CONTENTS ENVELOPE 6854

TENEMENT: Not Related.

TENEMENT HOLDER: Department Of Mines & Energy.

ENV 3859
81/29
DM 100/78
~~82/94~~

0003

DEPARTMENT OF MINES AND ENERGY—SOUTH AUSTRALIA

P.O. Box 151, Eastwood, S.A. 5063.

REMOVAL OF DRILL HOLE SAMPLES

The following samples have been supplied to:

Name: MARK DUNN Telephone No.: 02 241 1594

Company/Section: PNC EXPLORATION

Address: 16th floor 56 PITT STREET, SYDNEY

This removal of samples was approved by:

DRILL HOLE NAME AND NUMBER	DRILLING SPONSOR	DEPTH AND INTERVAL (m)	TYPE OF SAMPLE	OFFICE USE
MYALL CREEK RC2	SADME	45.3-45.35	chips	6333II
"	"	80.51-80.55	chips	
"	"	93.1-93.2	chips	
			6633 —	12

RB

Rec 2/7/87 BP

Nature of work to be undertaken on sample: TS and ASSAY

CONDITIONS:

1. The above samples are supplied on condition that copies of results of all work on these samples are forwarded to the Director-General, Department of Mines and Energy, as soon as they become available, and that these results be clearly marked for the attention of the Core Library Controller, Technical Information Services, Head Office.
2. Any residue material remaining after testing must be clearly labelled and returned to the Core Library Supervisor, Department of Mines and Energy, Core Library, Conyngham Street, Glenside S.A. 5065.
3. The confidentiality of information supplied is left to the discretion of the Director-General, Department of Mines and Energy.

I acknowledge receipt of the above samples and agree to meet the above conditions.

SIGNATURE: Mark Dunn WITNESS: [signature]

DATE: 27/5/87 DATE: 27/5/87

C2063

DMC 1

PNC Exploration (Australia) Pty Ltd
(Incorporated in New South Wales)
16th Floor, 56 Pitt Street, Sydney, N.S.W., Australia, 2000

PARENT CORPORATION:
POWER REACTOR & NUCLEAR FUEL DEVELOPMENT CORPORATION
TOKYO — JAPAN

Telephone: 241 3168, 241 1594-6
Telex: AA25912
Fac: 2511584

87-PJT-201

July 1, 1987

The Director-General,
Department of Mines & Energy,
P.O. Box 151,
EASTWOOD S.A. 5063

Attn: Core Library Controller
Technical Information Services

Dear Sir,

Please find enclosed petrographic descriptions and assay results for three samples taken from SADME DDH Myall Creek RC2.

The three samples were numbered 4028, 4029 and 4030 and were collected from the following intervals:

4028 : 93.1m-93.2m (10 cm)
4029 : 80.51m-80.55m (4 cm)
4030 : 45.30m-45.35m (5 cm)

Yours sincerely,
PNC EXPLORATION (AUSTRALIA) PTY. LTD.

Mark Dunn

M. DUNN
Project Geologist

Encl.

Pontifex & Associates Pty. Ltd.

TEL. 332 6744
A.H. 31 3816

26 KENSINGTON ROAD, ROSE PARK
SOUTH AUSTRALIA

P.O. BOX 91, NORWOOD
SOUTH AUSTRALIA 5067

MINERALOGICAL REPORT NO. 5018

BY A.C. Purvis PhD.

22nd June, 1987

TO: Mr. Mark Dunn
PNC Exploration (Aust) Pty. Ltd.,
16th Floor,
Royal Exchange Building
56 Pitt St.
SYDNEY NSW 2000

YOUR REFERENCE: Order No. 1795

MATERIAL: Core samples from Myall Creek
RC2 Gawler Range volcanics

IDENTIFICATION: 4028, 4029, 4030

WORK REQUESTED: Thin section preparation
and description

SAMPLES & SECTIONS: Returned to you with this report.

PONTIFEX & ASSOCIATES PTY. LTD.

4028 : altered biotite rhyolite (or rhyodacite?)
(Gawler Range Volcanics)

The phenocrysts in this rock are:

(1) quartz (7-10%): rounded to amoeboid and resorbed crystals to 2mm in size, with optically continuous overgrowths.

(2) alkali felspar (10-15%): whole to fragmented crystals to 4mm long usually hematite stained

(3) plagioclase (3-5%): isolated mostly whole phenocrysts to 2mm in size

(4) biotite (1-2%): chlorite-magnetite-leucoxene pseudomorphs after flakes to 1.5mm long

(5) magnetite (1-2%): ilmenite or hematite + leucoxene skeletons derived from magnetite to 0.4mm in size

(6) possible pyroxene (<1%): clay pseudomorphs to 1mm in size, mostly in a possible xenolith with granular felspar and minor quartz.

The groundmass is microgranophyric, with quartz grains about 0.2mm in size enclosing alkali felspar, which is strongly hematite-stained. Irregular quartz veins are common and locally have adularia overgrowths on primary alkali felspar adjacent to the veins.

This is a typical Gawler Range Volcanic lithology (as are Nos 4029-30, also described in this report).

4029 : rhyodacite with clay and hematite alteration

The phenocrysts in this rock are slightly different from those in 4028 with more abundant plagioclase, also ferromagnesian minerals other than biotite, are more abundant than biotite.

Quartz phenocrysts are less abundant (3-5%), and smaller (0.2-1.5mm in size). Neither the alkali felspar (10%) or plagioclase (10%) phenocrysts are fragmented, and they are 1-4mm in size. The alkali felspar is heavily hematite-stained.

Minor magnetite and apatite microphenocrysts were present. The magnetite and apatite microphenocrysts were present. The magnetite tends to be skeletal as in 4028 and then leucoxenised.

The ferromagnesian phenocrysts were mostly pyroxene and/or amphibole, and were 1-2mm long. They are altered to yellow and green clays, mostly without leucoxene, and made up 7-10% of the rock. Biotite (2%) is altered to fibrous clays and leucoxene.

The groundmass is hematite stained, and clay-rich and has a granophyric texture as in 4028. Clay veins are present, but quartz veins are rare.

4030 : rhyodacite with clays and hematite alteration.

This rock represents an extension of the trend from 4028-4029, in that the plagioclase (altered to yellow clays) is dominant (15-20%) over alkali felspar (5-7%) Also there is less quartz (3-5%) than in 4029.

The felspar phenocrysts were larger (to 7mm long) than in 4029, but the quartz is of similar size (0.2-2mm). The alkali felspar is hematite-stained.

The ferromagnesian phenocrysts to 2mm long include biotite (altered to clay + leucoxene), and other phase(s) also altered to clays. Magnetite-microphenocrysts are altered to rutile (or anatase?).

The groundmass is microgranophyric, and clay-limonite stained as in the other samples. Clay veins, locally with minor quartz are present.

COMLABS SERVICES PTY. LTD.

ANALYTICAL REPORT

JOB COM871331
O/N : 1797

SAMPLE	Cu	Pb	Zn	Co	U
4028	3	12	100	26	4
4029	6	14	175	24	10
4030	2	8	30	22	12
UNITS	ppm	ppm	ppm	ppm	ppm
SCHEME	AAS1	AAS1	AAS1	AAS1	XRF1

001	0.0	5.1	D1	B	ESW	002	5.1	10.0	D1	E	ESW	003	10.0	15.8	D1	E	ESW
004	15.8	20.4	D1	E	ESW	005	20.4	25.6	D1	E	ESW	006	25.6	31.3	D1	E	ESW
007	31.3	38.7	D1	E	ESW	008	38.7	45.1	D1	E	ESW	009	45.1	53.9	D1	E	ESW
010	53.9	58.8	D1	E	ESW	011	58.8	59.7	D1	E	ESW						

6633 001 00003 MR113 137.0 F DD2 6 16061960 SA DEPT OF MINES
RED *PRINCE-ALFRED-MINE CU 019

*** GRID REF... C12 ***

DEPARTMENT OF MINES - CORE SAMPLE UPDATED RECORDS 11/06/85

100 SO NO RUN SECT BOREHO REFERENCE DEPTH ZN COORDINATES HOLENO TRY DATE C SPONSOR

001	0.0	6.0	D1	B	ESV	002	6.0	12.1	D1	B	ESV	003	12.1	17.6	D1	E	ESV
004	17.6	23.4	D1	E	ESV	005	23.4	28.0	D1	E	ESV	006	28.0	33.5	D1	E	ESV
007	33.5	37.7	D1	E	ESW	008	37.7	44.5	D1	E	ESW	009	44.5	53.3	D1	G	ESW
010	53.3	65.8	D1	G	ESW	011	65.8	76.2	D1	G	ESW	012	76.2	88.3	D1	G	ESW
013	88.3	96.0	D1	G	ESW	014	96.0	103.3	D1	G	ESW	015	103.3	110.6	D1	G	ESW
016	110.6	119.1	D1	G	ESW	017	119.1	125.2	D1	G	ESW	018	125.8	131.9	D1	G	ESW
019	131.9	137.1	D1	G	ESW														

6633 001 00004 MR113 15.0 F DD3 6 06071960 SA DEPT OF MINES
RED *PRINCE-ALFRED-MINE CU 002
001 0.0 13.1 D1 E A18Q 002 13.1 15.2 D1 N A18Q

6633 003 00005 673 127 BF3/- 162.0 F 1A N 03051946 ARTHUR J F J
WHI *ORROROO (NORTH-OF)-WATER-SUPPLY 001
001 0.0 156.6 R4 4 K18U

6633 001 00006 ENV2120 181.6 N MX - 01 N 02061973 UTAH DEVELOPMENT
SHL 720 RED *MATT-MAIN COPPER 001
001 0.3 35.3 P4 3 N1W

6633 001 00007 ENV2120 120.4 N MX - 02 N 28051973 UTAH DEVELOPMENT
SHL 720 RED *MATT-MAIN COPPER 001
001 0.3 24.0 P4 3 N1W

6633 001 00008 ENV2120 205.7 N MX - 03 N 29051973 UTAH DEVELOPMENT
SHL 720 RED *MATT-MAIN COPPER 001
001 0.3 41.1 P4 3 N1W

6633 001 00009 ENV2120 192.0 N MX - 04 N 31051973 UTAH DEVELOPMENT
SHL 720 RED *MATT-MAIN COPPER 001
001 0.3 38.4 P4 3 N1W

6633 002 00012 93.5 N RC 2 N 28111978 SA DEPT OF MINES + ENERGY
ERE *MYALL-CREEK-02 019

001	3.0	8.0	D1	2	P19W	002	8.0	13.0	D1	2	P19W	003	13.0	18.0	D1	2	P19W
004	18.0	23.0	D1	2	P19W	005	23.0	28.0	D1	2	P19W	006	28.0	33.0	D1	2	P19W
007	33.0	38.0	D1	2	P19W	008	38.0	43.0	D1	2	P19W	009	43.0	48.0	D1	2	P19W
010	48.0	53.0	D1	2	P19W	011	53.0	58.0	D1	2	P19W	012	58.0	63.0	D1	2	P19W
013	63.0	68.0	D1	2	P19W	014	68.0	73.0	D1	2	P19W	015	73.0	78.0	D1	2	P19W
016	78.0	83.0	D1	2	P19W	017	83.0	88.0	D1	2	P19W	018	88.0	93.0	D1	2	P19W
019	93.0	93.5	D1	2	P19W														

6633 003 00026 ENV2886 400.6 N CD026 N 28101976 UTAH DEVELOPMENT
EL 267 RED *EURELIA-CARRIETON COPPER 050

001	100.0	106.9	R2	2	N13U	002	106.9	109.9	R2	2	N13U	003	109.9	114.9	R2	2	N13U
004	114.9	119.6	R2	2	N13U	005	119.6	124.5	R2	2	N13U	006	124.5	129.5	R2	2	N13U
007	129.5	134.5	R2	2	N13U	008	134.5	139.3	R2	2	N13U	009	139.3	144.2	R2	2	N13V
010	144.2	149.1	R2	2	N13V	011	149.1	153.9	R2	2	N13V	012	153.9	159.0	R2	2	N13V
013	159.0	163.9	R2	2	N13V	014	163.9	168.8	R2	2	N13V	015	168.8	173.8	R2	2	N13V
016	173.8	178.8	R2	2	N13V	017	178.8	183.6	R2	2	N13V	018	183.6	188.6	R2	2	N13V
019	188.6	193.5	R2	2	N13V	020	193.5	198.2	R2	2	N13V	021	198.2	203.2	R2	2	N13V
022	203.2	208.3	R2	2	N13V	023	208.3	213.0	R2	2	N13V	024	213.0	220.0	R2	1	N13V
025	220.0	226.8	R2	1	N13V	026	226.8	233.5	R2	1	N13V	027	233.5	240.6	R2	1	N13V
028	240.6	247.6	R2	1	N13V	029	247.6	254.5	R2	1	N13V	030	254.5	261.4	R2	1	N13V
031	261.4	268.1	R2	1	N13V	032	268.1	275.2	R2	1	N13V	033	275.2	282.3	R2	1	N13V