

MINERAL RESOURCES TASMANIA

Laboratory Report

LJN2020-114

PETROPHYSICAL TESTS,

PERTH BYPASS

An unpublished Mineral
Resources Report for:

Mark Duffett, MRT

By: J Renaud, R S Bottrill,
and T Gallagher

Date: 12 November 2020

INTRODUCTION

Eleven rock samples were collected from Perth Bypass Diamond Drill Cores by M Duffett, for physical property measurements; with details listed in Table 1 below.

Table 1: Sample details

Reg. #	Field #	Location	Sample Description
L301486	99.1	CE_BH04	porphyry, quartz-feldspar-biotite
L301487	150.05	CE_BH04	porphyry, quartz-feldspar-biotite
L301488	199.6	CE_BH04	intruded by pink ?microgranite - porphyry, quartz-feldspar-biotite
L301489	251.3	CE_BH04	volcaniclastic sedimentary rock
L301490	300.8	CE_BH04	cm-scale iron staining around mm-size pyrite cores - volcaniclastic sedimentary rock
L301491	349.8	CE_BH04	coarse-grained granite with 1% sulfides, oxidising post-drilling
L301492	418	CE_BH04	coarse-grained granite with salmon-pink K-feldspar
L301493	100.1	CE_BH06	coarse-grained granite with up to 5% sulfides, oxidising post-drilling
L301494	122.5	CE_BH06	coarse-grained granite with up to 5% sulfides, oxidising post-drilling
L301495	140.95	CE_BH06	medium-grained granite with up to 5% sulfides, slightly altered to clay
L301496	156.3	CE_BH06	coarse-grained granite with less than 1% sulfides

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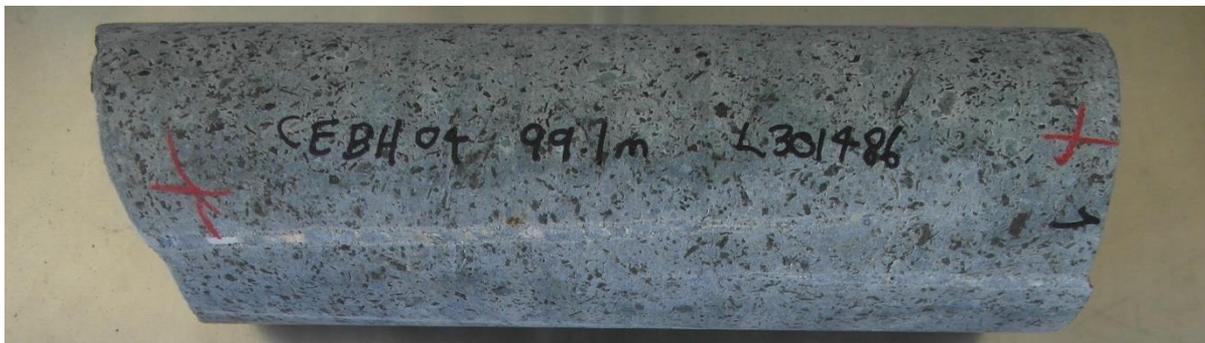


Photo 1: Sample L301486 - porphyry, quartz-feldspar-biotite. FOV: about 200 mm

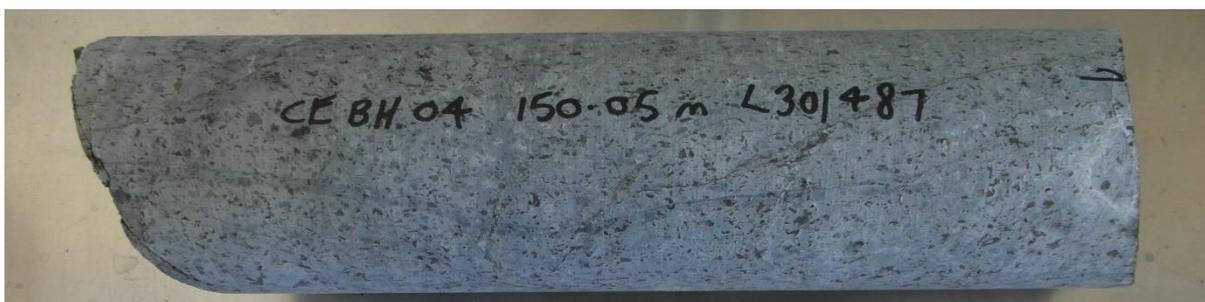


Photo 2: Sample L301487 - porphyry, quartz-feldspar-biotite. FOV: about 300 mm

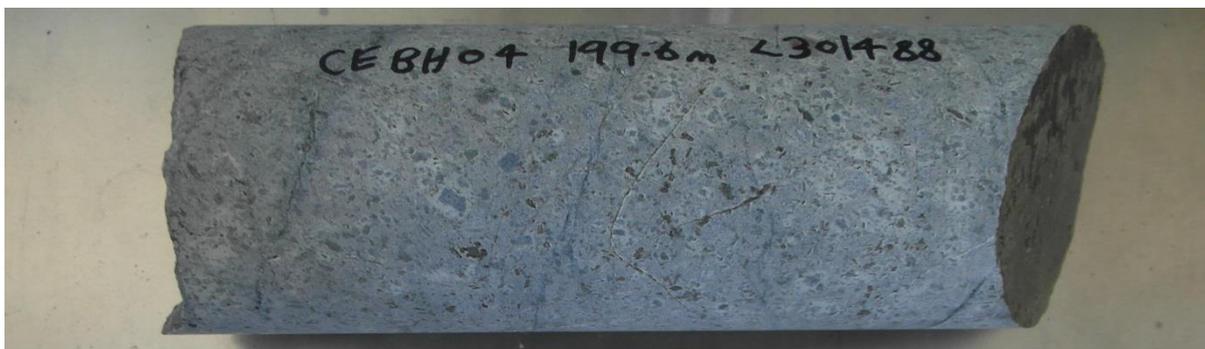


Photo 3: Sample L301488 - intruded by pink ?microgranite - porphyry, quartz-feldspar-biotite. FOV: about 200 mm

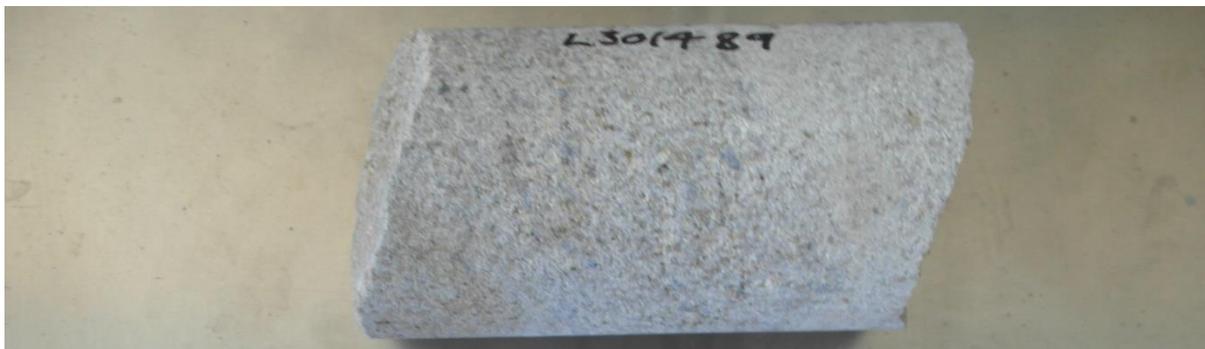


Photo 4: Sample L301489 – volcaniclastic sedimentary rock. FOV: about 200 mm

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Photo 5: Sample L301490 - cm-scale iron staining around mm-size pyrite cores - volcaniclastic sedimentary rock. FOV: about 200 mm



Photo 6: Sample L301491 - coarse-grained granite with 1% sulfides, oxidising post-drilling. FOV: about 300 mm



Photo 7: Sample L301492 - coarse-grained granite with salmon-pink K-feldspar. FOV: about 250 mm

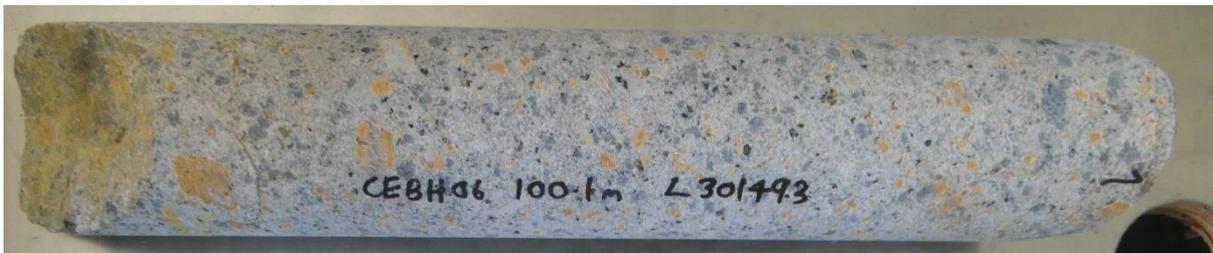


Photo 8: Sample L301493 - coarse-grained granite with up to 5% sulfides, oxidising post-drilling. FOV: about 400 mm

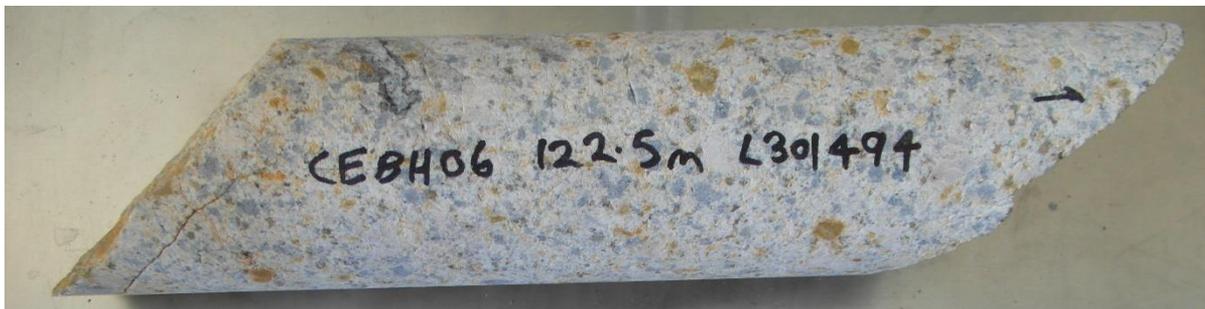


Photo 9: Sample L301494 - coarse-grained granite with up to 5% sulfides, oxidising post-drilling.
FOV: about 300 mm

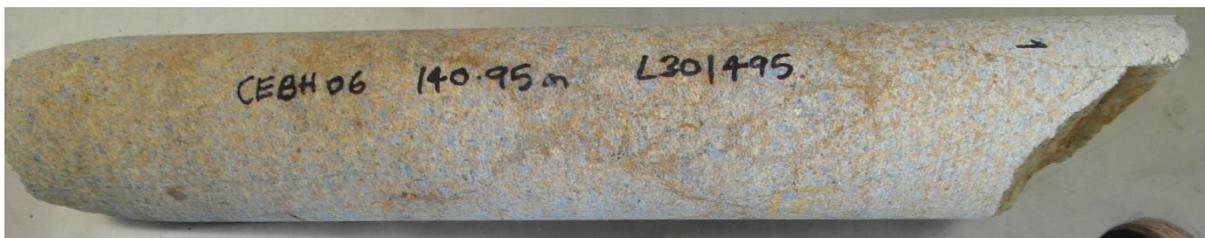


Photo 10: Sample L301495 - medium-grained granite with up to 5% sulfides, slightly altered to clay.
FOV: about 400 mm

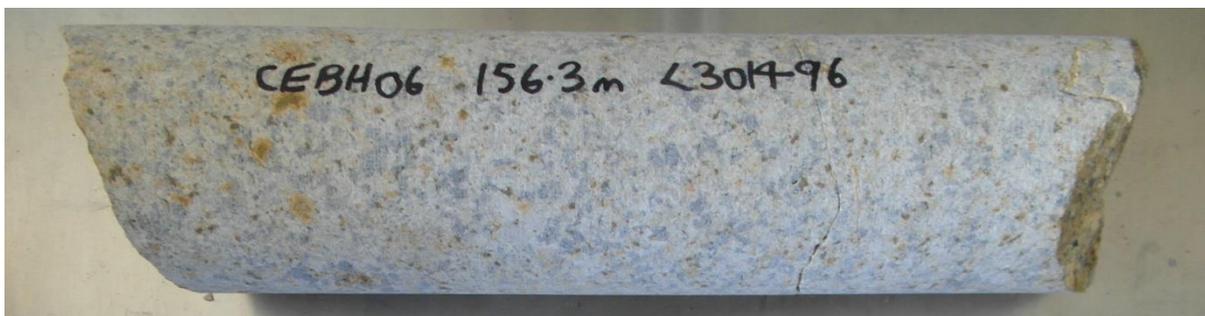


Photo 11: Sample L301496 - coarse-grained granite with less than 1% sulfides. FOV: about 300 mm

LABORATORY TESTS

The samples were soaked for a minimum of 48 hours and weighed in water, and then wet in air. Samples were dried in a 90°C oven for a minimum of 12 hours then weighed dry. The wet porosity and density (specific gravity) was determined by standard gravimetric methods in the Mineral Resources Tasmania (MRT) Core Library, with an electronic balance accurate to 0.1g. The relative accuracy of the results is ~1% for specific gravity and ~5% for wet porosity. The summary of results is shown in Table 2 and full details listed in Appendix 1.

Table 2: Summary of Specific Gravity and Wet porosity

Reg. #	DDH	Depth (m)	Rocktype	Dry bulk SG	Wet bulk SG	Wet Porosity (%)
L301486	CE_BH04	99.1	porphyry, quartz-feldspar-biotite	2.76	2.76	0.00
L301487	CE_BH04	150.05	porphyry, quartz-feldspar-biotite	2.72	2.72	0.07
L301488	CE_BH04	199.6	porphyry, quartz-feldspar-biotite	2.68	2.68	0.19
L301489	CE_BH04	251.3	volcaniclastic sedimentary rock	2.49	2.53	4.55
L301490	CE_BH04	300.8	volcaniclastic sedimentary rock	2.52	2.54	2.61
L301491	CE_BH04	349.8	granite	2.59	2.60	1.53
L301492	CE_BH04	418	granite	2.60	2.61	1.13
L301493	CE_BH06	100.1	granite	2.59	2.60	1.01
L301494	CE_BH06	122.5	granite	2.52	2.56	3.75
L301495	CE_BH06	140.95	granite	2.37	2.46	8.99
L301496	CE_BH06	156.3	granite	2.52	2.55	2.60

R.S. Bottrill

J Renaud and T Gallagher

MINERALOGIST/PETROLOGIST**TECHNICAL OFFICERS****Disclaimers:**

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Appendix 1: Laboratory Report – Physical Property analyses

Client: M Duffett
Analysis: Physical Properties
Method: Gravimetric S.G. & Porosity
Location: Perth Bypass
Job No.: LJN2020-114
Date: 12/11/2020

Results

Sample ID	Dry Weight in Air (g)	Sub-sat Wt in water (g)	Sat. Wt. in Air (g)	Dry bulk SG	Wet bulk SG	Wet porosity (%)
L301486 - 99.1m	1538.3	980.6	1538.3	2.76	2.76	0.00
L301487 - 150.05m	1818.2	1149.6	1818.7	2.72	2.72	0.07
L301488 - 199.6m	1378.7	865.1	1379.7	2.68	2.68	0.19
L301489 - 251.3m	825.8	509.1	840.9	2.49	2.53	4.55
L301490 - 300.8m	1386.6	850.1	1401.0	2.52	2.54	2.61
L301491 - 349.8m	1910.6	1183.2	1921.9	2.59	2.60	1.53
L301492 - 418.0m	1705.4	1056.0	1712.8	2.60	2.61	1.13
L301493 - 101.1m	2159.1	1332.7	2167.5	2.59	2.60	1.01
L301494 - 122.5m	1621.5	1002.7	1645.6	2.52	2.56	3.75
L301495 - 140.95m	1837.6	1132.9	1907.2	2.37	2.46	8.99
L301496 - 156.3m	1680.3	1031.9	1697.6	2.52	2.55	2.60

Analyst: T. Gallagher

Date: 12/11/2020