ASSESSMENT REPORT

Magnetometer Survey

Hayes Creek Area, Yukon

N.T.S. 115J/9, 115I/12

L. Walton
September, 1987

This report has been examined by the Geological Evaluation Unit under Section 41 Yukon Placer Mining Act and is recommended as allowable representation work in the amount of $ 3800.0 .

S. R. Mair

Chief Geologist, Exploration and Geological Services Division, Northern Affairs Program for Commissioner of Yukon Territory.

1. Introduction

This report outlines the results of a magnetometer survey in the Hayes Creek-Sonora Gulch area. The purpose of the survey was to delineate magnetite bearing zones in local gulch placer deposits. Three creeks were surveyed - Two Cabin Gulch, Old Klines Gulch and Peters Gulch (also known as Two Mile Gulch). Two Cabin Gulch and Peters Gulch are unofficial names.

The author and an assistant flew into the property on September 5, 1987. A placer mining camp belonging to Jan Martensson and Warren Arnholtz was used as a base camp. September 6 was spent locating Two Cabin Gulch and Old Klines Gulch. A grid was established over the stream channel in Two Mile Gulch and magnetometer readings were taken. September 7 was spent establishing a grid and doing a magnetometer survey over the stream channels in Old Klines Gulch and Peters Gulch. The crew flew to Carmacks and then drove back to Whitehorse that night.

2. Location and Access

The Hayes Creek-Sonora Gulch area is located in the Dawson Range 267 km northwest of Whitehorse (Figure 1). The three creeks investigated are situated between latitude 62° 35' to 62° 40' and longitude 138° 00' to 138° 05' on N.T.S. mapsheets 115J/9 and 115I/12.

Access to the property was by Trans North Turbo Air Bell 206 Jet Ranger helicopter based in Carmacks, 103 km southeast of the properties. Winter access is by winter roads from the Carmacks-Mt. Freegold Road (60 km) or from Minto (64 km).

3. Property

The following placer claims are held by Jan Martensson and Warren Arnholtz. The locations of the claims are shown in Figure 2.

Creek	Claim Name	Grant Number
Two-Cabin Gulch	Erik 1	P23283
	Erik 2	P23286
Old Klines Gulch	Klines 1	P23284
	Klines 2	P23287
Peters Gulch	Toby 1	P23282
	Toby 2	P23285
Sonora Gulch	Sonora 1-13	P3470 to P3482

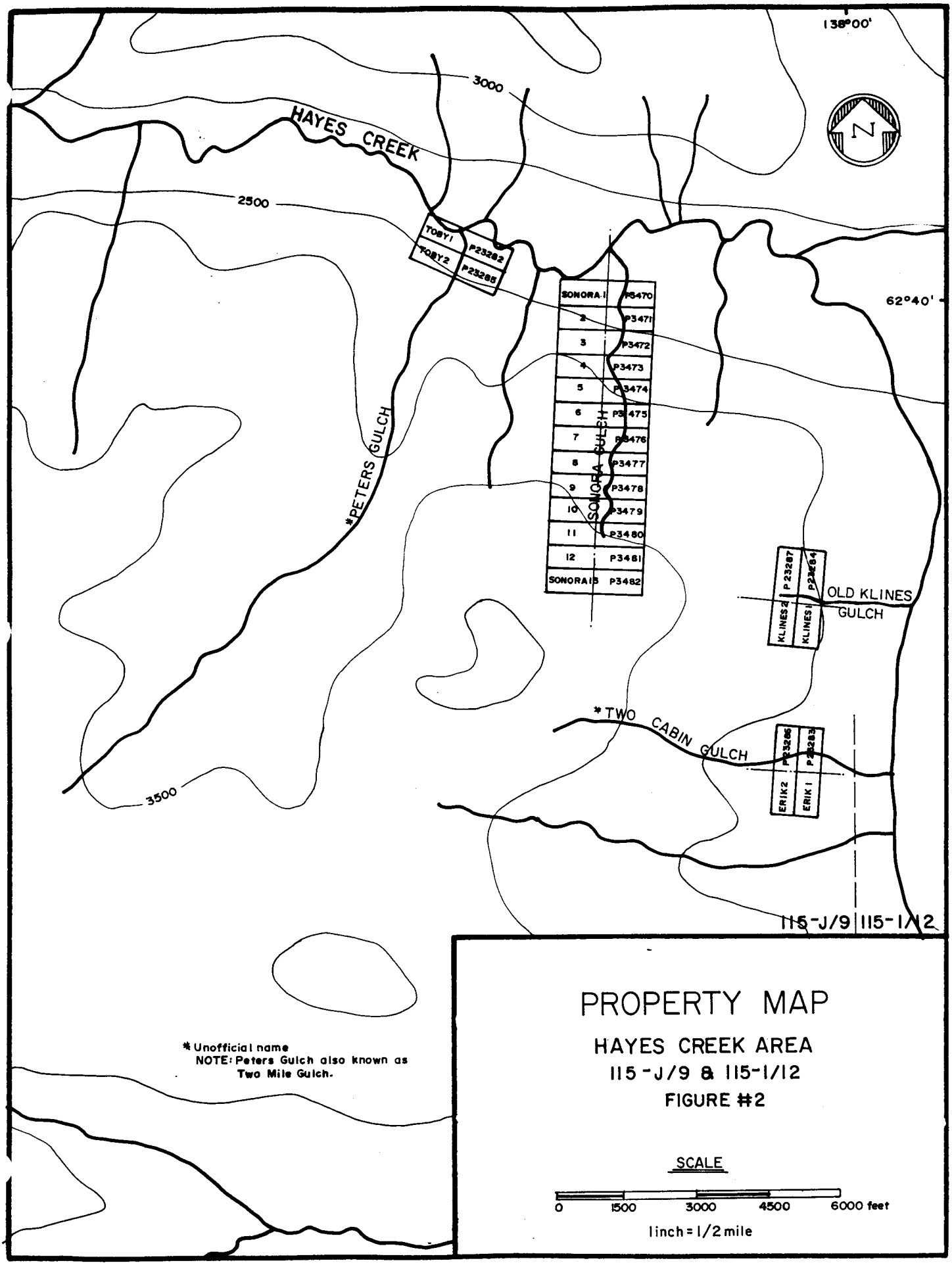
LOCATION MAP

HAYES CREEK AREA

115-J/9 & 115-I/12

FIGURE #1

SCALE 1:2,500,000



PROPERTY MAP

HAYES CREEK AREA

115-J/9 & 115-I/12

FIGURE #2

SCALE

0 1500 3000 4500 6000 feet

1 inch = 1/2 mile

*Unofficial name
NOTE: Peters Gulch also known as Two Mile Gulch.

4. History

The history of the area is summarized in private company reports by Watson (1979) and Douglas (1982). Placer gold was first discovered in Old Klines Gulch in 1898. Over 500 oz. of Au was reportedly recovered from the mouth of Old Klines Gulch during the early 1900's. Old Klines Gulch, and the other creeks in the area have been worked intermittently since then. Sonora Gulch was most recently worked in the 1970's and contains coarse gold and tetradymite (a bismuth telluride mineral). Old Klines Gulch was most recently worked in 1981. Permafrost and lack of water available for sluicing hamper placer mining in the area.

The bedrock potential of the area has been investigated by Hudson Bay Mining and Smelting, from 1976 to 1983. More recently, Hayes Resources completed a trenching program in 1985.

5. Bedrock Geology

The area investigated is underlain by three main rock units.

1. Yukon Group quartz-mica schists and quartz-biotite gneisses, which are probably Paleozoic and/or older.

2. Rhyolite porphyry intrusive plug of Tertiary age and associated dykes.

3. Coffee Creek Granite/Quartz Monzonite of Cenozoic age.

The Yukon Group rocks have been faulted, and several alteration zones have been noted in diamond drill holes.

For a detailed description of the geology of the area, the reader is referred to Tempelman-Kluit (1974).

6. Placer Creeks

The three placer creeks investigated are tributaries of Hayes Creek. Two Cabin Gulch and Old Klines Gulch flow east into Hayes Creek. Peters Gulch flows north into Hayes Creek. The creeks cut a bedrock terrace located above Hayes Creek. Up to 30 m of gravels overlie the terrace. The area has not been affected by the most recent glaciation. The three creeks surveyed are all cut close to bedrock.

7. Magnetometer Survey

A fluxgate II magnetometer was used for the survey. Corrections were applied and the readings were tied into the baseline. The results were plotted and contoured and are shown in Figures 3, 4 and 5.

a. Two Cabin Gulch

The baseline for the magnetometer survey was run at 90°. The start of the baseline (B/L=0E) is situated 18 m south of the No. 2 post for the Erik 2 placer claim. Pickets were spray painted orange and placed at 20 m intervals along the baseline. The pickets were labelled "Mag B/L 0E" to "Mag B/L 260E". Crosslines every 20 m were run at 90° to the baseline. Readings were taken every 5 m along the crosslines. Reading stations on the crosslines were marked with orange flagging tape.

The creek in the vicinity of the grid is 1 m or less in width and has a slow to medium flow rate. It is continuous except near the start of the baseline (0E), where it has emerged from an underground channel approximately 15 m long. The stream channel averages about 50 m in width and is covered by bushes and moss. Medium to steep sloped banks border both north and south sides of the stream channel. A narrow, nearly stagnant secondary stream occurs in the southeast part of the grid.

The results of the survey are shown in Figure 3. A magnetic high occurs south of the baseline from 0E to 40E. The anomaly persists onto the stream bank at the south end of the stream channel. The anomaly may be a function of depth to bedrock, or the type of bedrock. A weaker anomaly is situated at the No. 2 Post for the Erik 2 claim.

The middle of the grid (from 40E to 180E) is in a relatively non-magnetic area. The magnetic readings from 180E to 260E are slightly elevated in relation to the rest of the grid (except the southwest corner). A faintly visible, mossy, vegetation covered knob was noted in this area of the stream channel. A magnetic low in the northeast corner of the grid may reflect bedrock with a low magnetic signature.

b. Old Klines Gulch

The baseline for the magnetometer survey was run at 100°, starting from a point 18 m south and 5 m west of the No. 1 post for the Klines 1 placer claim. Pickets were spray painted orange and placed at 20 m intervals (from 0W to 260W). The pickets were labelled "Mag B/L 0W" to "Mag B/L 260W". Crosslines every 20 m were run at 90° to the baseline. Readings were taken every 5 m along the crosslines. Reading stations on the crosslines were marked with orange flagging tape.

The creek in Old Klines Gulch averages 1 m wide and is continuous. The claims are situated above the 1981 workings on the creek, where orange-rust weathering bedrock is exposed. The stream channel is up to 45 m wide and has a thick vegetation cover of alder, willow and moss. The stream has cut down 2 m into the current stream channel. Stagnant ponds and small swampy areas were noted south of the baseline.

The results of the survey are shown in Figure 4. There is a magnetic high in the extreme northwestern corner of the grid, up on the stream bank. There is another high at 260W, 15S; however, several abandoned fuel drums were noted in this area and may have influenced the readings. The area south of the baseline on line 240W is anomalous. There is a linear E-W trending anomaly south of the baseline on lines 160 W, 180 W and 200 W. The readings for the area between lines 0W and 140W are relatively low. There is a medium range spot anomaly at line 80W, 5S and a broader medium range anomaly at the south end of lines 80W to 20W.

c. Peters Gulch

The baseline was run at 90°, starting from a point 35 m south of the No. 1 post for the Toby 1 claim. Orange spray painted pickets were placed every 30 m along the baseline. The pickets were labelled "Mag B/L 0S" to "Mag B/L 270S". At B/L 150 S, the baseline azimuth was changed to 210°, to follow a change in direction of the creek. Crosslines every 30 m were run at 90° to the baseline and readings were taken every 5 m along the crosslines. Reading stations on the crosslines were marked with orange flagging tape.

From B/L 0S to B/L 150S, the stream channel was very narrow; only 5 m wide in most places and bordered by steep, nearly vertical banks. At B/L 150S, the direction of the stream changed, and the stream channel became wider-up to 30 m. An old shaft was noted in this area.

The results of the survey are shown in Figure 3. It was decided to use only the readings from B/L 150S to B/L 210S, since this is where the stream channel becomes wider. Despite minimal magnetic readings, Figure 5 shows a vague, weakly anomalous area in the stream channel which follows the trend of the present stream.

8. Summary and Conclusions

The author and assistant camped in the Hayes Creek-Sonora Gulch area (N.T.S. 115J/9, 115I/12) from September 5 to September 7, 1987.

Magnetometer surveys were conducted over stream channels on three sets of claims owned by Jan Martensson and Warren Arnholtz.

On Two Cabin Gulch, the magnetic survey revealed three zones. A magnetic high occurs in the southwest part of the grid. The center of the grid is relatively non-magnetic, while the western part of the grid is slightly elevated relative to the center part.

On Old Klines Gulch, the magnetic survey showed an

anomaly in the west part of the grid. A linear anomaly paralleling the creek was outlined in the central west part of the grid. Another anomaly was outlined in the south part of the grid from 20W to 100W. Both of the above mentioned anomalies would be good placer targets.

On Peters Gulch, magnetic readings were limited; however, a vague magnetic high paralleling the creek was outlined in an old stream bed in the south part of the grid. This grid should be extended to the south.

REFERENCES

Douglas, G., 1982, Private Company Report.

Tempelman-Kluit, D.J., 1974, Reconnaissance Geology of Aishihik Lake, Snag and part of Stewart River Map-Areas, West Central Yukon: Geological Survey of Canada Paper 73-41.

Watson, K., 1982, Private Company Report.

APPENDIX I - Statement of Costs

Salaries and Wages	
Geologist and assistant - six days @$250/day	$1500.00
Drafting - 12 hrs. @$15/hr.	$180.00
Camp and Office Supplies	
Camp equipment and supplies	$25.00
Food	$120.00
Office supplies	$25.00
Transportation	
Vehicle Rental - $44/day @ $.28/km	$230.00
Fuel	$56.00
Helicopter - 2.8 hrs @$550/hr.	$1540.00
Fuel	$159.60
TOTAL	**$3835.60**

APPENDIX II - Personnel and Contractors Employed

Geologist
L. Walton
409 Black Street
Whitehorse, Yukon
Y1A 2N2

Assistant
D. Ouellette
409 Black Street
Whitehorse, Yukon
Y1A 2N2

Drafting
Geological Drafting Services
36 Redwood Streed
Whitehorse, Yukon
Y1A 4B3

Helicopter
Trans-North Turbo Air Ltd.
Carmacks

CERTIFICATE OF QUALIFICATIONS

I, Lori A. Walton with business address:

United Keno Hill Mines Limited
409 Black Street
Whitehorse, Yukon
Y1A 2N2

do hereby certify that:

1. I am a practicing geologist.

2. I hold a Bachelor of Science (Specialization) Degree (1982) in Geology from the University of Alberta.

3. I hold a Graduate Gemologist Degree (1983) from the Gemological Institute of America in California, U.S.A.

4. I hold a Master of Science Degree (1987) in Economic Geology from the University of Alberta.

5. I have been working in the field of mineral exploration since May of 1980.

6. This report entitled "Assessment Report, Magnetometer Survey, Hayes Creek Area, Yukon" is based on my work on the properties on September 5,6 and 7, 1987.

7. I have not received nor do I expect to receive any interest, either directly or indirectly, in the properties concerned in this report.

Respectfully submitted,

Lori A. Walton,
M.Sc., G.G.

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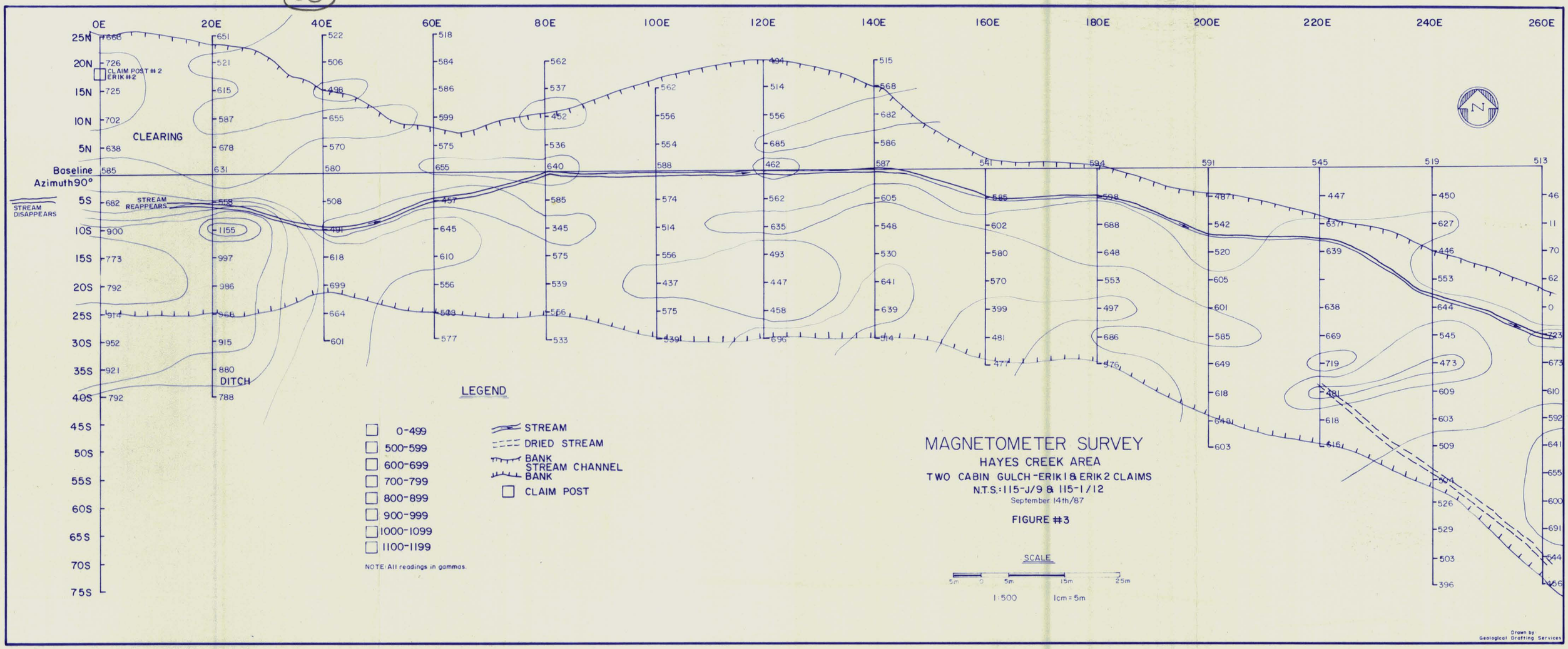
0E
20E
40E
60E
80E
100E
120E
140E
160E
180E
200E
220E
240E
260E
25N
20N
15N
10N
5N
Baseline
Azimuth 90°
5S
10S
15S
20S
25S
30S
35S
40S
45S
50S
55S
60S
65S
70S
75S
CLAIM POST #2
ERIK #2
CLEARING
STREAM DISAPPEARS
STREAM REAPPEARS
DITCH
LEGEND
0-499
500-599
600-699
700-799
800-899
900-999
1000-1099
1100-1199
NOTE: All readings in gammas.
STREAM
DRIED STREAM
BANK
STREAM CHANNEL
BANK
CLAIM POST
N
MAGNETOMETER SURVEY
HAYES CREEK AREA
TWO CABIN GULCH - ERIK 1 & ERIK 2 CLAIMS
N.T.S.: 115-J/9 & 115-I/12
September 14th/87
FIGURE #3
SCALE
5m 0 5m 15m 25m
1:500 1cm = 5m
Drawn by
Geological Drafting Services

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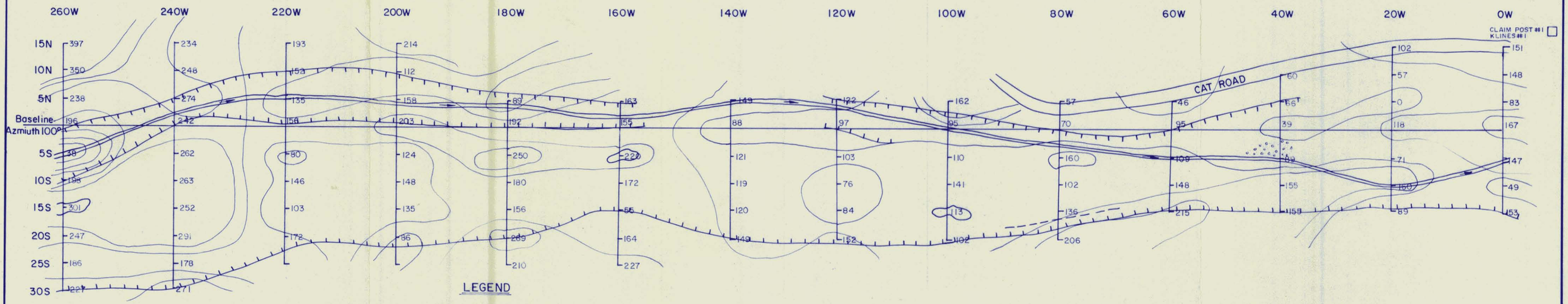

LEGEND

- 0-49
- 50-99
- 100-149
- 150-199
- 200-249
- 250-299
- 300-349
- 350-399

NOTE: All readings in gammas.

- STREAM
- NARROW STAGNANT STREAM
- STAGNANT POND
- GRAVEL
- CLAIM POST
- BANK
- STREAM CHANNEL
- BANK

MAGNETOMETER SURVEY

HAYES CREEK AREA

OLD KLINES GULCH-KLINES 1 & KLINES 2 CLAIMS

N.T.S.: 115-J/9 & 115-1/12

September 14th/87

FIGURE 4

SCALE

5m 0 5m 15m 25m

1:500 1cm = 5m

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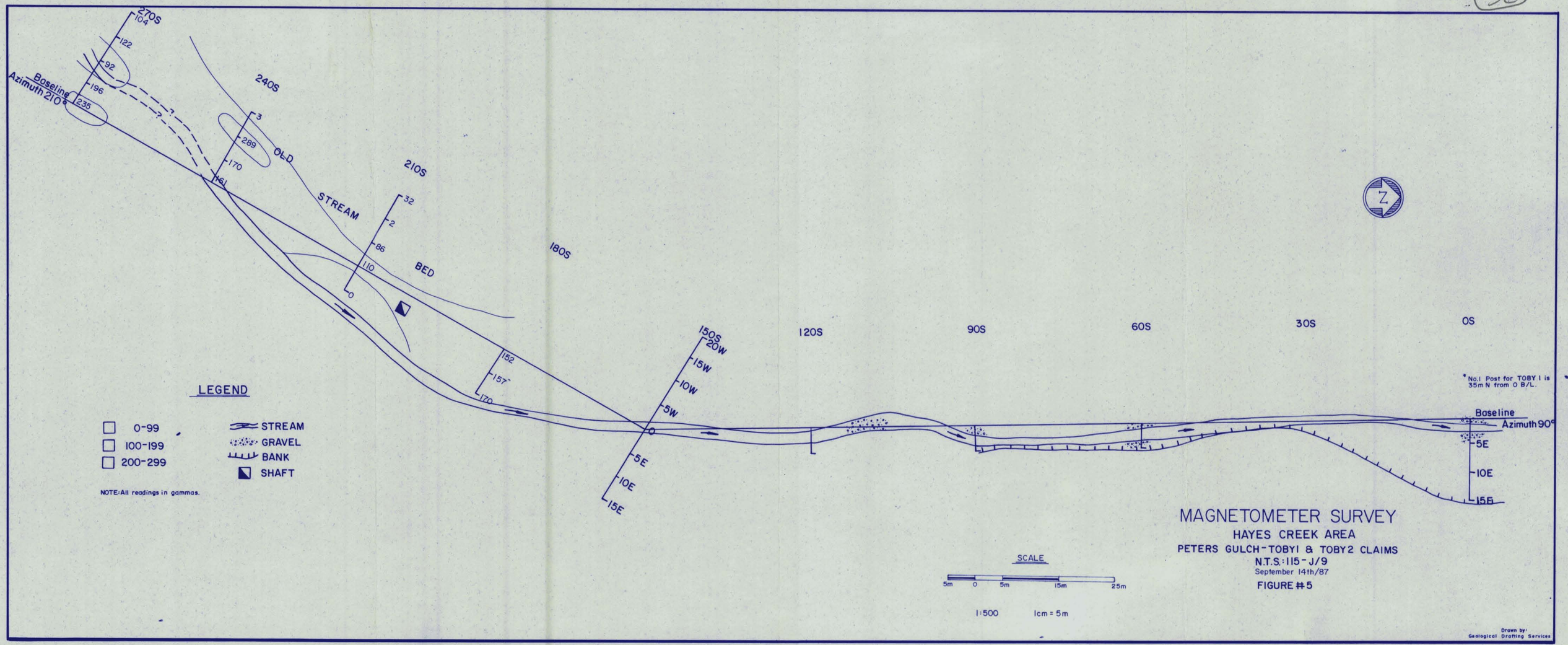

MAGNETOMETER SURVEY

HAYES CREEK AREA

PETERS GULCH - TOBY1 & TOBY2 CLAIMS

N.T.S: 115 - J/9

September 14th/87

FIGURE #5

Drawn by:
Geological Drafting Services