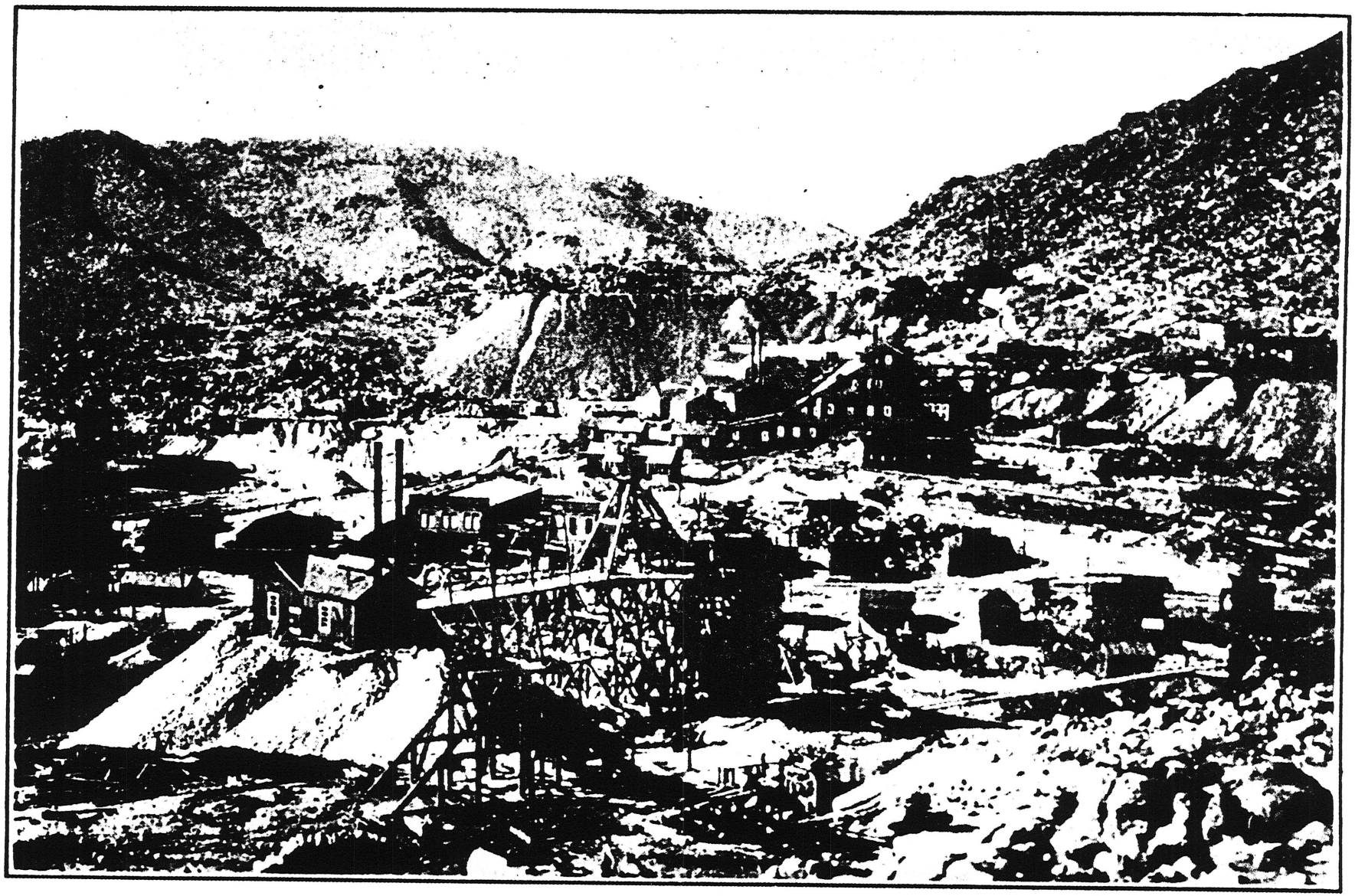
	Value of Consideration Received (a)			
	6-30-77	12-31-76	12-31-75	12-31-74
For cash	$11,900	$11,900	$10,500	$8,500
For services	1,200	1,200	1,200	1,200
For mining claims, patented and unpatented (b)	60,150	60,150	60,150	60,150
For equipment	12,000	12,000		
	$85,250	$85,250	$71,850	$69,850

a) Values of services, claims and equipment were determined by the directors of the corporation.

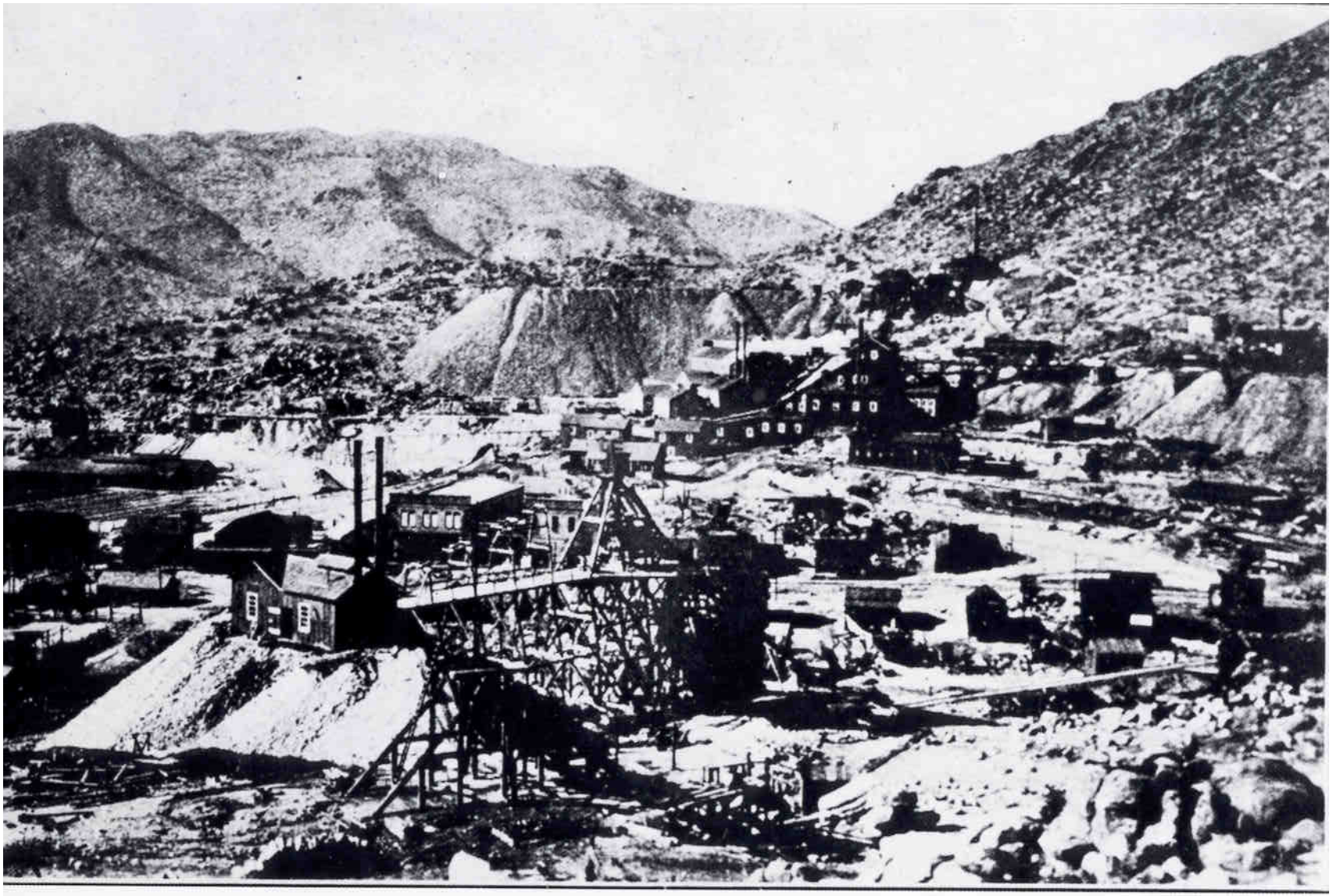
b) 800,000 shares were issued for patented and unpatented mining claims which were valued at transferors cost of $60,150. See note 2.

THE CONGRESS MINE

1975



Congress mine, Arizona about 1905. At left is cyanide plant. No. 5 shaft on Niagara vein in foreground. Above stamp mills (in center) is No. 2 shaft and at right is No. 1 shaft, both on Congress vein.



Congress mine, Arizona about 1905. At left is cyanide plant. No. 5 shaft on Niagara vein in foreground. Above stamp mills (in center) is No. 2 shaft and at right is No. 1 shaft, both on Congress vein.

THE CONGRESS MINE

1975

Since the price of gold reached $150 an ounce, the mining industry has given serious attention to the possibility of reviving the dormant American gold producing capability. With no new, high grade discoveries being reported, the focus has turned to rehabilitating mines that have been idle since 1942 or earlier because of the unprofitable expense/profit ratio.

By many accounts fabulous returns just await the daring capitalist who will finance the reopening of these glory holes. Unfortunately, most of these dreams quickly vanish when scientific and economic scrutiny is applied.

The Congress Mine in southern Yavapai County, Arizona is an exception to this general rule. It has the potential of again becoming a highly profitable mine. The facts supporting this statement make the reopening of this mine feasible even in spite of the harsh realities of today's economy.

Operating at its peak from 1891 to 1911 the Congress produced almost $60,000,000 worth of gold and silver at today's prices ($150 per ounce). Work at the mine from 1911 to 1938 was attempted sporadically by small lessees with little return for their efforts. From 1938 to 1942 operations of the mine were financed by a Reconstruction Finance Corporation loan, for the reclaiming of the low grade dumps (waste rock on the surface that was unprofitable to mill when mined) and tailings (residue from milling operations of the earlier era) produced $4,000,000 worth of gold and silver at today's prices.

Unlike the majority of the old mines that reportedly contain bonanzas the Congress still has on the surface, already mined, dumps and tailings containing sufficient gold to make the initiation of mining and milling operations, on that basis alone, an attractive project.

Another unique feature distinguishes the Congress from many of the idle mines dotting the Arizona landscape. The mine did not cease operations in 1911 due to the exhaustion of the ore. The owners (E. B. Gage and Frank Murphy) over-extended their finances by investing in other Arizona mines and when they proved unprofitable their empire failed, bringing the work at the Congress to a halt with pay ore still in sight. Subsequent increases in the price of labor and supplies and a ceiling on the price of gold maintained by the government at $20.67 per ounce made further operations unattractive until 1933 when the price of gold was raised to $35.00 per ounce.

Additionally, an unusually large number of reports and records, prepared by reputable mining and metallurgical engineers through the years, have been accumulated as well as copies of actual mill records from 1938 to 1942. These records bear testimony that an excellent financial return may be realized from operations at the Congress at today's price of gold. Valid reports of other idle mines are usually non-existent or at best are sketchy. The Congress Mine reports have been verified in recent years and they have been proven remarkably accurate. The estimated values in the dumps were further confirmed by the milling recovery during 1938 to 1942.

Remilling of the dumps and tailing ceased in June 1942 by Presidential Order L-208 which closed all gold mines for the duration of World War II. About one-half of the surface dumps had been milled when operations ceased.

See Appendix A for a recap of production and recovery from dumps 1938 through 1942.

THE PROPERTY

Currently, the property consists of eighteen patented claims, or 314 patented acres, and forty-four unpatented claims. The Congress Consolidated Gold Mining Company, Ltd., an Arizona Corporation, owns the surface of fourteen patented claims (this includes the dumps and tailings) and surface and mineral rights on four patented claims and all of the unpatented claims. It is anticipated that the subsurface of the fourteen patented claims, which does not contain an extensive amount of the original workings, can be acquired by the Congress Company if it is deemed essential to the underground operation of the mine.

The mine is located three miles north of Congress, Arizona and approximately seventeen miles north of Wickenburg.

A well-maintained gravel road leads from State Highway 71 to the mine, and the Santa Fe Railroad serves the community of Congress.

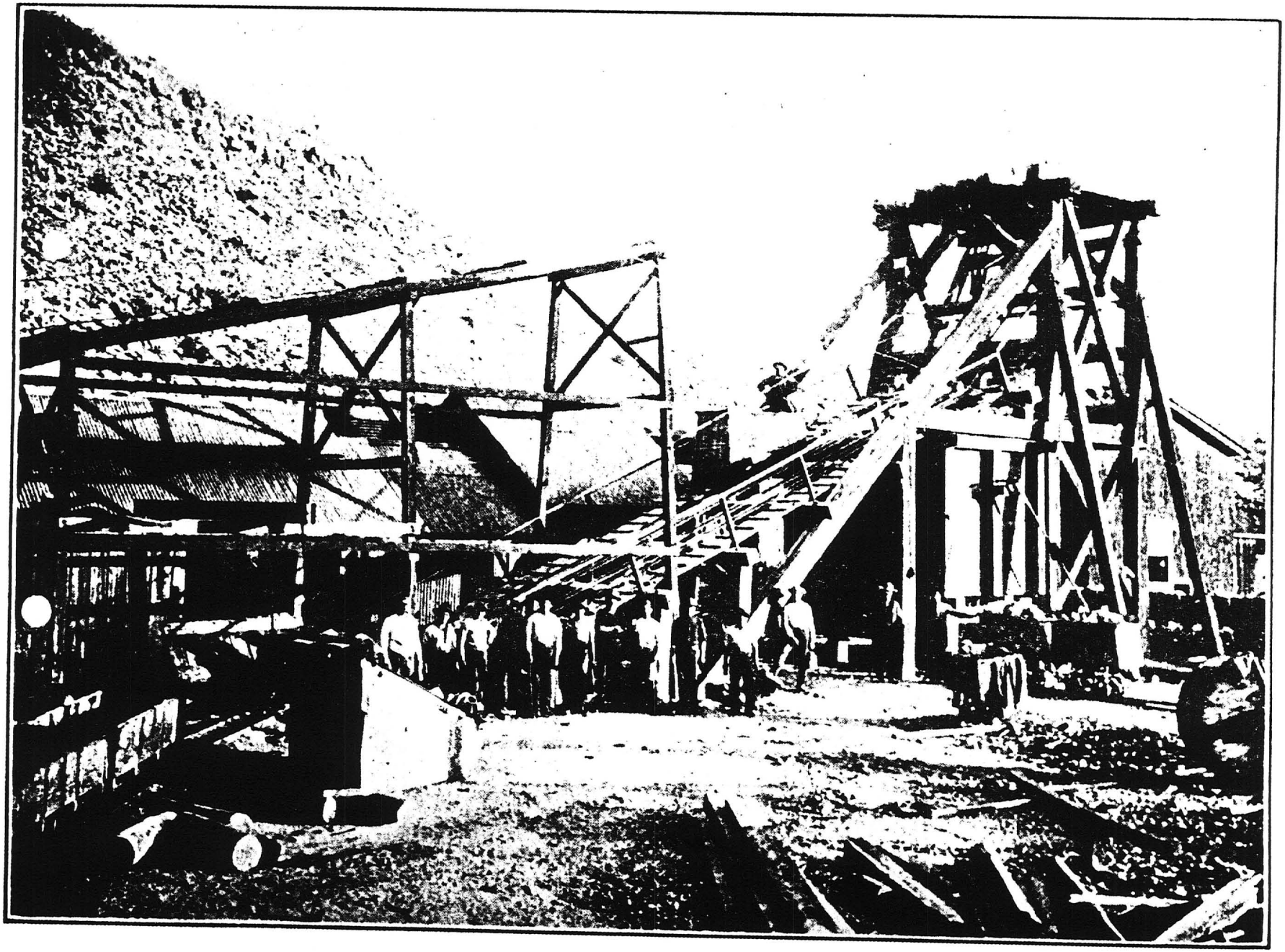
Recently, test wells drilled by the Congress Company indicates that sufficient water for milling purposes should be available on the property. If this source proves insufficient, wells could be drilled on the Company's property in Martinez Creek, which is located about a mile to the north of the workings, to supplement the water available on the property. Martinez Creek was the primary source of water for past operations and supplied 100 GPM which is sufficient to operate a 300 ton per day cyanide mill. Approximately one ton of water is required per ton of ore milled.

KNOWN AND PROBABLE ORE

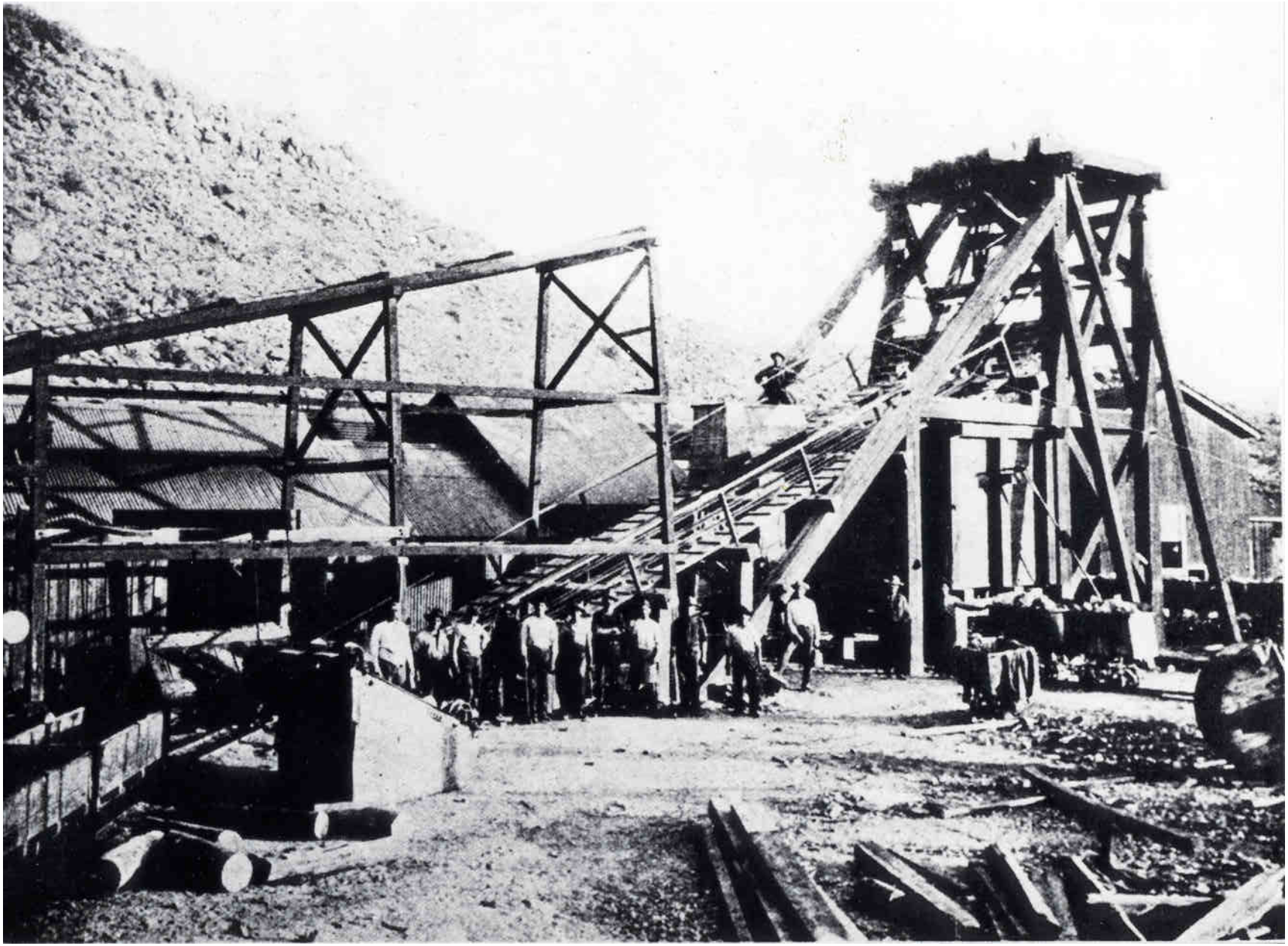
The following dollar values of ore are calculated on the price of gold at $150 per ounce unless otherwise indicated.

There are, by conservative estimate, approximately 300,000 tons of low grade ore, assaying .10 ounces of gold or $15.00 per ton on the seven dumps at the mine. This represents in the vicinity of $3,150,000 based on a 70% recovery rate, another conservative figure. The recoverable tailings, 200,000 tons at an average of .07 ounces of gold or $10.50 per ton and with a 70% recovery, contain another $1,470,000. Recent testing of the tailings confirm earlier reports that an enriched section of approximately two feet, running as high as 0.40 ounces of gold exists at the original ground level and the immediate subsurface. This could appreciably increase the average recovery from the tailings. While the aforementioned dollar estimates are based on a 70% recovery rate, with modern milling techniques and finer grinding a recovery of at least 90% should be attainable. An added 20% recovery on the above estimate of $4,620,000 would add $924,000 to the gross or $5,544,000.

When underground operations were conducted at the Congress, ore containing less than .35 ounce gold per ton ($7.00 in 1910 and $52.50 now) was either left in place or, when mined in conjunction with higher grade ore, left underground to the extent possible. W. F. Staunton, superintendent and general manager of the mine from 1894 to 1910, estimated there are 700,000 tons of low grade ore (gobs or backfill) left underground in the approximately twenty miles of workings. Unfortunately, access to the



No. 3 shaft on Congress vein. It is 4,000 ft. deep on a 25-degree incline.



underground is currently restricted to a limited area due to subsidence of the tunnels and verification of this estimate cannot be made. Available reports show that samples taken from the gobs by various engineers in 1934 and 1939 indicate that the gobs would run in excess of .25 ounce, or $37.50, a ton. The value of this ore is enhanced by the fact that this material has been "mined" and awaits transportation to the surface.

Recent observations in the number three shaft which is open to the water level indicates that water presently stands at the 1,100 foot level of the mine. Traditionally, the Congress was a dry mine making only six gallons per minute and the mine water is probably the result of surface run-off. Removal of the water to reach the lower depths could possibly be accomplished by using the mine water to hydraulic (wash) the gobs out of the stopes (an excavation from which ore was or may be obtained) and the moisture retained in the ore hoisted would eventually lower the level of the water in the mine.

An accurate estimate of the amount of ore left in place in the veins because it did not reach the former .35 ounce cut-off point, is difficult to make due to the inaccessability of the workings. G. M. Colvocoresses, a mining engineer who conducted an extensive survey of the Congress, reported in 1943 that there was a strong probability that 200,000 tons of $8.00 (.27 ounce) ore which at $150 per ounce would be $40.00 ore, remains to be mined within the limits of the old workings. (After underground rehabilitation .25 ounce per ton ($37.50) would be required for a minimal profit.

In summary there is an estimated $6,000,000 worth of recoverable gold in the dumps and tailings, $21,000,000 in the gobs, and a probability that $8,000,000 of economic ore remains in place in the old workings. Just on this basis the construction of a mill and opening of the mine is a financially sound proposition. With the likelihood of unexplored areas producing additional ore the potentiality of the operation becomes even more attractive.

NEW ORE POSSIBILITIES

In the area covered by the Congress Company holdings there is a series of more or less parallel gold bearing veins. Two of the veins were worked, the Congress and the Niagara. Mr. Staunton's reports indicate he did not believe any large, new body of high grade ore will be found below the 4,000 foot

level on the Congress Vein. However, he stated he believed there was considerable ore at $35.00 per ounce to be developed beyond the old stope ends above the 1,700 foot level. He was more optimistic about the possibility of further exploration on the Niagara and he stated, "it seems highly probable that a new line of high grade stopes can be opened by sinking the number five Niagara shaft beyond its present depth of 2,050 feet."

Farther north of the aforementioned veins another vein of quartz extending for over 1,500 feet has been located and samples from different areas averaged .14 to .52 over twenty-four inches. In 1917, Edward W. Brooks, a geologist, calculated that 300,000 tons of the .6 ounce gold per ton ($90.00) existed between the Congress vein and this vein. This is a very promising area in the opinion of the current owners and a high priority will be given to exploration of this section when funds become available or are generated by the milling of the dumps.

Another interesting possibility exists in a quartz vein immediately to the north of the outcrop of the Congress vein. In May, 1974, a surface sample from the outcrop of this vein assayed .82 ounce of gold per ton ($123.00). Previous lessees worked this vein and shipped some ore, however, the results of their work or the extent of this vein are unknown. The surface indications make this a very interesting possibility.

While the primary focus of the Congress Company will be on the recovery of gold, an interesting possibility exists in the mining of uranium found in the mine. In 1955 E. A. Colburn, Jr. of Wickenburg, an experienced miner who had been associated with organizations interested in the Congress Mine for over twenty years, reported the existence of uranium ore in various sections of the mine. The Atomic Energy Commission, Division of Raw Materials, Salt Lake Exploration Branch, reported to Mr. Colburn that samples he submitted to them contained two to eight pounds of uranium per ton.

The amount of uranium ore in the mine, its average grade, or recovery data is not known at this time. On May 15, 1975, the presence of uranium in the mine was confirmed as definitely existing at the 650 foot level of the number three shaft by Mr. John Kleiner, A Registered Mining Engineer. The company will carefully consider the possibility of recovery and will attempt to recover this ore in conjunction with the gold operation.

The uranium occurs in the sheared areas of the Congress vein and the mineral is liebigite which is readily water soluble so it could be recovered as a by-product in a conventional gold cyanide plant. Indications are that the central area of the Congress ore zone will run one to two pounds of uranium, however, if only one pound of uranium per ton could be recovered this would add another $20.00 per ton to value of the new underground ore.

See Appendix B, for recap of estimates of positive and probable ore.

USE OF FINANCING

The Congress Company proposes to build a 300 ton per day cyanide mill to recover the gold. At 1975 prices the estimated cost of the plant is $1,500,000. It is planned that officers of the Congress Company will design and construct the mill at a minimal cost for engineering to the company, thereby reducing the initial cost by several hundred thousand dollars. Funds procured from the financing will be used primarily to construct the mill.

Additionally, working capital in the amount of $500,000 is required to insure the organization can operate comfortably until production is well underway.

See Appendix C for an estimate of Mill construction costs.

PROFIT/EXPENSES

Based on current prices it is estimated expenses will run $2,300 per day (including $600 per day for amortization of the loan). This compares with an estimated daily gross of $3,360 or a profit in excess of $1,000 while operating from the low grade dumps and tailings. Profits should increase correspondingly when the higher grade underground material is milled.

See Appendix D for an abbreviated summary of the estimated expenses and profits.

THE CORPORATION

The Congress Consolidated Gold Mining Company, Ltd. was organized in 1974 by D. W. Jaquays, a Registered

Mining Engineer and a highly respected member of Arizona's mining community for over thirty-five years, for the purpose of developing the mine. Mr. Jaquays, the current President of the Congress Company, purchased the surface of the patented property at the Congress Mine in 1965, and acquired the unpatented claims since then.

A 1937 graduate of the Michigan College of Mining and Technology, Mr. Jaquays has in excess of forty years experience in mining, of which six years were in gold mines in Canada in various positions in the mines and mills. From early 1940 to the end of 1941, he served as Mine Manager of the Park View Mining Company's gold operation at South Mountain, Phoenix. In 1946, Mr. Jaquays established the D. W. Jaquays Company, a mining machinery and supplies firm. At present, he serves as President of that organization. From 1947 to 1952, Mr. Jaquays was also the Manager of the Arizona Chrysotile Asbestos Co., Globe, Arizona. In 1952, he organized the Jaquays Mining Corporation, and purchased the assets of the Arizona Chrysotile Asbestos Company and since then has, without interruption, produced chrysotile asbestos valued in excess of $10,000,000 from the Gila County Asbestos Mines and the Globe mill of the corporation. Mr. Jaquays currently is President and General Manager of that enterprise. As part of the overall plan to upgrade the facilities of the Jaquays Mining Corporation, in 1959 Mr. Jaquays designed and supervised the construction of the corporation's 24,000 square feet, thirty tons per day Globe asbestos mill. The fact that the Jaquays Mining Corporation is the only organization producing asbestos in Arizona and one of the few left in the United States attest to the mining and managerial ability of Mr. Jaquays.

It is anticipated that when financing is secured a general manager, knowledgeable in gold mining and milling operations will be retained to assist in the design and construction of the mill and to direct the day-to-day operations of the Congress Mine. A mill superintendent with forty years experience in gold mill operations is available to assist the company, either on a full-time basis or as a consultant. Additionally, Mr. Jaquays has in his employ Mr. Nelson Muncy, a Registered Mining Engineer. Mr. Muncy is a 1970 graduate of the University of Arizona, College of Mines and a 1966 graduate of the University's School of Business.

BENEFIT TO THE COMMUNITY

Construction of the mill will take twelve months and the majority of the $1,500,000 capital outlay will be expended through Arizona Corporations.

Operation of the mill will require approximately eighteen men. Probably 50% of them will be trained by the company. Wages for the personnel employed in the production phase of the operation are expected to be in the vicinity of $350,000 per year.

Rehabilitation of the underground workings or extensive exploration are not anticipated to start prior to two years after initiation of the mill operation. Reliance will be placed upon recovery of the dumps and tailings to generate sufficient capital to permit the company to finance the rehabilitation and a systematic exploration program.

When work underground begins an additional forty men will be required. This represents another $750,000 per year for labor. Again it is planned that on-the-job training will be required due to the dearth of skilled underground miners in the job market.

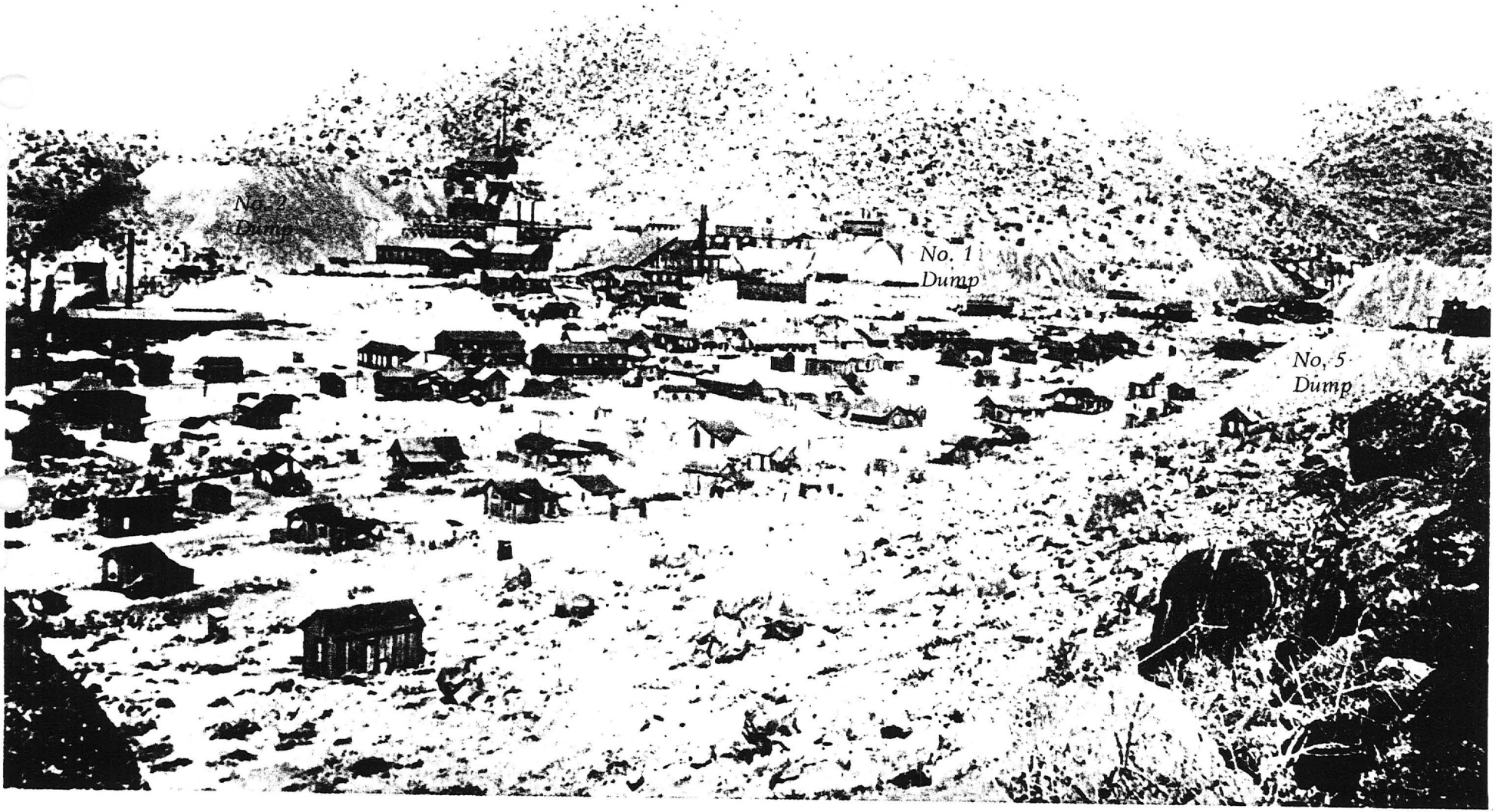
Based on the tonnage discussed in the KNOWN AND PROBABLE ORE Section of this report, 500,000 tons of dumps and tailings 700,000 tons of gobs, and 200,000 tons of recoverable ore in the workings, the mine, operating a mill with a 300 tons per day capacity, has a life expectancy in excess of fifteen years. Profitable ore found during the exploration program will of course increase the longevity of the property.

Yavapai County and the Wickenburg area will receive additional benefits through the availability of a custom mill at the Congress. This facility will spur other owners to open idle mines in the vicinity, thereby providing additional employment opportunities for the now depressed mining business.

The opportunity for stimulation of the economy of Yavapai County and Wickenburg is available through financing the Congress Company. The reserves, both gold and experienced personnel, are available to make the venture a profitable one for the community and the company.

Tucson, Arizona
September 9, 1975

H. R. Gannan



Congress Mine
1910

No. 2
Dump
No. 1
Dump
No. 3
Dump

APPENDIX A

CONGRESS MINE
REMILLING DATA - 1938 THROUGH 1942

YEAR	MOS.	TONS MILLED	OUNCES AU RECOVERED	AVERAGE RECOVERED	REMARKS
1938	7	49,727	3,110.76	0.0624	All tailings
1939	12	102,808	4,932.05	0.0487	Started milling dumps in Nov.
1940	12	93,990	5,380.87	0.0572	60% tailing 40% dumps
1941	12	97,778	7,383.57	0.0744	50% tailing 50% dumps
1942	5	41,587	3,060.70	0.0736	50% tailing 50% dumps
TOTAL	48	387,890	23,867.95		

Estimated Silver Recovery 0.10 ounce per ton or 38,789 ounces
Average Gold Recovery Total Tonnage 0.0615 ounces Au per ton

Value Gold	@ $150.00/oz	$ 9.23
Value Silver	@ $ 4.50/oz	0.45
		$ 9.68/ton
Value Gold	@ $200.00/oz	$12.30
Value Silver	@ $ 4.50/oz	0.45
		$12.75/ton

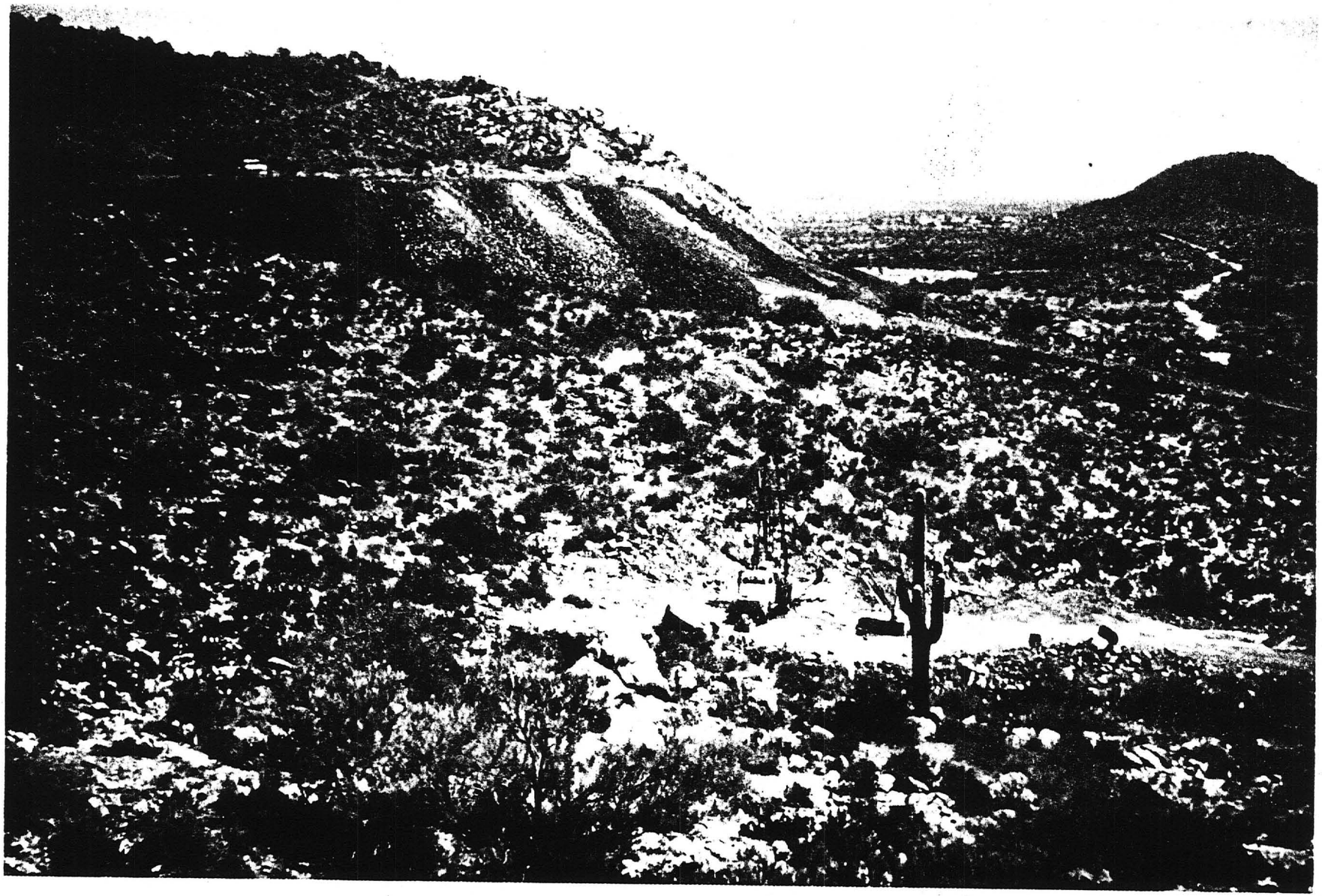
The above data from actual remilling of the tailing and rock dumps indicates what may be expected in recovery from the estimated 302,000 tons of rock dumps and 170,000 tons of tailings left by previous operators when shut down by World War II in 1942.

Historical Data

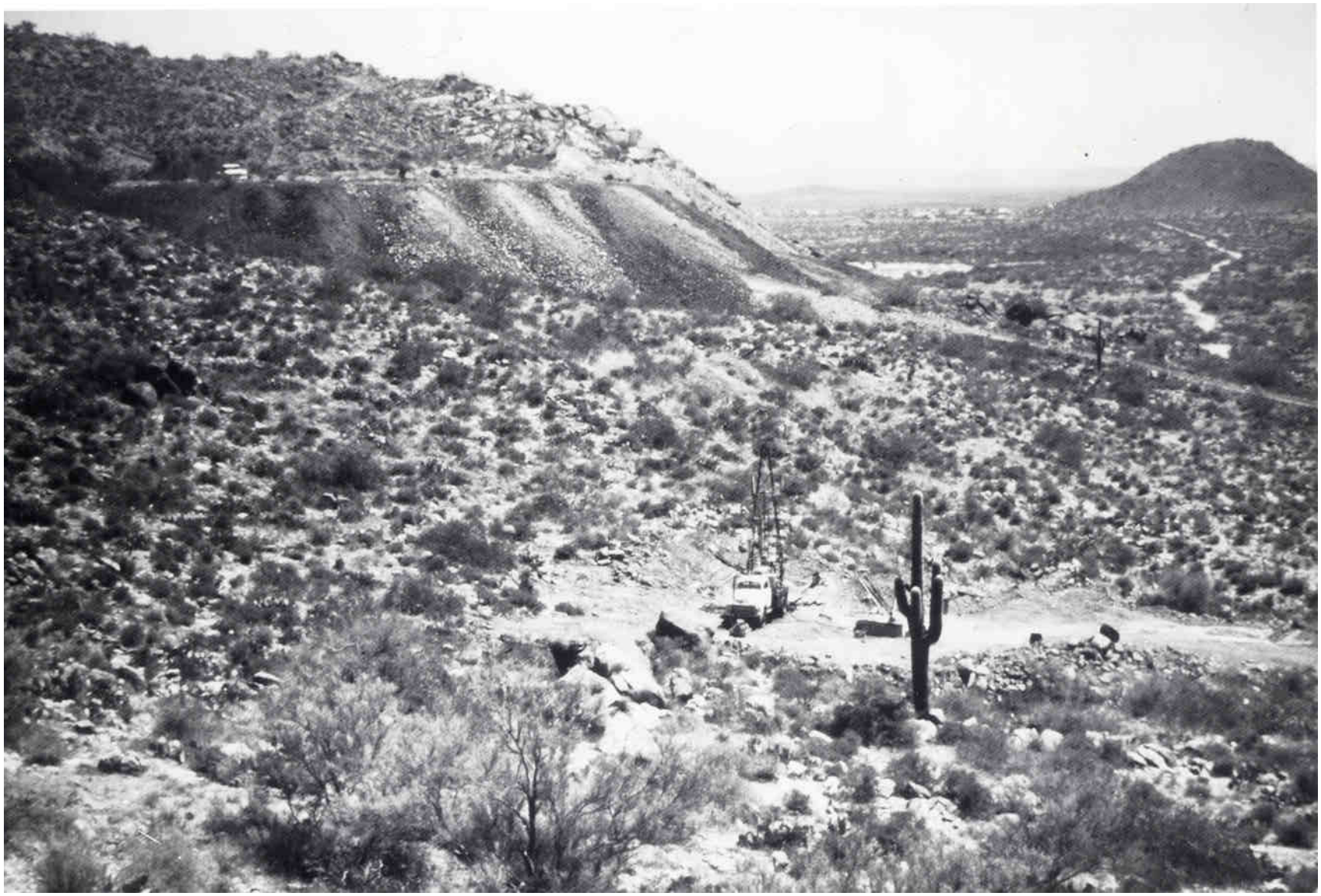
Total Gold Recovered 1880-1911	388,477.00 oz	Silver 345,598.0 oz
Total Gold Recovered 1938-1942	23,867.95 oz	Silver 38,787.0 oz
GOLD	412,344.95 oz	SILVER 384,385.0 oz

Total tons mined and milled 1880-1911	692,332 tons
Total tons low grade put on dumps	412,000 tons
Total tonnage removed from mine	1,104,332 tons
Less tonage remilled 1938-1942	(387,890) tons
Possible tonnage left in dumps	716,442 tons
instead of estimated 472,000 tons listed above	(472,000) tons
Difference	244,442 tons

Difference may be due to conservative estimates of material left in the tailings piles and the mine dumps. Some of the thinner areas of the tailings piles and hard to recover mine dumps were not included in the above estimates. Much of this material would now pay to recover, possibly an additional 150,000 to 200,000 tons over the estimates used in 1937.



Congress No. 3 Dump – 1975



APPENDIX B

The following data has been compiled from reports written by George M. Colvocoresses, Registered Mining Engineer and Gerald Sherman, Mining Engineer and personal observations and testing done by D. W. Jaquays, Registered Mining Engineer.

ORE POSSIBILITIES AT CONGRESS MINE
With Gold @ $150.00/oz and Silver @ $4.00/oz

No. 1 Dumps	55,000	tons	@ 0.10 oz	X $150	=	$ 825,000
No. 2 Dumps	90,000	tons	@ 0.10 oz	X $150	=	1,350,000
No. 3 Dumps	80,000	tons	@ 0.07 oz	X $150	=	840,000
No. 4 Dumps	4,000	tons	@ 0.10 oz	X $150	=	60,000
No. 5 Dumps	50,000	tons	@ 0.10 oz	X $150	=	750,000
No. 6 Dumps	8,000	tons	@ 0.12 oz	X $150	=	144,000
Queen of Hills	15,000	tons	@ 0.10 oz	X $150	=	225,000
TOTAL ROCK DUMPS	302,000	tons				$4,194,000
Old Tailings	150,000	tons	@ 0.07 oz	X $150	=	$1,575,000
Sub-Soil	20,000	tons	@ 0.10 oz	X $150	=	300,000
TOTAL TAILINGS	170,000	tons				$1,875,000
TOTAL ALL DUMPS	472,000	tons	Gross Value		=	$6,069,000
			Less 20% Tailing Loss		=	(1,213,800)
From All Dumps			Possible Net Recovery			$4,855,200

Ore Possibilities - Congress Vein Ore Extensions and Low Grade Gob and Dike Material Below 650 Foot Level:

Congress Vein	600,000	tons	@ 0.25 oz	X $150	=	$22,500,000
Queen of the Hills	200,000	tons	@ 0.25 oz	X $150	=	7,500,000
Congress Extension Sullivan & Suprise Veins	500,000	tons	@ 0.30 oz	X $150	=	$22,500,000
Total Possible Unbroken Ore Not Considering Vein Extensions to Depth					=	$52,500,000
Deduct 10% for tailing loss					=	5,250,000
TOTAL POSSIBLE RECOVERY FROM ORE					=	$47,250,000
TOTAL POSSIBLE RECOVERY FROM DUMPS					=	4,855,200
TOTAL POSSIBLE RECOVERY from 1,772,000 Tons Ore and Surface Dumps					=	$52,105,200

APPENDIX C
ESTIMATED COST OF 300 TPD CYANIDE PLANT
WITH ALL NEW EQUIPMENT

2	6' X 7' Ball Mills with Motor	$125,000	
2	42' X 18' Classifiers	13,000	
6	18' Airlift Agitator Mech.	72,000	
3	50' Thickner Mech.	60,000	
3	Dorrco 3" Pumps	14,000	
1	1,500 TPD PPT Plant	40,000	
1	Refinery Installation & Presses	50,000	
3	Solution Tanks Above Ground	40,000	
1	24" X 200' Conveyor	20,000	
1	24" Jefferies Feeder	5,000	
1	Fine Ore Receiving Hopper	20,000	
1	Lot Electrical Work	200,000	
1	Lot Piping	75,000	
1	Tailings Pump	5,000	
1	Lot Building 50' X 100' Open Sides	50,000	
1	Lot Office	75,000	
1	Fencing 400' X 300' = 1,400' X $15.00	21,000	
1	Lot Electric Power - APS Estimate	300,000	
1	Lot Water Development	100,000	$1,285,000
1	Lot Excavating & Tanks & Fine Ore Bins		100,000
1	Lot Engineering & Metallurgical Testing		100,000
	NEW EQUIPMENT TOTAL		$1,485,000

APPENDIX C REVISED
USING GOOD USED EQUIPMENT
AND DIESEL POWER

1	7' X 7' Ball Mill & Classifier Used		$ 55,000
3	30' X 20' Airlift Agitators	(Have)	15,000
3	50' X 10' Thickner Mech.	New	45,000
3	Dorrco 3" Pumps	New	10,000
1	1,500 TPD PPT Plant	New	40,000
4	25' X 8' Solution Tanks	New	24,000
1	24" X 200' Conveyor	New	20,000
1	18" X 25' Conveyor	New	2,000
1	10' X 10' X 10' Fine Ore Receiving Hopper		20,000
1	20' X 20' Fine Ore Bin		10,000
1	Lot Electrical Work		100,000
1	Lot Piping		55,000
1	Tailings Pump	New	5,000
1	Lot 66' X 100' Building	Open Sides	50,000
1	Trailor Type Office		8,000
1	Lot Fencing 400' X 300' = 1,400' X $15.00		21,000
1	Lot Water Development		50,000
1	Lot Excavating & Tank Holes		50,000
1	Lot Concrete & Gunite		75,000
	NEW AND USED EQUIPMENT TOTAL		$655,000

APPENDIX D

CONGRESS MINE COSTS ESTIMATED
MILLING 300 TPD DUMP

	Management		$ 100.00/Day	
1	Superintendent		50.00/Day	
3	Solution Men	@ $4.50/hr	108.00/Day	
3	Helpers	@ $4.00/hr	96.00/Day	
1	Swing Solution		36.00/Day	
1	Swing Helper		32.00/Day	
2	Crushermen	@ $4.00/hr	64.00/Day	
1	Assayer & Refinery Man		40.00/Day	
2	Maintenance		80.00/Day	
2	Truck Drivers	@ $4.00/hr	64.00/Day	
1	Loader Operator	@ $6.00/hr	48.00/Day	
1	Dozer Operator	@ $6.00/hr	48.00/Day	
			766.00/Day	
	Plus 20% Taxes, Other Misc		334.00/Day	
			$1,100.00/Day	$1,100.00
	Supplies	@ $1.00/ton	$ 300.00	
	Power	@ $1.00/ton	300.00	
	Amortization		600.00	
			$1,200.00	$1,200.00
	Total Costs/Day	@ $7.66/ton		$2,300.00

		Au @ $135
Estimated Recovery @ $165.00/oz Au $4.50/oz Ag		
Assay 0.10 oz Au X 90% Recovery = 0.09 X $165.00 =	$ 15.85	$12.15
Assay 0.40 oz Ag X 50% Recovery = 0.20 X $ 4.50 =	.90	0.80
Recovery Per Ton	$ 16.75	$12.95
Cost Per Ton Dump Material	$ 7.66	- 8.00
Estimated Profit Per Ton Milling 300 TPD	$ 9.09	$4.95

Dump Material Only Should Contain the Following Total Value:		
300,000 X $16.75 Net Recovery	$5,025,000.00	$3,900,000
300,000 X $ 7.66 Costs	$2,298,000.00	2,400,000
Total Gross Profit Possible Before Taxes . .	$2,727,000.00	$1,500,000

Tailings Material Only		
200,000 Tons X 0.07 oz Au X 80% Recovery = 0.056 X $165.00 =	$ 9.24	$8.56
200,000 Tons X 0.40 oz Ag X 50% Recovery = 0.200 X $ 4.50 =	.90	0.80
Recovery Per Ton	$10.14	$9.36
Cost Per Ton Tailings Material	7.66	8.00
Estimated Profit Per Ton Tailings	$ 2.48	$1.36

200,000 Tons Tailings Material X $2.48 = Total Profit $ 496,000.00 $272,000

Total Estimated Profit Dump and Tailings $3,223,000.00 $1,772,000
(With Au At $165.00 and 90% Recovery)

Note- Included in dump and tailings cost is $2.00/ ton amortization
or a total of $1,000,000.00

Any increased capacity over the 300 tons per day would greatly reduce the cost per ton and possibly leave some capacity available for custom milling.