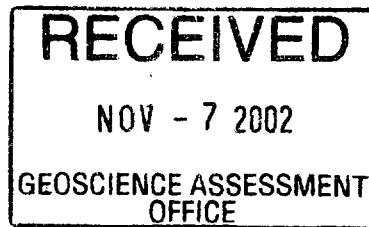


2.24476

HARKNESS HAYS - GOLD RANGE

PROPERTY



K. G. Fenwick

November 5, 2002



HARKNESS HAYS – GOLD RANGE PROPERTY

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HARKNESS HAYS – GOLD RANGE PROPERTY

PROPERTY LOCATION:

Mining Division:	Thunder Bay Mining Division
Resident Geologist District:	Thunder Bay South
Claim Map Area:	Priske Township G-0631
NTS Number:	42D 14SE
Latitude and Longitude:	48 48' 87 12'

LOCATION MAP:

See enclosed Claim Map A

ACCESS:

The Harkness Hays – Gold Range Property is 204 km east of the City of Thunder Bay, by Highway 17. Photo #1 shows that the C.P.R. tracks and a hydro line form the southern boundary of the property. Highway 17 cuts north – south through the western section of the property.

DEVELOPMENT HISTORY AND OWNERSHIP:

See enclosed write-up (Table A) by Schnieders et al, 1996.

GEOLOGY AND STRUCTURE:

The general geology (Map B) consists of felsic intrusive rocks of the Terrace Bay Batholith, in contact with predominantly mafic metavolcanics. In addition, minor felsic metavolcanics, tuff, iron formation and late felsic to mafic intrusives are present. Sulphide and oxide iron formations are present. They represent pauses in volcanism or sedimentation, and therefore occur at lithological contacts. Although assays from several of the iron formations indicate anomalous gold values (50 to 100 ppb), only the Ottisse and Harkness-Hays Properties have reported economic gold values.

The contact zone rocks have undergone amphibolite facies metamorphism, (hornblende-hornfels, Marmont (1984), within a 300 to 500 m halo of the Terrace Bay Batholith. Recrystallization has destroyed many of the primary textures in the

Craft Scale 1 : 20 000

TOWNSHIP

PRISKE

1247017

R27

0 Km

2. Km



1245802

1245804

Rapids

Harkness Hayes - Gold Range Property

SCHREIBER

High

Lake

Lamont

1245803

TB3876

TB3350

TB467982

TB3412

TB467981

TB3351

JK303

TB543087

TB467980

TB3413

453

TB6172

TB4033

TB3973

TB3327

TB3354 425

TB467979

TB655583

Hays Lake Road

E196

BF63

TB4594

TB3364

TB5420

TB557

119888

1245850

TB3588

TB655586

TB655585

TB655582

JK302

1205182

1241510

TB3589

Highway 17

CP Rail

3001302

1215675

R665

R608

TB3069

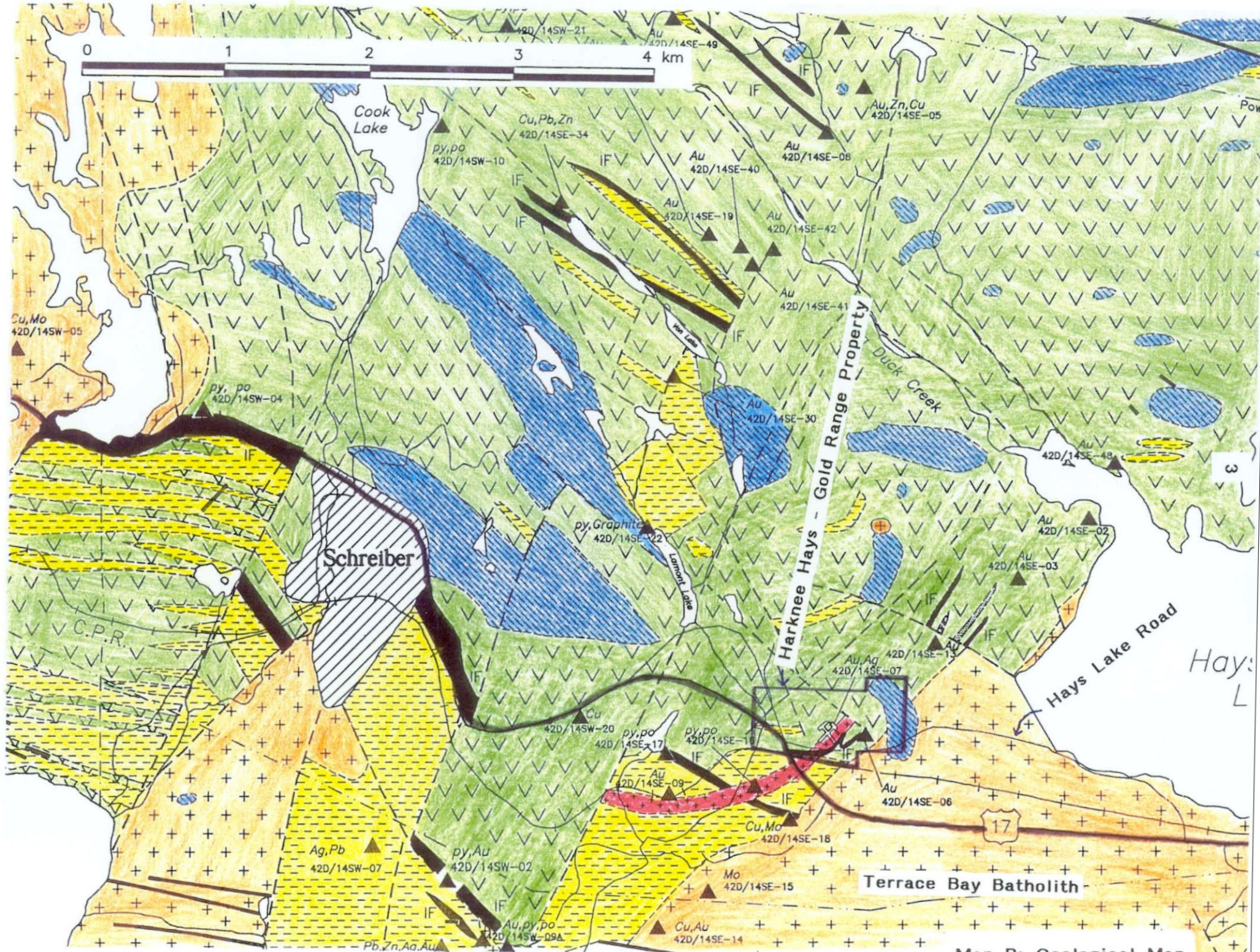
Map A: Claim Map

2863

TW166

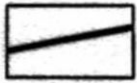
2864





LEGEND

PROTEROZOIC



Mafic Intrusive Rocks (diabase, lamprophyre, etc.)

ARCHEAN



Quartz Porphyry



Felsic Intrusive Rocks (granite, syenite, tonalite etc.)



Mafic Intrusive Rocks



Metasedimentary Rocks
(IF: Iron Formation – sulphide and oxide facies)

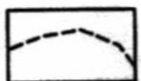


Felsic to Intermediate
Metavolcanic Rocks

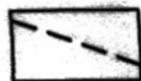


Mafic to Intermediate
Metavolcanic Rocks

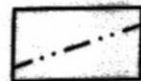
SYMBOLS



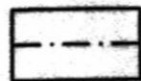
Geological Contact
(defined and assumed)



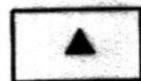
Fault (defined and assumed)



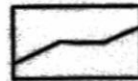
Powerline



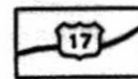
Township Boundary



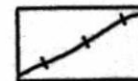
Mineral Occurrence



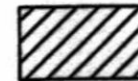
Road



Highway



Railway Line



Town



Past Producing Mine

metavolcanics. Outside of this contact metamorphic aureole, the metavolcanics display greenschist facies metamorphism.

Airphoto interpretation and detailed mapping indicate a complex structural pattern in the Gold Range – Harkness Hays area. A conjugate set of northeast and northwest-trending faults dominate the area. The Gold Range Ridge represents a large (4 x 1.5 km) northeast-trending fracture zone, containing an intricate system of northeast-, east-, and northwest-trending faults and shears. The intersection of a number of northeast- and northwest-trending structures occur in the Gold Range – Harkness-Hays Lake area.

(Patterson et al, 1987)

MINERALIZATION:

In the Gold Range – Hays Lake area, gold mineralization is concentrated in quartz veins, composite veins, breccias, stockworks, and hydrothermally altered metavolcanics occurring predominantly within the metamorphic aureole of the Terrace Bay Batholith. Accessory metallic minerals include disseminated pyrite, chalcopyrite, sphalerite, galena, molybdenite, and tellurides. The mineralized zones strike predominantly to the northeast and to a lesser extent to the northwest, generally reflecting the main structures.

Hydrothermal alteration of the metaolvanics consists of sericitization (potassic enrichment), carbonatization, silicification, pyritization, and sodium depletion. Marmont (1984) describes a silicified-carbonatized rim near the veins and a potassic alteration zone on the periphery. Evidence for several mineralizing events is present, including a suggested relationship between late intrusives and the concentration of auriferous solution.

(Patterson et al, 1987)

WORK DONE:

Three days were spent in the field with an assistant, on the Harkness Hays – Gold Range Property. No exploration work has been done on the Harkness Hays portion of the property (western two patented claims) since 1939. Fenwick (2001) relocated the three adits and one shaft and did minor assaying in 2000 on the Gold Range portion of the property. No exploration company has done any work here since 1991. In fact, this is the first time that the two properties were joined as one, and the veins on one property were followed onto the other.

Using Schnieders' 1986 map and a 1947 aerial photograph as reference, the trenches of Harkness Hays vein #3 were located and sampled. In total, sixteen (16) samples were taken from the property and gave some encouraging rassays (see Sample Table and Map C for results and location). Map C is a revised version of Schnieders' 1986 map. We blue-flagged the way to GR Adit #1, GR Adit #2, HH Adit #2, the trenches north of GR Adit #1 and four trenches of HH Vein #3.

Several old assays located in the literature (Assessment Files, Assay file, etc. located in the Thunder Bay Resident Geologist's office) were plotted on Map C.

Photographs taken of the property (samples, trench, etc.) are found at the end of this report.

CONCLUSION:

There are at least eight (8) gold-bearing veins on the property.

There does not appear to be wide quartz veins, but quartz breccia zones (Photo 6) and gold-bearing alteration envelopes (Photo 3).

RECOMMENDATIONS:

1. G.P.S. in all adits, shaft, veins and trenches.
2. Clean out entrances to HH Adit #2 and GR Adit #3. Re-sample workings and compare to old assay sketches.
3. Clean out trenches on HH Vein #3. Re-sample and compare to old assay sketch.
4. Check to see if HH Vein #4 is where I have shown it on Map C (from 1947 aerial photograph)
5. All veins strike northeast to north 60 degrees east plus dip approximately 75 degrees northwest. Several drill holes, from the top of the ridge striking approximately 135 degrees, would cut nearly all the veins and give an idea of the veins width and depth.

REFERENCES:

Patterson, G. C., Scott, J. F., Mason J. K., Schnieders, B. R., MacTavish, A. D., Dutka, R. J., Kennedy, M. C., White, G. D. and Hinz, P.
1987: Thunder Bay Resident Geologist's Area, North Central Region:
in Report of Activities, 1986, Regional and Resident Geologists,
edited by C. R. Kustra, Ontario Geological Survey.

Schnieders, B. R.
1986: Geological Map of Harkness Hays – Gold Range Property; located in
Thunder Bay
South Resident Geologist's Files, Scale 1:2000.

Schnieders, B. R., Smyk, M.C., Speed, A. A. and MacKay D. B.

1996: Mineral Occurrences in the Nipigon-Marathon area, Volumes 1 & 2,
Ontario Geological Survey, Open File Report 5951, 912 p.

Sample Table (see Map for locations)

Harkness Hays - Gold Range Property

Sample Number	Location	Description	Alteration/Mineralization	Assay Results
F-14-02	west of shaft area	narrow quartz stringers in fine-grained felsic rock	- speck of molybdenum - abundant disseminated pyrite - ankerite	834 ppb Au 3 ppm Ag
F-15-02	east edge of shaft	small blob of bull quartz in mafic medium grained meta-volcanic rock	disseminated pyrite	20 ppb Au 1 ppm Ag
F-16-02	≈ 30 m north of Gold Range Adit # 2	narrow quartz vein in granitic rock	- disseminated pyrite - some cubes	15867 ppb Au 17 ppm Ag
F-17-02	top of ridge above Gold Range Adit # 2	- quartz stringers in granitic rock	- abundant disseminated pyrite - well formed quartz crystals - alteration envelope	4729 ppb Au 4 ppm Ag
F-18-02	just above Harkness Hays Adit # 2	- narrow quartz vein (15 cm) in mafic meta-volcanics	- lots of pyrite - white bull quartz	6762 ppb Au 17 ppm Ag
F-19-02	10 m above Harkness Hays Adit # 2 - small adit	small quartz vein in mafic meta-volcanics	- lots of pyrite - mafic inclusions fine grained	658 ppb Au 2 ppm Ag

Sample Number	Location	Description	Alteration/Mineralization	Assay Result
F-20-02	near Hwy 17 on Hays Lake road	Iron formation well banded fine grained chert	bands of pyrite	16 ppb Au 1 ppm Ag
F-21-02	same outcrop as above	fine grained felsic rock (chert)	bands of pyrrhotite (magnetic)	14 ppb Au
F-33-02	just west of shaft	- very magnetic mafic rock - narrow quartz vein	- pyrite, molybdenum and chalcopyrite	1191 ppb Au 4 ppm Ag
F-34-02	20 m north of Gold Range Adit # 3	- quartz vein with rim of feldspar porphyry in mafic metavolcanics	- no sulphides	52 ppb Au
F-35-02	100 m uphill from Gold Range Adit # 1	quartz with mafic metavolcanics inclusion 13 cm wide vein	lots of pyrite in quartz and rim of mafic metavolcanics	1192 ppb Au 3 pp Au
F-36-02	145 m uphill from Gold Range Adit # 1	quartz vein with lots of mafic metavolcanics inclusion	pyrite within mafic metavolcanics inclusion	7000 ppb Au 5 ppm Ag

sample Number	Location	Description	Alteration/Mineralization	Assay Result
F-37-02	western most trench on Harkness Hays Vein # 3	- brecciated - quartz vein with mafic metvolcanics clasts	- lots of pyrite	1400 ppb Au 3 ppm Ag
F-38-02	first trench east of above trench	very narrow quartz veins cutting mafic metvolcanics	- some pyrite in mafic metvolcanics inclusions	644 ppb Au 3 ppm Ag
F-39-02	second trench east of F-37-02	- very narrow quartz veins cutting mafic metvolcanics	- alteration envelope - silicification and pyrite	377 ppb Au 2 ppm
F-40-02	near Hwy 17 on Hwy 17	graphitic seam	- dark yellow pyrite + lighter yellow pyrite cubes - some pyrite nodules	45 ppb Au 2 ppm Ag



PHOTO #1: CPR Track and Hydro line forms the southern boundary of the property.



PHOTO #2: Breccia noted just west of shaft. Angular mafic intrusive clasts in Feldspar porphyry.



PHOTO #3: Very narrow quartz veins with brown pyritized, silicified alteration envelope. (Assayed 1191 ppb Au).



PHOTO #4: Banded iron formation – west end of property.



Photo 5: High Grade Au sample - Polished Slab – large pyrite cubes in quartz Matrix - fine wire gold within fractured pyrite cubes (sample assayed 25 oz Au per ton).



Photo 6: Quartz breccia vein – mafic angular metavolcanic clasts – assayed 7000 ppb Au.



Photo #7: Filled-in trench on Vein #3.

Old Highway 17

Harkness Hays - Gold Range Property

Possible Trenches - #4 Vein

C.P.R.
Harkness Hays's Mine Buildings

Trenches - #3 Vein

Gold Range's Shaft
Gold Range's Trestleway to Adit #3

Scale 1:15 840

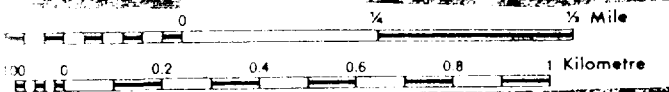


Photo #8 : 1947 Aerial Photo of Property

470-4835
90-11

Old Highway 17

Harkness Hays - Gold Range Property

Possible Trenches - #4 Vein

C.P.R.
Harkness Hays's Mine Buildings

Trenches - #3 Vein

Gold Range's Shaft
Gold Range's Trestleway to Adit #3

Scale 1:15 840

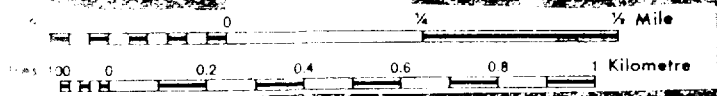


Photo #8 : 1947 Aerial Photo of Property

470-4835
90-11

DEVELOPMENT HISTORY AND OWNERSHIP:

- PAST: 1917-1919 Claims TB 3326, 3411, 3413, 3588, 3589, 3783, 3795 and 3815 were staked by W.S. Jackson, Harkness, Russell, and Hunt.
- Surface work, including stripping, trenching and shallow test pitting, was undertaken, revealing several auriferous quartz veins, mostly on TB 3326.
- 1920 A one-ton bulk sample was taken from TB 3354 and assayed, giving encouraging results.
- 1921 In December, the Jackson Development Co. Ltd. was incorporated and transferred and patent licensing procedure began on aforementioned claims.
- 1922 Work began on TB 3326; two adits were driven into the hillside to test underground vein extensions.
- 1924 All claims were patented and belonged to Jackson Development Co. Ltd.
- 1933 The lengths of 1 adits No. 1 & No. 2 were 21 m and 37 m, respectively.
- 1934 Newly incorporated Gold Range Mines Ltd. acquired the assets of the Jackson Development Co. Ltd.
- An additional 14 m of drifting was carried out on the No. 2 adit.
- H.R. Turner, consulting engineer, recommended the installation of a sluice to recover placer gold from sand and gravel near the veins.
- 1935 Underground exploration was temporarily discontinued in favour of exploiting a placer deposit at the base of the workings using a pit and sluice box with a small pulverizer and amalgamation plate treatment.
- 1936 Four shafts (pits) sunk in the overburden sands were systematically sampled; to a depth of 2.7 m in shaft No. 1, values averaged \$13.40 (0.30 ounce per ton Au), those from shaft No. 2 averaged \$11.40 (0.32 ounce per ton Au) to a depth of 5.2 m.

Consulting geologist J. Crookston examined and wrote a report on the property.

Limited development was undertaken on a vein discovered near the granite contact; channel sampling across 1.7 m returned average values of \$12.40 (0.354 ounce per ton Au).

First gold brick of 22 ounces, representing 40% of the total gold concentrates processed to date, was poured on May 31.

Placer operations were temporarily abandoned in August in favour of underground development.

Hammer mill, crusher and vertical steam engine were shipped to the property.

Surface work was carried on throughout the year. Underground work, consisting of about 30 m of drifting and cross-cutting in the two adits was carried out on from August until the end of the year. Seven veins were reported uncovered up to this time, the most important ones being the No. 2 and No. 3, in the hillside, and No. 7, 152 m south of the No. 2 adit close to the contact of the syenite intrusion. The old 8 m deep shaft on this vein was dewatered this year, samples were taken and three shallow holes were drilled to try to pin down the overburden covered syenite/metavolcanic contact.

A 31.8 kg sample of high grade ore was shipped to the Canadian Allis Chalmers Company for recovery tests. The average head assay was 6.99 ounce per ton Au, with the total gold recovery expected estimated at 99.4 to 99.7%.

A new high-grade vein was discovered during resumption of underground tunnelling; a new adit, the No. 3, was driven a total of 10 m into the hill at a north-westerly angle about 46 m east of the No. 1 adit.

Small test mill remained in operation; diamond drilling was planned.

Forty tons (36.3 tonnes) of ore was reportedly excavated during the year, but little of it was milled.

- 1937 No underground work was carried out during the year; operations were largely suspended except for camp maintenance.
- Further surface work was undertaken on newly discovered (1936?) massive ore zone on property's eastern boundary which yielded encouraging gold values.
- J.A. Cole examined and recommended the Gold Range property.
- The Inspector of Mines, S.A. Bayne inspected the property and requested numerous changes.
- 1938 No recorded activity.
- 1939 Systematic examination and sampling program undertaken by Sylvanite Gold Mines Limited; report submitted by G.L. Holbrooke did not favour optioning the property.
- 1940 Bayrich Gold Mines Ltd. planned to acquire assets of Gold Range Mines Ltd., but these plans were not proceeded with.
- 1941 Rolac Mines negotiated funding for diamond drilling of 8 patented claims; drilling was reported but no results were mentioned.
- A total of 38.975 tons (35.36 tonnes) of ore from the Gold Range property was treated by custom milling at Magnet Consolidated Mines Ltd. near Geraldton.
- 1941-1946 No recorded activity.
- 1946 Rolac Mines reportedly sought further financing.
- 1947 Company became idle; no development work ensued.
- 1952 Mining rights to the claims were forfeited to the Crown due to non-payment of taxes.
- Property partially restaked by M.W. Barnes; no work was recorded.
- 1956 Main showings (formerly claim TB 3326) restaked by J. Allard as TB 77902.
- 1957 All interest was transferred to Thorncrest Explorations Ltd., no work was recorded.

- 1964 TB 77902 restaked by R.V. Hangman as TB 110699; all interest was transferred to Hannam Explorations Ltd.
- 1967 Claim(s) lapsed; restaked by Hannam as TB 132339.
- 1968 All interest was again transferred to Hannam Explorations Ltd.
- 1969 Claim(s) lapsed; restaked by R.W. Pitkanen as TB 139094.
- 1971 Claim lapsed and was restaked by Pitkanen as TB 286592.
- 1972 Pitkanen's claim lapsed and was restaked by J.E. Halonen as TB 335767; all interest was transferred to W. Acker.
- 1973 Acker's claim lapsed and he restaked it as TB 350062.
- 1974 W. Acker restaked TB 350062 as TB 405571.
- 1975 Fifty percent interest was transferred to J. Santoro.
Claim lapsed and was restaked by W. Acker as TB 434193.
- 1977 W. Acker restaked lapsed claim TB 434193 as TB 4595889.
- 1978 Claim TB 465332 was restaked by W. Acker (former TB 459589).
- 1980 Mechanical work was carried out on TB 465332.
Lormac Explorations Ltd. acquired the northern part of former Gold Range property from J.C. Archibald and carried geophysical and geological surveys.
- 1983 Morgain Minerals Inc., had acquired an option on 7 claims (Gold Range group), including TB 465332, conducted geological mapping and examined the old workings.

- 1984 Phantom Exploration Services Ltd. was contracted to conduct a ground magnetometer survey over six claims (excluding TB 465332) by Morgain Minerals Inc.
- 1985 The Gold Range property was held by W. Acker and R. Otto.
- 1988 Beardmore Resources Ltd. conducted diamond drilling and sampling on the Gold Range and Hays Lake properties. Stripping was conducted on the No. 7 vein.
- 1991 W. Acker and R. Otto dewatered the No. 7 vein shaft and conducted sampling.
- 1994 K. Fenwick and D. Leishman staked the Gold range property.
- 1995 The Gold Range property was optioned by RJK Explorations Ltd.

No work was performed by RJK Explorations Ltd on the Gold Range Property.

(Schmieders et al. , 1996)

HARKNESS HAYS PROPERTY

DEVELOPMENT HISTORY AND OWNERSHIP:

- PAST: 1917 H. Harkness restaked two abandoned surveyed claims, 500X and R425 as TB 3327 and 3354 (Vimy Ridge gold property)
- 1917-1920 Surface exploration and development work undertaken.
- 1920 Bulk sampling of the ore and subsequent testing was carried out at Queen's University, Kingston with encouraging results.
- 1921 Claims TB 3327 and 3354 were transferred to M.R. Jackson. The Jackson-Russel claims (TB 3326, etc.) were also acquired. The claims were patented in December.
- 1922 Some trenching, tunnelling and sampling was carried out by W.S. Jackson (Jackson Gold Mining Company).
- Harkness claims were optioned to C.A. Foster and Glendenning; the Jackson claim (TB 3326?) was taken over by a Detroit interest (to later become part of Gold Range property). A reported \$20,000 was spent on buildings and prospecting.
- Two tunnels, 152.4 m apart, were driven into the hillside for 15.2 m and 30.2 m respectively, exposing two parallel veins on which a small amount of drifting was done.
- A 4.6 m test shaft was sunk on a small stockwork.
- 1923 A 76 cm vein was discovered in October and was stripped and trenched over two claims.
- 1924 The Tonopah Mining Company were under engagement to examine the Harkness-Jackson property with view to purchase.
- 1925 Harkness-Hays Gold Mining Company was incorporated to acquire and develop the property consisting of claims 3327 and 3354.
- Surface exploration was conducted during the summer.

- 1926 Buildings, including a blacksmith shop, powder magazine, cook camp and sleep camp were erected during the spring.
- Driving of an adit crosscut started on May 20 with hand steel.
- Expenditures to date amounted over \$125,000 spent on underground and surface work on eight veins.
- Bulk sampling of the No. 1 vein returned values of \$115 (5.56 ounce per ton Au); a 13.7 m tunnel had been driven on this vein.
- Vein No. 3 had been stripped for about 152 m displaying a rich, (1.21 ounce per ton Au) ore shoot 53.3 m long and 84 cm wide.
- 1927 In January, a gasoline-driven compressor, a drill sharpener and rock drills were added.
- The east and west drifts intersected the No. 3 and Nos. 4 and 5 veins respectively, 76.2 m below the surface outcrops. Tunnelling on the No. 1 vein continued.
- Work on the adit level was temporarily suspended on August 1, but 366 m of drifting and crosscutting had been completed and surface work continued.
- 1928 Very little work was reported; the property was idle when visited in August and the past year's accomplishments could not be ascertained.
- 1929 Following an examination of the 6-claim property, a report was submitted by J.C. Huston, consulting engineer, favouring further development. Based on the encouraging results, management pursued further financing.
- 1930 W.D. Hays patented TB 5420 and staked TB 9592.
- A total of 0.71 tons (0.64 tonnes) of ore was shipped to Noranda, returning \$71 (4.83 ounce per ton Au).

- 1932 32 tons (29 tonnes) of ore were milled (location unknown), yielding 71.28 ounces of gold.
- 1933 Exploration and development resumed during the summer following good assay results.
- 1934 Harkness-Hays Gold Mines Limited was incorporated in July and acquired the assets of the Harkness-Hays Gold Mining Co. Ltd.
- The property consisted of 5 patented claims, TB 3327, 3354, 5420, 6172 and 9592.
- Newly incorporated Gold Range Mines Ltd. acquired the assets of the Jackson Development Company Limited, including claim TB 3326.
- Preparation for a 25 ton/day mill construction commenced in November with site excavation.
- 1935 Work carried on from January to mid-April and from mid-July to the end of the year.
- A total of 33.5 m of drifting were completed. Approximately 500 tons (453 tonnes) of rock was mined, 119 tons (108 tonnes) were milled and 17 tons (15 tonnes) was sent to Ontario Refining Commission for testing. The test results indicated \$106 gold per ton (3.01 ounces gold per ton; 103.43 grams gold per tonne).
- A chute 67 m long was built to conduct ore from the hilltop to the mill and a fifty ton bin was built at the top of the hill for coarse ore storage.
- Milling was temporarily discontinued in October to allow alterations to be made to the flow sheet in order to enhance recovery of gold lost in the concentrates.
- 1936 Operations were largely confined in the stoping of ore from the veins in the hill of which 27 tons (24.5 tonnes) were shipped to Ontario Refining Commission, yielding \$75 gold per ton (2.14 ounces gold per ton; 73.43 grams gold per ton). Underground work consisted of about 7.6 m of raising and 50 tons (45.4 tonnes) of slashing near the mouth of No. 2 adit.

- 1937 Kay-Hays Mines Limited was incorporated in July to succeed Harkness-Hays Gold Mines Ltd.
- The property consisted of 5 patented claims: TB 3327, 3354, 5420, 7715 and 9592.
- No work was reported on the property during 1937.
- 1938 Reports circulated that operations would resume in the spring, including further exploratory work with backing by American financial interests.
- An official report noted that the company had funds for current needs.
- 1939 Sylvanite Gold Mines Limited examined the property and conducted a systematic channel sampling program of the veins.
- According to a report submitted by G.L. Holbrooke, only the No. 3 vein merited interest and the property as a whole was not recommended for optioning.
- 1940-1948 The company was largely inactive.
- 1948 The company's Ontario charter was cancelled.
- 1965 Mrs. M.R. Jackson transferred the claims to Hannam Exploration (1960) Ltd., no work was recorded.
- 1970 Hacquoil Construction Ltd. of Thunder Bay acquired the patented claims for the gravel contained on them.
- 1981 Area studied by S. Marmont for the Ontario Geological Survey.
- 1985 Claims were held by Hacquoil Construction Ltd. who excavated gravel from the old site for construction purposes.
- 1995 The property was optioned by RJK Explorations Ltd. No work performed on the Harkness Hays property .

ASSAY RESULTS

Number 1 vein sampled during driving of 40 feet tunnel on the vein and channeled at 5 feet intervals gave the following over an average of $3\frac{1}{2}$ feet wide.

24

	<u>@ \$20.67 per oz.</u>	<u>@ \$34.00 per oz.</u>	<u>wide</u>	<u>g/t</u>	<u>m</u>
5'	\$ 73.80	\$ 121.55	3'	122.6	0.91
10'	49.60	81.26	3'5'	81.9	1.07
15'	5.60	9.21	3.75'	9.3	1.14
20'	44.80	73.69	3.00'	74.3	0.91
25'	12.00	19.73	2.75'	19.9	0.84
30'	5.20	8.55	3.5'	8.6	1.07
35'	22.00	36.18	4.0'	36.5	1.22
40'	29.60	48.67	3.0'	49.1	0.91
45'	9.00	14.80	3.25'	14.9	0.99

Houston, J.C., 1929 - Assessment Files

The outcrop of number 3 vein was sampled at 5 foot intervals and gave the following results:

	width	\$34.00 per oz.	g/tonne	cm
1	12 in.	\$ 30.28	30.5	30.5
2	12 "	5.26	5.3	30.5
3	12 "	5.92	6.0	30.5
4	24 "	5.95	4.0	61.0
5	36 "	7.24	7.3	91.4
6	30 "	5.92	6.0	76.2
7	7 "	44.76	45.1	17.8
8	14 "	217.88	219.7	35.6
9	12 "	7.89	8.0	30.5
10	12 "	5.26	5.3	30.5
11	12 "	9.21	9.3	30.5
12	15 "	8.56	8.6	38.1
13	15 "	10.53	10.6	38.1
14	10 "	2.63	2.7	25.4
15	10 "	7.24	7.3	25.4
16	15 "	5.26	5.3	38.1
17	12 "	4.60	4.6	30.5
18	15 "	2.96	3.0	38.1
19	15 "	3.95	4.0	38.1
20	18 "	4.60	4.6	45.7
21	24 "	3.96	4.0	61.0
22	12 "	18.43	18.6	30.5
23	12 "	61.22	61.7	30.5
24	12 "	409.45	412.9	30.5
25	24 "	556.79	359.8	61.0
26	18 "	670.15	675.8	45.7
27	10 "	1385.05	1396.7	25.4
28	12 "	7.89	8.0	30.5
29	18 "	142.19	143.4	45.7
30	24 "	21.00	21.2	61.0
31	36 "	64.51	65.1	91.4
32	50 "	217.89	219.7	127.0
33	72 "	214.59	216.4	182.9
34	72 "	154.64	155.3	182.9
35	60 "	106.64	107.5	152.4
36	36 "	105.98	106.9	91.4
37	36 "	11.85	11.9	91.4
38	12 "	9.21	9.3	30.5
39	12 "	501.11	505.3	30.5
40	12 "	75.04	75.7	30.5
41	24 "	95.12	95.9	61.0
42	12 "	222.39	224.3	30.5
43	12 "	222.49	224.4	30.5
44	14 "	26.99	27.2	35.6
45	10 "	56.61	57.1	25.4
46	30 "	22.35	22.5	76.2
47	10 "	25.01	25.2	25.4
48	12 "	22.38	22.6	30.5
49	12 "	17.12	17.3	30.5
50	14 "	48.71	49.1	35.6

3.5 million US dollars (gold at \$321 US an ounce - Oct., 2002)

HARKNESS-HAYES GOLD MINES

LIMITED

LONGITUDINAL SECTION

ON

NUMBER THREE VEIN ORE-BODY

showing proposed development and ore and material handling arrangements and mill site.

Based on sampling of Consulting Engineer and assuming average width and value for portions of vein covered with deep overburden, this section would produce \$370,000 - 30% ± 373 Ft. ± 3.5 Acs.

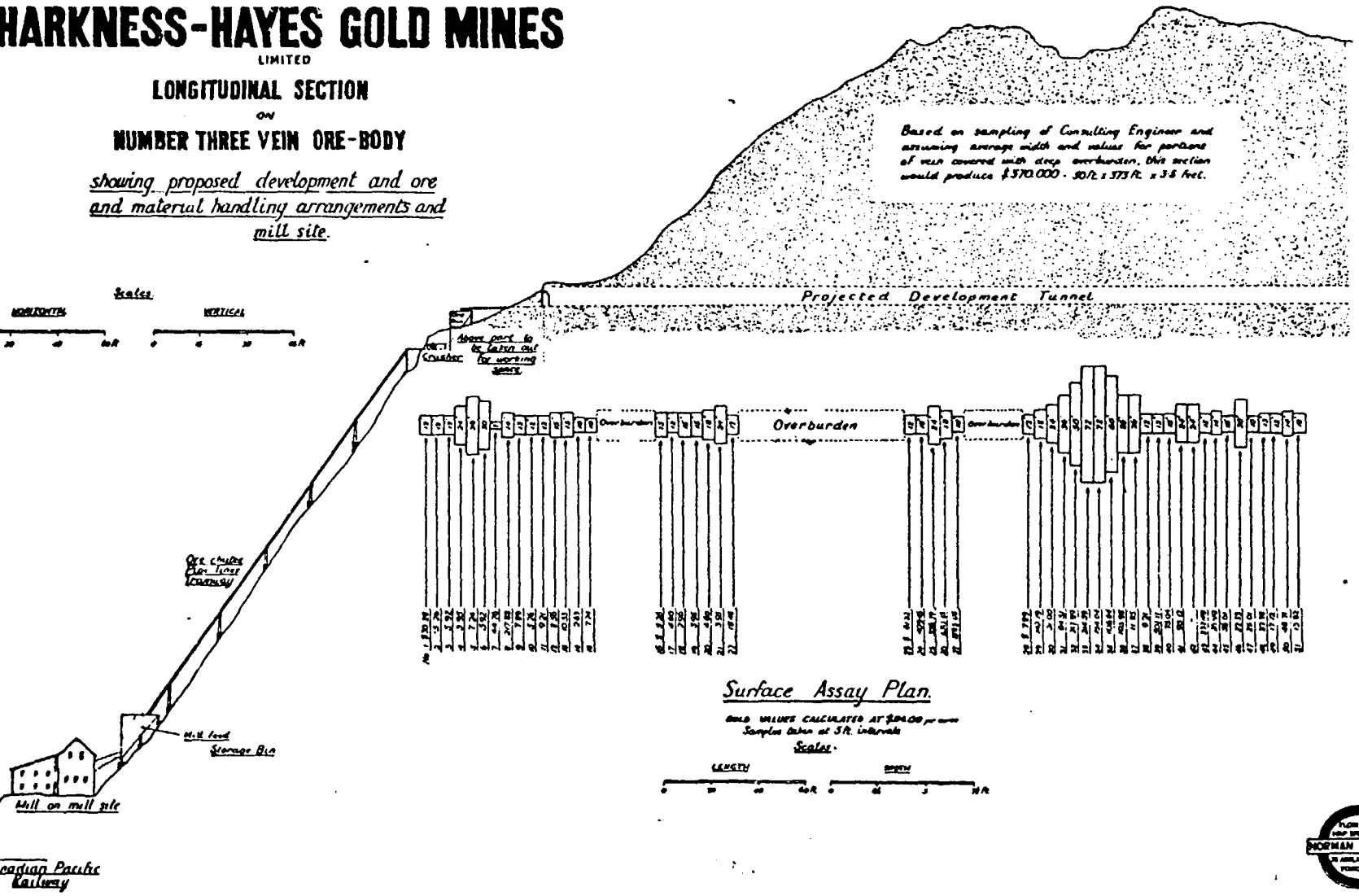
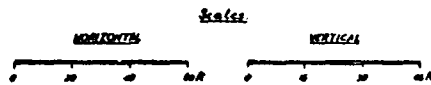


Table 2b: Vein #3 Ore Reserves

VEIN NO: 4.ASSAY RESULTS@ \$20.67 per oz.@ \$34.00 per oz.

g/t

cm

7-D	8 in.	\$ 100.80	\$ 165.80	167.2	20.3
8-D	4 in.	128.80	211.86	213.6	10.2
24-D	24 in.	407.20	669.80	675.3	61.0
25-D	8 in.	247.20	571.10	575.8	20.3
26-D	18 in.	248.80	409.25	412.6	45.7
27-D	10 in.	37.20	61.19	61.7	25.4
28-D	18 in.	30.80	50.66	51.1	45.7
29-D	13 in.	12.40	20.39	20.6	33.0
30-D	12 in.	9.60	15.79	15.9	30.5
31-D	10 in.	14.40	23.68	23.9	25.4
35-D	12 in.	440.40	724.41	730.4	30.5
36-D	12 in.	3.60	5.91	6.0	30.5
37-D	12 in.	3.20	5.16	5.2	30.5
38-D	12 in.	5.60	9.21	9.3	30.5
39-D	6 in.	8.40	15.81	13.9	15.2
40-D	6 in.	19.40	31.91	32.2	15.2
41-D	6 in.	13.60	22.37	22.6	15.2
42-D	6 in.	14.40	23.68	23.9	15.2
43-D	10 in.	8.80	14.47	14.6	25.4
44-D	6 in.	9.60	15.79	15.9	15.2

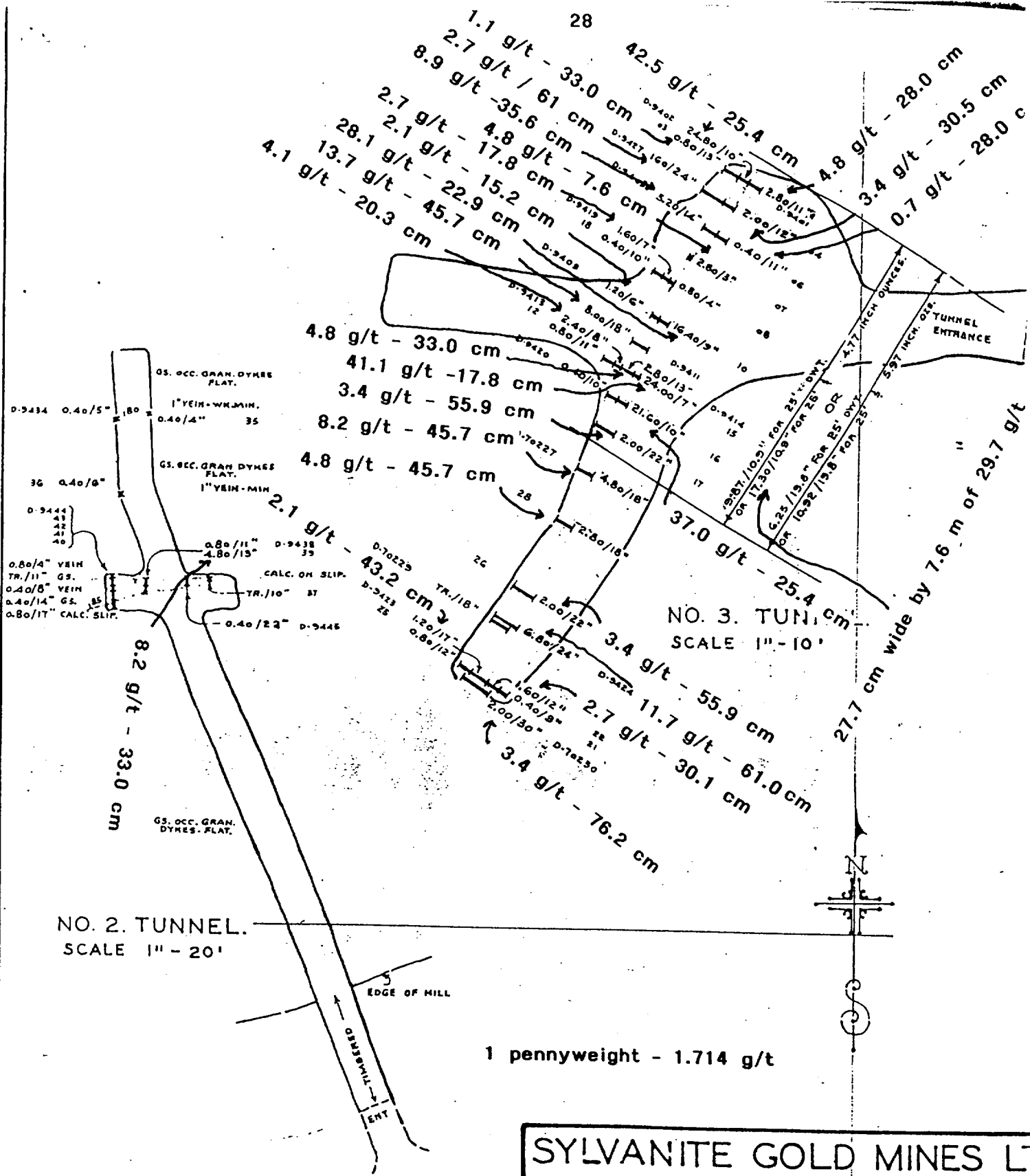


Table 4: Assays of Vein #2
- Gold Range

SYLVANITE GOLD MINES LTD.
 EXPLORATION DEPT.
 DRAWING LOCATION: DETAIL ASSAY PLANS. GOLD RANGE MINES LT TWP. 84 - THUNDER BAY DST. - SCHREIBER AREA AS NOTED.
 SCALE: MAPPED BY G.L.H. DRAWN BY K.O.M. REF. NO. 660
 SAMP. BY V.J. L.S. K.C. DATE: AUG. 2-39.

1 pennyweight - 1.714 g/t



A DIVISION OF ASSAY LABORATORY SERVICES INC.
MINERAL ASSAY DIVISION



1070 LITHIUM DRIVE, UNIT 2 THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 626-1630 FAX (807) 623 6820 EMAIL accuracy@tbaytel.net WEB www accurassay.com

Certificate of Analysis

Thursday, September 12, 2002

Fenwick, Ken, Geological Consultant
84 Velva Avenue
Thunder Bay, ON, CA
P7A6N5
Ph#: (807) 344-6568
Fax#: (807) 345-0916
Email

Date Received : 03-Sep-02

Date Completed : 12-Sep-02

Job # 200240654

Reference :

Sample #: 8 Rock

Accurassay #	Client Id	Au ppb	Pt ppb	Pd ppb	Rh ppb	Ag ppm	Co ppm	Cu ppm	Fe ppm	Ni ppm	Pb ppm	Zn ppm
25205	F-14	834				3						
25206	F-15	20				1						
25207	F-16	15867				17						
25208	F-17	4729				4						
25209	F-18	6762				17						
25210	F-19	653				2						
25211	F-20	16				1						
25212	F-21	14				<1						
25213	Check F-21	14				<1						

PROCEDURE CODES: AL9AUS, AL4Ag

Certified By: 

AL917-0072-09/12/2002 07:51 PM

Page 1 of 1



A DIVISION OF ASSAY LABORATORY SERVICES INC.
MINERAL ASSAY DIVISION



1070 LITHIUM DRIVE, UNIT 2 THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 626-1630 FAX (807) 623 6820 EMAIL accuracy@tbaytel.net WEB www accurassay.com

Certificate of Analysis

Thursday, October 31, 2002

Fenwick, Ken, Geological Consultant
84 Velva Avenue
Thunder Bay, ON, CA
P7A6N5
Ph#: (807) 344-6568
Fax#: (807) 345-0916
Email kfenwick@tbaytel.net

Date Received : 16-Oct-02
Date Completed : 30-Oct-02
Job # 200240945

Reference :

Sample #: 4 Rock

Accurassay #	Client Id	Au ppb	Pt ppb	Pd ppb	Rh ppb	Ag ppm	Co ppm	Cu ppm	Fe ppm	Ni ppm	Pb ppm	Zn ppm
37046	F-33-02	1191				4						
37047	F-34-02	52				< 1						
37048	F-35-02	1192				3						
37049	F-36-02	6469				6						
37050	Check F-36-02	7000				5						

PROCEDURE CODES: ALAAu3, ALAAg

Certified By: 

AL917-0072-10/31/2002 04:07 PM

Page 1 of 1



A DIVISION OF ASSAY LABORATORY SERVICES INC.
MINERAL ASSAY DIVISION



1070 LITHIUM DRIVE, UNIT 2 THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 828-1830 FAX (807) 629 6820 EMAIL accuracy@tbaytel.net WEB www.accuracyassay.com

Certificate of Analysis

Saturday, November 02, 2002

Fenwick, Ken, Geological Consultant
84 Velya Avenue
Thunder Bay, ON, CA
P7A6N5
Ph#: (807) 344-6568
Fax#: (807) 345-0916
Email kfenwick@tbaytel.net

Date Received : 28-Oct-02
Date Completed : 01-Nov-02
Job # 200240995

Reference :
Sample #: 4 Rock

Accuracy #	Client Id	Au ppb	Pt ppb	Pd ppb	Rh ppb	Ag ppm	Co ppm	Cu ppm	Fe ppm	Ni ppm	Pb ppm	Zn ppm
39613	37	1400				3						
39614	38	644				3						
39615	39	377				2						
39616	40	45				2						
39617	Check 40	45				2						

PROCEDURE CODES FOR THIS ALAAG

Certified By: 

AL917-0072-11/02/2002 07:33 PM

Page 1 of 1

Date: 2003-JAN-22

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

KENNETH GEORGE FENWICK
84 VELVA AVENUE
THUNDER BAY, ONTARIO
P7A 6N5 CANADA

Tel: (888) 415-9845
Fax: (877) 670-1555

Submission Number: 2.24476
Transaction Number(s): W0240.01700

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

Note, in subsequent submissions that contain assays, please ensure that the sample identification number and sample locations are plotted on one or more plan maps at a scale between 1:100 and 1:5,000.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,



Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

Donald Murray Leishman
(Claim Holder)

Kenneth George Fenwick
(Assessment Office)

Assessment File Library

Kenneth George Fenwick
(Claim Holder)

Date / Time of Issue: Wed Jan 22 13:44:45 EST 2003

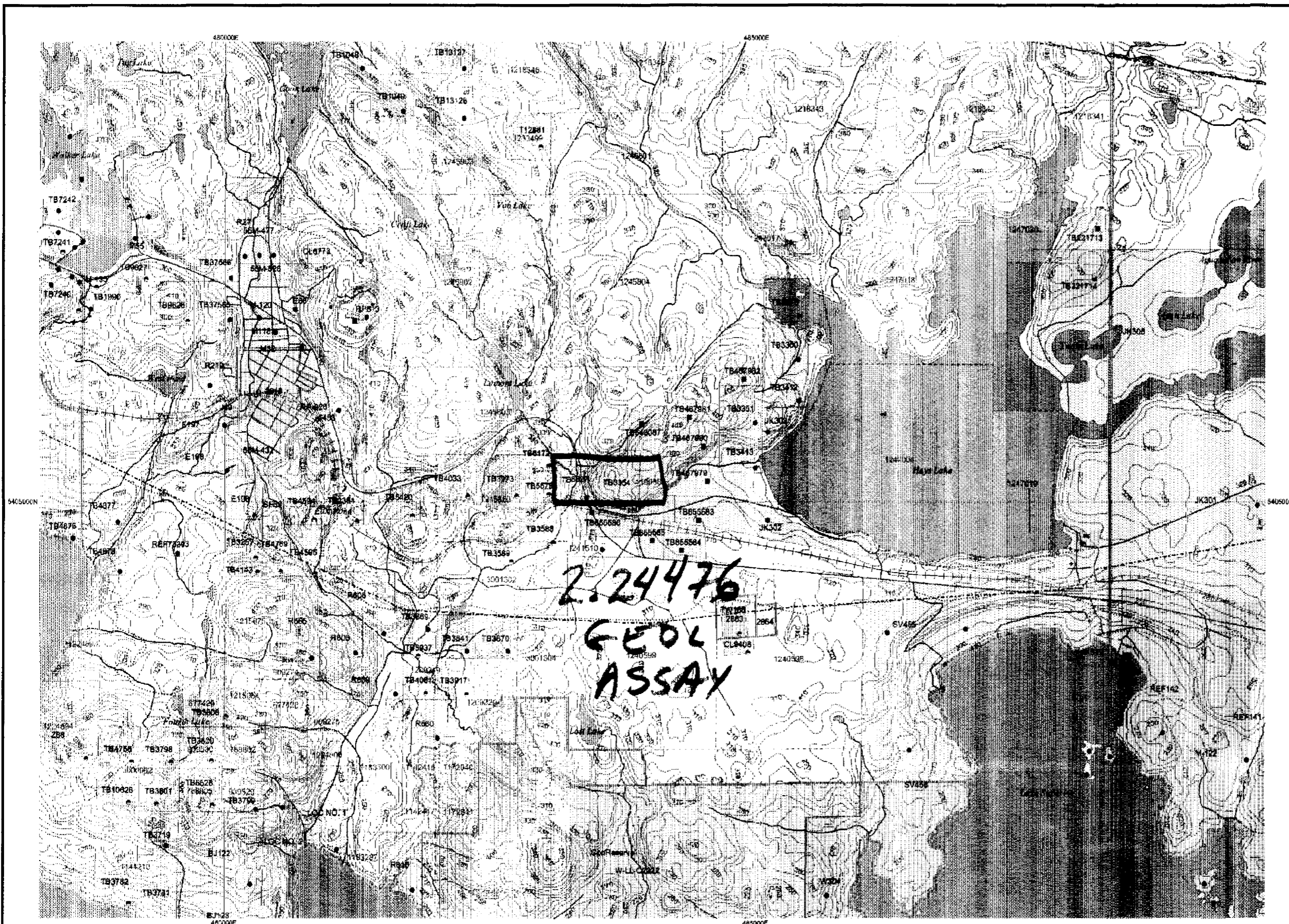
TOWNSHIP / AREA
PRISKE

PLAN
G-0631

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division
Land Titles/Registry Division
Ministry of Natural Resources District

Thunder Bay
THUNDER BAY
NIPIGON

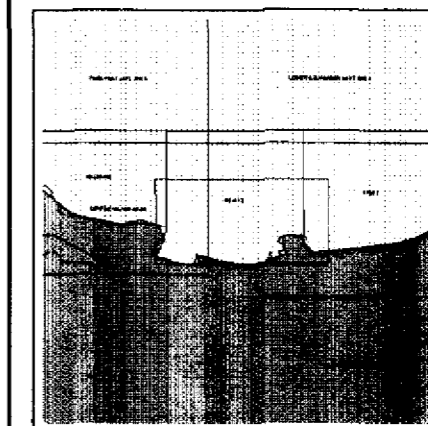


TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession Lot
- Provincial Park
- Indian Reserve
- CRT, P.E. & Pile
- Contour
- Mass Shale
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Utility
- Tower

Land Tenure

- Freehold Patent
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Leasehold Patent
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- License of Occupation
 - Uses Not Specified
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
 - Land Use Permit
 - Order In Council (Not open for staking)
 - Water Power Lease Agreement



LAND TENURE WITHDRAWALS

- 1234 Areas Withdrawn from Disposition
- Mining Acts Withdrawal Types
 - W/m Surface And Mining Rights Withdrawn
 - Ww Surface Rights Only Withdrawn
 - Wm Mining Rights Only Withdrawn
 - Order In Council Withdrawal Types
 - W's Surface And Mining Rights Withdrawn
 - W'm Mining Rights Only Withdrawn

IMPORTANT NOTICES



LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
2762	Wsm	Jan 1, 2001	RESERVE FLOODING RIGHTS TO CONTOUR 905 FT G.S.C. ON AGUASABON RIVER
2786	Wsm	Jan 1, 2001	FLOODING TO H.E.P.C. TO CONTOUR 905 ON THE AGUASABON RIVER AND ETC
2816	Wsm	Jan 1, 2001	STAKING MAY BE RESTRICTED BY SEVERAL SECTIONS OF MINING ACT - P.E.J
2863	Wsm	Jan 1, 2001	SURFACE RIGHTS WITHDRAWN FROM STAKING PERMANENTLY BUFFER ZONE
2864	Wsm	Jan 1, 2001	LAND USE PERMIT FOR SLUDGE STORAGE
2965	Wsm	Jan 1, 2001	LAND UNDER LAKE SUPERIOR WITHDRAWN FROM STAKING BY O.C. DATED
Con Reserve	Wsm	Apr 6, 2001	Lake Superior North Shore Conservation Reserve
W-L-C2222	Wsm	May 14, 1999	SEC35 W-L-C2222/90 NOT MAY 14/99 M&S - Notice. This withdrawal area has now

UTM Zone 16
5000m grid

Those wishing to stake mining claims should consult with the Provincial Mining Recorder's Office of the Ministry of Northern Development and Mines for additional information as to the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines web site.

General Information and Limitations

Contact Information:
Provincial Mining Recorder's Office
Willet Green Miller Centre 833 Ramsey Lake Road
Sudbury ON P3E 8B5
Home Page: www.mndm.gov.on.ca/MNDM/MINES/LANDS/landmmpgpe.htm

Toll Free
Tel: 1 (888) 415-8945 ext 5789
Fax: 1 (677) 670-1444

Map Datum: NAD 83
Projection: UTM (5 degree)
Topographic Data Source: Land Information Ontario
Mining Land Tenure Source: Provincial Mining Recorder's Office

This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, flooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.



42D148E2009 2.24476 PRISKE



Scale 1:2000



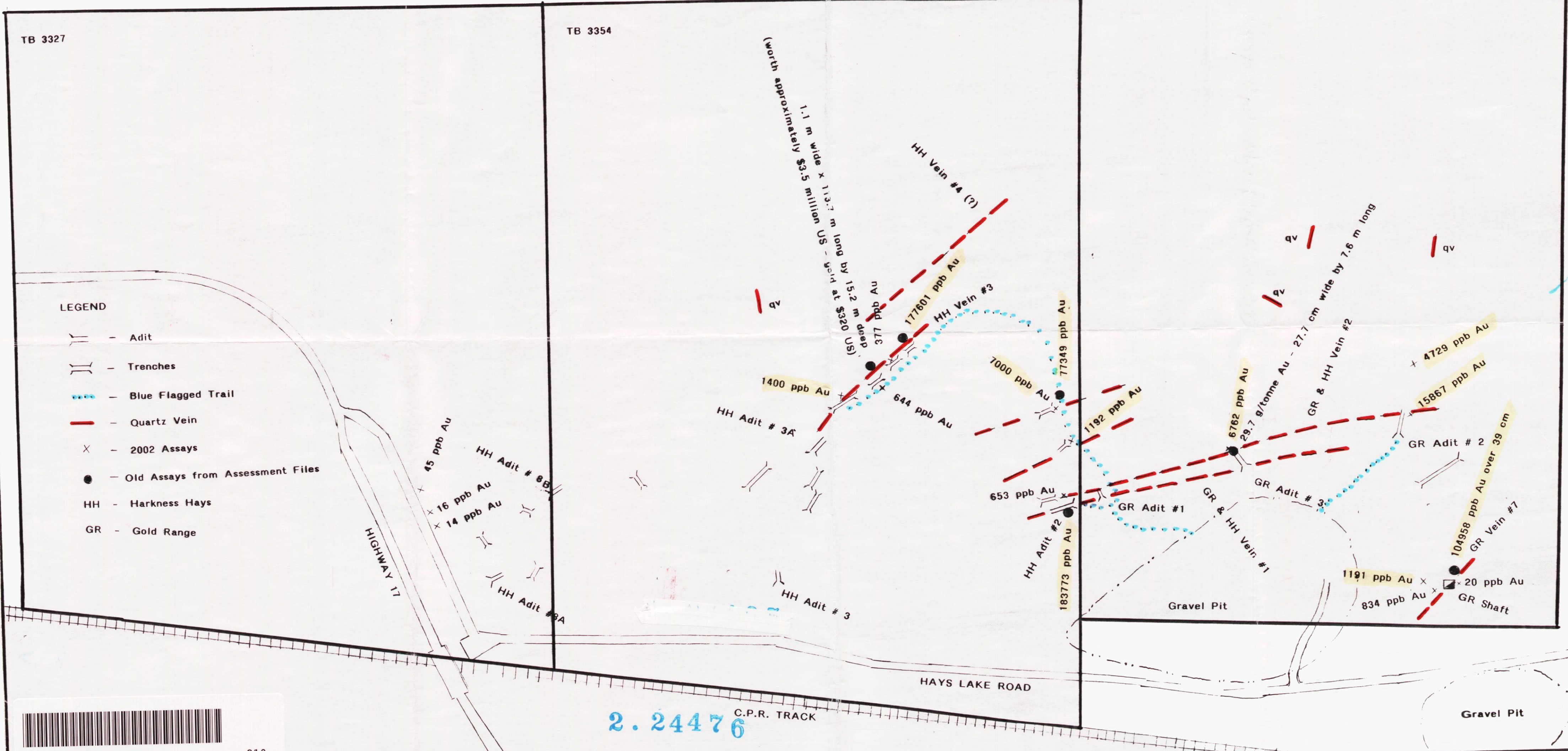
TB 3327

TB 3354

TB 1196889

LEGEND

- Adit
- Trenches
- Blue Flagged Trail
- Quartz Vein
- 2002 Assays
- Old Assays from Assessment Files
- HH - Harkness Hays
- GR - Gold Range



42D14SE2009 2.24476 PRISKE 210

Map G: Harkness Hays - Gold Range Property - showing location of the adits, shaft, veins and assays. (revised map of Schnieders, 1986)