REPORT ON A PRELIMINARY DRILLING PROGRAM AND GRID ESTABLISHMENT ON THE JOLLY CREEK GROUP

AH-CH CLAIMS AND FOUR CROWN GRANTS GREENWOOD MINING DIVISION

NTS 82E3E
119°08' W, 49° 07' N

by K. Heffernan

October 1, 1981

Owners:
C. Heady and A. Hook
Oliver, British Columbia

Operator:
Cheshire Exploration Ltd.
1010 505 3 Street S.W.
Calgary, Alberta

Consultant:
Kevin J. Heffernan
7 Templehill Cres. N.E.
Calgary, Alberta

TABLE OF CONTENTS

LIST OF MAPS AND FIGURES

1. INTRODUCTION

1.1 LOCATION AND ACCESS

The property is located 12 km northwest of the village of Rock Creek and approximately 3 km due east of Camp McKinney and 8 km north of the Rock Creek bridge on Highway 3. It is approximately centered at 119° 08' west longitude and 49° 07' north latitude (Figures 1 and 2). Access is gained from Canyon Road which turns north off Highway 3 immediately west of the Rock Creek bridge. The roads are in good condition and quite easily travelled by a 2-wheel drive vehicle.

1.2 STATUS OF CLAIMS AND GRANTS

The claim group lies within the Greenwood Mining Division and is shown on Figure 2, Mineral Titles Map 82E/3. Four Crown Grant claims and 2 located claims totaling 21 units comprise the property and their particulars are listed as follows:

Victoria Crown Grant	L218
Snowdon Crown Grant	L583
England Crown Grant	L658
Lemon Crown Grant	L760

The CH mineral claim, Record No. 1349, consisting of 6 units, was staked by Mr. Cyril Headey of Oliver on September 23rd, 1978, and recorded October 4th. The AH claim, Record No. 1350, 15 units, was recorded on October 4th, 1978 by Mr. Arthur Hook.

On October 3, 1979, the AH and CH claims and the four Crown Grant Mineral claims were grouped under the name Jolly Creek Group by Messrs. A. Hook and C. Heady (Notice to Group No. 1460).

The owners of record are:

Mr. C. Heady and Mr. A. Hook
Oliver, British Columbia

The operator is:

Cheshire Exploration Ltd.
1010 505 3 Street S.W.
Calgary, Alberta
FMC No. 224342

The consultant and agent for Cheshire Exploration is:

K.J. Heffernan
7 Templehill Cres. N.E.
Calgary, Alberta

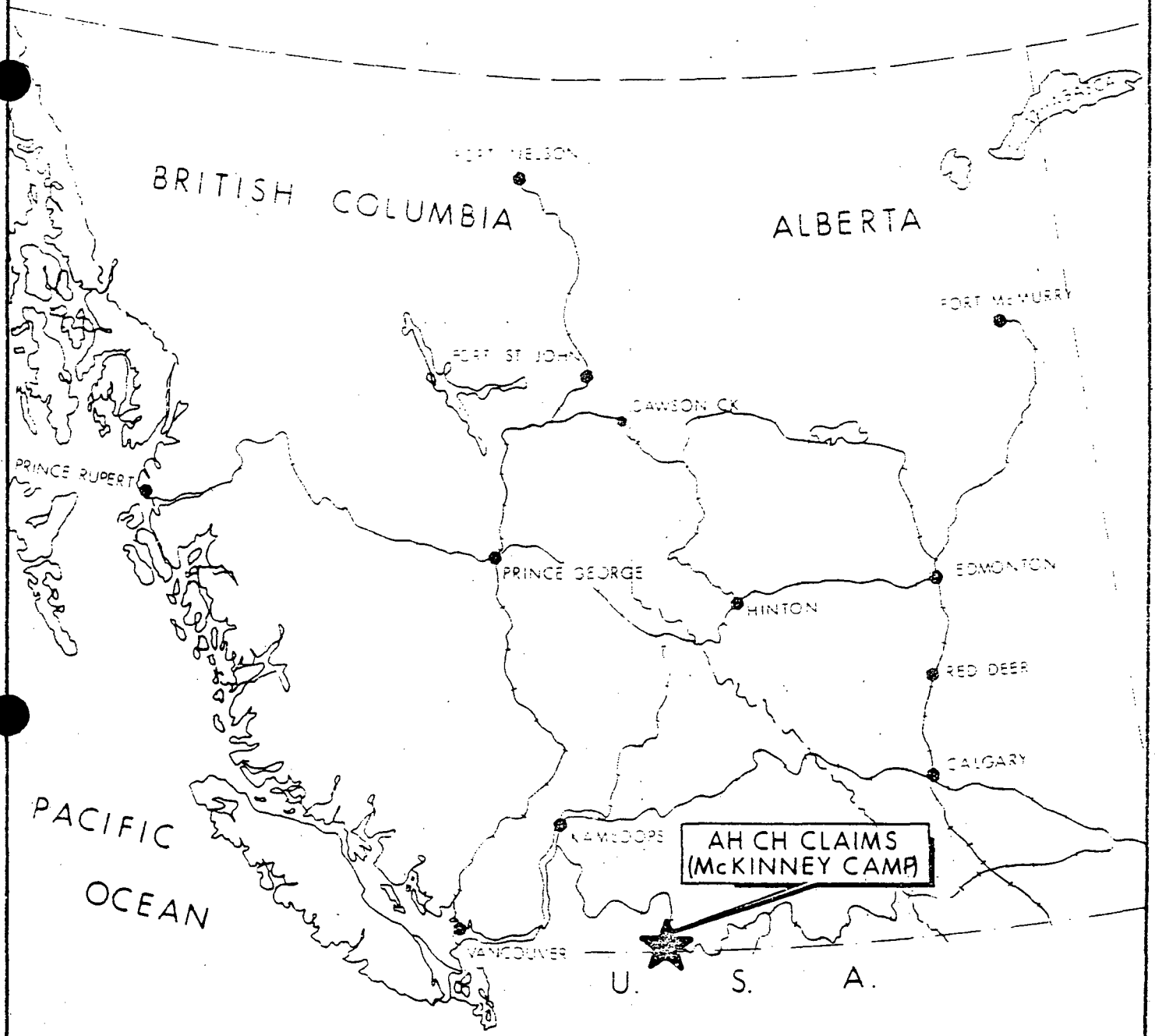
FMC No. 224034

1.3 OBJECTIVES

The two primary objectives of the work done on the claims during the summer of 1981 were:

1. Drill two short holes along the trend of the veining seen at surface. These holes would establish the presence of mineralization (gold) and provide evidence for the lateral persistence of the vein system.
2. Establish a grid on the claims so that if the results of the drilling program are encouraging additional surveys can be initiated immediately.

To meet these objectives a grid was established in early July, in part by cut lines, and in part by flagging lines. A drilling contractor was selected, and two short holes were drilled on the Old England Crown Grant in early August.

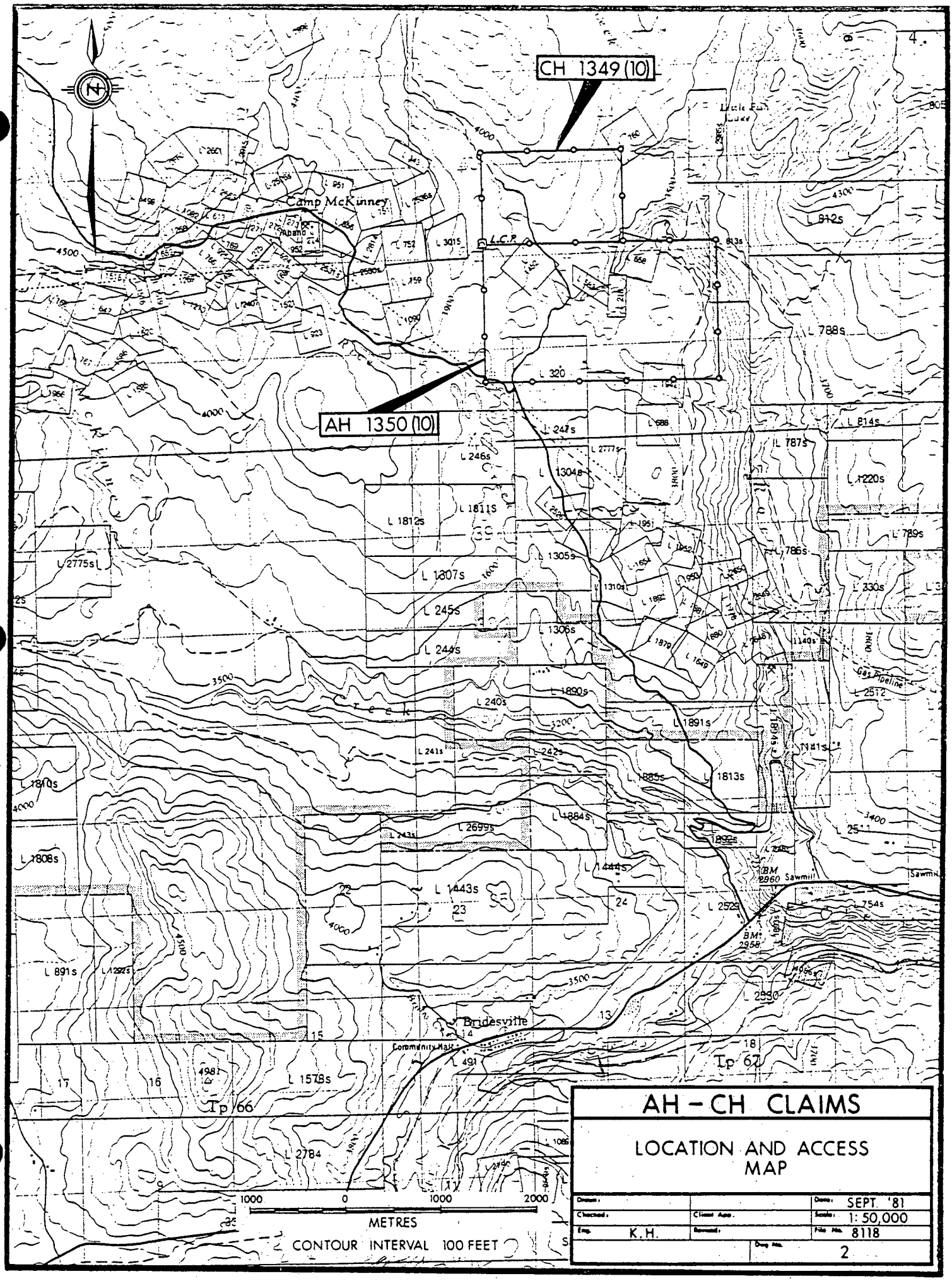


AH-CH CLAIMS

LOCATION MAP

DR DEC 80

FIG No 1



AH – CH CLAIMS

LOCATION AND ACCESS MAP

Drawn:		Date:	SEPT. '81
Checked:	Client App.:	Scale:	1: 50,000
Eng. K.H.	Remarks:	File No.	8118
		Dwg. No.	2

2. SUMMARY OF GEOLOGY

2.1 PREVIOUS WORK

The following paragraphs summarize work that has been done on the claims, and is available through the Mines Branch records, and government reports. The location of existing underground workings are shown on the map of the claims (Map 1) at a scale of 1:5,000. Evidence of much of the reported work is no longer visible, and as such many of the reported workings are not shown on the map.

2.1.1 Snowdon (Crown Grant)

The property is reported to have had at least one adit (80') developed along a shear zone about 1 foot wide. Mineralization consists of quartz, pyrite, galena and sphalerite, with "low values in gold".

2.1.2 Victoria (Crown Grant)

The initial discovery of gold in the McKinney Camp was made on the Victoria Grant in 1884. Work by 1894 appears to have been 110' inclined shaft. Assays of hand picked ore range from $127 to $480 per ton ($17/ounce Au).

Between 1896 and 1901 the workings included two tunnels with underground workings. No information is available on the orientation of the underground development. Tunnel #1, located in the "center" of the claim, was 234' deep. At 198', a "fault wall" containing thin faulted vein material was encountered. One hundred and ninety feet of drifting was completed along the wall, with a few inches of quartz continuing most of the way. Between 198' and 234' in the tunnel, the wall rock is mainly quartzite.

Tunnel #2 is located 750' away from and fifty feet below Tunnel #1. Tunnel #2 was 205' deep to the same "fault wall" as encountered in Tunnel #1. Further development included a 110' decline along the fault wall, a 145' raise along the fault wall and 300' of drifting and stoping. Assays from 30 tons of at

least one shipment of hand picked ore assayed 2.15 ounces gold per ton and 5.2 ounces silver per ton net value (Gold $17/ounce, Silver ?).

2.1.3 England ("Old England" Crown Grant)

Development work was done on three parallel veins in a zone about 80' wide. These veins were apparently traced across the grant. The east vein is exposed for 50 feet in out-crop and contains copper and iron sulphides. An "8' cross-cut" of mineralized vein as reported may refer to the vein thickness, but this is not certain.

The west vein was developed with a thirty foot tunnel on the vein. As reported the vein is 4' wide and contains galena, and iron sulphides.

Development on the center vein is poorly described. The vein at surface is "20 feet or more" wide. Reference is made to a 90' tunnel aimed at intersecting the vein at a depth of 200' below surface. No comment is made as to the success of this venture. Further reference is made to vein thickness of 3' at a depth of 75'; this suggests that a vertical or inclined shaft may have been developed. At that point both the vein and wall rock are mineralized. Wall rock mineralization is restricted to an envelope of alternation about 18" thick. Mineralization in both vein and wall rock consisted of talc and sulphides, with gold reported in galena (no values). It is not clear where later reported tunnel development took place, although some is reported. Similarly, an 80' inclined shaft under the fault is not given a location. The last reported work was the development of a 20' tunnel on the opposite side of the creek with "good" assays.

2.1.4 Lemon (Crown Grant)

By 1896 the reports indicate that the vein had been traced 1700' in a NE-SW direction and is described as a true fissure. The fissure lies at the contact between black slate to the west and quartzite to the east. No widths or grades are reported, although 10' of "iron cap" are described. An open cut measuring 20' x 6' x 9' is noted to intersect the main shaft at a depth of 10'. By 1901 the shaft apparently had been extended to 228' and passed under

the bed of Rock Creek. Again it is not clear whether there are one or two shafts and whether or not the vein continues southward.

2.1.5 AH and CH Claims

Some early work in the area of the AH and CH claims was reported, although it is difficult to put names to workings. The claims discovered to date have been staked to cover prospective ground adjacent to and along strike from known occurrences. Last assessment work was filed on these claims in October of 1979.

2.2 REGIONAL SETTING

The regional geology has been outlined by H.W. Little on G.S.C. maps 6-1957 and 15-1961, and shows the general claim area to be underlain by a sequence of Paleozoic volcanic sedimentary rocks. The volcanics consist of basaltic to andesitic lavas, greenstone and tuff, while the sediments vary in composition from coarse clastics through to limestone. Although the time designation is Paleozoic the section includes time-rock units regarded as upper Paleozoic and Triassic. Early workers use the term "Anarchist Series" in reference to the oldest rocks of the area, and refer to varying degress of metamorphism which produced schists and gneisses. Sheared and serpentinized basic rocks were noted along Rock Creek in old reports, and these were regarded as intrusive in origin.

The main intrusive rocks of the area belong to the Jurassic-Cretaceous Nelson and Valhalla granitic complexes, and these underlay large areas to the north and west. To the east numerous windows poke through patches of Tertiary cover rocks.

In the area of the crown grant claims, and east of Rock Creek, Tertiary volcanic flow rocks and sediments represent the youngest stratigraphic sequence.

The Camp McKinney (3 km west) mineralization consists of quartz veins with varying amounts of pyrite, galena, and sphalerite which strike easterly and

dip at high angles to the south. On the AH-CH Claims the most significant mineralized veins strike north and dip steeply to the east. They appear to be associated with zones of shearing and faulting.

3. PROCEDURES

The main objective of the work done during the 1981 field season was to confirm the presence of mineralized vein material at depth and along strike from an adit driven on a mineralized vein. A secondary objective was to establish a grid, in reference to this mineralized vein, so that grid surveys could be initiated following receipt of assay results from the drilling program.

3.1 ESTABLISHING GRID

The origin of the grid was established at the portal of the adit described above. The vein at this location trends N10^{o}E and dips at 70-80^{o} to the east. The adit was driven during the period 1929-1931 a distance of about 25 metres, to a point where the vein apparently dies out. Reported assays from this vein range from 0.26 to 1.18 ounces of gold per ton across thicknesses of 0.21 and 0.54 metres.

The baseline of the grid was designated as N10^{o}E, the same as the indicated strike of the vein. This baseline was extended 1500 metres north and 1000 metres south. Because the baseline extended onto adjacent claims to the north, a secondary baseline was established at 300 metres west, to approximately intersect an adit driven on a similar vein on the Snowdon Crown Grant.

The grid was laid out on a 30 metre spacing on the baseline and on cross-lines, using hip chains (Topofil) and compasses. Most of the grid was flagged, and coordinates marked on the flagging tape or on blazed trees, at 30 metre intervals. In addition, several cross lines were cut. Some mechanical difficulties were encountered with one of the hip chains, from 300N to 990N on the secondary baseline. Station intervals in that portion of the secondary baseline were found to be about 33 metres apart instead of 30 metres. This problem is indicated on the plan of the grid at a scale of 1:5,000 (Map 1). The cut lines and the flagged lines are also indicated on the plan.

The grid establishment and line cutting was contracted to Bema Industries Ltd. of Langley, British Columbia. In total, 20.72 kilometres of line was

flagged, and 5.81 kilometres of line was cut on the AH-CH claims. These totals do not include work done on ground adjacent to the claims.

The cut lines are:

Base Line			180N to 1000S
Cross Lines	00	B.L. to	120W
	300N	90W to	420W

Secondary Base Line (300W Line)			1500N to 1000S
Cross Lines	540S	180W to	420W
	570S	180W to	420W
	420N	180W to	420W
	540N	180W to	420W
	630N	180W to	420W
	720N	180W to	420W
	810N	180W to	420W

In addition, a small grid was established over a similar vein on flat ground in the northwest part of the claim group. The vein mineralization is exposed at surface in this area, with minimal overburden. This grid will serve as a control or test grid for any geophysical or geochemical surveys that may be done on the property. This grid is also shown on the plan of the claims at a scale of 1:5,000 (Map 1). Bema Industries Ltd. was also responsible for flagging and linecutting on this grid. In total, an additional 1.86 kilometres of line were flagged, and 0.78 kilometres of line were cut at the test grid. The cut lines are:

Base Line			120N to 120S
Cross Lines	60N	90E to	90W
	120N	90E to	90W
	120S	90E to	90W

Total flagging and cutting on AH-CH claims:

Grid Flagging	22.58 kilometres

Line Cutting 6.59 kilometres

3.2 DRILLING

The drilling of two core holes was contracted to G and D Diamond Drilling Co. Ltd., of Surrey, British Columbia, as part of a contract that included work on other properties. The cost of this work as indicated in the Itemized Statement of Expenditures (Appendix A), reflects only that portion of the invoice which is related to the drilling of these two holes on the AH-CH claim group.

The equipment used for this drilling included one Longyear Super 38 wireline core drill, one Case 1150 - C tractor, four-wheel drive trucks, and other accessories and tools. The core size selected was NQ (47.6 mm core) to ensure good core recovery.

The drill site selected was located on readily accessible ground, at grid coordinates 120N/30E, a short distance alongstrike from the portal of the adit. A summary of the results of this drilling program is provided in the following section.

4. RESULTS AND INTERPRETATION OF DRILLING

4.1 GENERAL STATEMENT

One hundred and five metres of NQ (69.9 mm hole) wireline diamond drilling (47.6 mm core) were contracted to G & D Diamond Drilling Company Ltd. of Surrey, British Columbia. The purpose of this drilling project was to test the down dip and lateral continuation of, and grades associated with a 1 metre wide shear and vein system located on the Old England Crown grant. This shear-vein is exposed in an adit positioned at grid coordinates 00W and 00E (Map 1) near the centre of the Old England Grant. The orientation of the vein and shear zone is $010^{o}/72^{o}$ E.

Two holes were drilled at the same site, located to the north of the adit, at grid coordinates 120 N and 30 E. A summary is given in the following table.

Hole	Coordinates	Inclin.	Azimuth	Casing	Depth	Dip Tests	
81-01	120 N 30 E	-45^{o}	280^{o}	21.48 m	44.50 m	41.45 m	-48^{o}
81-02	120 N 30 E	-70^{o}	280^{o}	15.24 m	59.74 m	23.16 m	-70^{o}
						56.69 m	-74^{o}

Due to the intensely sheared and breciated nature of the rock in Holes 81-01 and 81-02 and the abundance of gouge material and disseminated pyrite, the entire core was sampled and sent to Terra Min Research Labs Ltd. in Calgary. All samples were assayed for silver and gold (fire assay and atomic absorption). In total 243 samples were taken. Intervals which contained visible sulphides, other than pyrite, were also asssayed for Cu, Pb and Zn.

Core recovery was excellent with only a few centimeters of core being lost in shear, gouge and breccia zones. It was not possible to measure the amount of core lost in rubble zones, but it appears to have been minimal.

4.2 LITHOLOGIES

Six distinct rock types were intersected in the drill core and these will be discussed briefly in this section. Detailed lithology logs are presented

as part of Figure 3. Mineralized zones containing pyrite, galena, and chalcopyrite are also indicated in these logs. Figure 3 also includes an interpretation of the correlation between Holes 81-01 and 81-02.

Boundaries between units are generally gradational, but locally sharp contacts are encountered allowing some degree of confidence to be gained on the orientation of these units at depth. Most structures however, are represented by strongly defined gouge and breccia zones. Veins periodically assume distinct orientations, as in the case of quartz, pyrite and galena veins encountered in Hole 81-01, but more often veins are contorted, with several orientations defining a patchwork or mosaic texture.

Some units appear to be more favourably mineralized than others, especially those units referred to as altered greenstone, greenstone, and diabase. Pyrite mineralization is also concentrated within gouge, shear, and breccia zones, irregardless of the lithologies in which they occur.

Unit 1 - Altered Greenstone (Calc-silicate)

Two lithologies, which appear to be gradational with one another, define this unit. What has been termed "the altered greenstone" is a massive looking, light green, talc, dolomite, serpentine and chlorite bearing rock. It is extremely soft and friable. Locally it takes on a layered appearance, defined by thin (3-4 mm), light and dark green bands. Here the altered greenstone becomes richer in dolomite and is referred to as a calc-silicate.

Origin of this rock is uncertain, but the abundance of the talc, serpentine and dolomite suggests a source rich in Fe, Mg, and Ca. A mixture of Mg and Fe-rich volcanics with a limy sediment, may have led to the development of this unit.

Pyrite cubes and aggregates (up to 5 mm in size) are disseminated throughout. No other sulphides were noted.

Unit 2 - Meta-andesite

This lithology is characterized by a grey-black colour, and massive to crudely banded texture. Massive areas are fine grained and competent, thus resembling a true andesite. Locally, talc, serpentine and chlorite-rich zones occur and the rock takes on a somewhat less competent character. Dolomite and talc occur as a series of crudely parallel veins and shear zones, resulting in a banded appearance.

Unit 3 - Greenstone

Green to grey-green in colour and generally masssive but locally porphyritic in texture, this unit resembles a true greenstone. It is highly chloritized, with the local development of some talc and serpentine rich areas. Chlorite aggregates, probably pseudomorphs of pyroxene phenocrysts, occur sporadically. This unit often contains finely disseminated pyrite cubes and aggregates. Tiny hair-like veins filled with a yellow metallic mineral may represent fine aggregates of free gold.

Unit 4 - Diabase

This is a fine to medium grained rock, grey-green in colour. It is composed to euhedral to subhedral feldspar and chloritized pseudomorphs of either pyroxene or hornblende. Generally it has a gabbroic texture but locally a foliation, defined by mafic minerals, is developed. Periodically the grain size increases and it takes on the appearance of a diorite-gabbro. The unit is host for abundent aggregates of pyrite up to 3-4 mm in size. Tiny hair-like veins, filled with a yellow metallic mineral, may represent fine aggregates of free Au, but the identification is uncertain.

Unit 5 - Gabbro-diorite

The gabbro-diorite consists of medium to coarse (up to 1 cm) grained feldspar crystals and chlorite aggregates pseudomorphing pyroxene and/or hornblende. Minerals are subhedral and euhedral giving this rock a gabbroic texture. A distinctive green colour is the result of chloritization of the mafic minerals.

A decrease in the crystal size develops as the rock grades into the diabase and/or greenstone units.

Quartz-feldspar veins and lenses occur throughout. These reach a maximum thickness of 2-3 cm and appear to be unmineralized. Randomly oriented calcite veins (1 mm or less) are locally associated with pyrite mineralization. Tiny yellow wisps, possibly representing free Au, were noted once within this unit.

Unit 6 - Rhyodacite - dacite

A somewhat more felsic series of massive looking volcanic rocks were encountered within the core. These have been divided into a siliceous unit (Unit 8) and a less siliceous sequence referred to as dacites and rhyodacites. These dacites and rhyodacites are light grey to light green in colour and occasionally contain quartz, and feldspar and, more rarely, mafic phenocrysts. Locally a crude banding is developed; a product of darker green bands up to 1 cm wide within a light host rock.

This rock unit appears to be relatively poor in terms of mineralization. Sporadic fine disseminations of pyrite were noted, but no other sulphides were observed.

4.3 MINERALIZATION AND DRILL RESULTS

Originally, mineralization on the Old England Crown Grant was believed to occur within a 0.6 to 1.5 m wide shear and vein system exposed in an adit, located at grid reference 00E and 00N. This system, at the surface, is composed of quartz lenses (up to 0.2 m wide) concentrated along the footwall, structurally overlain by a shear and gouge zone. Abundant pyrite and traces of galena and chalcopyrite were noted within the quartz lenses. Pyrite is ubiquitous within the shear and gouge zones.

It is hoped that the shear and vein system would be readily recognizable in the core, but numerous shear and breccia zones occured throughout. All of these contained varying amounts of pyrite and occasionally traces of

chalcopyrite and galena were noted. At the calculated depth to intersection, no one shear zone with associated mineralization was encountered.

In the first hole (81-01), three quartz, pyrite, and galena veins were intersected at depths of 39.17 m, 39.87 m, and 41.25 m and are 9 cm, 10 cm, and 2 cm thick respectively. This zone, however, occurs 12.87 metres below the expected intersection of the mineralized veins exposed at the adit. This implies that either: 1) the occurrences are the same and the orientation of the vein changes with depth and/or along its strike, or 2) the occurrences are different and the nature of the system, exposed at the adit, changes with depth.

Hole 81-02 was extended to intersect this new vein system; however, 5 m above the projected intersection, the hole was lost in a rubble zone. Again, at the expected intersection depth of the adit showing, no mineralized quartz veins were encountered. Numerous pyritized gouge and shear zones occured throughout.

Mineralization occurs in five different styles:

1) Shear and breccia zones containing angular clasts of the country rock. Pyrite is disseminated throughout the breccia matrix.

2) Gouge zones represented by very soft, recessive, fine grained, clay, carbonate and talc filled areas. Fine grained pyrite (1 mm) is disseminated throughout.

3) Quartz-dolomite and/or quartz-calcite filled veins. These often contain disseminations and stringers of pyrite. In Hole 81-01 galena and pyrite-rich zones were assoicated with these veins.

4) Pyrite disseminations as single euhedral crystals and as aggregates of fine pyrite or marcasite. Favoured rock units for this type of mineralization include the altered greenstone, diabase, and greenstone.

5) Tiny (less than 1 mm) hair-like veins and/or wisps, filled with a finely disseminated yellow mineral, metallic in lustre. These could represent occurrences of free gold. Favoured lithologies are greenstone, diabase and gabbro-diorite.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Mineralization is not simply restricted to a single shear or vein system. Numerous gouge, shear and breccia zones contain abundant pyrite, with which the gold is believed to be associated. A number of these zones were intersected in each of the drill holes.

Both holes failed to intersect what could be recognized as the shear-vein system at the adit. However, in Hole 81-01 the quartz, galena and pyrite veins occured 12.87 metres past the expected intersection depth of the adit system.

Mineralization that may possibly represent free gold occurs as hair- like veins and wisps within three of the lithologies encountered in the core. The favoured horizons appear to be greenstone, diabase and gabbro-diorite.

5.2 RECOMMENDATIONS

Several recommendations, with regard to future exploration and continued evaluation of the property are suggested.

Assays should be duplicated for any samples which show high gold concentration and for any zones which were expected to contain gold and did not.

Contingent upon the results of the assays three other recommendations are put forward:

1) Trenching, with a cat, to the north and the south (Victoria Claim) of the adit showing on the Old England Crown Grant, to expose the shear-vein system which outcrops at the adit.

2) Continuation of the drill program for two purposes:

a) Further evaluation of the known mineralized zone. A series of step-out holes should be drilled close to the 1981 drill site.

b) Exploration drilling. Two or three holes located to the north of the Old England Grant would be useful in testing continuation of the system towards the Lemon Crown Grant. A deep drill hole, located east of the Victoria Crown Grant, would test continuation to the south.

3) Grid surveys should be initiated, including geochemical and geophysical surveys. The preferred geophysical survey would be a VLF-EM survey, to attempt to identify gouge, shear, and talc enriched areas.

6. STATEMENT OF ASSESSMENT

This report requests that five (5) years assessment be applied the AH and CH Claims, known as the Jolly Creek Group. An itemized statement of expenditures is included as Appendix A. Total applied expenditures are $22,085.03, including:

Physical Work	$ 2,587.42	One year	$ 2,100.00
Drilling and Sampling	$19,497.61	Four years	$16,800.00

This work would hold the claims in good standing until October 4, 1986.

APPENDIX A

ITEMIZED STATEMENT OF EXPENDITURES

APPENDIX A

ITEMIZED STATEMENT OF EXPENDITURES

1. Physical Work This portion of expenditures includes flagging the grid and linecutting. The attached invoice, from Bema Industries Ltd, also includes charges that apply to other claims, and only 44.13% of the invoice charges apply to work on the AH and CH claim group.

Personnel:	A. MacKenzie	Field Supervisor
	B. Fisher	Field Technician

Period: July 2, 1981 to July 11, 1981

Expenditures:

Mobilization and demobilization	$ 491.82
Linecutting (includes material and equipment)	1,547.33
Disbursements	548.27
Total	$2,587.42

2. Drilling and Sampling The attached invoice from G and D Diamond Drilling Co. Ltd. includes charges for drilling on the AH and CH claim group, and on other claims. Only 35.23% of the invoice charges apply to the AH and CH claim group. The period involved is August 9, 1981 to August 13, 1981.

a) Contractor costs:

Mobilization and demobilization	$ 704.60
Drilled footage costs	7,580.09
Labour costs	2,300.52
Materials	1,380.14
Total	$11,965.35

b) Geological costs: August 9 - August 16, 1981

Personnel:

K.J. Heffernan	August 12	1 day @ $250	$ 250.00
G. Crowe	August 9-16	8 days @ $150	1,200.00
B. Lissel	August 9-16	8 days @ $78	624.00
			$ 2,074.00

Meals:

16 man days @ $20.40	$ 326.40

Accommodations

16 man days @ $23.77	$ 380.32

Vehicle

Rental - 8 days @ $21.00	$ 168.00
Mileage @ $0.19/km	189.04
Total	$ 3,137.76

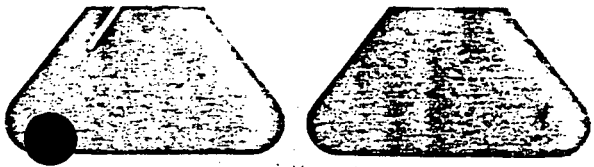
c) Report Preparation

G. Crowe	September 1-3	2.3 days @ $150	$ 350.00
K. Heffernan	September 21-25	5 days @ $250	1,250.00
Total			$ 1,600.00

d) Assays:

At the time of presentation of this report assay results were not yet available from Terra Min Reserach Labs Ltd. Assay costs are $11.50/sample, for Au and Ag. Results will be forwarded when received.

243 samples @ $11.50	$ 2,794.50
TOTAL EXPENDITURES (DRILLING)	$19,497.61
GRAND TOTAL EXPENDITURES TO BE APPLIED TO THE AH AND CH CLAIM:	$22,085.03



BEMA INDUSTRIES LTD.
5780-203 STREET LANGLEY B.C. V3A 1M3 (604)530-9731
203, 19945 - 56 Ave., Langley, B.C. V3A 3Y2

INVOICE No. 1061

DATE July 31, 1981

FILE NO.

PROJECT 81-47

Norwest Resources Consulting Ltd.
#600 - 610 - 8th Ave., S.W.
Calgary, Alta.
T2P 1G5

Attention: Mr. K. Heffernin

RE: KETTLE RIVER AREA
LINECUTTING & OVERBURDEN SAMPLING
PROGRESS BILLING

Labour	$3,637.94
Disbursements	805.92
Bema Supplied Equipment	1,347.78
Bema Supplied Material	71.70
	$5,863.34

THIS IS OUR ACCOUNT: $5,863.34

BEMA INDUSTRIES LTD.

PER: [signature]

DATE OF ISSUE: August 25, 1981

/mh

G

To: Norwest Resource Consultants Ltd
Suite 600 610 8th ave SW
Calgary alberta T2P 1G5

Invoice for August 8 - 1981 To Aug 18 - 1981

Mobilization and Demobilization	2,000.00
978 feet at $22.00	21,516.00
23 hrs for cat at 65.00	1,495.00
16 hrs for stand by at 65.00	1,040.00
30 hrs for travel time at 25.00	750.00
104 hrs for move, set up etc at 25.00	2,600.00
8 hrs for reaming core at 65.00	520.00
5 hrs for mixing mud at 25.00	125.00
7 acid test at 65.00	455.00
14 5 gallon of liquid mud at 210.00	2,940.00
1 NW casing shoe 275.00	275.00
45 NQ core box at 4.40	198.00
45 NQ lids at 1.10	49.50
Total $	33,963.50

Thank you

APPROVED BY Kevin J Heffernan Guy Delorme

W.O. # 8118

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH–TITLES DIVISION
MINERAL ACT

STATEMENT OF EXPLORATION AND DEVELOPMENT

I, KEVIN JOHN HEFFERNAN (Name)
7 TEMPLEHILL CRESCENT N.E. (Address)
CALGARY, ALTA T1Y 4C6
Valid subsisting F.M.C. No. 224034

Agent for CHESHIRE EXPLORATION LTD. (Name)
#1010, 505-3rd STREET S.W. (Address)
CALGARY, ALTA T2P 3E6
Valid subsisting F.M.C. No. 224342

STATE THAT

1. I have done, or caused to be done, work on the JOLLY CREEK GROUP (AH CLAIM AND CH CLAIM, AND LEMON, SNOWDON, OLD ENGLAND, AND VICTORIA CROWN GRANTS) Claim(s)
Record No.(s) 1349 (10) AND 1350 (10)
Situate at BRIDESVILLE AREA in the GREENWOOD Mining Division,
to the value of at least 22,085 dollars. Work was done from the 29 day
of JUNE 19 81, to the 30 day of SEPTEMBER 19 81

2. The following work was done in the 12 months in which such work is required to be done:

(COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)

A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by section 13 of regulations.)	COST
LINE CUTTING, ESTABLISH GRID (BEMA)	$2587.42
TOTAL PHYSICAL	$2587.42

I wish to apply $ $2100.00 of physical work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

JOLLY CREEK GROUP (21 UNITS) COMPRISED OF
AH CLAIM (15 UNITS) REC. NO. 1350 (10) $1500 - ONE YEAR
CH CLAIM (6 UNITS) REC. NO. 1349 (10) $ 600 - ONE YEAR
AT THE REQUIRED ASSESSMENT OF $100/UNIT/YEAR

B. PROSPECTING (Details in report submitted as per section 9 of regulations.)
(The itemized cost statement must be part of the report.)

	COST
NONE	

I wish to apply $ ..... of this prospecting work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

(For C and D sections, please turn over.)

C. DRILLING (Details in report submitted as per section 8 of regulations.) (The itemized cost statement must be part of the report.)	COST
	$19,497.61

D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL (Details in report submitted as per section 5, 6, or 7 of regulations.) (The itemized cost statement must be part of the report.) (State type of work in space below.)	
TOTAL OF C AND D	$19,497.61

Who was the operator (provided the financing)?

Name CHESHIRE EXPLORATION LTD.

Address #1010, 505-3rd STREET S.W.

CALGARY, ALTA

Portable Assessment Credits (PAC) Withdrawal Request	AMOUNT
Amount to be withdrawn from owner(s) account(s):	
Name of Owner	
(May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.) 1.	
2.	
3.	
4.	
TOTAL WITHDRAWAL	
TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL	$19,497.61

I wish to apply $ 16,800 of this work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

JOLLY CREEK GROUP (21 UNITS AND 4 CROWN GRANTS) COMPRISED OF

AH CLAIM (15 UNITS) REC NO. 1350 (10) $12,000. - FOUR YEARS ASSESSMENT

CH CLAIM (6 UNITS) REC. NO. 1349 (10) $ 4,800 - FOUR YEARS ASSESSMENT

AT THE REQUIRED ASSESSMENT RATE OF $200/UNIT/YEAR

Value of work to be credited to portable assessment credit (PAC) account(s).

(May only be credited from the approved value of C and (or) D not applied to claims.)

	Name	AMOUNT
In owner(s) name.	1.	
	2.	
	3.	
In operator(s) name (party providing the financing).	1. CHESHIRE EXPLORATION LTD.	$2697.61
	2.	
	3.	

Kevin S. Heffernan

(Signature of Applicant)

APPENDIX B

STATEMENT OF QUALIFICATIONS

APPENDIX B

STATEMENT OF QUALIFICATIONS

The undersigned certifies that:

1. He is a consulting geologist residing at 7 Templehill Cres. N.E., Calgary, Alberta.

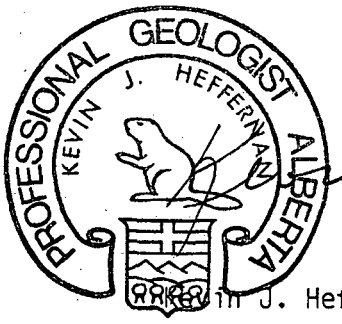
2. He is a graduate of the University of Saskatchewan (Saskatoon), with a B.Sc. (Honors), 1973.

3. He has been involved in mineral exploration since graduation.

4. He has based this report on the results of the exploration program conducted on the property in July and August, 1981.

5. He is a member in good standing of the Association of Professional Engineers, Geologist, and Geophysicists of Alberta.

Respectfully submitted,



Kevin J. Heffernan, P.Geol. (Alta)

CERTIFICATE

Concerning this report I herewith make the following statements:

1. I have received the following degree in the geological sciences:
   B.Sc. (Honours) - 1977 - Carleton University

2. I am presently completing the following degree in the geological sciences:
   M.Sc. - University of Calgary

3. I am an associate member of the Geological Association of Canada.
4. I am a Geologist, resident at 4-2038 Kensington Rd. N.W. Calgary, Alberta have been practising my profession for 7 years.
5. I have had six years experience at studying the geology of southern British Columbia.
6. Contributions to this report are based on observations in the field during and after the drilling program.

Gregory G. Crowe
Geologist

Supervised by

K. Heffernan
P.Geol. (Alta)

APPENDIX C

CORE DESCRIPTIONS
DRILL HOLES
81-01 AND 81-02

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 1 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	0.00	21.48	21.48				OVERBURDEN AND CASING	
	21.48	21.66	0.18		001	21.48	ALTERED GREENSTONE - takes on brecciated appearance, Breccia cement made of grey to light green Dolomite. Breccia fragments composed of highly chloritized Altered Greenstone containing TALC and Serpentine, dark black grains 2 mm in size disseminated throughout, 2 mm wide vein that occurs at 30° to the core axis is filled with Pyrite and Quartz, disseminated aggregates of Pyrite throughout, up to 3 mm in size.	
	21.66	21.67	0.01		001		DOLOMITE vein filled with a central core of Pyrite with aggregates up to 4 mm in size.	
	21.67	21.87	0.20		002		BRECCIATED ALTERED GREENSTONE - this zone is cut by conjugate veins both at an angle of 30° to the core axis. These are filled with TALC, Pyrite, and Quartz, disseminated Pyrite occurs throughout the Altered Greenstone.	
	21.87	21.96	0.09		003		SHEAR - GOUGE ZONE - consisting of fine (up to 5 mm), altered Greenstone Breccia fragments in a Dolomite, TALC, and disseminated Pyrite Matrix.	
	21.96	22.14	0.18		003		MORE COMPETENT ALTERED GREENSTONE - cut by numerous Dolomite viens (up to 3 mm thick). Veins have orientation of 30° to the core axis. The veins also contain Pyrite and TALC.	
	22.14	22.23	0.09		004		ALTERED GREENSTONE - with disseminated Pyrite cut by Dolomite and Pyrite Gouge Zone which cuts at 40° to core axis is 0.03 m in true thickness.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 2 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	22.23	22.36	0.13				BRECCIATED ALTERED GREENSTONE - with disseminated Pyrite, cut by 2 mm wide Quartz vein at an angle of 40° to the core axis.	
	22.36	22.56	0.20		005		GOUGE ZONE - with anglular Breccia fragments up to 2 - 3 cm across. Contains minor amounts of disseminated Pyrite.	
	22.56	22.86	0.30		005	22.86	CORE LOSS (Possible Gouge Material)	
	22.86	22.94	0.08				GOUGE ZONE - with angular breccia frangments.	
	22.94	23.16	0.22		006	23.16	BRECCIA GREY, BLACK - contains possible clasts of Altered Greenstone, Massive Texture, may be of volcanic origin (Meta-Andesite). Softness probably indicates the presence of Chlorite, TALC, Serpentine and/or clays. Mineralization restricted to narrow (5 - 6 mm) shear zone containing Pyrite. This occurs at 30° to the core axis. Unit cut by lenses and veins of Dolomite.	
	23.16	23.30	0.14		007		Same Rock as 006, cut by one shear zone at an angle parallel to the core axis. Shear zone contains some disseminated Pyrite.	
	23.30	23.48	0.18		008		SAME HOST ROCK as 006 and 007 but contains angular Breccia fragments of Altered Greenstone (up to 2 cm). The continuation of the shear zone in 007 now takes on form of one centimeter vein filled with Pyrite and Dolomite still dipping parallel to the core axis. Vein is lensy in appearance.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 3 OF 14
DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:
DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND
DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	23.48	23.62	0.14		009		SAME HOST ROCK as 008 but shear zone is less pronounced containing Breccia fragments of host rock. Dolomite and some disseminated Pyrite occur throughout.	
	23.62	23.82	0.20		010		SAME HOST ROCK as 009. The upper three inches are cut by two shear zones containing Breccia fragments of host rock set in highly chloritized, Dolomite and (TALC?) Matrix. These dip at 30° and 60° to core axis.	
	23.82	24.12	0.30		011		SAME HOST ROCK as 010. TALC coated slickenside surfaces occur at 60° to the core axis, cut by a vein of Dolomite dipping parallel to the core axis. Tiny (2 mm) veins cross cut this unit at various orientations.	
	24.12	24.36	0.24		012		SAME HOST ROCK as 011. Contains some chloritized and TALC bearing shear zones. Contains three orientations of vein. Upper most vein is one centimeter thick composed of Dolomite and dips 30° to the core axis. The other two veins are Dolomite and TALC bearing. These veins have a lensoid and sheared appearance, thickness 3 - 4 cm and dips 70° to the core axis.	
	24.36	24.66	0.30		013	24.36	META-ANDESITE - clasts and lenses of Altered Greenstone cut by irregular and patchy Dolomite veins.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 4 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	24.66	24.92	0.26		014		META - ANDESITE cut by numerous TALC coated shears dipping 45° to the core axis. A 2 mm Dolomite vein dipping 45° to the core axis occurs at the top.	
	24.92	25.20	0.28		015		META - ANDESITE - contains some Altered Greenstone clasts and is cut by TALC coated shears.	
	25.20	25.38	0.18		016		META - ANDESITE - takes on brecciated appearance, is cut by numerous Dolomite veins of various orientations. One 8 mm vein dips 45° to the core axis.	
	25.38	25.78	0.40		017		GOUGE ZONE - contains clasts of Meta Andesite and Altered Greenstone. Average size is one centimeter. Disseminated Pyrite is present between 016 and 017, dips at 45° to the core axis.	
	25.78	26.02	0.24		018		SLIGHTLY MORE COMPETANT META - ANDESITE cut by numerous shears and gouge zones. General orientation of shears dips 45° to the core axis. Random orientation of numerous small (1 mm) Dolomite and minor TALC filled veins give this rock a brecciated appearance.	
	26.02	26.21	0.19		019		GOUGE ZONE with clasts of Meta - Andesites ranging up to 2 cm. No mineralization is observed.	
	26.21	26.58	0.37		020	26.21	META - ANDESITE cut by numerous 2 - 3 mm TALC and Dolomite bearing veins of random orientation.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 5 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	26.58	26.84	0.26		021		META - ANDESITE cut by random orientated Dolomite and TALC bearing veins. Some TALC and chlorite filled veins (2 - 3 cm wide) occur at 45° to the core axis.	
	26.84	27.02	0.18		022		BRECCIA with clasts of Meta Andesite and possibly Altered Greenstone set in a TALC and Dolomite host. Contains aggregates of disseminated Pyrite up to 2 mm in size.	
	27.02	27.38	0.36		023		SHEARED, BRECCIATED META - ANDESITE sheared by veins of TALC and Dolomite with a dip of 45° to the core axis. Diseminated Pyrite is observed.	
	27.38	27.61	0.23		024		META - ANDESITE cut by an 8 cm wide vein (?) (zone) of heavily chloritized Greenstone.	
	27.61	27.83	0.22		025		BRECCIA AND GOUGE ZONE with clasts and fragments of Meta - Andesite. Some randomly orientated TALC and Dolomite veins.	
	27.83	28.24	0.41		026		BRECCIA with clasts and fragments of Meta - Andesite set in an Altered Greenstone looking cement or Matrix. Entire unit is cut by numerous small (2 mm) randomly orientated Dolomite and minor TALC filled veins.	
	28.24	28.56	0.32		027		SAME AS 026 cut by 2 cm Gouge zone dipping 30° to the core axis.	
	28.56	28.83	0.27		028		GOUGE zone with fragments of Meta - Andesite and Altered Greenstone Shear zones in the unit dip 60° 30° to the core axis.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 6 OF 14
DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:
DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND
DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	28.83	28.98	0.15		029		BRECIATED ALTERED GREENSTONE Gouge zone Matrix cut by 5 mm wide Dolomite, Pyrite and TALC filled veins.	
	28.98	29.26	0.28		030		GOUGE ZONE, fragments of Meta - Andesite and Altered Greenstone contains disseminated Pyrite, shear zones dip at angle of 40° to the core axis.	
	29.26	29.57	0.31		031	29.26	BRECCIA ZONE - clasts of Altered Greenstone set in Gouge Matrix. Matrix contains cubes and aggregates of Pyrite up to 2 mm.	
	29.57	29.89	0.32		032		ALTERED GREENSTONE - large angular clasts of chloritized possibly Meta - Andesite. Zone is cut by numerous shears, some of which are filled with Dolomite and TALC. Disseminated Pyrite throughout.	
	29.89	30.21	0.32		033		GOUGE ZONE with fragments of Altered Greenstone and META - ANDESITE, has some disseminated Pyrite.	
	30.21	30.47	0.26		034		BRECCIA ZONE - clasts of Meta - Andesite set in altered Greenstone host. Minor Dolomite and TALC filled veins cross cut the Altered Greenstone and Meta - Andesite.	
	30.47	30.76	0.29		035		SIMILAR TO 034 but not as heavily brecciated.	
	30.76	31.01	0.25		036		SIMILAR TO 035 but more heavily brecciated.	
	31.01	31.32	0.31		037		SIMILAR TO 036 but contains 2 - 3 cm wide vein which is highly Hematized and dips at 30° to the core axis.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 7 OF 14
DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:
DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND
DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	31.32	31.55	0.23		038		BRECCIA with clasts of Meta - Andesite set in Altered Greenstone Matrix cross cut by randomly orientated Dolomite veins.	
	31.55	31.80	0.25		039		META - ANDESITE cut by Dolomite and minor TALC filled veins in the upper 0.11 meters. Some disseminated Pyrite was observed.	
	31.80	32.21	0.41		040		SHEAR AND GOUGE ZONE with Breccia fragments of Meta - Andesite and Altered Greenstone. Cut by 1 cm thick Dolomite veins of random orientation. Some disseminated Pyrite was observed.	
	32.21	32.50	0.29		041	32.21	GOUGE ZONE with Meta - Andesite clasts cut by randomly orientated Dolomite filled veins. Some disseminated Pyrite.	
	32.50	32.78	0.28		042		CONTAINS SHEARED, ALTERED GREENSTONE cut by Dolomite veins 1 cm thick. Altered Greenstone has appearance of CALC Silicate. Green TALC and Dolomitic horizons containing randomly orientated stringers and inclusions. (Possibly indicates carbonaceous material). This unit has banded appearance with banding dipping 70° - 80° to the core axis. TALC coated shear horizons contain disseminated Pyrite.	
	32.78	33.18	0.40		043		HIGHLY SHEARED AND BRECCIATED ALTERED GREENSTONE in places becomes highly gouged. Those parts contain disseminated Pyrite.	
	33.18	33.33	0.15		044		META - ANDESITE cut by TALC and Dolomite veins in lower 5 cm.	
	33.33	33.74	0.41		045		HIGHLY SHEARED META - ANDESITE cut by numerous Dolomite and TALC filled veins in places takes on appearance of a CALC Silicate. 13 cm from top get 7 cm zone containing disseminated Pyrite.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 8 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	33.74	33.96	0.22		046		ALTERED GREENSTONE has well banded appearance. Banding dips at 80° to the core axis. Contains large amounts of disseminated Pyrite which sometimes occurs parallel to banding.	
	33.96	34.25	0.29		047		ALTERED GREENSTONE - well banded, banding occurs at 69° to the core axis. Cut by more shallowly dipping 1 cm wide Dolomite veins, aggregates of Pyrite occur sparsely throughout.	
	34.25	34.42	0.17		048		FINE GRAINED more Silicious rock (possibly a Meta - Dacite). Fairly massive looking, contact with Altered Greenstone is at 70° to the core axis. Minor amounts of disseminated Pyrite occur at the top of this unit.	
	34.42	34.63	0.21		049		META - DACITE cut by 1.5 cm thick Quartz and Dolomite vein which contains aggregates of Pyrite. This vein occurs at 30° to core axis and is somewhat contorted. Adjacent to the vein is a 1 cm thick Breccia zone with 2 mm wide clasts of Meta - Dacite and disseminations of Pyrite.	
	34.63	34.93	0.30		050		META - DACITE has a crude banding defined by darker green 5 mm bands and lighter green host. The host unit contains lathes of Feldspar. Unit is slightly brecciated. Contains aggregates of Disseminated Pyrite up to 1 mm and cubes of Pyrite.	
	34.93	35.10	0.17		051		SAME AS 050 cut by 2 mm wide Quartz vein which occurs at 20° to the core axis.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 9 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	35.10	35.33	0.23		052		BRECCIATED META-DACITE - unit contains disseminations of Pyrite which appear to be concentrated in Breccia-Gouge Matrix. The host rock appears to be getting coarser grained but still appears to be a Meta-Dacite.	
						35.36	Core Loss (equal 0.03 M)	
	35.36	35.55	0.19		053		BRECCIA AND GOUGE ZONE with clasts of Meta-Dacite. Gouge/shear zones occur at 30° to the core axis. Disseminated Pyrite cubes occur throughout.	
	35.55	35.79	0.24		054		META-DACITE - shear zone occurs at 10° to the core axis. Aggregates of Pyrite (2 - 3 cm) occur throughout.	
	35.79	35.91	0.12		055		META-DACITE cut by Quartz vein dipping 10° to the core axis. Gouge zones developed within 2 - 3 cm from Quartz vein. Quartz vein contains tiny (1 mm) Pyrite cubes. Meta-Dacite contains 2 - 3 mm size aggregates of Pyrite and Pyrite cubes up to 2 mm.	
	35.91	36.16	0.25		056		MEDIUM GRAINED grey green diorite or Diabase composed of Feldspar and chloritized hornblende or Pyroxene. Mafic minerals define a foliation which is parallel to core axis. 3 - 4 mm wide Quartz vein cuts this unit and dips 10° to the core axis, aggregates of Pyrite up to 3 - 4 mm are disseminated throughout.	
	36.16	36.48	0.32		057		DIABASE cut by minor shears containing disseminated Pyrite up to 3 - 4 mm.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 10 OF 10

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	36.48	36.72	0.24		058		DIABASE cut by a thin (2 - 3 mm) Quartz and Dolmite vein which dips 30° to the core axis. Contains aggregates of disseminated Pyrite.	
	36.72	37.20	0.48		059		DIABSE contains some minor Quartz and Dolomite veins, some of which contain abundant Pyrite. These dip at 30° to the core axis. Disseminations of aggregates of Pyrite occur throughout.	
	37.20	37.61	0.41		060		DIABASE, with disseminated aggregates of Pyrite up to 2 - 3 mm.	
	37.61	38.02	0.41		061		SAME AS 060	
	38.02	38.39	0.37		062		SAME AS 061	
						38.40	CORE LOSS (0.01 M)	
	38.40	38.62	0.22		063		SAME AS 062	
	38.62	38.65	0.03		064		DIABASE Slightly sheared containes a highly chloritized zone which appears to contain visible Gold. Gold is very finely disseminated and is associated with aggregates of Pyrite.	
	38.65	38.78	0.13		065		SHEARED AND BRECCIATED DIABASE cut by Quartz, Dolomite, Chlorite, and Pyrite veins. Some Pyrite veins up to 7 mm across.	
	38.78	38.84	0.06		066		SHEARED AND BRECCIATED DIABASE cut by Quartz and Dolomite veins. Aggregates of Pyrite occur throughout.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 11 OF 14
DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:
DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND
DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	38.84	39.04	0.20		067		GOUGE ZONE contains abundant disseminated cubes and aggregates of Pyrite.	
	39.04	39.17	0.13		068		SAME AS 067	
	39.17	39.35	0.18		069		CONSISTS OF 9 cm wide Quartz, Dolomite vein with a 5 cm vein of Galena and Pyrite, and occurs at 45° to core axis. Pyrite and Galena are also abundant in Gouge zone 4 mm away from vein.	
	39.35	39.46	0.11		070		GOUGE ZONE with disseminations of Pyrite and Galena. Fragments of Quartz, Dolomite, Pyrite, Galena veins form some of the Breccia clasts in this Gouge zone.	
	39.46	39.57	0.11		071		QUARTZ, Dolomite, Pyrite, Galena vein.	
	39.57	39.69	0.12		072		GOUGE ZONE with Meta-Dacite fragments and abundant Pyrite disseminations.	
	39.69	39.87	0.18		073		SHEARED AND BRECCIATED Meta-Dacite with disseminated Pyrite cubes and aggregates and minor amounts of Galena.	
	39.87	40.00	0.13		074		QUARTZ, Dolomite, Pyrite, Galena vein dipping 70° to the core axis. Appears to be crudely zoned with Pyrite and Galena along the borders and Galena and Quartz toward the center. The lower 3 cm form a Gouge zone with disseminated Pyrite.	
	40.00	40.24	0.24		075		META-DACITE, slightly brecciated, minor shear zones occur at 30° to the	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 12 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	40.00	40.24	0.24		075		core axis, disseminated aggregates of Pyrite form a crude foliation dipping at 45° to the core axis.	
	40.24	40.46	0.22		076		BRECCIA ZONE with clasts of Meta-Dacite. Pyrite cubes and aggregates are disseminated throughout.	
	40.46	40.61	0.15		077		META-DACITE with crystal size increasing towards the base. Takes on the appearance of Diabase. Narrow Quartz and Dolomite veins (1 - 2 mm) which dip at 60° to the core axis. Pyrite cubes and aggregates are disseminated throughout.	
	40.61	40.99	0.38		078		DIABASE - mafic minerals define foliation at 60° to the core axis. Narrow 1 mm Quartz and Dolomite veins cut this foliation. Disseminated Pyrite occurs throughout.	
	40.99	41.18	0.19		079		DIABASE cut by narrow Quartz Dolomite veins, contains disseminated Pyrite.	
	41.18	41.28	0.10		080		META-DACITE with disseminated aggregates of Pyrite. The lower 6 cm take on a sheared appearance and contains a 2 cm thick Quartz, Galena, Chlorite vein.	
	41.28	41.45	0.17		081		SHEARED META-DACITE with disseminated Pyrite.	
	41.45	41.53	0.08		082	41.45	CONSISTS OF 6 cm wide Quartz vein with minor amounts of disseminated Pyrite.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-01 SHEET No: 13 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	41.53	41.67	0.14		083		SHEARED AND BRECCIATED DIABASE with minor disseminated Pyrite.	
	41.67	41.74	0.07		084		ZONE HAS APPEARANCE of well banded CALC Silicate composed of Dolomite, TALC, and possibly carbonaceous material.	
	41.74	41.85	0.11		085		GOUGE ZONE with clasts of Greenstone and Calcsilicate material. Contains disseminated Pyrite.	
	41.85	41.95	0.10		086		WELL BANDED CALCSILICATE with disseminated Pyrite.	
	41.95	42.15	0.20		087		SHEARED AND BRECCIATED DIABASE with minor amounts of disseminated Pyrite.	
	42.15	42.33	0.18		088		DIABASE with disseminated Pyrite.	
	42.33	42.64	0.31		089		DIABASE WITH disseminated Pyrite.	
	42.64	42.88	0.24		090		SHEARED AND BRECCIATED DIABASE or Meta-Dacite with disseminated Pyrite.	
	42.88	43.48	0.60		091		DIABASE with finely disseminated Pyrite.	
	43.48	43.83	0.35		092		DIABSE with finely disseminated Pyrite.	
	43.83	44.01	0.18		093		GOUGE ZONE with Diabase Breccia fragments, 1 cm band at base rich in disseminated Pyrite.	
	44.01	44.45	0.44		094		SHEARED CALCSILICATE with minor amounts of disseminated Pyrite.	

NorWest

DIAMOND DRILL CORE LOG

HOLE No: 81-01 SHEET No: 14 OF 14

DATE BEGUN: Aug 10/81 DEPTH: 44.50 M BEARING: 280° U.T.M.:

DATE FINISHED: Aug 11/81 ELEV. COLLAR: TOTAL DEPTH: 44.50 M CLAIM: OLD ENGLAND

DATE: HOLE ANGLE: 46° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	44.45	44.58	0.13		095		SHEARED AND BRECCIATED DIABASE. Also contains Breccia fragments of Calcsilicate. Disseminated Pyrite occurs throughout. Contact with Calcsilicate occurs at 70° to the core axis.	
						44.50		

Sept 3/81

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 1 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	00	15.24	15.24				Overburden and Casing	
	15.24	15.42	0.18				Overburden (No sample)	
	15.42	15.64	0.22		001		Gouge zone with breccia fragments of highly altered greenstone. Contains abundant disseminated pyrite throughout	
	15.64	15.82	0.18		002		Highly sheared and brecciated altered greenstone. Altered greenstone consists of talc, chlorite and possible serpentine. Abundant disseminated pyrite throughout.	
	15.82	15.90	0.08		003		Dark green greenstone. Has more massive appearance than meta-andesite in DDH 81-01. Its softness indicates a high percentage of talc(?) and chlorite. Its contact with overlying gouge zone makes angle of 40° to the core axis. Fine (1 mm) pyrite cubes are disseminated throughout.	
	15.90	16.02	0.12		004		Highly altered greenstone or calc silicate is well banded. Banding is 40° with core axis. Banding is defined by alternating layers of dark, possibly carbonaceous bearing material and light grey green talc and dolomite horizons. Pyrite cubes and aggregates appear throughout	
	16.02	16.18	0.16		005		Same as 004	
	16.18	16.37	0.19		006		Similar to 005 but has more sheared appearance	
	16.37	16.64	0.27		007		Dark green massive greenstone. Highly chloritized contains fine	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 2 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	16.37	16.64	-				Pyrite throughout. Contact with upper calc silicate makes an angle of 60° to the core axis. Shears are coated with talc and chlorite.	
	16.64	16.88	0.24		008		Highly chloritized greenstone. Dark spots up to 2 mm may represent altered pyroxenes. This zone is highly sheared. Shear zones are coated with chlorite and possibly talc and pyrite aggregates up to 2 - 3 mm are disseminated throughout.	
	16.88	17.07	0.19		009		Highly sheared and broken greenstone has rubbly appearance, contains minor amounts of disseminated pyrite	
						17.07		
	17.07	17.28	0.21		010		Gouge zone. Contains clasts of calc - silicate. Disseminated pyrite occurs throughout.	
	17.28	17.35	0.07		011		Chloritized greenstone. Sheared and brecciated contains finely disseminated pyrite. Contact with calc-silicate makes an angle of 70° with the core axis.	
	17.35	17.62	0.27		012		Gouge zone with clasts of highly altered greenstone - calc-silicate. disseminated pyrite throughout.	
	17.62	17.68	0.06		013		Highly altered greenstone - calc silicate. Not banded but contains randomly orientated veins of dolomite which cross-cut large angular fragments consisting of talc and possibly serpentine. Large aggregates of pyrite up to 2 mm occur throughout.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 3 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
						17.68		
	17.68	17.79	0.11		014		Highly altered greenstone - calc silicate. Cut by randomly orientated dolomite veins. Contains large percentage of pyrite aggregates up to 2 mm in size	
	17.79	18.28	0.49		015		Highly altered greenstone - calc silicate with veins of dolomite. Contains disseminated aggregates of pyrite.	
	18.28	18.69	0.41		016		Same as 015	
	18.69	19.14	0.45		017		Same as 016	
	19.14	19.59	0.45		018		Same as 017	
	19.59	20.02	0.43		019		Same as 018	
	20.02	20.12	0.10			20.12	Core loss 0.10 metres	
	20.12	20.35	0.23		020		Similar to 019 but contains some veins of dolomite and pyrite up to 2 mm thick. These have random orientation.	
	20.35	20.49	0.14		021		Similar to 019 but aggregates of pyrite get up to 4-5 mm	
	20.49	20.61	0.12		022		Similar to 019 but contains a 6 mm wide vein of dolomite and pyrite dipping at an angle of 10° to the core axis	
	20.61	20.94	0.33		023		Similar to 015. Slightly sheared in places. Disseminated aggregates of pyrite up to 3 to 4 mm.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 3 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	20.94	21.04	0.10		024		Similar to 015. Contains two dolomite, talc, pyrite filled veins (3-4 mm). These dip at 40° to the core axis.	
	21.04	21.41	0.37		025		Same as 015 - Altered Greenstone	
	21.41	21.73	0.32		026		Same as 015 except some of the pyrite are up to 7-8 mm	
	21.73	21.89	0.16		027		Highly altered greenstone-calc silicate. Cut by three narrow (4-5 mm) dolomite, pyrite, talc veins which make an angle of 30° with the core axis	
	21.89	22.07	0.18		028		Highly altered greenstone - calc silicate with dolomite veins and some disseminated pyrite	
	22.07	22.42	0.35		029		Same as 028 but with minor shear zones	
	22.42	22.64	0.22		030		Same as 029	
	22.64	22.90	0.26		031		Same as 030 except contains some gouge zones	
	22.90	23.16	0.26		032		Same as 031	
						23.16		
	23.16	23.40	0.24		033		Meta-andesite cut by randomly oriented dolomite veins. Contains calc-silicate clasts and disseminations of pyrite	
	23.40	23.79	0.39		034		Meta-andesite. Highly sheared with development of some shear zones. Toward the top of this unit a 10 cm thick band of calc-silicate makes a sharp contact with the meta-andesite. This is represented by narrow (3-4 mm) Gouge zone which makes 45° angle with the core axis. Fine disseminated pyrite occurs in both units	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 4 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	23.79	24.33	0.54		035		Meta-andesite cut by some gouge zones. Disseminated pyrite throughout. 0.2 metres from top of sample a 3-4 mm wide dolomite and pyrite vein occurs dipping 70° to the core axis	
	24.33	24.68	0.35		036		Meta-andesite. Has contorted bands of dolomite. Small grains (1 mm) of pyrite were observed	
	24.68	25.14	0.46		037		Same as 036	
	25.14	25.60	0.46		038		Same as 036 except 0.14 metres from top get 4-5 mm vein of dolomite and aggregates of pyrite	
	25.60	26.04	0.44		039		Same as 036	
						26.21	Core loss equal 0.17 metres	
	26.21	26.50	0.29		040		Same as 036	
	26.50	26.80	0.30		041		Gouge zone. contact with meta-andesite makes an angle of 45°. Breccia fragments of meta-andesite. Pyrite is disseminated throughout.	
	26.80	27.10	0.30		042		Brecciated meta-andesite with some gouge zones. Some disseminated pyrite	
	27.10	27.33	0.23		043		Gouge zone with breccia fragments of meta-andesite. Some disseminated pyrite	
	27.33	27.62	0.29		044		Rubble gouge zone with angular fragments of meta-andesite	
	27.62	28.03	0.41		045		Meta-andesite. Highly sheared with the development of minor gouge zones	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 5 OF 15

DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:

DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England

DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	28.03	28.33	0.30		046		Gouge zone. Breccia fragments of meta-andesite. Some disseminated pyrite. Contact with above meta-andesite is 45°	
	28.33	28.69	0.36		047		Fairly competent meta-andesite. Some shearing, cut randomly by dolomite veins.	
	28.69	29.26	0.57		048		Rubbly meta-andesite cut by veins of dolomite and talc. Minor amounts of disseminated pyrite were observed	
						29.26		
	29.26	29.54	0.28		049		Meta-andesite. Sheared with the development of some gouge zones veins contain chlorite and talc. Traces of disseminated pyrite	
	29.54	29.70	0.16		050		Gouge zone with breccia fragments of meta-andesite. Traces of disseminated pyrite	
	29.70	29.90	0.20		051		Meta-andesite cut by dolomite veins randomly oriented. Contains disseminated pyrite	
	29.90	30.23	0.33		052		Breccia zone with breccia fragments of meta-andesite and greenstone. The greenstone occurs as 9 cm band 12 cm from the top of the unit. Contact makes an angle 60° to the core axis	
	30.23	30.56	0.33		053		Gouge zone with fragments of meta-andesite with some disseminated pyrite	
	30.56	30.97	0.41		054		Brecciated and sheared meta-andesite with development of gouge zones. These gouge zones make an angle of 30° with the core axis. Disseminated pyrite throughout	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 6 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	30.97	31.17	0.20		055		Breccia and gouge zone with fragments of meta-andesite. Disseminated pyrite occurs throughout	
	31.17	31.48	0.31		056		Sheared and brecciated meta-andesite with the development of 3 cm gouge zone 0.12 metres from base of this unit. Gouge zone contains disseminated pyrite and makes an angle of 40° with the core axis	
	31.48	31.97	0.49		057		Breccia and gouge zone with fragments of meta-andesite. Disseminated pyrite occurs throughout	
	31.97	32.31	0.34		058		Same as 057	
						32.31		
	32.31	32.72	0.41		059		Rubble zone with clasts of meta-andesite and greenstone	
	32.72	33.08	0.36		060		Light grey fine grained, massive looking unit. Possibly dacite may contain some hornblende phenocrysts. Traces of disseminated pyrite.	
	33.08	33.37	0.29		061		Gouge zone. Clasts of meta-andesite contains some disseminated pyrite	
	33.37	33.68	0.31		062		Same as 061	
	33.68	33.92	0.24		063		Well banded calc-silicate(?) cut by numerous dolomite veins. Banding is at 70° to the core axis. Fine disseminated pyrite occurs throughout	
	33.92	34.13	0.21		064		Gouge zone with fragments of calc-silicate. Some fine disseminated pyrite.	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 7 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	34.13	34.29	0.16		065		Fine grained massive greenstone. Sheared with the development of some gouge zones. Some disseminated pyrite	
	34.29	34.54	0.25		066		Sheared and brecciated calc-silicate with fine pyrite disseminations	
	34.54	34.87	0.33		067		Well banded calc-silicate. Slightly sheared. Disseminated pyrite throughout. 5 cm greenstone band at the top contact makes 60° angle with core axis	
	34.87	35.14	0.27		068		Well banded calc-silicate which becomes brecciated near base. 9 cm greenstone at base, at an angle of 50° to the core axis	
	35.14	35.36	0.22		069		Well banded calc-silicate	
						35.36		
	35.36	35.77	0.41		070		Calc-silicate. Banding is highly contorted. 3 cm greenstone band at base. Disseminated aggregates of pyrite up to 2-3 mm occur over a 7 cm interval 8 cm from the base	
	35.77	36.07	0.30		071		Diabase with disseminated aggregates of pyrite up to 2-3 mm. Cut by thin (1 mm) dolomite veins	
	36.07	36.47	0.40		072		Rubbly and sheared diabase with pyrite disseminations	
	36.47	36.87	0.40		073		Sheared diabase with pyrite disseminations	
	36.87	37.17	0.30		074		Same as 073	
	37.17	37.44	0.27		075		Coarser grained diabase. Contains fewer mafics, takes on appearance of quartz diorite. Diorite contains disseminated pyrite	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 8 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	37.44	37.93	0.49		076		Diorite-diabase contains disseminations of pyrite	
	37.93	38.40	0.47		077		Same as 076 except more brecciated appearance and is cut by thin (1 mm) dolomite veins	
						38.40		
	38.40	38.84	0.44		078		Diabase-diorite with disseminated aggregates of pyrite up to 2-3 mm	
	38.84	39.33	0.49		079		Diorite with pyrite disseminations	
	39.33	39.78	0.45		080		Dacite(?) sheared and brecciated in places. Contains disseminated aggregates of pyrite. Towards the base is cut by 7-8 mm wide randomly orientated dolomite and pyrite veins	
	39.78	40.10	0.32		081		Brecciated diabase with disseminated aggregates of pyrite	
	40.10	40.29	0.19		082		Brecciated diabase. Contains a 1.5 cm wide quartz which dips at 20° to core axis	
	40.29	40.52	0.23		083		Diabase. Brecciated and contains a 1.7 cm wide quartz vein with pyrite and galena. The vein dips at 20° to the core axis	
	40.52	40.68	0.16		084		Sheared and brecciated diabase. Shear zone contains disseminated pyrite in quartz and is near parallel to the core axis	
	40.68	41.05	0.37		085		Competent diabase becoming more coarse grained and felsic near the base. Contains disseminated aggregates of pyrite	
	41.05	41.19	0.14		086		Sheared diabase. A 2 cm wide shear zone contains a quartz and dolomite lens which contains pyrite and galena. This zone dips at 45° to the core axis	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 9 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	41.19	41.25	0.06		087		Sheared and brecciated diabase with quartz, dolomite, pyrite and possibly galena lenses	
	41.25	41.45	0.20		088		Sheared and brecciated diabase. Some quartz and dolomite veins and lenses. Pyrite disseminations throughout	
						41.45		
	41.45	41.78	0.33		089		Sheared and brecciated diabase. Cut by narrow (2 mm) quartz and dolomite veins. Disseminated pyrite throughout	
	41.78	42.00	0.22		090		Sheared and brecciated diabase with minor amounts of disseminated pyrite	
	42.00	42.07	0.07		091		Sheared and brecciated diabase with quartz, dolomite, pyrite and possibly galena lenses	
	42.07	42.44	0.37		092		Highly brecciated diabase with clasts up 2-3 mm with some disseminated pyrite	
	42.44	42.70	0.26		093		Same as 092	
	42.70	42.79	0.09		094		Sheared diabase. Cut by 2 cm wide quartz veins. Aggregates of pyrite throughout	
	42.79	43.22	0.43		095		Sheared, well banded calc-silicate cut by quartz and dolomite veins. Disseminated pyrite throughout	
	43.22	43.74	0.52		096		Well banded calc-silicate. Banding is somewhat contorted. Cut by randomly oriented dolomite and talc veins. Slightly sheared in places. Contains disseminated pyrite	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 10 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	43.74	44.09	0.35		097		Well banded calc-silicate, banding at an angle of 30° with core axis. Randomly cut by dolomite and talc veins	
	44.09	44.50	0.41		098		Well banded calc-silicate. Banding is contorted. Becomes sheared towards the base. Cut by irregular dolomite veins	
						44.50		
	44.50	44.74	0.24		099		Chloritized greenstone. Brecciated and sheared. Minor amounts of disseminated pyrite. Contact at base with calc-silicate is at an angle of 40° to the core axis	
	44.74	45.11	0.37		100		Well banded calc-silicate. Sheared and brecciated. Contains interbands or clasts of greenstone	
	45.11	45.43	0.32		101		Well banded calc-silicate contains some greenstone looking clasts. Banding makes angle of 45° with the core axis. Narrow bands 1 to 2 mm thick have reddish color to them possibly indicating hematite	
	45.43	45.77	0.34		102		Similar to 101 but contains an increasing amount of greenstone looking clasts. Cut by randomly orientated lenses and veins of dolomite Some hematite bands are noted 20 cm from the top	
	45.77	46.08	0.31		103		Sheared and brecciated greenstone - calc-silicate. Cut by randomly orientated dolomite veins	
	46.08	46.28	0.20		104		Similar to 103. But 14 cm from the top are some hematite and dolomite bands	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 11 OF 15

DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:

DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England

DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick.	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	46.28	46.42	0.14		105		Poorly banded calc-silicate. Gouge locally developed. Contact with upper unit makes an angle of 30° with the core axis	
	46.42	46.99	0.57		106		Highly contorted greenstone with minor amounts of hematization occurring 26 cm from the top of the unit	
	46.99	47.51	0.52		107		Similar to 106 but becomes increasingly sheared towards the base	
						47.55		
	47.55	47.65	0.10		108		Well banded calc-silicate. Highly sheared and brecciated. Cut by dolomite vein.	
	47.65	47.75	0.10		109		Gouge zone. Heavily hematized. Lower contact is at an angle of 45° with the core axis	
	47.75	48.03	0.28		110		Massive chloritized greenstone. Sheared towards the top, contains some dolomite and hematite veins (1 mm)	
	48.03	48.17	0.14		111		Rubble zone with slickensided clasts of greenstone	
	48.17	48.63	0.46		112		Massive greenstone cut by randomly orientated dolomite and hematite veins Aggregates of pyrite reach up to 2-3 mm. Unit becomes slightly coarser grained towards the base	
	48.63	48.77	0.14			48.77	Core loss = 0.14 metres	
	48.77	48.91	0.14		113		Medium grained greenstone. Takes on gabbroic appearance with feldspar crystals up to 2 mm. Some pyrite aggregates are disseminated throughout	
	48.91	48.96	0.05		114		Similar to 113 but contains 1 cm wide dolomite, quartz, chlorite, pyrite vein	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 12 OF 15

DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:

DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Claim: Old England

DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	48.96	49.10	0.14		115		Fine grained greenstone cut by randomly oriented dolomite and chlorite veins.	
	49.10	49.28	0.18		116		Sheared and brecciated greenstone cut by 4 quartz veins up to 0.5 cm, these make an angle of 30° with the core axis	
	49.28	49.61	0.33		117		Highly sheared and brecciated with some hematite coated shears. Minor amounts of disseminated pyrite were observed.	
	49.61	49.97	0.36		118		Greenstone slightly sheared. Some shears coated with hematite	
	49.97	50.30	0.33		119		Sheared and brecciated greenstone with the development of some gouge zones	
			0.					
	50.30	50.60	0.30		120		Medium grained gabbro-diorite with feldspar crystals up to 2-3 mm. Minor amounts of disseminated pyrite throughout	
						50.60		
	50.60	50.91	0.31		121		Gabbro-diorite. Becoming finer grained towards base, where it is in of 70° with the core axis	
	50.91	51.11	0.20		122		Greenstone becomes highly sheared and rubbly 5 cm from top. Slickenside surfaces are abundant	
	51.11	51.27	0.16		123		Greenstone. Slightly sheared and brecciated, is in contact at base with a more felsic volcanic unit, contact makes an angle of 45° with the core axis	
	51.27	51.80	0.53		124		Sheared and altered greenstone. Lighter color and more felsic than above unit	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 13 OF 15
DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV. m Rec.
	51.80	52.05	0.25		125		Sheared and brecciated greenstone. Contains some disseminated pyrite throughout	
	52.05	52.45	0.40		126		Well banded calc-silicate banding makes angle of 50° with core axis. Becomes increasingly sheared near base. Fine disseminated pyrite throughout	
	52.45	52.84	0.39		127		Gouge zone. Contains framgnets of greenstone, disseminated pyrite occurs throughout	
	52.84	53.23	0.39		128		Same as 127	
	53.23	53.64	0.41		129		Medium grained gabbro-diorite. Contains some randomly orientated dolomite veins. Becomes more sheared towards base	
						53.64		
	53.64	54.09	0.45		130		Gabbro-diorite. Becomes increasingly sheared at its base. Eleven cm from base cut by 2 cm quartz vein. Some shears coated with hematite	
	54.09	54.56	0.47		131		Brecciated and sheared gabbro-diorite. Some shears are hematite coated	
	54.56	54.79	0.23		132		Same as 131	
	54.79	55.04	0.25		133		Rubble zone with fragments of gabbro-diorite	
	55.04	55.25	0.21		134		Same as 133	
	55.25	55.46	0.21		135		Rubbly gabbro 4 cm from top get 1 cm wide vuggy quartz vein	

DIAMOND DRILL CORE LOG

NorWest

HOLE No: 81-02 SHEET No: 14 OF 15

DATE BEGUN: Aug. 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:

DATE FINISHED: Aug. 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England

DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	55.46	55.72	0.26		136		Gouge zone with fragments of gabbro. Some disseminated pyrite observed	
						55.78		
	55.78	55.99	0.21		137		Sheared gabbro cut by quartz and feldspar veins	
	55.99	56.26	0.27		138		Sheared and brecciated gabbro. Shears coated with hematite. Minor disseminated pyrite observed throughout	
	56.26	56.62	0.36		139		Similar to 138 but not as extensively sheared	
	56.62	567.06	0.44		140		Similar to 13 9 but very rubbly	
						57.30		
	57.30	57.49	0.19		141		Gouge zone with some disseminated pyrite	
	57.49	57.87	0.38		142		Felsic looking volcanic rock but becomes medium grained towards base with feldspar crystals up to 2 mm	
	57.87	58.21	0.34		143		Similar to 142 but towards base becomes brecciated with the development of gouge zones	
	58.21	58.40	0.19		144		Fine grained felsic looking unit. Light green in color cut by randomly orientated quartz and feldspar veins	
	58.40	58.77	0.37		145		Coarse grained gabbro-diorite with feldspar crystals up to 5 mm. Cut by randomly orientated quartz and feldspar veins	
	58.77	59.07	0.30		146		Sheared and brecciated medium grained gabbro-diorite. With some shears hematite coated	

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DIAMOND DRILL CORE LOG

HOLE No: 81-02 SHEET No: 15 OF 15
DATE BEGUN: August 11/81 DEPTH: 59.74 BEARING: 280° U.T.M.:
DATE FINISHED: August 12/81 ELEV. COLLAR: TOTAL DEPTH: 59.74 CLAIM: Old England
DATE: HOLE ANGLE: 70° LOGGED BY: G. Crowe CORE SIZE: NQ

BCN	UNIT From	UNIT To	UNIT THICKNESS Thick	UNIT THICKNESS True	SAMPLE NUMBER	MARKER	DESCRIPTION	RECOV m Rec.
	59.07	59.36	0.29		147		Same as 146	
	59.36	59.74	0.38		148	59.74	Rubbly with fragments of gabbro-diorite with some hematite coated shear surfaces	
						59.74	END OF HOLE	

Signed G Crowe Sept 3/81

APPENDIX D

ASSAY RESULTS
DRILL HOLES 81-01 AND 81-02

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 Norwest Resource Consultants Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-1- 1	3	11	66	18	140
2	4	9	49	52	110
3	2	6	43	<2	50
4	2	3	52	16	60
5	4	<1	60	<2	50
6	2	5	53	4	80
7	2	2	39	<2	<10
8	2	5	33	810	60
9	2	<1	50	<2	<10
10	1	<1	46	<2	20
11	2	<1	26	10	<10
12	1	<1	42	<2	<10
13	1	<1	57	<2	<10
14	1	1	39	10	10
15	1	3	47	66	<10
16	2	<1	38	<2	10
17	5	<1	43	90	50
18	8	2	34	<2	10
19	5	2	21	58	20
20	3	1	15	26	<10
21	4	<1	26	22	10
22	9	2	38	212	50
23	6	2	30	4	10
24	8	2	32	2	30
25	4	2	36	16	30

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 Norwest Resource Consultants Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-1-26	2	1	32	< 2	10
27	5	1	27	36	30
28	7	<1	42	12	30
29	4	1	32	28	100
30	20	2	48	<2	90
31	36	6	53	16	230
32	16	2	34	14	60
33	21	3	40	20	60
34	3	<1	32	<2	20
35	9	4	44	<2	40
36	13	<1	57	10	10
37	10	30	55	< 2	20
38	4	<1	33	<2	10
39	5	<1	51	22	40
40	4	<1	38	66	50
41	13	- 1	49	26	180
42	38	1	86	28	220
43	36	2	59	42	150
44	14	<1	72	<2	40
45	22	<1	42	<2	90
46	77	1	70	20	330
47	40	1	84	18	120
48	4	3	137	<2	60
49	250	900	2100	114	5200
50	23	160	250	32	720

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 Norwest Resource Consultants Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-1-51	10	72	162	96	270
52	15	65	133	190	380
53	35	170	210	114	1000
54	41	26	76	394	850
55	21	110	96	280	720
56	126	25	148	24	1080
57	44	11	83	< 2	390
58	40	17	47	70	280
59	31	12	49	42	370
60	36	25	50	< 2	330
61	40	85	63	10	320
62	35	54	139	124	330
63	36	129	200	220	860
64	47	170	300	316	1060
65	136	210	260	120	2800
66	70	166	230	56	1470
67	160	320	5800	228	15200
68	131	620	680	1346	8200
69	75	62000	18000	4380	70800
70	31	39000	750	266	20400
71	80	70000	5700	4200	130000
72	42	930	630	366	5000
73	40	500	380	302	2700
74	310	27000	3800	29000	200000
75	76	192	880	672	4900

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project |

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-1-76	130	280	990	258	5500
77	43	183	690	318	1000
78	75	17	96	26	540
79	43	16	84	22	680
80	42	1600	1000	832	4200
81	56	147	158	150	2700
82	11	40	78	224	540
83	26	173	102	100	720
84	4	<1	98	<2	20
85	9	124	94	18	350
86	16	4	84	10	250
87	49	420	54	<2	120
88	6	<1	65	12	500
89	9	<1	56	2	80
90	15	<1	76	2	40
91	14	3	61	50	10
92	14	<1	70	6	10
93	17	<1	68	22	90
94	13	<1	42	20	10
95	4	<1	57	20	20
OEDH-2- 1	7	8	40	6	50
2	8	3	36	8	30
3	12	2	38	8	30
4	6	3	38	22	30
5	9	12	42	16	140

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project |

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
QEDH-2- 6	6	4	60	10	110
7	3	<1	83	22	130
8	3	<1	66	30	210
9	4	4	87	10	70
10	13	<1	56	34	230
11	3	<1	102	<2	<10
12	5	25	46	32	250
13	4	<1	70	30	60
14	3	6	72	14	30
15	3	6	72	6	20
16	3	4	62	8	20
17	3	<1	67	10	20
18	2	2	62	6	20
19	2	1	56	<2	20
20	2	1	48	8	20
21	2	2	51	4	<10
22	1	<1	40	2	<10
23	2	6	39	6	<10
24	2	6	44	6	40
25	2	3	52	2	<10
26	2	3	51	8	<10
27	2	3	45	8	10
28	2	<1	47	4	<10
29	2	3	52	14	20
30	3	2	39	4	10

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job #81-262 Norwest Resources Consultants Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-2-31	3	3	47	18	<10
32	3	<1	45	26	70
33	3	<1	45	8	10
34	3	<1	38	4	<10
35	4	2	30	12	10
36	5	2	41	10	30
37	3	1	50	18	80
38	4	<1	56	88	390
39	4	2	60	2	20
40	3	<1	49	4	<10
41	8	2	40	16	20
42	6	1	22	20	20
43	9	<1	31	28	<10
44	3	<1	26	20	110
45	3	2	28	12	20
46	5	1	28	28	100
47	7	<1	29	46	120
48	7	<1	34	46	20
49	3	<1	33	6	<10
50	1	<1	28	12	10
51	1	<1	32	14	<10
52	5	<1	32	8	<10
53	7	<1	36	182	60
54	2	<1	42	4	<10
55	1	<1	50	8	20

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-2-56	1	1	40	12	10
57	1	1	44	34	10
58	2	<1	50	38	20
59	3	<1	49	36	20
60	5	<1	41	8	10
61	13	1	56	32	150
62	12	2	53	6	70
63	4	2	42	4	20
64	34	2	34	16	110
65	5	3	52	<2	<10
66	66	2	39	6	210
67	9	2	42	<2	50
68	28	<1	62	4	40
69	5	<1	63	4	<10
70	10	2	47	16	120
71	32	5	57	14	280
72	38	3	62	6	200
73	34	1	55	20	190
74	15	2	56	4	90
75	27	5	61	6	200
76	40	65	200	6	620
77	35	17	76	10	430
78	42	18	92	14	520
79	42	14	95	12	550
80	33	75	110	180	800

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job #.81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-2-81	86	420	560	218	2700
82	72	190	340	342	1680
83	26	580	460	360	1320
84	31	550	990	174	980
85	43	31	138	30	500
86	35	81	115	114	1600
87	96	175	125	368	4900
88	55	96	114	396	1300
89	88	58	145	244	1110
90	20	18	80	20	200
91	28	11	71	20	700
92	105	2	96	110	380
93	98	12	62	728	640
94	21	14	20	860	560
95	15	<1	48	20	80
96	11	<1	22	4	60
97	6	<1	31	4	10
98	4	<1	33	<2	10
99	7	<1	28	<2	10
100	7	<1	32	8	20
101	7	2	43	<2	20
102	5	2	30	4	20
103	6	<1	32	10	40
104	9	<1	30	6	<10
105	23	<1	58	4	<10

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TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project | Page 9 of 23

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-2-106	9	<1	32	<2	<10
107	11	<1	31	<2	<10
108	6	<1	46	6	40
109	12	<1	36	8	10
110 & 111	39	3	57	34	150
112	48	<1	51	14	60
113	37	<1	47	12	70
114	24	<1	71	<2	60
115	7	<1	50	<2	<10
116	36	<1	68	<2	<10
117	33	<1	60	<2	30
118	10	2	50	<2	20
119	19	<1	63	<2	30
120	22	<1	76	<2	20
121	25	1	62	6	110
122	6	<1	104	<2	30
123	6	3	60	16	80
124	35	<1	50	8	30
125	196	<1	94	8	200
126	4	<1	27	10	30
127	22	<1	60	12	80
128	23	<1	83	4	130
129	69	<1	53	8	260
130	35	<1	78	<2	80
131	7	1	57	<2	<10

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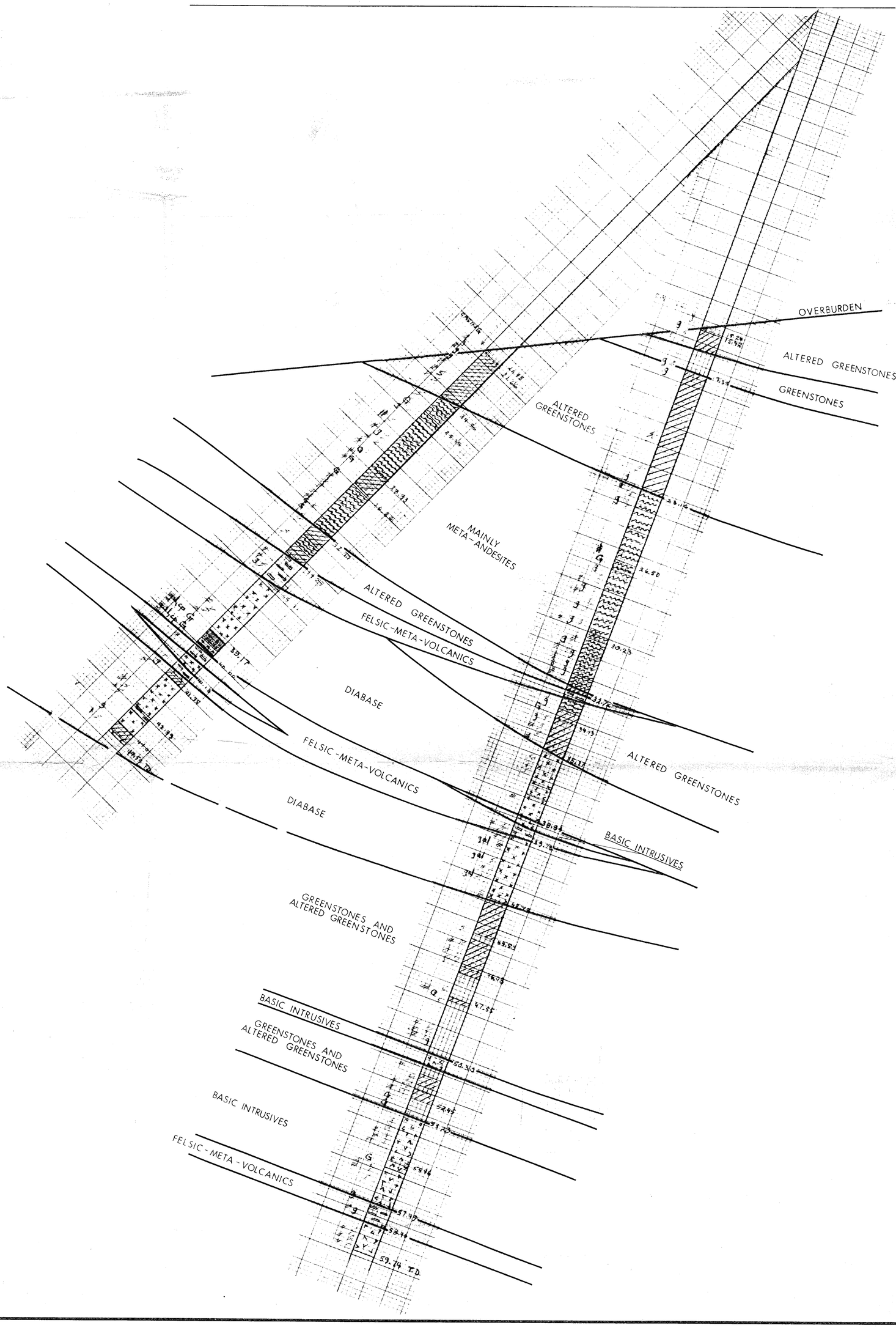
TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 81-262 | Norwest Resource Consultants | Date 14 October 1981

Client Project

Sample No.	Cu ppm	Pb ppm	Zn ppm	Au ppb	Ag ppb
OEDH-2-132	12	<1	56	6	10
133	62	<1	46	<2	40
134	184	<1	50	<2	180
135	440	<1	49	<2	260
136	102	<1	44	<2	100
137	18	<1	25	<2	30
138	3	<1	39	<2	20
139	2	<1	35	<2	20
140	2	<1	24	<2	20
141	3	<1	17	<2	10
142	2	<1	15	<2	<10
143	2	<1	10	<2	10
144	2	<1	15	<2	20
145	1	<1	9	<2	10
146	1	<1	16	<2	<10
147	1	<1	10	<2	10
148	2	<1	13	<2	<10



LEGEND

- ALTERED GREENSTONE (CALC - SILICATE)
- META - ANDESITE
- GREENSTONE
- DIABASE
- GABBRO - DIORITE
- RHYODACITE - DACITE
- OVERBURDEN
- SULPHIDES
- gal GALENA
- cp CHALCOPYRITE
- G,g GOUGE - Major, Minor
- S SHEAR
- # BRECCIATION

0 1 2 3 4 5
METRES

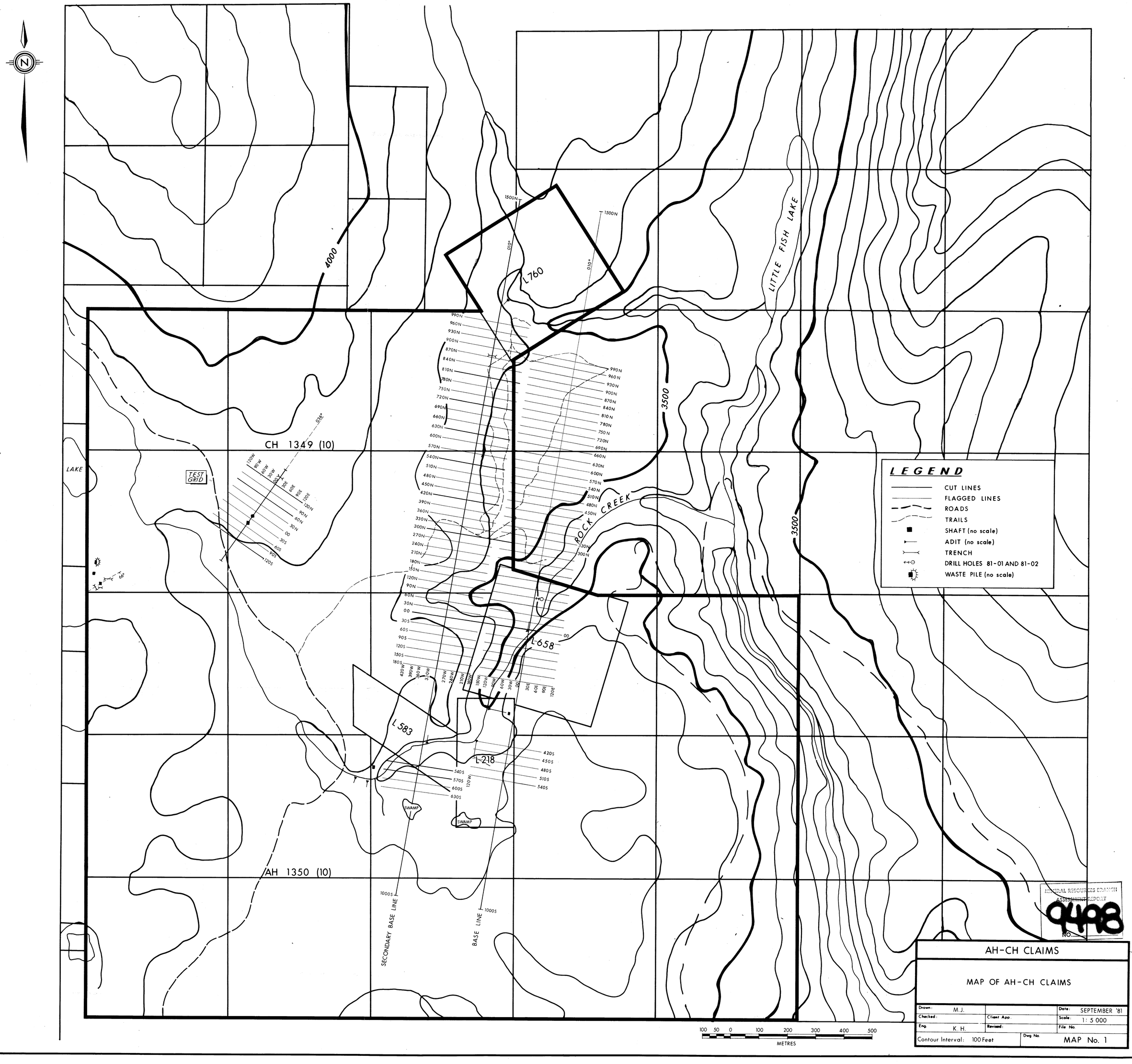
AH-CH CLAIMS

GEOLOGICAL INTERPRETATION
DRILL HOLES 81-01 AND 81-02

Drawn: M.J.		Date: SEPTEMBER '81
Checked:	Client App.	Scale: 1:100
Eng. K.H	Revised:	File No. 8118
	Dwg No.	FIG. No. 3

AH-CH CLAIMS

MAP OF AH-CH CLAIMS



Drawn: M.J.		Date:	SEPTEMBER '81
Checked:	Client App.	Scale:	1: 5 000
Eng. K. H.	Revised:	File No.	
Contour Interval: 100 Feet	Dwg No.	MAP No. 1	