

AR95-077

AR 95-077

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NATURAL
RESOURCES

WINE HARBOUR GOLD MINES

11 F/4 B

GUYSBOROUGH COUNTY NOVA SCOTIA

Ted MacNaughton
18th September 1995

DUPLICATE AVAILABLE

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NDP

Summary:

The people involved spent a good part of the prospecting time in orientation traverses. We saw the drill hole callers along the shore below the church as well as ones behind the cemetery. We examined large quartz boulders and pits in the Berichois brook area most of which was found to the north of the highway and west of the brook. Old grid lines were noticed and could be rehabilitated for future use. Pits were also noticed to the east of the Rude Hill Road.

Time was spent sluicing materials from the end of the Romkey Vein where it runs out into Berichois Point. Field crews panned shore line materials (for the most part) at well spaced intervals at the shore line from Berichois Harbour and Wine Harbour. Gold in different quantities was found at all locations. The best results were obtained at Berichois Point.

These locations are shown on maps (Fig #4 a.b.). About 600 boxes of old core was located in a field north of the property. From highway 316 east turn left at the east end of Indian Harbour Lake. Proceed about $\frac{1}{2}$ mile, then turn south on a dirt road to Wine Harbour. At a distance of $\frac{1}{3}$ mile turn left onto a steel gated road known as the Levi F. Rude Road. Proceed about $\frac{1}{4}$ mile on this road, the core is stored on the right side of the road. It would be a good idea if this core was collected and stored at the Core Library in Stellarton.

G. Mazerolle examined the assay results from the 1936-39 Mineral Industries Ltd. underground bulk sampling. He calculated the gold in each muck round. (Gold recovered plus tailings assayed for each round). See Fig. 3. The results indicate pay shoots and grade suitable for modern day mine.

Introduction:

The Wine Harbour mining district is now in the hand of one license holder. Its historic production and the Mineral Industries Ltd. 1936-39 work confirms the likelihood of economical gold concentrations in the Wine Harbour gold district.

The information available to us now in the form of Fairboults Geology maps and the modern exploration techniques, real section I.P., make the Wine Harbour gold district the perfect candidate for testing the Maguma age rocks and structures for concentrations of gold.

Another important aspect of late, has been the development of reliable analytical assay techniques that overcame the (nugget) affect and gives consistent assay results. One method developed by Exploration Orex Ltd in assessment report AR 90-174. Another has been developed by Technical University of Nova Scotia report 93-040 from the Department of Natural Resources.

Location:

The property covers the major part of the Wine Harbour Gold District in Guysborough County, Province of Nova Scotia.

The centre of the district is located at 45°04'35" north latitude and 61°50'37" west longitude.

The property is approximately 155 km east northeast of Halifax. Antigonish a town of about 10,000 people, is located on the Trans Canada Highway is about one hour away via Route 7 to Sherbrooke then by a good dirt road to Sanora and Wine Harbour.

The claim group is on the Atlantic Sea Coast with the claims eastern boundary being on the west side of Indian Harbour.

Description:

The MacNaughton claims (Figure 1) consist of Twenty-Seven (27) contiguous claims in two licenses. Only about three of these claims cover marine waters in Wine Harbour itself (2 claims) and another off of Rocky Pt and the Barachois in the east end of the claim. This would make 960 acres of claims that are accessible to evaluate by foot.

The first license, number 01461 consists of 15 claims consisting of G H J of Tract 67, claims E, F, G, H, J, K, L, M of tract 68 and claims E, F, L, M of tract 69. These are all contained on claim map 11 F/4 B.

Access:

The easiest access to the property is by way of N.S. Highway No 7 from Antigonish to the community of Stillwater then by secondary paved highway to the village of Port Hilford, at the north end of Indian Harbour. From Port Hilford to Wine Harbour is a short 5 km on a well kept gravel road.

Good gravel roads give excellent access to all parts of the claim groups.

The nearest rialhead is at Antigonigh 81 km away. Deep water docking facilities are located at Country Harbour about 15 km eastward from Port Hilford on a paved road.

An electrical sub-station is located at Indian Harbour Lake 8 km away.

Physiography:

The land form at Wine Harbour is one of genty rollings hills and locally flat wet areas. The hills rise to a miximum height of about 150 feet. Wine Harbour is a drowned river valley whose mouth is now nearly closed by a sand bar. On the east, the Barachois Cove is smaller but also has a bar giving the small boat docking facilities there protection from the open Atlantic.

The hills are covered by glacial overburden of up to 25 feet thick. Outcrops are locally numerous but in sections of the claims of heavy overburden, there are few outcrops to give guidance to the prospector. Outcrops are most abundant along parts of the shorelines and in the Central part of the Gold District. (Plough, Wiscasset and Hattie-Mitchell leads).

General Geology:

The property is underlined by rocks of Ordovician age that make up the Goldenville Formation of the Maguma Group. On the claim groups quartzites and minor interbedded slates are the rocks underlying the property.

These rocks along with the overlying younger Halifax formation make up the Gold Bearing Series of Nova Scotia. Granite plugs and Batholiths of Devonian age intrude the Maguma. The nearest plug to Wine Harbour occurs about two miles to the west of the property.

History:

In 1862 gold was discovered and production began that same year. Strong development continued until 1876 from which time work progressed only on an intermittent basis until in 1898 production increased almost to the level of the initial years but by 1907 production has ceased.

The Wine Harbour Gold District has been inactive since that time until present except for a period from 1936 to 1939 when an exploration program by Mineral Industries Limited bulk sampled some of the old workings. From the Plough Belt 7,663 tons were mined. 5,655 tons milled yielding a recovery of about .175 oz/ton with recoveries ranging from 67% to 93.4%

Notwithstanding the difficulties of the early inefficiencies of the early gold mining ventures in this province, the Wine Harbour District ranks ninth out of forty-seven in total gold production.

The belts-mineralized veins and slates here are also some of the widest (up to 40 ft) at any of the old gold mines in the Maguma rocks of the province.

Excellent reviews of previous work has been done by Derek Johnson in August 1966 and Theodore Koulomzinc in 1966 for Nicholas Onassis. These are N.S. assessment reports 21G - 5304 received on January 6, 1967 by the Department of Mines.

Structural Geology:

The Maguma rocks of eastern Nova Scotia are characterized by east-west trending folds (double plunging) having amplitudes of up to 15 km. These folds are cut by transverse quartz veins as well as bedding parallel veins any or all of which may be gold bearing.

The faulting and stresses that produced the opening for the veins had at least two episodes. During one of these deformation periods, subtle brittle-ductile deformation that trends, in plan, at a low angle to the fold axis. In Wine Harbour this mineralized alignment is clear. On the east the old producers were about 200 feet south of the anticline axis in the central part of the property and about one mile away the Plough belt is 1000 feet south of the anticlineal axis. (Figure 2).

Even though gold does occur in the bedding parallel (saddle veins) and in the cross structure veins the pay shoots occur where cross structure crumple zones transverse the older quartz veins and quantity rich slate belts.

Economic Geology:

Native gold occurs in two environments at Wine Harbour, first as native gold in the quartz veins and secondly as finer gold associated with the sulphides. The sulphides are primarily arsenopyrite but some chalcopyrite, sphalerite and galena have also been found associated with gold on the property.

The 35% gold loss in tailing in the old workings is attributed to the large amount of gold tied up in the arsenopyrite. The arsenopyrite interfered with the amalgamation process and most of this gold was lost to tailings. In some locations on the property arsenopyrite makes up to 30% of the rock.

G. Mazerolle, using Mineral Industries Ltd. data for tons milled, gold recovered and percent gold loss calculated the total gold values for each of their muck rounds on the Plough Lead. (Figure 3) Table 1. These numbers would indicate that the grade and size are present to make a viable mining operation using modern recovery methods.

This Plough Belt has a reported width of up to 40 feet (19-40 ft.). This lead, as with others here, is enriched by numerous south-dipping angulars which transect it. This forms a pay shoot of possible economic value that dips gently eastward. (Longitudinal Section Figure 3). Pay shoots in other belts range from about 10% to 27% easterly.

The Hattie-Mitchell Belt, the most northerly in this central section is located 1000 feet (305 m) south of the axis of the Wine Harbour anticline. The Plough Belt is about 1000 feet (305 m) south of the Hattie-Mitchell workings and development work was done in the past over 200 feet south of the Plough Belt. This indicates at least 1200 feet (365 m) of width having a good probability of hiding other gold bearing pay shoots. The length of ground having similar potential extending eastward only, is 5940 feet (1810 m or 1.8 km).

The grade calculated by Mineral Industries from recovered gold indicates a minimum tenor of 0.18 oz/ton. Modern recovery methods should be able to raise this value at least 10% and very likely 17% (giving 97% recovery) or about 0.213 oz/ton.

Northeastern Area

There are at least six leads in this Barrachois Cove area that have had some development work done on them in the past.

However, very little is recorded about them. Three were worked to a depth of 175-210 feet, the other two were excavated to a depth of from 50-60 feet. A large percentage of arsenopyrite can be observed in some of the rock in this area.

The position of the vein worked here allows one to make an estimate of the strike of brittle-ductile deformation that controls the gold enrichment in the quartz slate packages or "Belts". These zones of enrichment should trend 080° to 083° easterly the pay shoots are reported to still dip eastwards here.

Conclusions:

The historical production figures, along with the knowledge of the inefficiencies related to gold recovery in the 1862-1867 and 1898-1907 periods give notice to an examiner that Wine Harbour has good potential to become a viable gold producer.

The width of surface openings and the reported widths of some stopes (up to 40 feet) indicates that gold is present in large volumes of rock. This lending weight to the possibility that a large tonnage low grade deposit may exist here.

Thirdly the amount of arsenopyrite in some of the rocks is of great interest. Some is known to carry significant gold values. Gilpin reported an assay of massive arsenopyrite from this property that ran 11.43 oz/ton of gold. Most of these rich arsenopyrite areas have not been assayed if they were not associated with quartz veins.

The property must be looked at and explored as a whole. The old belts need to be systematically examined and new belts explored for in the area between the Barachois Cove area on the east and the South Central Belts. There is no reason to suppose that other pay shoots do not exist in this thicker drift cover area.

The characteristics of the enriched mineralization needs to be better understood. With the knowledge of how an enrichment develops its physical controls and size other pay shoots might be predicted. Wine Harbour holds out the strong possibility that one or more such zones can be found, exploited and studied. With an understanding of gold deposition in the Maguma rocks of Nova Scotia a company could possibly become the key player in this huge gold province. Wine Harbour has the potential to pay the investigator while gaining a complete understanding of gold depositions in the Maguma.

Derek Johnson concluded in his 1966 report "it's believed that the principal gold-bearing belts on the property may contain additional pay shoots of workable grade mineralization. Such pay shoots efficiently mined and milled, could well support a profitable operation". I fully concur.

Recommendations:

Derek Johnson in his report suggests trenching and bulk sampling of known belts. This would likely be the most economical way to assess the areas of known mineralization.

Another approach would first be to cut a grid over the complete area of potential pay shoots. This grid would have 400 m lines spaced at 50 m intervals along a base line striking at 080°. Every second line could be extended to give reconnaissance coverage to the remainder of the property. This would be about 40 km of lines over the potential pay shoot zone.

A Real Section Induced Polarization Survey should then be conducted over this grid. Test lines should be run first to determine if the technique detects known veins and belts. The shafts - pits in the South Central area should give excellent control and permit correlation with the F.R. Faribault 1902 on W. Rogers 1931 revision of the geology in the area.

If this technique is able to locate the old pay shoots and their unmined extensions. The expense of surveying the remaining details grid would be well worthwhile. Cost for this type of survey is about \$2500.00 per km or about \$50,000.00 if the complete zone were surveyed.

Trenching for the surface expression of indicated mineralized zones could then be undertaken with less disruption of the environment and better chance of success.

Drilling of the deeper I P targets could then proceed since the true depth of the target would be known. If this drilling gives positive results drill core size should be increased to at least 3 inches in diameter, preferably 5 inches so that assays will give a more reliable number of how much gold is really present in the rock. It should reduce the nugget effect caused by the frequent pockets of coarse gold found in the Maguma gold deposits.

Further I would recommend a combination Mag and VLF survey using the computerized simultaneous reading of two VLF EM transmitters and the total magnetic field. It is now known that Maguma rocks do have a subtle signature so that magnetic readings at 12.5 m stations along the grid lines might well be helpful in relating the magnets to the location of gold and pay shoots. This might necessitate that the magnetic survey be completed separately.

The grid, full real section I.P. survey VLF-EM and mag survey with supervision and some trenching would cost about \$100,000.00 or \$110,000.00 with contingency factored in.

The Wine Harbour Gold District has excellent potential. It needs to be evaluated and explored as a whole. There are enough indications from the previous work to strongly suggest that gold "ore" grade exists on the property.

Yours truly,

Gerard J. Mazerolle, B.Sc.

A detailed description of prospecting work:

Some drill holes were located on the property. Three of the drill holes were located north of the cemetery. The cemetery is located about 400M west of the Baptist Church in Wine Harbour. This would place them in the vicinity of claims 2 & 3 section N Fig 4B. It appears they were drilled to test the leads on these claims. It is hoped that core from these holes is stored on the Levi Rude Road.

Two other drill holes were found east of the old store and post office. Fig 4B. This is about 250M S.S.E. of the Church on the north edge of the Old Shore Road.

The large quartz float was found from claim 21, 22, 23, 24, 25, 26 on Fig 4A. This is south of Berichois Brook and north of the highway. The greatest concentration of quartz boulders appears to be in the northern half of claims 22, 23 and 24. This material may have as its source the Romkey Lead.

Pits were located up the Rude Hill Road about 100M north of its junction with Berichois Brook and 20M east of the road. Considerable rubble was observed but no outcrop seen. The trench trends approx SSE and is presumed to cut the Romkey and Twin Leads.

The results of the sluicing of the Romkey Lead at Berichois Point were negative. This was probably because the poor inexperienced operators and not enough equipment to do the job properly. The materials should be better classified before running through the sluice.

The panning activities along the shore consisted of processing about 4 KG of unclassified beach material at each site as marked on Fig 4A & 4B by a ⊕ symbol. At all sites some gold colours were observed in the concentrates. From the size of the sample used this would appear to indicate a considerable amount of gold distributed in the intertidal environment, perhaps sufficient for a successful placer operation.

The Mazerolle examination of the Mineral Industries work is covered in sufficient detail in the Summary.

STATEMENT OF QUALIFICATIONS

I Gerard J. Mazerolle of Antigonish, Nova Scotia do hereby state:

1. I participated in some of the work described in this report.
2. I am a qualified geologist with a Bachelor of Science degree obtained in may of 1968 from St Francis Xavier University at Antigonish in the province of Nova Scotia;
3. I have been active in mineral exploration on a full-time and part-time basis in various capacities since 1963 and as a geologist since 1968 in Canada and the Eastern United States;

Respectfully submitted



Gerard J. Mazerolle, B.Sc.
NOVEMBER 27, 1995.

WINE HARBOUR

<u>DATE</u>	<u>PERSONS</u>	<u>WORKED PERFORMED</u>	<u>CREDIT</u>
Oct 2/94	Ted MacNaughton	Checking boundries	150.00
Oct 16/94	Ted MacNaughton Ian Campbell	Panning Addem. Fig. 4	150.00 50.00
Nov 26/94	Ted MacNaughton Dave Sharp	Panned around the Plough lead	150.00 50.00
Dec 27/94	Ted MacNaughton Scott Grant Ian Campbell	Marking north boundary	150.00 150.00 50.00
Jan 29/95	Ted MacNaughton	Took samples - Berichois Point	150.00
Feb 14/95	Ted MacNaughton Scott Grant	Library	150.00 150.00
Apr 2/95	Ted MacNaughton Scott Grant	Panning old tailing piles Fig. 4	150.00 150.00
Apr 16/95	Ted MacNaughton Gordon Purcell	Sluice on beach - very small & chippy - Fig. 4	150.00 50.00
Apr 18/95	Scott Grant Gerry Mezerolle	Panned shore Plough lead & Berichois Pt. Fig. 4	150.00 300.00
Apr 30/95	Ted MacNaughton	Panned west end of Berichois Hbr. Fig. 4	150.00
Apr 29/95	James Grant Diedra Grant Scott Grant	Panning in Berichois Pt.	50.00 50.00 150.00
May 21/95	Ted MacNaughton Scott Grant	Ran a sluice at Berichois Beach. Fig. 4	150.00 150.00
Jun 21/95	Ted MacNaughton	Panning waste dump Fig. 4	150.00
Jun 27/95	Scott Grant	Library - Halifax	150.00
Jul 3/95	Ted MacNaughton Scott Grant	Panned on Berichois Island, Prospected	150.00 150.00
Jul 26/95	Scott Grant Art Langille	Marking west boundry	150.00 50.00

Jul 29/95	Ted MacNaughton Scott Grant Bud MacKenzie Wade Custance Paul Wadsworth	Used rotopan, sluice & pan on beach & waste pile. Fig. 4	150.00 150.00 150.00 50.00 50.00
Aug 6/95	Scott Grant Juanity Hamilton	Panning - Fig. 4 V.G. found	150.00 50.00
Aug 12/95	Paul Wadsworth Wade Custance	Sluiced & rotopan waste rock V.G. Fig. 4	50.00 50.00
Aug 20/95	Ted MacNaughton Scott Grant	Prospected pits by old Eureka Mine	150.00 150.00
Aug 27/95	Wade Custance	Panned at Berichois Pt. Fig. 4	50.00
Sep 10/95	Ted MacNaughton	Prospected more pits at Eureka Mine	150.00
Sep 16/95	Gerry Mezerolle	Report preparation	300.00
Sep 17/95	Ted MacNaughton Scott Grant	Report preparation	150.00 150.00
		TOTAL:	<u>5,750.00</u>

STATEMENT OF ASSESSMENT WORK EXPENDITURES

(N.B. Complete as necessary to substantiate the total claimed)

RE: EXPLORATION LICENCE NO. 01461 DATE OF ISSUE SEPT 21 1984

<u>TYPE OF WORK</u>			<u>AMOUNT SPENT</u>
1. Prospecting	<u>39</u> days		<u>\$ 4,700.⁰⁰</u>
2. Geological mapping	_____ days		_____
3. Trenching/Stripping/Refilling	_____ m ²		_____
4. Assaying & whole rock analysis	_____ #		_____
5. Other laboratory	_____ #		_____
6. Grid:			
a) Linecutting	_____ km		_____
b) Picket setting	_____ km		_____
c) Flagging	_____ km		_____
7. Geophysical Surveys:			
Airborne:			
a) EM	_____ km		_____
b) Mag or Grad	_____ km		_____
c) Radiometric	_____ km		_____
d) Combination	_____ km		_____
e) Other	_____ km		_____
Ground:			
a) EM	_____ km		_____
b) Seismic Soundings	_____ #		_____
c) Magnetic/telluric	_____ km		_____
d) IP/Resistivity	_____ km		_____
e) Gravity	_____ km		_____
f) Other	_____ km		_____
9. Geochemical Surveys:			
a) Lake, stream, spring (seds/water)	_____ samples		_____
b) Rock/core/chips	_____ samples		_____
c) Soil/Overburden	_____ samples		_____
d) Gas Method	_____ samples		_____
e) Biogeochemistry	_____ samples		_____
f) Sample Collection	_____ days		_____
g) Other	_____		_____
10. Drilling:			
a) Diamond (#holes/m)	_____ m		_____
b) Percussion (#hole/m)	_____ m		_____
c) Rotary (#hole/m)	_____ m		_____
d) Auger (#holes/m)	_____ m		_____
e) Reverse circulation (#holes/m)	_____ m		_____
f) Logging, supervision etc.	_____ days		_____
g) Sealing (# holes)	_____		_____
11. Other: (describe)			
<u>LIBRARY</u>	<u>3</u>		<u>450.⁰⁰</u>
<u>REPORT PREPARATION</u>	<u>3</u>		<u>600.⁰⁰</u>
	<u>SUBTOTAL</u>		<u>\$ 5,750.⁰⁰</u>

R 21 SEP 85 4 10

OVERHEAD COSTS

12. Secretarial Services		
13. Drafting Services		
14. Office Expenses (rent, heat, light etc.)		
15. Field Supplies		
16. Compensation Paid to Landowners		
17. Legal Fees		
18. Other (describe) <u>10% GAS, MAPS & ETC.</u>		<u>575.⁰⁰</u>
	<u>SUBTOTAL</u>	<u>\$ 6325.⁰⁰</u>
	<u>TOTAL</u>	<u>\$ 6325.⁰⁰</u>

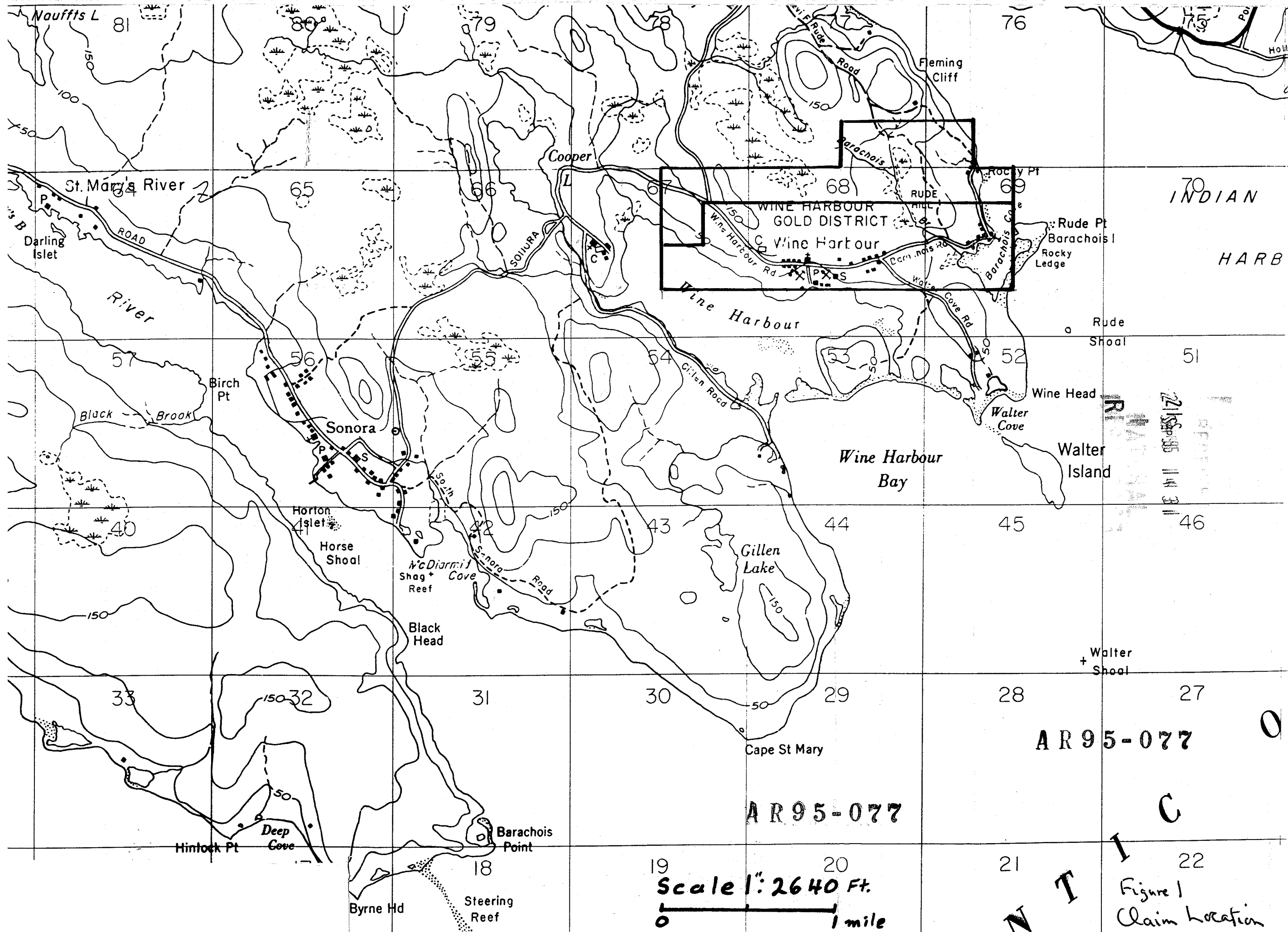
I hereby certify that the above information is true and correct and that it has not before been submitted for assessment work credit.

As _____ I am duly authorized to make this certification.
(Position in Company or Licensee)

DATED AT _____ in the Province of _____
this _____ day of _____ 19 _____.

Name and Address of Licensee: TED MAC LAUGHTON RR2 PICTOU
NOVA SCOTIA BOKIRO

Signature Ted Mac Laughton



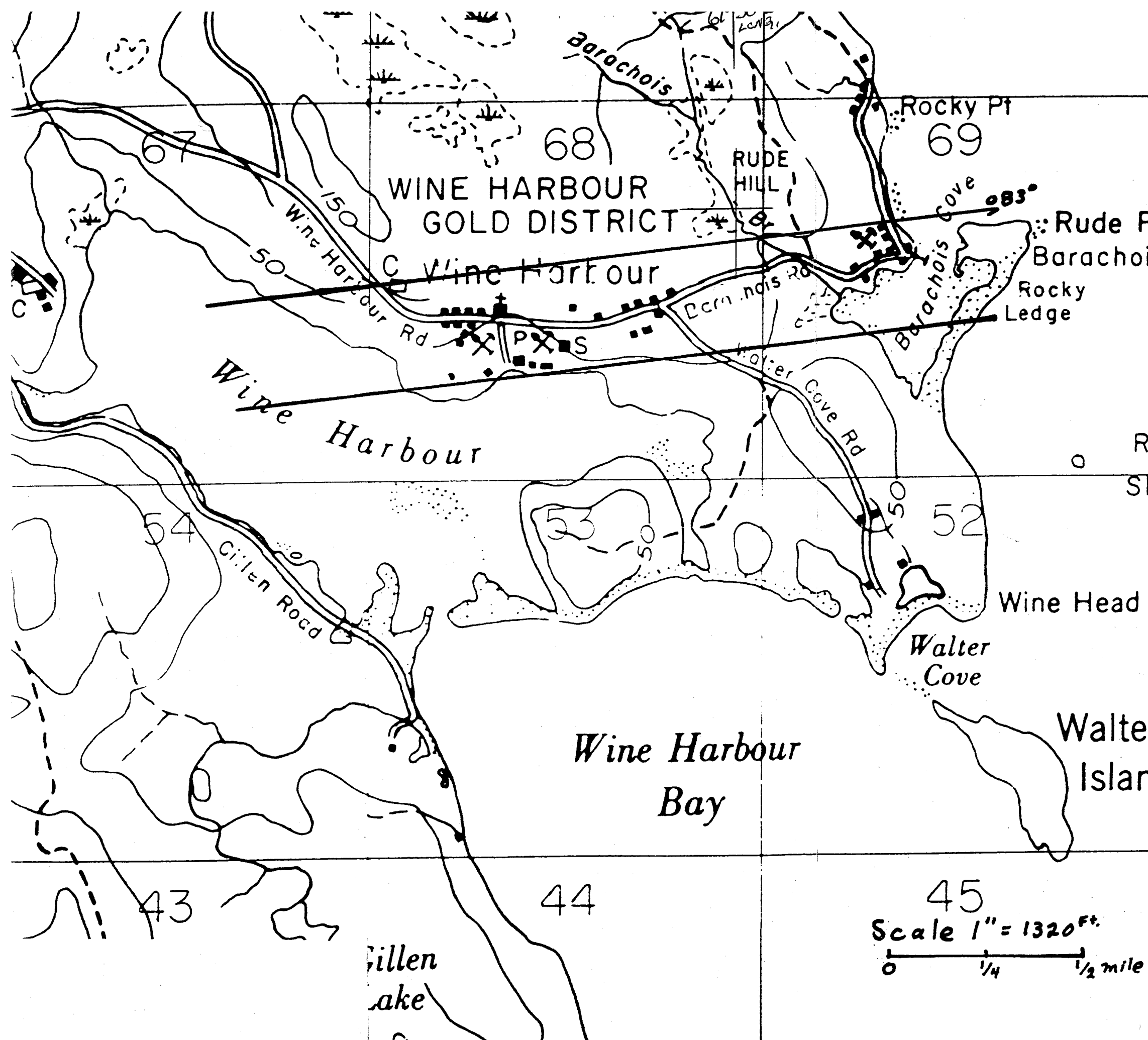
AR 95-077

70 INDIAN

45° 04' 15" N LAT

Zone of Possible Pay shoots

HARBOR

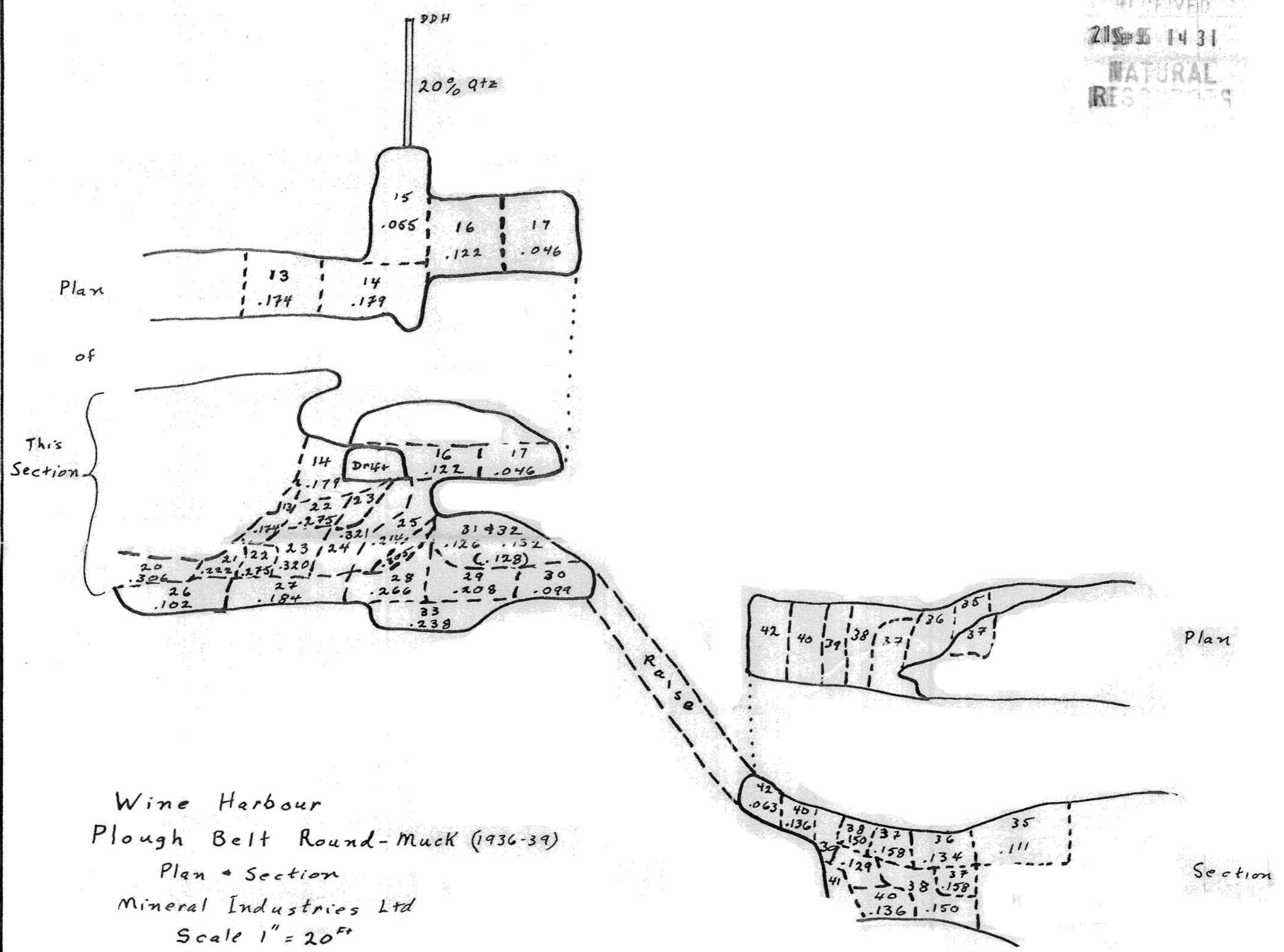


PREPARED
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NATURAL RESOURCES

LICENCE # 01461

RECEIVED
 21 SEP 14 31
 NATURAL
 RESOURCES



Wine Harbour
 Plough Belt Round-Muck (1936-39)
 Plan + Section
 Mineral Industries Ltd
 Scale 1" = 20'

Values are calculated total gold (recovered + tailings loss) average oz/ton for that round
 calculated by G. Mazerolle May 1995
 Drawn by G. Mazerolle
 16 Sept 1995

Figure 3 AR95-077

Block 3

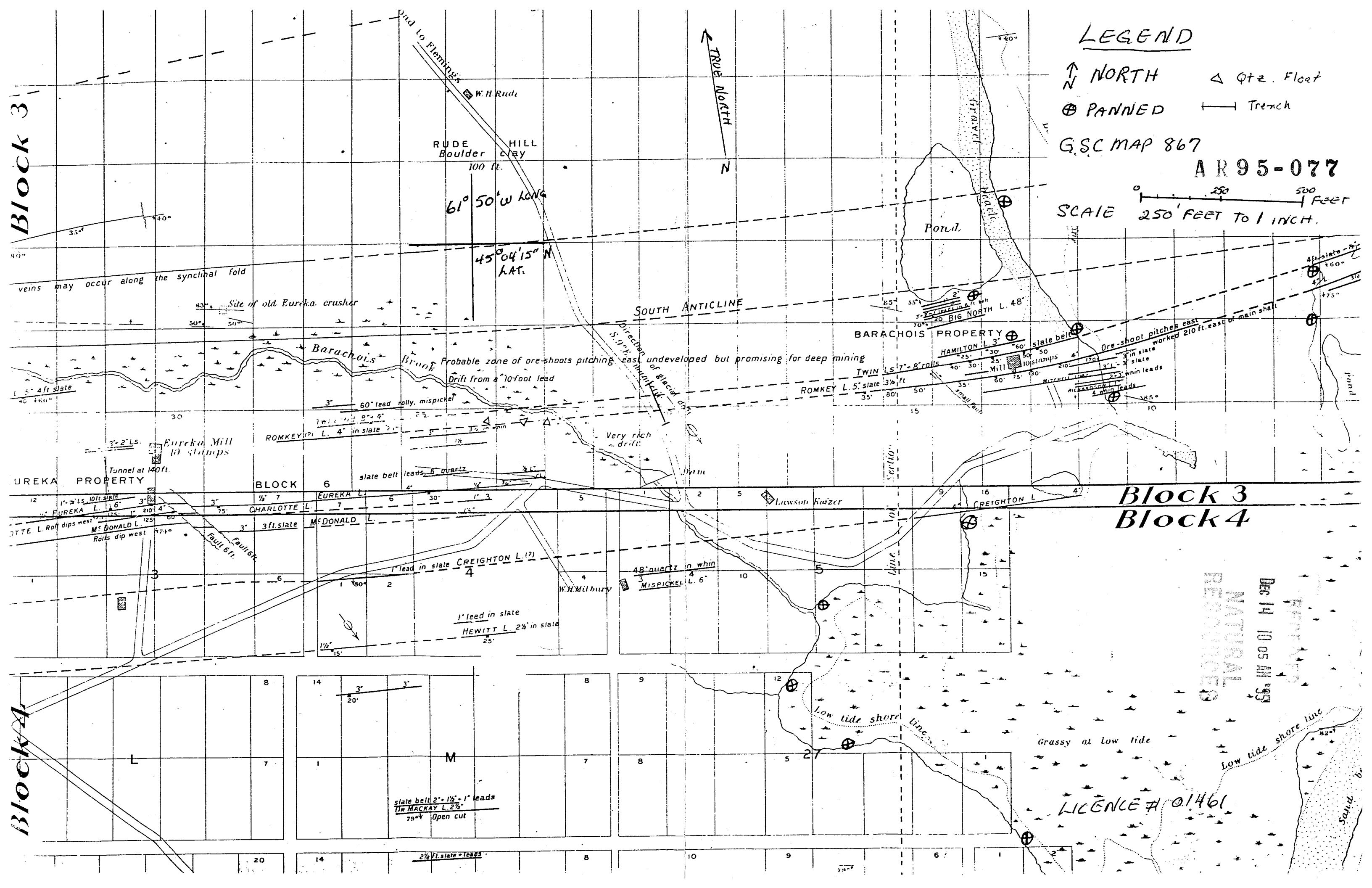
LEGEND

- ↑ NORTH Δ Qtz. Fluct
- ⊕ PANNED ─ Trench

G.S.C MAP 867

AR 95-077

SCALE 250 FEET TO 1 INCH.



Block 3
Block 4

NATURAL RESOURCES

DEC 14 10 05 AM '95

LICENCE # 01461

Block A

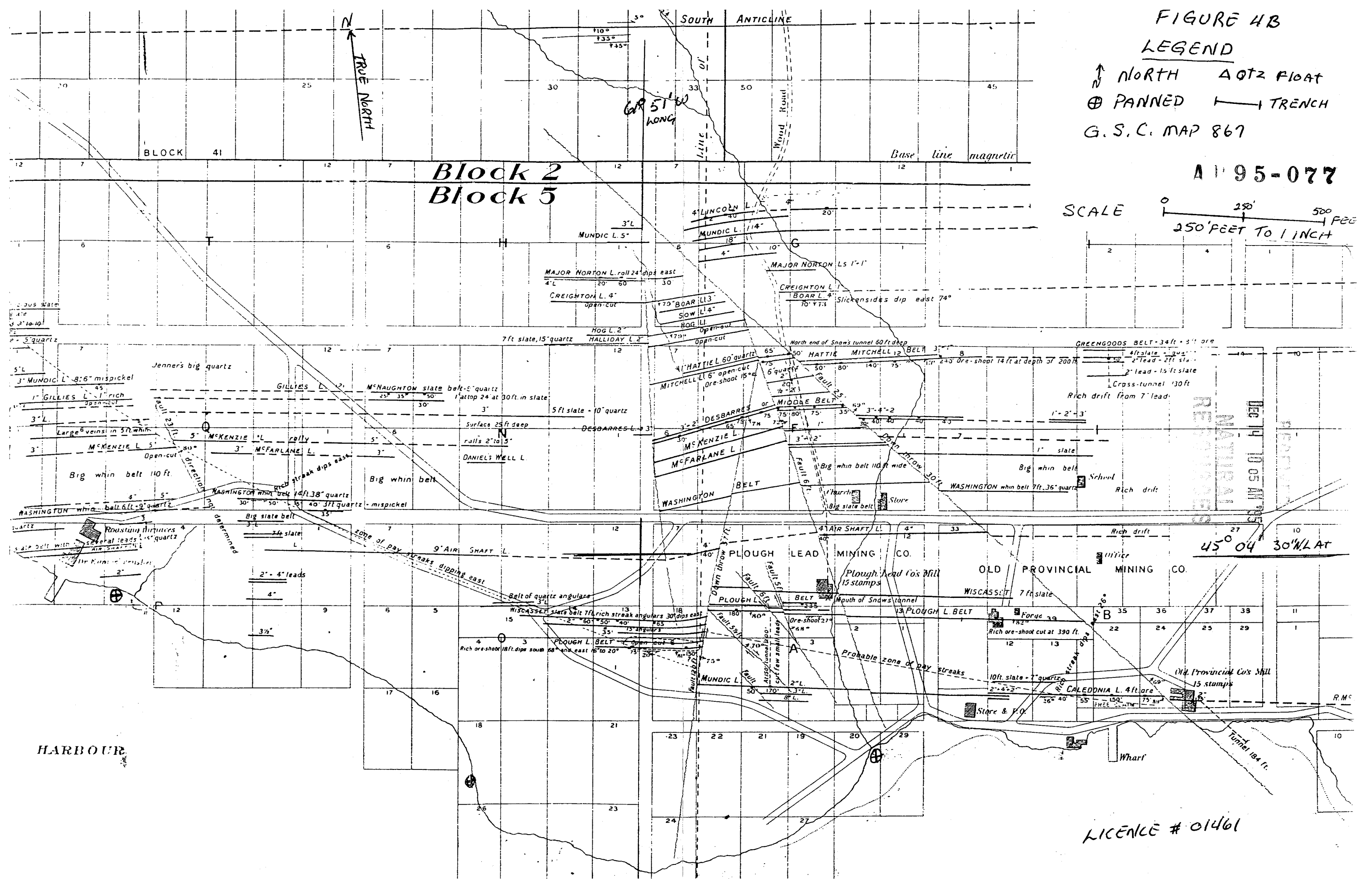
FIGURE 4B

LEGEND

- ↑ NORTH AOTZ FLOAT
 - ⊕ PANNED
 - TRENCH
- G.S.C. MAP 867

A 195-077

SCALE 0 250 500 FEET
250 FEET TO 1 INCH



45° 04' 30" N/LAT

LICENCE # 01461