

PINE CREEK GOLDFIELDS LIMITED

GANDYS HILL

MCN 157, 969, 1056
MLN 785, 786

REPORT ON DRILLING FOR 1989

OPEN FILE

CR90/659

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1. INTRODUCTION

During June - July 1989 a 9 hole diamond drilling programme was carried out over Gandys Hill resulting in 845m being drilled. Percussion drilling carried out in October of the same year resulted in 1169m being drilled over South Gandys and North International. Diamond drilling was designed to intersect the Enterprise anticline where previous diamond drilling was minimal, and to investigate at depth the west dipping 'sheeted' veins observed at surface.

Percussion drilling consisted of shallow vertical holes to determine the presence of mineralisation in the oxide zone between the Enterprise pit and South Gandys Hill and the northern extension of the International anticline, north of Arimco's ground. Percussion drilling was carried out by East-West Drilling using an H13 Gemco multipurpose rig.

1.1 Location and Land Tenure

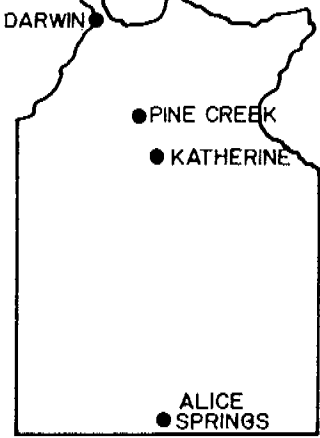
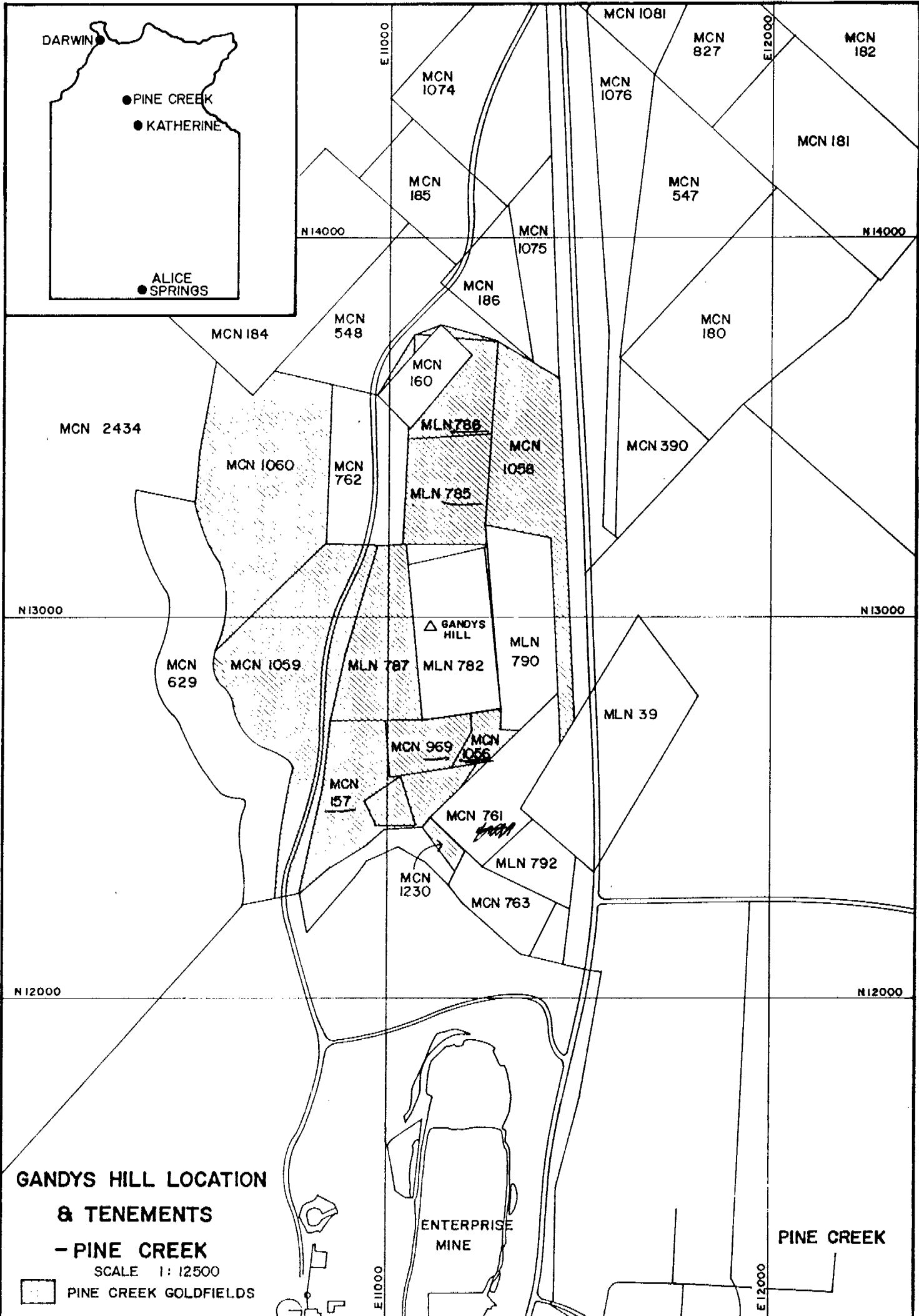
Tenements on which drilling was undertaken were MCN 1230, 1056, 969, MLN 785, 786 (Gandys Hill) and MCN 1058 (North International).

Gandys Hill is situated 2.5 km north-west of Pine Creek Between the Old Stuart Highway and the Stuart Highway on the Enterprise anticline. The International anticline is situated on the eastern side of Gandys Hill and trends parallel to the Enterprise anticline. MCN 1058 is at the northern end of the main International zone from 13200N (fig 1).

1.2 Drilling and Sampling Procedure

Diamond drilling was carried out by Gaden Drilling using HQ coring which was then cut and sampled at 1.5m intervals over the entire length.

Percussion drilling was carried out by East-West Drilling using an H13 Gemco multipurpose rig. Samples were taken at 2m intervals and split to 3-4kg. All samples were sent to AAL (Pine Creek) for Au analysis by 50g fire assay.



**GANDYS HILL LOCATION
& TENEMENTS
- PINE CREEK**
SCALE 1:12500
PINE CREEK GOLDFIELDS

ENTERPRISE
MINE

PINE CREEK

2. GEOLOGY

Six stratigraphic units have been identified in the Gandys Hill area by mapping. Four of these have been intersected by drilling.

The basal unit intersected at South Gandys is the Gandys Hill Greywacke. It is a fine to medium grained rock, micaceous and variably spotted and siliceous. This is overlaid by the Gandys Silt Horizon, which is a laminated and often spotted siltstone similar in appearance to those seen in the mine sequence. The upper unit is the Lower Mine Greywacke.

At North Gandys the lower unit intersected is the Lower Gandys Silt which is overlaid by the Gandys Hill Greywacke. Figure 2 shows the relationship between these stratigraphic units. Plans 1 and 2 show the interpretive geology.

The two saddle reefs are contained within the Gandys Silt Horizon at South Gandys and the Lower Gandys Silt to the north.

Thickness (m)

?

UMG

50-70

SSH

Enterprise saddle reef

45-60

LMG

North Enterprise saddle reef
Maid of Erin

35-50

GSH

South Gandys saddle reef

55-60

GHG

North Gandys saddle reef

?

LGS

figure 2

GANDYS HILL STRATIGRAPHIC COLUMN

3. MINERALISATION

Several styles of mineralisation in both the oxidised and primary rock are demonstrated at Gandys Hill with the bulk of the mineralisation contained within siltstones. These styles include:

- (i) Saddle reef.
- (ii) Stockwork veining across the anticlinal axis.
- (iii) Narrow quartz veins peripheral to the axis.
- (iv) Fault related mineralisation.

Two saddle reefs have been observed in outcrop at Gandys Hill. One (the Gandys Hill reef) is situated near the Gandys Hill trig., and the other (the North Gandys Hill reef) is located 500m to the north on MLN785. The North Gandys Hill reef is well developed near surface where it is up to 5m in width, and becomes poorly developed at depth. The reef is a banded pale greyish white quartz containing 2-5% veinlet and disseminated pyrite and arsenopyrite with minor chlorite and gold grades in the range 1.0 - 12.0 g/t. The saddle reefs are hosted by cordierite spotted siltstones containing 1-2% disseminated sulphides. The Gandys Hill reef is very poorly developed in the South Gandys area. At South Gandys, mineralisation is expressed as a zone of intense stockwork veining near to or across the anticlinal axis. Quartz veins in this zone have numerous orientations and are up to 1m thick with an average of 5-10cm. They contain 5% veinlet and disseminated pyrite, arsenopyrite, chalcopyrite and minor pyrrhotite, galena and sphalerite. Gold grades are typically in the range 1 to 15 g/t.

Narrow quartz veins peripheral to the fold axis are contained within siltstones and minor greywackes. The veining is either sub-parallel to or cross-cuts bedding. Veins contain up to 1% disseminated sulphides and have gold grades in the range 0.9 - 3.0 g/t.

Fault related mineralisation also makes up a small proportion of the total ore volume. It is located within or near major fault zones and occurs mainly in siltstones. The siltstones are highly foliated and silicified, and contain numerous narrow fracture-fill quartz veinlets and veins generally less than 1cm thick. The veins carry up to 1% disseminated pyrite, arsenopyrite and chalcopyrite and typically grade 1 to 8 g/t gold.

Mineralised intersections from recent drilling are given in table 1.

Table 1 Mineralised intersections from Gandys Hill diamond drill holes.

Hole No.	Northing	Easting	From	To	Depth(m)	Au g/t
PCDH 442	13301.70	11053.68	-	-	-	-
443	13300.55	11171.24	67.5	96.0	27.0	5.52
444	13552.77	11122.16	0.0	23.0	23.0	1.53
445	13546.18	11146.54	51.0	73.5	22.5	1.52
446	13250.30	11099.33	76.5	96.0	19.5	9.32
447	13249.61	11191.98	-	-	-	-
448	12698.67	11136.02	-	-	-	-
449	13017.41	10956.65	13.5 30.0	15.0 31.5	1.5 1.5	4.50 7.96
456	12600.91	11054.48	37.5	42.0	4.5	3.40

4. STRUCTURE

The Enterprise anticline at Gandys Hill has a southerly plunge of approximately 10-15°. According to Plibersek (1989 mapping report) there is a plunge reversal, beginning at 13550N where the axis is estimated to be horizontal and north of which there is a noticeable northerly plunge. However, mapping by Minsarco to the north of MCN 160 does not appear to support this idea and what has been observed may be a local flattening of the plunge. Diamond drilling is needed in this area to confirm the existence of such a reversal.

This flattening may be due in part to the presence of a significant northeast trending fault around 13400N. Heave on this fault is estimated to be between 15-20 metres. Throw is yet to be confirmed, however it appears there may be up to 50 metres of reverse movement.

A less significant fault observed at South Gandys, trends grid north along the eastern limb of the anticline. This appears to be a steep west dipping fault. The amount of disruption is hard to determine and movement appears to have been taken up within foliated chloritic zones.

5. RESULTS

Percussion drilling results at International were generally low confirming that mineralisation is spotty and weakens north and eastwards.

South Gandys results on lines 12720N and 12740N are generally strong around the anticlinal axis as would be expected from the nature of the Gandys Hill reef in this area. Further south on lines 12375N, 12400N and 12425N results are very weak in the oxide zone as the reef weakens down plunge.

Results from diamond drilling can be seen in Appendix one. The main zones of mineralisation intersected were associated with the anticlinal axis on sections 13250N and 13300N. Mineralisation intersected on 13550N is situated on the eastern limb and may be associated with faulting. Diamond holes designed to test west dipping veins intersected little or no mineralisation.

Appendix 1

Expanded diamond drillhole logs
with assay results

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT

PAGE: 1 DATE: 25 OCT 90

Diamond Hole : PCDH442

PROJECT IDEN : GANDYS	START DATE : 30 MAY 89	COMPLETION DATE : 2 JUN 89	LOGGED BY:CHRISTINE FAWCETT
COLLAR NORTHING: 13301.70	COLLAR EASTING : 11053.68	COLLAR ELEVATION: 1228.52	GRID AZIMUTH : 318.50
DRILLED BY :GADEN	TOTAL LENGTH : 139.70	CORE/HOLE SIZE : HQ	

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		48.50	-55.00	13301.70	11053.68	1228.52
001	60.00		54.75	-56.50			
002	120.00		56.75	-56.00			

R HED PC442 NORTH GANDYS
R HED HAMMER TO 38.20M, DIAMOND IN PRIMARY MATERIAL
R HED DRILLED TO INTERSECT ANTICLINE

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 38.20			PERCUSSION PRE COLLAR.	
	38.20 40.25	2.00	0.32	GREYWACKE: medium grey, 3% siltstone. MINERALOGY: 0.1% pyrite disseminations, scat. crystals.	
	40.25 40.85	0.60	0.00	SILTSTONE: medium grey. STRUCTURE: 1 deg bearing. MINERALOGY: 0.3% medium cordierite spots, 0.03% pyrite disseminations, scat. crystals, 0.1% arsenopyrite disseminations, scat. crystals.	
	40.85 43.50	2.15	0.37	GREYWACKE: medium grey. STRUCTURE: 1 deg bearing. QUARTZ VEINING: 1% quartz veins, fibrous, laminated, 1 vein(s) in interval, 4 cm total vein thickness. MINERALOGY: 1% k-feldspar veins, 0.3% pyrite disseminations & minor microveins, 0.3% arsenopyrite disseminations, scat. crystals.	
R	43.00 43.20			PROMINENT ASPY DISSEMINATIONS	
	43.50 43.80	0.30	0.25	QUARTZ VEIN: light grey. STRUCTURE: 1 deg bearing. MINERALOGY: 0.3% chlorite blebs, 0.3% pyrite disseminations, scat. crystals, 0.1% arsenopyrite disseminations, scat. crystals.	
	43.80 46.20	2.40	0.00	GREYWACKE: medium grey, 0.3% siltstone.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH442 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					STRUCTURE: bedding: 1 deg bearing, top up, 15 deg to s.c.a. MINERALOGY: 1% pyrite disseminations, scat. crystals, 1% arsenopyrite disseminations, scat. crystals.	
	46.20	46.80	0.60	0.00	GREYWACKE: medium grey, brecciated. QUARTZ VEINING: 3% quartz blebs. MINERALOGY: 3% pyrite disseminations, scat. crystals, 0.03% pyrrhotite disseminations, scat. crystals, 0.1% arsenopyrite disseminations, scat. crystals.	
R	46.20	46.80			MINOR FAULT, QZ INFILLING BRECCIA OPENINGS, + NUMEROUS NARROW	
R	46.20	46.80			VEINLETS	
	46.80	52.80	5.40	1.20	GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 5% pyrite within quartz vein.	
			0.30	0.10	49.30 - 49.50: 5% SILTSTONE: medium grey.	
			0.30	0.00	51.30 - 51.60: 5% SILTSTONE: medium grey.	
	52.80	53.80	0.80	0.00	GREYWACKE: brecciated. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 5% chlorite pervasive, 1% arsenopyrite disseminations, scat. crystals.	
R	52.80	53.80			MINOR FAULT, CHLORITIC WITH NUMEROUS SMALL QZ VEINLETS, VERY	
R	52.80	53.80			BROKEN	
	53.80	60.30	6.10	2.05	GREYWACKE: medium grey, 10% siltstone. STRUCTURE: joint: cross-cutting regular, 80 deg to s.c.a. QUARTZ VEINING: 0.3% quartz microveins, fracture fillings. MINERALOGY: 0.3% k-feldspar pervasive, 0.1% chert nodules, 1% pyrite disseminations, scat. crystals.	
	60.30	62.10	1.85	1.35	WACKE SILTSTONE: medium-dark grey. MINERALOGY: 0.03% pyrite microveins, fracture fillings.	
R	60.30	62.10			FINE GRAINED, MASSIVE SILT? FINE SPOTTY TEXTURE->ALTERATION?	
	62.10	66.30	4.10	0.92	GREYWACKE: medium grey, 5% siltstone. QUARTZ VEINING: 0.3% quartz microveins, fracture fillings. MINERALOGY: 0.1% carbonate microveins, fracture fillings, 0.1% k-feldspar microveins, fracture fillings, 0.03% galena within quartz vein, trace sphalerite, within quartz vein.	
R	62.10	66.30			NARROW QZVNS WITH SELVEDGE QZ -> CAVITY GROWTH WITH GALENA AND	
R	62.10	66.30			FELDSPAR	
	66.30	73.00	6.35	2.06	SILTSTONE: medium grey.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH442 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					STRUCTURE: bedding: top up, 15 deg to s.c.a. MINERALOGY: 0.3% medium cordierite spots, 1% coarse cordierite spots, 0.03% k-feldspar microveins, fracture fillings, 1% chert laminations/bedded, 1% pyrite disseminations & minor microveins, 0.03% chalcopyrite disseminations, scat. crystals, 1% galena within quartz vein.	
K GHG	66.30	66.30				
	73.00	77.10	3.95	0.80	SILTSTONE: medium grey. STRUCTURE: veining: cross-cutting regular, 50 deg to s.c.a, bedding: top up, 20 deg to s.c.a. MINERALOGY: 1% garnet disseminations, scat. crystals, 3% chert laminations/bedded, 3% pyrite microveins, minor disseminations.	
	77.10	79.45	2.35	0.92	SILTSTONE: medium grey. MINERALOGY: 0.03% garnet disseminations, scat. crystals, 0.3% chert laminations/bedded, 0.3% pyrite disseminations, scat. crystals, 1% arsenopyrite disseminations, scat. crystals.	
	79.45	79.85	0.45		SILTSTONE: medium-light grey, brecciated. QUARTZ VEINING: 30% quartz veins. MINERALOGY: 10% silicification pervasive, 0.03% pyrite disseminations, scat. crystals, 0.03% galena disseminations, scat. crystals.	
R	79.45	79.85			BRECCIA WITH QZ INFILL	
	79.85	90.60			SILTSTONE: medium grey.	
			1.40	0.25	79.85 - 81.32: 10% SILTSTONE: medium grey. MINERALOGY: 0.1% garnet disseminations, scat. crystals, 1% pyrite microveins, fracture fillings.	
			0.20	0.20	81.32 - 81.52: 3% QUARTZ VEIN: light grey. MINERALOGY: 5% pyrite within quartz vein, 20% arsenopyrite within quartz vein.	
			4.40	0.40	81.52 - 86.10: 40% SILTSTONE: medium grey. STRUCTURE: bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 1% medium cordierite spots, 1% chert laminations/bedded, 3% pyrite microveins, minor disseminations.	
			4.16		86.10 - 90.60: 50% WACKE SILTSTONE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings, 1% pyrite disseminations, scat. crystals.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH442 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	90.60	92.30	1.55	0.45	FAULT: medium grey, 80% siltstone, brecciated. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.3% pyrite disseminations & minor microveins.	
R	90.60	91.10			20% QZVNING	
R	91.10	92.30			VERY BROKEN	
	92.30	95.80	3.05	0.85	SILTSTONE: medium grey. QUARTZ VEINING: 1% quartz microveins, fracture fillings. MINERALOGY: chert laminations/bedded, 0.1% pyrite disseminations, scat. crystals.	
	95.80	100.60	4.50	2.00	SILTSTONE: medium grey. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 1% medium cordierite spots, 0.3% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations, 60% arsenopyrite disseminations, scat. crystals.	
R	95.80	100.60			MINOR BRECCIATION, QZ AND CB FRACTURE FILLINGS	
	100.60	109.20	4.30	0.35	SILTSTONE: medium grey. 100.60 - 105.00: 50% SILTSTONE: medium grey. STRUCTURE: bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.3% k-feldspar pervasive, 0.1% pyrite disseminations, scat. crystals.	
			4.00	1.65	105.00 - 109.20: 50% SILTSTONE: medium grey. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.1% pyrite disseminations, scat. crystals.	
	109.20	139.70	2.90	0.75	SILTSTONE: medium grey. MINERALOGY: 0.3% pyrite disseminations, scat. crystals. 109.20 - 112.20: 10% SILTSTONE: medium grey. STRUCTURE: bedding: top down, 70 deg to s.c.a. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.3% chert nodules, 0.3% pyrite disseminations, scat. crystals.	
K ANT	109.40	109.40				
R	112.20	113.70	1.50	0.20	QZVNS NEAR BED PARALLEL 112.20 - 113.70: 5% SILTSTONE: medium grey. STRUCTURE: veining: cross-cutting irregular, 80 deg to s.c.a. bedding: top down, 75 deg to s.c.a. QUARTZ VEINING: 20% quartz veins, 3 vein(s) in interval, 13 cm	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH442 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
					total vein thickness.	
			5.50	0.95	MINERALOGY: 0.03% pyrite disseminations, scat. crystals. 113.70 - 119.50: 20% SILTSTONE: medium grey.	
					QUARTZ VEINING: 1% quartz veins.	
			5.80	1.45	MINERALOGY: 0.3% k-feldspar veins, 0.3% pyrite disseminations, scat. crystals, 0.3% galena within quartz vein.	
					119.50 - 125.60: 20% SILTSTONE: medium grey.	
					STRUCTURE: bedding: top down, 85 deg to s.c.a.	
					QUARTZ VEINING: 0.1% quartz microveins, fracture fillings.	
					MINERALOGY: 0.3% pyrite disseminations, scat. crystals.	
R	124.95	126.20			BROWN SI/KSPAR ALTERATION	
			5.70		125.60 - 131.70: 20% SILTSTONE: medium-dark grey.	
					QUARTZ VEINING: 5% quartz veins.	
					MINERALOGY: 0.3% k-feldspar pervasive, 3% silicification pervasive, 0.3% pyrite disseminations, scat. crystals, 0.1%	
			6.70	2.50	arsenopyrite disseminations, scat. crystals.	
					131.70 - 138.00: 20% SILTSTONE: medium grey.	
					STRUCTURE: bedding: top down, 85 deg to s.c.a.	
					QUARTZ VEINING: 3% quartz veins.	
					MINERALOGY: 1% fine cordierite spots, 1% medium cordierite spots, 1% pyrite microveins, minor disseminations.	
R	138.00	139.70			SMALL ROLLOVER OF BEDDING	
			1.80	1.35	138.00 - 139.70: 5% SILTSTONE: medium grey.	
					STRUCTURE: bedding: top down, 85 deg to s.c.a.	
					QUARTZ VEINING: 1% quartz veins.	
					MINERALOGY: 3% chert laminations/bedded, 1% pyrite microveins, minor disseminations.	

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH442 (CONTINUED)

PAGE: 6 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
38.20	40.10	2534	0.02								
40.10	42.00	2535	0.16								
42.00	43.50	2536	0.86								
43.50	45.00	2537	0.34	0.37							
45.00	46.50	2538	0.14								
46.50	48.00	2539	0.13								
48.00	49.50	2540	0.13	0.13							
49.50	51.00	2541	0.07								
51.00	52.50	2542	0.10								
52.50	54.00	2543	0.14								
54.00	55.50	2544	0.12								
55.50	57.00	2545	0.02								
57.00	58.50	2546	0.22								
58.50	60.00	2547	0.14								
60.00	61.50	2548	0.01								
61.50	63.00	2549	0.01								
63.00	64.50	2551	0.03								
64.50	66.00	2552	0.03	0.02							
66.00	67.50	2553	-0.01								
67.50	69.00	2554	0.22								
69.00	70.50	2555	0.06								
70.50	72.00	2556	0.20								
72.00	73.50	2557	0.20	0.20							
73.50	75.00	2558	0.76								
75.00	76.50	2559	0.94								
76.50	78.00	2560	0.32								
78.00	79.50	2561	0.32								
79.50	81.00	2562	0.35								
81.00	82.50	2563	1.52								
82.50	84.00	2564	0.33	0.35							
84.00	85.50	2565	1.69								
85.50	87.00	2566	0.21								
87.00	88.50	2567	0.07								
88.50	90.00	2568	0.21								
90.00	91.50	2569	0.14								
91.50	93.00	2570	0.05								
93.00	94.50	2571	0.03	0.04							
94.50	96.00	2572	0.69								
96.00	97.50	2573	1.12	1.19							
97.50	99.00	2574	0.12								
99.00	100.50	2575	1.32								
100.50	102.00	2576	0.27								

INTERNATIONAL GEOSYSTEMS CORPORATION

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT

PAGE: 1 DATE: 25 OCT 90

Diamond Hole : PCDH443

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13300.55
DRILLED BY :GADENSTART DATE : 2 JUN 89
COLLAR EASTING : 11171.24
TOTAL LENGTH : 100.60COMPLETION DATE : 8 JUN 89
COLLAR ELEVATION: 1240.57
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		228.50	-50.00	13300.55	11171.24	1240.57
001	50.00		227.75	-47.50			
002	100.00		228.75	-47.00			

R HED PC443 NORTH GANDYS TO INTERSECT ANTICLINE
R HED 0.00-29.40M HAMMER PRE-COLLAR
R HED POX 38.60M
R HED ANT 80.50M
R HED END OF HOLE 100.60M

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 29.40			PERCUSSION PRE COLLAR.	
	29.40 38.60	8.20	0.15	GREYWACKE: medium grey, 1% siltstone. STRUCTURE: joint: conformable irregular, 45 deg to s.c.a. bedding: top up, 40 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 1% limonite microveins, fracture fillings.	
R	29.40 38.60			SEVERAL NARROW 1-10cm SILT BANDS, STRONGLY JOINTED AND	
R	29.40 38.60			FRACTURED.	
R	29.40 38.60			PARTING ON BEDDING, Y50, + NUMEROUS OTHER FRACTURES AND JOINTS	
	38.60 39.30	0.70	0.47	GREYWACKE: medium grey, 5% siltstone. STRUCTURE: veining: cross-cutting irregular, 70 deg to s.c.a. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.3% pyrite within quartz vein.	
K POX	38.60 38.60				
R	38.60 39.30			JOINTED AND FRACTURED - FILLED WITH QZ, MOVEMENT ON QZ FILLED	
R	38.60 39.30			JOINT UP TO 4cm. SMALL ELONGATE? SILT CLASTS IN GWAC AT BASE	
R	38.60 39.30			OF SILT	
R	38.60 39.30			QZ/FELDSPAR VEINS?	
	39.30 40.00	0.70	0.45	GREYWACKE: medium-light grey. STRUCTURE: bedding: top up, 50 deg to s.c.a. QUARTZ VEINING: 0.3% quartz microveins, fracture fillings. MINERALOGY: 0.1% pyrite microveins, minor disseminations.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH443 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
	40.00	40.80	0.70	0.35	SILTY GREYWACKE: 3% siltstone. STRUCTURE: joint: cross-cutting regular, 40 deg to s.c.a., veining: cross-cutting regular, 50 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% pyrite microveins, minor disseminations.	
R	40.00	40.80			BLEACHED ALONG NARROW QZ VEINLETS AND CHLORITIC? FRACTURES	
R	40.00	40.80			DARK IRREGULAR ELONGATE CARBONACEOUS? CLASTS IN VERY FINE	
R	40.00	40.80			GRAINED GWAC	
	40.80	46.30	5.00	1.45	GREYWACKE: medium-light grey, 5% siltstone. STRUCTURE: veining: conformable irregular, 20 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 1% pyrite disseminations & minor microveins.	
R	40.80	46.30			NARROW IRREGULAR QZ/FELDSPAR? VEINLETS X-CUTS QZVNS AND V.V	
	46.30	46.80	0.45	0.00	QUARTZ VEIN: 10% siltstone. QUARTZ VEINING: 80% quartz veins. MINERALOGY: 10% chlorite blebs, 0.1% pyrite disseminations, scat. crystals, 0.3% arsenopyrite disseminations, scat. crystals.	
	46.80	48.00	1.20	0.00	GREYWACKE: 3% siltstone. QUARTZ VEINING: 3% quartz veins. MINERALOGY: garnet 3% disseminations, scat. crystals.	
R	46.80	48.00			ZEOLITE FILLED FRACTURES, GARNET? SPOTTED	
	48.00	48.30	0.25	0.00	FAULT: greenish gray. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.3% chert laminations/bedded.	
R	48.00	48.30			SHEARED CHLORITIC MESS	
	48.30	48.90	0.50	0.16	SILTSTONE: medium grey. QUARTZ VEINING: 1% quartz veins.	
	48.90	49.60	0.70	0.55	QUARTZ VEIN: 10% siltstone. QUARTZ VEINING: 80% quartz veins. MINERALOGY: 0.3% k-feldspar blebs, 0.1% pyrite disseminations, scat. crystals, 0.3% arsenopyrite disseminations, scat. crystals.	
	49.60	53.00	3.35	0.72	GREYWACKE: medium grey, 1% siltstone. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 0.1% pyrite within quartz vein, 0.1% arsenopyrite	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH443 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
R	49.60	53.00			disseminations, scat. crystals. ONE QZVN TERMINATED AGAINST A QZ/FELS VEIN WITH 5%PY	
	53.00	54.40	1.20	0.00	SILTSTONE: medium grey. STRUCTURE: veining: conformable regular, 30 deg to s.c.a. bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 0.3% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
	54.40	57.20	2.65	0.00	GREYWACKE: 10% siltstone. MINERALOGY: 1% pyrite microveins, minor disseminations.	
	57.20	69.30			SILTSTONE: medium grey.	
K GHG	57.20	57.20				
R	57.20	57.20			GARNETS AND CHERT BAND PRESENT IN SILT BED, CHERT- UNEVEN UPPER MARGIN	
R	57.20	57.20			WHITE BLEBS - ANDALUSITE? 0.3%	
R	57.20	63.30			PYRRHOTITE PRESENT IN CHERT BANDS	
R	57.20	69.30	5.50	1.95	57.20 - 63.30: 50% SILTSTONE: medium grey, banded. STRUCTURE: bedding: top up, 40 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 3% silicification pervasive, 0.3% garnet disseminations, scat. crystals, 1% chert laminations/bedded, 0.3% pyrite disseminations, scat. crystals, 0.1% pyrrhotite disseminations, scat. crystals.	
R	59.30	63.30			FELDSPAR ALTERATION	
R	60.50	60.60			STRETCH LINEATION/CLEAVAGE? EVIDENT AT ~50-60deg SCA - ACROSS BEDDING	
R	60.50	60.60				
R	63.30	69.30			NUMEROUS SI/FELDS. FRACTURE FILL VEINLETS CUTTING ACROSS QZVNS & CHE	
R	63.30	69.30	5.50	0.80	63.30 - 69.29: 50% SILTSTONE: medium grey. STRUCTURE: veining: conformable regular, 35 deg to s.c.a. QUARTZ VEINING: 3% quartz veins, 4 vein(s) in interval, 25 cm total vein thickness. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 5% chert laminations/bedded, 5% pyrite microveins, minor disseminations, 0.1% pyrrhotite disseminations, scat. crystals, 5% arsenopyrite within quartz vein.	
	69.30	73.15	3.20	0.60	SILTSTONE: medium grey, brecciated. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 5% chlorite pervasive.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH443 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
R	69.30	73.15			PROBABLY FAULTED, VERY BROKEN CHLORITIC	
	73.15	74.30	1.25	0.60	QUARTZ VEIN: light grey. QUARTZ VEINING: 100% quartz veins. MINERALOGY: 1% pyrite microveins, minor disseminations, 0.1% chalcopyrite disseminations, scat. crystals, 10% pyrrhotite microveins, minor disseminations.	
R	73.15	74.30			PY MAINLY FROM 73.15-73.60M, ASPY 73.60-74.30M	
	74.30	75.30	1.00	0.00	SILTSTONE: medium grey. QUARTZ VEINING: 20% quartz veins. MINERALOGY: 0.1% k-feldspar blebs, 3% pyrite within quartz vein, 0.03% galena disseminations, scat. crystals, 1% arsenopyrite within quartz vein.	
R	74.30	75.30			SHEARED, CHLORITIC SILT AND QZVN	
	75.30	86.50	10.30	5.50	REEF: light grey. QUARTZ VEINING: 80% quartz veins. MINERALOGY: 3% pyrite microveins, minor disseminations, 5% arsenopyrite microveins, minor disseminations. 60% SILT WITH QZ, VERY BROKEN LAMINATED SILT/QZ/PY/ASPY AT 70deg SCA	
R	80.30	81.80				
R	80.30	80.50				
K ANT	80.50	80.50				
	86.50	89.20	2.45	0.55	SILTSTONE: medium grey. STRUCTURE: bedding: top up, 65 deg to s.c.a. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.3% k-feldspar blebs, 3% pyrite microveins, minor disseminations, 3% arsenopyrite microveins, minor disseminations.	
	89.20	92.25	2.80	1.90	QUARTZ VEIN: light grey, 10% siltstone. MINERALOGY: 1% pyrite microveins, minor disseminations, 0.3% galena disseminations, scat. crystals, 3% arsenopyrite microveins, minor disseminations.	
	92.25	100.60	7.50	1.10	SILTSTONE: medium grey. STRUCTURE: bedding: top down, 75 deg to s.c.a. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 1% chert laminations/bedded, 3% pyrite microveins, minor disseminations.	
R	100.60	100.60			END OF HOLE	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH443 (CONTINUED)

S U M M A R Y R E M A R K S

STRATIGRAPHY

0.00-57.20M GWAC WITH MINOR INTERBEDDED SILT NEAR BASE, -
GANDYS HILL GREYWACKE
57.20-100.60M LOWER GANDYS SILT

STRUCTURE

29.40-39.30M JOINTING AND FRACTURING WITH SOME MOVEMENT
48.00-48.30M FAULT
60.30-60.60M LINEATIONS X-CUTTING BEDDING
69.30-78.15M POSSIBLY FAULTED, BRECCIATED
74.30-75.30M SHEARED
ANTICLINE PALCED AT 80.50M

MINERALISATION

38.60-39.30M 10% QZVNING, PY
46.30-46.80M QZVN, PY + ASPY, CHL
69.30-73.15M 10% QZVNING
73.15-74.30M QZVN WITH PY AT 73.15-73.60, AND ASPY 73.60-74.30M
74.30-75.30M 20% QZVNING
75.30-86.30M REEF SYSTEM, 80.30-81.80M 60% V.BROKEN SILT, PY-ASPY
86.50-89.20M 10% QZVNING
89.20-92.25M QZVN PY, ASPY, GL
EOH 100.60M

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH443 (CONTINUED)

PAGE: 7 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
93.00	94.50	2644	0.88								
94.50	96.00	2645	1.00								
96.00	97.50	2646	0.21								
97.50	99.00	2647	0.17								
99.00	100.50	2648	0.26	0.24							

INTERNATIONAL GEOSYSTEMS CORPORATION

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT

PAGE: 1 DATE: 25 OCT 90

Diamond Hole : PCDH444

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13552.76
DRILLED BY :GADENSTART DATE : 8 JUN 89
COLLAR EASTING : 11122.16
TOTAL LENGTH : 66.35COMPLETION DATE : 16 JUN 89
COLLAR ELEVATION: 1237.90
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		228.50	-50.00	13552.76	11122.16	1237.90
001	30.00		227.75	-49.50			
002	66.00		227.75	-48.50			

R HED PC444 NORTH GANDYS TO INTERSECT ANTICLINE
R HED ANT 57.50M
R HED BOX 32.70M
R HED POX 47.20M
R HED END OF HOLE 66.35M
R HED 4.80-9.70M 50% CORE LOSS
R HED 9.70-18.00M 30% CORE LOSS
R HED OLD WORKINGS 0.00-9.70M

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
R	0.00 3.20	1.70	0.00	OVERBURDEN: reddish brown. QZ AND SILT RUBBLE	
	3.20 4.80	1.50	0.00	SILTSTONE: reddish brown. QUARTZ VEINING: 5% quartz veins. RUBBLEY LOOKING QZ	
R	3.20 4.80				
	4.80 6.70	1.00	0.87	QUARTZ VEIN: light grey, 50% core loss. MINERALOGY: 1% limonite microveins, fracture fillings. CAVITIES THROUGHOUT-50% CORE LOSS	
R	4.80 6.70				
	6.70 18.00	6.00	0.00	SILTSTONE: brownish gray, 30% core loss, banded. STRUCTURE: bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 5% carbonate pervasive, 3% limonite microveins, fracture fillings.	
R	6.70 18.00			VERY SOFT, CLAYEY	
	18.00 21.50	3.10	0.00	SILTSTONE: grayish brown, banded. STRUCTURE: veining: conformable regular, 30 deg to s.c.a. bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 20% quartz veins.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH444 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
R	18.00	21.50			MINERALOGY: 5% clay microveins, fracture fillings. WHITE CLAYEY VEINLETS FILLING FRACTURES AND JOINTS	
	21.50	25.60	3.55	0.30	SILTSTONE: brownish gray, banded. STRUCTURE: veining: cross-cutting irregular, 40 deg to s.c.a. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 0.3% clay microveins, fracture fillings, 1% limonite microveins, fracture fillings.	
	25.60	27.50	0.80	0.20	QUARTZ VEIN: light grey. MINERALOGY: 0.3% limonite microveins, fracture fillings.	
R	25.60	27.50			BLUE CLAYEY MATERIAL AFTER CPY?, 27.30-27.50M BANDED QZ/FE	
R	25.60	27.50			AFTER SULPHIDES	
	27.50	41.20			SILTSTONE: brownish gray.	
R	27.50	32.70			VERY BROKEN 32.00-32.50M FAULTED?	
			3.80	0.15	27.50 - 32.70: 20% SILTSTONE: brownish gray. MINERALOGY: 1% limonite microveins, fracture fillings, 0.3% chert nodules.	
K BOX	32.70	32.70			32.70	
R	32.70	41.20			BEDDING STEEPENS WITH QZVNING 34.80-36.40M	
			7.30	1.60	32.70 - 41.20: 80% SILTSTONE: brownish gray, bedded. STRUCTURE: veining: cross-cutting irregular, 60 deg to s.c.a., bedding: top up, 25 deg to s.c.a. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.3% k-feldspar pervasive, 0.1% chlorite pervasive, 1% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
	41.20	66.35			SILTSTONE: medium grey, banded, bedded.	
			6.30	1.90	41.20 - 48.20: 50% SILTSTONE: medium grey, banded, bedded. STRUCTURE: chloritic quartz vein: cross-cutting irregular, 85 deg to s.c.a., veining: conformable irregular, 30 deg to s.c.a. QUARTZ VEINING: 20% quartz veins. MINERALOGY: 3% k-feldspar patches, 1% pyrite microveins, minor disseminations, 0.1% arsenopyrite disseminations, scat. crystals.	
K POX	47.20	47.20				
R	48.20	58.90			BEDDING STEEPENS FROM 25deg TO 50deg FROM 57.50M - 65.75m	
			10.65	4.35	48.20 - 58.90: 40% SILTSTONE: medium grey, banded, bedded. STRUCTURE: quartz feldspar vein: cross-cutting regular, 40 deg to s.c.a., bedding: top up, 25 deg to s.c.a. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings, 5%	

LOG

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DATE: 25 OCT 90

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH444 (CONTINUED)

Interval From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
57.50	57.50		k-feldspar pervasive, 1% pyrite microveins, minor disseminations.	
	6.40	1.70	58.90 - 65.75: 20% SILTSTONE: medium grey, banded, bedded. STRUCTURE: joint: cross-cutting irregular, 30 deg to s.c.a. bedding: 50 deg to s.c.a. MINERALOGY: 0.3% chert laminations/bedded, 0.3% arsenopyrite disseminations, scat. crystals.	
	0.60	0.35	65.75 - 66.35: 20% SILTY GREYWACKE: medium grey.	

SUMMARY REMARKS

STRATIGRAPHY

0.00-66.35M LOWER GANDYS SILT

STRUCTURE

27.50-32.70M POSSIBLE FAULT

ANTICLINE PLACED AT 57.50M?

MINERALISATION

4.80-6.70M QZVN

18.00-21.50M 20% QZVNING

25.60-27.50M QZVN

32.70-41.20M 10% QZVNING PY, CHL, KF

41.20-48.20M 20% QZVNING, PY, ASPY, KF

EOH 66.35

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH444 (CONTINUED)

PAGE: 4 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	3053	1.44	1.41							
1.50	3.00	3054	2.32								
3.00	4.50	3055									
4.50	6.00	3056	0.40								
6.00	10.50	3057	1.36								
10.50	12.00	3058	1.25								
12.00	13.50	3059	0.56	0.68							
13.50	15.00	3060	0.70								
15.00	16.50	3061	1.21								
16.50	18.00	3062	1.68								
18.00	19.50	3063	3.88								
19.50	21.00	3064	1.54								
21.00	22.50	3065	1.03								
22.50	24.00	3066	0.79								
24.00	25.50	3067	2.39								
25.50	27.00	3068	4.16								
27.00	28.50	3069	1.37	1.39							
28.50	30.00	3070	0.73								
30.00	31.50	3071	0.43								
31.50	33.00	3072	0.24								
33.00	34.50	3073	0.78								
34.50	36.00	3074	0.33								
36.00	37.50	3075	0.27								
37.50	39.00	3076	0.15								
39.00	40.50	3077	0.06								
40.50	42.00	3078	0.24	0.19							
42.00	43.50	3079	0.03								
43.50	45.00	3080	0.10								
45.00	46.50	3081	0.20	0.12							
46.50	48.00	3082	0.49								
48.00	49.50	3083	0.15								
49.50	51.00	3084	0.26								
51.00	52.50	3085	0.24								
52.50	54.00	3086	0.19								
54.00	55.50	3087	0.27	0.29							
55.50	57.00	3088	0.03								
57.00	58.50	3089	0.12								
58.50	60.00	3090	0.06								
60.00	61.50	3091	-0.01								
61.50	63.00	3092	0.26	0.21							
63.00	64.50	3093	0.45								
64.50	66.38	3094	0.01								

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH444 (CONTINUED)

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ASSAY VALUES

From	To	Number	Au g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	3053	1.44					
1.50	3.00	3054	2.32					
3.00	4.50	3055						
4.50	6.00	3056	0.40					
6.00	10.50	3057	1.36					
10.50	12.00	3058	1.25					
12.00	13.50	3059	0.56					
13.50	15.00	3060	0.70					
15.00	16.50	3061	1.21					
16.50	18.00	3062	1.68					
18.00	19.50	3063	3.88					
19.50	21.00	3064	1.54					
21.00	22.50	3065	1.03					
22.50	24.00	3066	0.79					
24.00	25.50	3067	2.39					
25.50	27.00	3068	4.16					
27.00	28.50	3069	1.37					
28.50	30.00	3070	0.73					
30.00	31.50	3071	0.43					
31.50	33.00	3072	0.24					
33.00	34.50	3073	0.78					
34.50	36.00	3074	0.33					
36.00	37.50	3075	0.27					
37.50	39.00	3076	0.15					
39.00	40.50	3077	0.06					
40.50	42.00	3078	0.24					
42.00	43.50	3079	0.03					
43.50	45.00	3080	0.10					
45.00	46.50	3081	0.20					
46.50	48.00	3082	0.49					
48.00	49.50	3083	0.15					
49.50	51.00	3084	0.26					
51.00	52.50	3085	0.24					
52.50	54.00	3086	0.19					
54.00	55.50	3087	0.27					
55.50	57.00	3088	0.03					
57.00	58.50	3089	0.12					
58.50	60.00	3090	0.06					
60.00	61.50	3091	-0.01					
61.50	63.00	3092	0.26					
63.00	64.50	3093	0.45					
64.50	66.38	3094	0.01					

INTERNATIONAL GEOSYSTEMS CORPORATION

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT

PAGE: 1 DATE: 25 OCT 90

Diamond Hole : PCDH445

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13546.18
DRILLED BY :GADENSTART DATE : 16 JUN 89
COLLAR EASTING : 11146.54
TOTAL LENGTH : 118.80COMPLETION DATE : 28 JUN 89
COLLAR ELEVATION: 1240.13
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		228.50	-50.00	13546.18	11146.54	1240.13
001	60.00		225.75	-49.50			
002	118.00		225.75	-47.50			

R HED PC445 NORTH GANDYS TO INTERSECT ANTICLINE
R HED BOX 38.70M
R HED ANT 103.70M
R HED CORE LOSS 8.80-9.20M, 90%

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 2.10	0.75	0.00	OVERBURDEN: brownish red. QUARTZ VEINING: 10% quartz blebs.	
	2.10 9.55	2.50	0.66	GREYWACKE: yellowish brown. 2.10 - 4.60: 30% GREYWACKE: yellowish brown. QUARTZ VEINING: 10% quartz veins.	
R	4.60 5.40	0.80		VERY BROKEN, SOFT, CLAYEY 4.60 - 5.40: 10% GREYWACKE: yellowish brown. QUARTZ VEINING: 5% quartz veins.	
		0.85	0.35	MINERALOGY: 5% biotite disseminations, scat. crystals. 5.40 - 6.25: 10% GREYWACKE: yellowish brown. QUARTZ VEINING: 3% quartz veins.	
		0.30	0.00	6.25 - 6.55: 5% QUARTZ VEIN.	
		1.10	0.30	6.55 - 7.80: 20% GREYWACKE: yellowish brown. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 3% biotite disseminations, scat. crystals.	
R	8.20 9.55	0.20	0.00	7.80 - 8.20: 5% QUARTZ VEIN.	
		1.35		CORE LOSS 90% BTW 8.80-9.20-> QTZ RUBBLE 8.20 - 9.55: 20% GREYWACKE: yellowish brown. QUARTZ VEINING: 10% quartz veins.	
	9.55 10.80	1.10		SILTY GREYWACKE: reddish brown. STRUCTURE: bedding: top up, 30 deg to s.c.a. MINERALOGY: 3% fine cordierite spots, 1% medium cordierite spots, 5% biotite pervasive.	
R	9.55 10.80			MICACEOUS GWAC?	

IGC GEOLOG

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PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH445 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
	10.80	12.90	1.80	0.30	GREYWACKE: brownish gray, 3% siltstone. QUARTZ VEINING: 0.03% quartz microveins, fracture fillings. SILT-SOFT	
R	11.10	11.30				
	12.90	13.30	0.30	0.00	SILTY GREYWACKE: brownish gray. QUARTZ VEINING: 3% quartz pervasive. MINERALOGY: 3% medium cordierite spots. MICACEOUS	
R	12.90	13.30				
	13.30	15.50	1.80	0.00	GREYWACKE: brownish gray. STRUCTURE: veining: cross-cutting irregular, 85 deg to s.c.a. QUARTZ VEINING: 1% quartz veins.	
	15.50	16.40	0.90	0.00	WACKE SILTSTONE. MICACEOUS	
R	15.50	16.40				
	16.40	17.90	1.10	0.00	GREYWACKE: light grey, bleached. MINERALOGY: 1% silicification pervasive. VERY BROKEN	
R	16.40	17.90				
	17.90	18.60	0.60	0.00	GREYWACKE: medium grey. STRUCTURE: joint: cross-cutting regular, 70 deg to s.c.a., joint: cross-cutting irregular, 20 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins.	
	18.60	19.60	0.60	0.00	SILTSTONE: grayish brown. MINERALOGY: 1% medium cordierite spots.	
	19.60	20.70	0.85	0.00	GREYWACKE: brownish gray. QUARTZ VEINING: 3% quartz veins.	
	20.70	23.20	2.05	0.20	SILTSTONE: brownish gray, bedded. STRUCTURE: bedding: top up, 25 deg to s.c.a. MINERALOGY: 0.3% medium cordierite spots.	
	23.20	26.90	2.80	0.00	GREYWACKE: 20% siltstone. MICACEOUS SECTIONS	
R	23.20	26.90				
	26.90	30.30	2.50	0.15	SILTY GREYWACKE: grayish brown. MINERALOGY: 10% biotite pervasive. VERY MICACEOUS MATERIAL SPOTTED - MICACEOUS GWAC?	
R	26.90	30.30				
	30.30	32.40	1.25	0.00	GREYWACKE: medium-light brown, bleached.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
					QUARTZ VEINING: 10% quartz veins.	
R	32.40	33.30	0.65	0.15	QUARTZ VEIN: 5% siltstone.	
	32.40	33.30			FRACTURED QZVN AND SILT WITH CLAY INFILL	
	33.30	34.80	1.45	0.50	GREYWACKE: 1% siltstone. QUARTZ VEINING: 5% quartz veins.	
	34.80	36.45	1.40	0.00	SILTSTONE: grayish brown. STRUCTURE: bedding: top up, 10 deg to s.c.a. QUARTZ VEINING: 10% quartz veins.	
R	34.80	36.45			QZVNING ALWAYS FRACTURED WITH CLAY INFILL	
	36.45	37.60	1.15	0.17	GREYWACKE: yellowish brown. QUARTZ VEINING: 3% quartz veins.	
	37.60	38.70	0.90	0.15	SILTSTONE: grayish brown. QUARTZ VEINING: 0.3% quartz veins.	
K GHG	37.60	37.60				
K BOX	38.70	55.60			SILTSTONE: medium grey, bedded.	
	38.70	38.70	4.80	1.25	38.70 - 43.90: 30% SILTSTONE: medium grey, bedded. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 10% fine cordierite spots, 0.3% coarse cordierite spots, 0.3% garnet disseminations, scat. crystals, 0.1% chert laminations/bedded, 1% pyrite microveins, minor disseminations.	
			4.20	1.10	43.90 - 48.50: 30% SILTSTONE: medium grey, bedded. STRUCTURE: bedding: top up, 35 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% chlorite pervasive, 0.3% garnet disseminations, scat. crystals, 0.1% chert laminations/bedded, 3% pyrite microveins, minor disseminations.	
			5.90	1.20	48.50 - 55.00: 30% SILTSTONE: medium grey, bedded. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 3% chert laminations/bedded, 3% pyrite microveins, minor disseminations, 0.3% arsenopyrite veins.	
			0.30	0.20	55.00 - 55.30: 0.3% QUARTZ VEIN. MINERALOGY: 3% pyrite microveins, minor disseminations, 3% arsenopyrite microveins, minor disseminations.	
			0.50	0.15	55.30 - 55.60: 1% SILTSTONE: medium grey, bedded.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
					QUARTZ VEINING: 1% quartz veins. MINERALOGY: 1% pyrite microveins, minor disseminations.	
	55.60	58.70	3.05	1.35	SILTSTONE: medium-dark grey, bedded, banded. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.3% k-feldspar within quartz vein, 0.3% chert nodules, 5% pyrite microveins, minor disseminations.	
R	55.60	58.70			QZVNS ALL OVER - BED PARALLEL MAIN ONES TO 3cm, NARROW	
R	55.60	58.70			X-CUTTING VEINS HAVE WIGGLEY NEAR PTYGMOIDAL HABIT	
	58.70	60.55	1.60	1.15	SILTSTONE: medium grey, banded. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 5% k-feldspar pervasive, 5% silicification pervasive, 0.3% pyrite disseminations, scat. crystals.	
	60.55	64.80	4.10	1.50	SILTSTONE: medium grey. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 0.1% medium cordierite spots, 3% k-feldspar pervasive, 5% silicification pervasive, 1% chert nodules, 1% pyrite disseminations & minor microveins, 0.3% arsenopyrite disseminations, scat. crystals.	
	64.80	74.50	9.55	4.75	SILTSTONE: medium grey, bedded, banded. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.03% carbonate microveins, fracture fillings, 1% k-feldspar pervasive, 1% chert nodules.	
R	64.80	74.50			VEINING IN NUMEROUS DIRECTIONS	
	74.50	81.35	6.50	2.50	SILTSTONE: medium grey, bedded, banded. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 1% medium cordierite spots, 1% coarse cordierite spots, 0.3% k-feldspar pervasive, 0.3% silicification pervasive, 0.1% chert nodules, 1% pyrite microveins, minor disseminations, 0.03% pyrrhotite disseminations, scat. crystals, 0.3% arsenopyrite disseminations, scat. crystals.	
	81.35	88.70	7.05	2.00	SILTSTONE: medium grey, bedded. STRUCTURE: bedding: top up, 25 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 0.3% k-feldspar pervasive, 0.3% pyrite microveins and disseminations, 0.3% pyrrhotite disseminations, scat. crystals, 0.3% arsenopyrite disseminations, scat. crystals.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	88.70	92.40	3.50	1.90	SILTSTONE: reddish gray. STRUCTURE: bedding. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 0.1% fine cordierite spots, 0.1% medium cordierite spots, 10% k-feldspar pervasive, 10% silicification pervasive, 0.1% pyrite microveins and disseminations, 0.03% arsenopyrite disseminations, scat. crystals.	
	92.40	102.30	9.65	6.15	SILTSTONE: medium grey. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 30% quartz veins. MINERALOGY: 5% k-feldspar pervasive, 1% pyrite microveins, minor disseminations, 0.3% arsenopyrite disseminations, scat. crystals.	
R	92.40	102.30			BEDDING BTW 101.4-102.-CHANGES TO 80deg THEN BACK TO 40deg	
	102.30	104.90	2.50	0.50	SILTSTONE: medium grey. STRUCTURE: 1 deg bearing. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 0.3% carbonate microveins, fracture fillings, 3% k-feldspar pervasive, 3% silicification within quartz vein, 0.3% chert nodules, 1% pyrite microveins, minor disseminations.	
K ANT	103.70	103.70				
R	103.70	103.70			BEDDING CHANGES FROM 45deg TO 80deg AT 103.70M	
	104.90	118.80			SILTSTONE: medium grey. STRUCTURE: bedding: top up, 85 deg to s.c.a. MINERALOGY: 0.3% carbonate microveins, fracture fillings, 0.3% pyrite disseminations, scat. crystals.	
			6.30	3.00	104.90 - 111.20: 50% SILTSTONE: medium grey. STRUCTURE: bedding: top up, 85 deg to s.c.a. MINERALOGY: 0.3% carbonate microveins, fracture fillings, 3% silicification pervasive, 0.3% pyrite disseminations, scat. crystals.	
			7.30	3.70	111.20 - 118.79: 50% SILTSTONE: medium grey. STRUCTURE: bedding: top up, 85 deg to s.c.a. MINERALOGY: 0.3% carbonate microveins, fracture fillings, 0.3% pyrite disseminations, scat. crystals.	
R	118.80	118.80			END OF HOLE	

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

PAGE: 6 DATE: 25 OCT 90

S U M M A R Y R E M A R K S

STRATIGRAPHY

0.00-37.60M GANDYS HILL GREYWACKE, MICACEOUS AND SILICEOUS GWAC
WITH INTERBEDDED SILTS.

37.60-118.80M LOWER GANDYS SILT

STRUCTURE

ANTICLINE.AT 103.70M

NO MAJOR FAULTING EVIDENT

MINERALIZATION

QZVNS 6.25-6.55M, 7.80-8.20M, 32.40-33.30M

30.30-32.40M GWAC + 10% QZVNING

58.70-74.50M 10% QZVNING + SI/FELD ALTERATION

92.40-102.30M 30% QZVNING IN SILT

END OF HOLE 118.80M

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

PAGE: 7 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2211	0.46								
1.50	3.00	2212	0.30								
3.00	4.50	2213	0.22								
4.50	6.00	2214	0.08								
6.00	7.50	2215	0.22								
7.50	9.00	2216	0.11								
9.00	10.50	2217	0.35	0.38							
10.50	12.00	2218	0.07								
12.00	13.50	2219	0.03								
13.50	15.00	2220	0.22								
15.00	16.50	2221	0.25								
16.50	18.00	2222	0.21								
18.00	19.50	2223	0.16								
19.50	21.00	2224	0.05								
21.00	22.50	2225	0.12								
22.50	24.00	2226	0.23								
24.00	25.50	2227	0.06								
25.50	27.00	2228	0.03	0.02							
27.00	28.50	2229	0.32								
28.50	30.00	2230	0.83								
30.00	31.50	2231	0.16								
31.50	33.00	2232	0.15	0.16							
33.00	34.50	2233	0.33								
34.50	36.00	2234	0.13								
36.00	37.50	2235	0.05	0.06							
37.50	39.00	2236	0.08	0.06							
39.00	40.50	2237	0.06								
40.50	42.00	2238	0.14								
42.00	43.50	2239	0.11								
43.50	45.00	2240	0.44								
45.00	46.50	2241	0.07								
46.50	48.00	2242	0.15	0.16							
48.00	49.50	2243	0.26								
49.50	51.00	2244	0.14	0.14							
51.00	52.50	2245	2.28	2.14							
52.50	54.00	2246	0.13								
54.00	55.50	2247	1.47								
55.50	57.00	2248	1.48								
57.00	58.50	2249	2.47								
58.50	60.00	2251	0.85								
60.00	61.50	2252	0.97								
61.50	63.00	2253	1.70								

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH445 (CONTINUED)

PAGE: 8 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
63.00	64.50	2254	0.17	0.22							
64.50	66.00	2255	3.04								
66.00	67.50	2256	0.73								
67.50	69.00	2257	1.51	1.48							
69.00	70.50	2258	4.07								
70.50	72.00	2259	0.10								
72.00	73.50	2260	1.78								
73.50	75.00	2261	0.21								
75.00	76.50	2262	0.12	0.14							
76.50	78.00	2263	0.08								
78.00	79.50	2264	3.23								
79.50	81.00	2265	0.31								
81.00	82.50	2266	0.21								
82.50	84.00	2267	0.16								
84.00	85.50	2268	0.05								
85.50	87.00	2269	0.48								
87.00	88.50	2270	0.19	0.17							
88.50	90.00	2271	0.05	0.17							
90.00	91.50	2272	0.55								
91.50	93.00	2273	0.25								
93.00	94.50	2274	0.19								
94.50	96.00	2275	0.21								
96.00	97.50	2276	0.02								
97.50	99.00	2277	0.02								
99.00	100.50	2278	-0.01								
100.50	102.00	2279	-0.01								
102.00	103.50	2280	0.18								
103.50	105.00	2281	0.02								
105.00	106.50	2282	0.03								
106.50	108.00	2283	-0.01								
108.00	109.50	2284	-0.01								
109.50	111.00	2285	0.64	0.62							
111.00	112.50	2286	0.01								
112.50	114.00	2287	0.01								
114.00	115.50	2288	0.08	0.05							
115.50	117.00	2289	-0.01								
117.00	119.00	2290	0.02	-0.01							

Diamond Hole : PCDH446

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13250.30
DRILLED BY :GADENSTART DATE : 5 JUL 89
COLLAR EASTING : 11099.33
TOTAL LENGTH : 112.00COMPLETION DATE : 5 JUL 89
COLLAR ELEVATION: 1235.07
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE CALDWELL
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.0		48.50	-70.00	13250.30	11099.33	1235.07
001	52.0		64.00	-70.00			
002	112.0		62.00	-70.50			

R HED POX 29.50M
R HED BOX 22.30M
R HED DRILLED NORTH GANDYS TO INTERSECT ANTICLINE

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.0 1.0	0.20	0.00	OVERBURDEN: reddish brown.	
	1.0 7.9	6.20	1.00	GREYWACKE: 10% siltstone. STRUCTURE: bedding: top up, 45 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% clay microveins, fracture fillings, 0.1% pyrite within quartz vein.	
R	1.0 7.9			FOUR SILT UNITS <40cm	
	7.9 12.7	4.10	0.35	INTERBEDDED SILTSTONE & GREYWACKE: reddish brown. STRUCTURE: veining: cross-cutting irregular, 50 deg to s.c.a, bedding: top up, 45 deg to s.c.a. QUARTZ VEINING: 3% quartz veins, fibrous, laminated, 5 vein(s) in interval, 15 cm total vein thickness. MINERALOGY: 0.3% medium cordierite spots, 0.3% limonite microveins, fracture fillings.	
R	7.9 12.7			HIGHLY MICACEOUS SILT ANAD GWAC	
	12.7 17.8	4.15	0.30	GREYWACKE: yellowish brown, 5% siltstone. QUARTZ VEINING: 3% quartz veins, fibrous, laminated, 3 vein(s) in interval, 27 cm total vein thickness.	
R	12.7 17.8			VERY BROKEN	
	17.8 19.4	0.80	0.00	SILTSTONE: reddish brown, 3% greywacke. QUARTZ VEINING: 5% quartz veins. MINERALOGY: 5% medium cordierite spots.	
R	17.8 19.4			VERY BROKEN, DARK RED, MICACEOUS	

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
	19.4	22.3	2.35	0.15	GREYWACKE: 5% siltstone.	
	22.3	47.4			GREYWACKE: medium grey.	
K BOX	22.3	22.3				
R	22.3	24.6				
			3.70	0.00	NARROW QZ VEINLETS AND TENSION GASH FILL - NEAR FAULT? 22.30 - 27.60: 20% GREYWACKE: medium grey, 1% siltstone. QUARTZ VEINING: 0.3% quartz microveins, fracture fillings. SLICKENSLIDING ON SOME JOINT SURFACES.	
R	27.6	32.4				
			4.80	1.05	27.60 - 32.40: 20% GREYWACKE: medium grey, 0.3% siltstone. STRUCTURE: joint: cross-cutting irregular, 20 deg to s.c.a., bedding: top up, 45 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins, 1 vein(s) in interval, 8 cm total vein thickness.	
K POX	29.5	29.5				
			5.00	1.70	32.40 - 37.60: 20% GREYWACKE: medium grey, 1% siltstone. STRUCTURE: veining: cross-cutting regular, 60 deg to s.c.a., bedding: top up, 40 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins, 2 vein(s) in interval, 6 cm total vein thickness.	
			4.90	1.40	37.60 - 43.10: 20% GREYWACKE: medium grey, 5% siltstone.	
			3.85	1.25	43.10 - 47.39: 20% GREYWACKE: medium grey, 5% siltstone. STRUCTURE: bedding: top up, 40 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.3% pyrite within quartz vein.	
	47.4	48.9	1.55	1.30	SILTSTONE: medium grey. MINERALOGY: 5% medium cordierite spots.	
K GHG	47.4	47.4				
	48.9	52.1	2.70	0.00	SILTSTONE: medium grey. MINERALOGY: 0.1% carbonate microveins, fracture fillings, no chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
R	50.9	52.1			VERY BROKEN, SHEARED, FAULTED?	
	52.1	59.7	7.30	1.60	SILTSTONE: medium grey, banded. STRUCTURE: bedding: top up, 35 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings, 0.1% k-feldspar blebs, 0.3% garnet disseminations, scat. crystals, 3% chert laminations/bedded, 3% pyrite microveins, minor disseminations, 0.3% arsenopyrite disseminations, scat. crystals.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH446 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
	59.7	76.9			SILTSTONE: medium grey, banded. MINERALOGY: 0.3% garnet disseminations, scat. crystals.	
			3.10	1.10	59.70 - 62.80: 20% SILTSTONE: medium grey, banded. QUARTZ VEINING: 0.1% quartz microveins, fracture fillings. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 3% chert laminations/bedded, 1% pyrite microveins, minor disseminations.	
			2.90	1.00	62.80 - 65.90: 20% SILTSTONE: medium grey, banded. MINERALOGY: 3% fine cordierite spots, 3% medium cordierite spots, 0.3% garnet disseminations, scat. crystals, 5% chert laminations/bedded, 3% pyrite microveins, minor disseminations.	
			2.50	0.50	65.90 - 68.60: 10% SILTSTONE: medium grey, banded. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 1% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
R	66.8	67.8			BROKEN, BRECCIATED FAULT	
			2.85	0.52	68.60 - 71.60: 20% SILTSTONE: medium grey, banded. STRUCTURE: bedding: top up, 40 deg to s.c.a. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 1% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
R	71.6	76.9			FAIRLY BROKEN	
			4.90	0.40	71.60 - 76.95: 30% SILTSTONE: medium grey, banded. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 0.3% garnet disseminations, scat. crystals, 1% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations.	
	76.9	80.1	3.15	2.85	REEF: light grey. QUARTZ VEINING: 90% quartz veins. MINERALOGY: 3% pyrite within quartz vein, 5% arsenopyrite within quartz vein.	
	80.1	90.1	8.50	4.25	SILTSTONE: medium grey. STRUCTURE: bedding: top down, 70 deg to s.c.a. QUARTZ VEINING: 20% quartz veins. MINERALOGY: 10% chert laminations/bedded, 5% pyrite microveins, minor disseminations, 3% arsenopyrite disseminations, scat. crystals.	
R	80.1	90.1			BEDDING ANGLE CHANGES FROM 20deg TO 70deg	
K ANT	84.1	84.1			84.10	

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH446 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
K	84.1	84.1				
	90.1	97.1	6.40	1.20	SILTSTONE: medium grey. STRUCTURE: bedding: top down, 65 deg to s.c.a. QUARTZ VEINING: 10% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings, 0.3% chert laminations/bedded, 60% pyrite ms/cy replaces fx, 1% arsenopyrite disseminations, scat. crystals.	
	97.1	105.6	8.20	1.00	SILTSTONE: medium grey. STRUCTURE: bedding: top down, 80 deg to s.c.a. QUARTZ VEINING: 0.1% quartz microveins, fracture fillings. MINERALOGY: 0.3% pyrite microveins, minor disseminations.	
R	102.7	102.8			FAULTED MESS, REST FAIRLY BROKEN	
	105.6	112.0	6.15	2.15	SILTSTONE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.3% chert nodules, 0.1% pyrite microveins, minor disseminations.	
R	112.0	112.0			END OF HOLE	

SUMMARY REMARKS

STRATIGRAPHY

0.00-47.40 GANDYS HILL GREYWACKE - GWAC WITH INTERBEDDED SILTS.
 47.40-112.00 LOWER GANDYS SILT - WELL BANDED/BEDDED, FIVE GRAINED SILTS

MINERALIZATION

76.95-80.15M REEF. QZ WITH ASPY
 80.15-90.10M 20% QZVNING

STRUCTURE

POSSIBLE MINOR FAULTING AT 50.90-52.10M, 66.80-67.80M,
 102.70-102.85M
 ANTICLINE AT 84.10M

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2458	0.55								
1.50	3.00	2459	0.29	0.26							
3.00	4.50	2460	1.09	1.11							
4.50	6.00	2461	0.07	0.05							
6.00	7.50	2462	0.05								
7.50	9.00	2463	0.14								
9.00	10.50	2464	0.32								
10.50	12.00	2465	0.16	0.16							
12.00	13.50	2466	0.53								
13.50	15.00	2467	0.16								
15.00	16.50	2468	0.02								
16.50	18.00	2469	0.14								
18.00	19.50	2470	0.25								
19.50	21.00	2471	0.13								
21.00	22.50	2472	0.03								
22.50	24.00	2473	0.03								
24.00	25.50	2474	0.02	0.03							
25.50	27.00	2475	0.01								
27.00	28.50	2476	-0.01								
28.50	30.00	2477	0.20	0.19							
30.00	31.50	2478	-0.01								
31.50	33.00	2479	0.04								
33.00	34.50	2480	0.31								
34.50	36.00	2481	0.14								
36.00	37.50	2482	0.27								
37.50	39.00	2483	0.02	0.02							
39.00	40.50	2484	-0.01								
40.50	42.00	2485	-0.01	-0.01							
42.00	43.50	2486	-0.01								
43.50	45.00	2487	0.02								
45.00	46.50	2488	0.02								
46.50	48.00	2489	-0.01								
48.00	49.50	2490	-0.01	-0.01							
49.50	51.00	2491	0.30	0.33							
51.00	52.50	2492	0.03								
52.50	54.00	2493	0.09								
54.00	55.50	2494	0.02								
55.50	57.00	2495	0.01								
57.00	58.50	2496	0.01								
58.50	60.00	2497	0.20								
60.00	61.50	2498	0.02	0.02							
61.50	63.00	2499	0.09								

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH446 (CONTINUED)

PAGE: 6 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au-1	Au-2	Au-3	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
			g/t	g/t	g/t					
63.00	64.50	2501	0.86							
64.50	66.00	2502	0.66							
66.00	67.50	2503	4.08	4.03						
67.50	69.00	2504	0.10							
69.00	70.50	2505	0.26							
70.50	72.00	2506	0.03							
72.00	73.50	2507	0.05							
73.50	75.00	2508	0.06	0.06						
75.00	76.50	2509	0.35							
76.50	78.00	2510	5.56							
78.00	79.50	2511	9.20							
79.50	81.00	2512	18.90	20.20						
81.00	82.50	2513	3.52	3.56						
82.50	84.00	2514	5.41							
84.00	85.50	2515	4.01							
85.50	87.00	2516	12.30	12.10						
87.00	88.50	2517	52.00							
88.50	90.00	2518	2.79							
90.00	91.50	2519	3.14							
91.50	93.00	2520	0.77	0.80						
93.00	94.50	2521	1.08	1.14						
94.50	96.00	2522	2.50							
96.00	97.50	2523	0.23							
97.50	99.00	2524	0.08							
99.00	100.50	2525	0.03							
100.50	102.00	2526	0.01							
102.00	103.50	2527	0.02							
103.50	105.00	2528	0.02							
105.00	106.50	2529	0.02							
106.50	108.00	2530	0.10							
108.00	109.50	2531	-0.01	-0.01						
109.50	111.00	2532	0.01							
111.00	112.00	2533	0.04							

Diamond Hole : PCDH447

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13249.61
DRILLED BY : GADENSTART DATE : 12 JUL 89
COLLAR EASTING : 11191.98
TOTAL LENGTH : 90.00COMPLETION DATE : 12 JUL 89
COLLAR ELEVATION: 1248.19
CORE/HOLE SIZE : HQLOGGED BY: CHRISTINE CALDWELL
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.0		48.50	-50.00	13249.61	11191.98	1248.19
001	70.0		48.00	-50.50			

R HED
R HED
R HED
R HEDNORTH GANDYS HILL
BOX 53.00M
POX 76.20M
DRILLED TO INTERSECT BELOW OLD WORKINGS

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.0 1.0	0.50	0.00	OVERBURDEN: brown.	
	1.0 5.9	3.45	0.15	SILTSTONE: grayish brown, bedded, banded. STRUCTURE: bedding: top up, 75 deg to s.c.a. MINERALOGY: 0.1% limonite microveins, fracture fillings, 0.03% chert laminations/bedded.	
R	1.0 2.8			VERY BROKEN	
	5.9 6.6	0.70	0.00	GREYWACKE: reddish brown.	
R	5.9 6.6			BROKEN	
	6.6 7.6	0.60	0.00	SILTSTONE: grayish brown, 1% greywacke. STRUCTURE: bedding: top up, 60 deg to s.c.a. MINERALOGY: 0.1% limonite microveins, fracture fillings.	
	7.6 8.5	0.70	0.00	GREYWACKE: reddish brown. MINERALOGY: 0.3% limonite microveins, fracture fillings.	
R	7.6 8.3			YELLOW CLAYEY ~POSS. FAULTED?	
	8.5 14.5	4.20	0.15	INTERBEDDED SILTSTONE & GREYWACKE: grayish brown, 60% siltstone, 40% greywacke. STRUCTURE: bedding: top up, 60 deg to s.c.a.	
R	8.5 14.5			SOFT FRACTURED BROKEN SECTIONS THROUGHOUT	
	14.5 21.7	5.70	0.20	GREYWACKE: reddish brown, 5% siltstone. QUARTZ VEINING: 0.1% quartz veins.	
R	14.5 21.7			FRACTURES/JOINTS WITH WHITE CLAYEY MATERIAL	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH447 (CONTINUED)

	- Interval -		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
R	21.7	38.2			SILTSTONE: grayish brown, banded, bedded.	
	21.7	34.7			VERY BROKEN MESS	
			2.35	0.00	21.70 - 24.50: 20% SILTSTONE: grayish brown, banded, bedded.	
					STRUCTURE: bedding: top up, 60 deg to s.c.a.	
					MINERALOGY: 1% medium cordierite spots.	
			2.60	0.00	24.50 - 28.00: 20% SILTSTONE: grayish brown, banded, bedded.	
					QUARTZ VEINING: 0.03% quartz veins.	
R			3.00	0.00	28.00 - 31.50: 20% SILTSTONE: grayish brown, banded, bedded.	
			2.50	0.15	31.50 - 34.70: 20% SILTSTONE: grayish brown, banded, bedded.	
					STRUCTURE: bedding: top up, 65 deg to s.c.a.	
			3.20	0.92	34.70 - 38.20: 20% SILTSTONE: grayish brown, 1% greywacke, banded, bedded.	
	38.2	39.0	0.40	0.00	FAULT: brecciated.	
					MINERALOGY: 5% clay pervasive.	
	39.0	41.9	2.50	0.00	SILTSTONE: grayish brown.	
R					QUARTZ VEINING: 0.1% quartz microveins, fracture fillings.	
	39.0	41.9			MINERALOGY: 0.3% limonite microveins, fracture fillings.	
					MOVEMENT ON JOINTS AND SLICKENSLIDED ON BED PLANES	
	41.9	43.4	1.35	0.00	WACKE SILTSTONE: grayish brown.	
					MINERALOGY: 0.1% limonite microveins, fracture fillings.	
	43.4	45.0	1.05	0.00	SILTSTONE: brown, banded.	
					STRUCTURE: bedding: top up, 75 deg to s.c.a.	
R	45.0	53.0	4.50	0.00	WACKE SILTSTONE: grayish brown, 5% greywacke.	
					STRUCTURE: joint: cross-cutting irregular, 15 deg to s.c.a.	
					MINERALOGY: 3% fine cordierite spots, 5% medium cordierite spots, 0.1% limonite microveins, fracture fillings.	
	45.0	53.0			SPOTTED, RARELY BANDED, COARSER THAN ABOVE	
	53.0	54.0	0.90	0.33	GREYWACKE: medium grey, 3% siltstone.	
					MINERALOGY: 0.3% medium cordierite spots.	
	53.0	53.0				
K BOX	54.0	56.6	2.20	0.00	SILTSTONE: brownish gray, 1% greywacke.	
					MINERALOGY: 0.3% fine cordierite spots, 0.3% coarse cordierite spots, 0.1% limonite microveins, fracture fillings.	
	54.0	56.6			JOINTED-BROKEN TO PEIVES <10cm	
R	56.6	70.1			GREYWACKE: medium grey.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH447 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
K GSH	56.6	56.6			QUARTZ VEINING: 0.1% quartz veins.	
			3.10	0.60	56.60 - 60.00: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings.	
			2.20	0.20	60.00 - 62.40: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings.	
			1.80	0.20	62.40 - 64.40: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins.	
			2.20	0.90	64.40 - 67.00: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins.	
			2.65	0.30	67.00 - 70.10: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.1% k-feldspar microveins, fracture fillings.	
	70.1	75.7	4.60	0.33	SILTSTONE: medium grey. STRUCTURE: bedding: 50 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.1% carbonate microveins, fracture fillings.	
R	70.1	75.7			VERY BROKEN SHEARED SECTIONS 70.10-70.40, 73.90-74.60M	
	75.7	79.7	3.40	0.45	GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% pyrite disseminations, scat. crystals.	
K POX	76.2	76.2				
R	76.4	77.0			MINOR BRECCIATION	
	79.7	80.8	1.10	0.30	SILTSTONE: medium grey. STRUCTURE: bedding: top up, 60 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.1% chlorite within quartz vein, 0.1% pyrite within quartz vein.	
	80.8	82.4	1.30	0.17	SILTY GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins.	
R	82.4	82.4			END OF HOLE	

SUMMARY REMARKS

STRATIGRAPHY

0.00-56.60M GANDYS SILT HORIZON - SILTSTONE WITH INTERBEDDED
GWAC.

56.60-82.40M LOWER MINE GREYWACKE, MINOR SILT TOWARD BOTTOM OF

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH447 (CONTINUED)

PAGE: 4 DATE: 25 OCT 90

S U M M A R Y R E M A R K S

HOLE.

STRUCTURE

FAULT AT 38.20-39.00M

POSSIBLE FAULTING AT 7.60-8.30M, 21.70-34.70M

SHEARED SECTIONS 70.10-70.40M, 73.90-74.60M

MINERALIZATION

NEGGLIGIBLE

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH447 (CONTINUED)

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2704	0.05								
1.50	3.00	2705	-0.01								
3.00	4.50	2706	-0.01								
4.50	6.00	2707	0.05								
6.00	7.50	2708	-0.01	-0.01							
7.50	9.00	2709	0.20	0.23							
9.00	10.50	2710	-0.01	0.01							
10.50	12.00	2711	-0.01								
12.00	13.50	2712	-0.01								
13.50	15.00	2713	0.02								
15.00	16.50	2714	-0.01	-0.01							
16.50	18.00	2715	-0.01								
18.00	19.50	2716	0.06								
19.50	21.00	2717	0.05								
21.00	22.50	2718	0.06								
22.50	24.00	2719	-0.01								
24.00	25.50	2720	-0.01								
25.50	27.00	2721	0.26	0.25							
27.00	28.50	2722	0.01	0.25							
28.50	30.00	2723	0.01	0.01							
30.00	31.50	2724	-0.01								
31.50	33.00	2725	-0.01								
33.00	34.50	2726	-0.01								
34.50	36.00	2727	-0.01	-0.01							
36.00	37.50	2728	0.03								
37.50	39.00	2729	-0.01								
39.00	40.50	2730	-0.01								
40.50	42.00	2731	-0.01	-0.01							
42.00	43.50	2732	-0.01								
43.50	45.00	2733	-0.01								
45.00	46.50	2734	-0.01	-0.01							
46.50	48.00	2735	-0.01								
48.00	49.50	2736	-0.01								
49.50	51.00	2737	-0.01								
51.00	52.50	2738	-0.01								
52.50	54.00	2739	-0.01								
54.00	55.50	2740	-0.01	0.01							
55.50	57.00	2741	-0.01								
57.00	58.50	2742	-0.01								
58.50	60.00	2743	0.02	0.01							
60.00	61.50	2744	-0.01	-0.01							
61.50	63.00	2745	-0.01								

IGC GEOLOG

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH447 (CONTINUED)

PAGE: 6 DATE: 25 OCT 90

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
63.00	64.50	2746	-0.01								
64.50	66.00	2747	-0.01								
66.00	67.50	2748	-0.01								
67.50	69.00	2749	-0.01								
69.00	70.50	2751	0.01								
70.50	72.00	2752	-0.01								
72.00	73.50	2753	-0.01	-0.01							
73.50	75.00	2754	-0.01	-0.01							
75.00	76.50	2755	-0.01								
76.50	78.00	2756	-0.01								
78.00	79.50	2757	-0.01								
79.50	81.00	2758	-0.01								
81.00	82.50	2759	-0.01	-0.01							

Diamond Hole : PCDH448

PROJECT IDEN : GANDYS
COLLAR NORTHING: 12698.67
DRILLED BY :GADENSTART DATE : 14 JUL 89
COLLAR EASTING : 11136.02
TOTAL LENGTH : 78.50COMPLETION DATE : 17 JUL 89
COLLAR ELEVATION: 1231.82
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		228.50	-50.00	12698.67	11136.02	1231.82
001	78.00		224.75	-50.00			

R HED PC448 DRILLED SOUTH GANDYS TO INTERSECT SHEETED STYLE QZVNS
R HED BOX 35.60M
R HED POX 45.00M

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 1.90	1.30	0.00	OVERBURDEN: reddish brown.	
	1.90 5.15	2.75	0.00	GREYWACKE: reddish brown, 30% siltstone. STRUCTURE: joint: cross-cutting irregular, 50 deg to s.c.a. bedding: top up, 70 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins. BROKEN, VERY COARSE GREYWACKE	
R	3.50 4.50				
	5.15 8.10	2.65	0.44	SILTSTONE: reddish brown. QUARTZ VEINING: 0.3% quartz veins.	
R	7.20 7.25			LATERITIC.	
R	7.70 8.00			FRACTURED - minor shear?	
	8.10 25.10			GREYWACKE: yellowish brown, massive. MINERALOGY: 1% limonite microveins, fracture fillings.	
		3.85	0.20	8.10 - 12.50: 20% GREYWACKE: yellowish brown, massive. QUARTZ VEINING: 0.3% quartz veins, 2 vein(s) in interval, 11 cm total vein thickness. MINERALOGY: 1% limonite microveins, fracture fillings.	
R	10.85 11.00			SOFT SPOT	
		3.55	0.50	12.50 - 16.60: 20% GREYWACKE: yellowish brown, massive. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 1% limonite microveins, fracture fillings.	
		3.15	0.35	16.60 - 20.00: 20% GREYWACKE: yellowish brown, massive. QUARTZ VEINING: 0.03% quartz veins. MINERALOGY: 1% limonite microveins, fracture fillings.	
		4.15	0.40	20.00 - 25.09: 40% GREYWACKE: yellowish brown, 3% siltstone, massive.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH448 (CONTINUED)

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					STRUCTURE: joint set: cross-cutting irregular, 50 deg to s.c.a, joint set: cross-cutting irregular, 45 deg to s.c.a. QUARTZ VEINING: 1% quartz veins. MINERALOGY: 1% limonite microveins, fracture fillings.	
	25.10	35.60	9.30	1.70	GREYWACKE: grayish brown, 1% siltstone. QUARTZ VEINING: 1% quartz veins, 4 vein(s) in interval, 24 cm total vein thickness. MINERALOGY: 1% limonite microveins, fracture fillings.	
R	25.10	35.60			SOME SECTIONS HARDER - PARTIALLY SILICIFIED	
	35.60	40.70	4.45	0.95	GREYWACKE: medium grey. QUARTZ VEINING: 1% quartz veins, fibrous, zoned, 7 vein(s) in interval, 16 cm total vein thickness. MINERALOGY: 0.03% pyrite disseminations, scat. crystals, 0.03% arsenopyrite disseminations, scat. crystals.	
K BOX	35.60	35.60				
	40.70	41.90	0.80	0.37	QUARTZ VEIN: light grey, 10% siltstone. QUARTZ VEINING: 90% quartz veins. MINERALOGY: 3% pyrite within quartz vein.	
	41.90	51.45			GREYWACKE: medium grey, massive. STRUCTURE: veining: 30 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 5% silicification pervasive, 5% pyrite within quartz vein.	
			4.30	0.80	41.90 - 46.20: 50% GREYWACKE: medium grey, massive. STRUCTURE: joint: 75 deg to s.c.a. QUARTZ VEINING: 3% quartz veins, fibrous, laminated, 5 vein(s) in interval, 26 cm total vein thickness. MINERALOGY: 5% silicification pervasive, 5% pyrite within quartz vein.	
K POX	45.00	45.00				
			5.05	2.55	46.20 - 51.44: 50% GREYWACKE: medium grey, massive. STRUCTURE: joint: cross-cutting irregular, 30 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 0.1% k-feldspar microveins, fracture fillings, 5% silicification pervasive, 5% pyrite within quartz vein.	
	51.45	51.90	0.30	0.00	GREYWACKE: medium grey, 5% siltstone. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 3% pyrite within quartz vein.	
R	51.45	51.90			HIGHLY SHEARED, FRACTURED AND BROKEN - SMALL FAULT	

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH448 (CONTINUED)

	Interval		Rec. (m)	RQD (m)	Description	Unit
	From (m)	To (m)				
	51.90	60.45	8.20	4.30	GREYWACKE: medium grey. QUARTZ VEINING: 0.03% quartz veins, fibrous, 11 vein(s) in interval, 40 cm total vein thickness. MINERALOGY: 1% pyrite microveins, minor disseminations.	
	60.45	78.50	4.25	2.55	GREYWACKE: medium grey. 60.45 - 65.00: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins, fibrous, laminated, 4 vein(s) in interval, 7 cm total vein thickness. MINERALOGY: 1% pyrite disseminations, scat. crystals, 0.1% pyrrhotite disseminations, scat. crystals, 0.1% arsenopyrite within quartz vein.	
R	61.50	61.60	4.64	2.70	ROUNDED SILICEOUS PATCH WITH 10% PY 65.00 - 70.00: 30% GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins, fibrous, laminated, 5 vein(s) in interval, 12 cm total vein thickness. MINERALOGY: 1% pyrite disseminations, scat. crystals, 0.3% arsenopyrite disseminations, scat. crystals.	
			4.70	1.30	70.00 - 75.00: 30% GREYWACKE: medium grey. QUARTZ VEINING: 3% quartz veins, fibrous, laminated, 6 vein(s) in interval, 37 cm total vein thickness.	
			3.30	1.95	75.00 - 78.50: 20% GREYWACKE: medium grey. QUARTZ VEINING: 0.03% quartz microveins, fracture fillings.	

SUMMARY REMARKS

STRATIGRAPHY
 DRILLED WITHIN LOWER MINE GREYWACKE.

STRUCTURE
 POSSIBLE FAULT 51.45-51.90M

MINERALIZATION
 QZVN 40.70-41.90M

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH448 (CONTINUED)

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2651	0.29								
1.50	3.00	2652	0.09								
3.00	4.50	2653	0.24								
4.50	6.00	2654	0.14								
6.00	7.50	2655	2.10								
7.50	9.00	2656	0.25								
9.00	10.50	2657	0.05	0.04							
10.50	12.00	2658	1.17	1.18							
12.00	13.50	2659	0.57								
13.50	15.00	2660	0.29								
15.00	16.50	2661	-0.01								
16.50	18.00	2662	0.09								
18.00	19.50	2663	-0.01								
19.50	21.00	2664	0.36	0.39							
21.00	22.50	2665	-0.01								
22.50	24.00	2666	-0.01								
24.00	25.50	2667	0.22								
25.50	27.00	2668	0.35								
27.00	28.50	2669	0.14								
28.50	30.00	2670	-0.01								
30.00	31.50	2671	-0.01								
31.50	33.00	2672	0.22								
33.00	34.50	2673	0.14	0.12							
34.50	36.00	2674	0.02	0.12							
36.00	37.50	2675	0.34								
37.50	39.00	2676	0.77	0.81							
39.00	40.50	2677	0.18	0.81							
40.50	42.00	2678	0.16								
42.00	43.50	2679	0.15								
43.50	45.00	2680	0.05								
45.00	46.50	2681	0.12								
46.50	48.00	2682	0.03	0.02							
48.00	49.50	2683	0.20								
49.50	51.00	2684	0.28								
51.00	52.50	2685	0.19								
52.50	54.00	2686	0.27								
54.00	55.50	2687	0.11								
55.50	57.00	2688	0.25								
57.00	58.50	2689	0.23								
58.50	60.00	2690	0.31								
60.00	61.50	2691	0.05								
61.50	63.00	2692	0.71								

Diamond Hole : PCDH449

PROJECT IDEN : GANDYS
COLLAR NORTHING: 13017.41
DRILLED BY :GADENSTART DATE : 18 JUL 89
COLLAR EASTING : 10956.65
TOTAL LENGTH : 78.20COMPLETION DATE : 21 JUL 89
COLLAR ELEVATION: 1228.56
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		48.50	-50.00	13017.41	10956.65	1228.56
001	72.00		50.75	-49.00			

R HED PC449 DRILLED TO INTERSECT BELOW QTZ KNOB WEST SIDE OF GANDYS
R HED HILL
R HED BOX 37.35M
R HED POX 43.30M
R HED EOH 78.20M
R HED 0.0-1.20M 50% CORE LOSS

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 6.25	4.65	0.90	SILTSTONE: reddish brown, 10% core loss, bedded. STRUCTURE: bedding: top up, 15 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 0.3% limonite microveins, fracture fillings. 50% CORE LOSS	
R	0.00 1.20				
	6.25 7.80	1.35	0.35	LATERITE: reddish brown. QUARTZ VEINING: 1% quartz veins. LATERISED GWAC?	
R	6.25 7.80				
	7.80 11.50	3.35	0.75	SILTSTONE: reddish brown, banded, bedded. STRUCTURE: bedding: top up, 15 deg to s.c.a. MINERALOGY: 0.3% limonite microveins, fracture fillings, 0.3% chert nodules.	
	11.50 12.70	1.00		GREYWACKE: reddish brown. QUARTZ VEINING: 0.3% quartz veins.	
	12.70 28.95	6.75	1.15	SILTSTONE: reddish brown, bedded, banded. 12.70 - 20.50: 50% SILTSTONE: reddish brown, bedded, banded. STRUCTURE: bedding: top up, 15 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.3% limonite microveins, fracture fillings, 0.1% chert nodules.	
R	20.50 28.90			PARTS ALONG BEDDING - NARROW BANDED	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH449 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
			7.50	0.30	20.50 - 28.90: 50% SILTSTONE: reddish brown, 1% greywacke, bedded, banded. MINERALOGY: 0.3% medium cordierite spots, 0.3% limonite microveins, fracture fillings.	
	28.95	31.80	2.55	0.15	GREYWACKE: yellowish brown. MINERALOGY: 0.1% limonite microveins, fracture fillings.	
R	30.35	30.70			GOSSANOUS ZONE - POSSIBLE FAULT	
			0.30	0.00	30.35 - 30.70: 20% BRECCIA: reddish brown.	
	31.80	34.60	2.50	0.15	SILTSTONE: yellowish brown. STRUCTURE: bedding: top up, 25 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 1% limonite microveins, fracture fillings.	
	34.60	59.70			GREYWACKE: medium grey.	
K SSH	34.60	34.60				
			4.40	0.80	34.60 - 39.90: 20% GREYWACKE: medium grey, 3% siltstone. STRUCTURE: bedding: top up, 30 deg to s.c.a. QUARTZ VEINING: 3% quartz veins. MINERALOGY: 1% pyrite within quartz vein.	
K BOX	37.35	37.35				
R	39.60	44.25			STRONGLY FRACTURED	
			3.85	0.30	39.60 - 44.25: 20% GREYWACKE: medium grey.	
K POX	43.30	43.30				
R	44.25	45.50			VERY BROKEN, FRACTURED, FELD FRACTURE FILL VEINLETS - NEAR FAULT?	
R	44.25	45.50				
			0.65	0.00	44.25 - 45.50: 5% GREYWACKE: medium grey, brecciated. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 1% chlorite pervasive.	
			5.10	1.00	45.50 - 51.20: 20% GREYWACKE: medium grey, 3% siltstone. QUARTZ VEINING: 0.1% quartz microveins, fracture fillings.	
			4.30	1.50	51.20 - 56.00: 20% GREYWACKE: medium grey. MINERALOGY: 0.03% pyrite microveins, fracture fillings.	
			3.45	1.10	56.00 - 59.69: 10% GREYWACKE: medium grey.	
	59.70	60.30	0.60	0.00	SILTY GREYWACKE: medium grey, brecciated. MINERALOGY: 0.1% pyrite disseminations, scat. crystals.	
R	59.70	60.30			VERY BROKEN, FRACTURED	
	60.30	62.30	1.25	0.15	SILTY GREYWACKE: medium grey. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.03% k-feldspar blebs, 0.03% pyrite within quartz vein.	

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH449 (CONTINUED)

	Interval		Rec. (m)	RQD (m)	Description	Unit
	From (m)	To (m)				
	62.30	78.20	4.70	1.30	GREYWACKE: medium grey. 62.30 - 68.00: 30% GREYWACKE: medium grey, brecciated. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 5% k-feldspar pervasive, 5% chlorite pervasive, 0.3% pyrite within quartz vein.	
R	65.50	66.70			FAULTED	
R	68.00	78.20			FRACTURED	
			9.15	2.75	68.00 - 78.20: 70% GREYWACKE: medium grey, brecciated. QUARTZ VEINING: 0.03% quartz veins.	

S U M M A R Y R E M A R K S

STRATIGRAPHY

0.00-34.60M SILT WITH MONOR GWAC OF SPOTTED SILT HORIZON
 34.60-78.20M LOWER MINE GREYWACKE

STRUCTURE

POSSIBLE FAULTS AND SHEARS, 30.35-30.70M, 44.25-45.50M,
 59.70-60.30M, 62.30-78.20M
 MINOR QZVNING THROUGHOUT, SOME MINERALIZATION MAY BE ASSOCIATED
 WITH FAULTING
 END OF HOLE 78.20

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH449 (CONTINUED)

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2760	-0.01								
1.50	3.00	2761	-0.01								
3.00	4.50	2762	0.01	0.01							
4.50	6.00	2763	0.05								
6.00	7.50	2764	-0.01								
7.50	9.00	2765	-0.01								
9.00	10.50	2766	0.01	0.01							
10.50	12.00	2767	0.20								
12.00	13.50	2768	0.03								
13.50	15.00	2769	4.50								
15.00	16.50	2770	0.36								
16.50	18.00	2771	0.12	0.11							
18.00	19.50	2772	0.05								
19.50	21.00	2773	0.05								
21.00	22.50	2774	0.08								
22.50	24.00	2775	-0.01								
24.00	25.50	2776	0.03								
25.50	27.00	2777	-0.01								
27.00	28.50	2778	0.17								
28.50	30.00	2779	0.55	0.54							
30.00	31.50	2780	7.96	7.57							
31.50	33.00	2781	0.35	7.57							
33.00	34.50	2782	0.10	0.10							
34.50	36.00	2783	0.18	0.10							
36.00	37.50	2784	0.14								
37.50	39.00	2785	-0.01								
39.00	40.50	2786	-0.01								
40.50	42.00	2787	-0.01	-0.01							
42.00	43.50	2788	0.08	0.10							
43.50	45.00	2789	-0.01								
45.00	46.50	2790	-0.01								
46.50	48.00	2791	-0.01								
48.00	49.50	2792	-0.01								
49.50	51.00	2793	-0.01								
51.00	52.50	2794	-0.01	-0.01							
52.50	54.00	2795	-0.01								
54.00	55.50	2796	-0.01	-0.01							
55.50	57.00	2797	-0.01								
57.00	58.50	2798	-0.01								
58.50	60.00	2799	-0.01								
60.00	61.50	2801	0.03								
61.50	63.00	2802	0.04								

INTERNATIONAL GEOSYSTEMS CORPORATION

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT

PAGE: 1 DATE: 25 OCT 90

Diamond Hole : PCDH456

PROJECT IDEN : GANDYS
COLLAR NORTHING: 12600.91
DRILLED BY : GADENSTART DATE : 23 JUN 89
COLLAR EASTING : 11054.48
TOTAL LENGTH : 69.00COMPLETION DATE : 29 JUN 89
COLLAR ELEVATION: 1212.64
CORE/HOLE SIZE : HQLOGGED BY:CHRISTINE FAWCETT
GRID AZIMUTH : 318.50

SURVEY FLAG	SURVEY POINT (DEPTH)	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		48.50	-60.00	12600.91	11054.48	1212.64
001	69.00		42.75	-59.50			

R HED PC456 SOUTH GANDYS TO INTERSECT SHEETED VEINS ON WESTERN SIDE
R HED BOX 18.60M
R HED POX 29.40M
R HED END OF HOLE 69.00M

	- Interval - From (m) To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00 2.50	1.50	0.00	OVERBURDEN: reddish brown, 3% siltstone.	
	2.50 8.10	4.60	0.00	SILTSTONE: brownish gray, banded. STRUCTURE: bedding: top up, 10 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins. MINERALOGY: 0.3% fine cordierite spots, 0.1% coarse cordierite spots, 0.1% limonite microveins, fracture fillings.	
R	2.50 8.10			0.5CM MOVEMENT ON JOINTS	
	8.10 14.15	5.25		SILTSTONE: medium brown, banded. STRUCTURE: veining: conformable regular, 15 deg to s.c.a. bedding: top up, 15 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 1% fine cordierite spots, 3% medium cordierite spots, 1% coarse cordierite spots, 0.1% limonite microveins, fracture fillings.	
	14.15 18.60	4.15	0.45	SILTSTONE: grayish brown, bedded, cross-bedded. STRUCTURE: bedding: top up, 25 deg to s.c.a. MINERALOGY: 5% fine cordierite spots, 3% medium cordierite spots, 5% limonite microveins, fracture fillings.	
	18.60 27.70	8.40	2.15	INTERBEDDED SILTSTONE & GREYWACKE: 50% siltstone, 50% greywacke. STRUCTURE: veining: cross-cutting irregular, 80 deg to s.c.a. QUARTZ VEINING: 1% quartz veins, fibrous, laminated, 6 vein(s) in interval, 13 cm total vein thickness.	

PINE CREEK GOLDFIELDS LTD
GANDYS PROJECT
Diamond Hole : PCDH456 (CONTINUED)

	Interval		Rec.	RQD	Description	Unit
	From (m)	To (m)	(m)	(m)		
					MINERALOGY: 0.03% pyrite disseminations, scat. crystals, 0.03% arsenopyrite disseminations, scat. crystals.	
K BOX	18.60	18.60				
K SSH	18.60	18.60				
R	18.60	27.70				
R	22.90	23.00			CYCLES APPROX 1M SOFT CLAYEY PATCH, VERY BROKEN	
	27.70	31.05	3.20	0.70	SILTSTONE: medium-dark grey. STRUCTURE: bedding: top up, 20 deg to s.c.a. MINERALOGY: 0.3% fine cordierite spots, 0.3% medium cordierite spots, 0.1% coarse cordierite spots, 0.1% chert laminations/bedded, 0.3% pyrite microveins, minor disseminations, 0.03% pyrrhotite disseminations, scat. crystals.	
K POX	29.40	29.40				
	31.05	41.70	10.30	3.95	GREYWACKE: medium grey, 5% siltstone. STRUCTURE: veining: cross-cutting regular, 70 deg to s.c.a, bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins, 5 vein(s) in interval, 9 cm total vein thickness. MINERALOGY: trace biotite microveins, fracture fillings, 3% silicification pervasive, 0.3% pyrite within quartz vein.	
	41.70	42.60	0.76	0.20	SILTSTONE: medium grey. QUARTZ VEINING: 0.1% quartz veins, 1 vein(s) in interval, 1 cm total vein thickness. MINERALOGY: 1% fine cordierite spots, 1% medium cordierite spots.	
	42.60	44.60	1.90	1.20	GREYWACKE: medium grey. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 0.3% k-feldspar microveins, fracture fillings, 0.03% galena disseminations, scat. crystals.	
	44.60	47.40	2.60	1.30	INTERBEDDED SILTSTONE & GREYWACKE: medium grey, 50% siltstone, 50% greywacke. MINERALOGY: 3% medium cordierite spots.	
	47.40	55.95	8.25	4.75	SILTSTONE: medium grey, 10% greywacke, banded. STRUCTURE: veining: cross-cutting regular, 70 deg to s.c.a, bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 0.3% quartz veins, 3 vein(s) in interval, 6 cm total vein thickness.	

PINE CREEK GOLDFIELDS LTD
 GANDYS PROJECT
 Diamond Hole : PCDH456 (CONTINUED)

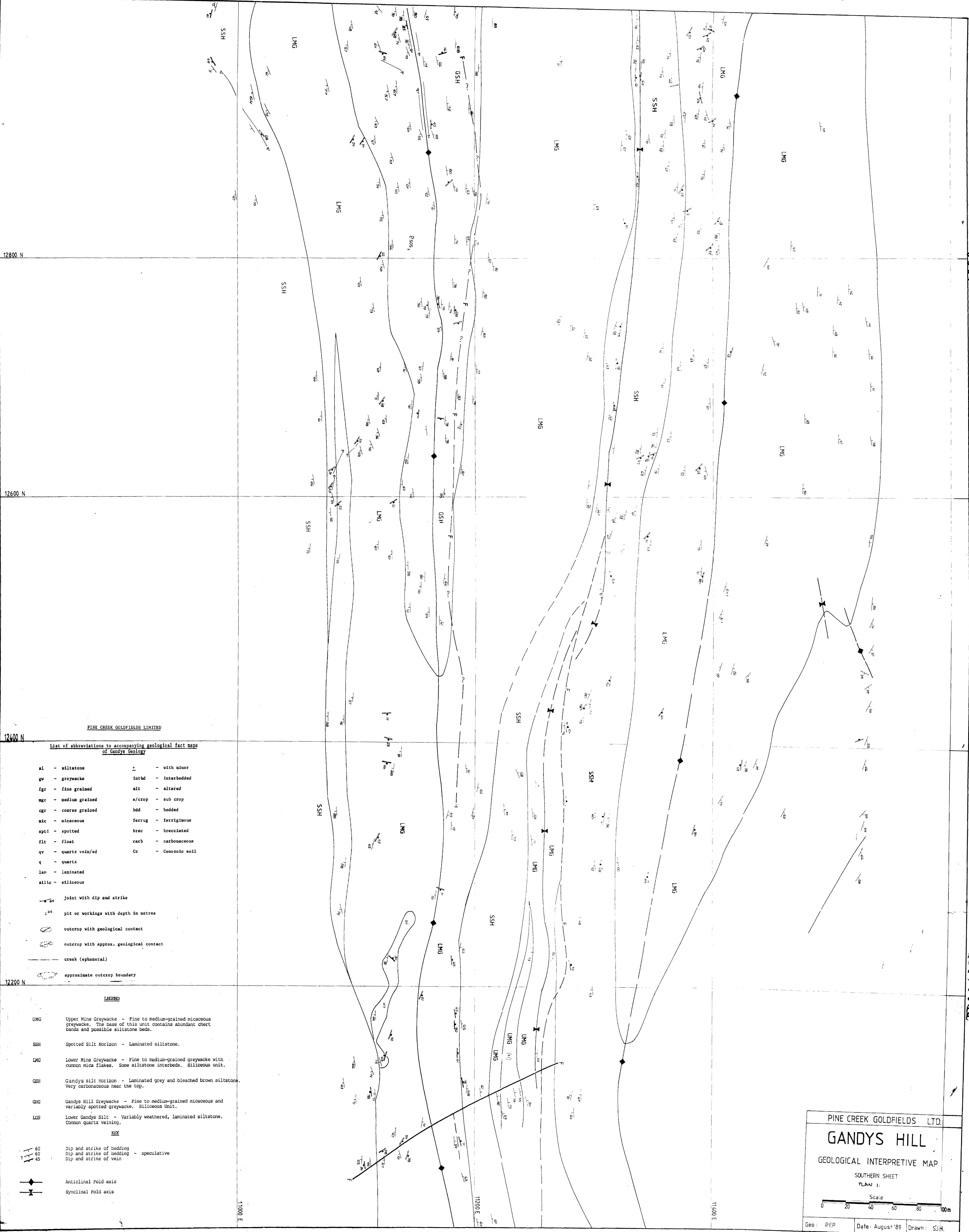
Interval		Rec.	RQD	Description	Unit
From (m)	To (m)	(m)	(m)		
				MINERALOGY: 5% medium cordierite spots, 5% pyrite within quartz vein, 5% galena within quartz vein, 0.03% pyrrhotite within quartz vein, 0.3% arsenopyrite within quartz vein 0.03% sphalerite, within quartz vein.	
55.95	65.25	8.70	2.50	GREYWACKE: medium grey. QUARTZ VEINING: 1% quartz veins, fibrous, zoned, 8 vein(s) in interval, 12 cm total vein thickness. MINERALOGY: 5% k-feldspar pervasive, 0.3% pyrite microveins, minor disseminations, 0.03% pyrrhotite disseminations, scat. crystals.	
65.25	69.00	3.75	1.70	SILTSTONE: medium grey, 5% greywacke. STRUCTURE: bedding: top up, 20 deg to s.c.a. QUARTZ VEINING: 0.1% quartz veins. MINERALOGY: 5% medium cordierite spots, 0.1% pyrite within quartz vein, 0.3% galena within quartz vein, 0.3% arsenopyrite within quartz vein.	
R 69.00	69.00			END OF HOLE	

S U M M A R Y R E M A R K S

STRATIGRAPHY
 0.00-18.60M SPOTTED SILT HORIZON
 18.60-69.00M LOWER MINE GREYWACKE, GWAC WITH CYCLICAL SILT/GWAC, SILT UNIT AT 47.40-55.95M
 QZVNS DIPPING STEEPLY EAST ACROSS BEDDING
 MINOR WEST DIP QZVNS AT 8.10-14.15M
 LITTLE MINERALISATION
 EOH 69.00M

ASSAY VALUES

From	To	Number	Au g/t	Au-1 g/t	Au-2 g/t	Au-3 g/t	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
0.00	1.50	2813	0.37	0.41							
1.50	3.00	2814	0.32								
3.00	4.50	2815	0.69								
4.50	6.00	2816	0.06								
6.00	7.50	2817	0.09								
7.50	9.00	2818	0.03								
9.00	10.50	2819	0.39	0.25							
10.50	12.00	2820	0.16								
12.00	13.50	2821	0.04								
13.50	15.00	2822	0.02								
15.00	16.50	2823	0.01								
16.50	18.00	2824	0.13	0.10							
18.00	19.50	2825	0.02								
19.50	21.00	2826	0.11								
21.00	22.50	2827	0.04								
22.50	24.00	2828	0.14								
24.00	25.50	2829	0.07								
25.50	27.00	2830	0.04	0.02							
27.00	28.50	2831	0.34								
28.50	30.00	2832	0.37								
30.00	31.50	2833	0.18								
31.50	33.00	2834	1.73	1.75							
33.00	34.50	2835	0.21	0.24							
34.50	36.00	2836	0.36								
36.00	37.50	2837	0.08								
37.50	39.00	2838	7.87	7.90							
39.00	40.50	2839	0.95								
40.50	42.00	2840	0.77	0.75							
42.00	43.50	2841	0.20								
43.50	45.00	2842	0.09								
45.00	46.50	2843	0.04								
46.50	48.00	2844	0.03								
48.00	49.50	2845	0.02								
49.50	51.00	2846	0.03	0.02							
51.00	52.50	2847	0.03								
52.50	54.00	2848	1.36	1.26							
54.00	55.50	2849	0.16								
55.50	57.00	2851	0.09	0.11							
57.00	58.50	2852	0.70								
58.50	60.00	2853	0.46								
60.00	61.50	2854	0.63								
61.50	63.00	2855	0.36	0.47							



PINE CREEK GOLDFIELDS LIMITED

List of abbreviations to accompanying geological fact maps
of Gandys Geology

- | | |
|----------------------|----------------------|
| sl - siltstone | z - with minor |
| gw - greywacke | intbd - interbedded |
| fg - fine grained | alt - altered |
| mgr - medium grained | s/crop - sub crop |
| cgr - coarse grained | bdd - bedded |
| mic - micaceous | ferrug - ferruginous |
| spti - spotted | brec - brecciated |
| flt - float | carb - carbonaceous |
| qv - quartz vein/ed | Cz - Cenozoic soil |
| q - quartz | |
| lap - laminated | |
| silic - siliceous | |

- joint with dip and strike
- pit or workings with depth in metres
- outcrop with geological contact
- outcrop with approx. geological contact
- creek (ephemeral)
- approximate outcrop boundary

LEGEND

- | | |
|-----|---|
| LWG | Upper Mine Greywacke - Fine to medium-grained micaceous greywacke. The base of this unit contains abundant chert bands and possible siltstone beds. |
| SSH | Spotted Silt Horizon - Laminated siltstone. |
| LMG | Lower Mine Greywacke - Fine to medium-grained greywacke with common mica flakes. Some siltstone interbeds. Siliceous unit. |
| GSH | Gandys silt Horizon - Laminated grey and bleached brown siltstone. Very carbonaceous near the top. |
| GHG | Gandys Hill Greywacke - Fine to medium-grained micaceous and variably spotted greywacke. Siliceous unit. |
| LGS | Lower Gandys Silt - Variably weathered, laminated siltstone. Common quartz veining. |

KEY

- | | |
|--|---|
| | Dip and strike of bedding |
| | Dip and strike of bedding - speculative |
| | Dip and strike of vein |
| | Anticlinal Fold axis |
| | Synclinal Fold axis |

PINE CREEK GOLDFIELDS LTD.

GANDYS HILL

GEOLOGICAL INTERPRETIVE MAP

SOUTHERN SHEET

PLAN 1.

Scale

0 20 40 60 80 100m

Geo: PEP

Date: August '89

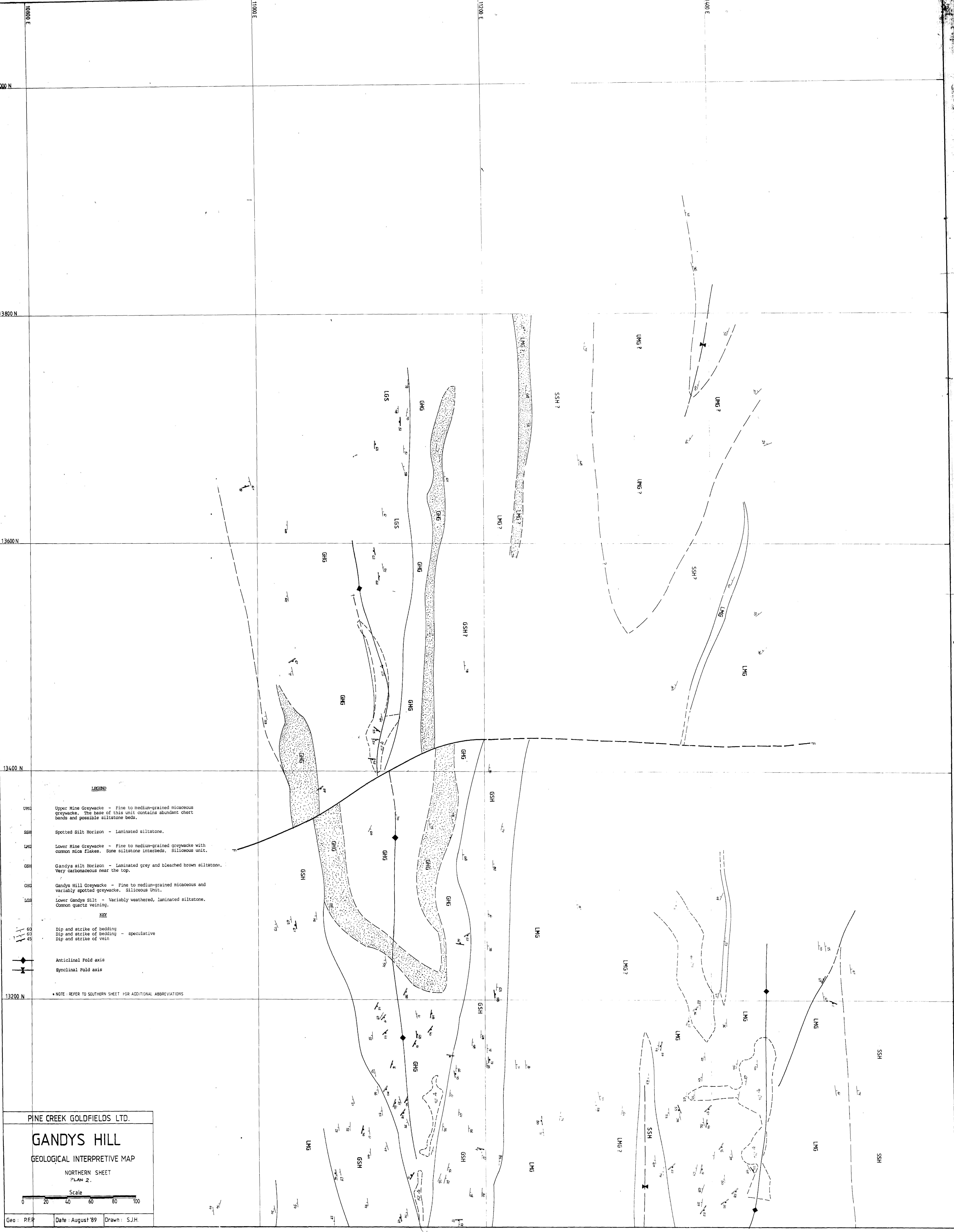
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PINE CREEK GOLDFIELDS LTD.

GANDYS HILL

GEOLOGICAL INTERPRETIVE MAP

NORTHERN SHEET

PLAN 2.

Scale

0 20 40 60 80 100

Geo: PEP

Date: August '89

Drawn: S.J.H.