350 000 E.
350 100 E.
350 200 E.
350 300 E.
350 400 E.
5359 000 N.
5 358 900 N.
5 358 800 N.
5 358 700 N.
5 358 600 N.
5 358 500 N.
PC 295
PC 294.
PC 293.
SB 49
SB 50
SB 51
SB 52
SB 53
Line 500 W
Line 400 W
Line 300 W
Line 200 W
470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
430
440
450
420
410
400
390
380
370
360
350
340
330
320
310
430
440
420
410
400
430
440
450
460
470
430
440
450
420
410
400
390
380
370
360
350
340
330
320
310
315·8
311·4
315·8
315·9
317·1
324·8
324·9
328·2
331·8
332·1
334·4
342·8
348·9
348·0
354·1
353·6
364·8
364·9
375·6
375·6
377·1
376·1
381·8
381·6
384·9
387·8
387·5
389·8
389·7

DATE	SVY.	AMENDMENT	F.B. REF.
FEB 82	S.W	DIGITIZED CONTOURS FROM 1:2000 ADDED.	

RENISON LIMITED

5 cm

SCALE. 1:500. METRES

DRAWN	
TRACED	
DATE	
SCALE	
DRAWING No.	TF6

85 - 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)

323

Heemskirk Granite Area
Standard
TF6 Survey
Contours
1:500
at
Access

350 000 E.
350 100 E.
350 200 E.
350 300 E.
350 400 E.
5 360 000
5 359 900 N.
5 359 800 N.
5 359 700 N.
5 359 600 N.
5 359 500 N.

Haulage Winder House ??
449·5
449·6
AM 489
460·6
468·6
468·5
482·6
482·8
Haulage Way
AM486
492·5
491·5
494·0
488·2
487·9
Water.
488·1
493·3
497·7
AM487
495·3
491·3
499·7
AM485
501·3
AM485
498·4
AM488
AM488.
494·4
592·9
Winch House ??
500·0
502·6
434·6
506·8
495·2
510·3
509·3
510·4
506·21
511·2
510·5
AM 484
510·8
509·2
BLACK FACE WORKINGS
Trench
512·6
511·7
511·3
515·2
505·6
506·5?
513·9
AM 480
514·2
AM483
505·8
514·1
513·9
514·1
520·4
521·4
520·9
521·0
522·5
522·0
Trench
521·0
Inclined Shaft.
S-2068
519·6
519·9
518·5
Trench.
518·9

5 cm

RENISON LIMITED
CENTRAL FEDERATION WORKINGS
DRAWN
TRACED
DATE
SCALE
DRAWING No.
SCALE. 1:500. METRES
TF6

Heemskirk Granite Area
STANDARD
TF6. CENTRAL FEDERATION WORKINGS
1:500

85 – 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)
32

350 400 E.
350 500 E.
350 600 E.
350 700 E.
350 800 E.
5 359 000 N.
5 358 900 N.
5 358 800 N.
5 358 700 N.
5 358 600 N.
5 358 500 N.

PC 303
PC 302.
PC 301.
PC 323.
PC 300
PC 299
PC 322
PC 321
PC 298
PC 297.
PC 320
PC 296
AM 491.
S-2048.
AM 614
AM 613
AM 616
AM 617
SDDH FED 1 inc -55° 07' Collar RL 420 AD
Line. 100 E.
Line.
100 WEST.

AMENDMENT | F.B. REF.
DIGITIZED CONTOURS FROM 1:2000 ADDED.

RENISON LIMITED

5 cm

SCALE. 1:500. METRES

DRAWN
TRACED
DATE
SCALE
DRAWING No.
TF7

Heemskirk Granite Area
Standard TF7. Survey Original
1:500 Contours & pieces

85 - 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)

325

LAKE CUMBERLAND

350800 E
350900 E
351000 E
351100 E
351200 E
5359000 N
5358900 N
5358800 N
5358700 N
5358600 N
5358500 N

DATE	SVY.	AMENDMENT	F.B. REF.
MAR 82	S.W.	DIGITIZED CONTOURS FROM 1:2000 ADDED.	

RENISON LIMITED

5 cm

SCALE. 1:500. METRES

DRAWN	
TRACED	
DATE	
SCALE	1:500
DRAWING No.	TF-8

Heemskirk Granite Area
Survey Data Final
TF8
Contours & Access
1:500
Strongarm

326

85 - 2486
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)

351200 E
351300 E
351400 E
351500 E
351600 E
5359000 N
5358900 N
5358800 N
5358700 N
5358600 N
5358500 N
JB.247 429·8
JB.248 421·9
JB.249 408·3
JB.250 412·6
JB.251 386·1
× 1140 N 500 E
× 1170 N 200 E
× 1140 N 300 E
× 1140 N 400 E
× 1170 N 400 E

DATE	SVY.	AMENDMENT	F.B. REF.
JAN' 82.	S.W.	DIGITIZED CONTOURS FROM 1:2000 ADDED.	

RENISON LIMITED

5 cm

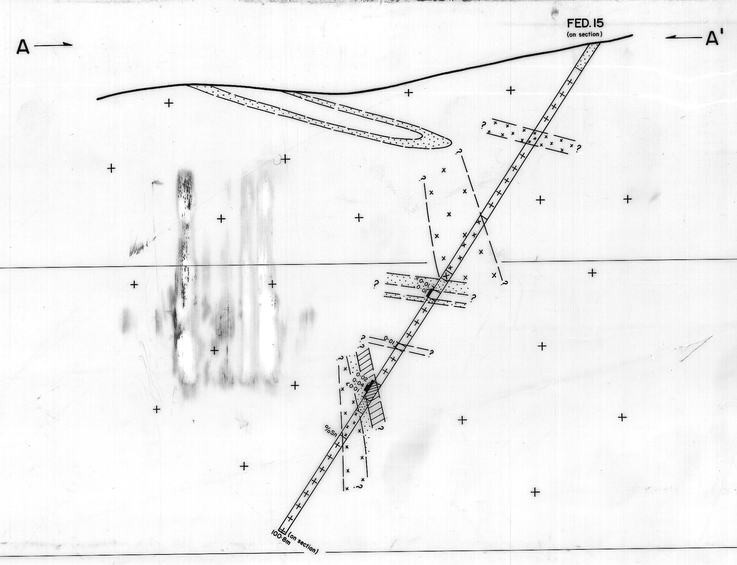
SCALE. 1:500. METRES

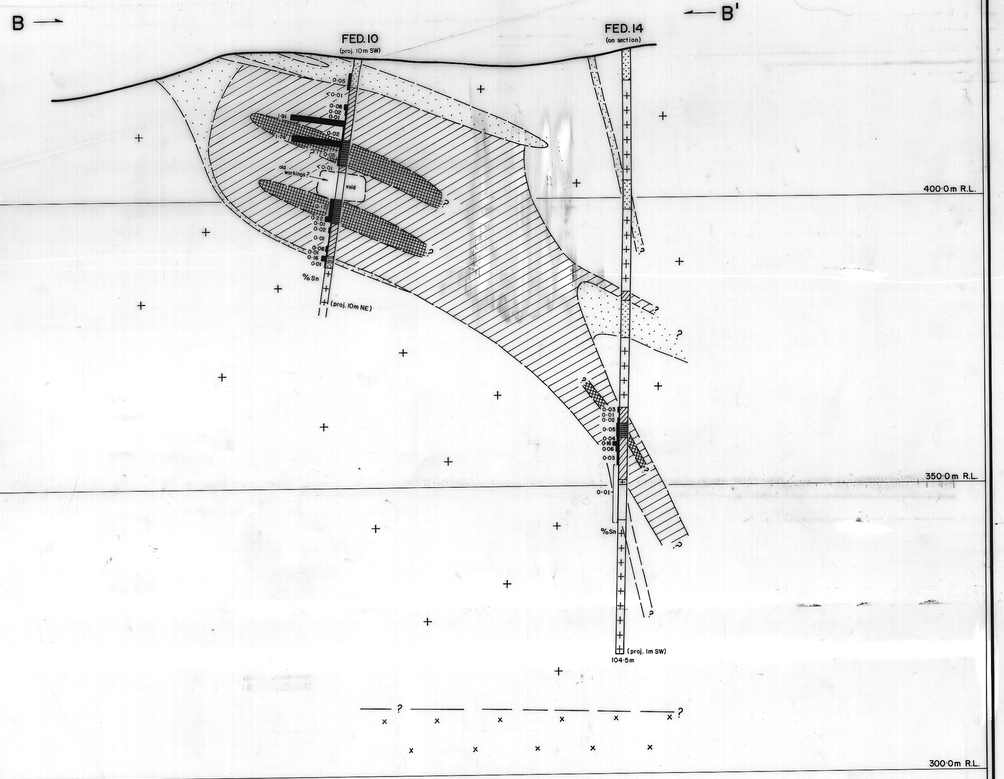
DRAWN	
TRACED	
DATE	
SCALE	1:500
DRAWING No.	TF-9

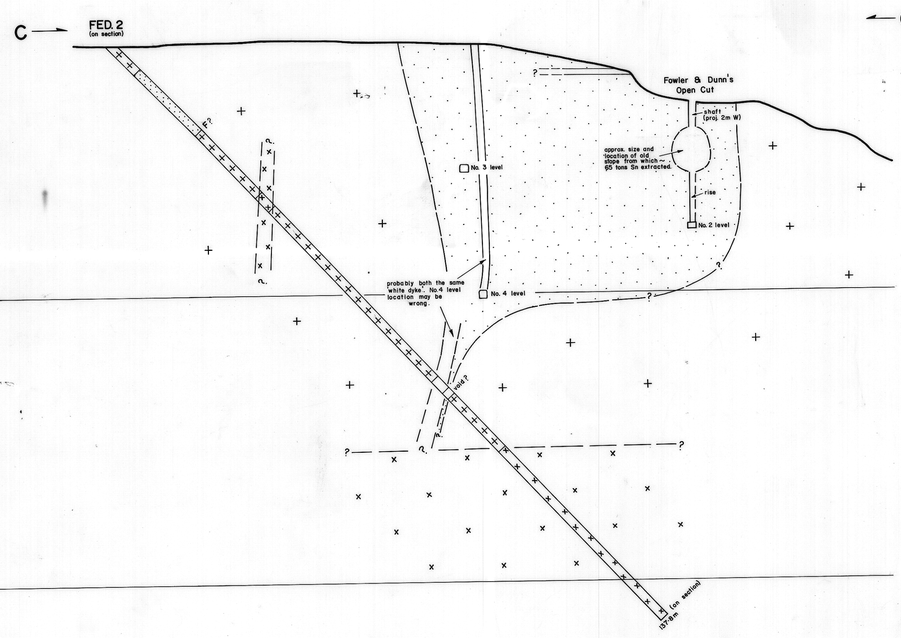
83 - 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)

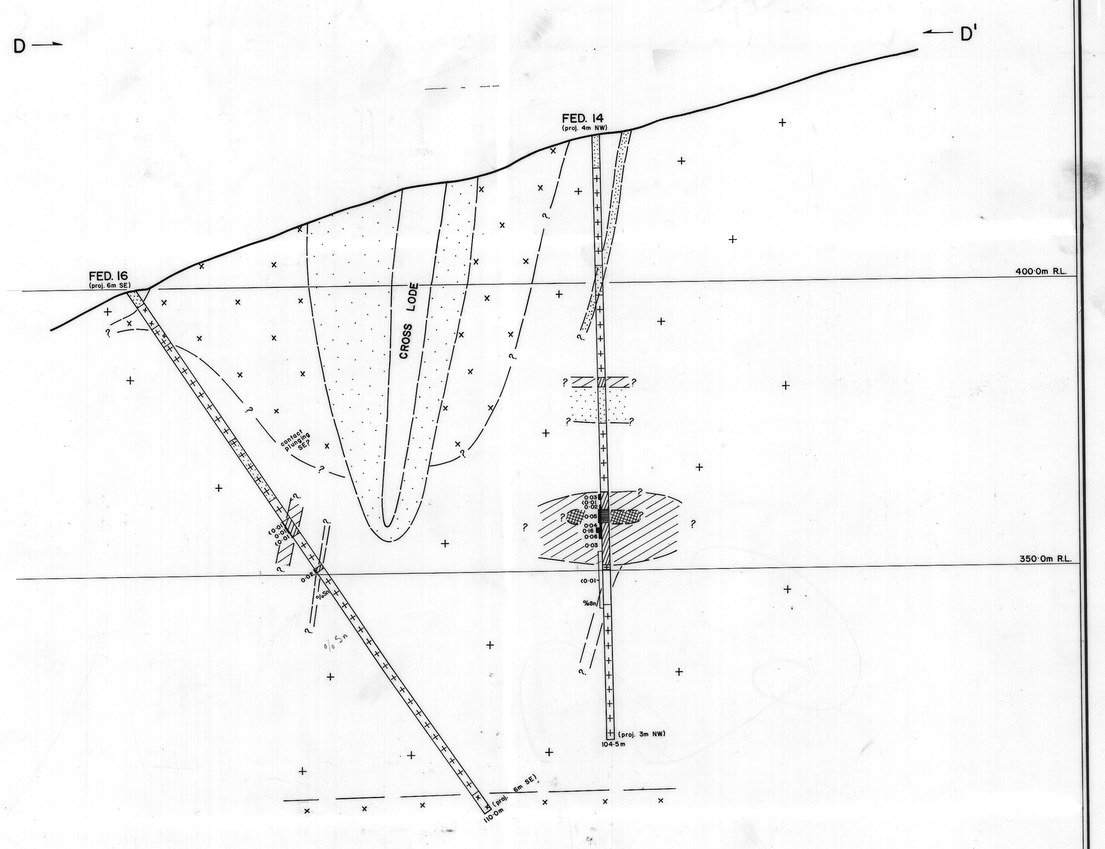
327

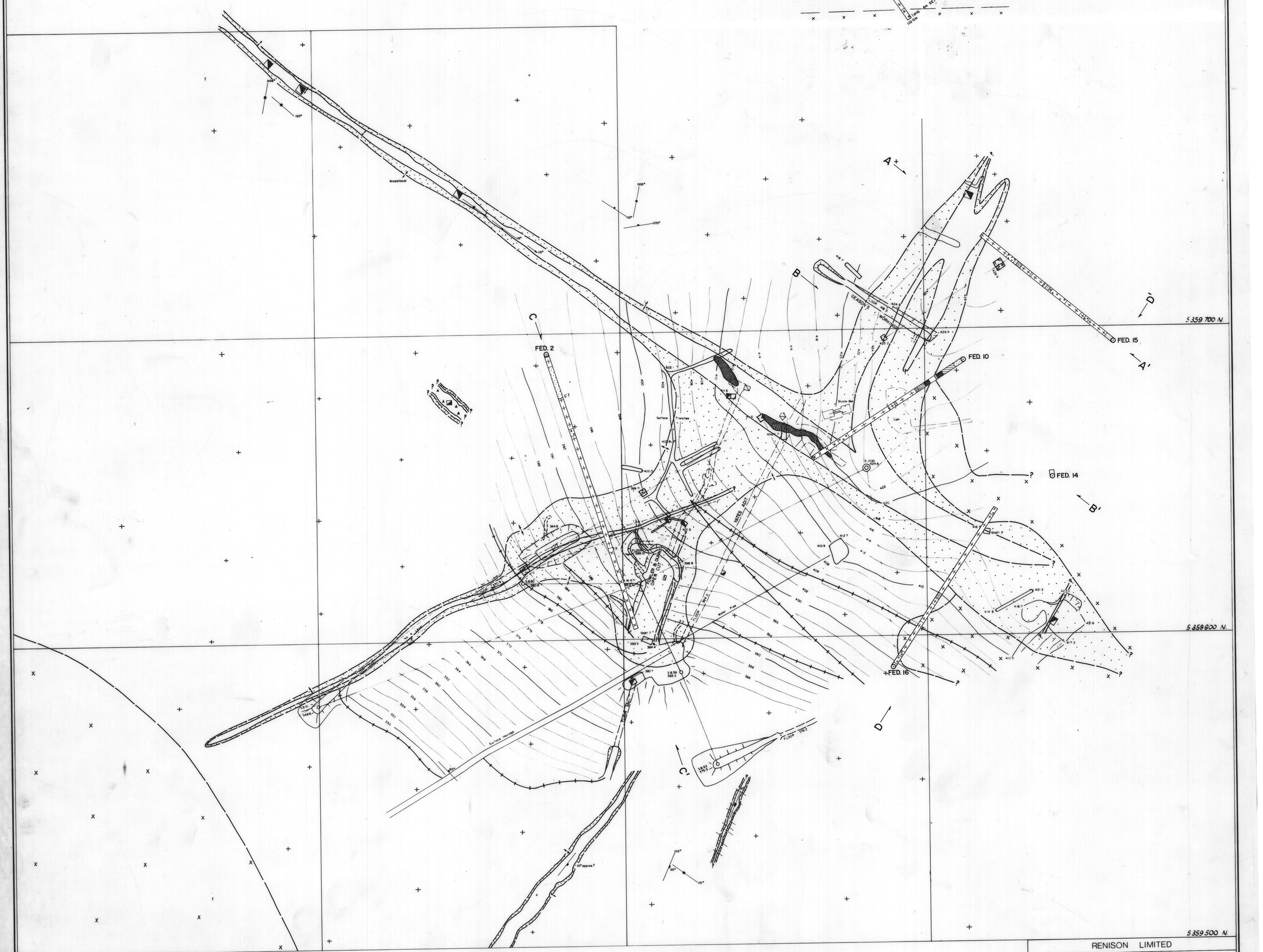
Heemskirk Granite Area
TF9. Survey Original Contour & Access
Standard 1:500











LEGEND

ALTERATION

- Quartz and topaz and / or tourmaline
- Total tourmalinization, occasionally with hematite
- Hydrothermal — Breccias
- Collapse — Breccias
- White alteration 'Dykes'
- Argillic alteration
- "Green" alteration (sericitized granite) generally with hematite or pyrite
- Quartz - mica greisen
- Area of tourmaline nodules

ROCK TYPES

- Aplite or microgranite
- Fine grained — White granite
- Medium grained — White granite
- Porphyritic granite
- Medium grained — Red granite
- Coarse grained — Red granite

- Major lineament
- F — F Fault
- Definite — Geological boundaries
- Approximate — Geological boundaries
- ? Inferred — Geological boundaries

5 cm

RENISON LIMITED

WEST FEDERATION

GEOLOGICAL INTERPRETATION & DIAMOND DRILL HOLES

GEOLOGIST	P.R. & K.W.	SCALE 1:500 METRES
DRAUGHTSMAN	T.G.D.S.	10 0 10 20
DATE	July 1981	
REVISIONS		DRAWING No. TD-5

Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)
85 - 2426

Heemskirk Granite Area
TD5 INTERP. GEOLOGY MAP
Drillhole locations
Stanbarr

351600 E
351700 E
351800 E
351900 E
352000 E
5359000 N
5358900 N
5358800 N
5358700 N
5358600 N
5358500 N
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
295
290
280
270
260
250
240
230
220
210
AM. 1193
AM. 1192
AM. 1191
AM. 1190
AM. 1189
AM. 1188
AM. 1187
AM. 1186
AM. 1185
311·8
312·9
314·6
314·7
312·2
312·2
312·2
313·4
312·9
309·0
309·5
309·0
304·6
303·9
300·2
301·7
299·7
303·2
300·5
299·3
295·7
293·9
293·8
297·6
288·4
288·3
285·2
293·5
FEO 20
Brg. 14°09'
Dip. -45°08'
R.L. 314·56
FEO 21
Brg. 332°32'
Dip. -45°43'
R.L. 288·57
FEO 22
Brg. 329°41'
Dip. -70°06'
R.L. 313·01
FEO 23
Brg. 36°02'99·5
Dip. -60°44'
R.L. 299·32
PM 15
PM 16
PM 17
PM 18
To 9205N

DATE	SVY.	AMENDMENT	F.B. REF.
JAN 82	S.W.	DIGITIZED CONTOURS FROM 1:2000 ADDED.	

NOTE: CONTOUR INFORMATION IS NOT RELIABLE AND SHOULD ONLY BE USED AS FORM LINES.

5 cm

RENISON LIMITED

SCALE. 1:500. METRES

DRAWN	
TRACED	
DATE	
SCALE	
DRAWING No.	
TF-10	

HEEMSKIRK GRANITE AREA
STANDARD TF10. SURVEY ORIGINAL ANOMALY I.P. Contour & Traverse 1:500

85 - 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)

328

A — A'

FED. 2 peak

E-S

zone

Fault? fracture (appx. 340°/?° W.) qtz. ± PY

m-l-g

E-S

No. 3 level

approx. site and location of old shaft. From which no ore had been extracted

South End Fenner & Dunn's Open Cut

shaft (proj. 2m. W.)

fire

No. 2 level

probably both the same fault - No. 4 level location may be wrong.

No. 4 level

Fault? fracture (appx. 340°/?° W.) qtz. ± PY

m-l-g

E-S

N.W. end

Fault? fracture (appx. 340°/?° W.) qtz. ± PY

m-l-g

Iam. - magnetite content

alternating patches

300·0 m. R.L.

B — B'

FED. 10

'GEASON'S LODE' dipping shallowly E.

'CROSS LODE'

300·0 m. R.L.

Eastern End, South Face - Geason's Workings Scale 1:100

Soft altered / weathered medium grained granite

white alteration 'dyke'

In End face and North wall, white alteration 'dyke' divided into two numerous, narrower, more tourmaline rich 'bands'.

Soft weathered / altered medium grained granite with minor qtz / tourmaline veins

Medium grained granite mostly unaltered

ADIT

ADIT

5 359 800 N

349 600 E

349 700 E

349 800 E

349 900 E

350 000 E

FED. 80/42 rock chip sampled across strike, quartz ± pyrite

W.F. 7 Medium grained tourmaline / quartz alteration 'dyke' 2-4 m. wide. Brown, soft altered granite on dumps - contains white mica ; grey qtz developed along contacts ?

FED. 80/43 rock chip sampled across strike, quartz ± PY

W.F. 8 Medium grained, fresh, unaltered granite

FED. 80/41 rock chip sampled across strike, quartz ± pyrite

Gradational

W.F. 6 Medium grained white alteration 'dyke' approx. 2 m. wide Minor tourmaline

FED. 80/45 rock chip sampled across strike, quartz ± pyrite

Medium grained granite Fresh, unaltered

Medium grained granite Fresh, unaltered

least dominant

110° W.F. 5

070° dominant

Fresh unaltered medium grained granite

FED. 80/39 rock chip sampled across strike, intensely quartz veined

W.F. 4 Massive black-rose tourmaline / hematite (similar to W.F. 2) hydrothermal system - medium grained aplite to be and to total replacement of granite

W.F. 3 On quartz medium grained granite. Size 3 m. altered to limonite, hematite, fine quartz, tourmaline fragments

W.F. 21

Surface Trenches

Tourmaline veins / veinlets

Massive white 'dyke' alteration

Sluice

Shaft

Shaft

W.F. 22 Flat lying white dyke. Width 1m or no tourmaline. Overlying weathered medium grained granite

FED. 80/38 rock chip sampled across strike, quartz ± pyrite

Soft, weathered / altered medium grained granite with minor quartz / tourmaline veinlets

'GEASON'S LODE'

Gradational

W.F. 1 Flat lying (approx 10° W to E) quartz / mixed tourmaline ('white dyke') alteration, with vertical ± EW sheets. Alteration along joints, granite between veins

FED. 10

W.F. 9 Heavily tourmalinised / minor quartz 'lode' - possibly brecciated. 'Lode' orientation and thickness unknown. Appears to be roughly parallel to 'C' Lode

Medium grained granite ground. Soft argillic alteration. Contact has a narrow micaceous greisen developed

Fault? fracture

m-l-g

f-g

CARDEN, WARREN & BURGESS
90.M
47
5ac.
(2ha.)

WHIP SHAFT & WORKINGS

W.F. 10 Pale, fresh coarse grained medium to coarse granite

W.F. 11 Medium grained quartz / tourmaline alteration 'dyke' 1-2 m. wide

W.F. 12 Dump of coarse grained - medium grained siliceous altered granite / tourmaline / quartz tourmaline alteration and quartz veins

Shaft

Fine grained white granite

Vertical dyke in Shaft

Shaft

Fine grained white granite

Fine grained white granite

Shaft

Shaft

Shaft

E 200 OSE

E 300 OSE

E 350 OSE

E 400 OSE

S 360 000N

S 359 000N

S 358 000N

S 359 700N

S 359 600N

S 359 500N

A

A'

500·0m. R.L.

400·0m. R.L.

Black Face Open Cut

FED.1

FED.9

115 Ft. level (on section)

(proj. 1m. S)

Medium grained 'red' granite including veins of grey-green greisen increasing in frequency towards main 'leak'

(proj. 10m. S)

quartz/topaz

tourmaline/quartz

wrgillised granite

230 Ft. level (on section)

End of 2000 ft. level cross cut S. (proj. 5m. S)

tour-rich leak

granite

(proj. 10m. S)

(proj. 1m. N)

(proj. 7.5m. S)

from Reid (1963)

'Branch leak' striking East and dipping steeply South (?) intersected in horizontal hole collared from 230 Ft. level FED. 9 between 39·0-47·5m (not shown in section view)

Fine to medium grained white granite including veins of grey-green greisen

Breccia Pipe

quartz/tourmaline

THP 123

(proj. 10m. S)

(proj. 2m. S)

180·5m.

Haulage Winder House ??

Medium grained (red ?) granite

Track

AM 488

Soft strongly wrgillised medium grained granite

469·C

468·C

AM 487

AM 485

AM 486

Winch House ??

500

200 Ft. level

Haulage Winder House ??

Zone of strongly tourmalinised granite

482·C

481·7

492·C

Highly siliceous alteration with disseminated brownish-grey cleavage planes

Strongly wrgillised

WATER

sulphides

Soft wrgillised granite with numerous blebs? topaz-quartz veins of strongly tourmalinised granite. Also evidence of presence of sulphides

C.F. 12

Outcrop of strongly tourmalinised granite

FED 8014

FED 8015

BLACK FACE WORKINGS

AM 484

horizontal drillhole at end of cross-cut approximately 455 R.L.

C.F. 16 Breccia Pipe - subangular to subrounded totally tourmalinised fragments usually 10 cms. across (type: tourmaserk) in a matrix of tourmaline & tourmalinised rock flour. & hydrothermal breccia.

Well developed banding in black grey/black strongly tourmalinised rock

Trench

S12

Adit developed on large mass of dense fine grained black tourmaline

C.F. 9

C.F. 10

AM 483

AM 480

Intensely tourmalinised contact zone

Granite strongly wrgillised with numerous quartz/tourmaline veins, dykes, pods etc.

FED 8012

MINERALISED SHAFT

Grey siliceous dyke with occasional small masses of dense fine grained black tourmaline

Outcrops of fine grained-medium grained granite

C.F. 5 Open framework breccia containing 2 types of fragments - subrounded medium grained grey fragments (similar to C.F. 6) up to 22 cms. average 10 cms and smaller fragments of white dense fine grained grey rock up to 15 cms across, average 7cms. In a matrix of kaolinite & tourmaline

Grey/white silicified granite

Trench

S21·0 "OUTLINED SHAFT"

C.F. 7 Altered (silicified) rocks on along contact fine grained sulphides? (pyrite)

Fine grained pale granite with tourmaline nodules up to 10 cms in diameter

C.F. 3 Strongly banded-quartz & topaz alternating with tourmaline bands enhanced by fracturing & strike faulting. Note also late veins - cut through all and areas of brecciation (relatively minor) - subangular fragments up to 10 cms across of dark tourmalinised rock surrounded by quartz crystals - collapse ?

C.F. 2 Outcrops (near footwall) of medium grained (white) granite with tourmaline nodules up to 7 cms in diameter

Outcrops of grey brecciated medium grained quartz/tourmaline rock similar to fragments in C.F. 6

C.F. 4 Collapse breccia - subangular fragments up to 12 cms across of medium grained grey quartz/tourmaline rock mantled by white fine tourmaline. Matrix of black tourmaline, clear quartz crystals often exhibiting comb structure - in places euhedral crystals obviously grown into voids

Alteration decreases and rock becomes less siliceous and returns to a medium grained granite

Grey alteration dyke: Evenly distributed quartz and tourmaline

C.F. 1

C.F.

'White dyke': Medium grained saccharoidal texture. No visible tourmaline

'White Dyke' smooth, massive, quartz (+ topaz ?) alteration.

• C.F.1. Surface rock sample location (K. Wells)

• Fed. 80/3 Surface rock sample location (P. Roberts)

5 cm

TD4	TD5	TD 6
TE4	TE5	TE6

RENISON LIMITED

CENTRAL FEDERATION WORKINGS

GEOLOGY, DIAMOND DRILLING AND ROCK CHIP SAMPLES

SCALE. 1:500 METRES

10 0 10 20 30

DRAWN	K. Wells, P. Roberts
TRACED	F. A. Colson
DATE	Aug. 1980
SCALE	1:500
DRAWING No.	TD 6

Heemskirk Granite Area
Strahan
TD6 Geology, Chip Sampling and Bulkhole Locations
1:500

287

85 - 2426
Heemskirk Granite Area
(E.L. 11/76 & S.P.L. 129)