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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number
N-63126

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MINERAL REPORT

Validity Examination of Six Mining Claims
within the West Half of Section 14
T. 23 S., R. 63 E.,
Mount Diablo Meridian
Clark County, Nevada

LANDS INVOLVED
W. ½, Sec. 14, T. 23 S., R 63 E., MDM
320 acres, more or less

Prepared by:

Signature
Matthew W. Shumaker
Senior Geologist
BLM National Training Center
CRME 028
10-19-1999
Date

BUREAU OF LAND MANAGEMENT CERTIFIED Matthew W. Shumaker REVIEW 028 MINERAL EXAMINER U.S. DEPARTMENT OF THE INTERIOR

Signature
Burrett W. Clay
BLM National Training Center,
Chairman, BLM Mineral Examiner
Certification Panel
CRME 001
10-19-1999
Date

BUREAU OF LAND MANAGEMENT CERTIFIED Burrett W. Clay REVIEW 001 MINERAL EXAMINER U.S. DEPARTMENT OF THE INTERIOR

Technical Review and Approval:

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Roger A. Haskins
Senior Geologist,
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Member, BLM Mineral Examiner
Certification Panel
Washington, DC
CRME 003
10/22/99
Date

BUREAU OF LAND MANAGEMENT CERTIFIED ROGER A. HASKINS REVIEW 003 MINERAL EXAMINER U.S. DEPARTMENT OF THE INTERIOR

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Glenwood Kerestes
Senior Mining Engineer
Member, BLM Mineral Examiner
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Montana State Office
CRME 009
10-21-99
Date

Signature
Roy Drew
Senior Geologist
Member, BLM Mineral Examiner
Certification Panel
Colorado State Office
CRME 022
10/26/99
Date

BUREAU OF LAND MANAGEMENT CERTIFIED Roy Drew REVIEW 022 MINERAL EXAMINER U.S. DEPARTMENT OF THE INTERIOR

Signature
Victor Dunn
Senior Mining Geologist,
Member, BLM Mineral Examiner
Certification Panel
Winnemucca Field Office
CRME 016
11/1/99
Date

BUREAU OF LAND MANAGEMENT CERTIFIED Victor C. Dunn REVIEW 016 MINERAL EXAMINER U.S. DEPARTMENT OF THE INTERIOR

Management Acknowledgment

Signature
Michael F. Dwyer
Bureau of Land Management
Field Manager
Las Vegas, Nevada
11/5/99
Date

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Summary
Burrett Clay and Matthew Shumaker were asked to investigate the validity of the Mijo 16 unpatented association placer mining claim, located in Section 14, T. 23 S., R. 63 E. Mount Diablo Meridian, in Clark County, Nevada. The claimant, reported to us as Ian Matheson, was said to be removing common variety mineral material from the mining claim, and selling it. Matheson asserted that the mineral material was "tailings" from his gold and silver operation. Matheson stated that, although gold was the metal of his primary interest, the material on the claim also contains platinum and related elements in very high concentrations.

Because of the immediate proximity, we added the Mijo 17 unpatented association placer mining claim to the examination. We later determined that a number of lode mining claims duplicated the same ground as the association placers, so we included them in this examination. The Mijo 16A, Mijo 16B, Mijo 17A, and the Mijo 17B unpatented lode claims have been located on ground that is included within the Mijo 16 and 17 unpatented association placer claims. This report is applicable to the lode mining claims, as well. The association placer claims have been through transfers of full and partial interest between associated locators. We did not undertake a thorough title history evaluation.

The Mijo group is located on a typical basin and range fanglomerate, with a southerly slope. From 1908 to about 1937, there was minor gold prospecting and very minor gold production about one to two miles away. There is no history of precious metal interest on the claims themselves reported in the literature.

We made four site visits during the examination. During these visits, we determined that there was not a gold and silver mine in operation, nor had there ever been any such activities beyond small scale prospecting. During these visits, we collected 14 samples, ranging in size from 0.025 cubic yards (about a five gallon bucket full) to about 2/3 cubic yard. We had been assured by Matheson that the gold and silver were largely homogeneously distributed, and in the minus 1/4 inch fraction; that this was a "new kind of deposit" which did not behave like a typical precious metal deposit, whether lode or placer. Therefore, the normal parameters applied to lode or placer sampling did not apply.

Matheson provided us with a prodigious volume of information. Much of the information was in the form of assay reports from small laboratories not normally used by the larger mining industry. Almost without fail, the precious metal concentrations reported by these labs ranged from merely high to spectacularly high. Unfortunately, the information was not organized or presented in such a way as to allow us to determine precisely where the samples were collected, what part of Eldorado Valley they were from, or if they were even from the vicinity of the claims in question. In almost every case, the assay methods employed were unusual or proprietary.

Matheson also provided information on the mineral processing facilities and techniques he planned to use. The two major facilities were Energy International of Phoenix, Arizona, and Utah Minerals Processing of Tooele, Utah. In both cases, the precious metal recovery system appeared to involve some form of thiourea. However, the actual process was said to be proprietary, and we could not obtain specific information on the reagents or the processes. Neither facility had obtained a complete set of operating permits. We were assured that Energy International, once financing materialized, would construct a major recovery facility at the old Clarkdale, Arizona copper mill's slag pile. At that facility, to be called "Resource Enhancement, Inc.," Matheson's mineral matter was to be processed to

remove gold using the same processing circuit which was to be used to recover iron and silica from the Clarkdale slag. Resource Enhancement had not obtained any permits for a processing plant in Clarkdale.

We had samples analyzed at three laboratories of Matheson's preference. Those were White Technologies (White), in St. George, Utah, Complex Metals Research (Complex Metals), in Hurricane, Utah, and Metallurgical Research and Assay Laboratory (MRAL), in Henderson, Nevada. In addition, we selected Legend and Chemex, in Reno, Nevada, and Bondar-Clegg in Vancouver, British Colombia.

The costs of assaying at White, Complex Metals, and MRAL was significantly higher than at labs normally used by the larger mining industry. Matheson attributed the additional cost to the exceptional experience of the assayers, and the individual attention that they gave to each sample. The conditions at each laboratory belied Matheson's description. The labs ranged from cluttered in the case of MRAL, to cluttered with unsafe practices at White, to filthy at Complex Metals.

Each suite of samples that we submitted to each laboratory contained at least two blanks. All but one suite included a standard or known reference material. For samples submitted to White, Complex Metals, MRAL, and Legend, one blank was clearly marked and identified as a blank, and at least one sample from one, or both of our yards, at our homes in central Arizona, was labeled as an actual Mijo group sample.

White, Complex Metals and MRAL reported that the blanks we had marked as blanks were barren of precious metals. However, for the blanks that we had labeled as actual samples, they reported very high values for precious metals. Standard and known reference materials were submitted to Complex Metals and MRAL. Their reported results did not even come close to the standard values, and there was no discernable pattern to the resulting concentration scatter. The samples that we submitted to Complex Metals were tampered with by the addition of precious metals while in the possession and control of the assayer, Jerry C. Henderson. We determined that White Technologies, Complex Metals, and MRAL had reported unreliable results, so we disregarded them in our economic analysis.

Legend, Chemex, and Bondar-Clegg reported that the blanks marked as blanks were barren, and that the blanks marked as actual samples were also barren. We submitted standard and known reference materials to Legend, Chemex, and Bondar-Clegg. Their reported results were within an acceptable analysis range. We determined that the results reported by Legend, Chemex, and Bondar-Clegg were reliable, and they were used in our economic analysis.

The values of platinum and related metals that were reported to us by Matheson and his preferred assayers could not be verified. Results from traditional laboratories, including Bondar-Clegg using their nickel sulfide collector fire assay, indicated the presence of platinum group elements in concentrations no greater than the average crustal abundance of these elements.

The very best reliable result, reported by Bondar-Clegg, a laboratory that reported reproducible results, contained a gross value of about thirteen cents of gold per ton of mineral matter. The claimant's own proposed costs for mining, screening, and magnetic separation are $1.00 per ton which leaves a loss of $0.87 per ton on that phase of the operation alone.

Conclusions and Recommendations for:

Validity Examination of Six Mining Claims
within the West Half of Section 14
T. 23 S., R. 63 E.,
Mount Diablo Meridian
Clark County, Nevada

Serial No. N-63126

Matthew W. Shumaker
Burrett W. Clay

Conclusions

The following mining claims do not contain a deposit of valuable minerals in quantity and quality such that a person of ordinary prudence would be justified in the further expenditure of labor and means with the reasonable expectation of developing a valuable mine.

Name	BLM Record No.	Type	Name	BLM Record No.	Type
Mijo 16 "A"	NMC 735192	Lode	Mijo 16	NMC 293590	Placer
Mijo 16 "B"	NMC 735193	Lode	Mijo 17	NMC 293591	Placer
Mijo 17 "A"	NMC 735562	Lode			
Mijo 17 "B"	NMC 735563	Lode			

We believe that the results of assays provided to us by White Technologies and MRAL are severely inaccurate, due to incompetence, fraud, carelessness, or all three. However, because they reported blank samples identified as blank to have no values, and blanks numbered as actual samples to contain significant values argues for fraud.

We believe that the results of assay provided to us by Complex Metals may be fraudulent. They are the result of the addition of foreign matter to our samples while in the possession and control of Jerry C. Henderson. The foreign matter consists of small silver alloy spheroids.

Recommendations

We recommend that contest should be initiated against the above described mining claims charging that:

- Minerals have not been found in quantity and quality such that a person of ordinary prudence would be justified in the further expenditure of labor and means with a reasonable expectation of developing a valuable mine.
- The mining claims are not held in good faith.

1. Introduction

On February 22, 1999, Shumaker and Clay were asked by the Deputy State Director for Minerals (DSD), of the BLM Nevada State office, Tom Leshendok, to undertake a validity examination of an association placer mining claim near Boulder City, Nevada. We subsequently included an adjacent association placer mining claim in our examination, plus four lode mining claims that were colocated on the same ground.

We were informed that the claimant, K. Ian Matheson, under the corporate name of "Pass Minerals" had been removing and selling mineral material that had been crushed, screened, and blended to meet local "type 2 road base" standards. The physical removal was conducted under contract with Pass Minerals by Hanson Aggregates, of Las Vegas. Hanson is a large, multinational aggregate producer. The Las Vegas Field Office (LVFO) issued a notice of trespass on January 11, 1999 to Hanson and Pass Minerals, and removal ceased. Hanson had removed 23,168 tons of material before operations ceased.

"Type 2 road base" consists of specific proportions of sand, gravel, clay and silt designed to pack well in road construction. "Type 2 road base" has other names in other geographic regions, but is commonly used as foundations for paved roadways, and as the surface on gravel roads. "Type 2 road base" and related mineral material commodities, are common variety minerals not subject to location under the Mining Law of 1872, as amended. In our briefing with the DSD, we were informed that Matheson had asserted that the road base material was "tailings" from his not yet producing gold and silver operation, so as to obtain title to the common varieties. Matheson has provided a plethora of information to us by telefax, including copies of what appear to be assay reports for these and other mining claims. Through this information, and in discussions with Matheson, we determined that gold was the metal of his primary economic interest. Matheson reported that silver and platinum group elements were present, but were of secondary interest to him.

Matheson evidently has a number of mining claim interests or mining interests in the Eldorado Valley, including interests in the vicinity of Searchlight, Nevada, some 20 miles to the South. Matheson is apparently a share holder in Delgratia, which was recently renamed "Central Minera." Many of the assay reports provided to us by Matheson appear to be from the immediate area of Delgratia's "Josh" project. Delgratia's Josh Project near Searchlight received considerable unfavorable press, when in 1997 it was discovered that their samples had been tampered with. The Delgratia affair has been covered by the Bloomberg News and the Northern Miner (Attachments 1-1 and 1-2).

2. Lands Involved, Status, and Mining Claim Records

There are a few mining and millsite claims located in the vicinity of this examination (Attachment 2-1) The two 160 acre placer mining claims involved, "Mijo 16" (NMC 293590), and "Mijo 17" (NMC 293591), are located by aliquot parts near Boulder City, in Clark County, Nevada (Figure 1). They were located by eight persons on December 16, 1983 (Attachment 2-2). Hereinafter, they will be referred to as the Mijo group. Occupying a portion of the land embraced by the Mijo 16 and Mijo 17 association placer claims are the four lode mining claims. They are:

Mijo 16A (NMC 735192), located 3/15/96 Mijo 16B (NMC 735193), located 3/15/96

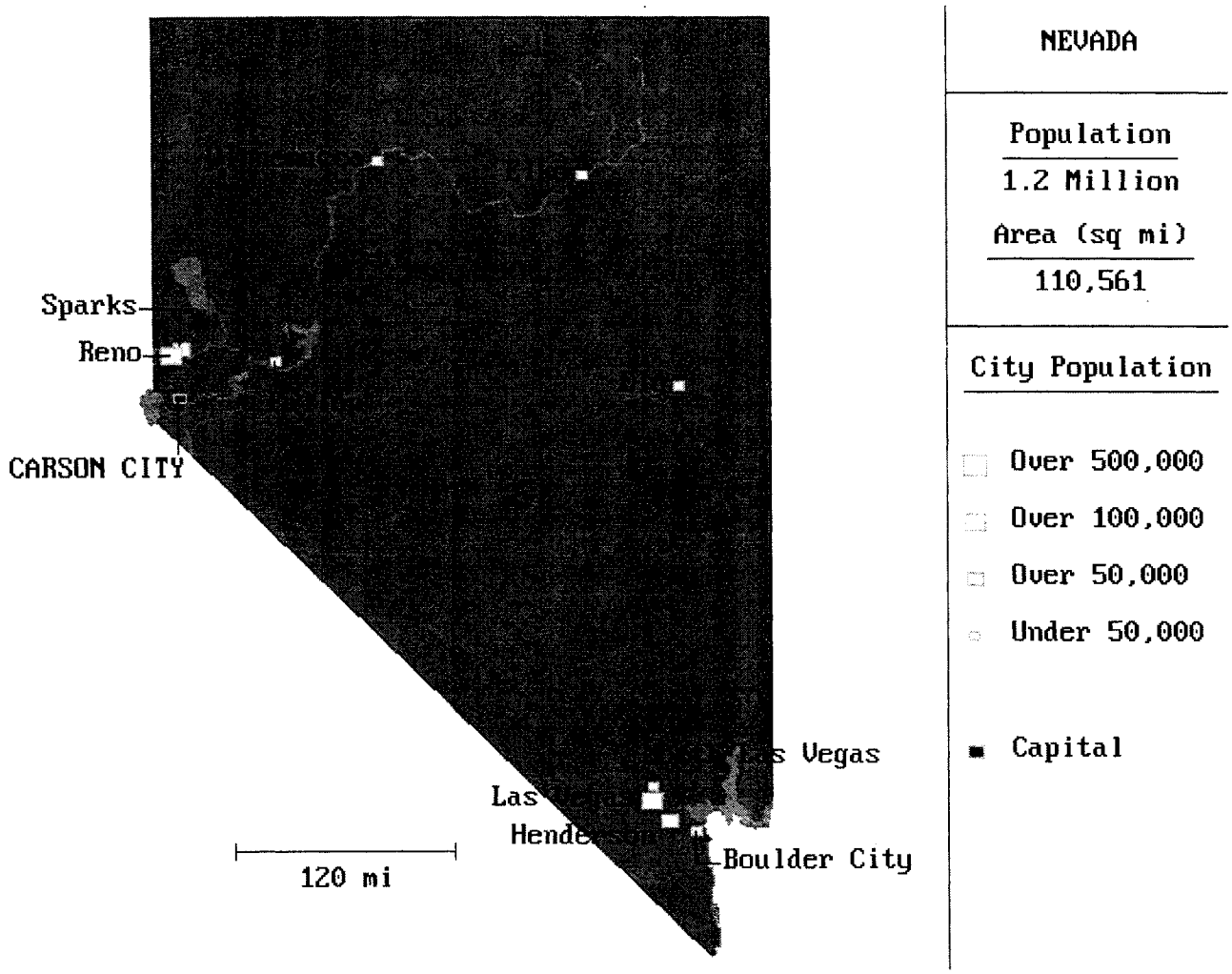


Figure 1 Nevada Location Map. Mijo Group is located about 2 miles southwest of Boulder City. (Map courtesy of Texas Agricultural Extension, 1999.)

Mijo 17A (NMC 735562), located 4/2/96 Mijo 17B (NMC 735563), located 4/2/96

All six mining claims are located on lands covered by this validity examination, and the results apply to all of them.

The mining claim block is within the northern Eldorado Valley. The nearest major geographic feature is Railroad Pass, about two miles due north of the subject mining claims. Railroad Pass is the site of a casino, on U.S. Highways 93 and 95. The nearest town, about two miles to the northeast, is Boulder City, and the Mijo group is adjacent to the PMC-Eldorado ammunition factory. Both association placer claims are located in Section 14, T. 23 S., R. 63 E., Mount Diablo Meridian. The Mijo 16 is located in N.W. 1/4 of Section 14, and the Mijo 17 is located in the S.W. 1/4 of Section 14 (Attachment 2-2 and Map 1). Both claims essentially encumber the west half of Section 14. In the same geographic area is the "Becki M" millsite claim, which duplicates ground encompassed by the Mijo 16. The "Becki M" millsite is not under investigation in this examination.

The Mijo 16 and Mijo 17 claims were located in1982 (Attachment 2-1), and are currently controlled by Matheson under two corporate names. The Mijo 16 is held by Pass Minerals. The Mijo 17 is held by Kiminco. Colocated with the Mijo 16 and the Mijo 17 are four lode mining claims. These are recorded as follows:

Name	BLM Record No.	Date of Location	Claimant	Name of Agent Locating Claim	Address
Mijo 16 "A"	NMC 735192	03/15/96	Pass Minerals, Inc.	Debra Matheson	2215 Lucerne Circle Henderson, NV 89014
Mijo 16 "B"	NMC 735193	03/15/96	Pass Minerals, Inc.	Debra Matheson	2215 Lucerne Circle Henderson, NV 89014
Mijo 17 "A"	NMC 735562	04/02/96	KIMINCO INC.	Debra Matheson	2215 Lucerne Circle Henderson, NV 89014
Mijo 17 "B"	NMC 735563	04/02/96	KIMINCO INC.	Debra Matheson	2215 Lucerne Circle Henderson, NV 89014

The land embraced by the Mijo group, plus considerable other acreage in the vicinity, was segregated from mineral entry by order number N-58331 on June 6, 1994. That segregation expired on June 6, 1999. The land was again segregated by order number N-61855, on July 23, 1997. The second segregation will expire five years from that date unless it is rescinded sooner.

3. Physical Features, Surface Improvements, and Access

Located on an alluvial fan in the far northwestern edge of the Eldorado valley, the surface of the subject mining claims is at approximately 2000 feet in elevation. Relief on the Mijo group is muted; approximately 300 feet over the mile of distance from north to south. The claims are dissected by several dry washes which run roughly north to south, but there is no perennial surface water on the claim block. Any water used must be pumped from groundwater or trucked in. Access within the claim group is not difficult for high ground clearance vehicles. A few informal roads have been established over time. Access from U.S. Route 95 is simple and is depicted on Map 1. Apart from pits and stockpiles resulting from the earlier sales of road base from Mijo 16, there are no improvements on the Mijo group. There is a steel building, a double-wide trailer, and an assortment of equipment present on the Becki M millsite, which shares ground with the Mijo 16.

4. Environmental Considerations

Air emissions resulting from a mining operation, or any other industrial enterprise, are strictly regulated. Such emissions would include particulates, carbon monoxide (CO), diesel exhaust from equipment, and evaporation of volatile organic compounds (VOCs) that may be used in processing. Of these, particulates and CO are of the greatest concern. Any reasonable mining scenario would closely resemble a sand and gravel operation. There are at least three sand and gravel plants, plus one crushed stone operation within a six square mile area. Cumulative effects may become significant. Pass Minerals asserts that it currently possesses the required air quality and groundwater permits. We did not verify those assertions, and they are not questioned herein.

5. Geologic Setting and Mining History

The Mijo group falls within the Basin and Range physiographic province of North America. This province is characterized by roughly northeast-trending linear mountain ranges separated by linear valleys. This pervasive regional horst and graben structure is commonly accepted to have been caused by faulting that resulted from large magnitude continental rifting during early to mid Tertiary time. The resulting crustal extension was irregularly distributed. This resulted in the creation of "metamorphic core complexes" in areas where the crust was thinned by relatively greater extension. This greater thinning exposed, within the core complexes, older rock units in lower stratigraphic positions that had often been altered and metamorphosed due to their greater proximity to, and interaction with, the mantle (Gans, 1996). Rifting and extension resulted in intrusion and extrusion of intermediate to felsic volcanic rocks, which are pervasive throughout the province.

In the region of the Mijo group, intrusive and extrusive rocks are felsic, and typically granitic and rhyolitic (Longwell, 1965, Pl. 1). Mafic and ultramafic rocks, such as basalt, perioditite, diorite, gabbro, and dunite are unusual and do not occur extensively. Felsic rocks are typically light colored, and contain silicate minerals including quartz, potassium feldspar and related minerals with relatively greater silicon and aluminum. Mafic rocks are normally darker, and contain dark silicates with larger proportions of iron and magnesium. Ultramafic rocks contain even greater proportions of dark silicates.

Although Nevada is noted worldwide for production of gold and silver, production in the Clark County region since the 1930s has been limited. Interest in and occurrence of gold and silver in the region appears to be geographically associated with metamorphic core complexes. Mineralization is not found primarily in the core complexes, but appears to occur in areas where complex tectonic activity, including normal faulting associated with crustal extension, has juxtaposed core complexes with Tertiary volcanic and intrusive rocks, creating fracturing, hydrothermal alteration and enrichment in the process. As is typical in the Basin and Range province, small, isolated, silicified veins with very high gold and silver values are sometimes found. Although the metal grades may be high, the veins and the precious metals are of very small extent.

Other than the Stillwater deposit in Montana, the conterminous United States are not noted for significant occurrences of platinum group elements (PGEs). Platinum group elements are also commonly referred to as "platinum group metals" (PGMs). Platinum group elements include platinum (Pt), palladium (Pd), iridium (Ir), osmium (Os), ruthenium (Ru), rhenium (Re), and rhodium (Rh). Where PGEs occur, they are almost always directly associated with ultramafic intrusive rocks (Mertie, 1969, Peterson, 1993). PGEs are sometimes recovered as a byproduct of copper smelting and refining. The PGEs make up a minuscule fraction of the copper metal. Copper production is often measured in thousands of tons of copper metal, so a minuscule fraction of PGEs eventually adds up to a quantity worth recovering.

PGEs occur in two locations within Clark County. The Boss Mine, in the Goodsprings or Yellow Pine District, is about 30 miles to the southwest. The Boss deposit occurs over a limited extent in a minor shear zone between the dolomitized basal Monte Cristo Limestone and the Valentine Limestone member of the Sultan Limestone (Longwell, 1965). The PGEs occur as an accessory mineral in a copper deposit, which may be similar to the copper deposits discussed by Peterson (1993). Minor

amounts of platinum and palladium were produced at the Boss Mine from 1916 to 1919. Limestones or shear zones that correlate to those at the Boss Mine do not occur in the vicinity of the Mijo group.

The second location reported within Clark County consists of two related prospects near Moapa, in the Copper King mining district. These two prospects are about 100 miles northeast of the Boss Mine and occur in a group of peroditite dikes. A shipment of about 46 tons prior to 1910 reportedly ran 0.13 to 0.15 troy ounces per ton (Mertie, 1969). No production has been reported from the Moapa area prospects since that time. No similar peridotite dikes occur within the vicinity of the Mijo group.

The Mijo group falls within the "Alunite" mining district. The name "Alunite Mining District" was applied as a matter of geographic convenience in the mining literature. The first exploration of the Alunite district in 1908 (Hanchett, 1908) was spurred by the discovery of the mineral, alunite, $KAl_3(SO_4)_2(OH)_6$. Alunite is frequently associated with hydrothermal alteration, and is an important indicator of gold in the Goldfield District, in Esmeralda County, about 170 miles north. Exploration at the prospect consisted of digging shallow shafts and a few short adits. A few small, high grade pockets of gold were located, but production was negligible, and the project was short-lived (Vanderburg, 1939, Longwell, 1965). Workings assumed to be remaining from the 1908 exploration are located within Sections 2 and 12, T. 23 S., R. 63 E. The nearest working to the Mijo group, about one mile to the northeast, is located on a topographic knob in the N.W. 1/4 of section 12, and can be seen from U.S. Route 95. Many remaining workings have been sealed or capped. Much of the area has been developed. The Railroad Pass Casino now occupies a portion of the Alunite prospect.

In 1915, the Quo Vadis prospect, in N.E. 1/4 of Section 13, T. 23 S., R. 62 E., was developed by one E. W. Clark of Las Vegas. Development was not extensive. Compressed air, for example, was produced by a modified Buick engine (Vanderburg, 1939). The Quo Vadis was more successful than the Alunite prospect. The small pockets of high grade material were evidently large enough at the Quo Vadis to support sporadic operation until about 1936 (Lincoln, 1923, Longwell, 1965). The Quo Vadis workings nearest to the Mijo group are about five miles to the west, across the northeastern ridge of the McCullough Mountains.

The "Blue Quartz Mine" is indicated on the Boulder City NW 7.5 min. Topographic Quadrangle in the N.W. 1/4 of Section 28, T. 23 S., R. 63 E. The map symbol on plate 2 of Longwell (1965) shows it as a small prospect for gold. However, the "Blue Quartz Mine" was not included in the text. We found no other references to the "Blue Quartz Mine."

6. Site Geology

The Mijo group is located on an alluvial fan with a gentle slope to the southeast. The fanglomerate consists of quartz monzonite and porphyritic rhyolite of the northern McCullough range (Map 2). Apart from the episodes at Alunite and Quo Vadis, both some distance away, there is no evident history of metallic mineral interest in the vicinity of the Mijo group. There has been considerable interest in the fanglomerate resources for mineral aggregates. These are mined at several locations to the south of the Mijo group and used to support the growing infrastructure of the Las Vegas area. The fanglomerate resources are made even more valuable by the resulting sprawl, which has reduced the volumes of quality aggregate available within a reasonable haul distance. CSR Aggregates of Henderson, NV, produces and hauls mineral material from Detrital Valley, 22 miles inside Arizona.

There is no geologic, physical, or geochemical evidence that would lead one to look for a precious metal placer deposit on the Mijo group. A lode source must be close enough that a transported placer deposit, caused by movement of water, could develop. Alternatively, a residual placer deposit could develop by gold particles remaining in the regolith as a lode deposit erodes and deflates. Neither situation applies to the Mijo group. The fanglomerate on the Mijo group is typical of basin and range fanglomerates, and has been transported into place. The fanglomerate is not a glacial deposit, as was suggested by Matheson during our visit of May 13, 1999. There are no lode deposits in the watershed above the Mijo group. There is no residual lode deposit nor outcrop of bedrock on the Mijo group. As shown on Map 2, the nearest outcrop of rock in place is about 1/4 mile away.

Platinum group elements are extremely rare. Ruthenium (Rh), Iridium (Ir), Osmium (Os), and Ruthenium (Ru), for example, are four of the five least common elements in the Earth's crust (Weast, 1973). Discovery of a deposit where concentrations of any of them were measured in ounces per ton would make news worldwide. The presence of PGEs on the Mijo group is extraordinarily unlikely. There are no mafic or ultramafic rocks anywhere near the Mijo group. Igneous rocks in the area are exclusively felsic. PGEs above trace levels are not normally associated with felsic rocks. Sheared limestones similar those found in the "Boss" deposit, do not occur in the vicinity of the Mijo group. The geologic environment is simply wrong.

7. Exploration Activities and Mine Workings

The presence of old workings on a property or nearby is often mistakenly assumed to be evidence of production, and therefore proof of the current presence of a valuable mineral deposit. That is, unfortunately, a poor assumption. Diamond drilling for exploration did not become widely available at a reasonable price until recent decades. Until that time, subsurface exploration was undertaken by sinking shafts and driving adits, using hand and hydraulic tools, and explosives. Once an individual exploratory working was shown to be barren or of too low a grade to produce, it was abandoned. Another exploratory working was often undertaken a short distance away. An unsuccessful exploration program of the time may have left a large number of small underground workings. Many of these workings have stood well for more than a century. Although they may signal interesting ground worth looking at during a regional exploration program, old workings do not signify present mineral reserves.

The use of terminology is important. The term "reserves" has actual, legal meaning. In essence, a mineral deposit contains reserves if the material in place can be profitably extracted and produced today, under present economic conditions. If the minerals in place cannot be profitably mined, they are not reserves. Mineral "resources" are of a quality and grade that they may be economically extractable in the future, depending on improvements in price, mine technology, or better delineation of their quality and quantity. Unfortunately, the terms "reserves" and "resources" are often used very loosely, which causes confusion.

Matheson reported that a small number of exploratory holes have been drilled on the Mijo 16 and Mijo 17. No maps showing the locations of the holes were available. There was no indication that bedrock was reached in any of the drilling. Any other exploration work on the Mijo group has evidently consisted of hand shoveling of material for some form of processing or analysis. In addition, a large number of samples collected in the southern end of the Eldorado Valley, possibly the Piute Valley,

have been reported by Matheson. These appear to be somehow related to the Delgratia Josh project, and were not collected on the Mijo group. Matheson has given us copies of a wide variety of assay reports. In every case, it is difficult or impossible to determine which sample was collected at which claim group in what area.

Bulk work that has taken place on the Mijo 16 consisted of excavations of mineral material for crushing and blending to create Type 2 road base for sale. Other mineral material was screened to about minus 1/4 inch and passed over a magnetic separator. Two piles resulted; one of nominally magnetic material, and one of nominally nonmagnetic material. We examined each pile, and determined that both piles had roughly the same concentration magnetic materials. Reportedly, only the magnetic material was to be bagged and sent to a custom mill in Phoenix, Arizona for recovery and refining. Reportedly, tests made at the Phoenix mill of Matheson's screened magnetic fraction showed extraordinarily high gold recoveries. The mill in Phoenix, "Energy International, Incorporated " (EII), is operated by Robert "Bob" Harlan Gunnison, Jr.

8. Mining, Milling, and Related Operations

There is no mining taking place on the Mijo group as of this writing. The BLM Las Vegas Field Office (LVFO) has suspended Pass Minerals' plan of operation until the completion of this examination. The magnetic separator remains on site, but idle. Matheson reports that a better separator, with unique rare earth magnets will be needed to properly separate the magnetic fraction. Apart from a small cascading tank system on the Becki M millsite, there are no processing facilities on or near the Mijo group. The system on the Becki M millsite would require serious retrofitting to be of any production benefit.

Any operation on the Mijo group will closely resemble a sand and gravel operation. There are no hard outcrops that will require blasting. Most excavation can be completed using a dozer/loader. Processing would likely be via a conveyor going to a minus 1/4 inch screen to separate the material that will be run over a magnetic separator.

Matheson reports that the minus 1/4 inch magnetic fraction will be shipped via truck to Energy International in Phoenix in large bags and processed through their two ton per hour plant. Energy International reportedly uses a proprietary and confidential "stabilized thiourea" process, and would not share the chemistry or Material Safety Data Sheets (MSDS) with us. We were assured, however, by Gunnison and Matheson, that the chemicals themselves were benign and environmentally friendly. After treatment, the waste material would contain nothing harmful, and would be dumped into a nearby urban landfill. A related company in which Gunnison is a principal, "Resource Enhancement, Inc.," is reportedly building a larger facility to reprocess copper mine tailings or slag at Clarkdale, Arizona, which we have been unable to verify as of this date. A check, by Shumaker, of corporate filings at the Arizona Corporation Commission (ACC) shows EII, but not Resource Enhancement. We were informed that Resource Enhancement would use essentially the same chemistry and process to recover all metals of the old Clarkdale mill tails, as well as process material from the Mijo group. Matheson and Gunnison gave us a copy of Energy International's cost estimate for processing, which will be covered in the Economic Evaluation section.

On March 29, 1999, Clay, Mark Chatterton, and Shumaker were given a tour of Energy International's (EII) 19th Avenue plant in Phoenix by Leon Harrington. His business card states that he is their Vice President for Project Development. That area is zoned by the City of Phoenix as A-1, light industrial. The facility appears to have, roughly estimated, 3500 square feet of industrial space under cover. EII has the facilities to perform assay work, including fire assay. The entire facility is scrupulously clean; as if it were brand new. EII has bulkhead storage for a limited tonnage of mineral matter in the back lot. About half of the bulkheads appeared to be used for vehicle parking and equipment storage (Photo P-1), plus storage of loose mineral matter in the remainder. There is no on-site provision for tailings or waste disposal. We were informed that EII would be permitted to dump the waste and tailings into a nearby landfill. We did not verify this assertion.

No flow chart was available from Energy International. However, Clay worked out a simple flow description during his visit. In essence, the mineral matter appears to enter a ball grinder via a conveyor belt (Photo P-2). Water is added to the crushed material resulting from the ball grinder, and the slurry is then pumped through a classifying device (Photo P-3). Oversize material returns to the ball mill, the slurry of undersize material is pumped through PVC pipes of about one inch diameter into a series of plastic cascading agitation tanks (Photo P-4) where it is treated with the secret, proprietary, confidential stabilized thiourea solution. Once all the slurry has been treated, the slurry is pumped, again through PVC pipe with PVC valves, to a belt dryer for removal of the solids (Photo P-5.) Pregnant solution is then piped into another part of the building for recovery of gold, silver, etc., in resin catalyst columns (Photo P-6). We were not informed what the resins were.

We observed a number of anomalies that at first appeared minor, but, taken together, had a significant effect on our opinions of any potential use of the circuit. The EII circuit requires a number of electric pumps to circulate fluids and slurries. Almost every pump was mounted on a wood product base that had been secured to the concrete floor. These wood products included plywood, flakeboard (intended for construction use for sheathing in dry areas), and particle board. In every case, any period of dampness would cause these wood bases to disintegrate. The pump would dislodge and the circuit would either shut down, or a flood would result. Pumps and other equipment are mounted on wood, particle board, and other water sensitive bases in a number of places, as indicated by Photos P-7, P-8, and P-10. We have examined many mills that use water solutions for processing. Although they take great efforts to manage water for safety reasons, they are always wet. Water sometimes splashes from the tanks. Slurry and solution lines leak. Workers clean off equipment with hoses. Water is just a fact of life. Pumps and similar equipment are normally bolted to steel frames, or directly to a concrete floor. Oddly, it appears that only insignificant water, and certainly not anything dirty, has ever been spilled at EII.

In addition, belt dryers that separate moisture from tailings material are routinely dirty. The very fine, solid, tailings are supposed to fall off and be scraped off into the receiving hopper shown in the lower right of Photo P-5 and in P-9. Not all of the solid material lands where it is supposed to, and a small, damp pile of it will develop under the end of the belt, behind the support timbers. There is no evidence that this drying unit has been used for anything but insignificant volumes. Also in the lower center of Photo P-5, yet another pump is mounted on the floor on flake board. This is an area where dampness can be expected, with resulting failure of the pump mount.

We were surprised at the number of PVC pipes that looked like they were intended to transport slurries. We were even more surprised to find that the valves in these lines were simple, hardware store type, PVC plastic valves. PVC pipe is intended to convey water and nonreactive fluids. A slurry will be abrasive which greatly reduces the life of the pipe. We were impressed with the overall cleanliness of the entire work area. Paint on all the equipment, including the conveying equipment, was fresh and shiny (Photos P-6, P-7, and P-11). There were none of the scrapes and gouges normally associated with use. The facility looked as if it had been moved in just that day. We have seen mill facilities in daily operation and none looked as clean as this one. There is simply no process control system we can think of that would result in such a spotless appearance. Even if daily wash-downs were asserted, these would have to include considerable work with an industrial vacuum; followed by thorough mopping of floors and walls, plus polishing and touching up the paint on the equipment. In light of these conditions, we began to wonder if the facility had ever been used for any more than insignificant quantities.

An inquiry with Paul Gilman, of the Maricopa Department of Air Quality indicated that there was no air quality permit held by Energy International, Inc., or by Robert Gunnison. Based on Shumaker's description of the facilities, Gilman stated that EII probably should have an air quality permit. In conversations the following day, Matheson said that he would contact Gunnison who was, on that day, back in the Searchlight area working with Dr. Charles Ager. Matheson telephoned later to tell Shumaker that Gunnison believed that EII was exempt from permitting under "Rule 303.3." Shumaker again telephoned Gilman, who explained that "Rule 200, Section 303.3" covered small scale exemptions, but indicated again that EII probably did not fit that category.

Shumaker visited Clarkdale, AZ on Saturday, July 17, 1999. Clarkdale is a small town, and no city offices were open. Through a coincidence, Police Chief Tom Wall arrived while Shumaker was at the Town Hall. In an initial discussion, Wall indicated no familiarity with Gunnison nor with any plans for an organization named "Resource Enhancement" to reprocess slag material from the Clarkdale copper mill. This facility had been used to recover copper from the massive sulfide ores of the mines at Jerome, Arizona. A few days later, Wall telephoned Shumaker. Wall had read the minutes of an October 10, 1995 Board of Adjustment (Town Council) meeting in which Robert H. Gunnison had presented information on the chemistry of a system to recover copper, iron, and silica from the old Clarkdale copper mill's slag. At that time, Gunnison was speaking on behalf of "Transylvania International" (TI), a Canadian corporation whose facility at Clarkdale is now idle. Wall added that their facility had never gone into operations.

Wall mailed us a copy of the October 10 minutes, plus other information, which we received on July 22, 1999. At that meeting, Gunnison and Dan Rodius (in other documents spelled "Rhodius"), representing Transylvania International made a presentation to the council outlining their asserted production method and answered questions. Among their statements, Gunnison and Rodius asserted that the plant would not be noisy, except for the sound of a tractor. Their plans, however, called for digging, loading, hauling, conveying, crushing, and grinding, none of which are quiet processes. They also asserted that their recovery process would recover all copper, all iron, all silica, produce no solid waste (other than garbage and trash produced by employees), and no liquid waste, so no EPA permits or other any kind of environmental permits would be required. They additionally claimed that no chemicals more dangerous than Coca-Cola would be used, and that no water would be required for the process. Rodius and Gunnison provided the Council a production flow chart, in which the various

recovery systems are simply boxes and circles labeled as "copper recovery," "iron drying and bagging," and "silica bagging and drying." The Clarkdale council members expressed some incredulity, as is indicated in the following quoted passage:

> "Vice Chairperson Russell stated that it seems strange that there will not be any waste from this operation. Will the silica be used entirely after the metals are extracted? Mr. Rodius stated that they will be shipping the silica and iron and the byproduct will also be shipped. There will be storage of these products until they are shipped."

The scenario proposed by Gunnison and Rodius is physically impossible, but it resembles the supposed recovery system described to us by Gunnison for the EII and Resource Enhancement operations. Gunnison and Matheson asserted that their system at Clarkdale could also be used to recover gold and silver from the mineral matter hauled in from the Mijo group. The Clarkdale slag was derived from a Kuroko or Noranda type massive sulfide deposit (Cox, 1987). It can thus be expected to contain a number of chemical impurities in addition to the iron, silica and copper asserted by Gunnison and Rodius. Some elements, such as lead and zinc, will have been partially recovered in smelting as a byproduct. Some lead and zinc will be retained in the slag, as will varying concentrations of sulfur, barium, arsenic, selenium, and bismuth. Gunnison's process does not address isolation and disposal of these problem elements. Gunnison and Rodius also claim that the residual silica slag product will be just like silica sand bought at a hardware store. That would not be the case, as their own plans call for very fine grinding to a powder. Additionally, the slag is a multi-element glass and no longer possesses a crystalline mineral structure. It cannot be equated to sand.

Matheson's reliance on Robert Gunnison as a reliable expert is of concern. Gunnison was implicated in sample tampering in the Delgratia Josh Project, in 1997 (Attachment 8-1). In 1975, Gunnison was convicted of five felony counts, including fraud and conspiracy, related to the sale of unregistered securities (A-33018, 1978, County of Pima, AZ, Attachment 8-2). Gunnison is not registered as an assayer by the Arizona State Board of Technical Registration. Registration is required by state law if an assayer is to provide services to someone other than an employer.

As a secondary processing facility, Matheson proposes to ship his material to an entirely different facility, Utah Minerals Processing (UMP), in Tooele, UT. UMP is operated by Archie Poarch, who reports that an entirely different fraction of the mineral matter from the Mijo group will produce gold, silver, platinum, and other PGEs. Poarch wants Matheson to ship the entire minus 1/4 inch fraction, which is different from the fraction that Gunnison would process.

In a June 16, 1999 telephone conversation with Poarch and Matheson, Clay and Shumaker were told that:

- Matheson can ship his concentrates (the minus 1/4 inch material, without separating out the magnetic fraction) by rail in cement cars.
- Poarch also uses a secret, proprietary leaching recovery system that he asserts is environmentally friendly.
- He would not tell us what the process is, nor send us an MSDS.
- UMP's mechanical processing seemed to flow as follows. Crush→grind→oxidize in agitated tanks with hydrogen peroxide and air (which, we were told, oxidizes everything except gold which goes to chlorides)→filter→direct solids to tailings ponds, run pregnant leachate through various, undisclosed, proprietary strip cycles to recover various unspecified metals. Poarch

would not give us a flow chart.

- Poarch stated that the operation cost is not related to the metal concentrations in the mineral matter, which is highly unusual . Material grade will dictate the type of milling process and amounts of chemicals used, which will directly affect cost.

We also determined that Poarch's UMP production plant had not been built, and was quite some time away from readiness. An inquiry with Kenneth Symons of the Utah Department of Environmental Quality indicated that UMP had a waiver permit for groundwater, in that their current small operation was to take place in vats.

9. Field Work, Sampling, and Analysis Reported by Claimant Matheson

The claimant has prepared no geologic map of the Mijo group. Although there has been drilling, no subsurface or mineralization model has been created and provided to us. Mr. Morris and Mr. Gene Phebus, associates of Matheson, prepared what we think is purported to be a some sort of geophysical map (Attachment 9-1a). This map marks approximate locations of some holes and samples, and also portrays lineations possibly derived from some sort of instrument traverse. On this unscaled map, where North is to the right, two of the structures are marked "water fault", and the center lineation is marked "out of structure." We are unable to determine what, if anything, this map means.

Matheson asserts that he has been working on understanding Eldorado Valley precious metal deposits for more than ten years. He has contacted a bewildering array of people in search of this understanding (Matheson, 1999, Sec. 6). Many of them have collected samples and provided assays for him. One of them, Dr. Charles Ager, of British Columbia, Canada, is reported by Matheson to have worked out the mineralogy of gold on the Mijo group. Ager has been unwilling to talk to us, according to Matheson, because of the ongoing Delgratia fraud lawsuit in which Ager has been named as a defendant. Matheson has been cooperative and forthcoming, and has provided us with copies of a large number of assay reports from a wide variety of assayers. Unfortunately, the reports do not systematically or reliably pinpoint sample locations, sample sizes, depths, methods of analysis, and the detection limits of the analysis method(s). It's doubtful that the locations of more than a few sample locations could be found again on the ground. In other cases, the assay reports provided to us by Matheson are for other claims in the southern end of Clark County. These appear to be in the same vicinity as the Josh project claims explored by Delgratia.

Matheson reports having had a difficult time finding assay laboratories that can detect and measure the precious metals asserted to exist within the Mijo group fanglomerate. He provided us with a number of reasons which are summarized below. The reasons are sometimes contradictory.

- The material is "time sensitive" (Lashley, 1982). Unless samples are analyzed within 24 hours, the gold will disappear or become unassayable. The problem is at times asserted to be from volatilization of gold chlorides, and at other times from encapsulation of gold, often by calcium carbonate.
- The material's "time sensitivity" can be overcome if the material spread out and dried in the sun for eighteen days.
- The material's "time sensitivity" can be overcome by using Merwin White's repetitive fire assays.
- The material is not time-sensitive if Jerry Henderson's assay methods are used.

- Normal fire assay techniques won't recover the precious metals. Only special techniques used by certain specified laboratories will work
- Only the "Slagmaster" fire assay procedure of Walter Lashley will work.
- The "Slagmaster" fire assay procedure is unnecessary if the methods of Jerry Henderson are used.
- Only fire assays in a scorification dish (which resembles a large, flattened crucible) will work. Classical crucible fire assay won't work.
- The material won't fire assay, but it will leach. The leach chemicals are environmentally friendly, but proprietary.
- The gold is in the clay and requires special methods to detect it.
- The gold is in the minus 1/4 inch fraction and requires special methods to detect it.
- The gold is in the entire rock, but it requires special methods to detect it.
- If you fire assay the "head material," you will get nothing. If you run the head material over a U-Tech table, which resembles a wilfley table with rotating magnets, there will be visible precious metals in each fraction that you would not see in the unprocessed "head material." Then, and only then, will individual fire assays of each fraction work, but they have to be scorification assays using Jerry Henderson's methods.
- Only specific assayers are willing to take the time and effort to properly conduct assays. Commercial labs, at $12 per fire assay just can't compare to a lab that gives each assay intense, individual attention, but at a higher price.
- The gold can be detected if the process uses water from Idaho, but not water from Vancouver or Las Vegas.
- Gold cannot be recovered from the samples at sea level.
- Typically, no precious metal values are recovered except by certain specific labs. In some cases, normal, industry-standard labs can detect and measure the precious metals, but the samples must first be prepared (crushed and pulverized) by one of the certain specified labs.

As a result, Matheson has turned to a small number of specific labs that utilize unconventional methods. Matheson appears to depend heavily upon Complex Metals Research, operated by Jerry Henderson, near Hurricane, Utah. Also used are White Technologies, operated by Merwin White in St. George, Utah, and Metallurgical Research and Analysis (MRA) Lab in Henderson, Nevada. Assay work from these laboratories is normally comparatively expensive, and the results quoted by them are almost invariably encouraging.

White Technologies, Merwin White, Proprietor.
Four holes were reportedly drilled on the Mijo 16 in September, 1996. The drilling was supervised by Charles Morris (Matheson, 1999, Sec. 9). The type of drill used was not reported, nor was bedrock reportedly reached. The material, which was not reported to be screened, was sent to Merwin White, of St. George, Utah, for analysis. White reportedly pretreated the samples, and then fire assayed the washed samples in a "micro wave furnace."

White reported gold results as an overall average of 0.275 ounces per ton (Attachment 9-1b). This is an unfortunate report format, as normal industry practice is to record metal concentrations over specific drill intervals. It is not normal to average all results from a program together. A handwritten annotation indicates that "these samples were done in the electric furnace." No further information was provided (Matheson, 1999, Sec. 11). It is uncertain whether the material was screened, or if only the magnetic fraction was collected and tested. Without that information, we cannot determine if the

assay result means 0.275 ounces per ton of magnetic concentrates, or 0.275 ounces per ton of screened material, or 0.275 ounces per ton of material on the ground. The differences are significant. For that reason, and others explained in Section 11B of this report, and because the drill locations cannot be reliably located on the ground, these results have little probative value, if any.

Complex Metals Research & Development, Inc., Jerry Henderson, Proprietor.
Three additional holes were reportedly drilled on the Mijo 16 using a Layne-Christianson auger drill in February, 1999. These were supervised by Charles Moore, and there was no indication that bedrock was reached. Samples of the auger cuttings were collected at a number of intervals, screened to minus 1/4 inch, split, screened to minus 30 mesh, and bagged. The one pound bagged samples reportedly were placed in buckets and sent to Jerry Henderson of Complex Metals Research & Development, in southwestern Utah for analysis (Matheson, 1999, Sec. 10).

Henderson reportedly used a scorification fire assay technique, with silver inquart. He combined the five resulting cupellation beads into one, and sent it to Donald Jordan, Metallurgical Research and Assay (MRA) Laboratory in Henderson, NV. Henderson and Jordan reported "combined average results" for seven samples in three holes of 0.25 ounces per ton gold, plus 0.01 and 0.05 ounces per ton respectively of platinum and palladium (Attachment 9-2). Again, the "combined average" report does not represent normal industry technique. Worse yet is the combining of the cupellation beads of apparently seven samples from different locations and depths. The resulting numbers cannot be applied to any location, and have very little scientific meaning. In addition, it is not certain if Jordan reported the metal concentrations as a proportion of the bead, a proportion of the cupel, a proportion of the one pound split, or as a proportion of the original unscreened drill cuttings. In other words, using gold as an example, we cannot tell if the result is 0.25 ounces per ton of cupelled dore' bead, 0.25 ounces per ton of dore' bead and cupel, 0.25 ounces per ton of the one pound multiply screened split, 0.25 ounces per ton of material screened to -1/4 inch, or 0.25 ounces per ton of material on the ground. Matheson and the assayers did not provide any weight information, so we cannot make the calculation ourselves. The resulting concentration numbers are scientifically meaningless. Again, due to the uncertainty of the drill locations, reasons explained in Section 11B of this report, and the meaningless assay report, these results must be disregarded.

Complex Metals Research & Development, Inc., Again
Matheson also provided an assay report dated 03/10/1988 (Attachment 9-6) from Jerry Henderson of Complex Metals Research & Development, Inc., when it was located in Arizona. The lab is now located in rural, southwestern Utah. This report chronicles the analysis of several "Balt" samples. There is no indication where or how the "Balt" samples were collected, or what they represent. Each sample apparently was fire assayed, and the resulting slag and cupel were ground, and re-assayed five additional times with a new cupel and more flux each time. 100 milligrams of silver was added as an inquart each time. According to this report, only negligible values were found until the final run, when, at last, measurable gold values were released. The explanatory paragraph at the bottom of the page is troubling. It would appear possible that the nitric acid parting solution used to dissolve the silver from each dore' bead was reused, and then the solution itself was assayed. Those final assays showed very large concentrations of silver. It is uncertain if the large silver concentrations were due to material actually in the sample, or if it represented the recovered silver from six stages of inquarting. In any event, because there is no indication of where the samples were collected, these results must also be disregarded.

Complex Metals Research & Development, Inc., Related Case, Kelso Dunes, CA
Results reported by Jerry Henderson and Complex Metals Research & Development, Inc. have been encountered in at least one previous Bureau of Land Management (BLM) mining claim examination. In 1990, during an examination of mining claims in the Kelso Dunes area of San Bernardino County, California, BLM mineral examiners were informed by the claimant, Art Parker, that Jerry Henderson was his consultant. Parker requested that the BLM mineral examiners observe Henderson performing chemical testing of sand concentrates for gold, silver, and PGEs. Henderson was representing Complex Metals Research and Development, Inc, which was at the time located in Arizona. A review of Henderson's methods by the BLM mineral examiners found them to be "...tedious, improper, and in no way a substitute for standard techniques for gold and particularly PGM assays." (Evans, et al, 1992, p. 5) The BLM examiners requested a review of Henderson's methods by Bondar-Clegg, Inc. of Sparks, Nevada, and Vancouver, British Columbia; and the US Bureau of Mines in Reno, Nevada, who also found Henderson's methods to be improper (Evans, et al, 1992, p. 5).

Metallurgical Research And Analysis Labs (MRAL), Donald Jordan, Proprietor.
David Graham, lab technician, of MRAL in Henderson, Nevada, reportedly collected a sample of undisclosed size and weight on the line between Mijo 16 and Mijo 17 on April 22, 1999. The sample was evidently screened to minus 16 mesh, and then concentrated over a No. 13 Wilfley table. The magnetic fraction was removed by undisclosed means. The resulting magnetic fraction, the nonmagnetic fraction, and the tails were fire assayed for gold by scorification (Matheson, 1999, Sec. 13). Results reported were 1.06 ounces per ton on the nonmagnetic fraction; 0.70 ounces per ton on the magnetic fraction, and 0.03 ounces per ton on the tailings (Attachment 9-3a$_{1,2,3}$). In this case, the location from which this sample was collected could probably be recovered. However, the result appears to be reported from 29 pounds of minus 16 mesh material run across the wilfley table. There is no indication of what the original weight of the sample was, prior to screening over the 16 mesh screen. We cannot tell if the results provided are in ounces per ton of that specific fraction, or have been recalculated as ounces per ton of material on the ground. Insufficient information is provided for us to make this calculation, so these results must be disregarded.

Matheson also provided a 1994 assay certificate from MRAL (Attachment 9-3b), showing high results for gold, platinum, and rhodium. This sample is identified as "#2 high side of hill." That is insufficient to establish the location of the sample, and how the sample was collected. There are no hills on the Mijo group, so the sample probably came from elsewhere. It cannot be used in the present examination due to location problems and assay report ambiguities.

Angus Resources, Dennis Holman, Proprietor
Dennis R. Holman, the President of Angus Resources in Tooele, Utah reportedly visited the Mijo 16 on April 1, 1999 (Matheson, 1999, Sec. 14). Holman reportedly personally collected an undisclosed number of samples of undisclosed sizes and weights using an undisclosed method from undisclosed locations on the Mijo 16. He reported keeping the samples under his custody and control until he delivered them directly "to the assayer." The name of the assayer was not disclosed. Using an

undisclosed analysis method, Holman reported the following results, but did not provide a signed assay sheet (Attachment 9-4A):

Au:	0.233 ounces per ton	Ag:	1.668 ounces per ton
Pt:	0.641 ounces per ton	Pd:	0.147 ounces per ton
Ir:	0.413 ounces per ton	Os:	0.078 ounces per ton
Rh:	1.285 ounces per ton	Ru:	1.130 ounces per ton

Considering the absence of ultramafic rocks in the Mijo group area, these results are peculiar and surprising. However, there is no indication of what analytical method, if any, was used, and no way to tell where the sample was actually collected so as to confirm the results. These results must therefore be disregarded.

Utah Minerals Processing, Archie Poarch, Proprietor

In a letter dated May 22, 1999 (Attachment 9-4B), Archie Poarch of UMP resubmitted the Angus Resources results to Matheson, but this time called them "approximate." Poarch stated that the material was "raw, unscreened ore, and by screening can be improved in the neighborhood of 20 to 1. Because neither the proprietary analysis method nor the method's detection limits were disclosed, it is difficult to place any meaning on these results without confirmation samples analyzed by another lab. Additionally, the location where these were collected was not disclosed, so these results must also be disregarded.

Rogers Research and Analysis Company, Clair Rogers, Proprietor

Matheson also provided an assay report (Attachment 9-5) from Rogers Research and Analysis Company, of Salt Lake City, Utah. This purports to report the results of assay of a sample, of undisclosed size or type, collected by Ian Matheson on the Mijo 16 on November 4, 1996. This attachment covers a wide variety or metals and makes no indication whatsoever of the analysis methods used. The location on Mijo 16 where the sample was collected is not given, so the results cannot be used in this report. Although we cannot tell if this sample was collected in exactly the same spot as the sample analyzed by UMP, the claimant has indicated that the locations were near to each other. The comparison in Table 9-1 of the values reported is instructive. The claimant has asserted that the deposit is mostly homogeneous, so the wide disagreement between labs is troubling. Note the wide difference in results reported for silver and platinum. In a truly homogeneous deposit where samples were analyzed by conventional means, results would be much closer.

Table 9-1. Comparison of Utah Mineral Processing Results to Rogers Research Results

Element	UMP	Rogers	Element	UMP	Rogers
Au:	0.233 oz/ton	0.20 oz/ton	Ag:	1.668 oz/ton	14.22 oz/ton
Pt:	0.641 oz/ton	0.04 oz/ton	Pd:	0.147 oz/ton	0.1 oz/ton
Ir:	0.413 oz/ton	0.003 oz/ton	Os:	0.078 oz/ton	trace
Rh:	1.285 oz/ton	not detected	Ru:	1.130 oz/ton	not detected

Rogers Research, Again
Matheson later provided a 1988 assay report from Rogers Research, identified as No. 1. The page had "KIM SAMPLE" pencilled on the front (Attachment 9-10). There was no indication as to where or how the sample was collected. This assay reports 0.816 ounces per ton gold, 0.002 ounces per ton osmium, 0.632 ounces per ton palladium, 0.041 ounces per ton platinum, 0.002 ounces per ton rhodium, and 6.19 ounces per ton of silver. Again, the results of this assay report are of no value because there is no indication of where the sample was collected.

Energy International, Incorporated, Robert "Bob" Harlan Gunnison, Proprietor
Matheson has also provided color copies of results of assays that he states were completed by Energy International, Incorporated, in Phoenix (Attachment 9-7). The results are hand printed, and are on ledger paper that appear to have the name and address of "I.C.S. Labs" in Henderson, NV rubber-stamped on the top. They are styled as "Cambridge Resources Bulk Test Results," and include pages marked "West We Go pg 6" and "West We Go pg 7." The page includes what appears to be the month and day of the sample or the processing, but omits the year. A sample number is given, but there is no key to where and how the samples were collected. In the column marked "Au (Mg)," there is a number, with what appears to be a black speck which has been colored yellow. This probably corresponds to the piece of gold recovered, and was originally taped to the page. In some entries, there is an indication that the initial sample charge may have been 500 pounds. However, there is no indication as to the source of the samples; they could have been collected anywhere. These results must also be disregarded.

DCRS (US) Ltd, Bob Barefoot, Proprietor
Matheson also provided us with a 1993 assay report from "DCRS (US) LTD" in Wickenburg, Arizona (Attachment 9-8). Once again, there is no specific indication of where the samples came from, although two are apparently from the Mijo 17. Of the two Mijo 17 analyses, only one is reported, and it is asserted to be 0.069 ounces per ton. There is no indication of how they were collected, and if they were concentrated or screened. The assay report is addressed to "Mr Ian Matheson, Mr. Chuck Agar [sic] (Fax 702-451-4939)".

The assay report is signed by "Bob Barefoot, Vice President." Matheson has explained that, with Dr. Van Loon of the University of Toronto, Bob Barefoot co-wrote an assay manual. However, Dr. Van Loon's co-author was Ron Barefoot, not Bob Barefoot. I telephoned Dr. R.R. Barefoot, Professor emeritus, of Oakwood Ontario. Dr. Ron R. Barefoot has never done any work in Wickenburg, and has never heard of "Bob" Barefoot. We were unable to locate Robert Barefoot on the Arizona State Board of Technical Registration's list of registered assayers. We were unable to contact Bob Barefoot. However, it appears that he may have recently focused his attention on a lecture tour on calcium as a nutritional supplement, and a book, "Death by Diet." Because of the lack of location information and the potential for fraud or misrepresentation, these assays must also be disregarded.

Pincock, Allen, and Holt
Matheson also provided a 1986 report by Pincock, Allen, & Holt (PAH) that he purported to be an audit of Bob Gunnison's process, using samples collected near, but not on the Mijo group (Attachment 9-9). Apparently, Gunnison was working out of Las Vegas at the time, at a lab known as "ICS Labs." Matheson quotes a portion of section 4.2 of the report in this manner: "Note 4.2 of the Report,

"Conclusions" which states that Gunnison's `proprietary chemistry has yielded measurable quantities of gold in samples on which classical methods have shown no gold content.'" Matheson, however, failed to quote the two following sentences: "The encouraging ICS Lab results warrant additional testing and project review. The additional testing is required in PAH's opinion since the limited work described within this report is insufficient to declare the ICS process as proven technology." The PAH report goes on to state, under "Testing", "Additional laboratory testing should be performed by an independent firm with replication of the tests independent of ICS Labs. It is assumed that these tests would not be performed in the ICS facilities. In this manner, a completely independent, controlled test can be performed."

It is evident that the PAH investigators were not convinced of the reproducibility of the ICS process. However, the samples for the PAH investigation were not collected on the Mijo group, and cannot be used in the present examination.

Chauncey Assay Laboratories, Inc, John. van Englen, Manager
Matheson has provided a 1991 assay report by Chauncey Assay Laboratories, of Chauncey, Ontario (Attachment 9-11). The report covers one sample. Again, because there is no indication of where or how the sample was collected, the results cannot be used in this examination.

Matheson seemed to rely most heavily on data provided by the preceding labs. He also provided information from other sources, which is summarized and evaluated below in Table 9-2.

Table 9-2 Assayer Name	Date	Elements Tested	Remarks
Action Mining Services	8/21/92	Au, Ag	Up to 7.5 ounces per ton. Probably concentrates. Action Mining Services used to publish a magazine called "Popular Mining." No indication of sample location. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-12.
American Society for Applied Technology	4/4/89	Au	Addressed to David P. Taylor of North Vancouver, B.C. Sample reportedly from "Becky M Placer Claim." No location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-13
Assayers Ontario	8/27/90	Au	No location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-14.
Bell-White Analytical Laboratories, Ltd.	7/3/91	Au, Pt, Pd	No location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-15.
C & W Mining, Buckeye, AZ	6/17/88	Au, Ag	Identified as "your Nevada ore" only. Inadequate location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-16
Core International	5/31/89 and 8/26/89	Au	Samples identified as "Phelps-Dodge Nevada Ore" and "...eight (8) samples pertaining to the subject mining property." Sample results highly variable. No indication of location where samples were collected, nor how they were collected. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-17

Table 9-2 Assayer Name	Date	Elements Tested	Remarks
Energy International (?)	10/6/98	Au	Handwritten report, partially illegible. Four samples, F2 through F5. Two identified as Mijo #16. Inadequate location and sample information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-18
Federal Testing Laboratories	5/9/91	Many	Sample identified as "Havasu Black Mags." No location or sample collection information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-19
Great Lakes Chemical	4/21/90	Au	Sample identified as "Southern Nevada Ore Deposit" on cover page. No other location information. Inadequate location and collection information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-20
Paul Guadagnoli, Assayer	6/28/89	Au	12 samples from somewhere in Eldorado Valley. Inadequate location and sample collection information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-21
Troy Becker	2/4/90	Many	Evidently some sort of analysis ("Nuclear Affinity Partial Analysis" (?)) of one concentrate sample, possibly from the El Dorado Balt. 24 claim (??). Unable to verify applicability, if any, of data. Disregarded. Attachment 9-22
Hazen Research, Inc	8/9/89	Au, Ag	This report is difficult to understand. It is not certain if it represents two samples repeatedly re-assayed in sequence, or as duplicates. This appears to be a follow-up to some other report. No information as to how the samples were collected, or where they were collected. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-23
Wallace C. Johnson	4/9/89	Au?	Five samples from claims other than the Mijo group. Some information given on assay methods. Oddly, WHAT was assayed for is not listed, and assumed to be gold. Units of reporting not specified. Could be ounces per ton, grams per tonne, parts per million, etc. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-24.
MRAL	3/25/99	At, Pt. Pd	Analysis of 23.3 gram residue submitted by Jerry Henderson. Concentration evidently calculated on the basis of a 35 gram sample. It is not known what the initial sample weight was. Probably from the Mijo 17. Disregarded for reasons outlined in Section 11B. Attachment 9-25
Chris Wilson	10/11/89	Au, Pt	Uncertain what this means. There is no sample collection or location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-26
Roger J. Smid, Lab Tech., Chemistry Dept.	7/10/91	Pt, Pd, Rh, Au	Reported on Univ. of NV, Las Vegas (UNLV) letterhead. No location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-27. Smid has reportedly performed "assays" in his off hours using UNLV equipment, but will not cooperate with the NV Bu. Mines & Geol. (Lechler, Personal Communication, 1999).

Table 9-2 Assayer Name	Date	Elements Tested	Remarks
Vortex Industries	8/7/91	Au, Ag	Third page only provided of an unknown number of pages. No location information. Appears to be different analyses of the same (?) material. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-28
Stan Wardle(?)	3/9/98	Au, Pd, Pt, Rh, Ag	Identified only as "KB, Concentrates." "IAN MASTESON STUFF" penciled on the page. No location information. Unable to verify applicability, if any, of data. Disregarded. Attachment 9-29. Stan Wardle was at one time a major figure with International Precious Metals (IPM), a "desert dirt" in Arizona.

10. Assay Laboratory Selection by BLM Mineral Examiners

In any patent or validity examination, a BLM mineral examiner must select a reputable assay laboratory to test the sample he or she has collected. The BLM *Handbook for Mineral Examiners*, H-3890, section IV-10.5, states in relevant part, "The analysis of samples requires considerable care by the mineral examiner. Be sure that the analytical laboratory has a good reputation and is qualified to perform the required assays." Part of the reason for this is that the assayer may be called upon to testify on the behalf of the BLM at a mineral contest hearing.

The selection process is not simple, and requires advance research and consultation. Picking the "low-bid" assayer is rarely an issue. Selecting a reputable assay laboratory usually involves telephone calls to other mineral examiners to inquire about their experiences with various labs . The mineral examiner will frequently telephone colleagues in private industry and ask similar questions.

The State of Arizona registers assayers through the State Board of Technical Registration. Such registration is generally required for a person to perform assays for anyone except as an employee for an employer, within the State of Arizona. Registration as an assayer indicates that a person has met certain basic requirements of education and experience. Such registration can be used as an indication, but not the sole indication, of an assayer's prospective competence. Registration does not guarantee competence or honesty.

One method of verifying a reputation is to determine if the lab or assayer is a member of the "Society of Mineral Analysts" (SMA). The SMA is a semiformal organization of commercial and mining company assayers. Many SMA members participate in a regular assaying "round-robin" in which each laboratory analyzes a split of a known sample, and compares their results against the results of other labs. Currently, 44 labs participate in the round robin. Improved work quality is the goal of SMA. The purpose the SMA is aptly stated at their Internet website, http://www.sma-online.org:

> "The aim and purpose of the SMA shall be the promotion of mutual cooperation in the minerals industry through the discussion and free exchange of information relating to the analysis, both chemical and physical, of minerals and mineral products"

In general, assayers and laboratories tend to fall into two broad groups. The first broad group caters primarily to the hobbyist, or amateur miner. Some, but not all, often advertise in publications such as

the "International California Mining Journal" (ICMJ). The ICMJ is a popular monthly magazine that publishes articles that are not normally peer-reviewed. ICMJ is widely read by weekend miners, suction dredgers, and similar hobbyists for ways to improve the enjoyment of their avocation. Assayers and laboratories that fall into this category often have only a local following, and do not attend professional meetings or trade shows. They frequently operate on a small budget, even though their cost per assay is often considerably greater than that of laboratories that primarily service mining professionals.

The second group focuses on professional geologists and engineers working in the mineral exploration and mining industry. These laboratories generally do not advertise, but will occasionally have a small listing in such professional publications as *Mining Engineering*. Laboratories that tend to fall into this category will frequently have a booth at national or regional meetings of professional organizations. The Northwest Mining Association (NWMA), for example, is a professional organization with many members from the United States, Canada, and a number of foreign countries. Their annual meeting is held in December, and features a large trade show. Many assay laboratories, including Bondar-Clegg, Chemex, and Silver Valley usually have a booth at the NWMA meeting.

The mineral examiner must evaluate all relevant factors, and come to a decision. Normally, their choice is from the second group.

11A. BLM Sampling Procedures

The sampling, of the property, occurred on three separate dates, March 9, 1999, April 14, 1999, and May 13, 1999. The claimant, or his representative, was present for all sampling. At our request, the claimant, or his representative, selected each of the sites to be sampled and observed the sampling. On March 9, we took samples at locations NV-A, NV-B, NV-C, NV-D, and NV-E. On April 14, samples were taken at NV-F, NV-G, NV-H, and NV-I. On May 13, we took samples at location NV-J, NV-K, and NV-L. See Sample Location Map, Map 3, for the spatial relationship between the sample sites.

The Mijo group is located on fanglomerate, which is an alluvial feature. Our first impression was that it should be treated as a precious metal placer. A precious metal placer will have heterogeneously distributed concentrations of precious metals generally deposited or enriched by the action of water. These concentrations will normally be separated by barren areas. However, we were assured by Matheson that, except for a few defined areas, the gold, silver, and PGE content was evenly distributed. Silver, especially reportedly tended to increase with depth. That was followed by showing us a rough map that Mr. Morris and Mr. Phebus, associates of Matheson, prepared which portrays some broad structures where they indicated the best mineralization was located (Attachment 9-1a). We asked the claimants to select the locations they would like us to sample to verify their discovery and they did so. We then sampled those locations.

Evaluating a precious metal placer will normally require the collection of a number of channel or bulk samples, frequently of a cubic yard or larger. Because of the heterogeneous nature of precious metal placer deposits and the comparatively large size of placer gold particles, it is unwise to split a sample (Wells, 1989). In this instance, because of the issues raised by the claimant, we attempted to duplicate the claimant's methods to the extent possible, including collecting a number of samples by his methods. We also collected two bulk placer samples, each approximately 2/3 loose cubic yard in size,

which we processed by normal, industry-accepted placer methods.

Most consistently, the claimant has reported that "the precious metals were contained in the 1/4"minus fraction," or "the magnetic portion of the 1/4"minus fraction," or "the nonmagnetic portion of the magnetic portion of the 1/4 inch minus fraction." The processing plant they had on site was setup to separate the magnetic fraction from the non-magnetic portion. Based on our observations, and Matheson's description of their sampling methods, it appears that their basic method was either to shovel a small (2 or 3 pounds) quantity of the fine material into a plastic bag, or to put a screen on a 5 gallon bucket and shovel material into it, discarding the 1/4 inch plus fraction.

In order to evaluate the property and address the issues raised by the claimant in our pre-sampling meeting, we sent samples to multiple assayers. To ensure quality we also submitted both simple and complex blanks as well as standards, knowns, and duplicates. This procedure generated a large volume of data, which requires close analysis and correlation. Accordingly we prepared table 11A-1 to correlate sample site location, or material source, with sample number and where it was sent for analysis.

Table 11A-1 Sample Source and Number Correlation Chart

Location or Source	Sample Numbers from this source	Samples Analyzed by:	Notes
NV-A	1	White Technologies	Splits of the same sample
	NVSO #1	Legend	
	#1 (placer)	NTC, Legend	bulk sample NTC - prepare concentrate Legend - amalgamation of concentrate
NV-B	#2 (placer)	NTC, Legend	bulk sample NTC - prepare concentrate Legend - amalgamation of concentrate
	2 (original)	not analyzed	Placed into storage. The No. 2 analyzed by White and NVSO #2 was from GL-C
NV-C	3	White Technologies	Splits of the same sample
	NVSO #3	Legend	
NV-D	4	White Technologies	Splits of the same sample
	NVSO #4	Legend	
	7B	Complex Metals,	
	7B	Legend	
NV-E	6	White Technologies	Splits of the same sample
	NVSO #6	Legend	
	10A	Complex Metals,	
	10A	Legend	
NV-F	7C	Complex Metals	
	7A	Complex Metals,	Splits of the same sample
	7A	Legend	
	21A	Legend	
	21B	Bondar-Clegg	
	21C	Chemex	
NV-G	8B	Complex Metals,	Splits of the same sample
	8B	Legend	
NV-H	9A	Complex Metals,	Splits of the same sample
	9A	Legend	
NV-I	10B	Complex Metals,	Splits of the same sample

Table 11A-1 Sample Source and Number Correlation Chart			
Location or Source	Sample Numbers from this source	Samples Analyzed by:	Notes
	10B	Legend	
NV-J			never processed, was originally collected to be sample 13, replaced by GL-S.
NV-K	14 heads	MRAL	Sample split into fractions by the lab Essentially the same as sample 8B
	14B	MRAL	
	14C	MRAL	
	14D	MRAL	
NV-L	15 heads	MRAL	Splits of the same sample
	15B	MRAL	
	15C	MRAL	
	15D	MRAL	
	22A	Legend	Splits of the reject from 15
	22B	Bondar-Clegg	
	22C	Chemex	
GL-S	5	White Technologies	Complex Blank Splits of the same sample, Shumaker's front yard
	NVSO #5	Legend	
	8A	Complex Metals,	
	8A	Legend	
	11B	Complex Metals,	
	11B	Legend	
	13B	MRAL	
	13C	MRAL	
	13D	MRAL	
	13S	MRAL	
	B-1	MRAL	
	23A	Legend	
	23B	Bondar-Clegg	
	23C	Chemex	
GL-C	2	White Technologies	Complex Blank Splits of the same sample, Clay's backyard
	NVSO #2	Legend	
	9B	Complex Metals	
	9B	Legend	
NVBMG-2b	11S	Complex Metals	Splits of the same sample, this is reference standard 2b, purchased from Nevada Bureau Of Mines and Geology
	11S	Legend	
	13	MRAL	
	S -1	MRAL	
	24A	Legend	
	24B	Bondar-Clegg	
	24C	Chemex	
SMILL-C	14S	MRAL	Splits of the same sample, Stillwater Mill Concentrates, from Montana Bureau of Mines and Geology
	S - 3	MRAL	
SMILL-D	25A	Legend	Splits of the same sample, Stillwater Mill Concentrates diluted with hardware store sand
	25B	Bondar-Clegg	
	25C	Chemex	
Hdware-S	26A	Legend	Splits of the same sample
	26B	Bondar-Clegg	
	26C	Chemex	

Sample collection and processing:

On March 9, 1999, we collected the samples from locations NV-A thru NV-E.

NV-A We collected two samples at location NV-A. We had a BLM backhoe clear the surface down to a depth of about 1½ feet. The first sample (#1) was a bulk sample for processing by traditional placer methods. Photos S-1 thru S-8 show the collection of both samples at this location. We set buckets, in the back of a pickup, on a tarp in close hexagonal packing and then had the backhoe operator dump material from the pit directly into the buckets (see photos S-4 and S-5). The material that fell between the buckets was collected from the tarp and placed in additional buckets (see photo S-9). As each bucket was filled, it had a lid placed on it and then it was sealed by nylon strapping tape. This was accomplished by wrapping the tape around the bucket, top to bottom, in two directions and the signing the tape (see photo S-9). While the tape does not physically prevent anyone from opening the bucket, it is nearly impossible to do so without making it evident that it has been disturbed. Throughout the entire investigation all buckets were sealed in this manner. The sample was then secured on pallets on a BLM flat bed trailer (see photo S-10) and taken to the Las Vegas Field Office where it was stored in the warehouse until it was processed on 3/11/99.

The second was two five gallon buckets taken from a channel sample on the side of the pit excavated for the bulk sample. It was processed following the claimants methods. This method involved screening the material thru a 1/4" sieve and discarding the oversize. The 1/4" minus was then separated into magnetic and non-magnetic fractions with a shop magnet (photo S-11). The magnetic fraction was then split into parts using a sample splitter and then bagged in a thick polyethylene bag. The air in the bag was displaced with nitrogen (see photo L-2), and the bag was thermally sealed (see photo L-1) to counteract the air exposure related "time sensitivity" (Lashley, 1982) that Matheson told us would cause the gold concentration to diminish. It was then sealed within a second bag using the same technique. The sealed bags were tamper evident. One split was shipped via Federal Express to Legend Labs while a second one was hand delivered to White Technologies the next day. The remainder was initially stored in secure storage at the Las Vegas Field Office and then transferred to secure storage at the NTC.

NV-B We sampled this location just as was done at NV-A with one exception, the second sample taken (two five gallon buckets taken as a channel sample on the side of the pit) were not delivered to the assayer. After the initial processing they were secured in the back of our truck and then transported to the NTC.

NV-C We had a BLM backhoe dig a pit to a depth of about 4 feet and we took a channel sample from the side of the pit. It was two five gallon buckets and it was processed, split, and handled as described for the second sample taken at NV-A. After we collected our samples the claimants collected some sample material from each location. In some cases it was a plastic baggie full of the fines, in other cases they took between 1/4 and 1/3 of a 5 gal. bucket. When they collected into a bucket they used a grizzly pan to screen the material so

that only the 1/4 inch minus went into the pan (see Photo S-15). They discarded the oversize with out measuring it in any way. There was no way to relate the material they collected to the original volume, therefore any data they might obtain from it would be of little use in establishing in-place values.

NV-D This sample was physically collected the same as was NV-C. It was two five gallon buckets and it was processed, split, and handled as described for the second sample taken at NV-A with one exception. When processing it, we did not separate the magnetic fraction from the non-magnetic fraction.

NV-E This sample was collected, processed, split and handled the same as NV-D.

On April 14, 1999, samples were taken from locations NV-F thru NV-I.

NV-F We had a BLM backhoe dig a pit about six feet deep. We then had the backhoe operator scoop material from the bottom of the pit and we shoveled it into 5 gallon buckets (see photos S-16 thru S-18). We filled three buckets. The buckets were secured in the back of our truck until we returned to the Las Vegas Field Office where one of the buckets was screened to 1/4" minus. The 1/4" minus fraction was then split into three parts (photo S-19), each of which was bagged and sealed in nitrogen as described above (samples marked 7A). One split was hand carried to Jerry Henderson's lab (Complex Metals Research) the following day (April 15, 1999), a second split was sent to Legend Labs in Reno, via Federal Express, and the remaining split was initially stored in secure storage at the Las Vegas Field Office and then transferred to secure storage at the NTC. A second bucket (marked 7C) was also hand delivered to Henderson's Lab for processing. The third bucket (marked 7B), and the oversize from the first bucket were initially stored in secure storage at the Las Vegas Field Office and then transferred to secure storage at the NTC.

NV-G Sample collected the same as NV-F except we only filled two five gallon buckets. One of the buckets was processed, split and handled as described for NV-F bucket 7A, and the other as described for NV-F bucket 7B.

NV-H Sample collected, processed, split and handled the same as NV-G with one exception, we had the backhoe operator fill the bucket by scraping the side of the pit on the way up as opposed to taking the material from the bottom of the pit.

NV-I Sample collected, processed, split and handled the same as NV-H.

On May 13, 1999, we took samples from locations NV-J thru NV-L.

NV-J This sample was taken immediately adjacent to sample NV-F. It was hand dug about two feet deep, to reach undisturbed material, and then the sample collected from the bottom of the hole. The material was shoveled into a 1/4" screen resting on a bucket. The 1/4" minus went into the bucket and the oversize was dumped into a separate bucket which was weighed and then discarded. When the undersize bucket was full it was sealed and placed in the back of our truck. This material was not delivered to the assay office.

NV-K This sample was taken adjacent to sample NV-G. It was collected and processed in the same manner as NV-J. We hand delivered it to Metallurgical Research and Assay Laboratory (MRAL) in Henderson NV that same day.

NV-L This sample was taken adjacent to sample NV-B. It was collected and processed in the same manner as NV-J. We hand delivered it to MRAL that same day.

In addition the following materials were collected or purchased, and analyzed as checks and references.

GL-S This complex blank material was collected in Shumaker's front yard, Glendale Arizona, (see photo S-20). It was screened to remove excess organic materials and delivered to the various labs with the samples collected on the claims.

GL-C This complex blank material was collected in Clay's backyard, Glendale Arizona. It was screened to remove excess organic materials and delivered to the various labs with the samples collected on the claims.

NVBMG-2b This was actually a standard reference ore material from Jerritt Canyon, NV, purchased from the Nevada Bureau of Mines and Geology (NBMG), and designated "2b" by them

SMILL-C The second standard was a known obtained from the Montana Bureau of Mines and Geology. It consisted of Stillwater Mining Company's platinum and palladium mill concentrates.

SMILL-D Stillwater Mining Co.'s platinum and palladium mill concentrations that we cut, with hardware store sand by a factor of 10:1 by weight.

Hdware-S Hardware store sand. Provided to White Technologies straight from the bag, but pulverized at the NTC lab for the other assayers.

The bulk samples we collected were each approximately 2/3 loose cubic yard in size. Placer sample #1 weighed about 2500 pounds. Placer sample #2 weighed about 2300 pounds. We concentrated them by normal, industry-accepted placer methods, with NTC's portable placer lab in a community sand and gravel pit just outside Las Vegas (see photos S-21 thru S-23). The equipment used in this examination consisted of a Denver Goldsaver and a 24 inch diameter Knudsen bowl. When operating in conjunction, these components are capable of recovering gold in minute size fractions.

The Goldsaver recovery circuit is composed of a feed hopper, trommel, sloped oscillating riffle board and an oversize chute. Buckets of sample material are placed onto the hopper's feed platform and the material is hand-fed through the hopper and into the trommel. Cobbles too large (4-inch plus) to fit through the hopper opening are brushed and washed clean by hand and then thrown clear of the concentrator. In the trommel the material is classified to plus and minus ¼-inch sizes. Oversized

material is directed out the oversize chute where it is inspected for nuggets. Undersized material passes through the trommel and over a sloped oscillating riffle board where most of the gold (if present) and other heavy minerals are collected.

Material that washes over the riffle board is fed into a 24-inch Knudsen bowl. The Knudsen bowl is a highly efficient device used to recover fine particles of gold. It utilizes moving water and centrifugal force to collect heavier materials in its lower riffles and discharges lighter weight materials through a reject pipe into a safety bucket.

The concentrates from this processing were hand carried to NTC where they were further concentrated in the NTC lab using a wilfley table. Sample #1 produced 527.81 grams of final concentrate. Sample #2 produced 268.87 grams of final concentrate. These concentrates were shipped to Legend Labs for free gold amalgamation and assay of the tails (see Attachment 11B-9b). The assay of the tails showed concentrations below lower detection limits for each of the metals tested. The better of the two samples (#2) contained 0.024 mg of gold, the equivalent of 0.0000006 ounces per ton of pit-run material in place. This translates to $0.0002 per ton at $286 per ounce for gold.

11B. Analysis of BLM Samples

We engaged the services of six assay laboratories for this program. These were:

- White Technologies, St. George, Utah
- Complex Metals Research & Development, La Verkin, UT. (Complex Metals also uses a Hurricane, UT mailing address, and is formerly of Tempe, Arizona.)
- Metallurgical Research and Analysis (MRAL) Laboratory, Henderson, Nevada.
- Legend Laboratories, Reno, Nevada.
- Chemex Laboratories, Sparks, Nevada.
- Bondar-Clegg, Vancouver, British Columbia.

Results of all analyses are detailed in Attachment 11B-1

In consultation with Matheson, we determined that White Technologies, Complex Metals, and MRAL were his preferred laboratories. They were used to evaluate the analysis methods that he asserts to be useful. We also selected Legend, Chemex, and Bondar-Clegg on the basis of our past experience, membership in the Society of Mineral Analysts, consultation with BLM Review Mineral Examiners and the BLM Mineral Examiners' Panel, and discussions with professionals in private industry.

When having samples analyzed by any laboratory, it is normal practice to concurrently submit blank and standard or known samples to make certain that no gross errors are made. A blank consists of material that is known to contain none of the elements of interest in the examination. Several types of blanks are used in precious metal examinations. One common type is "silica sand," which is simply sand that contains almost exclusively quartz and feldspar minerals. Most reputable labs use silica sand to clean their crushing and grinding equipment between samples. Also used is "hardware store sand." This is washed sand sold in hardware stores, often used to fill sand bags or fill a child's sand box. It typically comes in bags of 75 to 100 pounds, and resembles screened river sand in content. Hardware

store sand and silica sand are graded according to grain size. A problem with using silica sand or hardware store sand as blanks is that they are obvious to an assayer when submitted with sample material that is clearly different in size and appearance. The best type of blank to use is called a "complex blank." A complex blank consists of material that may resemble one or more of the samples, but is known to contain no precious metals above the average crustal abundance or the detection limits of standard analytical methods used. A complex blank will contain a wide assortment of accessory minerals that may also occur in the actual samples. This causes the blank to behave more like a sample during analysis.

A "standard," sometimes called a "reference material,"consists of material that has been tested by a number of independent assayers and found to contain a specific and predictable concentration, within a normal range, of one or more metal elements. Standards are normally obtained in pulverized form, resembling face powder in particle size and consistency. They are typically expensive, and available from a small number of sources, including the Government of Canada, and the Nevada Bureau of Mines and Geology. A "Known" is similar to standard, except that it has not received as much independent testing. The assay results of a known can be expected to vary somewhat more than a standard.

Submission of blanks and standards is not an absolute requirement, but it is does help assure that the samples have been properly processed. Wilbur Guay, one of Matheson's colleagues, has suggested the use of blanks in evaluating the asserted Mijo deposit and the laboratories. In a March 3, 1999 letter from Guay to Nevada State Director Bob Abbey (Attachment 11B-2), Guay makes the following statement:

> "In order to satisfy the BLM's requirements that assay information be uncontaminated I suggest that the BLM use procedures that are being done by a laboratory which is capable of assaying these complex ores. The BLM assayer can observe and confirm the procedures. Also the laboratory should assay blanks. ..... I would recommend that you assay several blanks along with you [sic] ore samples. For example, you could put a few samples of barren silica sand in place of the ore. ..."

Although that had been our plan from the outset, we did essentially as Mr. Guay suggested. We did not exclusively use barren silica sand or hardware store sand as our blanks. We developed complex blanks that resembled screened material from the Mijo group. We used two complex blanks. One consisted of mineral matter from Clay's back yard. The other, used more frequently, consisted of mineral matter from Shumaker's front yard. With the exception of the first set of analyses conducted by White Technologies, these complex blanks were used for the materials that we identified as blanks to the assayer. In the case of White Technologies, the blank sample that we identified as a blank consisted of hardware store sand. In all sets submitted to White Technologies, Complex Metals, MRAL, and Legend, one or more of the complex blanks derived from our yards was substituted for, and labeled as, a sample actually collected on the Mijo group.

As a final verification round, a test block of Mijo group mineral matter, complex blanks, a standard, and a known was submitted to Legend, Chemex and Bondar Clegg. Prior to shipping the samples to these labs, we crushed and pulverized all samples in the NTC laboratory. Each sample was then homogenized and split into several duplicate sets. We spooned Nevada Bureau of Mines standard 2b

directly from the stock jar. Only individual samples of Shumaker's yard were submitted to Legend, Chemex, and Bondar-Clegg. Due to the NTC preparation, and the anonymity of the submission, it was not necessary to submit a complex blank that visually resembled the Mijo group mineral matter.

White Technologies–Analysis of BLM Samples

On March 10, 1999, we hand delivered samples 1 through 6 to White Technologies. Each sample had been split from a larger sample prepared on site at the Mijo 16 claim. Each sample was placed into a thick polyethylene bag. Air was displaced with nitrogen gas, and then thermally sealed closed (Photos L-1 and L-2). The resulting sealed bag was again sealed within a second bag using the same technique. The intent of the nitrogen gas and thermal sealing was to counteract the asserted effects of "time sensitivity," if such a problem actually exists (Lashley, 1982).

White's lab technician prepared all six samples via the following process.

1. Open bags and split samples using a small splitter (Photo L-3).
2. Each split was dried in a kitchen-type microwave oven.
3. Each split was crushed in a Bico "Chipmunk" jaw crusher, and pulverized in a Bico disc pulverizer (Photo L-4). The only cleaning of the equipment between samples consisted of brushing out with an old paint brush. The same brush was used for most procedures. No compressed air was used for cleaning. Cross-contamination between samples cannot be ruled out in this step, or in step 6. As a safety issue the lab technician was required to reach across the equipment to turn it on or off at the breaker panel.
4. An assay ton (29.1 grams) of pulverized sample was weighed out on a small electric scale. At no time did we witness the scale being calibrated. The scale was calibrated in 0.1 gram increments.
5. The approximate assay ton of material was placed into a used "mixed nuts" can. Into the can was introduced an unmeasured amount of litharge, plus additional flux material, including flour.
6. The lab technician then placed a lid on the mixed nuts can and shook it vigorously by hand. The resulting mixture was poured into a large crucible. A "Herman Inquart" consisting of a known weight of lead and silver was added to assure a bead upon cupeling (Photo L-5). The mixed nuts can was brushed out with the same brush used in step 3, and then blown out by mouth. Steps 1 through 6 were repeated for the next sample until all had been prepared. Cross-contamination may have occurred here, or in step 3. Cross-contamination in step 6 is much more serious due to the smaller weight of sample affected.
7. Samples in crucibles were placed into an electric oven, and fired at 2050 degrees F for about an hour.
8. Molten samples were poured into a cast iron cone mold (Photo L-6), and the slag was separated and retained. The resulting lead collector was removed and hammered into a cube shape (Photo L-7).
9. Lead cubes were placed on preheated cupels, and fired in excess air until a dore' bead was achieved (Photo L-8).
10. Each bead was removed from its cupel, and placed into storage for later weighing by Merwin White, which might take place the following day. Each cupel was retained with the corresponding slag. As there was no definite schedule for weighing or subsequent analysis, this step was the end of the process that we witnessed.

After our departure, the slag and cupels from each sample were reportedly ground and reassayed in the

same manner as above. The process of grinding and reassaying slags and cupels was reportedly repeated five times for each sample, and the resulting concentrations were added together to form one result. A second split of the samples were assayed at Matheson's request and at his expense, reportedly according to the same procedure. The report from White Technologies is appended as Attachment 11B-3.

The samples submitted to White Technologies were derived as follows:

- Sample 1 consisted of the magnetic fraction of screened material from location NV-A on the Mijo 16.
- Sample 2 was collected at location NV-B on the Mijo 16. However, this material was placed into storage and a sample of Clay's back yard was submitted to White Technologies in its place.
- Sample 3 consisted of the magnetic fraction of screened material from location NV-C on the Mijo 16.
- Sample 4 consisted of screened material from location NV-D on the Mijo 16.
- Sample 5 was collected at location NV-E on the Mijo 16. This material was screened to minus 1/4 inch. The material was renumbered as "sample 6" for submission to White Technologies. A sample of Shumaker's front yard was labeled as sample 5 and submitted to White Technologies
- Sample 6 consists of the material from the actual Sample 5, above.
- A seventh sample that we provided, consisting of hardware store sand, was identified as a blank, but not numbered. White Technologies also ran an in-house blank, consisting of reagents with no mineral matter charge. White reported provided no written results for our hardware store sand blank, nor for his in-house blank.

White reported the following results:

Table 11B-1 Sample No.	Au, troy ounces per ton	Ag, troy ounces per ton	Type
1 set 1	0.028	0.310	mag fraction, minus 1/4"
1 set 2	0.048	0.200	mag fraction, minus 1/4"
2 set 1 (Clay's yard)	0.042	0.760	minus 1/4"
2 set 2 (Clay's yard)	0.066	0.530	minus 1/4"
3 set 1	0.050	0.880	mag fraction, minus 1/4"
3 set 2	0.042	0.580	mag fraction, minus 1/4"
4 set 1	0.042	0.430	mag fraction, minus 1/4"
4 set 2	0.060	0.380	mag fraction, minus 1/4"
5 set 1 (Shumaker's yard)	0.092	0.400	minus 1/4"
5 set 2 (Shumaker's yard)	0.200	0.260	minus 1/4"
6 set 1	0.049	1.700	minus 1/4"
6 set 2	0.046	2.820	minus 1/4"

Beyond the incorrect assays of blank material (samples 2 and 5), the spread of reported results between

reruns of the same sample are excessive. For example, the gold value reported for sample 5, set 2 is more than double the value reported for sample 5 set 1. Apart from the fact that sample 5 was a blank, that magnitude of deviation is simply unacceptable. It is illustrative of the problems that we encountered with White Technologies that the three highest gold concentrations they reported were from blanks.

An identical set of sample splits, prepared in the same manner at the same time, was sent via Federal Express to Legend Labs in Reno. They performed both a standard fire assay and "Jerry Henderson method" scorification fire assay for gold and silver of every sample. In all cases, Legend reported that if gold and silver were present, it was in concentrations so minuscule as to be below the detection limit of the method (Attachment 11B-4). This was true for all samples from the Mijo 16, samples dug from the yards of Shumaker and Clay, and for all the blanks.

The laboratory at White Technologies is located in a light industrial area, in a building with multiple tenants. They are adjacent to a company that produces purified bottled water for culinary uses. Conditions inside the White Technologies lab were cluttered and dusty (Photo L-9). Reagents were stored in what appeared to be a haphazard manner and in containers not designed for such use. In one particularly egregious example, we noted a plastic bleach bottle hand-marked "NaCN" (sodium cyanide) stored next to two glass bottles marked "Hydrochloric Acid," and "Phosphoric Acid," and near a glass bottle marked "Nitric Acid" (Photo L-10). If the bleach bottle actually contained sodium cyanide, then a leak or spill in which it mixed with any of the acids would produce hydrogen cyanide gas. This is the same substance used in gas chambers for executions. In other instances, labels on glass bottles had deteriorated to the point of illegibility.

It is normal laboratory practice to assay the slag and cupel from a fire assay one time (Bacon, et al, 1989). This allows the assayer to determine the amount of precious metals lost into the slag or cupel. Normally, this number will be very small or zero. Litharge, used in most fire assays, contains lead. The lead will contain minuscule concentrations of gold and silver, which is just a fact of nature. Similarly, any silver inquarted into a sample will contain a minuscule concentration of gold (Reddy, 1989, personal communication). The amount of gold and silver added to a sample by litharge and inquarts is insignificant when a fire assay is completed under normal practice. However, the continued and repeated addition of litharge and inquarts as was done in White's slag and cupel multiple re-analysis, plus any cross-contamination from dust will eventually accumulate enough gold and silver to become measurable (Lewis, 1999, personal communication). Unless the concentration of gold and silver in the litharge and inquarts is known exactly and subtracted, their added values will be incorrectly ascribed to the sample. The error will be insignificant where the sample actually contains multiple-ounce per ton concentrations of gold and silver, but will portray false values where the samples are actually barren.

Because of the potential of cross contamination of samples, the inaccuracy introduced by continued re-analysis of slags and cupels, and the incorrect results reported for the complex blanks, the results reported by White Technologies must be disregarded for this examination. The problems that we found render any results reported by this lab to be highly questionable, at the very best. We believe that results reported by White Technologies, Merwin White, or his staff should not be accepted at face value by the BLM for any purpose, and that independent analysis of verifiable samples by an

unrelated, competent lab must be required.

Complex Metals Research & Development, Inc.- Analysis of BLM Samples
On April 15, 1999, we hand delivered Samples 7 through 11 to Jerry C. Henderson, sole proprietor of Complex Metals Research & Development, Inc. (Complex Metals). ("Henderson" and "Complex Metals" are used interchangeably herein.) Complex Metals is located in a rural area about halfway between Hurricane and Hildale, Utah. Henderson uses mailing addresses in Hurricane and Laverkin, Utah. Matheson was anxious for us to submit samples to Henderson and watch them being analyzed. According to Matheson, Henderson was able to take screened samples from the Mijo group that would not produce encouraging results through standard fire assay, run them over a U-tech table and produce concentrates with visible precious metals. With specific exceptions, samples taken to Complex Metals had been collected on the Mijo 17. The sample number 12 was not used in this examination. Each sample was split into two parts. One of the two parts was then replaced with material collected from another location. Sample 7 was presented in three parts; the third being a five gallon bucket full of material from the Mijo 17, screened to minus 1/4 inch. Origins and results of each sample and split are detailed in Attachment 11B-1. However, we told Henderson that the splits were from the same samples.

We contracted with Legend Labs, of Reno Nevada, to monitor and evaluate the processing. The evaluation report, by Mark Lewis, Manager/Metallurgist of Legend Labs, is Attachment 11B-5.

Henderson's methodology was essentially as follows:
Part 1.

- Weigh samples on a bathroom scale (Photo L-11).
- Screen sample into a plastic bucket through a piece of 1/4 inch galvanized hardware cloth (Photo L-12).
- Henderson separated out a small portion of the screened material to perform a fire assay of the head material.
- Classify material using a "U-Tech" brand shaker table, which resembles a small wilfley table with a sieve screen and magnetic separation function (Photos L-13 & L-14). This resulted in four products, which Henderson generally labeled as Con #1, Con #2, Con #3, and a plus 16 mesh tail. The tail fraction was sometimes identified as rejects or oversize.

Part 2:

- The wet fractions were carried to a second building where Henderson panned them in a sink (Photo L-15), and displayed them to us under a microscope Photo L-16).
- Once dry, Henderson screened the samples to -20 mesh, which separated a varying numbers of spheroidal balls of silver appearance, which he termed "nuggets,"and pointed them out to us. (Analysis of four of them by Legend indicated that they were about 50% silver.)
- Henderson then recombined the screened fractions (Photo L-17), and then dried the samples by placing them on a coffee filter on an electric griddle.
- Henderson then visually selected a portion of the material, including the unwashed head material, and hand crushed it with a mortar and pestle (Photo L-18) until about 5 grams passed through a 20 mesh screen.
- Five grams of the sample plus one gram of what Henderson termed as "electrolytic silver" were

weighed out into a scorification dish, using a scale calibrated in 0.1 gram increments (Photo L-19). A spoon full of flux and litharge were stirred into the scorification dish (Photo L-20), and a layer of flux added to the top.

- Henderson then fired the prepared scorification dishes for an indeterminate period of time, but for about a half hour, at about 2000 to 2200 degrees F (Photo L-22).
- The resulting melt was poured into conical molds, the slag separated, and the lead buttons pounded into squares. Henderson did not effectively keep track of which button represented which sample, and relied on us to do that.
- The lead buttons were then cupelled in the same furnace at the same temperature.
- Each cupel resulted in a silver bead (Photo L-22), which was again weighed on the same scale. Due to the coarse precision of the scale, it was impossible to determine with any reliability if the weight of the resulting bead was greater than the weight of the inquarted "electrolytic silver."

The resulting beads from samples 7C, the unwashed head materials, plus the blank and standards, were taken by Mark Lewis, and analyzed by Legend in Reno. Legend performed analyses for gold, platinum, palladium, ruthenium, rhodium, iridium, and osmium, but not silver. Silver was not reported because of the severe uncertainty introduced by Henderson's imprecise scale and sloppy laboratory techniques.

The precision of the scale that Henderson used was plus or minus one tenth of a gram. With ideal, clean laboratory conditions, an operator might be able to obtain precision of plus or minus 0.05 grams, or 50 milligrams. Using an assay ton sample of 29.14 grams, one milligram of silver reporting to the final bead equates to one ounce per ton. Weighing out a silver inquart for a one assay ton sample using Henderson's scale would introduce a potential error of about plus or minus 50 ounces per ton. Because Henderson used only a 5 gram sample charge instead of the normal 29.14 grams, the potential for error is nearly six times higher; plus or minus about 300 ounces per ton.

Exact splits of all samples except 7C were sent via Federal Express to Legend in Reno. With the exception of the standard, Legend's results for all the splits showed concentrations below detection limits (Attachment 11B-6).

Beads resulting from the scorification assays of the remaining tabled material were sent by Henderson to an unspecified "silver, gold, and platinum refinery" for analysis. Based on conversations with him, we assumed that the unspecified lab was MRAL in Henderson, Nevada. Henderson then composited those results, reporting concentrations in ounces per ton of gold and ounces per ton of "PGM." We assume that by PGM, Henderson meant platinum group metals. However, they weren't differentiated, so there is really no way to tell (Attachment 11B-7).

The following table, 11B-2, summarizes and compares results for several of the samples processed by Henderson.

Sample No.	Table 11B-2 **Complex Metals -- Henderson** Results in troy ounces per ton. na = not analyzed. xx = below detection limits (See Attachment 11B-1 for full details.)								
	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type - Source
7B	0.16	na	0.12 (Pt Group)	na	na	na	na	na	Split of previous sample 4, stored, and presented to Henderson.
4 set 1	*0.042*	*0.580*	*na*	*na*	*na*	*na*	*na*	*na*	*Results of original sample as analyzed by Merwin White, White Technologies. Same as 7B analyzed by Henderson. Shown for comparison*
4 set 2	*0.060*	*0.380*	*na*	*na*	*na*	*na*	*na*	*na*	
NVSO # 4	*All results below detection limits*								*Crucible (conventional) and scorification assay by Legend, Reno, of split of sample 4 (duplicate of 7B).*
7B	*All results below detection limits*								*Conventional fire assay by Legend of split of 7B. (Same as 4.)*
8A	0.06	na	0.11 (Pt Group)	na	na	na	na	na	This is a split of the blank, 11S, and was dug out of Shumaker's yard.
8B	0.04	na	0.09 (Pt Group)	na	na	na	na	na	Note that results of 8A and 8B, ***collected in two different states,*** are closer than the agreement between two assayers for sample 4/7B. The agreement is probably random or contrived.
9A	0.02	na	Trace (Pt Group)	na	na	na	na	na	From Mijo 17.
9B	0.05	na	0.00 (Pt Group)	na	na	na	na	na	This was dug out of Clay's back yard.
11B	xx	xx	xx	xx	xx	xx	xx	xx	Same material as 8A. Blank, from Shumaker's yard. Labeled as blank.
11S	0.006	na	xx	xx	xx	xx	xx	xx	Scorification by Henderson, analysis of bead by Legend.
11S	*0.220*	*xx*	*xx*	*xx*	*xx*	*xx*	*xx*	*xx*	*NBMG Standard 2b, fire assay by Legend. Legend's detection limit was 0.02 oz/ton.*
(11S)	*0.228 +/- 0.008*	*0.02 +/- 0.03*	*na*	*na*	*na*	*na*	*na*	*na*	*Actual values of Standard 2b reported by NBMG. Numbered as 11S for Complex Metals assay.*

We tested Matheson's assertion that the mineral matter is "time sensitive" by relabeling a split of Sample 4 as Sample 7B, and submitting it to Henderson. We had collected Sample 4 on March 9, 1999. More than a month had elapsed since its collection. Henderson reported gold values at least three times greater than White for a split of the same material. In conventional assay practice, there would not be such a large discrepancy.

Sample 11S was actually a standard reference ore material from Jerritt Canyon, NV, purchased from the Nevada Bureau of Mines and Geology (NBMG), and designated "2b" by them. We marked that sample 11 S and both Legend and Henderson analyzed it. The results are summarized in the table above, and fully presented in Attachment 11B-1. Henderson's results were not even close. Both Henderson and White produced dismal results with blanks, and Henderson did not correctly analyze

the Nevada Bureau of Mines and Geology Standard 2b.

Henderson's work was performed in two buildings. The first was a large metal sided garage that contained a considerable amount of clutter. Adjacent to his U-Tech table was a Chevrolet Suburban with the engine out, and a front end loader undergoing service (Photo L-23). The second building was dedicated to Henderson's work and it was extremely cluttered, dusty, and disheveled (Photos L-24 and L-25). Plastic pipe hung unsupported from the rafters. Open and unlabeled bags, buckets and bottles were present on every horizontal surface, including chairs. At least once, something had exploded and left a black, friable deposit on the walls and ceiling, but had not been cleaned up. Slabs of plastic foam ceiling insulation had broken off and were resting precariously against the furnace hood. Almost every metal surface was corroded, probably due to acid mist in the air.

Henderson, as well as Matheson, had indicated that the "deposit" on the Mijo group contained native, or elemental silver. Henderson took great efforts to direct our attention to the silver balls that he was recovering in the concentrate material from the U-Tech table (Photo L-16) as proof. On some occasions, the balls were rust colored, gold colored, or copper colored. We had never seen any such metal balls in any of the samples collected from the Mijo group, nor had we seen them in the samples of Clay's yard (Sample 9B) or Shumaker's yard (Sample 8A). It was clear to us that they had been added to the samples somewhere in Henderson's processing. There was ample opportunity for this to occur, as on numerous occasions the samples were out of our sight (Photos L-12, L-13, L-15, L-26, L-27, and L-28). We had three of the metal balls analyzed by Legend, and their results indicated that they contained silver as their metal constituent (Attachment 11B-6b).

Upon our return to Phoenix, we examined the remaining concentrates under a binocular microscope. We took a number of photomicrographs of the material that we brought back, and that was returned to BLM by Henderson (Photos L-29 through L-40). There is a scale in all photographs that is calibrated in millimeters. A representative few are included for illustration.

The U-Tech table should have screened materials to a size that would pass through a 16 mesh screen. In all cases, the sample material did so, but silver colored soft metal balls and what appeared to be glassy slag remained on the screen. Photo L-29 shows material from sample 8A (Shumaker's yard) magnetic concentrate that remained on a 16 mesh screen. Photo L-37 shows a single silver metallic ball flanked by actual sample material from the 7C tails fraction. All the material remaining in these sample fractions should have been about the size of the loose material in the background and have passed through the screen. Photo L-30 shows material manually picked out of the sample 8A oversize. (This fraction was variously termed by Henderson as oversize, tails, or rejects.) The silver balls had evidently been added without much regard to the size fraction that they should have matched. Photo L-31 shows an assortment of oversize material in the 8A No. 2 screened concentrate. Several of the particles in each photo, identical to those analyzed by Legend, are spheroidal, soft, malleable silver colored balls.

Photo L-32 shows a representative assortment of material contained in the nugget trap fraction of sample 7C. The more angular particles in the photograph are actually from the sample. The spheroids are silver metallic balls that were added to the sample while in the custody of Complex Metals. Photo 33 shows one of the silver metallic balls from the 7C nugget trap after we hammered it flat with a 4

ounce hammer. Photo L-34 shows three silver metallic balls coated with a rust colored glassy material. The silver metallic balls are in all cases very soft and malleable (Photos L-33 and L-35). We believe that the glassy material is slag derived from the production of the tiny metal balls.

These soft, metallic balls or spheroids of what appears to be silver are out of place. They exist in the sample in size fractions that should not have passed through the sieve. Their shape and the adhered bits of glassy material indicate that they have not been transported the same distance as the mineral grains in the sample. Any metal that soft and malleable would have likely been battered into a shape approaching a flat plate. Adhered glass grains would have been broken and knocked off of the metallic spheroids by the impacts of transport in the alluvial fan. However, glass is not normally associated with native silver or gold. Indeed, we are unfamiliar with any such association.

Elemental, or native, silver is uncommon in nature. Compared to other "noble metals," silver is more chemically reactive. Over time, silver tends to oxidize or form soft waxy, chlorides, depending on the particular geologic environment. Native silver is normally limited to the oxide zones of some sulfide mineral deposits. It also occurs with arsenides and sulfides of cobalt, nickel, and silver, and with urananite and cobalt-nickel minerals (Klein, 1993). No such conditions are present on or anywhere near the Mijo group. No silver minerals, such as argentite (Ag_2S), were found in the samples that we examined. Silver nuggets, balls, spheroids, or any other native silver form, are not known to occur in a desert alluvial fan.

The effect of the addition of a one milligram piece of gold or silver, about the size of the head of a pin, to a one assay ton sample (29.14 grams) would be to produce an additional one ounce per ton in the reported result. However, if only five grams of sample is analyzed, the addition of a one milligram piece of gold or silver would raise the reported result by about six ounces per ton.

These sample results must be disregarded for this examination. The problems that we encountered destroy any probative value of results reported by Henderson or Complex Metals. The possible tampering or salting of our samples makes it impossible to accept any results submitted by Henderson, without independent verification by a competent, unrelated laboratory. We believe that results reported by Henderson, or Complex Metals should not be accepted at face value by the BLM for any purpose, and that independent analysis of verifiable samples by an unrelated, competent lab must be required.

Metallurgical Research and Analysis Laboratory (MRAL), Henderson, Nevada.
On May 13, 1999, we hand-delivered three samples to MRAL. These consisted of three five-gallon buckets filled with mineral matter screened to minus 1/4 inch. The samples were numbered 13, 14, and 15 (Attachment 11B-1). We had collected samples 13, 14, and 15 earlier that morning. Sample 13 had been collected on the boundary between Mijo 16 and Mijo 17. Samples 14 and 15 were collected on the Mijo 17 and Mijo 16, respectively.

While samples 14 and 15 were being collected, Shumaker replaced Sample 13 with a complex blank, which consisted of a five gallon bucket of screened mineral matter that had been collected from his yard at his home in central Arizona. This was identical to complex blank material submitted to all other assayers under different sample numbers and blank material that was labeled by MRAL as B-1.

Shumaker marked the bucket containing this complex blank as being Sample 13. The actual Sample 13 remains in locked storage at NTC.

We also submitted plainly-identified standards and blanks at the same time (Attachment 11B-1). The blank that we used was a split of the material from Shumaker's yard, identical to what we submitted as Sample 13, except that we first pulverized this split in the NTC lab. One standard, which was labeled by MRAL as "13(S-1) consisted of Nevada Bureau of Mines Standard No. 2b. The second standard was a known obtained from Robin McCulloch, Staff Mining Engineer at the Montana Bureau of Mines and Geology. The standard consisted of Stillwater Mining Company's platinum and palladium mill concentrates, with the company's assay data. The concentrates contain primarily palladium, secondary platinum, with minor gold and rhodium. Stillwater uses this material as a standard in their mill process control.

Matheson requested that Shumaker and Clay allow him to obtain a split of one of the samples' "head" material, to take to White Technologies. Reportedly, Merwin White wanted to conduct gold leach tests on them using a thiourea solution and a bromide solution. After discussions, it was agreed that Matheson could take a split of Sample 13, which had actually been collected in Shumaker's front yard.

MRAL's lab technician, David Graham prepared the three samples as follows:

1. Starting with Sample 13, open the buckets and weigh.
2. Screen the contents through a -16 mesh with a wood mounted screen into a wooden box.
3. Dump the -16 material into another bucket.
4. Dump the oversize into a bucket, and weigh.
5. Collect a small volume of the -16 material for separate assay, and transfer the remainder into a rotary sand washer and add water and detergent, agitate for about 30 minutes (Photo L-41).
6. Transfer the fully wetted material and the liquid back into a bucket (Photo L-42).
7. Run the material over a wilfley table to separate light material from heavy material (Photos L-43 & L-44).
8. Repeat for the other two samples.
9. Heavy material was taken inside the lab and the magnetic material was hand-separated using a plastic-coated stirring magnet (Photo L-45).
10. Place the separated fractions into available pans, and place into drying oven (Photo L-46).
11. Remaining steps were completed after we left.

The unwashed minus 16 material was reportedly assayed by MRAL via Direct Coupled Plasma Arc (DCP) for gold, silver, platinum, palladium, rhodium, iridium, ruthenium and osmium. In addition, our blank labeled "B-1" by MRAL and standards "13 S-1" and "S-3" were assayed for the same materials. Reported results (Attachment 11B-8) are summarized below in Table 11B-3:

	Table 11B-3.								
Sample number	**MRAL** Gold, Silver and PGE results in troy ounces per ton. nr = not reported. *Results in italics, inside the double-line boxes, are actual values of standard and known materials.*								Type – Source
	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	
13 heads	0.11	1.01	0.14	0.04	0.02	0.09	0.00	0.23	Shumaker yard. Blank. Labeled as sample 13. Same material as B-1.
B - 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Shumaker yard. Labeled as blank. Same material as 13 heads.
S-1 (re-assay)	1.92	6.06	0.00	0.00	0.00	0.00	0.00	0.00	NV Bureau of Mines standard 2b. Labeled as standard
S-1	*0.228*	*0.02*	*nr*	*nr*	*nr*	*nr*	*nr*	*nr*	*NV Bureau of Mines standard 2b, actual.*
Std. S - 3	0.23	7.86	0.00	96.68	0.00	0.00	0.00	0.00	Mill cons. from Stillwater Mining Co. Pt & Pd mill. Labeled as standard
Std. S-3	*1.01*	*nr*	*17.2*	*58.5*	*0.56*	*nr*	*nr*	*nr*	*Stillwater Mining Co. mill cons., average assays, Montana Bu. Mines & Geology.*
14 heads	0.08	1.23	0.08	0.00	0.00	0.05	0.00	0.15	Mijo 17
15 heads	0.13	1.52	0.05	0.03	0.00	0.03	0.00	0.16	Mijo 16

The three washed and tabled fractions (magnetic concentrates, nonmagnetic concentrates, and tails) of each sample material were reportedly assayed by MRAL for gold using their direct coupled plasma arc unit. In addition, blank "B-1," was again analyzed. The results are summarized in table 11B-4, below.

Table 11B-4		*(Entries in italics inside double-line boxes are concentrations of standards.)*	
Sample No.	Au, troy oz/ton	Type	Remarks
13B	0.38	1/4" minus, screened to -16 mesh at MRAL.	Shumaker yard substituted for sample 13.
13C	0.35	1/4" minus, screened to -16 mesh at MRAL.	Shumaker yard substituted for sample 13.
13D	0.02	1/4" minus, screened to -16 mesh at MRAL.	Shumaker yard substituted for sample 13.
13 (S-1)	0.78	minus 80 mesh	Nevada Bureau of Mines standard 2b. Identified to lab as standard.
13 (S-1), NBMG reported values	*0.220 +/- 0.008*	*pulverized*	*Nevada Bureau of Mines standard 2b. Concentration value reported by NBMG*
14B cons	0.35	1/4" minus, screened to -16 mesh at MRAL.	
14C mags	0.49	1/4" minus, screened to -16 mesh at MRAL.	
14D tails	0.03	1/4" minus, screened to -16 mesh at MRAL.	

Table 11B-4			*(Entries in italics inside double-line boxes are concentrations of standards.)*
Sample No.	Au, troy oz/ton	Type	Remarks
14S known	0.12	minus 80 mesh	Concentrates from Stillwater Mining Co. Pt & Pd mill. Identified to MRAL as a standard.
14S known (standard value)	*1.01*	*Pulverized*	*Concentrates from Stillwater Mining Co. Pt & Pd mill. Average concentration reported by MBMG.*
15B	0.28	1/4" minus, screened to -16 mesh at MRAL	22A, 22B, 22C are split from this material.
15C	0.40	1/4" minus, screened to -16 mesh at MRAL	22A, 22B, 22C are split from this material
15D	0.03	1/4" minus, screened to -16 mesh at MRAL	22A, 22B, 22C are split from this material
B - 1 blank	0.01	Pulverized	Obtained from Shumaker's yard. Same as Sample 13.

Although cluttered, conditions at MRAL were not as disorganized as at White Technologies or as at Complex Metals. Storage of reagents was informal. In the wet laboratory area, all exposed metal had rusted, probably due to airborne acid mist. Although MRAL personnel asserted that they had crushing and grinding apparatus, we did not see any during our visit. What appeared to be their Direct Coupled Plasma (DCP) Arc instrument (Photo L-47) was housed in a dusty office, adjacent to the main reception area.

The technique used during initial screening was sloppy. Cleaning the screen and wooden collection pan between samples consisted of tapping it against the concrete floor. The collection pan typically retained material from the previous sample (Photo L-48). Cross contamination occurred. In addition, material was frequently spilled onto the floor, and put back into the collection pan by hand. Not all spilled material was accounted for in final weights. The technique used to feed the wilfley table was similarly sloppy. The wetted material was scooped into the hopper either by hand, or using a ceramic bowl (Photo 43). Lost spillage was common (Photo 44). We did not witness weighing out of assay charges and reagents, so we cannot comment on the techniques and equipment used. However, the lab technique that we witnessed was poor, sloppy, and careless. Cross-contamination and loss of material were routine.

MRAL reported blank samples as high grade material when they were labeled as Mijo group samples, and as barren when they were identified as blanks. MRAL's reported results for the standards were also incorrect. They reported the gold concentration in NBMG standard 2b as 0.78 ounces per ton in one assay, and then as 1.92 ounces per ton in another. Neither were correct, and both were too high. NBMG reports gold concentration in standard 2b as 0.220 ounces per ton, plus or minus 0.008 ounces per ton. We had hoped for better accuracy on the analysis of the Stillwater Mining Company's Pt and Pd mill concentrates. MRAL reported zero platinum, where they should have found 17.2 ounces per ton. Even allowing for poor lab technique and inaccuracy, *some* platinum should have been reported. On the other hand, MRAL reported 96.68 ounces per ton of palladium when they should have found 58.5 ounces per ton. Even adding the MBMG standard values for platinum and palladium together still does not produce 96.68 ounces per ton.

The poor lab technique and wildly incorrect results for blanks and standards cause all the results reported by MRAL to be suspect. They must be disregarded for this examination. The problems that we found cast considerable doubt on any assays reported by this laboratory. We believe that results reported by MRAL, Donald Jordan, or the staff of MRAL should not be accepted at face value by the BLM for any purpose, and that independent analysis of verifiable samples by an unrelated, competent lab must be required.

Legend Labs, Reno, Nevada.
Because Mark Lewis, manager of Legend Labs had witnessed work at Complex Metals, Shumaker inspected Legend on June 10, 1999. No samples were left with Legend at that time. Shumaker spent about three hours at Legend, observing each phase of the fire assay process. Legend's fire assay procedure is essentially as follows:

1. Incoming samples are normally contained within cloth bags. The bags are dried unopened in large truck ovens (L-49).
2. Samples are opened, then crushed, and split to produce a fraction of about 200 grams. The crushing and splitting equipment is cleaned using compressed air.
3. The crushed sample is then pulverized in a ring and puck pulverizer (L-50). The pulverizer is then cleaned using compressed air.
4. An assay charge of 27 to 31 grams, to a precision of plus or minus 0.01 gram, is weighed out on an electronic analytical scale (L-51). The scale communicates with the central computer, which keeps track of the weights throughout the process.
5. The assay charge is placed into a crucible on a specially constructed carrier, and a silver inquart is added. The carrier resembles a very large egg crate, and consists of two parallel holding fixtures which each hold 12 crucibles. The process is repeated until the carriers are full (L-52)
6. Two blanks and two knowns are placed into crucibles, and put into different spots each time. Their locations are recorded so as to prevent mistaking one tray of samples for another. The known consists of gold ore with copper. The copper stains the slag green to make identification and verification of sample placement easy.
7. The crucibles containing the samples and standards are then fluxed with a standard flux, including litharge. The content of their standard flux is based on more than a decade of experience. Later inspection of the parted slag indicates if re-running with a different flux will be warranted.
8. The tray of 24 crucibles is covered with wax paper, and clamped into a bulk shaker for mixing (L-53).
9. Mixed samples in batches of six are placed into an electric oven with what looks like a pizza pitchfork. The samples are fired for one hour at 2000 degrees Fahrenheit.
10. After firing, the samples are removed and poured into cast iron cone molds in the same sample layout orientation (L-55).
11. After cooling, the slag is separated and inspected for signs of unusual or incomplete firing. The lead buttons are hammered into a rough cube, and then placed onto a sheet of cupels, again in the same sample layout orientation (L-56).
12. The cupels are fired at 1850 degrees Fahrenheit until complete, and then cooled.
13. The resulting dore' bead is weighed on an electronic analytical scale, and the results recorded in that sample's computer file (L-51). The analytical scale is accurate to plus or minus 1

microgram, or 0.001 milligrams, and is calibrated several times daily.

14. The dore' bead is parted with nitric acid to remove the silver.
15. The resulting gold sponge is then weighed on the same electronic analytical scale, and the results recorded in that sample's computer file.
16. The weight of the silver inquart is subtracted, and the concentrations of gold and silver are calculated.

Testing for PGEs begins with a fire assay preconcentration, using steps 1 through 14, except that aqua regia (nitric plus hydrochloric acids) is used to dissolve the entire bead. The solution is placed into a graduated pipette (L-57), and the volume standardized to 10 milliliters. The concentration of the desired elements is then read using a high definition Induction Coupled Plasma (ICP) Arc instrument (Photo L-58). The spectra of a blank, a known, and the sample are compared on a computer screen, and the concentration of the desired element is then calculated.

Conditions at Legend were neat and well ordered. Ventilation is excellent. There is no rusting of equipment due to airborne acid mist. Considerable effort is expended in dust control in the crushing and grinding areas. Within portions of the lab where precision work is completed, conditions resemble an industrial "clean room." Reagents are stored inside cabinets. Glassware and reagents in use are maintained within spill collection trays. Contrast Photos L-51, L-58 and L-59 with Photos L-9, L-24, L-45, and L-46.

The entire analysis process at Legend is designed around accuracy, prevention of contamination, and strict accounting of each sample. They have reduced manual handling of samples, which in turn reduces the chances of inadvertently substituting one sample for another. Blanks and knowns are analyzed with each batch, and analyses of samples submitted are duplicated at random. This has produced consistently accurate and dependable results.

The final round of sample analysis consisted of sending three identical suites of six prepared samples to Legend, Bondar-Clegg, and Chemex. These consisted of splits of two samples from the Mijo group, two blanks, NBMG standard 2b, and a sample of Stillwater Mining Co.'s platinum and palladium mill concentrations that we cut by a factor of 10:1 by weight. The numeration system is shown in Table 11B-5, with the suite sent to each lab designated by a differing letter suffix.

Table 11B-5

Samp No.	Source	Samp No.	Source
21	Same as sample 7A	24	NBMG Standard 2b
22	Same as sample 15.	25	Stillwater Mining Co. Pt/Pd Mill Concs., cut 10:1 by weight.
23	Complex blank, from Shumaker's front yard. Same material as used for all blanks.	26	Hardware store sand.

We submitted a number of samples to Legend, including the concentrates from the bulk samples 1 and

2. Table 11B-6 illustrates the results of several key analyses. The remainder are detailed in Attachment 11B-1. And 11B-9.

Samp No.	**Table 11B-6** *(Entries in italics inside double-line boxes are concentrations of standards.)* **Legend**. Results in Troy ounces per ton. xx = below detection limit. nr = not reported								
	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Source - Type
NVSO #5	xx	xx	xx	xx	xx	xx	xx	xx	Shumaker's front yard, split from sample given to White.
11S	0.220	xx	xx	xx	xx	xx	xx	xx	NBMG Standard 2b, same standard analyzed by Henderson
21A	xx	xx	xx	xx	xx	xx	xx	xx	Same as 7A
22A	xx	xx	xx	xx	xx	xx	xx	xx	Split from 15.
23A	xx	xx	xx	xx	xx	xx	xx	xx	Shumaker's yard. Complex blank
24A	0.236	xx	xx	xx	xx	xx	xx	xx	NBMG Standard 2b
Ref.	*0.228 +/- 0.008*	*0.02 +/- 0.008*	*nr*	*nr*	*nr*	*nr*	*nr*	*nr*	*NBMG Standard 2b average.*
25A	0.120	5.60	1.5611	5.1325	xx	xx	xx	xx	Stillwater Mining Co. mill concs, cut 10:1.
Ref.	*0.101*	*nr*	*1.72*	*5.85*	*0.056*	*nr*	*nr*	*nr*	*Predicted value of Stillwater mill concs. Cut 10:1,+/- about 10%.*
26A	xx	xx	xx	xx	xx	xx	xx	xx	Hardware store sand.

Legend's results were consistent and reliable. Their reported analyses of blanks and standards produced results that were expected. Duplicates of the same sample submitted to Legend produced duplicate results, even when we identified one as a blank and the other as having come from the Mijo group. Results reported by Legend are, therefore, considered in this report.

Bondar-Clegg, Vancouver, British Colombia

We submitted a duplicate set of final samples to Bondar-Clegg, with suffix "B.". We did not inspect their facility. With more than a decade of experience with Bondar-Clegg, we were satisfied with their reputation. The following table, 11B-7, illustrates the results reported by Bondar-Clegg.

Samp No.	**Table 11B-7** *(Entries in italics inside double-line boxes are concentrations of standards.)* **Bondar-Clegg** Results in Troy ounces per ton. xx = below detection limit. nr = not reported								
	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Source - Type
21B	0.00013	xx	xx	xx	xx	xx	xx	xx	Same as 7A
22B	0.00045	xx	xx	xx	xx	xx	xx	xx	Split from 15.
23B	0.00015	xx	xx	xx	xx	xx	xx	xx	Shumaker's yard. Complex blank
24B	0.245	0.03	nr	nr	nr	nr	nr	nr	NBMG Standard 2b
Ref.	*0.228 +/- 0.008*	*0.02 +/- 0.008*	*nr*	*nr*	*nr*	*nr*	*nr*	*nr*	*NBMG Standard 2b average.*
25B	0.1015	0.06	Greater than 0.146	Greater than 0.146	Greater than 0.029	0.0044	0.0139	0.0073	Stillwater Mining mill concs, cut 10:1. Concentration xceeded method's upper detection limits for Pt, Pd, Rh.
Ref.	*0.101*	*nr*	*1.72*	*5.85*	*0.056*	*nr*	*nr*	*nr*	*Predicted value of Stillwater mill concs. Cut 10:1,+/- about 10%.*
26B	0.00003	0.04	xx	xx	xx	xx	xx	xx	Hardware store sand.

We requested that Bondar-Clegg use a fire assay with nickel sulfide collector for samples 21B, 22B, and 23B. This method is extremely accurate, with very low detection limits, capable of detecting concentrations in the range of average crustal abundance (Table 11B-8). Bondar-Clegg did find gold in extremely minuscule, average crustal abundance level, concentrations in both Mijo samples and in the complex blank. The greatest concentration reported was for Sample 22B, which is a split from Sample 15. That concentration amounts to *four point five ten-thousandths of a troy ounce per ton* (0.00045 ounces per ton). That value is one hundred times leaner than the lowest grade extracted from a modern disseminated gold mine.

Table 11B-8 Average Crustal Abundance of Selected Elements (Weast, 1973)

Element	Concentration, ppm	Concentration, troy oz/ton	Element	Concentration, ppm	Concentration, troy oz/ton
Gold (Au)	0.005	0.00015	Iridium (Ir)	0.001	0.00003
Silver (Ag)	0.1	0.003	Rhenium (Re)	0.001	0.00003
Platinum (Pt)	0.005	0.00015	Osmium (Os)	0.001?	0.00003
Palladium	0.01	0.0003	Ruthenium (Ru)	0.001?	0.00003
Rhodium	0.001	0.00003			

Bondar-Clegg reported slightly higher gold concentrations in NBMG Standard 2b than Legend or Chemex. The standard's concentration is nominally 0.228 +/- 0.008 ounces per ton. Bondar-Clegg's result is 0.009 ounces per ton higher than expected for this standard. This could have been caused by

our failure to adequately homogenize the standard material prior to shipping. We spooned the pulverized sample material out of the jar without agitating it first. Some settling may have occurred. It appears that the concentrations increased very slightly as we reached deeper into the jar. In any event, this difference is not significant.

Chemex, Sparks, Nevada

We submitted a duplicate set of final samples to Chemex, with suffix "C.". We did not inspect their facility. Based on experience with Chemex, and discussions with colleagues, we were satisfied with their reputation. Table 11B-9 illustrates the results reported by Chemex.

Samp No.	Table 11B-9 *(Entries in italics inside double-line boxes are concentrations of standards.)* **Chemex** Results in Troy ounces per ton. xx = below detection limit. nr = not reported								
	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Source - Type
21C	xx	xx	xx	xx	xx	xx	xx	xx	Same as 7A
22C	xx	xx	xx	xx	xx	xx	xx	xx	Split from 15.
23C	xx	xx	xx	xx	xx	xx	xx	xx	Shumaker's yard. Complex blank
24C	0.238	xx	nr	nr	nr	nr	nr	nr	NBMG Standard 2b
Ref.	*0.228 +/- 0.008*	*0.02 +/- 0.008*	*nr*	*nr*	*nr*	*nr*	*nr*	*nr*	*NBMG Standard 2b average.*
25C	0.090	0.03	1.620	5.39	0.05	xx	xx	xx	Stillwater Mining mill concs, cut 10:1.
Ref.	*0.101*	*nr*	*1.72*	*5.85*	*0.056*	*nr*	*nr*	*nr*	*Predicted value of Stillwater mill concs. Cut 10:1,+/- about 10%.*
26C	xx	xx	xx	xx	xx	xx	xx	xx	Hardware store sand.

Results from Chemex are very similar to those from Legend. As with Bondar-Clegg, Chemex was sent one of the later portions NBMG Standard 2b. The known submitted as sample 25 was derived from Stillwater Mining Co. platinum and palladium mill concentrates mixed with pulverized hardware store sand, and then homogenized at the NTC lab via repeated passes through a splitter. High grade materials will typically have a greater magnitude of analysis scatter.

Evaluation of Results by Laboratory

Exact splits of the samples analyzed by White Technologies and Complex Metals, including blanks and standards, were submitted to Legend. In each case, Legend reported blanks as barren, and standards within the expected concentration range. This result includes the blanks that we labeled as Mijo group samples. Similarly, selected Mijo group samples, blanks, standards, and knowns were submitted to Chemex and Bondar-Clegg. The following table, 11B-10, summarizes the assay results received from each laboratory for key blanks and standards.

Table 11B-10	Results of Key Blanks and Standards.					
Sample Location Designation and Source	Spl. #s , this source (see att. 11B-1 for complete list)	Sample Analyzed by:	Assay results, Troy ounces per ton, unless noted. na=not analyzed. xx=below detection limit			
			Au	Ag	Pt	Pd
GL-S Complex Blank Splits of the same sample, from Shumaker's front yard	5 set 1	White Tech.	0.092	0.400	na	na
	5 set 2	White Tech.	0.200	0.260	na	na
	NVSO #5	Legend	xx	xx	xx	xx
	8A	Complex Metals	0.06	na	0.11 (Pt. Group)	
	8A	Legend	xx	xx	xx	xx
	11B (labeled as blank)	Complex Metals	xx	xx	xx	xx
	11B (labeled as blank)	Legend	xx	xx	xx	xx
	13B	MRAL	0.38	na	na	na
	13C	MRAL	0.35	na	na	na
	13D	MRAL	0.02	na	na	na
	13S	MRAL	0.11	1.01	0.14	0.04
	B-1 (labeled as blank)	MRAL	0.00	0.00	0.00	0.00
	23A	Legend	xx	xx	xx	xx
	23B	Bondar-Clegg	0.00015	xx	xx	xx
	23C	Chemex	xx	xx	xx	xx
NVBMG-2b Splits of the same sample. This is reference standard ore material 2b, purchased from Nevada Bureau Of Mines and Geology	11S	Complex Metals	0.006	na	xx	xx
	11S	Legend	0.220	xx	xx	xx
	13 (S-1)	MRAL	0.78	na	na	na
	S -1 (reassay)	MRAL	1.92	6.06	0.00	0.00
	24A	Legend	0.236	xx	xx	xx
	24B	Bondar-Clegg	0.245	xx	xx	xx
	24C	Chemex	0.238	xx	xx	xx
SMILL-C Splits of the same sample, Stillwater Mill Concentrates, from Montana Bureau of Mines and Geology	14S	MRAL				
	S - 3	MRAL				
	Actual values	Stillwater Min. Co.	1.01	na	17.2	58.5

Legend, Bondar-Clegg, and Chemex reported results for blanks, standards, and knowns that were within acceptable bounds. Results from Legend Labs, Chemex and Bondar-Clegg are acceptable and are used in this examination.

In every case with White Technologies, Complex Metals, and MRAL, mineral matter derived from our residential yards in central Arizona was reported as barren or nearly so when we identified it as a blank. When the mineral matter from our yards was identified to these three laboratories as a Mijo group sample, it was reported with variable but high values of gold, silver, and PGEs. In some cases, the material from our yards had the highest reported values. Because we had not yet received our standard and known materials, we did not submit one to White Technologies. However, standards and/or knowns were submitted to Complex Metals and MRAL. In every case, the results they reported were significantly different from the standard assays for those materials. Accordingly, due to their

failure to report accurate values for blanks and standards, as well as for other reasons explained previously, we are unable to consider any results reported by White Technologies, Complex Metals, or MRAL for the purposes of this examination

12. Economic Evaluation

Information provided to us by Matheson indicated that the material on the Mijo group is more like a homogeneous lode deposit than a classic gold placer, even though it consists of a typical basin and range fanglomerate. Some of the information he provided us from some of his consultants directly contradicted that opinion. Based on our assay results, it appears that the minuscule concentration of precious metals does appear to be homogeneous. According to the results we received from Bondar Clegg the best sample (22B) contained 0.00045 troy ounces of gold per ton. The best results (Sample 2) we received with traditional placer mining methods, which only capture the free gold, was 0.0000006 troy ounces of gold per ton.

At a gold price of $286 per troy ounce, these gold concentrations result in values of $0.13 (thirteen cents) per ton for sample 22B and $0.0002 (two hundredths of a cent) per ton for Sample 2. The gold price of $286 per troy ounce that we used is based on averaged historic data for the past three years and the futures market looking forward to December of 2002. The actual price used makes little difference to these claims. The gold price would have to significantly exceed the historic high of nearly $900 per troy ounce by an order of magnitude just to begin to pay the current dollar costs for this operation.

The claimant has proposed a number of different mining and processing scenarios. In view of the values returned by the sampling program, rather than addressing each of them and going through their major points we will just address one common factor. That factor is the cost of mining the material. Matheson has provided us with a cost estimate, the accuracy of which has been attested to in a sworn and notarized affidavit by Robert H. Gunnison (Attachment 12-1, and see Attachment 8-2). We have not verified the accuracy, applicability, or feasibility of their estimate. However, we use it here for a comparison of costs to projected income.

Using the claimants own costs for mining, screening, and magnetic separation of $1.00 per ton (see Attachment 12-1) and comparing them to the best gross in place value, that of $0.13 per ton for sample 22B, we come up with a net loss of $0.87 per ton of material mined. This does not address any other cost factors such as disposal of oversize, crushing and grinding, transportation, environmental mitigation, reclamation, or refining. It also does not address factors that affect recovery such as mill loss. It also assumes that gold recovery would be 100%, and that the gold would contain no impurities. Applying the unavoidable additional costs that would occur, plus mill loss, would serve only to deepen the net economic loss per ton mined.

13. Selected References

Bacon, W.G., Hawthorn, G.W., and Poling, G.W., 1989, Gold Analyses – Myths, Frauds, and Truths, Canadian Institute of Mining and Metallurgy Bulletin, November, 1989, p. 29-35.

Cox, D.P., Singer, D.A., editors, 1987, Mineral Deposit Models, U.S. Geological Survey, Bulletin 1693.

Evans, J.R., Waiwood, R.M., Leverette, M., Ford, M, 1992, Valid Existing Rights Determination (VERD) for 42 Placer Mining Claims of Mineral Extractors, Inc. (J&P Project), Kelso Dunes, San Bernardino County, California, U.S. Bureau of Land Management, California State Office, Sacramento, CA.

Gans, P.B., 1996, Magmatic-Tectonic Interactions in a Miocene Continental Rift: The Eldorado Mountains and Environs, Northern Colorado River Extensional Corridor, unpublished manuscript, University of California, Santa Barbara.

Hill, R.T., 1908, Camp Alunite, a New Nevada Gold District, The Engineering and Mining Journal, December 19, 1908, p. 1203-1208.

Klein, K., and Hurlbut, C.S., 1993, Manual of Mineralogy, John Wiley & Sons, 21st ed.

Langenheim, V.E., and Schmidt, K.M., 1996, Thickness and Storage Capacity of Basin Fill of the Northern Part of the Eldorado Valley, Nevada, and the Extent of the Boulder City Pluton, U.S. Geological Survey, Open File Report 96-512.

Lashley, W.C., 1982, Time Sensitive Ores, California Mining Journal, December.

Lincoln, F.C., 1923, Mining Districts and Mineral Resources of Nevada, Nevada Newsletter Publishing Company, reprinted 1982 by Nevada Publications, Las Vegas, NV.

Longwell, C.R., Pampeyan, E.H., Bowyer, Ben, and Roberts, R.J., 1965, Geology and Mineral Deposits of Clark County, Nevada, Nevada Bureau of Mines and Geology, Bulletin 62.

Matheson, K. Ian, 1999, "Discovery Pass Minerals/Kiminco Inc. Mijo 16 / Mijo 17 Placer Mining Claims, unpublished compendium of maps, letters, and other supporting documents.

Mertie, J.B., 1969, Economic Geology of the Platinum Metals, U.S. Geological Survey Professional Paper 630.

Peterson, J.A., 1994, Platinum-Group Elements in Sedimentary Environments in the United States, U.S. Geological Survey Bulletin 2049-A.

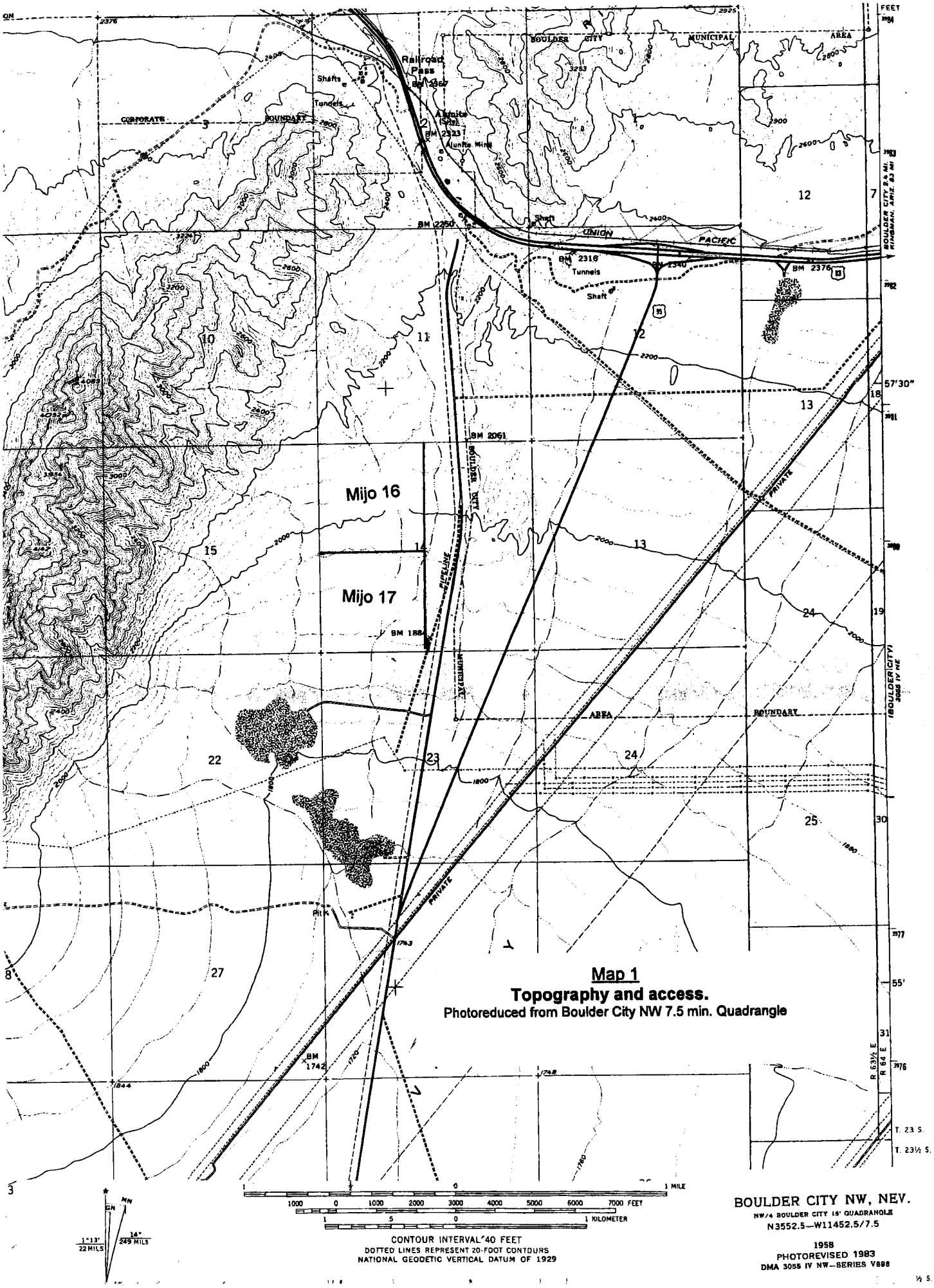
Reddy, R.A., 1988, Fire Assaying Fundamentals and Laboratory, course notebook from Mackay School of Mines, University of Nevada Reno.

U.S. Geological Survey, 1983, Boulder City NW, Nevada Quadrangle, topographic map.

Vanderburg, W.O., 1937, Mining Districts in Clark County, Nevada, U.S. Bureau of Mines Information Circular 6964, reprinted 1989.

Weast, R.C., editor, 1973, Handbook of Chemistry and Physics, 54th edition, The Chemical Rubber Company, p. F-188.

Wells, J.H., 1989, Placer Examination–Principles and Practice, U.S. Bureau of Land Management Technical Bulletin 4.



Map 1

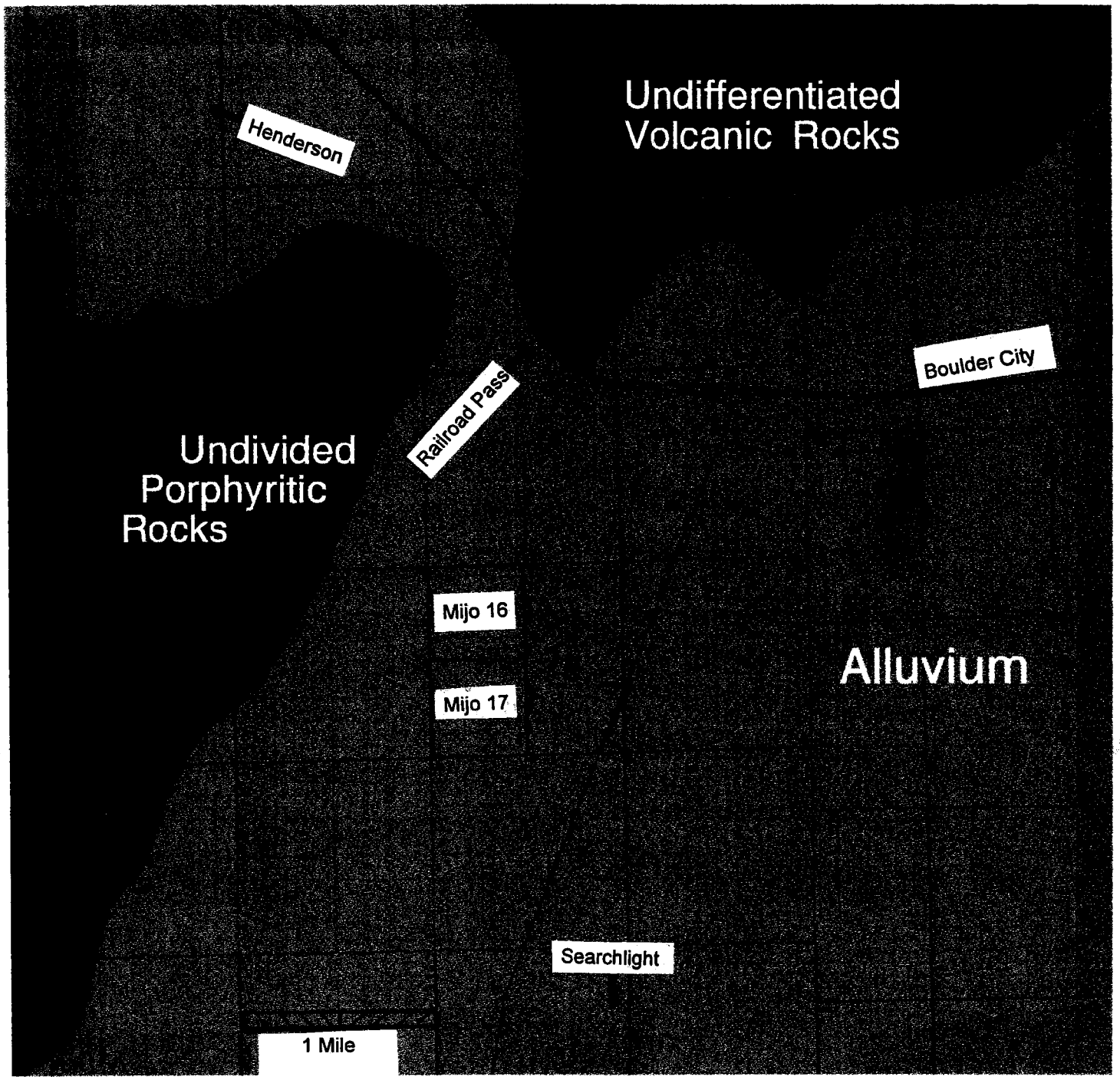
Topography and access.

Photoreduced from Boulder City NW 7.5 min. Quadrangle

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

BOULDER CITY NW, NEV.
NW/4 BOULDER CITY 15' QUADRANGLE
N3552.5—W11452.5/7.5

1958
PHOTOREVISED 1983
DMA 3055 IV NW—SERIES V898

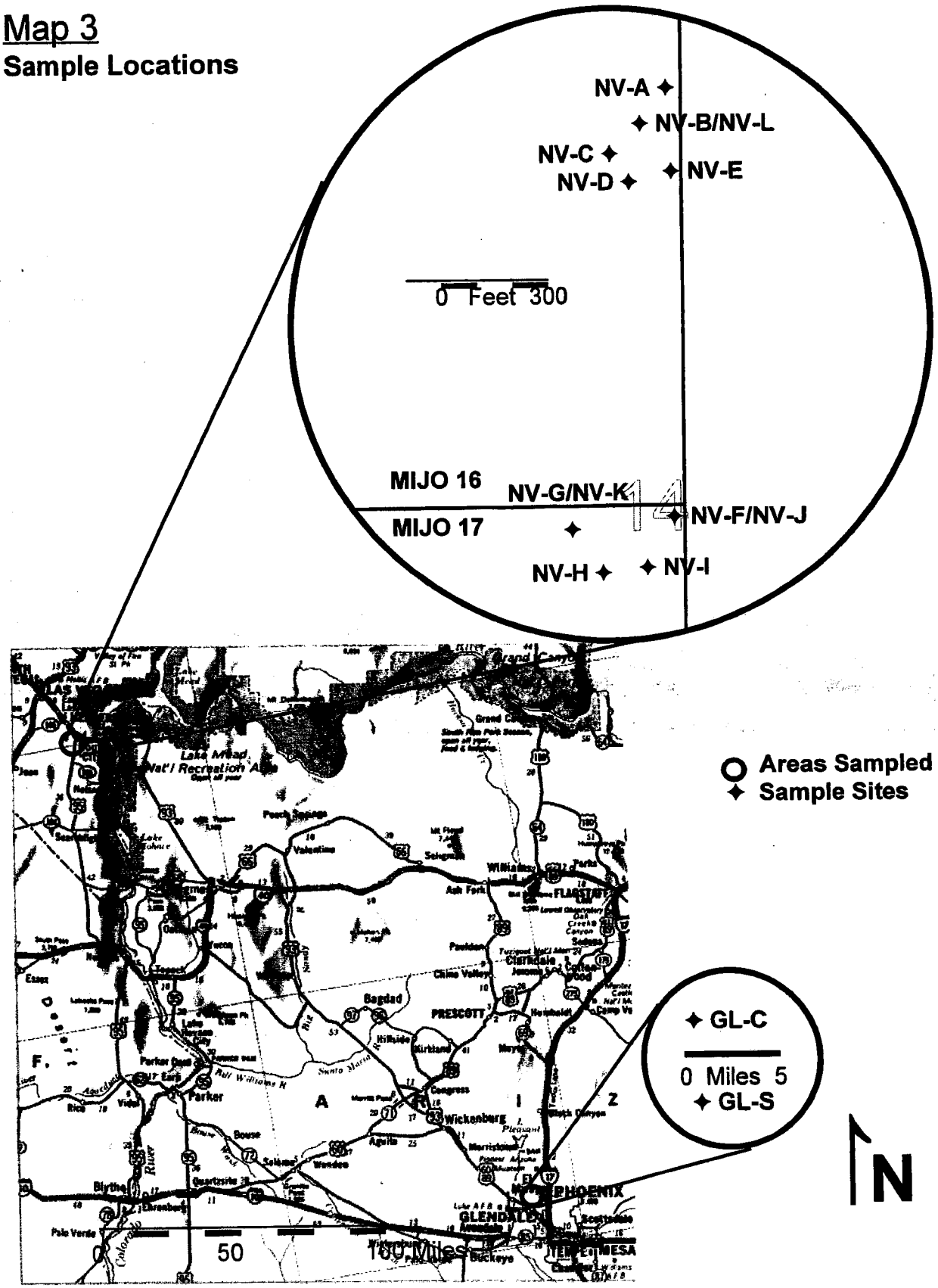


Map 2

Geologic Map of the Northern Eldorado Valley Showing Locations of Mijo 16 and Mijo 17 Unpatented Placer Mining Claims. (After Longwell, 1965, plate 1)

Explanation:
Undifferentiated Volcanic Rocks are Tv; Tertiary volcanic rocks of rhyolitic to andesitic composition, Tertiary in age.
Undivided Porphyritic Rocks are Tki; granite porpyhry, rhyolite, trachydolerite, and other intrusives ranging from basaltic to rhyolitic, Cretacious(?) To Tertiary in age. In the vicinity of the Mijo group, only granitic porpyhry and porphyritic rhyolite were observed in alluvium.
Alluvium consists of Qal, transported alluvial fan material derived from Tv and Tki.

Map 3
Sample Locations



:MN 05:25 Delgratia Mn: Monitoring of Assay Results and Industry Proce

97/04/18 Market News Publishing Inc. No: 000169

DELGRATIA MINING CORP ("DELGF-Q")
- Monitoring of Assay Results and Industry Procedures

Paula Toti, Media Relations of Delgratia Mining Corporation wishes to report on monitoring of our assay results by the Arizona Board of Technical Regulation, and on industry procedures that relate to the assaying of minerals in Nevada.

70% of U.S. gold production is done in the State of Nevada. However, Nevada as a State does not register assayers or certify labs. Nevada does have qualified assayers and labs that do meet or exceed industry standards and do have reputations of high regard within the mining community.

Therefore people in the business (including our company), use labs they believe offer the quality of work they need, as it relates to their exploration projects.

In the State of Arizona assayers can be registered, but labs are not certified. We use labs wherever they may be for their particular expertise and reputations, as that relates to the work we want done.

We have used two labs in Arizona (Jacobs and Mountain States), that do employ registered assayers that have certified work done on our Josh Project in Nevada.

Along these same lines we'd like to update the news concerning the monitoring of our assay results by the Arizona Board of Technical Regulations.

The board informs us of no reason to believe that work done at the project lab in Phoenix by Mr. Robert Gunnison and his staff on Drill Holes 5 & 4 is anything other than credible work, meeting or exceeding industry standards.

Lavern Douglas, Deputy Director of the Arizona Board of Technical Regulation says a news report quoting Ron Dalrymple, executive director of the agency seemed to imply that the department was conducting something other than a routine follow-up to a inquiry by a third party.

When asked if Mr. Gunnison was properly representing himself by a sign in the lab saying "We are not a registered or accredited assaying lab", Lavern Douglas, Deputy Director of the Arizona Board of Technical Regulation said "it would seem so by the sign." The Board has no reason to believe the work done there is anything other than reliable.

Meanwhile we are pleased to report that assays will continue to be verified by registered and/or certified assayers based in the U.S. and/or Canada.

TEL: (614) 771-6853 Paula Toti, Media Relations

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Attachment 1-1a
Bloomberg News coverage of Delgratia Project

BN 04/15 Delgratia's Independent Assayer Under Investigation in Arizona

Delgratia's Independent Assayer Under Investigation in Arizona

Searchlight, Nevada, April 15 (Bloomberg) -- Delgratia Mining Corp.'s independent gold assayer, Robert Gunnison, is under investigation by Arizona officials who are examining assay work he did for Delgratia without a license.

It's a misdemeanor in Arizona to do independent assaying without first being licensed by the Arizona Board of Technical Regulation.

''We're going to investigate this,'' said Ron Dalrymple, executive director of the agency.

Meanwhile, Delgratia's shares soared for a second day, gaining 6 1/2 to 18 as investors regained confidence in the company's claim to a big gold discovery in Nevada. Yesterday, they rose 3 1/2.

Today, the company said a new assay by a licensed independent assayer, Jacobs Assay office in Tucson, supported the reliability of work done by Gunnison. Jacobs said it received its first sample from Delgratia on April 1.

Robert Gunnison's Energy International laboratory in Tucson, Arizona was exclusive independent assay lab for Delgratia's Searchlight, Nevada-based Josh Project property until recently.

Gunnison was convicted of securities fraud in 1978. That conviction may make it impossible for him to receive an Arizona assayer's license, said Dalrymple. A criminal conviction can disqualify an applicant if it's ''reasonably related to the profession'' being licensed, he said.

''It appears that it very well might be,'' said Dalrymple.

Gunnison declined to comment this morning.

Today, Delgratia released results performed last week by the Jacobs Lab in Tucson on an ore sample from Hole 5 that was ''transported directly from secured storage at the project site.''

Delgratia said the ore tested by Jacobs that came directly from the company's storage facility confirmed earlier assay results.

Neither Ager nor Jacobs was available for comment today.

--David Evans in Los Angeles (310) 827-2348 through the New York Newsroom (212) 318-2300/jp

Story illustration: For a graph of the company's stock performance, type DELGF US <Equity> GPC.

Company news:	Industry news:	
DELGF US, BMX CN, BMXNF US	NI GLD	Gold
<Equity> CN	NI MNG	Mining
	NI PCS	Precious Metals

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Attachment 1-1b
Bloomberg News coverage of Delgratia Project

Delgratia's Gold Results Were Based on Tests by Convicted Felon

Searchlight, Nevada, April 11 (Bloomberg) -- Delgratia Mining Corp. based its claim to having made a big gold discovery in Nevada on laboratory tests conducted by an unlicensed gold assayer who was convicted of securities fraud in 1978.

Delgratia has declined to identify the assayer, which it described in a press release yesterday only as ``an outside, independent lab.''

Two consulting mining engineers hired last month by Delgratia to monitor its operations told Bloomberg News that the testing was conducted by Robert Harlan Gunnison in Phoenix.

They said the testing took place at Energy International, a small lab in Phoenix owned by Gunnison.

The engineers, Brian Mountford and Dr. Morris Beattie, each said they weren't aware of Gunnison's felony conviction until contacted by Bloomberg last night.

``That makes one hell of a difference,'' said Mountford. ``All the samples we checked were in his lab at one time or another. We don't know whether it's been salted or not.''

Delgratia, which is based in Vancouver, Canada, used Gunnison as its independent assayer to test samples from the first four drill holes at its Josh Project near Searchlight, Nevada.

Gunnison isn't a licensed assayer, according to the Arizona Board of Technical Regulation. The Board licenses assayers who analyze ore to determine the quality of the gold present. To conduct an independent assay of ore without a license is a misdemeanor in Arizona.

``(Delgratia president Chuck) Ager was surprised,'' said Delgratia spokeswoman Paula Toti. ``This is absolutely the first he's heard of it. If this is true, we say it does not affect the quality of the work, but certainly does affect public perception, and that is unacceptable.''

After being halted for three weeks, Delgratia shares resumed trading this morning at 14 3/4 and fell to 11 within the first 10 minutes of trading.

Volatile Stock

It was positive test results from Gunnison, reported by Delgratia on Feb. 26 and March 19, that sent its shares soaring from 13 1/4 on Feb. 28 to 34 3/4 on March 20. There are 15 million shares outstanding, according to the company.

The stock plunged over the next two days as Bloomberg reported a Nevada mining official was skeptical of a company claim of a 5 million ounce gold reserve at Josh Project, which located on 9,000 acres near Searchlight. The company later said that claim was premature.

Bloomberg also reported that Delgratia hadn't disclosed that it bought its interest in Josh from a company half-owned by a family trust of Delgratia's President Dr. Chuck Ager, a geologist and geophysicist. Delgratia made that disclosure after the story.

Ager disclaims any beneficial interest in the trust,

Attachment 1-1c
Bloomberg News coverage of Delgratia Project

explaining that it only benefits his wife and three children. He denies any conflict of interest.

Late yesterday, Delgratia released the results of assays from two licensed labs in Tucson that confirmed Gunnison's tests on hole 4, and found even higher levels of gold in samples taken from hole 5.

Delgratia also said 20 random ore samples taken from the Phoenix lab were sent by Delgratia's new consulting engineers to an independent lab in Vancouver, which also confirmed Gunnison's results.

However, all the samples tested at the new independent labs in Tucson and Vancouver were prepared at Gunnison's lab.

100 Million Ounces

Consulting engineer Mountford said Gunnison worked with Ager for five years on the Josh Project.

``The fact that he's a felon doesn't help their case one bit,'' said Beattie. ``It's not a good thing, obviously.''

Mountford said he's been a personal friend of Delgratia President Chuck Ager for 20 years.

``What I know about him is that he's truthful,'' said Mountford.

Mountford said he's consulted with Ager from time to time about Josh over the past two years. He said he's told Ager that Josh may have a huge gold deposit.

``If one does the math on the numbers that have been released by Delgratia, you come up with 100 million ounces,'' he said.

To be sure, Mountford said there are other possible explanations for the test results from the Josh Project.

Forensic Audit Needed

``I've told him one answer is someone is salting this and not telling you,'' said Mountford. ``We feel we must do a forensic audit where we don't lose sight of those samples from the time they leave the ground until the time we produce the gold.'' He said he and Beattie hope to complete such an audit within two to three weeks.

Gunnison's Energy International lab displays a sign saying, ``We are not a registered or accredited assaying lab,'' according to Ager and Mountford.

``We are a private laboratory. We work on a contract basis for Chuck,'' said Gunnison, who said he's been an assayer for a long time. ``I've been doing this for 20 years.''

He said he began assaying while he was in the mortgage business. During two separate telephone calls last night, Gunnison hung up the phone when asked about his conviction.

In the 1970's, Gunnison was president of Arizona Realty and Mortgage Trust. In 1978, he was convicted of fraud in the sale of securities by a state court in Tucson. In 1979, the Arizona Court of Appeals upheld the conviction.

``Appellant (Gunnison) knew phony mortgages were going to be

created and therefor knew that untrue and misleading statements would be made to the buyers of these mortgages,'' the court held. In 1980, the Arizona Supreme Court upheld Gunnison's conviction.

--David Evans in Los Angeles (310) 827-2348 through the New York Newsroom (212) 318-2300/jp

Story illustration: For a graph of the company's stock performance, type DELGF US <Equity> GPC.

Company news:
DELGF US, BMX CN, BMXNF US <Equity> CN

Industry news:
NI GLD Gold
NI MNG Mining
NI PCS Precious Metals

Regional news:
NI CANDA Canada News
NI NV Nevada

News by category:
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Story illustration: For a graph of the company's stock performance, type DELGF <Equity> GPC.

Company news:
DELGF US <Equity> CN

Industry news:
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NI GLD Gold
NI PCS Precious Metals

Regional news:
NI CANDA Canada News
NI NV Nevada

News by category:
NI SEC SEC
NI NASD NASD

For more stories about Nevada's mining industry: TNI MNG NV

Attachment 1-1e
Bloomberg News coverage of Delgratia Project

N. MINER 4/28/97
GUNNISON, ROBERT

Goldfields's (SAS-T) mill, in nearby Stock Twp. The 4,492-gram (144-oz.) bar was produced from low-grade material shipped to the mill at startup, together with some high-

Minable reserves now stand at 665,000 tonnes grading an average 12.9 grams gold per tonne, all above the 250-metre level. At the time of Exall's feasibility study, the reserve

aged over mining widths of at least 1.8 metres, grades ranged from 1.2 to 27.5 grams, with intersections up to 10.2 metres wide. "We've almost

See GLIMMER, Page 3

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Drilling expands Bulyanhulu resource

BY ROB ROBERTSON

VANCOUVER — Deep drilling at the Bulyanhulu gold project in northwestern Tanzania has intersected gold mineralization some 300 metres beyond the previously defined depth to nearly 1,100 metres below surface.

Sutton Resources (STT-V) has three drill rigs working in an effort to expand the resource of the Reef 1 system. The effort is part of a US$20-million development program aimed at advancing the project to the final feasibility stage.

The company holds an 85% interest in the project, with the balance held by the Tanzanian government.

Hole 288 encountered a 1.6-metre true-width interval grading 24.8 grams gold per tonne at a vertical depth of 1,082 metres. Preliminary results for two other deep holes include a true width of 7.8 metres grading 8.7 grams at a vertical depth of 905 metres in hole 277, and a 13-metre intercept at a depth of 943 metres in hole 310.

Results are not yet available for hole 310.

Sutton is in the process of going underground on the Reef 1 system via a decline. The company has moved 35 metres of overburden to reach bedrock and expects to begin portal excavation before May. The underground development program will form the basis of a bankable feasibility study, scheduled for completion in early 1998.

In light of the latest drill results, the company is considering sinking a shaft prior to the delivery of the feasibility study. Sutton is more than adequately funded, with working capital of US$33.8 million.

The Bulyanhulu deposit is a

See SUTTON, Page 2

Back from Pax

'Desert dirts' all the rage in southwestern U

BY VIVIAN DANIELSON AND JAMES WHYTE

In the mid-1980s, a junior company touting a huge platinum resource told potential investors that the U.S. Bureau of Mines had "verified" the presence of platinum at its property in Arizona.

"Not true," the Bureau said, though it did confirm that the company's president had brought samples to its mineralogists for mineral or metal identifications. In response to inquiries, the Bureau said it could "neither prove nor disprove" Global Energy's claim that it had a platinum deposit, because it had no information on the history of the samples brought in by its president, Richard Jensen.

"None of his samples were raw rock or ore," the Bureau wrote. "They all had undergone some treatment or process in an attempt to recover or concentrate the noble metals. Most were barren, but we did find visible platinum in a few of the samples allege
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See DESE

Delgratia resumes trading after assaying controversy

BY TED WORTHINGTON

LAS VEGAS, NEV. — Shares of **Delgratia Mining** (DELGF-Q) have resumed trading after a 3-week halt related to controversy over assay results from the company's Josh property, some 40 miles south of here.

In late February, the company released results from the first three holes drilled on the property. Results from a fourth hole (1,030 ft. grading 0.063 oz. gold per ton), released on March 19, pushed the price of Delgratia shares to a high of US$33.

At that point, however, concerns were raised when it was learned that Delgratia had its assaying done by a lab which the company refused to identify, with check assays performed at other labs, which the company also refused to identify. Delgratia shares soon fell to US$16, and, on March 21, regulators halted trading for three weeks.

In an effort to reassure investors and mining analysts, Delgratia Chairman Charles Ager led analysts on a tour of the Josh property.

See DELGRATIA, Page 6

Attachment 1-2a
Northern Miner coverage of Delgratia Project

procedures and errors on the part of the Exchange's consultants," and is fighting the de-listing order.

Using two Naxos-approved methods, combined with conventional fire assay, Ledoux continues to crank out gold grades of 0.01 to 0.4 oz. per ton, and Naxos has a drill program planned for the next few weeks at Franklin Lake.

International Platinum

In the early 1990s, a company, then known as International Platinum, acquired claims in Arizona from vendors (or lessors) Dale Runyon and William Marston. The claims were described as having "potential for gold and platinum group elements."

on Page 1

The group, which included *The Northern Miner*, was shown a fenced-off compound containing the sample preparation facilities, crushing room and a locked container where rejects were stored.

Ager said he became aware of the property in 1991 and was convinced of its "economic potential" after interviewing self-taught assayers in the region. As geophysicist, he was hesitant to provide a geological interpretation of the property, preferring rather "to let the facts speak for themselves."

Ager told analysts that he spent two years and US$5 million on metallurgical testing before establishing a process to extract the gold. He said the gold cannot be recovered using conventional panning and gravity methods, because "the gold particles are so small that they do not respond to the density contrast, but are more affected by their electrical charge."

The samples are taken from the drill rig using a standard cyclone and splitter. Delgratia takes 20-ft. composite samples, a procedure which, Ager said, "evens out the histograms of the assay values." The samples are brought to the on-site sample preparation lab and then sent for assaying to Energy International in Phoenix, Ariz., which works under an exclusive agreement with Delgratia and has no other client. Check assays were later performed on selected samples at two local laboratories.

Not long after Delgratia resumed trading, a news service reported that the owner of Energy International, Robert Harlan Gunnison, had been assaying without a licence and was under investigation by the Arizona Board of Registration (for assayers and geologists). Gunnison was also convicted of felony fraud relating to the sale of securities when he was president of Arizona Realty & Mortgage Trust in 1978.

This blow to the credibility of the lab and its results did not appear to faze investors. Over the next several days of trading, the share price of Delgratia rose US$9 to the US$17 level, though it has since slipped to about US$13.

Mining analysts are openly skeptical about Delgratia's assay results and the potential of the property. One analyst who toured the property later told Bloomberg news service that "if there is gold there, I'd like to know how it got there. Geologically, it doesn't make sense."

Delgratia's interest in the Josh is held through its 40% ownership position in Nevada Gold, a private company which holds title to the property. Delgratia is earning another 30% interest in Nevada Gold from Philgold Investments, a private company 50%-owned by Ager, in exchange for 3 million shares of Delgratia and a work commitment of US$15 million. Through Philgold, Ager owns another 51,000 acres of land surrounding the Josh.

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Attachment 1-2b
Northern Miner coverage of Delgratia Project

gold per ton, are to be milled at the River Gold mill near Wawa, Ont., during July and August 1997. Another 11,000 tons will be milled in December 1997, and plans call for a further 20,000 tons to be mined and milled by mid-1998.

Assuming a gold price of $470 per oz., the ore milled in December will result in a total profit of $2.4 million for VenCan and River, and the milling of Edwards ore in mid-1998 will net $4 million. When Edwards ore is not being processed, rock [illegible]ain underground.

To [illegible]ate, underground chip sampling at the Edwards mine yields an overall, weighted average grade of 0.96 oz. gold per ton (uncut) across an average width of 6.52 ft. The arithmetic average of all underground chip sample assays to date is 1.11 oz. gold per ton. An independent reserve report prepared by Gamah International in April estimates an *in situ* grade of 0.83 oz. gold per ton contained within the first 61,500 tons of proven reserves.

Little light shed on Delgratia salting scandal

DENVER — Shareholders of **Delgratia Mining** (DELGF-Q) are finding more questions than answers in a report examining recent work at the company's Josh property in Nevada.

The audit, performed by consulting engineers Brian Mountford and Morris Beattie, states that no gold was detected from samples assayed by reputable laboratories and that the only time the precious metal was readily detected was when the samples were assayed by Energy International. This unlicensed laboratory, based in Phoenix, Ariz., is owned by Robert Harlan Gunnison, who was convicted of securities fraud in 1978.

The report also raised concerns about the procedures employed by another lab, White Technology of St. George, Utah. Delgratia had not previously disclosed that White Technology or its principal, Merwin White, had assayed samples from the Josh property. Merwin White has, however, carried out assaying work for another junior under fire for misrepresenting assay results, namely **Naxos Resources**, which has been suspended from trading by the Alberta Stock Exchange.

Three class-action lawsuits have been launched against Delgratia and certain principals, namely Charles Ager, president. The lawsuits allege that Ager not only handpicked the unlicensed labs to assay samples from the property but that he stood to benefit financially from the fabricated results as his family trust owned the property vended to Delgratia.

A man with many hats, Ager also owned Cactus Mining, the company exploring the Josh property for Delgratia. Cactus had its own assay lab and, in an unusual development, Mountford and Beattie asked Cactus' principal assayer, David Camacho, to join its audit team after swearing him "to secrecy." As a consequence, Camacho's role, and that of Cactus Mining (owned by Ager), was not investigated in the audit.

Ager could not be reached for comment.

Delgratia says it has retained Behre Dolbear to conduct "such additional programs as may be necessary, including a review of existing data," in order to determine if the property should be retained.

In other news, the British Columbia Securities Commission (BCSC) filed a notice of hearing against **American Technology Exploration**, a junior promoting an unsubstantiated gold deposit in Nevada. While the company is listed on the Bulletin Board in the U.S., its executive offices are in British Columbia.

The company's president, Philip Lieberman, is subject to outstanding orders, issued by the BCSC in March of 1994, prohibiting him from acting as a director or officer of any reporting issuer for a period of eight years. The order was issued as a result of "false and misleading representations" made by Lieberman concerning a mineral property.

tion in early 1[illegible], is expected to have an annual production rate of 80,000 oz. and cash production costs below US$250 per oz. Rea started commissioning the mill in the first

full production in September

Since February, when the entered production, Rea

Kennecott inks Mexican deal

DENVER — **Kennecott Minerals** has signed a letter of intent with a private company to develop a copper mine in the central Mexican state of Zacatecas.

According to terms of the deal, Kennecott, a subsidiary of **Rio Tinto** (RTP-N), would receive a 65% interest in the Tayahua mine from Minera Tayahua. The transaction is still subject to a due diligence.

Should Kennecott decide to seal the deal, the company would undertake a US$10-million exploration program in order to identify additional mineralization required to support a mine expansion to 10,000 tonnes per day.

The mine currently produces copper, lead and zinc concentrates from two orebodies at a mining rate of 2,000 tonnes per day.

Proven and probable reserves at the project, according to Minera Tayahua, stand at 40 million tonnes averaging 1.4% copper.

MINING AN[illegible]
FOR

Interfax Russian News A[illegible]
information source for Western [illegible]
metals and minerals across the f[illegible]
Report provides the information n[illegible]
for your ventures in the former So[illegible]

- complete coverage of the ferro[illegible]
- updates on joint ve[illegible]
- laws and regul[illegible]

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call +1 (303) 825-1510, o[illegible]

MILLING/CRUSHING EQUIPME[illegible]

MILLING EQUIPMENT

MILLS

6-12-1/2' X 13' MARCY BALL MILLS, Complete with 1500 Hp GE motors - direct drive

6-10-1/2' X 14' ALLIS-CHALMER ROD MILLS, Complete with 800 Hp Allis Chalmers motors - direct drive

1-10' X 20' MARCY REGRIND MILL, Complete with 1000 Hp Westinghouse motor with Fawick air clutch

4-8' X 22' TRAYLOR REGRIND MILLS, Complete with 500 Hp G.E. motors - direct drive

1-13' X 20-1/2' NORDBERG ROD MILL, Complete with 1500 Hp Westinghouse motor with Fawick air clutch

PUMPS

3-ASH G-9-5 16 X 16 PUMP

8-ASH CD-6-5 10 X 10 PUMPS

18-ASH D-41-5 12 X 12 PUMPS

2-ASH D-6-5 12 X 12 PUMPS

2-WORTHINGTON SEAL WATER PUMPS

2-ASH SRH 500 COLUMN FEED PUMPS

4- 3" FLOOR SUMP PUMPS

1 - DENVER 10" PUMP

1 - ASH 6X4 B-41-5 PUMP

FLOTATION

MISCELLAN[illegible]

1 - AIR DRIER

1 - COMPUTO[illegible]

1 - JOY TWIST[illegible]

1 - JOY COMP[illegible]

1 - CP AIR CO[illegible]

2 - WORTHIN[illegible]

2 - WORTHIN[illegible]

- LIME UNLO[illegible]

1 - ROTARY L[illegible]

17-26" KREBS [illegible]

CRUSHERS

3-7' HEAVY DU[illegible] motor

1-7' HEAVY DU[illegible] on hand

2-SPARE SETS [illegible]

3-DUST COLL[illegible]

1 - DOOR - OLS[illegible]

2 - FILTRATIO[illegible]

[illegible]ERSOLL[illegible]

[illegible]THING[illegible]

[illegible]GHER [illegible]

[illegible]NAP BL[illegible]

[illegible]O FILT[illegible]

[illegible]BANKS[illegible]

[illegible]ERS DI[illegible]

[illegible]CRUBBER [illegible]

[illegible]ASH VACU[illegible]

Attachment 1-2c
Northern Miner coverage of Delgratia Project

'resources, but we need
See KABILA, Page 2

ıership

Photo by The Northern Miner

ls with Mines Minister
ɔject near Lubumbashi.
ınd developing several
ɔjects in the country.
ıtlook is optimistic and
ıt Kabila has said [about
],'' said company
Earl Young, adding
See AMF, Page 2

ɛbels

November with state-
ɛénérale des Carrières
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ɛr rebel control, Geca-
ɛing run out of the
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See TENKE, Page 10

ɔrogram

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Rooyen, who trav-
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the rebel authorities.
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ɛements with what
See BANRO, Page 14

BY LAWRENCE KOOTNIKOFF

VANCOUVER — Faced with conflicting results from trench assaying at the Stenpad property in Ghana, **Golden Rule Resources** (GNU-T) and subsidiary **Hixon Gold Resources** (HGX-V) are investigating the possibility that their previously reported assay results were artificially enhanced by selective sampling or tampering.

Assays reported by the joint venture were significantly higher than the results released in two recent reports completed by the Ghana Minerals Commission and CME Consulting, a Vancouver-based firm retained by the Commission.

On May 15, the Vancouver Stock Exchange halted trading in Hixon, which had previously closed at $6.40. Golden Rule was halted in Toronto on the same day but resumed trading on May 16; the issue plunged to $2.85 on May 20 from $7.40 on May 15.

In the autumn of 1996, the joint venture reported 100 metres grading 8.8 grams gold per tonne, including 12.35 metres of 27.5 grams gold, for the Agyakra trench 1
See GOLDEN RULE, Page 14

Delgratia stung by salting

BY TED WORTHINGTON

DENVER — Another scandal rocked the mining industry this week as **Delgratia Mining** (DELGF-O) reported that someone had tampered with samples from its Josh property in Nevada.

Situated south of Las Vegas, the 9,000-acre property has, in recent months, been the focus of controversy related to the veracity of assay results received from drilling.

Suspicions were raised when the company first announced that it had intercepted gold mineralization over sizable widths in what turned out to be valley-fill gravels, an unlikely geological source for such high-grade intersections. Those suspicions proved to be justified after an audit revealed evidence that samples from the drilling had been tampered with.

The audit, conducted by Brian Mountford and Morris Beattie, concluded that the Josh property contained "insignificant gold." It also noted that "any gold detected beyond background amounts was introduced into the samples after they had been collected at the drill."

Charles Ager, president and chairman of Delgratia, agreed with the statements but claimed that his company was "the victim of data falsification." He also said "the company is taking steps to notify
See DELGRATIA, Page 14

NM Y 908615 0700 0001
H MASON C06GTN
DIRECTOR
DEPT MINES & MINERAL RESOURCES
1502 W WASHINGTON
PHOENIX AZ 85007-3210 U.S.A.

ENERGY INT.
GUNNISON

5/26/97
N. MINER

Attachment 1-2d
Northern Miner coverage of Delgratia Project

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red several mineralized zones hich have been correlated with milar zones to the east. The zones e substantially wider than those ound at Fuller in the past, ranging om 1 to 25 metres along the core. orizontal widths are typically 2 to metres, and grades range from 1 21 grams per tonne.

The deposit's Contact and anging Wall (HW) zones have roved the thickest, with one inter-ction in the former grading 5.6 ams gold per tonne over 21.3 etres (6.2 metres horizontal) plus additional 4.1 grams over 10.8 etres (4.6 metres horizontal). In e HW zone, a 25.6-metre inter-ction graded 4.5 grams.

Some higher-grade intersections ave also been encountered, ncluding 21.9 grams over a 4.4-etre core length and 14.6 grams ver 2.8 metres.

Induced-polarization (IP) sur-eys half a kilometre north of the eposit revealed several charge-ble zones that have since been ripped and water-washed. One IP urvey detected three surface ones of disseminated sulphides bout 6 to 30 metres wide. Drilling n the downdip extension of the urface zones is planned for the nd of May.

Delgratia stung by salting

From Page 1

law enforcement authorities," though exactly which authorities was not made clear.

While some press reports suggest that Delgratia knows who did the tampering, this information has not been made public. The company could not be reached for further comment.

The National Association of Securities Dealers Automated Quotation (NASDAQ) halted trading on the issue on May 19 and summoned company personnel to Washington, D.C., to meet with the listings qualifications panel. The exchange had halted trading of the company previously, from March 20 to April 11, after the stock lost half its value on March 19. The company offered no explanation as to why the value of the stock had plummeted.

Before the "no gold" announcement, a class-action suit had been filed against Delgratia charging certain of its officers and directors with having violated federal securities laws. Filed in U.S. District Court, the suit alleges that the defendants, including Ager, made false and misleading statements about the Josh property.

Ager may have trouble convincing the plantiffs that he was "the victim of data falsification." The lawsuit alleges that Ager controlled the company that was conducting exploration on the Josh property and had personally selected, as the project's assayer, "a person who was a long-time business associate, a convicted securities fraudster and [that] neither a licenced nor [an] independent outside lab [was used]." Several analysts visited the lab in question and noted a prominently displayed sign stating that it was "not a registered or accredited assaying lab."

The statement of claim further alleges that Ager "held a substantial undisclosed economic interest in the success of the Josh project."

The plaintiffs seek to recover damages on behalf of purchasers of the stock during the period between Nov. 18, 1996, and April 11 of this year.

The share price rose steadily to a high of US$34.75, only to plummet to US$16 on March 20, 1997. Trading was halted for three weeks following the price crash.

When trading resumed on April 11, the share price fell to US$8 on heavy trading. During that week, a news service reported that the company's assayer was under investigation by the Arizona board of technical registration. However, by April 15, the share price had closed up US$6 to US$17.50 per share. The shares were trading at US$12 before the salting disclosure.

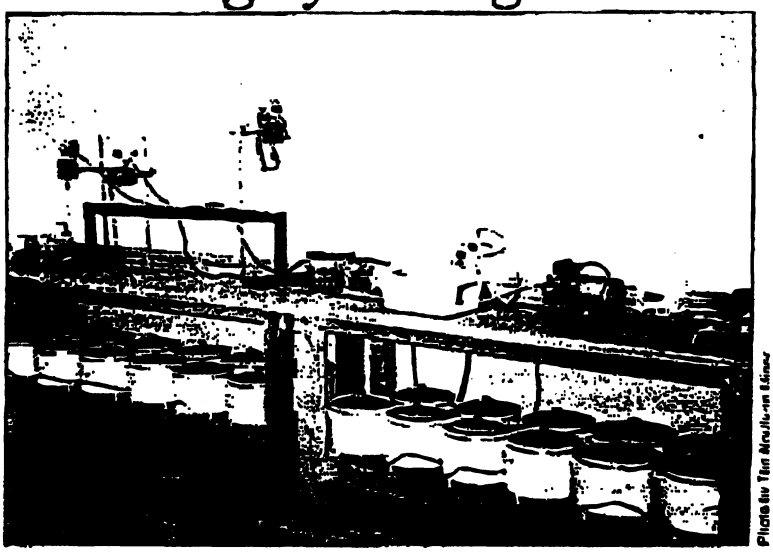

Photo by Tim Krulik-an Elinor

This assembly line of crock pots, part of Delgratia's sample preparation facilities on the Josh property in Nevada, is a sight not typically seen at a mineral exploration project. While an audit has shown that Delgratia's samples were salted, it is not known if this took place before, during, or after the "cooking" process.

Golden Rule

rom Page 1

compared with 100 metres of 6.78 rams reported by the Minerals ommission) and 13.6 metres of 16 rams gold at trench 2 (compared ith 4.29 grams reported by the ommission).

At Seidu trench 2, the Minerals ommission results were 16 metres f 1.29 grams, compared with the int venture's 14.3 metres of 7.3 rams gold. At trench 3, the ommission reported 96 metres rading 3.54 grams, compared with e joint venture's earlier results of 3 metres of 16 grams gold.

The assay results in CME onsulting's report, carried out at o separate labs, also were signifi-ntly lower than those obtained by the joint venture.

CME reported 99 metres of 3.75 grams gold from Agyakra trench 1 at its first lab, and 5.78 grams at its second lab. From Agyakra trench 2, CME reported 14 metres grading 0.29 gram at the first lab and 0.34 gram at the second.

From Seidu trench 2, CME reported 16 metres grading 3.65 grams gold from lab 1 and 1.86 grams from lab 2. At trench 3, the results were 96 metres of 0.42 gram from lab 1 and 0.41 gram from lab 2.

Calls to Golden Rule and Hixon's Calgary offices were not returned. But, in a conference call with analysts, Golden Rule President Glen Harper said "selec-

nation for the variance. "Did the Ghanaian geologist want to keep us happy by putting a whole bunch of quartz that he knew ran [with gold] into our original samples?" he asked. "That is a probability or a possibility. I just don't know."

In a statement, Golden Rule and Hixon said they had passed both sets of results to Associated Mining Consultants, with "a mandate to audit sampling and assay procedures and the 'chain of custody' of the initial drill cores." A report is expected by mid-June.

Golden Rule is operator at the 6,938-ha concession, which is in the Asankranga district of the West African nation, and retains a 50

nder

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Attachment 1-2e
Northern Miner coverage of Delgratia Project

16 23 S 63 E 13 NW J 17

REPORT DATE: FEB 19, 1999 UNITED STATES DEPARTMENT OF THE INTERIOR PAGE NO. 22459

ADMINISTRATIVE STATE: NEVADA BUREAU OF LAND MANAGEMENT PCN: LT892PP1

GEOGRAPHIC INDEX MERIDIAN: MOUNT DIABLO

ALL CLAIMS

- -LEGAL DESCRIPTION- - TWNSHP	RANGE	SEC	SUBDV	GEO CTY	BLM DIST	SERIAL CASE NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)	LEAD FILE	COUNTY BOOK;PAGE	LOCATION DATE	LATEST ASSMT-YR	CASE CLOSED
23 S	63 E	13	NW	3	5	529713	PL	DUTCHMAN # 25	TOLMAN RONALD L	529689		9/12/1988	0000	10/22/1990
									TOLMAN ERIC D					
									TOLMAN RONALD PAUL					
									TOLEMAN HOLLY C					
									TOLMAN LEO R					
									TOLMAN IRENE M					
									HIENER GARY					
									HIENER SUSAN					
			SW	3		529714	PL	DUTCHMAN # 26	TOLMAN RONALD L	529689		9/12/1988	0000	10/22/1990
									TOLMAN ERIC D					
									TOLMAN RONALD PAUL					
									TOLEMAN HOLLY C					
									TOLMAN LEO R					
									TOLMAN IRENE M					
									HIENER GARY					
									HIENER SUSAN					
			NE	3		680802*	LD	SUNSHINE NO 3	GREENE O B	680800		8/27/1993	1995	12/30/1996
		14	NE	3		293449	MS	BALT # 1	MORTON LUIS M JR	293449	1850;0	12/14/1983	1999	
									MORTON MARGARITA F					
			NE	3		293450	MS	BALT # 2	KIMINCO INC	293449	1850;0	12/14/1983	1999	
			NE	3		293451	MS	BALT # 3		293449	1850;0	12/14/1983	1999	
			NE	3		293452	MS	BALT # 4	PILOT PLANT INC	293449	1850;0	12/14/1983	1995	2/29/1996
			NE	3		293453	MS	WEST WE GO	PASS MINERALS INC	293453	1850;0	12/14/1983	1999	
			NE	3		293454	MS	MISS T		293453	1850;0	12/14/1983	1999	
			NE	3		293455	MS	MR L		293453	1850;0	12/14/1983	1999	
			NE	3		293456	MS	BECKI M	PILOT PLANT INC	293453	1850;0	12/14/1983	1999	
			NW	3		293590*	PL	MIJO # 16	PASS MINERALS INC	293590	1848;0	12/14/1983	1999	
			SW	3		293591*	PL	MIJO # 17	KIMINCO INC	293590	1848;0	12/14/1983	1999	
			SE	3		298720	MS	BALT MILLSITE # 5	MORTON LUIS M JR	298720	1868;0	1/28/1984	1999	
			SE	3		298721	MS	BALT MILLSITE # 6	VINCENT ARBY J	298720	1868;0	1/28/1984	1986	11/16/1989
									VINCENT BECKI M					
									VINCENT RICK J					
									VINCENT VIRGINIA					
			SE	3		298722	MS	BALT MILLSITE # 7	VINCENT ARBY J	298720	1868;0	1/28/1984	1986	11/16/1989
									VINCENT BECKI M					
									VINCENT RICK J					
									VINCENT VIRGINIA					
			SE	3		298724	MS	BALT MILLSITE # 9	VINCENT ARBY J	298720	1868;0	1/28/1984	1986	11/16/1989
									VINCENT BECKI M					
									VINCENT RICK J					
									VINCENT VIRGINIA					
			SE	3		298725	MS	BALT MILLSITE # 10	VINCENT ARBY J	298720	1868;0	1/28/1984	1986	11/16/1989
									VINCENT BECKI M					
									VINCENT RICK J					
									VINCENT VIRGINIA					

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Attachment 2-1a
BLM Nevada Mining Claim Records for
T. 23 S., R. 63 E, Sec. 14

23 S 63 E 14 SE K 17

REPORT DATE: FEB 19, 1999 UNITED STATES DEPARTMENT OF THE INTERIOR PAGE NO: 29460
ADMINISTRATIVE STATE: NEVADA BUREAU OF LAND MANAGEMENT PCH: [illegible]

GEOGRAPHIC INDEX MERIDIAN: MOUNT DIABLO
ALL CLAIMS

-LEGAL DESCRIPTION- TWNSHP	RANGE	SEC	SUBDV	GEO CTY	BLM DIST	SERIAL CASE NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)	LEAD FILE	COUNTY BOOK;PAGE	LOCATION DATE	LATEST ASSMT-YR	CASE CLOSED
23 S	63 E	14	SE	3	5	398022*MS		ARENA # 1	SEATON TIMOTHY VINCENT ARBY J JR	398022	; ``	2/02/1987	1992	9/01/1993
			SE	3		398023*MS		ARENA # 2	SEATON TIMOTHY VINCENT ARBY J JR	398022	; ``	2/02/1987	1992	9/01/1993
			NE	3		403793*PL		AMI # 1	AIRCASTLE MINING INC	403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403794*PL		AMI # 2		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403795*PL		AMI # 3		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403796*PL		AMI # 4		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403797*PL		AMI # 5		403793	; ``	4/16/1987	0000	9/27/1989
			NE	3		403798*PL		AMI # 6		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403799*PL		AMI # 7		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403800*PL		AMI # 8		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403801*PL		AMI # 9		403793	; ``	4/16/1987	0000	9/27/1989
			NW	3		403802*PL		AMI # 10		403793	; ``	4/16/1987	0000	9/27/1989
			SE	3		403803*PL		AMI # 11		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403804*PL		AMI # 12		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403805*PL		AMI # 13		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403806*PL		AMI # 14		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403807*PL		AMI # 15		403793	; ``	4/16/1987	0000	9/27/1989
			SE	3		403808*PL		AMI # 16		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403809*PL		AMI # 17		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403810*PL		AMI # 18		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403811*PL		AMI # 19		403793	; ``	4/16/1987	0000	9/27/1989
			SW	3		403812*PL		AMI # 20		403793	; ``	4/16/1987	0000	9/27/1989
			NE	3		611835*PL		SNAP # 1	NORTH JORDAN	611835		9/20/1990	0000	5/26/1993
			SE	3		611836*PL		SNAP # 2		611835		9/20/1990	0000	5/26/1993
			SE	3		611837*PL		SNAP # 3		611835		9/20/1990	0000	5/26/1993
			NE	3		611838*PL		SNAP # 4		611835		9/20/1990	0000	5/26/1993
			SE	3		611839*MS		SNAPPY HILLSITE		611835		9/20/1990	1994	9/01/1994
			NE	3		624608 MS		ART HILLSITE # 1	KNIGHT ROUNDY MINING	624608	031;644	3/06/1991	0000	9/01/1993
			NE	3		624609 MS		ART HILLSITE # 2		624608	031;645	3/06/1991	0000	9/01/1993
			NE	3		624610 MS		ART HILLSITE # 3		624608	031;646	3/06/1991	0000	9/01/1993
			NE	3		624611 MS		ART HILLSITE # 4		624608	031;647	3/06/1991	0000	9/01/1993
			SE	3		624612 MS		ART HILLSITE # 5		624608	031;648	3/06/1991	0000	9/01/1993
			SE	3		676799 MS		GOLD CITY	CARTER JACK K	676799		2/19/1993	1999	
			SE	3		677981 MS		PAN WORLD	PAN WORLD MINS INTL	677981		2/13/1993	1993	6/07/1994
			SE	3		682315*MS		ARENA MILL SITE 1	CARLWOOD DEV INC	682294		9/02/1993	1999	
									CRESCENT CORP					
									CAMEL INC					
									BROADWAY ENTPR INC					
									PILOT PLANT INC					
									GEOTECH MIN INC					
									MINCOR INC					
									GEOSEARCH INC					

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Attachment 2-1b
BLM Nevada Mining Claim Records for
T. 23 S., R. 63 E, Sec. 14

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993

993

23 S 63 E 14 SE L 17

REPORT DATE: FEB 19, 1999 UNITED STATES DEPARTMENT OF THE INTERIOR PAGE NO: 20651

ADMINISTRATIVE STATE: NEVADA BUREAU OF LAND MANAGEMENT PCN: LT892PPI

GEOGRAPHIC INDEX MERIDIAN: MOUNT DIABLO

ALL CLAIMS

-LEGAL DESCRIPTION- TWNSHP	RANGE	SEC	SUBDV	GEO CTY	BLM DIST	SERIAL CASE NO.	TYPE	CLAIM NAME/NUMBER	CLAIMANT(S)	LR'D FILE	COUNTY BOOK;PAGE	LOCATION DATE	LATEST ASSMT-YR	CASE CLOSED
23 S	63 E	14	SE	3	5	682316*MS		ARENA MILL SITE 2	CARLWOOD DEV INC	682294		9/02/1993	1999	
									CRESCENT CORP					
									CAMEL INC					
									BROADWAY ENTPR INC					
									PILOT PLANT INC					
									GEOTECH MIN INC					
									MINCOR INC					
									GEOSEARCH INC					
			NW		3	704377 PL		MIJO 16	MATHESON PATRICK B	704377		9/01/1994	1995	9/01/1995
									MATHESON MICHAEL I					
									ANDERSON MICHAEL D					
									DROZD FARRELL					
			NW		3	735192*LD		MIJO 16 A	PASS MINERALS INC	735192		3/15/1996	1999	
			NW		3	735193*LD		MIJO 16 B		735192		3/15/1996	1999	
			SW		3	735562*LD		MIJO 17 A	KIMINCO INC	735562		4/02/1996	1999	
			SW		3	735563*LD		MIJO 17 B		735562		4/02/1996	1999	
		16	SW		3	114414 LD		RAINBOW # 3	GRASSMEIER JOHN L	114405	34;0	1/04/1955	1979	8/07/1981
			W2		3	114415 LD		SKYLINE		114405	47;0	1/03/1955	1979	8/07/1981
			SW		3	114416 LD		SKYLINE # 1		114405	34;0	1/03/1955	1979	8/07/1981
			SW		3	114417 LD		SKYLINE # 2		114405	47;0	1/03/1955	1979	8/07/1981
			SW		3	114419 LD		RAINBOW # 4		114405	47;0	1/03/1955	1979	8/07/1981
			SW		3	196814*LD		RAINBOW # 3		196806	1395;0	5/01/1981	1996	9/01/1996
			SW		3	196815*LD		RAINBOW # 4		196806	1395;0	5/01/1981	1996	9/01/1996
			W2		3	196816 LD		SKYLINE		196806	1395;0	5/01/1981	1996	9/01/1996
			SW		3	196817 LD		SKYLINE # 1		196806	1395;0	5/01/1981	1996	9/01/1996
			SW		3	196818*LD		SKYLINE # 2		196806	1395;0	5/01/1981	1996	9/01/1996
			W2		3	196819 LD		SKYLINE # 3		196806	1395;0	5/01/1981	1983	8/04/1982
			SW		3	777570*LD		RAINBOW #3		777569		8/26/1997	1998	
			SW		3	777571*LD		RAINBOW #4		777569		8/26/1997	1998	
			SW		3	777572*LD		SKYLINE		777569		8/26/1997	1998	
			SW		3	777573*LD		SKYLINE #1		777569		8/26/1997	1998	
			SW		3	777574*LD		SKYLINE #2		777569		8/26/1997	1998	
		17	SE		3	114405 MS		MILL SITE		114405		1/05/1955	1979	8/07/1981
			SE		3	114414 LD		RAINBOW # 3		114405	34;0	1/04/1955	1979	8/07/1981
			SE		3	196814*LD		RAINBOW # 3		196806	1395;0	5/01/1981	1996	9/01/1996
			SW		3	198729 MS		RAINBOW MILL SITE		196806	1395;0	5/01/1981	1992	8/31/1993
			NW		3	529709 PL		DUTCHMAN # 21	TOLMAN RONALD L	529689		9/12/1988	0000	10/22/1990
									TOLMAN ERIC D					
									TOLMAN RONALD PAUL					
									TOLMAN HOLLY C					
									TOLMAN LEO A					
									TOLMAN IRENE M					
									HIEMER GARY					
									HIEMER SUSAN					

* * DISCLOSURE* * ALL INFORMATION RECEIVED IN THIS OFFICE MAY NOT YET BE LISTED ON THIS REPORT. NAMES AND ADDRESSES ARE ENTERED AS THEY APPEAR ON THE LOCATION NOTICE OR ARE ABBREVIATED TO FIT LIMITED SPACE; THEREFORE THEY MAY NOT APPEAR IN THE EXPECTED SEQUENCE. A BLANK LATEST ASSESSMENT YEAR IN THIS REPORT DOES NOT CONSTITUTE AN ABANDONED CLAIM. * AFTER S/N INDICATES LAND STATUS CHECKED.

Attachment 2-1c
BLM Nevada Mining Claim Records for
T. 23 S., R. 63 E, Sec. 14

CERTIFICATE OF LOCATION OF PLACER MINING CLAIM

MINING MAP
File 31 Page 31

(Prepared by the Nevada Bureau of Mines and Geology, and Approved by Attorney General of Nevada, August 1971)

NEVADA

TO ALL WHOM IT MAY CONCERN:

NMC 293590

The undersigned hereby certifies (certify) that he (she, they) has (have) located the MIJO 16 Placer Mining Claim in Section 14, Township 23 S, Range 63 E, in the ALUNITE Mining District, in CLARK County, in the State of Nevada, on the 14 day of DEC., 1983.

The name(s) and post office address(es) of the locator(s) is (are) (please print):

(Name)	(Post Office Address)
1. Arby J. Vincent Jr.	3200 E. Stewart #293 Las Vegas Nev. 89110
2. Becki M. Vincent	3200 E. Stewart #293 Las Vegas Nev. 89110
3. Rick J. Vincent Sr.	200 N. Pecos #128 Las Vegas, Nev. 89110
4. Virginia Vincent	200 N. Pecos #128 Las vegas, Nev. 89110
5. Thomas Abadie Jr.	3700 E. Stewart #293 Las Vegas, Nev. 89110
6. Yvonne W. Brai	3613 Edenborn Metairie,La. 70002
7. Luther Hendrickson	1200 N. Lamb #186 Las Vegas, Nev. 89110
8. Thelma I. Mc Kinney	1200 N. Lamb #186 Las Vegas, Nev. 89110

The number of acres claimed is 160.

The location monument stands at a point on the north boundary of the claim.

The area claimed consists of (specify parts of Section, Township and Range if claim is taken by legal subdivisions of the Public Land Surveys).

NW 1/4 Sect. 14 T23S R63E -
4"X4" Post at NE corner of claim

OR

The area claimed consists of the area shown on the claim map that is filed herewith, and the location point and boundaries of the claim have been marked on the ground as provided by NRS 517.090.

The location work consisted of making a claim map as provided in NRS 517.100. Two copies of this claim map have been filed with the Clark County Recorder, and the $1 per acre placer claim filing fee, totalling $_____ has been paid to the County Recorder

Dated this 16 day of Dec., 1983.

(Locator sign here)

Arby J. Vincent Jr. — Thomas Abadie Jr.

Becki M. Vincent — Yvonne W. Brai

Rick J. Vincent Sr. — Luther Hendrickson

Virginia Vincent — Thelma I. Mc Kinney

RECEIVED
U.S. DEPT. OF INTERIOR
BUREAU OF LAND MANAGEMENT
NEVADA LAND OFFICE
0:00 A.M. DEC 23 1983
NEVADA STATE OFFICE
CARSON CITY, NEVADA

Note 1: Two copies of this certificate and two copies of the claim map must be filed, and the appropriate filing fee must be paid, within 90 days after date of posting Notice of Location.

Note 2: "Every person who willfully and knowingly makes a false material statement on the location certificate or on any map required by this chapter shall be guilty of a felony, and upon conviction thereof shall be imprisoned in the state prison for not less than 3 years nor more than 10 years." NRS 517.300, Subsection 2.

Note 3: The claim map of this claim is filed in the Clark County Recorder's Office as Document No. _____. (may be filled in by locator)

Recorder's Stamp

CLARK COUNTY, NEVADA
JOAN L. SWIFT, RECORDER
RECORDED AT REQUEST OF

DEC 16 1 29 PM '83

FEE ____ DEPUTY ____
OFFICIAL RECORDS
BOOK INSTRUMENT
1007355

The above claim located and claimed for:
The "MIJO" Group
1200 N. Lamb #186 Las Vegas, Nev. 89110

JAN 9 1984

Attachment 2-2a

Location Notice for Mijo 16, NMC 293590

CERTIFICATE OF LOCATION OF PLACER MINING CLAIM

MINING MAP
File 21 Page 22

(Prepared by the Nevada Bureau of Mines and Geology, and Approved by Attorney General of Nevada, August 1971)

NEVADA

TO ALL WHOM IT MAY CONCERN:

NMC 293591

The undersigned hereby certifies (certify) that he (she, they) has (have) located the MIJO 17 Placer Mining Claim in Section 14, Township 23 S, Range 63 E, in the Alunite Mining District, in Clark County, in the State of Nevada, on the 14 day of DEC., 1983.

The name(s) and post office address(es) of the locator(s) is (are) (please print):

(Name)	(Post Office Address)
1. Arby J. Vincent Jr.	3200 E. Stewart #293 Las Vegas Nev. 89110
2. Becki M. Vincent	3700 E. Stewart #293 Las Vegas Nev. 89110
3. Dick J. Vincent Sr.	200 N. Pecos #128 Las Vegas, Nev. 89110
4. Virginia Vincent	200 N. Pecos #128 Las vegas, Nev. 89110
5. Thomas Abadie Jr.	3700 E. Stewart #293 Las Vegas, Nev. 89110
6. Yvonne M. Brai	3613 Edenborn Metairie,La. 70002
7. Luther Hendrickson	1200 N. Lamb #186 Las Vegas, Nev. 89110
8. Thelma I. MC Kinney	1200 N. Lamb #186 Las Vegas, Nev. 89110

The number of acres claimed is 160.

The location monument stands at a point on the north boundary of the claim.

The area claimed consists of (specify parts of Section, Township and Range if claim is taken by legal subdivisions of the Public Land Surveys).

SW 1/4 Sect. 14 T23S R63 E - 4"X4" Post at NE corner of claim

OR

The area claimed consists of the area shown on the claim map that is filed herewith, and the location point and boundaries of the claim have been marked on the ground as provided by NRS 517.090.

The location work consisted of making a claim map as provided in NRS 517.100. Two copies of this claim map have been filed with the Clark County Recorder, and the $1 per acre placer claim filing fee, totalling $ _____ has been paid to the County Recorder

Dated this 16 day of DEC., 1983.

(Locator sign here)

Arby J. Vincent Jr. — Thomas Abadie Jr.

Becki M. Vincent — Yvonne M. Brai

Dick J. Vincent Sr. — Luther Hendrickson

Virginia Vincent — Thelma I. Mc Kinney

Note 1: Two copies of this certificate and two copies of the claim map must be filed, and the appropriate filing fee must be paid, within 90 days after date of posting Notice of Location.

Note 2: "Every person who willfully and knowingly makes a false material statement on the location certificate or on any map required by this chapter shall be guilty of a felony, and upon conviction thereof shall be imprisoned in the state prison for not less than 3 years nor more than 10 years." NRS 517.300, Subsection 2.

Note 3: The claim map of this claim is filed in the Clark County Recorder's Office as Document No. _____. (may be filled in by locator)

The above claim located and claimed for:
The "MIJO" Group
1200 N. Lamb #186 Las Vegas, Nev. 89110

RECEIVED
Bureau of Land Management
NEVADA LAND OFFICE
9:00 A.M. DEC 23 1983

Recorder's Stamp

CLARK COUNTY NEVADA
JOAN L. SWIFT RECORDER
RECORDED AT REQUEST OF

Dec 16 1 27 PM '83

FEE ____ DEPUTY ____
OFFICIAL RECORDS
BOOK INSTRUMENT
1848 1027957

Attachment 2-2b

Location Notice for Mijo 17, NMC 293591

COLOCATION

CERTIFICATE OF LOCATION
LODE MINING CLAIM

NMC 735192

TO ALL WHOM IT MAY CONCERN:

The undersigned hereby certifies that she has caused to be located the MIJO 16 "A" LODE MINING CLAIM in the following quarter section:

1/4	SECTION	TOWNSHIP	RANGE	MERIDIAN
NW	14	23 S	63E	MDM

735192

in Clark County, Nevada, on the 15th day of March, 1996.

Name and mailing address of locator is: PASS MINERALS INC c/o DEBRA MATHESON AGENT
2215 Lucerne Circle,
Henderson, Nev 89014

The Claim is approximately 1500 feet long and 600 feet wide, such that 1450 feet are claimed in a East direction and 50 feet in a West direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with 300 feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the West to the East direction.

96 MAR 20 PM 2:16
BLM
NEVADA STATE OFFICE

The number, location and markings on each corner monument are as follows:

	LOCATION		MARKINGS (METAL TAGS)	DESCRIPTION
No. 1	NW	Corner	NW CORNER MIJO 16 A	2"X2"X5' WOODEN POST
2	NE	"	NE " " " "	" " " " " " "
3	SE	"	SE " " " "	" " " " " " "
4.	SW	"	SW " " " "	" " " " " " "

As erected on the ground, each corner monument is marked as described above by metal tags.
The work of location consisted of making a claim map as provided in NRS 517.00.
Dated this 15th day of March, 1996

SIGNATURE OF LOCATOR:

By: Debra Matheson
DEBRA MATHESON, AGENT

RECEIVED
Bur. of Land Management
9:00 A.M. MAR 20 96
NEVADA STATE OFFICE
RENO, NEVADA

RECORDERS STAMP

CLARK COUNTY, NEVADA
JUDITH A. VANDEVER, RECORDER
RECORDED AT REQUEST OF:
PASS MINERALS INC
03-18-96 15:13 JMC
BOOK 960318 INST: 01338
FEE: 9.50 APTT: .00
CERT LOCATION MM 059 0013
CONFORMED COPY HAS NOT BEEN COMPARED TO THE ORIGINAL

Attachment 2-2c

Location Notice for Mijo 16A NMC 735192

CO LOCATION

CERTIFICATE OF LOCATION
LODE MINING CLAIM

NMC 735193

TO ALL WHOM IT MAY CONCERN:

The undersigned hereby certifies that she has caused to be located the MIJO 16 "B" LODE MINING CLAIM in the following quarter section:

1/4	SECTION	TOWNSHIP	RANGE	MERIDIAN
NW	14	23 S	63E	MDM

in Clark County, Nevada, on the 15th day of March, 1996.

Name and mailing address of locator is: Pass Minerals Inc
c/o Debra Matheson Agent.
2215 Lucerne Circle,
Henderson, Nev 89014

The Claim is approximately 1500 feet long and 600 feet wide, such that 1450 feet are claimed in a East direction and 50 feet in a West direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with 300 feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the West to the East direction.

The number, location and markings on each corner monument are as follows:

	LOCATION		MARKINGS (METAL TAGS)	DESCRIPTION
No. 1	NW	Corner	NW CORNER MIJO 16 B	2"X2"X5' WOODEN POST
2	NE	"	NE " " " "	" " " " " " "
3	SE	"	SE " " " "	" " " " " " "
4.	SW	"	SW " " " "	" " " " " " "

As erected on the ground, each corner monument is marked as described above by metal tags.
The work of location consisted of making a claim map as provided in NRS 517.00.
Dated this 15th day of March, 1996

SIGNATURE OF LOCATOR:

By: Debra Matheson
DEBRA MATHESON, AGENT

RECORDERS STAMP
CLARK COUNTY, NEVADA
JUDITH A. VANDEVER, RECORDER
RECORDED AT REQUEST OF:
PASS MINERALS INC
03-18-96 15:13 JMC
BOOK: 960318 INST: 01333
FEE: 9.50 SERT: 00
CERT LOCATION MM 069 0014
CONFORMED COPY-HAS NOT BEEN COMPARED TO THE ORIGINAL

735193

95 MAR 20 PM 2:17
BLM STATE OFFICE

RECEIVED
Bur. of Land Management
9:00 A.M. MAR 20 96
NEVADA STATE OFFICE
RENO, NEVADA

Attachment 2-2d

Location Notice for Mijo 16B, NMC 735193

N.M.C.

735562

B.L.M
NEVADA STATE OFFICE
96 APR -5 AM 11:11

NMC 735562

CERTIFICATE OF LOCATION
LODE MINING CLAIM

TO ALL WHOM IT MAY CONCERN:

The undersigned hereby certifies that she has caused to be located the **MIJO 17 "A" LODE MINING CLAIM** in the following quarter section:

1/4	SECTION	TOWNSHIP	RANGE	MERIDIAN
SW	14	23 S	63E	MDM

in Clark County, Nevada, on the 2nd day of April, 1996.

Name and mailing address of locator is: KIMINCO INC.,
2215 Lucerne Circle,
Henderson, Nev 89014

The Claim is approximately 1500 feet long and 600 feet wide, such that 1450 feet are claimed in a East direction and 50 feet in a West direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with 300 feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the West to the East direction.

The number, location and markings on each corner monument are as follows:

	LOCATION	MARKINGS (METAL TAGS)	DESCRIPTION
No. 1	NW Corner	NW CORNER MIJO 17 A	2"X2"X5' WOODEN POST
2	NE "	NE " " " "	" " " " " " "
3	SE "	SE " " " "	" " " " " " "
4.	SW "	SW " " " "	" " " " " " "

As erected on the ground, each corner monument is marked as described above by metal tags.
The work of location consisted of making a claim map as provided in NRS 517.00.
Dated this 2nd day of April 1996

SIGNATURE OF LOCATOR:

By: Debra Matheson
DEBRA MATHESON, AGENT

****
* RECORDERS STAMP
*
*
*
*
*
*

CLARK COUNTY, NEVADA
JUDITH A. VANDEVER, RECORDER
RECORDED AT REQUEST OF:
KIMINCO INC

04-02-96 11:41 DB1 1
BOOK: 960402 INST: 01115
FEE: 9.50 RPTT: .00
CERT LOCATION MM 069 0059
CONFORMED COPY-HAS NOT BEEN COMPARED TO THE ORIGINAL

RECEIVED
Bur. of Land Management
9:00 A.M. APR 05 96
NEVADA STATE OFFICE
RENO, NEVADA

Attachment 2-2e

Location Notice for Mijo 17A, NMC 735562

RECEIVED
Bur. of Land Management

9:00 A.M. APR 05 96

NEVADA STATE OFFICE
RENO, NEVADA

CERTIFICATE OF LOCATION
LODE MINING CLAIM

TO ALL WHOM IT MAY CONCERN:

The undersigned hereby certifies that she has caused to be located the **MIJO 17 "B" LODE MINING CLAIM** in the following quarter section:

1/4	SECTION	TOWNSHIP	RANGE	MERIDIAN
SW	14	23 S	63E	MDM

in Clark County, Nevada, on the 2nd day of April, 1996.

Name and mailing address of locator is: KIMINCO INC., 2215 Lucerne Circle, Henderson, Nev 89014

The Claim is approximately 1500 feet long and 600 feet wide, such that 1450 feet are claimed in a East direction and 50 feet in a West direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with 300 feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the West to the East direction.

The number, location and markings on each corner monument are as follows:

	LOCATION	MARKINGS (METAL TAGS)	DESCRIPTION
No. 1	NW Corner	NW CORNER MIJO 17 B	2"X2"X5' WOODEN POST
2	NE "	NE " " " "	" " " " " " "
3	SE "	SE " " " "	" " " " " " "
4.	SW "	SW " " " "	" " " " " " "

As erected on the ground, each corner monument is marked as described above by metal tags.
The work of location consisted of making a claim map as provided in NRS 517.00.
Dated this 2nd day of April, 1996

SIGNATURE OF LOCATOR:

By: Debra Matheson
DEBRA MATHESON, AGENT

****
* RECORDERS STAMP *

CLARK COUNTY, NEVADA
JUDITH A. VANDEVER, RECORDER
RECORDED AT REQUEST OF:
KIMINCO INC

04-02-96 11:41 DBI 1
BOOK: 960402 INST: 01118
FEE: 9.50 RPTT: .00
CERT LOCATION MM 069 0060
CONFORMED COPY HAS NOT BEEN COMPARED TO THE ORIGINAL

NMC 735563

735563 NMC

96 APR -5 AM 11:11
NEVADA STATE OFFICE
B.L.M.

Attachment 2-1f

Location Notice for Mijo 17B, NMC 735563

Ariz. assayist in Nev. 'gold strike' was convicted of fraud in 1978

AZ Rep. 4/12/97

By David Evans
Bloomberg News

SEARCHLIGHT, Nev. — Delgratia Mining Corp. based its claim that it made a big gold discovery in Nevada on laboratory tests conducted by an unlicensed gold assayer in Arizona who was convicted of securities fraud in 1978.

Delgratia described the assayer in a news release Thursday only as "an outside, independent lab."

But two consulting mining engineers hired by Delgratia last month to monitor its operations said the testing was conducted by Robert Harlan Gunnison in Phoenix.

They said the testing took place at Energy International, a small lab owned by Gunnison.

The engineers, Brian Mountford and Morris Beattie, each said he wasn't aware of Gunnison's felony conviction until contacted by Bloomberg on Thursday night. The revelation raised questions about the veracity of the testing and sparked speculation that the ore that was tested might have contained gold that wasn't there when it was mined.

"That makes one hell of a difference," Mountford said. "All the samples we checked were in his lab at one time or another. We don't know whether it's been salted or not."

Delgratia, which is based in Vancouver, British Columbia, used Gunnison as its independent assayer to test samples from the first four drill holes at its Josh Project near Searchlight.

The company's shares lost half their value in trading Friday, slipping 8 to close at 8. With 15 million shares outstanding, according to the company, Friday's decline represented a loss of $120 million market value. The shares had been suspended for three weeks.

Gunnison isn't a licensed assayer, according to the Arizona Board of Technical Regulation. The board licenses assayers who analyze ore to determine the quality of the gold present. To conduct an independent assay of ore without a license is a misdemeanor in Arizona.

"We are a private laboratory. We work on a contract basis for (Delgratia President) Chuck (Ager)," Gunnison said. "I've been doing this for 20 years."

He said he began assaying while he was in the mortgage business. Gunnison declined to comment when asked about his conviction.

Gunnison's Energy International lab displays a sign saying, "We are not a registered or accredited assaying lab," according to Ager and Mountford.

"Dr. Ager was surprised," Delgratia spokeswoman Paula Toti said. "This is absolutely the first he's heard of it (the fraud conviction). If this is true, we say it does not affect the quality of the work, but certainly does affect public perception, and that is unacceptable."

It was positive test results from Gunnison, reported by Delgratia on Feb. 28 and March 19, that sent the company's shares soaring from 15¼ on Feb. 28 to 34¼ on March 20.

The stock plunged over the next two days after a Nevada mining official said he was skeptical of a company claim of a 5 million-ounce gold reserve at Josh Project, which is on 9,000 acres near Searchlight. The company later said that claim was premature.

It was also reported that Delgratia hadn't disclosed that it bought its interest in Josh from a company half-owned by a family trust of Ager, a geologist and geophysicist. Delgratia made that disclosure after the story.

Ager disclaims any beneficial interest in the trust, explaining that it benefits only his wife and three children. He denies any conflict of interest.

Late Thursday, Delgratia released the results of assays from two licensed labs in Tucson that confirmed Gunnison's tests on Hole 4 and found even higher levels of gold in samples taken from Hole 5.

"It's got a smell to it," said Mike Jacobs of Jacob's Assay office in Tucson, who said he received his first samples from Delgratia on April 1. "The numbers are too damn good. This would be a major project."

Delgratia also said 20 random ore samples taken from the Phoenix lab were sent by Delgratia's new consulting engineers to an independent lab in Vancouver, which confirmed Gunnison's results.

However, all the samples tested at the labs in Tucson and Vancouver were prepared at Gunnison's lab.

Consulting engineer Mountford said Gunnison worked with Ager for five years on the Josh Project.

"The fact that he's a felon doesn't help their case one bit," Beattie said. "It's not a good thing obviously."

In the 1970s, Gunnison was president of Arizona Realty and Mortgage Trust. In 1978, he was convicted by a state court in Tucson of fraud in the sale of securities. In 1979, the Arizona Court of Appeals upheld the conviction.

"Appellant (Gunnison) knew . . . that untrue and misleading statements would be made to the buyers of these mortgages," the court held. In 1980, the Arizona Supreme Court upheld the conviction.

Attachment 8-1a
Arizona Republic coverage of mining activities of Robert Harlan Gunnison.

2 ex-cohorts of Warren linked to gold mine deals

By ALBERT J. SITTER Rep. 4-8-79

Law enforcement sources say they have linked two former associates of land swindler Ned Warren Sr. with a network of suspected Arizona gold mine investment schemes.

Lt. Duane Kingsbury, head of the special investigations division of the Yavapai County Sheriff's Office, identified them as Robert H. Gunnison Jr. and William F. Fine, both of Phoenix.

Another key suspect in the investigation, Louis Bourguignon, 48, of Albuquerque, New Mexico, also was one of three men who have negotiated to buy a tiny Caribbean island and have sought to buy the island's independence from the British government.

Gunnison, 36, was convicted of mortgage fraud last year by a Pima County Superior Court jury and was sentenced to one to three years in prison. He is free on bond while appealing the conviction.

He was indicted on a perjury charge in November and is awaiting trial.

Fine was the real estate broker for some of Warren's land companies. The Arizona Real Estate Department revoked his license in 1969.

Records of the Arizona Corporation Commission disclosed that Fine was among the incorporators last year of Ultra Holding Corp., which Kingsbury said is believed to be the core of a maze of corporations whose principal assets appear to be worthless Arizona mining claims.

Many of the claims are in Yavapai County, Kingsbury said.

Bourguignon was indicted on 11 felony counts last year in New Mexico in the mining investment investigation. He is a fugitive, Kingsbury said.

Gunnison is employed by Mountain View Management Corp., which was negotiating a merger with Ultra Holding, according to documents obtained by the criminal conspiracy unit of the Arizona Department of Public Safety.

Ultra Holding and Mountain View Management had the same Phoenix address, according to Corporation Commission records. That address was the office suite of Gunnison's firm, Arizona Realty and Mortgage Trust.

Continued on Page A-10

More about Mine deals

Continued from Page A-1

Earlier this year, Knute Petersen of Scottsdale, president of Mountain View Management, petitioned a Pima County Superior Court judge to allow Gunnison to travel out of state on company business while awaiting appeal. Judge Norman Fenton denied the request.

Mountain View Management's corporate charter had been revoked by the Corporation Commission on Jan. 15, two days before Petersen's request to Judge Fenton, according to court records.

Law enforcement sources have connected Bourguignon with a plan to buy Big Ambergris, an uninhabited island in the British West Indies.

Bourguignon and Arizona investors reportedly offered the British government $50 million to grant independence to the four-mile by one-mile island.

The investors wanted permission to form a security force, issue passports, establish banks and charter corporations.

The negotiations with the British were conducted by Creighton F. Hampton of Glendale, a retired Air Force major, and Jay E. Fuller, a Tucson contractor.

The island's owner, D. O. Astwood, a dental surgeon who lives on nearby Grand Turk Island, said in a telephone interview this week that the Arizonans' $10,000 option to buy Big Ambergris expired March 23 and that the island has been placed on the open market for $2.5 million.

"But if they (Arizonans) still want it, they can have it," Astwood said.

Astwood said the initial offer to buy the island, which has been in his family for many years, came from Bourguignon, Fuller and Hampton.

Hampton said Tuesday that the group's plan to acquire the island is "still on hold." He maintained that the option to buy the property still is in effect.

The deal will be consummated, Hampton said, "when I can raise some more money."

"We didn't want to blow the deal, so we can't have much notoriety," Hampton explained.

Attachment 8-1b
Arizona Republic coverage of mining activities of Robert Harlan Gunnison.

Massive fraud is linked to depleted mine claims

By ALBERT J. SITTER

Bands of con men are suspected of using depleted gold and silver mining claims in Arizona to engineer a series of massive investment swindles that may be international in scope, according to Arizona law enforcement sources.

The alleged frauds could run into the hundreds of millions of dollars, said Lt. Duane Kingsbury, head of the special investigations division of the Yavapai County sheriff's office.

Thus far, Kingsbury said, three men have been arrested in connection with the swindles.

Corporations formed by swindlers for the sole purpose of soliciting investments list mining claims among their assets, Kingsbury said. Financial statements of the corporations attribute tremendously inflated values to the claims, which actually are of little or no worth, he said.

Many of the suspect corporations were formed in Arizona, Kingsbury said. Others are chartered by Nevada and New Mexico and a few were traced to Mexico, he said.

Other law enforcement agencies credit Kingsbury with having detected the alleged swindles early this year when he discovered an abrupt increase in the number of mining claim filings in Yavapai County.

The filings, normally totaling about five or six a month, suddenly increased to about 200 a month last spring, according to Kingsbury.

Yavapai County was a hotbed of

Continued on Page A-5

Mine fraud

Continued from Page A-1

land fraud operations in past years, other authorities pointed out.

Claim filings also are on the increase in southern Arizona, according to Sgt. Hugh Hawley of the criminal investigations bureau of the Department of Public Safety.

Hawley said investigators fear that many of the claims will be used as a basis for major securities fraud that could equal or exceed the dollar loss suffered by victims of land fraud operators.

"We advise investors to be wary when considering investments in gold mining operations in Arizona, Nevada or New Mexico," Hawley said. "Caution also should be used when investing in corporations that list large numbers of gold and silver mines among their assets."

Kingsbury said two of his current investigations involve complexes of corporations that have mining claims among their alleged assets.

Kingsbury related that he has evidence that residents of Arizona and other states have given the suspected swindles up to $200,000 each to invest in their questionable enterprises.

Identified by Kingsbury as a principal suspect in one of the investment operations that involves a maze of nearly 20 corporations is Louis Bourguignon, 48, of Albuquerque, N.M.

Judd Conway, an assistant district attorney in Albuquerque, said in a telephone interview earlier this week that Bourguignon has been indicted on 11 felony counts, including fraud and offering to sell unregistered securities.

Conway estimated that the alleged frauds may exceed $100,000.

At the request of New Mexico authorities, Bourguignon was arrested in Phoenix earlier this year. He was released on bond, apparently left the state and currently is regarded as a fugitive from justice, officials said.

Records of the Arizona Corporation Commission identify Bourguignon as a director of Ultra Holding Corp., formed last March by Bourguignon and others.

The company listed its business address as Suite 234 B at 5150 N. 16th St., which is currently occupied by Omnicomp, an unrelated computer firm.

At the time Ultra Holding claimed to be located in the suite, it actually was occupied by Arizona Realty and Mortgage Trust, a corporation operated by Robert Gunnison, a former associate of Ned Warren Sr., a notorious land swindler.

Gunnison, 35, had been assigned three years ago by the state attorney general's office to rehabilitate three fraud-ridden subdivisions in Yavapai County that were owned by Consoli-

Louis Bourguignon

dated Mortgage Corp., a com[illegible] previously controlled by Warren.

Gunnison was found innocen[illegible] land fraud charges in April b[illegible] federal court jury in San Diego. [illegible]ren is serving a long sentenc[illegible] Arizona State Prison.

A Southern California real es[illegible] broker said in an interview last w[illegible] that Bourguignon attempted to [illegible]cruit him earlier this year to bec[illegible] the general manager of Ultra Hold[illegible]

The broker, who asked that [illegible] name not be disclosed, said Bourg[illegible]non claimed the firm's projects [illegible]cluded the purchase of a Medite[illegible]nean island near Crete. Plans ca[illegible] for the company-owned island to [illegible]tain sovereignty and to be conve[illegible] into a tax sanctuary for various b[illegible]ness enterprises, the broker said.

Despite the offer of a large sal[illegible] the broker said he declined. [illegible] broker said Bourguignon told [illegible] that Ultra Holding's headquar[illegible] would be in Prescott.

Kingsbury said he also is investi[illegible]ing suspected swindles involving [illegible]lace E. Chaney, 56, formerly of Ph[illegible]nix.

Chaney, who authorities said [illegible] used numerous aliases, was arres[illegible] in Alabama in July after he was [illegible]dicted by an Alabama grand jury [illegible] 13 felony counts of selling worth[illegible] securities that were backed by n[illegible]existent assets in gold mines in Ya[illegible]pai County.

Detective Javon Daniel of the C[illegible]man (Ala.) Police Department s[illegible] last week that Chaney failed to app[illegible] for his arraignment last month an[illegible] regarded as a fugitive. An Alaba[illegible] judge has forfeited Chaney's $18,[illegible] bond, Daniel said.

Chaney also has an arrest record [illegible] Japan in connection with black-m[illegible]ket currency operations, Daniel sai[illegible]

According to Kingsbury, some [illegible] Chaney's Arizona associates also [illegible] subjects of an investigation. Chan[illegible] also was involved in a now-defu[illegible] insurance firm in Phoenix, Kingsbu[illegible] said.

Attachment 8-1c
Arizona Republic coverage of mining activities of Robert Harlan Gunnison.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA STATE OFFICE

9260 (911)

April 21, 1998

Memorandum

To: Matt Shumaker, Solid Minerals Team Leader, National Training Center

From: Nancy Kragl, Law Enforcement Technician

Subject: Verification of State Conviction

Attached please find the information you requested on the conviction of Robert Harlan Gunnison, Jr. for felony securities fraud in Pima County, Arizona.

If you have any questions, or need additional information, you may contact me at 602-317-9318.

Nancy L. Kragl

Attachments

Attachment 8-2a
Felony convictions of Robert Harlan Gunnison

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

IN AND FOR THE COUNTY OF PIMA

ROBERT B. BUCHANAN
JUDGE/~~COURT COMMISSIONER~~

NO. A-33018

DATE September 21, 1978

STATE OF ARIZONA,
PLAINTIFF

PLAINTIFF'S ATTORNEY

ROBERT HARLAN GUNNISON,
DEFENDANT

DEFENDANT'S ATTORNEY

UNDER ADVISEMENT: MINUTE ENTRY

The court having taken the matter under advisement after a trial to the court,

THE COURT FINDS beyond a reasonable doubt that the defendant Robert Harlan Gunnison in the last weeks of November, 1975, specifically intended to conspire with Thomas Michael O'Brien and Equitable Mortgage Company, Inc., to sell real property securities in violation of the provisions in Article 18 of Chapter 12 of Title 44 of Arizona Revised Statutes and to violate the provisions of A.R.S. §44-1991, and,

FINDS FURTHER that the defendant Robert Harlan Gunnison knew that the Real Property Securities Dealers Act required that he post a bond and that he file an annual report, and that he knowingly failed to comply with said requirements, and,

FINDS FURTHER that said defendant knowingly aided and abetted the sales of mortgages to Marcella Birenbaum and to Charles Nuel in violation of A.R.S. §44-1991.

IT IS THEREFORE THE FINDING OF THE COURT that the defendant Robert Harlan Gunnison is guilty of the crime of Conspiracy Second Degree as alleged in Count One of the Indictment; is guilty of the crime of Fraud In Purchase Or Sale Of Securities as alleged in

NORMA M. FELIX, Clerk

By D. Giansiracusa

Attachment 8-2b
Felony convictions of Robert Harlan Gunnison

MINUTE ENTRY

Page No. 2 Date Sept. 21, 1978 Case No. A-33018

Count Two of the Indictment; is guilty of the crime of Fraud In Purchase Or Sale Of Securities as alleged in Count Twenty-three of the Indictment; is guilty of the crime of Failure To Post Real Property Securities Dealer's Bond as alleged in Count One Hundred Sixty-six of the Indictment; and is guilty of Failure To File Real Property Securities Dealer Annual Report as alleged in Count One Hundred Sixty-seven of the Indictment.

IT IS ORDERED setting this matter for entry of judgment of guilt and sentencing on October 20, 1978, at 9:00 a.m. in Division XIII of the Superior Court.

IT IS FURTHER ORDERED that Mr. Kaufman direct his client to the Adult Probation Department upon receipt of this order.

Copies to: Court Administrator
County Attorney, Att. Mr. Parrish and Mr. Davidon
Jeffrey S. Kaufman, 111 W. Monroe, Suite 1411,
Phoenix, Arizona 85003 (with yellow probation form)
Adult Probation
Under Advisement Desk
Jordan L. Green, 45 W. Jefferson, 7th Floor,
Phoenix, Arizona 85003
Division XIII (2 copies)

D. Giansiracusa, Deputy Clerk.

Attachment 8-2c
Felony convictions of Robert Harlan Gunnison

R

A - Down Holes Readings

1 0-10 12%
0-20 16%
0-40 32%
0-50 45%
Overall 55%

2 0-10 12%
10-20 12%
20-40 18%
40-50 50%

B - Down Hole Readings

1 0-10 8%
10-20 12%
20-40 25%
40-50 50%

2 0-10 12%
10-20 15%
20-40 22%
40-50 45%

3 0-10 12%
10-20 25%
20-40 45%
40-50 60%

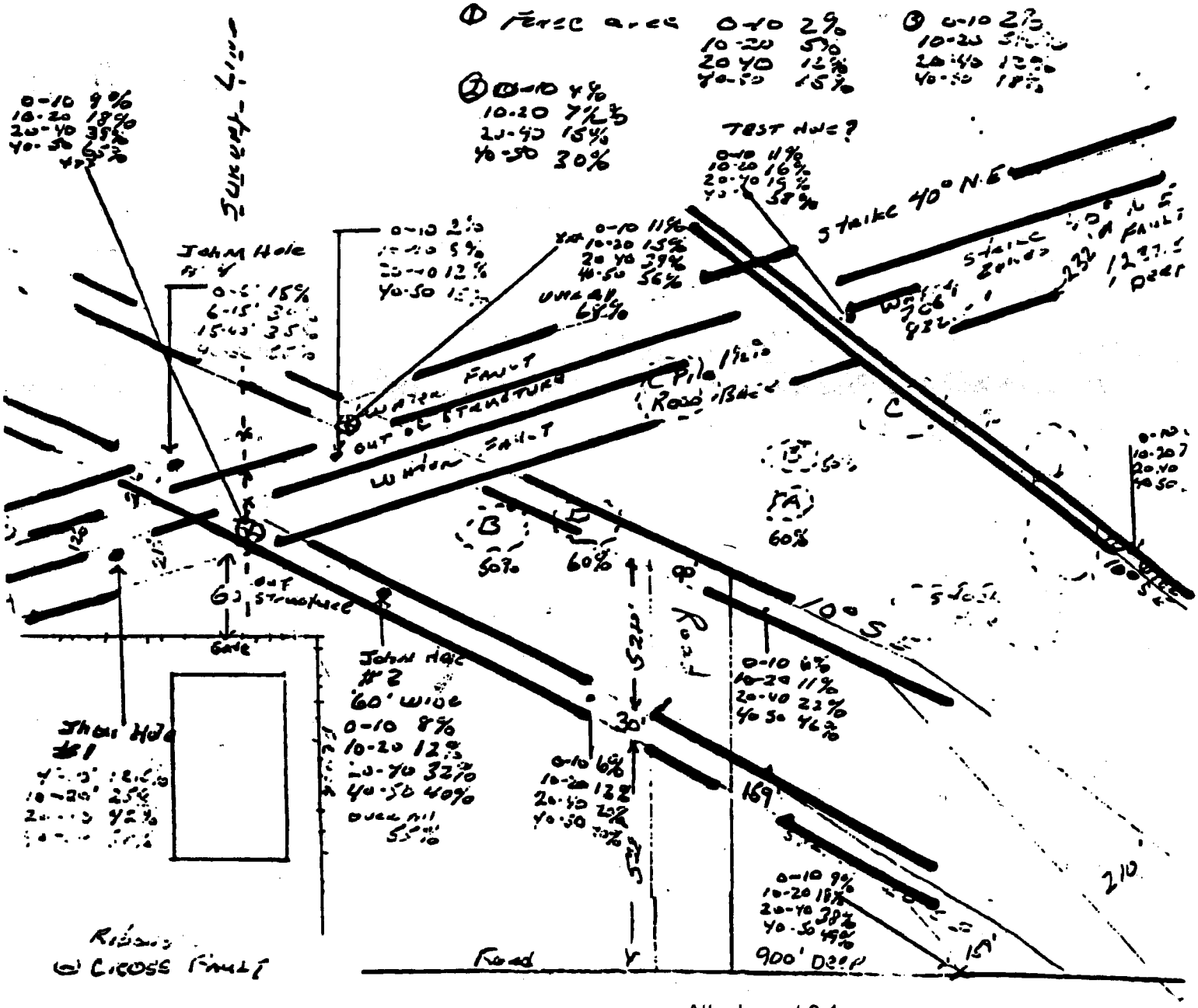
Date 11-19-98
Geophysical Sur
C - Moore
J - Pholus

Out of Structure Readings

1 Fence area 0-40 2%
10-20 5%
20-40 12%
40-50 15%

2 0-10 4%
10-20 7%
20-40 15%
40-50 30%

3 0-10 2%
10-20 5%
20-40 12%
40-50 18%



Attachment 9-1a

Map provided by K. Ian Matheson

Hole	Sample	Depth	Assay
1	A	10'	.120
2	A	10'	.150
	B	20'	.110
3	A	10'	1.020
	B	20'	.265
	C	30'	.120
	D	40'	.110
	E	50'	.295
4	A	10'	.290
	TOTALS	200'/9 = 22'	2.480/9 = .275 OZ/TON AU

THESE SAMPLES WERE DONE IN THE ELECTRIC FURNACE.

Attachment 9-1b
Average assay results for 1996 drilling on Mijo 16, White Technologies

Complex Metals Research & Development, Inc.
Gold, Silver & Platinum Ores
P. O. Box 41, Hurricane, Utah 84737
Telephone 435 877 1059

Mr. Ian Matheson,
Pass Minerals Inc./Pilot Plant Inc.
2215 Lucerne Circle,
Henderson, NV 89014

Subject: Samples submitted by Charles Moore
Pass Minerals Inc. Mijo 16 Claim

On February 24, 1999 I received from UPS a 5 gallon bucket containing samples for assay from Charles Moore. I have read his affidavit stating that these samples originated from a drilling program on the Mijo 16 claim.

I assayed by scorifying assay with silver inquart the following samples:

Hole # 1	Depth	0 - 20, 80 - 100 feet
Hole # 2	Depth	10 - 20, 30 - 40, 80 - 100 feet
Hole # 3	Depth	20 - 30, 60 - 80 feet

All of the gold and platinum residue was combined together for DCP analysis by Metallurgical Research and Assay Laboratory, Dr. Donald Jordan, Registered Assayer, State of Arizona.

The combined average results from the seven samples assayed as reported on Metallurgical Research and Assay Laboratory's Assay Number 5083, March 25, 1999 and Certified by Dr. Jordan are:

	Oz/Ton
Gold	0.25
Platinum	0.01
Palladium	0.05

Jerry C. Henderson, Research Chemist

Attachment 9-2a
Average assay results for 1999 drilling on Mijo 16, Complex Metals and MRAL

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5083 **Date:** 3/25/99

Customer : PILOT PLANT INC.

Sample Identification: 35 GRAM SAMPLE , 7 CSR - MAR, 8/99 - ACTUAL WEIGHT OF RESIDUE 23.3 mgs.
CALCULATED AS A 35 gm. SAMPLE
SAMPLE SUBMITTED BY JERRY HENDERSON

Element	Oz/Ton
Au-Gold	0.25
Pt-Platinum	0.01
Pd-Palladium	0.05

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 4/28/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 9-2b
Average assay results for 1999 drilling on Mijo 16, Complex Metals and MRAL

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5169 **Date:** 4/24/99

Customer : PILOT PLANT

Sample Identification: GRAVIMETERIC CONCENTRATION TEST ON - 16 MESH MATERIAL TAKEN FROM THREE FEET EAST OF MONUMENT STAKE. 29 lbs. WAS RUN OVER A WILFLEY CONCENTRATING TABLE WHICH PRODUCED 411 gms. OF CONCS.292 gms. OF NON - MAGNETICS , 119 gms. OF MAGS.

THIS ASSAY IS ON THE NON - MAG FIRACTION (292 gms.)
5 gms. SCORIFIER WITH SILVER INQUART

Element	Oz/Ton
Au-Gold	1.06

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 4/24/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 9-3a1

April, 1999 assay report from MRAL

3 A-1

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5170 **Date:** 4/24/99

Customer : PILOT PLANT

Sample Identification: GRAVIMETERIC CONCENTRATION TEST ON - 16 MESH MATERIAL TAKEN FROM THREE FEET EAST OF MONUMENT STAKE. 29 lbs. WAS RUN OVER A WILFLEY CONCENTRATING TABLE WHICH PRODUCED 411 gms. OF CONCS.292 gms. OF NON - MAGNETICS , 119 gms. OF MAGS.

THIS ASSAY IS ON THE MAG FRACTION (119 gms.)
5 gms. SCORIFIER WITH SILVER INQUART

Element	Oz/Ton
Au-Gold	0.70

REGISTERED ASSAYER CERTIFICATE NO 19127 DONALD E JORDAN Date Signed 4/26/99 ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 9-3a2

April, 1999 assay report from MRAL

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5171 **Date:** 4/24/99

Customer : PILOT PLANT

Sample Identification: GRAVIMETERIC CONCENTRATION TEST ON - 16 MESH MATERIAL TAKEN FROM THREE FEET EAST OF MONUMENT STAKE. 29 lbs. WAS RUN OVER A WILFLEY CONCENTRATING TABLE WHICH PRODUCED 411 gms. OF CONCS.292 gms. OF NON - MAGNETICS , 119 gms. OF MAGS.

THIS ASSAY IS ON THE TAILINGS FRACTION .
5 gms. SCORIFIER WITH SILVER INQUART

Element	Oz/Ton
Au-Gold	0.03

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 4/24/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 9-3a3

April, 1999 assay report from MRAL

Metallurgical Research and Assay Laboratory

745 Sunset Road Suite 8
Henderson, NV 89015
702-565-0074
702-564-0726

ASSAY REPORT

ASSAY NUMBER 9778 DATE: 1/24/94

CUSTOMER PILOT PLANT

SAMPLE IDENTIFICATION #2 HIGH SIDE OF HILL

Element	PPM ug/g		troy oz/s.ton
Au-Gold	12.500		0.36
Pt-Platinum	50.800		1.48
Rh-Rhodium	10.300		0.30

REGISTERED ASSAYER 19127 DONALD E. JORDAN Arizona

UNLESS PRIOR ARRANGEMENTS ARE MADE, ALL SAMPLES WILL BE DISCARDED AFTER 30 DAYS.

THESE RESULTS ARE BASED ON WELL KNOWN ACCEPTED ANALYTICAL PROCEDURES AND SOLELY ON THE SAMPLES SUBMITTED BY CUSTOMER. THIS REPORT IS PREPARED FOR THE EXCLUSIVE USE OF THE CUSTOMER ONLY. NO WARRANTIES AS TO REPRODUCIBILITY OR EXTRACTABILITY OF THE ORE IS GIVEN. DONALD E. JORDAN AND/OR METALLURGICAL RESEARCH AND ASSAY LABORATORY MAKE NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED AND ASSUME NO LEGAL LIABILITY WHATSOEVER AS TO THE ACCURACY OE USEFULNESS OF ANY INFORMATION CONTAINED IN THIS REPORT.

NOTE: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.

Attachment 9-3b
January, 1994 assay report from Complex Metals

AFFIDAVIT

Be it acknowledged, that Dennis R. Holman, 50 So Main St., Tooele, UT 84074 the undersigned deponent, being of legal age does hereby depose and say under oath as follows.

1. That I am the President of Angus Resources Inc.

2. That my corporation has a joint venture with Utah Minerals Processing Inc. to supply precious metal ores to that refinery for processing.

3. That Utah Minerals Processsing Inc. is desirous of obtaining up to 1000 tons per day of -1/4" ore from Pass Minerals Inc. Mijo 16 Placer Mining claim at Railroad Pass, Nevada.

4. That on April 1, 1999,I visited the above claim and personally took samples for assay.

5. The samples were under my control at all times and were delivered by me directly to the assayer.

6. The average results of the head ore assay in oz/ton are:

PGM's

Au.	.233
Ag.	1.668
Pt.	.641
Pd.	.147
Ir.	.413
Os.	.078
Rh.	1.285
Ru.	1.310

7. The proprietary leach developed by Utah Minerals Processing Inc will leach all of the above metals from the ore. Organics will be used to remove the metals from the leach. The precious metals are then recovered from the organics.

Signed: _____
Dennis R. Holman

PGM'S SURFACE SAMPLE ICP

Attachment 9-4a
Undated assay affidavit from Angus Resources

UTAH MINERALS PROCESSING, INC.
/dba
U.M.P.I.

May 3, 1999

K. Ian Matheson,
President,
Pass Minerals Inc.
2215 Lucerne Circle,
Henderson, NV 89014

Dear Mr. Matheson:

Further to our letter dated September 15, 1998 this letter will update the progress of our solvent extraction plant to be built in Tooele, Utah.

We have the land and most of the necessary permits and anticipate beginning construction within 90 days. We will be ready for you to ship ore in quanity around March 1st, 2000. Prior to that date we will need ore for testing purposes in truckload quanity.

Our most recent tests on your ore from the Railroad Pass location show the following approximate results:

Au. .233, Ag. 1.688, Pt. .641, Pd. .147, Ir. .413, Os. .078, Rh. 1.285. Ru. 1.310.

This is raw unscreened ore, and by screening can be improved in the neighborhood of 20 to 1.

Our process uses a highly oxidative leach (which is proprietary in nature) and leaches all metals from the ore, making them water soluble. At this point organics are used to selectively remove those metals we wish to obtain. The precious metals are recovered from the organics, the balance of the metals are treated to render them harmless.

When we begin production we estimate our initial requirement of your ore will be 1000 tons per day of minus 1/4" dry screened material.

We hope this information is helpful in your planning.

Sincerely,

Archie L. Poarch, President
Utah Minerals Processing Inc.

RGM'S HEAD ORE

Pt	.641
Pd.	.147
Ir.	.413
Os	.078
Rh	1.28
Ru	1.31

272 North Broadway
Tooele, Utah 84074

Phone (435)833-9851
Fax (435)833-9858

Attachment 9-4b
May, 1999 assay report from Utah Minerals Processing, Archie Poarch

ROGERS RESEARCH & ANALYSIS COMPANY

2340 South Redwood Road (1700 W.) • Salt Lake City, Utah 84119 • Phone (801) 973-4637
CLAIR W. ROGERS, President

MR. K. IAN MATHESON
2215 LUCERNE CIR.
HENDERSON, NEV. 89015

DECEMBER 4, 1996

CUSTOMERS IDENTIFICATION: SAMPLE #21854 MIJO 18

ANTIMONY		PALLADIUM	2.1 OZ/TON
ARSENIC	TRACE	PLATINUM	2.34 OZ/TON
BARIUM	.4 %	RHODIUM	NOT DETECTED
BISMUTH		RUBIDIUM	.1 %
CHROMIUM	.2 %	RUTHENIUM	NOT DETECTED
COBALT	TRACE	SILVER	14.22 OZ/TON
COPPER	.3 %	STRONTIUM	1.6 %
GOLD	0.20 OZ/TON	THORIUM	
IRON	21.3 %	TIN	.1 %
LEAD	.3 %	TITANIUM	2.3 %
MANGANESE	.4 %	TUNGSTEN	TRACE
MOLYBDENUM	TRACE	URANIUM	
NICKEL	.1 %	VANADIUM	TRACE
OSMIUM	TRACE	YTTRIUM	
IRIDIUM	0.003 OZ/TON	ZINC	.3 %
TELLURIUM	.1 %	ZIRCONIUM	TRACE
CADMIUM	.1 %		
INDIUM	.07 %		

C.W. Rogers
CLAIR W. ROGERS M.S.

SAMPLE TAKEN NOV. 27/96 BY K.I.M.
P.O. # 21854

Attachment 9-5
December 1996 assay report from Rogers Research and Analysis Co.

Complex Metals Research & Development, Inc.

Gold, Silver & Platinum Ores

2804 N. Evergreen Street, Chandler, Arizona 85224
Telephone (602) 963-6502

March 10, 1988

REPORT NO. 2

Mr. Arby Vincent, Jr.
Mr. Ian Matheson
High Desert Resources, Inc.
8390 South 4th Street
Henderson, NV 89015

SUBJECT: Six (6) Samples Submitted by Ian Matheson

Corrected and Controlled assays were run on six (6) 30-gram samples, saving the slags each time and grinding the cupel. Mixing the slag and cupel and refluxing each time. Each sample was re-run six times at 2400°F. for four (4) hours. 100 mg. silver inquart was used in each sample. After parting the Dore bead, the nitric solution was decanted and used in the next assay on the same sample. Results as follows:

GOLD

	1st Run Au Oz./Ton	2nd Run Au Oz./Ton	3rd Run Au Oz./Ton	4th Run Au Oz./Ton	5th Run Au Oz./Ton	6th Run Au Oz./Ton
1. Balt 17/18, 30 gms	Trace	Show	Show	Show	Show	1.36
Final silver - 14.30 oz./ton; Pt.Group - Shows						
2. Balt 17 Comp., 30 gms	None	None	Show	Show	Trace	0.28
Final silver - 4.72 oz./ton; Pt.Group - Show						
3. Balt 18 Comp., 30 gms	None	None	None	Show	None	0.15
Final silver - 12.80 oz./ton; Pt.Group - Show						
4. Balt 18 Comp., 30 gms	None	Trace	None	Show	Show	0.28
Final silver - 23.18 oz./ton; Pt.Group - Show						
5. Balt 17/18 Comp. 30 gms	None	Show	Show	Show	Show	0.81
Final silver - 8.40 oz./ton; Pt.Group - Show						
6. Balt 17 Comp., 30 gms	Show	None	None	Show	Show	1.85
Final silver - 81.12 oz./ton; Pt.Group - Show						

The final nitric partings were all run as one assay, mixed in a flux, smelted and cupeled. The Dore bead was parted with sulfuric acid, decanted, washed, dried and annealed. Weight of Pt.Group metals from the six total samples was 8.52 mg. This divided by 6 = 1.42 oz./ton of Pt.Group metals.

Pt Group Metals are worth more than Gold

Jerry C. Henderson, Research Chemist

PAID IN FULL

Attachment 9-6
March 10, 1988 assay report from Complex Metals, then in Chandler, Arizona

I.C.S. LABS, INC.

8390 S. 4TH STREET
HENDERSON, NV 89015
(702) 564-6654

West We Go Pg 6

Cambridge Resources INC
Bulk Test Results

	E		Date	Sample	Date (Mg)	Au (Mg)	Au OT	Au GT
1	8/15			W18,21,23/11-20	22	15		
2	8/16			W 14,18,23/0-10	36	32		
3	8/20			W 22,24,25/0-10	39	26		
4			8/18	W 23/11-20	19	10		
5			"	"	21	16		
6			"	"	22	13		
7			"	"	32	30		
8		*	"	"	25	22		
9		*	"	"	36	30		
10		*	8/18	W 24/0-10	29	22		
11			"	"	46	35		
12			"	"	50	46		
13			"	"	49	33		
14			"	"	74	72		
15			8/19	W 24/11-20	11	8		
16			"	"	5	4		
17			"	"	5	2		
18			"	"	16	10		
19		*	"	"	12	8		
20		*	"	"	16	13		
21			8/19	W 25/0-10	38	32		
22			"	"	40	26		
23			"	"	29	21		
24			"	"	37	25		
25		*	"	"	23	19		
26			8/21	W 25/11-20	7	5		
27			"	"	4	3		
28			"	"	7	6		
29			"	"	13	10		
30		*	"	"	9	8		
31			"	"	7	LOST 5		
32			8/23	W 24,26,27/0-10	21	15		
33			8/21	W 21,23,25/11-20	TR	TR		
34								
35								
36								
37								
38								

Attachment 9-7a
Handwritten, undated report (?) from ICS Labs, Inc., Henderson, NV (Robert Gunnison)

I.C.S. LABS, INC.

8390 S. 4TH STREET
HENDERSON, NV 89015
(702) 564-6654

West We Go Pg 7

Cambridge Resources Inc
Bulk Test Results

	F	Date	Sample	Done	(Mg)	Au	(Mg)	Au OT	Au CT
1		8/22	W 26/0-10		23	O	19		
2		"	"		18	O	17		
3		"	"		24	O	21		
4	*	"	"		6		4		
5		8/22	W 26/11-20		11	O	7		
6		"	"		9		3		
7		"	"		9		4		
8		"	"		12		7		
9	*	"	"		15	O	10		
10	*	"	"		14	O	7		
11		8/22	W 27/0-10		66		58		
12		"	"		51		37		
13		"	"		54		51		
14	*	"	"		41		34		
15	*	8/23	W 27/11-20		8	O	4		
16	*	"	"		13	O	11		
17		"	"		9		5		
18		"	"		18	O	14		
19		"	"		14	O	10		
20	*	8/23	W 28/0-10		33		31		
21		"	"		45		35		
22		"	"		48		43		
23		"	"		53		47		
24	*	8/25	W 28/11-20		16		13		
25	*	"	"		15	O	10		
26		"	"		11		7		
27		"	"		16		14		
28		8/25	W29/0-10		23	O	18		
29		"	"		1		TR		
30		"	"		13	O	11		
31		"	"		6		4		
32		"	"		9		6		
33	*	"	"		42	O	35		
34									
35									
36									
37									
38	*	From 500 #s							
39									

Attachment 9-7b
Handwritten, undated report (?) from ICS Labs, Inc., Henderson, NV (Robert Gunnison)

U.S. Department of the Interior
Bureau of Land Management
National Training Center

Short Note Transmittal July 13, 1999

To: Burrett Clay

From: Matt Shumaker

Subject: Bob Barefoot Assays, Mijo Exam

As you will recall from our recent trips to the Boulder City Nevada area, and from other conversations with K. Ian Matheson, the name "Bob Barefoot" has frequently surfaced as a reliable assayer for mineral matter such as is found on the Mijo group. Matheson has referred to Mr. Barefoot as a well known assayer from a college in Canada. Matheson has also provided us with the results of assays and other mineral tests performed by Bob Barefoot. Matheson has also referred us to geochemical publications written and co-written by "R.R. Barefoot." I rely on one of them, "Analytical Methods for Geochemical Exploration," by J.C. Van Loon and R.R. Barefoot.

Dr. R.R. Barefoot is, indeed, a well known and well respected analytical geochemist recently retired from the University of Toronto, Ontario, Canada. The work provided to us by Matheson under the name "Bob Barefoot" did not resemble the work performed by "R.R. Barefoot."

Today, I tracked down Dr. Ron Barefoot, professor emeritus, University of Toronto. I first called the Geology department, and they gave me a work phone for Dr. Barefoot of 416-978-5612. They could not release his home telephone number, but did say that it was in a different area code. There was no answer at his work telephone number.

Using Netscape's "People Finder" on the Internet, I located R.R. Barefoot, in Oakville, Ontario. At 12:00 MST today, I telephoned the number that was provided. Mrs. Barefoot answered the telephone and confirmed that it was indeed the residence of Dr. Ron Barefoot. She said that he was gardening, but that she would go and get him.

A few minutes later, Dr. Ron Barefoot picked p the telephone. I identified myself as a geologist with the U.S. Department of the Interior, and explained that I was working on a mining claim examination in Nevada. I also explained that people were referring to, or mistaking, the work of one "Bob Barefoot" of Wickenburg, Arizona as actually being the work of Dr. R.R. Barefoot of Toronto, Ontario. Dr. Ron Barefoot replied that he had never done any work in Arizona, and that he had never heard of "Bob Barefoot." He also stated that the laboratory at the University of Toronto that did that kind of work had been closed for several years.

I then asked Dr. R.R. Barefoot if he had applied for any patents under the name "R.R. Barefoot of DCRS (Barbados), Ltd." Dr. Barefoot replied that he had not, and in fact, held no patents at all.

I thanked Dr. Barefoot for his time and assistance, and we ended the call.

Attachments: Bob Barefoot information provided by Ian Matheson.

Attachment 9-8a
The Bob Barefoot and Dr. Ron Barefoot confusion.

PASS MINERALS INC. **FAX/LETTER**

2215 LUCERNE CIRCLE,
HENDERSON, NEVADA 89014
DATE FAXED: APRIL , 1999

Phone 702 451 4981
Fax # 702 451 4939

April 24, 1999

TO: MATT SHUMAKER
BURRETT CLAY

FROM: IAN MATHESON

RE: DCRS (US) LTD - BOB BAREFOOT

In 1992 I started working with Bob Barefoot from DCRS in Wickenburg. Bob has a process, explained in his memorandum dated July 28, 1992 which works on our ore. I have tested the Mijo 16/17 claims with this process. Bob was recovering gold in the .07 oz/ton range. The real advantage to his process is he has the facility which produces and weighs the gold. The system is high volume and very inexpensive to operate.

Bob also has a lot of theories. He was in research in the Oil Industry for years. He also has written a number of books. One of the books is an assay manual written with Dr. Van Loon from the University of Toronto. Most assay labs which use instrumentation have a copy of this text.

Here is Bob's theory on the ore. "The gold occurs as sulfate salt-encapsulated micron gold. In nature it is found in hematite (hydrated iron oxide) sand, but it can also be found in the sulfide tailings of copper and gold ores. It has remained hidden from man's fire assay gold analyses as the acid salt reacts with the sodium carbonate in the fire assay flux to generate large volumes of carbon dioxide gas which propel the encapsulated gold as a froth to the top of the assay cup, where it cannot be entrapped by the scouring lead in the flux (known as "acid slag effect" in assay and mining journals). The encapsulation also blocks the gold from vision, as well as causing numerous analytical difficulties. However, once the salt has been removed (he has a patent pending for this), the gold is both assayable by certified fire assay, and is recoverable by techniques that recover micron gold."

Dr. Guay's theory is that pressure from gas in the furnace is causing an interruption in the assay alloying the collector to drop prematurely. I am going to send Dr. Guay some of Bob's theories to get his reaction.

Attachment 9-8b
The Bob Barefoot and Dr. Ron Barefoot confusion.

In some information I received from Bob he states, "For decades hundreds of amateur "clandestine laboratories" over the south west have been analyzing such hematite ore using home-made analytical procedures and discovering amounts of gold that were well beyond the realm of credibility. The professional critics could not verify the work using the tried and proven certified fire assay, and thus dismissed all such claims as fraudulent. (I took Walter Lashley's article on Time Sensitive ores to Bob and had a great argument with him) He later says that he "apologetically, admits to being part of the ignorant chorus. Actually, the procedures used by most of the clandestine labs were derivatives of the totally acceptable procedure of re-firing the cup and cupel for two or more times. Furthermore, the assay problems caused by acid slag are well documented in both assay and mining journals. The reason that the professional community was unable to reproduce the high results was that neither they nor their amateur counterparts recognized the problem, and, therefore, did not under stand that the samples **changed dramatically with dehydration,** which increases salt precipitation and encapsulation. Recently, the problem of time in assaying these ores has been recognized, and the term "time sensitive ore" has been coined."

After Bob was convinced our "Fresh Sample Theory" along with Lashley's verification was sound he completed extensive research on his theory using very "so called" credible laboratories:

	By FIRE ASSAY		
	Chemex Reno	Iron King Humbolt	Loring Calgary
Before Treatment - Averages	.004	.012	.002
After Treatment Averages	.015	.021	.014
Increase by washing out acid salts	3.75 times	1.7 times	7 times

Barefoot then checked on the drying procedures of the laboratories and found that the Iron King assays being higher and more accurate were bringing each sample "just to dryness", whereas most other laboratories over dry each sample, unknowing ensuring that the gold is encapsulated in a hardened acid salt.

Loring dried the longest thereby producing the most salt crystallization resulting the lowest assays.

Attachment 9-8c
The Bob Barefoot and Dr. Ron Barefoot confusion.

TABLE #3

Comparison of DCRS Recoveries With the Assays of Both Virgin Hematite Sand Samples and the Same Samples With Their Acid Salts Washed Out.

Sample #	Dry Wt (lbs)	Soak time (hr)	DCRS Recovery mgs	DCRS Recovery oz/ton	Head Assay (oz/ton) Dry	Head Assay (oz/ton) Washed
Nevada #1	50	12	8.7	0.0112	0.001	0.049
Nevada #2	128	12	6.2	0.0031	0.001	0.022
Nevada #3	52	13	5.3	0.0033	0.001	0.008
Nevada #4	47	0	20.0	0.026	0.003	0.030
Nevada #5	47	0	5.0	0.007	0.001	0.007
Nevada #6	47	0	6.0	0.008	0.003	0.002
Nevada #7	47	0	6.0	0.007	0.001	0.003
Nevada #8	47	0	481.0	0.461	0.002	0.118
Nevada #9	47	3	147.0	0.181	0.006	0.219
Nevada #10	47	5	63.0	0.078	0.002	0.004
Nevada #11	47	5	23.0	0.029	0.001	0.010
Nevada #12	47	6	2857.0 *	3.205 *	0.004	0.007
Nevada #13	47	8	287.0	0.353	0.003	0.009
Nevada #14	47	8	291.0	0.358	0.003	0.011
Nevada #15	47	10	57.0	0.071	0.003	0.002
Nevada #16	45	10	40.0	0.051	0.003	lost
Nevada #17	47	11	20.0	0.025	0.002	0.015
Nevada #18	47	12	30.0	0.037	0.002	0.002
Nevada #19	47	22	37.0	0.045	0.004	0.022
Nevada #20	47	25	47.0	0.058	0.004	0.013
Nevada #21	47	26	20.0	0.025	0.002	0.018
Nevada #22	47	45	32.0	0.039	0.002	0.003
Nevada #23	47	48	11.0	0.014	0.003	0.014
Nevada #24	47	49	9.0	0.009	0.001	0.006
Nevada #25	47	50	7.0	0.009	0.003	0.006
Nevada #26	47	3	12.3	0.0151	0.037	0.140
Nevada #27	47	7	0.6	0.0007	0.001	0.015
Nevada #28	47	6	5.1	0.0063	0.001	0.003
Nevada #29	47	8	1.9	0.0023	0.001	0.008
Nevada #30	39	9	0.1	0.0002	0.002	0.014
Nevada #31	36	10	0.1	0.0002	0.005	0.009
Nevada #32	47	9	3.4	0.0042	0.001	0.006
Nevada #33	47	9	1.0	0.0012	0.001	0.025
Nevada #34	47	10	23.2	0.0286	0.001	0.009
Nevada #35	44	10	2.0	0.0026	0.001	0.001
Nevada #36	47	11	0.1	0.0001	0.002	0.036
Nevada #37	47	11	0.1	0.0001	0.001	0.026
Averages	49	16	46.2	0.061	0.003	0.025

* delete anomaly from averages

RECOVERED

FIRE ASSAY DRY

FIRE ASS WET

Attachment 9-8d
The Bob Barefoot and Dr. Ron Barefoot confusion.

TABLE #2

Time Sensitive Ores (Walter Lashley, California Mining Journal 12/92)

Certain ores assayed immediately upon sampling will assay many times higher than when they are assayed several days later. This phenomenon is well known by many researchers , but because no viable explanation could be given, no assays were ever published prior to Lashley's..

Sample #	Fire Assays (oz/ton) New Ore	Old Ore
1	0.44	0.00
2	0.24	0.00
3	0.24	0.00
4	0.23	0.02
5	0.41	0.01
6	0.41	0.01
7	0.42	0.01
8	0.05	0.01
9	0.70	0.00
10	0.34	0.05
11	0.24	0.01
12	0.63	0.04
13	0.15	0.04
A	0.11	0.001
B	0.22	0.001
Average	0,33	0.02

THIS IS WHY IT IS IMPERATIVE THAT WE TEST FRESH SAMPLES

Phenomenon is due to acid salt precipitation encapsulating the gold as the samples dry slowly over time (Barefoot Theory). Thus the phenomenon is due to water sensitivity, with time only being a factor which determines the degree of dehydration which would result in the precipitation of acid salts to encapsulate the gold..

Attachment 9-8e
The Bob Barefoot and Dr. Ron Barefoot confusion.

DCRS (US) LTD.
PO BOX 20818
WICKENBURG, ARIZONA
85358, U.S.A.

REPORT
(chuck-8.doc)

(602) 684-2867

DATE: May 26, 1993

TO: Mr. Ian Matheson, Mr. Chuck Agar (Fax 702-451-4939)

FROM: Bob Barefoot

SUBJECT: Gold Evaluation of Two Submitted Samples (water sensitivity)

BACKGROUND:
1. On May 17, 1993, Mr. Matheson delivered two alluvial bucket ore samples, both of which were reported to be identical, to the DCRS Test Facility, five miles south of Congress Arizona.
2. Since the buckets were expected to be water sensitive, a pre-water soak program was designed to liberate the gold.
3. On May 17, $ 700.00 was received as full payment for the assessment.

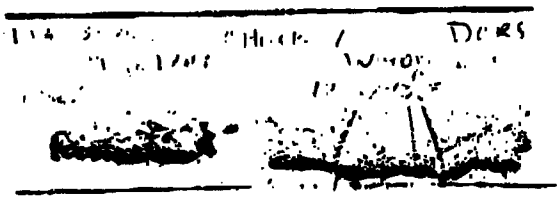
PROGRAM:
1. On May 18, the samples were weighed and split into three buckets before being submerged in water and allowed to soak for five days.
2. On May 23, both samples were processed through a mini DCRS Autocon metal concentrator.
3. The produced concentrates were then electro-amalgamated, with the amalgams distilled and treated with concentrated nitric acid to liberate the bullion.

RESULTS:

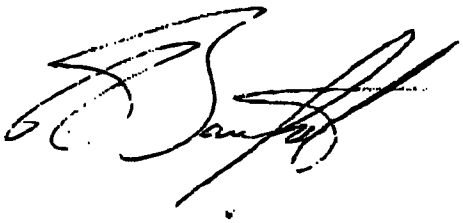
Sample	Dry Weight (lbs)	Fire Assay (oz/cuyd)	Recovery mgs	purity*	oz/ton	$ /cuyd**
Mijo 17 #1	53	pending	63	90 %	0.069	39.21
Windmill #1	48	pending	125	92 %	0.154	87.80
Mojo 17 #2	44	HOLD				

* Visual estimated purity.
** Gold at $380.00/Troy ounce and 3000 pounds/cubic yard.

COMMENTS: This ore ie definitely "water sensitive".



Bob Barefoot
Vice President



Attachment 9-8f
The Bob Barefoot and Dr. Ron Barefoot confusion.

DCRS (US) LTD.
PO BOX 20818
WICKENBURG, ARIZONA
85358, U.S.A.

PROPOSAL
(chuck-7.doc)

(602) 684-2867

DATE: December 31, 1993

TO: Mr. Ian Matheson, Mr. Chuck Agar (Fax 702-451-4939)

FROM: Bob Barefoot

SUBJECT: Proposal To Evaluate the Metallurgical Problems of the Needle Ore

BACKGROUND:

1. The ore that Pilot Plan Inc. has been evaluating at the DCRS Test Facility south of Congress Arizona is basically the same as ores from several other DCRS clients:
   - i) hematite sand
   - ii) fire assays are time sensitive
   - iii) fire assay procedures had to be developed to even see any gold in the samples.
   - iv) both the assays and the recoveries are subject to the moisture in the sample.
   - v) the DCRS recovery technique is the only process that ever recovers any significant gold.
   - vi) significant silver exists in all samples
   - vii) trace platinums exist in most of the samples along with trace amounts of rare earths.
   - viii) all gold recovered is micron in size.
2. Since the DCRS process s uses a great deal of water with a great deal of turbulence, and is the only process to recover gold from these samples, it makes sense to carry out a study to determine the effects on recovery by varying the time that the oore is run with the moisture content of the ore.

PROGRAM:

1. Three truckloads of the same ore which has just been dug and immediately sealed in plastic after loading, be delivered to the DCRS Test Facility.
2. DCRS will immediately process the first load.
3. DCRS will soak the second load with water and cover it with plastic, running it three days later.
4. The third load will be spread out to dry for at least a week before it is run.

COMMENTS:

1. The current DCRS recoveries, although low, are in the economic range
2. The results should lead to both better techniques of bulk testing, and a more rapid resolution of the technical problems leading to higher recoveries.

COSTS: As per price list schedule ($6,600.00).

Bob Barefoot
Vice President

Attachment 9-8g
The Bob Barefoot and Dr. Ron Barefoot confusion.

BAREFOOT.

TO: CHUCK AGER

FROM: IAN MATHESON

DATE: APRIL 5, 1993

RE: BOB BARESFOOT PROCEDURE FOR FIRE ASSAYING ORE

1. WASH THE ORE IN WATER - PREVENTS SALTING WITH GOLD CHLORIDE

2. TAKE 10 LB SAMPLE PUT IN CLEAN CEMENT MIXER, ADD 9 GALLONS (U.S) WATER AND STEEL BALLS. ROTATE FOR 3-6 HRS.

3. DURING THE LAST 30 MINUTES ADD 250 MLS OF SULPHURIC ACID.

4. DUMP THE SLURY INTO 2 - 5 GALLON BUCKETS AND LET SETTLE FOR 1 DAY. SYPHON OFF AS MUCH WATER AS POSSIBLE.

5. WASH AGAIN AND POUR BOTH BUCKETS INTO ONE BUCKET. SYPHONE OFF AGAIN.

6. DRY SAMPLE BY AIR.

7. SPLIT AND BLEND.

8. FIRE ASSAY.

WE SHOULD TRY AN INTERUPTED VERSION OF THIS ASSAY BY ADDING THE SULPHURIC ACID TO THE GROUND SAMPLES AND THEN COMPLETING THE PROCEDURE.

BAREFOOT SAYS THAT THE BLACK SAND HAAS A NEGATIVE CHARGE ON THE SURFACE AND A POSITIVE CHARGE BELOW THE SURFACE AND THE GOLD IONS ARE POSTIVE ON THE OUTSIDE. IS THIS CORRECT???

Attachment 9-8h
The Bob Barefoot and Dr. Ron Barefoot confusion.

DCRS (US) LTD.
PO BOX 20818
WICKENBURG, ARIZONA
85358, U.S.A.

UPDAATED REPORT (includes fire assays)
(chuck-6.doc)

(602) 684-2867

DATE: December 20, 1993

TO: Mr. Ian Matheson, Mr. Chuck Agar (Fax 702-451-4939)

FROM: Bob Barefoot

SUBJECT: Gold Evaluation of Two Submitted Samples (time ffect study)

MOISTURE SUMMED IN FROM RAIN THAT DAY.

BACKGROUND:
1. On Dec 9, 1993, Mr. Matheson delivered two alluvial bucket ore samples, both of which were reported to be identical, to the DCRS Test Facility, five miles south of Congress Arizona.
2. One bucket was to be run immediately and the other on December 16. The purpose was to see if the recoveries would change with time, a phenomenon familiar to their assays. Mr. Matheson took one and dried it on newspaper on his roof before returning it.
3. On Oct 9, $ 500.00 was received as full payment for the assessment.

PROGRAM:
1. On December 9, the first sample was processed through a mini DCRS Autocon metal concentrator.
3. On December 16, the dried sample was processed.
2. The produced concentrates were then electro-amalgamated with the amalgams distilled and treated with concentrated nitric acid to liberate the bullion.

RESULTS:

Sample	Dry Weight (lbs)	Fire Assay (oz/cuyd)	Recovery mgs	purity*	oz/cuyd	$ /cuyd**
Dec 9	40	0.002	6.6	95	0.015	$ 5.60
Dec 17	41	0.003	11.1	95	0.025	9.20

* Visual estimated purity.
** Gold at $370.00/Troy ounce.

Bob / The dry sample showed higher results here.

COMMENTS:
1. The sample should not have been dried rapidly on a roof.
2. The fire assays are lower than the DCRS recoveries due to either magnetite or salt (or both) encapsulation of the gold. More gold may exist in each sample.

Bob Barefoot
Vice President

Attachment 9-8i
The Bob Barefoot and Dr. Ron Barefoo confusion.

TO: CHUCK AGER

FROM: IAN MATHESON

DATE: APRIL 6, 1993

RE: BAREFOOTS ASSAY PREPARATION

BAREFOOT CLAIMS THAT HIS ASSAY PREPARATION OF GETTING RID OF THE SALTS INCREASE THE "STANDARD FIRE ASSAY" RECOVERY SUBSTANTIALLY. HE ALSO CLAIMS THAT THIS IS THE REASON THAT A FIRE ASSAY IMMEDIATELY AFTER A RAIN WILL RECOVER HIGHER VALUE THAN ONE TWO WEEKS LATER. WE HAVE EXPERIENCED THE RAIN PHENOMENON IN ARBY'S LABORATORY.

IF BAREFOOT IS CORRECT - WE SHOULD FIND OUT IF HE IS - DOES IT THEN FOLLOW IN LEACHING THE SALTS MAY ALSO INTERFERE AND INSTEAD OF CAPTURING THE WASH WATER WE SHOULD BE ELIMINATING IT PRIOR TO LEACHING????

Attachment 9-8j
The Bob Barefoot and Dr. Ron Barefoot confusion.

TO: CHUCK AGER
FROM: IAN MATHESON
DATE: OCTOBER 27, 1994

RE: CONVERSATION WITH BAREFOOT

THE NEW SYSTEM (DOUBLE RUN) WILL CAPTURE 90% OF FINE GOLD WHICH HAS BEEN PUT INTO A SAMPLE. THE OLD SYSTEM CAPTURED 78%.

NATURALLY WET ORE PRODUCES SIGNIFICANTLY BETTER RESULTS THAN ORE WHICH HAS BEEN ARTIFICIALLY WETTED. BAREFOOT SAYS THIS IS BECAUSE IT HAS BEEN WET FOR A SIGNIFICANTLY LONG PERIOD OF TIME. ACCORDING TO BOB IF YOU DIG DOWN IN THE DESERT YOU WILL FIND MOISTURE IN THE 15 - 20% RANGE. WHILE THE SALTS ARE DISSOLVED THE GOLD IS LIBERATED.

HE CLAIMS THAT THE SULFATE IONS ENCIRCLE THE POSITIVE GOLD CRYSTALS.

WHEN YOU HYDRATE YOU NOW HAVE AN ACID SALT COATING WHICH WILL INTERFERE WITH AN ASSAY.

HE HAS DONE A TEST BY ADDING GOLD AND PERCIPITATED SULFATES THE ASSAYS DROP 20 - 50% WHEN THE PERCIPITATED SULFATES ARE ADDED. HE CLAIMS HE CAN MAKE THE GOLD DISAPPERAR.

HE IS NOW PUMPING ELECTRONS INTO THE SLURY BY ZAPPING IT. HE CAN PRODUCE THE SAME RESULTS IN 15-20 MINUTES THAT HE WAS IN 7 DAYS. THEY ARE NOW ABOUT TO TRY THIS IN THE PRODUCTION SYSTEM.

HE CLAIMS THAT SUNLIGHT IS CAUSING SOME OF THE CHANGES. SOME OF THE MOST IMPORTANT INFORMATION HE IS TRYING TO DEVELOP IS THE HYDRATION HISTORY.

HE IS FINDING THE DIFFERENCE BETWEEN NATURALLY MOIST AND DRY AS GREAT AS FROM $.30 TO $ 30.00.

LASHLEY, ACCORDING TO BAREFOOT, CLAIMS THAT IT IS AN ENCAPSULATION. BAREFOOT SAYS HE IS WRONG - HE SAYS IT IS THE POSITIVELY CHARGED PARTICLES ARE THAT ARE ATTRACTING THE NEGATIVE IONS AND COAT THE PARTICLE WITH A SALT AS A RESULT OF THE DEHYDRATION.

BAREFOOT IS NOW TRYING TO FIND A VIBRATION FREQUENCY OF THE SALT CRYSTAL AND FEELS HE MAY BE ABLE TO ATTACK IN THIS MANNER.

Attachment 9-8l
The Bob Barefoot and Dr. Ron Barefoot confusion.

**BAREFOOT CLAIMS THE FIRE ASSAY PROBLEMS ARE CREATED A BETWEEN 1170
C TO 1320 C WHEN THE SO2 COMES OFF.**

HE SAYS THAT BY ELIMINATING THE SULFATE ACID SALTS YOU ELIMINATE THE FIRE ASSAY PROBLEM. HE HASS DONE A STUDY WITH THREE LABORATORIES ON THIS PROBLEMAND HAS REPORTED HHIS FINDINGS IN "THE GREAT BASIN BOLD DISCOVERY"

HOW MUCH OF THIS IS ON TARGET????

Attachment 9-8k
The Bob Barefoot and Dr. Ron Barefoot confusion.

DCRS (US) LTD.
#27, 455 NORTH TEGNER
WICKENBURG, ARIZONA
85390, U.S.A.

MEMORANDUM

(602) 684-2867

DATE: July 28, 1992

TO:

FROM: Bob Barefoot

SUBJECT: Conventional Gravity Recovery Systems Versus the DCRS Process

COMMENTS:

There are only two conventional processes for making gold concentrates. One is froth floatation where oils added to an aquaous slurry of the ore adheres to certain minerals such as sulfides and also to certain size fractions of gold metal thereby allowing them to attach to bubbles of soap (generated from below) and float to the surface as a froth which can readily be scooped from the surface. The second is the myriad of gravity systems based on the fact that gold has a specific gravity that makes it 19 times heavier than water. Thus, whenever gold experts are asked to evaluate a gold concentration process, they have been trained to place the process in any one of the above two categories. Since froth floatation is so readily identifiable, all other processes must be gravity systems. However, after 100 years without a new category, examination of the Differential Charge Recovery System (DCRS) shows dramatic and unexplainable inconsistencies when compared to the conventional systems. But, true to form, experts' training forces them to categorize the DCRS process as a gravity system, albeit a "glorified one". The gold recovered forces them to admit that "it works"; however, they are left without any explanations, other than the ones provided by DCRS to explain all of the physical inconsistencies which their training told them was suppose to be impossible. A fair evaluation of the DCRS process would have to be done by a scientific mind that was not weighted down by endoctrinated preconceived parameters. As a prerequisite, this expertise should be in physics, and not gold, thus saving face with peers. Even then, the problem that occurs is that currently physics experts admit that "they do not understand the microphysics of electrification of clouds", although it is universally accepted that <u>the water is charged positively</u> with up to millions of volts. The problem is <u>what is charged negatively?</u> DCRS believes that since the only two components in the clouds, water and air, that it is logical to assume that <u>the air</u>, which is made up of the two most electronegative (tenacity for holding on to electrons) substances on earth (oxygen 18% and nitrogen 71%), <u>is charged negatively</u>. Thus it was based on this assumption that the DCRS process was designed to maximize water contact with air, which coincidently maximized the recovery of gold. The following is a list of inconsistencies when comparing the DCRS process to the conventional gravity systems.

<u>Attachment 9-8m</u>
The Bob Barefoot and Dr. Ron Barefoot confusion.

1. The fist inconsistency is turbulance. All experts are baffled by the fact that the DCRS process is based on turbulace which they always must avoid with gravity systems for fear that they will wash away the gold. Yet in test after test, the more turbulant the DCRS process, the more efficient the recovery.
2. The second major inconsistency is the fineness in size of the gold recovered by the DCRS process. While the majority of the conventional gravity systems recover course gold with a minor presence of fine sized micron gold, the preponderance of gold recovered by the DCRS process is so fine in size that it is classed as the invisible gold (cannot be seen in the ore with the naked eye). Even though this gold has a specific gravity of 19, it is so fine that it readily floats on water making it almost impossible to recover with a gravity system, and yet it makes up the majority of the gold recovered in the turbulent DCRS process.
3. The third major inconsistency is efficiency. All of the world's experts can find a way to be 99 % efficient using gravity systems as long as the very slow rate of processing is not considered. However, when the economics of processing has to be considered, their efficiencies soon plummet down to below the 30 % level (although they do not like to admit this) for a typical placer, for example. The DCRS system recovers more than three times the amount of gold and does it at even higher rates of production than the conventional gravity system. For example, in the test run for W.T.I. on the CSG desert fan alluvial, DCRS recovered $6.00/cu.yd. with over 75 % of the gold being the invisible crystals. The Hollinger gold experts who had spent $3,000,000 over 3 years attempting to use gravity systems to recover the desert placer gold only managed to recover a maximum of $1.50/cu.yd., never seeing the micron gold.
4. The forth major problem that the experts have is that since they have staked their reputations on proving that much of the gold is adhered or included on the surface of the heavy minerals, recovery of the minerals is a prerequisit to recovering the gold. Yet they witness these same minerals flashing through the DCRS process leaving the gold behind to be recovered in the ultra rich DCRS concentrates.
5. The fifth major inconsistency is the incredibly small amount of concentrate produced by the DCRS process when compared to any conventional gravity system. For example, in the case of the desert alluvial, the amount of black minerals can be as high as 7 %. This means that even if 1000 cu.yds of ore could be processed though a conventional system with 100 % recovery, over 70 cu.yd (100 tons) of concentrates would be produced and have to be reprocessed somehow. The same 1000 cu.yd run through a DCRS process would produce less than 200 pounds of concentrates (1000 times as rich in gold) from which the gold is readily extractable. Another example is the production of 35 to 1 (ore to concentrates) sulfide concentrates with the DCRS process which had previously allowed only 5 to 1 (at the same efficiency) concentrates using froth floatation, with for example, ore from the Central City area, Colorado (7 times as rich in gold). Hence, the "experts" classify the DCRS process as "glorified" but has no explanations as to how it apparently is defying the laws of physics!
6. The sixth major inconsistency occurs when the DCRS process makes economic concentrates from ores that have proven to be unresponsive to the attempts by the experts to use gravity concentration systems. Two recent examples are: 1) the production of 1.20 oz/ton concentrates from a sample of the 1,000,000 tons of 0.07 oz/ton Congress Mine tailings which had previously yielded only a high of 0.20 oz/ton after decades of expert efforts using every conventional gravity system conceivable; and 2) the production of 0.72 oz/ton concentrates from a sample of the 12,000,000 tons of 0.05 oz/ton Iron King tailings that had previously defied all attempts by leading world experts to use gravity systems to make an economic concentrate (froth floatation could not be used as the tailings are already 56 % sulfides).

NOTE:

1. Each expert's response to these apparently impossible inconsistencies which they witnessed is, "I'm going to have to think about it" followed by a deafening silence as they take the ostrich position and bury their heads in the sand never coming up for air.

2. There are many more inconsistencies, for example the five minute DCRS amalgamation of ores (electroamalgamation) that require 24 hours by conventional processing; however, 6 apparently impossible inconsistencies should be enough for any reasonable man to admit that calling on experts to assess a technology which currently has no experts is like giving crediblity to the experts of the past who claimed that man will never fly or exceed the speed of a racing horse without being killed by the physical forces being exerted on his body. The atomic theory (believed by every grade school child today) was dismissed and belittled by the "experts" of the time for over 100 years before it was finally accepted. Albert Einstein, on hearing that the experts against his theory of relativity had written a paper entitled "One Hundred Against Einstein" remarked "If they were right, one would be enough".

3. The numerous "experts" assessing the DCRS process over the years, all admit, as they are fondling the gold product which can be seen, weighed and sold, that "the process works" but they "just cannot explain why ?" Ironically, history has a habit of repeating itself and has also shown that the experts believe their "silence is golden" even though it cannot be seen, weighed or sold..

Bob Barefoot

Attachment 9-8o
The Bob Barefoot and Dr. Ron Barefoot confusion.

DCRS (US) LTD.
PO BOX 20818
WICKENBURG, ARIZONA
85358, U.S.A.

MEMORANDUM

(602) 684-2867

DATE: July 13, 1992

TO: To Whom It May Concern

FROM: Bob Barefoot

SUBJECT: Evaluation and Exploitation of Gold Prospects

BACKGROUND:

1. Over a period of 10 years of research and development and several million dollars in expenditures, a Differential Charge Recovery System (DCRS) for extracting precious metals from ores was developed. The System employs a high voltage charge around a high velocity slurry of ore which causes the contained metals and minerals to take an electrical charge. These charged particles are then recovered by passing the slurry over an equally and oppositely charged collector plate.
2. In 1990 the first patent was obtained for South Africa which produces the majority of the Free World's gold.
3. In 1991 a United States patent was obtained and DCRS (US) Ltd. was incorporated to exploit the technology with major corporations in the U.S..
4. The first patent obtained in 1992 was for Taiwan.
5. Currently, patents pending in in over 30 gold producing countries.

MODE OF BUSINESS:

1. DCRS (US) Ltd. has set up a Test Facility 5 miles south of the town of Congress Arizona.
2. Ores from all over the U.S. and other countries are tested <u>at cost</u> for interested clients (see attached price list).
3. Should the tests demonstrate economic success in extracting the metals contained in the ore, the client can elect to lease the DCRS equipment <u>at cost</u> with DCRS (US) Ltd receiving a 5% net smelter royalty.
4. DCRS will install the equipment and provide trained operators as well as provde for maintenance and improvements: all <u>at cost</u>.

COMMENTS:

1. The DCRS process has been successfully field tested and proven to recover substantially more gold than any other process currently in use.
2. The DCRS process is an extremely high volume low cost system that results in a very small amount (pounds versus tons by conventional systems) of very high grade concentrate that metal refiners preferentialy purchase.
3. Subject to both legal and geological substantiation of a client's ore followed by the bulk testing of the ore and concentrates at the Arizona Test Facility, DCRS would entertain entering into negotiations with the client to lease DCRS equipment and technology.
4. Detailed terms of the business agreements are avalilble to approved clients upon request.

Bob Barefoot
Vice President

Attachment 9-8p
The Bob Barefoot and Dr. Ron Barefoot

economically exploited using conventional recovery systems.

The publication gives a list of Canadian and US gold recovery patents dating from the last century.

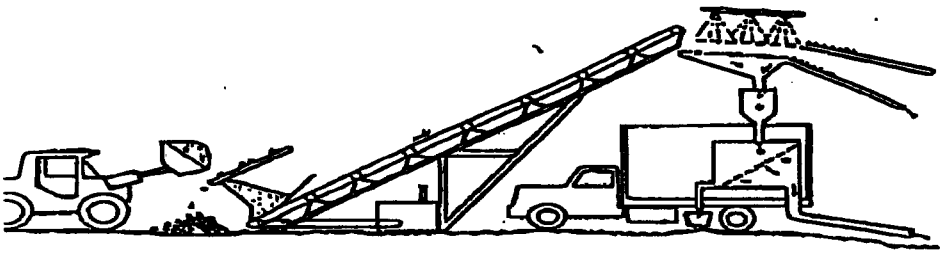


Figure 20

Doc.	Patent Application WO 90/03846, 67 pp PCT Application in English, filed for AT AU BE BF BJ BR CF CG CH CM DE FR GA GB HU IT JP KP KR LU ML MR NL SE SN SU TD TG
Appl.	DCRS (Barbados) Ltd., L.A. Wood
Inv.	R.R. Barefoot
Pr.D.	7 Oct. 1988, GB
Pub.D.	19 April 1990

P 91 1 26 Carbon Elutriation

According to this invention, loaded carbon in a gold extraction process is eluted with alcohol (methanol or ethanol) in a batchwise or continuous manner. In the disclosed process all three, the alcohol, the water and the carbon are recirculated.

Doc.	Patent ZA 89/4598, 9 pp
Appl.	Goltech Sales (Pty) Ltd.
Inv.	N. Bowker
Pr.D.	22 June 1988 ZA
Pub.D.	28 March 1990

P 91 1 27 Selective Flotation of Gold

Froth flotation is widely used for the beneficiation of ores which contain valuable minerals. Successful gold flotation is heavily dependent on the so called collectors which selectively impart hydrophobicity to the gold to be separated from the gangue. Best known as collectors are probably the xanthates. Also known is the use of monothiophosphates as collectors. However, these reagents were hitherto only used in acid media.

Unexpectedly, the present disclosure teaches that certain monothiophosphates exhibit high selectivity for precious metal flotation under alkaline conditions. Such compounds are, for instance,

- diethyl monothiophosphate,
- di-t-butyl monothiophosphate
- diisobutyl monothiophosphate,
- dioctyl monothiophosphate,
- diphenyl monothiophosphate,
- dibenzyl and dicresyl mono-thiophosphate.

Any known frothing agent may be employed in the invention.

Doc.	Patent Application ZA 90/3298, 21 pp
Appl.	American Cyanamid Company
Inv.	S.D. Fleming
Pr.D.	1 May 1989
Pub.D.	1 Nov. 1990

Attachment 9-8q
The Bob Barefoot and Dr. Ron Barefoot confusion.

Doc.	Patent US 4955699, 7 pp
Appl.	Westinghouse Electric Corp.
Inv.	N.B. Singh *et al.*
Pr.D.	23 Nov. 1988
Pub.D.	11 Sept. 1990

P 91 1 24 Production of a Chemical

Although this invention is said to be applicable to other noble metal cyanide complexes, it is mainly directed towards the production of high purity potassium gold(I)cyanide. The process involves a trickle-bed reactor in which, in the presence of oxygen and optionally under elevated pressure, potassium cyanide solution is recycled through gold granules. Once the concentration of $KAu(CN)_2$ in the recycled fluid is sufficiently high the gold complex is recovered by crystallization.

Doc.	Patent ZA 89/8520
Appl.	AECI Ltd.
Inv.	M. Stewart, B.C. Bok, T.R. Sangiorgio
Pr.D.	9 Nov. 1988
Pub.D.	29 Aug. 1990

RECOVERY

Δ The recovery of gold from refractory ores is the theme of US 4941917 (Exxon Chemical Patents Inc.),

Δ ZA 89/8124 (Hydrochem. Dev. Ltd.)

Δ US 4923510 (G. Ramadorai),

Δ and SU 1518792 (Krasy Tsvetmetavtom).

Δ Gold mining by pumping pressurised liquids into boreholes and lifting of the gold by pressurised gas is disclosed in WO 90/03494 (L.R. Baster).

Δ US 4946585 (American Cyanamid Co.) claims collector compositions for the froth flotation of gold,

Δ and Great Lakes Chemical Corp. recovers gold from bromine complex leachates with peat moss (US 4936910).

Δ Gold recovery by the carbon-in-pulp process is found in CA 2000463 (New Zealand Government) and the improved sorption of gold from slurries is disclosed by Newmount Gold Co. in AU 8943941.

Δ Como Engineers Pty propose an electrowinning cell for gold recovery in AU 8941439,

Δ and US 4952514 discloses a method of gold analysis by 'Ion-interaction Reverse Phase Liquid Chromatography'.

P 91 1 25 Waterflow Differential Electrical Charging Process for Ores

This patent application proposes a combined aqueous/electrostatic/amalgamation process for the recovery of gold from its ores. High pressure water jets create a high velocity turbulent flow of fine ore particles in water droplets which thereby acquire frictional electric charges. The charging is said to be dependent on the conductivity of the ore particles which therefore can be separated from gangue by guiding them through electric fields. This separation can be combined with amalgamation. The system is called the 'Differential Charging Recovery System (DCRS)' and consists of

a) Charging System,
b) Electrostatic Concentrator or Collector,
c) Electrostatic-electrogravity Concentrator,
d) Electroamalgamator and
e) Hydraulic Charge/Discharge Concentrator.

The system can be designed as a Self Contained Mobile DCRS Unit (Fig. 20) which can be used to process ores from small or remote deposits that cannot be

Attachment 9-8r
The Bob Barefoot and Dr. Ron Barefoot confusion.

Analytical Methods for Geochemical Exploration

Bureau of Land Management
National Training Center
9828 N. 31st Ave.
Phoenix, AZ 85051

(416) 978-5612

J. C. Van Loon and R. R. Barefoot

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and
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The Bob Barefoot and Dr. Ron Barefoot confusion.

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Attachment 9-8t
The Bob Barefoot and Dr. Ron Barefoot confusion.

PASS MINERALS INC. **FAX/LETTER**

2215 LUCERNE CIRCLE.
HENDERSON, NEVADA 89014
DATE FAXED: APRIL 02, 1999

Phone 702 451 4981
Fax # 702 451 4939

May 02, 1999

TO: BURETT CLAY
MATT SHUMAKER

FROM: IAN MATHESON

RE: PINCOCK, ALLEN & HOLT, INC.

Enclosed please find a study conducted by Pincock, Allen & Holt on the Gunnison process. This study was conducted when Gunnison was in Las Vegas. The Double O Group owned the Mill Site building directly south of our mill site building at Railroad Pass.

The Mortage Investment Company of El Paso, Texas went the way of most Texas financial Instutions in the early 1980's.

Arby Vincent, who owned our claims, was involved as a major shareholder in Double O. This was in 1986 prior to my becoming involved with the project.

Note 4.2 of the Report, "Conclusions" which states that Gunnison's "proprietary chemstry has yielded measurable quantities of gold in samples on which classical methods have shown no gold content."

Attachment 9-9a
The Pincock, Allen & Holt evaluation of Robert Gunnison's process.

PINCOCK ALLEN & HOLT

International Mineral Industry Consultants

STATEMENT OF QUALIFICATIONS

Setting the Standard...
A Tradition of Technology and Integrity Since 1968

PRELIMINARY DRAFT

Attachment 9-9b
The Pincock, Allen & Holt evaluation of Robert Gunnison's process.

REPRESENTATIVE CLIENT LIST (SINCE 1990)

PAH's clients include mining companies, financial institutions, investors, and government bodies and agencies (excluding regulating units). Truly international in scope, PAH has completed projects in Africa, the Asia-Pacific region, Canada, Europe, Latin America, the former Soviet Union, and the United States. The following list includes representative clients to whom PAH has provided services in the last 5 years:

MINING COMPANIES

Alta Gold
American Gold Resources
Asamera Minerals (U.S.) Inc
ASARCO
Atlas Corporation
Barrick Gold Corporation
Cia. Minera Mexico S.A. de C.V.
Cia. Minera Dona Ines de Collahuasi, S.A.
Cementos Lima, S.A.
Compania Minera El Indio
Compania Minera La Parrena S.A. de C.V.
Compania Minera Nevada S.A.
Cons. Nevada Goldfields Inc.
Cyprus Mining Company
Echo Bay Mines
El Dorado Corporation
Exxon Coal and Minerals Company
Golden Queen
Greenstone Resources
Hecla Mining Company
High Desert Mineral Resources, Nevada Inc.
Homestake Mining Company
Independence Mining Co.
Industria Minera Mexico
Industrias Luismin S.A. de C.V
Lepanto Cons. Mining Co.
Metallica Resources
Nescor Minerals
Newmont Mining Company
Orvana Resources Corporation
Pegasus Gold Corporation
Royal Oak Resources Ltd.
Santa Fe Pacific Gold Corporation
Siskon Gold Corporation
Sociedad Contractual Minera El Abra
Sunshine Mining &Refining Company
Teberebie Goldfields Ltd.
U.S. Energy Corporation (Sutter Gold)
Viceroy Gold Corporation

FINANCIAL

ABN AMRO Bank
Bankers Trust of Canada
Bank of Tokyo - Mitsubishi
Banque Paribas
Barclays Bank/BZW
Capital Finance Corporation
Citibank
Chase Securities
Coopers and Lybrand
Credit Lyonnais
Deutsche Bank
Dresdner Bank
European Bank for Reconstruction & Dev.
Export-Import Bank of Japan
Export-Import Bank of the United States
FerroScandia Bank Ltd
Generale Bank
Industrial Bank of Japan
James Capel
Kreditanstalt für Wiederaufbau
NCNB Texas National Bank
NMB Bank
Overseas Private Investment Corporation
Price Waterhouse, IPG
SBC Warburg
Standard New York Inc.
Union Bank of Switzerland
Westpac Banking Corporation

GOVERNMENT

BRGM (France)
City of Denver
CODELCO (Chile)
Colorado Department of Natural Resources
COMIBOL (Bolivia)
Corporacion Minera Nicaraguense (INMINE)
Dickenson County, Virginia
Empresa Minera Especial Tintaya S.A. (Peru)
Empresa Del Hierro Del Peru (Peru)
United Nations Development Program

Attachment 9-9c
The Pincock, Allen & Holt evaluation of Robert Gunnison's process.

EVALUATION OF THE

ICS LABORATORIES

GOLD EXTRACTION PROCESS

Performed for

MORTGAGE INVESTMENT COMPANY
OF EL PASO, TEXAS

Pincock, Allen & Holt, Inc. - DENVER. 303-986-6950
1750 E. Benson Highway
Tucson, Arizona 85714

PAH Project No. 661.01

August 1986 - DAVID MCCEE.. LOUISIANA MINING.

Attachment 9-9d.
The Pincock, Allen & Holt evaluation of Robert Gunnison's process

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APPENDIX I - Jacobs Assay Office Results

Attachment 9-9e
The Pincock, Allen & Holt evaluation of Robert Gunnison's process

1.0 INTRODUCTION

As part of the evaluation of the Double "O" Gold project, Pincock, Allen & Holt, Inc. (PAH) was requested by Mr. Ronald A. Piperi to visit the laboratory and pilot plant of ICS Laboratories. The visit by PAH was for the purpose of evaluating a precious metal extraction process developed by ICS Laboratories. On August 7 and 8, Mr. John Rozelle, Geologist for PAH, visited the Double O claims to procure the necessary ore samples. On August 13th, testing was performed under the supervision of Mr. Kenneth Edmiston, Manager of Process Engineering for PAH. Mr. Jim Hazelwood, representing Double "O" Resources, aided in both of the above tasks.

Attachment 9-9f
The Pincock, Allen & Holt evaluation of Robert Gunnison's process.

2.0 SUMMARY

To evaluate the ICS Labs process PAH procured five bulk samples from previously excavated pits. Each of these bulk samples was then batch leached in the ICS Labs pilot plant located outside of Henderson, Nevada. The ICS Lab personnel monitored the leach tests under the supervision of PAH personnel. Slightly less than 1000 pounds of material was leached for each sample.

At the completion of leaching, samples of the initial leach solution and pregnant liquors (gold bearing solution resulting from leaching) were taken to the ICS Laboratory in Henderson. At the laboratory, the solutions were assayed utilizing the Chiddey method. That fraction of the samples not utilized for Chiddey assays were treated by ICS to destroy their proprietary chemistry and were taken by PAH for check assays. The results of both sets of assays as they relate to the soluble gold content of the ore are as follows:

	Gold Content (oz/ton)			
	Minus 1/8 inch Ore		Insitu Ore [1]	
Sample	ICS	Jacobs [2]	ICS	Jacobs
B18A-12	0.00	0.000	0.00	0.000
B18A-7	0.06	0.156	0.03	0.078
C3-2	0.08	0.133	0.04	0.093
B18-25	0.19	0.000	0.13	0.000
B29E-5	0.17	0.252	0.13	0.189

[1] Includes plus 1/8 inch rock as being barren in gold.

[2] Jacobs Assay Office, Registered Assayer.

Attachment 9-9g
The Pincock, Allen & Holt evaluation of Robert Gunnison's process.

During the course of the testing program PAH attempted to insure that the testing was done without bias or contamination. Control samples were run and reagents used for assaying were checked for contamination. Although nothing was observed during the test monitoring that would discredit the above results, PAH believes that additional testing is required before the ICS process can be deamed a proven technology. The PAH reservations arise from the wide fluctuation between the ICS results and the check assays. Also, the inability to determine the total gold content of the ore (soluble gold plus non-soluble gold) has been prevented by the fact that classical means of assaying the ore solids has shown no measureable quantities of gold.

Attachment 9-9h
The Pincock, Allen & Holt evaluation of Robert Gunnison's process

3.0 EVALUATION PROGRAM

3.1 Sample Acquisition

On August 7 and 8, 1986 a total of five bulk samples were collected by PAH and Double "O" Resource personnel. These samples were collected at five different locations, with each sample weighing approximately 1,500 pounds. The five locations were:

Sample Identification	Sample Location
B18A-7	In a pit adjacent to the B18A claim corner
B18A-12	In a pit located 300 feet east of the B18A claim corner
B18A-25	In a pit located 1200 feet west of the B18A claim corner
C3-2	In a pit located 100 feet southwest of the C3G claim corner
B29E-5	In a pit located 130 feet west of the C295 claim corner

The samples were taken from pit side walls of existing pits. These pits were excavated with a front-end loader and were approximately 15 to 20 feet long, 8 feet wide and 6 feet deep. Before the bulk samples were taken, the pit side walls were cleared with a loader to insure an uncontaminated sample.

Attachment 9-9i
The Pincock, Allen & Holt evaluation of Robert Gunnison's process

Each bulk sample was screened in the field through a 1/8-inch screen. The screen undersize was placed in 55 gallon drums, labelled and sealed. The screen undersize fraction represents the ore to be tested. The oversize was rejected. The proportion of the sample which passed through the screen was visably estimated at:

Sample	Percent Passing Screen
B18A-7	50
B18A-12	70
B18A-25	70
C3-2	70
B29E-5	75

The drummed samples were retained by Double "O" Resources personnel.

3.2 Pilot Plant Testing

On August 13th, the bulk samples were taken to the pilot plant for testing. For each sample the following procedure was followed:

1) A separate 3 ft diameter by 4 ft agitated tank was used for each sample. The samples were leached in a batch manner.

2) The tanks were filled with leach solution prior to the test. The tank contained 1000 pounds of leach solution. Samples of the leach solution were taken from each tank prior adding solids.

3) A 1000 pound sample was removed from the drums, weighed, sampled and fed into the agitated tank. Separate ore samples for assay and moisture were taken.

4) The tanks were agitated for one hour and then the agitator stopped. During the agitation period, the ICS Laboratory personnel took periodic readings to monitor the chemistry.

5) The solids in the tanks were allowed to settle prior to removing a sample of clear, pregnant solution.

The exceptions to the above procedure was the addition of four gallons of hydrochloric acid to the tank containing sample B18-25. The leaching of this sample was accompanied by a large quantity of foaming with associated acid consumption. There was a lesser quantity of foaming in sample B29E-5 and C3-2.

The bulk leaching tests were performed quickly and without any difficulties. Only one of the ICS Laboratory personnel was allowed access to the leach tank area after the test was begun, and this was always in the presence of a PAH engineer.

3.3 Laboratory Testing

The leach and pregnant solutions from each test were transported by PAH and Double 'O' personnel to the ICS Laboratory in Henderson. At the laboratory, 292 cc samples of

the leach and pregnant solution were taken for analysis. The analyses at the laboratory were performed utilizing the Chiddey method. This is a widely accepted method to determine the gold content of cyanide solutions. The sequence of events in determining the gold content of the solution were:

1) Chiddey assay of 10 assay tons of solution.
2) Cupellation of the lead from the Chiddey assay.
3) Weighing of the resulting dore (gold plus silver).
4) Inquarting of silver and re-cupellation of the dore bead.
5) Parting of the resulting dore bead to give a pure gold bead.

The results of the above procedure are reported in Table 3-1. In addition to leach solution and pregnant liquor samples, a solution prepared by PAH (KJE-6) was also assayed. Also, blanks were run to check for contamination in the laboratory reagents. All blanks showed no measurable gold content.

The ratio of silver to gold in sample B18A-7 appeared high compared to similar samples and may represent a parting error which would tend to show more silver at the expense of the gold content.

TABLE 3-1

ICS Laboratory

Sample Identification	Pilot Plant Weights (lb) Solids	Pilot Plant Weights (lb) Solutions	Bead Weights (mg)[1] Doré	Bead Weights (mg)[1] Gold	Pregnant Solution (oz/ton) Gold	Pregnant Solution (oz/ton) Silver	Calculated Soluble Content of Solids (oz/ton) Gold	Calculated Soluble Content of Solids (oz/ton) Silver
B18A-12	971	1000	0.0	0.0	0.00	0.00	0.00	0.00
B18A-7	973	1000	1.9	0.6	0.06	0.13	0.06	0.01
C3-2	990	1000	1.5	0.8	0.08	0.07	0.08	0.07
B18-25	975	1045	1.9	1.6	0.18	0.01	0.19	0.01
B29R-5	990	1000	2.3	1.7	0.17	0.06	0.171	0.06
KJE-6 [2]	—	—	—	0.8	—	0.16	—	—
Compo of Start[3]	—	—	trace	trace	trace	trace	—	—

1) All weights are from 10 assay tons except KJE-6 which was 5 assay tons.

2) Sample prepared by PAH as check on known.

3) A composite sample of five solutions in leach tanks prior to start of leaching.

3.4 Analytical Results

ICS Labs does not allow samples of solutions to leave their facilities so as to protect the proprietary chemistry they have developed. This presented a problem with regard to verifying the analytical results in Table 3-1. After reviewing this problem, it was decided to add caustic and sodium sulfide to the solutions so as to destroy the proprietary chemistry and thus allow samples to be taken for verifying assays. The above was done and PAH took samples to the Jacobs Assay office in Tucson, Arizona (Registered Assayer No. 11650 - State of Arizona). The following is a discussion of the laboratory results. A copy of the Jacobs Assay certificate is in Appendix I.

Procedure

The solutions were assayed by both atomic adsorption and fire assay. Due to the presence of large quantities of sodium and other interfering ions, the atomic adsorption assays were deemed less accurate. Therefore, the fire assays were utilized for verifying the ICS Labs results. The verification is discussed in the following sections.

Leach and Pregnant Solution

Samples of leach solution and pregnant liquor were checked for each test. In all cases the leach solution (solution in tanks prior to adding solids) contained gold. The results are as follows:

Sample		Gold Assay (oz/ton) Jacobs	ICS Labs
B18A-12	- start (leach soln)	0.015	tr (1)
	stop (preg soln)	0.010	0.00
B18A-7	- start	0.010	tr (1)
	stop	0.162	0.06
C 3-2	- start	0.010	tr (1)
	stop	0.142	0.08
B18-25	- start	0.010	tr (1)
	stop	0.010	0.18
B29E-5	- start	0.002	tr (1)
	stop	0.252	0.17

(1) A composite of start solutions was assayed.

Standard Solution

A gold solution was prepared by PAH and assayed by both laboratories. The sample was prepared to give a gold assay of 0.12 oz per ton. The Jacobs assays were 0.13 and 0.11 oz per ton. The ICS Lab report 0.16 oz per ton of gold. It is felt that a large part of the difference between the ICS results and the standard may be in the determination of bead weights at ICS.

Weight Check

Five gold beads were weighed on the balance at ICS, Jacobs and Skyline. The ICS balance weighs to 0.1 milligrams, the Jacobs and Skyline balance weigh to 0.001 milligrams. The weights are as follows:

Sample	ICS bead WT (mg)	Jacobs bead WT (mg)	Skyline WT (mg)
B18A-7	0.6	0.363	0.363
C3-2	0.8	0.728	0.730
B18-25	1.8	1.732	1.729
B29E-5	1.7	1.442	1.440
KJE-6	0.8	0.647	0.639

Reagent Check

In addition to the leach and pregnant liquor samples, samples of reagents were also assayed. The samples and their assay are as follows:

Sample	Gold Assay (oz/ton)
Zinc dust - used in Chiddey assay	0.012
Lead acetate - used in Chiddey assay	0.020
Hydrochloric acid - added to B18-25	0.028
Hydrochloric acid - added to Chiddey	0.010

None of the above significantly affects the ore assay results.

CONCLUSIONS

additional testing is required in PAH's opinion since the limited work described within this report is insufficient to declare the ICS process as proven technology. Also, the fluctuation between check assays and ICS Lab results indicates that additional testing is necessary. PAH recommends the following future program.

Testing

Additional laboratory testing should be performed by an independent firm with replication of the tests independent of ICS Labs. It is assumed that these tests would not be performed in the ICS facilities. In this manner, a completely independent, controlled test program can be performed.

Economic Analysis

After the successful completion of the above test program, order of magnitude estimates for capital and operating costs should be prepared. These estimates would be utilized in an order-of-magnitude or prefeasibility study of the Double "O" Resource claims.

TEST REPORTS.

ROGERS RESEARCH & ANALYSIS COMPANY

2340 South Redwood Road (1700 W.) • Salt Lake City, Utah 84119 • Phone (801) 973-4637
CLAIR W. ROGERS, President

MR. IAN MATHESON
2215 LUCERENE CIRCLE
HENDERSON, NEVADA 89015

MAY 24, 1988

KIM SAMPLE

CUSTOMERS IDENTIFICATION: NO. 1

ANTIMONY		PALLADIUM	0.632 OZ/TON
ARSENIC		PLATINUM	0.041 OZ/TON
BARIUM		RHODIUM	0.002 OZ/TON
BISMUTH		RUBIDIUM	
CHROMIUM		RUTHENIUM	NOT DETECTED
COBALT		SILVER	6.19 OZ/TON
COPPER		STRONTIUM	
GOLD	0.816 OZ/TON	THORIUM	
IRON		TIN	
LEAD		TITANIUM	
MANGANESE		TUNGSTEN	
MOLYBDENUM		URANIUM	
NICKEL		VANADIUM	
OSMIUM	0.002 OZ/TON	YTTRIUM	
IRIDIUM	NOT DETECTED	ZINC	
TELLURIUM	.2 %	ZIRCONIUM	

CW Rogers
Clair W. Rogers M.S.

Attachment 9-10
May, 1988 assay report from Rogers Research & Analysis Co.

TO:

FROM: IAN MATHESON

DATE: JULY 11, 1991

RE: RESULTS OF JOHN VAN ENGELEN'S TESTS ON SAMPLES TAKEN BY ALINE.

THESE RESULTS ARE IN PARTS PER MILLION - TO EQUATE TO OZ/TON THE RESULTS MUST BE MULTIPLIED BY .02916

	REJECTS		HEAD ORE		BLACK SAND	
	PPM	OZ/TON	PPM	OZ/TON	PPM	OZ/TON
AU	18.5	.5394	24	.699	113	3.295
PT	63	1.83	80	2.33	331	9.651
PD	91	2.65	160	4.66	734	21.403

WE ARE CONCENTRATING AT ABOUT 20 TONS TO GET 1 TON OF CONCENTRATE. TO RECONCILE THE ABOVE FIGURES WE SHOULD BE ABLE TO TAKE THE HEAD ORE LESS THE REJECTS TIMES OUR CONCENTRATION FACTOR OF 20 AND THE RESULT SHOULD GIVE WHAT WE ARE GETTING IN THE BLACK SAND CONCENTRATE.

LETS TRY: IN OZ/TON

	HEAD ORE	LESS REJECT	=	X 20 =	BLACK SAND ASSAY IS
AU	.699	.539	= .16	X 20 = 3.2	3.29
PT	2.33	1.83	= .50	X 20 = 10.0	9.65
PD	4.66	2.65	=2.01	X 20 = 40.4	21.4

THE GOLD AND PLATINUM CERTAINLY RECONCILE CLOSE ENOUGH WITH WITH THE BLACK SAND ASSAY. THE PD IS OBVIOUSLY OUT. WHY ??

IT WOULD APPEAR FROM THIS EXERCISE THAT WHILE THE CONCENTRATE IS VERY COST EFFECTIVE ($ 6,666/TON) OUR CONCENTRATION METHOD IS NOT VERY EFFICIENT.

AU	.699	X	$ 367 =	$ 1,209
PT	9.651	X	386 =	3,725
PD	21.4	X	82 =	1,732
				6,666

Attachment 9-11a
Results of tests by John Van Engelen at Chauncey Assay Labs., Toronto

CHAUNCEY ASSAY LABORATORIES LTD.

33 Chauncey Avenue, Toronto, Ontario M8Z 2Z2
Tel: (416) 239-3527 FAX: (416) 239-4012

CERTIFICATE OF ANALYSIS

DATE: July 11, 1991 **REPORT NO.:** NEV-13
RECEIVED FROM: Mr. R.I. Matheson

RESULTS IN ppm

SAMPLE:	REJECTS	HEAD ORE	BLACK SAND
Au	18.5	24	113
Pt	63	80	331
Pd	91	160	734
Ag	5.0	2.9	6.0
Al	1.1	1.1	.9
As	13	<10	40
B	67	85	500
Ba	248	264	185
Be	<10	<10	<10
Bi	15	<10	41
Ca	1.3	1.0	1.1
Cd	<10	<10	10
Ce	<10	<10	<10
Co	14	16	67
Cr	44	58	400
Cu	45	37	39
Fe %	2.0	2.5	15.9
Hg	<10	<10	<10
K %	.3	.3	.3
La	43	50	44
Mg %	.8	.8	.8
Mn	470	526	1429
Mo	<10	<10	<10
Na %	.03	.05	.02
Nb	<10	<10	<10
Ni	35	41	193
P %	.09	.1	.1
Pb	55	71	127
S %	.02	.02	.04
Sb	<10	<10	<10
Se	<10	<10	<10
Si	---	---	---
Sn	<10	110	19
Sr	73	76	51
Te	<10	<10	<10
Th	<10	<10	<10
Ti	1070	1313	5324
U	<10	<10	14
V	55	76	765
W	<10	<10	10
Y	11	11	15
Zn	52	73	221
Zr	19	20	28

J. Van Engelen Mgr.

Attachment 9-11b
Results of tests by John Van Engelen at Chauncey Assay Labs., Toronto, 1991

FIRE ASSAY REPORT

ACTION
Mining Services Inc.
4460 W. Reno Ave. #D
Las Vegas, NV. 89118
(702) 362-1511

Date 8/21/92

Assay performed for:

Name IAN/PILOT PLANT INC. Phone

Address CORRESPONDENCE. City, State, Zip

MG = milligrams OZ/Ton = ounces per ton of ore pre = pretreatment

ORE SAMPLE		FIRE ASSAY NOTES	Results Gold	Results Silver
1	400 MESH	Notes 2 STANDARD FIRE ASSAYS	OZ/Ton 2.97	OZ/Ton .99
2	40 MESH	Notes " "	OZ/Ton 7.52	OZ/Ton 2.50
3	400 MESH	Notes AQUA-REGIA TEST	OZ/Ton 1.80	OZ/Ton 5.42
4	40 MESH	Notes " " "	OZ/Ton .73	OZ/Ton 2.21
		Notes	OZ/Ton	OZ/Ton
		Notes	OZ/Ton	OZ/Ton
		Notes	OZ/Ton	OZ/Ton
		Notes	OZ/Ton	OZ/Ton

NOTE: Elements shown are in the values indicated and are present in the sample in an uncombined state, or in physical combination with other material, or in a compound with other elements. Such elements may or may not be recoverable in quantities indicated. These readings are for the above sample splits only.

Comments: I THE UNDERSIGNED HEREBY CERTIFY THIS IS A TRUE AND EXACT COPY

Signature of Lab Manager

Attachment 9-12
Fire assay report from Action Mining Services,

American Society for Applied Technology

A Non-Profit Scientific Foundation
P. O. Box 1705, Silver City, NM 88062
(505) 388-5654
IRS 501(c) (3) # 85-0305276

April 4, 1989

David P. Taylor, P.Eng.
254 E. 27th Street
North Vancouver
B.C., Canada V7N 1B6

Dear David,

We have completed our analysis of the placer sands identified as "- 1/4 inch, from the Becky M. placer claim in El Dorado Valley", and herewith report our findings.

Five fire assays were completed, three using flux type #37 and two using flux type #39 (#39 was used in the event that we had underestimated the aluminum content). One blank charge was included to determine if any contamination existed within the fluxing reagents.

One attempt at recovery using a thiourea leach with recovery upon activated charcoal followed by fire assay of the charcoal concluded our series of tests.

Sample #:	Flux Type:	Gold in oz/short ton
1	#37	[redacted]
2	#37	[redacted]
3	#37	0.110
4	#39	0.100
5	#39	0.090
Average of 5 assays		0.104
Recovered by thiourea leach		0.014
Blank charge		0.000

Comments:

This placer material appears to be of commercial value, however, standard thiourea leaching does not appear to be a successful means of recovery. We would suggest that alkali cyanide or bromine leaches should be tried as well as some of the less common thiourea lixiviants.

Small Plate Amalgamation produced isometric crystals of gold, most of which were 10 microns and under in size.

Sincerely,

Walter C. Lashley
Director of Research

WCL/jes

cc: Arby Vincent

Attachment 9-13
Report by Walter Lashley, Becky M placer claim. 1989

Your contributions are deductible under sec. 170 of the IRS code. Bequests, legacies, devises, gifts, transfers to ASAT or for ASAT's use are deductible under sec. 2055, 2106, or 2522.

ASSAYERS ONTARIO LABORATORIES
A DIVISION OF ASSAYERS CORPORATION LTD.
33 CHAUNCEY AVENUE, TORONTO, ONTARIO M8Z 2Z2 • TELEPHONE (416) 239-3527
FAX (416) 239-4012

Certificate of Analysis

Certificate No. MI-2989 Date: August 27, 1990

Received Samples of Clay

Submitted by Mr. Ian Matheson

On sample as received August 8, 1990

Standard Fire Assay	.015 oz/ton Au
Parr Bomb Method	.20 / .13 oz/ton Au

ASSAYERS ONTARIO LABORATORIES

Per

J. van Engelen Mgr.

Attachment 9-14
Results of tests by John Van Engelen at
Assayers Ontario Labs., Toronto, 1990

BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, POJ 1KO
HAILEYBURY, ONTARIO
TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

1

NO. 0327 DATE: July 03, 1991

SAMPLE(S) OF: Fines (1) RECEIVED: July 1991

SAMPLE(S) FROM: Ian Matheson, St. Genevieve

Sample #	Oz/ton Gold	Oz/ton Pt	Oz/ton Pd
001	0.058	0.001	0.001
Blank	Trace	Trace	Trace

NOTE: 2 A.T. 25g Inq. H2S04 Part.

Attachment 9-15
Report from Bell-White Analytical Labs, Haileybury, ONT, 1991

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER

BUCK TEST

C & W MINING, INC.
P.O. BOX 566
BUCKEYE, AZ. 85326

Mr. K.I. Matheson
4614 N. 40th Street
Phoenix, Az. 85018
702-451-4981

6/17/88

Dear Mr. Matheson,

This letter will confirm the numerous telephone discussions regarding the milling and precious metal recovery on 40 tons of your Nevada ore processed at C & W Minings Hassayampa Mill north of Buckeye, Arizona.

The 40 tons of ore was delivered in two (2) twenty ton (20.25 & 21.5) loads in latter April and early May 1988. This ore was screened to 3/8" producing approximately 15 tons of mill feed. They were identified as lot #1 IM and lot #2 IM, assayed separately with the following results.

LOT #	Au oz/t	Ag oz/t	METHOD OF ASSAY
1 IM	0.30	NOT RUN	AQUA REGIA
1 IM	0.22	WOULD NOT PART	PURE
THIS SAMPLE WOULD NOT PART IN 1:1 NITRIC ACID; THEREFORE IT IS GREATER THAN 40% GOLD			
1 IM	0.38	0.8	THIOUREA LEACH
2 IM	0.26	NOT RUN	AQUA REGIA
2 IM	0.29	NOT RUN	THIOUREA LEACH
GRAVITY CONC'S	0.473	0.231	AQUA REGIA

The fifteen (15) tons of 3/8" ore was milled to 100% - 60 mesh and processed as follows.

I 10 tons concentrated by gravity to 1300 lbs and leached with, H2SO4, thiourea and ferric sulphate. Tailings were discarded. After leaching Jerry Henderson picked up the leached concentrate tails for further processing. He will issue a separate report.

Attachment 9-16
Report from C & W Mining, Buckeye, on "Nevada ore," 1988

Nuc L

CORE INTERNATIONAL, INC.

Precious Metals
Metallurgy and Processing
Assayers

August 26, 1989

TO: IAN MATHESON
FAX: 702-451-4939

REF: PHELPS DODGE - NEVADA ORE

Dear Ian,

The samples received from Phelps Dodge were fire assayed by our crucible method and resulted:

Split Sample	#25	Au	0.020	Ag	0.080	oz./Ton
	#26	Au	0.040	Ag	0.092	oz./Ton
	#27	Au	0.020	Ag	0.080	oz./Ton

The scorifying assay was then conducted on August 25, 1989 and resulted in:

#25	Au	0.868	Ag	2.169	oz./Ton
#26	Au	1.370	Ag	2.973	oz./Ton
#27	Au	0.886	Ag	2.203	oz./Ton

I having a hard time trying to figure out what's going on! This is the first time I have had such discrepancy. I will re-assay Monday. Meanwhile, it is out of the question to communicate such results to Phelps Dodge.

Sincerely,

Ben d'Andrimont

BD/jh

Attachment 9-17a
Report on "Phelps Dodge Nevada Ore" from Core International, 1989.

5075 Tabor St., Wheat Ridge, CO 80033, U.S.A. • Tel. (303) 421-4052 • Fax (303) 421-3946

CORE INTERNATIONAL, INC.

May 31, 1989

TO: IAN MATHESON
FAX: 604-682-8784

FROM: BEN D'ANDRIMONT
FAX: 303-421-3946

RE: CLARK COUNTY - NEVADA
FIRE ASSAY CONDUCTED UNDER THE PROCEDURE OF A REPORT FROM COMPLEX METALS RESEARCH AND DEVELOPMENT, INC. DATED MARCH 10, 1988

The sample tested was 1 A.T. (30 grams) from a composite split of eight (8) samples pertaining to the subject mining property. Each firing was inquarted with 100 mg Ag.

1st Firing resulted in:	0.225 oz./Au/ton
2nd Firing resulted in:	0.060 oz./Au/ton
3rd Firing resulted in:	0.120 oz./Au/ton
4th Firing resulted in:	0.010 oz./Au/ton
5th Firing resulted in:	0.000 oz./Au/ton
6th Firing resulted in:	<0.002 oz./Au/ton

All the parting residues were fired in one and cupelled resulting in a total weight of 0.399 oz. Au/ton.

We found the results to be very unusual particularly in reference to Number 3 Firing. We believe some of the gold may have come from the excessive amount of litharge required to fuse cupels. Accordingly, we cannot certify the total result as being accurate but merely indicative that there is indeed loses in the cupellation process.

Sincerely yours,

Ben d'Andrimont
Metallurgist

P.S.
Hazen Report follows.

Attachment 9-17b
Report from Core International using Jerry Henderson's procedure, 1989

Jan Matheson
Pass Minerals

10/6/98

Fire Assay

F2	13348 #2 PV Light Belgium		Au O/T NIL
F3	13348 #3 ES Black band - very good looking con - all black		TRACE
F4	Mojo #16 Twin of 20oz hole - sun dried 5 days low (~20%) humidity.	5.25	
F5	Mojo #16 Twin of 20oz hole - dried on top of furnace inside for 5 days.	7.09	

SUNDRIED AND FURNACE DRIED ALMOST SAME.

TWIN OF THE 20 OZ HOLE.

TOTAL P.01

Attachment 9-18
Assay report, handwritten, reported by Matheson to be from Energy International

FEDERAL TESTING LABORATORIES 29½ Dravus • Seattle, WA 98109 • 283-4202

May 9, 1991

Rio Raga Inc.
8390 South 4th Street
Henderson, Nevada 89015

Test Report: #91-1473

Process: Mat'l Anal/JO 37684
Specification: FTPS Anal Procedures
Date Tested: May 1 - 8, 1991

Below are listed the results of analyses performed on a silver button received on May 1, 1991. The analyses were performed by means of Inductively Coupled Argon Plasma Spectrometry. The results are calculated as percent of the sample weight. The precious metal values are also calculated to troy oz/ton based on the stated information of a two gram concentrate sample. Silver values is stated as grams of silver recovered based on a one gram inquartz.

Sample: Havasu Black Mags

Metals detected:

Gold.....0.0456%
Boron.....0.1097%
Barium.....0.0006%
Bismuth....0.0027%
Calcium....0.0098%
Chromium...0.0058%
Iron.....0.0683%
Potassium..0.0687%
Magnesium..0.0363%
Silver....95.89 %
Sodium.....0.0092%
Nickel.....0.0033%
Lead.....0.1367%
Tin.....0.0014%
Zinc.....0.0141%

Gold value translated: 0.00091 gm in 2.0 gm sample of concentrates. This is equivalent to [redacted] troy oz/ton.

FEDERAL TESTING LABORATORIES
Patrick [illegible]

cc: Mel Mathis

Attachment 9-19
Report by Federal Testing Labs, Seattle, on "Havasu Black Mags." 1991

Great Lakes
Chemical Corporation

P.O. BOX 2200 • HIGHWAY 52 N.W. • WEST LAFAYETTE, IN 47906 • PHONE: 317-497-6100 • FAX: 317-497-6294 • TELEX: 27-9428 • CABLE: GLAKCHEM LAFAYETTE

March 21, 1990

Mr. K. Ian Matheson
2215 Lucerne Circle
Henderson, NV 89015

Re: Southern Nevada Ore Deposit
My Site Visit - March 13, 14, 15, 1990

Dear Mr. Matheson:

As you requested I am writing this report on my visit to the mining claims south of Las Vegas and your laboratory in Henderson, Nevada.

The mining claims were visited on the morning of March 14th, at which time we drove over the property and I personally took samples at random intervals. The samples were taken to the laboratory where I met with Paul Guadagnoli, your fire assayer. Six of these samples were fire assayed and only two samples were subjected to a bromine leach. I worked closely with Paul in the laboratory and observed the procedures he used for fire assay tests.

I reviewed all of the procedures which were used for fire assay in your laboratory. I found Paul Guadagnoli to be very knowledgeable. He performed all of the fire assay tests following a procedure which he had developed for these ores. I conducted the bromine leach tests.

All the buttons resulted from the fire assay tests were dissolved in Geobrom 3400. These solutions plus another one from Geobrom 3400 agitation leach test were brought back to Great Lakes Chemical and analyzed for gold using an ICAP instrument. The results are presented in Table 1, attached.

We also completed two simulated heap leach tests. In one test, the make-up water was from Henderson, Nevada, and in the other one, we used water received from Idaho. The test using Henderson water did not produce much gold in solution. However, the test with Idaho water produced measurable gold value in solution. The gold from this solution, after concentration by ion

Attachment 9-20a
Report by Great Lakes Chemical Corp. on observations of Guadagnoli fire assays, 1990.

TABLE 1

GOLD ANALYSIS BY ICAP

SAMPLE	VOLUME mL	AU mg/ℓ	AU oz/t
B	47	17.20	0.81
B	50	36.06	1.81
B	55	24.00	1.32
P	37	0.59	0.02
B	46	0.30	0.01
S	35	32.09	1.13
3	240	0.34	0.03

Matheson
ne Circle
NV 89015
(ern Nevada Or
to visit Mr

Attachment 9-20c
Report by Great Lakes Chemical Corp. on observations of Guadagnoli fire assays, 1990.

exchange resin, was precipitated and fire assayed. The gold button produced from Paul's fire assay weighed 56.94 mg which equates to 0.236 oz/t of gold.

I would suggest that additional research to be carried out to resolve the following:

- It is not clear why the bromine leach test using Idaho water resulted in 0.236 oz/t of gold whereas the test used the water from Henderson only produced 0.008 oz/t of gold in solution. In the hope to find a clue to this mystery, I recommend a complete analysis of these water samples for their compositions and also their bromine demand.

- Gold extraction using bromine reagents, regardless of the water source, seems to be much lower than the fire assay results. More research work must be performed with bromine reagents in order to increase the gold extraction up to 95% of its value found by fire assay.

It appeared from my intense observation and review of the documents produced by you that you have had a great deal of research work carried out by the outside laboratories over the past two years. Also, the work performed in your own laboratory has been effective in getting you to your present position.

Sincerely,

Ahmad Dadgar

Ahmad Dadgar, Ph.D.
Section Leader
New Technology

AD/vkm

Attachment

Attachment 9-20b
Report by Great Lakes Chemical Corp. on observations of Guadagnoli fire assays, 1990.

Paul Guadagnoli, Assayer,
3505 Irv- Marcus Drive,
Las Vegas, Nevada 89108
702 - 658 - 1689

Mr. Arby Vincent,
Mr. K. I. Matheson,
Micro Placers Inc.
Henderson, Nevada.
June 28, 1989

RESEARCH REPORT

RESEARCH ASSIGNMENT: A. To find a fluxing procedure that will fit all Eldorado ore samples, and prove appreciable and/or economic values.

B. To determine if all electric furnaces will produce consistent fire assay results.

A working format was based on finding the oxidation/reduction rate of the ore. * (See: A textbook of Fire Assaying by Edward Bugbee pgs. 159 - 166).

The sample used for this procedure was taken from Balt 17 and 18.
The reducing power of the ore was found to be 3 - 7 grams.
The reducing agent recognized there was carbon present in the ore.

With this information, two fluxes were realized and these were used in a test series. This series was run against a now readily used pre-wash, pretreat, flux. This is the 5% sodium sulfide (3 1/2 minute) wash. (Flux C)

Testing format consisted of 6 tests of raw head ore (untreated), and 6 tests o ore prewashed with 5% sodium sulfide. There were 2 tests in each series of each identical flux. This was to eliminate or recognize "nugget" effects. Al Ore samples were ground to 200-.

Fluxes used in testing:

	Flux A 1 A.T.	Flux B 1/2 A.T.	Flux C 1 A.T.
Litharge (PbO)	62 gms	29 gms	50 gms
Soda Ash (Sodium Carbonate)	23 gms	6.9 gms	40 gms
Borax Glass	7 gms	11.25 gms	10 gms
Pot Ash (Potassium Carbonate)	7 gms	-	-
Sodium Cyuanide	4 gms	5 gms	
Fluorspar	2 gms	1.6	10
Niter (Potassium Nitrate)	1 gm	9.9	10
Lime	1 gm	2.5	-
Charcoal (as a cap)	1 gm	-	-
Granulated lead	-	18 gms	-
Ammonium Carbonate	-	3.2 gms	-
Silica	-	3.5 gms	-
Potassium Oxalate	-	2.6 gms	-
Lithium Carbonate	-	1.0 gm	-
Flour	-	-	8 gms

Attachment 9-21a
Report by "Paul Guadagnoli, Assayer" on fire assay flux for Eldorado Valley, 1989

TYPE OF FURNACE: - Vcella Kiln Electric (no hole in top)

ASSAY PROCEDURE -

Place charges in furnace at 1100 - 1200 F for 30 minute
Temperature raised to 1500 F for 30 - 40 minutes
then raised to 2100 and held for 5 minutes
(The above time and temperature is critical.)

GOLD RESULTS

SAMPLES: 1 - 6 Non-sulfide wash
7 - 12 Sulfide wash 5%

Sample	Claim	Tad 5 & 6	Roy 1	Roy 2	Roy 7 - 13	Roy 8
1	Flux A	.41	.04	Deleted	.04	.08
2	Flux A	.32	.04	Deleted	Deleted	.08
3	Flux B	.30	.24	Trace	.08	.20
4	Flux B	.30	.24	Trace	Deleted	.16
5	Flux C	.16	.08	.04	.02	.12
6	Flux C	.15	.08	Deleted	.02	.04
7	Flux A	.12	.12	.02	.02	Deleted
8	Flux A	.10	.08	Trace	.04	Deleted
9	Flux B	.20	.08	Trace	.42	.12
10	Flux B	.24	.04	.04	.42	.12
11	Flux C	.21	.04	Trace	.15	.10
12	Flux C	.21	.04	Trace	.12	.10

Glasses were combined on duplicate tests and refired. - Traces recovered.

"Deleted" means the flux migrated out of the crucible, due to an overabundance of oxygen released at the same time.

I was aware that difficulties had been encountered in attempting to reconcile figures between Core International's electric furnace and Hazen Laboratories gas fired furnace. I was also obtaining higher values in my lab than I was able to obtain in the furnaces at Micro Placers using the same splits.

For these reasons I decided to test the furnaces at Micro Placers against each ther.

Attachment 9-21b
Report by "Paul Guadagnoli, Assayer" on fire assay flux for Eldorado Valley, 1989

TEST TO DETERMINE WHAT TYPE OF FURNACE WOULD YIELD THE HIGHEST RESULTS

FURNACES USED IN THE TEST WERE:

Furnace # 1 Vcella Kiln - no hole in top
Furnace # 2 Cress Kiln 1/2 " hole in top
Furnace # 3 Cress Kiln 1" hole in top
All of the furnaces are electric

Material tested; Balt 18 200- grind, raw ore
Flux B was used in this test

Test Procedure:
Place charges in furnace at 1100 - 1200 F 30 min
Raise temperature to 1500 F hold for 30 min
Raise temperature to 2150 F hold for 5 min

Results were as follows:

Furnace # 1	.02 Au
# 2	.08
# 3	.42
2 nd test # 3	.61

Furnace #3 was further tested to see if there was a nugget effect. The result of this test confirmed that # 3 furnace is produces higher values. Several more tests were run in this furnace and th results were all between the ranges .42 - .61.

SUMMARY OF TEST SERIES

A. This series proves that I could not find a universal flux. I do feel tha the current use of the 5% Sodium Sulfide wash proves consistently that the or carries value. Flux B tends to prove more consistent values.

In fire assaying this ore large amounts of "oxidative additives" in the form flux reagents are needed to release gold values.

B. Electric furnaces react differently in the amount of gold they give up intitially in a fire assay. This appears dirctly dependent upon the amount c oxygen getting into the furnace.

In testing this ore I have proved that the amount of oxygen getting into the furnace is critical in obtaining proper assay results. The furnace must offe large amounts of oxygen to aid in the release of values. If this is not done results will be a small percentage of the ores potential and thus will be ver misleading. The oxygen problem in the furnace can be rectified by drafting i the furnace or by scorification techniques.

Yours very truly,

John Hamilton
John Hamilton, Lab Technician

Paul Guadagnoli 6/27/8
Paul Guadagnoli, Assayer
©

Attachment 9-21c
Report by "Paul Guadagnoli, Assayer" on fire assay flux for Eldorado Valley, 1989

Leubec Co. 11748 Sandpoint Way N.E., Seattle, Washington 98125-5852 - 206-362-5360

February 4, 1990

Paul Guadagnoli
3505 Irv Marcus Drive
Las Vegas, Nevada 89108

Report on Analysis

Re: A. Vincent-Black Sands

Subject: El Dorado Balt.24 - Black Sands Concentrate #1 Scalp 307 gms.
Your Hand Sample.

Results of Nuclear Affinity Partial Analysis:

The first screening cut gave us 240 gms -50 mesh. The balance was ground in a ceramic mortar to give 100% -50 mesh. Both fractions were mixed and the analysis of the 50 mesh is as follows:

Gold is 1.02%. It is all isotope 197. It is electron sharing for 99.8%. The balance of 0.2% is a compound Gold.

Iridium	0.2%	Aluminum	2.4%	Manganese	1.1%
Silica	20.3%	Tellurium	1.1%	Iodine	0.4%
Fluorine	1.1%	Calcium	3.1%	Iron	13.2%
Cobalt	0.3%	Cerium	1.0%	Chromium	30.4%
Niobium	0.6%	Magnesium	2.3%	Nickel	0.4%
Selenium	2.4%	Titanium	0.1%	Sodium	0.2%
Chlorine	0.2%	Potassium	1.3%	Bromine	1.2%

The balance of the following elements were checked and found to be negative: Silver, Platinum, Palladium, Rhodium, Osmium, Arsenic, Beryllium, Bismuth, Germanium, Carbon, Copper, Gallium, Mercury, Lithium, Molybdenum, Phosphorous, Lead, Indium, Rhenium, Sulfur, Antimony, Tin, Strontium, Uranium, Vanadium, Tungsten, Zinc, Dysprosium and Boron.

30 gms were cut from the -50 mesh material and was separated with a magnet in water to give two (2) separate fractions: magnetic and non-magnetic. The magnetic fraction weighed 16 gms with an analysis showing only the following:

Chromium	53.1%	Iron	27.0%	Gold	5.1%
Titanium	0.2%	Selenium	4.1%	Manganese	2.2%
Chlorine	0.4%				

The non-magnetic fraction weighs 14 gms with the analysis showing only the following:

Iron	0.04%	Tellurium	3.1%	Nickel	3.3%
Sodium	0.2%	Cobalt	0.6%	Cerium	2.0%
Iodine	0.9%	Niobium	0.9%	Magnesium	4.3%
Fluorine	2.3%	Calcium	5.4%	Aluminum	4.0%
Bromine	2.4%	Potassium	2.5%	Silica	46.0%

Attachment 9-22a
Report by Troy Becker of "Nuclear Affinity Partial Analysis" 1990

The above percentages reflect the spectrum of the isotopes present of each element (these being stable, metastable, and unstable forms). The recoverable percentages in stable metallic form will vary according to the disparate methods applied. Any of these methods, however, must include a system of stabilization designed and programmed for the particular isotopic configuration of each material. Delivery of this analysis shall not impose any obligation on behalf of LEUBEC CO. to extract the metallic values, or to disclose any or all of its systems or procedures except under separate cover.

This method of analysis is not an accepted system in the trade. To have value, it must be followed by extractive procedures, as mentioned above, to obtain a stable, marketable metal. This black sand does separate into an excellent Chrome-Iron concentrate close to the 2 to 1 market use. With the extremely large volume of placer, it is possible that a portion could be separated for this product without hurting the original Head ore. We would not recommend this as a source for Gold, as a method of extraction by our systems would be too expensive and time consuming. However, if a market could be secured, it could be an excellent source for initial capital for the Corporation. Since our interests are primarily Gold and Silver, we are not in a position to recommend the extraction of any of the other elements, but we do recognize that they could be profitable to other systems. Further research for that would be necessary. We can recommend that a market be checked for this quality of Chrome product.

LEUBEC CO.

Troy E. Becker

Troy E. Becker, Analyst

State of Washington
County of KING

On this 6th day of February, 1990, before me appeared Troy E. Becker to me known to be the owner of the Company that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Company for the use and purposes herein mentioned and on oath stated that he executed said instrument as his free act and deed and the facts contained herein are to the best of his knowledge true and correct.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Darrell D. Stigall

Notary Public in and for the State of Washington, residing at Edmonds
My Comm Expires 2/8/92

Attachment 9-22b
Report by Troy Becker of "Nuclear Affinity Partial Analysis" 1990

HAZEN

Hazen Research, Inc.
4601 Indiana St. • Golden, Colo. 80403
Tel: (303) 279-4501 • Telex 45-860

DATE	August 9, 1989
HRI PROJECT	002-45-R
HRI SERIES NO.	
DATE RECD.	8/3/89
CUST P.O.#	

Core International, Inc.
5076 Tabor Street
Wheat Ridge, Colorado 80033

HAZEN FINALLY PRODUCES

REPORT OF ANALYSIS

SAMPLE IDENTIFICATION	GB11-2
Gold, oz/ton (fusion) (Replicate 1)	0.122
Gold, oz/ton (fusion) (Replicate 2)	0.086
Gold, oz/ton (fusion) (Replicate 3)	0.092
Silver, oz/ton (fusion) (Replicate 1)	0.41
Silver, oz/ton (fusion) (Replicate 2)	0.45
Silver, oz/ton (fusion) (Replicate 3)	0.52
Gold, oz/ton (scorification) (Replicate 1)	0.111
Gold, oz/ton (scorification) (Replicate 2)	0.075
Silver, oz/ton (scorification) (Replicate 1)	0.37
Silver, oz/ton (scorification) (Replicate 2)	0.27

NOTE: Fusion assy done using one assay ton sample, 50g litharge, 40g soda ash, 10g borax, 5g CaF_2, 10g flour, 10g niter in an electric furnace operated with the door open more than normal to increase the air flow through the furnace.

Scorification assay done using 5g sample, 50g lead shot, 2g litharge, 2g borax in an electric furnace operated with the door open more than normal to increase the air flow through the furnance.

HAZEN COULD NOT PRODUCE VALUE WITHOUT SCORIFYING AND KEEPING FURNACE DOOR OPEN.

By: Robert Rostad
Laboratory Manager

Attachment 9-23
Report from Hazen Research, Denver, on results of scorification assay.

WALLACE C. JOHNSON

Mineral Processing Engine..

770 Anne Lane
Henderson, Nevada 89015

Telephone: (702) 565-9614

Mr. David Hall,
Hughes - Lang
Vancouver, B. C.
c/o K. Ian Matheson,
2215 Lucerne Circle,
Henderson, Nev. 89015

March 9, 1989

Enclosed please find the Fire Assay results of cut samples which were supplie to me by Stan Reamsbottom from bulk samples taken by him.

Splits of these samples were assayed using three separate assay techniques:

1. Nitre Assay
2. HNO3 Wash
3. Standard Flux Assay

Basically the methods vary in amount of KNO3 used, silver inquart size, and shing out contaminents with Nitric Acid. The use of larger quantites of KN and large silver inquartx is suggested for better recovery..

Both inquartz of purified silver wire and purifide silver chloride were used the Nitre assays with no differences observed.

Use of MgO cupels is preferred.

The results are:

	CLAIM	NITRE ASSAY	HNO3 WASH	STD. ASSAY
1.	Roy 1	0.24	.92	.02 ***
2.	Roy 2	1.90	.03 *	.03 ***
3.	Roy 8	0.19	.01 **	.05 ***
4.	Todd 5 & 6 Comp	0.1 **	.01 **	.03 ***
5.	Roy 7 & 13 Comp	0.29	.35	.03 ***

* Less than reported figure
** More than reported figure
*** Approximate only - too small to weigh

The procedures used for each assay technique is attatched to this report alon with my Educational and Professional credentials

Certified Wallace C. Johnson
Wallace Johnson,
Mineral Processing Engineer

Attachment 9-24
Report by Wallace Johnson on assays from "Roy" and "Todd" groups of claims, 1989.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5083 **Date:** 3/25/99

Customer : PILOT PLANT INC.

Sample Identification: 35 GRAM SAMPLE , 7 CSR - MAR, 8/99 - ACTUAL WEIGHT OF RESIDUE 23.3 mgs.
CALCULATED AS A 35 gm. SAMPLE
SAMPLE SUBMITTED BY JERRY HENDERSON

Element	Oz/Ton
Au-Gold	0.25
Pt-Platinum	0.01
Pd-Palladium	0.05

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 4/8/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 9-25
Report from MRAL on analysis of 35 grams of residue submitted by Jerry Henderson,

DATE: OCTOBER 11, 1989

TO: IAN MATHESON

FROM: CHRIS WILSON

SUBJ: GOLD DETERMINATION OF SAMPLE 6B11-2

NUCLEAR ACTIVATION SERVICES RECEIVED A POWDER SAMPLE 6B11-2 ON 27-JUL-89. ANALYSIS WAS REQUESTED FOR VARIOUS TRACE ELEMENTS BY NEUTRON ACTIVATION (INAA). DCP EMISSION SPECTROMETRY, AND XRAY FLOURESCENCE (XRF); MAJOR OXIDES BY XRF; PLATINUM GROUP ELEMENTS PLUS GOLD BY NICKEL SULFIDE FIRE ASSAY WITH AN ICP/MS FINISH.

THE SAMPLE WAS DIVIDED UP BETWEEN THE VARIOUS LABS AS FOLLOWS:

0.5 GRAMS => INAA
25.0 GRAMS => NISFA - ICP/MS
1.3 GRAMS => XRF
0.8 GRAMS => DCP

GOLD WAS DETERMINED BY INAA AND ICP/MS. FOR INAA, NO SAMPLE PREPARATION WAS PERFORMED. 0.5 GRAMS OF THE ORIGINAL SAMPLE WAS PLACED IN A HIGH PURITY POLYETHYLENE VIAL AND IRRADIATED IN A THERMAL NEUTRON FLUX FOR ONE HOUR. AFTER 7 DAYS THE GAMMA RAY SPECTRUM WAS COLLECTED. THE GOLD CONCENTRATION WAS 4700 PPB (0.137 TROY OZ/TON).

CONCURRENTLY, A NICKEL SULFIDE FIRE ASSAY WAS PERFORMED ON 25.0 GRAMS OF THE SAMPLE. PLATINUM GROUP ELEMENTS AND GOLD WERE DETERMINED WITH AN ICP/MASS SPECTROMETRY FINISH. THE GOLD CONCENTRATION WAS 4800 PPB (0.140 TROY OZ/TON).

PREF METHOD

NAS INC. REPORTED A GOLD CONCENTRATION OF 4800 PPB (0.140 TROY OZ/TON). THE PREFERRED METHOD IS ICP/MS; A LARGER FRACTION OF THE SAMPLE IS USED WITH ICP/MS AND WITH INAA GOLD OFTEN EXIBITS A SELF SHEILDING EFFECT (NOT ALL OF THE GOLD IN THE SAMPLE BECOMES ACTIVATED) CAUSING THE CONCENTRATION TO APPEAR LOWER THAN ACTUAL.

Attachment 9-26
Report from Chris Wilson on analysis of Sample 6B11-2, 1989

DEPARTMENT OF CHEMISTRY

July 10, 1991

Subject: Samples submitted by Arby Vincent

The below listed samples were submitted to me by Mr Arby Vincent for the purpose of assay for the Platinum Metals Group (PMG). Results are reported in ounces per ton.

Sample	AV	AV2	Button	DD (DON DAY)	DW (DAN WRIGHT)
Pt	531.0	530.6	534.4	527.3	65.9
Pd	32.5	29.0	30.0	28.6	13.5
Rh	3.02	3.15	3.26	2.89	0.92
Au	9.97	9.36	11.62	9.11	1.79

Methods used were instrumentation (ICP and AA) and fire assay methods.
Methods employed were standard methods used and referenced in Analysis of Noble Metals by F.E. Beamish and J,C, Van Loon, published by Academic Press, 1977.

Respectfully Submitted;

Roger J. Smid
Lab Tech.
Chemistry Dept.

Attachment 9-27 Report by Roger J. Smid, Lab Tech, on UNLV letterhead, reporting results of five samples., showing extremely high values. 1991

Weight of Gold Bead Recovered - 0.271 mg or a recovery of 0.271 oz/T.

Test #1 - on untreated head ore sample -

Atomic Absorption Readings - Au: 0.169 oz/T in solution
Ag: 0.046 oz/T in solution

Weight of Gold Bead Recovered - 0.165 mg or a recovery of 0.165 oz/T.

Test #3 - on roasted concentrates -

Atomic Absorption Readings - Au: 2.904 oz/T in solution
Ag: 0.443 oz/T in solution

Weight of Gold Bead Recovered - 2.889 mg or a recovery of 2.889 oz/T.

Test #4 - on untreated concentrates -

Atomic Absorption Readings - Au: 1.774 oz/T in solution
Ag: 0.391 oz/T in solution

Weight of Gold Bead Recovered - 1.693 mg or a recovery of 1.693 oz/T.

BROMINE LEACH TESTS, SERIES #2:

Procedure:

Quantity of Ore Used: 29.16 grams (= 1 assay ton)
Mesh Size: -100 mesh (see page 1 of this report)
Quantity of Lixiviant Used: 100 ml of bromine solution prepared as follows: 90 ml H_2O + 0.5 ml Geobrom 3400A + 4 grams NaBr + 10 ml concentrated HCl.

Attachment 9-28
Report from Vortex Industries, Sun Valley, Idaho, 1991

3/10/98 383-3143 SAMPLE #13320 HAN LIGHT CON.

Report of Findings

AA Analysis

IAN MASTESON STUFF

Sample: KB, Concentrates

1.8 gm. of Conc from 2900 gm ore.

	PPM	Vol. Sol	GMs Ore	OPT
Au	8.32	100	1.8	13.48
Pd	1.72	100	1.8	2.79
Pt	5.63	100	1.8	9.12
Rh	0.95	100	1.8	1.54
Ag	nt	0	0	########

26.93

Sample:

	PPM	Vol. Sol	GMs Ore	OPT
Au	0	0	0	0.00
Pd	0	0	0	0.00
Pt	0	0	0	0.00
Rh	0	0	0	0.00
Ag	nt	0	0	########

Sample:

	PPM	Vol. Sol	GMs Ore	OPT
Au	0	0	0	0.00
Pd	0	0	0	0.00
Pt	0	0	0	0.00
Rh	0	0	0	0.00
Ag	0	0	0	0.00

Sample: Average

	PPM	Vol. Sol	GMs Ore	OPT
Au	0	0	0	0.00
Pd	0	0	0	0.00
Pt	0	0	0	0.00
Rh	0	0	0	0.00
Ag	0	0	0	0.00

Sample:

	PPM	Vol. Sol	GMs Ore	OPT
Au	0	0	0	0.00
Pd	0	0	0	0.00
Pt	0	0	0	0.00
Rh	0	0	0	0.00
Ag	0	0	0	0.00

Sample:

	PPM	Vol. Sol	GMs Ore	OPT
Au	0	0	0	0.00
Pd	0	0	0	0.00
Pt	0	0	0	0.00
Rh	0	0	0	0.00
Ag	0	0	0	0.00

Attention Recipient;

This Report of Analysis presents sample data which represents a single sample or collection of individual samples. This data may not be construed to represent any other samples(s). This data was obtained by the Atomic Absorption method of analysis and may not represent actual recoveries. This data may not be used to solicit the sale of stock or to promote the investment of money without the express written consent of The Lab and its Proprietor. Any decision to invest in a project should be only after the potential investment value of the claim or recovery project has been determined by the prospective investor and/or by a qualified person selected by him and based on an evaluation of all available data concerning the proposed project.

Attachment 9-29
Report of findings by Stan Wardle (?) on "KB concentrates," "Ian Masteson Stuff," 1998

Date: 3/09/98

Prepared For: Stan Wardle **Prepared By: SJW**

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
NVSO #1	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 1 split from same sample.	Fire Assay, AA finish for Au, others ICP.	
NVSO #1	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 1 split from same sample	Scorification (Henderson's method), AA finish for Au, others ICP.	
1 set 1	16	White Tech.	0.028	0.310	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 1 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
1 set 2	16	White Tech	0.048	0.200	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 1 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together	3 4
1 bulk	16	Legend	0.016 total mg	xx	xx	xx	xx	xx	xx	xx	Bulk placer sample	No. 1	Mercury amalgamation of concs., fire assay of tails. Results in total milligrams.	
2 bulk	16	Legend	0.024 total mg	xx	xx	xx	xx	xx	xx	xx	Bulk placer sample	No. 2	Mercury amalgamation of concs., fire assay of tails. Results in total milligrams.	

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
NVSO #2	Clay's Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 2 split from same sample	Fire Assay, AA finish for Au, others ICP.	
NVSO #2	Clay's Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 2 split from same sample	Scorification (Henderson's method), AA finish for Au, others ICP.	
2 set 1	Clay's Yard	White Tech	0.042	0.760	na	na	na	na	na	na	minus 1/4"	All No. 2 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
2 set 2	Clay's Yard	White Tech	0.066	0.530	na	na	na	na	na	na	minus 1/4"	All No. 2 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together	3 4
NVSO #3	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 3 split from same sample	Fire Assay, AA finish for Au, others ICP.	
NVSO #3	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	mag fraction, minus 1/4"	All No. 3 split from same sample	Scorification (Henderson's method), AA finish for Au, others ICP.	
3 set 1	16	White Tech	0.050	0.880	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 3 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together	3 4

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
3 set 2	16	White Tech	0.042	0.580	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 3 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
NVSO #4	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	All No. 4 split from same sample	Fire Assay, AA finish for Au, others ICP.	
NVSO #4	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	All No. 4 split from same sample	Scorification (Henderson's method), AA finish for Au, others ICP.	
4 set 1	16	White Tech	0.042	0.430	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 4 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
4 set 2	16	White Tech	0.060	0.380	na	na	na	na	na	na	mag fraction, minus 1/4"	All No. 4 split from same sample	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
NVSO #5	Shumaker, Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	Same as 8A, B-1, 11B, all No. 13, all No. 23	Fire Assay, AA finish for Au, others ICP.	
NVSO #5	Shumaker, Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	Same as 8A, B-1, 11B, all No. 13, all No. 23	Scorification (Henderson's method), AA finish for Au, others ICP.	

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
5 set 1	Shumaker, Yard	White Tech	0.092	0.400	na	na	na	na	na	na	minus 1/4"	Same as 8A, B-1, 11B, all No. 13, all No. 23	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
5 set 2	Shumaker, Yard	White Tech	0.200	0.260	na	na	na	na	na	na	minus 1/4"	Same as 8A, B-1, 11B, all No. 13, all No. 23	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together.	3 4
NVSO #6	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	All #6 from same sample. A split was stored and submitted to Henderson as 10A.	Fire Assay, AA finish for Au, others ICP. *This was the actual sample collected as 5, and then renumbered* as sample 6.	
NVSO #6	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	All #6 from same sample. A split was stored and submitted to Henderson as 10A.	Scorification (Henderson's method), AA finish for Au, others ICP. *This was the actual sample collected as 5, then renumbered 6.*	

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
6 set 1	16	White Tech.	0.049	1.700	na	na	na	na	na	na	minus 1/4"	All #6 from same sample. A split was stored and submitted to Henderson as 10A.	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added together. *This was the actual sample collected as 5, renumbered 6.*	3 4
6 set 2	16	White Tech.	0.046	2.820	na	na	na	na	na	na	minus 1/4"	All #6 from same sample. A split was stored and submitted to Henderson as 10A.	Crucible fire assay, with five reassays of slags and cupels. Numbers reported are results of each added *together. This was the actual sample collected as 5, renumbered* 6.	3 4
7 (no suffix) conc 1 (our sampl e 7C)	17	Complex Metals--- analysis of beads by Legend	0.037 mg	na	xx	xx	xx	xx	xx	xx	minus 1/4		Filled 5 gallon bucket screened, concentrated on U-Tech table, then scorify assayed. Resulting beads analyzed by Legend	1 2
7 (no suffix) conc 2 (our sampl e 7C)	17	Complex Metals--- analysis of beads by Legend	0.012	na	xx	xx	xx	xx	xx	xx	minus 1/4		Filled 5 gallon bucket screened, concentrated on U-Tech table, then scorify assayed. Resulting beads analyzed by Legend	1 2

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
7 (no suffix) conc 3 (our sample 7C)	17	Complex Metals--- analysis of beads by Legend	0.024	na	xx	xx	xx	xx	xx	xx	minus 1/4		Filled 5 gallon bucket screened, concentrated on U-Tech table, then scorify assayed. Resulting beads analyzed by Legend	1 2
7 (no suffix) head (our sample 7C)	17	Complex Metals--- analysis of beads by Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4		Filled 5 gallon bucket screened, concentrated on U-Tech table, then scorify assayed. Resulting beads analyzed by Legend	1 2
7A	17	Jerry Henderson, Complex Metals	0.03	na	Trace (Pt Group)	na	na	na	na	na	minus 1/4", concs.		Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
7B	16	Jerry Henderson, Complex Metals	0.16	na	0.12 (Pt Group)	na	na	na	na	na	minus 1/4", concs.	This is a split of previous sample 4.	Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
8A	Shumaker, Yard	Jerry Henderson, Complex Metals	0.06	na	0.11 (Pt Group)	na	na	na	na	na	minus 1/4", concs.	Same as 5A, B-1, 11B, all No. 13, all No. 23	Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
8B	17	Jerry Henderson, Complex Metals	0.04	na	0.09 (Pt Group)	na	na	na	na	na	minus 1/4", concs.		Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
9A	17	Jerry Henderson, Complex Metals	0.02	Na	Trace (Pt Group)	na	na	na	na	na	minus 1/4", concs.		Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
9B	Clay's Yard	Jerry Henderson, Complex Metals	0.05	na	0.00 (Pt Group)	na	na	na	na	na	minus 1/4", concs.		Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
10A	16	Jerry Henderson, Complex Metals	0.03	na	Trace (Pt Group)	na	na	na	na	na	minus 1/4", concs.	This is a split of previous sample No. 6.	Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2
10B	17	Jerry Henderson, Complex Metals	0.04	na	0.07	na	na	na	na	na	minus 1/4", concs.		Sample was gravity concentrated into 3 parts. Crucible assay of each part. Results evidently composited for all 3 fractions & calculated to bank run.	1 2

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart
Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
11S	NVBMG Std. 2b	Complex Metals, finished by Legend	0.006	na	xx	xx	xx	xx	xx	xx	-80 mesh		Scorify assayed. Resulting beads analyzed by Legend	
11B	blank	Complex Metals, finished by Legend	xx	xx	xx	xx	xx	xx	xx	xx	-80 mesh	Same as 5, 8A, B-1, all 13, 23A, 23B, 23C	Scorify assayed. Resulting beads analyzed by Legend	
7A	17	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"		Split from identically numbered sample taken to Complex Metals.	
7B	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	This is a split of previous sample 4.	Split from identically numbered sample taken to Complex Metals.	
8A	Shumaker Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	Same as 5, B-1, 11b, all 13, all 23	Split from identically numbered sample taken to Complex Metals.	
8B	17	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"		Split from identically numbered sample taken to Complex Metals.	
9A	17	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"		Split from identically numbered sample taken to Complex Metals.	

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
9B	Clay's Yard	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"		Split from identically numbered sample taken to Complex Metals.	
10A	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"	This is a split of previous sample 6.	Split from identically numbered sample taken to Complex Metals.	
10B	17	Legend	xx	xx	xx	xx	xx	xx	xx	xx	minus 1/4"		Split from identically numbered sample taken to Complex Metals.	
11B	blank	Legend	xx	xx	xx	xx	xx	xx	xx	xx	-80 mesh	Same as 5, 8A, B-1, all 13, 23A, 23B, 23C		
11S	NVBMG Std 2b.	Legend	0.220	xx	xx	xx	xx	xx	xx	xx	-80 mesh			
12	Number not used													
13B	blank	MRAL – Don Jordan	0.38	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13.	
13C	blank	MRAL – Don Jordan	0.35	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13.	

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
13D	blank	MRAL – Don Jordan	0.02	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13.	
13S heads	blank	MRAL – Don Jordan	0.11	1.01	0.14	0.04	0.02	0.09	0.00	0.23	1/4" minus, screened to -16 mesh at MRAL.	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13.	
B - 1	Blank	MRAL – Don Jordan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Minus 80 mesh	Same as 5, 8A, 11B, 13, 23A, 23B, 23C	Shumaker yard. Pulverized at NTC lab. Same as 13S heads. Identified to lab as a blank.	
13S heads	blank	White Tech.	0.213	0.40	nr	nr	nr	nr	nr	nr	Same as 13S heads. Thiourea leach at White Tech.	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13. Split taken by Matheson to White Tech.	
13S heads	blank	White Tech.	0.345	nr	nr	nr	nr	nr	nr	nr	Same as 13S heads. Bromide leach at White Tech	Same as 5, 8A, B-1, 11B, 23A, 23B, 23C	Shumaker yard substituted for sample 13. Split taken by Matheson to White Tech.	
13 (S-1)	NBMG standard 2b	MRAL – Don Jordan	0.78	na	na	na	na	na	na	na	minus 80 mesh	Same as 11S, 24A, 24B, 24C.	Nevada Bureau of Mines standard 2b. Identified to lab as a standard.	
S-1 (re-assay)	NBMG standard 2b	MRAL – Don Jordan	1.92	6.06	0.00	0.00	0.00	0.00	0.00	0.00	minus 80 mesh	Same as 11S, 24A, 24B, 24C.	Nevada Bureau of Mines standard 2b.Identified to lab as standard	

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart
Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
14B cons	17	MRAL – Don Jordan	0.35	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 8B		
14C mags	17	MRAL – Don Jordan	0.49	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 8B		
14D tails	17	MRAL – Don Jordan	0.03	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL.	Same as 8B		
14S known		MRAL – Don Jordan	0.12	na	na	na	na	na	na	na	minus 80 mesh	Same as Std. S- 3	Uncut Pt/Pd mill concentrates from Stillwater, MT, mine. Identified to lab as standard	
Std. S - 3		MRAL – Don Jordan	0.23	7.86	0.00	96.68	0.00	0.00	0.00	0.00	minus 80 mesh	Same as 14S known	Uncut Pt/Pd mill concentrates from Stillwater, MT, mine. Identified to lab as standard	
14 heads	17	MRAL – Don Jordan	0.08	1.23	0.08	0.00	0.00	0.05	0.00	0.15	1/4" minus, screened to -16 mesh at MRAL.	Same as 8B		
15B	16	MRAL – Don Jordan	0.28	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL	Same as 2.	22A, 22B, 22C are split from this material.	

Sample and Assay Correlation Chart
Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
15C	16	MRAL – Don Jordan	0.40	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL	Same as 2.	22A, 22B, 22C are split from this material	
15D	16	MRAL – Don Jordan	0.03	na	na	na	na	na	na	na	1/4" minus, screened to -16 mesh at MRAL	Same as 2.	22A, 22B, 22C are split from this material	
15 heads	16	MRAL – Don Jordan	0.13	1.52	0.05	0.03	0.00	0.03	0.00	0.16	1/4" minus, screened to -16 mesh at MRAL	Same as 2.	22A, 22B, 22C are split from this material	
B - 1 blank		MRAL – Don Jordan	0.01	na	na	na	na	na	na	na				
21A	17	Legend	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 7A	Pulverized at NTC lab.	
22A	16	Legend	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 2. Material is minus 16 mesh split from 15.	Pulverized at NTC lab.	
23A	blank	Legend	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	same as 5, 8a, 11b, 13, B-1	Pulverized at NTC lab. Collected from Shumaker's front yard. Used for blank at all labs except White. Substituted for Mijo sample at 5, 8a, 13.	
24A	NBMG Standard 2b	Legend	0.236	xx	xx	xx	xx	xx	xx	xx	Minus 80 mesh, from NBMG			

Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
25A	Stillwater MT	Legend	0.120	5.60	1.5611	5.1325	xx	xx	xx	xx	Minus 80 mesh, from MTBM&G		Minus 80 mesh diluted 90% by weight with pulverized hardware store sand	
26A	Hdware store sand	Legend	xx	xx	xx	xx	xx	xx	xx	xx			Pulverized at NTC lab.	
21B	17	Bondar-Clegg	0.00013	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 7A	Pulverized at NTC lab.	
22B	16	Bondar-Clegg	0.00045	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 2. Material is minus 16 mesh split from 15.	Pulverized at NTC lab.	
23B	blank	Bondar-Clegg	0.00015	xx	xx	xx	xx	xx	xx	xx	1/4" minus	same as 5, 8a, 11b, 13	Pulverized at NTC lab. Collected from Shumaker's front yard. Used for blank at all labs except White. Substituted for Mijo sample at 5, 8a, 13.	
24B	NBMG Standard 2b	Bondar-Clegg	0.245	0.03	nr	nr	nr	nr	nr	nr	Minus 80 mesh, from NBMG			
25B	Stillwater MT	Bondar-Clegg	0.1015	0.06	Greater than 0.146	Greater than 0.146	Greater than 0.029	0.0044	0.0139	0.0073	Minus 80 mesh, from MTBM&G		Minus 80 mesh diluted 90% by weight with pulverized hardware store sand	

Attachment 11B-1 Sample and Assay Correlation Chart

Sample and Assay Correlation Chart
Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Samp No.	Mijo Claim No.	Assay Results, in troy ounces per ton unless otherwise noted. "xx" denotes results below detection limits or not detected. "na" denotes not analyzed. Blank space denote results pending. Unless otherwise stated, all samples with the same alphanumeric designation are splits of the same sample, details under Correlation.												Note
		Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Type	Correlation	Remarks	
26B	Hdware store sand	Bondar-Clegg	0.00003	0.04	xx	xx	xx	xx	xx	xx			Pulverized at NTC lab.	
21C	17	Chemex	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 7A	Pulverized at NTC lab.	
22C	16	Chemex	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	Same as 2. Material is minus 16 mesh split from 15.	Pulverized at NTC lab.	
23C	blank	Chemex	xx	xx	xx	xx	xx	xx	xx	xx	1/4" minus	same as 5, 8a, 11b, 13, B-1	Pulverized at NTC lab. Collected from Shumaker's front yard. Used for blank at all labs except White. Substituted for Mijo sample at 5, 8a, 13.	
24C	NBMG Standard 2b	Chemex	0.238	xx	xx	xx	xx	xx	xx	xx	Minus 80 mesh, from NBMG			
25C	Stillwater MT	Chemex	0.090	0.03	1.620	5.39	0.05	na	na	na	Minus 80 mesh, from MTBM&G		Minus 80 mesh diluted 90% by weight with pulverized hardware store sand	
26C	Hdware store sand	Chemex	xx	xx	xx	xx	xx	xx	xx	xx			Pulverized at NTC lab.	

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Lower Detection Limits, as reported by each laboratory. Troy ounces per ton except where noted.													Note
	Assayer	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os				
	Bondar-Clegg	1 ppb	0.02	20 ppb	20 ppb	5 ppb	1 ppb	50 ppb	10 ppb				5
	Chemex	0.001	0.01	0.002	0.002	0.001	na	na	na				
	Complex Metals	No detection limits, upper or lower, reported.											2
	Legend	0.003	0.05	0.003	0.003	0.003	0.003	0.003	0.003				
	MRAL	No detection limits, upper or lower, reported											
	White Tech.	No detection limits, upper or lower, reported											3
Values of blanks, standards, and knowns used in testing. Troy ounces per ton, unless otherwise noted.													
	Type	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Source	Remarks		
	Gold, silver (standard)	0.228 +/- 0.008	0.02 +/- 0.03							Nevada Bureau of Mines and Geology. Jerritt Canyon, Nevada, carbonaceous Au-Ag ore.			6
	Platinum, palladium, gold, rhenium (known)	1.01		17.2	58.5	0.56				Montana Bureau of Mines and Geology. Mill concentrates from Stillwater platinum and palladium mine, Nye, Montana.	Standard deviation not provided. Values are average of two assays.		6

Attachment 11B-1 Sample and Assay Correlation Chart

Mijo 16 and 17 Unpatented Placer Mining Claims, Clark County, Nevada

Values of blanks, standards, and knowns used in testing.
Troy ounces per ton, unless otherwise noted.

	Type	Au	Ag	Pt	Pd	Rh	Ir	Ru	Os	Source	Remarks	
	Platinum, palladium, gold, rhenium.	0.101		1.72	5.85	0.056				Stillwater mill concentrates cut 10:1 by weight using pulverized hardware store sand.	Values listed are predicted from calculations.	6
	complex blank -and- substitute sample	xx	xx	xx	xx	xx	xx	xx	xx	Minus 1/4 inch commercial "decomposed granite" landscape material in Shumaker's front yard.	At times, this material was substituted for actual samples, and analyzed in their place. All results should be below lower detection limits, regardless of assayer or method.	
	hardware store sand	xx	xx	xx	xx	xx	xx	xx	xx	Guillibrand "Silver Sand" brand of utility screened and washed sand.	Used as blank at White Tech, and to dilute Pt/Pd mill concentrates.	

Notes:

1. Foreign matter was added to the sample at the assay lab.
2. There was significant imprecision in weighing out the initial assay charge of concentrated material. Henderson used a scale accurate to plus or minus 0.1 gram to weigh out a 5 gram assay charge. Our initial calculations indicate that any result should be viewed as having a possible error of plus or minus 50 troy ounces per ton.
3. Equipment and techniques were similar to note 2.
4. Crushing and pulverizing equipment, and all sample vessels were cleaned of dust using the same old paint brush. Vessel used to mix ground sample material with reagents was a 15 ounce mixed nuts tin, blown out by mouth between samples. Crusher and grinder were not cleaned by running silica sand between samples. Cross-contamination cannot be ruled out, and is probable.
5. Ppb = parts per billion. 10 ppb = 0.00029 troy ounces per ton. 1 troy ounce per ton = 34,246.58 ppb.
6. An assay *standard* consists of finely ground and homogenized ore material that has been asayed numerous times by a number of reliable laboratories to establish a mean concentration and standard deviation. An assay *known* is the same as a standard, but has not received as many assays, and the mean concentration is less precise.

Attachment 11B-1 Sample and Assay Correlation Chart

Dr. W. J. Guay
3477 WEST SADDLEBACK ROAD,
PARK CITY, UTAH 681364

March 3, 1999

Mr. Bob Abbey,
State Director,
Bureau of Land Management,
Reno, Nevada.

Dear Sir:

Since the mid 1960's I have been an integral part of the Mining Industry in Nevada. I was Senior Metallurgist and Chief Metallurgist for Newmont Mines at Carlin, Nevada and developed the original process for treating Carbonacious Gold - Bearing ores. I obtained four patents and was author or coauthor of five publications regarding extraction and recovery of metals in Nevada.

Since 1993 I have been involved on an intermitent basis on projects north of Searchlight, Nevada. I personally took samples from this deposit and spent six days in a laboratory evaluating a process for extracting gold, silver and the platinum group metals. These results were promising for the development of a commercial extractive procedure.

I have been providing metallurgical consulting services to a group of scientists studying a certain orebody in this area. These scientists have employed the services of a number of very capable fire assayers who are experienced with complex ore.

I am privy to the new geological, mineralogical and metallurgical information which proves beyond doubt the existence of a new type of gold deposit not yet known or understood by the mining industry. This new gold deposit does not readily respond to standard analytical procedures including fire assaying and leaching. New technologies however conclusively confirm the existence of the deposit.

W J Guay
(1)

Attachment 11B-2a
Letter from W.J. Guay to BLM Nevada State Director, March 3, 1999.

The fact that their ore is non responsive to standard analytical procedures is making it difficult for one of my clients, Pass Minerals, Inc., to prove its validity to the BLM. Verification of the company's fire assay results by standard commercial laboratories is almost impossible. There is no doubt that standard fire assaying procedures are the work horse of the gold mining industry, and they are accurate and reliable for many types of ore. However, to say, as do so many people in the mining industry, and the commercial laboratories, that a standard, unmodified fire assay is universally applicable to and reliable for all types of precious metal ores is erroneous.

As a former Fire Assay Instructor at the Colorado School of Mines (1958 - 1963) I know how difficult assaying complex ores can be. A very good text on Fire Assaying is "Textbook of Fire Assaying" by E. E. Bugbeee, John Wiley and Sons, 3rd Ed., 1940. I know that its very old, but I've only seen once since, and that is the Slagmaster Method of Fire Assay By Walter C. Lashley of the American Society of Applied Technology, Jan 1985. Any one who reads either of these publications in any detail will quickly conclude that fire assaying of some ores can be very difficult, and requires a mastery of a lot of science and laboratory techniques. Although many ore types respond readily to standard fire assaying techniques, many do not. It takes years of experience for an assayer to be able to deal with unusual ore types. The assayers that Pass Minerals has used have a considerable depth of experience.

The reason that standard commercial laboratories are not suitable for check assays on complex ores, such as Eldorado Valley Ores, is that they are set up to produce a large volume of assays on ores which do not require special experience and attention. Furthermore, many of these laboratories, because of their success with many ore types, think that special procedures are not necessary and will bluntly tell you so. They are not set up as research facilities to develop assay procedures for difficult or complex ores, nor do they usually have the expertise necessary to develop these procedures. The American Society of Applied Technology (ASAT) a Silver City, N.M. through Walter C. Lashley has established itself as a research facility, and have developed the Slagmaster Procedure for fire assaying, which is effective on some of the Eldorado type ores. Their manual of fire assaying is the best on the subject since Bugbee. Their procedures are tailor made for different ore types. Even following the Slagmaster protocol takes more time and expertise than commercial laboratories want to commit to an assay.

W J Guay

Attachment 11B-2b
Letter from W.J. Guay to BLM Nevada State Director, March 3, 1999.

I can run a standard fire assay. Most Metallurgists, Geologists, and Mining Engineers have never run a fire assay. It does make a difference. One technique that I have personally used is to reassay slags after the first assay showed no value. This is logical, is based on good science, and should be acceptable. All it means is that the necessary chemical reactions were not complete in the first assay. The values were not released from the incompletely decomposed ore. Additional time was necessary, and it was provided by reassaying the slag. The slag is the discarded waste material from a properly run fire assay. It can contain value which means that the assay was not properly done.

The statement that ores of the Eldorado Valley type are a new type of mineralization is not as outlandish as some people think. Why should we assume that all mineral types have been discovered. All of the ore that is now being mined in the Carlin Trend in Northern Nevada is a new type that was almost unknown before the 1960's. On the basis of work done by Dr. Ralph Roberts of the U. S. Geological Survey, and by two Newmont Geologists, John Livermore and Alan Coope, the initial discovery was made in 1962.

If the discovery at Carlin shook up the long held beliefs of many competent geologists is it not also possible that the long held view that the standard unmodified fire assay is infallible ~~and~~ can indeed come up short with certain types of mineralization. Remember that the Carlin area had been explored for many years by people who did not think that that type of mineralization contained gold values. They walked right over gold bearing ore without ever having it assayed.

In order to satisfy the BLM's requirements that assay information be uncontaminated I suggest that the BLM use procedures that are being done by a laboratory which is capable of assaying these complex ores. The BLM assayer can observe and confirm the procedures. Also the laboratory should assay blanks. I would recommend that the BLM assayer take his own samples in the field under the direction of Ian Matheson, and prepare them exactly as Ian advises. I would recommend that you assay several blanks along with you ore samples. For example you could put in a few samples of barren silica sand in place of the ore. When you have Matheson's laboratory do the assays they would not know which were ore samples and which were blanks. The assay procedure on the blanks is run from start to the production

W J Guay

Attachment 11B-2c
Letter from W.J. Guay to BLM Nevada State Director, March 3, 1999.

of a final assay bead. If no residue is obtained when the final silver button is parted in nitric acid at the end of the assay there has been no contamination introduced into the samples. I did this on samples that I assayed from the Searchlight area in 1993.

The BLM assayer should stay with the samples at all times while the laboratory is assaying them. At night the BLM assayer will have to be certain that the laboratory is locked so that no one can enter and introduce anything into the samples. His use of blanks should of course act as a check to determine if anyone introduces contamination, but a lock and key is a further safeguard.

This procedure is conclusive, cost effective and more reliable than trying to teach even an experienced fire assayer how to reproduce results from a complex ore in a second laboratory. It is also a generally accepted standard procedure used by metallurgists as verification.

The BLM assayer should report findings and results from the blank assays. Any values in the blanks should be deducted from the ore assay. The BLM can then be assured that assay results are legitimate. The BLM would have then discharged its duty to both the claimant and the taxpayer.

In considering the validity of the Pass Minerals Project you should also check with the refineries which are being set up to process the ore. Energy International Inc. in Phoenix and Utah Minerals Processing, in Tooele, Utah both are looking to this ore body to supply them feed and concentrate for their plants. Energy International wants to produce metal, not sell stock. They are privately financed, their real proof will be in the bullion they produce. I don't know about Utah Minerals financing.

CONCLUSION:

1. Hundreds of assays in numerous commercial assay facilities have proved standard analytical procedures do not apply to the Eldorado Valley deposits.

2. Experienced research fire assays have developed their own protocols for assaying this ore.

W J Guay

4

Attachment 11B-2d
Letter from W.J. Guay to BLM Nevada State Director, March 3, 1999.

3. There is a generally accepted procedure which can be used to insure these protocols are not contaminated.

4. There is a new type of gold deposit in southern Nevada.

5. There are two refineries which will depend upon this deposit to supply their raw ore.

I have enclosed a copy of an Affidavit which I have given regarding this project.

I hope you will consider my suggestions when trying to establish a protocol to evaluate the validity of Pass Minerals Inc. project at Railroad Pass.

Yours very truly,

W J Guay

Dr. W. J. Guay (5)

cc: K. Ian Matheson,
Pass Minerals Inc.

Attachment 11B-2e
Letter from W.J. Guay to BLM Nevada State Director, March 3, 1999.

WHITE TECHNOLOGY

Merwin G. White, President
Metallurgical Chemist

815 Red Rock Road Suite #2
(801) 634-1994
FAX (801) 634-1995

CERTIFICATE OF ASSAY

For: Mark R. Chatterton
Assistant Field Manager
Non-Renewable Resources
Bureau of Land Management
4765 Vegas Drive
Las Vegas, NV 89108

Date: March 16, 1999

SAMPLE DESCRIPTION:

Received six samples marked 1, 2, 3, 4, 5 and 6. All samples were dried, passed through the jaw crusher, then pulverized to a fine powder. A 30 gram amount of ore was taken from each sample and individually mixed with the following flux: 45 Gm Borax (anhydrous), 30 Gm Soda Ash, 50 Gm Red Litharge and 4 Gm of Flour. The fluxed samples each had two Herman inquarts added and were then placed in the Cress electric furnace and brought to a temperature of 2050 degrees F. The samples were then poured and cupelled. The parting process was done with a 1:7 solution of Nitric acid and Distilled Water. All slags were saved and a series of five slag reassays (as described below) was performed for each sample.

Slag Reassay - The slag was passed through the jaw crusher, placed back into the crucible and covered with a flux consisting of 50 Gm Red Litharge, 30 Gm Borax (anhydrous), 20 Gm Fluorspar and 4 Gm Flour. The fluxed slags had one Herman inquart added during each reassay. The slag was placed in the Cress electric furnace and brought to a temperature of 2050 degrees F. They were then poured, cupelled and parted as described above.

Blanks - Two blank samples were also run during the initial set. One blank (Blank 1) was run on a 30 gram sample of silica sand using the same flux as noted above. The other blank (Blank 2) that was run used only the flux mixture with no ore added. Slag reassays were not performed for either of the blank samples.

Upon completion of the above tests a second set was run, as requested by Mr. Ian Matheson, using the same samples and procedures with the following exceptions:

1. A sample size of 15 grams of ore was used vs. the original 30 gram sample.
2. The samples were fired in the gas pot furnace at higher temperatures than the Cress electric furnace is capable of producing

Attachment 11B-3a

Assay reports from White Technologies.

RESULTS:

		SET 1 (1 AT)		SET 2 (1/2 AT)	
		Au oz/T	Ag oz/T	Au oz/T	Ag oz/T
1.	Ore	Trace	00.130	00.004	Trace
	1st slag	00.002	00.080	00.008	00.140
	2nd slag	00.006	00.060	00.012	Trace
	3rd slag	00.003	Trace	00.008	Trace
	4th slag	00.006	00.020	00.010	00.020
	5th slag	00.011	00.020	00.006	00.040
	TOTAL:	**00.028**	**00.310**	**00.048**	**00.200**
2.	Ore	Trace	00.130	00.004	00.140
	1st slag	00.002	00.050	00.020	00.100
	2nd slag	00.004	00.070	00.010	00.130
	3rd slag	00.005	00.060	00.010	Trace
	4th slag	00.009	00.020	00.010	00.040
	5th slag	00.022	00.430	00.012	00.120
	TOTAL:	**00.042**	**00.760**	**00.066**	**00.530**
3.	Ore	Trace	00.220	00.004	Trace
	1st slag	00.003	00.030	00.008	00.160
	2nd slag	00.009	00.150	00.010	00.140
	3rd slag	00.009	00.080	00.006	Trace
	4th slag	00.007	00.040	00.008	00.200
	5th slag	00.022	00.360	00.006	00.080
	TOTAL:	**00.050**	**00.880**	**00.042**	**00.580**
4.	Ore	Trace	00.170	00.004	Trace
	1st slag	00.002	Trace	00.012	00.100
	2nd slag	00.008	00.100	00.008	Trace
	3rd slag	00.007	00.020	00.010	00.080
	4th slag	00.009	Trace	00.008	00.040
	5th slag	00.016	00.140	00.018	00.160
	TOTAL:	**00.042**	**00.430**	**00.060**	**00.380**
5.	Ore	Trace	Trace	00.004	Trace
	1st slag	00.050	00.120	00.010	00.060
	2nd slag	00.006	00.030	00.012	00.140
	3rd slag	00.005	00.030	00.134	00.060
	4th slag	00.009	00.110	00.028	Trace
	5th slag	00.022	00.110	00.012	Trace
	TOTAL:	**00.092**	**00.400**	**00.200**	**00.260**

Attachment 11B-3b

Assay reports from White Technologies.

RESULTS: (continued)

		SET 1 (1 AT)		SET 2 (1/2 AT)	
		Au oz/T	Ag oz/T	Au oz/T	Ag oz/T
6.	Ore	Trace	00.100	00.004	02.520
	1st slag	00.002	00.050	00.008	00.120
	2nd slag	00.008	Trace	00.010	00.100
	3rd slag	00.018	01.530	00.006	Trace
	4th slag	00.009	Trace	00.010	00.040
	5th slag	00.012	00.020	00.008	00.040
	TOTAL:	**00.049**	**01.700**	**00.046**	**02.820**
7.	Blank 1	Visible Trace			
8.	Blank 2	Blank			

These results are based on accepted or modified fire assay procedures. Each result is from a weight of separated precious metals. The assay reported can only refer to the addressee's submitted samples. No representation otherwise can be made. The results are for use of the addressee only.

Note: One Assay Ton equals 29.1667 grams. Each milligram of metal per assay ton equals one ounce per ton of ore.

Signed:

Merwin G. White

Merwin G. White
Analyst

Attachment 11B-3c

Assay reports from White Technologies.

Ian Matheson

Ran on 1/2 Assay Ton of Fine pulverized ore

BLM Samples # 2 and #5

Ran in Electric Furnace with hole open on top.

Samples

BLM #2	Gold oz/ton	Silver oz/ton
Orig	.006	.06
#1 Slag	.008	Tr
#2 Slag	.006	Tr
#3 Slag	.012	Tr
#4 Slag	.018	.08
#5 Slag	.014	.02
#6 Slag	.008	.06
Total	.072	.22

BLM #5	Gold oz/ton	Silver oz/ton
Orig	.014	.12
1st Slag	.012	Tr
2nd Slag	.008	.12
3rd Slag	.014	.24
4th Slag	.018	Tr.
5th Slag	.014	.20
6th Slag	.018	Tr
Total	.098	.56

	Gold	Silver
Composite CN Leach of Cupels	.020	2.14
Total Slag + Cupels	.092	2.36

	Gold	Silver
	.028	2.14
	0.126	2.70

Mervin G. White

Attachment 11B-3d

Assay reports from White Technologies.

PASS MINERALS INC. **FAX/LETTER**

2215 LUCERNE CIRCLE,
HENDERSON, NEVADA 89014
DATE FAXED: MAY , 1999

Phone 702 451 4981
Fax 702 451 4939

May 21, 1999

TO: BURRETT CLAY
MATT SHUMAKER

FROM: IAN MATHESON

RE: MURRAY WHITE - ASSAY RESULTS # 13

Enclosed please find the Assay Results from Murray White from sample # 13.

This sample was sent to White Technology directly from Dr. Jordan's laboratory as per our agreement.

This sample was tested by White using two separate leaches, the results are:

Thiourea Leach	.231 oz/ton gold
Bromide Leach	.345 oz/ton gold

Ian

Attachment 11B-3e

Assay reports from White Technologies.

WHITE TECHNOLOGY

Merwin G. White, President
Metallurgical Chemist

815 Red Rock Road Suite #2
(801) 634-1994
FAX (801) 634-1995

CERTIFICATE OF ASSAY

For: Ian Matheson **Date: May 19, 1999**

SAMPLE DESCRIPTION: Heads #3

METHOD: Thiourea Leach

SAMPLE TAKEN:
AT LOCATION MONUMENT S.E. BORDER MIJO 16
N.E. BORDER MIJO 17 MAY 13, 1999 - BY BLM
SAMPLE IDENTIFICATION # 13 DON JORDAN
SAMPLE FIRED: MAGS & TAILS MAY 15, 1999
CONS MAY 17, 1999

RESULTS: HEAD ORE - **SAMPLE SENT TO WHITE TECHNOLOGY MAY 15, /99**
WITH APPROVAL BURRETT CLAY BLM
HEAD ORE SCREENED TO -1/4"

Dore: 5.60 mg

Au : 0.213 Ounces per ton

Ag : 0.40 Ounces per ton

These results are based on accepted or modified fire assay procedures. Each result is from a weight of separated precious metals. The assay reported can only refer to the addressee's submitted samples. No representation otherwise can be made. The results are for use of the addressee only.

Note: One Assay Ton equals 29.1667 grams. Each milligram of metal per assay ton equals one ounce per ton of ore.

Signed: Merwin G. White

Merwin G. White
Analyst

Attachment 11B-3f
Test thiourea leach report from White Technologies for Sample 13.

WHITE TECHNOLOGY

Merwin G. White, President
Metallurgical Chemist

815 Red Rock Road Suite #2
(801) 634-1994
FAX (801) 634-1995

CERTIFICATE OF ASSAY

For: Ian Matheson **Date: May 19, 1999**

SAMPLE DESCRIPTION: Heads #3

METHOD: Bromide Leach

SAMPLE TAKEN:
AT LOCATION MONUMENT S.E. BORDER MIJO 16
N.E. BORDER MIJO 17 MAY 13, 1999 - BY BLM
SAMPLE IDENTIFICATION # 13 DON JORDAN
SAMPLE FIRED: MAGS & TAILS MAY 15, 1999
CONS MAY 17, 1999

RESULTS:

HEAD ORE **SAMPLE SENT TO WHITE TECHNOLOGY MAY 15, /99**
WITH APPROVAL BURRETT CLAY BLM
HEAD ORE SCREENED TO -1/4"

Au : 0.345 Ounces per ton

These results are based on accepted or modified fire assay procedures. Each result is from a weight of separated precious metals. The assay reported can only refer to the addressee's submitted samples. No representation otherwise can be made. The results are for use of the addressee only.

Note: One Assay Ton equals 29.1667 grams. Each milligram of metal per assay ton equals one ounce per ton of ore.

Signed: Merwin G. White

Merwin G. White
Analyst

Attachment 11B-3g
Test bromide leach report from White Technologies for Sample 13

Fax message, page 1 of 1
March 16, 1999

U.S. Department of Interior
Bureau of Land Management
Attention: Thomas V Leshendok
1340 Financial Blvd
PO Box 12000
Reno NV 89520-0006
861-6711 fax

Preliminary copy by fax, final copy by mail.

Dear Mr. Leshendok:

Attached are results from the assays run on the samples you delivered to our Reno laboratory.

We ran standard one assay ton fire assays as well as scorification assays run by a special procedure provided by Ian Matheson which he stated was the procedure used by Jerry Henderson.

The sample preparation on the samples, as well as the scorification assay were done according to this special procedure.

This scorification assay utilized a very small starting sample (5 grams) and results in a large final volume of final sulfuric acid solution. Both of these factors lead to the high detection limit of 0.058 troy ounces per short ton shown on the report. The standard fire assay uses a larger sample (29.168 grams) and a small final solution volume (10 ml) to give the lower detection limits. Any results on the scorofication assay lower than this detection limit may be expansion of instrument "noise". Legend utilizes an axial ICP, which gives approximately 10 times lower detection limits than a standard radial ICP. AA is much less sensitive on these elements and would have an even higher detection limit.

Be aware that the results are all less than the detection limits. No precious metals were detected by either procedure. It was not possible to analyze for silver on the scorification due to the very large silver inquart added.

A copy of the scorification procedure from Mr. Matheson and Mr. Henderson will be attached with the final report along with the spectra print outs. You may find it helpful to review this information with me which I would be happy to do.

Sincerely,

Mark F. Lewis
Manager
Email: mlewis@legend-reno.com
Website: www.legend-reno.com

Attachment 11B-4a
Report and assays from Legend for Mijo group samples 1 through 6.

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - *fax (702) 786-3613*

Certificate of Analysis

Submitted By: Bureau of Land Management — Laboratory # 990289
Client Number:
Attention: Thomas V. Leshendok — Date: 3/16/99

Method: 1 AT Fire Assay

Lab Code:	2012	2012	3037	3037	3037	3037	3037	3037
Analysis Type:	FA/AA	FA/GR	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	Au	Ag	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks								
NVSO#1	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
NVSO#2	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

Method: Supplied by client (Scorification)

Lab Code:	2000	3037	3037	3037	3037	3037	3037
Analysis Type:	AA	ICP	ICP	ICP	ICP	ICP	ICP
Element:	Au	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks							
NVSO#1	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058
NVSO#2	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058

Rec'd
Las Vegas Field office
B Lin -
3/25/99
MRR

By: Mark F. Lewis
Manager/Metallurgist

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

Attachment 11B-4b
Report and assays from Legend for Mijo group samples 1 through 6.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 ppm

1 ppm = 0.029167 Troy oz./ton

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - *fax (702) 786-3613*

Certificate of Analysis

Submitted By: Bureau of Land Management — Laboratory # 990311
Client Number:
Attention: Thomas V. Leshendok — Date: 3/26/99

Method: 1 AT Fire Assay

Lab Code:	2012	2012	3037	3037	3037	3037	3037	3037
Analysis Type:	FA/AA	FA/GR	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	Au	Ag	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks								
NVSO#3	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
NVSO#4	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
NVSO#5	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
NVSO#6	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

Method: Supplied by client (Scorification)

Lab Code:	2000	3037	3037	3037	3037	3037	3037
Analysis Type:	AA	ICP	ICP	ICP	ICP	ICP	ICP
Element:	Au	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks							
NVSO#3	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058
NVSO#4	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058
NVSO#5	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058
NVSO#6	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058

By: _____
Mark F. Lewis
Manager/Metallurgist

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

Attachment 11B-4c
Report and assays from Legend for Mijo group samples 1 through 6.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 ppm

1 ppm = 0.029167 Troy oz./ton

May 3, 1999

U.S. Department of the Interior
Bureau of Land Management
National Training Center
9828 North 31 Avenue
Phoenix AZ 85051

1602-906-5577 fax

Attention: Burrett Clay and/or Matthew Shumaker

Re: Trip to Mr. Jerry Henderson's assay laboratory

INTRODUCTION

I was contacted by Mark Chatterton of the Las Vegas office of the BLM to travel to Las Vegas and on to Laverkin, UT to review assaying that was being done by Jerry Henderson. Mr. Henderson is doing assays for K. Ian Matheson of Pass Minerals. The assay techniques are unconventional. We had previously preformed some assays using techniques described by Mr. Henderson at our Reno laboratory.

I traveled to Las Vegas by Air Wednesday evening (April 14, 1999). Thursday morning I met with Mark Chatterton, Matthw Shumaker, and Burrett Clay (all of the BLM) at the BLM office in Las Vegas at 8:00 am. We traveled to Mr. Henderson's laboratory outside Hurricane UT after a brief stop in St. George, UT where we met Mr. Matheson and Mervin White at Mr. White's office/laboratory. Mr. White is also an assayer that Mr. Matheson utilizes, who generates positive results utilizing, among other techniques, the 'slagmaster' assay technique. This technique is discussed further below.

The BLM had previously collected samples. They were double bagged in heat sealed poly bags which had been purged with Nitrogen. The Nitrogen purge was used to negate the "time sensitive" effect of the ore (details on this are listed below).

SAMPLE PROCESSING

Samples were processed in the following manner.

1) The samples were initially weighed.
2) The samples were screened over a piece of ¼" screen.
3) The –1/4" potion was run over a "U-teck" gravity concentration table. This table had an integrated 20 mesh screen, and produced three products. The +20 mesh tail, and three table fractions labeled Con #1, Con #2, and Con #3.
4) The fractions were taken over to the assay lab building where they were examined under a microscope after hand panning.

The first sample run was MIJO 17, sample 7. It had an initial weight of 75 lbs. The +1/4" fraction weighed 37.5 lbs. And the –1/4" fraction weighed 40.5 lbs. These weights were obtained on an

Attachment 11B-5a

"Complex Metals" Lab, visit report by Mark Lewis

electronic 'bathroom scale', so it is not surprising that the two fractions do not total to the starting weight.

The Con #1 sample was screened on a 20-mesh screen. The +20 mesh sample showed silver metallic balls, which Mr. Henderson referred to as 'nuggets'. There were also some flat, black particles, which Mr. Henderson identified as 'Platinum-Rhodium'. The plus and minus 20 mesh material was recombined, and filtered on a coffee filter in a funnel. This was dried on an electric griddle. Clumps were broken up with a spoon, and a portion of the sample was taken off the filter paper and ground in a mortar and pestle to passing 20 mesh. Five grams of the sample was weighed out into a scorification dish, along with one gram of electrolytic silver. One spoon full of flux (a mixture of litharge and flour) was mixed with the sample and silver, and a second spoon full of flux added on top. Two spoons full of borax were added on top. This was put into the oven.

Mr. Henderson reported that the oven was set to about 2000 degrees F. I checked the controller, and it was set to 2200 degrees F (this may have been due to an out of calibration controller and is not necessarily pertinent).

It is noted, that the entire procedure was very casual. When Mr. Henderson was asked how long the scorificiers were left in the oven, he said he did not know, but we were welcome to time him. When asked why the samples were screened at 20 mesh, he answered that this seemed to work well. He was questioned if he had notices the 'time sensitive' effect of the ore (whereby the grade of the material decreased with time), and he answered that he had not seen this effect. He was also questioned if any of the special furnace effects noted by My. Matheson had any effect and he answered that he had not seen them (more detail on this below).

After scorification, the samples were poured into conical molds, and the lead buttons pounded. These were cupelled in the same furnace, at the same temperature, without cracking the door for additional ventilation (there was a large crack in the top of the joint between the door and the furnace).

The cupels had a silver bead, which were weighed on the top load balance (this was the same balance used to weigh out the sample and the electrolytic silver). Because of the large amount of inquart silver added, and the poor precision and readability of the top load scale (0.1 gram readability), it would be impossible to assay for silver using this technique. Each of the silver buttons weighed between 0.9 grams and 1.1 grams, so there was no apparent gain or loss in dore weight over the amount of silver added.

Mr. Henderson did have a microbalance (a Cahn model 21), but he did not have a calibration weight. This type of balance is very temperature dependent, and must be maintained in a clean, temperature controlled environment, and must be frequently calibrated (daily, or more often). We did not witness any parting, or weighing of gold or other precious metals on the microbalance. Since there was no calibration weight, I do not see how it would be possible to generate any assay results.

Mr. Henderson stated that many of his assay beads were sent off to Mr. Don Jordan in Henderson Nevada for digestion and subsequent DCP analysis for the platinum group. Since I did not visit this facility, I have no knowledge of how these analyses may have been preformed. I would be interested in seeing the procedure to verify that any interference's are being corrected or avoided, and that proper background correction is being done. Emission spectroscopy by either DCP or ICP is prone to great interference's and other errors, which can give false positive results.

ASSAY DIFFICULTIES REPORTED BY MR. MATHESON

During discussions on this trip, and during previous phone discussions, Mr. Matheson mentioned the problems he has encountered assaying this ore. He has discussed research and testing that has taken place to develop a technique that will work on this material. This includes using special, "old time", gas fired muffle furnaces, drilling holes in the roof of the oven to allow extra air into the furnace, assaying the material immediately after the sample is collected, special sample preparation techniques requiring very fine grinding, multiple firings of the slag and cupels from assays (the 'slagmaster' technique) as well as other special leaching and assay methods.

Mr. Henderson was questioned about most of these techniques. He was quite adamant, that while some of these techniques may have merit, he did not need to use them to get the results he was able to produce. He was specifically questioned if he had notices the 'time sensitive' effect of the ore, improvements in results with a hole drilled in the furnace roof, the 'slagmaster' technique, utilizing gas muffle furnaces, and he answered that he did not need any of these special techniques and was able to get good results using only his scorification fire assay.

Whereas Mr. Matheson suggested that many factors had to be controlled, and each step of the process had to be done in a specific way to be able to get a positive gold assay, Mr. Henderson suggested that none of these factors effected the assays in his experience. The scorification assay preformed was very rudimentary and quite unsophisticated, with almost no sample preparation being done.

"SILVER BALLS"

Some of the samples had small silver balls, which were evident after panning. These balls were generally spherical, and were malleable. One assay was done without an inquart on a sample that contained the greatest number of these balls, and a small dore bead was produced (we could not weigh this bead because of the lack of a functioning microbalance).

One of these balls was removed from a sample by Mr. Shumaker of the BLM. It was returned to Legend and had the following characteristics:

Starting weight: 39.867 milligrams
Weight after cupellation: 25.464 milligrams
Gold or other Precious Metals: none detected

The weight after cupellation would be the total precious metal content indicating that the bead has a silver content of 63.9% silver.

ASSAYING TECHNIQUE

It is noted that all of the equipment used in processing and assaying these samples was in very poor condition and terribly unclean. The gravity table had 'concentrate looking' material all around on the apparatus. The table surface looked relatively clean, but most of the buckets used were unclean and were made up of old wastebaskets, galvanized pails, and old 5 gallon pails. These were rinsed out before use.

The tails discharge from the table went over a sluice box that had a piece of astro-turf on it. It did not appear that this mat was cleaned between samples. The material that was not captured on the sluice flowed into a tub with a sump pump. This sump was full of material, presumably the tails from other table tests.

In general, the apparatus was not clean, was not cleaned between samples, and was used for a variety of purposes with nothing more that a 'tap' between processes. For instance, a spoon in the assay laboratory was used to break up the clumps of the concentrate, to scoop the sample onto the balance, to scoop out the electrolytic silver, to scoop out the flux, mix the samples, and place the lead buttons on the cupels in the furnace. This spoon was never cleaned or washed between samples, or between duties. If any of the samples had a large concentration of gold or other precious metals there would be a serious threat of contamination.

Proper testing technique was not generally followed. A proper table concentration test would include a 'metallurgical balance' where each of the products is weighed and assayed. The calculated head of this test would be compared to the assay head. The tail from the table was not collected. Therefore, a calculated head and mass balance could not be preformed. It did not appear that either Mr. Matheson or Mr. Henderson understood the relationship between concentration and increase in grade of the sample. Several conversations failed to obtain coherent responses regarding this concept. The lack of a metallurgical and mass balance from the tabling would also indicate this.

Sampling of the concentrate is also critical. Any precious metals should be collected in these fractions, and a great deal of sample variation would be present when trying to take a sub-sample for assay. Good technique would dictate that the entire sample be blended and ground. Mr. Henderson's technique involved only scooping a small amount of the sample from a single spot, and grinding this small amount. No mixing, blending, or other homogenization was done on any of the samples.

Mr. Henderson did not seem to have many of the standard materials on hand that assayers routinely use. I inquired if he had any lead foil, and he said he did not. This is routinely used for re-cupelling and re-inquarting of high grade samples and for other various assay lab procedures. No standard assay inquarts were evident- only Mr. Henderson's electrolytic silver.

The electric furnaces were in a terrible state of repair. There were chunks of furnace lining falling down from the roof of the furnace, large cracks in the brick, and large gaps in the joint between the door and the furnace. The floor of the furnace was also in poor condition and was uneven which caused the scorifiers and cupels to sit at an angle.

CONCLUSION

No assays were completed during our visit at Mr. Henderson's laboratory, so no results (positive or otherwise) were produced. Due to the missing calibration weight for the microbalance, it would have been impossible to complete any assays.

I did not see any gold when examining the samples under the microscope. Mr. Henderson seemed to find all kinds of precious metals (gold, platinum/rhodium, osmium, etc.) in the samples and was able to identify and name them instantly by sight, but none of these identifications were obvious to me, and no analysis on the individual particles done to confirm this.

Dore' beads from these assays were collected and returned to the Legend, Inc. assay laboratory for ICP analysis for precious metals. Duplicate splits of the samples were also sent by the BLM office to Legend, Inc. for analysis. Results from these analysis are reported seperately.

CONCLUSION

There was nothing involved in any of the assay techniques done by Mr. Henderson that could not be reproduced in another laboratory. He used commercially available Vcella ovens, and standard reagents. It was inquired of Mr. Henderson if there was anything 'special' being done during the table process that would improve the results, and he indicated that there was not. He had used other types and brands of tables, other brands of laboratory products, other furnaces, etc. with similar results.

Sincerely,

Mark F. Lewis
Manager/Metallurgist
Email: mlewis@legend-reno.com

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - *fax (702) 786-3613*

Certificate of Analysis

Submitted By: U.S. Department of Interior, BLM — Laboratory # 990386
Client Number:
Attention: Burrett Clay/Matthew Shumaker — Date: 05/03/99

Method: 1 AT Fire Assay, solid samples

Lab Code:	2012	2012	3037	3037	3037	3037	3037	3037
Analysis Type:	FA/AA	FA/GR	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	Au	Ag	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks	-------	-------	-------	-------	-------	-------	-------	-------
7A	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8A	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8B	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9A	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9B	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10A	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10B	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
STD	0.220	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
BLANK	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

By:_____
Mark F. Lewis
Manager/Metallurgist

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

Attachment 11B-6a
Assays from Legend for Mijo group samples 7 through 10.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 ppm

1 ppm = 0.029167 Troy oz./ton

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - *fax (702) 786-3613*

Certificate of Analysis

Submitted By: U.S. Department of Interior, BLM — Laboratory # 990384
Client Number:
Attention: Burrett Clay/Matthew Shumaker — Date: 06/22/99

Method: Fire Assay. *ND=None Detected. Due to varying sample size, detection limits vary.

Lab Code:	2012	2012	3037	3037	3037	3037	3037	3037
Analysis Type:	FA/AA	FA/GR	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	Au	Ag	Pt	Pd	Ru	Rh	Ir	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks								

Buttons returned from Henderson lab

	SAMPLE WEIGHT mg	Au mg	Ag mg	Pt mg	Pd mg	Ru mg	Rh mg	Ir mg	Os mg
Ag ball	39.87	*ND	25.46	*ND	*ND	*ND	*ND	*ND	*ND
Black ball	137	*ND	23.10	*ND	*ND	*ND	*ND	*ND	*ND
Rust ball	110	*ND	56.83	*ND	*ND	*ND	*ND	*ND	*ND

	Au oz/t	Pt oz/t	Pd oz/t	Ru oz/t	Rh oz/t	Ir oz/t	Os oz/t
Con1	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Con2	0.012	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Con3	0.024	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Head1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7A	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
7B	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8A	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8B	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9A	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9B	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10A	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10B	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11B	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11S	0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

By: _____
Mark F. Lewis
Manager/Metallurgist

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 pp

Attachment 11B-6b Assays from Legend of material received from Complex Metals, and of metallic balls added to samples

COMPLEX METALS RESEARCH & DEVELOPMENT, INC.
P.O . Box 41
Hurricane, Utah 84737

April 19, 1999

Bureau of Land Management
9828 N. 31st Ave.
Phoenix, AZ 85051-2517

Attention: Mr. Burrett W. Clay
Division Chief

SUBJECT: Ore Samples: Mijo 17, Sec. 14, T23S, R63E, Clark County, Nevada

75 lb. bucket, 7A - 8.5 lbs; 7B - 3.5 lbs; 8A - 5 lbs; 8B - 8.5 lbs; 9A - 5.5 lbs; 9B - 5.00 lbs; 10A 4.5 lbs; and 10B 4.5 lbs; Sample S and Sample B, submitted by Mr. Burrett W. Clay and Mark R. Chatterton of the Bureau of Land Management:

1. Mijo 17: 75-lb. bucket was screened to minus 1/4:. Plus 1/4" was weighed: 37.5 lbs. To the minus 1/4" was added water and non-toxic wetting agent (Planet Solutions TM), mixed well then run over a concentrating table (U-Tech). As the ore is put on to the table it runs over a 16 mesh screen. The plus 16 mesh is washed off the table and run over nugget traps, then on to a sluice box. The minus 16-inch meshrun over the table with fresh water on table. The U-Tech table has three traps for concentrates. All samples or concentrates were saved and weighed.

From each sample, 5 grams were taken for assay with a 1-gram silver inquart:

2. 7A - Raw ore: 5 grams, 1 gram silver.
7B " " " "
8A " " " "
8B " " " "
9A " " "
9B " " " "
10A " " " "
10B " " " "

All Dore buttons and weights were taken by Legend Lab, Mr. Mark Lewis of Reno, Nevada and submitted in Dore button form to me.

S - Raw sample: 5 grams, 1 gram silver
B - Raw sample, 5 grams, 1 gram silver

	Ag., Au., and PGM
8B - #1 con	2.22
#2 con	1.19
#3 con	5.57

Nugget trap not assayed.
All Dore back to BLM

Attachment 11B-7a
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

10B - #1 con, 7.0 grams, 5 grams assayed
#2 con - 16.5 grams, 5 grams assayed
#3 con, 2.1 grams
9B - Nugget trap, 3.2 grams
#1 con - 11.7 grams, 5 grams assayed
#2 con, 6.6 grams, 5 grams assayed
#3 con - 1.7 grams
9A - Nugget trap - 2.6 grams to BLM
#1 con - 8.3 grams, 5 grams assayed
#2 con - 11.2 grams, 5 grams assayed
#3 con - 4.5 grams
7A - Nugget trap, 1.4 grams to BLM
#1 con - 11.4 grams, 5 grams assayed
#2 con 23.0 grams, 5 grams assayed
#3 con - 2.9 grams, 2.9 grams assayed
7B - Nugget trap, 2.4 grams to BLM
#1 con - 4.6 grams, 4.6 grams assayed
#2 con - 20.4 grams, 5 grams assayed
#3 con - 3.4 grams, 3.4 grams assayed

Aftee all samples were run, the sluice box was cleaned, the rug was washed into a 5-gallon bucket. Was rerun over U-Tech table. Total concentrate: 20.3 grams. to BLM.

Slag; from 9A, 7A and 7B was crushed, ground and concentrated on U-Tech table. Concentrate weight - 16.7 grams to BLM.

7A - Reject and tails weight 267.9 grams.
1 assay ton - no inquart, button weight 0.67 mg., Au 0.02.

7B rejects and tails weight - 164.9 grams.
9A rejects and tails - weight 298.3 grams.
9B rejects and tails weight - 246.7 grams
10A - Rejects & tailw - weight 295.9 grams.
10Brejects and tails, weight - 157.9 grams.
8A rejects & tails weight 177.0 grams
8B rejects and tails weight 213.6 grams

NOTE:All samples were run like a gravel screening plant. All plus 1/4 inch gravel, over size pile. Minus 1/4 inch, put in water slurry with wetting agent and put on concentrating table.

Charges: $1000.00

Jerry C. Henderson
Research Chemist

JCH:hh
4/19/99

Attachment 11B-7b
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

3. All samples were run over the U-Tech concentrating table.

		5 grams or Less -	Ag - Au/PGM
#8A -	#1 Con		1.23 mg.
	#2 Con		2.45 mg.
	#3 Con		1.14 mg.
	Nugget trap went with Mr. Lewis		
#10B	Nugget trap		3.70 mg.
#10A -	#1 Con	3.2 grams	3.38 mg.
	#2 Con	26.1 grams	6.66 mg.
	#3 Con	2.1 grams	2.29 mg.
	#4 Nugget trap not assayed		

Attachment 11B-7c
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

1C B OVERSIZED 3.70 mg. au/PER

10 B #1 CON 2.38 Mg. au/PER

10 B #2 CON 6.66 Mgs au/PER

10 B #3 CON 2.24 Mgs au/PER

8 B #1 CON 2.22 Mgs au

8 B #2 CON 1.19 Mg. au/PER

8 B #3 CON 5.57 Mg au/PER

8 A #1 CON. 1.23 Mg.

8 A #2 CON 2.45 Mgs

8 A #3 CON 1.14 Mgs

Attachment 11B-7d
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

MR. Clay

Here are all the concentrates Results from all the samples.

The Gold + Platinum Button that I have in my lab. plus the Base Buttons on the #1 #2 #3 concentrates. He been taken to a Silver, Gold & Platinum Refinery for analysis.

When they are completed I will send you the Results.

Complex Metals Rare
Jerry R. Henderson

Attachment 11B-7e
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

FAX

Date: 5-10-99 **Time:** 6:10 **Pages** 2

To: BLM
Burrett W. Clay
Fax: 602-906-5577
Voice:

From: Complex Metals R+D
Jerry C. Henderson
Fax: 435-635-0446
Voice:

Final assays on the Eight Samples were fax to you on 4-30-99:
(25) [redacted] Samples were taken to a Silver, Gold + Platinum Refinery. Here are the results
Fax to you on
4-30-99

Jerry C. Henderson

Attachment 11B-7f
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

	Au Oz./ton	PGM oz./ton
8A. 5 pounds bank run, minus 1/4" #1-2-3 cons. Concentration ratio: 69.94 to 1	0.06	0.11
8B. 8.5 pounds bank run, minus 1/4" #1-2-3 cons Concentration ratio:101.53 to 1	0.04	0.09
10A. 4.5 pounds bank run, minus 1/4" mesh #1-2-3 cons Concentration ratio: 60.94 to 1	0.18	0.43
10B. 4.5 pounds bank run 1/4" minus #1-2-3 cons Concentration ratio: 74.74 to 1	0.04	0.07
9B. 5.0 pounds bank run, 1/4" minus #1-2-3 cons Concentration ratio: 91.64 to 1	0.05	0.00
9A. 5.5 pounds bank run, 1/4" minus #1-2-3 cons Concentration ratio: 87.92 to 1	0.02	Trace
7A. 8.5 pounds bank run, 1/4" minus #1-2-3 cons Concentration ratio: 93.39 to 1	0.03	Trace
7B. 3.5 pounds bank run, 1/4" minus #1-2-3 cons Concentration ratio: 48.32 to 1	0.16	0.12

All samples were mixed with water and a wetting agent in a 5-gallon bucket, then run on the U-Tech concentrating table.
All assays are calculated back to bank run sample

NOTE: All samples from the nugget trap were sent to the BLM office in Las Vegas, Mr. Mark Chatterton.

Jerry C. Henderson
Research Chemist

4/30/99

Attachment 11B-7g
Assay report(s) from Complex Metals, Jerry Henderson, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5195 **Date:** 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: 31 pounds of # 13at -16 mesh was run over a No. 13 wifley concentrating table.
There were 1050 gms. Of concentrates
There were 190 gms. Of magnetics
There was one % moisture in the sample
S-1 supplied by Matt Shumaker

	Element	Oz/Ton
B - concs	Au-Gold	0.38
C - mags	Au-Gold	0.35
D - tails	Au-Gold	0.02
S - 1 std.	Au-Gold	0.78

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 5/19/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8a
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5195A **Date:** 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: HEAD ORE - # 13, BROUGHT BY MARK R. CHATTERTON

Element	Oz/Ton
Au-Gold	0.11
Ag-Silver	1.01
Pt-Platinum	0.14
Rh-Rhodium	0.02
Os-Osmium	0.23
Ru-Ruthemium	0.00
Pd-Palladium	0.04
Ir-Iridium	0.09

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 5/19/99
ARIZ

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

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Attachment 11B-8b
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5196 **Date:** 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: 27 pounds of # 14at -16 mesh was run over a No. 13 wifley concentrating table.
There were 692 gms. Of concentrates
There were 250 gms. Of magnetics
There was two % moisture in the sample
S-3 supplied by Matt Shumaker

	Element	Oz/Ton
B - concs	Au-Gold	0.35
C - mags	Au-Gold	0.49
D - tails	Au-Gold	0.03
S - 3 std.	Au-Gold	0.12

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed: 5/19/99
ARIZONA, U.S.A.

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Attachment 11B-8c
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5196A **Date:** 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: HEAD ORE - # 14, BROUGHT BY MARK R. CHATTERTON

Element	Oz/Ton
Au-Gold	0.08
Ag-Silver	1.23
Pt-Platinum	0.08
Rh-Rhodium	0.00
Os-Osmium	0.15
Ru-Ruthemium	0.00
Pd-Palladium	0.00
Ir-Iridium	0.05

REGISTERED ASSAYER CERTIFICATE NO 19127 DONALD E JORDAN Date Signed 5/19/99 ARIZONA, U.S.A.

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Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8d
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5197 **Date:** 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: 45 pounds of # 15 at -16 mesh was run over a No. 13 wifley concentrating table.
There were 888 gms. Of concentrates
There were 230 gms. Of magnetics
There was two % moisture in the sample
B - 1 supplied by Matt Shumaker

	Element	Oz/Ton
B - concs	Au-Gold	0.28
C - mags	Au-Gold	0.40
D - tails	Au-Gold	0.03
B - 1 std.	Au-Gold	0.01

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed: 5/19/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8e
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5197A Date: 5/19/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: HEAD ORE - # 15, BROUGHT BY MARK R. CHATTERTON

Element	Oz/Ton
Au-Gold	0.13
Ag-Silver	1.52
Pt-Platinum	0.05
Rh-Rhodium	0.03
Os-Osmium	0.16
Ru-Ruthemium	0.00
Pd-Palladium	0.03
Ir-Iridium	0.03

REGISTERED ASSAYER CERTIFICATE NO 19127 DONALD E JORDAN Date Signed 5/19/99 ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8f
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5198 **Date:** 6/2/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: Std. B - 1 THIS SAMPLE WAS TREATED THE SAME AS THE TAILLINGS

Element	Oz/Ton
Au-Gold	0.00
Ag-Silver	0.08
Pt-Platinum	0.00
Rh-Rhodium	0.00
Os-Osmium	0.00
Ru-Ruthemium	0.00
Pd-Palladium	0.00
Ir-Iridium	0.00

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 6/2/99

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8g
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5199 **Date:** 6/2/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: Std. , S - 1 SAME AS CONCS.

Element	Oz/Ton
Au-Gold	1.92
Ag-Silver	6.06
Pt-Platinum	0.00
Rh-Rhodium	0.00
Os-Osmium	0.00
Ru-Ruthemium	0.00
Pd-Palladium	0.00
Ir-Iridium	0.00

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed: 6/2/99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8h
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

Metallurgical Research and Assay Laboratory

745 Sunset Road Suites 8
Henderson, NV 89015
702-565-0074

ASSAY REPORT

Assay Number: 5200 Date: 6/2/99

Customer : BUREAU of LAND MANAGEMENT

Sample Identification: Std. S - 3 , SAME AS MAGNETICS

Element	Oz/Ton
Au-Gold	0.23
Ag-Silver	7.86
Pt-Platinum	0.00
Rh-Rhodium	0.00
Os-Osmium	0.00
Ru-Ruthemium	0.00
Pd-Palladium	98.68
Ir-Iridium	0.00

REGISTERED ASSAYER
CERTIFICATE NO
19127
DONALD E
JORDAN
Date Signed 4-9-99
ARIZONA, U.S.A.

These results are based on well known accepted analytical procedures used solely on the sample submitted by the customer. This report is prepared for the exclusive use of the customer. No warranty as to the reproducibility or extractability of the material other than the sample is given. Donald E. Jordan and/or Metallurgical Research and Assay Laboratory make no representation express or implied on material other than that represented by the sample assayed.

Note: " #VALUE! " MEANS THAT ELEMENT HAS NOT BEEN ANALYZED FOR THIS REPORT.
Unless prior arrangements are made, all samples will be discarded after 30 days.

Attachment 11B-8i
Assay reports from Metallurgical Research and Assay Laboratory, Donald Jordan, proprietor.

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - fax (702) 786-3613

Certificate of Analysis

Submitted By: Bureau of Land Management — Laboratory # 990553

Client Number:

Attention: Matthew Shumaker — **Corrected Report** — Date: 7/12/99

Method: Fire Assay

Lab Code:	2012	2012			3037	3037	3037	3037	3037	3037
Analysis Type	FA/AA	FA/GR	CHECK	CHECK	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	GOLD	SILVER	GOLD	SILVER	Pt	Pd	Rh	Ir	Ru	Os
Units:	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t	oz/t
Sample Marks										
21A	<0.003	<0.05	<0.003	<0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
22A	<0.003	<0.05			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
23A	<0.003	<0.05			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
24A	0.236	<0.05								
25A	0.120	5.60			1.561	5.133	<0.020	<0.020	<0.020	<0.020
26A	<0.003	<0.05			<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

Attachment 11B-9a
Assay report from Legend for samples 21A through 26A

By: _____
Mark F. Lewis
Manager/Metallurgist

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 ppm

1 ppm = 0.029167 Troy oz./ton

LEGEND, Inc.

125 Manuel St. - Reno, Nevada 89502 - Phone (702) 786-3003 - *fax (702) 786-3613*

Certificate of Analysis

Submitted By: Bureau of Land Management — Laboratory # 990650
Client Number:
Attention: Matthew Shumaker — Date: 7/26/99

Method: Amalgamation

Units:	SAMPLE WEIGHT grams	PLACER mg	GOLD mg	SILVER mg	FA/GR TAILS GOLD mg	FA/GR TAILS SILVER mg
Sample Marks						
#1	527.81	0.018	0.016	<0.05	<0.003	<0.20
#2	268.87	0.024	0.024	<0.05	<0.003	<0.20

Method: Fire Assay

Lab Code:	3037	3037	3037	3037	3037	3037
Analysis Type	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP	FA/ICP
Element:	Pt	Pd	Rh	Ir	Ru	Os
Units:	mg	mg	mg	mg	mg	mg
Sample Marks						
#1 Tail	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
#2 Tail	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

By: _____
Mark F. Lewis
Manager/Metallurgist

Attachment 11B-9b
Mercury amalgamation and fire assay of tails; results from Legend for Samples 1 and 2.

Nevada Assembly Bill No. 519.130 requires the following statement: The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project.

A less than sign (<) is to be read "less than" or "none detected"

1 ppm = 0.0001%
1 Troy oz./ton = 34.286 ppm

1 ppm = 0.029167 Troy oz./ton

Intertek Testing Services
Bondar Clegg

Vancouver, B.C. Canada

"U R G E N T & C O N F I D E N T I A L"

To: BUREAU OF LAND MANAGEMENT
Attention : Mr. Matthew W. Shumaker
Reference :
Submitter : M. SHUMAKER

Our Fax No: (604) 985-1071
Your Fax No: 1-602-906-5577
Number of Pages : 2 including this page.

Report : V99-00481.0 Status : COMPLETE Total number of samples: 6

Element	Method	Totl	Element	Method	Totl	Element	Method	Totl
AuGrav	GRAVIMETRIC	1	Au	CALCULATION	1	AgGrav	FIRE ASSAY-GRAV	6
Ag	CALCULATION	6	Au	NEUTRON ACTIVATION	5	Pt	NEUTRON ACTIVATION	5
Pd	NEUTRON ACTIVATION	5	Rh	NEUTRON ACTIVATION	5	Os	NEUTRON ACTIVATION	5
Ir	NEUTRON ACTIVATION	5	Ru	NEUTRON ACTIVATION	5			

Sample Preparations	Totl	Sample Type	Totl	Size Fraction	Totl	Remarks
HOMOGENIZING	3	PREPARED PULP	6	AS RECEIVED	6	The Neutron Activation weight use for fusion was 20G except for sample P4 25B was reduced to 5G because of high CU.
PULP VERIFICATION	3					(CBI)

Notes:

If you do not receive the entire transmission in legible form, please call us at (604) 985-0681.

Attachment 11B-10a
Assay report from Bondar Clegg for samples 21B through 26B.

Intertek Testing Services
Bondar Clegg

CLIENT: BUREAU OF LAND MANAGEMENT
PROJECT: M100 16/17
REPORT: V99-00481.0 (COMPLETE)
DATE RECEIVED: 03-JUN-99
DATE PRINTED: 15-JUL-99

SAMPLE NUMBER	ELEMENT UNITS	AuGrav PPM	Au OPT	AgGrav PPM	Ag OPT	Au PPB	Pt PPB	Pd PPB	Rh PPB	Os PPB	Ir PPB	Ru PPB
P4 21B				<0.7	<0.02	4	<20	<20	<5	<10	<1	<50
P4 22B				<0.7	<0.02	14	<20	<20	<5	<10	<1	<50
P4 23B				<0.7	<0.02	5	<20	<20	<5	<10	<1	<50
P4 24B		8.40	0.245	0.9	0.03							
P4 25B				2.1	0.06	3580	>5000	>5000	>1000	250	159	460
P4 26B				1.3	0.04	1	<20	<20	<5	<10	<1	<50

Attachment 11B-10b
Assay report from Bondar Clegg for samples 21B through 26B.

Chemex Labs, Inc.

Analytical Chemists * Geochemists * Registered Assayers

994 Glendale Ave., Unit 3, Sparks
Nevada, U.S.A. 89431
PHONE: 775-356-5395 FAX: 775-355-0179

To: USDI BUREAU OF LAND MANAGEMENT

9828 NORTH 31 AVE.
PHOENIX, ARIZONA
85051-2517

Project : M130
Comments: ATTN: MATT SHUMAKER

Certificate Date: 28-JUN-1999
Invoice No. : I9920367
P.O. Number :
Account : RCC

CERTIFICATE OF ANALYSIS A9920367

SAMPLE	PREP CODE		Au oz/ton	Pt oz/ton	Pd oz/ton	Rh oz/ton	Au oz/ton	Ag oz/ton
21C	225	--	< 0.001	< 0.002	< 0.002	< 0.001	-----	< 0.01
22C	225	--	< 0.001	< 0.002	< 0.002	< 0.001	-----	< 0.01
23C	225	--	< 0.001	< 0.002	< 0.002	< 0.001	-----	< 0.01
24C	225	--	-----	-----	-----	-----	0.238	0.01
25C	225	--	0.090	1.620	5.39	0.050	-----	0.03
26C	225	--	< 0.001	< 0.002	< 0.002	< 0.001	-----	< 0.01

Attachment 11B-11
Assay report from Chemex for samples 21C through 26C.

CERTIFICATION: [signature]

PASS MINERALS INC. **FAX/LETTER**

2215 LUCERNE CIRCLE,
HENDERSON, NEVADA 89014
DATE FAXED: MAY , 1999

Phone 702 451 4981
Fax 702 451 4939

May 17, 1999

TO: TOM LESHENDOK

BURRETT CLAY
MATT SHUMAKER

FROM: IAN MATHESON

RE: PROJECTIONS MIJO 16/17
DISPOSAL OF TAILINGS FROM EII IN PHOENIX

On Friday, May 14, 1999 I had various meetings in Phoenix with Bob Gunnison regarding the above.

Mr. Gunnison who is an Arizona State grauduate in accounting as well as a refiner of precious metals (past 20 years) has given an Affidavit stating the Economic Projection of the Mijo 16 claim is fair and reasonable.

We also met with Waste Management of Arizona regarding disposing of the tailings from EII at their landfill. This landfill can accomodate the tailings at a price under the cost of $ 5.00 per ton used in our projections.

I trust you will find this in order.

Yours very truly,

K. Ian Matheson

Attachment 12-1a
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison.

AFFIDAVIT

BE IT ACKNOWLEDGED, that Robert Gunnison, of P. O. Box 42036 - 271, Phoenix, AZ., 85080, the undersigned deponent, being of legal age, does hereby depose and say under oath as follows:

1. I have given an Affidavit dated March 17, 1999 and April 14, 1999 stating my qualifications and the fact that I graduated from Arizona State University in 1964 (Accounting) and I am expert in leaching precious metals from the ore and concentrates in the Eldorado Valley, Nevada.

2. As an addendum to the above Affidavit I further state that based on my experience as both an accountant and a precious metals refiner:

   a. I have reviewed the Projected Economics Mijo 16 Estimated Income and Cost Schedule for the Reconcentrated Ore - Gold.

   b. I have read the Conditions for Discovery, including excerpts from Chrisman v. Miller, Prudent Person Test; Davis v. Weibbold and U.S. v. Feezor re: Quantity of Material; and Converse v.Udall and U.S. v. Fitzgerald re: Profitable Ventures

Based on my review in (a) and reading of the excerpts from the case law in (b) in my opinion, based on my qualifications as an accountant and an expert refiner knowledgeable in all of the associated costs and revenues, the projected Income and Cost Schedule per ton of Reconcentrated ore - Gold as represented in the Projected Economics Mijo 16 - Estimated Income and Cost Schedule - Concentrate is fair and reasonable and that condition for discovery as per the case law in (b) have been met.

Signed: Robert H Gunnison
Robert Gunnison

FILE: AFFIDAVIT ROBERT GUNNISON # III

Attachment 12-1b
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison.

AFFIDAVIT

STATE OF ARIZONA)
)
COUNTY OF MARICOPA)

On ~~April~~ May 14, 1999 before me, Maria G. Kasem (notary's name) personally appeared Robert H. Gunnison, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

OFFICIAL SEAL
MARIA G. KASEM
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires Feb. 24, 2000

Signature: Maria G. Kasem

My Commission Expires 2/24/00

FILE: AFFIDAVIT ROBERT GUNNISON # III

Attachment 12-1c
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison

PROJECTED ECONOMICS MIJO 16

ESTIMATED INCOME AND COST SCHEDULE - CONCENTRATE

	Existing Phoenix 2 T/hr	Projected L.V. 15 T/hr
Estimated cost Mine, Screen & Magnetically separate 100 tons of ore:		
100 tons X $ 1.00 (1)	$ 100.00	
Average number of tons of mags (4)	3.07	
Cost to mine 1 ton of mag cons	33	33
Cost to re concentrate 1 ton mags (2)	10	10
Reconcentrating doubles(3) gold content from 1.98 oz/ton (5) to 3.96 oz/ton		
Transport to Phoenix (6)	15	5
Processing in Phoenix Plant (7)	195	
Reclamation, permitting, bonding, DT*(8)	1	1
Processing in 15 ton/hr Plant (7)		35
Dispose of tailings (9)	5	5
Refine resins $2 x 3.96 (10)	8	8
Overhead (12)	10	8
Contingency 30% (11)	80	30
TOTAL COST TO PROCESS 1 TON RECONCENTRATED MAGNETICS	357	129
Gold recovery 3.96 oz (13) x $ 280.00	1,108	1,108
ESTIMATED PROFIT PER TON RECONCENTRATE ORE - GOLD	**$ 751**	**$ 973**

NOTE: For the purpose of this projection Gold is the only precious metal which has been considered. Silver & PGM's will be recovered in the Energy Internation facility but have been ignored for the purposes of this projection.

FILE: BLM LV PROJECTED ECONOMICS

Attachment 12-1d
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison.

PROJECTED ECONOMICS MIJO 16

ESTIMATED INCOME AND COST SCHEDULE - CONCENTRATE

PERSONS RESPONSIBLE FOR FIGURES USED IN SCHEDULE

FUNCTION	PERSON	AFFIDAVIT & EXPERIENCE	AMT	SCHEDULE AMT
1. Production Cost to process 1 ton head ore into concentrates	Wayne Stroud	Manager Technical Serv. CSR	1.00 T	1.00 T
2. Cost to reconcentrate	Darvin Wade	President, U - Tech	5.00 T	10.00 T
3. Increase in value of	Ernest Phebus	Affidavit	300 %	200 %
4. % Magnetics	Charles Moore	Affidavit	3 - 4 %	3.07
5. Value of Magnetics	Robert Gunnison	Affidavit	4 - 5 oz	3.96
6. Transportation of	Rainbow Rock	Back haul	15.00	15.00
7. Processing Cost	Robert Gunnison	Affidavit	195/35	195/35
8. Reclamation, permit Bonding, Des. Tortoise	K. Ian Matheson	Estimate	1.00	1.00
9. Dispose of tailings	Robert Gunnison	Estimate	5.00	5.00
10. Refine resins	Robert Gunnison	Estimate	2.00	2.00
11. Contingency	K. Ian Matheson	Estimate	30%	30 %
12. Overhead	K. Ian Matheson	Estimate	10.00	10.00
13. Gold recovery oz/ton	Robert Gunnison	Afidavit	4 - 5 oz	3.96 oz

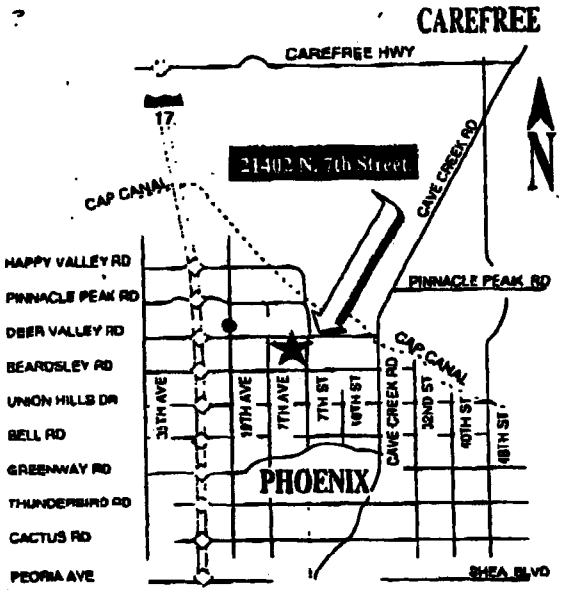
Attachment 12-1e
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison.

WASTE MANAGEMENT OF ARIZONA

LONE CACTUS LANDFILL

Quality Service With Integrity

21402 N. 7th STREET
(602) 581-0939



Acceptable Wastes
- Construction Debris
- Demolition Debris
- Site Clearing
- Paper Products
- Landscape Trimmings
- Unpackaged Non-Friable Asbestos †

Prohibited Wastes
- Household Garbage
- Medical Wastes
- Hazardous Wastes
- Explosives
- 55 Gallon Drums
- Liquids or Sludges
- Fly Ash
- Lead Acid Batteries
- Car Bodies and Tires
- Manure
- Pesticides or Herbicides
- Dead Animals
- Septage
- Appliances containing refrigerant

† Packaged Non-Friable Material should not be labeled as HAZARDOUS.

Rubbish Disposal Rates Effective January 1, 1999

Vehicle Description	Pricing
TRASH	
Small Pick-up	$8.00
Small Pick-up with side boards	$16.00
Full Size Pick-up	$16.00
Full Size Pick-up with side boards	$32.00
Trailers 4x8x4	$27.50
All Other Trailers Per Cu. Yd.	
Internal / External Front Load Trucks	$200.00
Internal / External Roll Off Trucks 40	$170.00
Internal / External Roll Off Trucks 30	$150.00
Internal / External Roll Off Trucks 20	$125.00
Internal / External Roll Off Trucks 10	$90.00
Internal / External Roll Off Compactor	$190.00
Semi Truck 0-45 Yd. Cap.	$170.00
Semi Truck 45-60 Yd. Cap.	$250.00
10 Wheel Dump 0-15 Cu. Yd.	$100.00
6 Wheel Dump / Bobtail By Cu. Yd.	$5.50

Vehicle Description	Pricing
INERT	
Semi Truck 0-45 Yd. Cap.	$160.00
Semi Truck 45-60 Yd. Cap.	$175.00
10 Wheel Dump 0-15 Yd. Cap.	$75.00
10 Wheel Dump 15-30 Yd. Cap.	$135.00
6 Wheel Dump / Bobtail By Cu. Yd.	$4.25
COVER MATERIAL 6" OR MINUS CLEAN FILL	
Semi	$112.00
10 Wheel Dump	$37.50
6 Wheel Dump / Bobtail	$20.00
~~Clean Asphalt~~	~~$14.00/LB.~~

Landfill Hours: Monday thru Friday 6:00 am until 5:00 pm, except holidays, Saturday 6:00 am until 4:00 pm
Master Card and Visa Accepted

DISTRICT OFFICE - WASTE MANAGEMENT OF ARIZONA • 2425 S. 40TH STREET • PHOENIX, AZ 85034
602-470-0227 • Fax 602-470-0692

Attachment 12-1f
Mining and Milling Cost Information Prepared by K. Ian Matheson and Verified by Robert H. Gunnison.

Photo L-1. Burrett Clay and Mark Chatterton sealing plastic sample bags with thermal sealer. M. Shumaker, 3/9/99.

Photo L-2. Mark Chatterton and Burrett Clay filing plastic sample bags with nitrogen prior to sealing. M. Shumaker, 3/9/99.

Photo L-3. Lab technician at White Technologies splitting a sample using assorted pieces of glass kitchenware. M. Shumaker, 3/10/99.

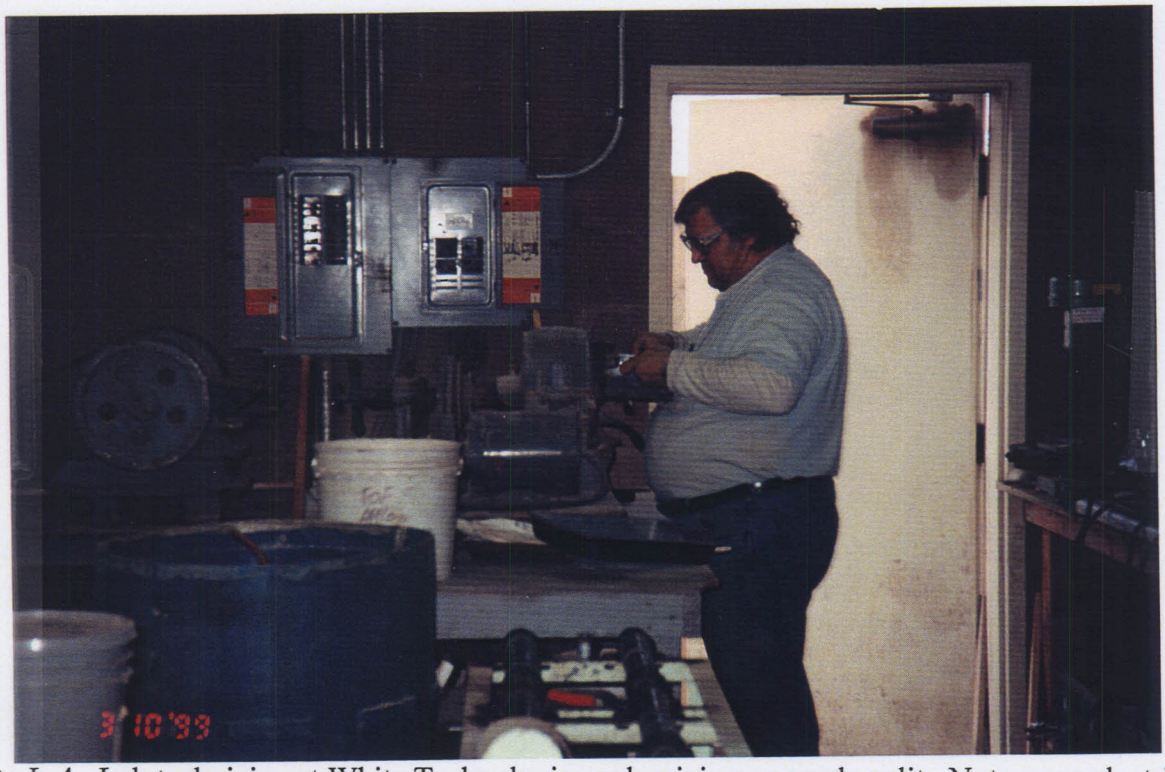


Photo L-4. Lab technician at White Technologies pulverizing a sample split. Note open electric circuit breaker panels. They are the only on and off switching for the crusher (device with open belts on the left) and the pulverizer. M. Shumaker, 3/10/99.

Photo L-5. Lab technician at White Technologies adding "herman inquarts" to sample crucibles. M. Shumaker, 3/10/99

Photo L-6. Lab Technician at White Technologies pouring a fused fire assay sample. M. Shumaker, 3/10/99.

Photo L-7. Lab technician at White Technologies hammering a lead button prior to cupellation. M. Shumaker, 3/10/99

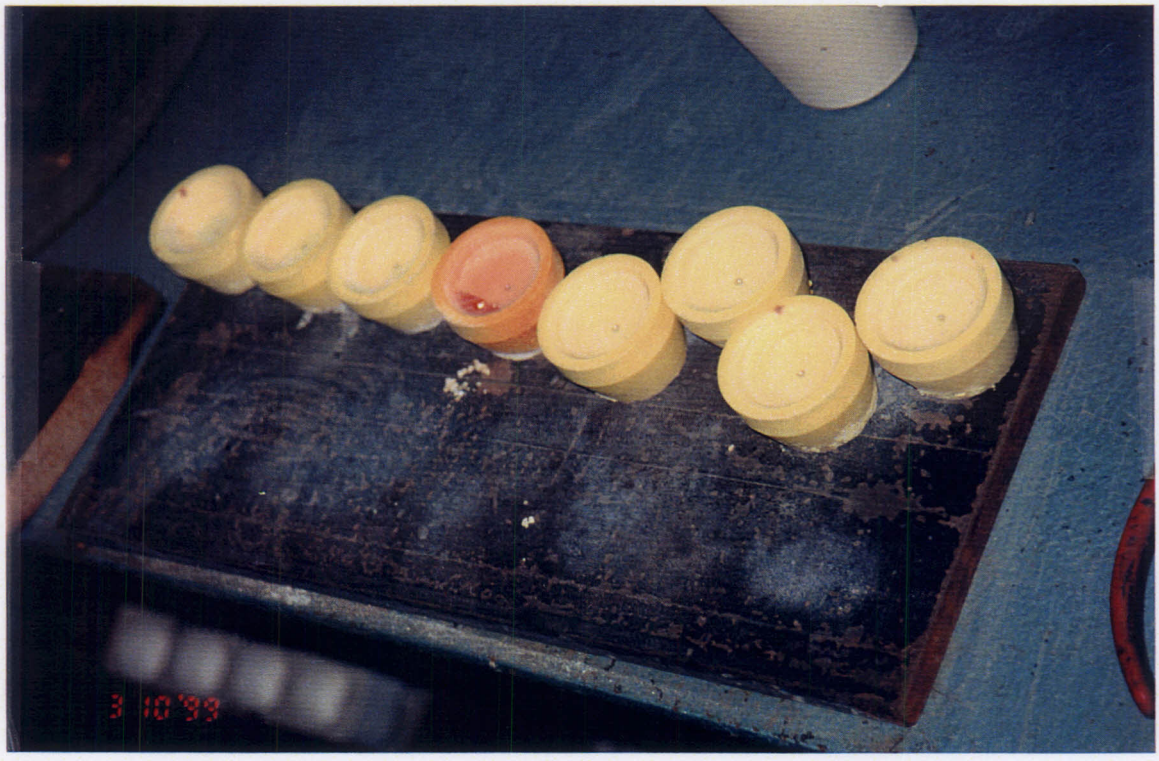


Photo L-8. Cupelled dore' beads cooling at White Technologies. M. Shumaker, 3/10/99.

Photo L-9. Storage of chemicals and reagents at White Technologies. M. Shumaker. 3/10/99.

Photo L-10. Floor storage of dangerously incompatible reagents at White Technologies. Front row from left to right, an unidentified glass bottle, plastic bottle marked hydrofluoric acid, brown glass bottle marked hydrochromic acid, clear glass bottle marked phosphoric acid, a gap, and a clear glass bottle marked nitric acid. Immediately behind the bottle marked phosphoric acid is an old bleach bottle hand marked as containing sodium cyanide. Accidental mixing of the sodium cyanide with any of the acids would produce toxic hydrogen cyanide gas. M. Shumaker, 3/10/99.

Photo L-11. Mark Lewis (Legend Labs) and Burrett Clay recording sample weights on Jerry Henderson's bathroom scale at Complex Metals. M. Chatterton, 4/15/99.

Photo L-12. Jerry Henderson screening sample 7C at Complex Metals. M. Chatterton, 4/15/99.

Photo L-13.. Jerry Henderson feeding a sample into the "U-Tech" concentrating table as Mark Lewis looks on. M. Chatterton, 4/15/99.

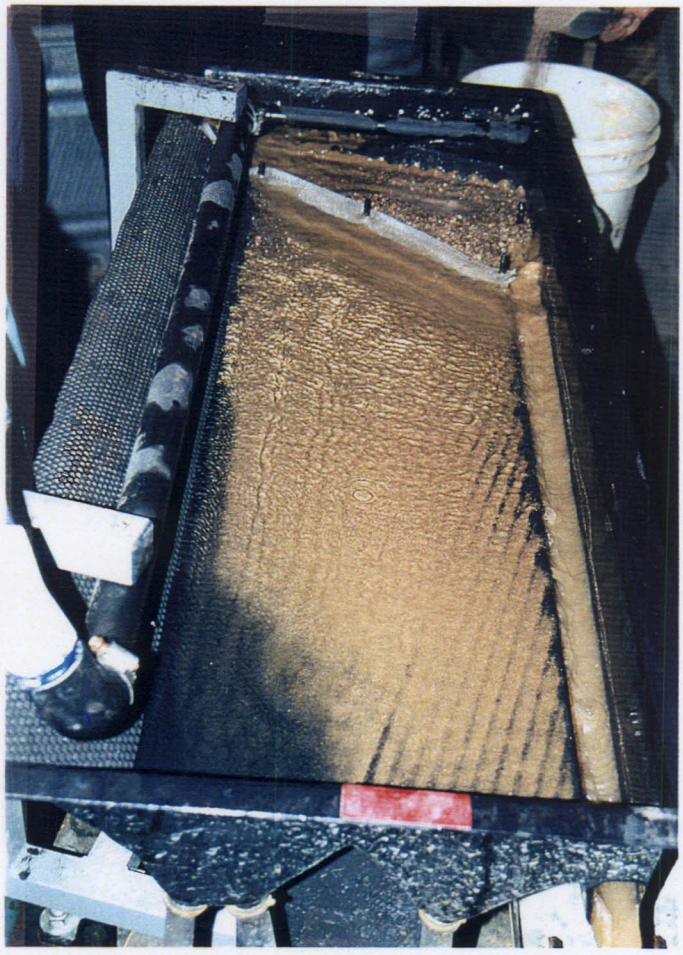


Photo L-14. U-Tech table in operation at Complex Metals. M. Chatterton, 4/15/99.

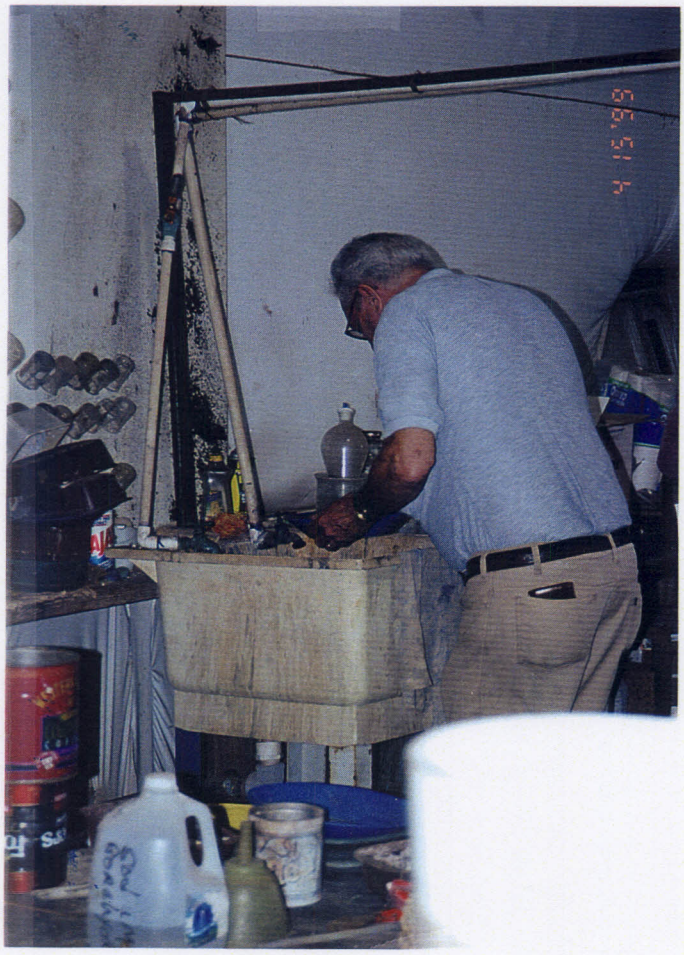


Photo L-15. Jerry Henderson hand panning concentrates from U-Tech table. Note haphazard plumbing and general conditions at Complex Metals. M. Chatterton, 4/15/99.

Photo L-16. Shumaker observing "silver balls" resulting from panning shown in Photo L-15. M. Chatterton, 4/15/99.

Photo L-17. Jerry Henderson washing panned concentrates into a coffee filter inside a funnel for drying prior to fire assay. M. Chatterton, 4/15/99.

Photo L-18. General conditions inside Complex Metals. From left to right, B. Clay, M. Lewis, J. Henderson. Note storage of reagents and placement of compressed flammable gas cylinder under kilns. White panel in upper right that appears to be a roof gable is actually a fallen 4 by 8 foot piece of rigid foam insulation resting on the hot exhaust vent. M. Chatterton, 4/15/99.

Photo L -19. Henderson weighing out what he claimed to be an "electrolytic silver" fire assay inquart using a scale with accuracy of plus or minus one tenth gram. M. Chatterton, 4/15/99.

Photo L-20. Henderson stirring sample and flux mixture with a spoon prior to firing in kiln. M. Chatterton, 4/15/99.

Photo L-21. Henderson placing scorification dish of sample and flux into furnace. Note samples being cupelled in same furnace. Fusion and cupellation are different procedures that should be accomplished at different temperatures and under different oxygen conditions. Just to the right of the furnace, a sample fraction on a coffee filter is drying on a hot plate. M. Chatterton, 4/15/99.

Photo L-22. Beads resulting from cupellation at Complex Metals. These are uncommonly large, considering that only 5 grams of sample was used, and, theoretically, 5 grams of silver inquarted. M. Chatterton, 4/15/99.

Photo L-23. Sample concentration area at Complex Metals. Henderson's U-Tech table is located to the left of the forklift. M. Chatterton, 4/15/99.

Photo L-24. General conditions at Complex Metals, view toward the front. Note rusted work tables, splattered material on wall to left, and storage of glass reagent bottles. From left to right, Mark Lewis, Jerry Henderson, Burrett Clay, and Merwin White. M. Chatterton, 4/15/99.

Photo L-25. View toward the back, inside Complex Metals laboratory. Note splattered material on wall to right, papers stacked on chair, food on the work table, and open shelf storage in background. From left to right, K. Ian Matheson, Burrett Clay, Jerry Henderson, Merwin White. M. Chatterton, 4/15/99.

Photo L-26. Henderson's U-Tech table in operation. Henderson is feeding the table. Note the position of his left hand. From left to right, Mark Lewis, K. Ian Matheson, Merwin White, Matt Shumaker, Burrett Clay. Forklift and disabled Chevrolet are in background. M. Chatterton, 4/15/99.

Photo L-27 Henderson hand screening a sample prior to processing on the U-Tech table. From left to right, Mark Lewis, back of Shumaker, Merwin White, Jerry Henderson, Burrett Clay, K. Ian Matheson. Note position of Henderson's hands, and White physically handling sample material. M. Chatterton, 4/15/99.

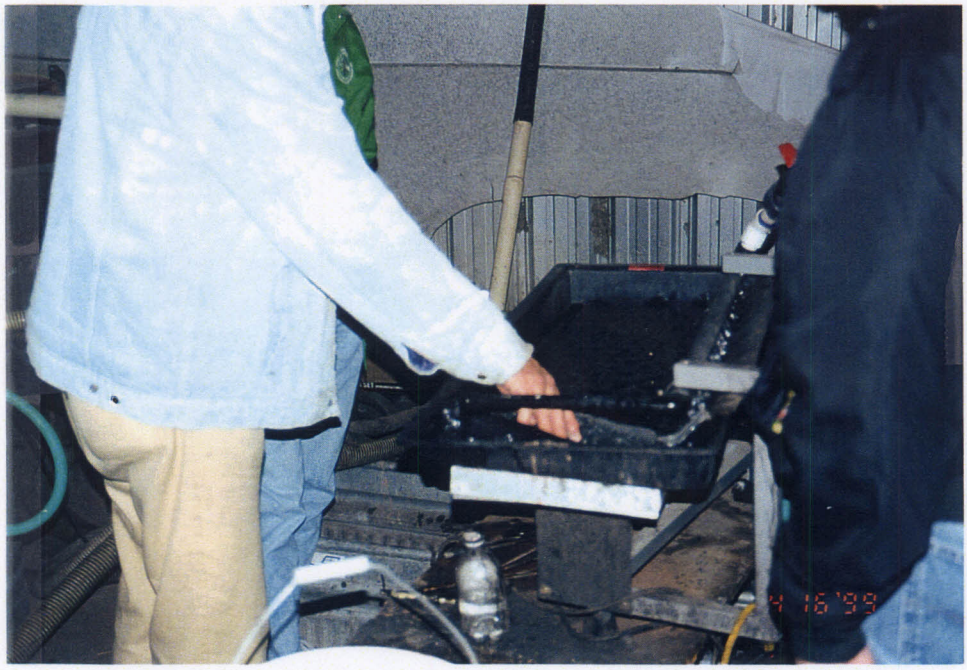


Photo L-28. Henderson manipulating sample processing on U-Tech table. Note long sleeves and his hand in the processing area. M. Chatterton, 4/16/99.

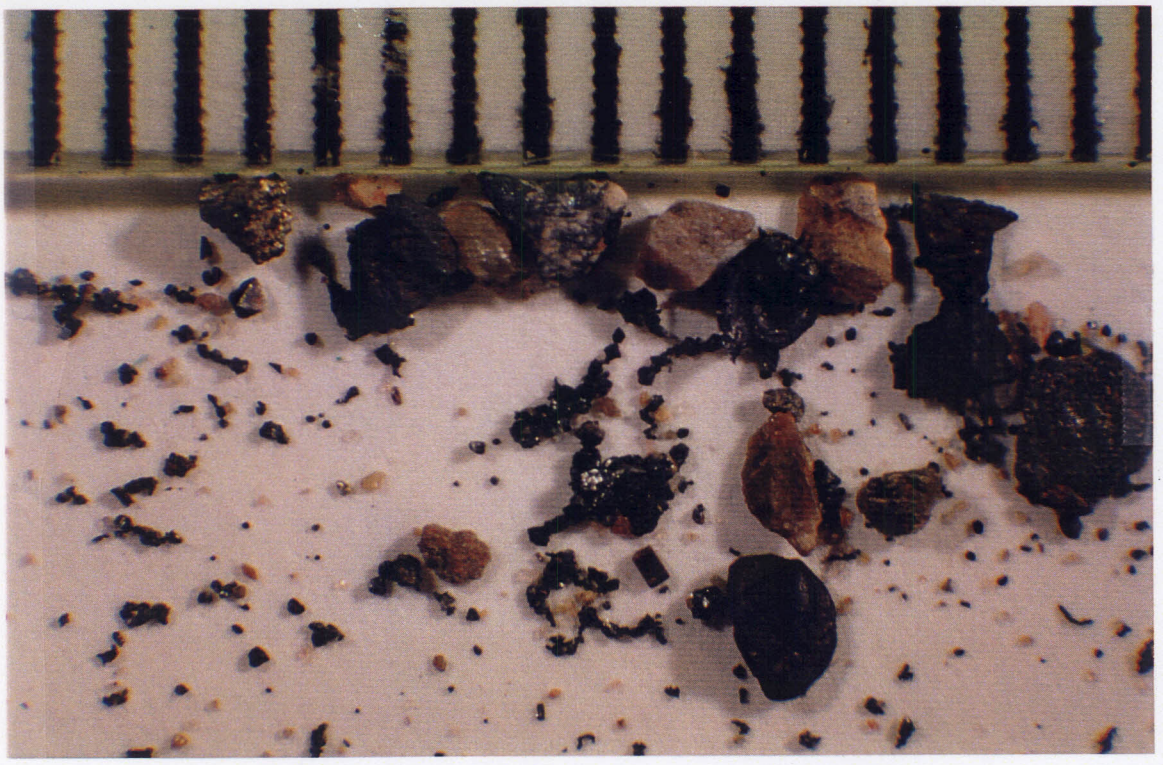


Photo L-29. Photomicrograph of screened concentrates from sample 8A, after processing at Complex Metals. Material should consist of sizes passing through a 16 mesh sieve, and the small particles are actual minus 16 mesh material. The larger material was added to the sample at Complex Metals, and includes silver metallic balls and glass-like material which is probably slag. Sample 8A was identified to Henderson as coming from the Mijo 17, but is actually from Shumaker's yard. Scale is in millimeters. M. Shumaker, 7/1/99.

Photo L-30. Photomicrograph of material hand picked out of Sample 8A oversize, after processing at Complex Metals. These are spheroids of silver metallic material that is soft and malleable. Sample 8A was obtained from Shumaker's yard. Scale is in millimeters. M. Shumaker, 7/1/99.

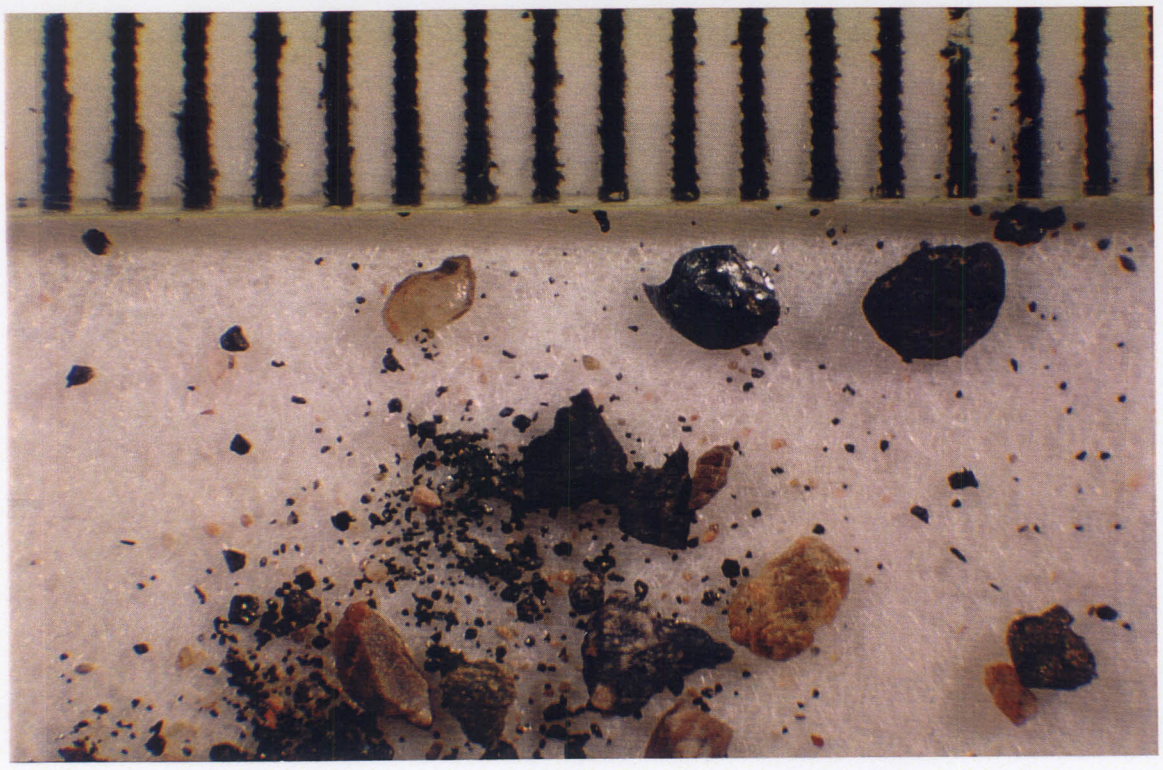


Photo L-31. Photomicrograph of oversized material derived from the No. 2 screened concentrate of Sample 8A, after processing at Complex Metals. Material present should be minus 16 mesh, as represented by the small particles present. Larger material, including silver spheroids and slag, was added at Complex Metals. Scale is in millimeters. M. Shumaker, 8/2/99.

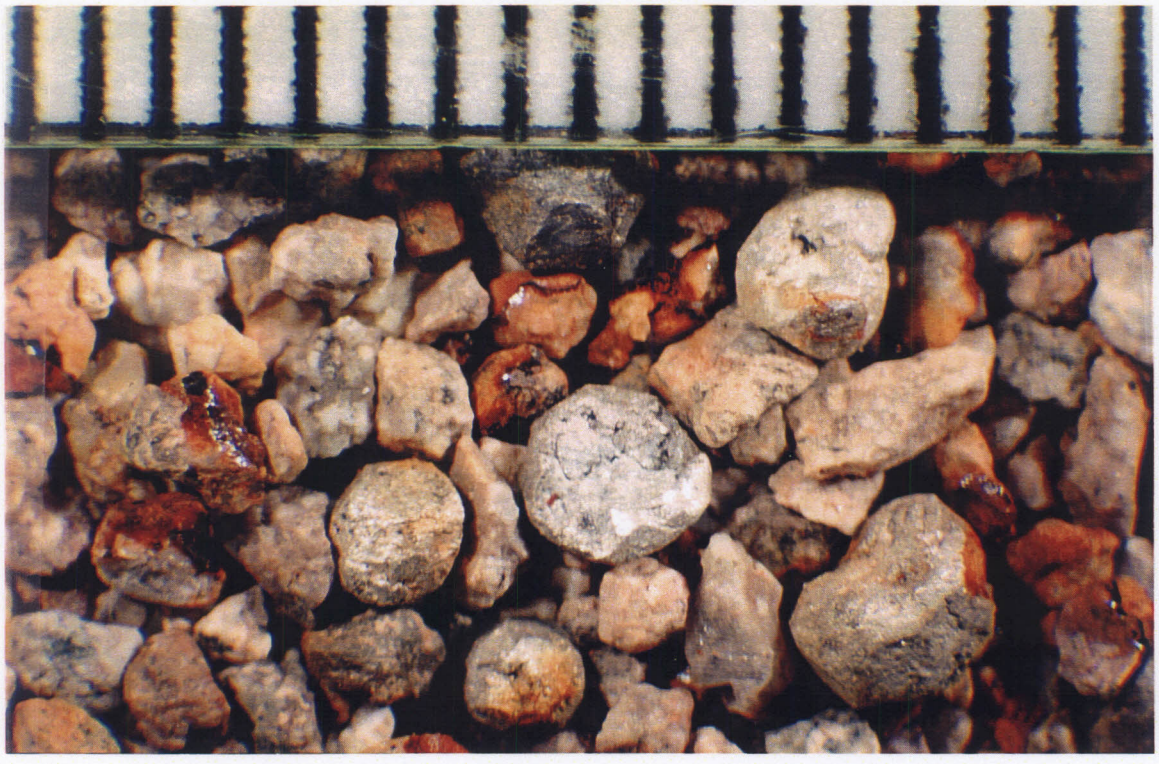


Photo L-32. Photomicrograph of a representative assortment of material in the nugget trap fraction of sample 7C, after processing at Complex Metals. The angular appearing particles are actually from the sample. The spheroidal, metallic appearing particles were added to the sample. Scale is in millimeters. M. Shumaker, 7/1/99.

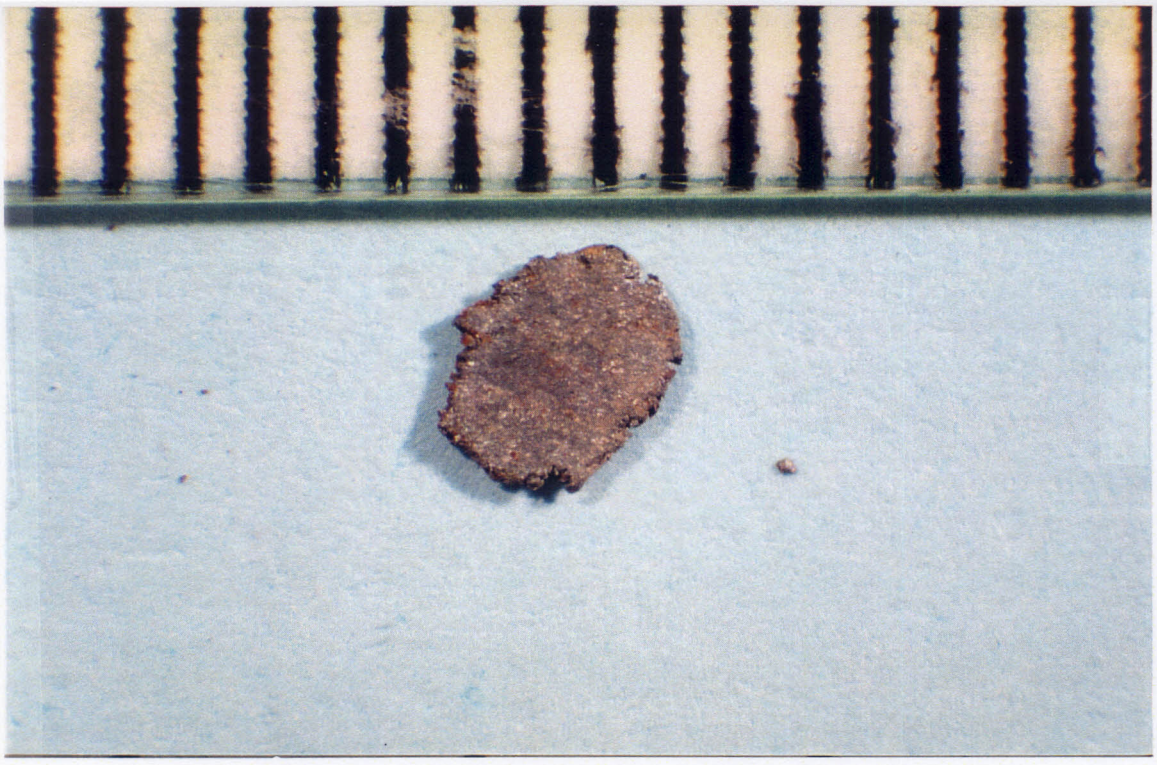


Photo L-33. Photomicrograph of a metallic spheroid that we hammered flat with a four ounce hammer. Scale is in millimeters. M. Shumaker, 7/1/99.

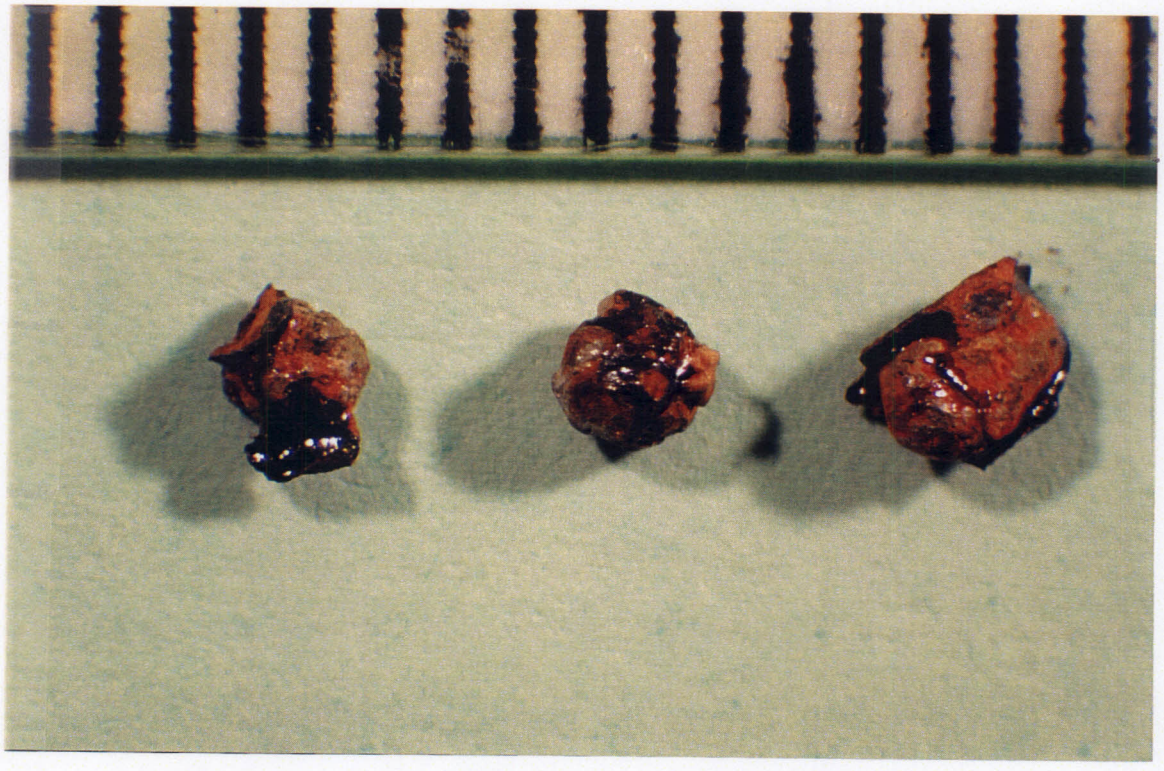


Photo L-34. Photomicrograph of silver metallic spheroids from the Sample 7C nugget trap that are coated with a rust colored, glassy material. All are soft and malleable. Scale is in millimeters. M. Shumaker, 8/2/99.

Photo L-35. Photomicrograph of five silver metallic spheroids after crushing with hand pliers. Analyses by Legend labs of three different spheroids revealed that their primary constituent was silver. Scale is in millimeters. M. Shumaker, 7/1/99.

Photo L-36. Photomicrograph of material, after processing at Complex Metals, from Sample 7C nugget trap remaining on a 16 mesh sieve screen. No material in the frame is actually from the sample we provided to Henderson. All is foreign matter added at Complex Metals. Scale is in millimeters. M. Shumaker, 7/1/99.

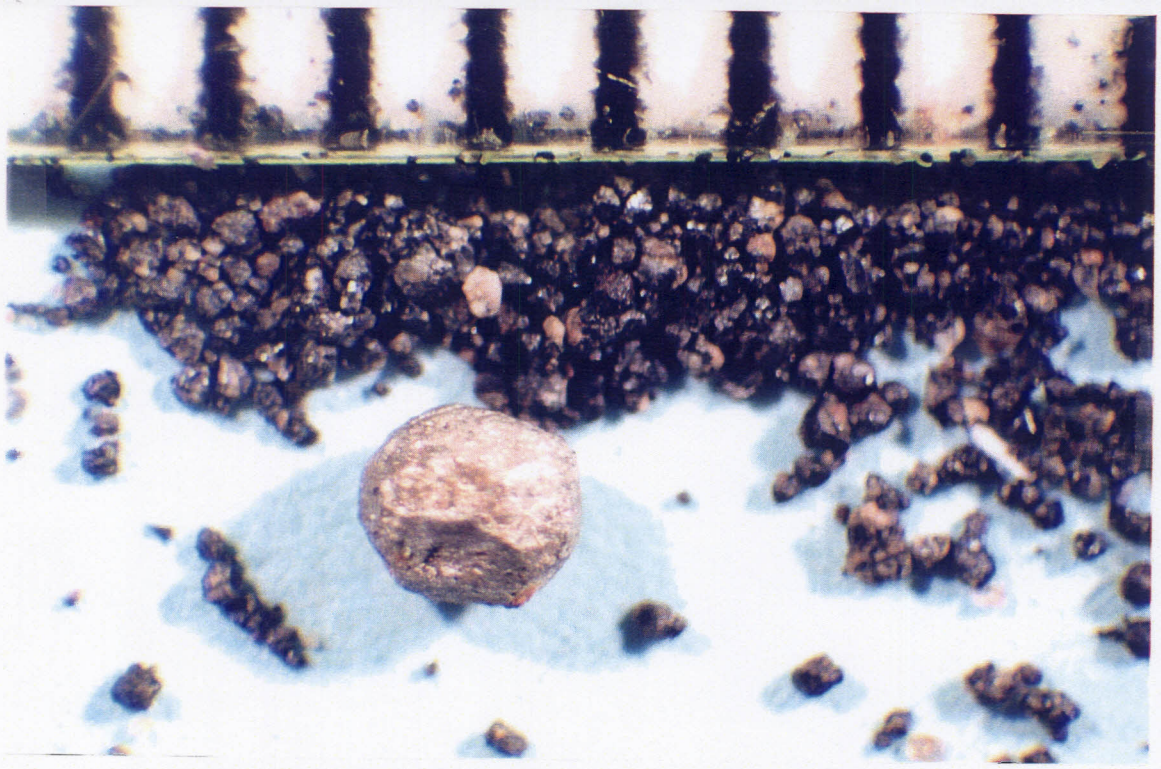


Photo L-37. Photomicrograph of material, after processing by Complex Metals, from the tails of sample 7C. All material should be capable of passing through a 16 mesh screen, as the fine particles in the background did. The silver metallic spheroid was added at Complex Metals. Scale is in millimeters. M. Shumaker, 7/1/99.

Photo L-38. Photomicrograph of glassy shards in the middling fraction of Sample 7C, after processing at Complex Metals. This material resembles obsidian, but appears to be slag. No slag or obsidian is present on the Mijo group. Scale is in millimeters. M. Shumaker, 7/1/99.

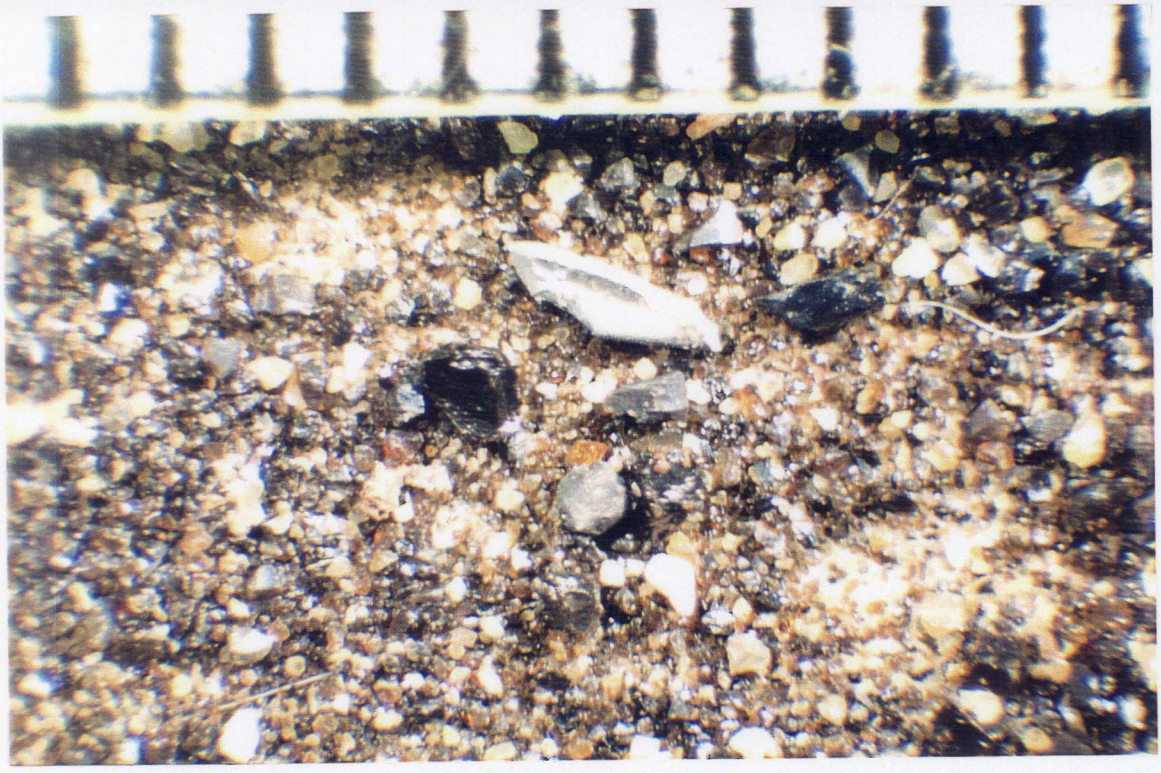


Photo L-39. Photomicrograph of a random spoonful of material returned by Henderson. The bag was labeled as containing samples "s/a 9 con 9A-7A-7B." Most of the material present is glassy slag, with some metals. Only a small portion is actually true mineral matter. Scale is in millimeters. M. Shumaker, 7/2/99.

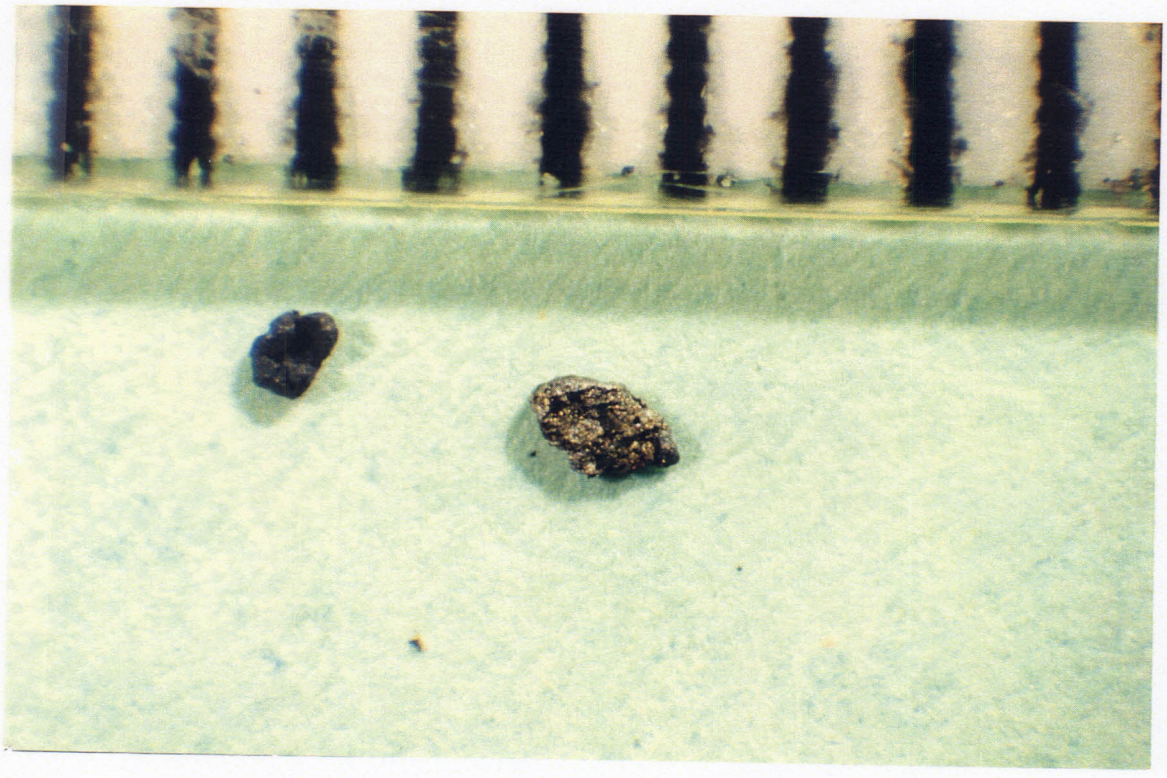


Photo L-40. Two convex metallic particles. These appear to have been quenched in a manner that produced more of a dish shape. Scale is in millimeters. M. Shumaker, 7/2/99.

Photo L-41. Metallurgical Research and Assay Lab (MRAL) technician David Graham pouring a sample into a rotary washer. M. Shumaker, 5/13/99.

Photo L-42. MRAL technician Graham transferring sample from the washer into a bucket. M. Chatterton 3/13/99.

Photo L-43. MRAL technician Graham literally hand feeding a washed sample onto a wilfley table. M. Shumaker, 5/13/99.

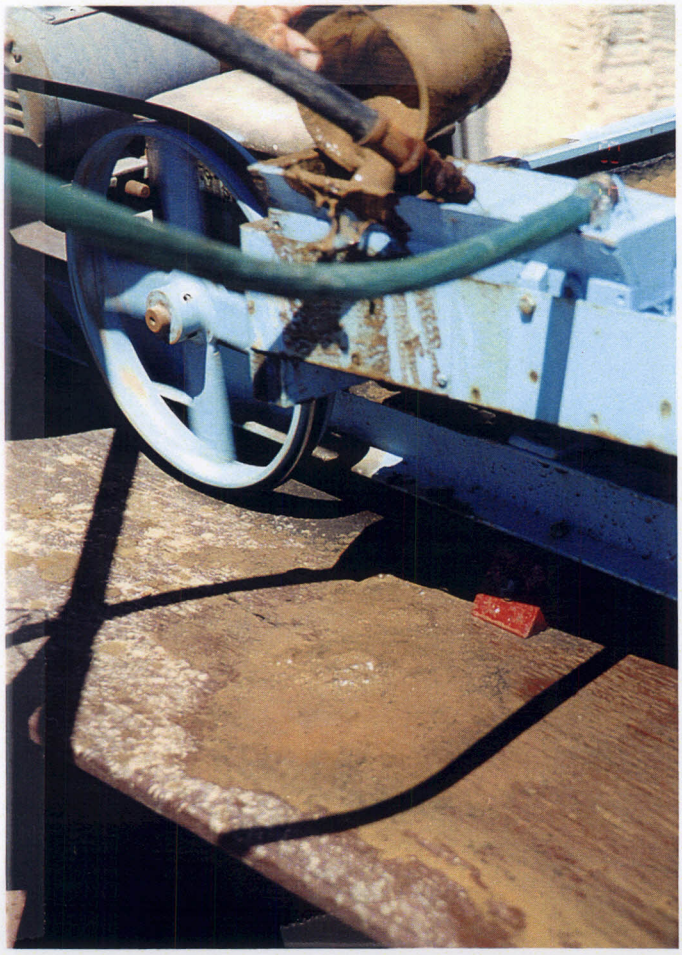


Photo L-44. MRAL technician Graham feeding wilfley table using a plastic beaker. Note sample loss. M. Chatterton, 5/13/99.

Photo L-45. MRAL technician Graham removing magnetic material using a teflon-coated stirring magnet. M. Shumaker, 5/13/99.

Photo L-46. Drying oven at MRAL. M. Chatterton 5/13/99.

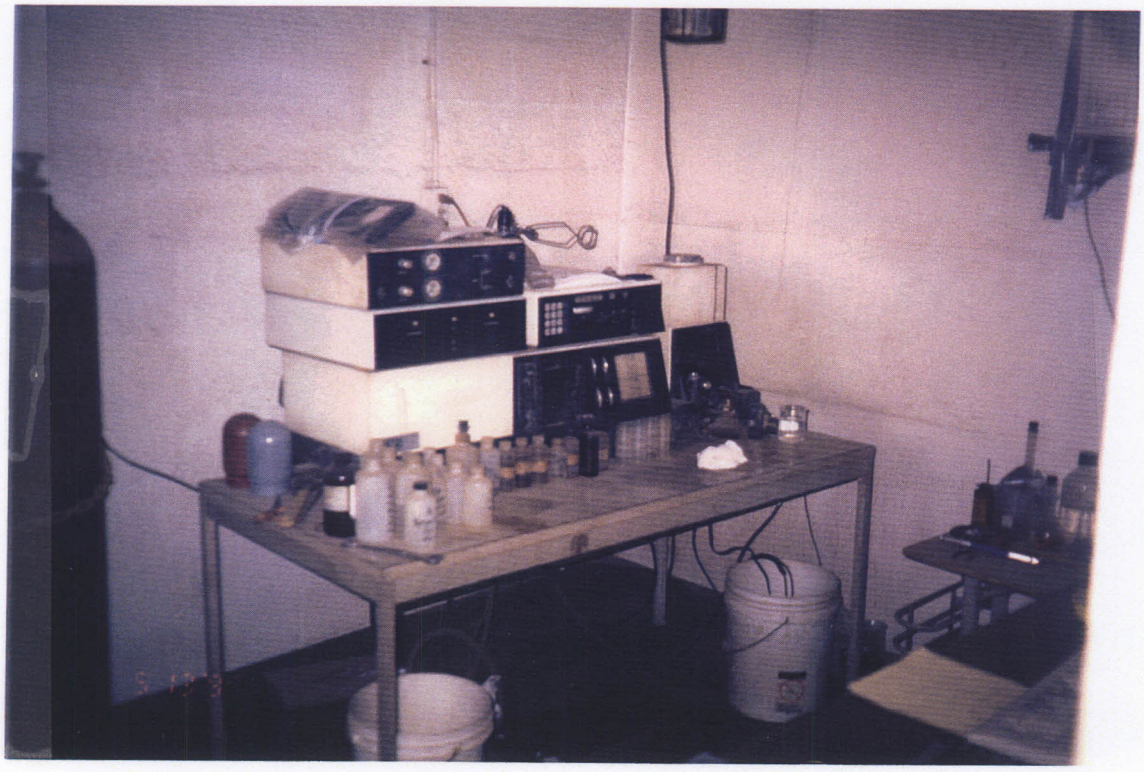


Photo L-47. Device purported to be a Direct Coupled Plasma Arc (DCP) instrument at MRAL. M. Shumaker, 5/13/99.

Photo L-48 Separatory box at MRAL. Note sediment from previous samples remaining in corners and edges, causing probable cross-contamination. M. Shumaker, 5/13/99.

Photo L-49. Truck oven at Legend Labs, Reno, Nevada used to dry incoming samples contained in canvas bags. M. Shumaker, 6/10/99.

Photo L-50. Ring and puck pulverizer used at Legend Labs for sample preparation. Round objects to the right are the pulverizing devices, which are removable for thorough cleaning. Compare to disc pulverizer and work area shown in Photo L-4. M. Shumaker, 6/10/99.

Photo L-51. Electronic analytical scale used at Legend Labs for weighing sample charges and recovered precious metals. Resulting weights for each sample are tracked by Legend's computer system. Note the cleanliness of the work area. Compare to the work areas in Photos L-5 and L-19. M. Shumaker, 6/10/99.

Photo L-52. Crucibles at Legend Labs being prepared for placement into the fusion furnace. Note orderly placement of crucibles, which diminishes the chance of transposing a sample and reporting incorrect results. M. Shumaker, 6/10/99.

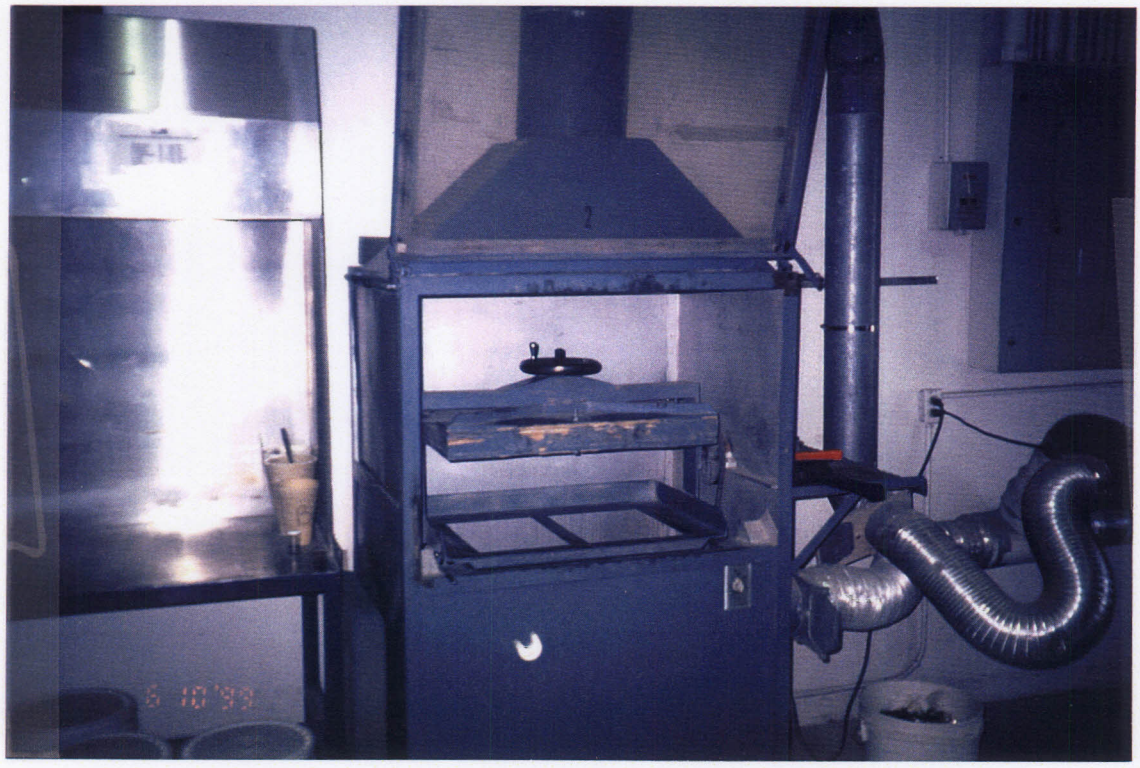


Photo L-53. Mechanical mixing shaker used at Legend Labs to blend flux mixture with pulverized sample prior to fusion. The tray of crucibles from Photo L-52 is covered with a fresh sheet of industrial wax paper, and clamped into the shaker by tightening the wheel in the center of the photo. Work table is to the left. Note the general cleanliness of the area. Compare to the mixing method shown in Photo L-20.

Photo L-54. Removal of crucibles from Legend's furnace after fusion is complete. Note that orientation of crucibles is maintained from the filling and mixing steps. Note the general order and cleanliness of the work area. Compare the furnace method and condition to Photo L-21.

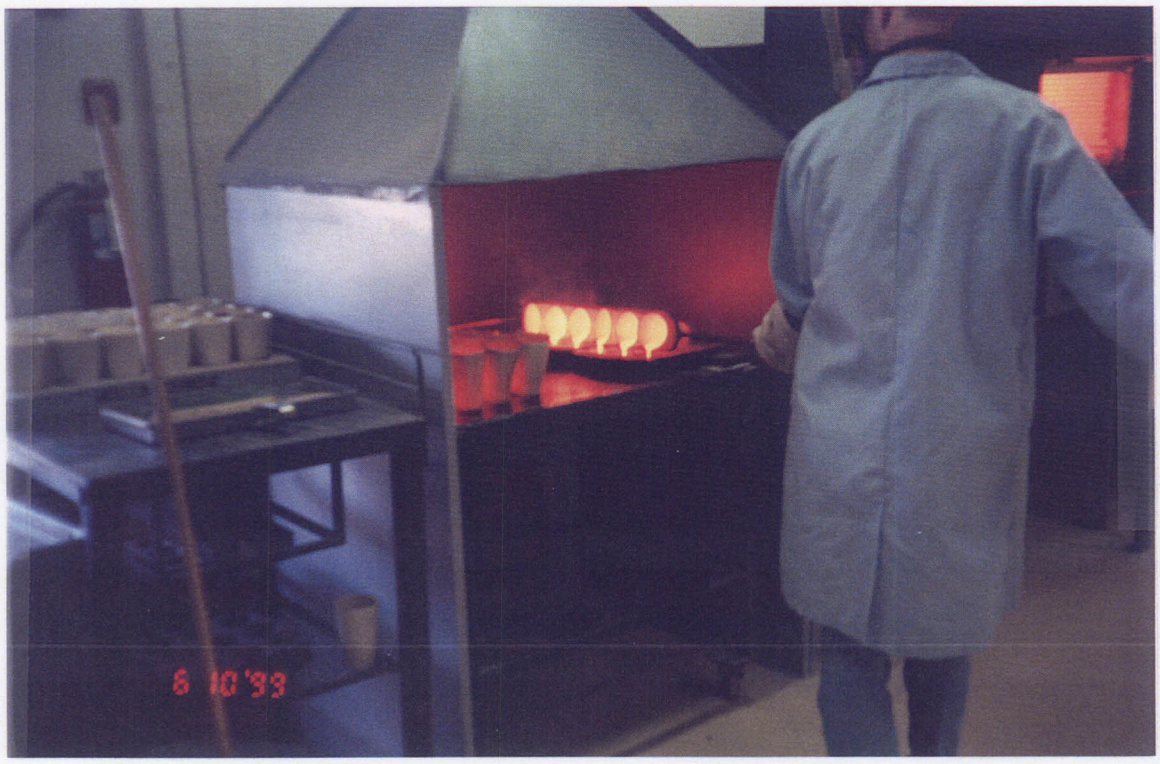


Photo L-55. Pouring molten fire assay fusion product at Legend Labs. Note that orientation of crucibles from Photo L-54 has been maintained. Molten samples are poured into cast iron cone molds in exactly the same orientation and order as they were in the crucibles. The tray of crucibles on the left is awaiting fusion. Compare to methodology shown in Photo L-6. M. Shumaker, 6/10/99.

Photo L-56. Finished cupels at Legend Labs. Orientation of each cupel is the same as the original orientation established with initial crucible layout. Darker color cupels are stained with copper from a laboratory "known" used to assure that the cupels are not transposed, and as an analysis accuracy check. Compare to layout and methodology shown in Photos L-8 and L-22. M. Shumaker, 6/10/99.

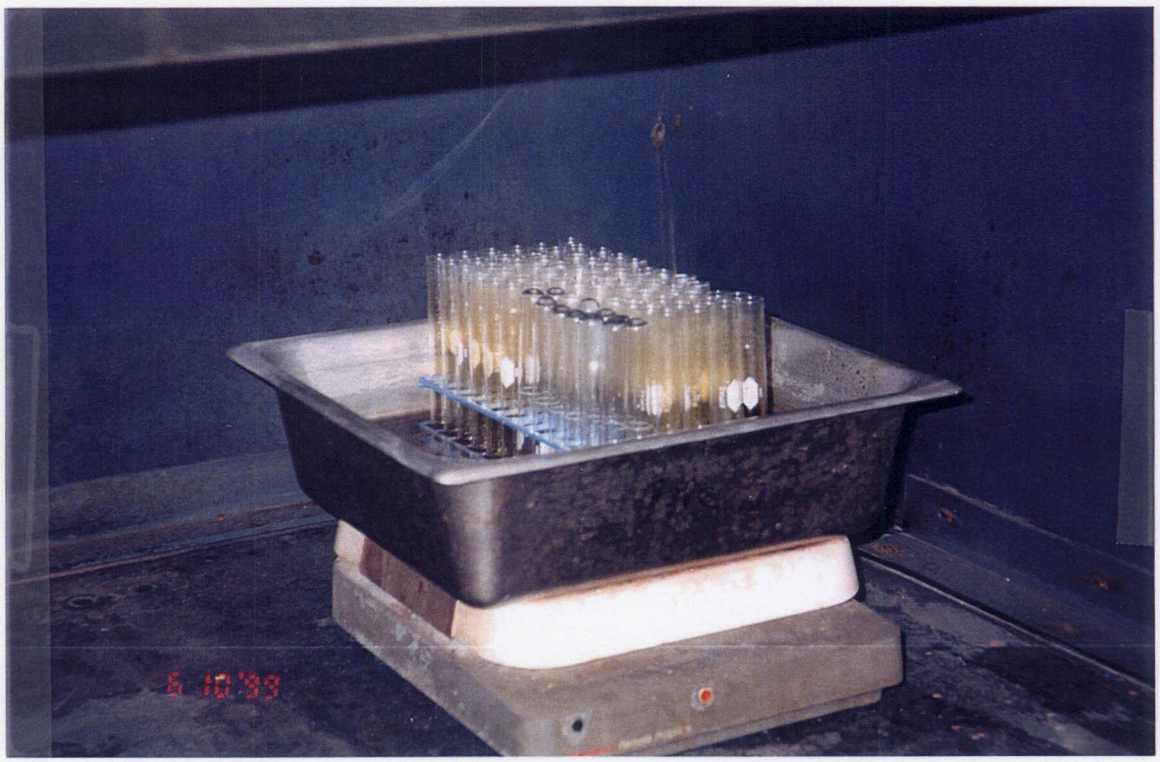


Photo L-57. Graduated pipettes at Legend Labs used for measured volume of solution used for analysis of platinum group elements. M. Shumaker, 6/10/99.

Photo L-58. High definition Induction Coupled Plasma Arc (ICP) device used at Legend Labs. Solutions as shown in Photo L-57 are analyzed using this instrument for very precise measurements of metals. Compare to instrument and work area shown in Photo L-47. M. Shumaker, 6/10/99.

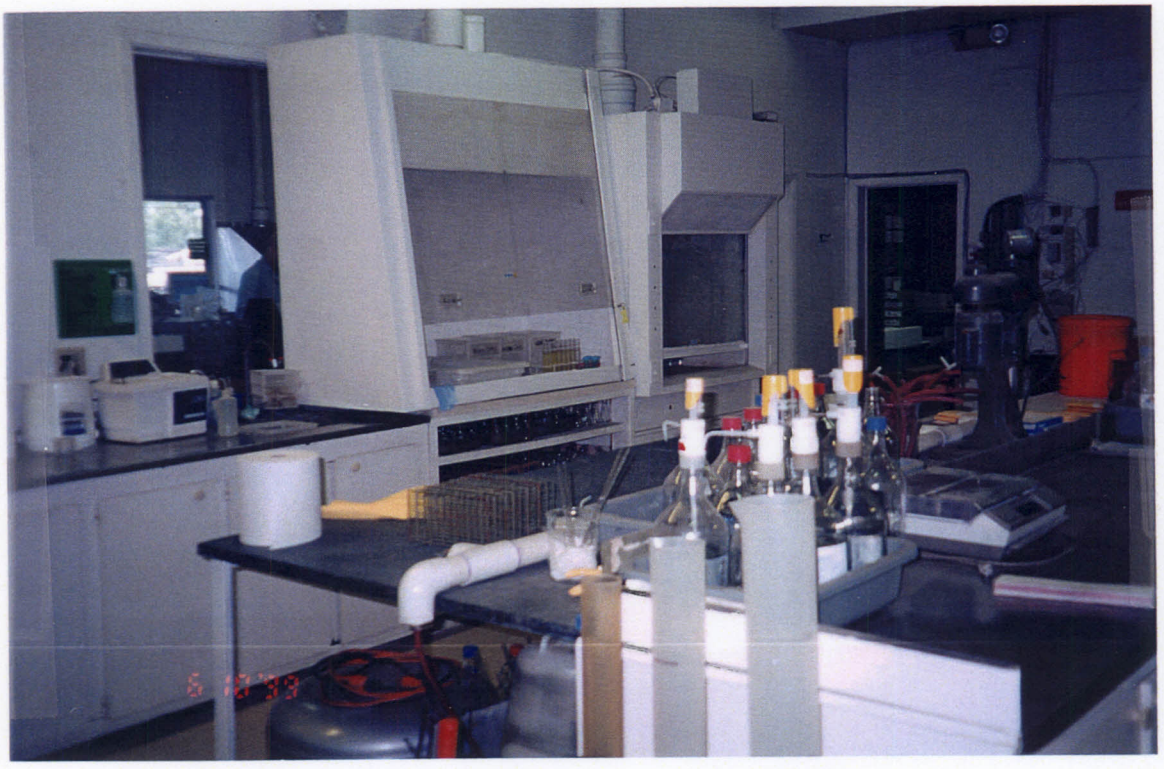


Photo L-59. Work area and reagent storage in one work area at Legend Lab. Note overall neat and clean conditions. Only reagents in immediate use are stored on work tables, and then in plastic trays to contain spills. Compare work areas and reagent storage shown in Photos L-5, L-9, L-10, L-25, and L-25.

Photo P-1. Bulkhead storage in rear yard at Energy International, 22246 North 19th Avenue, Phoenix, Arizona. 3/29/99 by M. Chatterton.

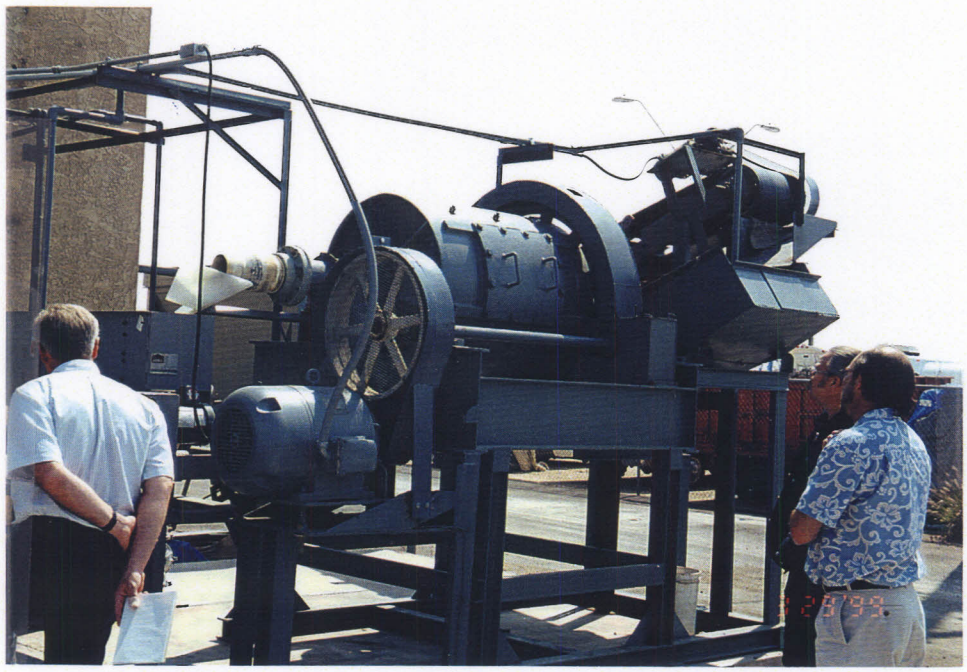


Photo P-2. Ball mill at Energy International. Note scrupulously clean condition, and absence of dirt or staining on conveyor belt (upper right). Left to right, M. Shumaker, B. Clay, Leon Harrington (EII). 3/29/99 by M. Chatterton.

Photo P-3. Another view of the ball mill at Energy International. Note gray colored screening and classifying system, with plastic chutes into a plastic tub. Note overall clean and pristine appearance, and absence of stain or residue in white plastic chute. Pump at bottom center is mounted on particle board, which will normally disintegrate under wet conditions, such as would occur here.
M. Chatterton, 3/29/99

Photo P-4. Cascading agitation tank system at Energy International. Covers are gray-painted plywood. Note clean appearance, and absence of drip stains on tanks, and intact condition of paper labels. (Greenish coloration of photo is due to fluorescent lighting.) M. Chatterton, 3/29/99

Photo P-5. Collection end of belt dryer at Energy International. Apparatus appears to have been used, but for a minuscule volume of material. Note exceptionally clean and unabraded condition of green paint, and absence of sludge buildup on belt and at edges. Pump to lower left is mounted on flakeboard, which is not designed for use in wet areas. M. Chatterton, 3/29/99

Photo P-6. Resin tanks at Energy International. Note extreme cleanliness of columns, collection tanks, and floor. Mounting pedestal is steel angle iron which shows no evidence of even minor rust. M. Chatterton, 3/29/99.

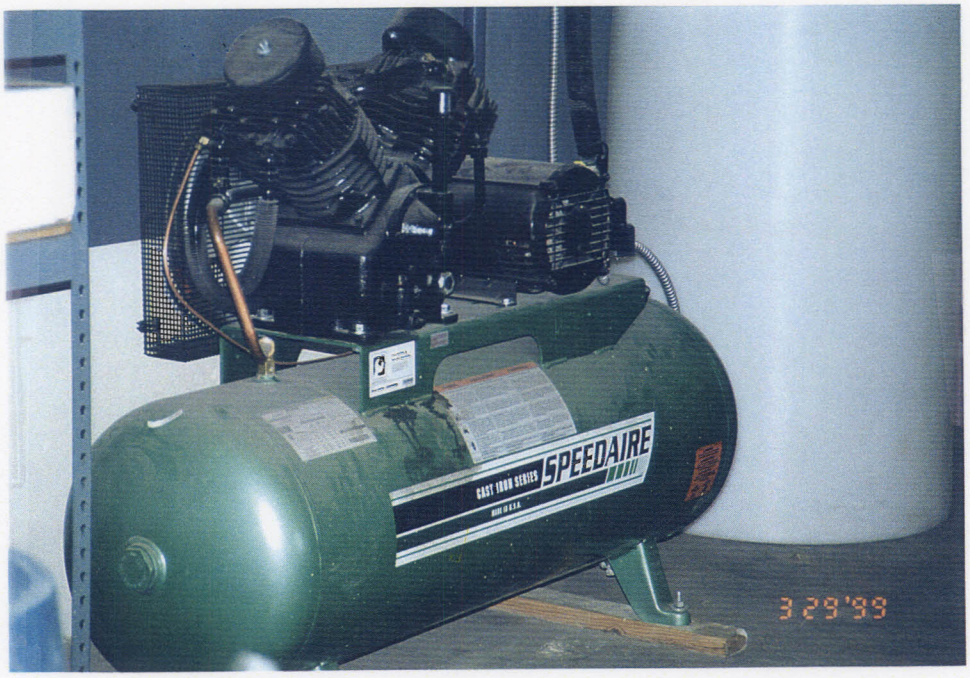


Photo P-7. Floor mounted air compressor at Energy International. Note light coating of dust with fingerprints. Compressor is mounted on lumber, and is adjacent to a liquid tank. Note absence of water staining on mounting lumber. We noted no evidence of floor staining due to internal condensation drainage. There are oil drips just below the crankcase which are indicative of filling only. Repeated use would produce a thicker, dirty buildup due to oil checking and normal oil oozing. M. Chatterton, 3/29/99.

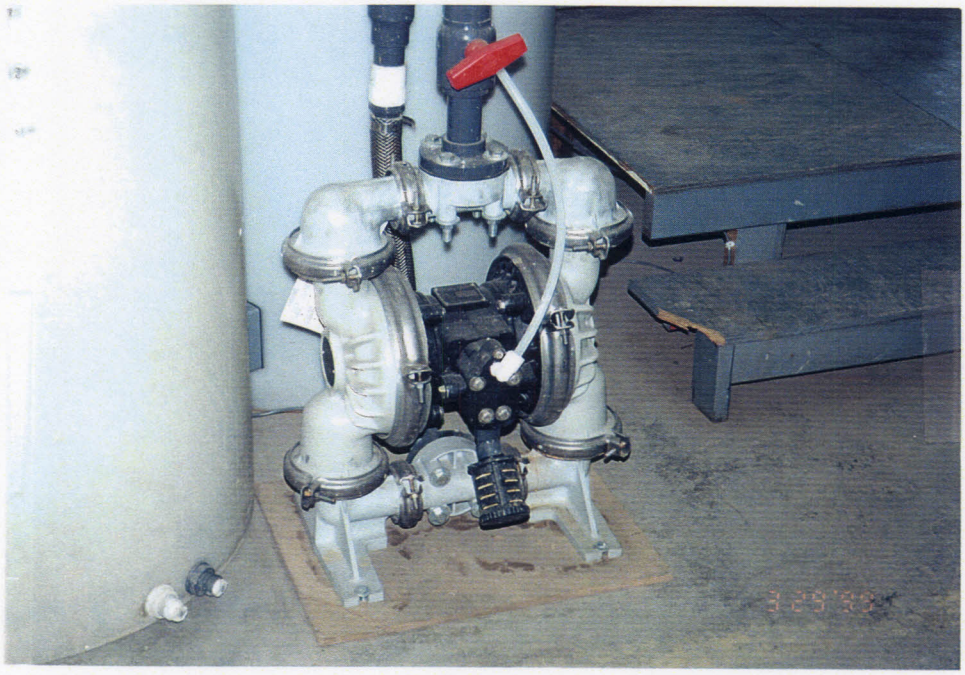


Photo P-8. Floor mounted pump at Energy International. Pump appears to be for slurry transfer, and is mounted on particle board adjacent to drains on a plastic tank. Particle board will normally disintegrate under wet conditions, such as would be expected here. Note absence of water staining on floor, pump base, and bottom of steps. M. Chatterton, 3/29/99.

Photo P-9. Another view of belt dryer at Energy International, showing tails conveyor. Note clean condition of paint on inside conveyor rails and lack of residue buildup under end of the conveyor (green frame). M. Chatterton, 3/29/99.

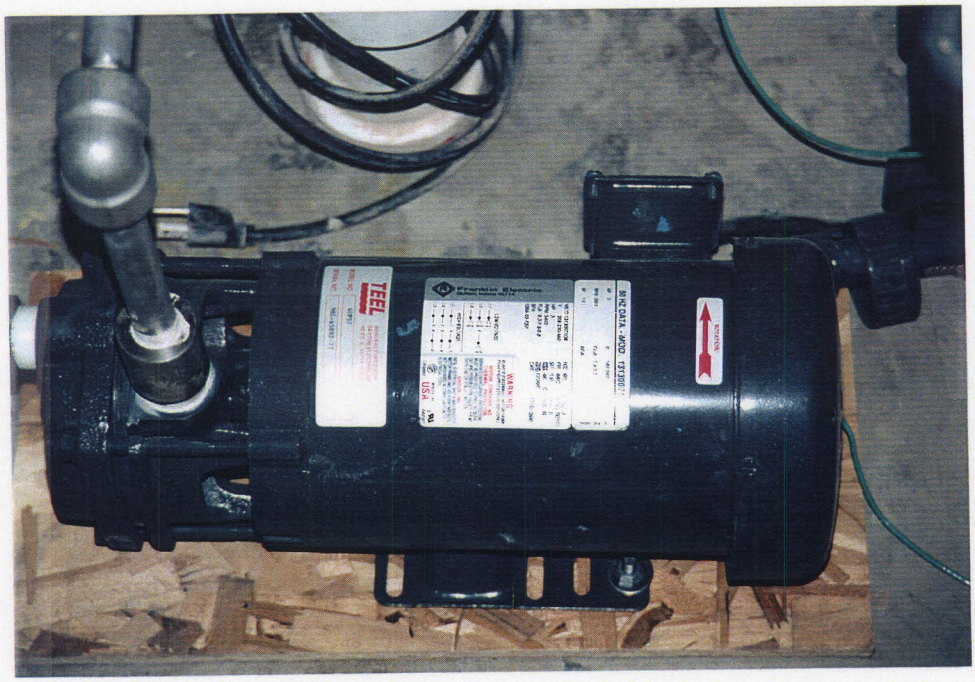


Photo 10. Close-up of pump shown in P-5 at Energy International. Pump is mounted on flake board, which is not intended for use in wet or damp areas, such as would be expected here. . Note complete absence of water staining on wood and on pump body. M. Chatterton, 3/29/99

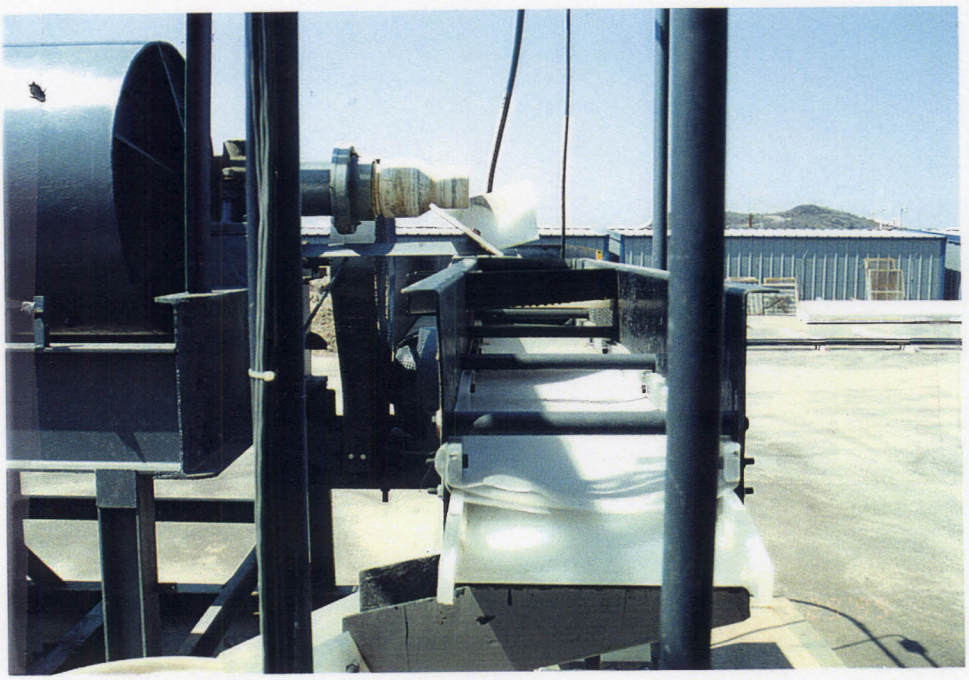


Photo P-11. Internal view of screener and classifier at Energy International. Note shiny paint on inside and lack of scratching, gouging, or staining. M. Chatterton, 3/29/99.

Photo S-1. Claimant identifying the locations for sampling. The pink flagging marks the site of NV-A. Left to right, M. Shumaker, I. Matheson (claimant), C. Morris (claimant's representative), B. Clay. M. Chatterton, 3/9/99.

Photo S-2. Location NV-A prior to sampling. B. Clay, 3/9/99.

Photo S-3. BLM backhoe clearing the surface at NV-A prior to sampling. Stockpile in the background is from claimants mining operation. It is the magnetic fraction of the 1/4 inch minus fraction. M. Shumaker, 3/9/99.

Photo S-4. Sample #1 (bulk) being taken at location NV-A. Buckets in the back of a pickup, on a tarp, with the backhoe operator dumping material from the pit directly into the buckets. B. Clay directing the operator. M. Shumaker, 3/9/99.

Photo S-5. Sample #1 (bulk) being taken at location NV-A. Closeup of the backhoe dumping sample material into the buckets. M. Chatterton, 3/9/99.

Photo S-6. Location NV-A after the collection of sample #1 (bulk). M. Chatterton, 3/9/99.

Photo S-7. B. Clay and J. Mur collecting channel sample 1 at location NV-A. M. Chatterton, 3/9/99.

Photo S-8. Location NV-A after the collection of channel sample 1. M. Chatterton, 3/9/99.

Photo S-9. Foreground, M. Chatterton sealing bucket with nylon strapping tape to prevent tampering with the sample. Background, B. Clay filling buckets with sample material from the safety tarp. M. Shumaker, 3/9/99.

Photo S-10. Sample #1 (bulk) secured on pallets on a BLM flat bed trailer ready for transportation to the Las Vegas Field Office. M. Shumaker, 3/9/99.

Photo S-11. B. Clay separating the 1/4" minus portion of sample 1 into magnetic and non-magnetic fractions with a shop magnet. M. Shumaker, 3/9/99.

Photo S-12. Backhoe excavating the sample pit at location NV-D. B. Clay, 3/9/99.

Photo S-13. Sample pit at location NV-E prior to collecting the sample. B. Clay, 3/9/99.

Photo S-14. Sample pit at location NV-E after collecting the sample. B. Clay, 3/9/99.

Photo S-15. Claimant collecting sample at location NV-E after we had sampled. In this instance the claimant is using a 5 gal bucket. Note the grizzly pan placed on the bucket. The oversize material was just dumped without being measured. J. Mur, 3/9/99.

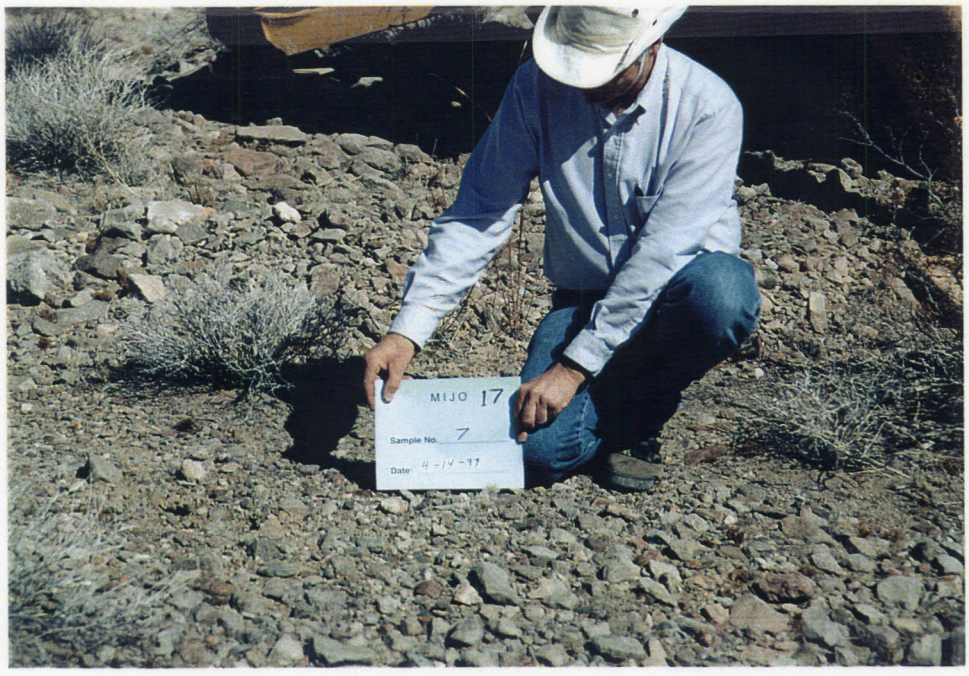


Photo S-16. Location NV-F prior to collecting the samples. M. Chatterton, 4/14/99.

Photo S-17. M. Shumaker filling the sample buckets out of the backhoe bucket at location NV-F. This is sample 7. M. Chatterton, 4/14/99.

Photo S-18. Sample pit at location NV-F after collecting the samples. M. Chatterton, 4/14/99.

Photo S-19. Splitting samples 7 thru 10 in the yard at the Las Vegas Field Office. B. Clay pouring split sample into bag held by M. Chatterton. Sample splitter in the lower right portion of the photo. M. Shumaker, 4/14/99.

Photo S-20. Location GL-S after the collection of some of the complex blank material. M. Shumaker, 4/10/99.

Photo S-21. B. Clay and M. Chatterton feeding sample material into the Goldsaver. The cylindrical object below the bucket is the rotating trommel. The chute with the blue label GOLD KING on it is the oversize chute. M. Shumaker, 3/11/99.

Photo S-22. M. Shumaker checking water flow in the trommel. In the foreground there is the 24-inch Knudsen bowl. In the lower right corner of the photo the safety tub is visible. J. Mur, 3/11/99.

Photo S-23. Closer photo of the Knudsen bowl. Material is washed down the chute from the Goldsaver and enters the Knudsen bowl in the center. The lighter material is then pushed to the top and out, leaving the heavy materials, like gold, in the bottom. This piece of equipment can recover extremely fine gold. J. Mur, 3/11/99.