REPORT OF WORK PERFORMED

ON MINING CLAIMS L 522687 TO 522693 INCLUSIVE AND L 512579

GRENFELL TOWNSHIP, LARDER LAKE M.D.

Field work was carried out in two periods in 1982.

(a) Backhoe/bulldozer stripping and trenching from Aug.17th to Aug.24th and

(b) Prospecting and mapping of trenches from Sept.8th to Sept.16th. Drafting and other office work was performed at a later date.

BACKHOE/BULLDOZER WORK

This work was done for the purpose of (a) exposing areas considered to be geologically favourable, (b) opening up contacts between the main rock units for examination, (c) uncovering mineral-bearing deposits and (d) exposing more of the rock surface in the shaft area for examination and sampling.

The work was done under contract by Glen Kasner of Kirkland Lake, Ont. using a backhoe mounted on a timberjack vehicle and a D7 bulldozer.

DISCUSSION OF THE WORK AND RESULTS

The accompanying plan shows the stripping and trenching carried out during the 1982 field season.

Trench 82-1 exposed a dike or sill with a surface width of 20 to 30 feet of pinkish, porphyritic rock in an intermediate to basic volcanic host. Relative positions of porphyry outcrops suggest a northeasterly strike. The contacts are sharp and tongues of porphyry intrude surrounding rock. No significant alteration or mineralization were seen.

Many of the gold deposits of the area appear to be near or at the contact between the coarse and fine-grained rocks. The shaft area deposits occur on the east side of a large central mass of coarse-grained rock. The west margin also appeared to warrant investigation. To this end, trenches 82-2 to 82-6 were excavated.

Trench 82-2, the site of an earlier trench, contains a shear 3 to 4 feet wide between the coarse and fine-grained rocks. The shear is silicified, contains pyrite, strikes southwesterly and has a steep dip. An assay of gold content is expected in the near future.

Trench 82-3 was an effort to locate the southwestward extension of the shear in trench 82-2. A shear of more serecitic character was exposed with a similar strike but not directly in line with the former. If it is the same shear, both it and the contact are offset in a northwesterly direction about 20 feet. Sparse quartz stringers and pyrite are present.

Trenches 82-4 and 82-5 located the contact between the coarse-grained rock on the east and fine-grained on the west but revealed little else except a narrow north-south lamprophyre dike in trench 82-5.

Trench 82-6 exposed massive, fine-grained rock with what may be Keweenawan diabase at its west end.

Trenches 82-7 and 82-8

The purpose of this work was to expose more rock in the shaft area in order to gain a better understanding of the surface conditions adjacent to the main gold occurrence. A large quantity of mine rock was moved during the operation. Water from the nearby swamp soon flooded parts of the trenches limiting sampling and examination.

Trench 82-7

The fault which strikes S-48^{o}- 30' W. and dips 79^{o} southeasterly, extends in both directions through and beyond the trenched area. At its SW. end the strike changes to S-30^{o}-W. and it passes through a shattered zone containing a 12-inch gouge of finely brecciated rock to disappear into wet, swampy ground. Fine fracturing of the fault walls was observed in trench 82-7. Quartz stringers are present but not abundant. Blasting of the surface followed by careful sampling would be necessary to reveal

Trench 82-7(cont'd)

detail and ascertain gold content in a setting where high gold values are distributed in such an unpredictable way. Two chip samples across the fault in trench 82-7 gave 0.011 and 0.014 ounces per ton.

Trench 82-8 reveals the fault continuing northeastward from the main open pit at the base of a prominent escarpment and heading into a wide, wet swamp. Quartz veins and stringers occupy the fault zone varying in width along strike. At a point 17 feet northeast of the east end of the main open pit a 6-inch width of quartz is exposed and contains chalcopyrite, a mineral often associated with gold at this property. A grab sample of the quartz assayed 0.011 ounces per ton. Ten feet south of this point a parallel quartz stringer 2-inches in width showed a gold content of 0.864 ounces per ton, indicating that gold is distributed over a considerable width in the vicinity of the fault. Blasting and sampling are indicated as well as further stripping of the parallel occurrence.

PROSPECTING AND LOCATING TRENCHES

In addition to the mechanical trenching, the 1982 program included examination of the resulting trenches and locating them on the survey grid of the property. Maps of trenches and other information gained as well as reports were subsequently prepared from this data.

An investigation of the area northeasterly from the shaft showed that most of it, along the strike of the fault, was overburdened. Exploration southwestward yielded a closer determination of the contact and continuation of the favourable host rock structure for a distance of at least 1200 feet in low to swampy ground. The fault is probably obscured by drift cover.

It is probable that the fault which appears to have been an important control factor of the high grade gold values in the shaft area continues under overburden in both directions, possibly being offset in places by other faults. Other gold deposits may occur along its strike or downdip. Based on this, a search both ways along strike seems essential.

Future exploration of the property could consist of two categories (a) surface exploration for extensions or new deposits and (b) diamond drilling and underground examination of the known gold occurrences.

(a) Surface exploration for extensions or new occurrences by backhoe trenching and drilling where necessary are possible interim steps feasible with modest expenditures.

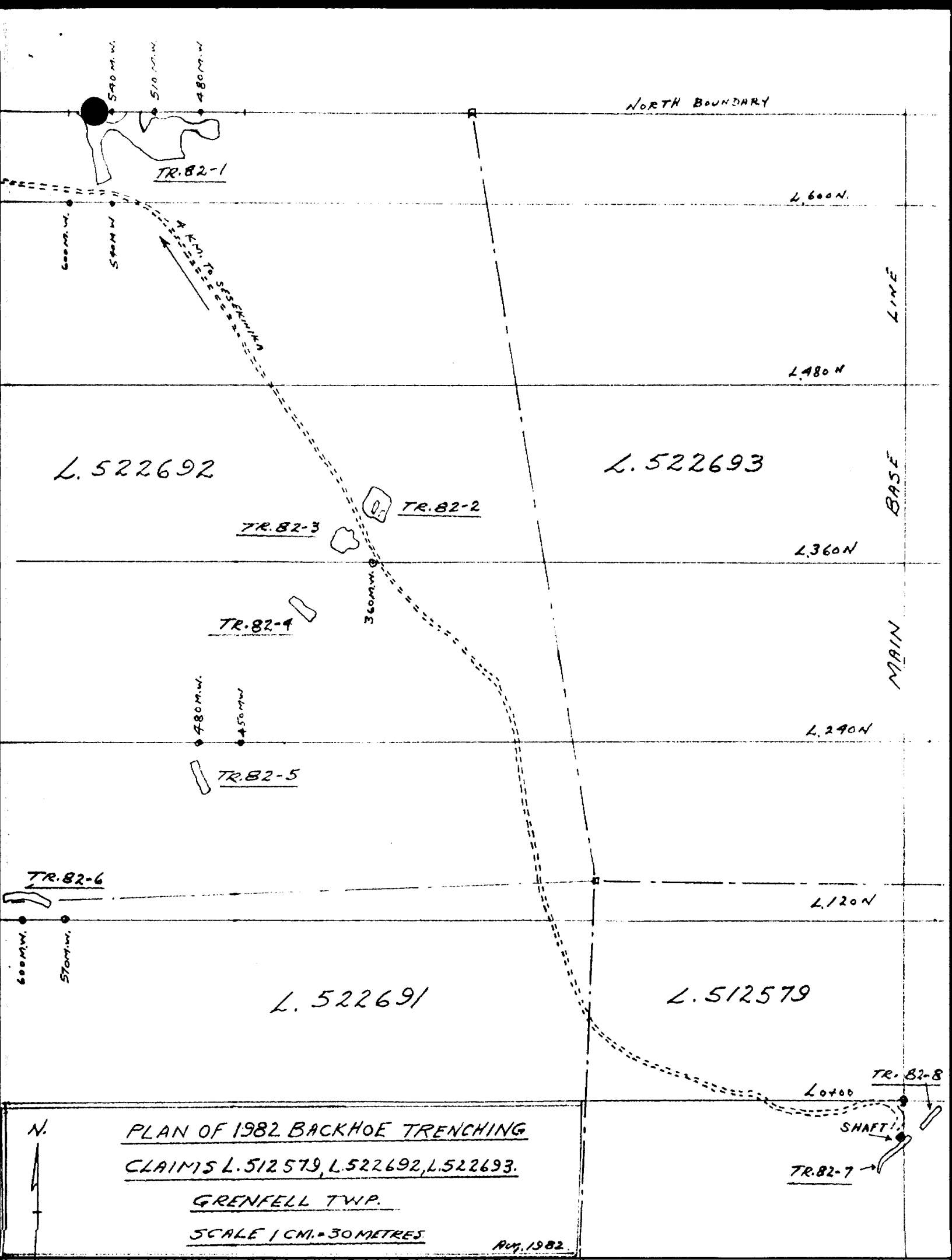
(b) Recent sampling and earlier Company reports indicate favourable possibilities for the open pit area. Sampling/examination of the existing underground workings and surface/underground drilling would be necessary to confirm its potential. Substantial funds would be required for stage (b).

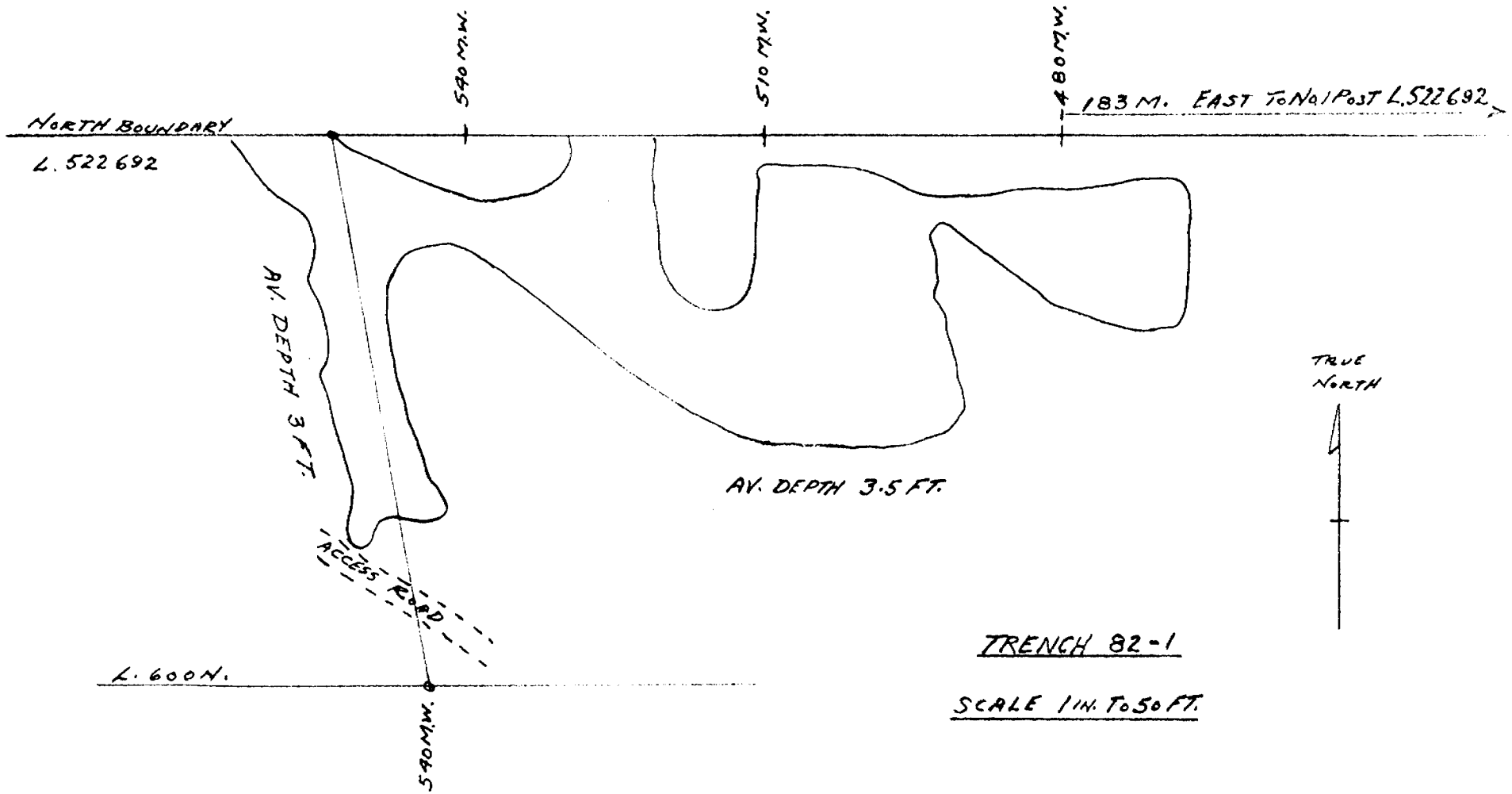
Cobalt, Ontario
November, 1982

Encl.

John Sirola

John Sirola, P. Eng.

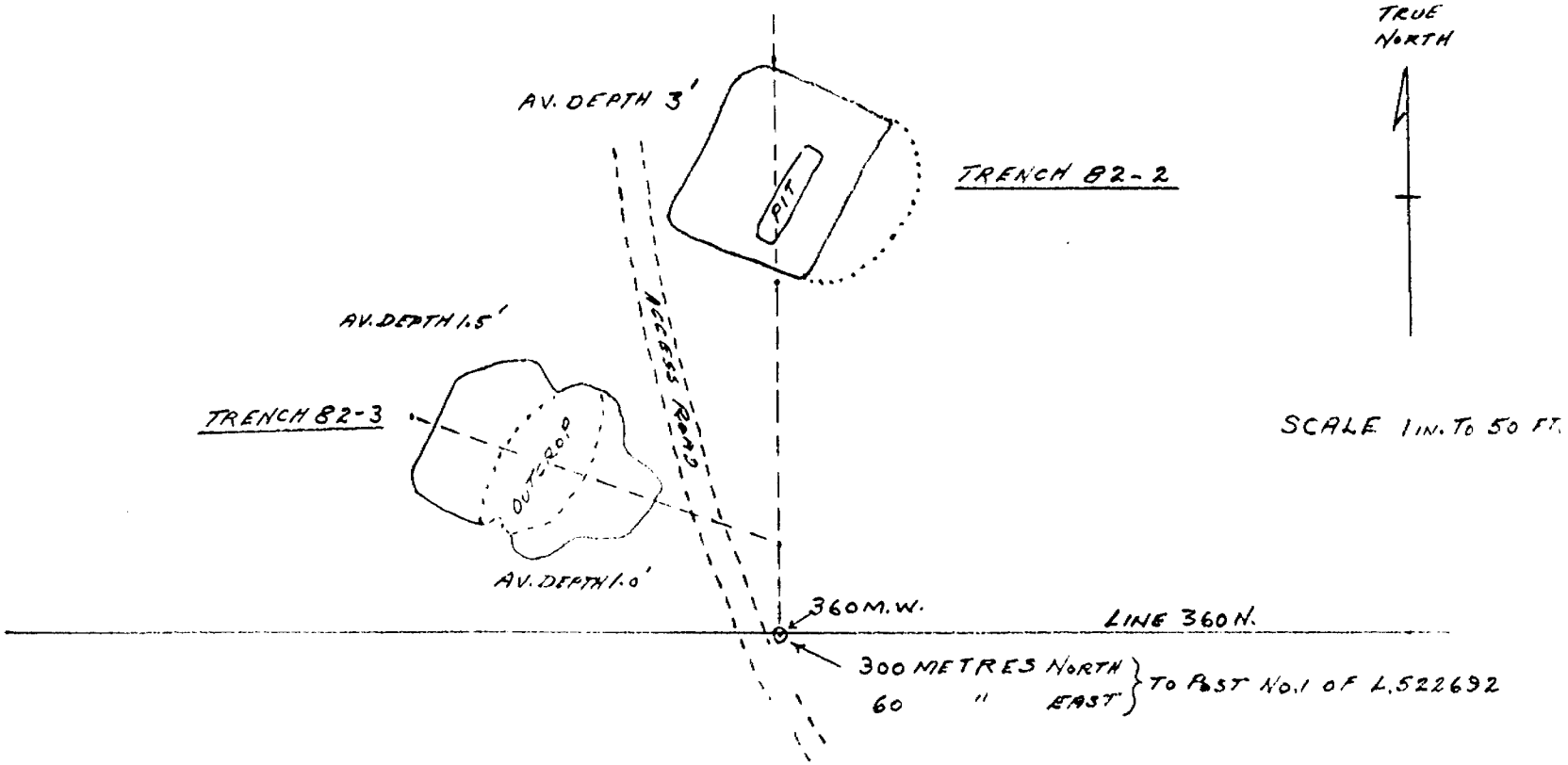

540 M.W.
510 M.W.
480 M.W.
NORTH BOUNDARY
TR. 82-1
L. 600 N.
600 M.W.
570 M.W.
A KM. TO SESEKINIKA
LINE
L. 480 N
L. 522692
L. 522693
TR. 82-2
TR. 82-3
BASE
L. 360 N
360 M.W.
TR. 82-4
MAIN
480 M.W.
450 M.W.
L. 240 N
TR. 82-5
TR. 82-6
L. 120 N
600 M.W.
570 M.W.
L. 522691
L. 512579
TR. 82-8
L. 0+00
SHAFT
TR. 82-7
N.
PLAN OF 1982 BACKHOE TRENCHING
CLAIMS L. 512579, L. 522692, L. 522693.
GRENFELL TWP.
SCALE 1 CM. = 30 METRES.
Aug. 1982.

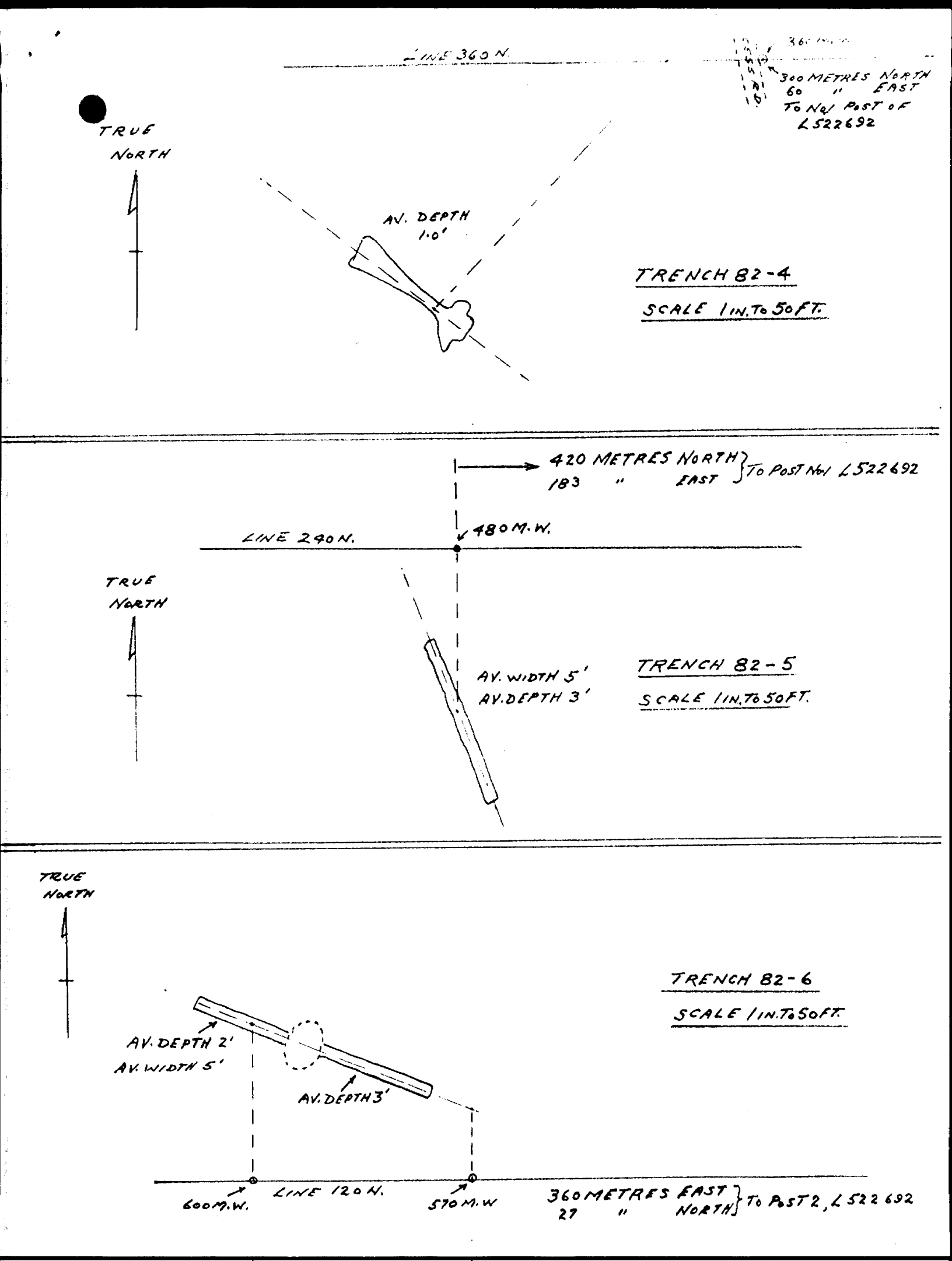


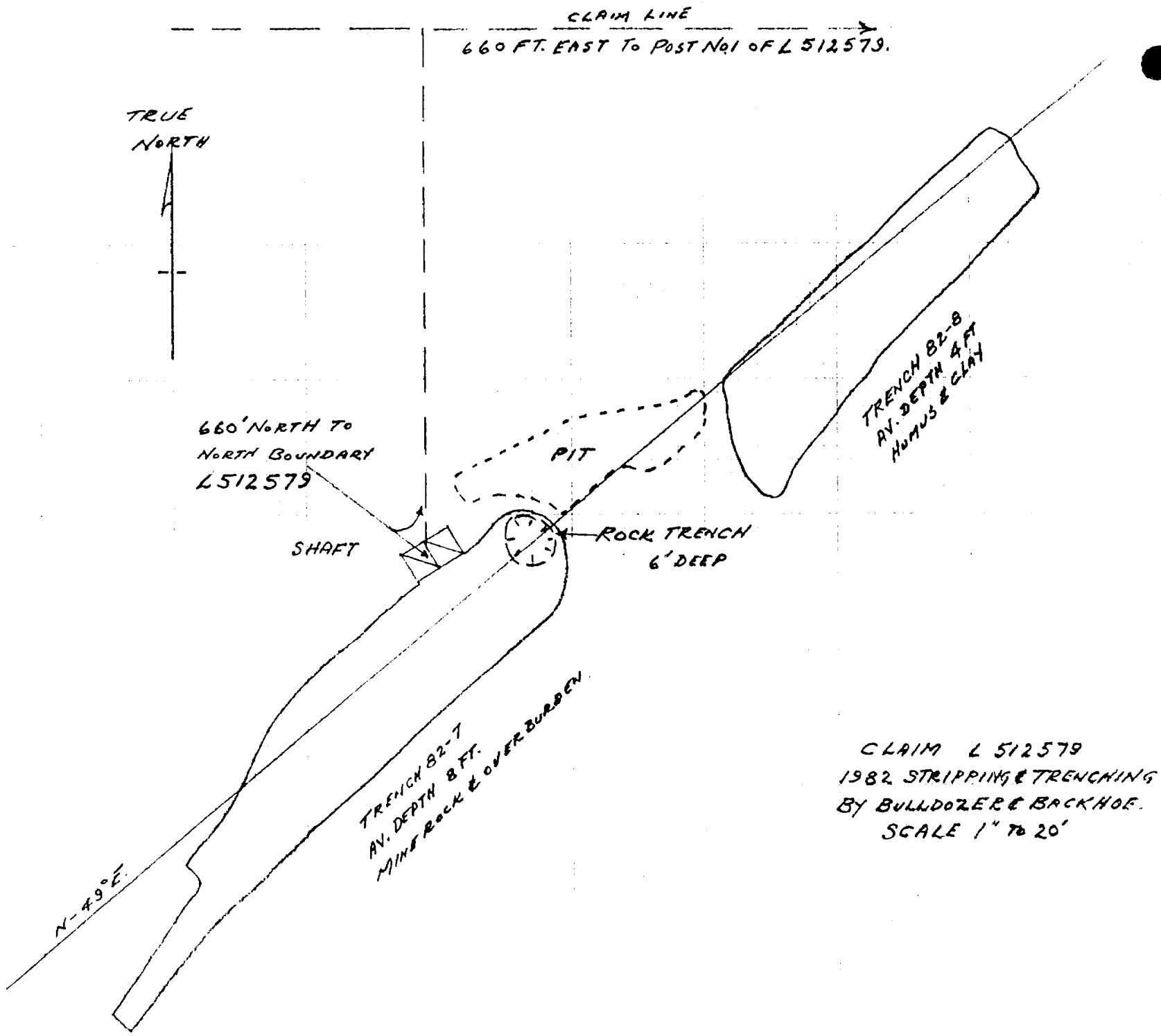
TRENCH 82-1

SCALE 1 IN. TO 50 FT.

SEPT. 1987


TRUE NORTH
AV. DEPTH 3'
PIT
TRENCH 82-2
AV. DEPTH 1.5'
TRENCH 82-3
OUTCROP
ROAD
SCALE 1 IN. TO 50 FT.
AV. DEPTH 1.0'
360 M.W.
LINE 360 N.
300 METRES NORTH
60 " EAST
TO POST No.1 OF L.522692


LINE 360 N.
300 METRES NORTH
60 " EAST
TO No1 POST OF
L522692
TRUE
NORTH
AV. DEPTH
1.0'
TRENCH 82-4
SCALE 1 IN. TO 50 FT.
420 METRES NORTH
183 " EAST
TO POST No1 L522692
480 M.W.
LINE 240 N.
TRUE
NORTH
AV. WIDTH 5'
AV. DEPTH 3'
TRENCH 82-5
SCALE 1 IN. TO 50 FT.
TRUE
NORTH
TRENCH 82-6
SCALE 1 IN. TO 50 FT.
AV. DEPTH 2'
AV. WIDTH 5'
AV. DEPTH 3'
600 M.W.
LINE 120 N.
570 M.W.
360 METRES EAST
27 " NORTH
TO POST 2, L522692


CLAIM LINE
660 FT. EAST TO POST No1 OF L 512579.
TRUE NORTH
660' NORTH TO NORTH BOUNDARY L512579
PIT
TRENCH 82-8 AV. DEPTH 4 FT. HUMUS & CLAY
SHAFT
ROCK TRENCH 6' DEEP
TRENCH 82-7 AV. DEPTH 8 FT. MINE ROCK & OVERBURDEN
N-49° E.
CLAIM L 512579
1982 STRIPPING & TRENCHING
BY BULLDOZER & BACKHOE.
SCALE 1" TO 20'

FIELD JOURNAL

1982

AUG. 15/82 PACKING & PREPARING CAMPER & TRUCK FOR DEPARTURE TO GRENFELL TWP. PROPERTY.

" 16 DRIVING TO PROPERTY, CLEARING WINDFALLS EN ROUTE, UNPACKING & SETTING UP.

" 17 INVESTIGATED OUTCROPS ALONG NORTH BOUNDARY OF PROPERTY. LOCATED A NEW PORPHYRY BODY. MADE PLANS FOR BULLDOZER/BACKHOE EXCAVATION OF TRENCH TR 82-1. DIRECTED SAME LATER IN THE DAY. SCOUTED AHEAD FOR FURTHER TRENCHING SITES.

" 18 DIRECTED TRENCHING & MADE A PRELIMINARY EXAMINATION OF TRENCHES 82-2 & 82-3. SELECTED & MARKED SITES FOR TRENCHES 82-4 & 82-5.

" 19 DIRECTED TRENCHING AT 82-4 & 82-5 & EXAMINED SAME. SELECTED & MARKED SITE FOR TRENCH 82-6.

" 20 DIRECTED TRENCHING & EXAMINED TRENCH 82-6 MOVED BACKHOE, BULLDOZER & CAMPER TO SHAFT AREA & STARTED TRENCHING AT SITE 82-7.

" 21 DIRECTED TRENCHING AT SITE 82-7 AND EXAMINED SAME. A LARGE TONNAGE OF MINE ROCK & OVERBURDEN WAS MOVED TODAY. PLANNED & MARKED OUT THE SITE FOR TRENCH 82-8.

" 22 RE-ESTABLISHED THE FORMER BASE LINE IN THE SHAFT AREA FOR MAPPING PURPOSES. DIRECTED CONTINUING EXCAVATION AT TRENCH 82-7 & THE START OF IT AT TRENCH 82-8. CHAINED IN THE POSITION OF POST NO. 3 OF L. 512 579.

" 23 SUPERVISED THE CONTINUING EXCAVATION OF TRENCH 82-8, THE DE-WATERING OF THE OPEN PIT AND RE-ERECTION OF THE SHAFT FENCE.

" 24 SUPERVISED CLEARING OF A ROCK TRENCH AT SITE 82-7, DIGGING OF A DRAINAGE DITCH, COMPLETION OF THE SHAFT FENCE, PUMPING OF THE OPEN PIT & WASHING OF TRENCHED ROCK SURFACES. MAPPED OUTCROPS ON THE WEST END OF LINE 240 S.

" 25 EXAMINED THE CLEARED AREA OF TRENCH 82-7 AND ESTABLISHED A PICKET LINE ALONG IT. MAPPED STRIPPED AREAS ALONG THIS LINE. EXAMINED & TOOK SPECIMENS FROM THE OPEN PIT. PUT UP TEMPORARY POLE POLE BARRICADES AND MOVED CAMPER TO A POINT NEAR L 360N., 360W.

JOURNAL
1982

Sept. 26/82 MAPPED A NUMBER OF NEW TRENCHES, PACKED & DROVE TO COBALT

" 27 UNLOADED EQUIPMENT ETC. FROM CAMPER & PLOTTED SOME OF THE NEW FIELD INFORMATION.

SEPT. 7/82 PACKED CAMPER & DROVE TO GRENFELL PROPERTY STOPPING FOR FUEL & SUPPLIES & SET UP IN THE SHAFT AREA.

" 8 PROSPECTING & MAPPING ROCK OUTCROPS AT THE S.W. EXTENSION OF THE FAVOURABLE ROCK UNITS AT THE SHAFT AREA. THE WORK WAS CONCENTRATED ON LINES L360S. & L480S., ABOUT 200 W. AND ADJACENT AREAS.

" 9 BLAZED & CHAINED A NEW LINE FROM L120S., 18 J. TO L360S., 180 W. TO LOCATE & MAP NEW OUTCROP POSITIONS. REBLAZED THE CLAIM LINE FROM L 360 S., 240 W. TO L 480 S., OBSERVING & MAPPING OUTCROPS ALONG & ADJACENT TO THIS TRAVERSE.

" 10 PROSPECTED OUTCROP AREA 56.9 METRES SOUTH OF L 24 S, 180 W. BLAZED A COMPASS LINE FROM THERE AT AZIMUTH 37 DEGREES TO THE SHAFT AREA FOR LOCATING & MAPPING OUTCROP. CHAINED FROM THIS LINE TO 0+00 ON THE MAIN BASE LINE. EXAMINED THE ROCK TRENCH WEST OF THE OPEN PIT.

" 11 EXPLORED EAST FROM L 120 N, 90 E. TO 240 E BUT FOUND NO NEW OUTCROPS. SIMILARLY AN E-W. TRAVERSE 61 METRES TO THE NORTH PROVED TO BE DRIFT COVERED EXCEPT AT ITS WEST END WHERE THE CONTACT BETWEEN THE COARSE & FINE-GRAINED ROCKS WAS FOUND. IT WAS ALSO OBSERVED NEAR AN OLD BUILDING SOME 500 FEET N.E. OF THE SHAFT. THIS AREA WAS SCANNED BUT NO OTHER OUTCROPS WERE FOUND.

" 12 SCOUTED FOR OUTCROPS SW. OF THE SHAFT & NW OF THE NEW N-37°E LINE & REBLAZED PARTS OF EARLIER GRID LINES. CONTINUED CHAINING IN POINTS ALONG THE N-37°E LINE.

" 13 EXPLORED S.E SIDE OF THE GREENSTONE BELT FROM THE BASE LINE TO L 360 S. ON E-W COMPASS LINES AT 100-FOOT SPACINGS WHERE REQUIRED. MAPPED MORE OUTCROPS ON THE N.W. SIDE OF THE N-37°E CONTROL LINE.

" 14 BUILT FOOT BRIDGE ACROSS A SWOLLEN CREEK, MAPPED OUTCROPS & OLD TRENCHES S.W. OF THE SHAFT. REPAIRED BARBED WIRE AROUND SHAFT FENCE.

JOURNAL
1982

SEPT. 15/82 — CHAINED IN POINTS IN TRENCHES 82-7 AND 82-8. PUT UP POLE BARRIERS AT EAST END OF OPEN PIT. DUG TO THE BOTTOM OF THE ROCK TRENCH AT SITE 82-7 AND TOOK TWO CHIP SAMPLES ACROSS THE FAULT.

" 16 — TOOK VARIOUS MEASUREMENTS & BEARINGS IN THE SHAFT AREA FOR MAPPING PURPOSES. PACKED UP & DROVE TO COBALT STOPPING TO GET FURTHER PARTICULARS AT TRENCH 82-1.

" 17 — UNPACKED CAMPER, STORED FIELD EQUIPMENT USED AND PLOTTED SOME OF THE FIELD RESULTS.