GEOLOGICAL MAPPING, TRENCHING AND SAMPLING

on the

HALCROW CREEK PROPERTY

HALCROW TOWNSHIP

PORCUPINE MINING DISTRICT, ONTARIO

by

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TARGET EXPLORATION SERVICES LTD.

PORT HOPE, ONTARIO

JAN. 15, 1993

SUMMARY

A program of gridding, geological mapping, manual stripping and channel sampling was carried out on the Halcrow Creek Property during the period Sept. 16 to Oct. 6, 1992.

All three zones sampled show highly anomalous gold values to 2990 ppb. A trench at Zone 2, just north of the pond in the south-central part of the property, yielded a weighted average of 1.11 g/T Au over 4.5 metres. Channel sampling from Zone 3 yielded an average value of 0.74 g/T Au over 2.6 metres. The best interval from a mineralized interval in Zone 4 that appears to be at least 20 metres in width was 0.89 g/T over 3.7 metres.

Due to the difficulty in sampling the sheared and weathered rock exposed in the trenches, it is recommended that further exploration be undertaken and that this should include testing of the zones by a program of Winkie diamond drilling.

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I. INTRODUCTION

A. General

During the period Sept. 16 to Oct. 6, 1992, Target Exploration Services Ltd. carried out a field exploration program on the Halcrow Creek property, which is held under option by Lorac Properties Limited. Previous sporadic exploration over at least fifty years had identified the area of the current claim group, within the Swayze Greenstone Belt, as highly prospective for gold.

The current program was designed to evaluate the known zones which were particularly anomalous in gold, to extend these zones if possible, to determine the controls on the mineralization, and to explore for new showings on the property.

This report describes the results of that work.

B. Location and Access

The property is located in NTS area 41O/15 within the Porcupine Mining District. The centre of the property is at 47°50'N, 82°57'W (Figure 1).

Access to the property is by a network of logging roads (Lynwood Forest Products) which runs to the southwest off Highway 101 about 40 km. west of Foleyet, the nearest settlement. The northwest corner of the property lies about 28 km. from the highway.

C. Property

The property consists of 6 claims (1150962, 1150965 - 1150969), which were recorded in October, 1991, totalling approximately 1000 acres (Figure 2 and Appendix 1). The property is held under option by Lorac Properties Limited from the recorded owner of the claims, Alcanex Ltd.

D. Topography and Vegetation

Topography on the property is gently rolling to moderately rugged with maximum relief of about 50 metres. The northern part of the grid area mapped in 1992 comprises a high percentage of outcrop, whereas much of the central part of the grid is occupied by a large drift-covered hill. In general, outcrop comprises about 10 to 20 percent of the area of the property. A long linear cedar swamp averaging 60 metres in width runs parallel to, and just north of tieline 122N. This gives way to the east to a large marshy area.

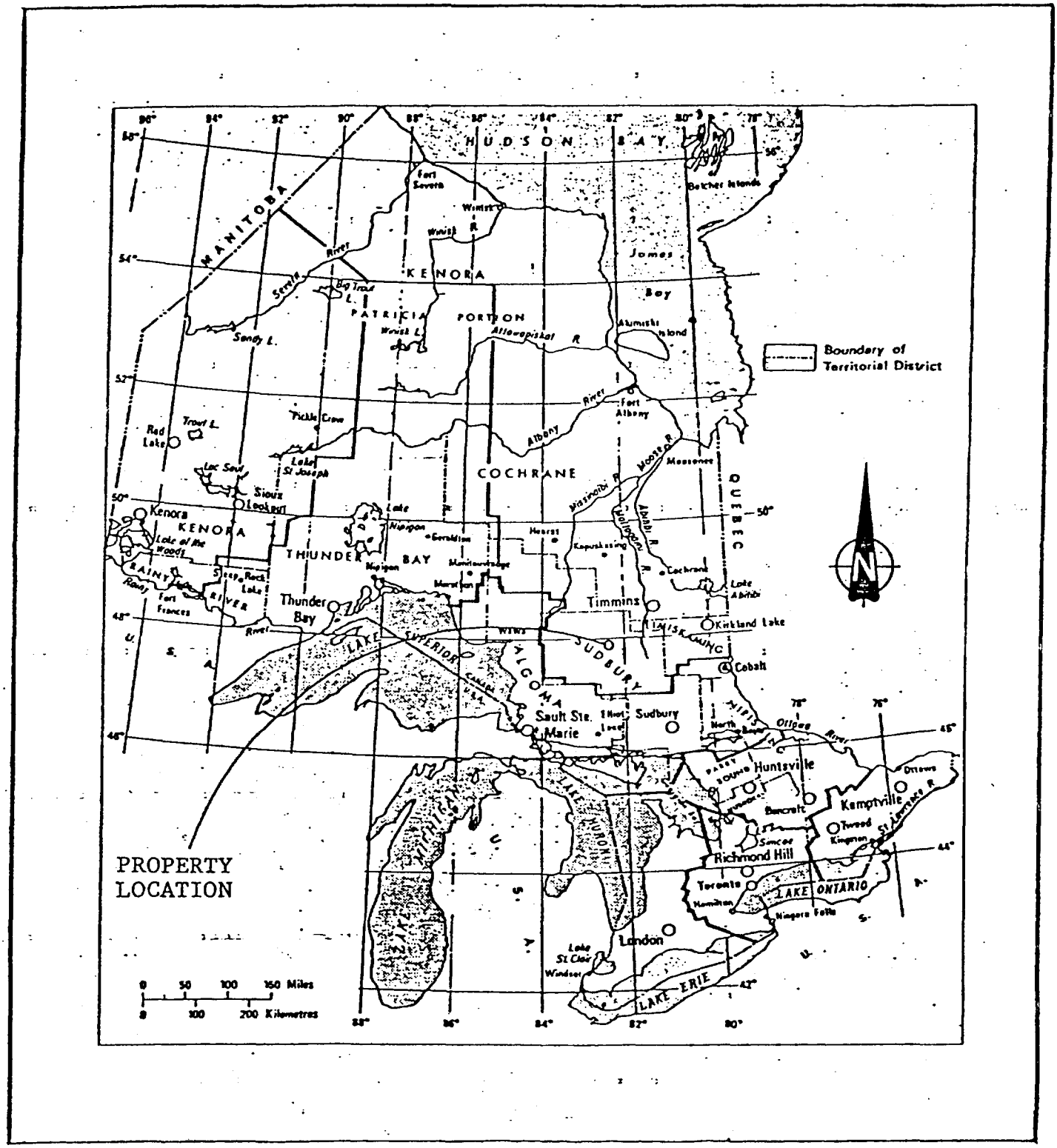
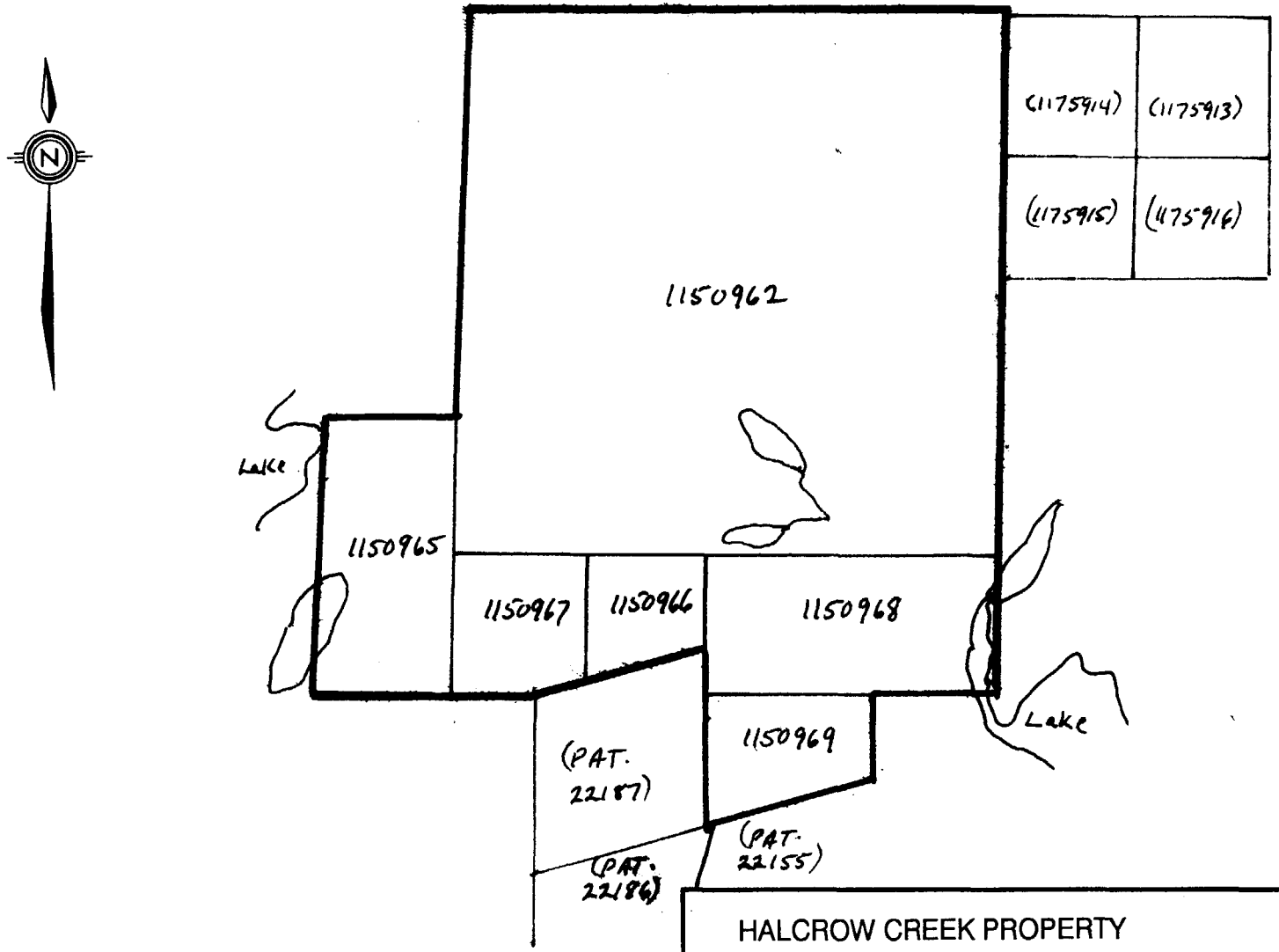


Figure 1. Property Location Map



(1175914) = Claims Held by Other Parties

HALCROW CREEK PROPERTY

CLAIMS	SCALE 1:20,000	DRAWN BY W. Johnson REVISED
DATE DEC. 15/92	TARGET EXPLORATION SERVICES LTD.	DRAWING NUMBER FIG. 2

The Ivanhoe River crosses the northwest corner of the property. The river is about one metre deep and swiftly flowing where it narrows at the rapids. A crossing can be made on logs which have fallen over the river.

The high ground on the property is covered mainly by a mixed forest of poplar, white spruce, white birch, balsam fir, jack pine and alders, approximately in that order of abundance. Lower areas include white cedar and black ash as well as some of the above species. Much of the area between the property and the highway has been clearcut in recent years.

E. Previous Work

The area has been subjected to intermittent waves of exploration since the discovery of the Timmins gold camp. Initial exploration was carried out for iron prior to 1910. Gold exploration was initiated in the 1930's and a number of companies have carried out gold and base metal exploration programs in the area since that time.

The patented claims formerly held by Halcrow-Swayze Mines Ltd., immediately south of the property, had a great deal of exploration carried out during the period 1932-34. In 1934, a shaft was sunk to a depth of 371 feet. At this time the company extimated a reserve of 127,500 tons with a grade of 0.11 oz/ton on the No. 2 vein to the 354 foot level.

Karvinen (1980) discussed results of work carried out by prospectors W. Hammerstrom and W.J. Koski in the mid-40's as follows. "Results of their work plotted on an old 1946 sketch map indicate five outcrops considered to be favourable for gold mineralization. All were sampled by Hammerstrom, but only one showing returned a value of 0.12 oz./ton gold from a grab sample." This is presumed to be the showing just north of the pond located in the south-central part of the property. They also attempted to locate the source of a vein quartz boulder mineralized with pyrite and arsenopyrite, which yielded 3.65 oz/ton gold. This was found in the 1930's, some 2250 feet south of the current property, in an area covered by a patented claim. According to Karvinen, Hammerstrom suggested the float could originate from beneath the pond but this idea was never tested. Several pits and trenches on the property found during the current program presumably date from this work by Hammerstrom and Koski or from earlier work.

Part of the property was staked at least twice in the 1950's and 1960's.

In a search for base metal massive sulphide deposits, Granges Explorations AB drilled one hole on an airborne electromagnetic anomaly in the southeastern part of the current property in 1977. This hole, located southeast of the pond postulated to be the source of the float, intersected 10 to 30 per cent pyrite over a few feet in tuff and argillite. No analyses for gold were reported.

In 1980, Gossan Resources Ltd. staked twenty claims covering essentially the same area as the current property. They engaged W.O. Karvinen to carry out a small program of mapping and to sample some known gold showings. An attempt was also made to locate the source of high-grade gold-bearing vein-quartz float. Karvinen concluded (with very little evidence!) that the boulders came from a source only a few hundred feet to the north of where they were found.

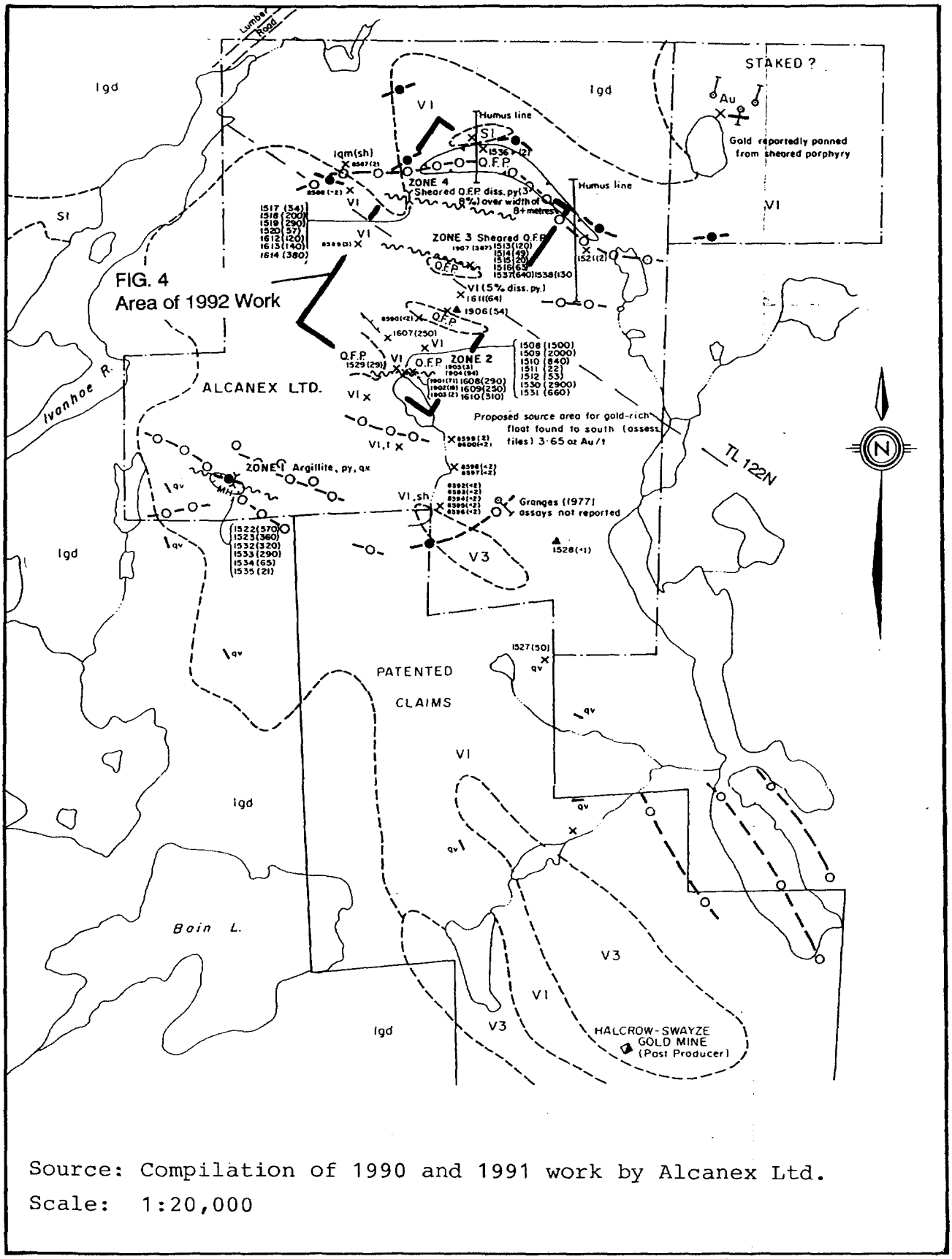
Regal Petroleums carried out geological mapping, prospecting and rock sampling in the area now covered by the property in 1984. This was part of an evaluation of a large claim block for its gold potential. The same year, the company contracted Aerodat Limited to carry out a helicopter-borne magnetic, electromagnetic and VLF survey over the area. They located several occurrences with gold values in the hundreds of parts per billion and recommended further work on what is now the central portion of the current property.

Prospecting carried out in 1990 and 1991 by W. Troup and B. Otton under the provisions of an OPAP grant resulted in the discovery or re-discovery of four separate zones of anomalous gold mineralization (Fig. 3). Following this work, the property was staked by Alcanex Ltd. In three of the zones, gold values are from bodies of sheared quartz-feldspar porphyry. The other zone is associated with a band of argillite and iron formation. In all instances, anomalous gold values, to 2900 ppb Au, are associated with disseminated pyrite. Troup and Otton also carried out humus sampling, along two reconnaissance lines in the northern part of the property.

F. Work Done This Program

1. Gridding

Old tieline 122N (Fig. 3), put in by Regal Petroleums in 1984, was re-cut and re-chained between lines 210W and 250W. Chainage of all lines is in feet. The tieline is oriented at 130 degrees. Old lines 210W and 230W were also re-cut and re-chained between 107N and 137N, and line 250W was re-cut and re-chained between 122N and 130N. Stations were established at 100-foot intervals.



Source: Compilation of 1990 and 1991 work by Alcanex Ltd.

Scale: 1:20,000

FIGURE 3. Location of 1992 Work and Previous Sampling

LEGEND

INTRUSIVES

1di	diorite
1qm	quartz monzonite
1gd	granodiorite
QFP	quartz feldspar porphyry

SEDIMENTS

IF	iron formation / chert
S2	quartzite
S1	greywacke / arkose

VOLCANICS

V3	felsic volcanics
V2	intermediate volcanics
V1	mafic volcanics

Geologic contact

A.E.M. anomaly (gov't survey)

Magnetic high — M.H

Magnetic low

Drill hole location

Rock sample location & number — 1990 — • 190( )

1991 — • 1530( )

Float sample — ▲

Gold analysis (ppb) — (2900)

Lake bottom sample — o

Humus sample line

Outcrop; large, small — ×

Foliation

A.E.M. assessment compilation

ABBREVIATIONS

t - tuff, f - flow, qv - quartz vein

c.g. - coarse grained, f.g. - fine grained

LEGEND FOR FIGURE 3

Nine lines at approximately 200-foot intervals were established by hip-chain and compass between 107N and 137N. Stations were established at 50-foot intervals. Orientation and chainage of these was checked by temporary tie-lines run across the ends of the lines.

A magnetometer survey originally planned for this program was postponed to a later program, so that results of this program could be incorporated in the design of the survey.

2. Geological Mapping

Geological mapping at a scale of 1:1200 was carried out over all of the new grid area with the exception of the less prospective northeast corner which could not be completed due to time constraints. Twenty-one samples were analyzed from this work.

3. Manual stripping and channel sampling

Six old trenches or stripped areas, sampled in a reconnaissance manner by Troup and Otton, were cleaned out to expose the bedrock as much as possible. The two trenches near the pond were washed off by Wajax Mark III fire pump.

All trenches were then channel-sampled by diamond saw where exposure allowed; otherwise chip or grab samples were collected. Thirty-six samples were collected and analyzed.

4. Analysis

Fifty-seven samples were analyzed for gold at X-Ray Assay Labs in Toronto. The method involved the analysis of 30-gram samples by lead fire assay with a direct current plasma (DCP) finish after dissolution of the fire assay bead. Samples were first crushed to -3mm, riffle divided to a maximum of 250 g, and milled in chrome steel. Quartz cleaner was milled between samples to minimize contamination. Detection limit was 1 ppb Au.

5. Personnel

The writer, assisted by Kevin Armstrong of Port Hope, carried out the field work.

II GENERAL GEOLOGY

The property is located within, and at the western extremity of, the Swayze Greenstone Belt, which may be considered the western extension of the Abitibi Greenstone Belt.

In a report on the Halcrow-Ridout Lakes area, Donovan (1968) describes the geology in the area of the property as follows (pg. 29): "The major structure in the map-area is an east-west-trending tightly folded doubly-plunging syncline, whose axis is terminated against a large granite body along the Ivanhoe River in Halcrow township. The synclinal axis is in intermediate to basic volcanic rocks and can be traced eastward into the adjoining townships. The shape of the synclinal structure is delineated by the sedimentary rocks...". The sedimentary rocks, which define the limbs of the synclinal structure, are present in belts up to about two kilometres in width to the east of the property, but are present only sporadically in the area of the property. The axis of the synclinal structure is located at about the southern margin of the property.

III GEOLOGY OF THE HALCROW CREEK PROPERTY

A. General Geology

1. General Summary

The property is underlain in large part by massive andesite and andesite tuff. These rocks are intruded by several small felsic intrusive dykes or sills and in the area northwest of the pond by a larger body of granitic rock which in places is porphyritic. The western and northern extremities of the property are underlain by granodiorite. Clastic metasediments, mainly grey mudstone and siltstone occur in the northern part of the property and immediately west of the pond. Pyritic argillite and quartz-magnetite iron formation are reported to occur in two areas near the southern margin of the property.

2. Amphibolite

Amphibolite is exposed along the western margin of the grid (Fig. 4). This rock is massive to gneissic, black to grey with pink streaks in places. As a large mass of granodiorite is known to intrude the volcanics several hundred metres to the northwest, the amphibolite is assumed to be contact metamorphosed andesite. Foliation in the amphibolite tends to be northerly to northeasterly, approximately parallel to the granodiorite contact.

3. Andesite

The eastern half of the grid is underlain by mafic volcanic rocks, believed to be andesitic in composition. These dark to medium green, fine-grained to medium-grained rocks, which vary from massive to tuffaceous, are commonly foliated to weakly sheared to strongly sheared in places. Because massive and tuffaceous varieties appear to be intimately interlayered, and because metamorphic foliation and shearing have made it difficult to distinguish between the two varieties, no attempt has been made to identify separate units on the geology map.

4. Sedimentary Rocks

Two main areas of clastic sedimentary rocks occur within the grid. In the northwest corner of the grid, strongly crenulated and folded fissile to slaty grey-green mudstone and chlorite schist occur on the north side of a prominent valley.

In the area immediately north of the pond at the southern edge of the grid, several outcrops expose highly crenulated slaty grey micaceous siltstone or quartzite

interlayered with friable calcite-chlorite schist. This apparent wedge of sediments occurs between andesite and the felsic intrusive body along a prominent air photo lineament, possibly marking a zone of shearing.

Nearby, to the northeast of the grid, a narrow band of light grey-green micaceous quartzite occurs between massive andesite or mafic intrusion and chloritic to sericitic quartz-feldspar porphyry.

5. Felsic Intrusives

Much of the southwest corner of the grid appears to be underlain by a large body of granitic rock exposed sporadically within a topographic high. This is commonly quartz-feldspar phyric, highly chloritic and sheared. In places, the rock contains up to 3-5 percent pyrite. Analyses from this rock gave only low gold values.

Similar rock occurs just north of the tieline in the western part of the grid in the area of trenches 5 and 6. Schistosity in these rocks ranges from about 125° to 170° as compared with the most common foliation of 090 to 110° in the andesite.

It is not known if the area of no outcrop between the two areas in which granitic rocks are exposed is also underlain by the same rock.

At least four narrow dykes or sills of similar rock, up to a few metres in width occur elsewhere on the grid. These are important as all of the areas of anomalous gold values observed on the grid are associated with these bodies.

6. Pleistocene

Several large broad hills of sandy to gravelly till occur within the grid area. This till appears to be the predominant surficial material within the property.

B. Structural Geology and Metamorphism

1. Orientation of Stratigraphy

No stratigraphic units were mapped which unequivocally denote the orientation of the stratigraphy. The sediment/volcanic contact at the northwest corner of the grid and on a small exposure just northeast of the pond indicate a stratigraphic direction of about 100°. This is close to the most prominent foliation within the andesite over most of the grid which averaged about 090° to 110°.

2. Foliation and shearing

Most of the rocks are at least weakly foliated. In places, this foliation is strong and pervasive, locally grading into schistosity or shearing. Areas in which shearing is indicated usually include minor amounts of pyrite and occasional quartz veining. The three mineralized zones described below are areas in which shearing is particularly pronounced.

It is possible that the linear swamp with a trend of about 125° and just north of the tieline may be underlain by a major shear zone. This theory is supported by the fact that the swamp is also marked by an airborne VLF anomaly and just east of the grid by an airborne EM anomaly (Aerodat, 1984).

3. Faults and folds

There is a presumed north-trending fault trending from the pond to the area of trenches 5 and 6. Evidence for this is mainly the topographic depression, foliation measurements in outcrop south of the trenches, and a hard, red, siliceous granitic rock found just south of the trenches.

Another possible fault underlies the prominent valley near the north end of the grid. This prominent lineament may also be related to the sediment/volcanic contact. The nature of the contact between the wedge of sediments immediately north of the pond and adjacent volcanics is uncertain.

As discussed under a previous section, the property may be underlain by the nose of a large fold structure. Sedimentary rocks, possibly with interbedded tuff, are commonly tightly folded and crenulated on a centimetre scale.

3. Metamorphism

Rock types underlying most of the property have been metamorphosed to greenschist facies as evidenced by abundant chlorite and occasional sericite. In the southwest corner of the grid, rocks have been metamorphosed to amphibolite facies, as evidenced by the black to reddish amphibolite, presumably a result of contact metamorphism of the volcanics related to the nearby granitic batholith.

C. Economic Geology

Gold concentrations appear to be directly related to areas of shearing, especially where shearing is accompanied by pyrite in amounts of up to 10 percent. This condition is most commonly, but not exclusively, seen within and at the contact of bodies of granitic rock. It is postulated that the ductility contrast between the granitic rock and host andesite may have provided increased permeability for mineralizing solutions.

In addition to the sampling of the trenches to be described in detail in the following section, local sampling elsewhere has returned anomalous gold values. The most significant of these are:

- from the tieline at 230+50W where a sample of pyritic mafic rock from an old pit gave a value of 83 ppb Au;

- near 212W at 120N where a sample of sheared andesite from a small gossan gave a value of 129 ppb Au;

- near 216W at 116N where a small shear zone gave a value of 75 ppb Au.

Except for the fact that these samples indicate widespread anomalous gold mineralization, they are not considered individually significant at this time.

The most significant occurrences examined during the program are those in Zones 2, 3 and 4 described in detail in the following section.

IV. RESULTS OF MAPPING AND SAMPLING

A. Introduction

A total of thirty-six channel or chip samples were collected from the old trenches in Zones 2, 3 and 4. The results of this sampling are described below.

B. Zone 2

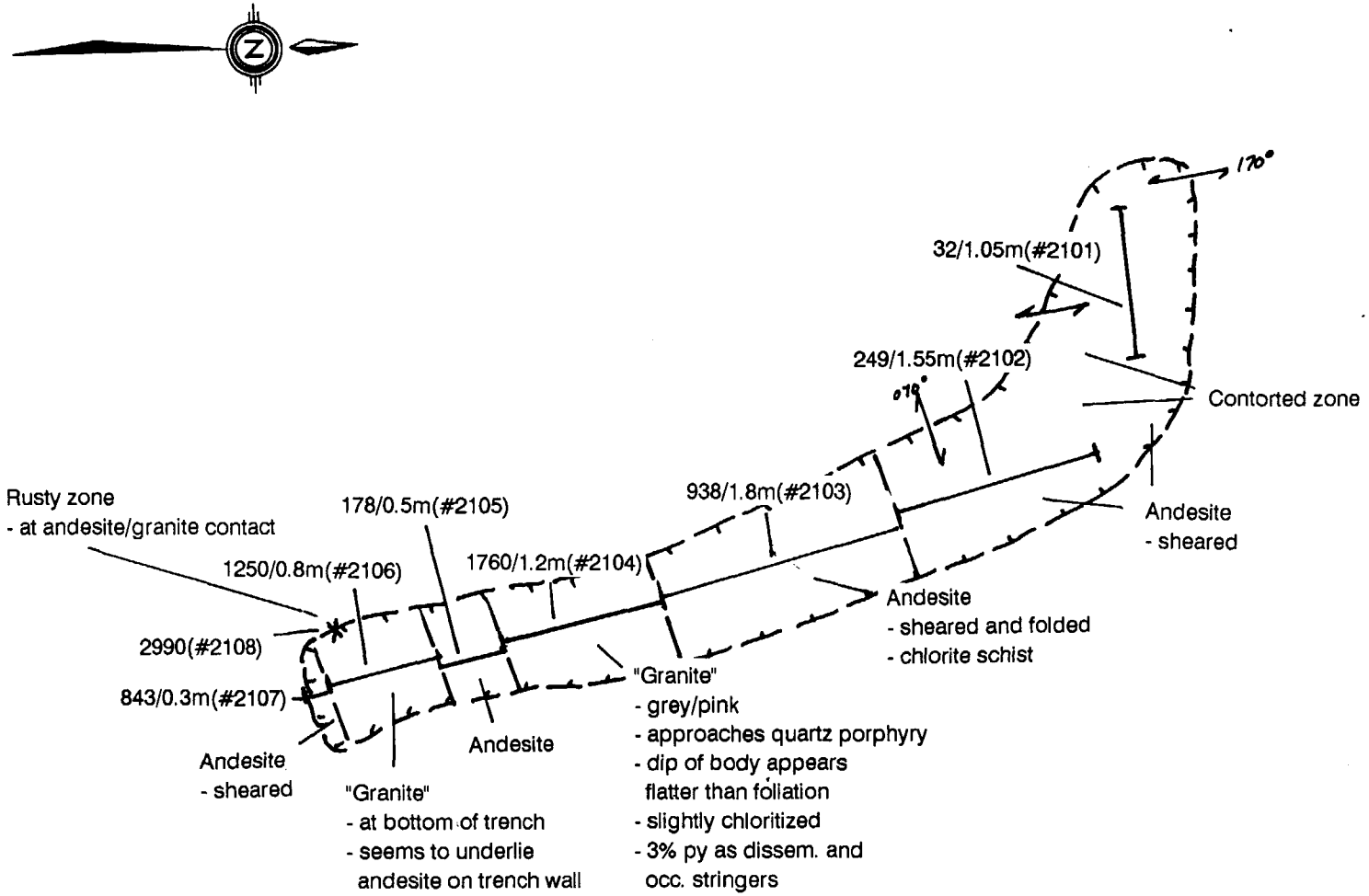
Two trenches and two outcrops were sampled at this prospect.

Trench 1 (Figure 5), a shallow trench in outcrop, is located about 70 metres north of the pond, at the top of a ridge adjacent to a northeast-trending draw near the junction with a prominent northwest-trending valley. This is presumably the site of Hammarstrom's value of 0.12 oz/ton gold. Troup and Otton reported several anomalous grab samples with values in the hundreds and thousands of ppb's, with the highest value being 2900 ppb gold (0.085 oz/ton gold).

The trench exposes two bands, approximately a metre wide, of slightly porphyritic pink granitic rock which appear to dip to the north at a flatter angle than the enclosing somewhat sheared and contorted andesite and chlorite schist. The granite is somewhat rusty and chloritized with up to 3% pyrite as disseminations and minor stringers. Although most rocks exposed in the trench strike at about 070°, which is the trend of the draw immediately to the south, andesite at the northwest end of the cleared area strikes at about 170°, subparallel to the prominent northwest-striking valley.

Surprisingly, all samples had anomalous amounts of gold, with the highest values, of 1760 and 1250 ppb Au, reported from the two bands of granitic rock. The highest value was 2990 ppb gold from a chip sample near the southern extremity of the trench. A weighted average of the best interval, excluding the chip sample 2108, returned 1.11 g/T Au over 4.5 metres.

Trench 2 (Fig. 6), approximately 65 metres to the northeast of Trench 1, exposes the contact between massive to fractured granite and highly sheared and fissile andesite to the southeast. The best value received from this trench was 191 ppb Au. As the mineralized zone was not traced between the two trenches, the trenches may be exposing different zones. It is postulated that the zone exposed in Trench 1 may be to the south of Trench 2, under the draw.



LEGEND

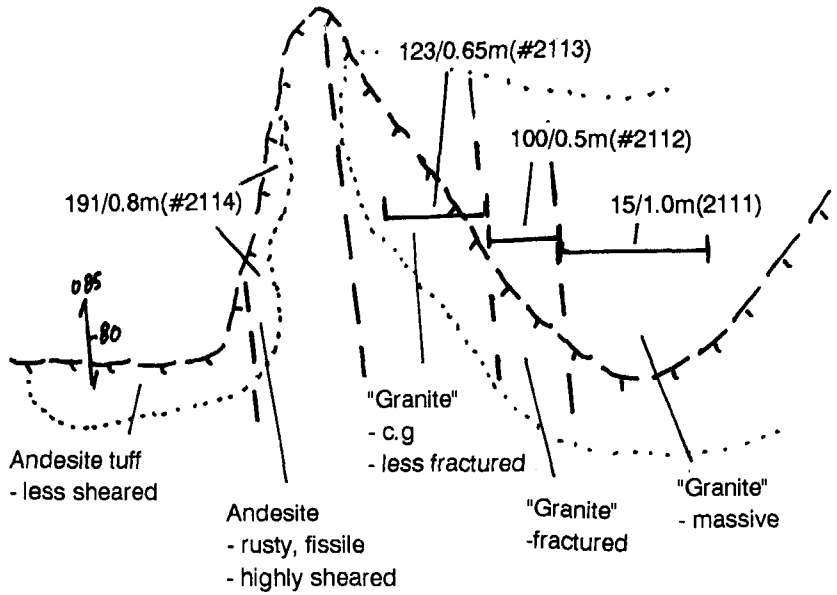
x 1250(#2126)	Grab sample: Au(ppb)(sample number)
———	Channel sample
1760/1.2m(2104)	Au(ppb)/channel length in metres (sample number)
	Trench
	Outcrop/bedrock

HALCROW CREEK PROPERTY

TRENCH 1	ZONE 2	SCALE 1:50	DRAWN BY W. Johnson REVISED Dec. 15/92

GEOLOGY AND SAMPLING

DATE JAN/93	*TARGET EXPLORATION SERVICES LTD.*	DRAWING NUMBER FIG. 5



LEGEND

x 1250(#2126)	Grab sample: Au(ppb)(sample number)
———	Channel sample
1760/1.2m(2104)	Au(ppb)/channel length in metres (sample number)
	Trench
	Outcrop/bedrock

HALCROW CREEK PROPERTY

TRENCH 2	ZONE 2	SCALE 1:50	DRAWN BY W. Johnson ~~REVISED~~ Dec. 15/92

GEOLOGY AND SAMPLING

DATE		DRAWING NUMBER
JAN/93	*TARGET EXPLORATION SERVICES LTD.*	FIG. 6

The mineralized zone exposed in Trench 1 appears to be related to shearing within and adjacent to small granitic dykes or sills. The location near the presumed junction of two possible shear zones may also be significant.

Further work is strongly recommended on this prospect. This should include further prospecting and detailed mapping in the vicinity of Trench 1 and two short diamond drill holes to probe beneath Trench 1 and under the topographic lows to the south and west of the Trench.

3. Zone 3

Two partially stripped areas or trenches located at Tieline 122N were cleaned off and channel sampled by diamond saw. Trench 4 (Fig. 8) at the tieline at line 219W exposed a body of granitic rock approximately 3.4 metres wide, flanked by sheared andesite. This rock is in places strongly sheared and weathered with 2 to 5 percent pyrite. Channel samples gave values to 1190 ppb Au over 1.2 metres or 740 ppb Au over 2.6 m.

Trench 3 (Fig. 7), another stripped area 45 metres to the west, may be exposing the same granitic body. Channel samples of granitic rock visually similar to that in Trench 4 and of sheared andesite with up to 5 percent pyrite returned only low values to 25 ppb Au.

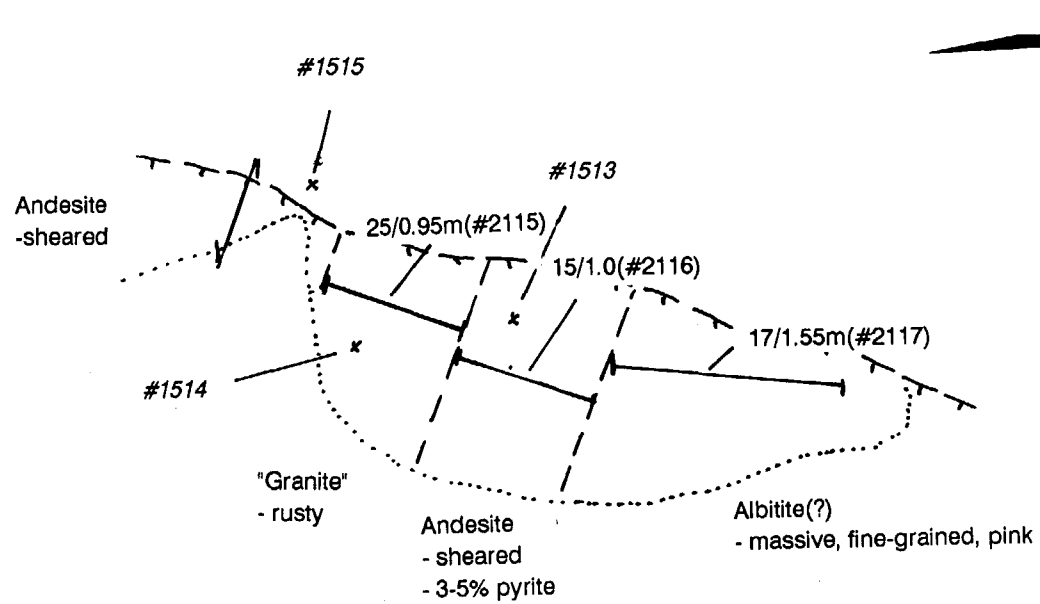
Similarly, a grab sample of chloritic granite with up to 7% pyrite from a small pit midway between the two trenches returned a value of only 28 ppb Au.

It would appear that anomalous gold values occur where certain structures, in particular shear zones, intersect certain, but not all, granitic sills or dykes. The mineralization would appear to be related to the ductility contrast between granite and the enclosing andesite country rock.

Further exploration is recommended for the area of Trench 4. This should include detailed prospecting, stripping and channel sampling, and one or two short diamond drill holes if sampling results warrant it.

4. Zone 4

Two old large trenches, each over 30 metres long, located between lines 226W and 228W at about 126+50N, were cleaned out and resampled (Fig. 9). The trenches, probably originally excavated in the 1940's or 1950's, are about 30 metres long, 2 metres wide and up to 2 metres deep. They were dug mainly in shallow overburden, although trench 6

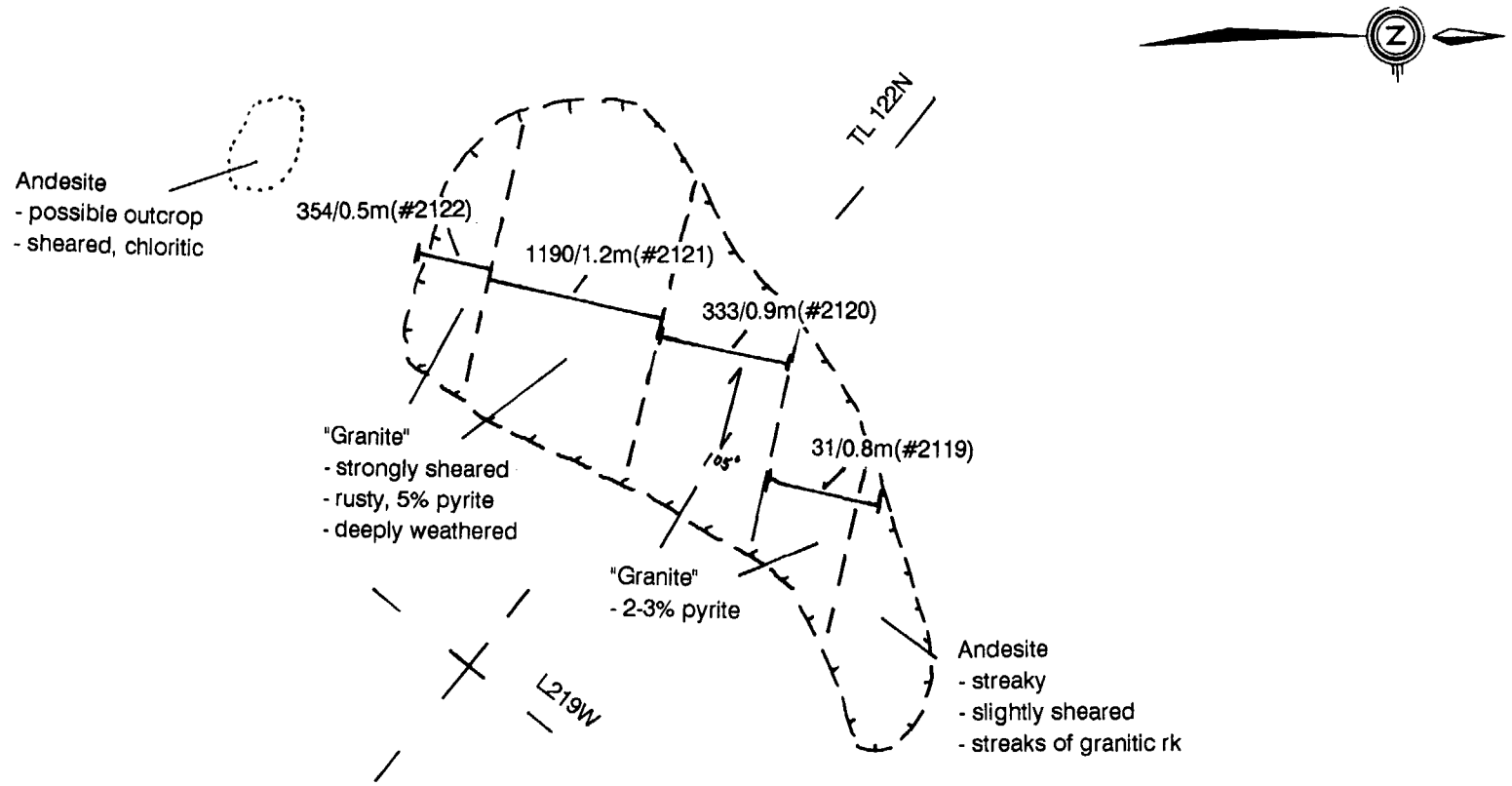


LEGEND

x 1250(#2126)	Grab sample: Au(ppb)(sample number)
———	Channel sample
1760/1.2m(2104)	Au(ppb)/channel length in metres (sample number)
	Trench
	Outcrop/bedrock

HALCROW CREEK PROPERTY

TRENCH 3	ZONE 3	SCALE 1:50	DRAWN BY W. Johnson REVISED Dec. 15/92
GEOLOGY AND SAMPLING			
DATE JAN/93	TARGET EXPLORATION SERVICES LTD.		DRAWING NUMBER FIG. 7



LEGEND

x 1250(#2126)	Grab sample: Au(ppb)(sample number)
———	Channel sample
1760/1.2m(2104)	Au(ppb)/channel length in metres (sample number)
	Trench
	Outcrop/bedrock

HALCROW CREEK PROPERTY			
TRENCH 4	ZONE 3	SCALE 1:50	DRAWN BY W. Johnson ~~REVISED~~ Dec. 15/92
GEOLOGY AND SAMPLING			
DATE JAN/93	*TARGET EXPLORATION SERVICES LTD.*		DRAWING NUMBER FIG. 8

spans a small knob of outcrop. Bedrock is exposed in places along the bottom and sides of the trenches. Both trenches reveal highly sheared and weathered granitic rock and chlorite schist, presumably representing altered andesite tuff.

Trench 5 was sampled in 1991 by Troup and Otton who obtained values of 34 to 380 ppb Au from seven grab samples. No other results of previous sampling are known.

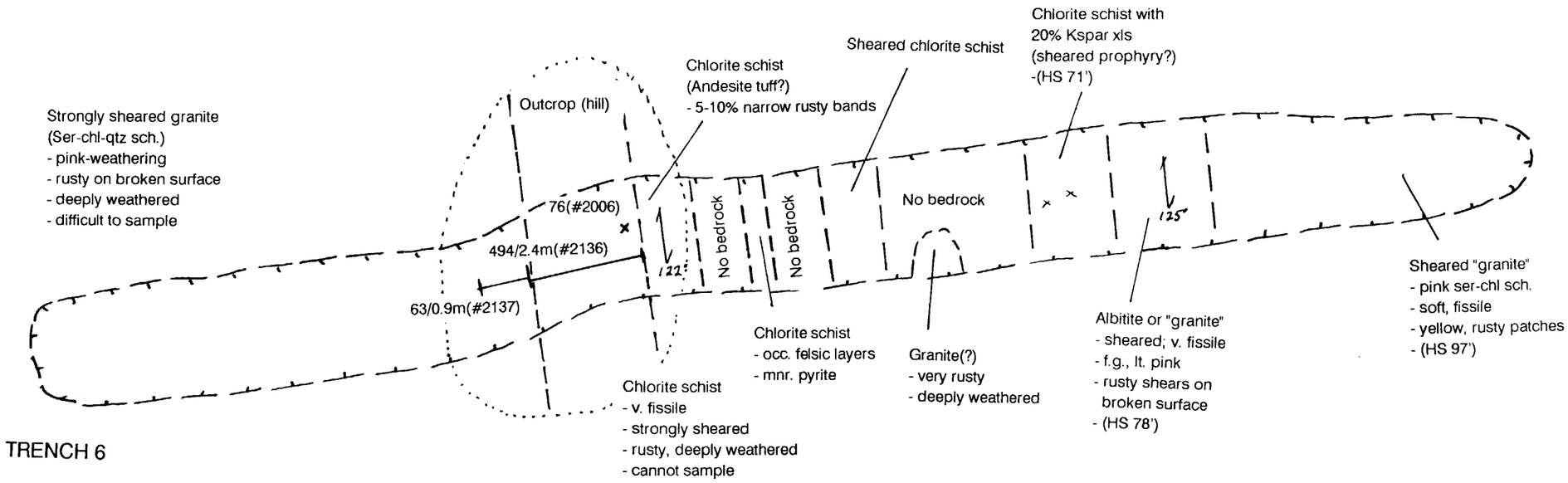
An attempt was made to sample most of trench 5, although this was only partially successful as there was no bedrock exposed in places, or bedrock was too fissile and weathered to sample. Nevertheless, eleven channel samples and one grab sample were collected. The best value obtained was 1250 ppb Au from a grab sample in deeply sheared and weathered granitic rock. The southern part of the trench from which this sample was obtained returned channel samples averaging 885 ppb Au over 3.7 metres (12 feet). Several samples were also taken about a third of the way from the northern end of the trench. Although these returned only low values (up to 43 ppb Au), grab samples taken by Troup and Otton from exposures not sampled in the current work (esp. samples 1518-19) gave up to 290 ppb Au in this vicinity. Taken together, the samples indicate a broad zone of anomalous gold values over at least 20 metres in width.

Trench 6, about 75 metres WNW of Trench 5, revealed mainly sheared granitic rock with bands of sheared chlorite schist, presumably andesite tuff, near the centre of the trench. Although much bedrock was exposed, particularly in the southern half of the trench which exposes bedrock on the south-facing slope of a small hill, the rock was difficult to sample due to the fact it was deeply weathered. Furthermore, the oxidation of the sulphides would have made sample results unreliable. Only two samples were taken, one of which returned 494 ppb Au over 2.4 metres in chlorite schist.

The two trenches reveal similar geology, with sheared granitic rock at each end and bands of sheared chlorite schist or andesite tuff in the centre.

Based on the similarity in geology, one would expect that the southern end of Trench 6 should also be mineralized as in Trench 5.

Although pyrrhotite was observed in an outcrop east of Trench 6, pyrite was the only sulphide noted within the trenches. Gold is presumably contained within the pyrite.



LEGEND

x 1250(#2126) Grab sample: Au(ppb)(sample number)

Channel sample

1760/1.2m(2104) Au(ppb)/channel length in metres (sample number)

Trench

Outcrop/bedrock

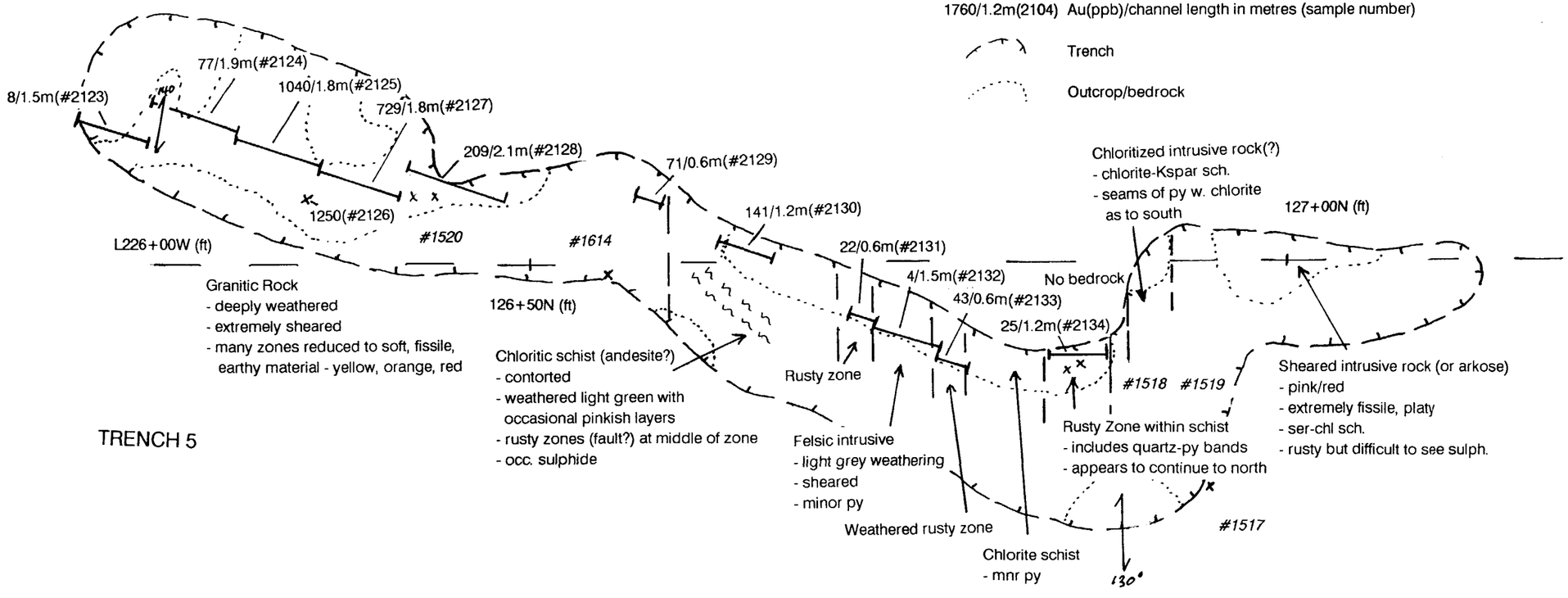


FIG. 9

HALCROW CREEK PROPERTY

ZONE 4

GEOLOGY AND SAMPLING

JAN/93 1:100

TARGET EXPLORATION SERVICES LTD.

W. Johnson Dec. 15/92

V. RECOMMENDATIONS AND CONCLUSIONS

A. Conclusions

Three distinct zones of gold mineralization were located and sampled. Gold values are related to shearing, in particular within and adjacent to bodies of granitic rock. These zones are located within an area 800 metres wide across the regional foliation and stratigraphy. Although gold values in the economic range have not yet been obtained, the results are highly encouraging and possibly indicative of economic mineralization. The area underlain by a linear swamp near Zones 3 and 4 should be evaluated as a potential mineralized shear zone.

B. Recommended Work Program

Further work, including testing of the zones by a small drilling program, is strongly recommended.

The proposed work program is intended to evaluate the known zones by diamond drilling, to extend these zones if possible by mapping and prospecting, to determine the controls on the mineralization, and to explore for new showings on the property and on immediately adjacent open ground.

The recommended program consists of:

1. Line-cutting and chaining of parts of the grid to be covered by magnetic survey and the extension of lines to Zone 1, not yet examined. Approx. 10 km.

2. Approx. 10 km. of detailed magnetic survey at 6.25 or 12.5 m spacing over prospective areas.

3. Outcrop washing (by fire pump), hand stripping, and channel sampling (diamond saw) of Zone 1 and some washing and additional sampling at Zones 2, 3, and 4 to follow up on results of the 1992 work.

4. Detailed geological mapping in the area of the four zones.

5. Prospecting and reconnaissance mapping and sampling on the property and, if time permits, on immediately adjacent open ground on strike with the known zones.

6. Diamond drilling on zones 2, 3 and 4 employing a Winkie diamond drill recovering core equivalent to BQ. Two 100-foot holes are planned for each of the three zones to test fresh rock beneath the trenches.

C. Estimated Budget

Prospecting and reconnaissance mapping		$ 3,000
Line-cutting and chaining		
10 km @ $300		$ 3,000
Magnetic Surveys - 10 km @ $150		$ 1,500
Geological Mapping, drafting and report		$12,000
Stripping, outcrop washing, channel sampling, map and report prep.		$ 4,800
Diamond drilling		
600 feet drilling @ $25	$15,000	
Mobilization	3,000	
Room and Board - 20 man-days	1,000	
Assays - 100 @ $15	1,500	
Report	2,500	
Total		$23,000
TOTAL EXPENSES		$47,300
OVERHEAD (5%)		$ 2,365
TOTAL PROGRAM COST		**$49,665**

Respectfully Submitted,
Target Exploration Services Ltd.

Wayne Johnson

REFERENCES

Aerodat

1984: Report on Combined helicopter Borne Magnetic, Electromagnetic and VLF Survey, Swayze Area, Ontario; Tooms, Halcrow, Greenlaw Townships, Porcupine Mining Division; unpub. report (available in assessment files)

Donovan, J.F.

1968: Geology of Halcrow-Ridout Lakes Area; Ont. Dept. Mines, Geol. Rept. 63.

Karvinen, W.O.

1980: Report on the Gossan Resources Property, Halcrow Township, district of Sudbury, Ontario.; unpub. report (available in assessment files)

Troup, W.R. and Otton, B.

1991: Swayze Project - OPAP Grant #91-611. (Report on OPAP Project).

APPENDIX 1. LIST OF CLAIMS

Claim #	size	Twp	Recording Date
1150962	16 units	Halcrow	Oct. 23, 1991
1150965	2 units	Halcrow	Oct. 23, 1991
1150967	1 unit	Halcrow	Oct. 25, 1991
1150966	1 unit	Halcrow	Oct. 25, 1991
1150968	2 units	Halcrow	Oct. 25, 1991
1150969	1 unit	Halcrow	Oct. 25, 1991

APPENDIX 2. ANALYSES

XRAL

X-RAY ASSAY LABORATORIES

A DIVISION OF SGS SUPERVISION SERVICES INC.
1885 LESLIE STREET • DON MILLS, ONTARIO M3B 3J4 • CANADA
TEL: (416)445-5755 TELEX: 06-986947 FAX: (416)445-4152

CERTIFICATE OF ANALYSIS

REPORT 21145

TO: TARGET EXPLORATION
ATTN: WAYNE JOHNSON
20 BARRETT STREET
PORT HOPE, ONTARIO
L1A 1M7

CUSTOMER No. 1788

DATE SUBMITTED
5-Nov-92

REF. FILE 13725-A7

Total Pages 3

107 ROCKS

	METHOD	DETECTION LIMIT
AU-1AT PPB	FADCP	1.

*** UNLESS INSTRUCTED OTHERWISE WE WILL DISCARD PULPS IN 90 DAYS ***
AND REJECTS IN 30 DAYS FROM THE DATE OF THIS REPORT

DATE 25-NOV-92

CERTIFIED BY .....

Jean H.L. Opdebeeck, General Manager

SAMPLE	AU-1AT PPB
2001	83
2002	23
2003	13
2006	76
2008	14
2009	75
2010	2
2011	<1
2012	129
2013	100
2014	<1
2018	3
2019	10
2020	2
2021	27
2022	70

AU-1AT PPB - ASSAY PERFORMED ON 30 GRAM ALIQUOT

SAMPLE	AU-1AT PPB
2023	39
2024	54
2025	<1
2026	30
2028	160
2101	32
2102	249
2103	938
2104	1760
2105	178
2106	1250
2107	843
2108	2990
2109	334
2110	1160
2111	15
2112	100
2113	123
2114	191
2115	25
2116	15
2117	17
2118	28
2119	31
2120	333
2121	1190
2122	354
2123	8
2124	77
2125	1040
2126	1250
2127	729
2128	209
2129	71
2130	141
2131	22
2132	4
2133	43
2134	25
2136	494
2137	63

AU-1AT PPB - ASSAY PERFORMED ON 30 GRAM ALIQUOT

230W 228W 226W 224W 222W 220W 218W 216W 214W 212W 210W

136N 134N 132N 130N 128N 126N 124N TL122N 120N 118N 116N 114N 112N 110N 108N

TL 122N @ 130

NOT MAPPED

NOT MAPPED

NOT MAPPED

EM

MAG LOW

VLF LOW

VLF HIGH

AIR PHOTO LINEAMENT

ZONE 4

ZONE 3

ZONE 2

Scattered Outcrops

Boulders Ridge

Cedar Swamp

Low, flat

Low, wet

Hill

High Ground

Pond

Esker

valley

TR 1 TR 2 TR 3 TR 4 TR 5 TR 6

1160/0.5m(#2110)
334/0.6m(#2109)
<1(#2025)
76(#2006)
39(#2023)
70(#2022)
54(#2024)
30(#2026)
160(#2028)
23(#2002)
13(#2003)
27(#2021)
83(#2001)
2(#2020)
28(#2118)
#1512
#1611
129(#2012)
75(#2009)
#1904
#1905
3(#2018)
10(#2019)
<1(#2014)
<1(#2011)
2(#2010)
2017-9

LEGEND

G	Granitic rocks: gr, granite; p, quartz-feldspar porphyry
S	Metasedimentary rocks: q, quartzite; l, siltstone; m, mudstone; s, sandstone
A	Andesite: m, massive; t, tuffaceous
Aa	Amphibolite

TEXTURAL/STRUCTURAL MODIFIERS

f	Foliated, slightly sheared
sh	Strongly sheared
l	Finely laminated or foliated
ch	Chloritic
cr	Strongly folded and crenulated
cc	Chlorite-calcite schist
g	Gneissic

SYMBOLS

- Topographic feature
- Outcrop
- Cliff or steep outcrop
- 75(#2009) Sample - Au(ppb)/sample number
- *#1512* Location of old sample
- Foliation; cleavage
- Trench or pit
- Plot of airborne geophysics feature (Dighem, 1984)
- Assumed Geologic Contact

FIGURE 4

AREA WITHIN CLAIM #1150962.

LORAC PROPERTIES LIMITED

HALCROW CREEK PROPERTY, ONTARIO

GEOLOGY AND COMPILATION
ZONES 2, 3 AND 4

Scale 1:1200

0 50 100 m

JAN., 1993 | W. Johnson Dec. 15/92 | NTS: 41 O/15

TARGET EXPLORATION SERVICES LTD.

200

41O15SW0047 DIMS/GIS HALCROW