



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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416

CALIFORNIA JOURNAL OF MINES AND GEOLOGY

[Vol. 52

GOLD ORE

No. 4]

EL DORADO COUNTY—CLARK AND CARLSON

417

HISTORY

- 1948 Gold bearing quartz vein discovered in a new logging road cut.
- 1948-1957 Documented Production:
\$1,298,000.00 from 41,100 tons milled.
(This would be about \$5,142,000.00 at today's prices.)
- 1957-1961 Estimated Production:
45,000 tons - yield unknown.
- 1961 or 1962 Mill burns down
- 1961-1975 Property in litigation and in various states of probate.
- 1975 Circa June: Title to property cleared of all encumbrances.

Fact 1: At least 30,000 tons of ore containing 22,400 ounces of gold is blocked out above the 200-foot level.

Fact 2: The ore is of the "free milling" type and bullion will be produced on the property.

J. H. WREN & CO.
Consulting Engineers

January 21, 1957

Phone Hillcrest 6-0922

This report is the property of Ramon Shannon
4297 D Street
Sacramento, Cal.

EXPLORATORY REPORT OF THE HAZEL CREEK MINE

EL DORADO COUNTY, CALIFORNIA

LOCATION:

The Hazel Creek Mine is located in El Dorado County, California, some seven miles southerly from the town of Collock Pines, at an elevation of 3,600 feet.

The property is approached by excellent oiled surface road to within three miles of the mine, and three miles of graded graveled road.

Adequate water is available to meet any mining and milling requirements during most seasons of the year. If additional water should ever be needed, water is available from Sly Park Dam a short distance from the mine plant site. Gravity disposal tailings storage space is somewhat limited, but an unlimited volume can be taken care of with use of a tailings sand pump.

Mining timber is available on the ground.

PROPERTY EXTENT:

According to Mr. Richard Ronne of the Hazel Creek Mining Company, the property consists of 80 acres of patented land including mineral rights.

PROPERTY OPERATED:

The property is operated by the Hazel Creek Mining Company under mining lease agreement from the Ruple Estate of Placerville, California.

HISTORY:

The mine was discovered in the late 1940s and continuously produced an economic grade of ore from the surface downward in the confines of the presently opened

HAZEL CREEK MINE REPORT-2

mineralized zone. The early stages of the operation were not too efficiently aligned from both a mining and a business standpoint.

The property was first operated through a tunnel level adit furnished production to a 30-ton treatment plant. Subsequently a two-compartment shaft was sunk to the 100-foot level with a pocket and short sump below that level. Southerly development was driven in excess of 700 feet from the shaft.

The Hazel Creek Mine shaft was deepened in 1955 when it was sunk to the 200-foot level, a station cut and preparation was made for a 200-ton storage pocket. The shaft is some 50 feet below the 200-foot level with a pump sump driven some 30 feet southerly at an elevation of 40 feet below the 200-foot level sill.

During 1955 a new mill building was constructed and treatment equipment of 100 tons capacity was installed. This unit is now complete except for primary crushing facilities, filtering, drying, conveying and weighing ahead of the fines bin.

GEOLOGY:

The Hazel Creek Mine's geology is comparatively quite simple with regard to geological complications connected with economic mining, in the opened mineralized zone. Some minor post-mineral dikes intrude the ore, but are not a dilution problem. Faulting problems which would affect production in the developed area do not exist.

Technical details concerning the geology are herewith included under separate heading by Mr. Ira E. Klein, Geologist, of Sacramento, California.

It is suggested that some surface channels be run with a heavy tractor-bulldozer on the surface north and south of the developed ore shoot zone. Indications of additional veins are present and some considerable light could be thrown on the general geology, as well as the possibility of locating more economic ore shoots. There is apparently a fault north of the Hazel Creek Shaft. Surface channels might designate a continuation of the No. 1 Vein. Some surface channels are also needed south of the developed area. The south 100-foot level ore shoot has a flat rake to the south swelling below that level but pinched at the face some 750 feet from the shaft. It may be possible to locate another ore shoot south of the present workings by stripping overburden off of the vein.

HAZEL CREEK MINE REPORT-3

DEVELOPMENT:

1. Existing development at the property is as follows:
 - a) 250' of two-compartment shaft average inclined at 80 degrees. This shaft has two stations - one on the 100' level and one on the 200' level. There is a pump sump driven some 30 feet southerly from the shaft 40 feet below the 200' level which holds storage for some 12,040 gallons of water.
 - b) Tunnel level development aside from raises consists of:
 - 430' of drifting on the No. 1 Vein.
 - 320' of drifting on the No. 2 Vein.
 - 80' of cross-cutting.
 - c) 100' level development aside from raises consists of:
 - 390' of drifting on the No. 1 Vein.
 - 520' of drifting on the No. 1 and No. 2 Veins.
 - 120' of miscellaneous cross-cutting.
 - d) 200' level development consists of:
 - 30' of drifting.
 - Large station cut.
 - Proposed skip pocket of 200 tons capacity.
2. Only limited surface exploration channeling has been done. Additional surface exploration should be scheduled to disclose geological data and possible new ore shoots.

PRODUCTION HISTORY:

Production records prior to 1950 are not available. However, on the authority of Mr. Richard Bonne it is reported that some \$300,000 was produced before 1950.

	GROSS RECEIPTS	TONS MILLED
1950-1951	\$ 4,715.52	21.93
1951-1952	114,865.44	4,688.38
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1956	92,800.05	3,826.80
TOTAL RECEIPTS	\$ 998,031.13	TOTAL TONS- 41,079.05
Prior to 1950	<u>300,000.00</u>	
TOTAL	\$1,298,031.13	

HAZEL CREEK MINE REPORT-4

Production History, continued

Value per ton recovered 1950 to 1956, inclusive, \$24.30

It is assumed that the value per ton recovered can be raised on the basis of controlled dilution, assay controls and theft safeguarding.

All development work, for the most part, has been run through the mill. Very limited assaying has been done, and as a consequence sub-marginal ore has been run with economic grade which has cut down the highest head average possible. The universal ore grade control in mines of this type is to sample each round of development advance in the drifts and each raise round of advance while preparing stopes. This data is entered on an assay chart which enables one to control mill head grade and leave lean zones as pillar sections, resulting in an over-all higher mill head. Aside from the probability of \$2-per-ton mill loss, early stage gold theft was probably a factor in reduction of over-all recovery averages. It is quite possible that mill loss was higher than \$2 per ton during the early adjustment stages of milling on the property. Consequently, it is safe to assume that with controlled grade and the other items above mentioned, a \$28 mill recovery would have been possible to date out of the Hazel Creek ore zone.

ORE RESERVES:

(NOTE: The following ore reserve evaluation is based upon recent limited grab and channel samples taken by the writer, and correlation of tonnages run against gold recovered. This estimate may require additional evaluation sampling in view of the fact that the operators did not carry on a normal production and sampling program; hence only limited detail assay determinations were available. It is suspected that the \$24.30 of actually recovered values may be low in view of mill loss, theft, and dilution. At the writing of this preliminary report, time is not available to conduct a detailed level and stope sampling program. There is a possibility that, if the operation is conducted under a controlled sampling procedure, estimated tonnage grade may be raised by keeping dilution out of the production circuit.)

Please refer to the "BLOCK DIAGRAM SHOWING ESTIMATED EXISTING ORE RESERVES". It will be noted that a definite rake is present in the southern end of the ore shoot. There is a tendency indicated on the 100-foot level south not only to lengthen as depth is attained, but a swelling influence with downward progress is also well marked. Generally the hanging-wall indicates a flatter dip than the footwall on the last 100 feet of the south production zone. It can be particularly noted

HAZEL CREEK MINE REPORT-5

Ore Reserves, continued

some 125 feet north of the 100-foot level drift face. Ore width at the back of the slope some 30 feet above the level is about 3 feet, and at the level all the width is 6 feet. Swelling on the level northerly is present as far back as the intersection of No. 1 and No. 2 Veins to a 20-foot width in some cases.

Ore reserve dimensions are listed on the "Ore Block Diagram" to qualify the following reserve tonnages.

Qualification of the 2,500 tons of broken ore above the 100-foot level regarding value is the result of a general grab sample of 65 pounds checked by a duplicate sample of 65 pounds, with an average of 1.04 oz. Au., .38 oz. Ag., for a ton value of \$36.78. A third sample, taken by Mr. Victor Baumgardt for Mr. A. L. Damon, of the production run went .99 oz. Au. apparently closely checking the above samples of broken tonnage.

	TONS	TON VALUE	TOTAL VALUE
<u>POSITIVE ORE:</u>			
BLOCK A	13,500	\$20.00	\$270,000.00
BLOCK B	400	22.50	9,000.00
BLOCK C	5,000	30.00	150,000.00
BLOCK C Broken Ore	<u>2,500</u>	<u>35.00</u>	<u>87,500.00</u>
	21,400		\$516,500.00
<u>PROBABLE ORE:</u>			
BLOCK A	18,000	20.00	360,000.00
BLOCK B	<u>26,000</u>	25.00	<u>650,000.00</u>
	44,000		\$1,010,000.00
<u>POSSIBLE ORE:</u>			
BLOCK A	4,000	20.00	80,000.00
BLOCK B	3,000	15.00	45,000.00
BLOCK C	5,000	25.00	125,000.00

HAZEL CREEK MINE REPORT-6

Ore Reserves, continued

NOTE: In No. 2 Vein north of intersection not shown on diagram is:

	TONS	TON VALUE	TOTAL VALUE
<u>POSITIVE ORE:</u>			
50' x 100' x 6'	2,500	15.00	37,500.00
80' x 100' x 6'	4,000	15.00	<u>60,000.00</u>
			\$97,500.00
TOTAL ESTIMATED RESERVES			\$1,724,000.00

NOTE: Above values were substantiated by the operator and mine superintendent.

Total possible reserves could add up to some considerable dollar volume on the basis of potential depth. Mr. Clarke, Geologist for the California State Bureau of Mines, and Mr. I. E. Klein, Geologist for the U. S. Bureau of Reclamation, both see no geological reason for the vein system not to continue several hundred feet below the present lowest developed point. East Belt properties have achieved 3,000 feet of economical mining depth and Mother Lodge Middle Belt from 3,000 feet to 5,000 feet. No possible reserves have been estimated below the 200-foot level. After running the level southerly on the vein, greater probable and possible reserves can be compiled.

PRODUCTION ECONOMICS:

In the event that it is possible to treat 100 tons per day in the newly set up large plant (see mill observations) and 30 tons per day in the small plant for a total of 130 tons per day, the following mining economics will be accurate on the basis of a \$25 mill head. Subsequently refinement of the underground loading and utilization of modern breakage methods can cut \$2 per ton off of the over-all production costs, with some tightened efficiency at the mill.

130 tons treated per day @ \$25 mill head	\$3,250.00 gross
Mill loss, chiefly in the slimes	<u>140.00</u>
Recovery estimate	3,110.00
Royalty deduction	<u>311.00</u>
Gross after royalty	2,799.00

HAZEL CREEK MINE REPORT-7

Production economics, continued

Total mining cost including insurance, supervisory, overhead, etc., \$5 per ton @ 130 tons per day	\$ 650.00
Total milling cost \$3 per ton @ 130 tons per day	390.00
Marketing and misc., 50¢ per ton @ 130 tons per day	65.00
Production costs per day	<u>1,105.00</u>
ESTIMATED POSSIBLE NET PER DAY	\$1,694.00

It is recommended to operate the mill on a 7-day work week basis with staggered shifts to side-step overtime. Mine will have to produce seven days' required tonnage in six working days.

Estimated net 30-day milling month \$50,820.00
(Possible with \$25 mill heads and similar alignment to the herein described mining and milling procedure.)

MINING:

Sufficient reserves are available to cover the mill's full capacity by conducting breakage on a two-shift basis and stressing 200-foot-level southerly drift advance. It is suggested to operate the mine six days per week, breaking enough tonnage to allow the mill to operate on a seven-day work week.

Northerly and southerly exploration advance on the 100-foot level is of no priority importance at this time.

It is suggested to mill off and set up to produce "POSITIVE ORE BLOCK A".

"POSITIVE ORE BLOCK B" has chutes already prepared to obtain the remaining wedge-shaped section of ore.

While the above blocks are being readied for production, pull broken cubics in "POSITIVE ORE BLOCK C" followed by setting up to produce the footwall seab of ore left by previous operators.

New ore chute construction should include a modern steel gate installation which will lower car loading time. All chutes should be standard and framed on top ahead of installation requirement.

Finish the 200-foot level pocket including a skip loading cartridge. This cartridge will assist in balancing the slow hoist time as only above five seconds is needed to measure out a full skip load

HAZEL CREEK MINE REPORT-8

Mining, continued

Drive the 200-foot south drift on a round-in-round-out policy with use of the 12-B mucking machine. This drift should be bent into the footwall in order to pick up mill grade ore as soon as possible. By carrying the right side on the footwall grade is expected to pick up. The 240-foot pump sump illustrates the fact that grade at this point feathers out towards the hanging wall and is diluted with calcite.

Inventory mining equipment and appraise the mechanical condition. Add necessary items to the equipment complement in order to assure the highest tonnage possible per manshift worked and to insure the delivery of capacity mill tonnage.

As soon as convenient install a Mancha Little Trammer battery locomotive on the 200-foot level to expedite haulage and cut down manshifts worked. This level has some considerable tonnage to produce which will shortly amortize the locomotive's cost.

Various safety measures are required to comply with the California code underground.

The 200-foot level will require some production engineering study as soon as it has been drifted out. Some possibility of encountering 15- to 25-foot widths exists. In that case, and in view of the excellent wall conditions, a very low-cost mining method may be used. One could drive a footwall drift with entries into the vein for mucking machine holings. The ground could be shrank with use of long hole breakage out of the stope raises and pulled by a 21-B Kinco mucking machine with 100 tons capacity per shift. Chute building, level silling, and 90 percent of the stope timber framing and installation would be reduced. Breakage and haulage to the surface over 15- to 25-foot widths under this mining method should not exceed \$3 per ton. The present estimate over-all under existing methods is \$6.

An incentive pay policy carefully designed will lower mining costs, produce much more per manshift worked, automatically weed out culls, and assure a full supply of labor against the competitive lumber industry in the district.

Normal sampling controls must be instituted. Not one major and successful Mother Lodge property ever operated without grade knowledge and control. The writer will be glad to outline an ore control procedure when and if needed.

Note present mine equipment in the attached inventory.

HAZEL CRUX MINE REPORT-9

MILLING

A thorough survey of the mechanical condition of both the 30-ton plant and the 100-ton plant should be made.

A single filtering and drying unit will serve both plants. More efficiency is required in the handling of concentrates than is now in effect.

Primary crushing and secondary conveying installation requires being set up for the new plant. A closed circuit screen with oversize return to the secondary crusher should be installed in order to raise the capacity of the ball mill.

It may be found that the present flotation cell capacity is short for the 100-ton mill.

The Knudsen bowls will be of assistance in free gold recovery.

It is advisable to amalgamate the jig concentrates. At present they are being shipped to a smelter. It is more economical to amalgamate, retort and ship the sponage to the U. S. mint, with amalgamator reject going to the smelter.

At this time it would appear mandatory (while the large plant is being finished and coordinated) to operate the 30-ton plant 24 hours per day seven days per week. The head product from the broken ore alone should gross some \$1000 per day according to the storage sack samples. This income will coordinate the operation towards the 130-tons-per-day movement.

When both plants are running, income should be constant, even during periods of repair because, if preventive maintenance is conducted, at least one unit will be treating ore during shut-down periods of repair to a unit. Practically no additional labor will be needed to run both plants.

Tailings disposal at this time is not a pressing problem. However, it will eventually become one if the operation is not set up with a tailings sand pump to store tails in one of the flat areas westerly and above the mill elevation.

Diesel electric sets should be checked as it is doubtful whether P.C. & E. service would be obtained short of 90 days after putting up a cash deposit for the power line installation.

A continuous operation of this size calls for some means of fast communication. The nearest telephone line available to be hooked in should be checked. If not available, a radio-telephone may solve the problem.

HAZEL CREEK MINE REPORT-10

Milling, continued

An assay laboratory should be set up for mining and milling controls. It was noted that part of the laboratory equipment is already part of the company's inventory.

The Hazel Creek culverts at the bottom of the mill may require enlargement as the capacity seems too small to handle high water.

Subsequently, on a long-range perspective, thought might be given cyanidation of the flotation concentrates. They would require roasting first, but some considerable saving would be effected in a 130-ton-per-day movement. Most middle-class to large California operators in gold changed from shipping concentrates to treating their own to save trucking, smelting charges, and percentage losses on the treatment schedule.

Basically, the property does not seem to hold any metallurgical problems. Standard practice of this type of milling has been pioneered for many years.

ORGANIZATION:

This operation can be operated with very little overhead requirement. Supervisory needs are: One manager to oversee all phases of the movement and expedite supplies. One experienced mine superintendent with a good modern production background. One professional mill superintendent with considerable general and gold milling experience. One combination assayer-time keeper. This latter person can keep an up-to-date inventory of the operating stock. Procedure would be to assay in the morning with one half day for time keeping and other duties.

The property is in need of normal operating reports daily from the mine and daily from the mill, which can be compiled, averaged, and sent in to management by the mine manager weekly. It should not be necessary to have an office staff at the mine. A firm of accountants should be able to handle the books for \$100 to \$150 per month. Receipts to be okayed by the mine manager. The mine superintendent, mill superintendent, and mechanic should live at the mine; in fact it is mandatory that they do live in camp. These men are on call 24 hours a day, and should be readily available.

SUMMARY:

The mine equipment inventory as listed by the Hazel Creek Mining Corporation to an amount in excess of \$178,000.00 may be appraised for existing market value accuracy. However,

HAZEL CREEK MINE REPORT-11

the inventory and new mill construction plus employee housing is highly acceptable to a proposed production operation.

Generally the Hazel Creek Mine has had a good record of economic grade ore production. Its early stages leading up to the time that the Richard Ronne interests took over management is recorded as a badly aligned project movement. In spite of that condition almost one million dollars in production was achieved during that period.

Available ore outlook at the property is excellent with long range vision toward some considerable potential depth below the present 200' level.

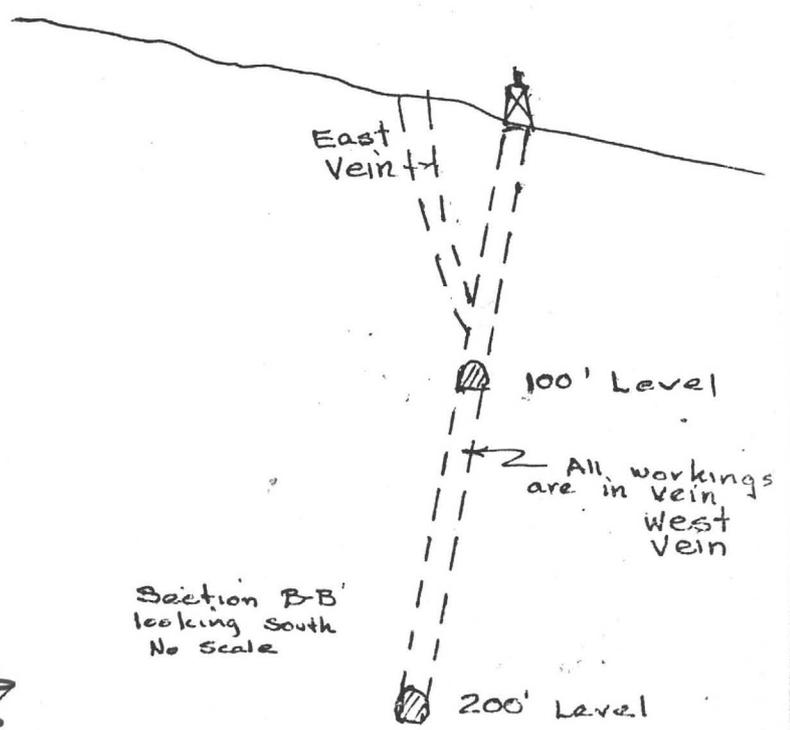
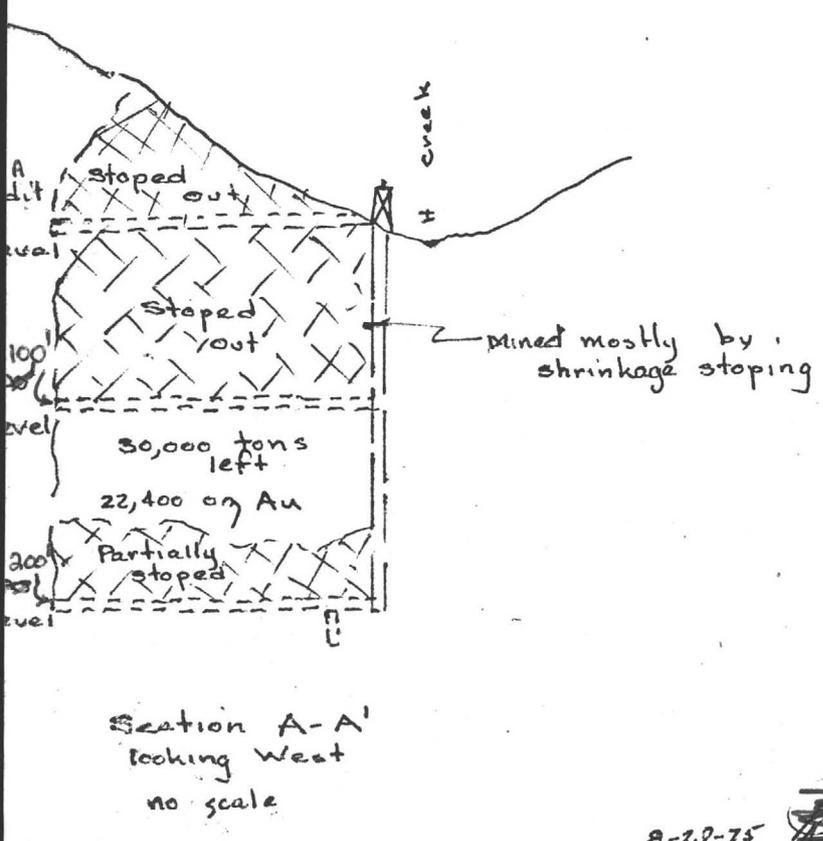
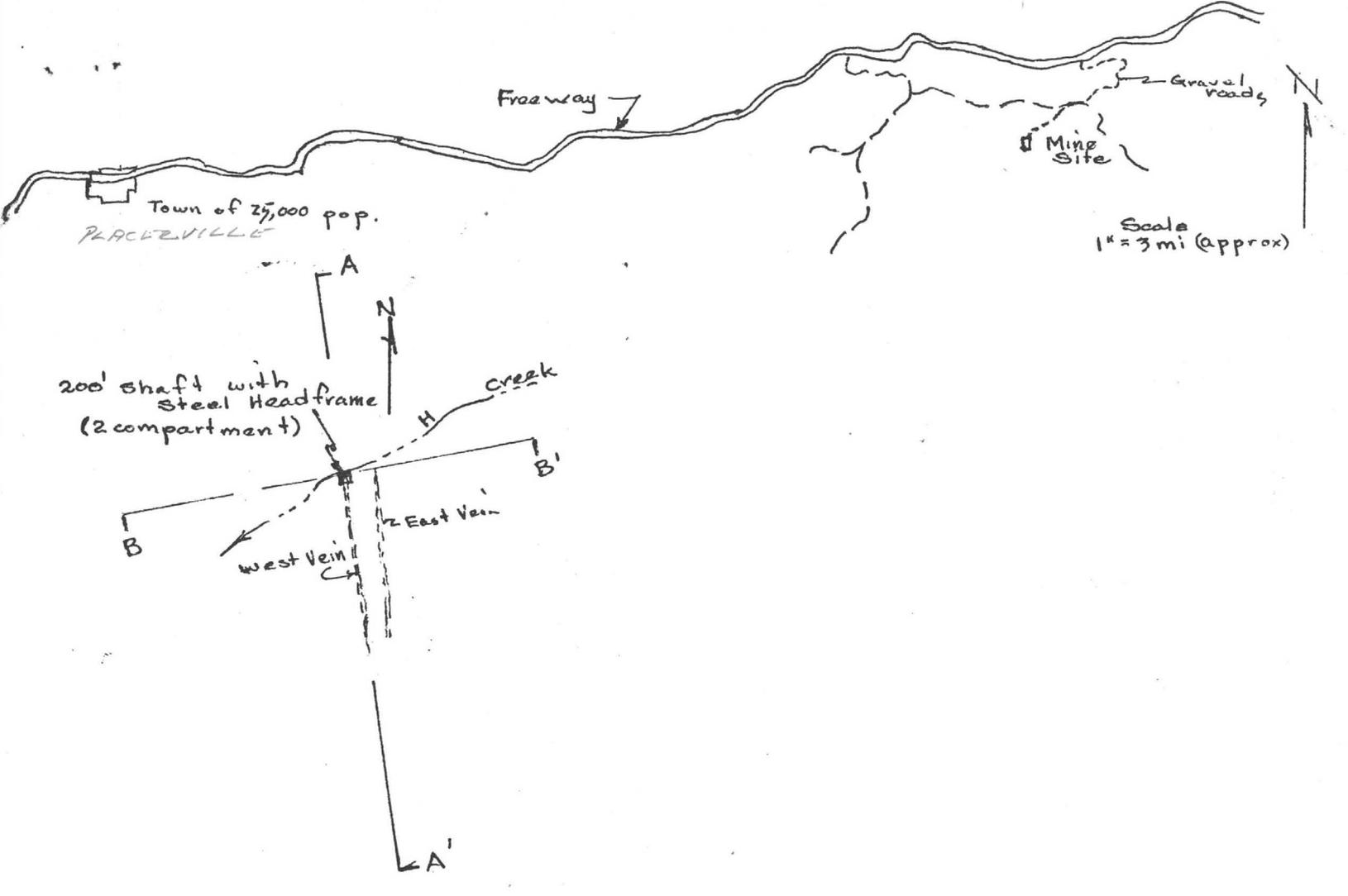
No risk is present regarding lowering of the gold market as is always a consideration in the other metals. As long as the economics are favorable relative to potential profit at \$35 per ounce gold value, the outlook should be quite stable. Considerable margin exists as a result of the estimated possible net profit of \$50,000 per month at 130 tons per day of ore treated.

Very truly yours,

J. H. WREN & COMPANY

BY JAMES H. WREN (SIGNED)

JHWfd



8-29-75

J. H. WREN & CO.
Consulting Engineers

January 21, 1957

Phone Hillcrest 6-0922

This report is the property of Ramon Shannon 297 D Street
Sacramento, Cal.

PRELIMINARY REPORT OF THE HAZEL CREEK MINE

EL DORADO COUNTY, CALIFORNIA

LOCATION:

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HAZEL CREEK MINE REPORT-2

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HAZEL CREEK MINE REPORT-3

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HAZEL CREEK MINE REPORT-4

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HAZEL CREEK MINE REPORT-5

Ore Reserves, continued

some 125 feet north of the 100-foot level drift face. Ore width at the back of the slope some 30 feet above the level is about 3 feet, and at the level sill the width is 6 feet. Swelling on the level northerly is present as far back as the intersection of No. 1 and No. 2 Veins to a 20-foot width in some cases.

Ore reserve dimensions are listed on the "Ore Block Diagram" to qualify the following reserve tonnages.

Qualification of the 2,500 tons of broken ore above the 100-foot level regarding value is the result of a general grab sample of 65 pounds checked by a duplicate sample of 65 pounds, with an average of 1.04 gm. Au., .38 oz. Au., for a ton value of \$36.78. A third sample, taken by Mr. Victor Beaumgardt for Mr. A. L. Damon, of the production run went .99 oz. Au. apparently closely checking the above samples of broken tonnage.

	TONS	TON VALUE	TOTAL VALUE
<u>POSITIVE ORE:</u>			
BLOCK A	13,500	\$20.00	\$270,000.00
BLOCK B	400	22.50	9,000.00
BLOCK C	5,000	30.00	150,000.00
BLOCK C Broken Ore	<u>2,500</u>	<u>35.00</u>	<u>87,500.00</u>
	21,400		\$516,500.00
<u>PROBABLE ORE:</u>			
BLOCK A	18,000	20.00	360,000.00
BLOCK B	<u>26,000</u>	25.00	<u>650,000.00</u>
	44,000		\$1,010,000.00
<u>POSSIBLE ORE:</u>			
BLOCK A	4,000	20.00	80,000.00
BLOCK B	3,000	15.00	45,000.00
BLOCK C	5,000	25.00	125,000.00

HAZEL CREEK MINE REPORT-6

Ore Reserves, continued

NOTE: In No. 2 Vein north of intersection not shown on diagram is:

	TONS	TON VALUE	TOTAL VALUE
<u>POSITIVE ORE:</u>			
50' x 100' x 6'	2,500	15.00	37,500.00
80' x 100' x 6'	4,000	15.00	<u>60,000.00</u>
			\$97,500.00
TOTAL ESTIMATED RESERVES			\$1,724,000.00

NOTE: Above values were substantiated by the operator and mine superintendent.

Total possible reserves could add up to some considerable dollar volume on the basis of potential depth. Mr. Clarke, Geologist for the California State Bureau of Mines, and Mr. I. E. Klein, Geologist for the U. S. Bureau of Reclamation, both see no geological reason for the vein system not to continue several hundred feet below the present lowest developed point. East Belt properties have achieved 3,000 feet of economical mining depth and Mother Lodge Middle Belt from 3,000 feet to 5,000 feet. No possible reserves have been estimated below the 200-foot level. After running the level southerly on the vein, greater probable and possible reserves can be compiled.

PRODUCTION ECONOMICS:

In the event that it is possible to treat 100 tons per day in the newly set up large plant (see mill observations) and 30 tons per day in the small plant for a total of 130 tons per day, the following mining economics will be accurate on the basis of a \$25 mill head. Subsequently refinement of the underground loading and utilization of modern breakage methods can cut \$2 per ton off of the over-all production costs, with some tightened efficiency at the mill.

130 tons treated per day @ \$25 mill head	\$3,250.00 gross
Mill less, chiefly in the slimes	<u>140.00</u>
Recovery estimate	3,110.00
Royalty deduction	<u>311.00</u>
Gross after royalty	2,799.00

HAZEL CREEK MINE REPORT-7

Production economics, continued

Total mining cost including insurance, supervisory, overhead, etc., \$5 per ton @ 130 tons per day	\$ 650.00
Total milling cost \$3 per ton @ 130 tons per day	390.00
Marketing and misc., 50¢ per ton @ 130 tons per day	65.00
Production costs per day	<u>1,105.00</u>
 ESTIMATED POSSIBLE NET PER DAY	 \$1,694.00

It is recommended to operate the mill on a 7-day work week basis with staggered shifts to side-step overtime. Mine will have to produce seven days' required tonnage in six working days.

Estimated net 30-day milling month \$50,820.00
(Possible with \$25 mill heads and similar alignment to the herein described mining and milling procedure.)

MINING:

Sufficient reserves are available to cover the mill's full capacity by conducting breakage on a two-shift basis and stressing 200-foot-level southerly drift advance. It is suggested to operate the mine six days per week, breaking enough tonnage to allow the mill to operate on a seven-day work week.

Northerly and southerly exploration advance on the 100-foot level is of no priority importance at this time.

It is suggested to sill off and set up to produce "POSITIVE ORE BLOCK A".

"POSITIVE ORE BLOCK B" has chutes already prepared to obtain the remaining wedge-shaped section of ore.

While the above blocks are being readied for production, pull broken cubics in "POSITIVE ORE BLOCK C" followed by setting up to produce the footwall seab of ore left by previous operators.

New ore chute construction should include a modern steel gate installation which will lower car loading time. All chutes should be standard and framed on top ahead of installation requirement.

Finish the 200-foot level pocket including a skip loading cartridge. This cartridge will assist in balancing the slow hoist time as only above five seconds is needed to measure out a full skip load

HAZEL CREEK MINE REPORT-8

Mining, continued

Drive the 200-foot south drift on a round-in-round-out policy with use of the 12-B mucking machine. This drift should be bent into the footwall in order to pick up mill grade ore as soon as possible. By carrying the right side on the footwall grade is expected to pick up. The 240-foot pump ~~sump~~ illustrates the fact that grade at this point feathers out towards the hanging wall and is diluted with calcite.

Inventory mining equipment and appraise the mechanical condition. Add necessary items to the equipment complement in order to assure the highest tonnage possible per manshift worked and to insure the delivery of capacity mill tonnage.

As soon as convenient install a Mancha Little Trammer battery locomotive on the 200-foot level to expedite haulage and cut down manshifts worked. This level has some considerable tonnage to produce which will shortly amortize the locomotive's cost.

Various safety measures are required to comply with the California code underground.

The 200-foot level will require some production engineering study as soon as it has been drifted out. Some possibility of encountering 15- to 25-foot widths exists. In that case, and in view of the excellent wall conditions, a very low-cost mining method may be used. One could drive a footwall drift with entries into the vein for mucking machine holings. The ground could be shrunk with use of long hole breakage out of the stope raises and pulled by a 21-B Kinco mucking machine with 100 tons capacity per shift. Chute building, level silling, and 90 percent of the stope timber framing and installation would be reduced. Breakage and haulage to the surface over 15- to 25-foot widths under this mining method should not exceed \$3 per ton. The present estimate over-all under existing methods is \$6.

An incentive pay policy carefully designed will lower mining costs, produce much more per manshift worked, automatically weed out culls, and assure a full supply of labor against the competitive lumber industry in the district.

Normal sampling controls must be instituted. Not one major and successful Mother Lodge property ever operated without grade knowledge and control. The writer will be glad to outline an ore control procedure when and if needed.

Note present mine equipment in the attached inventory.

HAZEL CREEK MINE REPORT-9

MILLING:

A thorough survey of the mechanical condition of both the 30-ton plant and the 100-ton plant should be made.

A single filtering and drying unit will serve both plants. More efficiency is required in the handling of concentrates than is now in effect.

Primary crushing and secondary conveying installation requires being set up for the new plant. A closed circuit screen with oversize return to the secondary crusher should be installed in order to raise the capacity of the ball mill.

It may be found that the present flotation cell capacity is short for the 100-ton mill.

The Knudsen bowls will be of assistance in free gold recovery.

It is advisable to amalgamate the jig concentrates. At present they are being shipped to a smelter. It is more economical to amalgamate, retort and ship the sponge to the U. S. mint, with amalgamator reject going to the smelter.

At this time it would appear mandatory (while the large plant is being finished and coordinated) to operate the 30-ton plant 24 hours per day seven days per week. The head product from the broken ore alone should gross some \$1000 per day according to the storage muck samples. This income will coordinate the operation towards the 130-tons-per-day movement.

When both plants are running, income should be constant, even during periods of repair because, if preventive maintenance is conducted, at least one unit will be treating ore during shut-down periods of repair to a unit. Practically no additional labor will be needed to run both plants.

Tailings disposal at this time is not a pressing problem. However, it will eventually become one if the operation is not set up with a tailings sand pump to store tails in one of the flat areas westerly and above the mill elevation.

Diesel electric sets should be checked as it is doubtful whether P.O. & E. service could be obtained short of 90 days after putting up a cash deposit for the power line installation.

A continuous operation of this size calls for some means of fast communication. The nearest telephone line available to be checked in should be checked. If not available, a radio-telephone may solve the problem.

HAZEL CREEK MINE REPORT-10

Milling, continued

An assay laboratory should be set up for mining and milling controls. It was noted that part of the laboratory equipment is already part of the company's inventory.

The Hazel Creek culverts at the bottom of the mill may require enlargement as the capacity seems too small to handle high water.

Subsequently, on a long-range perspective, thought might be given cyanidation of the flotation concentrates. They would require roasting first, but some considerable saving would be effected in a 130-ton-per-day movement. Most middle-class to large California operators in gold changed from shipping concentrates to treating their own to save trucking, smelting charges, and percentage losses on the treatment schedule.

Basically, the property does not seem to hold any metallurgical problems. Standard practice of this type of milling has been pioneered for many years.

ORGANIZATION:

This operation can be operated with very little overhead requirement. Supervisory needs are: One manager to oversee all phases of the movement and expedite supplies. One experienced mine superintendent with a good modern production background. One professional mill superintendent with considerable general and gold milling experience. One combination assayer-time keeper. This latter person can keep an up-to-date inventory of the operating stock. Procedure would be to assay in the morning with one half day for time keeping and other duties.

The property is in need of normal operating reports daily from the mine and daily from the mill, which can be compiled, averaged, and sent in to management by the mine manager weekly. It should not be necessary to have an office staff at the mine. A firm of accountants should be able to handle the books for \$100 to \$150 per month. Receipts to be okayed by the mine manager. The mine superintendent, mill superintendent, and mechanic should live at the mine; in fact it is mandatory that they do live in camp. These men are on call 24 hours a day, and should be readily available.

SUMMARY:

The mine equipment inventory as listed by the Hazel Creek Mining Corporation to an amount in excess of \$175,000.00 may be appraised for existing market value accuracy. However,

HAZEL CREEK MINE REPORT-11

the inventory and new mill construction plus employee housing is highly acceptable to a proposed production operation.

Generally the Hazel Creek Mine has had a good record of economic grade ore production. Its early stages leading up to the time that the Richard Ronne interests took over management is recorded as a badly aligned project movement. In spite of that condition almost one million dollars in production was achieved during that period.

Available ore outlook at the property is excellent with long range vision toward some considerable potential depth below the present 200' level.

No risk is present regarding lowering of the gold market as is always a consideration in the other metals. As long as the economics are favorable relative to potential profit at \$35 per ounce gold value, the outlook should be quite stable. Considerable margin exists as a result of the estimated possible net profit of \$50,000 per month at 130 tons per day of ore treated.

Very truly yours,

J. H. WREN & COMPANY

BY JAMES H. WREN (SIGNED)

JHWfd

PHONE (916) 622-5611

Carol Hughes

SECRETARY - MANAGER



**HANGTOWN
CHAMBER OF COMMERCE**

P. O. BOX 151
PLACERVILLE, CALIF. 95667



HANGTOWN CHAMBER of COMMERCE

P. O. Box 151

(916) 622-5611

PLACERVILLE, CALIFORNIA 95667

July 22, 1975

Mr. Ramon P. Shannon
1585 East Grant Road
Tucson, Arizona 85719

Dear Mr. Shannon,

Regarding our telephone conversation of July 21st, please be advised that Mrs. Faye Cannon was contacted this date (622-3363) and seemed most delighted that you called. Mrs. Cannon took your name and address and will be contacting you shortly.

We did not go into detail on the Hazel Creek Mine, but apparently it may be available for operation. Hope it works out for you.

In the event that you would like to get better acquainted with our beautiful area, we have enclosed several maps and brochures. Please pay particular attention to the economic summary put out by the County Chamber in addition to the county tour guide and Placerville map.

It is always interesting to hear from our friends in Arizona. Several of our local part time residents love to take their mobile traveling homes and visit your State for several months out of the year. Or should I say reside there.

If in the event things should not work out for you on the Hazel Creek Mine, there is another available for lease in the Shingle Springs area. For further information call 622-6001 and ask for Dan Nickles (Placerville).

When you arrive in Hangtown, drop by our office. Would love to meet you.

Sincerely,

Carol Hughes
Carol Hughes
Manager

encl;

15. CHARACTERISTICS OF THE LABOR FORCE

Extent of Unionization: Lumber mill employees, construction workers, bartenders and culinary workers are mostly union members. Agriculture and most other industries and occupations are non-union.

Employment in the county is highly seasonal with peak employment occurring in August and September. Major seasonal fluctuations are found in agriculture, logging, lumbering, and service industries. Job opportunities in government, trade and service industries expand during the summer months. There is a high quantity of male and female semi-skilled and unskilled labor available in the county for year around employment opportunities.

Wage rates, extent of unionization, fringe benefits and related information for specific industries and job classifications may be obtained from the State Employment Development Department, located at 893 Spring Street, Placerville, California 95667, or at 800 Capitol Mall, Sacramento, California 95814.

16. MANUFACTURING EMPLOYMENT

There are approximately 35 manufacturing plants in the County. Leading classes of products are lumber & wood products, mining & plastic products.

The largest manufacturing firms in the County are:

- Golden State Bldg. Products
295 employed - lumber and box products
- Michigan California Lumber
180 employed - lumber products
- Certain-Teed Products
78 employed - plastic pipe and fittings
- Dorado Estates - Cameron Park
78 employed - homes & homesites
- El Dorado Limestone
75 employed - processed lime
- Placerville Lumber
52 employed - lumber products
- The Tahoe Tribune
45 employed - Daily newspaper
- Diamond Springs Lime
41 employed - processed lime
- Vita Bark
35 employed - bark chip products
- The Mountain Democrat
32 employed - Weekly newspaper
- Nielsen-Ferrari Lumber
30 employed - lumber products
- El Dorado Northern Lumber Co.
22 employed - lumber & wood products
- Rol-a-chart
15 employed - scheduling devices
- Placerville Fruit Growers Assn.
8 full time - 125-250 seasonally - fruit & food products packing.

17. NON-MANUFACTURING EMPLOYMENT

- Schools in El Dorado County
1086 employed including substitute teachers and part-time aides (669 certificated - 417 classified) - Teaching, Administration and services
- El Dorado County
680 employed - County government
- Hospitals in El Dorado County
424 employed - hospital administration & services (190 Barton, 147 Marshall, 87 Mother Lode)
- U.S. Forest Service
189 employed - forestry, fire protection & recreation services
- City of South Lake Tahoe
188 employed - City government and services
- Heavenly Valley
180 employed (seasonal) - ski resort
- Convalescent Hospitals
175 employed

17. NON-MANUFACTURING EMPLOYMENT (continued)

- Pacific Telephone
174 employed - telephone services
- Kirkwood Meadows
160 employed (seasonal) - ski resort
- Pacific Gas & Electric
100 employed - electric service
- Sierra Ski Ranch
70 employed (seasonal) - ski resort
- City of Placerville
67 employed - City government and services
- El Dorado Irrigation District
65 employed - water/sewer services & water oriented recreation
- South Tahoe Public Utility District
50 employed - sewer service
- Sierra Pacific Power
34 employed - electric service
- Georgetown Divide Public Utility District
17 employed - water/sewer service

18. COMMUNITY FACILITIES

HEALTH: El Dorado County has 3 general hospitals with 172 total bed capacity, 2 convalescent hospitals with 198 total bed capacity, 56 physicians and surgeons, 31 dentists, 7 optometrists, 8 chiropractors, 1 podiatrist, 7 veterinarians, and 4 ambulance services.

EDUCATION: 26 elementary schools, 2 intermediate schools, 4 high schools, 1 junior college, 1 church sponsored school, special classes for the educationally advanced, educationally and orthopedically handicapped, mentally retarded, visually handicapped, deaf and hard of hearing, speech & language handicapped & juvenile hall class.

CULTURAL: El Dorado County: 45 churches, 6 libraries and 1 bookmobile, 7 newspapers, 1 radio station, 1 cable TV station, 5 TV stations received direct, 3 TV cable systems, 9 banks, 3 savings and loans, 60 parks, 40 playgrounds, and 2 theatres. Other recreational facilities include: 2 drive-in movies; 2 roller skating rinks, 2 bowling alleys, 4 18-hole and 2 9-hole public golf courses, 1 18-hole and 1 9-hole private golf course, 3 community concert associations, more than 200 lakes featured by Lake Tahoe, Lake Folsom and Jenkinsen Lake, Gold Discovery State Park at Coloma, Sugar Pine Point, D.L. Bliss and Emerald Bay State Parks at Lake Tahoe, the Eldorado National Forest and the Eldorado Wilderness Area, 682 miles of rivers, 50 public multiple-use recreational camping and picnicking areas and 22 privately operated recreational campgrounds, 5 ski resorts and numerous snow play areas.

19. HOUSING AVAILABILITY - Prices and Rentals

Placerville Area - Rentals: for 1 and 2 bedroom apartments and duplexes range from \$135 to \$250 per month. Rentals for 2 and 3 bedroom houses range from \$150 to \$250. Sales prices for existing homes during 1973 were from \$19,500 to \$55,000.

South Lake Tahoe Area - Rentals: 1 and 2 bedroom apartments and duplexes range from \$150 to \$275 per month. Rentals for 2 & 3 bedroom houses range from \$200 to \$450 per month. Sales prices for existing homes during 1973 were from \$25,000 to \$100,000.

There are 4 hotels with approximately 50 rooms in the county, 250 motels with more than 7,000 rooms, and 55 mobile home parks.

20. REMARKS

In the format standardized by the California Chamber of Commerce, Department of Economic Development and Research, 455 Capitol Mall, Sacramento, California, 95814.

The community economic profile was prepared and published by the El Dorado County Chamber of Commerce.

For further information contact the El Dorado County Chamber of Commerce, 542 Main Street, Placerville, California 95667.

COMMUNITY ECONOMIC PROFILE

for

EL DORADO COUNTY, CALIFORNIA

Including Cities of Placerville and South Lake Tahoe

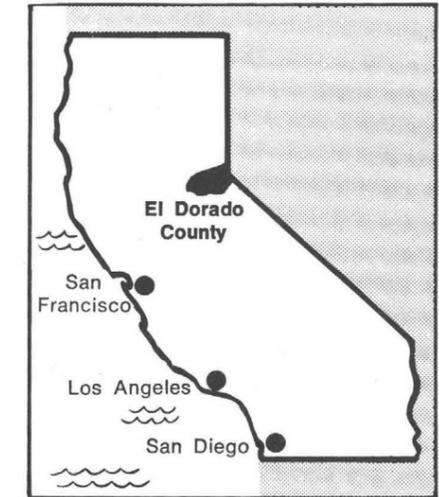
Published by the

EL DORADO COUNTY CHAMBER OF COMMERCE

Based on the format

Established by the California Chamber of Commerce

December 1, 1974



1. LOCATION:

El Dorado County is located in North Central California between the Sacramento Metropolitan Area and the Nevada State Line at Lake Tahoe. The county is 430 miles North of Los Angeles, 105 miles Northeast of San Francisco, and 60 miles Southwest of Reno, Nevada. There are two incorporated cities in El Dorado County: Placerville, incorporated in 1854; and, South Lake Tahoe, incorporated in 1965. El Dorado County has 1,713 square miles. 54% in public ownership.

2. ECONOMIC GROWTH AND TRENDS:

- Population in County
- Population in City Limits, Placerville
- Population in City Limits, South Lake Tahoe
- Total Taxable Retail Sales, County
- Total Taxable Retail Sales, Placerville
- Total Taxable Retail Sales, South Lake Tahoe
- Occupied Dwellings, County
- Occupied Dwellings, Placerville
- Occupied Dwellings, South Lake Tahoe
- School Enrollment, Grades K-8, County

	1950	1960	1970	1973
Population in County	16,207	29,390	43,833	53,300
Population in City Limits, Placerville	3,749	4,439	5,418	5,575
Population in City Limits, South Lake Tahoe	—	—	12,921	19,050
Total Taxable Retail Sales, County	14,000*	43,196*	75,628*	106,574*
Total Taxable Retail Sales, Placerville	N.A.	15,400*	24,027*	37,308*
Total Taxable Retail Sales, South Lake Tahoe	—	—	32,493*	64,121*
Occupied Dwellings, County	5,436	15,592	23,877	26,163
Occupied Dwellings, Placerville	1,264	1,568	2,180	2,396
Occupied Dwellings, South Lake Tahoe	—	—	4,769	6,925
School Enrollment, Grades K-8, County	2,280	5,203	8,286	8,715

*Taxable Retail Sales are in thousands of dollars.

Sources: U.S. Census; California State Department of Finance; California State Board of Equalization; Planning Departments for El Dorado County, City of Placerville and City of South Lake Tahoe; El Dorado County Superintendent of Schools.

3. CLIMATE: (P) Placerville - elevation 1890 feet, and (ST) South Lake Tahoe - elevation 6229 feet. County elevations range from 200 ft. to 10,881 ft.

	AVERAGE TEMPERATURES						*RAIN Inches (P) (ST)		HUMIDITY					
	Minimum (P) (ST)		Mean (P) (ST)		Maximum (P) (ST)				8 a.m. (P) (ST)		Noon (P) (ST)		8 p.m. (P) (ST)	
January	30	18	40	27	50	36	7.83	6.13	80	70	70	75	85	85
April	38	27	53	39	68	51	3.49	2.10	70	60	55	70	50	80
July	52	44	74	61	95	78	.01	.26	50	30	30	35	25	50
October	40	32	57	45	74	58	2.09	1.90	55	70	40	35	35	45
Year	40	30	56	43	71	55	40.27	30.90	64	58	49	54	49	65

*Includes moisture content of snowpack. Average snowfall for Placerville area is 5.5 in. and 215.4 in. for South Lake Tahoe. Cool nights during the summer months. High for the summer months is in the 90's but low humidity, about 27%, makes comfortable daytime temperatures.

In winter, occasional snow flurries in Placerville. Greatest depth of snow in the eastern part of the county at the higher elevations. Good skiing.

Winter lows in the 20's but there are many bright sunny days. Average breeze 10-15 mph except in stormy weather from about January to March.

Prevailing winds: Generally West; South and Southwest in winter months. Mean hourly speed: 6 MPH.

Source: U.S. Weather Bureau.

4. TRANSPORTATION

RAIL: Southern Pacific between Sacramento and Placerville; rail service between Camino and Placerville maintained by the Michigan California Lumber Company.

TRUCK: Eleven major carriers with over-night service to San Francisco Bay Area points, Los Angeles and Reno, Nevada.

AIR: South Lake Tahoe County Airport with daily commercial flights to major California cities; Sacramento Metropolitan Airport, 50 miles west of Placerville, and Reno Airport, 60 miles northeast of South Lake Tahoe, with passenger and air freight service to major cities in nation; executive air facilities at Cameron Park, Georgetown and Placerville.

BUS: South Lake Tahoe; continuous public inter-city bus system with ski bus in winter. County; Greyhound - 4 bus trips daily connecting Placerville and South Lake Tahoe to all points east and west; schedule reduced by 2 trips each direction during winter months. Pilot rural transportation program being assessed for feasibility.

WATER: From Placerville it is 50 miles to the Port of Sacramento, 65 miles to the Port of Stockton, and 130 miles to the coastal ports of Oakland and San Francisco.

HIGHWAYS: Transcontinental U.S. 50 crosses El Dorado County East and West through Placerville and South Lake Tahoe connecting with California's major North-South freeways in Sacramento and is built to freeway standards between Sacramento and Riverton in central El Dorado County. The major North-South routes in El Dorado County are State Highway 49 through Placerville and State Highway 89 through South Lake Tahoe.

5. INDUSTRIAL SITES

a. **GENERAL:** There are over 2,500 acres of land zoned for industry in El Dorado County. Most of the acreage is level with good drainage and bearing capacity and has rail and highway access.

b. **CAMERON PARK INDUSTRIAL:** 300 acres, 17% occupied; manufacturing, R & D distribution; rail borders property; utilities available; terrain is flat to gentle with good drainage and bearing capacity.

c. **CAMERON AIR PARK:** 48 light industrial sites on 4,000 ft. FAA runway; all improvements in; ground level with good drainage and bearing capacity; 25% available with sites from 1/4 to 4 acres.

d. **DIAMOND INDUSTRIAL PARK:** 13 acres, 60% occupied; zoned for heavy and light manufacturing; 18" water and 6" sewer lines; on rail with County road through property; sites are level to gentle with good drainage and bearing capacity; owned by local development corporation with location assistance available.

e. **GEORGETOWN INDUSTRIAL CENTER:** a new light manufacturing park on County land at the Georgetown Airport; 70 acres, 100% available; water will be available in January '75; ground level to gentle with good drainage and bearing capacity; electricity in; community assistance available for industrial locations.

Site data compiled in cooperation with: El Dorado County Planning Department; El Dorado Irrigation District; El Dorado County Industrial Development Corporation; Georgetown Divide Public Utility District; City of Placerville.

6. WATER SUPPLY

Name of Supplier: El Dorado Irrigation District serving central, southern and western portions of the county;

El Dorado Hills: Capacity: 4 mill/gal/day.
Estimated Use: 1.3 mill/gal/day

Cameron Park: Capacity: 1.5 mill/gal/day
Estimated Use: 1.1 mill/gal/day

Diamond Springs: Capacity: 2.5 mill/gal/day
Estimated Use: 2.1 mill/gal/day

Smith Flat: Capacity: 2.4 mill/gal/day
Estimated Use: 1.2 mill/gal/day

Pollock Pines: Capacity: 1 mil/gal/day
Use: 5 mill/gal/day

Cost per 1,000 gal. in quantities of 100,000 gal/month; \$0.04.
Cost per 1,000 gal in quantities of 1,000,000 gal/month; \$0.035
Water connection charge: \$155.00 - 3/4"; \$210.00 - 1"; ; larger service at cost.

6. WATER SUPPLY (continued)

Name of Supplier: Georgetown Divide Public Utility District, serving the Georgetown Area.

Present capacity: 0.25 mill/gal/day
Present Use: 0.25 mill/gal/day

Proposed estimated completion date; end of 1974
Estimated capacity: 1.5 mill/gal/day
Estimated use: 0.3 mill/gal/day

Auburn Lake Trails Area
Capacity: 1.8 mill/gal/day
Use: 0.4 mill/gal/day

Name of Supplier: City of Placerville.
Maximum pumping capacity: 2.5 mill/gal/day
Average consumption: 1.5 mill/gal/day

Cost per bi-monthly period:
1,000 cubic feet \$4.15
10,000 cubic feet \$18.25
100,000 cubic feet \$108.25

Water connection charges:
3/4" meter; \$105 plus \$2.70 per ft. plus 10%
1" meter \$165 plus \$2.85 per ft plus 10%
2" meter \$240 plus \$3.50 per ft plus 10%

LAKE TAHOE BASIN: Eight water supply companies serve the Lake Tahoe area of El Dorado County.

Names of Suppliers: Angora, Cave Rock, Lukins Brothers, Tahoe Paradise and Tahoe Sierra Water Companies.

In South Shore area: Tamarack Mutual Water Co. (Meeks Bay) and Tahoe Cedars Water Co. (Tahoma)

Source of supply is primarily from deep wells. Capacities are sufficient for current demands and necessary reserves.

Details concerning pumping capacities, rates and connection fees available through the individual companies. Service area identifications are available from the office of the South Lake Tahoe Chamber of Commerce, Highway 50, South Lake Tahoe.

7. SEWER SERVICE

Name of Supplier: El Dorado Irrigation District with treatment facilities at:

El Dorado Hills: Primary and secondary treatment with 750,000 gal/day capacity and 350,000 gal/day peak flow.

Cameron Park: Primary treatment with 150,000 gal/day capacity and 350,000 gal/day peak flow. (Capacity to 950,000 gal/day in 1973).

El Dorado: Primary treatment with 200,000 gal/day capacity and 250,000 gal/day peak flow.

Camino Heights: Primary treatment with 100,000 gal/day capacity and 20,000 gal/day peak flow.

Sewer service charge: \$3.00 per month.

No facilities for non-recoverable industrial waste water. Sewer connection charge at cost.

Name of Supplier: City of Placerville.

Capacity of sewer plant: 800,000 gal/day; peak capacity 1.76 mill/gal/day.

Sewer service charge: \$2.00 per month.

Type of treatment plant: Primary and Secondary
No facilities for non-recoverable industrial waste water.
Sewer connection charge: \$250.00

Name of Supplier: South Tahoe Public Utility District, serving south end of Tahoe Basin from Emerald Bay to Stateline, Nevada

Capacity of sewer plant: 7.5 million gal/day; Peak flow, 4.50 million gal/day

Sewer service charge: \$30.60 per year.

Type of treatment plant: Primary, secondary, tertiary.
No facilities for non-recoverable industrial waste water.

Sewer connection charge: \$240.00 permit plus installation from property line.

Name of Supplier: Tahoe City Public Utility District (present service to D.L. Bliss State Park.

Capacity of sewer plant: 3.3 mill/gal/day; peak flow, 5 mill/gal/day

7. SEWER SERVICE (continued)

Sewer service charge: \$50.00 per year.

Type of treatment plant: Primary

No facilities for non-recoverable industrial waste water.

Sewer connection charge: \$225.00

8. STORM DRAINS & FLOOD CONTROL

Master plan of storm drains has not been adopted for South Lake Tahoe portion of County but studies are presently underway.

9. STREET IMPROVEMENTS

Dedication requirements: Per City of Placerville, City of South Lake Tahoe, and El Dorado County.

Improvement requirements: Per City of Placerville, City of South Lake Tahoe, and El Dorado County.

10. NATURAL GAS

Name of Supplier: South Tahoe Gas Company.

For rates applicable to South Lake Tahoe area, contact the South Tahoe Gas Company office, Highway 50, South Lake Tahoe.

NO NATURAL GAS SERVICE ELSEWHERE IN COUNTY

Liquidified bottled and bulk gas available from local distributors

11. ELECTRICAL POWER

Names of Suppliers: Pacific Gas and Electric Company; Sierra Pacific Power Company.

For Western El Dorado County rates contact the PG&E office at 516 Main Street, Placerville; for Lake Tahoe area rates contact Sierra Pacific's office at 3320 Sandy Way, South Lake Tahoe.

12. TELEPHONE

Name of Supplier: Pacific Telephone Company.

For rates and types of service in Western El Dorado County, contact the Pacific Telephone office at 525 Main Street, Placerville; for Lake Tahoe area rates contact Pacific Telephone office at 1900 Lake Tahoe Boulevard, South Lake Tahoe

13. GOVERNMENTAL FACILITIES - TAX AND INSURANCE RATES

El Dorado County has the general law type of government with two incorporated cities. The City of Placerville and the City of South Lake Tahoe both have the Council-Manager form of government.

Assessed Valuations:
El Dorado County (1973/74) . . . \$237,459,773.00
Placerville - City (1973/74) . . . 14,956,443.00
So. Lake Tahoe-City (1973/74) . . . 79,023,053.00

Ratio of assessed value to appraised value: 25% of real cash value.

City of Placerville:

Combined total property tax rates (1973/74) per \$100 assessed value. Code Areas 1-00/1-16: Total \$9.68 - \$11.16.

County: \$2.80. School: \$5.69

City tax rate: \$1.50

Adjacent unincorporated areas:

Code areas 90-00/90-25:

TOTAL TAX RATE: \$8.81 - \$10.01

County - outside: \$3.10. School: \$5.69

City of South Lake Tahoe:

Combined total property tax rates (1973/74) per \$100 assessed value. Code areas 2-01/2-11

TOTAL: \$8.48 - \$10.34

County: \$2.80. School: \$4.04

City tax rate: \$1.55. Other \$1.23 - \$1.90

Adjacent unincorporated areas: Code Areas 75-00/75-43

TOTAL TAX RATE: \$7.22 - \$10.12

County - outside: \$3.09. School: \$4.04

Retail Sales Tax: State 5%; City/County 1%; Total 6%

Police Departments

City of Placerville: Chief of Police, 4 sergeants, 10 officers, 2 meter maids, 5 dispatchers, 10 reserves, 1 police clerk, 8 vehicles.

13. GOVERNMENTAL FACILITIES

TAX AND INSURANCE RATES (Continued)

City of South Lake Tahoe: Chief of police, 1 captain; 2 lieutenants, 10 sergeants, 26 officers, 8 dispatchers, 1 police secretary, 20 reserves, 1 police maintenance man, 1 property identification clerk, 16 vehicles.

County of El Dorado, Sheriff's Department: Sheriff, Under Sheriff, 2 captains, 3 lieutenants, 9 detectives, 9 sergeants, 59 deputies, 20.75 sheriff's clerks & matrons, 2 cooks, 1 reserve force co-ordinator, and 45 resident deputies. New sheriff's department substation at South Lake Tahoe has been completed.

Fire Departments

Placerville Fire Department: 4 firemen, 29 volunteers, 3 pumpers, 2 pickups & 2 attack trucks, 1 tank truck, 1 snorkel.

South Lake Tahoe Fire Department: 37 firemen, 15 cadets, 3 pumpers, 1 reserve pumper, 1 snorkel, 2 tankers, 5 staff vehicles.

Other fire fighting agencies in the county include: American River Canyon Volunteer Fire Dept., Cameron Park Fire Dept., Camino/Pollock Pines Fire Dept., Coloma/Lotus Fire Dept., Diamond Springs Fire Dept., El Dorado Fire Protection District, El Dorado Hills Fire Dept., Garden Valley Volunteer Fire Dept., Georgetown Fire Dept., Lake Valley Fire Dept., Meeks Bay Fire Dept., Northside Volunteer Fire Dept., Omo Ranch Volunteer Fire Dept., Pioneer Volunteer Fire Dept., Pleasant Valley Fire Protection District, Rescue Volunteer Fire Dept., Shingle Springs Fire Dept., California Division of Forestry and U.S. Forest Service.

Fire Insurance Classifications - source of Rating:
Pacific Board of Fire Underwriters.

City of Placerville rating 5 & 8. Adjacent unincorporated areas 8

City of South Lake Tahoe rating 6 & 9. Adjacent unincorporated areas 6 & 9.

Major Improvement Projects

City of Placerville's east end sewer project; City of South Lake Tahoe's community swimming pool and center; City of South Lake Tahoe and El Dorado County combined police and sheriff facilities; South Tahoe Public Utility District's extension of sewer services to Fallen Leaf Lake and Angora Highlands; Georgetown Divide Public Utility District's water treatment and distribution service project for the Georgetown area; El Dorado Irrigation District's extension of water service to Pleasant Valley area, water and sewer services for Kirkwood Meadows ski and community development and engineering for expanded water services in central and southern portions of Western El Dorado County; Cameron Park sewer plant expansion to 950,000 gal/day capacity; County office complex, City of Placerville, underway; County office complex, South Lake Tahoe; Completion of 4 lane U.S. 50 between Sacramento and Riverton; Extension of Carson Road to parallel U.S. 50; Improvements to Green Valley Road; New County Museum, Placerville; New and proposed shopping centers in Placerville, South Lake Tahoe and Cameron Park; New school buildings at Buckeye, Mother Lode and El Dorado Union High schools.

14. EL DORADO COUNTY LABOR MARKET AREA - JUNE 1973

Area includes all of El Dorado County.

Estimated area population: 53,300

Civilian Labor Force: 25,275

Labor force employed: 22,675

Labor force unemployed: 2,600 - 10.3%

600 Agriculture

1100 Construction

1200 Manufacturing

700 Transportation/Communications/Utilities

3200 Retail/Wholesale Trade

875 Finance/Real Estate/Insurance

3175 Services

2800 Government

Note: Data does not include jobs outside County boundaries. There is a high percentage of County residents employed in Sacramento County and at Stateline, Nevada. Data also does not include self-employed, domestics or seasonal agricultural and packing jobs.

Source: Employment Development Research, San Francisco