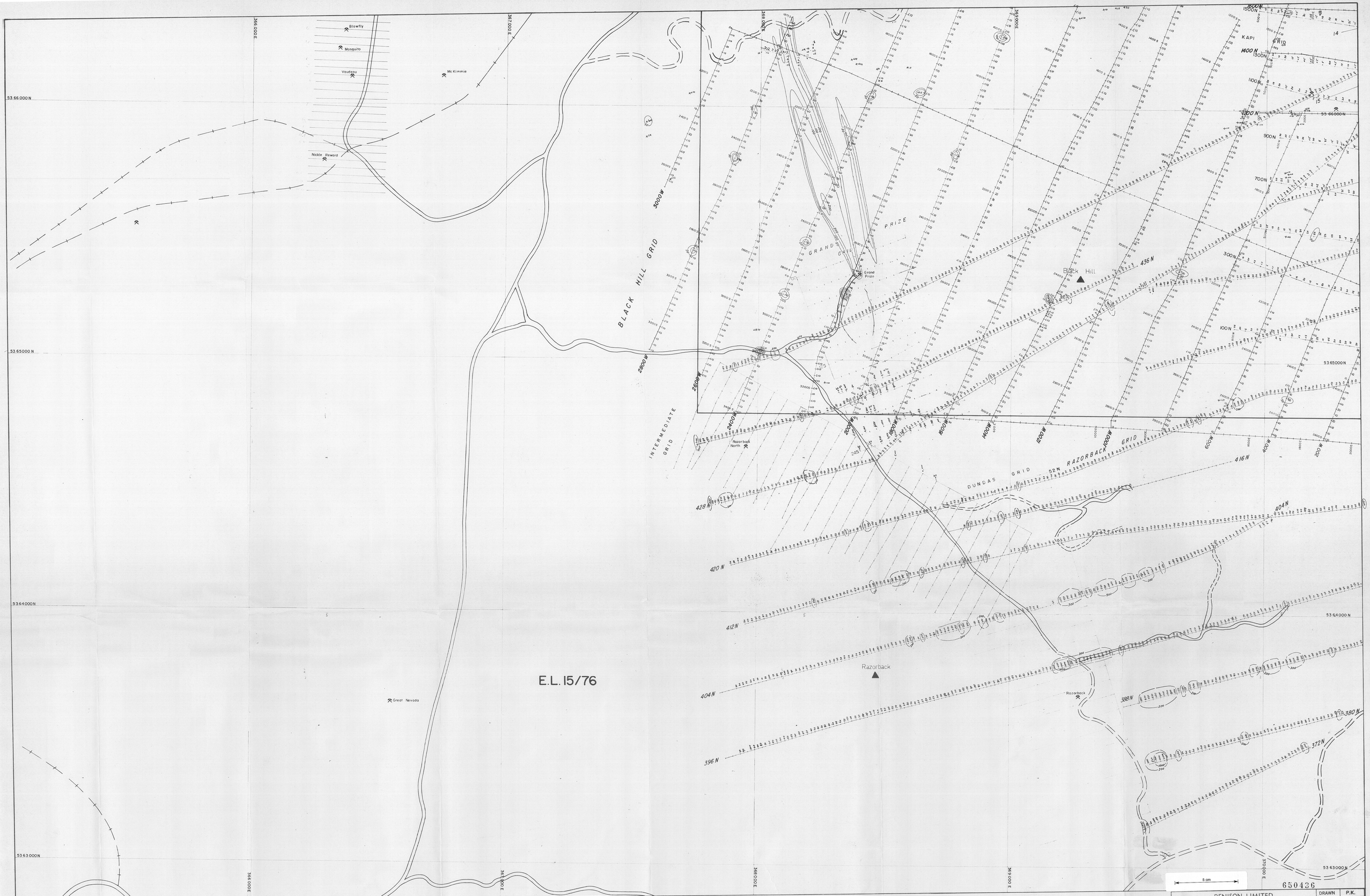


650436

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	Renison Ltd. (1967-70)
Commonwealth Hill Grid	Renison Ltd. (1968-69)
Razorback Hill Grid	Renison Ltd. (1968-69)
Kapi Grid	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

SAMPLES

- Soil
- Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3

TIN GEOCHEMISTRY IN P.P.M. 84-2183 vol 2/5

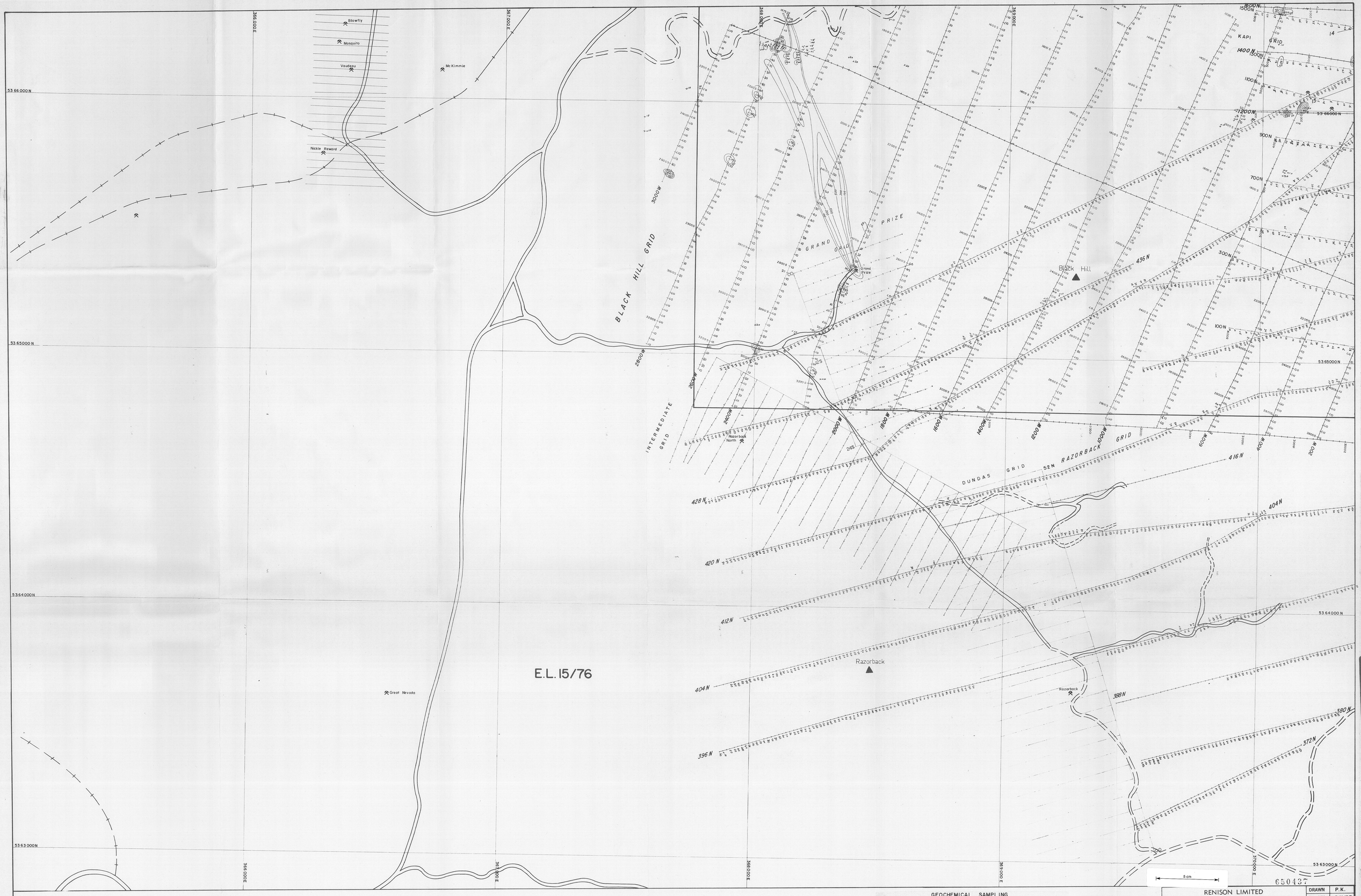
SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1 5000
DRAWING No.	

FIG. 16

015



650437

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
- Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3

ARSENIC GEOCHEMISTRY

IN P.P.M. 84-2183 vol 2/5

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K/S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	

FIG. 17

016



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
- Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/4

COPPER GEOCHEMISTRY IN P.P.M. 84-2183 Vol 2/5

SCALE. 1:5000 METRES
100 0 100 200 300

DRAWN	P. K.
TRACED	P. K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	

FIG. 18

017

CARBINE HILL GRID

NORTH DUNDAS GRID

GODKIN RIDGE

CARBINE HILL

MOORE'S PIMPLE

Hecla Mine

South West Curtain Davis

South Curtain Davis

No.1 Curtain Davis

Curtain Davis Consols

Evendon Prospect

Ramsdale Prospect

Great Northern Creek Mine

Wallace's Prospect

1500 N
1600 N
1300 N
1400 N
1200 N
1000 N
700 N
800 N
300 N
500 N
100 N
400 N
200 N
00 N
412N
396N
388N

5366000N
5365000 N
5364000N
5363000N

371000 E
372000 E
373000 E
374000 E
375000 E

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
× Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/4

LEAD GEOCHEMISTRY IN P.P.M.

SCALE. 1:5,000 METRES
100 0 100 200 300

DRAWN	P. K.
TRACED	P.K./ S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 19

650429

5 cm



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
· Soil
× Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/4

ZINC GEOCHEMISTRY IN P.P.M. 84-2183 vol 3/5

SCALE. 1:5000 METRES
100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	

FIG. 20

019



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kopi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES

- Soil
- × Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/4

TIN GEOCHEMISTRY

IN P.P.M. 84-2133 vol 3/5

SCALE 1:5000 METRES

100 0 100 200 300

5 cm

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 21



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty. Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES

- Soil
- × Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/4

ARSENIC GEOCHEMISTRY IN P.P.M. 84-2183 vol 3/5

SCALE. 1:5000 METRES

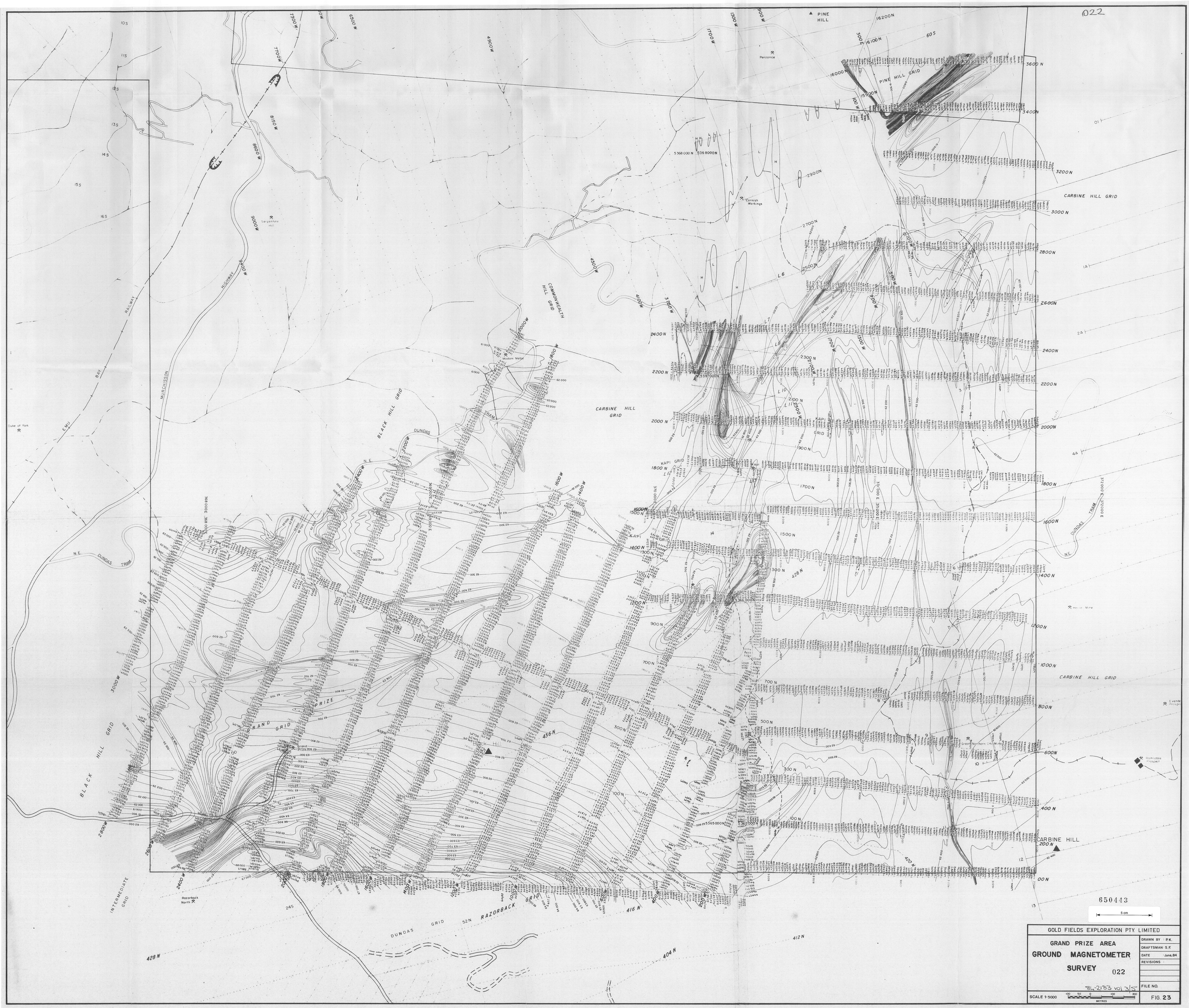
100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	

FIG. 22

021

022



GOLD FIELDS EXPLORATION PTY. LIMITED

GRAND PRIZE AREA

GROUND MAGNETOMETER SURVEY 022

DRAWN BY : P.K.
DRAFTSMAN : S.F.
DATE : June, 84
REVISIONS :
FILE NO.
SCALE 1:5000
METRES
FIG. 23

84-2183 vol 3/5


PINE HILL
PINE HILL GRID
CARBINE HILL GRID
COMMONWEALTH HILL GRID
BLACK HILL GRID
KAPI GRID
GRAND PRIZE
Black Hill
CARBINE HILL
RAZORBACK GRID
DUNDAS GRID
INTERMEDIATE GRID
Serpentine Hill
Cornish Workings
Penzance
Hecla Mine
Ramsdale Prospect
Razorback North
Grand Prize
Duke of York
EMU BAY RAILWAY
MURCHISSON HIGHWAY
N.E. DUNDAS TRAM
Japan Transmitter
Grid North
N.W. Cape Transmitter
Transmitter Direction
INDEX TO SHEETS
ZEEHAN 84/1
ZEEHAN 84/2
ZEEHAN 84/3
ZEEHAN 84/4
Black Hill Grid (7) - North West Cape Transmitter
Carbine Hill Grid (8,6)
1st. Reading : N.W. Cape Transmitter
2nd. Reading : Japan Transmitter
GOLD FIELDS EXPLORATION PTY. LIMITED
V.L.F.
FRASER ALGORITHM
(N.W. CAPE) 023
DRAWN BY : P.K.
DRAFTSMAN : S.F.
DATE : June, 84
REVISIONS :
FILE NO.
SCALE 1:5000
METRES
FIG. 24
84-2183 vol 3/5
650444
5 cm


024
PINE HILL
PINE HILL GRID
CARBINE HILL GRID
COMMONWEALTH HILL GRID
BLACK HILL GRID
KAPI GRID
GRAND PRIZE
Black Hill
CARBINE HILL
RAZORBACK GRID
DUNDAS GRID
INTERMEDIATE GRID
Japan Transmitter
Grid North
N.W. Cape Transmitter
Transmitter Direction
INDEX TO SHEETS
ZEEHAN 84/1
ZEEHAN 84/2
ZEEHAN 84/3
ZEEHAN 84/4
Black Hill Grid (7) - North West Cape Transmitter
Carbine Hill Grid (8,6)
1st. Reading : N.W. Cape Transmitter
2nd. Reading : Japan Transmitter
650445
5 cm
GOLD FIELDS EXPLORATION PTY. LIMITED
V.L.F.
FRASER ALGORITHM
(JAPAN) 024
DRAWN BY : P.K.
DRAFTSMAN : S.F.
DATE : June, 84
REVISIONS :
FILE NO.
SCALE 1:5000
METRES
FIG. 25

025

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

2600 S 2400 S 2200 S 2000 S

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (——)
SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

2600 S 2400 S 2200 S 2000 S

V.L.F. - E.M.

DIP ANGLE (——)
SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)
RESISTIVITY IN OHM METRES (——)

2600 S 2400 S 2200 S 2000 S

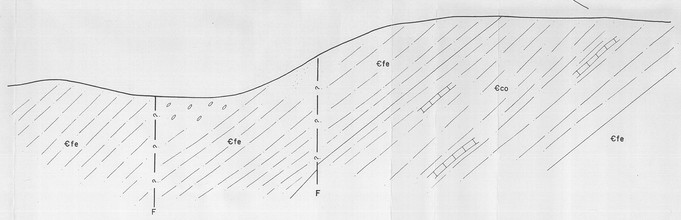
Total Magnetic Field (γ)

62 680 62 640 62 600 62 560 62 520 62 480

2600 S 2400 S 2200 S 2000 S

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

600 550 500 450 400 350 300 250 200 150



650446

5 cm

2600 S 2400 S 2200 S 2000 S

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 – BLACK HILL GRID	
LINE 200W	
LOOKING N.W.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	S.F.
DATE	Mar.,84
SCALE	1:2000
FIG. NO.	26

025

I.P. DATA

MAGNETICS
Base Station at: approx. 2800E 3350S
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- €ms' Melba Spilites (basic Lavas)
- €um Ultra-mafics
- €g Gabbro

DEVONIAN
- Dg Granite
- Dqp Quartz porphyry

FORMATION
- €d Dundas Group (unasigned)
- €rl Red Lead Conglomerate
- €b Brewery Junction
- €r Razorback
- €h Hodge Slate
- €fg Fernfield
- €co Comet
- €f Fernflow
- 30/60 Bedding
- 50/80 Cleavage

* All Bearings Magnetic

025

Geochemistry (PPM)

1000 800 600 400 300 200 100 80 60 40 20 10

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

V.L.F. - E.M.

Tx = N.W. Cape

DIP ANGLE (- - -) SMOOTHED DERIVATIVE (——)

30 20 10 0 10 20 30 50 40 30 20 10 0 10

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

V.L.F. - E.M.

DIP ANGLE (- - -) SMOOTHED DERIVATIVE (——)

30 20 10 0 10 20 30 50 40 30 20 10 0 10

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

Total Magnetic Field (Ỏ)

63 600 63 560 62 820 62 480 62 440

63 000 62 800 62 600 62 400 62 200

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

600 550 500 450 400 350 300 250 200 150

CREEK

Cfa Cfa Cco Cfe Cfe

650447

5 cm

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 – BLACK HILL GRID	
LINE 400 W	
LOOKING N.W.	
SCALE 1:2000 METRES	
0 40 80 120	

DRAWN	P.K.
TRACED	S.F.
DATE	Mar.84
SCALE	1:2000
FIG. NO.	27

026

I.P. DATA

Base Station at: approx. 2800E 3350S

Designated:

MAGNETICS

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Cd Dundas Group (unassigned)
- Crl Red Lead Conglomerate
- Cb Brewery Junction
- Cro Razorback
- Hodge Slate
- Cfe Fernfield
- Cco Comet
- Cr Fernflow

30-60 Bedding

50-80 Cleavage

* All Bearings Magnetic

026

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

V.L.F. - E.M.

Tx = N.W. Cape

30 150 20 10 0 10 20 30 40 50

DIP ANGLE (- - -)

SMOOTHED DERIVATIVE (——)

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

V.L.F. - E.M.

30 150 20 10 0 10 20 30 40 50

DIP ANGLE (- - -)

SMOOTHED DERIVATIVE (——)

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

Total Magnetic Field (Ø)

62 440 - 63 000

62 400 - 62 800

62 360 - 62 600

62 320 - 62 400

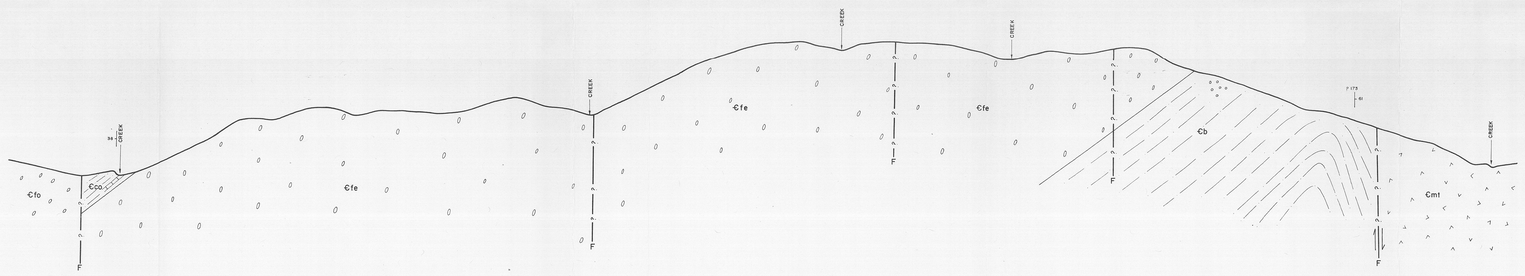
62 280 - 62 200

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

600 550 500 450 400 350 300 250 200 150



650448

5 cm

2600 S 2400 S 2200 S 2000 S 1800 S 1600 S

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN: P.K.
E.L.42/71 — BLACK HILL GRID	TRACED: S.F.
LINE 600 W.	DATE: Mar.84
LOOKING N.W. SL-2/53 vol 3/5	SCALE: 1:2000
SCALE 1:2000 METRES	FIG. NO. 28

I.P. DATA

027

MAGNETICS

Base Station at : approx. 2800 E 3350 S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

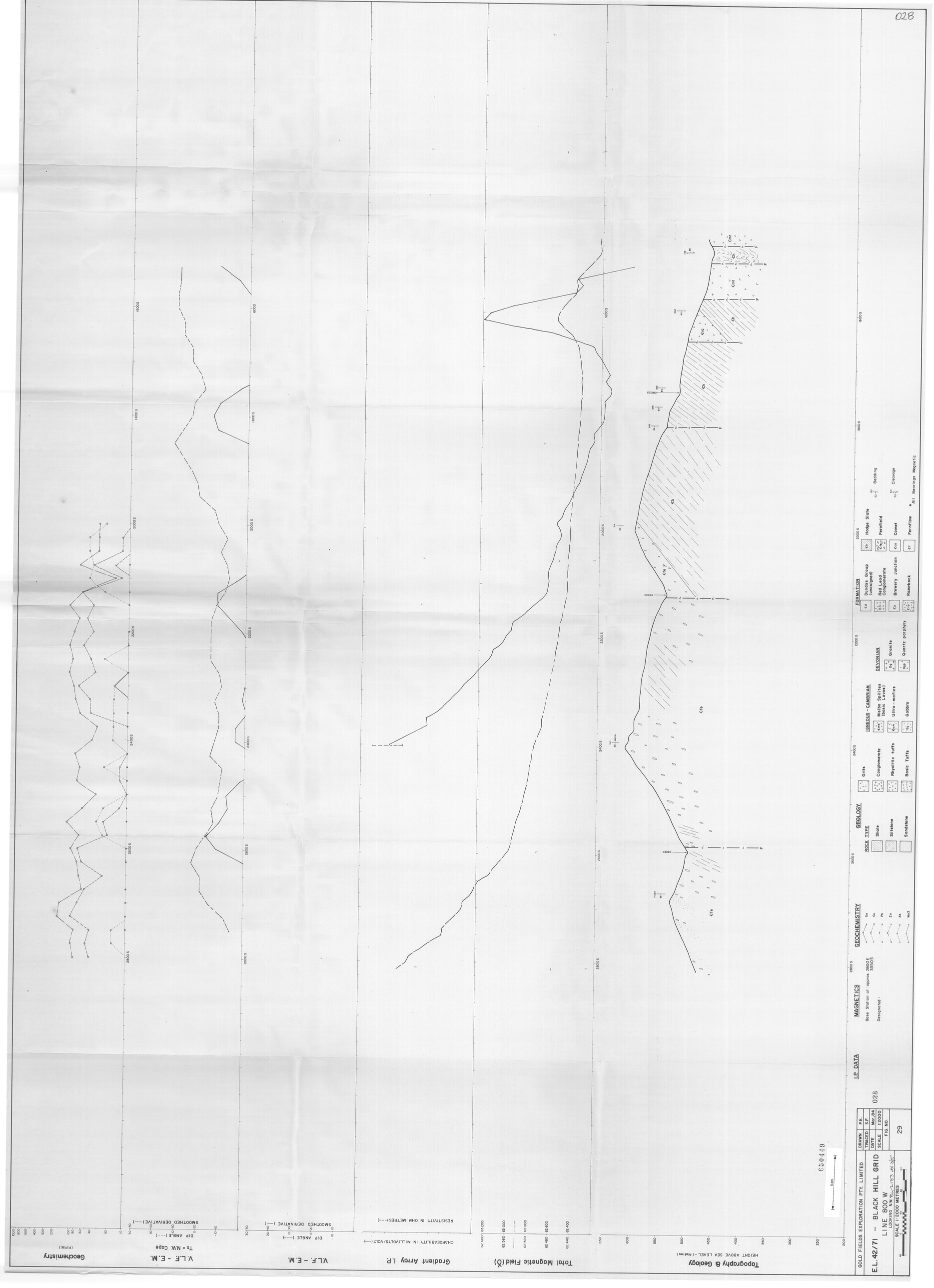
- Cd Dundas Group (unasigned)
- Cfe Red Lead Conglomerate
- Cb Brewery Junction
- Cfo Razorback
- Cs Hodge Slate
- Cfe Fernfield
- Cco Comet
- Cf Fernflow

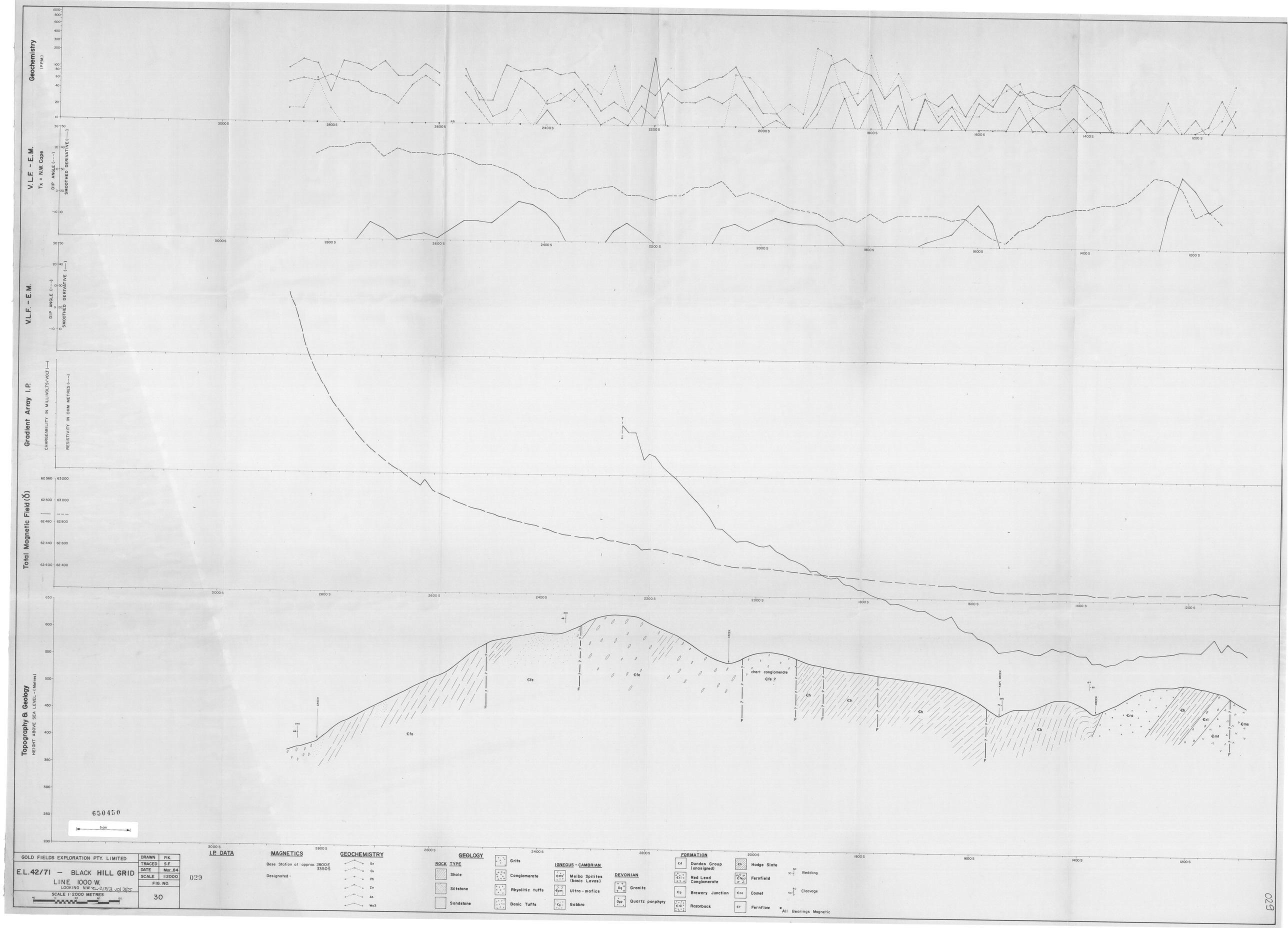
60/30 Bedding

80/50 Cleavage

* All Bearings Magnetic

027


028
Geochemistry (PPM)
V.L.F. - E.M.
Tx = N.W. Cape
DIP ANGLE (---)
SMOOTHED DERIVATIVE (—)
V.L.F. - E.M.
DIP ANGLE (---)
SMOOTHED DERIVATIVE (—)
Gradient Array I.P.
RESISTIVITY IN OHM METRES (---)
CHARGEABILITY IN MILLIVOLTS/VOLT (—)
Total Magnetic Field (γ)
Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)
I.P. DATA
MAGNETICS
Base Station at approx. 2800E 3350S
Designated :
GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3
GEOLOGY
ROCK TYPE
Shale
Siltstone
Sandstone
Grits
Conglomerate
Rhyolitic tuffs
Basic Tuffs
IGNEOUS - CAMBRIAN
Melba Spilites (basic Lavas)
Ultra - mafics
Gabbro
DEVONIAN
Granite
Quartz porphyry
FORMATION
Dundas Group (unasigned)
Red Lead Conglomerate
Brewery Junction
Razorback
Hodge Slate
Fernfield
Comet
Fernflow
Bedding
Cleavage
All Bearings Magnetic
GOLD FIELDS EXPLORATION PTY. LIMITED
E.L. 42/71 - BLACK HILL GRID
LINE 800 W
LOOKING N.W. 84-2183 Jul 3/5
SCALE 1:2000 METRES
DRAWN P.K.
TRACED S.F.
DATE Mar. 84
SCALE 1:2000
FIG. NO. 29
028
650449



GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID

LINE 1000 W.

LOOKING N.W. SL-2183 vol 3/5

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Mar.,84
SCALE	1:2000
FIG. NO.	30

029

I.P. DATA

MAGNETICS

Base Station at: approx. 2800E 3350S

Designated:

GEOCHEMISTRY

Sn, Cu, Pb, Zn, As, Wo3

GEOLOGY

ROCK TYPE

Shale, Siltstone, Sandstone

Grits, Conglomerate, Rhyolitic tuffs, Basic Tuffs

IGNEOUS - CAMBRIAN

Ꞓms Melba Spilites (basic Lavas), Ꞓum Ultra-mafics, Ꞓg Gabbro

DEVONIAN

Dg Granite, Dgp Quartz porphyry

FORMATION

Ꞓd Dundas Group (unasigned), Ꞓrl Red Lead Conglomerate, Ꞓb Brewery Junction, Ꞓra Razorback, Ꞓh Hodge Slate, Ꞓfe Fernfield, Ꞓco Comet, Ꞓf Fernflow

Bedding, Cleavage

* All Bearings Magnetic

029

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

3000 S 2800 S 2600 S 2400 S 2200 S 2000 S 1800 S 1600 S 1400 S 1200 S

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

3000 S 2800 S 2600 S 2400 S 2200 S 2000 S 1800 S 1600 S 1400 S 1200 S

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (---)

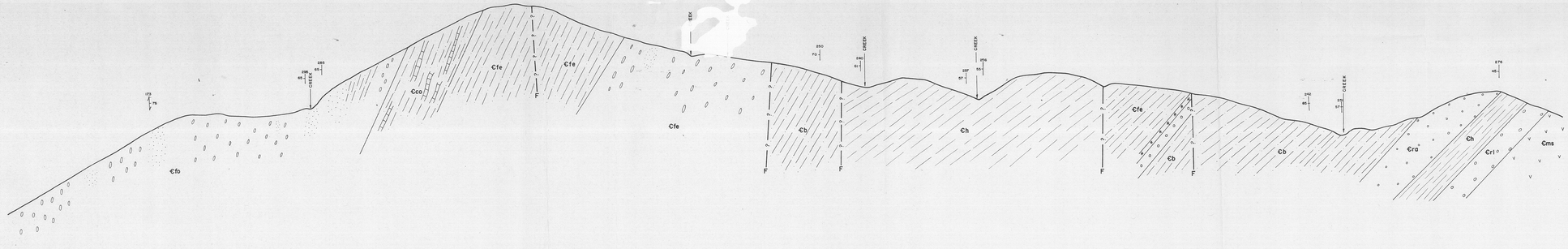
Total Magnetic Field (Ø)

62 440 - 63 200
62 400 - 63 000
62 360 - 62 800
62 320 - 62 600
62 280 - 62 400

3000 S 2800 S 2600 S 2400 S 2200 S 2000 S 1800 S 1600 S 1400 S 1200 S

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

700 650 600 550 500 450 400 350 300 250



650451

5 cm

3000 S 2800 S 2600 S 2400 S 2200 S 2000 S 1800 S 1600 S 1400 S 1200 S

I.P DATA

MAGNETICS

Base Station at : approx. 2800 E 3350 S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Cd Dundas Group (unasigned)
- Crl Red Lead Conglomerate
- Cb Brewery Junction
- Cro Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

60/30 Bedding

80/50 Cleavage

*All Bearings Magnetic

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.
	TRACED	S.F.
E.L.42/71 - BLACK HILL GRID	DATE	Mar.,84
LINE 1200 W.	SCALE	1:2000
LOOKING N.W. SRL 2183 VOL 3/5	FIG. NO.	31
SCALE 1:2000 METRES 40 0 40 80 120		

030

030