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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORTS

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JUL 23 1996

ASSESSMENT REPORT ON

ARCH PROPERTY

TWELVE MILE CREEK, KASLO AREA

SLOCAN MINING DIVISION, BRITISH COLUMBIA

PROPERTY

Southeast corner of property is 17
kilometers west of Kaslo, B.C.

49° 59' North latitude
117° 05' West longitude

N.T.S. 82F/14 E

WRITTEN FOR

WHITE WOLF EXPLORATIONS LTD.
548 Beatty Street
Vancouver, B.C. V6B 2L3

WRITTEN BY

LLOYD C. BREWER
548 Beatty Street
Vancouver, B.C. V6B 2L3

JOHN D. YOUNG, B.Sc.
548 Beatty Street
Vancouver, B.C. V6B 2L3

DATE

July 14, 1996

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INTRODUCTION

This report discusses the work carried out on the Arch Silver Property in late September 1995. The work was carried out of by Gerard Gallasant, B.Sc. and John D. Young, B.Sc. both of whom are employed by White Wolf Explorations Ltd., of Vancouver, BC

The property consists of three mineral claims encompassing 48 units (1,200 Ha) in total surface area. The claims cover the lower reaches of Twelve Mile Creek, in the Slocan Mining Division, British Columbia (Figures 1 & 2).

The property is of interest as a potential host to economic silver-lead-zinc mineralization, in epithermal veins typical of the Slocan Mining Camp. There are also gold values reported in some of the workings, these definitely warrant further investigation. Work on the property in the past ten years has been sporadic, with limited geochemical sampling in 1984, airborne magnetic and electro-magnetic surveys flown in 1985 and gridwork, prospecting and searches for the old workings being carried out in more recent years.

The property is known to host five sets of workings, consisting of adits, shafts and trenches.

PROPERTY AND OWNERSHIP

The Arch property located in the Slocan Mining Division consists of three claims totaling 48 metric claim units. The total physical area of the claims is 1,200 hectares. The claims are further described as follows:

Claim Name	Number of Units	Record Number	Expiry Date *
Arch 2	12 units	324683	April 11, 1997
Arch 3	18 units	324684	April 11, 1997
Arch 4	18 units	324685	April 11, 1997

* The Expiry Date takes into account the exploration work described herein as being accepted for assessment credits.

The claims are held by Lloyd C. Brewer in trust for White Wolf Explorations Ltd. of Vancouver, BC

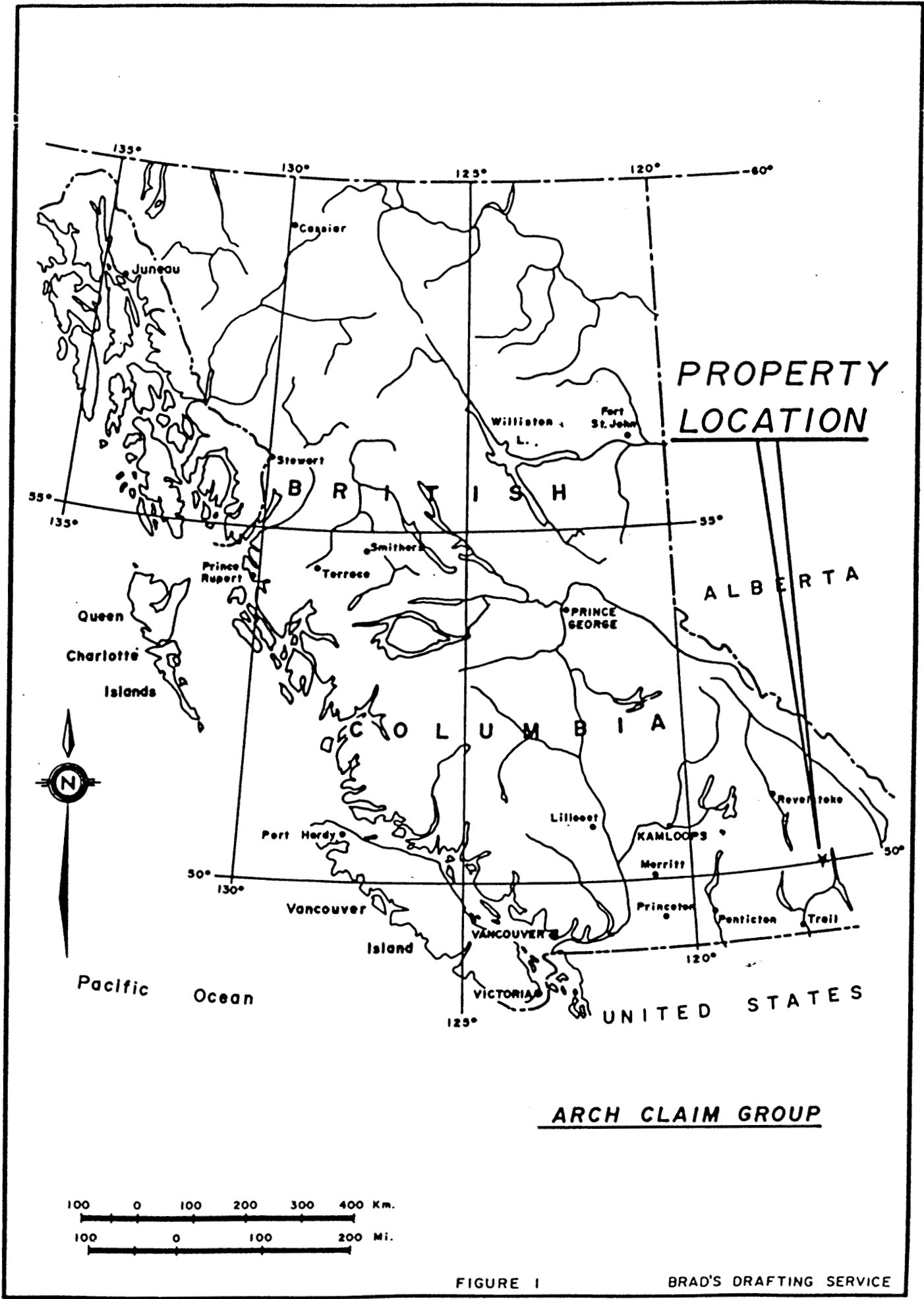
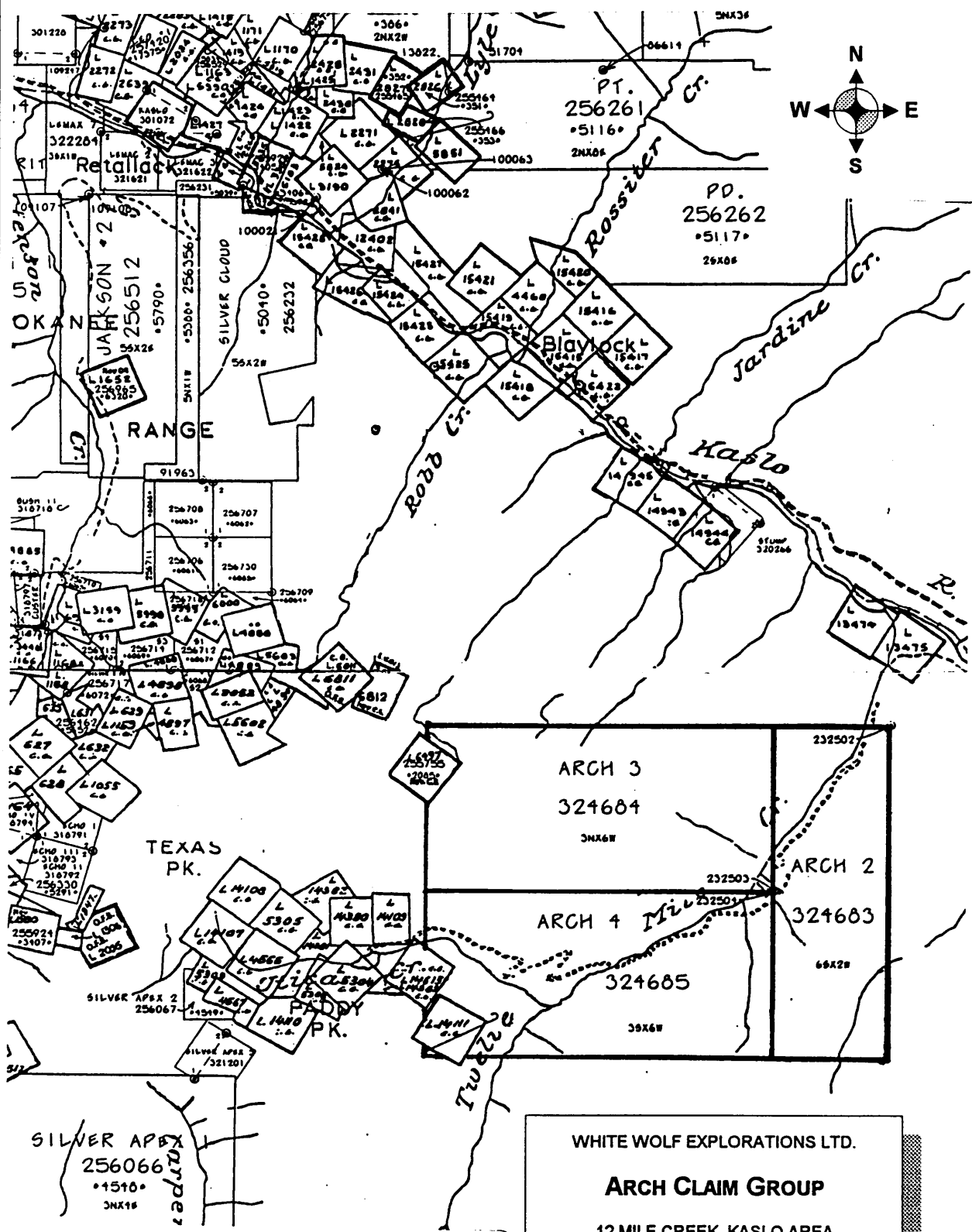


FIGURE 1

BRAD'S DRAFTING SERVICE



WHITE WOLF EXPLORATIONS LTD.
ARCH CLAIM GROUP
 12 MILE CREEK, KASLO AREA
 SLOCAN MINING DIVISION, B.C.
 82 F/14 E SCALE 1:50,000

LOCATION AND ACCESS

The property is located at the north end of the Kokanee Range in the Selkirk Mountains, on the lower reaches of Twelve Mile Creek, a tributary of the Kaslo River. It lies to the immediate south of Highway 31A, approximately 17 kilometers to the northwest of Kaslo.

The Utica mine road runs through the eastern part of the property. This gravel road leads to the now abandoned Utica mine site, adjoining to the south of the claim group. However, the bridge crossing the Kaslo River has been removed and a washout 2 km up from Hwy. 31A make the road impassable to vehicles. Numerous overgrown logging roads traverse the eastern portion of the claim group. A foot trail runs northwest from the Utica mine road towards the showings in the center of the claims.

At present the Kaslo River can be crossed either by wading or by canoe. Helicopter can also provides access to the claims for preliminary exploration. Any advanced stages of exploration and development of the property would require the emplacement of a sturdy bridge crossing the Kaslo River and access roads to the showings.

PHYSIOGRAPHY

The property lies between the elevations of 1,066 meters and 2,130 meters. The main areas of interest lie between approximately 1,200 meters and 1,800 meters a.s.l. Slopes are in the range of 20° to 40°, with occasional bluffs. Vegetation is moderate to heavy at lower elevations, particularly in areas of glacial cover. Higher elevations are more lightly vegetated, with many areas of outcrop. There is ample timber and water within the property to support all phases of exploration.

The property is snow free from June through November providing a five to six month exploration season.

The property is within easy commuting distance of Kaslo. Kaslo offers full facilities of a small town having a hotel, motel, bank and supermarket. Nelson, which is one hour and a half to the south, is the nearest major center.

HISTORY OF PREVIOUS WORK

Exploration in the area dates back to the turn of the century when native guides led a group of prospectors northwest from the Ainsworth Camp, the group subsequently located a high grade silver - lead showing which was staked as the Noble Five claims. This discovery initiated a staking rush in the area which led to the discovery and development of a vast number of mineral deposits with over 300 properties having

reached some form of production. Production records show Silver, Lead, Zinc, Cobalt, Gold and Platinum Group Minerals Elements were produced from these properties.

It should be noted that the British Columbia government production records are incomplete as it was common practice for the miners in the 1910 to 1930 period to ship their ore south down Kootenay Lake and the Kootenai River directly to mills at Coeur D'Alaine in Idaho for smelting.

The area saw a resurgence of activity during World War II as the demand for Zinc and other base metals increased. Production in the region has continued continuously through to the 1970's. Since that time production has been mainly limited to custom miners and leasers high grading tailings and reserves of the old producers.

The claims adjoin the Utica Mine to the west, the Utica mine produced in excess of 50,000 tons of high grade silver and lead ore, zinc is also reported in the mines production records.

The original showings on the Arch Silver Property were discovered in the early 1900's. The majority of the development work was done in the 1910 - 1926 period. The recorded production from the property is less than 30 tons of hand cobbed Silver - Lead ore from three of the six showings. This seems rather odd as the Helen workings, within the claims, have over 400 meters of underground development and have gold values of 0.12 oz/t reported in dump material.

The property has not had a modern systematic multi-phase exploration program conducted on it, nor has the target areas defined in previous work been followed up. In 1983 prospecting was performed, 1984 a small geochemical survey was carried out, (Hansen; Geological Report - June 22, 1984), in 1984 - 1985 airborne magnetic and electro-magnetic surveys were carried out over the property, (Mark; Geophysical Report - April 9, 1985), Prospecting 1986 (Brewer; Prospecting; April 8, 1986) a Compilation Report in 1986 (Hainsworth; July 30, 1986), and a report on grid emplacement and airphoto interpretation (Brewer, Young, June 2, 1996).

REGIONAL GEOLOGY

The Arch property occurs within the central section of the Kootenay Arc. The Arc is composed of a band of sedimentary, volcanic and metamorphic rocks that extend from northern Washington State where they strike northeasterly, to north of Revelstoke where they strike northwesterly. The age of the rocks varies from Precambrian to Jurassic.

The Milford Group is the lowest member of the stratigraphic sequence exposed in the vicinity, and is of Mississippian to Permian age. From the base the rocks consist of conglomerate, amygdaloidal metabasaltic flows, limestone phyllite, sandstone and chert. This sequence is itself underlain by rocks of the Lardeau Group.

The oldest rocks on the property are those of the Kaslo Group which occur near the northeast corner of the property. These rocks are thought to be of upper Permian to lower Triassic in age and overlay the Milford Group. The Kaslo Group rocks consist of mafic volcanic breccia, andesite, basalt, chlorite schist, tuffaceous argillite, talc and serpentinite. Sills and small plugs of gabbro or diorite that probably are of this group occur throughout the older sediments.

The Slocan Group is the youngest and is Upper Triassic in age. this group consists of undifferentiated slate, argillite, limestone, quartzite and tuffaceous sediments with some dolomite.

PROPERTY GEOLOGY

The Slocan Group covers most of the property and outcrops locally as slate, limestone and argillite. The sediments were observed to have a predominant strike of northwest with variable southwesterly dips. These rocks are cut by both concordant and discordant dykes which appear to be mostly felsic. The Slocan Group sediments are highly metamorphosed in areas where they come into contact with the intrusives.

The Nelson Batholith occurs along the southern edge of the property and along two northwesterly trends within the center of the property, and is of Jurassic age. This batholith was observed during the most recent examination of the property as consisting of unaltered porphyritic granite with smaller stocks of quartz diorite.

Dyke-shaped intrusives trend northwesterly and north-northwesterly through the northern half of the property. The petrology of these dykes varies from granite to quartz diorite and is of unknown age.

SUMMARY OF WORK PERFORMED

The Arch property was visited from September 21, 1995 to September 24, 1995, during which time a program of prospecting and sample collecting was undertaken by John D. Young, B.Sc. geologist and Gerard Gallissant B.Sc., both working for White Wolf Explorations Ltd. The days of September 18th and 19th, 1995 were spent traveling from Penticton to Kaslo, and preparation in Kaslo, September 25th was spent traveling back to Penticton, B.C. Access to the property was gained on September 21, 1995 via helicopter transport. An hour was spent in the air in order to pinpoint old showings and to locate a suitable camp site. A camp site was eventually located in an area close to the Keno showing at approximately 2,130 meters a.s.l. Ten rock samples, labeled R2 KAS 1 to R2 KAS 10, were taken during the visit and are described in detail in the Description of Showings section of this report. Ten geochemical soil samples were also taken from a

small trench above the Keno showing, and are labeled S1 KAS 1 to S1 KAS 10. The main showings visited during this time include the Keno showing and the Utica mine.

DESCRIPTION OF SHOWINGS

The following is a description of the properties utilizing descriptions taken from Hansen's report as well as Ministry of Mines Annual Reports from various years: The Keno showing and the Utica mine were both visited in September 1995. Observations from this program have been added to Hansen's notes.

Big Ben

(not observed September 1995)

There are two mentions of this showing; in the Annual Report of the Minister of Mines (1926), and a quote by Cairnes (1935) from this annual report. The workings consist of a 6 meter shaft within granite. This is sunk on a vein, 45 cm to 50 cm' wide, oriented $075^{\circ}/67^{\circ}$ NW. Mineralization consists of galena, pyrite and quartz. A grab sample assayed 0.12 oz/t Au (3.7g/tne), 94.5 oz/t Ag (2,887.9 g/tne), 81.2% Pb, 0.9% Zinc.

Marble Arch

(not observed September, 1995)

The Marble Arch is described in the same two references as the Big Ben. Workings consists of a shallow shaft and two adits within calc-schist. These develop a quartz-filled fissure containing streaks of "high-grade ore." The vein, oriented $070^{\circ}/50^{\circ}$ SE, is reported to be about 4" wide. A sample across the vein assayed 0.14 oz/t Au (4.3 g/tne), 393.6 oz/t Ag (12,028.4 g/tne), 70.3% Pb.

California

(not observed September, 1995)

In addition to the above two references California is also mentioned in the 1927 Report to the Minister of Mines. It consists of two sets of workings. The lower consists of two adits 17 meters and 20 meters in length, developed on a fissured band of altered, schistose limestone. The limestone oriented $330^{\circ}/60^{\circ}$ NE, 4 meters to 6 meters wide, is sparsely mineralized with disseminated galena and sphalerite, along with surface patches of goethite and/or limonite. The upper workings, consisting of a shallow shaft and three adits, developed such iron cappings, apparently "gossanous" in nature.

Helen

(not observed September, 1995)

References to this showing are; Cairnes (1935), Minister of Mines Annual Reports for 1917, 1918 and 1919. Workings consist of 365 meters of raise, shaft, adit and stope, with 12 meters of surface trenching. Two adits and one shaft provide access to the underground workings. The lode which has been developed is approximately one meter wide, oriented $055^{\circ}/45^{\circ}$ SW, and consists of sheared granite and metamorphosed sediments. Vein mineralization consists of galena and sphalerite. Replacement mineralization in the form of "carbonate ore" was also encountered. A channel sample of the carbonate ore assayed 0.04 oz/t Au (1.2 g/tne), 56 oz/t Ag (1,711.4 g/tne), and 12% Zn. A shipment of six tons of ore in 1915 averaged 178 oz/t Ag (5,439.7 g/tne) and 61% Pb.

The Helen workings have yet to be re-located, The Big Ben, Marble Arch, California and Keno workings have been observed during various recent field examinations, all underground workings are presently inaccessible.

Keno

The Keno workings are situated at an elevation of 2,000 meters as measured by altimeter on a north facing slope and consist of 3 adits as described by Cairnes (1935):

The upper adit has a raise to the surface at 13 meters, then splits at 16.5 meters. The east fork of this adit extends for 15 meters, the south for 13 meters. The workings develop a shear zone, oriented $180^{\circ}/50^{\circ}$ East in the Slocan series sediments. The shear is one to four feet in width, consisting of fractured and slickensided sediments.

A grab sample taken earlier in 1995 (Brewer) from vein material on the roof of the upper-most adit assayed 551 ppb Au, 3,872 g/tne Ag and 61% Pb.

The showing was most recently visited during this program. All three adits were found to be caved, although a 50 cm vein striking $030^{\circ}/60^{\circ}$ E was exposed at the surface of the upper-most adit. The host rock is limestone and argillite of the Slocan series (Upper Triassic), and is unaltered. The style of mineralization was observed to be both in veins as well as mineralization replacing carbonate. (The most productive veins have been described by Cairnes as occurring within competent host rock or locally supported by more competent units such as limestone, quartzite, dykes or sills.)

Samples labeled KAS 4 - KAS 10 were taken from this site and are described as follows:

- KAS 4** was sampled from the dump of the lowest adit #1, and contained massive galena and sphalerite within a quartz-calcite gangue. This sample assayed 546 ppb Au, 2,195.3 g/t Ag, 26.88% Pb and 9.9% Zn.
- KAS 5** was sampled from the dump of the middle adit #2, 25m up slope from adit #1, and contained galena sphalerite within calcite gangue. KAS 5 assayed 534 ppb Au, 1339.6 g/t Ag, 22.65% Pb and 6.3% Zn.
- KAS 6** was sampled from the dump of adit #3, 10m up slope from KAS 5. This sample assayed 756 ppb Au, 2,086.3 g/t Ag, 30.60% Pb and 13.4% Zn.
- KAS 7** was taken from an exposed vein within gray limestone above adit #3. The vein contained sphalerite and galena within calcite vein material. This sample assayed 129 ppb Au, 671.5 g/t Ag, 8.97 % Pb and 14.22% Zn.
- KAS 8** was taken from the tailings pile near the KAS 7 sample location, and assayed 366 ppb Au, 6,623.4 g/t Ag, 76.02 % Pb and 1.85 % Zn.
- KAS 9** was taken from the tailings pile near the KAS 7 sample location, and assayed 381 ppb Au, 2,895.1 g/t Ag, 32.68 % Pb and 13.4% Zn.
- KAS 10** was taken from the tailings pile near the KAS 7 sample location, and assayed 1062 ppb Au, 4,038.5 g/t Ag, 58.81 % Pb and 3.1% Zn.

All of the rock samples taken during this program were grab samples.

Prospect Pit Above Keno

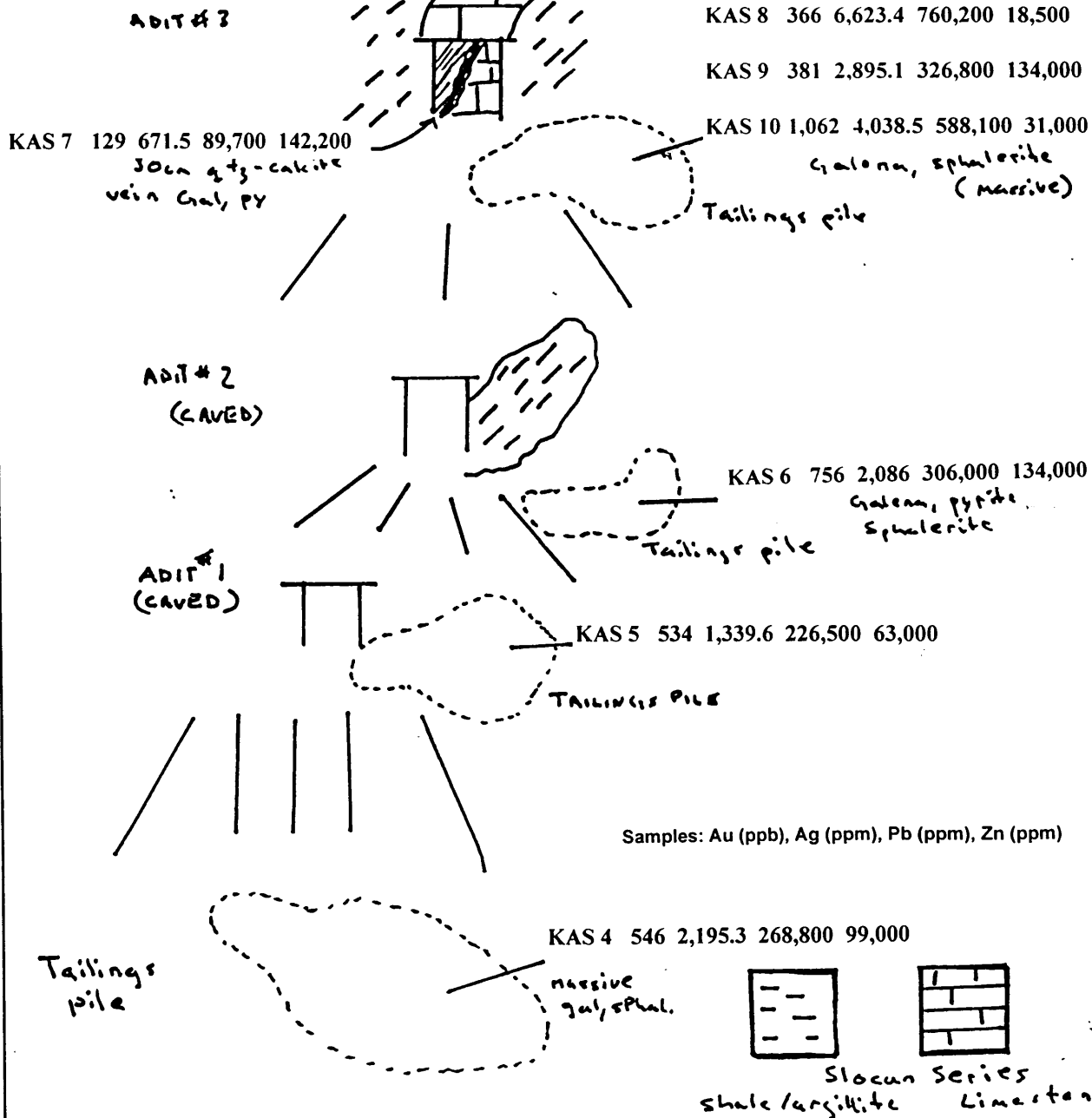
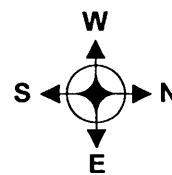
A small prospect pit was discovered during this above the Keno showing at an elevation of 2,280 meters as measured by altimeter. The pit was cut into slate/argillite of the Slocan series and contained no visible mineralization. Material inside the pit contained minor galena and sphalerite within a carbonate gangue, assays of sample KAS 1 as follows:

- KAS 1** was taken within the Prospect Pit above the Keno and the assay of this sample returned 22 ppb Au, 188.9 g/t Ag, 4.64% Pb and 7.1% Zn. (fig. 3)

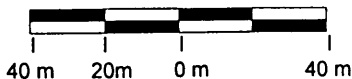
WHITE WOLF EXPLORATIONS LTD.
ARCH CLAIM GROUP

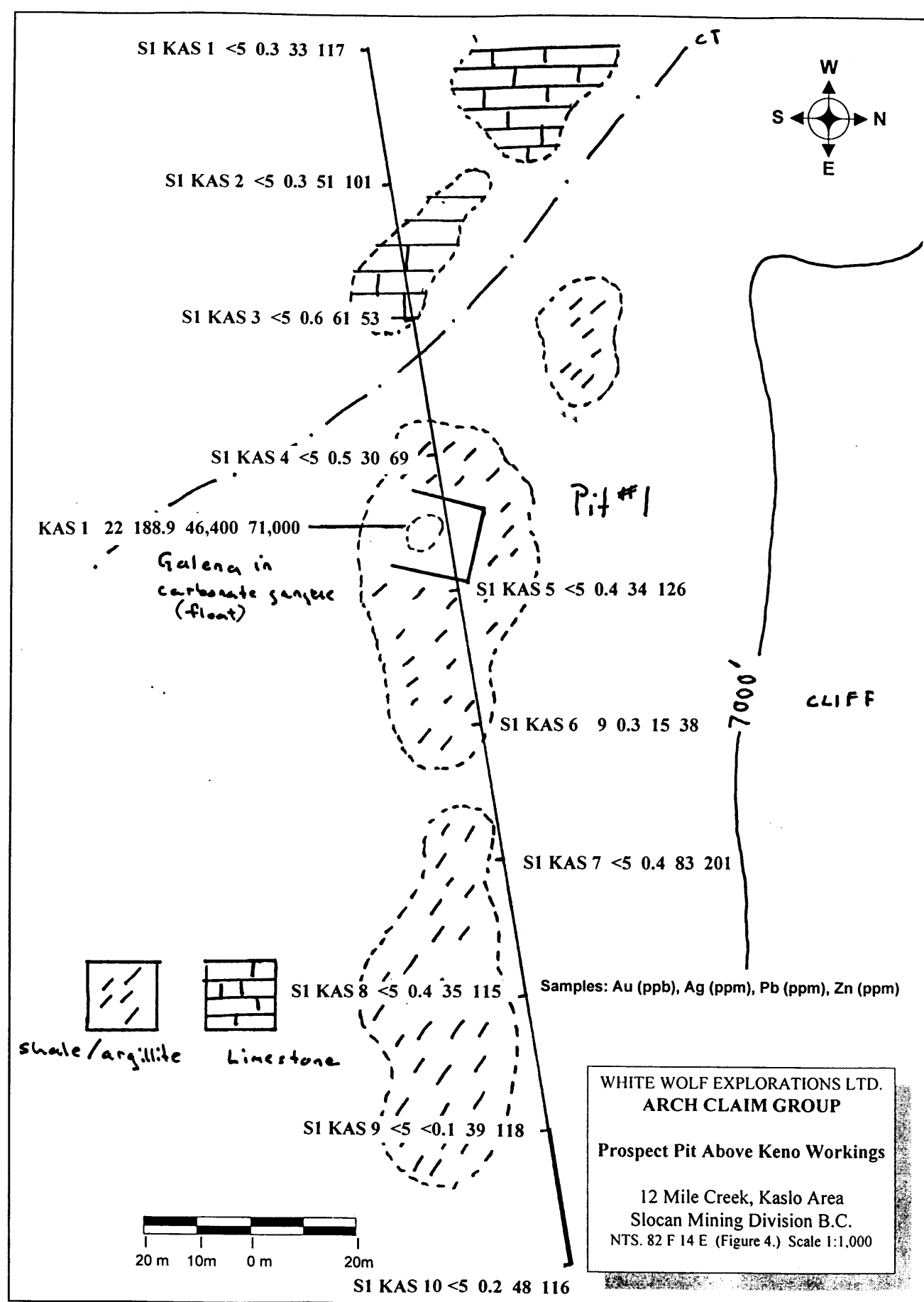
Keno Sample Locations

12 Mile Creek, Kaslo Area
Slocan Mining Division B.C.
NTS. 82 F 14 E (Figure 3.) Scale 1:2,000



Samples: Au (ppb), Ag (ppm), Pb (ppm), Zn (ppm)





Utica Mine

The Utica mine originally comprised of 10 separate claims on or near Paddy's Peak, at the head of Twelve Mile Creek and approximately 24 kilometers from Kaslo. The Utica Mine property is adjacent to the western boundary of the Arch Silver property. The geological formations present in the immediate area consist mainly of rocks of the Slocan series which have been altered by near by granitic intrusions belonging to the Nelson Batholith of Middle Jurassic age. The rocks hosting vein material are either slates or schists which have been classified as being chialstolite schists (BCDM Annual Report, 1923).

Two main veins 25 meters apart and running parallel are known as the "East" and "West" veins. These veins strike 035° - 70° and are composed of quartz-calcite-siderite gangue material containing galena and sphalerite. The main adit, visited on September 21, 1995, was boarded up. Several old mine buildings are still standing although in poor condition. The mining dumps in the vicinity of the Utica portal were examined and sampled. Samples KAS 2 and KAS 3 contained galena, sphalerite in a quartz calcite gangue. Analysis of the samples are as follows:

KAS 2 38 ppb Au, 330.5 g/tne Ag, 0.25% Pb and 7.3% Zn

KAS 3 10 ppb Au, 155.3 g/tne Ag, 3% Pb and 1.5% Zn

Cairnes considers that the zone of economic mineralization is 330 meters to 660 feet thick, and coincidentally parallels the present land surface in many areas. In general the higher parts of this zone are characterized by silver and lead, the lower parts by pyritiferous zinc. Thus, all showings on the claim group can be considered to be lying towards the top of the zone of mineralization.

It appears that the showings on the claims correspond with several features considered by Cairnes to be important in the occurrence of economic mineralization. It can be stated, therefore, that the property seems to be a prime target for silver-lead-zinc epithermal vein mineralization. The presence of gold mineralization in some of the workings is significant as there is recorded gold production in the White Water Basin located four kilometers to the northwest of the property.

SOIL GEOCHEMISTRY

A total of ten soil samples were taken from a 15m, east to west striking trench situated on a ridge approximately 600m above the upper-most Keno adit (#3). The trench was cut in slate of the Slocan series sediments, and contained no visible mineralization. The samples were taken at various locations within the trench and are labeled S1 KAS 1 thru S1 KAS 10. The location of the samples are shown on figure 4, results are listed below and analytical certificates appear in Appendix 1.

The soil samples were taken using mattocks from unconsolidated material within the above noted trench. It is assumed that this material has sloughed from the sides of the trench. Soil samples were placed in kraft envelopes and shipped to Bondar Clegg Laboratories in Vancouver. Atomic absorption analysis was carried out on the samples for Gold, Silver Lead and Zinc element analysis including gold. The analytical methods and results are presented in Appendix I.

Soil Geochemistry Results

SAMPLE NUMBER	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)
SI KAS 1	<5	0.3	33	117
SI KAS 2	<5	0.3	51	101
SI KAS 3	<5	0.6	61	53
SI KAS 4	<5	0.5	30	69
SI KAS 5	<5	0.4	34	126
SI KAS 6	9	0.3	15	38
SI KAS 7	<5	0.4	83	201
SI KAS 8	<5	0.4	35	115
SI KAS 9	<5	<0.1	39	118
SI KAS 10	<5	0.2	48	116

The results of the sampling indicated the presence of mineralization, although the scope of the sampling was too limited to determine any pattern to the mineralization.

CONCLUSIONS

The results of this program confirm the presence of "High Grade" Silver, Lead and Zinc mineralization within the Arch Silver Property. The samples collected and analyzed are consistent with results from previous programs. The property warrants an extensive program of geological mapping and sampling to locate an economic body of Silver, Lead and Zinc ore.

RECOMMENDATIONS

- Geological mapping Detailed geological mapping and prospecting should be carried out. It would seem logical that mapping would radiate out from known showings and be carried out in conjunction with geochemical sampling. Follow up mapping and prospecting should be carried out on target areas defined by any anomalous zones identified in geochemical surveys.
- Geochemical soils & talus Several lines of reconnaissance contour soil samples should be run to identify any downhill disbursement trains from mineralized areas. Closer spaced conventional grid soil samples should be taken around known showings and any areas of interest located by reconnaissance geochemical and geological surveys. Large samples should be collected analysis should also include gold, with sample preparation such that any coarse gold in samples would not be lost.
- Access road The access road should be located so that it will cut across as many of the mineralized zones as possible, essentially "Cat Trenching", this methodology is very successful in defining extensions to known mineralization as well as location new targets. The access road costs can be offset if built in conjunction with local logging companies. The road will also eliminate the use of helicopter in all phases of future exploration and development.
- Trenching "Cat Trenching" using either a D-6 caterpillar tractor or a Cat 235 Excavator should be carried out on old workings as well as targets as defined by preliminary surveys.
- Drilling Advanced geophysics may be considered prior to diamond drilling. For cost effectiveness "stepout" preliminary shallow drilling could be carried out using a track mounted percussion drill.

STATEMENT OF COSTS

I, Lloyd C. Brewer, President of White Wolf Explorations Ltd. here by certify that the following is a true and accurate cost statement for the charges incurred on the Arch Silver Property from September 15, 1995 to October 15, 1995.

WAGES:

Gerard Gallissant, B.Sc. Geographer & Crew Chief	8 Days @ \$250.00 P/D	\$2,000.00
John D. Young, B.Sc. Geologist	8 Days @ \$200.00 P/D	1,600.00

ASSAYS & ANALYSIS:

Analysis (Bondar Clegg Inchscape)	20 samples (Au, Ag, Pb & Zn)	403.73
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TRANSPORTATION:

Mobilization Demobilization Penticton - Kaslo Return		300.00
Helicopter		831.00
4x4 Truck Rental (Fuel Included)	7 Days @ \$100.00 P/D	700.00

ROOM AND BOARD:

Food		165.00
Lodging		73.00

EQUIPMENT:

Survey consumable		81.25
Camp General Exploration Equipment.	7 Days @ \$50.00 P/D	350.00

OFFICE & PRESENTATION:

Report Preparation		<u>500.00</u>
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TOTAL COST OF PROJECT:		\$7,003.98
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BIBLIOGRAPHY

Annual Reports of the Minister of Mines, B.C.: for the years - 1917, 1918, 1919, 1923, 1926 and 1927;

Brewer, L.C.: Prospecting - Property Examination on the Marble Arch Claims for Stryder Explorations Ltd., 1986;

Brewer, L.C. & Young, J.D.: Report on Grid Emplacement and Airphoto interpretation on the Arch Silver Property for White Wolf Explorations Ltd., 1996;

Burton, A.D.: Report on the Marble Arch Claim for Almine Resources Ltd., 1983;

Cairnes, C.E.: Slocan Mining Camp, B.C., GSC Memoir 173, 1934;

Cairnes, C.E.: Description of Properties, Slocan Mining Camp, B.C., GSC Memoir 184, 1935;

Fyles, J.T.: Geology of the Ainsworth-Kaslo Area, B.C., BCDM Bulletin 53, 1967;

Hainsworth, W.G.: Report on a Mining Claim Block for Chandi Resources Ltd., 1986;

Hansen, M.C.: Geological Report on the Marble Arch Claims Group for Almine Resources Ltd., 1984;

Mark, D.G.: Geophysical Report on Airborne Magnetic and VLF-EM Surveys over the Marble Arch Claim Group for Stryder Explorations Ltd., 1985;

QUALIFICATIONS

I, Lloyd C. Brewer, of 548 Beatty Street, in the City of Vancouver, British Columbia, do hereby certify:

1. THAT I am president and owner of White Wolf Explorations Ltd. and have worked in the mining industry on a full time basis since 1981;
2. THAT this report is based on an exploration program carried out under my indirect supervision by crews of White Wolf Explorations Ltd. on the Arch Silver Property during the mid part of September, 1995, and by various geological reports in both the private and public domain;

Dated at Vancouver, British Columbia, this 14th day of January, 1996.



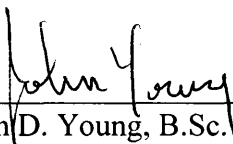
Lloyd C. Brewer

QUALIFICATIONS

I, John D. Young, of 548 Beatty Street, in the City of Vancouver, British Columbia, do hereby certify:

1. THAT I am an exploration geologist, having practiced my profession in Ontario and British Columbia since 1992;
2. THAT I am a graduate of the Lakehead University with a Bachelor of Science in Honors Geology;
3. THAT the information contained herein is based on published and unpublished reports on claims now covered by the Arch Property, and as a result of a work program conducted on the Property by White Wolf Explorations Ltd., which included geological mapping & sampling and prospecting by myself during the period September 21, 1995 to September 24, 1995; and
4. THAT I have no interest in the Arch Silver Property, or in any other property within a 10 kilometer radius of the property, nor do I expect to receive any as a result of co-authoring this report.

Dated at Vancouver, British Columbia, this 14th day of July, 1996.



John D. Young, B.Sc.

APPENDIX 1

ANALYTICAL CERTIFICATE FOR ROCK AND SOIL SAMPLES TAKEN AS
DISCUSSED HEREIN:



Bondar Clegg Inchcape Testing Services

Geochemical Lab Report

WHITE WOLF EXPLORATION
548 BEATTY ST.
VANCOUVER, B.C. V6B 2L3

Large empty rectangular area with a dotted border, intended for the report content.



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

REPORT: V95-01511.0 (COMPLETE)

REFERENCE:

CLIENT: WHITE WOLF EXPLORATION
PROJECT: ARCH SILVERSUBMITTED BY: L. BREWER
DATE PRINTED: 18-JUL-96

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au30 Gold	20	5 PPB	Fire Assay of 30g	30g Fire Assay - AA
2	Ag Silver	20	0.1 PPM	HCL:HNO3 (3:1)	ATOMIC ABSORPTION
3	AgOL Silver, semiquant.	10	1 PPM	HCL:HNO3 (3:1)	ATOMIC ABSORPTION
4	Pb Lead	20	2 PPM	HCL:HNO3 (3:1)	ATOMIC ABSORPTION
5	Zn Zinc	20	1 PPM	HCL:HNO3 (3:1)	ATOMIC ABSORPTION
6	ZnOL Zinc, semiquant	8	0.1 PCT	HCL:HNO3 (3:1)	ATOMIC ABSORPTION

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
S SOIL	10	1 -80	10	DRY, SIEVE -80	10
R ROCK	10	2 -150	10	CRUSH/SPLIT & PULV.	10

REPORT COPIES TO: 548 BEATTY ST.

INVOICE TO: 548 BEATTY ST.

Bondar-Clegg & Company Ltd.

130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, Canada

Tel: (604) 985-0681. Fax: (604) 985-1071



Bondar Clegg

Inchcape Testing Services

Geochemical Lab Report

CLIENT: WHITE WOLF EXPLORATION
REPORT: V95-01511.0 (COMPLETE)

PROJECT: ARCH SILVER
DATE PRINTED: 18-JUL-96 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU30 PPB	Ag PPM	AgOL PPM	Pb PPM	Zn PPM	ZnOL ₁ PCT
S1 KAS-1		<5	0.3		33	117	
S1 KAS-2		<5	0.3		51	101	
S1 KAS-3		<5	0.6		61	53	
S1 KAS-4		<5	0.5		30	69	
S1 KAS-5		<5	0.4		34	126	
S1 KAS-6		9	0.3		15	38	
S1 KAS-7		<5	0.4		83	201	
S1 KAS-8		<5	0.4		35	115	
S1 KAS-9		<5	<0.1		39	118	
S1 KAS-10		<5	0.2		48	116	
R2 KAS-1		22	>50.0	206	>10000	>20000	7.1
R2 KAS-2		38	>50.0	321	2455	>20000	7.3
R2 KAS-3		10	>50.0	153	3000	14811	
R2 KAS-4		546	>50.0	>500	>10000	>20000	9.9
R2 KAS-5		534	>50.0	>500	>10000	>20000	6.3
R2 KAS-6		756	>50.0	442	>10000	>20000	13.4
R2 KAS-7		129	>50.0	>500	>10000	>20000	>15.0
R2 KAS-8		366	>50.0	>500	>10000	1850	
R2 KAS-9		381	>50.0	424	>10000	>20000	13.4
R2 KAS-10		1062	>50.0	461	>10000	>20000	3.1



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STANDARD NAME	ELEMENT UNITS	Au30 PPB	Ag PPM	Ag0L PPM	Pb PPM	Zn PPM	Zn0L PCT
HIGH GOLD STANDARD		511	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-
Mean Value		511.3	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		500	-	-	-	-	-
BCC GEOCHEM STD 3		-	5.1	-	269	546	-
Number of Analyses		-	1	-	1	1	-
Mean Value		-	5.10	-	269.2	546.0	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	7.8	8	250	500	0.1
ANALYTICAL BLANK		-	<0.1	-	<2	<1	-
Number of Analyses		-	1	-	1	1	-
Mean Value		-	0.05	-	1.0	0.5	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		5	0.1	<1	1	1	<0.1

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SAMPLE NUMBER	ELEMENT UNITS	Au30 PPB	Ag PPM	AgOL PPM	Pb PPM	Zn PPM	ZnOL PCT
KAS-2		<5	0.3		51	101	
Duplicate		<5	0.3		57	92	
KAS-10		1062	>50.0	461	>10000	>20000	3.1
Duplicate			>50.0	>500	>10000	>20000	3.0

APPENDIX 2

STATEMENT OF EXPLORATION AND DEVELOPMENT FOR THIS PROGRAM
(as filed with Ministry of Mines)