2.30733

HARKNESS HAYS – GOLD RANGE

PROPERTY

K. G. Fenwick, P. Eng.
Historical Prospecting

October 18, 2005

HARKNESS HAYS – GOLD RANGE PROPERTY

TABLE OF CONTENTS

LIST OF FIGURES AND MAPS

Oct./05

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
Property composed of 3 staked claims and 2 patented claims.

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 central 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 - Carter, 1981) consists of felsic intrusive rocks of the Terrace Bay Batholith, in contact with predominantly mafic metavolcanics. In addition, minor felsic metavolcanics, tuff, lamprophyre dikes 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 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 alterered metavolcanics occurring predominantly within the metamorphic aureole of the Terrace Bay Batholith. Accessory metallic minerals include disseminated pyrite, chalcopyrite, sphalterite, 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:

Two 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 geological and compilation map (Map C) and a 1947 aerial photograph (Photo 9)as reference, the trenches and adit of Harkness Hays vein #3 were located and sampled. Also, the large gossan zone at the entrance and along Hays Lake Road was sampled and assayed. In total, eleven (11) samples were taken from the property (see Sample Table and Map E for results and location). We blue-flagged the way to four trenches and adit of HH Vein #3, and the adit north of sample F-22-05.

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

Map D indicates the location and date of all traverses. Map E indicates the location of all samples assayed. The Sample Table describes samples and gives assay results.

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 and gold-bearing alteration envelopes in the mafic metavolcanics.

In researching the geology of the property, I noted that there are six outcrops of lamprophyre dikes on Schnieders' (1986) and Carter's (1981) geological maps. DIAMONDS are being found in lamprophyre dikes east of Terrace Bay and most recently in the Timmins-Kirkland Lake area.

Only one sample (F-15-05) from the third trench going west on the Harkness Hays' Vein #3 assayed anomalous gold (3154 ppb Au). Quartz veining was only noted in the roof of the adit on Harkness Hays Vein #3. The chemical metasedimentary rocks (graphitic-pyrite slate, banded chert) are not anomalous in gold.

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 Photo #9 (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

Carter, M. W.
1961: Precambrian Geology of the Terrace Bay Area, West Sheet, Thunder Bay District; Ontario Geological Survey Preliminary Map P.2417,
Geological Series, Scale 1:15840 or 1 inch to ¼ mile. Geology 1980.

Marmont, Soussan
1984: The Terrace Bay Batholith and Associated Mineralization, Ontario Geological Survey Open File Report 5514, 95 p., 10 photos,
7 figures, 4 tables and 1 map in back pocket.

Patterson, G.C., Scott, J.F., Mason, J.K., Schnieders, B.R., MacTavish, A.D., Dukta, 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,
Miscellaneous Paper 134, 322 p.

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 E for locations)

Harkness Hays - Gold Range Property

Sample Number	Location	Description	Alteration/Mineralization	Assay Result
F-12-05	140 m uphill from Gold Range Adit #1	quartz vein with slivers of mafic metavolcanics	pyrite, chalcopyrite and possible galena	126 ppb Au 14 ppm Ag
F-13-05	Vein #3 - top of ridge second trench going west	fine-grained, black iron formation	- magnetic - pyrite stringers	8 ppb Au 5 ppm Ag
F-14-05	second trench east of F-13-05	bleached mafic metavolcanic	- cut by numerous small quartz veins - disseminated pyrite in qtz stringers & metavolcanic host rock - some brown hematitic weathered surface	399 ppb Au 5 ppm Ag
F-15-05	Vein #3 3rd trench going west - north wall	- bleached mafic metavolcanic	- many small pyrite cubes plus disseminated pyrite in seams and on faces	3154 ppb Au 8 ppm Ag
F-16-05	- 5th trench west - top entrance to adit	quartz vein	- disseminated pyrite thru-out - some small stratiated pyrite cubes	24 ppb Ag 2 ppm Ag
F-17-05	- east side of Hay Lake road - near Hwy 17	white quartz boulder (chert?) - very hard	some brown hematitic weathered surface	13 ppb Au 1 ppm Ag

Sample Number	Location	Description	Alteration / Mineralization	Assay Resa
F - 18 - 05	- near F-17-05 - talus debris with quartz boulders	fine grained quartz (chert?) - very hard	- brownish stain - vuggy	< 5 ppb Au < 1 ppm Ag
F-19-05	- near F-18-05 further west	- fine-grained felsic to mafic metavolcanics - non magnetic	- gossan area - lots of pyrite	< 5 ppb Au 4 ppm Ag
F-20-05	- west of F-19-05	- banded pyrite-chert	- vuggy pyrite rich seams - brown weathered surface	69 ppb Au 3 ppm Ag
F-21-05	- west of F-20-05 - along Hays Lake road	- 1½' wide graphitic seam with pyrite	- white to yellow weathered surface	104 ppb Au 5 ppm Ag
F-22-05	trench found up ridge	fine grained white quartz	- lots of pyrite cubes	7 ppb Au 2 ppm Ag

7.

Ken/Marilyn Fenwick

From: "Accurassay Laboratories" <assay@accurassay.com>
To: "Ken Fenwick" <kfenwick@shaw.ca>
Sent: Tuesday, July 19, 2005 4:43 PM
Attach: APPMPPB 72 200541083 050719.xls

Fenwick, Ken
Date Created: 05-07-19 11:11
AM
Job Number: 200541083
Date Recieved: 7/12/2005
Number of Samples: 11
Type of Sample: Rock
Date Completed: 7/18/2005
Project ID:

Accurassay #	Client Tag	Au PPB	Pt PPB	Pd PPB	Rh PPB	Ag PPM
	77876F-12	126				14
	77877F-13	8				5
	77878F-14	399				5
	77879F-15	3154				8
	77880F-16	24				2
	77881F-17	13				1
	77882F-18	<5				< 1
	77883F-19	<5				4
	77884F-20	69				3
	77885F-21	104				5
	77886F-21	114				6
	77887F-22	7				2

Sincerely,
Jason Moore
General Manager
Accurassay Laboratories
1070 Lithium Dr.
Thunder Bay, Ontario, P7B 6G3
(807) 626-1630
assay@accurassay.com

TOWNSHIP PRISKE

PLAN G-0631

2.30733

Harkness Hays-Gold Range Property

Bond, J

Kravchik, S

Renner, R

Fenwick, K

Leishman, D

Hacquoil, J

Skalesky, A

Christianson, D

Hwy 17

W-LL-C2222
ConReserve

Scale 1:40000
1km 0km 3km

Date / Time of Issue: Tue Sep 20 08:55:53 EDT 2005

Map A Claim Map of the Harkness Hays-Gold Range Property

Scale 1:15 840

Mile ¼ 0 ¼ ½ Mile

Metres 100 0 0.2 0.4 0.6 0.8 1 Kilometre

PRELIMINARY MAP P.2417

2.30733

Hays

Lake

Schreiber

East Pond

Lamont L.

Harkness Hays-Gold Range Property

Harknee Hays Mine Site

Gold Range Mine Site

Hwy 17

Harkness-Hayes Mine

Otisse Mine Au,Cu,Pb,py,po,gf

Au,Ag,Cu,Mo,Pb,Zn,po,py

Au,Ag,Cu,Pb,Zn

Mo,Cu Trenches

Mo,Cu,mag,po,py 6ch Trenches

Marley Showing

MICRO-WAVE TOWERS

Highrop L.

Dock(MNR)

Map B: Geological Map of the Schreiber Area

LEGEND[a]

PHANEROZOIC
CENOZOIC
QUATERNARY
Pleistocene and Recent
Sand, gravel, and swamp deposits

UNCONFORMITY

PRECAMBRIAN
MIDDLE TO LATE PRECAMBRIAN
MAFIC INTRUSIVE ROCKS(DIKES)

7
- 7a Diabase
- 7b Diabase, granophyric
- 7c Diabase, porphyritic
- 7d Lamprophyre
- 7e Olivine diabase

INTRUSIVE CONTACT

EARLY PRECAMBRIAN
FELSIC INTRUSIVE ROCKS

6
- 6 Unsubdivided
- 6a Syenite-diorite
- 6b Feldspar porphyry
- 6c Granite-tonalite
- 6d Porphyritic or porphyroblastic feldspar
- 6f Aplite
- 6g Hornblende
- 6h Hornblende-biotite
- 6k Biotite
- 6p Porphyritic quartz
- 6y Quartz-feldspar porphyry
- 6z Pegmatite

INTRUSIVE CONTACT

METAMORPHOSED MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

5
- 5a Diorite
- 5b Gabbro, amphibolite
- 5c Serpentinite

INTRUSIVE CONTACT

METAVOLCANICS AND METASEDIMENTS[b]
METASEDIMENTS

4
- 4a Chert, grey and black
- 4c Wacke
- 4f Wacke, garnetiferous
- 4r Graphitic shale with pyrite + pyrrhotite
- 4t Quartzite, grey
- 4u Chert-magnetite ironstone

METAVOLCANICS
Felsic Metavolcanics

3
- 3a Aphanitic
- 3b Porphyritic flows
- 3f Carbonatized

Intermediate Metavolcanics

2
- 2a Aphanitic
- 2b Lapilli tuff
- 2d Porphyritic flows
- 2j Amygdaloidal
- 2k Variolitic
- 2m Tuff

Mafic Metavolcanics

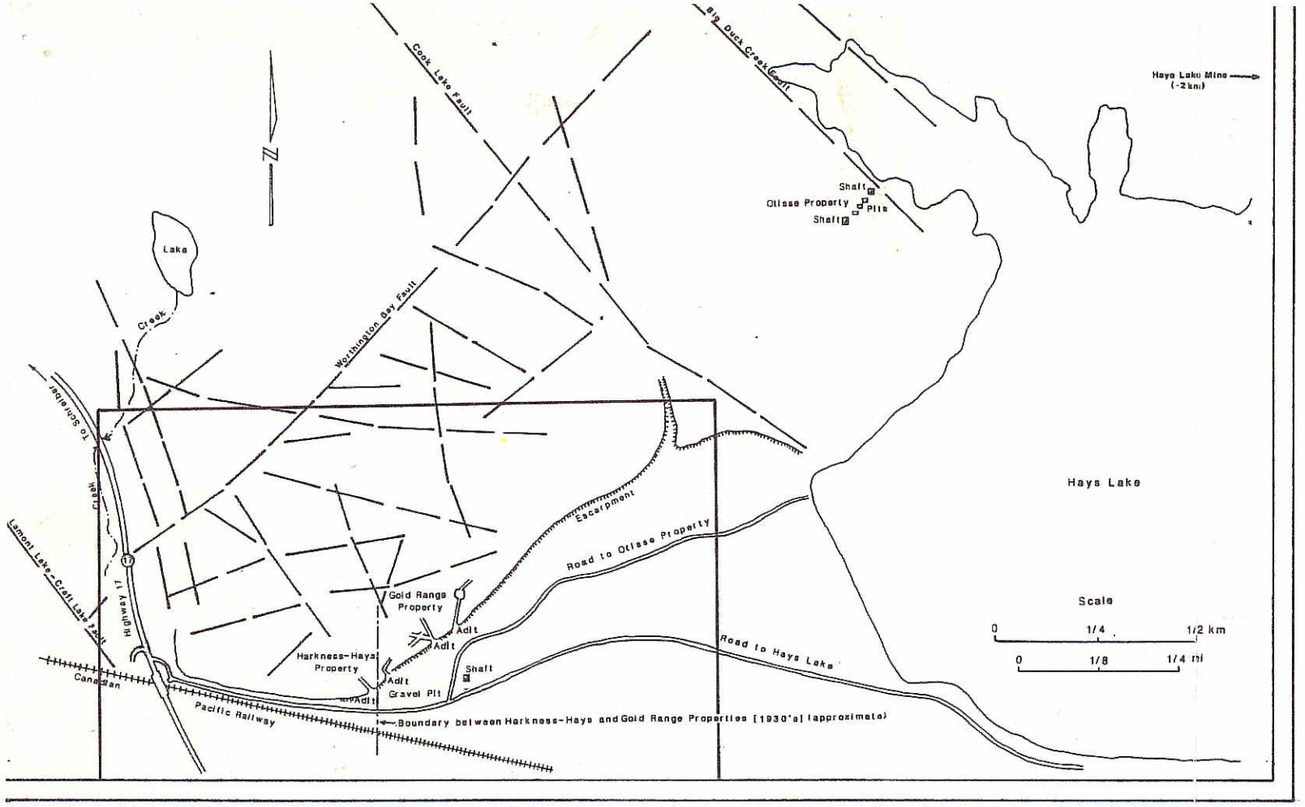
1
- 1a Aphanitic
- 1c Amygdaloidal
- 1d Amphibole schist, amphibolite, fine- to medium-grained
- 1e Pillowed
- 1j Porphyritic feldspar
- 1k Amphibolite-granite migmatite, contact rock
- 1m Tuff
- 1p Variolitic
- 1q Carbonatized

NOTES

[a]This is basically a Field Legend and may be changed as a result of subsequent laboratory investigations.

[b]Subdivision of major rock units does not indicate age relations.

PRECAMBRIAN GEOLOGY OF THE TERRACE BAY AREA



Legend

Map Units

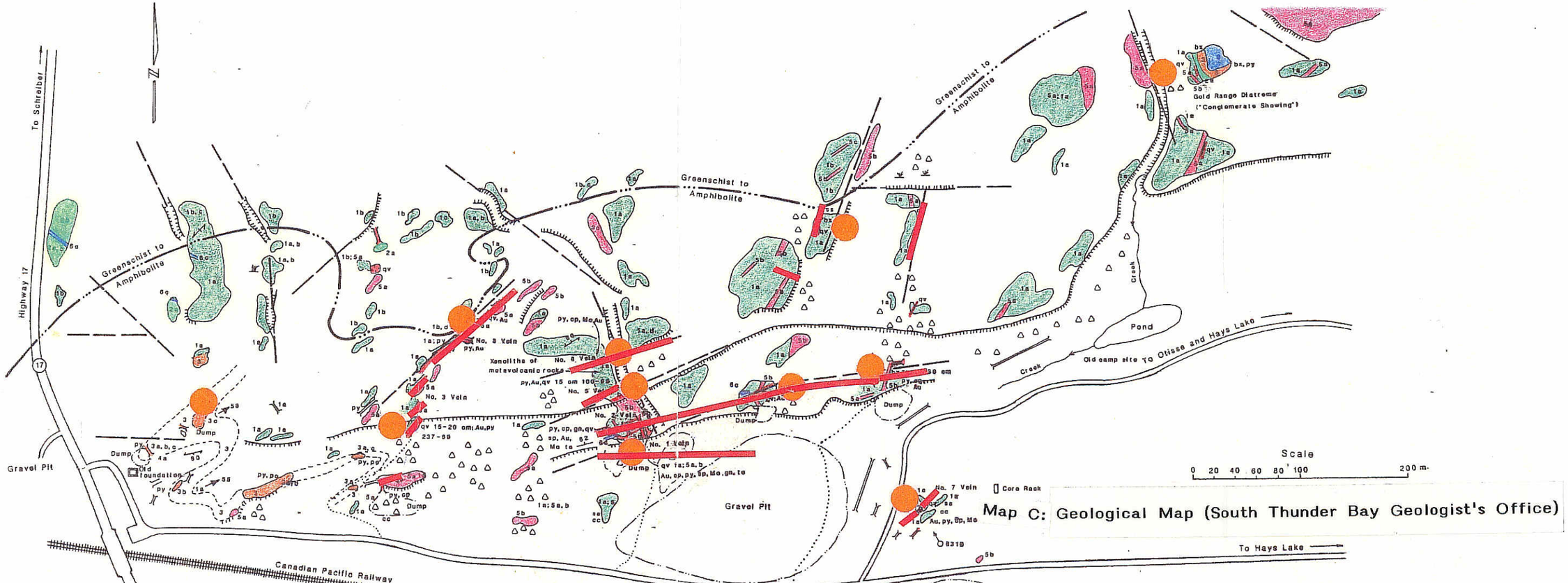
1) Mafic to intermediate Metavolcanic Rocks
   a) amphibolite
   b) basalt, massive
   c) chlorite schist
   d) pillowed flows
2) Intermediate to felsic Metavolcanic Rocks
   a) massive flows
   b) sericite schist (altered mafic rocks)
3) Chemical Metasedimentary Rocks-Iron Formation
   a) graphitic-pyritic slate
   b) massive pyrite
   c) chert
4) Clastic Metasedimentary Rocks
   a) slate
   b) greywacke
5) Felsic Intrusive Rocks
   a) quartz-feldspar porphyry (white)
   b) hornblende-biotite granite (red)
   c) aplite (white)
6) Mafic Intrusive Rocks
   a) metagabbro
   b) diabase
   c) lamprophyre

Mineral Symbols

Au Gold
gn Galena
py Pyrite
po Pyrrhotite
Mo Molybdenite
sp Sphalerite
cp Chalcopyrite
te Tellurides
cc Carbonitization
se Silicification

Symbols

8318 Diamond drill hole and number
bx Breccia
Quartz vein
Rock outcrop
Rock dump
Trench
Adit
Escarpment/valley
58 Direction and plunge of fold axis
80 Strike and dip of bedding
Geological contact assumed
Pit
Schistosity: vertical, inclined
Fault/lineament
Metamorphic isograd
Talus/talus slope
Gravel Pit
Swamp
Trail
Shaft
Dike



Map C: Geological Map (South Thunder Bay Geologist's Office)

TB 3327

TB 3354

TB 1196889

0 20 40 60 80 100 200 metres

Scale 1:2000

2.30733

N

July 8, 2005

July 7, 2005

HIGHWAY 17

HAYS LAKE ROAD

C.P.R. Track

Gravel Pit

Map D: Traverse locations and date done

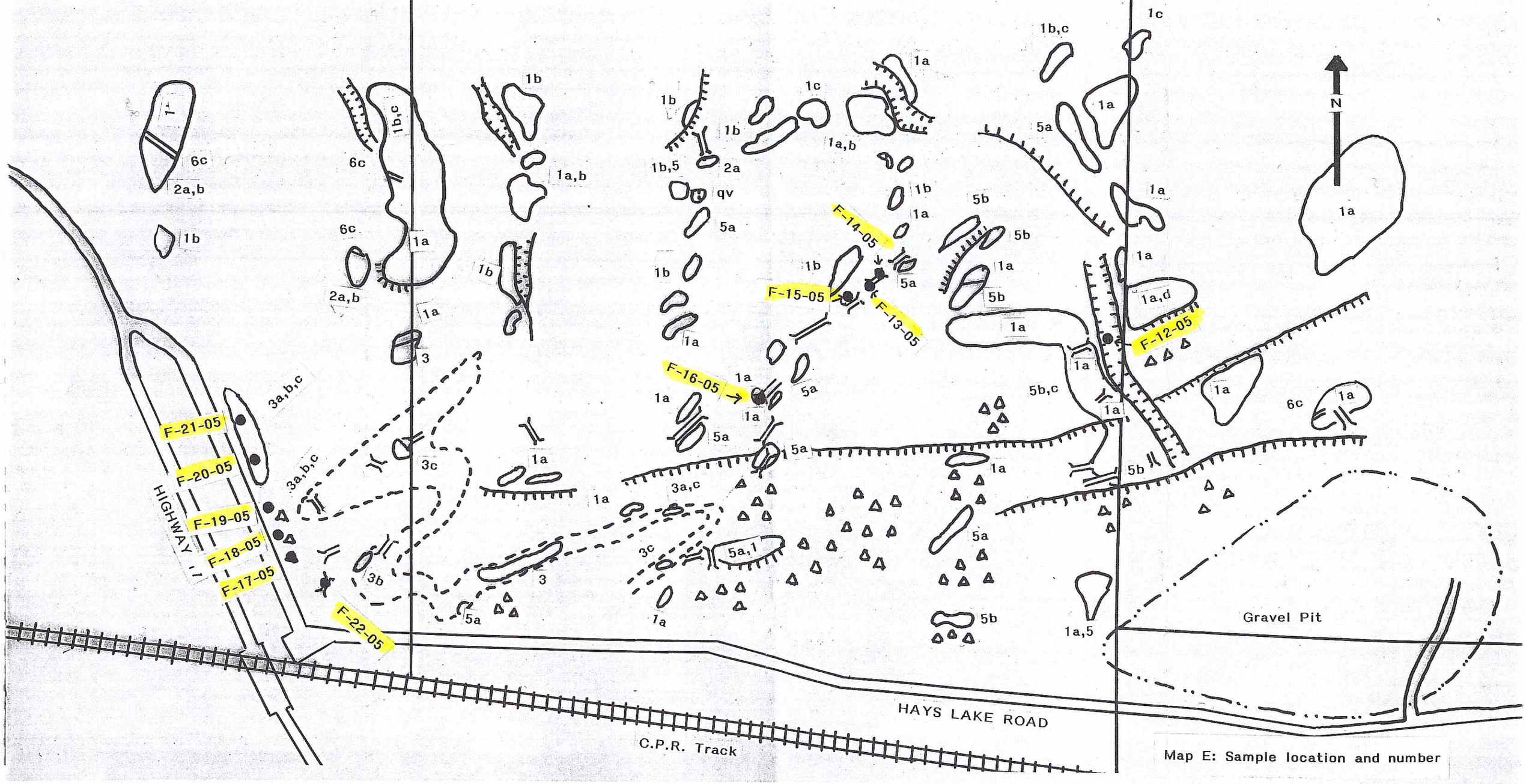
TB 3327 TB 3354 TB 1196889

0 20 40 60 80 100 200 metres

Scale 1:2000

LEGEND

● Sample location



Map E: Sample location and number

July 7, 2005

Haskins - Hays
K.F.
D.R.

back + 146430
home + 145932
498

adit on cut near top of ridge
- quartz with slivers of m.v.
- pyrite, chalcopyrite
galena?

F-12-05

2 pictures

First eastern trench
magnetite mafic rx - IF
possible garnets

Second trench from east end
IF with lots of pyrite

F-13-05

no picture

F-14-05

f.g. felsic rock with qz string
+ pyrite

3rd Trench

F-15-05

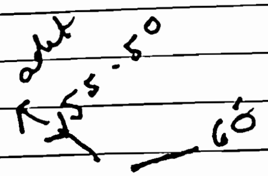
f.g. felsic rx + pyrite cubes
north wall

with IF + pyrite

4th Trench -
- f.g. felsic rock - bleached
- some pyrite
- f.g. mv. - magnetite

5th trench
adit at east end
F-16-05 2 pictures
host of ts well sheared
platy quartz rx
small glistening
N 70° E · 70 N
goes in at least 20'

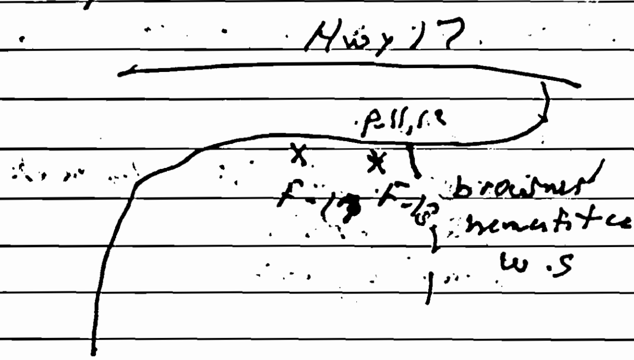
last trench - N 60° E



216.7 Km to Red Dog Inn

July 8, 2005

Hackmore ~Lts
KF . 10 a



F-17-05

- f.g white qtz boulder
- no visible sulphides

P - 9, 10

P-11-12 talus debris with many qtz boulders

F-18-05 from talus

P-13-14

Some very large qtz boulders
greenish to brown
weathering surface
vuggy in places

farther west - rusty stain
to dark brown - gossan area.

F-19-05

- f.g : felsic to mafic meta
- lots of pyrite
  non-magnetic

near end

banded pyrite - chert
125° - 60 NE

F-20-05

f.g quartz chert, banded
vuggy pyrite rich seams

P-20-21 ?

F-21-05

- graphite seam with pyrite
  1½" wide

P-22-23
white to yellow w 6

F-22-05

- sample D on brought back from adit
- good f.g quartz well lots of pyrite
- from small trench before adit

entrance to adit

6' x 8' - 20' at least in
high across

250 paces up from
~~[illegible]~~ concrete form
- blue flagged off

from D-F-22
~~P-24 56 05~~

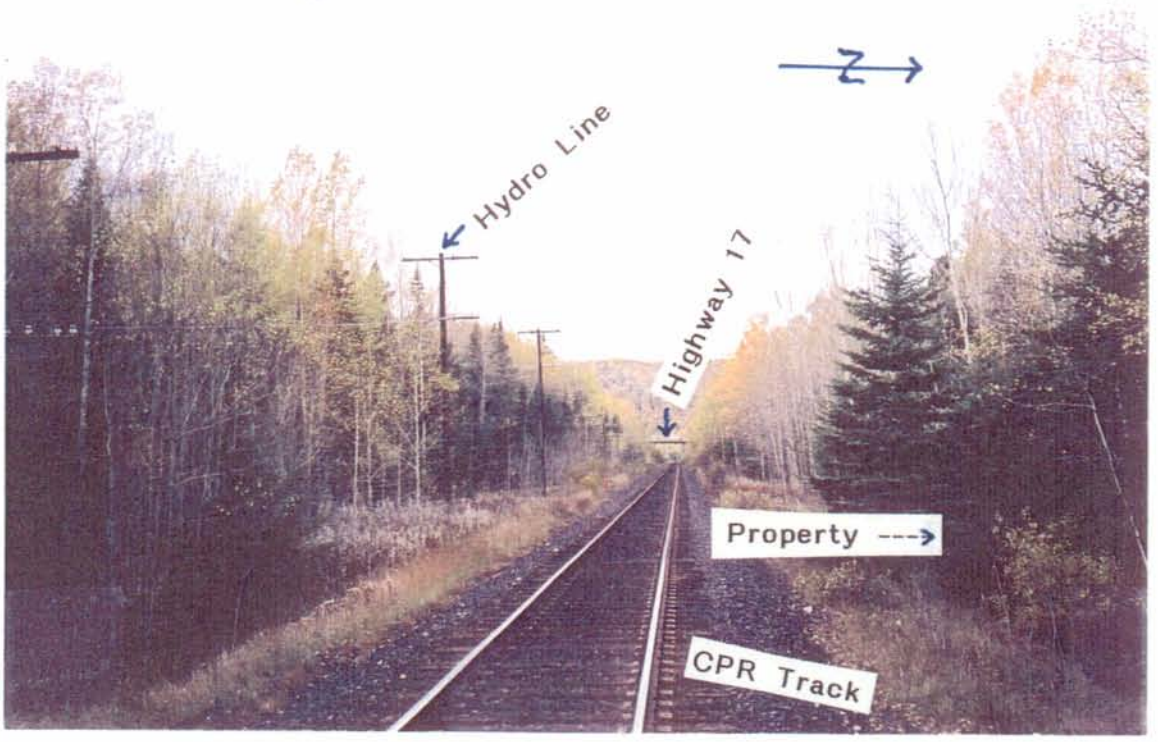


PHOTO #1: C.P.R. Track and Hydro line form the southern boundary of the property.

PHOTO #2: Filled-in trench on Vein #3.

PHOTO #3: Entrance to adit at west end of Vein #3. Sample: F-16-05.

PHOTO #4: Chert debris along east side of Hays Lake Road. Sample: F-18-05.

PHOTO #5: Gossan Zone - Mafic Metavolcanics with abundant pyrite. Sample: F-19-05.

PHOTO #6: Banded Chert-Pyrite. Sample: F-20-05.

PHOTO #7: Graphitic Seam with Pyrite. Sample: F-21-05.

PHOTO #8: Adit at top of hill - north of Sample: F-22-05.

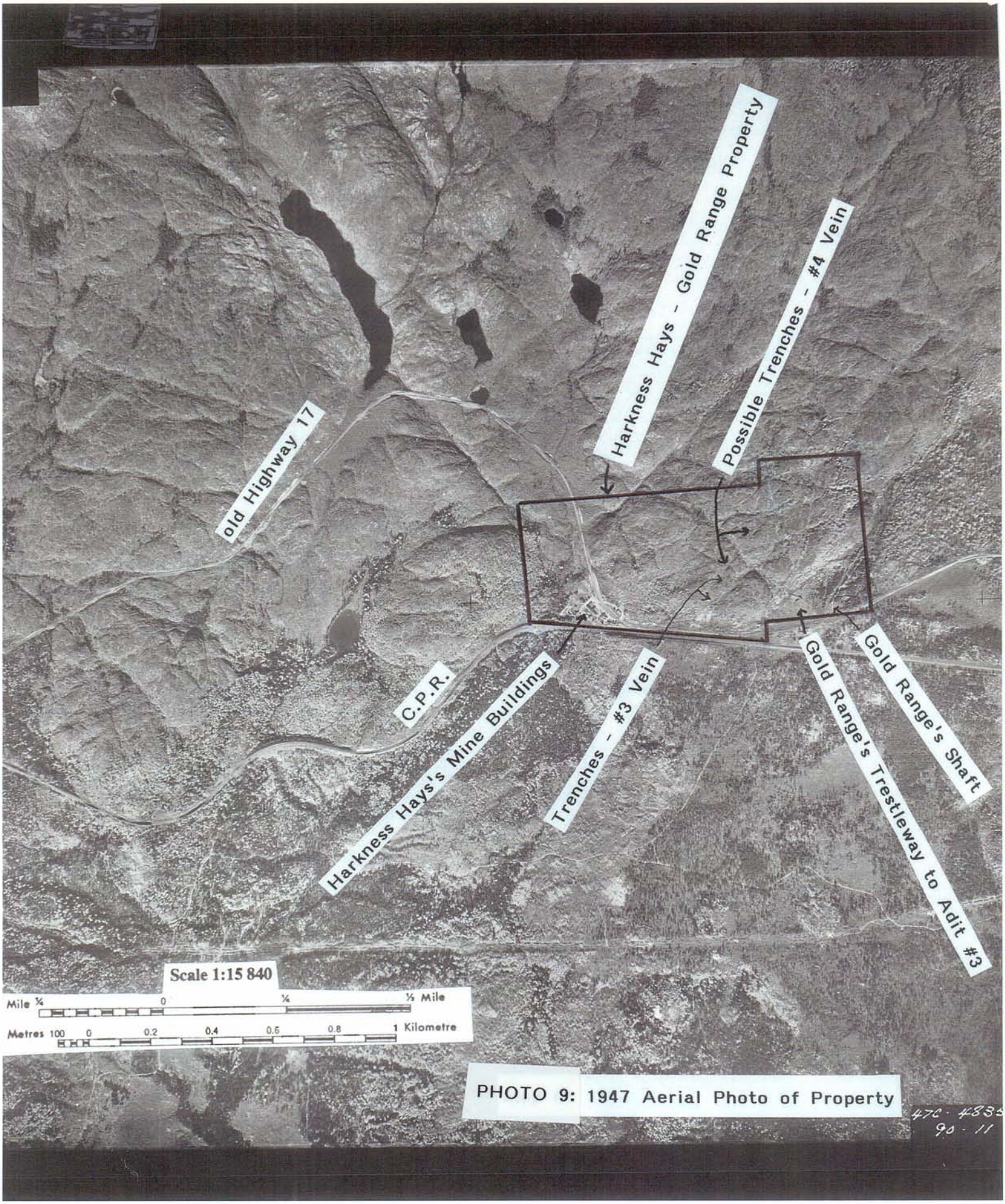


PHOTO 9: 1947 Aerial Photo of Property

47C · 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.

(Schnieders 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 .**

Schnieders et al., 1996

HISTORICAL PROSPECTING

I, KENNETH GEORGE FENWICK, DO HEREBY CERTIFY THAT:

1. I HAVE GRADUATED FROM QUEEN'S UNIVERSITY, KINGSTON, ONTARIO, CANADA, WITH A B.SC. IN GEOLOGICAL ENGINEERING AND FROM MICHIGAN TECHNOLOGICAL UNIVERSITY, HOUGHTON, MICHIGAN, WITH A M.SC. IN GEOLOGY.

2. I WAS EMPLOYED, BEFORE RETIREMENT, BY THE ONTARIO GEOLOGICAL SURVEY, FOR THIRTY-FIVE YEARS, OF WHICH TEN YEARS WERE SPENT AS PARTY CHIEF, DOING GEOLOGICAL MAPPING AT A SCALE OF 1 INCH TO ONE QUARTER MILE, REPORT WRITING AND MAP PREPARATION.

KENNETH FENWICK.