

52F16SW0022 2.3905 VAN HORNE

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AN
EVALUATION
GLATZ GOLD PROPERTY
VAN HORNE - WATSON LAKE JOINT VENTURE
DISTRICT OF KENORA
ONTARIO

10/

INTRODUCTION

The following evaluation and subsequent report was commissioned by the President and Directors of Van Horne Gold Exploration Inc., and Watson Lake Mines Ltd., and was carried out by W. G. Wahl Limited under the direct supervision of D. G. Wahl, P.Eng., Consulting Engineer, and is based on our evaluation of all available company data and government publications. A personal visit to the property was not however undertaken at this time, due to the extensive snow cover and flooded nature of the old mine workings.

Van Horne Township is located in western Ontario and has long been the centre of one of the older gold prospecting areas of the province. Numerous gold occurrences are located in the southern part of Van Horne and adjacent townships and were first documented in the Bureau of Mines Reports in 1898 by A. P. Coleman¹. Between 1904 and 1923, 625.36 ounces² of gold were produced from three mines (Redeemer, Rognon, and Bonanza) in the area, from ore grading 0.253 ounces² of gold per ton.

Recent work by prospector Alex Glatz of Dryden, on his property in the western part of Van Horne Township, has resulted in the discovery of new gold mineralizations occurring in narrow high grade veins and in widespread lower grade quartz stock works and stringers within a highly carbonatized, intermediate to mafic volcanic rock.

The potential economic significance of this new gold discovery induced Van Horne Gold Exploration Inc., and Watson Lake Mines Ltd. to purchase the Alex Glatz property. Under the terms of the purchase agreement, dated January 21, 1981, Van Horne and Watson Lake each hold 50% interest in the property.

¹A.P. Coleman, Ont. Bur. Mines, Vol. VII, 1898, pt. 2, pg. 125.

²J. Satterly, Ont. Dept. Mines, Vol. L, 1941, pt. 2, pg. 50.

The following report describes the geology and the gold mineralization of the area and recommends an exploration program to be carried out on the property, designed not only to confirm the grade and extent of the known mineralization but also to explore for new zones and to determine their potential viability as economic deposits.

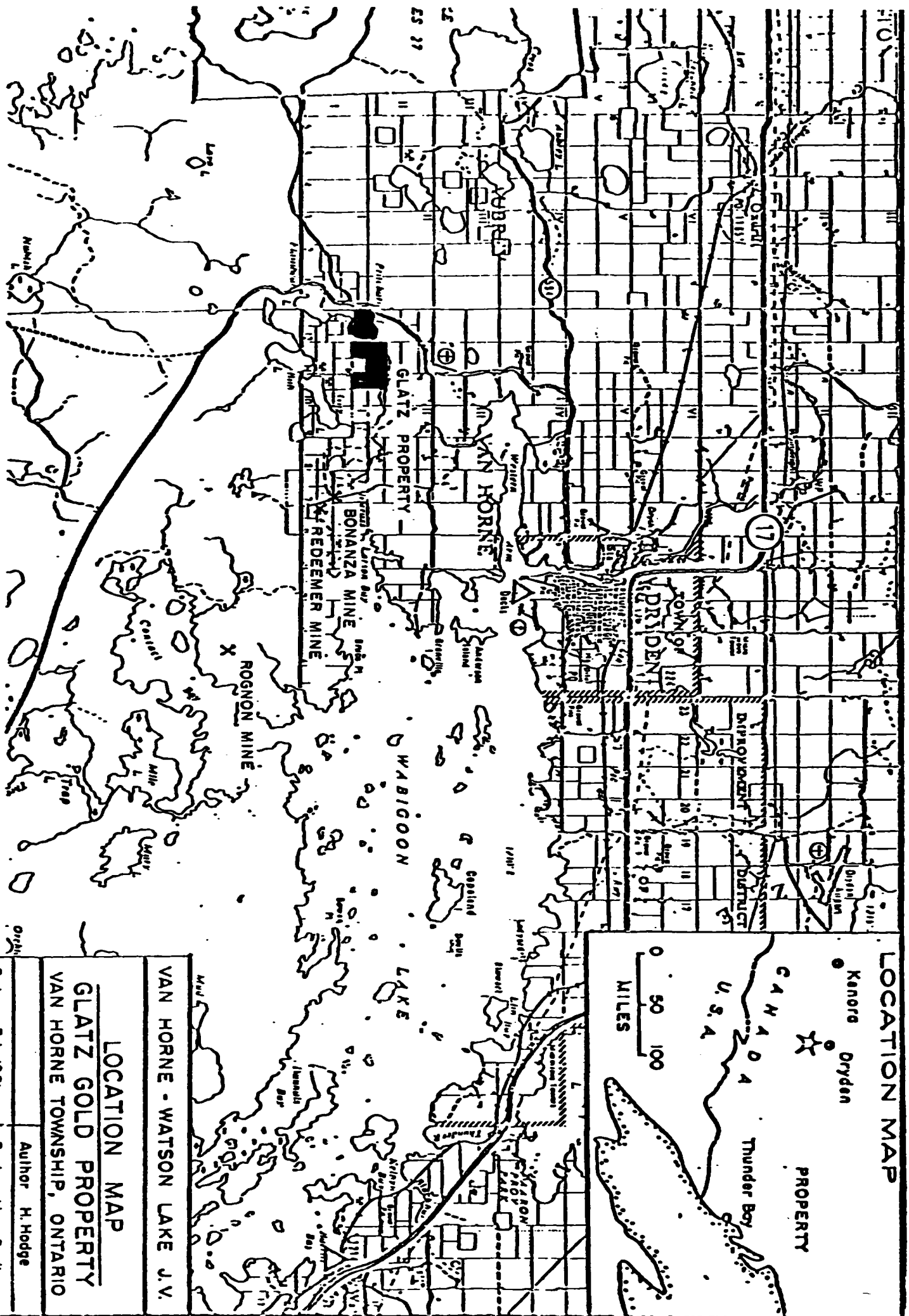
GENERAL

Property:

The Glatz property consists of the following eight (8) unpatented mining claims, comprising approximately 320 acres.

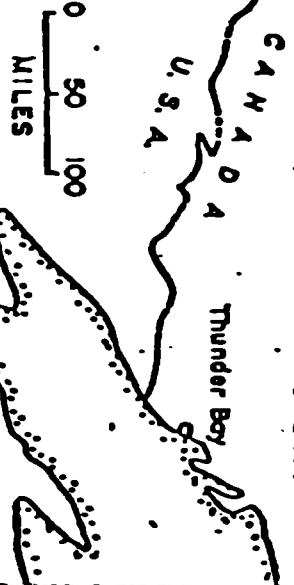
<u>Claim No.</u>	<u>Recording Date</u>	<u>Work Requirements</u>
K-490364	February 19, 1980	40 days per claim before February 19, 1982
K-490365	February 19, 1980	
K-490366	February 19, 1980	
K-490367	February 19, 1980	
K-490368	February 19, 1980	
K-533291	September 10, 1980	20 days per claim before September 10, 1982
K-533292	September 10, 1980	
K-533293	September 10, 1980	

Three of the aforementioned claims, K-533291, K-533292 and K-533293, are covered by the waters of Pritchard Lake.



LOCATION MAP

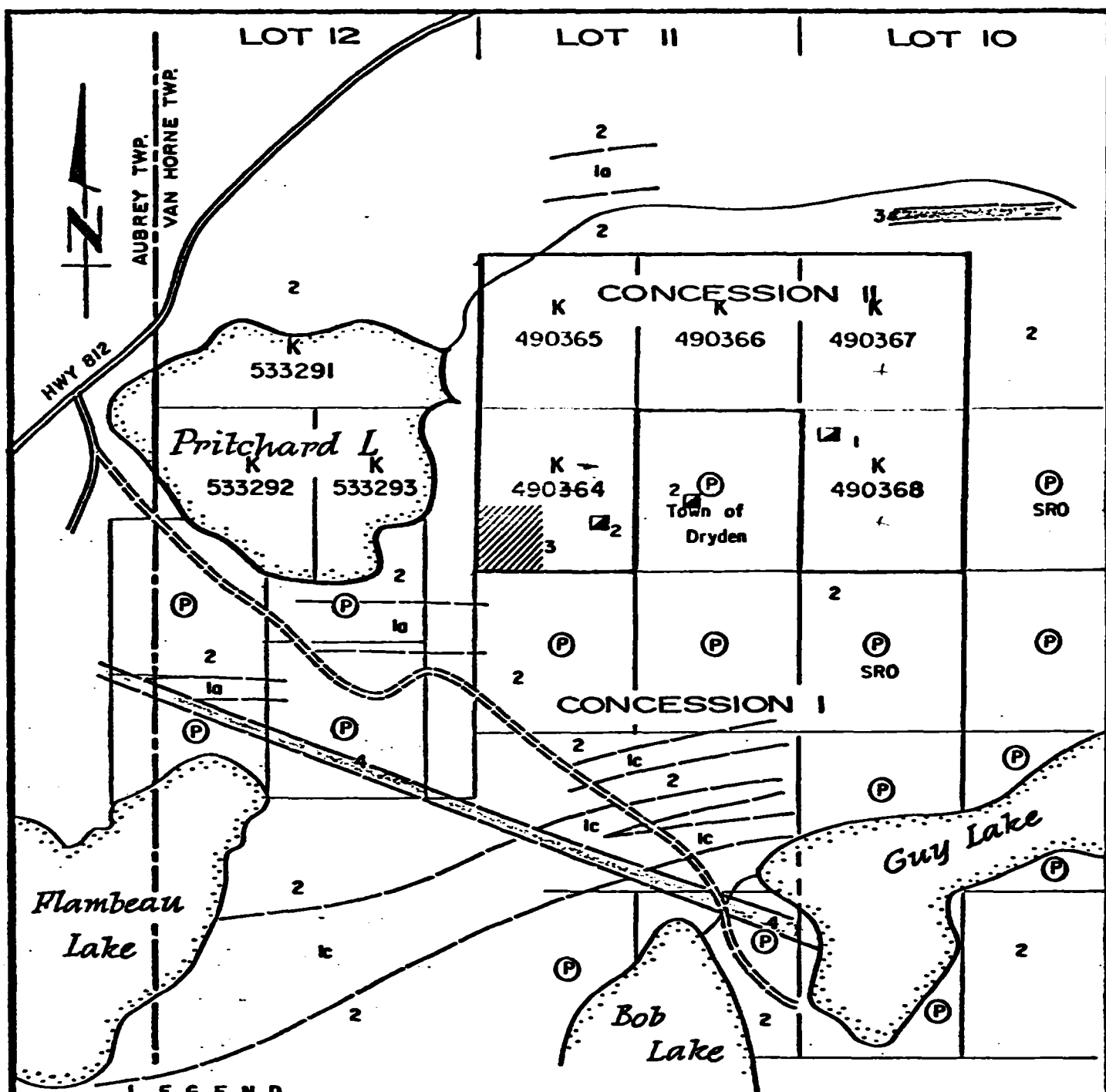
Kenora
Dryden
PROPERTY



LOCATION MAP

GLATZ GOLD PROPERTY
VAN HORNE TOWNSHIP, ONTARIO

Date Feb. 1981
Author H. Hodge
Scale 1 in = 2 miles



LEGEND

- DIABASE, Keewauwan
- QUARTZ FELDSPAR, GRANITE AND APLITE DYKES
- INTERMEDIATE TO BASIC VOLCANICS
massive and pillowed flows and fragmentals,
variably carbonalized
- FELSIC VOLCANICS
1a- fragmentals, tuffs and breccias
1c- carbonalized
- ROAD: FIRST CLASS, BUSH
- GEOLOGICAL CONTACT
- PATENTED CLAIM
- SURFACE RIGHTS ONLY

MINE SHAFTS

- 1 Little Jumbo
- 2 Cleveland (Gordon)
- 3 Glatz - New showing

VAN HORNE - WATSON LAKE J.V.

GEOLOGY
GLATZ GOLD PROPERTY
VAN HORNE TOWNSHIP, ONTARIO

Location:

The claims are located in Lots 10, 11, and 12, Concessions I and II, Van Horne Township approximately 5 miles southwest of the town of Dryden.

Access, Transportation and Culture:

The property is readily accessible by a new all-weather highway 818, linking Dryden with highway 11, and Fort Frances to the south. This highway runs along the west shore of Pritchard Lake, immediately west of the property. Pritchard Lake is approximately 7 miles by road from Dryden.

Dryden is located on the TransCanada Highway and the main trans-continental line of the Canadian Pacific Railway.

Nordair provides daily jet service to Winnipeg, Thunder Bay and Toronto.

Dryden has a population of approximately 7,000. The principal industry is a paper mill operated by Great Lakes Paper Co. Tourism is an important source of employment in the summer season.

All of the services required to support a potential mining operation, including electric power and housing, are available in Dryden.

HISTORY

Gold was first reported in the southern part of Van Horne Township in 1898 by A. P. Coleman¹. Between 1898 and 1923 numerous shafts were put down in the region, particularly to the east of the Glatz property where three mines, notably the Redeemer, Rognon and Bonanza produced 625.36 ounces² of gold from 2,463 tons² of ore, grading 0.253 ounces per ton. All of the ore was custom milled at the Redeemer mill.

The Glatz property also received considerable attention, by various interested parties, during this period of time and will be detailed in a later section of this report.

During 1940, Vanlas Mines Limited reportedly carried out 500 feet of diamond drilling on the property³, however, the location and the results of the drilling are not known.

No further work was reported on the property until 1980 when Alex Glatz acquired the property and discovered the new gold mineralization on claim K-490364.

¹A. P. Coleman, Ont. Bur. Mines, Vol. VII, 1898, pt. 2, pg. 125.

²J. Satterly, Dept. of Mines, Vol. L, 1941, pt. 2, pg. 50.

³J. Satterly, Dept. of Mines, Vol. L, 1941, pt. 2, pg. 51.

GEOLOGY

Regional Geology:

The only geological mapping carried out in the area has been reconnaissance in nature and was carried out in 1941 by J. Satterly¹.

The topography of Van Horne Township is characterized by gently rolling hills which generally tend to reflect the primary east-west structures of the bedrock volcanics. The overall topographic relief is less than 100 feet.

Bedrock is well exposed along the east-west ridges but becomes progressively less as one proceeds northward, where extensive, well stratified white clay, with minor interbedded sand and gravel of glacial-lacustrine origin, covers most of the area. Glacial direction is south 28 degrees west.

The area lies within the western end of the Wabigoon sub-province of the Precambrian Shield. The Wabigoon sub-province is composed predominantly of Archean volcanic rocks, with lesser interbedded sedimentary rocks, all of which have been intruded by granitic plutonic rocks.

The property is located near the north contact of the Wabigoon belt with the English River sub-province, which is composed mainly of clastic meta-sedimentary and granitoid rocks. The boundary between the two sub-provinces is interpreted² to be a major fault called the Wabigoon fault. This fault crosses the area three miles north of the property and is accompanied by intense shearing and carbonatization of the adjacent volcanic rocks.

¹J. Satterly, Ont. Dept. Mines, Vol. L, 1941, pt. 2, map 50e

²C. E. Blackburn, Geoscience Canada, Vol. 7, No. 2, June 1980, pg. 64.

Local Geology:

The property area is underlain by Archean volcanic rocks consisting predominantly of intermediate to mafic volcanics, with minor felsic volcanics. The mafic volcanics are mainly massive and pillowed flows, breccias, tuffs, and agglomerates. The felsic volcanics are mainly rhyolitic fragmentals, consisting of tuffs and agglomerates. Felsic dykes cut the volcanic rocks, generally parallel or sub-parallel to the primary bedding in the volcanics. A late, Keewanawan diabase dyke cuts southeasterly through the area, approximately one half mile south of the property.

The general strike of the volcanic rocks is east-west to slightly north of east. Dips are steeply north to vertical and tops are considered to be to the north.

The volcanic and intrusive rocks are considerably altered, iron carbonate and chlorite, along with lesser sericite, being the principal alteration minerals. Iron carbonate is particularly ubiquitous, occurring throughout the volcanic sequence as well as in veins and stringers with quartz.

Shearing is described as being common, generally parallel or sub-parallel to the strike of the volcanics. Faulting is not evident, except perhaps along shear zones.

Gold Occurrences:

Numerous gold occurrences are reported on the property and in the adjacent area. These gold occurrences are of two closely related types;

. . . Gold in quartz filled fissure veins with ankerite, minor tourmaline, and pyrite, and occasional chalcopyrite, galena, and sphalerite.

. . . Gold in narrow quartz veinlets, stringers, and stockworks in intensely fractured and carbonatized felsic and mafic volcanic rocks and felsic dykes.

At least three shafts and numerous trenches and pits have been put down on gold occurrences on, or adjacent to, the property. Figure 2 shows the approximate location of the shafts, as described in government reports.

On claim K-490368 near the north-west corner, the Little Jumbo shaft was sunk to a depth of 55 feet, and 20 feet of lateral work carried out on a high altered felsite dyke, described by A. P. Coleman¹ as having *" . . . been sheared into a dark spotted schist, . . . said to assay on the average \$14.00 (0.67 oz) per ton. . . "* A grab sample of this mineralized material taken by Coleman¹ assayed 1.0 ounces of gold per ton. Also reported¹ in the area are numerous narrow veins and stringers of quartz with tourmaline and ankerite, some of which carry gold values. In 1911, A. L. Parsons² reported that *" . . . on the same claims are three large quartz veins running from two to six feet in width upon which shallow openings have been made but no shaft sunk. . . "* Recently H. J. Hodge, P.Eng., of Toronto sampled, what was thought to be, the dump material from the pits report by Parsons in 1911, the results of which returned an average grade of 0.07 ounces of gold per ton. Additional representative chip samples were also taken by H. J. Hodge across a two to three inch wide quartz vein mapped in a shallow shaft, adjacent to the pits described by Parsons, which assayed 0.11 ounces of gold per ton.

On claim K-490364 and on the adjoining patented claim to the east held by the Town of Dryden, two shafts have been sunk to a depth of 90 feet and 43 feet respectively, and 39 feet of cross-cutting and 50 feet of lateral drifting carried out in the western most shaft on a quartz vein described

¹ A. P. Coleman, Ont. Bur. Mines, Vol. VII, 1898, pt. 2, pg. 125.

² A. L. Parsons, Ont. Bur. Mines, Vol. XX, 1911, pt. 1, pg. 192.

by Coleman¹ as "... average 2½ feet in width and said to have been traced for half a mile...". This was the original Grimsby Mine discovery, later renamed the Gordon Mine, still later the Cleveland Mine, and more recently the Vanlas Mine³. Sample of this vein material taken by A. P. Coleman¹ assayed 0.37 ounces of gold per ton. This vein material was also reported by Ellis Thompson² to contain "... exceptionally attractive free gold...". Thompson² also makes note of "... several old mine buildings, including the remains of an old mill, are still standing near the shaft, but all the equipment has been removed...". No record for any production figures can be found for the Cleveland mill.

Following the recent discovery of the new gold mineralization, on claim K-490364, Alex Glatz continued to expand the discovery area by stripping off the overburden to expose scattered areas of the bedrock over approximately 600sq.ft. The freshly exposed bedrock revealed gold mineralization in narrow quartz veinlets, stringers, and stockworks in an intensely fractured and carbonatized mafic volcanic rock. Random sampling of the exposed bedrock was carried out using an Atlas Copco plugger to drill 72 holes to a depth of approximately three feet. The percussion drill cuttings were collected on a plastic sheet and assayed for gold, the results of which exhibit an anomalous gold distribution over the exposed area from trace amounts up to a high of 0.97 ounces per ton. This data is present on drawing 100.

CONCLUSIONS

Previous exploration, from 1898 to 1925, has documented the occurrences of widespread gold mineralization on the property and adjacent areas.

¹ A. P. Coleman, Ont. Bur. Mines, Vol. V11, 1898, pt. 2, pg. 125

² Ellis Thompson, Ont. Bur. Mines, Vol. XXV1, 1917, pg. 183

³ J. Satterly, Ont. Dep't. Mines, Vol. L, 1941, pt. 2, pg. 51

The gold occurrences are of two closely related types;

. . . gold in quartz filled fissure veins with ankerite, minor tourmaline, and pyrite with occasional chalcopyrite, galena and sphalerite.

. . . gold in narrow quartz veinlets, stringers, and stockworks in highly fractured and carbonatized felsic and mafic volcanic rocks and felsic dykes.

These gold occurrences were not considered economic in the earlier years at the price of gold of \$20.67.

With the exception of a reported 500 feet of diamond drilling, no work was carried out on the property since approximately 1925. No geophysical or geochemical surveys have ever been carried out on the property.

At the present gold prices and greatly improved recovery techniques, some of these gold zones are of economic interest.

In particular the Glatz occurrence exhibits widespread anomalous gold distribution in the intensely fractured and carbonatized mafic volcanic rocks and may have potential for a large tonnage, low grade open pit type deposit.

The property deserves a comprehensive exploration program for gold.

RECOMMENDATIONS

In light of the aforementioned conclusions it is strongly recommended that;

. . . additional mining claims be acquired to insure coverage of projected zones of gold mineralization off the Glatz property. Specifically, the Town of Dryden claim, and claims to the west of 490364 and south of Pritchard Lake, as well as to the east of 490367 and 490368, should be acquired to cover known gold mineralization in these areas.

. . . a true one hundred foot grid be established on the property with stations being designated at fifty foot intervals on all lines.

. . . a VLF electromagnetic survey and a total field magnetometer survey be carried out over this grid to locate shear, fault, or sulphide zones which may have localized gold deposition. Induced polarization surveys should be considered in selected areas to test VLF and magnetic anomalies and suspected alteration zones for disseminated sulphides which are known to be associated with gold.

. . . a detailed geochemical sampling of the humus, soils, rocks or basal tills should be carried out over drift covered areas in an attempt to delineate gold mineralization.

. . . a detailed geological mapping program be carried out over the grid to define and delineate volcanic rock units, structures, quartz veins, and alteration zones, which may control the localization of gold mineralization.

. . . the property should be prospected and all shafts, pits, quartz veins, shear zones, alteration and sulphide zones should be representatively sampled to determine the existence and tenor of gold mineralization.

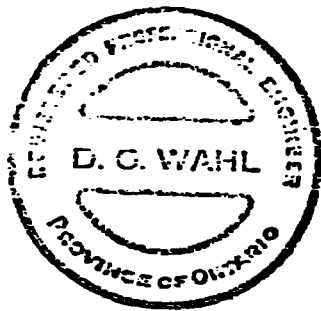
. . . all geophysical and geochemical anomalies and all zones, determined from sampling to carry economic grade values in gold, be investigated by diamond drilling.

COST ESTIMATE

i) Property Acquisition:				\$ 25,000.00
ii) Line-cutting:				
30 line miles @ \$300. per line mile				9,000.00
iii) Ground Geophysics:				
...VLF electromagnetic survey				
...total field magnetometer survey				
...selected I.P. profiles				
30 line miles @ \$400. per line mile				12,000.00
iv) Geological Mapping:				
Project Geologist, MSc.				
BASIC PAYROLL COST	APEO* COST FACTOR	PROJECT DURATION		
(\$2,200.00)	(2.5)	(1 month)		6,100.00
v) Prospecting and Sampling:				
Prospector				
BASIC PAYROLL COST	APEO* COST FACTOR	PROJECT DURATION		
(\$1,800.00)	(2.5)	(1 month)		4,500.00
vi) Geochemical Sampling and Analysis:				
500 samples @ \$12.00 per sample				6,000.00
vii) Diamond Drilling:				
5,000 feet @ \$22.50 per foot				112,500.00
viii) Supervision, Travel, Accomodation and Food:				25,000.00
ix) Assaying, Supplies and Field Equipment:				<u>15,000.00</u>
	SUB TOTAL			215,100.00
	Contingency(approx.) 20%			<u>42,900.00</u>
	T O T A L :			<u>\$258,000.00</u>

*** NOTE: All of the fees presented in this cost estimate are in accordance to and agreement with those outlined in the "Suggested Schedule of Fees for General Engineer Projects" published by The Association of Professional Engineers of the Province of Ontario dated June, 1979.**

All of which is respectfully submitted.



DGW/ml

**Yours very truly,
W. G. WAHL LIMITED**


**D. G. Wahl, P.Eng.,
Consulting Engineer**

VAN HORNE PROPERTY

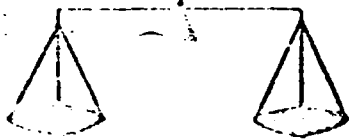
Drill Logs:

All Holes (72) were drilled at right angles to the quartzstringers where possible. The average hole would be 70% basalt or porphyry and 30% quartz. Some holes did not intersect quartz.

Depth of Holes - 3 ft.

The powder from each hole was collected on a large canvas or plastic sheet, bagged and sent to the office of Cochenour Fire Assaying in Cochenour. Each hole yielded approximately 2 pounds of powder.

Three sample locations could not be drilled due to excessive fracturing. Chip samples were taken from these locations.



"Assaying over 30 Years"

COCHENOUR



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900

J.W. Beck, Assayer,
Box 43, Cochenour, Ont.

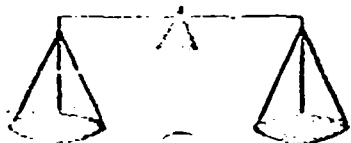
ASSAY CERTIFICATE

Date: Dec. 11-80

Sample No.	To Sherritt Gordon Mines Ltd. Description	oz/ton Au	oz/ton Ag
5001-U	Test Holes.	.16	
02		.03	
03		.04	
04		.97	
05		.06	
06		Trace	
07		"	
08		"	
09		"	
10		"	
11		"	
12		"	
13		"	
14		"	
15		.03	
16		.07	
17		.03	
18		.08	
19		Trace	
20		.18	
21		.06	
22		.16	
23		Trace	
24		"	

Assayer:

J.W. Beck



"Assaying over 30 Years"

COCHENOUR FIRE ASSAYING

J.W. Beck, Assayer,
Box 43, Cochenour, Ont.

Phone: Bus. 756-3521
Res. 756-3341

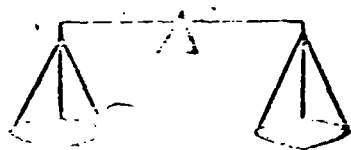
ASSAY CERTIFICATE

Date: Dec. 11-80

Sample No.	To Sherritt Gordon Mines Ltd. Description	oz./ton Au	oz./ton Ag
5925-11	Test Holes.	.14	
26		Trace	
27		"	
28		"	
29		"	
30		"	
31		"	
32		"	
33		.05	
34		Trace	
35		.01	
36		.02	
37		.01	
38		.02	
39		.04	
40		.16	
41		.05	
42		.06	
43		.09	
44		Trace	
45		"	
46		"	
47		.01	
48		.09	

Assayer:

J.W. Beck



"Assaying over 30 Years"

COCHENOUR FIRE ASSAYING

J.W. Beck, Assayer,
Box 43, Cochenour, Ont.

Phone: Bus. 755-35
Res. 755-31

ASSAY CERTIFICATE

Date: Dec. 12-80

Sample No.	To Sheritt Gordon Mines Ltd. Description	oz Ton Au	oz Ton Ag
5949-U	Test Holes.	.02	
50		Trace	
51		"	
52		"	
53		"	
54		.06	
55		.05	
56		Trace	
57		"	
58		"	
59		"	
60		"	
61		"	
62		.07	
63		.09	
64		Trace	
65		.06	
66		Trace	
67		.06	
68		.03	
69		.18	
70		.02	
71		Trace	
72		.01	

Assayer:

J.W. Beck



**J.W. Beck, Assayer,
Box 43, Cochenour, Ont.**

**Phone: Bus. 756-3521
Res. 756-3341**

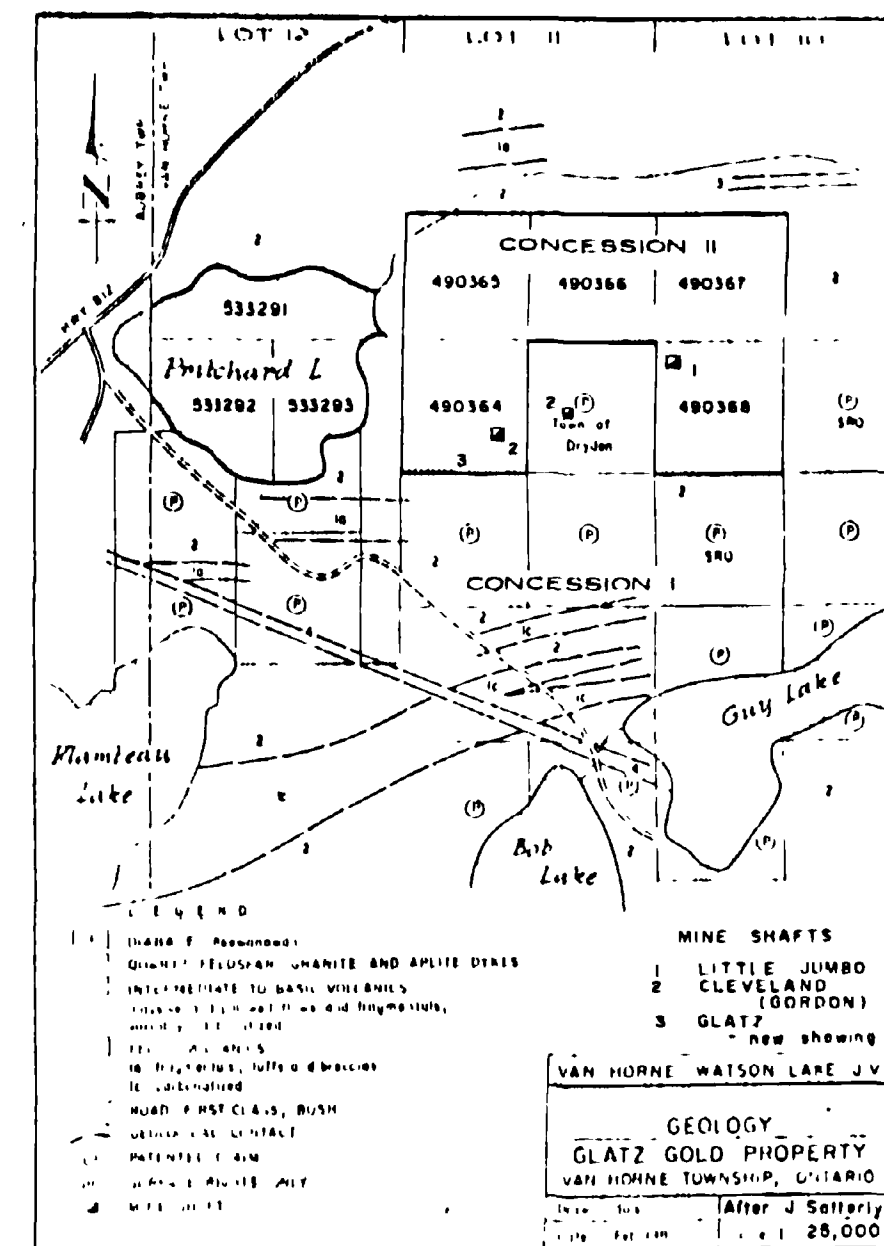
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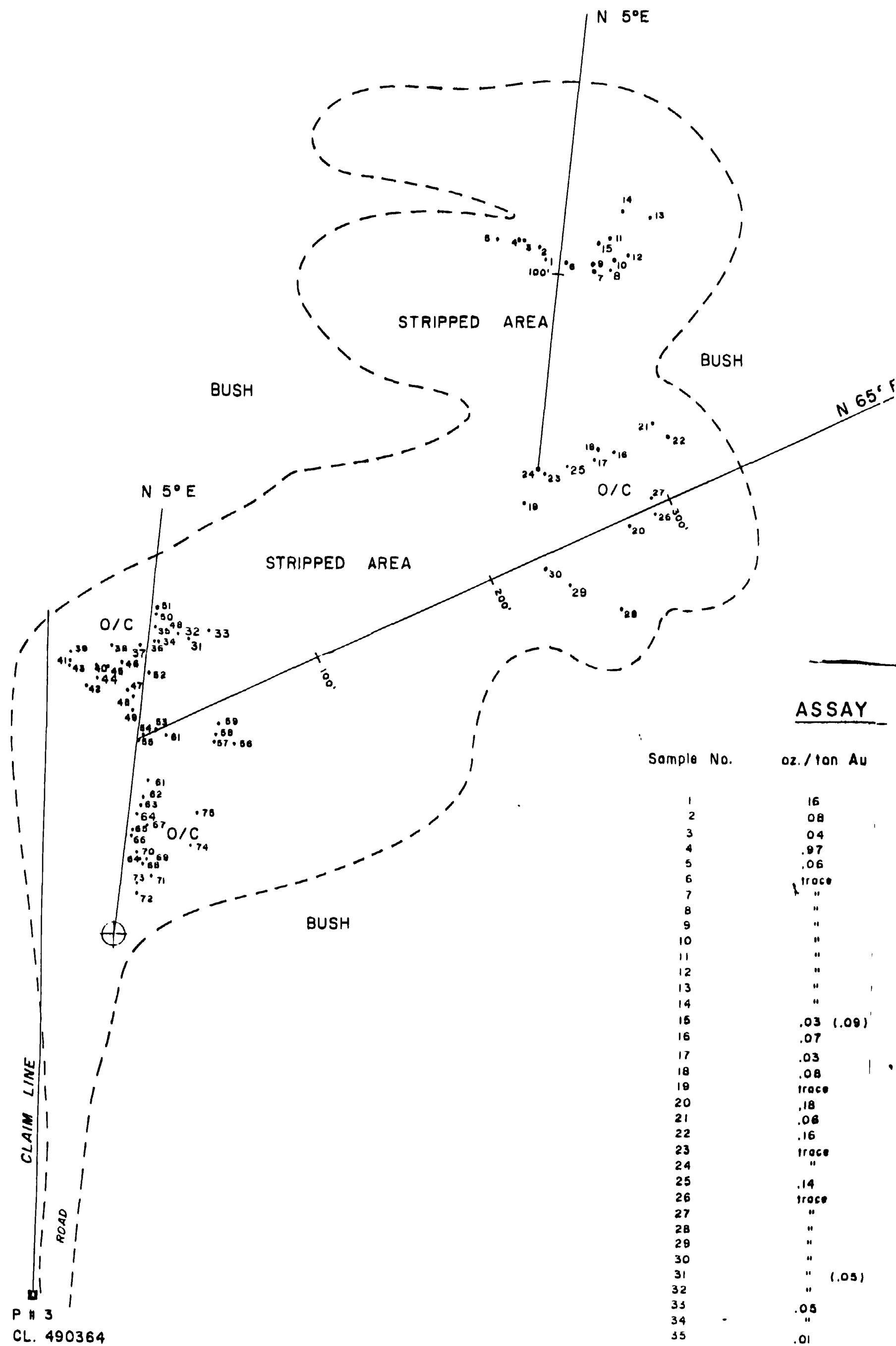
Assayer:

Subscribed

INDEX MAP



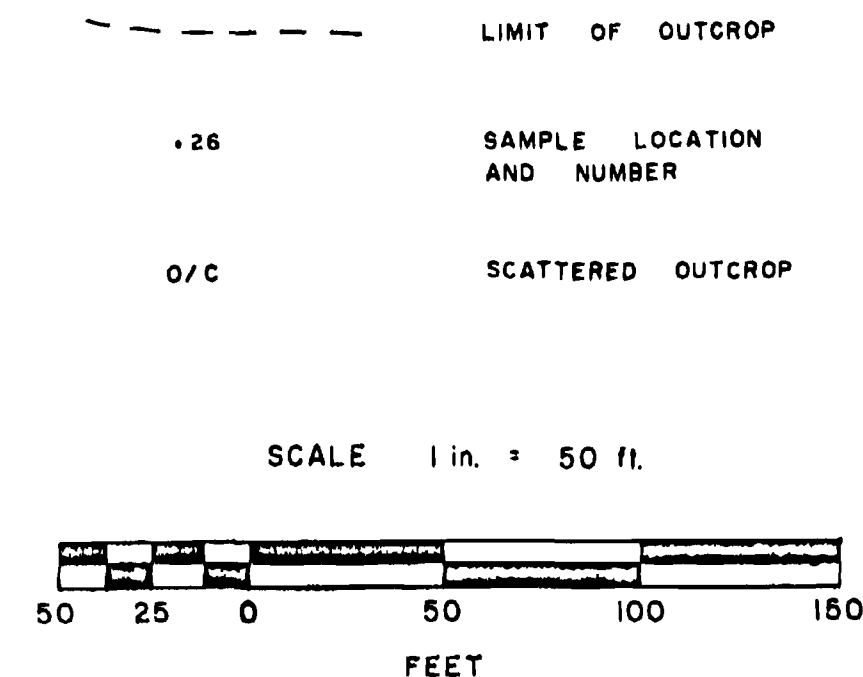
Caution location of drill holes subject to survey.



ASSAY RESULTS

Sample No.	oz./ton Au	Sample No.	oz./ton Au
1	.16	37	.01
2	.08	38	.02
3	.04	39	.04
4	.97	40	.16
5	.06	41	.05
6	trace	42	.06
7	"	43	.09
8	"	44	trace
9	"	45	"
10	"	46	"
11	"	47	.01
12	"	48	.09
13	"	49	.02
14	"	50	trace (.03)
15	.03 (.09)	51	"
16	.07	52	"
17	.03	53	"
18	.08	54	.06
19	trace	55	.05
20	.18	56	trace
21	.06	57	"
22	.16	58	"
23	trace	59	"
24	"	60	"
25	.14	61	"
26	trace	62	.07
27	"	63	.09
28	"	64	trace
29	"	65	.06
30	"	66	trace
31	" (.05)	67	.06
32	"	68	.03
33	.05	69	.18
34	"	70	.02
35	.01	71	trace
36	.02	72	.01

LEGEND



VAN HORNE - WATSON LAKE J. V.	
GLATZ GOLD PROPERTY	
SAMPLE LOCATIONS & ASSAY RESULTS	
TRACED BY J. R. B.	REV. MAR '81
APPROVED	REV.
DATE 52 F/15	REV.
W. G. WAHL LTD.	Scale 1" = 50'
DRG. NO. 100	



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