

Marble Arch
800368

REPORT ON A

MINING CLAIM BLOCK

SLOCAN MINING DIVISION
KASLO, BRITISH COLUMBIA

FOR

CHANDI RESOURCES CORPORATION

930 - 470 Granville Street

Vancouver, B.C.

BY

W. G. Hainsworth, P. Eng.
W. G. HAINSWORTH & ASSOCIATES LTD.
905 - 837 West Hastings Street
Vancouver, B.C.
V6C 1B6

Vancouver, B.C.

July 30, 1986

TABLE OF CONTENTS

Page

Summary and Conclusions	i
Recommendations	ii
Cost Estimates	iii
Introduction	1
Location and Access	2
Property	3
History	4
Geology, Regional	5
Geology, Local	6
Showings	7
Past Work	9
Writers Certificate	10
Bibliographies	11

Figures

Figure 1 Location Map following page 2

Figure 2 Claim Map following page 3

Summary and Conclusions

The block of 52 contiguous units constituting three claims that Chandi Resources Corporation has acquired in the Kaslo area of interior central British Columbia are well located in a geological environment which has successfully produced numerous silver-gold-lead mines in the past and which has some five showings of modest interest. Three of the showings made were taken from ore shipments during and following World War I.

The claims adjoin one of the more recognized, although presently defunct, producers of this area, the Utica Mine.

The prior owner of the claims carried out an airborne geophysical survey plus restricted soil sampling around one of the showings within the last three years. Several anomalous situations were recognized from these surveys but no follow-up was ever conducted.

It is the writers contention that in view of the favourable geological strata, as demonstrated by past regional operations plus the physical preserve of fine showings with attendant good assay result, the property is deserving of a thorough and intensive exploration program. The potential of the claims should be proven up.

Exploration of the claims will proceed by establishing a grid line plot to cover some 70% of the claim units. Along these grid lines surveys consisting of a VLF EM-16 geophysical operation to substantiate some of the conductors located by the airborne survey and a soil sampling operation to further check the anomalies created by the previous restricted soil survey and to assist in locating other anomalous conditions shall be run. Based on success being generated in this phase of activities, the follow-up phase would increase the detailed geochemical sampling and EM-16 survey in anomalous areas. To allow for easier access around the claims, roadwork would be an early requirement. The reopening of the various adits of the showing, plus the follow-up underground sampling would be the final activity of this phase.

This two-phase program is recommended for the Chandi Resources Corporation claim holdings in the Kaslo area with a total cost of \$84,300 over a 2 1/2 to 3 month operational period.

Recommendations:

The large holdings of Chandi Resources Corp., in the Kaslo area have five known silver-lead-gold showings contained within the area. A minor amount of ore was shipped from 3 of the showings some sixty to seventy years ago. The Kaslo-Slocan area has long been known for its high grade silver deposits and production.

The writer considers that the claims of Chandi Resources Corp. located in this specific area, that once produced, is worthy of further investigation.

Several recent surveys have revealed interesting situations upon which there was no follow-up. The writer's approach to the property investigation is prompted by the limited surface work done to date. The object of the recommendations is to elaborate on past surface work and substantiate results from the airborne geophysics. This will delineate targets for follow-up programs.

It is recommended that the claim holdings be investigated by a well organized soil and stream sampling program with the samples being run for gold, silver and mercury.

The fissure and shear structures within the showings contain variable amounts of sulphides, normally conductive. It is recommended that due to the large expanse of soil cover, extensions of presently known veins and shears, in addition to the possible location of other hidden structures, be probed by means of a ground VLF EM survey utilizing an EM-16 unit. Particular attention should be paid to the anomalous areas as defined by the airborne survey.

These surveys should be conducted over a well located and identified surface grid.

In addition, a concerted effort should be made to locate and mark the old adits of the various showings. Opening of these adits would be reserved for the next phase of operations.

All the above recommendations are surface investigations of the claim group with target priorities being established. This would constitute Phase I of the recommended program.

Phase II would include more detailed geochemical sampling and geophysical programs in anomalous areas. In addition, this phase would include back hoe stripping, trenching and/or portal re-opening of gold showings or favourable target zones. Roadwork would be an essential early requirement in this phase to allow for heavy machinery work. As stated in the Summary and Conclusions, this phase would be success oriented as regards the initial phase.

Phase III would be the gearing up for a major drill program or underground development of established or new showings. This phase is of necessity a success dependant program.

Cost Estimates

Phase I - Surface Examination

Preparation and running of a 2750 meter east-west baseline with flagged north-south grid lines. All grid lines will be at 150 meter intervals. There will be 19 cross lines totalling 28500 meters.

31.25 kilometers of line @ \$85/km	\$ 2,660
Soil sampling - sampling @ 25 meter intervals	4,400
- assaying 1100 samples @ \$12 per	13,200
EM Survey - \$125/km	3,900
Equipment Rental	3,000
Billoting and Crew victualling	3,500
Supervision, report writing	2,000
Transportation	<u>1,000</u>
	33,660
Contingency 10%	<u>3,340</u>
	37,000

Phase II - Detailed Surface Examination

Road building	10,000
Bulldozer trenching on specifically established targets	15,000
Detailed soil and/or EM 16 Survey plus assays	10,000
Supervision, report writing	2,500
Rentals, travel	1,500
Billoting and Crew victualling	<u>4,000</u>
	43,000
Contingency 10%	<u>4,300</u>
	47,300
TOTAL Phase I & II	\$ 84,300

Phase III - Grid Surface Investigation

This is a success-contingent phase with the amount of drilling or underground development work dependant upon the proceeding two phases. No cost estimates can be advanced at the present time.

W. G. Hainsworth, P.Eng.

W. G. HAINSWORTH & ASSOCIATES LTD.

Mining Consultants

SUITE 905
837 WEST HASTINGS STREET
VANCOUVER, BRITISH COLUMBIA
V6C 1B6 (604) 687-6930

Introduction

The Chandi Resources Corporation property consisting of 6 grid-style claims containing a total of 52 units is 17 kilometers (10 miles) northwest of the town of Kaslo, British Columbia. Examination of the claim group took place July 5th and 6th, 1986 at the request of Mr. A. Hamilton, director of Chandi Resources Corporation.

The claim topography is that of a steep, southeast facing hill side. Small rivulets and creeks empty into the northeast flowing Twelve Mile Creek, which roughly divides in half the claim group. Highway 31A passes by the northeast corner of the property, while numerous logging roads with accompanying washouts allow access to the southeastern section of the claim block.

There are no known economic mineral deposits on the property despite the presence of numerous old workings in the central and northwestern portion of the claims. Three of the showings are reported to have made small, but high grade, ore shipments during and following World War I.

During the 2 day examination period the writer attempted to locate the six showings on the property but only one was located, the California.

Location and Access

The Marble Arch claim group of Chandi Resources Corp. lies 17 kilometers (10 miles) northwest of Kaslo, British Columbia just off Highway 31A. Kaslo is 733 kilometers (455 miles) by road from Vancouver and 70 kilometers (43 miles) north of Nelson on Kootenay Lake.

Access to the claims is southwest on the Twelve Mile Creek road off Highway 31A. This hardpack gravel road leads through to the old Utica Mine at Paddy Peak. During the writer's visit numerous rock slides and road washouts were in evidence along this route, particularly in the first four kilometers where the road runs close to the steep banks of Twelve Mile Creek. Refer to figure 1.

The claim group has co-ordinates centering on latitude 49° 58' north and longitude 117° 05' west. Its National Topographic System location is 82F/14 .

CHANDI RESOURCES CORPORATION

MARBLE ARCH CLAIM GROUP

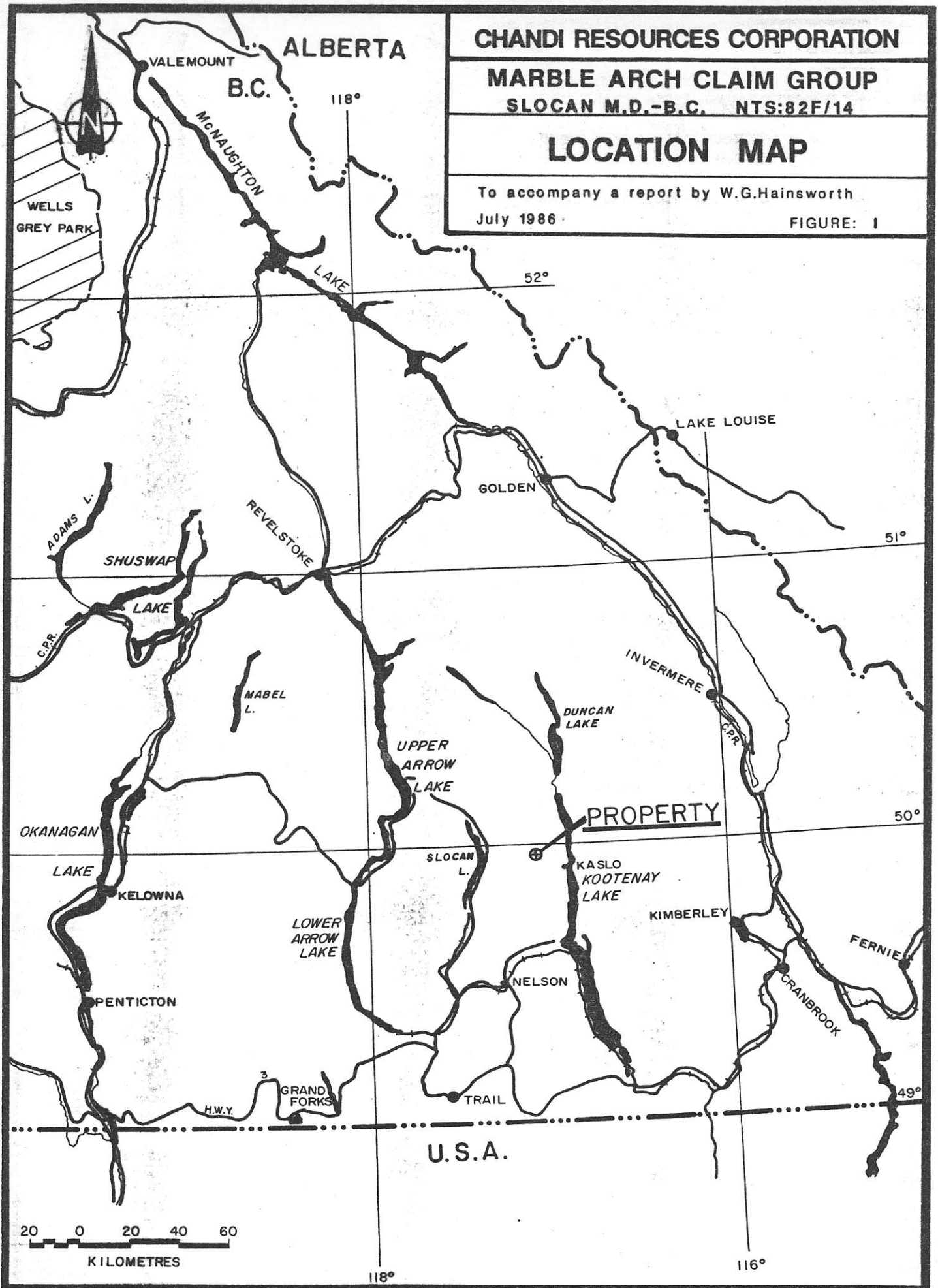
SLOCAN M.D.-B.C. NTS:82F/14

LOCATION MAP

To accompany a report by W.G.Hainsworth

July 1986

FIGURE: I



Property

The Chandi Resources claim group located 17 kilometers northwest of Kaslo, is within the Slocan Mining Division, British Columbia.

The property consists of 6 contiguous claims containing a total of 52 units extending east-west for a length of 4500 meters (14,760 feet) with a north south dimension of 4000 meters (13120 feet). The northeast corner of the claim block is located just off Highway 31A. In total the group occupies approximately 1300 hectares (3213 acres) of area. Refer to figure 2.

<u>Claim</u>	<u>Registration #</u>	<u>Units</u>	<u>Expiry Date</u>
Marble Arch	2820	12	February 9, 1987
Marble Arch 1	3781	6	April 15, 1987
Marble Arch 2	3782	4	April 15, 1987
Marble Arch 3	3783	12	April 15, 1987
Marble Arch 4	3784	3	April 15, 1987
Marble Arch 5	3785	15	April 15, 1987

To maintain the 52 units in good standing for one additional year will require that \$10,400 of work be carried out on the claims.

* * * * *

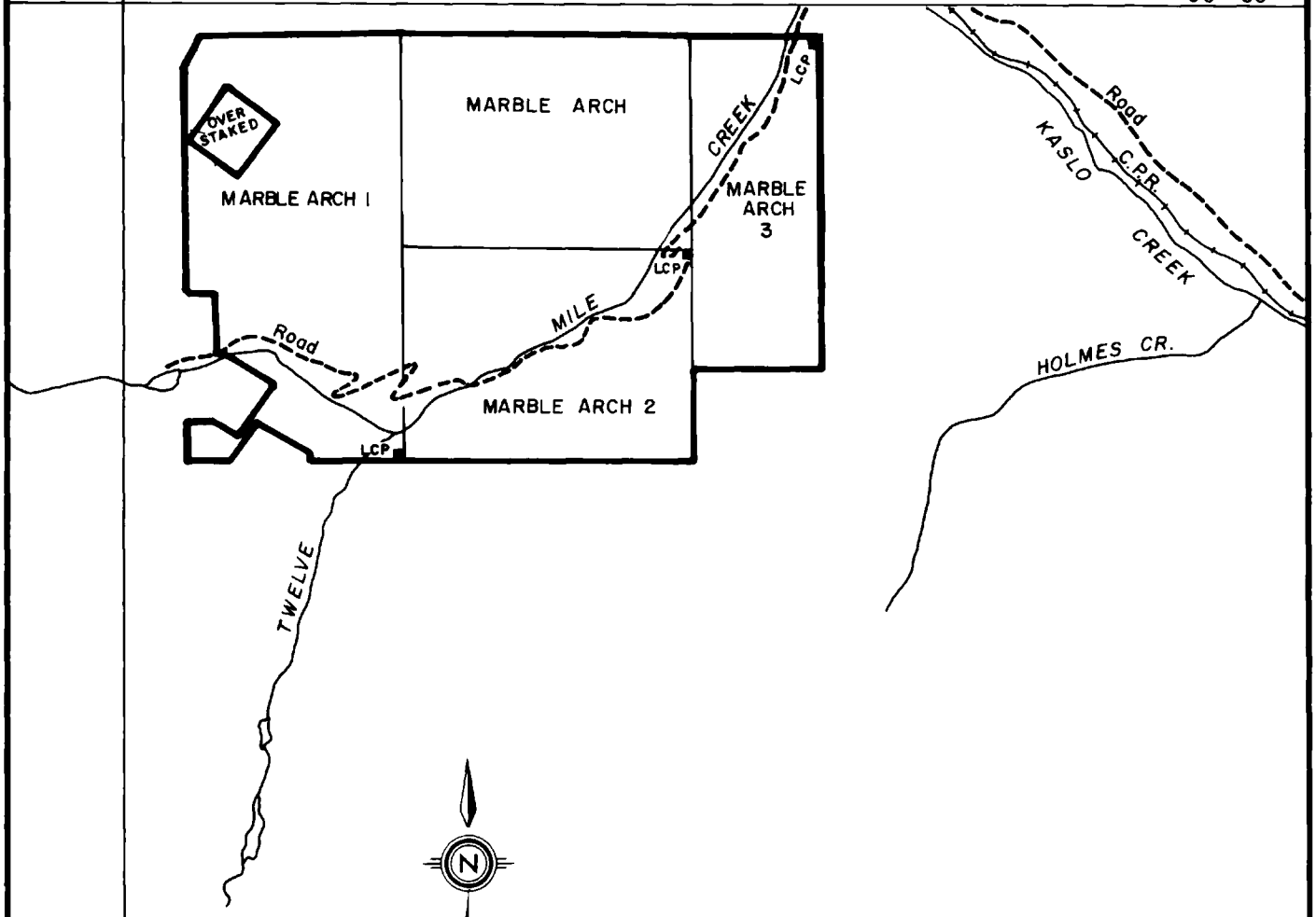
Since the writing of this report (July 30, 1986) the company claims have expired and have been restaked. The new claim block occupies the same area as previous but the individual claims have been rearranged in identification and unit numbers.

<u>Claim</u>	<u>Registration #</u>	<u>Units</u>	<u>Expiry Date</u>
Marble Arch	5203	18	February 13, 1988
Marble Arch 1	5305	18	May 14, 1988
Marble Arch 2	5304	12	May 14, 1988
Marble Arch 3	5303	10	May 14, 1988

It should be noted that 6 units of Marble Arch are an overstaking of Marble Arch 3. Assessment to the amount of \$1,800 (1 year) has been done on the Marble Arch claim and recorded.

117° 7' 30"

50° 00'



CHANDI RESOURCES CORPORATION

MARBLE ARCH CLAIM GROUP

SLOCAN M.D.-B.C. NTS:82F/14

CLAIM MAP

To accompany a report by W.G.Hainsworth

July 1986

Feb., 1988

FIGURE: 2

History

The history of the Kaslo-New Denver area has its beginnings with the discovery of lead ore rock exposures on the east shoreline of Kootenay Lake in the early 1820's. The finding eventually became the Blue Bell Mine of Cominco, but only after it went through several rediscoveries. However, the location attracted a large community of settlers, miners and prospectors who in 1888 were awakened to the silver possibilities of the area across the lake and to the northwest of their community.

In 1891, some 80 claims near Sandon were staked which, combined with the interest originating from the high grade silver ore stakings, created a town of four to five thousand people at Kaslo from a community of several homes the year previous. Sixteen properties were producing in the Kaslo area in 1892 and even then prospecting was pushing south and southwest into the Nelson Batholith area and enjoying considerable success. The town of Slocan rapidly built up, rivalling Kaslo for activity and population.

The Hall Smelter at Nelson became operational in 1896 treating silver-lead ores of the Slocan area while previously in 1894 the CPR had pushed a branch line to Sandon and in 1911 extended the rail line through to Kaslo. The Trail Smelter was purchased by the CPR in 1898.

The Kaslo-Slocan mining camp was the chief producer of silver-lead ores during the 1890's and into the early part of the 20th Century before a slump developed. Zinc ores came into demand during the First World War creating a boom for the district.

In 1892 what is now called the Utica Mine was staked. It was investigated by 5 adits over an elevation difference of 463 meters (1520 feet). In 1912 shipments which were to total in excess of 5,500 tons grading 128 ounces silver per ton and 15% lead began. The mine which was officially closed down in the mid-1920's paid \$64,000 in dividends. The Utica adjoins the Marble Arch 5 on its southwest boundary.

Strong silver grades plus gold values, the latter mineral normally not a strong part of the general make up of the Kaslo camp mineralogy, are presently instrumental in reviving interest in the area.

Regional Geology

The region hosts the Slocan Series, a formation of sedimentary beds considered to be of Triassic origin. This strata includes argillites, slates, quartzites and numerous interbeds of limestone. The formations have a general northwesterly trend with steep southwesterly dips and show strong folding along their northwesterly axes developing complex folds and creating faulted, sheared and brecciated structures. A strong set of northeast developed fractures has been known to host vein structures. Most of the mineral deposits of this formation occur in the more massive argillitic member.

Flanking the Slocan towards the Kootenay Lake side are successive beds of earlier Kaslo volcanics and metamorphosed formations belonging to the PreCambrian Lardeau series. A thin band of Paleozoic sediments, the Milford group, lies in between the two formations.

To the south and southwest, intrusive rocks which correlate with the Nelson granitic batholith occupy large areas of the Selkirk Mountains.

Local Geology

The Marble Arch claims of Chandi Resources Corp., lie within the argillitic-limestone member of the Slocan series as witness the locations of California (limestone-argillite contact), Marble Arch (argillites) and the Keno showing (interbedding of limestone and argillite). The trend of the sediments is northwest with southwesterly dips.

Two of the showings, the Helen and the Big Ben are located in an aphyaxis of granite likely related to the Nelson Batholith.

Recognizable criterions of the productive structures of the Kaslo-Slocan area are, according to C.E. Cairnes in his G.S.C. Memoir 173, primarily of the fissure-vein type in fissile or thinly laminated rocks with strong supportive units of the series nearby. The host structures strike northeasterly to north of east with southeastern dips. This is in agreement with the various structures within the Marble Arch group. Most of the important deposits occur in the Slocan series with the Chief vein constituents being argentiferous galena, freibergite and sphalerite. Within the granitic intrusives, gold values become more prominent while the lodes are smaller but seemingly richer than the Slocan series. Zinc mineralization is conspicuously low as a rule in the intrusives.

In the sedimentary formations, the ore shoots develop at irregular intervals along the vein filled fissures while in some localities, such as the Keno and California, carbonate ore occurs within the structure.

Quartz and to a lesser extent, calcite, are the usual gangue material of the veins.

Small ore shipments, totalling 12 tons, from the various showings on Chandi Resources large claim holdings were made in the late 1910's and mid '20s.

Showings

There are six showings of interest located in a scattered manner through the Chandi holdings off Twelve Mile Creek. Four of these showings are grouped within 400 meters (1320 feet) of one another. During the property examination the writer located only one of the showings, that of the lower California. Despite steady bushbeating the others were not located. As a consequence descriptions of the showings are taken from Cairnes G.S.C. Memoir 184.

Marble Arch - along with the Big Ben and California showings is situated in the main Marble Arch claim on the northwest slope of Twelve Mile Creek at an elevation of 1420 meters (4650 feet). The showing is that of an extension of the northeasterly trending California vein. A shallow shaft and two short adits, all caved, originated along a tight, well mineralized seam. The vein carries argentiferous galena and freibergite with minor amounts of gold. A sample from the shaft by the B.C. Department of Mines inspector in 1926 assayed 0.14 ounces gold per ton; 393.6 ounces silver per ton and 70.3% lead with no evidence of zinc. The short adits are stated to have developed no ore of consequence.

On strike to the northeast and slightly lower in elevation, in keeping with the 50° southeast dipping vein structure is the upper California showing. Here a band of northwesterly trending limestone displays a mineralized, fractured contact zone which is locally oxidized. A shaft and a 60 foot adit were driven on oxidized vein material stated to be up to 6 meters (20 feet) in width.

Near the cabin some 145 meters (500 feet) lower in elevation, on a blasted face 15 feet wide, the writer observed a 4" oxidized vein in argillites with a north 20° west strike and 75° east dip. It would appear that this was the location of a 3 ton sample shipped in 1916 from the group under the name of Silver King. It is reported to have run high grade in silver but no assays are available. Some 18 meters (60 feet) lower is a portal-blocked adit said to have been driven for 17 meters (57 feet) on a 3.4 meter (11 foot) vein similar to the one higher up.

The Big Ben, higher up the hillside than the other two showings, was developed on a 50 centimeter (20 inches) almost east-west striking quartz vein carrying galena and pyrite. Closeby a 6 meter (20 foot) shaft was sunk on the vein which died out near the bottom of the shaft. A representative sample taken by the government inspector from the dump ran 0.12 ounces gold to the ton; 94.5 ounces silver to the ton and 81.2% lead and 0.9% zinc. The host rock is granite.

Two other showings, the Keno and Helen, lie over the ridge on the north facing slope.

The Keno property has not as yet been located within the claim boundaries. It appears to be located close to the summit on the north side of the hill at an elevation of 1875 meters (6150 feet). A series of 3 adits have followed a strong shear zone striking south and dipping 50 to the east. In 1925 only the upper adit was accessible. The zone varying from one to four feet in width (0.3 to 1.2 meters) splits with one section dying out and the other showing interesting structure on the final face. In 1921 a 3 ton shipment was made from the showing which was claimed to be rich in lead. The host rocks are limestones and argillites of the Slocan series.

The other showing, the Helen is located further down the hillside alongside an intermittent creek at an elevation of 1570 meters (5150 feet). The workings consist of a raise through to surface from one of the two adits, all collapsed. Here an east-west mineralized shear dipping moderately south has had some stoping done on it. A shallow shaft is located south of the upper adit. In 1915, a 6 ton shipment from the workings assayed 178 ounces silver to the ton and 61% lead. In August, 1985 a grab sample taken by the former claim owner from the Helen dump ran 121.1 ounces per ton silver; 0.016 ounces per ton gold and 60.20% lead. The host rock is a granitic apophysis from the Nelson batholith.

Past Work and Expenditures

Since the showings were originally worked in the 1915 to 1929 period, little further work has been performed. The recent stakers and owners of the claims - up to April 1986 - have had rather sporadic work performed on the claim group.

In 1983 physical work - cleaning trails, repairing roads - was applied to the claims. A property examination with recommendations was carried out by a consulting firm, Barton Consulting Inc., that same year.

In 1984, a geochemical survey involving the collection of 319 soil samples was organized by Mark C. Hansen, Consulting Geologist, in the vicinity of the Big Ben, Marble Arch and California showings. Three anomalous areas were located, one related to a known showing while the other two have unknown roots. There was no follow-up on this work.

In December 1984, an airborne survey by Geotronics Survey Ltd. utilizing magnetics and VLF electromagnetics was flown. The results indicated nine conductors as revealed by the VLF-EM and outlined the intrusive contact along the southern boundary of the claims. Two of the conductors occur close to the Siocan-Nelson contact which is known to be related to gold and sulphide mineralization. Several of the showings occur close to a north-northeasterly trending lineation. Again there was no surface follow-up on these results.

In August 1985, a prospecting crew was sent into the holdings with the intent purpose of locating the Helen workings. This was accomplished with a grab sample from the dump being brought out and analysed.

As indicated by Lloyd C. Brewer of Stryder Explorations Ltd. in a letter to Chandi management April 8, 1986 the following expenditures have been performed on the claims within the last three years:

Physical (Feb 1983)	\$ 1,345
Property Examination (March 1983)	500
Geochemical Survey (June 1984)	9,085
Airborne Geophysical (April 1985)	13,720
Prospecting (August 1985)	<u>2,650</u>
	\$27,300

Respectfully submitted,

W. G. Hainsworth, P. Eng.

CERTIFICATE

I, W.G. Hainsworth, P.Eng., of Vancouver, B. C. do hereby certify:

- (1) That I am a Consulting Geologist residing at 836 West 13th Avenue, Vancouver, B. C.
- (2) That I am a graduate of the University of Western Ontario, London, Ontario, Bachelor of Science Degree, Honours Geology.
- (3) That I have practiced my profession for some 30 years.
- (4) That I have been a continuous member of the Association of Professional Engineers of British Columbia since 1965 and am a Professional Geologist registered with the Association of Professional Engineers, Geologists, and Geophysicists of Alberta since 1979.
- (5) That I have no financial interest, direct or indirect, in Chandi Resources Corporation, and do not expect to obtain any such interest.
- (6) That the information contained in this report is based on a visit to the Marble Arch claims and perusal of all pertinent information available.
- (7) That consent is herewith given to Chandi Resources Corporation, to use any or all material from this report in information circulars, offerings or shareholders' brochures.

W. G. Hainsworth, P. Eng. (B.C.)
P. Geol. (Alta)

To accompany:

A REPORT ON A MINING CLAIM BLOCK
NELSON MINING DIVISION
KASLO, B. C.

FOR

CHANDI RESOURCES CORPORATION
930 - 470 Granville St.
Vancouver, B. C.

July 30, 1986

Bibliographies

Geophysical Report on Airborne Magnetic and VLF EM Surveys
Geotronics Survey, April 1985

Report on The Marble Arch Claim. Burton Consulting Inc.
March 1983

Report on the The Marble Arch Claim Group. Mark C. Hansen.
June 1984

Prospecting Property Examination. Lloyd C. Brewer
April 1986

G.S.C. Memoirs 173 and 184. Slocan Mining Camp. C.E. Cairnes
1935

B. C. Minister of Mines Reports:

1926 - 266

1919 - 121-122