

CLIFTON MINING COMPANY

**UPDATE OF
BEHRE DOLBEAR REPORT**

PJ96-24

**REVIEW OF THE ORE RESERVES AND
EXPLORATION POTENTIAL
AT CLIFTON'S GOLD HILL PROPERTY**

October 2000

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1.0 EXECUTIVE SUMMARY

Robert Cameron, Consulting was commissioned by Clifton Mining Company to undertake an update of the Behre Dolbear's review of the ore reserves and exploration potential at the Clifton property in the Gold Hill area of Tooele County, Utah. Behre Dolbear's original report was dated April 1996 and, subsequent to the report, there were five updates issued by Behre Dolbear adding to Clifton's resource base. Most of this report is extracted from the original Behre Dolbear report which focused on Clifton's:

- ◆ Reserve estimation data and procedures;
- ◆ Reserve estimate;
- ◆ Resource potential of the property; and
- ◆ Preliminary assessment of environmental permit requirements, status and constraints.

The Clifton property lies in the northern Deep Creek Mountains of west-central Utah in the Gold Hills Mining District. The structural history of the Gold Hill area is complex and characteristic of polyphase deformational sequences with several stages of folding and faulting.

The area of the Clifton property of current interest is a set of shear zone veins. Thirty-eight veins have been identified and are steeply-dipping striking north-to-northeasterly in an equigranular quartz monzonite intrusive. Apparent strike lengths of these veins are greater than 6,000 feet. Of these veins, 20 have been sampled and Clifton has calculated resources on eight.

Behre Dolbear in 1996 reviewed Clifton's sampling and estimation procedures and found them acceptable to produce a preliminary reserve statement conforming to Ontario Securities Act and Regulations for Measured and Indicated Resources Reserves. Subsequent to issuing their report, Behre Dolbear reclassified the reserves as resources due to uncertainty in metal prices and some engineering details. Table 1.1 summarizes what Robert Cameron, Consulting believes the Measured and Indicated Resource statement should be for the Clifton property as of November 2000.

Table 1.1
Estimate of Measured and Indicated Resources
November 2000

Category	Tons	Ag (opt)	Ounces Ag	Au (opt)	Ounces Au	Pb (%)
Measured	107,178	8.41	901,597	0.045	4,802	5.09
Indicated	474,122	8.15	3,905,133	.051	21,824	5.22
Total	581,300	8.05	4,806,730	0.050	26,626	5.20

Behre Dolbear believed in 1996 that there is excellent potential for additional reserves to be identified at the Clifton property. Robert Cameron, Consulting agrees with that opinion since, currently, only 11 of the 38 identified shear veins have been included in resources calculations and, the calculated resource represent less than 10 percent of the potential of these veins. Most of the preliminary sampling on other veins indicates that these veins will most likely prove out with similar grade and thickness to those currently within the resource basis after the planned program of sampling and drilling has been completed.

Robert Cameron, Consulting did not complete an update to Behre Dolbear's environmental review. Discussions with the Clifton Mining Company indicated that they currently hold all the necessary permits for the current status of their operations. The Behre Dolbear 1996 review has been included in this report for completeness. It should be noted that the Behre Dolbear's environmental review is not suitable to substantiate a request for financing, however they found no fatal flaws in Clifton's permitting efforts.

2.0 INTRODUCTION

Clifton Mining Company (Clifton) commissioned Robert Cameron, Consulting to prepare an update of the Behre Dolbear & Company, Inc. 1996 review of the ore reserves and exploration potential at the operation of its Clifton property in the Gold Hill area of Tooele County, Utah. Behre Dolbear commenced its effort on March 18, 1996. In 1996, Dr. Robert E Cameron was the Director of Geostatistics and Mine Planning for Behre Dolbear. He was the principal investigator for Behre Dolbear and spent three days on site.

Subsequent to the site visit, Robert Cameron, an Associate of Behre Dolbear, conducted 5 reviews and additions to the resource reported in the original report. This report compiles the information previously reviewed by Behre Dolbear into a single document.

3.0 SCOPE AND PROCEDURES

Robert Cameron, Consulting was commissioned by Clifton Mining Company in October 2000 to undertake an update of the Behre Dolbear's review of the ore reserves and exploration potential at the Clifton property in the Gold Hill area of Tooele County, Utah. Behre Dolbear's original report was dated April 1996 and, subsequent to the report, there were five updates issued by Behre Dolbear adding to Clifton's resource base. Most of this report is extracted from the original Behre Dolbear reports.

For the original report, Behre Dolbear's effort focused on the preliminary review of Clifton Mining's assets. Their activities included:

- ◆ Site Visit by a Behre Dolbear professional to review work to date, on-site data and establishment of future information needs;
- ◆ Coordination with Clifton to gather existing public domain information;
- ◆ Review of Clifton's estimation of the geologic reserves; and
- ◆ A preliminary assessment of environmental permit requirements, status and constraints.

During the site visit, Dr. Cameron, then the Director of Geostatistics and Mine Planning of Behre Dolbear and currently President of Robert Cameron, Consulting:

- ◆ Toured the mine and mill sites;
- ◆ Reviewed sampling locations and continuity of mineralization;
- ◆ Reviewed assay procedures, the qualifications of laboratories utilized, and the frequency of submission of check samples;
- ◆ Reviewed all geologic cross sections and checked approximately 20 percent of the sections for accuracy in plotting of geology, geologic features, assayed intervals, and grades;
- ◆ Reviewed reserve calculation parameters including:

- The justification of the density factor used;
 - Inclusion of dilution;
 - The justification of the cut-off grade used; and
 - The criteria used in categorizing reserves;
-
- ◆ Reviewed the resources and potential of the Clifton Mining property;
 - ◆ Reviewed both on-property and off-property exploration projects; and
 - ◆ Reviewed and discussed his preliminary conclusions with Clifton management.

3.1 DATA SOURCES

For this update, Robert Cameron, Consulting was provided with information and reports developed by Clifton Mining Company and its consultants. Most of the data came from the files and consultants reports of the Clifton Mining Company. Robert Cameron, Consulting relied primarily upon the original report and update letters issued by Behre Dolbear & Company, Inc. to complete this updated report.

Robert Cameron, Consulting followed standard professional procedures in preparing the content of this report, which is based primarily on details, information, and assumptions provided by Clifton Mining. Robert Cameron, Consulting, therefore, cannot guarantee the correctness of all of the information supplied, but, to the extent of its investigation and within the scope of the work delegated to it, Robert Cameron, Consulting believes that the report contained herein is substantially correct.

All units used in this report are English unless otherwise specified.

4.0 CLIFTON PROPERTY

4.1 PROPERTY LOCATION

The Gold Hill/Clifton Mining District straddles the Gold Hill and Clifton 7.5' quadrangles, Tooele county, northwest Utah. It lies in the east central part of the Great Basin section of the Basin and Range Province, at the north end of Deep Creek Mountains. The area is characterized by highly dissected hills of relatively low relief. The Town of Gold Hill, immediately north of the property, has an elevation of 5,321 feet. The area is bounded to the east by the Gréat Salt Lake Desert at an altitude of approximately 4,300 feet, to the north by Dutch Mountain with an elevation of 7,735 feet, to the west by Clifton Flat at an approximate elevation of 6,600 feet and to the south by Montezuma Peak with an elevation of 7,369 feet. The relatively low hills at the ghost town of Clifton, located in the south part of the property, merge westward into Ochre Mountain which has an elevation of 7,541 feet. Figures 4.1 and 4.2 show the detailed location of the Clifton property.

4.2 ACCESS

Access to the property is by alternate I-93, a paved two-lane highway, south 24.6 miles from Wendover, Nevada to the Ibapah Road. The Ibapah Road, a paved two-lane highway is then taken east a distance of 15.7 miles to the Gold Hill turn-off. A gravel all-weather road provides access to the town of Gold Hill, 11.2 miles to the southeast. An all-weather road leading south from Gold Hill provides access to the property.

The Clifton property is located approximately 5 miles south of Gold Hill. Numerous dirt roads provide access to most parts of the property. The roads are generally passable with a high-centered two-wheel drive vehicle although a four-wheel drive is preferable.

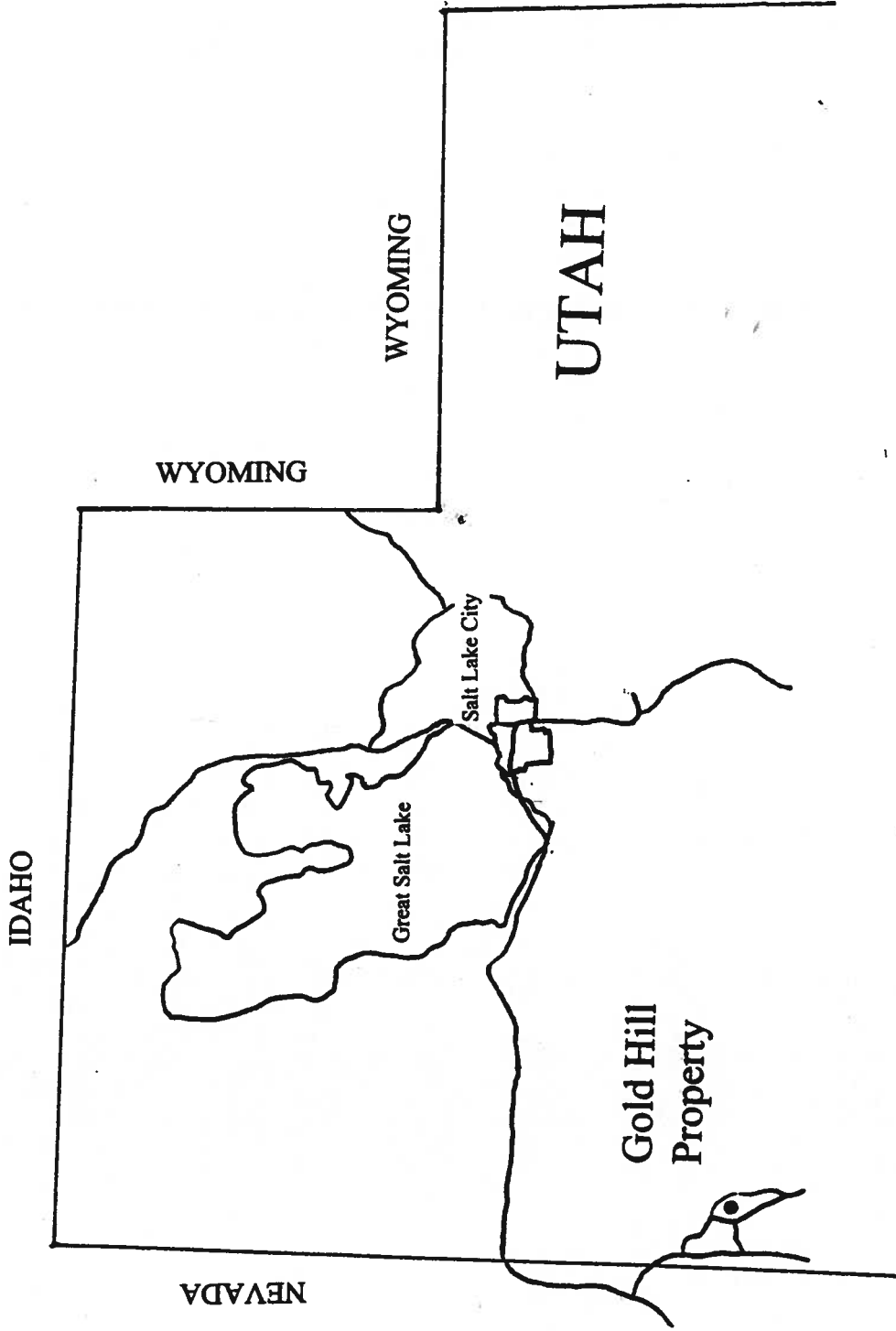


Figure 4.1 - General Location Map

4.3 LAND STATUS

Clifton Mining Company was formed to consolidate ownership and control of individual properties and claims within the Clifton Mining District in Utah, so that a contiguous group of claims could be explored and operated as a single property. The Clifton property, as reviewed by Behre Dolbear in 1996, consisted of 19 patented and 49 unpatented (lode) contiguous mining claims, and one State Mineral Lease totaling approximately 1,823 acres located in the Clifton Mining District, Tooele County, Utah. Since the original report, Clifton Mining has acquired an additional 1,620 acres in 81 claims in the Clifton Mining and Clifton Gold's merger, has acquired the Southern Confederate Claim, has acquired roughly 173 acres of patented claims from Woodman Mining Company and has options on 23 claims consisting of 460 acres owned by American Consolidated Mining Company. This brings its current property position, in November 2000, to roughly 4073 acres. Neither Robert Cameron, Consulting nor Behre Dolbear completed a review of the legal status of ownership, but has accepted the information provided by Clifton. Appendix A lists summarizes these claims held by Clifton.

4.4 REGIONAL HISTORY

Historically the Clifton-Gold Hill area has undergone extensive mining activity, dating back to the late 1800's. Around 1857, galena rich samples attracted the attention of California settlers and some stayed to prospect for minerals. As a result, the town of Clifton and the Clifton (Gold Hill) Mining District was established. Placer gold was discovered in Gold Hill in 1858, but prospectors were hindered by repeated Indian attacks and the area was abandoned.

In 1872, a lead smelter was constructed at Clifton and 1,500 tons of high-grade lead-silver ore was treated. The smelter at Clifton was moved to Gold Hill in 1874 where an additional 500 tons of ore from the Western Utah Copper Company was treated. The mining boom in Gold Hill began in 1892 when Col. J.F. Woodman build a new mill and smelter in Gold Hill. It produced \$300,000 in gold and silver ore between 1892 and 1896.

The mill was in operation for 23 months during the years 1892 to 1895. The average grade of the ore treated in the mill is reported to have average \$20 to \$30 per ton in gold at a gold price of \$20.67 per ounce. The area then remained relatively inactive until 1905 when renewed activity centered on the development of copper ore. Gold Hill and Wendover, Nevada were linked by the Deep Creek Railroad in 1917 which resulted in a third mining revival. A 1920 publication reported that the district's gross ore production from 1892 to 1917 was \$951,803 in gold, silver, copper, and lead.

Production of tungsten and bismuth in the district began around 1912. Ore comprising copper oxides and sulfides with scheelite were mined during 1958. Silver Queen Mines extracted an estimated 15,000 tons of ore from the Yellow Hammer pit in 1970. In 1985, American Consolidated Mining Company (ACMC) extracted 50,000 tons of gold-silver-copper-tungsten ore.

The Clifton/Gold Hill Mining district has produced gold, copper, arsenic and tungsten and minor amounts of lead, zinc, silver and bismuth. Total recorded production from 1901 to 1964 includes 25,000 oz Au, 832,000 oz Ag, 1,700 short tons copper and lesser quantities of lead and zinc. Complete bismuth and tungsten production statistics are not available.

5.0 GEOLOGY

5.1 REGIONAL GEOLOGY

The Clifton Mining Company property lies in the northern Deep Creek Mountains of west-central Utah, immediately east of the Nevada-Utah state line. The Deep Creek Mountains are a northerly-trending fault-bound range in the northern Basin and Range province. Underlying rock types include Paleozoic sediments and Mesozoic to Cenozoic igneous and metamorphic lithologies.

The Paleozoic sedimentary sequence consists of Cambrian through Pennsylvanian aged clastics and carbonates with typical miogeoclinal facies associations. Total thickness of the regional sedimentary stratigraphic column in the Gold Hill area is approximately 12,800 feet.

Mesozoic (Jurassic) granodiorites are volumetrically the most significant intrusives in the area; Tertiary diorite (pre-Oligocene) and quartz monzonite (Oligocene) are reported locally, primarily in the northern Deep Creek Mountains. Volcanics in the vicinity are Oligocene-Miocene in age, and range in composition from basalt through rhyolite. Both flows and pyroclastic horizons are present.

Restricted metamorphic units appear to be the result of local contact metasomatism and consist predominantly of calc-silicate skarns. As such, these may equally be considered alteration zones rather than metamorphic rocks. Pegmatitic zones present locally on the APMC property and have been interpreted as pegmatites as replacement phenomena.

The structural history of the Gold Hill area is complex and characteristic of polyphase deformational sequences in a tectonically active environment. Several stages of folding and faulting related to both compressional and extensional events are present. Eardley in 1962 recognized at least four and possibly five phases of deformation, with each phase consisting of an initial compressive stage and a final extensional phase.

Alteration processes within the carbonate sequences include recrystallization, silicification, bleaching, dolomitization, and formation of calc-silicate skarns. Resultant fabrics include the development of micaceous andalusite hornfels, diopside-actinolite-garnet and wollastonite-spadaite skarns, and jasperoids with associated barite and opal.

Alteration in the intrusives consists of diopside-orthoclase alteration associated with actinolite and garnet, chloritization, sericitization, propylitization, and silicification associated with quartz-carbonate flooding.

Mineralization found in the area to date has been subdivided into a tripartite classification system. These deposit types include: contact metasomatic deposits, vein deposits, and replacement deposits.

Contact metasomatic deposits exhibit an intimate spatial relationship to the limestone-granodiorite contact and are characterized by the presence of a distinctive calc-silicate gangue mineralogy consisting of wollastonite-amphibole (tremolite?)-garnet-tourmaline-diopside-quartz.

The characteristic economic mineral association is native gold-pyrite-chalcopyrite-bornite-covellite-molybdenite-scheelite. The Frankie mine, located north of Clifton's property, is an example of a local contact metasomatic deposit.

Economic veins in the area are of two types: either quartz-carbonate-adularia or simple quartz veins. The quartz carbonate-adularia veins are reportedly restricted to the body of the intrusive and are mineralized with both sphalerite and galena as well as beryllium. Veins of this type are well exposed in the northern part of the property and are known simply as the beryllium veins. Quartz veins do not exhibit a host preference: mineralization consists of scheelite-pyrite-chalcopyrite-bismuth-gold as well as secondary quartz-hematite-magnetite. Veins of this type are represented by the Lucy L mine. It is probable that these zones could more accurately be described as structurally controlled veins or shear zone-related mineralization.

Replacement deposits include both limestone- and intrusive-hosted variants. The limestone-hosted type of deposits may be found in either fractured but unaltered, or silicified, hematized and

brecciated units. Ore mineralogy may include any of the series arsenopyrite-galena-sphalerite-chalcopyrite-pyrite-pyrrhotite-tetrahedrite. Where oxidized, a variety of arsenate minerals are locally present. The Smelter Tunnels workings on the Herat claim in the Clifton area is typical of replacement deposits developed along the limestone-monzonite contact.

Intrusive-hosted deposits consist of scheelite-molybdenite-powellite mineralization intergrown with coarse bladed actinolite and perthitic orthoclase. Associated minerals include chalcopyrite-pyrite-copper oxides and abundant magnetite. Gangue mineralogy consists of actinolite-perthite-garnet-apatite-tourmaline-quartz. Both the Yellow Hammer and Reaper Mines have been classified as intrusive-hosted replacement deposits.

5.2 PROPERTY GEOLOGY

The Clifton Shear Zones are located on the north side of Montezuma Peak, and the old townsite of Clifton. The shear zones are a series of parallel to near parallel, steeply-dipping north-to-northeasterly striking shear zone sets or veins, in an equigranular quartz monzonite intrusive. The scale of the individual shear zones is regional with documented strike lengths in excess of 1,500 feet, and apparent strike lengths greater than 6,000 feet. V.C. Heikes reviewed this area as follows:

“In the quartz monzonite forming the northern part of Clifton Mountain east and northeast of Clifton many veins, composed essentially of quartz and carbonate, carry small amounts of galena and other sulphides. Their chief value has been lead and silver.

Most of the veins outcrop prominently and can be traced for hundreds of feet. The general strike is about N60E and the dip is steeply east: both, however, vary considerable. Most veins show a banded structure, in some indistinct and some well developed. The relative amounts of quartz and carbonates differ in different veins and in different parts of a single vein. Some veins are composed very largely of carbonates - probably iron-magnesium-calcium carbonates of variable composition.

The wall rock has undergone pronounced sericitation. Chlorite and a green pleochroic mica are present, but magnesian minerals appear to be less abundant than in the wall rock of the tourmaline quartz veins.”

The veins appear to be braided and imbricated in echelon shear sets. The minerals encountered in these structures are mainly oxides of lead in a gangue of quartz and carbonates. The lead minerals identified are cerussite, anglesite, plumbojarosite, and fine grained galena, with minor amounts of mimetite and phosgenite. A significant amount of silver is contained in these veins, along with minor amounts of free milling gold. Copper is also present in the veins in the form of malachite, azurite, chrysocolla, and minor cuprite and chalcopyrite.

There is demonstrated evidence that a zone of mineral depletion exists for one to four feet beneath the surface outcrop. At times, it is necessary to remove the first two to three feet of the vein to gain a sample.

There are 38 shear veins that have been identified by Clifton to date. Of these veins, 20 have been sampled. The shear veins are exposed on the surface and penetrated by numerous shafts, tunnels, and pits. Maps, sample numbers, and sample locations, as well as drill locations and results are available for review at the Company's corporate offices.

6.0 MINERAL RESOURCES AND RESERVES

Behre Dolbear was requested in 1996 to categorize the reserves at the Clifton Property according to Ontario Securities Act and Regulations, National Policy Statement No. 2-A. Criteria for these standards are:

- ◆ **Ore** means a natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated;

- ◆ **Proven Reserves or Measured Reserves** are those materials for which tonnage is computed from dimensions revealed in outcrops or mine workings and/or drill holes and for which the grade is computed from the results of adequate sampling. The sites for inspection, sampling and measurement are so spaced and the geological character so well defined that the size, shape and mineral content are established. The computed tonnage and grade are judged to be accurate. It should be stated whether tonnage and grade of 'Proven' or 'Measured' reserves are in situ or extractible. Dilution factors and cutoff grades, if used should be clearly explained and the vertical and horizontal projections from intersection or sample points should be given;

- ◆ **Probable Reserves or Indicated Reserves** are those materials for which tonnage and grade are computed partly from specific measurements, samples, or production data, and partly from projections for a reasonable distance on geological evidence. The sites available for inspection, measurement and sampling are too widely or otherwise inappropriately spaced to outline the material completely or to establish its grade throughout. It should be stated whether the tonnage and grade of 'Probable' or 'Indicated' reserves are in situ or extractible. Dilution factors and cutoff grades, if used, should be clearly explained and the vertical and horizontal projections from intersections or sample points should be given.

- ◆ **Possible Reserves or Inferred Reserves** are those materials for which quantitative estimates are based largely on broad knowledge of the geological character of the deposit and for which there are few samples or measurements. The estimates are based on inferred continuity or repetition for which there are reasonable geological indications. Bodies that are completely concealed may be included if there is specific evidence of their presence.

- ◆ **Summation of Reserves** - The tons and grades of the two classes of reserves as defined in subsection 2.7.2 and 2.7.3 (Proven and Probable) may be combined into one total tonnage and average grade provided these two categories are disclosed separately in the report but the Possible or Inferred reserves must not be included in a combined total summation of all three categories and should not be used in feasibility studies.

Subsequent to the report, Behre Dolbear reclassified the reserves as resources due to uncertainty in some of the economic parameters and engineering details. Robert Cameron, Consulting agrees with the reclassification for the present time. This moves Proven Reserves into Measured Resources, Probable Reserves into Indicated Resources and Possible Reserves into Inferred Resources.

6.1 TECHNICAL PROCEDURES

Clifton's database and technical procedures for reserve calculations for the Clifton Property were reviewed in detail by Behre Dolbear to assure that appropriate procedures were followed.

6.1.1 Sampling

In general, Clifton samples the veins by taking a chip sample across the width of the vein. These chip samples are placed in sample bags and then sent to be assayed. Sampling is conducted on both the surface and within underground workings. The majority of surface samples, to date, have been collected from old, shallow prospecting pits since the first few feet of the veins tend to be very low

grade because of surface leaching and alteration. Hence, the irregular spacing and limited extent of the surface sample set was determined by the random locations of these old pits.

The underground samples have been taken from old mines generally opened around the turn-of-the-century. Clifton personnel have taken samples in areas readily assessable from these old workings. The natural tendency with this chip sampling technique is for the geologist to collect a greater volume on material in areas of apparent stronger mineralization since the material is generally weaker and easier to collect. Behre Dolbear believes that this sampling technique may create a bias to the Clifton data but, believes from, field observations, that sampling has been conducted in a manner to give a rough overall picture of the potential reserves. Future reserves definition and refinements should be conducted with data obtained through drilling programs; as currently planned by Clifton Mining.

6.1.2 Assay Laboratories

Most of the assay work conducted for reserve estimation was completed by X-RAL, Rocky Mountain Geophysical, Kimball, University of Idaho, Chemex, and Cone Geochemical Laboratories. Behre Dolbear has experience with most of these laboratories and believes they are reputable commercial assaying laboratories.

6.1.3 Assaying Procedures

The assay data used for ore reserve calculation are standard fire assays with an AA finish. Metallic assays were not conducted to determine coarse gold. Behre Dolbear believes that the assaying procedures meet acceptable industry practices and will provide an acceptable reserve estimate if conducted in the manner presented.

6.1.4 Check Assays

Clifton has not developed a check assay procedure or program, but has conducted multiple assays on some of the higher assay material. In areas where multiple assays exists, Clifton uses the lower

values to calculate their reserves. Behre Dolbear has seen evidence however that there tends to be a good correlation between the multiple assays of the higher grade material. Behre Dolbear believes that a more systematic approach to check assaying should be implemented for future sampling programs. Behre Dolbear also believes that the current procedures of eliminating the highest assays does ensure that some of the bias is eliminated from the Clifton reserve estimates and is acceptable for Clifton's current reserve estimates.

6.1.5 Capping of Assay Grades

High grade values in a sampling pit or area are generally eliminated by the Clifton geologist before averaging and assigning a grade. Once a sufficient database of samples have been collected, Behre Dolbear would recommend that Clifton conduct appropriate statistical studies to determine the proper capping level.

6.1.6 Sample Locations

The sample locations were not determined by surveying. Sample locations have been determined and plotted on long-section in reference to surface or underground workings or other prominent feature located on either the USGS 7.5 minute quads or the 1993 aerial photographs completed by the US Department of Agriculture. Typically, Clifton will determine the position from surface measurements in respect to one of the mine shafts or mine adits to locate and plot their sample position. While this is sufficient for the current reserve and resource statement, Behre Dolbear would recommend surveying exact sample locations in the future tied into the Utah State Plane Coordinate system.

6.1.7 Tonnage Factor

Clifton applies an average tonnage factor of 12 cubic feet per ton of ore. The tonnage factor is based upon specific gravity measurements of numerous ore samples made by Dawson Laboratories. Behre Dolbear believes that adequate determination of the tonnage factor has been made for the current estimates. Additional work will be warranted after future drilling is completed.

6.1.8 Bulk Sampling/Metallurgical Testing

Metallurgical testing was performed on samples by Dr. Pesic of the University of Idaho, a reputable facility. An 80 ton large bulk samples for testing were taken and milled by M&W Milling & Refining Inc. (M&W) of Virginia City, Montana and the resulting concentrates were shipped to the ASARCO smelter. This bulk sample milling test resulted in a potential smelting contract for the concentrates used by Clifton for their economic analysis of the in-situ mineralization.

6.1.9 Dilution

Dilution is not included in Clifton's reserve calculations. Behre Dolbear finds this to be not in conformance with industry practice and standards. However, because the vein cleanly breaks against both the hanging and footwall as evidenced in the underground workings, Clifton and potential mining contractors have hypothesized that little dilution should occur with the proposed mining methods. Robert Cameron, Consulting agrees with Behre Dolbear when they recommended a 5 percent dilution factor be included when Clifton's converts the resources into reserves.

6.1.10 Estimation Procedures

Clifton utilizes a manual sectional method for the estimation of the resources. The general procedures utilized by Clifton for manual resource estimation are:

- ◆ Sample grade and vein thickness are compiled and averaged in each of the surface sampling pits;
- ◆ Surface and underground samples are plotted on long-sections in respect to a known point such as a mine shaft or mine adit;
- ◆ Areas of influence are plotted;

- ◆ Areas were planimetered;
- ◆ An in-situ tonnage computed by multiplying area by vein thickness; and
- ◆ Reserves were summarized.

The long sections are generated on the veins only within the areas with sufficient sampling. While the veins extend quite a distance beyond sample points, these extensions were not included in the resource or reserve calculations.

Measured Resources are typically plotted as a rectangular area 50 feet from a sample. Indicated resources are those resources 50 feet from the surface where continuity of the vein has been mapped between sample points but greater than 50 feet from a sample. Indicated Resources also include the down dip extension of the measured resources: either 200 feet or to an elevation in which the underground workings have shown continuity. The Clifton Inferred Resource estimate is material within the long sections outside of the area believed to be Measured or Indicated but still with strong evidence to infer continuity. The long-sections used by Clifton for reserve calculations are shown in Appendix B.

All resources plotted and estimated by Clifton cover the mining, processing, and smelting and refining costs (in 1996) including appropriate recoveries. Mining costs were based on utilizing contract mining as bid by Patrick Harrison Constructors, Inc., milling costs were based on internal estimates developed jointly by Clifton Mining and Dr. Pesic of the University of Idaho and recoveries were based on metallurgical testing conducted by Dr. Pesic of Idaho and the results of a 80 ton bulk sample test sent to M&W of Virginia City, Montana.

6.2 RESOURCE STATEMENT

Clifton has determined a measure and indicated resource at the Clifton property of 581,300 tons grading 8.05 ounces of silver per ton, 0.050 ounces of gold per ton and 5.20 percent lead. Table 6.1 divides these calculated reserves between measured and indicated. Two veins, 130' Shaft and Lower

George did not have the Measure and Indicated resources tabulated separately so all of the tonnage was included in the Indicated category. Table 6.2 shows the resources by vein.

Table 6.1 Clifton's Estimate of Measured and Indicated Resources November 2000						
Category	Tons	Ag (opt)	Ounces Ag	Au (opt)	Ounces Au	Pb (%)
Measured	107,178	8.41	901,597	0.045	4,802	5.09
Indicated	474,122	8.15	3,905,133	0.051	21,824	5.22
Total	581,300	8.05	4,806,730	0.050	26,626	5.20

Table 6.2
Clifton's Detailed Estimate of Measured and Indicated Resources
November 2000

Vein	Tons	Ag (opt)	Ounces Ag	Au (opt)	Ounces Au	Pb (%)
Measured						
George Washington	9,200	12.60	115,898	0.052	476	5.14
Lynx	2,258	3.88	8,750	0.047	107	2.59
Lion	13,959	2.38	33,169	0.034	470	2.15
Bobcat	6,722	5.24	35,246	0.081	544	3.09
Yellow Cougar	25,348	13.49	341,846	0.0662	1,679	5.75
Ridgeline	8,917	3.21	28,627	0.018	158	3.82
30 foot Shaft	10,167	8.61	87,531	0	0	8.32
Southern Confederate	12,150	7.76	94,291	0.0756	918	5.90
Hidden Mine Vein	18,457	8.47*	156,239	0.0244	450	5.73
Total Measured	107,178	8.41	901,597	0.0448	4,802	5.09
Indicated						
George Washington	92,470	12.60	1,165,122	0.053	4,900	8.66
Lynx	5,423	6.80	36,876	0.063	342	4.70
Lion	58,338	2.38	138,844	0.034	1,984	2.15
Bobcat	36,280	5.37	194,970	0.083	3,010	3.83
Yellow Cougar	70,422	11.40	802,810	0.076	5,352	2.62
Ridgeline	41,710	3.20	133,472	0.018	751	3.80
30 foot Shaft	16,255	8.60	139,793	0	0	8.30
Southern Confederate	31,637	7.76	245,503	0.07501	2,373	5.90
Hidden Mine Vein	86,569	8.47	733,170	0.02439	2,111	5.73
130' Shaft Vein (M+I)	14,222	9.08	129,136	0.03092	440	7.78
Lower George (M+I)	20,796	8.92	185,437	0.02698	561	5.34
Total Indicated	474,122	8.24	3,905,133	0.046	21,824	5.22

Behre Dolbear reviewed the measured and indicated resource statement in 1996 produced by Clifton and commented that approximately 20 percent of the measured resources are marginally measured resources based on the Canadian definitions. These resources would fit more into the Indicated category since the resource is defined by the downward extension of a surface sample point to assumed continuity of vein based on an elevation determined by underground workings. While there is sufficient evidence to suggest that the vein may in fact extend to depth and even increase in grade with depth, Behre Dolbear also indicated that inadequate data exists to unilaterally accept this conclusion to all of the depths used by Clifton and to classify these deeper reserves as probable, especially for financing consideration. Robert Cameron, Consulting agrees with these conclusions but would note that it does not effect the total of the Measured and Indicated resources on the property.

In addition, Behre Dolbear noted that 100 percent extraction of the estimated ore zone or stope in deposits of this type are generally not achievable. Therefore, they recommended that 5 percent of the potential ore be eliminated as mining losses before including dilution to compensate for both typical mining losses and the tendency for the sectional method to overestimate the gold content in the reserves. Robert Cameron, Consulting agrees with this recommendation when the resource is converted into a minable reserve.

6.3 RESOURCE RISK ANALYSIS

Overall Robert Cameron, Consulting believes that the resources have been calculated in a manner conforming to acceptable industry practices for preliminary estimates. The main areas of risk include:

- ◆ The resource was calculated assuming the same spatial correlation of silver, gold and lead values demonstrated in the veins with the most sampling occur in all shear zone veins. While the current evidence suggests that this is reasonable conclusion, the assumption should be checked when additional

sample data becomes available. The overall risk to the reserve estimate is minimal.

- ◆ Down dip extension of the resource figures have not been adequately quantified. More work is needed to locally check the down dip extension of the Indicated resources.

Sufficient portions of the veins on the Clifton property have not been mapped, sampled or estimated which show strong geologic similarities and potential of becoming resources and reserves when the appropriate sampling and engineering work is completed. Therefore, Robert Cameron, Consulting believes that there is significant potential to find additional reserves on these Clifton veins; resulting in a low overall risk for the above stated resources existing on the Clifton property.

6.3.1 Resource Categorization

Based upon the methodologies utilized in sampling and assaying, and the continuities of mineralization demonstrated by the sample spacing and surface/underground continuity of the veins, Robert Cameron, Consulting concludes that reserves calculated from the resource figures presented in Table 6.2 would comply with standards established by the National Policy Statement 2-A for Proven and Probable reserves. The reserves would currently meet standards established by most financial institutions for preliminary estimates.

7.0 ENVIRONMENTAL REVIEW

Robert Cameron, Consulting has not completed an environmental review of the Clifton Mining Company's Gold Hill property. This part of the report is extract from the original Behre Dolbear April 1996 report.

7.1 INTRODUCTION

Behre Dolbear was asked to conduct a preliminary environmental review of the proposed Clifton Mining Company (Clifton) operation 40 miles southeast of Wendover, UT near Gold Hill, UT in western Tooele County. The purpose of the review was to identify any permits that were lacking or any documents that needed to be developed. While this report of the environmental review is not a document suitable to substantiate a request for financing, because the site was not visited and documents and reports were not verified, it does serve as a guide to areas where management should explore further. The review consisted of perusal of correspondence, discussion with state agencies, and discussion with site management personnel.

All drainage runs off on to the "Dugway Proving Grounds" Airforce Gunnery Range which is an environmentally insensitive area.

7.2 PERMITS AND REGULATORY COMPLIANCE

7.2.1 Federal

There are patented and Unpatented claims which make up the Clifton Mining Company land holdings. Because the mining operation will initially be limited to five acres, there is no US Bureau of Land Management (BLM) regulatory requirement to perform extensive environmental assessment nor to compose a Plan of Operation (PoO). If the size of the operation should expand, the company

is aware that other requirements may be necessary. The BLM has delegated some management aspects to the Utah Division of Oil, Gas, and Minerals.

Apparently the mill is exempt from a Plan of Operation because it has been more or less in operation for the last 75 years. This exemption should be confirmed and documentation placed in the file. The mill site claim is reportedly five acres, but if there is a need for other land for waste deposition and operation, the necessity for a Plan of Operation may arise.

7.2.2 State

The Utah Division of Oil, Gas, and Minerals (DOGGM) has a Memo of Understanding with the BLM which delegates the authority to the DOGGM to stipulate the environmental protection measures that will be required at the operation. Clifton Mining Company has both a mining and milling permit issued by DOGGM. The mining permit stipulations are few and not overly burdensome. This is due to the fact that the regulatory concern level for DOGGM is set at five acres and the mine is at this level and therefore not distinctive.

Both the air and water quality division personnel from the Utah Department of Environmental Quality have reportedly visited the site and have not required any permits due to the *de minimis* impacts of the operation on environmental resources. This is an unusual declaration for a regulatory agency. It would be prudent to solicit letters from the air and water divisions to the effect that they have no concerns and place this documentation in the file to substantiate their declarations.

7.2.3 Local

The land one-fourth mile northwest of the town of Gold Hill where the Clifton mill is located has been re-zoned to allow the milling and processing to occur in compliance with ordinances. In the County Conditional Use Permit, there are references to maintaining state air quality and to avoiding adverse drainage by the mining company.

7.3 CLOSURE AND RECLAMATION

A \$17,000 reclamation bond is being held in the form of a Certificate of Deposit payable to the Utah Division of Oil, Gas, and Minerals and Tooele County for five acres of mining and exploration disturbance.

The mine is located in an historical mining district which has existing disturbances and mine wastes. Clifton would be responsible for reclaiming previous disturbances only if they re-disturb them. Surveys using color aerial photographs have been made to delineate past disturbances. This information has been used to document and support reclamation responsibility discussions and agreements with DOGM.

There does not appear to be a reclamation plan, bond, or any such consideration for the mill site. Apparently the site has been more or less in operation for the last 75 years, is "grand fathered", and is not subject to such. The lack of a requirement for a reclamation plan or bond should be confirmed and documentation placed in the file. With the placement of more tailings on the site in the event of the commencement of production, there may be some interest by the BLM or DOGM to require reclamation.

Acid rock drainage would not appear to be a problem at either the mine or mill site with the sparse precipitation (7-12 inches per year) in this area on the southwestern border of the Great Salt Lake Desert. Some sulfide ores may be handled. It would be helpful to know the acid-base accounting so that potentially acid-producing materials can be appropriately placed as ore and waste rock are being handled.

7.4 LONG TERM LIABILITY

Behre Dolbear has reviewed the EPA CERCLIS database (the list of sites which are to be investigated for possible inclusion on the Superfund list). No mining sites were found on the list in and around Gold Hill.

Behre Dolbear believes that because of the very low precipitation in the area, the risk of future Superfund listing is low. This is true even if a predominance of waste materials are acid generating, so long as reclamation and closure are completed in accordance with state and federal requirements.

It would be prudent to identify, delineate, and avoid past mine or mill waste which could connect Clifton to a future Superfund action. If the state is willing to negotiate on the processing or reclamation of problem wastes to the mutual advantage of Clifton and the state, then maybe some understanding can be reached.

8.0 POTENTIAL FOR ADDITIONAL MINERALIZATION AT THE CLIFTON PROPERTY AND REGION

The potential for additional mineralization at the Clifton property and in the Clifton/Gold Hill area has already been demonstrated by numerous past mining and exploration activities. Mineralization has been discovered and mined adjacent to the Clifton Shear Zone in the Yellow Hammer and Kiewit deposits. An oxidized copper zone has been found to exist north of the Yellow Hammer, and copper-silver-tungsten-gold-arsenic mineralization in different combinations have been sampled and/or mined in various areas in and around the Clifton property. Robert Cameron, Consulting also believes it is probable that additional exploration targets will be found in the area with increased exploration activity.

Exploration at Clifton is at a juvenile state and has been concentrated in only one area, the Shear Zone. A diligent exploration program is likely to discover additional areas of potentially economic material.

8.1 POTENTIAL AT THE CLIFTON SHEAR ZONES

Robert Cameron, Consulting is confident that resources and reserves will be increased at the Clifton property within the shear zone. The magnitude of the additional resources and reserves is difficult to quantify until more exploration has been performed, but the surface outcrop of the shear zones veins have been mapped for 3,000 to 12,000 feet. Current resource calculations and sampling includes less than 10 percent of this potential. In addition, sampling and resource calculations have been limited to approximately 11 of the 38 veins that have been identified and mapped.

Further potential also exists at depth for these veins. The vertical extent has not been identified and all indications are that they continue at depth. Additional drilling is needed to establish the vertical extent of and continuity of the veins and associated grade and thickness.

Only 11 of the 38 identified veins within the Shear Zone area have been sampled and resource or reserves calculated. Clifton has sample data on at least 10 of the veins not included in their resource statement. This preliminary data indicates that these veins will most likely prove out with similar grade and thickness to those currently within the resource basis after additional sampling and drilling has been conducted.

8.2 OFF-PROPERTY POTENTIAL

The Clifton property is centered around a complex intrusive of the Basin and Range province and is one of a series in the area. Additional ore deposits are a logical expectation. This has been demonstrated by the Yellow Hammer and Keiwit zones on the adjacent property. There is also many surface areas, exposure and prospecting pits in this area with evidence to mineralization.

Significant off-property prospects and potential include:

- ◆ Alta Gold Kinsley Gold Project;
- ◆ Fish Springs - Zinc;
- ◆ Dutch Mountain - Tungsten;
- ◆ Kennecott - ½ township west of Clifton property;
- ◆ Alvarado & Rube Gold Mines; and
- ◆ Gold Hill Mines.

8.3 EXPLORATION PRIORITIES

Robert Cameron, Consulting believes that Clifton needs to concentrate and refine a systematic exploration program for the Clifton property. There are numerous potential targets on the property and it is important that Clifton prioritize their exploration dollars in order to demonstrate the potential of its properties.

Behre Dolbear offered these observations considered as recommendations in their 1996 report:

- ◆ **The Clifton Shear Zone veins should be explored with core drilling.** Since Clifton Mining intends to commence surface mining operations in the near future on the Shear Zone veins, it is recommended that Clifton develop a systematic drilling program to prove out additional near surface resources extending along strike of the veins targeted for initial exploitation. The actual veins targeted should be in priority of the tentative mining sequence of the veins. This program should include:
 - Removal of overburden;
 - Cleaning the outcrop
 - Detailed mapping;
 - Trenching and preliminary sampling; and
 - Drilling holes on 200 foot spacing intercepting the vein some 25 to 50 feet below the surface.

- ◆ **The underground resources and potential should be defined.** Second priority at this stage is for Clifton to develop the and exploit the property through underground mining. The underground resources at present constitute the majority of the probable resources and the potential resource on the property. Several deep drill holes should be place intersecting the multiple veins to better define and verify this underground potential and to better verify vertical continuity of both grade and thickness of the veins at depth.

- ◆ **The other exploration targets should be mapped and then drilled.** The Clifton property includes several additional exploration targets apart from the shear zone veins. These should be mapped and drilled at a later date. Behre Dolbear while acknowledging the vast potential that some of these other targets represent to Clifton, we see little justification at this time for expending the limited explorations dollars available on higher risk, less known targets. The priority for developing new mining areas should be lower than developing the resources on the known veins.

While Clifton Mining has made good progress in implementing these recommendations, Robert Cameron, Consulting still sees a need for the company to continue with the above work program in order to better quantify the resource potential of the property

APPENDIX A

LIST OF PATENTED AND UNPATENTED CLAIMS

Clifton Mining Company Property Summary	
Patented Claims	317 Acres
Load Claims (approximately)	2600 Acres
State Lease Lands	532 Acres
Total Clifton Property	3449 Acres

Other property available to Clifton:

Woodman Mining Company 11 claims = 173.59 acres

ACMC option property 23 claims = 460 acres

Clifton Mining Company - Patented Claims

Claim Name	Acres
1. Black Hawk & Red Jacket Sur. 6173	33.453
2. Calendar Lot 68	17.45
3. Democrat Lot 68	18.17
4. Mt. Vernon Lot 66	16.386
5. Sunshine Lot 67	8.559
6. Elephant Lot 67	10.686
7. George Washington Lot 70	12.6
8. Albany Sur 3354	17.101
9. Iron #6 Lot 46	19.61
10. Fleet Wing Lot 42	15.00
11. Herat Lode Lot 39	18.64
12. Juniper Lot 57	15.894
13. Lost Treasure Lot 41	15.320
14. Columbia Lot 43	19.9
15. Neptune Lot 40	19.380
16. Atlantis Lot 44	16.67
17. Ibapah Lot 47	19.31
18. George E Lot 71	16.88
19. Red jacket (see #1)	
20. Southern Confederate	6.82
Total Patented Acres	317.829

Clifton Mining Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
Flat 328	280	136	022854	317890
Flat 327	280	137	022855	317889
Clifton 26	280	138	022856	317867
Clifton 27A	280	139	022857	317869
Clifton 28	280	140	022858	317870
Clifton 23	280	142	022860	317866
Clifton 27	280	143	022861	317868
Flat 326A	280	144	022862	317888
Flat 326	280	145	022863	317887
Clifton 14	280	146	022864	317857
Clifton 11	280	147	022865	317854
Clifton 12	280	148	022866	317855
Clifton 10	280	149	022867	317853
Clifton 9	280	150	022868	317852
Clifton 13	280	151	022869	317856
Clifton 16	280	152	022870	317859
Clifton 17	280	153	022871	317860
Clifton 15	280	154	022872	317858
Flat 309	280	154A	022873	317878
Flat 310	280	175	022895	317879
Clifton 8	280	176	022896	317851
Clifton 18	280	184	022904	317861
Flat 314	280	190	022910	317883
Flat 313	280	191	022911	317882
Clifton 19	280	192	022912	317862
Flat 312	280	205	022925	317881

Clifton Mining Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
Flat 311	280	206	022926	317880
Flat 323	280	210	022930	317884
Flat 324	280	211	022931	317885
Flat 325	280	212	022932	317886
Clifton 22	280	213	022933	317865
Clifton 21	280	214	022934	317864
Flat 330	280	223	022943	317892
Flat 329	280	224	022944	317891
Clifton 29	280	225	022945	317871
Clifton 30	280	226	022946	317872
Flat 330 A	304	588-589	034978	335443
Flat 323 A	304	587	034977	335442
Flat 314 A	304	586	034976	335441
Flat 309 A	304	585	034975	335440
Flat 502	398	250	075192	357130
Flat 504	398	251	075193	357131
CB - 1	398	252	075194	357125
CB - 2	398	253	075195	357126
CB - 3	398	254	075196	357127
CB - 5	398	255	075197	357128
CB - 6	398	256	075198	357129
CB - 7	398	811	075483	357672
CB - 8	398	810	075482	357673

Clifton Gold Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
CGC-1	384	331	069367	355781
CGC-2	384	332	069368	355782
CGC-3	384	333	069369	355783
CGC-4	384	334	069370	355784
CGC-5	384	335	069371	355785
CGC-6	384	336	069372	355786
CGC-7	384	337	069373	355787
CGC-8	384	338	069374	355788
CGC-9	384	339	069375	355789
CGC-10	384	340	069376	355790
CGC-11	384	341	069377	355791
CGC-12	384	342	069378	355792
CGC-14	384	343	069379	355793
CGC-15	384	344	069380	355794
CGC-16	384	345	069381	355795
CGC-17	384	346	069382	355796
CGC-40	384	347	069383	355797
CGC-41	384	348	069384	355798
CGC-42	384	349	069385	355799
CGC-43	384	350	069386	355800
CGC-44	384	351	069387	355801
CGC-45	384	352	069388	355802
CGC-46	384	353	069389	355803
CGC-47	384	354	069390	355804
CGC-48	384	355	069391	355805
CGC-49	384	356	069392	355806

Clifton Gold Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
CGC-50	384	357	069393	355807
CGC-51	384	358	069394	355808
CGC-52	384	359	069395	355809
CGC-53	384	360	069396	355810
CGC-54	384	361	069397	355811
CGC-81	384	362	069398	355812
CGC-82	384	363	069399	355813
CGC-83	384	364	069400	355814
CGC-84	384	365	069401	355815
CGC-85	384	366	069402	355816
CGC-86	384	367	069403	355817
CGC-87	384	368	069404	355818
CGC-88	384	369	069405	355819
CGC-89	384	370	069406	355820
CGC-90	384	371	069407	355821
CGC-91	384	372	069408	355822
CGC-92	384	373	069409	355823
CGC-93	384	374	069410	355824
CGC-130	384	375	069411	355825
CGC-131	384	376	069412	355826
CGC-132	384	377	069413	355827
CGC-133	384	378	069414	355828
CGC-204	384	379	069415	355829
CGC-205	384	380	069416	355830
CGC-206	384	381	069417	355831
CGC-207	384	382	069418	355832

Clifton Gold Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
CGC-208	384	383	069419	355833
CGC-209	384	384	069420	355834
CGC-213	384	385	069421	355835
CGC-289	384	386	069422	355836
CGC-290	384	387	069423	355837
CGC-291	384	388	069424	355838
CGC-292	384	389	069425	355839
CGC-299	384	390	069426	355840
CGC-299A	384	391	069427	355841
CGC-300	384	392	069428	355842
CGC-301	384	393	069429	355843
CGC-301A	384	394	069430	355844
CGC-302	384	395	069431	355845
CGC-305	384	396	069432	355846
CGC-306	384	397	069433	355847
CGC-307	384	398	069434	355848
CGC-308	384	399	069435	355849
CGC-315	384	400	069436	355850
CGC-316	384	401	069437	355851
CGC-317	384	402	069438	355852
CGC-318	384	403	069439	355853
CGC-319	384	404	069440	355854
CGC-320	384	405	069441	355855
CGC-321	384	406	069442	355856
CGC-322	384	407	069443	355857
CGC-331	384	408	069444	355858

Clifton Gold Company - Load Claims

Claim Name	Book	Page	Entry No.	UMC No.
CGC-332	384	409	069445	355859
CGC-333	384	410	069446	355860
CGC-334	384	411	069447	355861
Cactus Mill	279	691	022679	317839
GHM-1	412	573	080792	359375
GHM-2	412	574	080793	359376
GHM-3	412	575	080794	359377

Unpatented Mining Claims

IP 14B

IP 12

IP 10

IP 18

IP 6

CLIFTON 7

IP 15b

IP 13

IP 11

IP 9

IP 7

CLIFTON 20

PEARL 438

PEARL 438A

IP 47

IP 47A

IP 45

IP 43

IP 39

IP 41

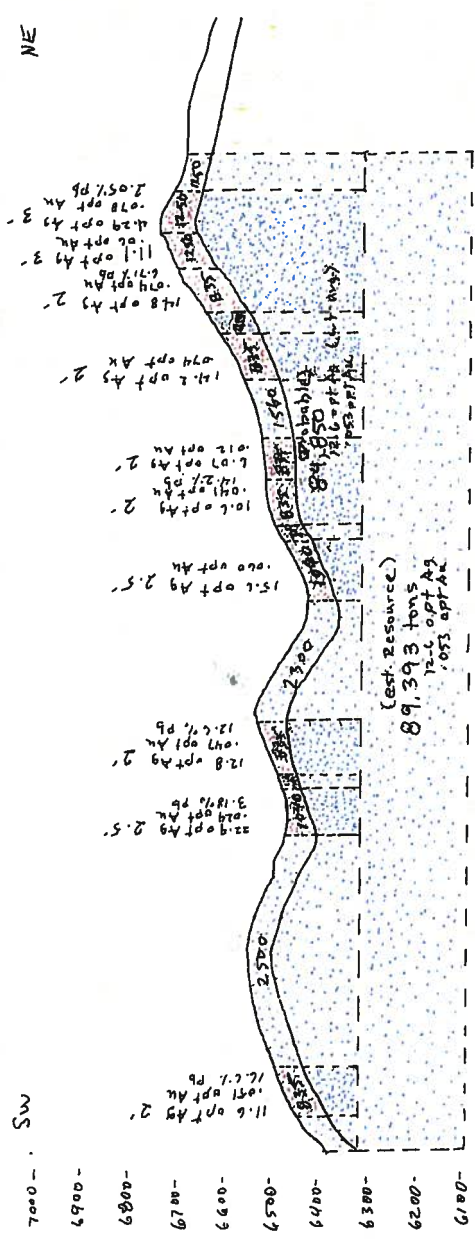
IP 40

Woodman Mining Company - Patented Claims

Claim Name	Acres
1. Imperial	19.974
2. Newton Albert Lode	23.588
3. Newton Albert Lode Mill Site	
4. Bonnemort	18.874
5. Crane Spring Lode	17.220
6. Crane Spring Lode #2	4.922
7. Frankie	19.043
8. Lucky Jim	16.940
9. Alvarado	15.670
10. Ethel	20.470
11. Emma No. 2	16.890
Total Patented Acres	173.591

APPENDIX B

RESOURCE CALCULATION LONG-SECTIONS



RESERVES

Proven - 7,200 tons
 115,898 oz. Ag
 4763 oz. Au

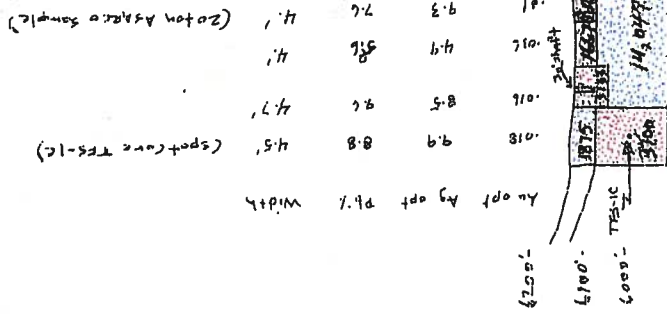
Probable - 92,470 tons
 1,165,122 oz. Ag
 4,900 oz. Au

Resource - 89,393 tons
 1,124,352 oz. Ag
 4,758 oz. Au

945,881 lbs Pb
 1,025,500 lbs Pb

(Est. Resource)
 89,393 tons
 1,124,352 oz. Ag
 4,758 oz. Au

Long Section of the
 George Washington
 Vein 3/16
 WDP

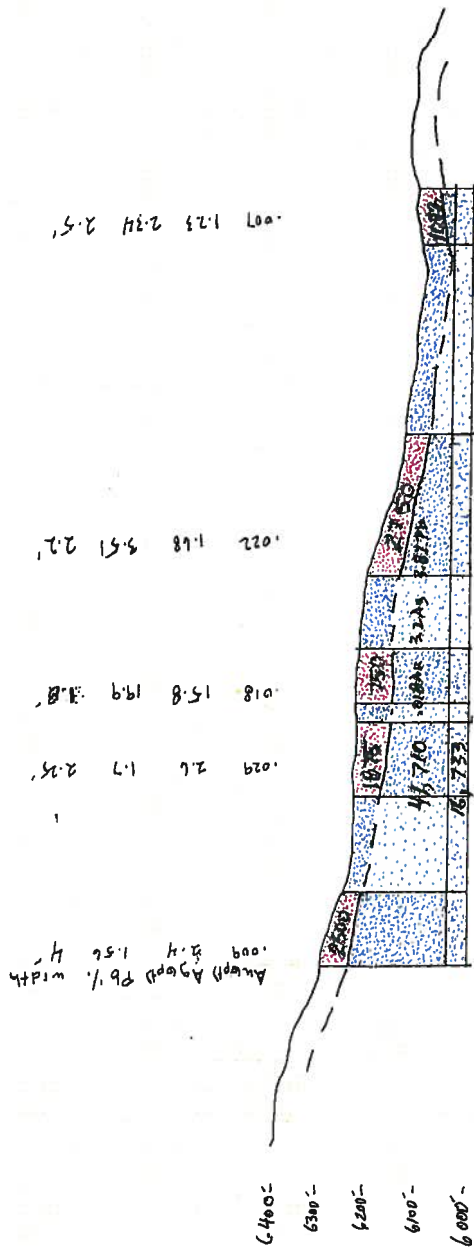


Long Section of the
30 Foot Shaft
Vein 3/16
WDP
1" = 400'

Reserves

Proven - 10,167 tons
 193.4 oz. Au
 87,531 oz. Ag
 1,692,824 lbs. Pb

Probable - 16,255 tons
 308.8 oz. Au
 139,793 oz. Ag
 2,698,330 lbs. Pb



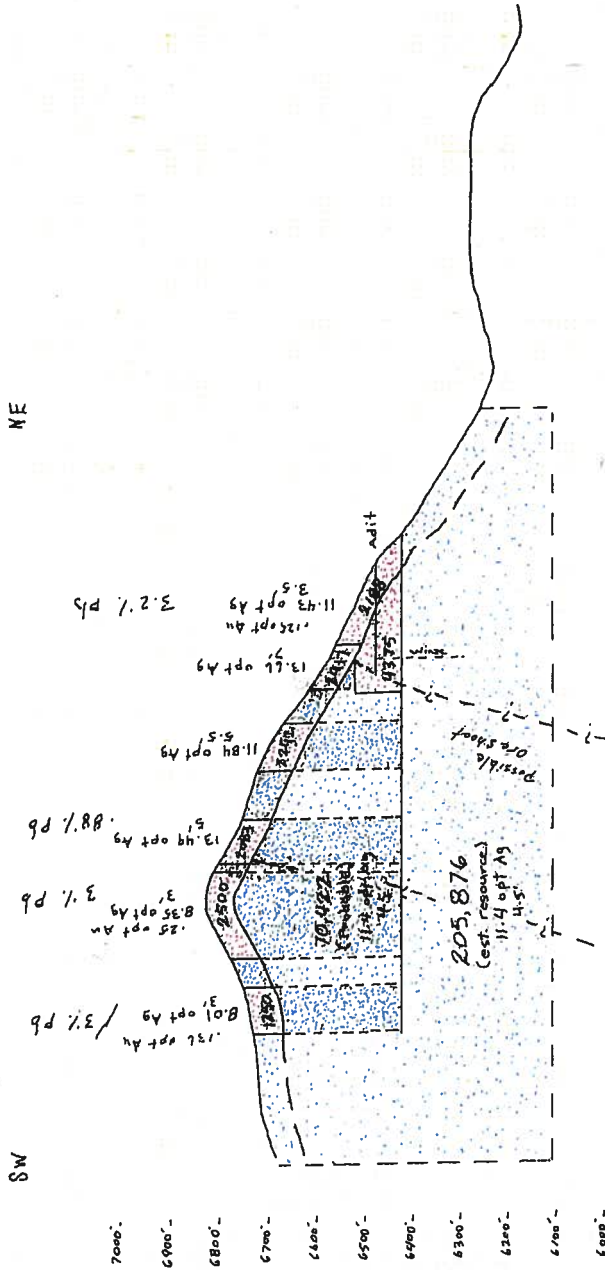
0' 200' 400'
 Long Section of the
 Ridgeline
 Vein
 WDP 3196

Reserves

Proven - 8,917 tons
 158.2 oz Au
 28,627 oz Ag
 687,005 lbs Pb

Probable 41,710 tons
 750.8 oz Au
 133,472 oz Ag
 3,169,910 lbs Pb

Resource - 16,733 tons
 301.2 oz Au
 535,744 oz Ag
 1,271,708 lbs Pb



RESERVES

Proven - 17,605 tons Ag
200,769 oz Au
1338 oz Au

Probable - 70,422 tons Ag
802,810 oz Au
5352 oz Au

Resource - 205,876 tons Ag
2,398,986 oz Au
15,440 oz Au

922,502 lbs Pb
avg.

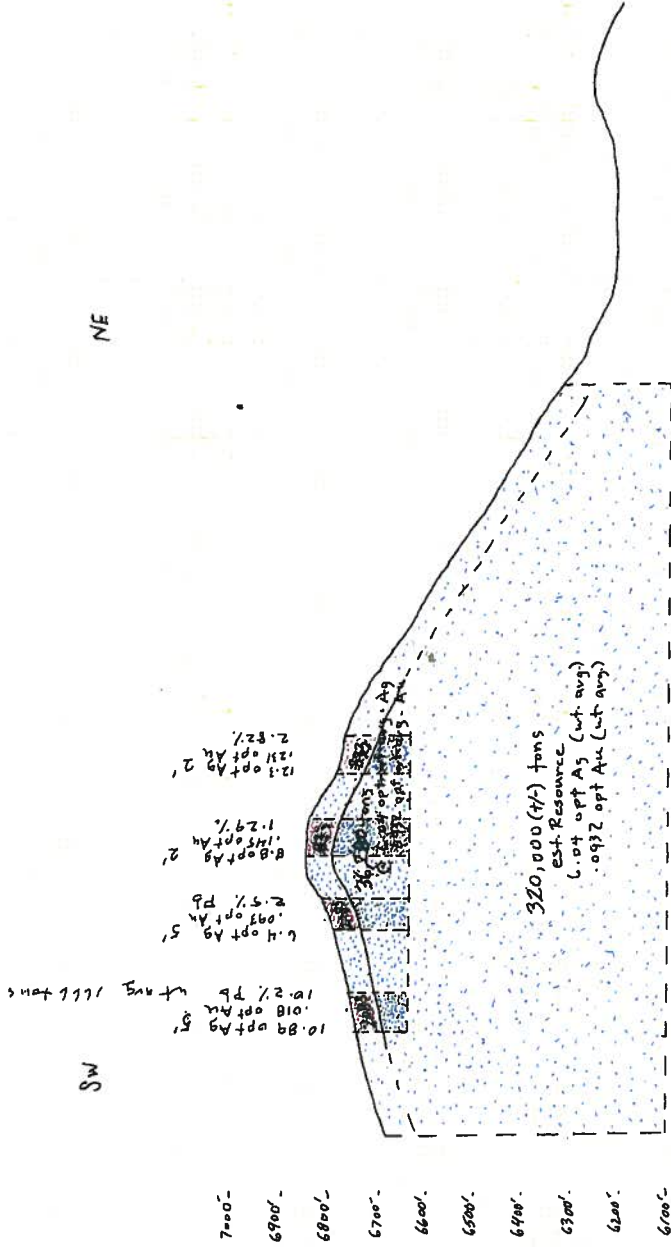
3,679,113 lbs Pb
avg.

19,587,902 lbs Pb
avg.

Long Section of YELLOW COUGAR Vein

WDP 2/96

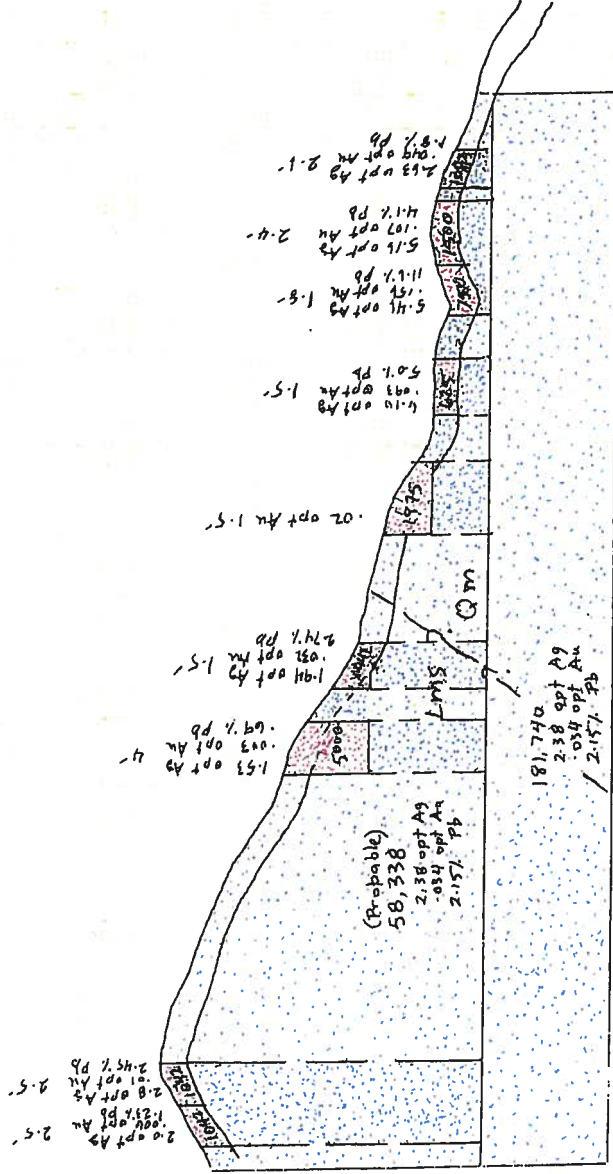
(widths on per K. Modler 2/96)



RESERVES

Proven -	6,722 tons	415,818 lbs Pb
	35,246 oz. Au	
	544 oz. Ag	
Probable-	36,280 tons	2,779,048 lbs Pb
	194,970 oz. Au	
	3,010 oz. Ag	
Resource-	320,000 tons (±)	
	1,932,800 oz. Au	24,572,200 WDP
	27,825 oz. Ag	11,175 WDP

Long Section of Bobcat VEIN 3/96



0' 200' 400'

Long Section of the
LION
Vein
WSP 3196

RESERVES

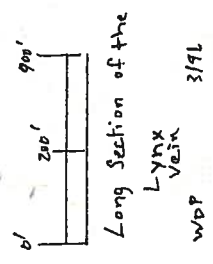
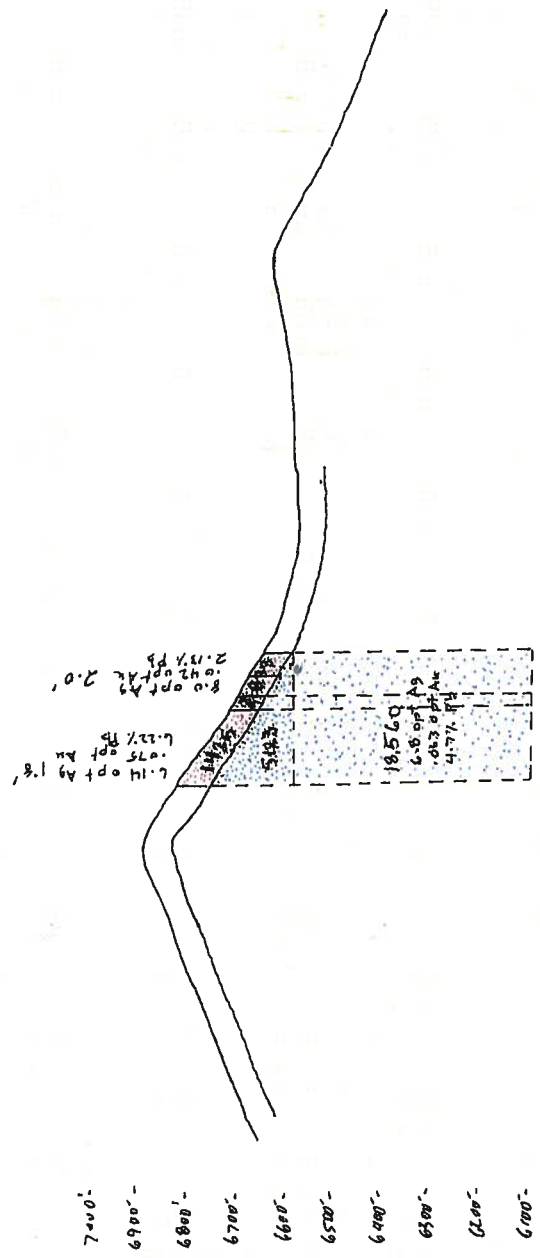
Proven- 13,959 tons
33,169 oz Ag
470 oz Au
604,281 lbs Pb

Probable 58,338 tons
138,804 oz Ag
1984 oz Au
2,508,534 lbs Pb

Resource- 181,740 tons
432,541 oz Ag
6179 oz Au
7,814,810 lbs Pb

NE

SW



RESERVES

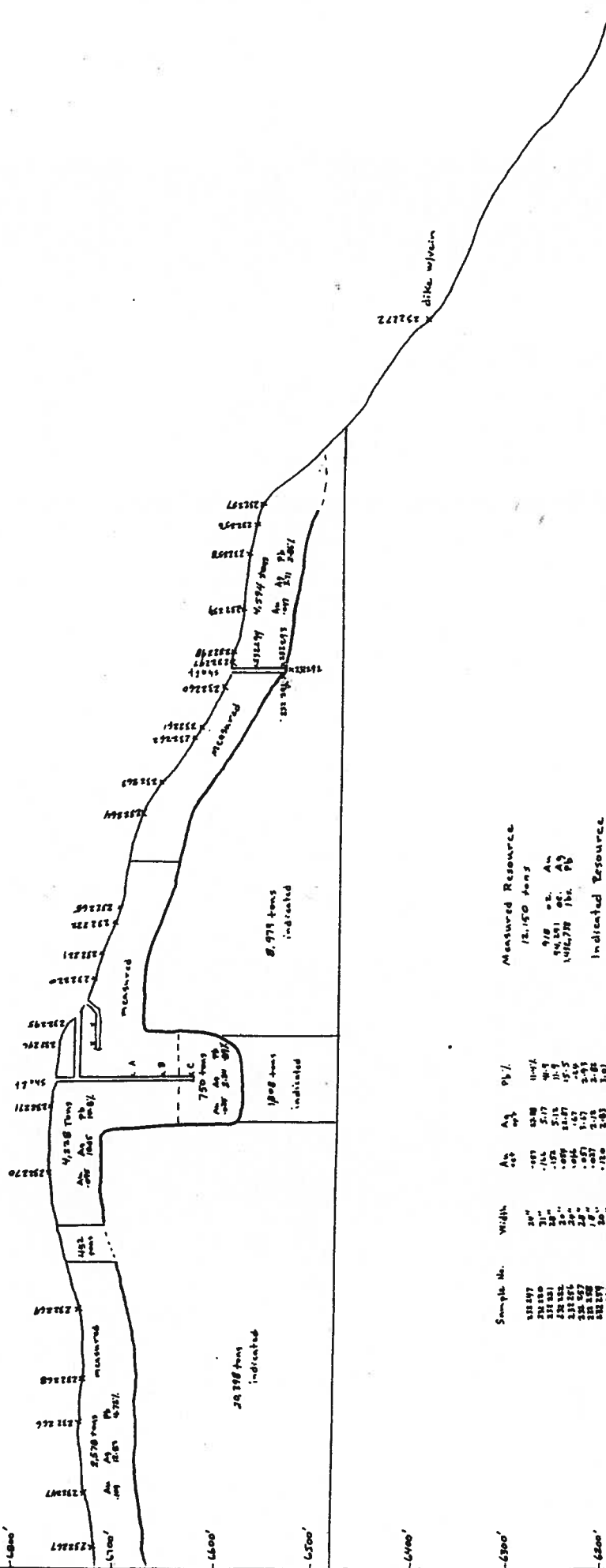
Proven. 2250 tons
 8750 oz. Ag
 107 oz. Au
 177,270 lbs. Pb

Probable. 5423 tons
 36,876 oz. Ag
 342 oz. Au
 509,762 lbs. Pb

Resource- 18,510 tons
 126,208 oz. Ag
 1149 oz. Au
 1,744,480 lbs. Pb

NE

SW



Measured Resource
12,150 tons
97% Zn, 0.5% Pb
100% Cu, 0.5% Ag, 0.5% Pb

Indicated Resource
31,637 tons
2,371 oz. Zn, 0.5% Ag, 0.5% Pb
3,785,755 oz. Zn, 0.5% Ag, 0.5% Pb

Sample No.	Width	A ₁	A ₂	A ₃	A ₄	% Zn	% Pb	% Cu	% Ag	% Pb
23247	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23248	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23249	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23250	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23251	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23252	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23253	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23254	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23255	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23256	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23257	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23258	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23259	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23260	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23261	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23262	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23263	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23264	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23265	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23266	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23267	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23268	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23269	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23270	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23271	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23272	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23273	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23274	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23275	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23276	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23277	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23278	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23279	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23280	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23281	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23282	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23283	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23284	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23285	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23286	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23287	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23288	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23289	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23290	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23291	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23292	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23293	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23294	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23295	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23296	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23297	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23298	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23299	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5
23300	24"	0.07	0.08	0.09	0.10	97.0	0.5	100.0	0.5	0.5

Clifton Mining Company

TOLERANCES EXCEPT AS NOTED	REVISIONS	
	NO	DATE BY
1		
2		
3		
4		
5		

Resource Calculation
Southern Confederate Vein
Longitudinal View
Looking North-west

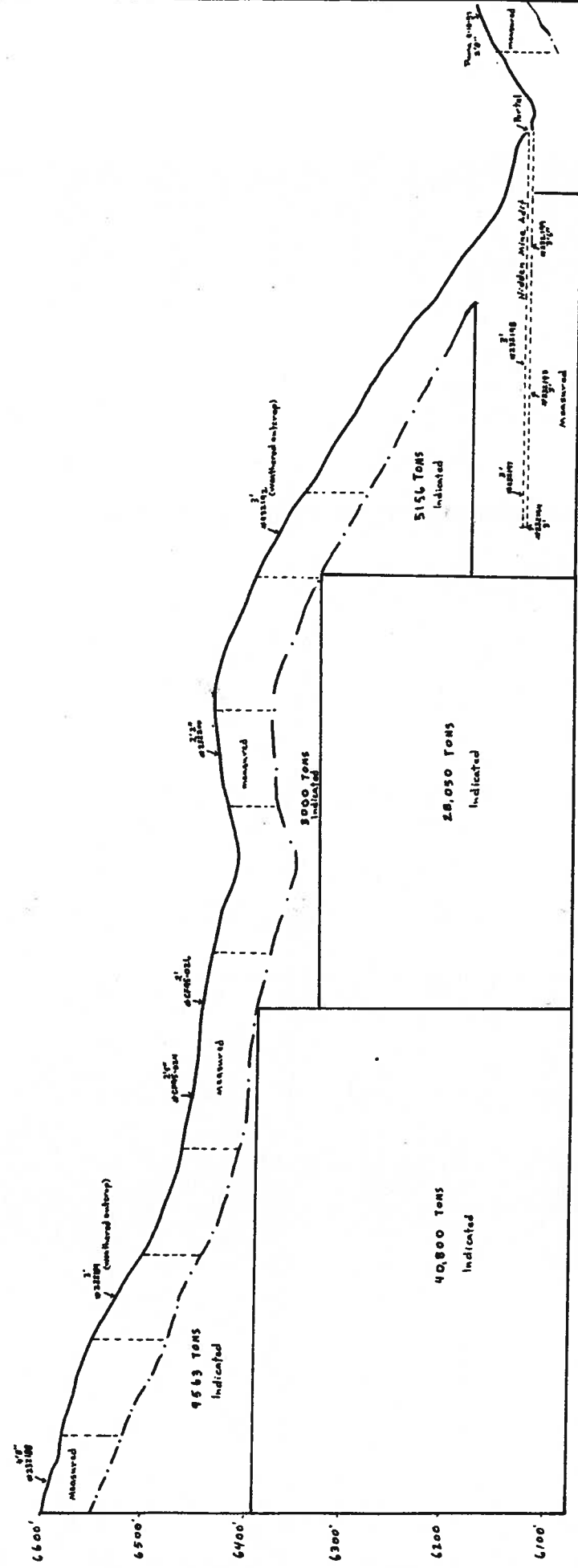
Checked by: D. B. B. J. C.
Checked: DATE 10/17/1917
Prepared by: J. E. B. J. C.
Prepared: DATE 10/17/1917



S 40° W

6700'

N 40° E



Sample #	Type	Assay	Ag	Pb	Zn	Measured Tons
232188	Block	.017	16.71	0.1	1770	1770
232192	Block	.012	21.76	0.2	2770	2770
232193	Block	.018	21.32	0.3	3500	3500
232194	Block	.011	4.36	0.8	3500	3500
232195	Block	.003	4.36	0.4	3500	3500
232196	Block	.019	9.31	1.0	2077	2077
232197	Block	.017	3.16	2.1	875	875
232198	Block	.010	18.23	1.5	1000	1000
232199	Block	.008	6.73	0.5	750	750
232200	Block	.006	14.10	0.5	1750	1750
Wighted Average .02400 8.9700 0.737						
Total Measured						18,417
Total Indicated						86,514

Estimated Total Measured Resource
 156,239 ounces Silver
 450.5 " Gold
 2,113,340 pounds Lead

Estimated Total Indicated Resource
 733,170 ounces Silver
 2,111.5 " Gold
 9,320,462 pounds Lead

TOLERANCES	REVISIONS		
SECRET AS NOTED	NO	DATE	BY
1			
2			
3			
4			
5			

Longview Section
 Hidden Mine Vein
 Clifton Mining District
 Trench County, Utah

SCALE
 1 inch = 100'
 DRAWN BY
 J. W. B. [Name]
 CHECKED BY
 J. W. B. [Name]
 DATE
 30 April 1947
 APPROVED BY
 [Signature]