

MECCA

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June 4, 1976

Subject: PRELIMINARY REVIEW OF THE ECONOMIC POTENTIAL OF THE
MINING OF THE DRY GULCH PLACER DEPOSIT

Introduction: The Dry Gulch Placer is a gold-bearing alluvial in the Humboldt Range of Pershing County, Nevada. It has been mined by small-scale methods for about 95 years. Recently, exploitation of the deposit was attempted by Monarch Royalty, but the operation was short-lived. Following a comprehensive prospecting and sampling program carried out in the Spring of 1973, a group of investors headed by Mr. Carl Long formed a partnership to mine the gold-bearing gravels. Under his leadership a plant was built, equipment for the transport of the gravel was purchased, a pipeline was installed, and other facilities were provided at the site. For a short period of time the deposit was mined and processed with a peak production of about 600 yards a day. Reliable records are not available to the writer regarding the gold recovery or the cost of the operations. The writer has viewed a number of "superintendents' daily records" showing up to 25 ounces of gold a day from production of 600 yards of gravel. The operations were suspended in December, 1974. As to the salient reasons for the failure, the writer can only conjecture that the lack of skill and the flagrant theft of the product contributed greatly. In Lovelock, the narrative of the history of that short operation is told with amusing anecdote. Otherwise, the reasons for the failure have no practical significance.

The processing plant and pipeline have been removed from the site, having been sold for indebtedness to the F.D.I.C., Mecca and an associate, Grizzly Corp., signed a lease and option on the property effective November 15, 1975. The lease has a life of 99 years, and requires a minimum payment of \$1000.00 a month royalty contributing, and an end price of \$1,250,000.00. The basic royalty is 5%, with an additional 5% payable against the indebtedness on the equipment that was on the site when the lease was signed. In the opinion of Meccas' counsel, the fact that the equipment is no longer available to us renders the additional 5% royalty provision unenforceable.

From the time of signing the lease, Mecca has performed significant engineering studies on operations methods and processing of the product.

General Information. The property is located on the east slope of the Humboldt Range, easterly from Oreana, Nevada. Access is by State Highway 50 from both Oreana and Imlay. The 5000 feet elevation and good access should enable year-round operations to proceed without much weather problem.

History of the district dates to 1868 when lode mining was done in the area. Mark Twain and Phoebe Hearst are among the famous residents in the hey-day of early activity. Placer mining began in 1881, and since then the placer deposits have attained the greatest output of any in the State of Nevada. It is reported that between the years 1884 and 1895 about 3000 Chinese placer miners were employed in the district. The remains of that work by Chinese is evident in Dry Gulch and Spring Valley where hundreds of narrow shafts are open to view.;

From 1910 to 1914, Federal Mines Company operated a dredge in Spring Valley. Another dredging operation was run from 1947 to 1949. Both operations were apparently successful. Gold was \$18.00 during the period of the former operation and \$35.00 during the latter.

The geology of the operation is not significant to the mode of operation, except that the bed-rock is of rhyolitic composition and easily recognized as true bed-rock. The upper surface of the bed-rock in many places contains rich accumulations of placer gold in cracks and crevices. There are occurrences of "false bed-rock", generally indurated clay, which in some places provides a higher-grade streak. In this deposit the extraction of the gravel is not very selective and generally all the gravels in a given area are taken up and processed. We have measured depths of gravel to 75 feet, which is well within the economic limit for excavation. As compared to mining of underground ore deposits, the process is simple and does not require substantial costs in development of reserves..

Ore Reserve Calculations. Previous investigators estimate the volume of extractable gravel in Dry Gulch to be 6,500,000 yards. Since some was mined by the last operation, the writer prefers to estimate the volume at 6,000,000 yards. Also, the Chinese may have moved and cleaned about 20% of the material in the early days. The calculations consider that contingency.

Calculations.

<u>Area</u>	<u>Total yards</u>	<u>Yards recoverable</u>	<u>Ave. Value/yard</u>	<u>Total Value</u>
P1	250,000	200,000	\$6.87	\$1,374,000.00
P2	335,000	268,000	9.97	2,671,960.00
P3	415,000	332,000	2.25	747,000.00
P4	500,000	400,000	3.80	1,520,000.00
P5	500,000	400,000	9.97	3,988,000.00
P6	600,000	480,000	6.03	2,894,400.00
P7	1,000,000	800,000	6.67	5,336,000.00
P8	1,150,000	920,000	10.69	9,834,000.00
P9	1,250,000	1,000,000	1.36	1,700,000.00
	6,000,000	4,800,000	(\$ 6.40) (\$ 6.26)	\$30,065,000.00

Gold @ \$127.00

Silver nil in calculations

The above calculations were based on the previous investigators' sampling results. Our experience in testing and sampling shows somewhat lower values recovered. It is possible that the other engineer had a better recovery with his sampling method. Also, he ran larger and more samples, which in a placer deposit, usually gives a slightly higher average. The experience of the writer compels him to reduce the values recovered figure for economic evaluation purposes. Accordingly, the figures have been reduced by one-third, giving a value recoverable of one gram per yard or \$4.08 at the price of \$127.00 per ounce.

Economic evaluation.

Production cost per yard (estimated)

Mining	\$1.50
Processing	.50
Royalty	.20
Overhead	.30
Development	.10
Amortization	.20
Total	\$2.80

Value of ore per yard	\$4.08
Production cost " "	2.80
Profit " "	\$1.28

Volume of reserves 4,800,000 yards

Projected profit

@1000 yards/day 300,000 yds/yr. X \$1.28 = \$384,000.00/yr.

@2000 yards/day 600,000 yds/yr. X \$1.28 = \$768,000.00/yr.

Total projected profit exclusive of

taxes, depletion and depreciation:

4,800,000 yards X \$1.28 = \$6,144,000.00

The calculations above include only the Dry Gulch deposit, about half of the ground under lease. Data is being developed on the other. Also, the projections ignore the possibility the price of gold may increase when the IMF runs its course and completes its sale program in four years. In final conclusion, a placer deposit among commercial gold deposits is the more easily and economically mined.