



**Mt Lindsay – Webbs Creek
Exploration Licence 21/2005**

Annual Report for the period 22/08/2017 to 21/08/2018

S Owen
August 2018
Venture Minerals Ltd
Level 3, 24 Outram Street
West Perth WA 6005
PO BOX 1175
West Perth WA 6872

Contents

1 SUMMARY	1
2 INTRODUCTION	1
3 LOCATION AND ACCESS	1
4 EXPLORATION AND MINING HISTORY	3
5 GEOLOGICAL SETTING	3
6 2017-2018 ANNIVERSARY YEAR EXPLORATION ACTIVITIES	4
6.1 Cruncher Prospect	4
6.2 Salmons – Pieman target area.....	6
6.3 Eastern Skarn.....	8
6.4 LAICPMS tourmaline Upper Harman and Webbs.....	11
7 CONCLUSIONS AND RECOMMENDATIONS	13
8 BIBLIOGRAPHY	15

Figures

Figure 1: EL21/2005 Location Plan	2
Figure 2: Lindsay – Stanley basement geology interpretation with soil boron contours.	5
Figure 3: Cruncher soils on EM image.	6
Figure 4: Salmons – Pieman geological mapping locations with soils	7
Figure 5: Eastern Skarn composition compared with Main Skarn garnets	11
Figure 6: Tourmaline LAICPMS element charts	13

Appendices

- Appendix A: Soil sample locations and assays
- Appendix B: Rock sample locations and assays
- Appendix C: Geological locations
- Appendix D: LAICPMS analyses (tourmaline)
- Appendix E: Microprobe analyses (garnets)

1 Summary

Exploration Licence 21/2005 located in western Tasmania includes several skarn and greisen tin and tungsten prospects adjacent to the Mt Lindsay tin+tungsten+magnetite deposits. Soil sampling in 2018 has resolved three discrete NW trending +500 ppm boron anomalies up to 900 m long and 150 m wide between 500 m and 1000 m southwest of the Livingstone skarn. High powered EM may be an effective way of refining the Cruncher target for drill targeting.

Mapping and prospecting of the Stanley dolomite suggests it is worth extending reconnaissance soil lines into EL21/2005 from the adjacent 7M/2012.

Microprobe work in 2018 returned cassiterite distal garnet compositions from PH003 similar to garnets in PH001 and PH002. The Eastern Skarn garnets are generally low in Sn and relatively grossular-rich consistent with cassiterite-distal samples from the Main Skarn. The most andraditic and prospective garnet samples obtained were from amphibole+magnetite zones in the upper part of granite-proximal PH004 and the deeper biotite and axinite bearing part of granite-distal PH002.

LAICPMS work on tourmaline from upper Harman and Webbs Creek greisens confirms observations that green tourmaline greisens and adjacent skarn are prospective for cassiterite and probably also scheelite. The upper Harman greisen is along strike of a low level Sn anomaly within the Wilson River Ultramafic Complex that is prospective for concealed greisen.

2 Introduction

Exploration Licence 21/2005 is located in the tin-tungsten province of western Tasmania and covers the south eastern contact metamorphic aureole of the Meredith Granite. The Meredith Granite is part of a suite of Devonian granites which is very important to tin and tungsten mineralization in Tasmania, and deposits associated with this suite include the world class Renison Bell tin mine (26 Mt at 1.46% Sn), Mount Bischoff (10.54 Mt at 1.1% Sn), Cleveland (12.4 Mt at 0.62% Sn, 0.25% Cu) and King Island (17 Mt at 0.85% WO₃). Cleveland and Mount Bischoff are situated around the northern margin of the Meredith Granite, and Renison Bell is associated with the Pine Hill Granite c. 15 km to the southeast of the Meredith Granite.

Previous exploration activities mainly for tin within the area now covered by E21/2005 also indicated the presence of potentially economic magnetite skarns. There are currently two producing magnetite mines in Tasmania, the Kara magnetite-scheelite mine located near Hampshire approximately 55 km in a direct line northeast of EL21/2005 and the Savage River magnetite mine (371 Mt at 31.9% Fe in magnetite) situated c. 25 km directly north northwest of the Mt Lindsay magnetite-tin-tungsten skarns.

3 Location and Access

Exploration Licence 21/2005 currently covers c. 65 km² and is located approximately 130 km by road southwest of the port of Burnie, and c. 35 km by road from the nearest town

Tullah. Exploration Licence 18/2012 and the southern part of EL33/2007 were amalgamated with EL21/2005 in February 2014. Mining Leases 3M/2012 and 7M/2012 covering the Livingstone, Reward, Main and No.2 Tin-Tungsten-Magnetite resources were granted to Venture in 2012 and 2014 respectively and excised from EL21/2005. The outline of EL21/2005 as it now stands is shown in Figure 1.

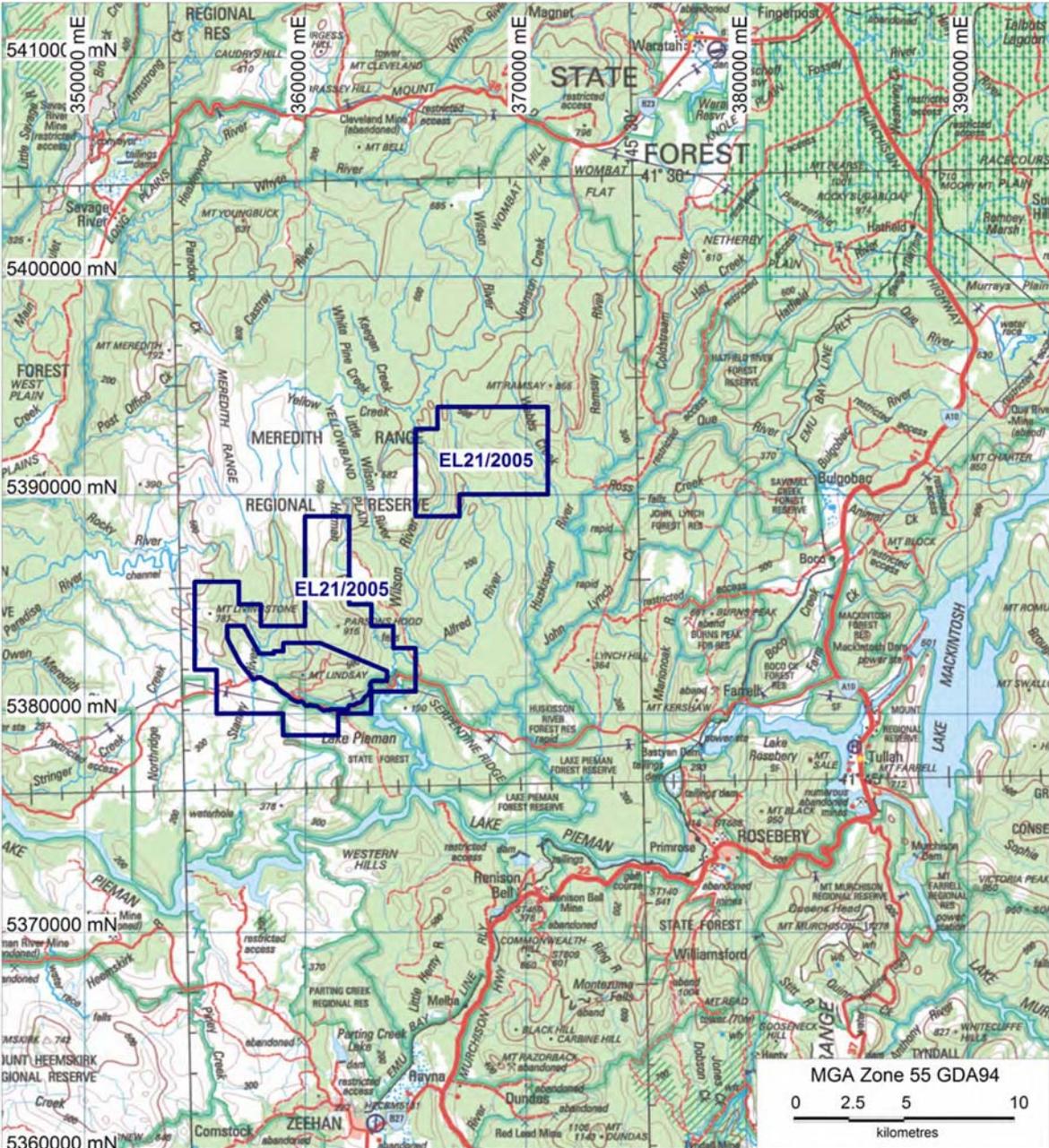


Figure 1: EL21/2005 Location Plan

Access to the licence is via the sealed (bitumen) Pieman Road which branches off the Murchison Highway c. 5 km north of Tullah, then approximately 3 km of 4WD vehicle track to the drill site. The drill site is c. 3 km from Hydro Tasmania transmission lines (adjacent to the Pieman Road) and 21 km from the Bastyan hydroelectric powerhouse and Emu Bay Railway which connects with the port of Burnie.

Elevation within the licence ranges from 100 m above median sea level where Lake Pieman winds around the south western corner, to 913 m at the top of Parsons Hood at the

southern end of the Meredith Range and 781 m for Mt Livingstone in the west. Average annual rainfall is approximately 2000 mm and vegetation is dominated by dense patches of dense sub-alpine scrub and button grass over granitic basement, dense regenerating forest and temperate rainforest.

4 Exploration and Mining History

Please refer to previous annual reports for reviews of past exploration and mining (e.g. Owen 2010).

5 Geological Setting

The Parsons Hood - Stanley River area in the south western part of EL21/2005 is underlain by northwest striking sedimentary and volcanic rocks of the Neoproterozoic – Early Cambrian Crimson Creek Formation, Success Creek Group and Oonah Formation, and the Devonian Meredith Granite (Figure 2). The Webbs Creek area in the north eastern corner of EL21/2005 (the Webbs Creek area) is underlain by Silurian to Devonian sedimentary rocks of the Eldon Group, the Ordovician Gordon Limestone, Crimson Creek Formation, and Meredith Granite (Figure 2). The sedimentary stratigraphy is largely steeply dipping to vertical.

The intrusive contact of the Meredith Granite dips away at a modest angle beneath the various sedimentary units, but in detail the granite margin is complicated by numerous irregular granitic dykes, shelves and apophyses which appear to stope the host meta-sedimentary and meta-igneous units. There are also large rafts of Crimson Creek and Success Creek rocks within the margins of the Meredith Granite. Preliminary interpretation suggests several phases of granite intrusion culminating in late stage quartz-tourmaline veining and the localised development of quartz±tourmaline±topaz and sericite±siderite greisens.

A broad contact metamorphic aureole is developed around the Meredith Granite, characterised by the development of fine grained amphibole, cordierite, biotite and pyroxene hornfels. Carbonate units are locally present within all of the enclosing sedimentary units and locally form the protolith to a variety of proximal contact skarns, greisenized skarns and more distal carbonate replacement bodies. The principal exploration targets for Venture within EL21/2005 are carbonate replacement, greisenized skarn, and vein and greisen style tin and tungsten mineralisation.

Potentially significantly mineralised skarns have been identified within the current EL21/2005 at Parsons Hood (Eastern Skarn) and in the Webbs Creek – Wilson River area (Webbs Skarns), and one potentially significant vein and endogreisen tin prospect named North Cashbolt is recognised within the Meredith Granite. The Eastern Skarn on Parsons Hood is hosted by the Crimson Creek Formation, Webbs Skarns by the Gordon and Eldon groups. More detailed descriptions of the alteration and mineralisation encountered in the

various identified deposits can be found in previous annual reports (e.g. Owen 2011, Owen & Pfeifenberger 2012). Additional skarn targets have been identified in the Cruncher Creek and lower Harman River areas, as discussed further below.

6 2017-2018 Anniversary Year Exploration Activities

Activities within EL21/2005 during the 2018 anniversary year were focussed on evaluating the Cruncher, Salmons-Pieman, and Eastern skarn targets.

6.1 Cruncher Prospect

The Cruncher target is a NW-trending boron anomaly (up to 1230 ppm B) with minor spots of low-level tin (+10ppm, peak 26 ppm Sn) and As (max. 81 ppm) anomalism within the Oonah Fm about 800 m southwest of the boron-rich Livingstone skarn. Very slow progress in dense vegetation at Cruncher resulted in a somewhat reduced sampling programme (157 samples vs the proposed +200 samples). Nevertheless, the 2018 soil sampling campaign defines at least 3 discrete +500 ppm B anomalies up to 900 m long and 150 m wide within a 1.2 km by +500 m wide +150 ppm B anomaly (Figure 2). The 2018 sampling confirms the 2017 inference that the boron anomaly closes out to the SW, SE, most likely NW, and is not continuous with the Livingstone skarn boron anomaly to the NE. Rb (to 170 ppm), Ce (max. 309 ppm) and La (up to 124 ppm) are distinctly anomalous within the much of the +150 ppm B anomaly, but largely antithetic to the +500 ppm B zones. A similar antithetic relationship between B and Rb, Ce and La is evident in the Main and No. 2 greisens.

Cruncher is similar in extent to the boron in soil anomaly adjacent to the Main and No.2 skarns at Mt Lindsay and currently the strongest known in the Mt Lindsay – Stanley area. It is at least partly coincident with magnetic and airborne EM conductivity highs. The B anomaly remains partly open across stratigraphic strike to the E, and alignment with the Livingstone skarn to the NE may reflect the presence of an underlying NE trending fracture zone.

Soil assays are given in Appendix A.

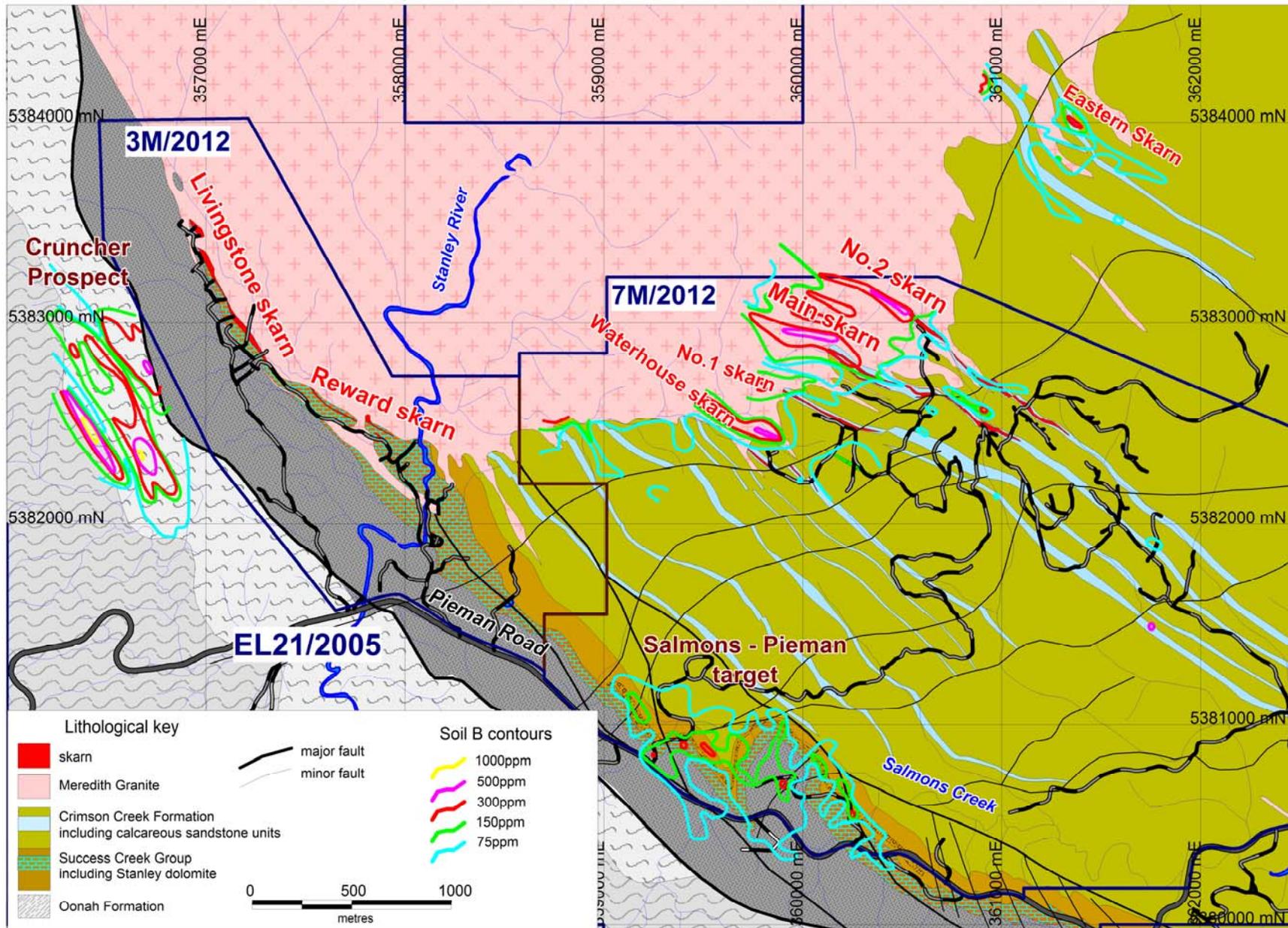


Figure 2: Lindsay – Stanley basement geology interpretation with soil boron contours.

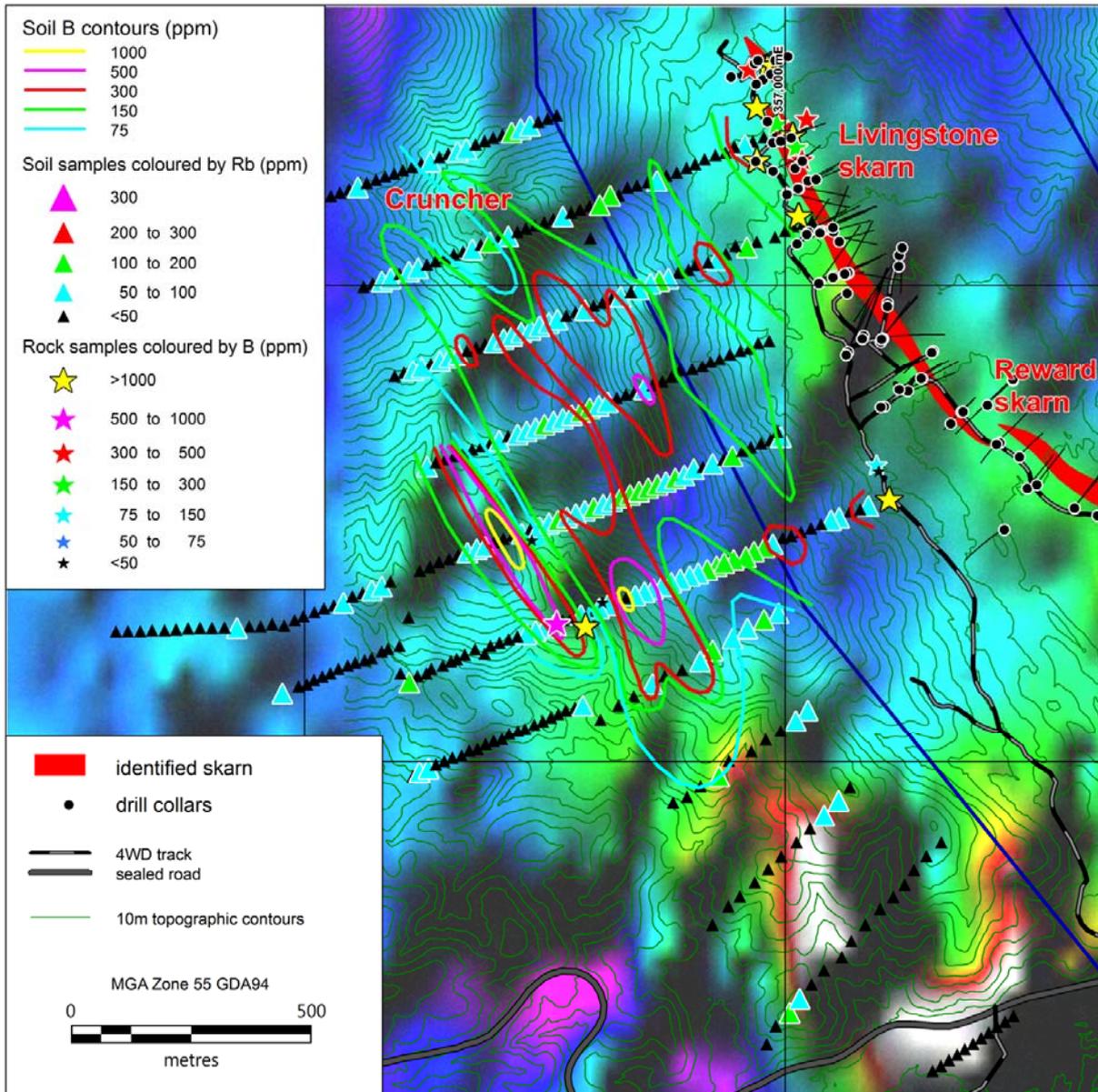


Figure 3: Cruncher B in soil contours with soil sample locations coloured by Rb ppm overlaid on WTRMP EM coaxial conductivity 980 hz.

6.2 Salmons – Pieman target area

The Salmons – Pieman Prospect is c. 2.5 km long Sn and B geochemical anomaly following the Stanley dolomite and Red Rock Member SE from the Reward skarn at the margin of the Meredith Granite in Stanley River – Salmons Creek area. The target area straddles the boundary or 3M/2012, 7M/2012 and EL21/2005, and soil sampling during the 2018 anniversary year was entirely within the adjacent 3M/2012 and 7M/2012. However, mapping and prospecting of the Stanley dolomite suggests it is worth extending reconnaissance soil lines into EL21/2005. Rock sample assays are included in Appendix B. Note location and sample THML117 is now thought to be from dump of Wilson River Ultramafic rock used in the construction of the Pieman Road and now overgrown by forest.

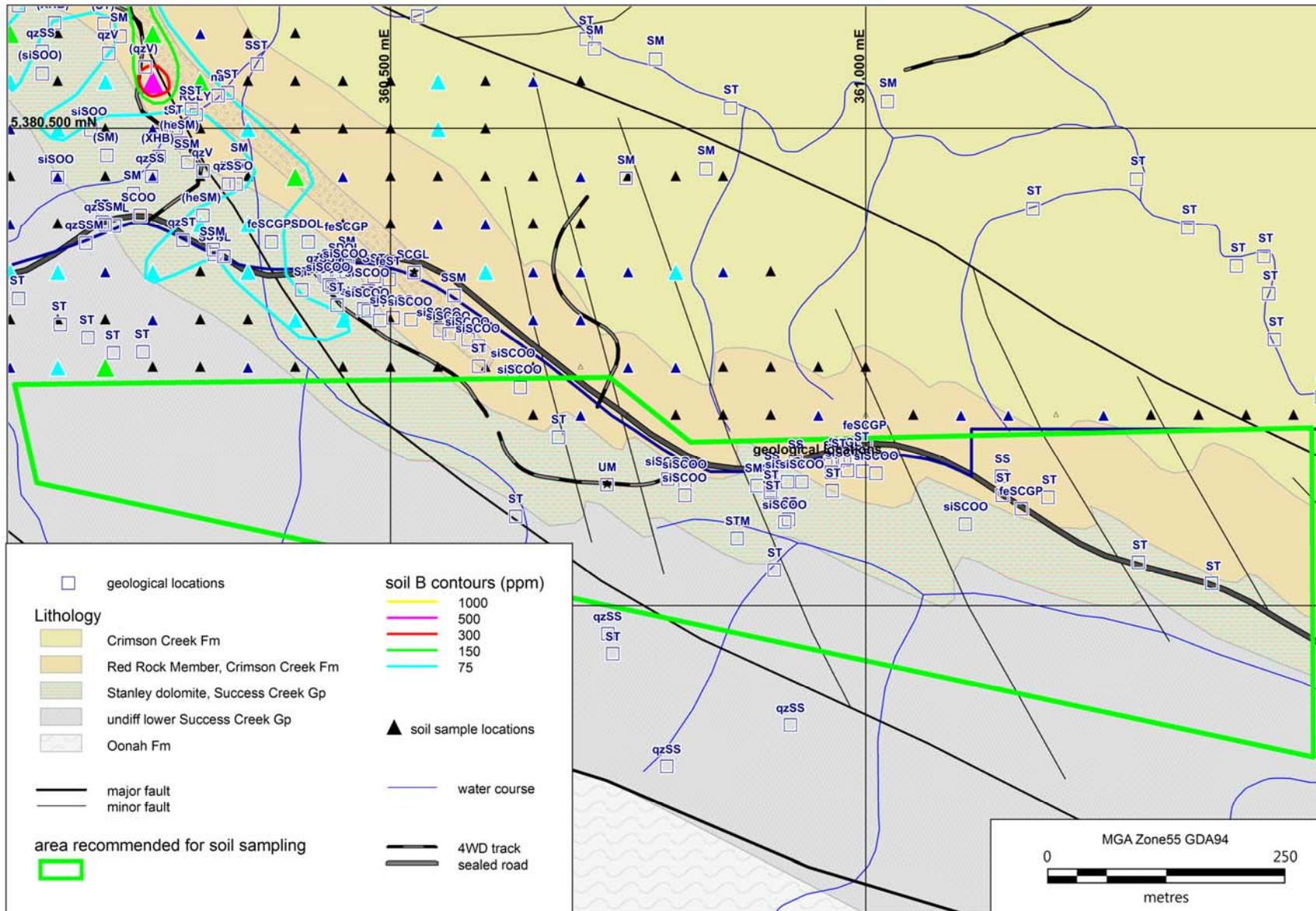


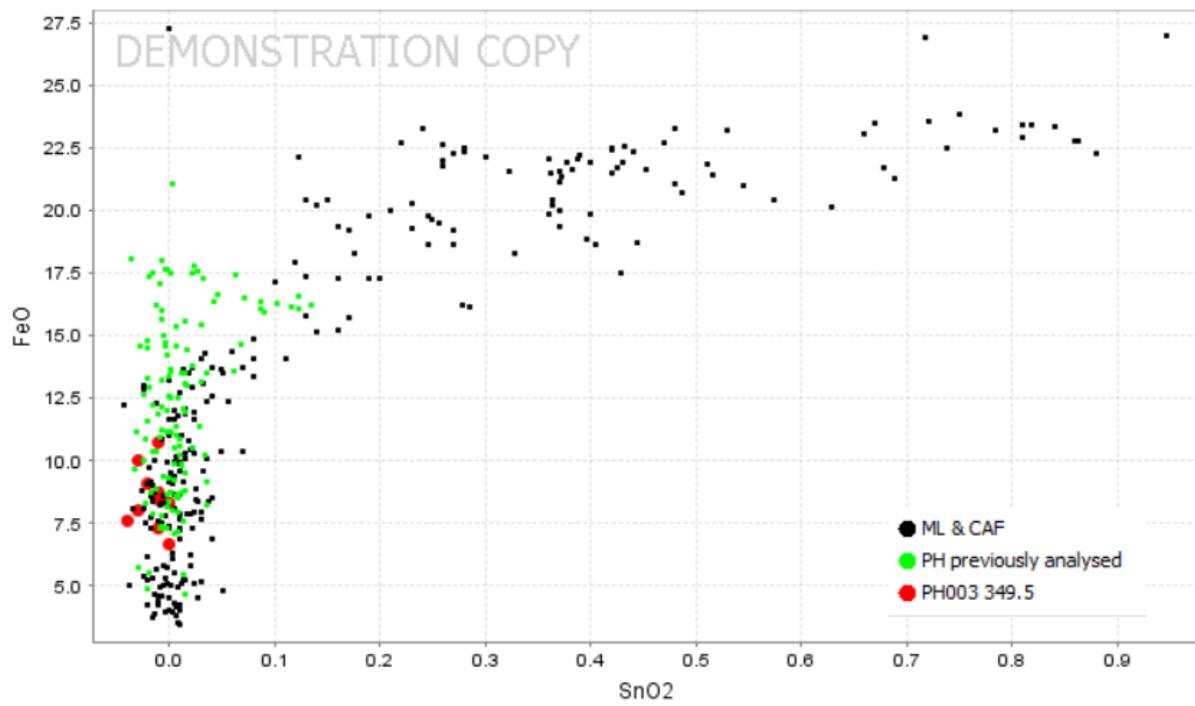
Figure 4: Salmons – Pieman geological mapping locations with soil sample locations coloured by B ppm. See Appendix C for 2018 geological location log and rock and mineral codes.

6.3 Eastern Skarn

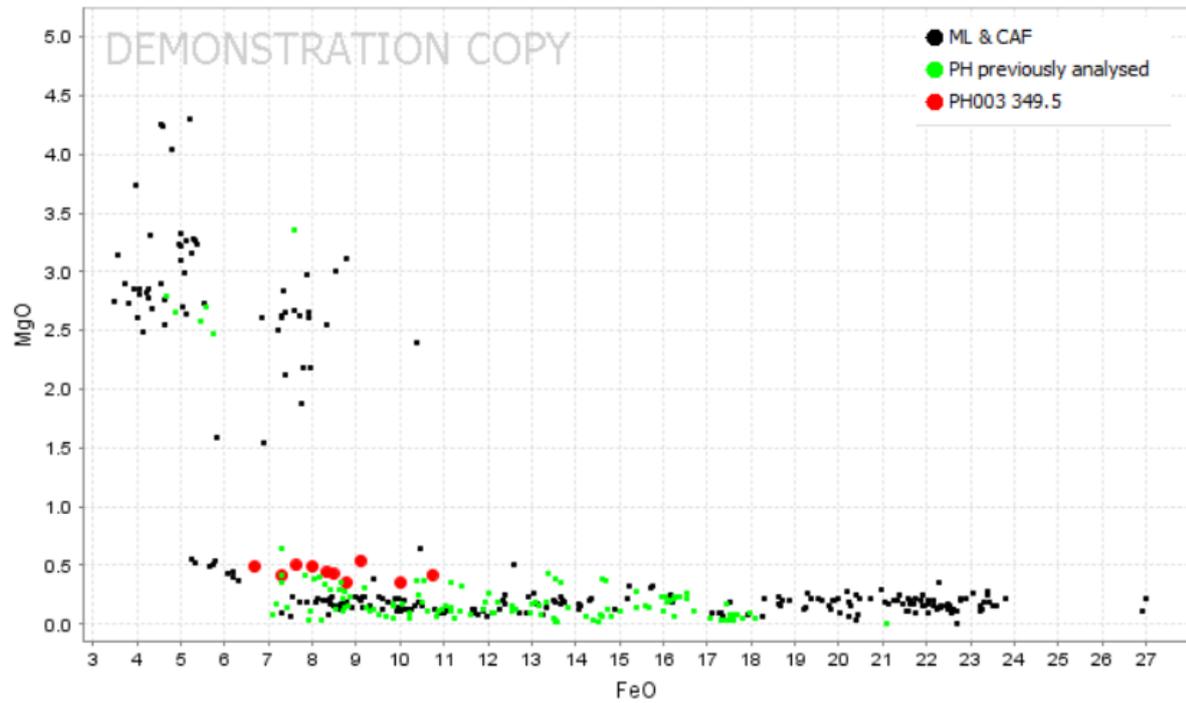
The Eastern skarn is located about 1.2 km northeast of the Main and No.2 deposits (Figure 2). Previous drilling over c. 1.5 km strike extent and 300 m dip extent encountered a broad (>100 m true thickness) garnet + pyroxene and amphibole + titanite skarn including narrower magnetite zones (est. 10-20 m true thickness), but no significant cassiterite or scheelite mineralization. Narrow greisen alteration zones were identified overprinting amphibole + titanite + magnetite and garnet + pyroxene skarn in the most granite-proximal drill hole PH004.

Microprobe work in 2018 returned low Fe and Sn skarnoid or cassiterite distal garnet compositions from PH003 similar to garnets in PH001 and PH002 (see Appendix E). The Eastern Skarn garnets are generally low in Sn and relatively grossular-rich consistent with cassiterite-distal samples from the Main Skarn. The most andraditic and prospective garnet samples obtained were from amphibole+magnetite zones in the upper part of granite-proximal PH004 and the deeper biotite and axinite bearing part of granite-distal PH002.

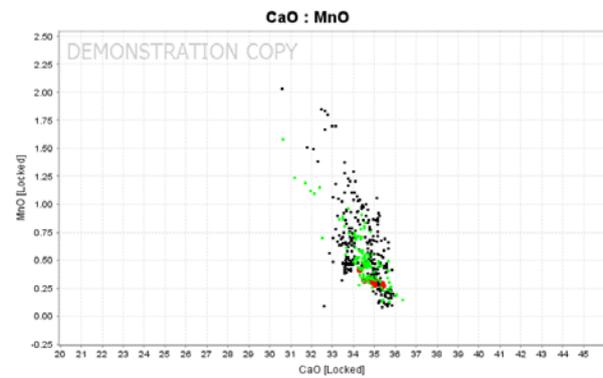
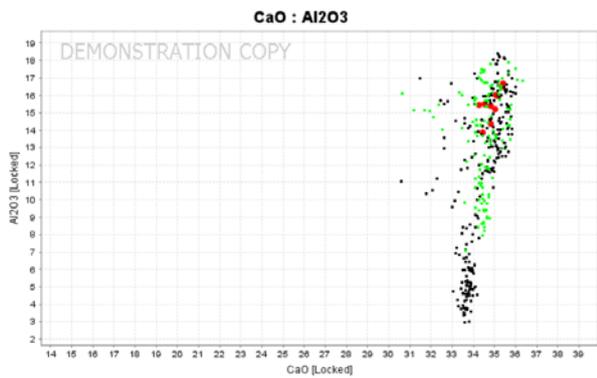
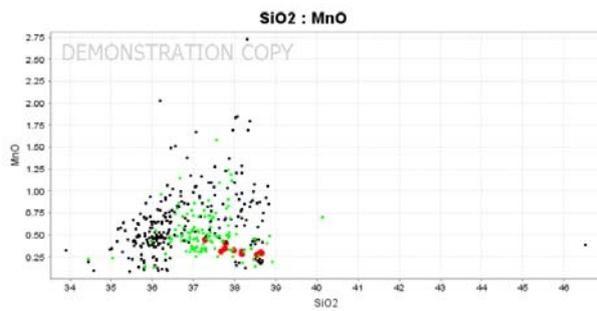
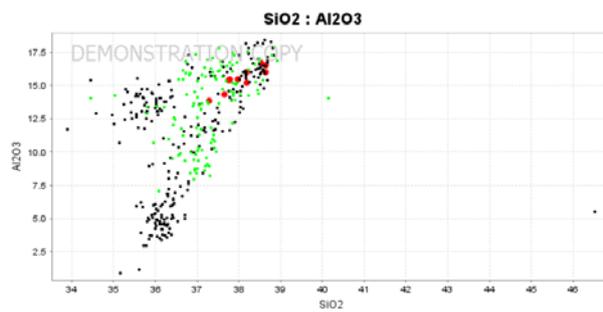
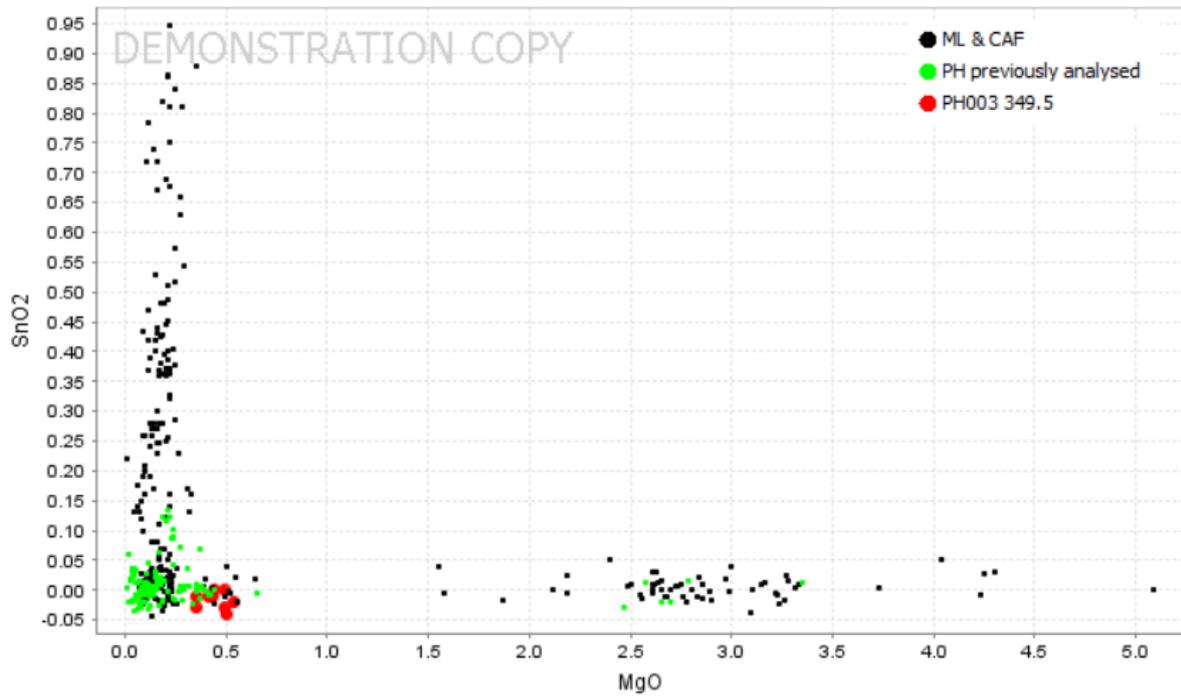
SnO2 : FeO



FeO : MgO



MgO : SnO2



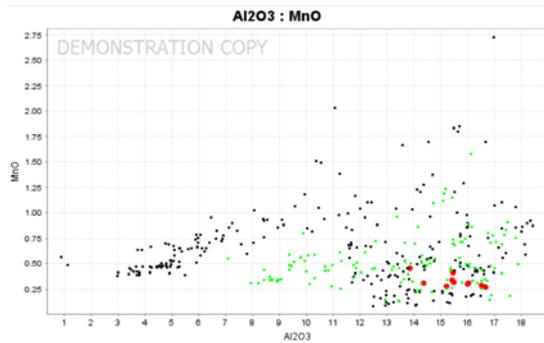
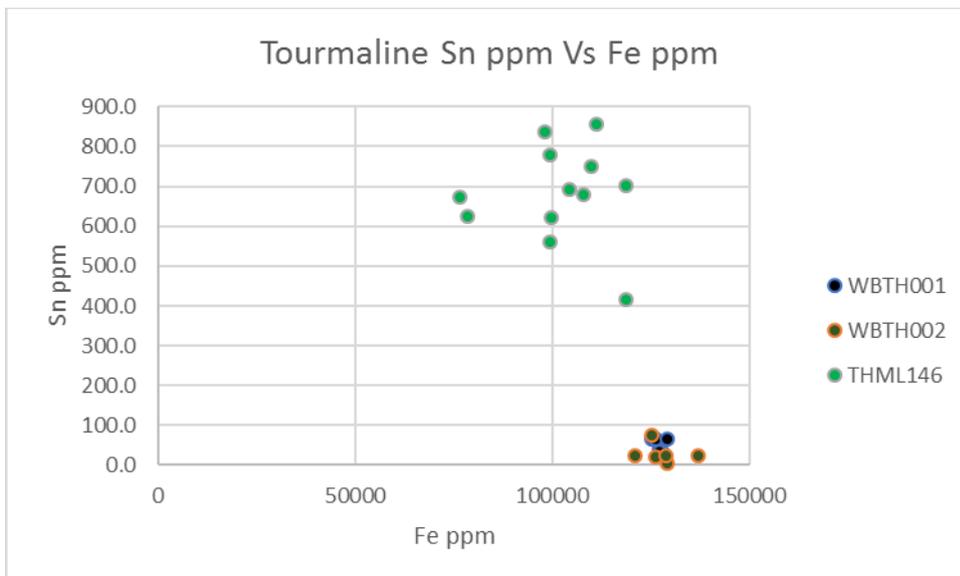
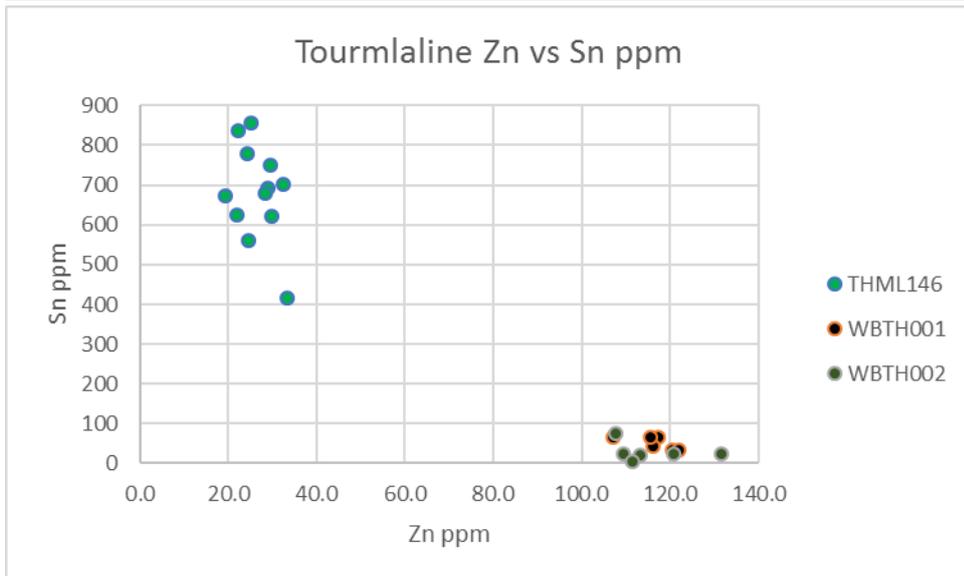
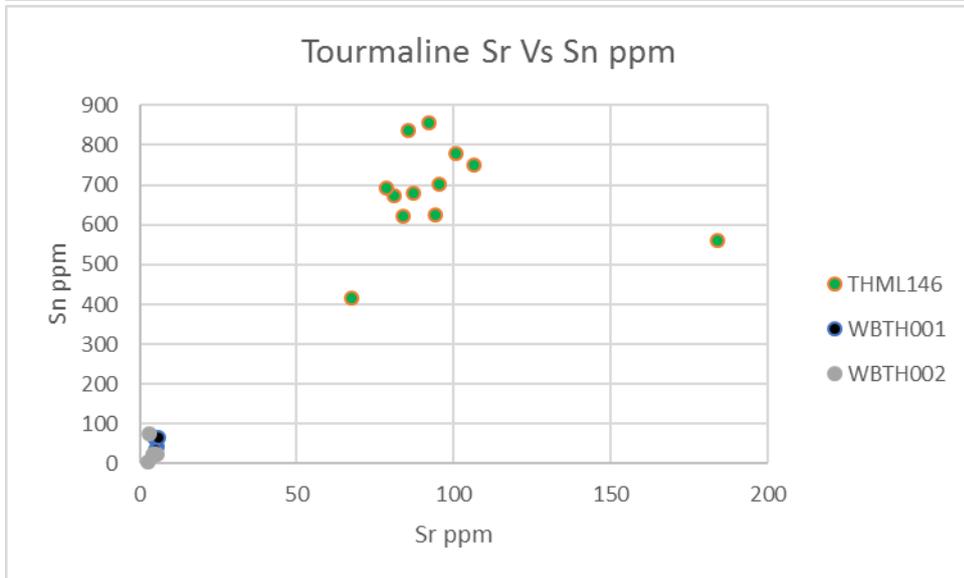
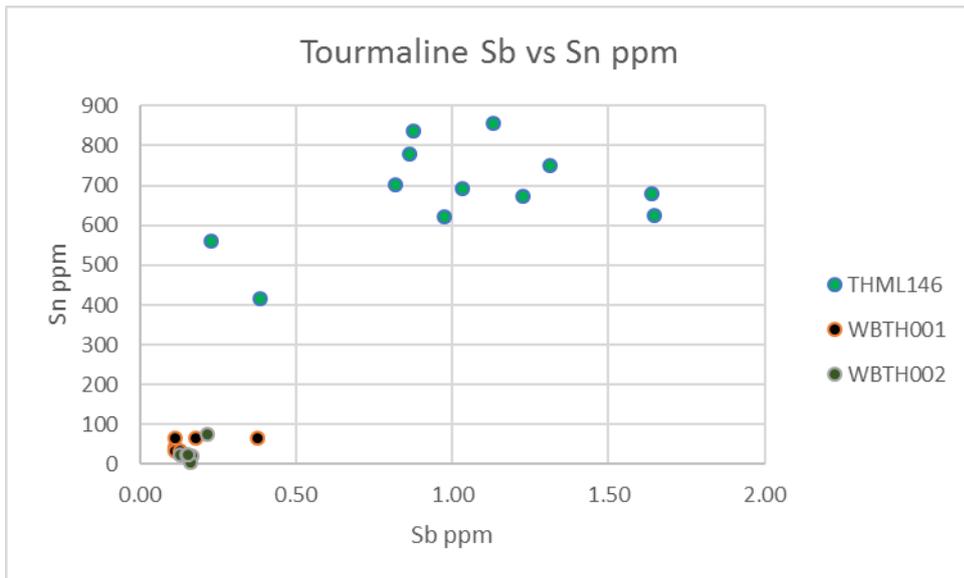


Figure 5: Eastern Skarn composition compared with Main Skarn garnets. Analytical conditions: Electron microprobe: JEOL 8230/8530 (TCP/IP Socket and EIKS) equipped with 5 tunable wavelength dispersive spectrometers. The beam current was 20 nA, and the beam diameter was 5 microns.

6.4 LAICPMS tourmaline Upper Harman and Webbs

Three tourmaline-bearing endogreisen samples from the upper Harman River (THML147 361718mE 5388052mN MGA Zone 55 GDA94) and Webbs Creek (WBTH001 and WBTH002 365700mE 5392700mN MGA Zone 55 GDA94) areas were subject to LAICPMS analysis during the 2018 anniversary year. LAICPMS data given in Appendix D. The Upper Harman sample THML146 is from a cassiterite-bearing greisen and the tourmalines are green with conspicuously elevated Sn, weakly elevated W, and relatively low Ce, La and REEs. Tourmaline samples from the Webbs Ck greisens were brown with low Sn, W and relative to Upper Harman high Ce, La and REEs. Brown tourmaline is commonly observed to rim (overprint) green tourmaline, and the 2018 LAICPMS work confirms observations that green tourmaline greisens and adjacent skarn are prospective for cassiterite and probably also scheelite.





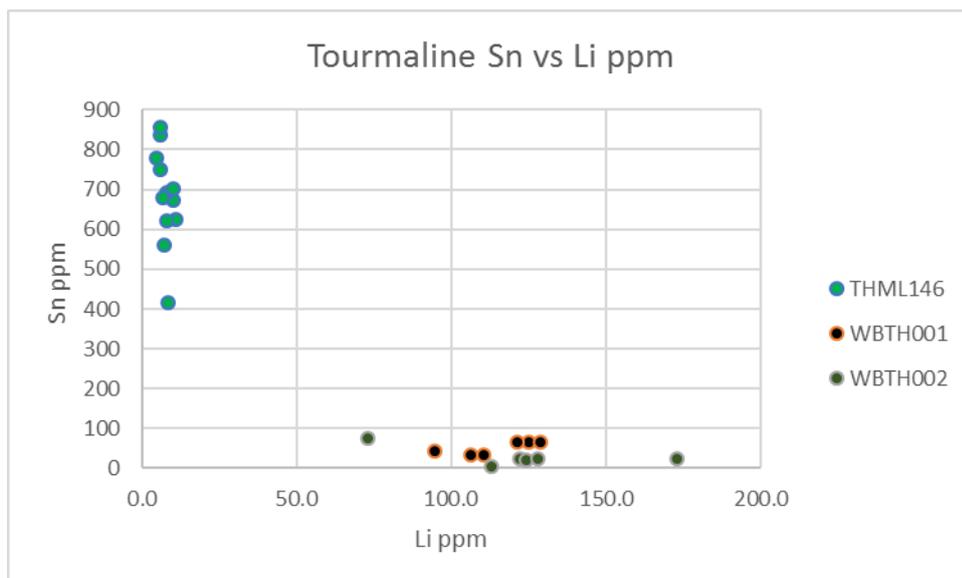


Figure 6: Selected LAICPMS element charts for tourmaline samples from tourmaline greisens in the upper Harman and Webbs Creek areas. See Appendix D for data.

7 Conclusions and Recommendations

Soil sampling in 2018 has resolved three discrete NW trending +500 ppm boron anomalies up to 900 m long and 150 m wide between 500 m and 1000 m southwest of the Livingstone skarn. Spot low-level Sn and As anomalism is apparent, and conspicuous Ce, La and Rb anomalism is at least partly antithetic to the +500 ppm B anomalies. The main question to be answered now is whether the Cruncher boron anomaly is distal to significant Sn mineralisation, and infill soil sampling in such dense vegetation may not be the most effective use of exploration budget. The western part of the Cruncher boron anomaly coincides with a weak low frequency EM anomaly (WTRMP 2001-2002). The target minerals cassiterite and scheelite will not have an EM response most of the tin and tungsten skarns in the Mt Lindsay area include a significant pyrrhotite zone overlapping or adjacent to the cassiterite and scheelite zones. The known massive pyrrhotite zones within the Main Skarn are not defined by the WTRMP 2001-2002 survey and even the lowest frequency (980 hz and 880 hz) conductivity responses seem to be heavily influenced by wet areas and drainage patterns: the WTRMP survey may not have been powerful enough to see beyond the near surface groundwater conductivity effects. High powered ground EM should be more effective, but terrain and dense vegetation makes ground EM in this area relatively expensive. Venture's recent experience elsewhere suggests current heliborne EM will provide significantly better identification of sulfide bodies than the 2001-2002 VTRMP vintage heliborne EM and may be the most cost effective solution especially if more than one geochemical target within Venture's entire Mt Lindsay Project tenement group is tested. Quotes for EM survey covering a range of targets should be sought.

Mapping and prospecting of the Stanley dolomite suggests it is worth extending reconnaissance soil lines into EL21/2005 from the adjacent 7M/2012. Infill soil sampling over the Stanley dolomite within the immediately adjacent 7M/2012 during 2018 returned up to 1300 ppm Sn within three discrete + 100 ppm Sn anomalies with combined trend extent of c. 300 m.

Microprobe work in 2018 returned cassiterite distal garnet compositions from PH003 similar to garnets in PH001 and PH002. The Eastern Skarn garnets are generally low in Sn and relatively grossular-rich consistent with cassiterite-distal samples from the Main Skarn. The most andraditic and prospective garnet samples obtained were from amphibole+magnetite zones in the upper part of granite-proximal PH004 and the deeper biotite and axinite bearing part of granite-distal PH002. Further prospecting and potentially drilling is required to identify Sn metasomatic zones within the Eastern Skarns.

LAICPMS work on tourmaline from upper Harman and Webbs Creek greisens confirms observations that green tourmaline greisens and adjacent skarn are prospective for cassiterite and probably also scheelite. The upper Harman greisen is along strike of a low level Sn anomaly within the Wilson River Ultramafic Complex that is prospective for concealed greisen.

Prospecting and surface geochemistry of the Webbs Skarns is recommended to advance the identified targets to drill ready stage. The historic Renison helipads are now well overgrown and new pads will need to be cut to access the area.

8 Bibliography

Allen, D. V., 1923. Notes on Lindsay Reward Tin Mine, Western Tasmania. Proceedings of the Australian Institute of Mining and Metallurgy. New Series no. 51. p. 47-51. (MRT Report No. 23-0029).

Allegiance Mining NL, 2005. Avebury Mine Area Resources. ASX Announcement 9 November 2005 by Allegiance Mining NL.

Brown, A. V., 1986. Geology of the Dundas – Mt Lindsay – Mt Youngback region. Tasmania Department of Mines. Geological Survey Bulletin 62.

Cartwright, A.J., Komyshan, P., & Roberts, P.A. 1984. E.L. 17/77 Wilson River Area Annual Report for 1983-84. Gold Fields Exploration Pty Ltd.

Comstaff, 1972. (anonymous). Exploration Licence 1/68. 1971/1972 Summer Field Season Report. Meredith Granite Project. [MRT report # 72-0856].

Comstaff, 1973. (anonymous). Exploration Licence 1/68. Meredith Granite Project. 1972/1973 Summer Field Season Report. [MRT report # 73-0953].

Couper, J. K., 1964. Interim report on Mt Lindsay prospect, Zeehan, Tasmania. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR64-0386).

Couper, J. K., 1964. Geological report of Stanley River area, Mt Lindsay Prospect, Schedule 6b-1964. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR64-0376).

Ellis, P. D. 1982. Exploration progress report EL53/70, Stanley River, West Tasmania, period ending 10th June 1982. EMR 111/82. Unpublished report for CSR Ltd – Minerals Division Exploration Group, available from Mineral Resources Tasmania (TCR82-1804).

Ellis, P. D. 1982. Exploration progress report EL53/70, Stanley River, West Tasmania, period ending 10th November 1982. EMR 160/82. Unpublished report for CSR Ltd – Minerals Division Exploration Group, available from Mineral Resources Tasmania (TCR82-1874).

Eshuys, E., & Etheridge, M., 1968. Report on the Mt Lindsay area, Tasmania (Summer Programme 1967/68). Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR68-0499).

Gibson, B. G. 1984. Stanley Reward tin prospect EL53/70, Western Tasmania. Bulletin 134, Addendum 3. Unpublished report for Gencor (Australia) Pty Ltd, available from Mineral Resources Tasmania (TCR84-2290).

Howland-Rose, A. W., 1975. Report on an electrical induced polarization survey over the Mt Livingstone Prospect near Renison Bell, West Coast Tasmania on behalf of Pacminex Pty Limited. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR74-1073).

Irving, J. T., 1971. Report on Exploration Licence 53/70. Stanley River, Tasmania. Unpublished report for Valley Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR71-0816).

Irving, J. T., 1972. Valley Exploration Pty Ltd. EL53/70 Stanley River area, Tasmania. Unpublished report for Valley Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR72-0913).

Jessup, A., 1969. Report on the summer exploration programme undertaken at Mt Lindsay Tasmania, 1968-1969. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR69-0600).

Jessup, A., 1969. Review of summer exploration program undertaken in EL3/63, West Coast, Tasmania, 1968-1969. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR69-0601).

Jordan, M., 1970. Report on the summer exploration program undertaken at Mt Lindsay and in the Stanley River area 1969-1970. Unpublished report for the Paringa Mining and Exploration Company Limited, available from Mineral Resources Tasmania (TCR70-0626).

King, D. Report on the tin resources of Tasmania. Utah Development Company, report available from Mineral Resources Tasmania (TCR63-0364).

Kitto, P. A., 1992. The geological and structural controls on mineralisation at the Renison Bell tin mine. Tasmania Department of Mines. Geological Survey Bulletin 70, p97-117.

Komyshan, P., 1985. EL2/63 and EL17/77 Mt Lindsay and Wilson River areas Annual Report 1984-85. Unpublished report for Gold Fields Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR85-2406).

Kwak, T. A. P., 1982. The geology and geochemistry of the zoned, Sn-W-F-Be skarns at Mt Lindsay, Tasmania, Australia. Unpublished report available from Mineral Resources Tasmania (TCR82-1805).

Macnamara, P. M., 1974. Progress report of exploration and drilling to May 1974 on EL53/70, Tasmania. PMR 60/74. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR74-1014).

Macnamara, P. M., 1976. Geochemical testing of airborne EM anomalies EL53/70 Stanley River, Tasmania. PMR 196/76. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR76-1186).

Macnamara, P. M., 1977. Stanley Reward: EL53/70 West Tasmania report on exploration 1975-1977 (drilling, geochemical and magnetic surveys). PMR 153/77. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR77-1227).

Macnamara, P. M., 1977. Stanley Reward: EL53/70 grid soil geochemistry 1975-1977. PMR 168/77. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR77-1241).

Macnamara, P. M., 1978. Stanley Reward drilling - 1978 EL53/70 Stanley River, West Tasmania. PMR 97/78. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR78-1311).

Macnamara, P. M., 1978. Geochemical sampling 1978, EL53/70 Stanley River, West Tasmania. PMR 103/78. Unpublished report for Pacminex Pty Ltd, available from Mineral Resources Tasmania (TCR78-1315).

Macnamara, P. M., 1980. Anomalous geochemical and geophysical target zones: Stanley Reward grid EL53/70 Stanley River, West Tasmania. EMR 59/80. Unpublished report for CSR Ltd – Minerals Division Exploration Group, available from Mineral Resources Tasmania (TCR80-1471).

Macnamara, P. M., 1980. Drilling and geochemical sampling, Stanley Reward grid, EL53/70 Stanley River, West Tasmania. EMR 87/80. Unpublished report for CSR Ltd – Minerals Division Exploration Group, available from Mineral Resources Tasmania (TCR81-1554).

Martin, L. A., 1981. EL2/63 Mt Lindsay area, western Tasmania 1981-1982 Annual Report. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR81-1568).

Martin, L. A., 1982. EL2/63 Mt Lindsay area, western Tasmania 1981-1982 Annual Report. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR82-1797).

Moore, B. R., 1987. Fracture and mineralisation study, Mt Livingstone area, Tasmania, Australia. Unpublished report by Geo-Flite Research Pty Ltd Macleod Mining and Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR87-2724).

Morton, J. L., 1963. Progress report no. 8 of Mt Lindsay tin prospect, Zeehan, Tasmania. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR63-0361).

Morton, J. L., 1963. Progress report no. 9 of Mt Lindsay tin prospect, Zeehan, Tasmania. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR63-0365).

Morton, J. L., 1964. Review of Mt Lindsay diamond drilling and reconnaissance programme as at 19.3.1964, Zeehan - Corrina, Tasmania. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR64-0368).

Morton, J. L., & Couper, J. K., 1964. Review of Mt Lindsay prospect at completion of second diamond drilling program, Zeehan, Tasmania. Report No. 3. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR64-0377).

Newnham, L. A., 1973. EL2/63 Mt Lindsay area, Western Tasmania. Interpretation of a helicopter borne magnetic survey in the Renison Bell area (Tasmania). Extracted directly from a report by G. Omnes of Compagnie Generale De Geophysique dated 4th August 1973. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR73-0969).

Newnham, L. A., 1975. A Lower Cambrian marker sequence in the Renison – Mt Lindsay area. Paper presented at the geological Society of Australia, Tasmania Division, West Coast Symposium on Lower Palaeozoic Geology of Western Tasmania, September 1975.

Newnham, L. A., 1975. EL2/63 and EL18/73, Mt Lindsay area, Western Tasmania, Annual Report 1974-75. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR75-1120).

Newnham, L. A., 1975. Mt Lindsay area (EL2/63 and EL18/73) diamond drilling proposal summer 1975-76. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR75-1127).

Newnham, L. A., 1999. EL22/98 Meredith Range Annual Report for the period ending November 1999. Unpublished report for Goldstream Mining NL, available from Mineral Resources Tasmania (TCR99-4406).

Newnham, L. A., & Schellekens, R. R., 1973. EL2/63 Mt Lindsay – Western Tasmania. Annual Report. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR73-0962).

Newnham, L. A., & Schellekens, R. R., 1974. EL2/63 and EL18/73, Mt Lindsay area, Western Tasmania, Annual Report 1973-74. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR74-1038).

Newnham, L. A., & Schellekens, R. R., 1978. Annual Report 1977-78 Mt Lindsay (EL2/63) and Stanley (EL18/73) areas. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR78-1280).

Owen, S., 2008. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2007 to 22/8/2008. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., 2009. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2008 to 22/8/2009. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., 2010. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2009 to 22/8/2010. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., 2011. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2010 to 22/8/2011. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., & Pfeifenberger, S., 2012. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2011 to 22/8/2012. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., Joughin, S., and Stein, J., 2013. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2012 to 21/8/2013. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., & Martin, A., 2014. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2013 to 21/8/2014. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Owen, S., 2015. Mt Lindsay Project. Exploration Licence 21/2005. Annual Technical Report for the period 22/8/2014 to 21/8/2015. Venture Minerals Ltd. Unpublished report for Mineral Resources Tasmania.

Pearson, H. F., 1952. Report on the Mt Lindsay Tin Mine near Zeehan, Tasmania. Unpublished report held by Mineral Resources Tasmania, written at latest 1952 (MRT Report No. 61-0337).

Reid, A. MacKintosh, 1927. Preliminary report on the Mt Lindsay tin mine. Department of Mines, Tasmania, report available from Mineral Resources Tasmania (UR1927A p50-60).

Ransom, D. M., & Wilson, J. L., 1966. Report on the regional geology, summer 1965-1966 (Waratah, Mt Cleveland, Mt Lindsay). Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR66-0425).

Roberts, P.A. & Martin, L.A. 1982. Annual Report E.L. 17/77 – Wilson River Area, Western Tasmania, 1981- 82. Gold Fields Exploration Pty Ltd. [MRT report # 82-1857].

Roberts, P. A., & Cartwright, A. J., 1983. EL2/63 Mt Lindsay area, Annual Report 1982-83. Unpublished report for Gold Fields Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR83-2048).

Roberts, P. A., 1984. EL2/63 Mt Lindsay area, Annual Report 1983-84. Unpublished report for Gold Fields Exploration Pty Ltd, available from Mineral Resources Tasmania (TCR84-2202).

Ross, A. F., 1976. EL2/63 and EL18/73 Mt Lindsay area, Western Tasmania, Annual Report 1975-76. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR76-1164).

Ross, A. F., 1977. EL2/63 and EL18/73 Mt Lindsay area, Western Tasmania, Annual Report 1976-77. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR77-1210).

Ross, A. F., 1980. EL2/63 Mt Lindsay area, Western Tasmania, Annual Report 1979-80. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR80-1507).

Schellekens, R. 1978. Progress Report – September 1978. E.L. 17/77 – Wilson River Area, Western Tasmania. Renison Ltd.

Schellekens, R. R., 1979. Annual Report 1978-79 Mt Lindsay (EL2/63) and Stanley River (EL18/73) areas, Western Tasmania. Unpublished report for Renison Ltd, available from Mineral Resources Tasmania (TCR79-1381).

Sloggett, T. M., 1988. Co-relation of previous exploration reports to fracture and mineralisation study as undertaken by Geo-Flight Research Pty Ltd in respect of Exploration Licence 53/70. Unpublished report by T. M. Sloggett and Associates for Mr B. T. Irving, available from Mineral Resources Tasmania (TCR88-2821).

Sloggett, T. M., 1988. The Livingstone Creek tin gossans EL53/70, vicinity of Mt Livingstone, north west Tasmania. Unpublished report by T. M. Sloggett and Associates for Mr B. T. Irving, available from Mineral Resources Tasmania (TCR88-2848).

Sloggett, T. M., 1988. Proposed application for Mining Lease. Unpublished application with supporting documentation on behalf of Mr B. T. Irving by T. M. Sloggett and Associates, available from Mineral Resources Tasmania (TCR88-2897).

Taylor, B. L., 1954. Progress report on the north Pieman mineral area. Report to the Director of Mines, Hobart, available from Mineral Resources Tasmania (TCR55-0121).

Tester, D. K., 1972. The Mt Lindsay area, Tasmania. A summary of exploration activities undertaken by the Aberfoyle Group from 1962 until 1970. Unpublished report for the Aberfoyle Tin Development Partnership, available from Mineral Resources Tasmania (TCR70-675)

Waterhouse, L. L., 1914. The Stanley River Tin Field. Tasmania Department of Mines. Geological Survey Bulletin 15.

Winnall, N. J., 1983. Annual Report Stanley Reward tin prospect, EL53/70, Western Tasmania. Unpublished report for Union Corporation (Australia) Pty Ltd, available from Mineral Resources Tasmania (TCR83-2050).

Zimmerman, D., 1973. Geological review of EL53/70 Stanley River area, Western Tasmania and proposal and cost estimate for further exploration. Unpublished report by Contech Pty Ltd for Valley Exploration (Holdings) Pty Ltd, available from Mineral Resources Tasmania (TCR73-0943).

Appendix A

Soil sample locations and assays

Appendix A: Soil sample locations and assays

H0002	Version	3																		
H0003	Date_generated	21/8/2018																		
H0004	Reporting_period_end_date	21/8/2018																		
H0005	State	TAS																		
H0100	Tenement	EL21/2005																		
H0101	Tenement_holder	Venture Minerals Ltd																		
H0102	Project_name	Mt Lindsay																		
H0106	Tenement_operator	Venture Minerals Ltd																		
H0150	250K_map_sheet	SK5503 Burnie																		
H0151	100K_map_sheet	7914 Pieman																		
H0152	50K_map_sheet	na																		
H0153	25K_map_sheet	3437 Stringer, 3438 Livingstone, 3637 Rosebury, 3638 Parsons, 3639 Ramsay																		
H0200	Start_date_of_data_acquisition	22/8/2017																		
H0201	End_date_of_data_acquisition	21/8/2018																		
H0202	Data_format	SG3																		
H0203	Number_of_data_records	157																		
H0204	Date_of_metadata_update	21/8/2018																		
H0500	Feature_Located	Sample Point																		
H0501	Geodetic_datum	GDA94																		
H0502	Vertical_datum	not applicable																		
H0503	Projection	MGA																		
H0531	Projection_zone	55																		
H0532	Surveying_instrument	Garmin GPS64																		
H0533	Surveying_Company	Venture Minerals Ltd																		
H0600	Sample_code	SOIL																		
H0601	Sample_type	hand augered & screened to 100% pass 3mm																		
H0602	Sample_description	see data																		
H0700	Sample_preparation_code	PREP-21																		
H0701	Sample_preparation_details	dried & screened to 100% passing 3mm, pulverise in ring mill to P80 75 microns																		
H0702	Job_no	PH18101914																		
H0800	Assay_code	B-ICP69, ICP61, MS85 (see H1002 field)																		
H0801	Assay_company	ALS Geochemistry																		
H0802	Assay_description1	MS85 = lithium metaborate/lithium tetraborate fusion at 1025°C followed by dissolution in nitric, hydrochloric and hydrofluoric acids with ICPMS finish																		
H0803	Assay_description2	ICP61 = pulp digested by perchloric, nitric, hydrofluoric and hydrochloric acids & resulting solution analysed by ICP-AES																		
H0804	Assay_description3	B-ICP69 = pulp subject to hydrofluoric & nitric acid digest at 200 degrees celsius & resulting solution analysed by ICP-AES																		
H0900	Remarks:	- denotes below lower limit of detection																		
H1000	Prospect	Sample	E_MGA55	N_MGA55	Depth_cm	Colour	Horizon	Lith	Description	Batch	Sn	W	Ag	Al	As	B				
H1001		m	m	cm							ppm	ppm	ppm	%	ppm	ppm				
H1002			10	10	10						MS85	MS85	ICP61	ICP61	ICP61	B-ICP69				
D	Cruncher	CRS049	356375	5382227	40	bn	B	qsSS	organic rich loam. Side of steep hill	PH18101914	1	1	-0.5	0.84	-5	30				
D	Cruncher	CRS050	356198	5382243	30	lgy	B	ST	angular gravels	PH18101914	3	4	-0.5	2	-5	70				
D	Cruncher	CRS051	356174	5382237	20	lgy	B	ST	gravelly	PH18101914	3	2	-0.5	2.01	-5	50				
D	Cruncher	CRS052	356161	5382231	30	gy	B	ST	gravelly	PH18101914	2	2	-0.5	0.61	-5	90				
D	Cruncher	CRS053	356140	5382218	50	dbn	B	FSGVL	clay	PH18101914	2	2	-0.5	1.05	-5	50				
D	Cruncher	CRS054	356125	5382213	15	lbn	B	qzST	gravelly	PH18101914	2	2	-0.5	2.13	-5	30				
D	Cruncher	CRS055	356106	5382208	30	lgy	B	qzST	gravelly	PH18101914	2	2	-0.5	2.2	-5	50				
D	Cruncher	CRS056	356090	5382202	50	bn	B	FSGVL	gravelly loam	PH18101914	3	2	-0.5	2.39	-5	60				
D	Cruncher	CRS057	356071	5382195	40	dbn	B	qzFSGVL	gravelly loam	PH18101914	3	6	-0.5	1.83	-5	100				
D	Cruncher	CRS058	356054	5382186	50	dbn	B	qzFSGVL	gravelly	PH18101914	1	3	-0.5	0.87	-5	30				
D	Cruncher	CRS059	356037	5382179	50	dbn	B	qzFSGVL	gravelly	PH18101914	2	3	-0.5	2.02	-5	60				
D	Cruncher	CRS060	356020	5382172	50	dbn	B	qzFSGVL	gravelly clay	PH18101914	3	3	-0.5	1.06	-5	40				
D	Cruncher	CRS061	356005	5382163	20	dbn	B	qzST-FSG	gravelly loam	PH18101914	2	2	-0.5	1.46	-5	40				
D	Cruncher	CRS062	355988	5382159	20	dbn	B	qsFSGVL	gravelly loam	PH18101914	2	7	-0.5	0.77	-5	50				
D	Cruncher	CRS063	355967	5381253	25	dbn	B	qzFSGVL	gravelly loam	PH18101914	2	2	-0.5	0.96	-5	30				
D	Cruncher	CRS064	355954	5382146	20	lgy	B	ST	sandy	PH18101914	3	3	-0.5	3.99	5	50				

Appendix A: Soil sample locations and assays

H1000	Prospect	Sample	E_MGA55	N_MGA55	Depth_cm	Colour	Horizon	Lith	Description	Batch	Sn	W	Ag	Al	As	B
H1001			m	m	cm						ppm	ppm	ppm	%	ppm	ppm
H1002			10	10	10						MS85	MS85	ICP61	ICP61	ICP61	B-ICP69
D	Cruncher	CRS065	356355	5382236	50	bn-gy	B	ST	gravelly loam	PH18101914	2	2	-0.5	0.67	-5	60
D	Cruncher	CRS066	356334	5382225	15	gy	B	ST	gravelly clay	PH18101914	2	2	-0.5	1.5	-5	60
D	Cruncher	CRS067	356317	5382216	25	bn-gy	B	ST	gravelly clay	PH18101914	2	2	-0.5	1.55	-5	100
D	Cruncher	CRS068	356305	5382211	50	gy	B	ST	gravelly	PH18101914	3	6	-0.5	2.84	-5	50
D	Cruncher	CRS069	356288	5382202	25	gy	B	ST	rocky side of creek bank	PH18101914	2	1	-0.5	0.9	-5	40
D	Cruncher	CRS070	356264	5382195	20	lbn	B	qz	loamy clay	PH18101914	2	2	-0.5	1.05	-5	30
D	Cruncher	CRS071	356254	5382186	20	gy	B	na	sandy gravel	PH18101914	2	2	-0.5	2.17	-5	110
D	Cruncher	CRS072	356235	5382180	40	dbn	B	qzSGVL	gravelly with rounded qzSGVL at base	PH18101914	2	2	-0.5	1.69	-5	40
D	Cruncher	CRS073	356218	5382169	30	lgy	B	qzSS	gravelly with rounded qzSGVL at base	PH18101914	10	5	-0.5	6.95	-5	150
D	Cruncher	CRS074	356226	5381969	70	dbn	B	qz	sandy loam with qz gravels. Organic rich buttongrass hill	PH18101914	3	2	-0.5	2.9	-5	60
D	Cruncher	CRS075	356239	5381980	20	lgy	B	qzSS	sandy gravel in Oonah Fm outcrops	PH18101914	2	2	-0.5	3.73	-5	50
D	Cruncher	CRS076	356258	5381987	15	lgy	B	qzSS	sandy gravel in Oonah Fm outcrops	PH18101914	4	4	-0.5	5.47	-5	120
D	Cruncher	CRS077	356274	5381993	20	dbn	B	qzSGVL	qz gravel in loamy soil	PH18101914	1	2	-0.5	0.16	-5	70
D	Cruncher	CRS078	356291	5382000	5	bn	B	qzST	rocky shallow soil	PH18101914	2	1	-0.5	0.49	-5	50
D	Cruncher	CRS079	356308	5382008	20	bk	B	qzSGVL	gravelly buttongrass loam	PH18101914	2	4	-0.5	0.61	-5	40
D	Cruncher	CRS080	356956	5383310	70	bn	B	na	gravelly clay	PH18101914	181	3	-0.5	0.72	-5	300
D	Cruncher	CRS081	356933	5383301	25	dbn	B	na	gravelly clay	PH18101914	25	3	-0.5	1.48	-5	770
D	Cruncher	CRS082	356916	5383296	20	bn	B	na	wet gravelly clay by small creek bed	PH18101914	6	3	-0.5	3.06	-5	240
D	Cruncher	CRS083	356895	5383290	40	bn	B	na	wet gravelly clay by small creek bed	PH18101914	19	3	-0.5	2.06	-5	460
D	Cruncher	CRS084	356876	5383278	20	lbn	B	qzSGVL	silty clay	PH18101914	4	2	-0.5	0.99	5	120
D	Cruncher	CRS085	356855	5383272	30	bn	B	qzSGVL	gravelly clay	PH18101914	3	3	-0.5	0.99	-5	180
D	Cruncher	CRS086	356833	5383264	40	lbn	B	qzSGVL	sandy clay	PH18101914	3	2	-0.5	0.93	-5	110
D	Cruncher	CRS087	356813	5383254	20	lbn	B	na	loamy clay	PH18101914	3	3	-0.5	0.92	-5	90
D	Cruncher	CRS088	356795	5383246	15	bn	B	qzSGVL	loamy clay	PH18101914	3	3	-0.5	1.3	-5	100
D	Cruncher	CRS089	356775	5383236	30	lbn	B	ST	gravelly clay	PH18101914	4	4	-0.5	2.38	-5	130
D	Cruncher	CRS090	356753	5383230	15	lbn	B	ST	clay. Gravel at base	PH18101914	4	4	-0.5	1.99	7	70
D	Cruncher	CRS091	356733	5383221	15	lbn-gy	B	qzSGVL	gravelly clay	PH18101914	7	3	-0.5	4.37	6	150
D	Cruncher	CRS092	356714	5383215	30	dbn	B	qzSGVL	gravelly clay	PH18101914	2	1	-0.5	0.65	-5	100
D	Cruncher	CRS093	356692	5383209	5	bn-lgy	B	FSGVL	gravelly clay	PH18101914	3	2	-0.5	1.16	-5	90
D	Cruncher	CRS094	356672	5383205	30	dbn	B	na	silty clay	PH18101914	3	2	-0.5	1.15	-5	70
D	Cruncher	CRS095	356654	5383189	30	lbn	B	qzSGVL	organic rich gravelly clay	PH18101914	4	4	-0.5	2.55	-5	80
D	Cruncher	CRS096	356636	5383190	40	lbn	B	na	clay	PH18101914	7	4	-0.5	5.33	14	90
D	Cruncher	CRS097	356614	5383170	30	bn	C	na	clay	PH18101914	5	4	-0.5	5.05	-5	80
D	Cruncher	CRS098	357056	5383135	70	gy-bn	B	na	sandy clay	PH18101914	83	2	-0.5	0.88	-5	270
D	Cruncher	CRS099	357037	5383130	50	gy-bn	B	na	silty clay	PH18101914	105	2	-0.5	0.66	-5	280
D	Cruncher	CRS100	357017	5383124	50	bn	B	na	gravelly clay	PH18101914	11	3	-0.5	1.21	-5	160
D	Cruncher	CRS101	357000	5383114	70	gy	B	na	sandy clay	PH18101914	4	8	-0.5	0.76	-5	70
D	Cruncher	CRS102	356979	5383101	20	bn	B	na	loamy clay	PH18101914	4	2	-0.5	2.1	6	90
D	Cruncher	CRS103	356595	5383099	40	lgy	B	na	gravelly clay	PH18101914	3	3	-0.5	1.56	-5	110
D	Cruncher	CRS104	356941	5383091	70	gy-bn	B	na	rocky clay with deep organic overburden	PH18101914	3	4	-0.5	2.02	-5	60
D	Cruncher	CRS105	356920	5383082	25	lbn	B	na	gravelly clay	PH18101914	4	5	-0.5	9.39	15	100
D	Cruncher	CRS106	356897	5383083	30	lbn	B	na	gravelly clay	PH18101914	5	3	-0.5	2.79	-5	260
D	Cruncher	CRS107	356877	5383066	10	lbn	B	na	moist soil/clay/silt	PH18101914	4	3	-0.5	3.5	8	80
D	Cruncher	CRS108	356858	5383055	40	lbn	B	na	sandy clay	PH18101914	7	4	-0.5	3.47	-5	410
D	Cruncher	CRS109	356840	5383048	30	bn	B	ST	gravelly clay	PH18101914	8	3	-0.5	3.47	-5	1950
D	Cruncher	CRS110	356813	5383043	70	lbn	B	ST	organic rich clay	PH18101914	1	6	-0.5	0.31	-5	230
D	Cruncher	CRS111	356799	5383033	35	gy	B	ST	gravelly clay	PH18101914	14	4	-0.5	1.98	-5	250
D	Cruncher	CRS112	356778	5383027	30	lbn	B	ST	gravelly clay	PH18101914	2	2	-0.5	1.47	-5	80
D	Cruncher	CRS113	356757	5383017	25	lgy	B	ST	gravelly clay	PH18101914	6	4	-0.5	3.25	-5	100
D	Cruncher	CRS114	356738	5383012	15	lgy	B	ST	silty clay	PH18101914	6	5	-0.5	5.27	8	170
D	Cruncher	CRS115	356720	5383006	30	lbn	B	ST	silty clay	PH18101914	5	5	-0.5	3.31	-5	130
D	Cruncher	CRS116	356696	5382994	30	bn-gy	B	ST	gravelly clay	PH18101914	6	3	-0.5	3.65	-5	180

Appendix A: Soil sample locations and assays

H1000	Prospect	Sample	E_MGA55	N_MGA55	Depth_cm	Colour	Horizon	Lith	Description	Batch	Sn	W	Ag	Al	As	B
H1001			m	m	cm						ppm	ppm	ppm	%	ppm	ppm
H1002			10	10	10						MS85	MS85	ICP61	ICP61	ICP61	B-ICP69
D	Cruncher	CRS117	356679	5382987	30	gy	B	ST	silty clay	PH18101914	4	3	-0.5	2.63	-5	170
D	Cruncher	CRS118	357173	5382539	60	dbn	B	na	gravelly clay	PH18101914	16	4	-0.5	3.68	5	680
D	Cruncher	CRS119	357156	5382529	50	bk	B	na	bk clay w. wt qzSGVL	PH18101914	4	2	-0.5	2.33	-5	300
D	Cruncher	CRS120	357135	5382525	50	bk	B	na	bk clay w. wt qzSGVL	PH18101914	4	3	-0.5	2.62	9	260
D	Cruncher	CRS121	357112	5382514	10	bk-dgy	B	na	bk clay with organics	PH18101914	8	4	-0.5	3.95	-5	200
D	Cruncher	CRS122	357095	5382509	40	bk	B	qzSGVL	gravelly organic rich clay	PH18101914	9	6	-0.5	4.14	-5	250
D	Cruncher	CRS123	357075	5382498	30	dbn	B	na	gravelly clay	PH18101914	4	2	-0.5	1.95	-5	400
D	Cruncher	CRS124	357054	5382490	10	lgy	B	qzSGVL	organic rich gravelly clay	PH18101914	3	3	-0.5	1.36	-5	210
D	Cruncher	CRS125	357033	5382482	20	lgy	B	qzSGVL	organic rich gravelly clay	PH18101914	3	2	-0.5	2.82	-5	140
D	Cruncher	CRS126	357013	5382474	30	bk	B	qzSGVL	gravelly clay	PH18101914	5	8	-0.5	1.68	-5	320
D	Cruncher	CRS127	356995	5382469	40	bk	B	qzSS SGV	gravelly clay	PH18101914	3	2	-0.5	1.41	-5	170
D	Cruncher	CRS128	356974	5382459	15	lgy	B	qzSS SGV	organic rich gravelly silt	PH18101914	7	4	-0.5	5.42	-5	610
D	Cruncher	CRS129	356957	5382452	50	bn	B	qzSS SGV	gravelly clay	PH18101914	10	4	-0.5	8.09	16	130
D	Cruncher	CRS130	356935	5382443	5	lbn	B	qzSS	gravelly clay	PH18101914	8	6	-0.5	4.88	5	250
D	Cruncher	CRS131	356918	5382432	40	lgy-lbn-og	B	qzSS	gravelly clay	PH18101914	10	6	-0.5	7.88	12	210
D	Cruncher	CRS132	356893	5382426	40	dbn	B	qzSGVL	gravelly clay	PH18101914	5	5	-0.5	5.01	-5	90
D	Cruncher	CRS133	356873	5382419	30	gy	B	qzSGVL	gravelly clay	PH18101914	4	3	-0.5	5.07	-5	60
D	Cruncher	CRS134	356790	5382603	25	gy	B	qzSS SGV	gravelly clay	PH18101914	6	5	-0.5	3.41	-5	150
D	Cruncher	CRS135	356810	5382616	30	gy-bn	B	qzSS	gravelly clay	PH18101914	6	12	-0.5	3.18	-5	140
D	Cruncher	CRS136	356829	5382618	10	lgy	B	qzSS	gravelly clay	PH18101914	6	4	-0.5	2.62	5	180
D	Cruncher	CRS137	356849	5382627	15	lgy	B	qzSS	gravelly clay	PH18101914	6	4	-0.5	2.66	-5	200
D	Cruncher	CRS138	356872	5382634	20	gy	B	qzSS	gravelly clay	PH18101914	5	3	-0.5	2.65	5	270
D	Cruncher	CRS139	356890	5382643	15	lbn	B	qzSS	loamy clay	PH18101914	6	3	-0.5	5	9	160
D	Cruncher	CRS140	356911	5382652	50	dbn	B	qzSGVL	loamy clay	PH18101914	4	1	-0.5	2.58	8	170
D	Cruncher	CRS141	356929	5382660	50	dbn	B	qzSGVL	gravelly clay	PH18101914	4	2	-0.5	2.16	-5	140
D	Cruncher	CRS142	356950	5382668	30	bk	B	qzSS	loamy clay	PH18101914	5	5	-0.5	2.76	-5	170
D	Cruncher	CRS143	356970	5382675	30	bk	B	qzSS	loamy clay	PH18101914	4	3	-0.5	2.3	-5	100
D	Cruncher	CRS144	356991	5382683	30	bn	B	qzSS	gravelly clay	PH18101914	5	2	-0.5	6.2	-5	150
D	Cruncher	CRS145	356984	5382692	70	gy-bn	B	qzSS	gravelly clay	PH18101914	1	1	-0.5	0.39	-5	40
D	Cruncher	CRS146	356967	5382884	5	lbn	B	na	sloppy gravelly clay	PH18101914	4	6	-0.5	1.83	5	180
D	Cruncher	CRS147	356944	5382879	5	gy	B	qzSS	sandy gravel	PH18101914	4	2	-0.5	1.8	-5	160
D	Cruncher	CRS148	356926	5382869	60	ye	B	qz	gravelly clay	PH18101914	2	1	-0.5	0.55	-5	80
D	Cruncher	CRS149	356907	5382863	70	lbn	B	qz	gravelly clay	PH18101914	1	2	-0.5	0.37	6	40
D	Cruncher	CRS150	356885	5382856	40	dbn	B	qzSS	organic rich clay	PH18101914	2	2	-0.5	0.61	-5	30
D	Cruncher	CRS151	356864	5382845	50	lgy	B	qzSS	gravelly clay	PH18101914	5	6	-0.5	2.64	-5	120
D	Cruncher	CRS152	356845	5382839	30	lgy	B	qzSS	gravelly clay	PH18101914	6	4	-0.5	2.46	-5	80
D	Cruncher	CRS153	356828	5382830	50	lgy	B	qzSS	gravelly clay	PH18101914	3	5	-0.5	1.57	5	110
D	Cruncher	CRS154	356807	5382824	50	lgy-dbn	B	qzSS	organic rich gravelly clay	PH18101914	2	2	-0.5	0.5	-5	120
D	Cruncher	CRS155	356781	5382821	40	lgy-dbn	B	qzSS	organic rich gravelly clay	PH18101914	2	2	-0.5	0.67	-5	110
D	Cruncher	CRS156	356764	5382808	40	gy	B	qzSS	clay-gravel 3x holes sampled	PH18101914	4	2	-0.5	1.53	7	160
D	Cruncher	CRS157	356745	5382797	15	gy	B	qzSS	organic rich gravelly clay	PH18101914	5	3	-0.5	0.64	-5	190
D	Cruncher	CRS158	356327	5382012	30	gy-bk	B	qzSGVL	gravelly clay	PH18101914	2	1	-0.5	1.48	-5	60
D	Cruncher	CRS159	356343	5382022	30	lgy	B	qzSGVL	sandy gravel	PH18101914	1	4	-0.5	0.99	-5	20
D	Cruncher	CRS160	356360	5382026	40	bk	B	qzSGVL	gravelly loam	PH18101914	1	2	-0.5	1.07	-5	20
D	Cruncher	CRS161	356377	5382036	15	gy	B	qzSS	dry clay	PH18101914	2	2	-0.5	2.02	-5	60
D	Cruncher	CRS162	356394	5382043	5	lgy	B	qzSS	gravelly clay	PH18101914	2	2	-0.5	1.79	7	30
D	Cruncher	CRS163	356411	5382047	15	lgy	B	qzSS	gravelly clay	PH18101914	3	2	-0.5	2.31	-5	110
D	Cruncher	CRS164	356426	5382058	15	lgy	B	qzSGVL	gravelly clay	PH18101914	3	2	-0.5	2.77	-5	120
D	Cruncher	CRS165	356444	5382064	15	bn	B	qzSGVL	gravelly clay	PH18101914	3	2	-0.5	1.13	6	230
D	Cruncher	CRS166	356459	5382069	20	bn	B	qzSS	gravelly clay	PH18101914	2	3	-0.5	2.8	-5	60
D	Cruncher	CRS167	356478	5382078	15	bn-lgy	B	lgy SS	gravelly clay	PH18101914	1	3	-0.5	0.52	-5	120
D	Cruncher	CRS168	356496	5382085	20	gy	B	SS	gravelly clay	PH18101914	3	2	-0.5	1.39	-5	50

Appendix A: Soil sample locations and assays

H1000	Prospect	Sample	E_MGA55	N_MGA55	Depth_cm	Colour	Horizon	Lith	Description	Batch	Sn	W	Ag	Al	As	B
H1001			m	m	cm						ppm	ppm	ppm	%	ppm	ppm
H1002			10	10	10						MS85	MS85	ICP61	ICP61	ICP61	B-ICP69
D	Cruncher	CRS169	356513	5382093	20	bn-lgy	B	SS	gravelly clay	PH18101914	1	4	-0.5	0.5	-5	30
D	Cruncher	CRS170	356528	5382100	30	gy	B	SS	gravelly clay	PH18101914	1	2	-0.5	0.13	-5	30
D	Cruncher	CRS171	356544	5382108	30	bn	B	qz	gravelly clay	PH18101914	3	2	-0.5	1.64	-5	80
D	Cruncher	CRS172	356563	5382114	60	gy	B	SS	gravelly clay	PH18101914	2	2	-0.5	0.75	-5	60
D	Cruncher	CRS173	356579	5382120	10	gy-bn	B	SS	gravelly clay	PH18101914	4	3	-0.5	3.13	-5	70
D	Cruncher	CRS174	355980	5382297	20	bn	B	qzSS	loamy clay	PH18101914	2	2	-0.5	0.91	-5	20
D	Cruncher	CRS175	355998	5382306	20	bn	B	SS	loamy clay	PH18101914	2	1	-0.5	0.91	-5	30
D	Cruncher	CRS176	356021	5382314	10	bn	B	SS	organic rich gravelly clay	PH18101914	2	2	-0.5	1.78	-5	40
D	Cruncher	CRS177	356041	5382322	60	bn	B	qzSGVL	gravelly clay	PH18101914	3	1	-0.5	1.94	7	40
D	Cruncher	CRS178	356061	5382328	40	bn	B	qzSS	gravelly clay	PH18101914	2	3	-0.5	1.5	-5	30
D	Cruncher	CRS179	356081	5382336	20	bn	B	qzSS	gravelly clay	PH18101914	3	12	-0.5	3.77	5	30
D	Cruncher	CRS180	356100	5382347	40	bn	B	qzSS	organic rich gravelly clay qz-tuV float nearby	PH18101914	3	3	-0.5	2.08	-5	40
D	Cruncher	CRS181	356121	5382354	50	bn-rd	B	qzSS	loamy clay	PH18101914	1	2	-0.5	0.94	-5	20
D	Cruncher	CRS182	356140	5382362	10	bn	B	qzSS	gravelly mud	PH18101914	5	4	-0.5	4.92	5	80
D	Cruncher	CRS183	356161	5382370	30	gy	B	qzSS	gravelly clay	PH18101914	3	2	-0.5	2.99	-5	40
D	Cruncher	CRS184	356179	5382378	70	lgy	B	qzSS	gravelly clay	PH18101914	2	3	-0.5	2.1	-5	90
D	Cruncher	CRS185	356200	5382186	40	gy	B	qzSS	sandy clay	PH18101914	2	3	-0.5	2.03	-5	120
D	Cruncher	CRS186	356217	5382303	20	gy	B	qzSST	gravelly clay. tuV nearby	PH18101914	2	2	-0.5	2.19	-5	60
D	Cruncher	CRS187	356240	5382401	30	gy-bn	B	qzSST	organic rich gravelly clay	PH18101914	1	4	-0.5	0.27	-5	20
D	Cruncher	CRS188	356261	5382409	20	gy	B	qzSST	gravelly clay	PH18101914	2	4	-0.5	0.97	-5	90
D	Cruncher	CRS189	356280	5382419	20	lbn	B	qzSST	gravelly clay	PH18101914	3	5	-0.5	1.8	-5	80
D	Cruncher	CRS190	356301	5382426	40	gy	B	qzSST	gravelly clay tuV nearby	PH18101914	3	4	-0.5	2.28	-5	180
D	Cruncher	CRS191	355958	5382286	35	gy	B	qzSS	gravelly clay	PH18101914	3	2	-0.5	2.26	-5	70
D	Cruncher	CRS192	355933	5382289	40	gy	B	qzSST	gravelly clay tuV nearby	PH18101914	2	2	-0.5	0.83	-5	100
D	Cruncher	CRS193	355909	5382284	60	gy	B	qzSST	gravelly clay	PH18101914	3	2	-0.5	2.69	-5	90
D	Cruncher	CRS194	355885	5382284	10	gy	B	qzSST	gravelly clay	PH18101914	3	3	-0.5	2.03	-5	140
D	Cruncher	CRS195	355859	5382283	20	gy	B	qzSST	clay	PH18101914	3	3	-0.5	3.38	-5	80
D	Cruncher	CRS196	355834	5382282	40	bn	B	qzSST	sloppy gravelly clay	PH18101914	2	1	-0.5	1.25	-5	60
D	Cruncher	CRS197	355808	5382281	30	gy	B	qzSST	gravelly clay	PH18101914	2	2	-0.5	1.84	-5	40
D	Cruncher	CRS198	355783	5382281	40	gy	B	qzSST	gravelly clay	PH18101914	2	3	-0.5	1.36	-5	40
D	Cruncher	CRS199	355758	5382280	50	gy	B	qzSST	gravelly clay	PH18101914	2	2	-0.5	1.61	-5	50
D	Cruncher	CRS200	355733	5382278	40	gy	B	qzSST	gravelly clay	PH18101914	2	3	-0.5	1.72	-5	30
D	Cruncher	CRS201	355709	5382276	40	gy	B	qzSST	gravelly clay	PH18101914	2	2	-0.5	1.78	-5	40
D	Cruncher	CRS202	355683	5382276	20	gy	B	qzSS	gravelly clay tuV nearby	PH18101914	1	4	-0.5	1.29	-5	20
D	Cruncher	CRS203	355659	5382274	10	gy	B	qzSS	gravelly clay	PH18101914	2	2	-0.5	1.82	-5	30
D	Cruncher	CRS204	355633	5382274	40	gy	B	qz	gravelly clay	PH18101914	2	7	-0.5	1.29	-5	30
D	Cruncher	CRS205	355608	5382273	60	gy	B	qzSS	gravelly organic rich clay	PH18101914	2	3	-0.5	1.97	-5	30
EOF																

Appendix A: Soil sample locations and assays

Sample	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cu	Fe	Ga	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb	S	Sb	Sc	Sr	Th	Ti	U	V	Zn
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	ICP61	ICP61	ICP61	ICP61	MS85	ICP61	MS85	ICP61																							
CRS065	40	-0.5	-2	0.09	20.2	-0.5	1	20	4	0.4	-10	0.25	10	-10	0.09	50	1	0.04	-1	110	3	11	0.05	-5	2	22	-20	0.22	-10	11	8
CRS066	80	-0.5	-2	0.03	27.9	-0.5	-1	30	3	0.45	-10	0.54	10	-10	0.06	55	1	0.04	2	110	2	25.6	0.02	-5	3	9	-20	0.2	-10	20	9
CRS067	80	-0.5	-2	0.01	38.7	-0.5	1	30	5	0.63	10	0.5	20	-10	0.06	69	1	0.03	4	90	2	25.8	0.02	-5	3	7	-20	0.2	-10	21	6
CRS068	190	-0.5	-2	0.09	54.7	-0.5	1	30	4	0.5	10	1.04	20	-10	0.08	97	1	0.08	3	140	5	47.3	0.04	-5	6	17	-20	0.32	-10	33	15
CRS069	50	-0.5	-2	0.01	16.4	-0.5	1	20	3	0.71	-10	0.33	10	-10	0.04	134	1	0.02	1	50	3	12.5	0.02	-5	2	4	-20	0.22	-10	12	3
CRS070	70	-0.5	-2	0.02	13.9	-0.5	-1	20	7	0.83	-10	0.41	10	-10	0.06	127	1	0.03	4	50	3	16.7	0.04	-5	3	8	-20	0.24	-10	13	5
CRS071	120	-0.5	-2	0.01	48.9	-0.5	-1	30	4	0.52	10	0.74	20	-10	0.07	89	-1	0.04	4	50	4	37.2	0.01	-5	4	6	-20	0.23	-10	25	4
CRS072	90	-0.5	-2	0.01	49.4	-0.5	-1	20	3	0.37	10	0.56	20	-10	0.05	60	1	0.03	1	50	2	25.9	0.01	-5	3	6	-20	0.2	-10	18	4
CRS073	520	0.8	-2	0.01	95	-0.5	-1	60	2	0.54	20	3.06	40	-10	0.21	45	1	0.13	3	80	4	137	0.02	-5	13	19	-20	0.39	-10	72	5
CRS074	250	-0.5	-2	0.01	50.3	-0.5	-1	30	4	0.48	10	1.01	20	-10	0.1	45	1	0.05	3	60	5	44.5	0.02	-5	5	15	-20	0.25	-10	30	4
CRS075	280	0.7	-2	0.01	50	-0.5	-1	30	5	0.35	10	1.18	20	-10	0.1	38	1	0.06	5	70	10	50.2	0.01	-5	6	19	-20	0.26	-10	34	4
CRS076	400	0.7	-2	0.01	70.5	-0.5	1	40	3	0.35	10	1.92	30	-10	0.17	20	1	0.1	7	70	7	89.4	0.01	-5	9	29	-20	0.36	-10	53	4
CRS077	10	-0.5	-2	0.04	5.1	-0.5	-1	20	5	0.56	-10	0.04	-10	-10	0.04	60	1	0.02	2	30	2	1.3	0.06	-5	1	11	-20	0.16	-10	4	3
CRS078	40	-0.5	-2	0.02	6.6	-0.5	1	20	7	0.66	-10	0.16	-10	-10	0.03	71	2	0.02	5	30	6	6.5	0.03	-5	1	7	-20	0.14	-10	8	8
CRS079	50	-0.5	-2	0.02	11	-0.5	-1	20	5	0.39	-10	0.18	-10	-10	0.03	50	2	0.02	2	30	4	7.4	0.02	-5	1	7	-20	0.19	-10	10	5
CRS080	20	0.5	-2	0.02	24.7	-0.5	-1	20	4	0.62	-10	0.15	10	10	0.09	65	1	0.05	2	50	-2	7.6	0.04	-5	2	6	-20	0.14	-10	11	8
CRS081	30	0.9	-2	0.04	31.5	-0.5	1	30	2	1.07	10	0.25	10	10	0.13	96	1	0.09	3	110	4	13.2	0.04	-5	3	11	-20	0.13	-10	19	12
CRS082	200	0.7	-2	0.02	61.4	-0.5	1	40	5	0.69	10	1.11	30	10	0.14	81	1	0.06	3	70	4	60.2	0.02	-5	5	9	-20	0.18	-10	36	8
CRS083	100	0.8	-2	0.02	44.4	-0.5	1	30	5	0.81	10	0.64	20	10	0.13	86	1	0.06	4	60	5	34	0.01	-5	4	9	-20	0.13	-10	24	10
CRS084	50	-0.5	-2	0.06	28.5	-0.5	-1	30	3	0.73	-10	0.34	10	10	0.07	83	1	0.04	3	60	4	17.2	0.03	-5	3	11	-20	0.24	-10	19	7
CRS085	50	-0.5	-2	0.03	28.9	-0.5	-1	30	6	0.88	-10	0.3	20	10	0.07	105	2	0.04	3	60	-2	14.6	0.02	-5	3	10	-20	0.27	-10	19	8
CRS086	50	-0.5	-2	0.01	43.6	-0.5	-1	30	6	0.71	-10	0.24	20	10	0.05	85	1	0.03	3	70	-2	12.1	0.02	-5	3	7	-20	0.27	-10	19	15
CRS087	40	-0.5	-2	0.06	42.8	-0.5	1	30	4	0.86	-10	0.23	20	10	0.05	103	1	0.03	2	90	3	11.8	0.03	-5	3	11	-20	0.24	-10	18	7
CRS088	70	-0.5	-2	0.06	49	-0.5	1	30	8	0.95	-10	0.39	20	10	0.06	113	2	0.04	3	100	7	20.1	0.03	-5	3	13	-20	0.25	-10	23	7
CRS089	140	0.5	-2	0.02	76.6	-0.5	1	40	6	0.75	10	0.81	40	10	0.08	89	2	0.05	5	130	4	40.4	0.02	-5	5	16	-20	0.36	-10	37	7
CRS090	140	0.5	-2	0.06	51.8	-0.5	-1	30	3	0.65	10	0.67	30	10	0.13	72	1	0.04	3	170	7	34.6	0.03	-5	4	12	-20	0.25	-10	29	8
CRS091	310	0.8	-2	0.05	73.4	-0.5	1	50	3	0.67	10	1.64	40	10	0.21	85	2	0.08	4	180	9	80.4	0.02	-5	8	15	-20	0.38	-10	57	9
CRS092	40	-0.5	-2	0.09	21.5	-0.5	1	20	8	0.87	-10	0.2	10	-10	0.07	102	1	0.03	4	130	5	9.2	0.04	-5	2	15	-20	0.17	-10	13	9
CRS093	80	-0.5	-2	0.05	44.1	-0.5	-1	20	3	0.41	-10	0.38	20	10	0.05	47	1	0.03	3	110	4	16.1	0.02	-5	3	11	-20	0.23	-10	19	6
CRS094	70	-0.5	-2	0.04	50.1	-0.5	1	30	7	0.84	-10	0.3	20	-10	0.06	92	1	0.03	5	130	7	13.8	0.05	-5	3	17	-20	0.23	-10	21	7
CRS095	210	0.7	-2	0.05	72.8	-0.5	1	40	7	0.89	10	0.93	40	10	0.1	85	1	0.06	4	110	11	40.7	0.04	-5	7	17	-20	0.35	-10	43	6
CRS096	360	1.2	-2	0.01	84.5	-0.5	2	60	5	2.14	20	2.12	40	10	0.19	86	1	0.09	5	130	19	112	0.02	-5	10	33	-20	0.34	-10	87	13
CRS097	290	1.1	-2	0.01	97.8	-0.5	1	50	6	1.65	20	1.83	50	10	0.18	84	1	0.06	7	130	11	103.5	0.02	-5	9	36	20	0.33	-10	58	12
CRS098	40	0.6	-2	0.03	47.2	-0.5	1	30	7	0.99	-10	0.24	20	10	0.09	111	2	0.07	4	90	3	11.8	0.04	-5	2	10	-20	0.13	-10	12	6
CRS099	20	0.5	-2	0.03	31.3	-0.5	-1	30	2	0.55	-10	0.1	20	10	0.08	57	1	0.04	1	70	2	5	0.02	-5	2	12	-20	0.21	-10	13	5
CRS100	40	-0.5	-2	0.01	41.9	-0.5	1	30	4	0.58	-10	0.23	20	-10	0.04	61	1	0.03	2	80	3	12.2	0.02	-5	2	7	-20	0.2	-10	19	4
CRS101	50	-0.5	-2	0.02	26.3	-0.5	1	30	7	1	-10	0.26	10	-10	0.09	112	1	0.04	3	90	-2	11.5	0.04	-5	2	11	-20	0.24	-10	15	7
CRS102	150	0.5	-2	0.04	52.8	-0.5	1	30	2	0.59	10	0.78	30	10	0.12	79	1	0.04	3	100	5	41.5	0.03	-5	4	9	-20	0.21	-10	27	5
CRS103	100	-0.5	-2	0.04	39.5	-0.5	-1	30	4	0.52	10	0.58	20	10	0.09	73	1	0.04	4	100	5	26.8	0.02	-5	4	13	-20	0.26	-10	26	8
CRS104	100	0.5	-2	0.02	36.6	-0.5	1	40	8	1.19	10	0.67	20	-10	0.15	180	1	0.06	6	140	3	31.9	0.07	-5	4	7	-20	0.2	-10	29	7
CRS105	380	3.2	-2	0.03	166	-0.5	16	110	223	1.52	30	1.98	80	40	0.41	83	2	0.07	24	360	139	110	1.14	-5	11	74	20	0.24	-10	72	76
CRS106	180	0.8	-2	0.02	54.7	-0.5	-1	30	6	0.75	10	0.96	30	10	0.11	77	1	0.06	5	100	6	47.9	0.02	-5	5	14	-20	0.22	-10	32	7
CRS107	90	0.6	-2	0.02	89.5	-0.5	1	40	25	1.15	10	0.52	40	10	0.11	194	2	0.03	11	170	17	30.8	0.04	-5	6	15	20	0.43	-10	49	11
CRS108	210	1.1	-2	0.02	51.3	-0.5	1	40	5	0.88	10	1.26	30	10	0.14	70	1	0.09	6	110	7	55.2	0.04	-5	7	19	-20	0.29	-10	42	8
CRS109	120	2.7	-2	0.06	56.1	-0.5	2	40	4	1.25	10	0.54	20	10	0.34	83	1	0.18	8	80	6	33.5	0.02	-5	6	22	-20	0.26	-10	41	13
CRS110	10	-0.5	-2	0.02	14.7	-0.5	1	20	6	0.86	-10	0.04	10	10	0.08	94	-1	0.03	4	40	-2	2	0.04	-5	1	6	-20	0.14	-10	6	3
CRS111	110	0.6	-2	0.02	55.7	-0.5	1	30	3	0.66	10	0.6	30	10	0.09	68	1	0.05	3	80	5	29.6	0.02	-5	4	13	-20	0.26	-10	29	5
CRS112	80	-0.5	-2	0.01	21.5	-0.5	1																								

Appendix A: Soil sample locations and assays

Sample	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cu	Fe	Ga	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb	S	Sb	Sc	Sr	Th	Ti	U	V	Zn
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	ICP61	ICP61	ICP61	ICP61	MS85	ICP61	MS85	ICP61																							
CRS117	160	0.6	3	0.02	67.7	-0.5	1	30	2	0.57	10	0.93	30	10	0.1	66	1	0.06	3	100	-2	44.8	0.02	-5	5	10	-20	0.27	-10	31	6
CRS118	210	1.3	2	0.02	53.1	-0.5	2	40	6	0.96	10	1.22	20	10	0.17	80	1	0.11	8	70	2	57.5	0.02	-5	7	15	-20	0.27	-10	42	8
CRS119	130	0.8	2	0.02	43.3	-0.5	1	30	7	0.63	10	0.7	20	10	0.09	51	-1	0.06	4	70	6	30.1	0.03	-5	5	11	-20	0.2	-10	27	5
CRS120	150	0.7	2	0.01	48.1	-0.5	1	30	3	0.61	10	0.89	20	10	0.1	45	-1	0.06	6	80	3	41.7	0.01	-5	5	8	-20	0.19	-10	29	5
CRS121	230	0.9	3	0.07	78	-0.5	2	40	5	0.57	10	1.32	40	10	0.15	46	-1	0.1	8	120	7	65.9	0.04	-5	8	17	-20	0.3	-10	42	8
CRS122	250	0.9	4	0.02	68.6	-0.5	1	40	6	0.85	10	1.52	30	10	0.13	72	1	0.1	6	90	3	67.9	0.02	-5	9	13	-20	0.37	-10	51	6
CRS123	90	0.6	3	0.02	52.9	-0.5	1	30	2	0.74	10	0.47	20	10	0.11	69	1	0.06	4	60	5	23.7	0.03	-5	4	8	-20	0.22	-10	25	6
CRS124	70	-0.5	3	0.01	42.8	-0.5	1	30	5	0.68	10	0.42	20	10	0.07	66	1	0.04	4	60	2	19.3	0.02	-5	3	5	-20	0.21	-10	22	4
CRS125	170	0.5	3	0.02	56.9	-0.5	1	30	5	0.66	10	0.87	20	10	0.11	56	1	0.06	5	80	-2	47.1	0.03	-5	5	9	-20	0.19	-10	33	5
CRS126	50	0.6	4	0.03	48.7	-0.5	1	30	2	0.68	-10	0.3	20	-10	0.09	66	-1	0.04	1	100	4	17.2	0.02	-5	4	16	-20	0.22	-10	27	5
CRS127	70	-0.5	3	0.02	31.5	-0.5	1	30	4	0.5	-10	0.46	10	10	0.07	47	1	0.04	2	60	2	23.4	0.02	-5	4	7	-20	0.21	-10	20	4
CRS128	310	1	3	0.03	61.9	-0.5	1	60	4	0.95	20	1.99	30	10	0.22	62	-1	0.16	6	100	3	99.3	0.01	-5	10	21	-20	0.33	-10	56	8
CRS129	540	1.3	-2	0.01	92.2	-0.5	1	70	5	1.13	20	3.45	40	20	0.25	52	2	0.19	3	130	6	175.5	0.02	-5	13	30	-20	0.39	-10	77	7
CRS130	310	1	-2	0.02	53.8	-0.5	1	50	4	0.71	10	1.97	20	10	0.15	57	1	0.13	3	90	7	111.5	0.02	-5	9	19	-20	0.37	-10	51	7
CRS131	530	1.5	-2	0.01	88	-0.5	1	70	3	1.29	20	3.11	40	30	0.26	68	2	0.18	5	110	6	168	0.01	-5	13	28	-20	0.4	-10	81	9
CRS132	320	0.8	2	0.01	58.5	-0.5	1	50	2	0.65	10	1.99	30	10	0.12	57	1	0.1	4	80	7	115	0.02	-5	10	17	-20	0.35	-10	56	7
CRS133	310	1	-2	0.01	61.2	-0.5	-1	50	3	0.45	20	2	30	10	0.13	35	-1	0.09	3	80	6	127	0.02	-5	10	22	-20	0.35	-10	55	7
CRS134	230	0.6	-2	0.01	55.3	-0.5	-1	40	5	0.68	10	1.27	20	10	0.11	68	1	0.08	2	90	4	71.6	0.02	-5	7	18	-20	0.26	-10	43	7
CRS135	220	0.6	4	0.03	37.3	-0.5	-1	40	3	0.6	10	1.24	20	10	0.14	61	-1	0.09	2	100	4	63.9	0.04	-5	7	20	-20	0.29	-10	41	7
CRS136	160	0.7	2	0.02	56.5	-0.5	1	40	5	0.74	10	0.91	30	10	0.1	73	1	0.07	2	90	2	48	0.02	-5	6	20	-20	0.39	-10	36	6
CRS137	170	0.7	-2	0.02	56.3	-0.5	-1	40	4	0.6	10	0.99	20	10	0.11	56	1	0.07	2	90	4	53.5	0.02	-5	6	14	-20	0.32	-10	33	5
CRS138	150	0.6	6	0.03	51.3	-0.5	-1	30	2	0.69	10	0.98	20	10	0.1	62	1	0.08	3	100	-2	46.6	0.02	-5	6	15	-20	0.32	-10	34	6
CRS139	280	0.9	4	0.02	65.8	-0.5	1	50	3	0.52	10	2.01	30	10	0.19	42	-1	0.09	1	100	4	105	0.01	-5	9	14	-20	0.31	-10	53	5
CRS140	150	0.7	4	0.02	52.7	-0.5	-1	30	4	0.56	10	0.81	20	10	0.1	49	-1	0.05	4	120	5	43.5	0.02	-5	5	14	-20	0.22	-10	29	5
CRS141	120	0.5	5	0.01	51.8	-0.5	1	30	2	0.52	10	0.7	20	-10	0.08	49	1	0.05	3	100	4	33.7	0.02	-5	4	9	-20	0.21	-10	27	5
CRS142	160	0.6	2	0.01	56.4	-0.5	1	30	5	0.69	10	0.95	30	-10	0.09	64	1	0.07	3	90	2	41.6	0.03	-5	6	16	-20	0.31	-10	35	5
CRS143	110	0.5	3	0.02	61.1	-0.5	-1	30	3	0.39	10	0.8	30	10	0.08	37	-1	0.05	4	100	2	36.7	0.03	-5	5	10	-20	0.27	-10	32	5
CRS144	250	1.2	3	0.01	83.9	-0.5	2	50	7	0.63	20	1.57	40	10	0.15	47	-1	0.06	7	130	15	76.4	0.02	-5	9	25	-20	0.33	-10	53	10
CRS145	30	-0.5	3	0.01	18	-0.5	1	20	5	0.48	-10	0.13	10	-10	0.08	53	-1	0.02	3	60	-2	5	0.05	-5	1	4	-20	0.17	-10	9	4
CRS146	110	-0.5	2	0.02	39.1	-0.5	1	30	5	0.69	10	0.61	20	10	0.09	69	1	0.04	3	80	-2	31.8	0.01	-5	3	8	-20	0.16	-10	22	5
CRS147	110	0.5	3	0.02	46.2	-0.5	1	30	2	0.51	10	0.59	20	10	0.09	50	-1	0.04	3	140	5	33.6	0.02	-5	4	9	-20	0.19	-10	24	6
CRS148	30	-0.5	2	0.03	17.3	-0.5	1	30	17	0.79	-10	0.16	10	-10	0.06	84	2	0.03	14	80	8	6.7	0.05	-5	2	13	-20	0.2	-10	13	15
CRS149	20	-0.5	3	0.11	5.4	-0.5	1	10	4	0.36	-10	0.12	-10	-10	0.17	35	-1	0.04	2	120	-2	4.2	0.1	-5	1	42	-20	0.07	-10	6	7
CRS150	40	-0.5	2	0.05	15.7	-0.5	1	10	3	0.7	-10	0.23	10	-10	0.14	72	-1	0.04	1	160	2	9.7	0.12	-5	1	12	-20	0.07	-10	7	7
CRS151	150	0.7	3	0.08	37.8	-0.5	1	30	5	0.54	10	0.98	20	-10	0.09	50	-1	0.07	4	100	-2	39.9	0.02	-5	6	16	-20	0.35	-10	35	6
CRS152	140	0.6	6	0.1	25.6	-0.5	-1	30	5	0.56	10	0.98	10	-10	0.11	56	1	0.08	2	110	4	43.6	0.04	-5	6	23	-20	0.35	-10	39	7
CRS153	120	-0.5	3	0.04	40.3	-0.5	-1	30	2	0.54	-10	0.57	20	-10	0.1	55	1	0.05	1	100	-2	24.8	0.04	-5	4	13	-20	0.21	-10	23	5
CRS154	20	-0.5	2	0.1	33.3	-0.5	1	20	7	0.87	-10	0.09	20	-10	0.11	91	-1	0.03	4	120	2	3.7	0.06	-5	1	24	-20	0.13	-10	10	5
CRS155	30	-0.5	3	0.08	15.2	-0.5	-1	20	6	0.64	-10	0.19	10	-10	0.1	71	1	0.04	3	150	-2	7.5	0.06	-5	2	13	-20	0.17	-10	12	6
CRS156	90	-0.5	3	0.07	34	-0.5	1	20	3	0.54	10	0.5	20	-10	0.09	56	-1	0.05	-1	160	6	23.6	0.05	-5	3	16	-20	0.21	-10	19	5
CRS157	30	-0.5	4	0.08	13.5	-0.5	1	20	7	0.63	-10	0.12	10	-10	0.08	65	-1	0.03	2	110	6	6.1	0.06	-5	2	30	-20	0.18	-10	10	5
CRS158	110	-0.5	-2	0.01	21.9	-0.5	-1	20	9	0.83	10	0.48	10	-10	0.06	93	1	0.04	5	60	5	21.4	0.01	-5	3	9	-20	0.23	-10	17	7
CRS159	70	-0.5	3	0.01	28.7	-0.5	1	10	4	0.48	-10	0.38	10	-10	0.06	50	-1	0.02	2	60	3	18.4	0.01	-5	2	7	-20	0.14	-10	12	4
CRS160	70	-0.5	5	0.01	23.6	-0.5	1	20	7	0.62	-10	0.4	10	-10	0.05	64	-1	0.02	3	60	3	17.8	0.02	-5	2	6	-20	0.13	-10	12	5
CRS161	140	-0.5	-2	0.01	20.9	-0.5	2	20	9	0.76	10	0.75	10	-10	0.09	87	-1	0.06	3	70	3	31	0.02	-5	4	14	-20	0.33	-10	24	15
CRS162	110	-0.5	4	0.01	41.7	-0.5	1	20	5	0.75	10	0.63	20	-10	0.08	78	-1	0.03	4	80	4	29.5	0.02	-5	3	11	-20	0.22	-10	21	8
CRS163	140	-0.5	5	0.02	34.8	-0.5	-1	20	6	0.53	10	0.77	20	-10	0.08	65	-1	0.05	5	110	6	34.4	0.03	-5	4	11	-20	0.22	-10	24	11
CRS164	140	-0.5	3	0.01	56.5	-0.5	1	30	9	0.73																					

Appendix A: Soil sample locations and assays

Sample	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cu	Fe	Ga	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb	S	Sb	Sc	Sr	Th	Ti	U	V	Zn
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	ICP61	ICP61	ICP61	ICP61	MS85	ICP61	MS85	ICP61																							
CRS169	30	-0.5	2	0.02	10.5	-0.5	1	10	9	0.87	-10	0.14	10	-10	0.04	92	1	0.03	4	70	3	5.2	0.05	-5	1	6	-20	0.25	-10	9	8
CRS170	10	-0.5	-2	0.07	5.4	-0.5	1	20	9	0.87	-10	0.03	-10	-10	0.04	102	1	0.02	2	50	-2	1	0.04	-5	1	15	-20	0.22	-10	5	5
CRS171	100	-0.5	2	0.12	44.7	-0.5	1	30	6	0.97	10	0.64	20	-10	0.09	171	-1	0.05	3	220	13	26.7	0.06	-5	4	20	-20	0.3	-10	24	16
CRS172	20	-0.5	3	0.04	10	-0.5	-1	30	9	0.83	-10	0.09	10	-10	0.06	98	1	0.02	4	70	-2	4.2	0.02	-5	1	9	-20	0.21	-10	12	9
CRS173	190	-0.5	5	0.06	36.5	-0.5	1	40	8	0.99	10	1.27	20	10	0.12	128	1	0.07	3	150	6	56.9	0.03	-5	7	14	-20	0.3	-10	44	15
CRS174	60	-0.5	4	0.2	13.8	-0.5	1	10	4	0.44	-10	0.33	10	-10	0.11	47	-1	0.06	2	110	10	11.3	0.1	-5	2	14	-20	0.22	-10	13	7
CRS175	60	-0.5	3	0.05	29.6	-0.5	-1	20	7	0.67	-10	0.33	10	-10	0.07	75	1	0.03	3	90	2	13.1	0.04	-5	2	16	-20	0.27	-10	14	9
CRS176	110	-0.5	3	0.01	43.3	-0.5	1	20	7	0.73	10	0.68	20	-10	0.07	73	1	0.04	4	70	4	32.9	0.02	-5	3	7	-20	0.2	-10	21	5
CRS177	120	-0.5	3	0.01	37.5	-0.5	1	20	3	0.65	10	0.77	20	-10	0.07	68	-1	0.04	2	60	-2	37.3	0.01	-5	4	7	-20	0.2	-10	23	5
CRS178	90	-0.5	5	0.02	24	-0.5	1	20	6	0.76	10	0.57	10	-10	0.06	62	1	0.04	3	140	2	27.2	0.04	-5	3	8	-20	0.16	-10	18	6
CRS179	200	0.5	2	0.07	51.5	-0.5	1	40	8	0.66	10	1.23	20	10	0.12	78	1	0.06	7	220	4	61.5	0.05	-5	7	14	-20	0.27	-10	44	10
CRS180	90	-0.5	3	0.35	19.7	-0.5	1	30	5	0.58	10	0.84	10	-10	0.12	70	1	0.06	1	200	7	34.1	0.08	-5	6	40	-20	0.27	-10	33	12
CRS181	40	-0.5	4	0.05	7.9	-0.5	-1	10	3	0.18	-10	0.4	-10	-10	0.19	15	-1	0.07	1	110	2	18.2	0.13	-5	3	9	-20	0.15	-10	16	7
CRS182	350	1.6	3	0.01	86.2	-0.5	2	60	6	0.83	10	1.86	40	10	0.18	94	1	0.07	10	130	5	79.7	0.01	-5	8	23	-20	0.32	-10	46	12
CRS183	90	-0.5	4	0.05	14.3	-0.5	-1	50	2	0.54	10	1.05	10	-10	0.1	59	-1	0.06	1	60	4	52.6	0.03	-5	7	11	-20	0.27	-10	47	6
CRS184	90	-0.5	2	0.13	10.4	-0.5	1	40	6	0.72	10	0.92	-10	-10	0.12	77	-1	0.06	3	80	-2	42.2	0.05	-5	5	20	-20	0.21	-10	35	7
CRS185	120	-0.5	3	0.02	50.5	-0.5	-1	40	4	0.44	10	0.69	20	10	0.11	73	-1	0.04	3	90	3	36.2	0.03	-5	4	6	-20	0.2	-10	28	6
CRS186	70	-0.5	-2	0.01	20.8	-0.5	1	40	3	0.61	10	0.59	10	-10	0.06	62	-1	0.03	2	50	4	28.3	0.02	-5	3	4	-20	0.16	-10	28	7
CRS187	10	-0.5	-2	0.09	5.6	-0.5	1	20	5	0.37	-10	0.08	-10	-10	0.09	41	1	0.06	3	110	3	3.5	0.1	-5	1	24	-20	0.13	-10	6	8
CRS188	40	-0.5	-2	0.07	21.9	-0.5	-1	30	6	0.6	-10	0.35	10	-10	0.06	67	1	0.03	4	50	3	18.2	0.04	-5	3	14	-20	0.24	-10	21	7
CRS189	100	-0.5	-2	0.11	36.7	-0.5	-1	40	3	0.66	10	0.68	10	-10	0.1	65	1	0.05	3	90	8	36	0.06	-5	5	16	-20	0.22	-10	31	9
CRS190	90	-0.5	-2	0.02	56.9	-0.5	1	50	5	0.69	10	0.72	20	10	0.1	83	1	0.04	5	70	4	42.3	0.02	-5	5	8	-20	0.27	-10	43	7
CRS191	120	-0.5	-2	0.01	37.8	-0.5	-1	30	5	0.63	10	0.73	10	-10	0.07	67	1	0.04	7	40	4	29.4	0.02	-5	4	11	-20	0.28	-10	27	6
CRS192	50	-0.5	-2	0.01	19.1	-0.5	-1	20	3	1.08	-10	0.26	10	10	0.04	111	1	0.03	4	30	-2	10.8	0.02	-5	2	6	-20	0.13	-10	10	6
CRS193	160	-0.5	2	0.01	58.1	-0.5	1	30	5	0.54	10	0.91	20	-10	0.09	61	-1	0.06	6	60	4	41.9	0.03	5	5	11	-20	0.27	-10	33	7
CRS194	130	-0.5	-2	0.01	41.7	-0.5	-1	30	6	0.64	10	0.68	10	-10	0.08	70	1	0.05	7	40	-2	33.4	0.02	-5	4	10	-20	0.21	-10	20	7
CRS195	210	-0.5	-2	0.01	63.8	-0.5	1	30	4	0.77	10	1.16	20	-10	0.1	118	1	0.07	7	50	5	51.9	0.02	-5	6	13	-20	0.28	-10	34	7
CRS196	80	-0.5	3	0.01	27.7	-0.5	1	20	9	0.85	-10	0.43	10	10	0.05	103	1	0.03	5	40	4	20.7	0.01	-5	2	7	-20	0.15	-10	12	6
CRS197	110	-0.5	-2	0.01	42.8	-0.5	-1	20	5	0.54	-10	0.64	20	10	0.07	56	1	0.04	6	40	4	32.6	0.01	-5	3	9	-20	0.21	-10	20	5
CRS198	80	-0.5	-2	0.01	34.3	-0.5	-1	20	4	0.77	-10	0.43	10	-10	0.05	77	1	0.03	4	40	2	18.5	0.02	-5	3	9	-20	0.23	-10	18	6
CRS199	100	-0.5	-2	0.01	38.8	-0.5	1	20	7	0.7	-10	0.53	20	10	0.07	76	1	0.04	7	50	3	25.1	0.01	-5	3	11	-20	0.22	-10	19	6
CRS200	100	-0.5	-2	0.01	42.6	-0.5	-1	20	6	0.63	10	0.53	20	-10	0.07	60	1	0.04	5	50	-2	25.3	0.02	-5	3	12	-20	0.26	-10	23	6
CRS201	100	-0.5	-2	0.01	39.3	-0.5	-1	30	3	0.51	10	0.57	10	10	0.07	59	-1	0.03	4	40	2	27.6	0.01	-5	3	9	-20	0.25	-10	22	5
CRS202	70	-0.5	-2	0.01	26	-0.5	1	50	6	0.54	-10	0.42	10	10	0.06	63	1	0.03	5	30	-2	21.3	0.02	-5	2	7	-20	0.18	-10	16	6
CRS203	110	-0.5	-2	0.01	35.1	-0.5	-1	20	5	0.47	10	0.66	10	-10	0.07	63	1	0.04	5	30	4	30.1	0.01	-5	3	9	-20	0.22	-10	22	6
CRS204	80	-0.5	-2	0.01	31.7	-0.5	1	20	11	0.83	-10	0.45	10	-10	0.06	104	1	0.03	10	30	10	20.6	0.02	-5	2	7	-20	0.21	-10	17	12
CRS205	140	-0.5	-2	0.01	48.7	-0.5	1	20	8	0.67	10	0.74	20	10	0.09	70	1	0.04	5	40	8	36.1	0.02	-5	3	9	-20	0.23	-10	22	6

Appendix B

Rock sample locations and assays

Appendix B: Rock sample locations and assays

H0002	Version	3																	
H0003	Date_generated	21/8/2018																	
H0004	Reporting_period_end_date	21/8/2018																	
H0005	State	TAS																	
H0100	Tenement	EL21/2005																	
H0101	Tenement_holder	Venture Minerals Ltd																	
H0102	Project_name	Mt Lindsay																	
H0106	Tenement_operator	Venture Minerals Ltd																	
H0150	250K_map_sheet	SK5503 Burnie																	
H0151	100K_map_sheet	7914 Pieman																	
H0152	50K_map_sheet	na																	
H0153	25K_map_sheet	3437 Stringer, 3438 Livingstone, 3637 Rosebury, 3638 Parsons, 3639 Ramsay																	
H0200	Start_date_of_data_acquisition	22/8/2017																	
H0201	End_date_of_data_acquisition	21/8/2018																	
H0202	Data_format	SG3																	
H0203	Number_of_data_records	2																	
H0204	Date_of_metadata_update	21/8/2018																	
H0500	Feature_Located	Sample Point																	
H0501	Geodetic_datum	GDA94																	
H0502	Vertical_datum	not applicable																	
H0503	Projection	MGA																	
H0531	Projection_zone	55																	
H0532	Surveying_instrument	Garmin GPS64																	
H0533	Surveying_Company	Venture Minerals Ltd																	
H0600	Sample_code	ROCK																	
H0601	Sample_type	rock																	
H0602	Sample_description	see data																	
H0700	Sample_preparation_code	PREP-21																	
H0701	Sample_preparation_details	dry, crush, pulverised in ring mill to P80 75 microns																	
H0702	Job_no	PH18101922																	
H0800	Assay_code	B-ICP69, ICP61, MS85 (see H1002 field)																	
H0801	Assay_company	ALS Geochemistry																	
H0802	Assay_description1	MS81 = lithium metaborate/lithium tetraborate fusion at 1025°C followed by dissolution in nitric, hydrochloric and hydrofluoric acids with ICPMS finish																	
H0803	Assay_description2	ICP61 = pulp digested by perchloric, nitric, hydrofluoric and hydrochloric acids & resulting solution analysed by ICP-AES																	
H0804	Assay_description3	B-ICP69 = pulp subject to hydrofluoric & nitric acid digest at 200 degrees celsius & resulting solution analysed by ICP-AES																	
H0900	Remarks:	- denotes below lower limit of detection																	
H1000	Sample	E_MGA55	N_MGA55	Stype	Lith	Description	Logged	Batch	Sn	Sn (soluble)	W	W (soluble)	Ag	Al	As	B	Ba		
H1001		m	m						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm		
H1002		10	10						MS81	ICP61	MS81	ICP61	ICP61	ICP61	ICP61	B-ICP69	ICP61		
D	THML117	360728	5380128	float	UM	gn UM with img lgn ?px & dgn ifg am matrix	TH	PH18101922	-1	10	3	-10	-0.5	0.17	-5	10	4		
D	THML146	361718	5388052	outcrop	ZQT	ZQT nodule. Bladed tu replacing fsp in img FG	TH	PH18101922	1455	320	18	-10	-0.5	6.84	-5	8900	4.9		
EOF																			

Appendix C

Geological mapping locations

Appendix C: Geological locations

H1000	Location	Prospect	E_MGA55	N_MGA55	Lith1	Lith2	Description	Outcrop	Logged
H1001			m	m					
H1002			10	10					
D	THML139	Salmons	360182	5380282	ST		lbn-lgy lam-tnb ST, hydro road subcrop	subcrop	TH
D	THML140	Salmons	360153	5380296	ST		lbn-lgy lam-tnb ST. hydro road subcrop	subcrop	TH
D	THML141	Salmons	360109	5380323	ST		lbn-lgy lam-tnb ST. hydro road subcrop	subcrop	TH
D	THML142	Salmons	360456	5380379	feSCGP		rd hematitic microconglomerate	subcrop	TH
D	THML143	Salmons	360414	5380382	SDOL		dgy ifg rock with 1-2mm qzV ?SDOL no oolites	subcrop	TH
D	THML144	Salmons	360375	5380382	feSCGP		rd hematitic microconglomerate	subcrop	TH
D	THML145	Salmons	361105	5380087	siSCOO		oolitic dolomite in road cut subcrop	subcrop	TH
D	THML146	Harman	361718	5388052	ZQT		ZQT nodule. Bladed tu replacing fsp in img FG	outcrop	TH
D	THML147	Salmons	361618	5388160	tuV	FG	tuV in img-icg FG. Early gn tu replaced by late bk tu	outcrop	TH
D	THML148	Salmons	361621	5388150	FG	ZQT	tu nodule in icg FG. bk 2-4mm bladed tu	outcrop	TH
D	THML149	Salmons	356579	5382120	qzSS	tuV	tuV in qzSS from CRS173	outcrop	TH
EOF									

Lithologic Codes	Description
Regolith (R*)	
R	undifferentiated regolith
RCAC	calcrete
RSIC	silcrete
RMAG	magnesite
RFEC	ferricrete
RL	undifferentiated laterite
RLG	lateritic gravel (loose)
RLD	lateritic duricrust
RLPD	pisolitic duricrust
RCLY	in situ clay, mot for mottled
RSAP	undifferentiated saprolite
RGOS	gossan ("iron cap") = iron oxide rock formed by weathering of sulphide rick rock. Textural or mineral prefix as appropriate (e.g. aciRGOS = acicular gossan, mcRGOS = malachite gossan)
RB	regolith breccia, cy prefix for clay matrix
Sediments & Sedimentary Rocks (S*)	
S	undifferentiated sediment
SGVL	unconsolidated gravel
SPCS	unconsolidated pebbly or cobbly sands
SAND	unconsolidated sand
SILT	unconsolidated silt
SMUD	unconsolidated mud
SCLY	unconsolidated clay (transported)
SS	sandstone, minimum >75% sandstone over minimum 5m logging interval, prefixes qzSS = quartz sandstone, lithSS = lithic sandstone, volcSS = volcanogenic sandstone, ccSS = calcareous sandstone
SSW	wacke
SM	>75% mudstone over minimum 5m logging interval
ST	>75% siltstone over minimum 5m logging interval
SSM	intercalated sandstone and mudstone, between 25-75% of each over minimum 5m logging interval
SST	25-75% sandstone & siltstone over minimum 5m logging interval
SMH	shale
SML	slate
SMA	argillite (weakly metamorphosed mudstone)
SMP	phyllite
SGRT	grit
SSPC	pebbly or cobbly sandstone
SSIT	intraclastic/ripup-rich sandstone
SCG	undifferentiated conglomerate
SCGR	intraclast/mud chip (rip-ups) conglomerate
SCGM	monomict conglomerate
SCGP	polymict conglomerate
SBRM	monomict breccia
SBRP	polymict breccia
SCB	undifferentiated carbonate, prefixes oo = oolitic, st = stromatolitic, bc = bioclastic
SLST	limestone
SDOL	dolomite
STIL	tillite
STUF	tuffite (redeposited)
SLAP	redeposited lapilli-stone
SCHT	chert
SBIF	banded iron formation
SLIG	lignite
SVAP	evaporites
Igneous Rocks (U* for Ultramafic, M* for Mafic, I* for Intermediate, F* for Felsic)	
U	undifferentiated ultramafic
UDUN	dunite
UHAR	harzburgite
UPX	pyroxenite
UPD	peridotite
USERP	serpentinite
UKIM	kimberlite
ULAP	lamproite
ULAY	ultramafic lamprophyre
UK	komatiite (undifferentiated)
UKSPX	spinifex textured part of komatiite flow
UKoAC	adcumulate part of komatiite flow
UKoOC	olivine orthocumulate part of komatiite flow
UKoMC	olivine mesocumulate part of komatiite flow
M	undifferentiated mafic
MG	gabbro
MGL	leucogabbro
MD	dolerite
MB	basalt
MBHM	high-magnesium basalt
MBP	pillow-basalt
MBHY	basaltic hyaloclastite
MLAP	mafic lapilli-stone
MTUF	mafic tuff
IAND	andesite
ILAT	latite
ITCH	trachyte
IDIO, pxIDIO, amIDIO, btIDIO	diorite, with lower case mineral prefixes for key mafic phases, eg btIDIO, amIDIO, pxIDIO

Lithologic Codes	Description
F	undifferentiated felsic rock
FG, amFG, pxFG, btFG	undifferentiated granitoid, with lower case mineral prefixes for key mafic phases, eg btFG, amFG, pxFG
FGRA, amFGRA, btFGRA	granite, with lower case mineral prefixes for key mafic phases, eg btFGRA, amFGRA
FGRD, amFGRD, btFGRD	granodiorite, with lower case mineral prefixes for key mafic phases, eg btFGRD, amFGRD
FMON, amFMON, btFMON	monzonite, with lower case mineral prefixes for key mafic phases, eg btFMON, amFMON
FSYE, amFSYE	syenite, with lower case mineral prefixes for key mafic phases, eg btFSYE, amFSYE
FTON	tonalite
FTUF	felsic tuff
FCGL	felsic volcanic clast conglomerate, may be matrix-rich
FV	undifferentiated felsic volcanic rock
FRHY	rhyolite
FDAC	dacite
FPEG	pegmatite
FIGM	ignimbrite
Metamorphic & Metasomatic Rocks (Z*)	
ZSCH	undifferentiated schist
mZSCH	undifferentiated mafic schist, typically dominated by amphibole, chlorite and/or biotite with lesser feldspar, quartz, accessory leucoxene etc...
fZSCH	undifferentiated felsic schist, dominated by quartz & feldspar, muscovite, & accessory mafic minerals
btZSCH, btclZSCH, tcZSCH, etc...	biotite schist, biotite-chlorite schist, etc... using mineral code prefixes for only the distinguishing minerals
ZGNS	undifferentiated gneiss
btZGNS, kspZSCH, etc...	biotite gneiss, k-feldspar gneiss, etc... using mineral code prefixes for the key minerals
ZAMP	undifferentiated amphibolite
ZHF, pxZHF, btZHF, andZHF	hornfels = ZHF, microcrystalline, up to 2 lower case mineral prefixes as appropriate, eg. btZHF, andZHF, pxZHF etc...)
ZMRB, gtZMRB, olZMRB, veZMRB, etc...	marble, with up to 2 key alteration mineral prefixes, eg gtZMRB, gtpxZMRB, olZMRB, srZMRB, veZMRB
ZXS, gtZXS, gtpxZXS, woZXS	ZXS = exoskarn, with maximum 2 dominant mineral prefixes in alphabetical order, eg gtZXS, gtpxZXS, ccwoZXS, woZXS, gtmZXS, cpygtZXS etc...
ZNS, gtpxZNS, epZNS,	ZNS = endoskarn (skarn formed within genetically related granitoid), with up to 2 dominant mineral prefixes in alphabetical order, eg epgtZNS, epZNS, pxZNS
ZGRS, tzZGRS, qztuZGRS	ZGRS = greisen comprising fine saccharoidal aggregate of quartz and muscovite, with up to 2 dominant mineral prefixes, eg. tzZGRS, qztuZGRS
ZALT, chZALT, seZALT, qzseZALT, etc...	alteration rock for which protolith is effectively obliterated, use lower case prefixes for main alteration minerals
Veins (V)	
V	Veins, up to 2 key mineral prefixes as appropriate (eg qzV, qztuV), only use in Lith1 column
VB	Vein breccias, up to 2 key mineral prefixes as appropriate according to mineralogy of cement (eg clccVB), only use in Lith1 column
Hydrothermal Breccias, Faults and Shear Rocks (X*)	
XHB	hydrothermal breccia
XMYL	mylonite
XFB	Fault breccia - incohesive >30% clastic
XFG	Fault gouge - incohesive <30% clastic
XFC	Fault cataclasite - cohesive more than >30% clastic
No Recovery & Cavities (N*)	
NCAV	cavity
NREC	no sample recovery (unknown problems)
NSAV	sample no longer available (applies to relogging)

Mineral Codes	
aca	acanthite
act	actinolite
aik	aikinite
ala	alabandite
alb	albite
alm	almandine
amp	amphibole
ana	anatase
adl	andalusite
and	andradite
ank	ankerite
ano	anorthite
atq	antigorite
ars	arsenates
asp	arsenopyrite
aue	auerite
aug	augite
ax	axinite (Ca-Mg-Al borosilicate)
az	azurite
bar	baryte
bth	berthierite
byl	beryl
bt	biotite
bim	bismuthinite
bor	borate (undifferentiated)
brn	brannerite
bau	braunite
bru	brucite
bus	bustamite
cc	calcite
can	canfieldite
cb	carbonate (undifferentiated)
cs	cassiterite
cer	cerrusite
cha	chalcedony
cpy	chalcopyrite
cvx	chenevixite
chl	chlorite
cdp	chrome diopside
chr	chromite
cyb	chrysoberyl
crp	chrysoprase
crt	chrysotile
cin	cinnabar
cy	clay (undifferentiated)
cpx	clinopyroxene
cob	cobaltite
col	columbite
cd	cordierite
cos	cosalite
cub	cubanite
da	danalite
dd	diamond
di	diopside
dol	dolomite
dum	dumortite
elc	electrum
eng	enargite
ep	epidote
fay	fayalite
fsp	feldspar
fe	fe-oxide or hydroxide
feg	fergusonite
flu	flourite
flb	fluorborite
for	forsterite
fuc	fuchsite
gal	galena
gt	garnet
go	goethite
Au	gold
gra	graphite
grs	grossular
gyp	gypsum
hau	hausmannite
hed	hedenbergite
he	hematite
hb	hornblende
hul	hulsite
ilit	illite
ilm	ilmenite
ilv	ilvaite
ixi	ixiolite
jap	jalpaite
jam	jamesonite
ka	kaolin
kes	kesterite
ksp	k-feldspar (undifferentiated)
kob	kobellite
ky	kyanite
lau	laumontite
lep	lepidolite
lx	leucoxene
lim	limonite (undifferentiated iron oxyhydroxide)
lol	loellingite
lw	ludwigite
luz	luzonite
mg	magnesite
mt	magnetite
mic	malachite
mly	malayaite
mi	mica (undifferentiated)
mcr-pcl	microlite-pyrochlore
mn	mn-oxides
ms	moissanite
mol	molybdenite
mz	monazite

mon	montmorillonite
mu	muscovite
nac	nacrite
Bi	native bismuth
ol	olivine
ops	opaline silica
or	orthoclase
sxo	oxidised sulphide
pav	pavonite
pnt	pentlandite
pv	perovskite
pen	phenacite
phl	phlogopite
plg	plagioclase
pbs	polybasite
pcr	polycrase
pmg	polymignyte
prh	prehnite
pru	proustite
pyg	pyrargyrite
py	pyrite
pp	pyrope
px	pyroxene
po	pyrrhotite
qz	quartz
rhd	rhodenite
rdc	rhodochrosite
rf	rock fragments
rut	rutile
sam	samarskite
sa	saponite
scp	scapolite
sh	scheelite
sco	scorodite
se	sercite
sr	serpentine
sd	siderite
si	siliceous
spc	specularite
sph	sphalerite
spn	spinel
spd	spodumene
stan	stannite
snd	stannoidite
stb	stibnite
sb	stilbite
stp	stilpnomelane
stv	strueverite
sx	sulphide
tc	talc
tap	tapiolite
tt	tetrahedrite-tennantite
ti	titanite (sphene)
tz	topaz
tu	tourmaline
trm	tremolite
ve	vesuvianite (idocrase)
vo	vonsenite (Fe borate)
wlf	wolframite
wo	wollastonite
ze	zeolites
zin	zinnwaldite

Appendix D

LAICPMS analyses (tourmaline)

Appendix D: LAICPMS analyses (tourmaline)

H0002	Version	3													
H0003	Date_generated	21/8/2018													
H0004	Reporting_period_end_date	21/8/2018													
H0005	State	TAS													
H0100	Tenement	EL21/2005													
H0101	Tenement_holder	Venture Minerals Ltd													
H0102	Project_name	Mt Lindsay													
H0106	Tenement_operator	Venture Minerals Ltd													
H0150	250K_map_sheet	SK5503 Burnie													
H0151	100K_map_sheet	7914 Pieman													
H0152	50K_map_sheet	na													
H0153	25K_map_sheet	3437 Stringer, 3438 Livingstone, 3637 Rosebury, 3638 Parsons, 3639 Ramsay													
H0200	Start_date_of_data_acquisition	22/8/2017													
H0201	End_date_of_data_acquisition	21/8/2018													
H0202	Data_format	SG3													
H0203	Number_of_data_records	24													
H0204	Date_of_metadata_update	21/8/2018													
H0500	Feature_Located	mineral analysis													
H0501	Geodetic_datum	GDA94													
H0502	Vertical_datum	not applicable													
H0503	Projection	MGA													
H0531	Projection_zone	55													
H0532	Surveying_instrument	Garmin GPS64													
H0533	Surveying_Company	Venture Minerals Ltd													
H0600	Sample_code	LA-ICPMS													
H0601	Sample_type	mineral													
H0602	Sample_description	minerals in polished puks													
H0702	Job_no	na													
H0800	Assay_code	LA-ICPMS													
H0801	Assay_company	UTAS													
H0802	Assay_description	Laser Ablation ICPMS analyses minerals in polished puks Laser Ablation ICPMS analyse of minerals in polished puks, 29 micron spot size													
H0900	Remarks	< denotes below Lower Limit of Detection													
H1000	Sample	Puk	E_MGA55GDA94	N_MGA55GDA94	Li	Be	B	Na	Mg	Al	Si	P	K	Ca	
H1001	Unit				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
H1002	Average lower detection limit				0.13	0.14	3.40	5.14	0.56	0.72	211.13	12.40	3.61	131.22	
D	C18AP17A0009	THML146	361718	5388052	11.15	69.67	32091.47	19261.09	30175.12	165005.23	171478.81	19.78	225.89	2864.54	
D	C18AP17A0010	THML146	361718	5388052	10.27	87.01	32573.46	19364.44	30063.47	166822.70	170653.82	29.96	295.76	2532.55	
D	C18AP17A0011	THML146	361718	5388052	7.98	39.33	32098.20	18789.35	22627.87	157779.74	170151.22	13.04	290.86	2161.51	
D	C18AP17A0012	THML146	361718	5388052	8.62	30.68	31599.11	19683.04	17968.78	151074.64	167481.63	13.15	368.13	2293.25	
D	C18AP17A0013	THML146	361718	5388052	8.22	39.98	31895.37	19988.72	20820.85	159572.75	167887.26	<12.436673	373.33	2138.63	
D	C18AP17A0014	THML146	361718	5388052	6.08	24.75	31992.87	19970.79	25151.78	158205.48	169777.64	<11.975589	348.50	2112.57	
D	C18AP17A0015	THML146	361718	5388052	6.66	30.92	31490.41	19190.23	21108.27	155156.02	168133.89	16.97	333.75	2306.65	
D	C18AP17A0016	THML146	361718	5388052	10.15	43.88	31429.14	20197.35	14762.15	153808.03	168920.31	15.29	422.44	2007.36	
D	C18AP17A0017	THML146	361718	5388052	6.11	24.05	31332.26	20006.32	20427.42	155336.52	167791.36	24.50	381.27	2650.07	
D	C18AP17A0018	THML146	361718	5388052	4.55	22.48	32068.57	20427.74	24959.75	158367.98	168415.27	<12.178705	361.29	2203.26	
D	C18AP17A0019	THML146	361718	5388052	6.20	32.68	31590.16	20306.25	20895.50	155567.30	167869.34	18.41	412.39	2412.40	
D	C18AP17A0020	THML146	361718	5388052	7.09	45.04	31627.16	20008.61	22971.10	159090.00	168457.15	24.69	378.90	3134.71	
D	C18AP17A0021	WBTH001	365700	5392700	125.18	23.77	31426.79	17529.35	5709.22	164644.75	160625.53	27.42	493.10	3122.19	
D	C18AP17A0022	WBTH001	365700	5392700	94.56	43.07	31429.04	18129.69	6540.46	162580.36	159797.28	16.36	554.37	3399.50	
D	C18AP17A0023	WBTH001	365700	5392700	121.53	24.21	31319.77	17832.29	5265.49	164048.34	161090.06	34.60	504.14	3347.07	
D	C18AP17A0024	WBTH001	365700	5392700	128.90	25.32	30983.25	18052.81	5761.09	162282.17	160853.45	31.17	587.68	2856.48	
D	C18AP17A0025	WBTH001	365700	5392700	110.38	41.32	31003.50	17768.85	5304.37	166376.09	159459.74	15.69	511.08	2731.57	
D	C18AP17A0026	WBTH001	365700	5392700	106.42	38.45	31202.75	18002.88	5349.88	165462.97	160563.54	21.07	539.39	2459.74	
D	C18AP17A0027	WBTH002	365700	5392700	122.32	34.99	31423.18	17483.96	5926.71	170664.11	160412.84	28.98	498.00	1714.66	
D	C18AP17A0028	WBTH002	365700	5392700	73.10	46.55	31379.62	17305.24	4836.07	167339.12	161283.48	28.77	437.34	1789.82	
D	C18AP17A0029	WBTH002	365700	5392700	124.44	42.63	31179.00	17870.05	4239.54	168480.79	160640.76	30.62	481.92	1844.57	

Appendix D: LAICPMS analyses (tourmaline)

H1000	Sample	Puk	E_MGA55GDA94	N_MGA55GDA94	Li	Be	B	Na	Mg	Al	Si	P	K	Ca
H1001	Unit				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H1002	Average lower detection limit				0.13	0.14	3.40	5.14	0.56	0.72	211.13	12.40	3.61	131.22
D	C18AP17A0030	WBTH002	365700	5392700	112.96	34.26	30851.62	17545.76	6193.55	161965.79	162991.60	<12.906540	407.07	1499.75
D	C18AP17A0031	WBTH002	365700	5392700	128.13	38.29	31172.81	18008.00	1273.72	166162.56	159904.80	18.36	501.53	1555.52
D	C18AP17A0032	WBTH002	365700	5392700	172.79	23.52	31161.24	17606.07	2880.51	169199.04	160487.77	22.54	517.01	1833.50
EOF														

Appendix D: LAICPMS analyses (tourmaline)

Sample	Puk	Ti	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ga	As	Rb
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average lower detection limit		0.67	0.84	0.48	16.69	0.03	0.05	0.91	0.18	0.01	0.01	0.38	0.06
C18AP17A0030	WBTH002	4027.04	1.46	1374.34	129259.01	12.83	2.42	<0.787280	111.37	80.32	82.73	<0.246076	<0.068623
C18AP17A0031	WBTH002	753.76	<0.931162	1700.64	136845.88	13.43	0.65	0.94	131.62	114.02	117.48	1.73	<0.064659
C18AP17A0032	WBTH002	1369.31	<1.037918	1511.54	128818.04	11.78	1.19	<0.905531	120.73	125.39	127.53	2.54	0.08

Appendix D: LAICPMS analyses (tourmaline)

Sample	Puk	Sr	Y	Zr	Nb	Mo	Ag	Cd	Sn	Sb	Cs	Ba	La
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average lower detection limit		0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.19	0.13	0.02	0.01	0.00
C18AP17A0030	WBTH002	2.70	0.02	0.12	1.23	0.04	<0.010197	<0.042936	5.98	<0.160475	<0.023499	0.21	4.38
C18AP17A0031	WBTH002	5.66	0.06	0.98	20.57	0.04	<0.012601	<0.044558	23.39	<0.150683	<0.024487	0.04	15.06
C18AP17A0032	WBTH002	4.38	1.27	4.80	17.34	0.04	<0.014680	<0.036875	25.38	0.15	0.13	0.17	13.72

Appendix D: LAICPMS analyses (tourmaline)

Sample	Puk	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average lower detection limit		0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
C18AP17A0030	WBTH002	8.25	0.79	2.14	0.35	0.02	0.25	0.01	0.06	0.00	<0.003888	<0.000442	0.04	0.00
C18AP17A0031	WBTH002	27.47	2.51	7.67	1.19	0.08	0.34	0.06	0.09	0.01	0.02	0.00	0.01	0.00
C18AP17A0032	WBTH002	25.80	2.37	6.68	1.25	0.08	0.43	0.06	0.18	0.05	0.20	0.03	0.42	0.08

Appendix D: LAICPMS analyses (tourmaline)

Version	3												
Date_generated	21/8/2018												
Reporting_period_end_date	21/8/2018												
State	TAS												
Tenement	EL21/2005												
Tenement_holder	Venture Minera												
Project_name	Mt Lindsay												
Tenement_operator	Venture Minera												
250K_map_sheet	SK5503 Burnie												
100K_map_sheet	7914 Pieman												
50K_map_sheet	na												
25K_map_sheet	3437 Stringer, :												
Start_date_of_data_acquisition	22/8/2017												
End_date_of_data_acquisition	21/8/2018												
Data_format	SG3												
Number_of_data_records	24												
Date_of_metadata_update	21/8/2018												
Feature_Located	mineral analysis												
Geodetic_datum	GDA94												
Vertical_datum	not applicable												
Projection	MGA												
Projection_zone	55												
Surveying_instrument	Garmin GPS64												
Surveying_Company	Venture Minera												
Sample_code	LA-ICPMS												
Sample_type	mineral												
Sample_description	minerals in poli												
Job_no	na												
Assay_code	LA-ICPMS												
Assay_company	UTAS												
Assay_description	Laser Ablation												
Remarks	< denotes below												
Sample	Puk	Hf	Ta	W	Au	Tl	Pb	Bi	Th	U	Total	O	
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
Average lower detection limit		0.00	0.00	0.01	0.02	0.02	0.01	0.01	0.00	0.00	calculated	calculated	
C18AP17A0009	THML146	0.09	2.53	2.51	<0.017785	<0.032468	5.15	0.02	0.13	0.04	50.15	46.45	
C18AP17A0010	THML146	0.12	1.26	3.16	<0.016905	<0.026636	4.73	<0.007417	0.08	0.03	50.05	46.55	
C18AP17A0011	THML146	0.07	5.42	1.16	<0.013527	<0.023621	4.13	<0.006987	0.09	0.03	50.75	45.85	
C18AP17A0012	THML146	0.11	3.76	0.81	<0.010881	<0.024680	4.07	<0.007786	0.04	0.04	51.41	45.19	
C18AP17A0013	THML146	0.14	2.97	1.29	0.02	<0.021606	5.18	<0.010893	0.08	0.06	50.94	45.66	
C18AP17A0014	THML146	0.16	1.85	1.46	<0.017005	<0.018077	5.33	0.03	0.12	0.09	50.75	45.85	
C18AP17A0015	THML146	0.04	6.53	1.50	<0.013210	<0.016871	4.63	<0.010755	0.19	0.14	51.09	45.51	
C18AP17A0016	THML146	0.25	5.53	1.33	<0.014682	<0.016553	6.95	0.01	0.08	0.03	51.36	45.24	
C18AP17A0017	THML146	0.11	5.37	1.82	<0.022377	<0.020785	6.18	0.01	0.14	0.07	51.22	45.38	
C18AP17A0018	THML146	0.04	2.89	0.95	<0.023131	<0.022858	5.30	<0.007820	0.06	0.03	50.82	45.78	
C18AP17A0019	THML146	0.20	3.89	1.15	<0.020916	<0.020067	7.64	0.01	0.11	0.05	51.16	45.44	
C18AP17A0020	THML146	0.07	5.15	1.06	<0.021690	<0.026470	3.40	<0.006839	0.02	0.00	50.86	45.74	
C18AP17A0021	WBTH001	0.77	29.68	1.46	<0.021339	<0.027694	4.83	0.07	0.96	0.13	51.58	45.02	
C18AP17A0022	WBTH001	0.30	16.52	0.68	<0.016969	<0.019504	4.05	0.05	0.27	0.02	51.69	44.91	
C18AP17A0023	WBTH001	0.46	34.12	1.34	<0.012099	<0.019026	4.55	0.02	0.51	0.01	51.61	44.99	
C18AP17A0024	WBTH001	0.72	29.67	1.24	<0.013244	<0.021784	4.69	0.01	0.48	0.04	51.75	44.85	
C18AP17A0025	WBTH001	0.21	15.41	0.64	<0.014450	<0.023791	3.21	0.03	0.21	0.03	51.68	44.92	
C18AP17A0026	WBTH001	0.09	13.66	0.48	<0.012895	<0.018225	3.88	0.02	0.60	0.00	51.63	44.97	
C18AP17A0027	WBTH002	0.09	6.15	0.16	<0.015287	<0.016252	3.54	0.02	0.76	0.03	51.37	45.23	
C18AP17A0028	WBTH002	2.57	31.20	0.50	<0.017871	<0.015379	2.57	0.03	1.64	0.51	51.50	45.10	
C18AP17A0029	WBTH002	0.10	7.46	0.45	<0.019913	<0.012911	3.22	<0.008163	0.52	0.03	51.55	45.05	

Appendix D: LAICPMS analyses (tourmaline)

Sample	Puk	Hf	Ta	W	Au	Tl	Pb	Bi	Th	U	Total	O
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Average lower detection limit		0.00	0.00	0.01	0.02	0.02	0.01	0.01	0.00	0.00	calculated	calculated
C18AP17A0030	WBTH002	<0.007394	0.45	<0.002634	<0.017762	<0.012687	1.44	<0.006875	0.01	<0.001313	51.65	44.95
C18AP17A0031	WBTH002	0.05	5.54	0.20	<0.014152	<0.015533	2.61	<0.007067	0.32	0.01	51.84	44.76
C18AP17A0032	WBTH002	0.39	5.87	0.55	<0.014063	<0.010162	3.33	<0.009186	1.53	0.42	51.60	45.00

Appendix E

Microprobe analyses (garnets)

Appendix E: Microprobe analyses (garnets)

H1000	Sample	Almandine	Andradite	Grossular	Pyrope	Spessartine	Uvarovite	SiO2	TiO2	SnO2	Al2O3	V2O3	Cr2O3	FeO	MnO
H1001		%	%	%	%	%	%	%	%	%	%	%	%	%	%
D	ML200_361.5gt	0	49.00612444	47.75626541	0.455698328	2.694081351	0.087830469	36.3617	0.44448	0.200269	9.57074	0.005171	0.024617	17.3226	1.05723
D	ML200_361.5gt		45.5659862	50.21968724	0.362620737	3.784353023	0.076352803	36.5598	0.607377	0.120022	10.378	0.02471	0.021728	17.9102	1.50784
D	ML200_361.5gt	0	42.38163592	53.79784256	0.371746711	3.377991884	0.070782924	36.8497	0.425324	0.095143	11.241	0.083409	0.020612	17.1221	1.37727
D	ML200_361.5gt	0	45.87411008	50.96211571	0.431923677	2.596192632	0.135657908	37.0576	0.314372	0.159143	10.4568	0.051494	0.039169	17.311	1.04955
D	ML200_361.5gt	0	47.63942391	48.91576402	0.411113407	2.962972967	0.070725699	36.9177	0.387376	0.189679	9.94403	0.05604	0.020051	17.2581	1.17613
D	ML200_361.5gt	0	56.18385864	40.25151234	0.577179101	2.635047504	0.352402424	36.4983	0.714539	0.273292	8.07193	0.057256	0.097567	19.1975	1.02146
D	ML200_361.5gt	0	44.85134843	51.01251553	0.330270492	3.736904822	0.06896073	36.4441	0.698101	0.13164	10.5455	0.043989	0.019683	17.3729	1.49338
D	ML205_262.0gt	0	36.9008478	59.57113979	0.817238435	2.669109265	0.041664707	37.4446	1.01971	0.068007	12.4373	0.073737	0.012251	13.7646	1.09885
D	ML205_262.0gt	0	41.39257384	55.83840299	0.572598298	2.085823618	0.110601255	37.2118	0.609686	0.076258	11.4945	0.014834	0.032399	14.8814	0.855496
D	ML205_262.0gt	0	27.311672	72.1216336	0.344368313	0.280238459	-0.057912372	38.2503	0.095935	0.003723	15.2512	-0.00108	-0.0181	11.0071	0.122632
D	ML205_262.0gt	0	34.54705427	62.49903777	0.482236173	2.447632636	0.024039144	37.4857	0.626558	0.02685	13.3534	0.000252	0.007314	14.0932	1.04268
D	ML205_262.0gt	0.27427266	20.45139746	76.37967478	0.447439068	2.405488595	0.04172744	38.476	0.638712	0.011111	16.9989	0.046611	0.0133	9.92023	1.0735
D	ML205_262.0gt	0	31.99778784	64.61903006	0.794194579	2.250701339	0.338286185	36.7064	3.88529	0.07262	12.6459	0.10574	0.094252	10.4007	0.877997
D	ML205_262.0gt	0	18.38482798	78.49258786	0.660869936	2.497357182	-0.035642963	37.9913	1.50549	0.013037	17.2565	0.06688	-0.01123	8.68835	1.10168
D	ML205_262.0gt	0	36.0859239	58.61691549	2.175566953	2.720399261	0.401194399	37.3714	1.25047	0.043545	12.2821	0.060559	0.115659	12.5773	1.09806
D	ML205_295.9gt	0	44.35870629	52.27087978	0.960009211	2.340496707	0.069908016	36.6944	1.26105	0.141233	10.6629	0.080908	0.019997	15.1807	0.937378
D	ML205_295.9gt	0	50.19179687	46.12524471	1.449431899	2.309346585	-0.075820064	36.2239	2.38847	0.125715	9.14436	0.107496	-0.02072	15.7603	0.883616
D	ML205_295.9gt	0	50.06393434	45.93797721	1.518245568	2.442908986	0.036933891	35.9408	2.58272	0.157926	9.09616	0.072896	0.010037	15.2239	0.929512
D	ML205_295.9gt	0	51.10184081	45.1676878	1.418989328	2.264171815	0.047310242	35.8506	2.51984	0.170283	8.93081	0.096619	0.012894	15.7306	0.863994
D	ML205_295.9gt	0	64.43825202	32.5366707	1.248842427	1.697798805	0.078436047	35.655	2.25882	0.229212	6.22144	0.102043	0.020502	19.2857	0.621349
D	ML205_295.9gt	0	65.56624988	31.34094365	1.045974815	1.844994154	0.201837506	35.536	2.09338	0.159524	5.95171	0.166339	0.052315	19.3584	0.669558
D	PH001_317.5	0	30.48501561	67.05225494	0.39510513	2.037283579	0.030340747	37.016	0.700109	-0.01898	14.1469	-999	0.009209	12.9623	0.865778
D	PH001_317.5	0	39.79524828	58.6352602	0.291497757	1.227104201	0.050889557	37.3252	0.724338	-0.02125	11.8682	-999	0.014968	14.8024	0.505342
D	PH001_317.5	0	61.6200368	36.96777141	0.03306691	1.429131093	-0.050006209	36.0856	0.060216	0.002742	7.09334	-999	-0.01376	21.0721	0.550599
D	PH001_317.5	1.86627836	25.15319056	69.90682265	0.362932429	2.67133208	0.039443925	36.6658	0.713513	-0.00788	15.4367	-999	0.012134	12.1306	1.15059
D	PH001_317.5	0	36.75131651	61.92747091	0.204406991	1.098815353	0.017990237	36.4441	0.691769	0.011519	12.5615	-999	0.005328	13.5161	0.455639
D	PH001_317.5	0	38.89655439	59.75514703	0.306406647	1.005671945	0.036219981	36.4204	0.804585	-0.00231	12.0266	-999	0.010634	14.2414	0.413403
D	PH001_317.5	0	33.95627715	63.61907415	0.129924156	2.275498317	0.019226227	36.2123	0.671092	0.035471	13.3744	-999	0.005806	13.5231	0.962118
D	PH001_317.5	0	39.86368994	58.62385339	0.304722343	1.09602136	0.11171297	36.9959	0.634917	-0.0037	11.8406	-999	0.032852	14.6145	0.45128
D	PH001_317.5	0	41.79185887	56.16942535	0.490462163	1.513094125	0.035159486	36.6571	1.05735	-0.00462	11.2428	-999	0.01013	15.0145	0.610382
D	PH001_317.5	0	37.16962869	60.91775716	0.089559641	1.734114756	0.088939749	37.0032	0.223154	-0.02081	12.5663	-999	0.026556	14.5224	0.724959
D	PH001_317.5	0	40.45168944	58.11863625	0.321147814	1.172473519	-0.063947021	36.6124	0.745709	-0.02818	11.7685	-999	-0.01882	14.573	0.483138
D	PH001_317.5	0	48.94003352	48.88021893	0.20847822	1.981543177	-0.010273847	36.5926	0.008879	-0.03594	9.8699	-999	-0.00296	18.0758	0.799339
D	PH002_341.9	1.19227068	23.8739107	72.39724513	0.435570349	2.026550388	0.074452745	37.3642	0.440001	0.028688	16.0178	-999	0.023377	11.3795	0.890911
D	PH002_341.9	0	29.66514558	68.7302659	0.387185083	1.246408852	-0.029005414	36.941	0.505697	0.013861	14.5477	-999	-0.00894	12.0875	0.537883
D	PH002_341.9	0	34.70910165	64.09876086	0.054340629	1.110566302	0.027230558	37.0907	0.037705	0.061381	13.2409	-999	0.008236	13.5886	0.470298
D	PH002_341.9	0	25.78617608	72.73232398	0.215570411	1.273867422	-0.007937884	37.2027	0.385857	-0.00696	15.6964	-999	-0.00249	11.2217	0.559484
D	PH002_341.9	0.08648422	23.9012793	73.53947345	0.443641308	2.000749366	0.028372365	36.6551	0.430336	0.002313	16.1511	-999	0.008769	11.1506	0.865797
D	PH002_341.9	0	38.31916233	60.52620102	0.11636573	1.064635808	-0.026364888	36.4807	0.219447	0.017506	12.45	-999	-0.00793	14.4091	0.44835
D	PH002_341.9	0	35.07707075	63.73918588	0.108380164	1.036996744	0.038366461	37.094	0.086181	0.015688	13.1945	-999	0.011631	13.5355	0.440161
D	PH002_341.9	0	45.30476108	53.36174877	0.298755125	1.055077739	-0.020342708	35.9639	0.496054	-0.01199	10.699	-999	-0.00593	16.2271	0.430625
D	PH002_341.9	0	30.71075528	67.5257456	0.439145157	1.340483672	-0.016129703	36.7602	0.534167	0.008774	14.2958	-999	-0.00496	12.5354	0.577146
D	PH002_341.9	0	32.76354157	65.40506043	0.524871325	1.247278772	0.059247902	37.1231	0.647183	-0.02454	13.6696	-999	0.017973	12.647	0.529761
D	PH002_341.9	0	33.09669872	65.35635962	0.329358673	1.219224626	-0.001641639	36.9133	0.376818	-0.00648	13.669	-999	-0.0005	13.2086	0.51993
D	PH002_341.9	0	33.54425787	64.79921911	0.535313731	1.072937694	0.048271597	36.9054	0.495417	0	13.4527	-999	0.014578	12.5745	0.45368
D	PH002_343.2	0	33.00894174	65.35872713	0.787547574	0.751380981	0.093402577	37.0438	0.927379	-0.01551	13.5258	-999	0.028153	12.2152	0.317099
D	PH002_343.2	0	23.29710716	75.11804669	0.865890229	0.740411864	-0.021455939	36.8137	1.94517	-0.00141	15.7833	-999	-0.00658	8.69708	0.317922
D	PH002_343.2	0	27.43244803	70.12818551	1.007861712	1.28008899	0.151415759	37.1108	1.5586	-0.01599	14.8013	-999	0.046137	10.4109	0.546119
D	PH002_343.2	0	25.9997009	72.36850131	0.526356979	0.982340357	0.123100454	37.6866	0.531902	-0.00848	15.3595	-999	0.038154	10.9597	0.426296
D	PH002_343.2	0	32.82908224	65.69664893	0.64861028	0.820772972	0.004885577	37.5228	0.724853	0.000937	13.6484	-999	0.00148	12.5349	0.348127
D	PH002_343.2	0	31.90931143	66.26285466	0.795602877	0.930824851	0.101403305	37.2439	0.904671	0.015933	13.7773	-999	0.030633	11.9505	0.393708
D	PH002_343.2	0	22.69081054	76.07311925	0.450042188	0.701878526	0.084149503	37.1851	0.772717	-0.00094	16.3726	-999	0.026384	9.29906	0.30812
D	PH002_343.2	0	21.39402053	77.49846903	0.571422819	0.573281051	-0.037193438	37.5796	1.1474	0.001882	16.5095	-999	-0.01164	8.72598	0.251202
D	PH002_343.2	0	24.03358073	74.18519862	0.612876321	1.142671504	0.025672822	36.7306	1.04721	0.004228	15.9426	-999	0.007951	9.85085	0.495494

Appendix E: Microprobe analyses (garnets)

H1000	Sample	Almandine	Andradite	Grossular	Pyrope	Spessartine	Uvarovite	SiO2	TiO2	SnO2	Al2O3	V2O3	Cr2O3	FeO	MnO
H1001		%	%	%	%	%	%	%	%	%	%	%	%	%	%
D	PH002_343.2	0	23.25581112	74.98600532	0.686130131	1.062503741	0.009549682	37.8415	0.986935	-0.02498	16.0622	-999	0.00298	10.0301	0.464223
D	PH002_343.2	0	25.78696929	72.42396055	0.732424982	1.05021837	0.006426811	37.0157	1.02055	0.021122	15.3665	-999	0.001984	10.5076	0.453936
D	PH002_343.2	0	24.02521816	74.03713584	0.712927566	1.128080188	0.096638245	37.6162	1.02412	0.011278	15.7048	-999	0.029818	9.85425	0.487347
D	PH004_157.9	0	19.14776062	77.89325316	0.91973425	2.028327398	0.010924573	37.8445	0.275359	-0.01275	17.4859	-999	0.003486	8.85805	0.906212
D	PH004_157.9	0	18.18850344	78.49672468	1.501443095	1.872304687	-0.05897591	37.8465	1.39768	0.003766	17.4319	-999	-0.01872	8.02037	0.832102
D	PH004_157.9	0	21.11170501	75.86038528	1.217002883	1.80776441	0.003142409	37.7911	0.765921	0.036227	16.7549	-999	0.000995	9.19845	0.801444
D	PH004_157.9	0	17.94190857	78.55271407	1.696983227	1.79876099	0.009633143	36.9592	1.84064	-0.00802	17.3618	-999	0.003002	7.30755	0.784847
D	PH004_157.9	0	18.81747437	76.76236855	2.631959171	1.788197912	0	37.2506	1.93169	-0.00614	16.9411	-999	0	7.3059	0.778892
D	PH004_157.9	0	27.67869835	55.98994202	14.54360501	1.722138598	0.065616027	40.1398	1.41025	0.012748	14.0354	-999	0.019001	7.57749	0.698238
D	PH004_157.9	0	17.22035793	79.67832338	1.402779854	1.695375971	0.003162859	37.5348	1.17065	-0.00189	17.798	-999	0.001001	7.31574	0.751258
D	PH004_157.9	0	18.84359415	78.25957159	1.411737624	1.552104057	-0.067007418	37.887	1.13472	0.008945	17.2784	-999	-0.02125	8.63998	0.689169
D	PH004_157.9	0	19.50423917	77.67305529	1.130485118	1.627393554	0.064826873	37.3742	1.10758	-0.01745	17.0502	-999	0.020429	8.71651	0.718048
D	PH004_157.9	0	26.802461	69.80317348	1.69085803	1.626518755	0.049888734	36.7288	1.64192	-0.00755	16.8423	-999	0.015481	7.8472	0.705269
D	PH001_309.7	0	33.46719384	64.52440973	0.230385169	1.707166145	0.070845116	36.8376	1.90625	0.01155	15.9135	-999	0.022005	9.82752	0.742431
D	PH001_309.7	0	37.11958349	60.62390437	0.613451103	1.604300054	0.038760984	37.2738	0.511782	0.006468	13.6725	-999	0.012182	11.0291	0.705957
D	PH001_309.7	0	28.66801742	69.79923667	0.529825524	1.025096378	-0.022175995	37.3295	1.19435	0.007872	16.3072	-999	-0.00698	8.53067	0.451758
D	PH001_309.7	0	23.58705187	75.37343829	0.669689312	0.403938525	-0.034117995	38.2027	0.808894	0.008822	17.57	-999	-0.01099	7.18292	0.182179
D	PH001_309.7	0	29.09551543	69.38898125	0.432671153	1.076631824	0.006200347	37.5669	0.577826	0.011587	16.8374	-999	0.001964	8.71294	0.477487
D	PH001_309.7	0	37.37211421	60.4605293	0.537419006	1.580466607	0.049470876	37.4696	0.452888	-0.00185	15.4492	-999	0.015593	11.1363	0.697484
D	PH001_309.7	0	37.60826858	60.38391075	0.46015707	1.546114073	0.001549521	37.4354	0.440855	-0.03107	15.5127	-999	0.000487	11.1745	0.680365
D	PH001_309.7	0	35.6946491	62.13488828	0.471629073	1.632058403	0.066775142	37.4012	1.21075	0.010169	15.7149	-999	0.020986	10.6055	0.718157
D	PH001_309.7	0	36.75339196	61.09781716	0.420561557	1.628537917	0.099691407	37.1209	0.48657	0.009248	15.8289	-999	0.031203	10.8755	0.713683
D	PH001_309.7	0	35.01123282	63.06273965	0.214298567	1.705391767	0.006337196	36.5498	1.92483	0.034163	15.4712	-999	0.001953	10.2006	0.735865
D	PH001_309.7	0	30.628828	67.83864145	0.534199294	0.982912212	0.015419046	37.7201	0.678016	0.004633	16.5101	-999	0.004904	9.20951	0.4377
D	PH001_309.7	0	29.53339914	68.76881752	0.633929637	1.118990439	-0.05513674	37.5133	1.36221	0.01435	16.0757	-999	-0.01744	8.83145	0.495565
D	ML322_114.1	0	32.96107609	65.18172793	0.859596136	1.063467693	-0.065867848	37.6316	0.800031	0.010643	15.7183	-999	-0.0209	9.88752	0.472461
D	ML322_114.1	0	33.71182124	64.13631614	0.90530245	1.218363871	0.0281963	37.0312	0.994033	-0.00232	15.5345	-999	0.008804	9.95138	0.53264
D	ML322_114.1	0	32.24941835	65.74776065	0.893165105	1.146034586	-0.036378698	37.3283	1.04778	0.031922	15.7265	-999	-0.01145	9.59607	0.505039
D	ML322_114.1	0	32.02759506	65.98535954	0.922745695	1.073805932	-0.009506233	37.3029	0.796252	0.001852	15.9977	-999	-0.00299	9.52358	0.472887
D	ML322_114.1	0	29.99475911	67.78405652	0.914918117	1.301629357	0.004636898	37.624	0.988769	-0.01532	16.4315	-999	0.001471	8.99588	0.578151
D	ML322_114.1	0	26.80328563	71.19950699	0.737584206	1.275711111	-0.016087932	36.7858	0.877832	0.010662	17.3152	-999	-0.00499	7.85962	0.554015
D	ML322_114.1	0	29.66389337	68.76000982	0.607737035	0.962044457	0.006315316	36.883	1.12893	-0.01439	16.3764	-999	0.001964	8.72143	0.4189
D	ML322_114.1	0	28.89881802	69.47842029	0.608716681	0.996620771	0.017424245	36.7825	1.15797	-0.01532	16.5976	-999	0.005404	8.47334	0.432773
D	ML322_114.1	0	26.9970854	71.18071584	0.744211205	1.050072412	0.027915143	37.6166	1.34653	-0.02416	16.8012	-999	0.008854	8.09524	0.466324
D	ML322_114.1	0	31.54728471	65.21768404	1.529350746	1.741938268	-0.036257758	37.4201	0.95327	0.005553	15.7318	-999	-0.01144	9.41023	0.769532
D	ML322_114.1	0	28.71313091	69.58888235	0.682453247	0.940046832	0.075486661	37.8106	1.35385	0.004631	16.26	-999	0.024066	8.65421	0.419616
D	PH004_140.4	0	55.50444311	42.24581181	0.82885177	1.291562934	0.129330374	36.5653	0.786499	0.11605	9.78339	-999	0.039874	16.1782	0.557537
D	PH004_140.4	0	56.50824245	41.38561739	1.094378897	1.011761263	0	36.7143	1.15689	0.07197	9.3625	-999	0	16.5379	0.438533
D	PH004_140.4	0	54.11236687	43.46186253	0.966437241	1.319193552	0.1401398	37.0175	0.712552	0.089972	10.065	-999	0.043741	15.9675	0.576507
D	PH004_140.4	0	56.38312425	41.45819758	0.982815808	1.116426564	0.059435793	36.4182	1.11339	0.042182	9.45399	-999	0.018251	16.3682	0.479996
D	PH004_140.4	0	53.93528714	43.94478558	0.725234255	1.321574178	0.073118853	37.4114	0.445678	0.122161	10.2925	-999	0.023065	16.0846	0.583693
D	PH004_140.4	0	55.17434532	42.7572061	0.8702948	1.087043413	0.111110365	36.9148	0.82752	0.134417	9.42256	-999	0.034584	16.2357	0.473736
D	PH004_140.4	0	55.16599481	42.5495644	0.964516534	1.284489247	0.035435004	36.9736	0.7998	0.102786	9.80491	-999	0.011047	16.2591	0.560675
D	PH004_140.4	0	55.85739404	42.03258582	0.9568776	1.114364955	0.038777585	36.7165	1.05802	0.086199	9.35599	-999	0.012005	16.3484	0.483034
D	PH004_140.4	0	54.59939622	43.12767189	0.933341138	1.211222227	0.128368526	36.8633	0.832388	0.086288	9.94107	-999	0.0399	16.0441	0.527117
D	PH004_140.4	0	56.05599097	41.56982593	0.875304568	1.3436496	0.155228932	37.0208	0.80887	0.123351	9.36239	-999	0.048455	16.5425	0.587247
D	PH004_41.8	0	46.03735366	50.48263043	0.777828775	2.600701966	0.101485171	37.6192	0.4761	0.014308	14.7398	-999	0.030476	13.0701	1.09349
D	PH004_41.8	0	48.020299	47.3829228	0.650931162	3.892553491	0.053293541	37.5531	0.299236	0.030482	16.1107	-999	0.015454	13.1645	1.58041
D	PH004_41.8	0	49.90751104	46.36786072	0.629063374	3.023014161	0.072551348	37.8524	0.462359	0.021229	15.1704	-999	0.02123	13.8065	1.23855
D	PH004_41.8	0	27.92035456	70.16426972	1.138326823	0.746228838	0.030820061	37.9583	1.15216	0	16.7396	-999	0.009829	8.41802	0.333209
D	PH004_41.8	0	27.23879334	70.76199117	1.309794742	0.742053614	-0.052632862	38.2304	1.59699	-0.02277	16.1908	-999	-0.01695	8.29304	0.334593
D	PH004_41.8	0	45.96461023	50.5072842	0.7451611	2.67124655	0.11169792	37.934	0.504654	0.016156	15.0951	-999	0.033378	12.9853	1.11763
D	PH004_41.8	0	51.53720356	46.39990552	1.096959101	0.978484963	-0.012553144	37.413	0.908517	0.005976	10.8201	-999	-0.00396	15.3701	0.432181
D	PH004_41.8	0	26.6761031	70.96115877	1.575526108	0.765887516	0.021324499	38.3816	1.68082	-0.00139	16.6273	-999	0.006887	8.14492	0.346326

Appendix E: Microprobe analyses (garnets)

H1000	Sample	Almandine	Andradite	Grossular	Pyrope	Spessartine	Uvarovite	SiO2	TiO2	SnO2	Al2O3	V2O3	Cr2O3	FeO	MnO
H1001		%	%	%	%	%	%	%	%	%	%	%	%	%	%
D	PH004_41.8	0	28.54352076	69.55587639	1.163492227	0.752712254	-0.015601627	37.8564	0.909822	0.006954	16.5259	-999	-0.00498	8.61351	0.336401
D	PH004_41.8	0	47.42656995	48.94486521	0.786298807	2.853910743	-0.011644706	37.9117	0.410878	-0.01992	15.1368	-999	-0.00346	13.3224	1.18729
D	PH004_135.2	0	46.21782	51.45411341	1.400445605	0.837698882	0.089922103	37.0876	1.77821	0.001382	11.7278	-999	0.02812	13.6638	0.36678
D	PH004_135.2	0	45.99468816	51.77455594	1.570324795	0.587274711	0.073156398	37.0523	1.8139	0.001842	11.275	-999	0.0228	13.552	0.256267
D	PH004_135.2	0	50.68079006	47.07526338	1.532045361	0.708744686	0.003156511	37.1241	1.46694	0.068091	10.1343	-999	0.000967	14.6783	0.304003
D	PH004_135.2	0	46.27782603	50.99308445	1.796000315	0.65521636	0.277872851	36.326	3.08604	0	10.9556	-999	0.084917	13.3701	0.280351
D	PH004_135.2	0	50.14341549	47.47709461	1.559945466	0.822755698	-0.003211259	37.0297	1.56063	0.007362	10.3109	-999	-0.00099	14.6146	0.35514
D	PH004_135.2	0	38.09603765	59.44436098	1.275934492	1.185248607	-0.001581721	37.8637	1.45534	0.006011	14.284	-999	-0.0005	11.385	0.524588
D	PH004_135.2	0	35.18490316	62.22901816	1.481073137	1.131712665	-0.026707119	37.799	1.72696	0.005088	14.5967	-999	-0.00846	10.5369	0.501936
D	PH004_135.2	0	37.22288257	60.20731825	1.398984318	1.136933428	0.033881434	38.0398	1.58521	0.000925	14.2962	-999	0.01074	11.1549	0.504599
D	PH004_135.2	0	40.27324989	57.51131167	1.049186846	1.13072666	0.035524929	37.8352	1.00711	-0.00278	13.8772	-999	0.011196	11.9994	0.498949
D	PH004_135.2	0	34.75589056	62.60733847	1.47894109	1.098847657	0.058982226	37.8622	2.02136	-0.013	14.4946	-999	0.018592	10.3573	0.484966
D	PH004_339.1	0	52.59151964	45.59736647	0.644425421	1.065186253	0.10502213	37.3406	1.01545	0.015182	10.6976	-999	0.031808	15.5808	0.467364
D	PH004_339.1	0	38.66280963	60.01680474	0.330708155	1.019430593	-0.02975311	38.4631	0.460758	-0.02089	14.4233	-999	-0.00945	11.6093	0.453342
D	PH004_339.1	0	50.17934935	47.8360838	0.542487864	1.403174298	0.038904686	37.8478	0.611065	-0.0037	12.1782	-999	0.012074	14.7227	0.609719
D	PH004_339.1	0	39.32129103	59.51006974	0.485393086	0.728395782	-0.045149639	37.9046	0.430831	-0.01021	13.9512	-999	-0.01443	11.881	0.325948
D	PH004_339.1	0	52.62941682	45.73500926	0.570581345	1.104267864	-0.039275289	37.3836	0.453077	-0.00786	10.9819	-999	-0.01238	15.6835	0.487354
D	PH004_339.1	0	51.70668673	46.49143368	0.582242118	1.185960809	0.033676672	37.4046	0.598929	0.030852	11.3012	-999	0.01061	15.4009	0.523149
D	ML152_215.1	0	79.18173279	18.73039782	0.580489989	1.575723726	-0.068344321	36.3373	-0.02963	0.738223	4.21068	-999	-0.02054	22.4976	0.663051
D	ML152_215.1	0	80.90334584	17.18671269	0.90506778	0.943221979	0.061651705	36.3919	0.308014	0.862824	3.80165	-999	0.018356	22.7726	0.393202
D	ML152_215.1	0	70.74719052	26.88050963	1.142746781	1.209113553	0.020439511	36.3722	0.708505	0.62841	5.91347	-999	0.006164	20.1704	0.510538
D	ML152_215.1	0	74.72411492	22.77389545	1.247945293	1.263946817	-0.009902484	36.1574	1.32155	0.5451	5.03577	-999	-0.00294	20.9738	0.525413
D	ML152_215.1	0	74.22666267	23.76604193	0.843004021	1.094052828	0.07023855	36.4154	0.482185	0.68789	5.22112	-999	0.02127	21.2503	0.463873
D	ML152_215.1	0	81.66275715	16.28304362	0.470241862	1.504302576	0.07965479	35.6534	0.042945	0.783932	3.88909	-999	0.023946	23.2091	0.633177
D	ML152_215.1	0	81.65841715	16.06635511	0.746830968	1.486636101	0.041760325	36.2281	0.00305	0.818553	3.72578	-999	0.012675	23.4314	0.631768
D	ML152_215.1	0	79.44494823	18.80173677	0.864436476	0.966292268	-0.077413746	36.1484	0.279381	0.859861	4.19597	-999	-0.02347	22.7706	0.410178
D	ML322_117.7	0	26.71369772	72.05079761	0.807651865	0.39430109	0.033551711	38.646	0.87461	-0.00798	16.4926	-999	0.010933	8.22947	0.179896
D	ML322_117.7	0	28.56102124	70.32634256	0.748003919	0.377006905	-0.012374628	38.6236	0.839441	-0.02533	15.9546	-999	-0.00403	8.79346	0.171906
D	ML322_117.7	0	32.43434557	66.47584585	0.568734725	0.501282922	0.019790936	38.5023	0.380838	0.004675	15.0514	-999	0.006425	9.95463	0.227855
D	ML322_117.7	0	27.96848583	71.00216893	0.628119286	0.398177897	0.003048051	38.5984	0.556545	-0.01736	16.1297	-999	0.000992	8.60541	0.181441
D	ML322_117.7	0	42.55996856	56.64192954	0.34834601	0.422224573	0.027531319	38.0161	0.296856	-0.02383	12.9638	-999	0.008825	12.8974	0.189496
D	ML322_117.7	0	39.17648997	59.97245072	0.478355129	0.34665248	0.026051702	38.0447	0.36895	0.015387	13.7906	-999	0.008357	11.881	0.155696
D	ML322_117.7	0	40.36061628	58.69634054	0.504372081	0.411156825	0.027514272	38.1	0.434873	-0.043	13.2745	-999	0.008839	12.2579	0.184936
D	ML322_117.7	0	33.37466927	65.73461308	0.472986487	0.498005735	-0.080274567	38.6048	0.511335	0.024299	14.767	-999	-0.02613	10.2705	0.226968
D	ML322_117.7	0	28.05800302	71.05614442	0.471135634	0.44256421	-0.027847282	38.5856	0.279879	-0.00563	16.2248	-999	-0.00906	8.63009	0.2016
D	ML322_117.7	0	30.22968336	68.66920631	0.634025114	0.454911431	0.012173782	38.6746	0.708941	0.002806	15.4026	-999	0.003962	9.30113	0.207293
D	ML322_117.7	0	28.22969915	70.76131035	0.591214729	0.440989054	-0.023213287	38.5736	0.705748	0.008427	16.1934	-999	-0.00755	8.6802	0.20082
D	PH002_352.8	0	61.20282828	37.66774565	0.363030882	0.715758002	0.050637191	36.913	1.59749	-0.00418	7.9383	-999	0.015466	17.6723	0.306086
D	PH002_352.8	0	53.83448213	44.75497261	0.436816884	0.952102965	-0.021625411	37.4591	0.883755	-0.00698	10.0005	-999	0.006794	15.9895	0.418807
D	PH002_352.8	0	60.86001554	38.11778997	0.362539719	0.707408271	0.047753507	37.31	1.19634	-0.00697	8.21847	-999	-0.01493	17.9887	0.309666
D	PH002_352.8	0	59.43143105	39.44794735	0.312810346	0.776983988	0.030827258	37.1909	1.18451	-0.00186	8.64461	-999	0.009667	17.6192	0.341144
D	PH002_352.8	0	59.45989178	38.63347478	0.674454911	1.006449708	0.225728823	36.8292	1.36174	0.063338	8.43523	-999	0.070097	17.4562	0.437596
D	PH002_352.8	0	59.49984563	39.39693625	0.302053251	0.853896223	-0.052731352	36.9529	1.29349	0.000925	8.63619	-999	-0.01643	17.5266	0.372514
D	PH002_352.8	0	60.40951652	38.60233887	0.176927484	0.775574367	0.035642757	36.9777	1.31056	0.0245	8.42973	-999	0.011113	17.8065	0.338573
D	PH002_352.8	0	56.29171615	41.93602282	0.474969209	1.182927538	0.114364284	37.2238	0.992595	0.046305	9.55448	-999	0.035839	16.6772	0.51903
D	PH002_352.8	0	58.95818548	40.07027588	0.128724127	0.7767096	0.066104914	37.2975	0.788044	-0.01626	8.9605	-999	0.020789	17.529	0.342001
D	PH002_352.8	0	59.71150519	39.27608319	0.158994297	0.788294084	0.065123236	36.9528	0.638855	0.026368	8.71503	-999	0.020291	17.5889	0.343894
D	PH002_352.8	0	58.64260729	40.41940424	0.131340069	0.792702739	0.013945661	37.0109	0.915042	0.031458	8.73411	-999	0.004352	17.3012	0.346361
D	PH002_352.8	0	58.77657241	40.31396218	0.154174478	0.742985175	0.012305757	37.2881	0.794687	0.021289	8.92337	-999	0.003869	17.4706	0.327069
D	PH002_352.8	0	58.55053161	40.55720307	0.138573039	0.769569928	-0.015877646	37.1983	0.780234	-0.01859	8.91634	-999	-0.00498	17.3615	0.337956
D	PH002_352.8	0	57.51024372	41.40739809	0.195395179	0.789851086	0.09711193	37.2508	0.936571	-0.0093	9.0529	-999	0.030502	17.0771	0.347352
D	ML120_206.4	0	60.51348384	36.4826316	0.76109558	2.161695249	0.081093732	36.3136	0.276917	0.428225	8.55501	-999	0.02483	17.5168	0.926729
D	ML120_206.4	0	66.23282998	28.57420134	0.269317722	4.975779972	-0.052129017	36.1855	0.299886	0.175725	11.0624	-999	-0.01521	18.2699	2.03273
D	ML120_206.4	0	54.47148159	42.91481634	0.730707963	1.863179121	0.019814987	37.3423	0.19113	0.278557	10.2125	-999	0.006239	16.2145	0.821381

Appendix E: Microprobe analyses (garnets)

H1000	Sample	Almandine	Andradite	Grossular	Pyrope	Spessartine	Uvarovite	SiO2	TiO2	SnO2	Al2O3	V2O3	Cr2O3	FeO	MnO
H1001		%	%	%	%	%	%	%	%	%	%	%	%	%	%
D	ML120_206.4	0	63.57314996	33.86117916	0.951836045	1.595404934	0.018429901	36.7896	0.528254	0.404095	7.5769	-999	0.005717	18.6437	0.692923
D	ML120_206.4	0	65.13277192	32.38008648	0.807900476	1.641933904	0.03730722	36.3166	0.331655	0.395294	8.0191	-999	0.011424	18.8555	0.703963
D	ML120_206.4	0	62.8305307	34.52706075	0.898827504	1.772310873	-0.02872983	36.5334	0.374775	0.327843	8.44088	-999	-0.00885	18.2976	0.764397
D	ML120_206.4	0	55.02687672	41.99836403	1.006816965	1.958680483	0.009261803	36.866	0.375431	0.285295	10.0237	-999	0.002879	16.1709	0.852469
D	ML120_206.4	0	63.12017143	34.16263477	0.621408393	2.142936008	-0.047150599	37.1404	0.167957	0.269869	8.39167	-999	-0.01475	18.6675	0.938605
D	ML120_206.4	0	63.28683757	33.89865011	0.685953845	2.114808457	0.013750021	37.1402	0.186857	0.246565	8.43277	-999	0.004285	18.6455	0.922757
D	ML120_206.4	0	66.92954747	30.29741965	0.866342378	1.919426881	-0.012736377	36.5954	0.459375	0.25665	7.42923	-999	-0.00393	19.5244	0.829253
D	ML258_176.0	0	30.13509717	66.96151841	0.898886583	1.998407971	0.006089867	38.1121	0.779605	-0.00093	15.9883	-999	0.001957	9.15522	0.899158
D	ML258_176.0	0	30.28290728	66.60124694	0.892145818	2.171938411	0.051761549	38.168	0.795969	-0.01808	15.9745	-999	0.016627	9.19639	0.976839
D	ML258_176.0	0	33.22779639	64.32547688	0.819667875	1.581444825	0.04561404	38.0751	0.920649	0.015698	14.9376	-999	0.014644	10.085	0.71086
D	ML258_176.0	0	31.9698532	65.5113752	0.746065116	1.757526732	0.015179747	38.1741	0.735852	-0.01853	15.7327	-999	0.004886	9.72843	0.792063
D	ML258_176.0	0	24.98871047	72.78715824	0.728177354	1.435670199	0.060283732	38.6799	0.26535	0.009269	17.1685	-999	0.019661	7.70482	0.655585
D	ML258_176.0	0	30.14913422	66.97677631	0.887185813	1.920770448	0.066133212	37.7227	0.800898	0.003235	15.986	-999	0.021035	9.0659	0.855396
D	ML258_176.0	0	44.34393159	53.08142128	1.038222907	1.514625772	0.021798449	36.8607	1.79883	-0.02397	11.8734	-999	0.006775	13.0296	0.65911
D	ML258_176.0	0	24.42287184	73.72982964	0.901485895	0.902073754	0.04373887	38.6825	0.675124	-0.02275	16.9617	-999	0.014266	7.53086	0.411951
D	ML258_176.0	0	21.76569019	61.11337055	16.61201698	0.46004365	0.048878634	36.0566	3.53575	-0.00557	12.7567	-999	0.011889	5.00509	0.156673
D	ML258_176.0	0	22.01426237	60.53385994	16.97462264	0.53367167	-0.056416624	35.7926	3.91642	-0.00834	12.5083	-999	-0.01348	4.97279	0.178536
D	ML112_172.0	0	34.98382927	58.12149233	0.545557402	6.376648716	-0.027527723	38.3021	0.271007	0.036028	16.9854	-999	-0.00841	10.1043	2.72764
D	ML112_172.0	0	37.61427766	57.64583516	0.47945027	4.136899695	0.123537221	38.3674	0.563456	0.012459	15.6468	-999	0.038366	11.0437	1.79884
D	ML112_172.0	0	39.44683603	56.20482971	0.488497482	3.866159112	-0.006322334	37.9619	0.663493	0.004608	14.5486	-999	-0.00198	11.6792	1.69526
D	ML112_172.0	0	37.4555657	57.84276586	0.372408395	4.28506137	0.044198673	38.0535	0.527045	-0.00648	15.7116	-999	0.013598	10.8942	1.84583
D	ML112_172.0	0	36.88182233	58.33830187	0.494484615	4.228902982	0.056488202	38.0181	0.534136	0.017992	15.4894	-999	0.017486	10.7934	1.83286
D	ML112_172.0	0	39.90085412	56.92210119	0.42549268	2.726974846	0.024573526	38.0346	0.471553	0.023964	14.2301	-999	0.007759	11.9106	1.20556
D	ML112_172.0	0	34.04242718	61.63728343	0.426295702	3.889300117	0.004693566	38.3305	0.376633	-0.01436	16.68	-999	0.001461	10.018	1.69507
D	ML112_172.0	0	40.4654658	56.3580239	0.270246485	2.907827725	-0.001563912	37.5124	0.362232	0.004147	14.3697	-999	-0.00049	11.9862	1.27562
D	ML112_172.0	0	40.57707979	56.21718465	0.393377722	2.789291705	0.023066126	37.7736	0.308767	0.015667	14.113	-999	0.007269	12.0891	1.23073
D	ML112_172.0	0	39.6198483	56.94423595	0.346597589	3.116080451	-0.026762297	37.8765	0.446372	0.007837	14.7047	-999	-0.00841	11.7706	1.37104
D	PH001_308.1	0	25.69426257	73.28970556	0.160843616	0.881299981	-0.02611173	38.7852	0.16746	-0.01586	17.2828	-999	-0.0085	7.90738	0.401676
D	PH001_308.1	0	22.92763684	75.70974307	0.317546917	1.071109478	-0.026036305	38.8548	0.407425	0.004658	17.8873	-999	-0.00851	7.08472	0.490177
D	PH001_308.1	0	25.94691014	73.36498851	0.410952468	0.321859379	-0.0447105	38.4891	0.327845	0.008374	16.814	-999	-0.01451	7.9608	0.146249
D	PH001_308.1	0	23.85953202	75.15667279	0.537722401	0.421967427	0.024105362	38.9173	0.886545	-0.00699	16.8808	-999	0.00791	7.40181	0.19387
D	PH001_308.1	0	26.87659537	72.00811753	0.154955014	0.99585556	-0.035523474	38.4986	0.118501	0.035351	16.998	-999	-0.01149	8.21849	0.450993
D	PH001_308.1	0	31.10652144	67.8199447	0.474693427	0.560446275	0.038394156	37.945	1.23546	-0.00558	15.2113	-999	0.012284	9.40891	0.25106
D	PH001_308.1	0	35.58850365	63.42916006	0.258851331	0.670334529	0.05315043	38.2235	0.690598	-0.02183	14.2851	-999	0.01713	10.8436	0.30249
D	PH001_308.1	0	31.11110879	67.85577703	0.287710122	0.759270225	-0.01386617	38.4034	0.569368	0.015316	15.2395	-999	-0.00449	9.52398	0.344235
D	PH001_308.1	0	33.36176211	65.7120713	0.377852823	0.490847955	0.057465809	38.4509	0.792655	0.010199	14.6538	-999	0.018631	10.2256	0.222814
D	PH001_308.1	0	31.41570794	67.71476633	0.252898605	0.580392245	0.036234883	38.5762	0.469872	-0.03257	15.4352	-999	0.011786	9.6605	0.26432
D	ML109_112.0	0	75.05531206	22.79382571	0.734411517	1.497529383	-0.081078676	36.4347	0.612234	0.362774	5.07884	-999	-0.02453	21.4677	0.634359
D	ML109_112.0	0	74.92552425	22.36479117	1.009892393	1.602694204	0.097097988	35.8314	0.821201	0.516213	5.05805	-999	0.029313	21.3842	0.677438
D	ML109_112.0	0	75.53303956	22.26418523	0.903088223	1.255854131	0.043832852	36.0507	0.52831	0.322032	4.94703	-999	0.013236	21.5629	0.530964
D	ML109_112.0	0	75.27924857	22.66350969	0.841965376	1.256157739	-0.040881375	36.3925	0.509868	0.372321	4.98116	-999	-0.01226	21.3429	0.527446
D	ML109_112.0	0	77.25673591	20.50961126	1.019344438	1.143456469	0.070851925	36.1989	0.509798	0.377015	4.56283	-999	0.021257	21.9129	0.480329
D	ML109_112.0	0	72.16319201	25.48003629	0.889120378	1.537110465	-0.06945914	36.0274	0.549564	0.486045	5.74364	-999	-0.0211	20.7244	0.653773
D	ML109_112.0	0	71.03165382	26.18985292	0.920295528	1.845743337	0.012454394	36.1333	0.636987	0.363987	5.91695	-999	0.003794	20.4569	0.787254
D	ML109_112.0	0	67.77710317	29.60396281	0.650383929	1.902405182	0.066144906	36.645	0.659935	0.245637	6.65946	-999	0.020421	19.7823	0.822342
D	ML109_112.0	0	70.61691125	26.84585676	0.805071479	1.785634425	-0.05347391	36.4173	0.636096	0.363078	5.982	-999	-0.0162	20.2253	0.757416
D	ML109_112.0	0	70.02161883	27.12044067	0.913095446	1.852078365	0.092766692	36.1779	0.650088	0.371309	6.05039	-999	0.027998	19.9793	0.782642
D	ML265_185.3	0	17.30371492	79.3543317	2.007947836	1.297436724	0.036568814	38.5742	1.47312	-0.00373	18.1538	-999	0.011894	5.32071	0.590843
D	ML265_185.3	0	18.75995542	77.30937588	1.977246575	1.916747501	0.036674622	38.3853	1.42205	-0.00279	18.0429	-999	0.01187	5.74024	0.868598
D	ML265_185.3	0	19.7476181	76.61095822	1.681889614	1.920055846	0.039478222	38.6154	1.07668	0.003717	18.4303	-999	0.012854	6.07867	0.875313
D	ML265_185.3	0	17.2358335	79.15285723	2.151362351	1.532950137	-0.07303218	38.1611	1.93148	-0.02048	18.128	-999	-0.02349	5.24308	0.690618
D	ML265_185.3	0	19.10335123	77.37114889	2.130535725	1.344112347	0.050851807	38.2357	2.19584	0.020872	17.415	-999	0.01633	5.79966	0.604344
D	ML265_185.3	0	20.30067899	76.3042325	1.53292695	1.813287071	0.048874494	38.3742	0.920791	0.019977	17.9975	-999	0.015814	6.20988	0.821476
D	ML265_185.3	0	18.60143837	77.56962441	1.935773501	1.891627953	0.001535758	38.2263	1.8074	-0.0121	17.7994	-999	0.000495	5.66816	0.853664

Appendix E: Microprobe analyses (garnets)

H1000	Sample	Almandine	Andradite	Grossular	Pyrope	Spessartine	Uvarovite	SiO2	TiO2	SnO2	Al2O3	V2O3	Cr2O3	FeO	MnO
H1001		%	%	%	%	%	%	%	%	%	%	%	%	%	%
D	ML265_185.3	0	20.24904602	76.05045696	1.703636097	1.975515803	0.021345116	38.4381	0.847792	-0.02141	18.2177	-999	0.006918	6.2044	0.896461
D	ML265_185.3	0	20.48744523	76.06750739	1.419152281	2.01078462	0.015110471	38.7651	0.774453	0.002788	18.3232	-999	0.004939	6.33085	0.920228
D	ML243_143.7	0	45.12833289	52.53295717	0.831594008	1.547840778	-0.04072484	37.7818	0.759034	0.050701	11.6587	-999	-0.01289	13.5038	0.685944
D	ML243_143.7	0	45.31800652	52.06983506	0.728733754	1.885008493	-0.001583825	37.4406	0.987901	0.019353	11.6984	-999	-0.0005	13.5253	0.833192
D	ML243_143.7	0	47.71387837	49.94451956	0.793241914	1.539209112	0.009151041	37.6103	0.621228	0.034548	11.5729	-999	0.002902	14.3049	0.683429
D	ML243_143.7	0	41.61740517	56.00124309	0.835935646	1.621442535	-0.076026434	37.174	1.07044	-0.01157	12.9424	-999	-0.02383	12.3324	0.71159
D	ML243_143.7	0	45.95136567	51.72183772	0.836408329	1.476555736	0.013832544	37.3993	0.984628	0.022125	11.6122	-999	0.004362	13.6992	0.651932
D	ML243_143.7	0	42.85668638	54.7068754	0.901923981	1.519276955	0.01523728	37.9081	1.07988	0.021222	12.2176	-999	0.004858	12.9176	0.678197
D	ML243_143.7	0	41.48070677	56.07677448	1.016172477	1.50974807	-0.083401803	37.4316	1.23523	0.03598	12.4055	-999	-0.02632	12.3757	0.667089
D	ML243_143.7	0	45.84567378	52.0505427	0.924637699	1.257768863	-0.078623039	37.3944	0.796106	0.013362	11.6227	-999	-0.02479	13.6659	0.55526
D	ML243_143.7	0	26.36534825	71.95400791	0.710069426	0.940186404	0.030388005	38.4388	1.26655	-0.03488	16.2982	-999	0.009849	8.07861	0.426651
D	ML243_143.7	-999	-999	-999	-999	-999	-999	37.5083	0.945366	0.032259	12.175	-999	-999	13.119	0.952427
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.4894	0.829946	0.005474	16.6153	-999	-999	8.11873	0.398571
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.509	0.89023	0.025532	16.3212	-999	-999	8.43438	0.433986
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.5836	0.815788	-0.00229	16.4983	-999	-999	8.31001	0.448968
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.3963	0.938757	-0.01554	16.1788	-999	-999	8.40831	0.386276
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.6887	0.431272	0.027821	16.7747	-999	-999	8.3721	0.751914
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.8331	0.341781	-0.00686	17.2646	-999	-999	7.50583	0.850092
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.479	0.753488	0.037854	16.2684	-999	-999	8.4106	0.451872
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.2885	0.601879	0.025984	16.0192	-999	-999	8.91195	0.672895
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.5115	0.861601	-0.0201	15.8592	-999	-999	9.08366	0.445638
D	ML258_199.2	-999	-999	-999	-999	-999	-999	38.809	0.378858	-0.01785	17.7988	-999	-999	7.30606	1.05514
D	PH003_349.5	-999	-999	-999	-999	-999	-999	37.9841	2.45419	-0.01	15.5015	-999	0.009355	8.47206	0.315209
D	PH003_349.5	-999	-999	-999	-999	-999	-999	37.7586	2.84696	0.004763	15.4186	-999	0.032596	8.33364	0.338349
D	PH003_349.5	-999	-999	-999	-999	-999	-999	37.28	2.05652	-0.00635	13.8464	-999	0.045466	10.7323	0.454972
D	PH003_349.5	-999	-999	-999	-999	-999	-999	37.7787	3.47598	-0.02971	15.463	-999	-0.0054	7.99961	0.41114
D	PH003_349.5	-999	-999	-999	-999	-999	-999	38.5432	2.40216	0.000882	16.6592	-999	0.002091	6.67404	0.269108
D	PH003_349.5	-999	-999	-999	-999	-999	-999	38.6529	1.88015	-0.00586	16.5201	-999	-0.00435	7.29889	0.290799
D	PH003_349.5	-999	-999	-999	-999	-999	-999	38.6374	0.970545	-0.01331	15.9888	-999	0.011779	8.77031	0.300415
D	PH003_349.5	-999	-999	-999	-999	-999	-999	38.1814	2.28757	-0.03522	16.0386	-999	-0.00242	7.63105	0.312679
D	PH003_349.5	-999	-999	-999	-999	-999	-999	38.1757	0.833544	-0.02754	15.2066	-999	-0.00165	10.0088	0.281359
D	PH003_349.5	-999	-999	-999	-999	-999	-999	37.6606	3.15537	-0.02132	14.3601	-999	-0.0028	9.08899	0.310423
EOF															

Appendix E: Microprobe analyses (garnets)

Sample	MgO	CaO	Na2O	K2O	P2O5	Cl	F	O	Total	Si	Ti	Sn	Al	V	Cr	Fe	Mn
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
ML200_361.5gt	0.101615	33.0175	0.016476	-0.00354	0.008644	-0.00543	0.176294	-0.07302	98.225346	16.9965	0.266465	0.157741	5.06527	<0.026	<0.023	13.465	0.818773
ML200_361.5gt	0.082099	31.7813	0.006372	0.001243	0.005965	-0.017136	0.388005	-0.16726	99.244537	17.0891	0.364122	0.094535	5.49251	<0.024	<0.021	13.9216	1.16775
ML200_361.5gt	0.086125	32.3019	0.0162	-0.00089	0.024937	0.003985	0.261051	-0.11083	99.797036	17.2247	0.254982	0.074939	5.94926	0.056698	<0.023	13.3091	1.06663
ML200_361.5gt	0.099219	33.2784	-0.00536	-0.00355	0.001518	-0.00125	0.101678	-0.04253	99.867253	17.3218	0.188466	0.125348	5.53419	0.035003	0.026799	13.4559	0.812826
ML200_361.5gt	0.092728	33.138	0.007123	0.000551	0.005447	-0.00418	0.13344	-0.05525	99.266965	17.2564	0.232232	0.149399	5.26284	0.038093	<0.022	13.4148	0.910851
ML200_361.5gt	0.127135	33.4611	0.016902	0.006728	0.013305	0.003897	0.21785	-0.09262	99.686141	17.0604	0.428366	0.215257	4.27203	0.03892	0.066755	14.9223	0.791068
ML200_361.5gt	0.074998	32.0806	0.00662	0.005382	-0.00062	-0.0023	0.4594	-0.19293	99.180443	17.0351	0.418511	0.103685	5.58118	0.029902	<0.021	13.504	1.15655
ML205_262.0gt	0.19118	33.9232	0.007263	-0.00162	0.000572	0.006435	0.121083	-0.05244	100.114728	17.5027	0.611314	0.053566	6.58238	0.050123	<0.021	10.6993	0.851008
ML205_262.0gt	0.133448	34.4603	-0.01964	-0.00265	0.016975	-0.00021	0.011577	-0.00483	99.771343	17.3939	0.365507	0.060064	6.08343	<0.022	0.022167	11.5674	0.66254
ML205_262.0gt	0.085629	35.7028	-0.00884	0.000826	0.005108	-0.00125	-0.00263	0.001381	100.494734	17.8794	0.057513	<0.026	8.07163	<0.024	<0.022	8.55588	0.094972
ML205_262.0gt	0.116731	34.0227	-0.00454	0.000275	0.013058	-0.00771	0.061376	-0.02411	100.813734	17.522	0.375621	<0.027	7.06721	<0.025	<0.021	10.9547	0.807506
ML205_262.0gt	0.113463	34.1757	-0.00502	0	0.012492	-0.00732	0.072149	-0.02874	101.511148	17.9848	0.382907	<0.025	8.99659	0.031684	<0.022	7.71104	0.831374
ML205_262.0gt	0.176045	34.1073	0.018458	0.017404	-0.00335	0.103342	0.196369	-0.106	99.298467	17.1577	2.32923	0.057199	6.69279	0.071877	0.064486	8.0845	0.679966
ML205_262.0gt	0.165658	34.0576	0.024462	0.008292	0.028286	0.001879	0.152561	-0.06467	100.986075	17.7583	0.902543	<0.025	9.13291	0.045462	<0.022	6.75349	0.853193
ML205_262.0gt	0.498985	33.5829	-0.01162	-0.00118	0.025457	0.006214	0.136191	-0.05875	98.97729	17.4685	0.749655	0.034298	6.50026	0.041165	0.079133	9.7764	0.85039
ML205_295.9gt	0.218476	34.1995	0.024192	0.00424	0.01372	0.007132	0.077028	-0.03405	99.488804	17.1521	0.755999	0.111241	5.64331	0.054998	<0.022	11.8	0.725953
ML205_295.9gt	0.315133	34.0855	-0.02725	0	0.022344	0.001213	0.078629	-0.03339	99.055316	16.9321	1.43189	0.099018	4.83961	0.073071	<0.023	12.2505	0.684317
ML205_295.9gt	0.328255	34.1743	0.003515	0.003817	0.028201	-0.00228	0.08942	-0.03714	98.602039	16.7998	1.54834	0.124389	4.8141	0.049551	<0.022	11.8336	0.719861
ML205_295.9gt	0.307682	34.2167	-0.00999	-0.00367	0.011426	-0.00228	0.07973	-0.03307	98.742168	16.7576	1.51065	0.134122	4.72659	0.065677	<0.022	12.2275	0.669121
ML205_295.9gt	0.259704	34.0406	-0.00205	0.000407	0.014925	0.001649	0.063061	-0.02694	98.745422	16.6662	1.35416	0.180537	3.29267	0.069364	<0.021	14.9909	0.481205
ML205_295.9gt	0.215693	33.9379	-0.01915	-0.00745	0.020643	-0.00062	0.12626	-0.05302	98.207482	16.6106	1.25498	0.125648	3.14992	0.113069	0.035794	15.0474	0.51854
PH001_317.5	0.095409	33.4787	-999	-999	-999	0.001211	-0.00953	0.003742	99.2509	17.3024	0.419715	<0.02	7.48718	-999	<0.01	10.0757	0.670503
PH001_317.5	0.068212	34.5778	-999	-999	-999	-0.00246	-0.00159	0.001225	99.8624	17.4469	0.43424	<0.02	6.28121	-999	<0.01	11.506	0.391362
PH001_317.5	0.007239	33.6367	-999	-999	-999	-0.00325	-0.00925	0.004627	98.487	16.8675	0.0361	<0.02	3.75412	-999	<0.01	16.3795	0.426412
PH001_317.5	0.088826	32.3808	-999	-999	-999	0.004852	-0.00449	0.017818	98.5488	17.1387	0.42775	<0.02	8.16981	-999	<0.01	9.42917	0.891073
PH001_317.5	0.048163	34.5377	-999	-999	-999	0.002816	0.003998	-0.00231	98.2764	17.0351	0.414715	<0.02	6.64814	-999	<0.01	10.5062	0.35287
PH001_317.5	0.071571	34.4176	-999	-999	-999	0.00201	0.017683	-0.0079	98.4157	17.024	0.482348	<0.02	6.36504	-999	<0.01	11.0699	0.32016
PH001_317.5	0.031215	33.7524	-999	-999	-999	-0.00205	0.02646	-0.01068	98.5816	16.9267	0.402319	0.027939	7.07834	-999	<0.01	10.5116	0.745113
PH001_317.5	0.071294	34.6314	-999	-999	-999	0.002011	0.016833	-0.00754	99.2802	17.293	0.380632	<0.02	6.26657	-999	0.022477	11.3599	0.349495
PH001_317.5	0.112425	34.0845	-999	-999	-999	0.009245	-0.02223	0.007271	98.7788	17.1346	0.633879	<0.02	5.95022	-999	<0.01	11.6708	0.472711
PH001_317.5	0.021275	34.0517	-999	-999	-999	0.015708	0.006686	-0.00636	99.1347	17.2964	0.133781	<0.02	6.65066	-999	0.018169	11.2883	0.561445
PH001_317.5	0.075196	34.7382	-999	-999	-999	-0.01227	-0.02144	0.011803	98.9271	17.1137	0.447052	<0.02	6.22841	-999	<0.01	11.3277	0.374167
PH001_317.5	0.047787	33.5961	-999	-999	-999	-0.01021	-0.02138	0.011303	98.9312	17.1045	<0.01	<0.02	5.2236	-999	<0.01	14.0504	0.619049
PH002_341.9	0.108807	33.4831	-999	-999	-999	-0.00041	-0.00945	0.00407	99.7306	17.4652	0.26378	<0.02	8.47737	-999	<0.01	8.84532	0.689967
PH002_341.9	0.094944	34.5297	-999	-999	-999	0.000404	0.037426	-0.01585	99.2713	17.2673	0.303165	<0.02	7.69928	-999	<0.01	9.39568	0.416564
PH002_341.9	0.013076	34.5664	-999	-999	-999	0.003628	0.00102	-0.00124	99.0808	17.3373	0.022604	0.048346	7.0077	-999	<0.01	10.5625	0.364223
PH002_341.9	0.053799	34.5836	-999	-999	-999	0.004446	0.048557	-0.02145	99.7257	17.3897	0.231321	<0.02	8.30723	-999	<0.01	8.72267	0.433293
PH002_341.9	0.109088	33.3432	-999	-999	-999	0.007686	-0.03235	0.011898	98.7036	17.1337	0.257986	<0.02	8.54789	-999	<0.01	8.66741	0.670518
PH002_341.9	0.027846	34.7723	-999	-999	-999	-0.00246	-0.05058	0.021851	98.7861	17.0522	0.131558	<0.02	6.58909	-999	<0.01	11.2003	0.347225
PH002_341.9	0.02614	34.8253	-999	-999	-999	0.003224	-0.00559	0.001629	99.2283	17.3388	0.051665	<0.02	6.9831	-999	<0.01	10.5212	0.340883
PH002_341.9	0.069287	34.4391	-999	-999	-999	0.002007	-0.05526	0.022812	98.2767	16.8106	0.297384	<0.02	5.6624	-999	<0.01	12.6134	0.333498
PH002_341.9	0.107437	34.3575	-999	-999	-999	-0.00246	0.00283	-0.00063	99.1712	17.1828	0.320233	<0.02	7.56599	-999	<0.01	9.7438	0.446971
PH002_341.9	0.126675	34.7204	-999	-999	-999	0.049181	0.001868	-0.01189	99.4963	17.3525	0.387986	<0.02	7.23459	-999	<0.01	9.83057	0.410274
PH002_341.9	0.079809	34.4385	-999	-999	-999	-0.00574	-0.00708	0.00428	99.1903	17.2544	0.225902	<0.02	7.23424	-999	<0.01	10.2671	0.40266
PH002_341.9	0.128619	34.8326	-999	-999	-999	0.013301	-0.01519	0.003387	98.859	17.2507	0.297002	<0.02	7.11979	-999	<0.01	9.77419	0.351353
PH002_343.2	0.188857	35.0711	-999	-999	-999	0.011861	0.010162	-0.00696	99.317	17.3154	0.555963	<0.02	7.15849	-999	0.019262	9.49496	0.245577
PH002_343.2	0.211267	35.2299	-999	-999	-999	0.003278	0.054074	-0.02352	99.0241	17.2078	1.16613	<0.02	8.35324	-999	<0.01	6.76028	0.246215
PH002_343.2	0.244326	34.8812	-999	-999	-999	-0.00417	0.045049	-0.01804	99.6063	17.3467	0.934378	<0.02	7.83354	-999	0.031567	8.09245	0.422942
PH002_343.2	0.129793	34.649	-999	-999	-999	-0.00501	0.022249	-0.00824	99.7815	17.6159	0.318875	<0.02	8.12894	-999	0.026105	8.51903	0.330146
PH002_343.2	0.156322	35.0601	-999	-999	-999	0.00491	-0.01914	0.00695	99.9906	17.5393	0.434549	<0.02	7.22335	-999	<0.01	9.74343	0.269608
PH002_343.2	0.191216	34.984	-999	-999	-999	0.003682	0.010347	-0.00519	99.5006	17.4089	0.54235	<0.02	7.29156	-999	0.020959	9.28917	0.304908
PH002_343.2	0.112262	35.2668	-999	-999	-999	-0.00334	0.010273	-0.00357	99.3454	17.3814	0.463243	<0.02	8.66513	-999	0.018052	7.2282	0.238624
PH002_343.2	0.142277	35.3381	-999	-999	-999	0.000821	0.001561	-0.00085	99.6858	17.5658	0.687868	<0.02	8.7376	-999	<0.01	6.78274	0.194543
PH002_343.2	0.151012	34.686	-999	-999	-999	0.011892	-0.01759	0.00473	98.9149	17.169	0.627804	<0.02	8.43753	-999	<0.01	7.65711	0.383736

Appendix E: Microprobe analyses (garnets)

Sample	MgO	CaO	Na2O	K2O	P2O5	Cl	F	O	Total	Si	Ti	Sn	Al	V	Cr	Fe	Mn
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
PH002_343.2	0.170343	34.7269	-999	-999	-999	0.002873	0.026551	-0.01183	100.278	17.6883	0.591667	<0.02	8.50087	-999	<0.01	7.79641	0.359518
PH002_343.2	0.179887	34.6068	-999	-999	-999	0.00123	-0.00483	0.001747	99.1721	17.3023	0.611822	<0.02	8.13262	-999	<0.01	8.16757	0.351551
PH002_343.2	0.175011	34.706	-999	-999	-999	0.004514	0.030577	-0.01389	99.63	17.5829	0.613962	<0.02	8.31169	-999	0.020402	7.65975	0.377427
PH004_157.9	0.233494	34.3843	-999	-999	-999	0.006995	-0.04525	0.017479	99.9577	17.6896	0.165077	<0.02	9.25433	-999	<0.01	6.8854	0.701817
PH004_157.9	0.379167	34.5455	-999	-999	-999	0.006167	0.014514	-0.0075	100.451	17.6906	0.837906	<0.02	9.22575	-999	<0.01	6.23427	0.644422
PH004_157.9	0.306579	34.51	-999	-999	-999	0.000411	0.001148	-0.00058	100.167	17.6647	0.459169	0.028534	8.86748	-999	<0.01	7.15	0.620676
PH004_157.9	0.420737	34.4971	-999	-999	-999	-0.00042	0.046933	-0.01968	99.1937	17.2759	1.10346	<0.02	9.18865	-999	<0.01	5.68019	0.607826
PH004_157.9	0.651422	34.3633	-999	-999	-999	0.003288	0.050864	-0.02215	99.2488	17.412	1.15805	<0.02	8.96603	-999	<0.01	5.67891	0.603214
PH004_157.9	3.35065	32.5211	-999	-999	-999	0.00909	-0.00684	0.000824	99.7678	18.7626	0.845443	<0.02	7.42818	-999	<0.01	5.89002	0.540751
PH004_157.9	0.353211	34.8183	-999	-999	-999	0.002056	0.12351	-0.00566	99.7498	17.5449	0.701805	<0.02	9.41949	-999	<0.01	5.68656	0.581812
PH004_157.9	0.356189	34.3531	-999	-999	-999	0.007814	0.012799	-0.00715	100.34	17.7095	0.680262	<0.02	9.1445	-999	<0.01	6.7159	0.533727
PH004_157.9	0.283431	34.2765	-999	-999	-999	-0.01087	0.014231	-0.00354	99.5292	17.4698	0.663994	<0.02	9.02374	-999	<0.01	6.77538	0.556093
PH004_157.9	0.416605	34.3988	-999	-999	-999	0.002463	0.034193	-0.01495	98.6106	17.1681	0.984329	<0.02	8.91371	-999	<0.01	6.09966	0.546196
PH001_309.7	0.056932	34.0604	-999	-999	-999	0.002422	0.026244	-0.0116	99.3953	17.219	1.1428	<0.02	8.42217	-999	<0.01	7.63898	0.574976
PH001_309.7	0.153389	34.1846	-999	-999	-999	0.003631	-0.02937	0.011543	97.5355	17.4229	0.306813	<0.02	7.23609	-999	<0.01	8.57293	0.546729
PH001_309.7	0.132677	35.2886	-999	-999	-999	0.006867	0.003939	-0.0032	99.2432	17.4489	0.71601	<0.02	8.63049	-999	<0.01	6.63093	0.349864
PH001_309.7	0.171624	35.9926	-999	-999	-999	0.014169	0.04823	-0.02351	100.148	17.8571	0.484932	<0.02	9.29886	-999	<0.01	5.58331	0.141089
PH001_309.7	0.109037	35.2208	-999	-999	-999	0.002831	0.029923	-0.01324	99.5355	17.5599	0.346406	<0.02	8.91114	-999	<0.01	6.77261	0.369791
PH001_309.7	0.134767	34.1483	-999	-999	-999	0.004445	-0.00296	0.000237	99.5039	17.5144	0.271506	<0.02	8.1764	-999	<0.01	8.65632	0.540167
PH001_309.7	0.115061	34.0891	-999	-999	-999	0.00202	-0.00348	0.001011	99.4169	17.4984	0.264292	<0.02	8.21001	-999	<0.01	8.68598	0.526909
PH001_309.7	0.117925	34.0539	-999	-999	-999	-0.01109	0.070695	-0.02727	99.8858	17.4825	0.725845	<0.02	8.31703	-999	<0.01	8.2437	0.556177
PH001_309.7	0.104727	34.1394	-999	-999	-999	0.00404	0.012122	-0.00602	99.3203	17.3514	0.291698	<0.02	8.37737	-999	0.021349	8.45357	0.552712
PH001_309.7	0.052543	33.7797	-999	-999	-999	0.00242	0.035447	-0.01547	98.7731	17.0845	1.15394	0.026909	8.18808	-999	<0.01	7.92897	0.569891
PH001_309.7	0.135172	35.168	-999	-999	-999	0.001213	0.052634	-0.02243	99.8996	17.6315	0.40647	<0.02	8.73791	-999	<0.01	7.1586	0.338978
PH001_309.7	0.159528	35.1857	-999	-999	-999	0.016965	0.0219	-0.01305	99.6462	17.5349	0.816647	<0.02	8.50799	-999	<0.01	6.86472	0.383791
ML322_114.1	0.216999	34.984	-999	-999	-999	-0.00575	0.005039	-0.00082	99.6992	17.5902	0.479618	<0.02	8.31886	-999	<0.01	7.68561	0.365898
ML322_114.1	0.224891	34.8268	-999	-999	-999	0.001615	-0.01074	0.004158	99.097	17.3095	0.595922	<0.02	8.22156	-999	<0.01	7.73525	0.412504
ML322_114.1	0.223656	34.9751	-999	-999	-999	0.011306	0.014198	-0.00853	99.4399	17.4484	0.628145	0.025143	8.32319	-999	<0.01	7.45907	0.391128
ML322_114.1	0.230906	34.8821	-999	-999	-999	-0.00534	0.029832	-0.01135	99.2183	17.4365	0.477353	<0.02	8.46671	-999	<0.01	7.40272	0.366228
ML322_114.1	0.230918	34.8642	-999	-999	-999	0.000809	-0.00471	0.001804	99.6974	17.5866	0.592766	<0.02	8.69628	-999	<0.01	6.99254	0.44775
ML322_114.1	0.182013	35.1742	-999	-999	-999	0.001617	0.190653	-0.08065	98.8659	17.1948	0.52626	<0.02	9.16399	-999	<0.01	6.10932	0.429058
ML322_114.1	0.150367	34.962	-999	-999	-999	0	0.02236	-0.00942	98.6416	17.2402	0.676795	<0.02	8.66714	-999	<0.01	6.77921	0.324417
ML322_114.1	0.150199	35.1431	-999	-999	-999	0.006868	0.037912	-0.01751	98.7548	17.1932	0.694199	<0.02	8.78422	-999	<0.01	6.58636	0.335161
ML322_114.1	0.187796	35.0241	-999	-999	-999	0.010921	0.031203	-0.01561	99.5491	17.5831	0.807246	<0.02	8.89198	-999	<0.01	6.29246	0.361145
ML322_114.1	0.383904	34.7688	-999	-999	-999	0.005252	-0.01217	0.003948	99.4287	17.4913	0.571484	<0.02	8.326	-999	<0.01	7.31461	0.595965
ML322_114.1	0.1731	35.1716	-999	-999	-999	0.007275	0.034581	-0.01621	99.8972	17.6738	0.811634	<0.02	8.60552	-999	<0.01	6.72696	0.324972
PH004_140.4	0.203309	34.6722	-999	-999	-999	0.003606	0.003855	-0.00244	98.9074	17.0917	0.471506	0.091406	5.17782	-999	0.027282	12.5754	0.431785
PH004_140.4	0.269534	34.6107	-999	-999	-999	0.014417	-0.01314	0.002277	99.1659	17.1614	0.693555	0.056687	4.95506	-999	<0.01	12.855	0.339622
PH004_140.4	0.239989	34.4309	-999	-999	-999	-0.00612	0.038951	-0.01502	99.1615	17.3031	0.427175	0.070866	5.32685	-999	0.029928	12.4116	0.446477
PH004_140.4	0.240105	34.6291	-999	-999	-999	-0.00897	-0.00315	0.003349	98.7546	17.023	0.667476	0.033224	5.00348	-999	<0.01	12.7231	0.371734
PH004_140.4	0.182009	34.4223	-999	-999	-999	0.001204	0.004729	-0.00226	99.571	17.4872	0.267184	0.09622	5.44724	-999	<0.01	12.5027	0.452041
PH004_140.4	0.215515	34.4647	-999	-999	-999	0.008016	0.037188	-0.01747	98.7512	17.2551	0.496098	0.105872	4.98685	-999	0.023662	12.6201	0.366886
PH004_140.4	0.239228	34.4177	-999	-999	-999	0.00842	-0.00288	-0.00068	99.1737	17.2826	0.47948	0.080959	5.1892	-999	<0.01	12.6382	0.434216
PH004_140.4	0.235683	34.5255	-999	-999	-999	-0.00163	0.011174	-0.00433	98.8266	17.1624	0.63428	0.067894	4.95162	-999	<0.01	12.7077	0.374086
PH004_140.4	0.230805	34.5414	-999	-999	-999	0.005213	0.003932	-0.00283	99.1127	17.231	0.499016	0.067964	5.26127	-999	0.027299	12.4712	0.408226
PH004_140.4	0.217378	34.2781	-999	-999	-999	-0.00612	0.015565	-0.00518	98.9933	17.3046	0.484917	0.097157	4.955	-999	0.033153	12.8586	0.454794
PH004_41.8	0.185836	32.1155	-999	-999	-999	0.006468	0.007139	-0.00446	99.3539	17.5844	0.285422	<0.02	7.80097	-999	0.020851	10.1594	0.846851
PH004_41.8	0.150173	30.6378	-999	-999	-999	0.010131	0.22085	-0.09528	99.6776	17.5535	0.179392	<0.02	8.52653	-999	<0.01	10.2329	1.22395
PH004_41.8	0.14645	31.2056	-999	-999	-999	0.002428	0.104181	-0.04441	99.987	17.6934	0.277184	<0.02	8.02888	-999	<0.01	10.7319	0.959196
PH004_41.8	0.288824	34.6337	-999	-999	-999	0.016598	0.032385	-0.01738	99.5653	17.7429	0.690716	<0.02	8.85937	-999	<0.01	6.54337	0.258054
PH004_41.8	0.335588	34.9136	-999	-999	-999	-0.00041	0.0282	-0.01178	99.8713	17.87	0.957396	<0.02	8.5689	-999	<0.01	6.44621	0.259126
PH004_41.8	0.177156	31.9451	-999	-999	-999	-0.00616	0.038105	-0.01465	99.8258	17.7315	0.30254	<0.02	7.98903	-999	0.022837	10.0935	0.865553
PH004_41.8	0.275311	34.3641	-999	-999	-999	0.001607	0.025161	-0.01096	99.6011	17.4879	0.544655	<0.02	5.72649	-999	<0.01	11.9473	0.334703
PH004_41.8	0.404825	34.9098	-999	-999	-999	0.003238	0.066924	-0.0289	100.542	17.9407	1.00765	<0.02	8.7999	-999	<0.01	6.33108	0.268212

Appendix E: Microprobe analyses (garnets)

Sample	MgO	CaO	Na2O	K2O	P2O5	Cl	F	O	Total	Si	Ti	Sn	Al	V	Cr	Fe	Mn
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
PH004_41.8	0.29547	34.8214	-999	-999	-999	0.004047	0.000746	-0.00123	99.3644	17.6952	0.545438	<0.02	8.74625	-999	<0.01	6.69532	0.260526
PH004_41.8	0.185877	31.6905	-999	-999	-999	-0.00288	0.059169	-0.02427	99.8541	17.7211	0.246321	<0.02	8.0111	-999	<0.01	10.3555	0.919496
PH004_135.2	0.348422	34.3176	-999	-999	-999	-0.00573	-0.007	0.004234	99.3112	17.3359	1.06604	<0.02	6.20687	-999	0.01924	10.621	0.284053
PH004_135.2	0.38937	34.9149	-999	-999	-999	0.001206	0.003782	-0.00187	99.2815	17.3194	1.08743	<0.02	5.96724	-999	<0.01	10.5341	0.198466
PH004_135.2	0.373406	34.7411	-999	-999	-999	0.009642	-0.02842	0.009792	98.8822	17.3529	0.879427	0.053631	5.36355	-999	<0.01	11.4095	0.235436
PH004_135.2	0.436662	34.2774	-999	-999	-999	0.006425	0.016361	-0.00834	98.8315	16.9799	1.85008	<0.02	5.79822	-999	0.0581	10.3927	0.217118
PH004_135.2	0.382613	34.7462	-999	-999	-999	0.007634	-0.0165	0.005226	99.0025	17.3088	0.935594	<0.02	5.45702	-999	<0.01	11.36	0.275038
PH004_135.2	0.320892	34.1274	-999	-999	-999	0	0.000833	-0.00036	99.967	17.6987	0.872478	<0.02	7.55976	-999	<0.01	8.84962	0.406268
PH004_135.2	0.373259	34.1453	-999	-999	-999	-0.00247	-0.00342	0.001999	99.6728	17.6684	1.03531	<0.02	7.72521	-999	<0.01	8.19039	0.388725
PH004_135.2	0.352814	34.1958	-999	-999	-999	0.005254	0.007067	-0.00416	100.149	17.781	0.950332	<0.02	7.56618	-999	<0.01	8.67079	0.390787
PH004_135.2	0.263071	34.1227	-999	-999	-999	0.004039	0.015854	-0.00758	99.6244	17.6853	0.603761	<0.02	7.34445	-999	<0.01	9.32718	0.386412
PH004_135.2	0.370891	33.9898	-999	-999	-999	0.013746	-0.00875	0.000587	99.5923	17.6979	1.21181	<0.02	7.67121	-999	<0.01	8.05081	0.375582
PH004_339.1	0.160666	34.0924	-999	-999	-999	0.012468	0.012149	-0.00794	99.4185	17.4541	0.608764	<0.02	5.66165	-999	0.021763	12.111	0.36195
PH004_339.1	0.083567	34.6802	-999	-999	-999	0.009706	-0.03181	0.011204	100.132	17.9788	0.276224	<0.02	7.63348	-999	<0.01	9.02399	0.351091
PH004_339.1	0.133946	33.6823	-999	-999	-999	-0.00041	-0.00817	0.003529	99.7891	17.6912	0.366333	<0.02	6.44526	-999	<0.01	11.444	0.472197
PH004_339.1	0.123423	34.9652	-999	-999	-999	-0.00041	0.000167	0.000023	99.5574	17.7178	0.258283	<0.02	7.38361	-999	<0.01	9.23518	0.252431
PH004_339.1	0.14309	34.3867	-999	-999	-999	-0.00164	0.02005	-0.00808	99.5093	17.4742	0.271619	<0.02	5.81212	-999	<0.01	12.1909	0.377432
PH004_339.1	0.145942	34.255	-999	-999	-999	-0.01024	-0.02198	0.011566	99.6506	17.484	0.359058	<0.02	5.98113	-999	<0.01	11.9712	0.405153
ML152_215.1	0.138798	33.2389	-999	-999	-999	-0.00122	0.121616	-0.05094	97.8439	16.9851	<0.01	0.581456	2.22848	-999	<0.01	17.4875	0.5135
ML152_215.1	0.21439	33.6591	-999	-999	-999	0.011928	0.039753	-0.01943	98.4542	17.0107	0.184654	0.679597	2.01201	-999	<0.01	17.7012	0.304516
ML152_215.1	0.274178	33.9707	-999	-999	-999	0.021113	0.085175	-0.04063	98.6203	17.0015	0.424748	0.494963	3.12968	-999	<0.01	15.6786	0.395387
ML152_215.1	0.294774	33.7658	-999	-999	-999	-0.01093	0.083384	-0.03265	98.6564	16.9011	0.792268	0.429345	2.66516	-999	<0.01	16.303	0.406907
ML152_215.1	0.203101	33.8992	-999	-999	-999	0.003185	0.097685	-0.04185	98.7033	17.0217	0.28907	0.541812	2.76325	-999	<0.01	16.518	0.359247
ML152_215.1	0.112469	33.3133	-999	-999	-999	0.013509	0.174091	-0.07635	97.7726	16.6655	0.025745	0.617459	2.05829	-999	<0.01	18.0405	0.490364
ML152_215.1	0.180342	33.4261	-999	-999	-999	-0.00849	0.098967	-0.03976	98.5085	16.9341	<0.01	0.644728	1.97185	-999	<0.01	18.2134	0.489274
ML152_215.1	0.208506	33.8797	-999	-999	-999	0.007949	0.052293	-0.02381	98.7656	16.8969	0.167489	0.677264	2.2207	-999	<0.01	17.6997	0.317662
ML322_117.7	0.209382	35.9897	-999	-999	-999	0.002451	0.027224	-0.01202	100.642	18.0643	0.524328	<0.02	8.72862	-999	<0.01	6.3968	0.13932
ML322_117.7	0.193806	35.8065	-999	-999	-999	0	0.025173	-0.0106	100.369	18.0538	0.503244	<0.02	8.44391	-999	<0.01	6.83519	0.133133
ML322_117.7	0.146895	35.6504	-999	-999	-999	0.00979	0.024077	-0.01235	99.947	17.9971	0.228312	<0.02	7.96591	-999	<0.01	7.73778	0.176462
ML322_117.7	0.162638	36.0231	-999	-999	-999	0.007757	0.003377	-0.00317	100.249	18.0421	0.333649	<0.02	8.53656	-999	<0.01	6.68903	0.140517
ML322_117.7	0.088836	35.5098	-999	-999	-999	-0.00828	-0.01647	0.008804	99.9312	17.7699	0.177965	<0.02	6.86101	-999	<0.01	10.0252	0.146755
ML322_117.7	0.122083	35.8176	-999	-999	-999	-0.00207	0.03498	-0.01427	100.223	17.7833	0.221185	<0.02	7.29863	-999	<0.01	9.23518	0.120579
ML322_117.7	0.12891	35.4907	-999	-999	-999	-0.00497	-0.01049	0.005539	99.8277	17.8091	0.260706	<0.02	7.02546	-999	<0.01	9.52813	0.143224
ML322_117.7	0.12249	35.7819	-999	-999	-999	-0.00456	-0.00477	0.003029	100.277	18.045	0.306545	<0.02	7.81538	-999	<0.01	7.98327	0.175776
ML322_117.7	0.12195	35.753	-999	-999	-999	0.008171	0.021361	-0.01083	99.8009	18.0361	0.167787	<0.02	8.58692	-999	<0.01	6.70821	0.156129
ML322_117.7	0.164167	35.6303	-999	-999	-999	0.004081	0.035846	-0.01601	100.12	18.0777	0.42501	<0.02	8.15173	-999	<0.01	7.22981	0.160539
ML322_117.7	0.152984	35.8824	-999	-999	-999	0.001633	0.002979	-0.00162	100.393	18.0305	0.423096	<0.02	8.57029	-999	<0.01	6.74716	0.155525
PH002_352.8	0.088215	34.4602	-999	-999	-999	-0.00205	0.014341	-0.00557	98.9937	17.2542	0.957696	<0.02	4.20131	-999	<0.01	13.7368	0.237049
PH002_352.8	0.109182	34.2904	-999	-999	-999	0.003241	0.005739	-0.00315	99.1568	17.5095	0.529811	<0.02	5.29272	-999	<0.01	12.4287	0.324346
PH002_352.8	0.090178	34.5263	-999	-999	-999	-0.00123	0.026016	-0.01067	99.6319	17.4398	0.717205	<0.02	4.34959	-999	<0.01	13.9827	0.239821
PH002_352.8	0.078042	34.4022	-999	-999	-999	0.015362	-0.01924	0.004631	99.4691	17.3841	0.71011	<0.02	4.57512	-999	<0.01	13.6955	0.264199
PH002_352.8	0.166631	34.2169	-999	-999	-999	0.007274	0.056147	-0.02528	99.0749	17.2151	0.81636	0.049888	4.46431	-999	0.04796	13.5687	0.338897
PH002_352.8	0.074876	34.4905	-999	-999	-999	0.003233	0.018432	-0.00849	99.3447	17.2729	0.775444	<0.02	4.57067	-999	<0.01	13.6235	0.288494
PH002_352.8	0.043888	34.5178	-999	-999	-999	-0.001069	0.009322	-0.00152	99.4574	17.2845	0.785682	<0.02	4.4614	-999	<0.01	13.841	0.262208
PH002_352.8	0.118419	34.1107	-999	-999	-999	0.008501	0.010476	-0.00633	99.291	17.3995	0.59506	0.036471	5.05667	-999	0.024521	12.9633	0.401964
PH002_352.8	0.032207	34.6476	-999	-999	-999	-0.00535	-0.02592	0.012119	99.5822	17.434	0.472432	<0.02	4.74231	-999	<0.01	13.6254	0.264863
PH002_352.8	0.039413	34.4654	-999	-999	-999	-0.00905	0.030425	-0.01077	98.8015	17.2728	0.382993	<0.02	4.61239	-999	<0.01	13.672	0.266329
PH002_352.8	0.032609	34.4957	-999	-999	-999	0.001617	0.006484	-0.00309	98.8768	17.3	0.548567	<0.02	4.62249	-999	<0.01	13.4483	0.268239
PH002_352.8	0.038565	34.6406	-999	-999	-999	0.013751	0.000064	-0.00312	99.5188	17.4296	0.476414	<0.02	4.72265	-999	<0.01	13.58	0.253299
PH002_352.8	0.034579	34.7581	-999	-999	-999	0.009706	-0.00995	0.001995	99.3651	17.3876	0.46775	<0.02	4.71893	-999	<0.01	13.4951	0.26173
PH002_352.8	0.048827	34.66	-999	-999	-999	-0.00041	0.001609	-0.00058	99.3954	17.4121	0.561474	<0.02	4.79121	-999	0.020869	13.2741	0.269007
ML120_206.4	0.185404	33.8658	-999	-999	-999	0.007998	-0.00965	0.002254	98.0939	16.974	0.166011	0.337288	4.5277	-999	0.016988	13.6159	0.717706
ML120_206.4	0.062518	30.6011	-999	-999	-999	0.00763	0.475701	-0.20204	98.9559	16.9142	0.179781	0.138408	5.85475	-999	<0.01	14.2013	1.57425
ML120_206.4	0.183044	34.3142	-999	-999	-999	-0.01347	0.038296	-0.01308	99.5756	17.4549	0.114582	0.219403	5.40494	-999	<0.01	12.6036	0.636119

Appendix E: Microprobe analyses (garnets)

Sample	MgO	CaO	Na2O	K2O	P2O5	Cl	F	O	Total	Si	Ti	Sn	Al	V	Cr	Fe	Mn
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
ML120_206.4	0.234908	33.9218	-999	-999	-999	0.001599	0.024854	-0.01083	98.8135	17.1966	0.316688	0.318282	4.01004	-999	<0.01	14.4918	0.536635
ML120_206.4	0.196822	33.99	-999	-999	-999	0.003596	-0.00815	0.002628	98.8184	16.9755	0.198827	0.311351	4.24407	-999	<0.01	14.6565	0.545185
ML120_206.4	0.220281	34.1092	-999	-999	-999	-0.00447	0.057111	-0.02303	99.0891	17.0768	0.224677	0.258223	4.4673	-999	<0.01	14.2228	0.591988
ML120_206.4	0.248993	34.2028	-999	-999	-999	0.01403	0.070233	-0.03274	99.08	17.2323	0.225071	0.224711	5.30502	-999	<0.01	12.5697	0.660195
ML120_206.4	0.154658	33.6679	-999	-999	-999	0	0.024419	-0.01028	99.3978	17.3605	0.10069	0.21256	4.44125	-999	<0.01	14.5103	0.726903
ML120_206.4	0.170072	33.5271	-999	-999	-999	0.010006	0.050581	-0.02356	99.3131	17.3605	0.112021	0.194205	4.46301	-999	<0.01	14.4933	0.714463
ML120_206.4	0.21268	33.6653	-999	-999	-999	-0.0061	0.041009	-0.01589	98.9874	17.1058	0.275395	0.202149	3.93189	-999	<0.01	15.1764	0.642216
ML258_176.0	0.229815	34.5926	-999	-999	-999	0.00969	0.040558	-0.01926	99.7888	17.8147	0.467373	<0.02	8.46173	-999	<0.01	7.1164	0.696353
ML258_176.0	0.227999	34.4649	-999	-999	-999	0.004442	-0.00695	0.001926	99.8025	17.8409	0.477183	<0.02	8.45442	-999	<0.01	7.1484	0.756514
ML258_176.0	0.209358	34.9364	-999	-999	-999	0.001209	0.00237	-0.00127	99.9077	17.7974	0.551929	<0.02	7.90568	-999	<0.01	7.83915	0.550526
ML258_176.0	0.191054	34.7717	-999	-999	-999	0.003229	0.038418	-0.01691	100.137	17.8437	0.441143	<0.02	8.32648	-999	<0.01	7.56195	0.613414
ML258_176.0	0.188944	35.6562	-999	-999	-999	0.006065	-0.01172	0.003555	100.346	18.0801	0.159077	<0.02	9.08633	-999	<0.01	5.98899	0.507718
ML258_176.0	0.224506	34.7388	-999	-999	-999	-0.00041	-0.01834	0.007816	99.4075	17.6327	0.480138	<0.02	8.46053	-999	<0.01	7.04697	0.662462
ML258_176.0	0.256723	34.6488	-999	-999	-999	0.006816	-0.01833	0.006184	99.1046	17.2298	1.0784	<0.02	6.28393	-999	<0.01	10.1279	0.510448
ML258_176.0	0.233929	35.8201	-999	-999	-999	0.000808	0.015654	-0.00677	100.317	18.0814	0.404737	<0.02	8.97691	-999	<0.01	5.85377	0.319036
ML258_176.0	3.21469	35.6756	-999	-999	-999	0.406164	0.82533	-0.43919	97.1997	16.8539	2.11968	<0.02	6.75142	-999	<0.01	3.89048	0.121335
ML258_176.0	3.22681	35.5287	-999	-999	-999	0.359653	0.723021	-0.38562	96.7993	16.7305	2.34789	<0.02	6.61995	-999	<0.01	3.86537	0.138268
ML112_172.0	0.132604	31.4744	-999	-999	-999	-0.00658	-0.02325	0.011276	100.006	17.9035	0.162469	0.028377	8.98945	-999	<0.01	7.8541	2.11242
ML112_172.0	0.118463	32.7875	-999	-999	-999	0.011311	0.024554	-0.01289	100.4	17.9341	0.337792	<0.02	8.28101	-999	0.02625	8.58434	1.39311
ML112_172.0	0.121714	33.1541	-999	-999	-999	0.001613	0.022916	-0.01001	99.8414	17.7445	0.397764	<0.02	7.69976	-999	<0.01	9.07828	1.31289
ML112_172.0	0.091154	32.4667	-999	-999	-999	0.008485	0.037075	-0.01752	99.6251	17.7873	0.315963	<0.02	8.31531	-999	<0.01	8.46811	1.4295
ML112_172.0	0.12178	32.6441	-999	-999	-999	0.00525	0.038963	-0.0176	99.4959	17.7708	0.320214	<0.02	8.19769	-999	<0.01	8.38978	1.41946
ML112_172.0	0.106886	33.8464	-999	-999	-999	0.001612	0.024206	-0.01055	99.8527	17.7785	0.282696	<0.02	7.53124	-999	<0.01	9.25815	0.933646
ML112_172.0	0.105572	32.9666	-999	-999	-999	-0.00082	0.029755	-0.01234	100.176	17.9168	0.225791	<0.02	8.82781	-999	<0.01	7.787	1.31275
ML112_172.0	0.067365	33.5771	-999	-999	-999	0.001209	-0.05218	0.021702	99.1251	17.5344	0.217158	<0.02	7.6051	-999	<0.01	9.31693	0.987903
ML112_172.0	0.098628	33.7706	-999	-999	-999	0.01249	-0.02512	0.007767	99.4024	17.6565	0.185106	<0.02	7.46924	-999	<0.01	9.39689	0.953141
ML112_172.0	0.086654	33.5779	-999	-999	-999	-0.00697	0.013756	-0.00422	99.8357	17.7046	0.2676	<0.02	7.78237	-999	<0.01	9.1493	1.0618
PH001_308.1	0.041656	35.6549	-999	-999	-999	-0.00124	-0.00291	0.001499	100.214	18.1294	0.100392	<0.02	9.14684	-999	<0.01	6.14645	0.311078
PH001_308.1	0.082575	35.6749	-999	-999	-999	0.007314	-0.00649	0.001087	100.48	18.1619	0.244251	<0.02	9.46679	-999	<0.01	5.50699	0.379618
PH001_308.1	0.106106	36.3423	-999	-999	-999	-0.00371	0.031711	-0.01251	100.196	17.991	0.196543	<0.02	8.89872	-999	<0.01	6.18797	0.113263
PH001_308.1	0.140382	36.069	-999	-999	-999	-0.00991	0.041452	-0.01522	100.507	18.1911	0.531483	<0.02	8.93408	-999	<0.01	5.75346	0.150143
PH001_308.1	0.039875	35.3886	-999	-999	-999	0	0.000433	-0.00018	99.7371	17.9954	0.071041	0.027844	8.9961	-999	<0.01	6.38827	0.349272
PH001_308.1	0.120831	35.7509	-999	-999	-999	0.000809	0.019399	-0.00835	99.942	17.7366	0.740658	<0.02	8.05049	-999	<0.01	7.31359	0.194434
PH001_308.1	0.066373	35.7127	-999	-999	-999	0.001213	0.031497	-0.01354	100.139	17.8668	0.414013	<0.02	7.56035	-999	<0.01	8.42874	0.234263
PH001_308.1	0.07412	35.6185	-999	-999	-999	0.009313	0.00513	-0.00426	99.7941	17.9509	0.341336	<0.02	8.06545	-999	<0.01	7.40303	0.266593
PH001_308.1	0.097463	35.76	-999	-999	-999	0.000809	-0.0013	0.00037	100.232	17.9731	0.475196	<0.02	7.75547	-999	<0.01	7.94837	0.172559
PH001_308.1	0.065445	35.8055	-999	-999	-999	0.000405	0.000452	-0.00029	100.257	18.0317	0.281688	<0.02	8.169	-999	<0.01	7.50915	0.204703
ML109_112.0	0.176775	33.912	-999	-999	-999	0.005182	-0.0036	0.000343	98.6568	17.0307	0.367034	0.285737	2.68796	-999	<0.01	16.6869	0.49128
ML109_112.0	0.242558	33.8699	-999	-999	-999	0.004378	0.018694	-0.00886	98.4444	16.7487	0.492309	0.406592	2.67695	-999	0.020056	16.6221	0.524642
ML109_112.0	0.216959	34.0678	-999	-999	-999	-0.00081	0.041921	-0.01748	98.2636	16.8512	0.316722	0.253646	2.61819	-999	<0.01	16.761	0.411206
ML109_112.0	0.200886	34.1024	-999	-999	-999	0.009961	0.005653	-0.00463	98.4283	17.011	0.305666	0.293256	2.63626	-999	<0.01	16.59	0.408481
ML109_112.0	0.243311	34.1992	-999	-999	-999	0.001194	0.006855	-0.00315	98.5104	16.9204	0.305624	0.296953	2.41486	-999	<0.01	17.033	0.371991
ML109_112.0	0.214884	34.0337	-999	-999	-999	0.001594	0.051567	-0.02207	98.4434	16.8403	0.329464	0.38283	3.0398	-999	<0.01	16.1092	0.506315
ML109_112.0	0.223045	33.9071	-999	-999	-999	0.009173	0.024312	-0.01231	98.5067	16.8898	0.415558	0.286692	3.13152	-999	<0.01	15.9012	0.60969
ML109_112.0	0.15975	33.6657	-999	-999	-999	-0.00325	0.008869	-0.00301	98.6631	17.129	0.395631	0.193475	3.52449	-999	<0.01	15.3769	0.636864
ML109_112.0	0.194043	33.8221	-999	-999	-999	0.016353	0.012216	-0.00884	98.4008	17.0225	0.381339	0.285976	3.16595	-999	<0.01	15.7212	0.586582
ML109_112.0	0.219251	33.7929	-999	-999	-999	0.006678	0.010668	-0.00602	98.0632	16.9106	0.389727	0.292459	3.20214	-999	0.019156	15.53	0.606118
ML265_185.3	0.519589	35.454	-999	-999	-999	0.004054	0.162235	-0.06923	100.191	18.0307	0.883133	<0.02	9.6078	-999	<0.01	4.13581	0.457579
ML265_185.3	0.509139	34.9373	-999	-999	-999	0.004863	0.07679	-0.03344	99.9627	17.9424	0.852516	<0.02	9.54912	-999	<0.01	4.46191	0.672687
ML265_185.3	0.435681	35.14	-999	-999	-999	0.010545	0.028489	-0.01437	100.693	18.05	0.64547	<0.02	9.75417	-999	<0.01	4.72498	0.677887
ML265_185.3	0.550738	35.4845	-999	-999	-999	0.010124	0.096714	-0.04301	100.209	17.8376	1.15792	<0.02	9.59418	-999	<0.01	4.07547	0.53485
ML265_185.3	0.544326	35.6568	-999	-999	-999	-0.00206	0.174062	-0.07283	100.588	17.8725	1.31641	<0.02	9.21682	-999	<0.01	4.5081	0.468034
ML265_185.3	0.394613	35.157	-999	-999	-999	0.002027	0.076202	-0.03255	99.9569	17.9373	0.552014	<0.02	9.52508	-999	<0.01	4.82697	0.636193
ML265_185.3	0.496395	35.0698	-999	-999	-999	-0.007	0.0921	-0.0372	99.9575	17.8681	1.08354	<0.02	9.42027	-999	<0.01	4.40589	0.661121

Appendix E: Microprobe analyses (garnets)

Sample	MgO	CaO	Na2O	K2O	P2O5	Cl	F	O	Total	Si	Ti	Sn	Al	V	Cr	Fe	Mn
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
ML265_185.3	0.439288	35.2501	-999	-999	-999	0.007703	0.029364	-0.0141	100.302	17.9671	0.508251	<0.02	9.64163	-999	<0.01	4.82271	0.694265
ML265_185.3	0.369046	35.1951	-999	-999	-999	0.010949	0.053418	-0.02496	100.725	18.12	0.464284	<0.02	9.69746	-999	<0.01	4.92099	0.712672
ML243_143.7	0.209409	34.9086	-999	-999	-999	0.015296	0.014795	-0.00969	99.5655	17.6603	0.45504	0.039935	6.17032	-999	<0.01	10.4965	0.53123
ML243_143.7	0.18303	34.7049	-999	-999	-999	0.010867	-0.04173	0.015125	99.3764	17.5008	0.592246	<0.02	6.19133	-999	<0.01	10.5133	0.645267
ML243_143.7	0.200135	34.771	-999	-999	-999	-0.00573	0.001296	0.00074	99.7975	17.5802	0.372426	0.027212	6.1249	-999	<0.01	11.1192	0.529282
ML243_143.7	0.20846	35.1638	-999	-999	-999	-0.00287	0.042038	-0.01706	99.5899	17.3763	0.641727	<0.02	6.84973	-999	<0.01	9.58603	0.551091
ML243_143.7	0.209842	34.7081	-999	-999	-999	0.010065	0.011022	-0.00691	99.3058	17.4816	0.590284	<0.02	6.1457	-999	<0.01	10.6485	0.50489
ML243_143.7	0.228776	34.977	-999	-999	-999	0.00685	0.008204	-0.005	100.043	17.7194	0.647387	<0.02	6.46611	-999	<0.01	10.0409	0.525231
ML243_143.7	0.255134	35.1339	-999	-999	-999	-0.00287	0.02361	-0.0093	99.5252	17.4966	0.740521	0.02834	6.56555	-999	<0.01	9.6197	0.516628
ML243_143.7	0.231947	35.0027	-999	-999	-999	0.00523	0.031466	-0.01442	99.2799	17.4793	0.477265	<0.02	6.15125	-999	<0.01	10.6226	0.430021
ML243_143.7	0.183097	35.4759	-999	-999	-999	0.006072	0.088379	-0.03858	100.199	17.9674	0.759293	<0.02	8.62573	-999	<0.01	6.27954	0.330421
ML243_143.7	0.179487	34.6922	-999	-999	-999	0.010466	0.078288	-0.03532	99.6559	17.5325	0.566746	<0.02	6.44354	-999	<0.01	10.1975	0.737608
ML258_199.2	0.21785	35.5983	-999	-999	-999	0.007562	0.021295	-0.01067	100.343	17.9911	0.497552	<0.02	8.79356	-999	0.035095	6.31073	0.308674
ML258_199.2	0.234764	35.57	-999	-999	-999	0.084326	0.056886	-0.04298	100.541	18.0003	0.533692	<0.02	8.63792	-999	<0.01	6.55608	0.336101
ML258_199.2	0.196457	35.4521	-999	-999	-999	0.003981	0.020315	-0.00945	100.329	18.0351	0.489064	<0.02	8.73163	-999	<0.01	6.45941	0.347704
ML258_199.2	0.221586	35.5248	-999	-999	-999	0.002785	-0.00334	0.000778	100.056	17.9476	0.562784	<0.02	8.56258	-999	<0.01	6.53582	0.299152
ML258_199.2	0.079171	35.1585	-999	-999	-999	-0.00891	-0.00311	0.003311	100.297	18.0843	0.258548	<0.02	8.87794	-999	<0.01	6.50767	0.58232
ML258_199.2	0.065666	35.1656	-999	-999	-999	0.00279	-0.0011	-0.00017	100.04	18.1518	0.204897	<0.02	9.13722	-999	<0.01	5.83431	0.658354
ML258_199.2	0.166481	35.6024	-999	-999	-999	0.228705	0.000999	-0.05203	100.385	17.9863	0.451716	0.029815	8.60995	-999	0.025137	6.5376	0.349953
ML258_199.2	0.139871	35.3198	-999	-999	-999	0.143585	0.01357	-0.03811	100.115	17.8972	0.360826	<0.02	8.47808	-999	<0.01	6.9273	0.521124
ML258_199.2	0.197367	35.235	-999	-999	-999	0.001989	-0.01716	0.006775	100.209	18.0014	0.516529	<0.02	8.39339	-999	0.029716	7.06077	0.345125
ML258_199.2	0.089283	35.1205	-999	-999	-999	0.00638	-0.01281	0.003956	100.561	18.1405	0.227125	<0.02	9.41994	-999	<0.01	5.67903	0.817152
PH003_349.5	0.431331	34.5299	-999	-999	-999	-0.00578	0.038231	0	99.72	17.7549	1.47128	<0.019	8.20408	-999	<0.019	6.58537	0.244114
PH003_349.5	0.435437	34.8185	-999	-999	-999	0.003359	0.019061	0	100.01	17.6495	1.70675	<0.018	8.16023	-999	0.022302	6.47778	0.262035
PH003_349.5	0.423714	34.4573	-999	-999	-999	0.005617	-0.0114	0	99.2844	17.4258	1.23288	<0.019	7.32814	-999	0.031108	8.34223	0.352353
PH003_349.5	0.487102	34.2927	-999	-999	-999	-0.00256	0.023379	0	99.8939	17.6589	2.08385	<0.019	8.18373	-999	<0.018	6.21813	0.318408
PH003_349.5	0.493671	35.3954	-999	-999	-999	0.006716	0.042587	0	100.489	18.0163	1.44009	<0.019	8.81682	-999	<0.018	5.18776	0.208411
PH003_349.5	0.410199	35.3784	-999	-999	-999	0.004028	0.022167	0	100.447	18.0675	1.12715	<0.018	8.74317	-999	<0.018	5.67346	0.225209
PH003_349.5	0.347581	35.167	-999	-999	-999	0.003457	-0.02397	0	100.16	18.0603	0.581841	<0.019	8.462	-999	<0.018	6.8172	0.232656
PH003_349.5	0.496744	35.0797	-999	-999	-999	0.011903	0.026106	0	100.028	17.8471	1.3714	<0.019	8.48833	-999	<0.018	5.93165	0.242154
PH003_349.5	0.352629	35.0536	-999	-999	-999	0.011401	-0.03788	0	99.8565	17.8445	0.499709	<0.019	8.04804	-999	<0.018	7.77988	0.217899
PH003_349.5	0.536158	34.8416	-999	-999	-999	0.000029	0.028509	0	99.9576	17.6037	1.89164	<0.019	7.60001	-999	<0.018	7.06491	0.240407

Appendix E: Microprobe analyses (garnets)

Version												
Date_generated												
Reporting_period_end_date												
State												
Tenement												
Tenement_holder												
Project_name												
Tenement_operator												
250K_map_sheet												
100K_map_sheet												
50K_map_sheet												
25K_map_sheet												
Start_date_of_data_acquisition												
End_date_of_data_acquisition												
Data_format												
Number_of_data_records												
Date_of_metadata_update												
Feature_Located												
Sample_code												
Sample_type												
Sample_description												
Job_no												
Assay_code												
Assay_company												
Assay_description												
Remarks												
Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total	
	%	%	%	%	%	%	%	%	%	%	%	
ML152_215.1_gt_01	0.149925	24.2538	<0.022	<0.009	<0.011	<0.013	0.099173	0	36.7703	0	98.379916	
ML152_215.1_gt_03	0.133642	24.0605	<0.025	<0.008	<0.011	<0.013	0.046823	0	36.6571	0	98.606222	
ML152_215.1_gt_04	0.12102	24.4823	<0.023	<0.008	<0.011	<0.013	<0.032	0	37.6491	0	99.123626	
ML152_215.1_gt_05	0.06392	23.6177	<0.027	<0.008	<0.011	<0.014	<0.032	0	35.2157	0	97.989458	
ML152_215.1_gt_06	0.132146	23.4676	<0.027	<0.008	<0.011	0.01383	<0.034	0	34.9283	0	97.607909	
ML152_215.1_gt_07	0.05337	23.8758	<0.023	<0.008	0.015707	<0.014	<0.032	0	36.2751	0	98.008833	
ML202_539.5_gt_02	0.106279	23.9318	<0.024	<0.008	<0.011	<0.013	0.074092	0	36.6909	0	98.636719	
ML202_539.5_gt_03	0.104429	24.0293	<0.026	<0.008	<0.011	<0.013	0.060161	0	36.6294	0	98.510087	
ML202_539.5_gt_04	0.12524	24.1116	<0.024	<0.008	0.015151	<0.013	0.04967	0	36.7002	0	98.678363	
ML202_539.5_gt_05	0.117726	24.2135	<0.024	<0.008	0.015536	<0.013	0.037955	0	36.5629	0	98.428879	
ML312G_175.1_gt_01	0.090007	24.3516	<0.021	<0.008	<0.012	<0.013	0.050902	0	40.239	0	100.227105	
ML312G_175.1_gt_02	0.098526	24.2893	<0.023	<0.007	<0.012	<0.012	0.045022	0	40.3571	0	100.41048	
ML312G_175.1_gt_03	0.079457	24.5927	<0.024	<0.008	<0.011	<0.011	<0.032	0	40.0094	0	100.295663	
ML312G_175.1_gt_04	0.07328	24.739	<0.021	<0.007	<0.010	<0.014	<0.031	0	40.4927	0	100.603862	
ML312G_175.1_gt_05	0.101952	24.4585	<0.023	<0.008	<0.012	<0.014	0.06057	0	39.7785	0	100.325795	
ML312G_175.1_gt_06	0.08667	25.1197	<0.022	<0.008	<0.012	<0.013	<0.033	0	40.6559	0	100.522058	
ML200_294.1gt	0.045305	24.8134	<0.025	<0.007	<0.010	0.015505	<0.032	0	39.4377	0	99.928378	
ML200_294.1gt	0.11015	24.7035	<0.023	<0.007	<0.010	0.016558	<0.032	0	38.9976	0	99.471778	
ML200_294.1gt	0.078471	24.8677	<0.023	<0.007	<0.012	<0.013	0.033762	0	40.6712	0	100.819927	
ML200_294.1gt	0.102785	24.5055	<0.023	<0.007	<0.011	<0.012	0.147322	0	38.974	0	99.651517	
ML200_294.1gt	0.083638	23.3165	<0.021	<0.008	<0.011	<0.012	0.184204	0	39.1668	0	99.561931	
ML200_294.1gt	0.095973	24.1165	<0.024	<0.007	<0.011	<0.012	0.150425	0	38.9972	0	99.796096	
ML200_294.1gt	0.103674	24.5991	<0.026	<0.007	<0.012	<0.014	0.101591	0	38.7046	0	99.330031	
ML200_294.1gt	0.130579	24.5924	<0.026	<0.008	0.015192	<0.012	0.101276	0	38.8706	0	99.792086	
ML200_294.1gt	0.058352	24.8547	<0.023	<0.008	<0.012	<0.014	<0.031	0	39.9956	0	100.352492	
ML200_294.1gt	0.062371	24.7795	<0.023	<0.007	<0.011	<0.014	<0.031	0	39.8117	0	100.349727	
ML200_361.5gt	0.099868	23.9509	<0.023	<0.008	0.01319	<0.013	0.080781	0	36.8537	0	98.764262	
ML200_361.5gt	0.127833	24.085	<0.025	<0.008	<0.011	<0.013	0.055029	0	36.5762	0	98.567241	

Appendix E: Microprobe analyses (garnets)

Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total
	%	%	%	%	%	%	%	%	%	%	%
ML200_361.5gt	0.061277	23.5974	<0.022	<0.008	<0.011	<0.013	0.176294	0	37.5927	0	98.19742
ML200_361.5gt	0.049508	22.7139	<0.023	<0.008	<0.011	0.017136	0.388005	0	37.9062	0	99.204366
ML200_361.5gt	0.051936	23.0859	<0.025	<0.008	0.010883	<0.013	0.261051	0	38.4216	0	99.767679
ML200_361.5gt	0.059832	23.7838	<0.023	<0.008	<0.012	<0.013	0.101678	0	38.429	0	99.874642
ML200_361.5gt	0.055918	23.6835	<0.024	<0.008	<0.011	<0.014	0.13344	0	38.1118	0	99.249273
ML200_361.5gt	0.076666	23.9145	<0.023	<0.007	<0.012	<0.013	0.21785	0	37.6542	0	99.658312
ML200_361.5gt	0.045226	22.9278	<0.023	<0.008	<0.012	<0.013	0.4594	0	37.8989	0	99.160254
ML205_262.0gt	0.115287	24.2447	<0.021	<0.008	<0.011	<0.012	0.121083	0	39.2642	0	100.095661
ML205_262.0gt	0.080473	24.6286	<0.024	<0.008	<0.011	<0.013	<0.031	0	38.8953	0	99.759381
ML205_262.0gt	0.051637	25.5166	<0.024	<0.008	<0.012	<0.013	<0.030	0	40.285	0	100.512632
ML205_262.0gt	0.070392	24.3158	<0.023	<0.007	<0.010	<0.013	0.061376	0	39.618	0	100.792605
ML205_262.0gt	0.068421	24.4251	<0.024	<0.007	<0.012	<0.013	0.072149	0	40.9947	0	101.498765
ML205_262.0gt	0.10616	24.3762	<0.022	<0.014448	<0.011	0.103342	0.196369	0	39.3519	0	99.286167
ML205_262.0gt	0.099896	24.3407	<0.020	<0.007	0.012345	<0.013	0.152561	0	40.9051	0	100.9565
ML205_262.0gt	0.300901	24.0015	<0.025	<0.008	<0.011	<0.013	0.136191	0	39.0312	0	98.969593
ML205_295.9gt	0.131747	24.4422	<0.022	<0.007	<0.010	<0.012	0.077028	0	38.546	0	99.440576
ML205_295.9gt	0.190034	24.3607	<0.026	<0.008	<0.010	<0.013	0.078629	0	38.1388	0	99.078669
ML205_295.9gt	0.197947	24.4241	<0.024	<0.007	0.012307	<0.014	0.08942	0	37.9782	0	98.591615
ML205_295.9gt	0.185541	24.4545	<0.025	<0.008	<0.011	<0.013	0.07973	0	37.9301	0	98.741131
ML205_295.9gt	0.156609	24.3286	<0.025	<0.008	<0.011	<0.012	0.063061	0	37.1411	0	98.724406
ML205_295.9gt	0.130068	24.2552	<0.027	<0.008	<0.010	<0.014	0.12626	0	36.852	0	98.219479
PH001_317.5	0.057534	23.927	-999	-999	-999	<0.01	<0.03	-999	39.3278	0	99.267832
PH001_317.5	0.041134	24.7125	-999	-999	-999	<0.01	<0.03	-999	39.0596	0	99.872946
PH001_317.5	<0.01	24.0399	-999	-999	-999	<0.01	<0.03	-999	36.9988	0	98.502332
PH001_317.5	0.053564	23.1423	-999	-999	-999	<0.01	<0.03	-999	39.3344	0	98.586767
PH001_317.5	0.029043	24.6839	-999	-999	-999	<0.01	<0.03	-999	38.587	0	98.256968
PH001_317.5	0.043159	24.598	-999	-999	-999	<0.01	<0.03	-999	38.4879	0	98.390507
PH001_317.5	0.018823	24.1226	-999	-999	-999	<0.01	<0.03	-999	38.7198	0	98.553234
PH001_317.5	0.042992	24.7508	-999	-999	-999	<0.01	<0.03	-999	38.7984	0	99.264266
PH001_317.5	0.067795	24.3599	-999	-999	-999	<0.01	<0.03	-999	38.4985	0	98.788405
PH001_317.5	0.012829	24.3365	-999	-999	-999	0.015708	<0.03	-999	38.8306	0	99.144392
PH001_317.5	0.045345	24.8271	-999	-999	-999	<0.01	<0.03	-999	38.6324	0	98.995874
PH001_317.5	0.028817	24.0109	-999	-999	-999	<0.01	<0.03	-999	37.9506	0	98.987866
PH002_341.9	0.065614	23.9301	-999	-999	-999	<0.01	<0.03	-999	39.9645	0	99.701851
PH002_341.9	0.057254	24.6781	-999	-999	-999	<0.01	0.037426	-999	39.4112	0	99.265969
PH002_341.9	<0.01	24.7044	-999	-999	-999	<0.01	<0.03	-999	39.0155	0	99.062573
PH002_341.9	0.032443	24.7167	-999	-999	-999	<0.01	0.048557	-999	39.8465	0	99.728414
PH002_341.9	0.065783	23.8302	-999	-999	-999	<0.01	<0.03	-999	39.5469	0	98.720387
PH002_341.9	0.016792	24.8516	-999	-999	-999	<0.01	<0.03	-999	38.6422	0	98.830965
PH002_341.9	0.015763	24.8894	-999	-999	-999	<0.01	<0.03	-999	39.0695	0	99.210311
PH002_341.9	0.041782	24.6134	-999	-999	-999	<0.01	<0.03	-999	37.971	0	98.343464
PH002_341.9	0.064788	24.5551	-999	-999	-999	<0.01	<0.03	-999	39.2876	0	99.167282
PH002_341.9	0.076388	24.8144	-999	-999	-999	0.049181	<0.03	-999	39.3456	0	99.501489
PH002_341.9	0.048127	24.613	-999	-999	-999	<0.01	<0.03	-999	39.1632	0	99.208629
PH002_341.9	0.077561	24.8946	-999	-999	-999	0.013301	<0.03	-999	39.0857	0	98.864197
PH002_343.2	0.113886	25.0651	-999	-999	-999	<0.01	<0.03	-999	39.3386	0	99.307238
PH002_343.2	0.1274	25.1786	-999	-999	-999	<0.01	0.054074	-999	39.9328	0	99.026539
PH002_343.2	0.147335	24.9294	-999	-999	-999	<0.01	0.045049	-999	39.8397	0	99.623061
PH002_343.2	0.078269	24.7634	-999	-999	-999	<0.01	<0.02	-999	39.9903	0	99.770965
PH002_343.2	0.094266	25.0572	-999	-999	-999	<0.01	<0.03	-999	39.6414	0	100.003103
PH002_343.2	0.115308	25.0028	-999	-999	-999	<0.01	<0.03	-999	39.4981	0	99.474055
PH002_343.2	0.067697	25.2049	-999	-999	-999	<0.01	<0.03	-999	40.0719	0	99.339146
PH002_343.2	0.085797	25.2559	-999	-999	-999	<0.01	<0.03	-999	40.3797	0	99.689948
PH002_343.2	0.091064	24.7899	-999	-999	-999	<0.01	<0.03	-999	39.7558	0	98.911944

Appendix E: Microprobe analyses (garnets)

Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total
	%	%	%	%	%	%	%	%	%	%	%
PH002_343.2	0.102721	24.8191	-999	-999	-999	<0.01	<0.03	-999	40.4075	0	100.266086
PH002_343.2	0.108477	24.7332	-999	-999	-999	<0.01	<0.03	-999	39.7502	0	99.15774
PH002_343.2	0.105536	24.8042	-999	-999	-999	<0.01	0.030577	-999	40.1102	0	99.616644
PH004_157.9	0.140803	24.5742	-999	-999	-999	<0.01	<0.03	-999	40.5923	0	100.003527
PH004_157.9	0.228648	24.6894	-999	-999	-999	<0.01	<0.03	-999	40.8896	0	100.440596
PH004_157.9	0.184876	24.6641	-999	-999	-999	<0.01	<0.03	-999	40.5249	0	100.164435
PH004_157.9	0.253716	24.6549	-999	-999	-999	<0.01	0.046933	-999	40.3869	0	99.198475
PH004_157.9	0.392825	24.5592	-999	-999	-999	<0.01	0.050864	-999	40.4292	0	99.250293
PH004_157.9	2.02053	23.2426	-999	-999	-999	<0.01	<0.03	-999	41.0124	0	99.742524
PH004_157.9	0.212996	24.8844	-999	-999	-999	<0.01	<0.03	-999	40.7042	0	99.736163
PH004_157.9	0.214791	24.552	-999	-999	-999	<0.01	<0.03	-999	40.776	0	100.32668
PH004_157.9	0.170917	24.4972	-999	-999	-999	<0.01	<0.03	-999	40.3685	0	99.525624
PH004_157.9	0.251224	24.5846	-999	-999	-999	<0.01	0.034193	-999	40.0214	0	98.603412
PH001_309.7	0.034331	24.3428	-999	-999	-999	<0.01	<0.03	-999	39.9675	0	99.342557
PH001_309.7	0.092498	24.4315	-999	-999	-999	<0.01	<0.03	-999	38.9384	0	97.54786
PH001_309.7	0.080008	25.2205	-999	-999	-999	<0.01	<0.03	-999	40.1542	0	99.230902
PH001_309.7	0.103494	25.7237	-999	-999	-999	0.014169	0.04823	-999	40.8934	0	100.148284
PH001_309.7	0.065752	25.172	-999	-999	-999	<0.01	0.029923	-999	40.2946	0	99.522122
PH001_309.7	0.081268	24.4055	-999	-999	-999	<0.01	<0.03	-999	39.8476	0	99.493161
PH001_309.7	0.069385	24.3633	-999	-999	-999	<0.01	<0.03	-999	39.8242	0	99.442476
PH001_309.7	0.071112	24.3381	-999	-999	-999	<0.01	0.070695	-999	40.0694	0	99.874559
PH001_309.7	0.063153	24.3992	-999	-999	-999	<0.01	<0.03	-999	39.7864	0	99.296852
PH001_309.7	0.031685	24.1422	-999	-999	-999	<0.01	0.035447	-999	39.6078	0	98.769422
PH001_309.7	0.081512	25.1343	-999	-999	-999	<0.01	0.052634	-999	40.3494	0	99.891304
PH001_309.7	0.096199	25.147	-999	-999	-999	0.016965	<0.03	-999	40.2568	0	99.625012
ML322_114.1	0.130856	25.0029	-999	-999	-999	<0.01	<0.03	-999	40.132	0	99.705942
ML322_114.1	0.135615	24.8905	-999	-999	-999	<0.01	<0.03	-999	39.8011	0	99.101951
ML322_114.1	0.134871	24.9965	-999	-999	-999	<0.01	<0.03	-999	40.0159	0	99.422347
ML322_114.1	0.139243	24.93	-999	-999	-999	<0.01	<0.03	-999	39.9757	0	99.194454
ML322_114.1	0.13925	24.9172	-999	-999	-999	<0.01	<0.03	-999	40.34	0	99.712386
ML322_114.1	0.109759	25.1388	-999	-999	-999	<0.01	0.190653	-999	39.9968	0	98.85944
ML322_114.1	0.090676	24.9871	-999	-999	-999	<0.01	<0.03	-999	39.8636	0	98.629138
ML322_114.1	0.090574	25.1165	-999	-999	-999	<0.01	0.037912	-999	39.9181	0	98.756226
ML322_114.1	0.113246	25.0315	-999	-999	-999	<0.01	0.031203	-999	40.4392	0	99.55108
ML322_114.1	0.231505	24.849	-999	-999	-999	<0.01	<0.03	-999	40.0593	0	99.439164
ML322_114.1	0.104384	25.1369	-999	-999	-999	<0.01	0.034581	-999	40.4511	0	99.869851
PH004_140.4	0.122601	24.78	-999	-999	-999	<0.01	<0.03	-999	38.1304	0	98.8999
PH004_140.4	0.162536	24.7361	-999	-999	-999	0.014417	<0.03	-999	38.2048	0	99.179177
PH004_140.4	0.14472	24.6076	-999	-999	-999	<0.01	0.038951	-999	38.3604	0	99.167667
PH004_140.4	0.14479	24.7492	-999	-999	-999	<0.01	<0.03	-999	38.0383	0	98.754304
PH004_140.4	0.109756	24.6014	-999	-999	-999	<0.01	<0.03	-999	38.5856	0	99.549341
PH004_140.4	0.129961	24.6317	-999	-999	-999	<0.01	0.037188	-999	38.0899	0	98.743317
PH004_140.4	0.144261	24.5981	-999	-999	-999	<0.01	<0.03	-999	38.3135	0	99.160516
PH004_140.4	0.142123	24.6752	-999	-999	-999	<0.01	<0.03	-999	38.0936	0	98.808903
PH004_140.4	0.139182	24.6865	-999	-999	-999	<0.01	<0.03	-999	38.3119	0	99.103557
PH004_140.4	0.131085	24.4983	-999	-999	-999	<0.01	<0.03	-999	38.1663	0	98.983906
PH004_41.8	0.112064	22.9527	-999	-999	-999	<0.01	<0.03	-999	39.5664	0	99.329058
PH004_41.8	0.090558	21.8966	-999	-999	-999	<0.01	0.22085	-999	39.7087	0	99.63298
PH004_41.8	0.088313	22.3025	-999	-999	-999	<0.01	0.104181	-999	39.7679	0	99.953454
PH004_41.8	0.174169	24.7525	-999	-999	-999	0.016598	0.032385	-999	40.4886	0	99.558662
PH004_41.8	0.202368	24.9526	-999	-999	-999	<0.01	<0.03	-999	40.6165	0	99.8731
PH004_41.8	0.10683	22.831	-999	-999	-999	<0.01	0.038105	-999	39.8384	0	99.819295
PH004_41.8	0.16602	24.5598	-999	-999	-999	<0.01	<0.03	-999	38.8055	0	99.572368
PH004_41.8	0.244121	24.9498	-999	-999	-999	<0.01	0.066924	-999	40.927	0	100.535387

Appendix E: Microprobe analyses (garnets)

Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total
	%	%	%	%	%	%	%	%	%	%	%
PH004_41.8	0.178177	24.8867	-999	-999	-999	<0.01	<0.03	-999	40.35	0	99.357611
PH004_41.8	0.112089	22.649	-999	-999	-999	<0.01	0.059169	-999	39.8013	0	99.875075
PH004_135.2	0.210108	24.5266	-999	-999	-999	<0.01	<0.03	-999	39.0532	0	99.323011
PH004_135.2	0.234801	24.9534	-999	-999	-999	<0.01	<0.03	-999	38.9647	0	99.259537
PH004_135.2	0.225174	24.8292	-999	-999	-999	<0.01	<0.03	-999	38.5515	0	98.900318
PH004_135.2	0.263319	24.4978	-999	-999	-999	<0.01	<0.03	-999	38.7516	0	98.808837
PH004_135.2	0.230726	24.8329	-999	-999	-999	<0.01	<0.03	-999	38.6063	0	99.006378
PH004_135.2	0.193506	24.3907	-999	-999	-999	<0.01	<0.03	-999	39.9909	0	99.961932
PH004_135.2	0.225086	24.4034	-999	-999	-999	<0.01	<0.03	-999	40.0439	0	99.680421
PH004_135.2	0.212757	24.4395	-999	-999	-999	<0.01	<0.03	-999	40.1175	0	100.128846
PH004_135.2	0.158639	24.3873	-999	-999	-999	<0.01	<0.03	-999	39.706	0	99.599042
PH004_135.2	0.223657	24.2923	-999	-999	-999	0.013746	<0.03	-999	40.0616	0	99.598615
PH004_339.1	0.096886	24.3656	-999	-999	-999	<0.01	<0.03	-999	38.7002	0	99.381913
PH004_339.1	0.050393	24.7857	-999	-999	-999	<0.01	<0.03	-999	40.0777	0	100.177378
PH004_339.1	0.080773	24.0725	-999	-999	-999	<0.01	<0.03	-999	39.22	0	99.792263
PH004_339.1	0.074427	24.9894	-999	-999	-999	<0.01	<0.03	-999	39.6645	0	99.575631
PH004_339.1	0.086287	24.5759	-999	-999	-999	<0.01	<0.03	-999	38.7171	0	99.505558
PH004_339.1	0.088007	24.4818	-999	-999	-999	<0.01	<0.03	-999	38.8809	0	99.651248
ML152_215.1	0.083699	23.7556	-999	-999	-999	<0.01	0.121616	-999	36.1199	0	97.876851
ML152_215.1	0.129283	24.0559	-999	-999	-999	<0.01	0.039753	-999	36.3121	0	98.429713
ML152_215.1	0.165337	24.2786	-999	-999	-999	0.021113	0.085175	-999	36.941	0	98.616103
ML152_215.1	0.177756	24.1322	-999	-999	-999	<0.01	0.083384	-999	36.7783	0	98.66942
ML152_215.1	0.122475	24.2275	-999	-999	-999	<0.01	0.097685	-999	36.7449	0	98.685639
ML152_215.1	0.067822	23.8088	-999	-999	-999	0.013509	0.174091	-999	35.7941	0	97.75618
ML152_215.1	0.108751	23.8894	-999	-999	-999	<0.01	0.098967	-999	36.1561	0	98.50657
ML152_215.1	0.125735	24.2136	-999	-999	-999	<0.01	0.052293	-999	36.4024	0	98.773743
ML322_117.7	0.126263	25.7216	-999	-999	-999	<0.01	<0.03	-999	40.9101	0	100.611331
ML322_117.7	0.11687	25.5907	-999	-999	-999	<0.01	<0.03	-999	40.6892	0	100.366047
ML322_117.7	0.088582	25.4791	-999	-999	-999	<0.01	<0.03	-999	40.2317	0	99.904946
ML322_117.7	0.098075	25.7455	-999	-999	-999	<0.01	<0.03	-999	40.6653	0	100.250731
ML322_117.7	0.053571	25.3786	-999	-999	-999	<0.01	<0.03	-999	39.5558	0	99.968801
ML322_117.7	0.07362	25.5986	-999	-999	-999	<0.01	0.03498	-999	39.8413	0	100.207374
ML322_117.7	0.077736	25.365	-999	-999	-999	<0.01	<0.03	-999	39.6617	0	99.871056
ML322_117.7	0.073865	25.5731	-999	-999	-999	<0.01	<0.03	-999	40.3119	0	100.284836
ML322_117.7	0.073539	25.5524	-999	-999	-999	<0.01	<0.02	-999	40.5009	0	99.781985
ML322_117.7	0.098997	25.4647	-999	-999	-999	<0.01	0.035846	-999	40.4663	0	100.110632
ML322_117.7	0.092253	25.6449	-999	-999	-999	<0.01	<0.03	-999	40.7233	0	100.387024
PH002_352.8	0.053196	24.6285	-999	-999	-999	<0.01	<0.03	-999	37.9053	0	98.974051
PH002_352.8	0.06584	24.5071	-999	-999	-999	<0.01	<0.03	-999	38.4907	0	99.148717
PH002_352.8	0.05438	24.6757	-999	-999	-999	<0.01	<0.03	-999	38.1636	0	99.622796
PH002_352.8	0.047061	24.587	-999	-999	-999	0.015362	<0.03	-999	38.2047	0	99.483152
PH002_352.8	0.100483	24.4546	-999	-999	-999	<0.01	0.056147	-999	37.9553	0	99.067745
PH002_352.8	0.045152	24.6501	-999	-999	-999	<0.01	<0.03	-999	38.1073	0	99.33356
PH002_352.8	0.026466	24.6696	-999	-999	-999	<0.01	<0.03	-999	38.101	0	99.431856
PH002_352.8	0.07141	24.3787	-999	-999	-999	<0.01	<0.03	-999	38.3445	0	99.272096
PH002_352.8	0.019421	24.7624	-999	-999	-999	<0.01	<0.03	-999	38.2913	0	99.612126
PH002_352.8	0.023767	24.6322	-999	-999	-999	<0.01	0.030425	-999	37.8831	0	98.776004
PH002_352.8	0.019664	24.6539	-999	-999	-999	<0.01	<0.03	-999	37.9798	0	98.84096
PH002_352.8	0.023256	24.7574	-999	-999	-999	0.013751	<0.03	-999	38.243	0	99.49937
PH002_352.8	0.020852	24.8414	-999	-999	-999	<0.01	<0.03	-999	38.19	0	99.383362
PH002_352.8	0.029444	24.7713	-999	-999	-999	<0.01	<0.03	-999	38.272	0	99.401504
ML120_206.4	0.111804	24.2037	-999	-999	-999	<0.01	<0.03	-999	37.4244	0	98.095497
ML120_206.4	0.0377	21.8704	-999	-999	-999	<0.01	0.475701	-999	37.7122	0	98.95869
ML120_206.4	0.110381	24.5241	-999	-999	-999	<0.01	0.038296	-999	38.4785	0	99.584821

Appendix E: Microprobe analyses (garnets)

Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total
	%	%	%	%	%	%	%	%	%	%	%
ML120_206.4	0.141656	24.2437	-999	-999	-999	<0.01	<0.03	-999	37.5278	0	98.783201
ML120_206.4	0.118689	24.2924	-999	-999	-999	<0.01	<0.03	-999	37.4727	0	98.815222
ML120_206.4	0.132835	24.3776	-999	-999	-999	<0.01	0.057111	-999	37.6903	0	99.099634
ML120_206.4	0.150149	24.4445	-999	-999	-999	0.01403	0.070233	-999	38.1822	0	99.078109
ML120_206.4	0.093263	24.0622	-999	-999	-999	<0.01	<0.03	-999	37.8758	0	99.383466
ML120_206.4	0.102558	23.9616	-999	-999	-999	<0.01	0.050581	-999	37.8479	0	99.300305
ML120_206.4	0.128252	24.0604	-999	-999	-999	<0.01	0.041009	-999	37.4327	0	98.996211
ML258_176.0	0.138584	24.7231	-999	-999	-999	<0.01	0.040558	-999	40.3197	0	99.778498
ML258_176.0	0.137489	24.6318	-999	-999	-999	<0.01	<0.03	-999	40.3612	0	99.807906
ML258_176.0	0.126249	24.9688	-999	-999	-999	<0.01	<0.03	-999	40.1419	0	99.881634
ML258_176.0	0.115211	24.8511	-999	-999	-999	<0.01	0.038418	-999	40.3536	0	100.145016
ML258_176.0	0.113938	25.4833	-999	-999	-999	<0.01	<0.03	-999	40.9115	0	100.330953
ML258_176.0	0.135383	24.8276	-999	-999	-999	<0.01	<0.03	-999	40.1636	0	99.409383
ML258_176.0	0.154811	24.7632	-999	-999	-999	<0.01	<0.03	-999	38.9818	0	99.130289
ML258_176.0	0.141066	25.6004	-999	-999	-999	<0.01	<0.03	-999	40.9318	0	100.309119
ML258_176.0	1.93854	25.4971	-999	-999	-999	0.406164	0.82533	-999	38.792	0	97.195949
ML258_176.0	1.94585	25.3921	-999	-999	-999	0.359653	0.723021	-999	38.6925	0	96.815102
ML112_172.0	0.079964	22.4945	-999	-999	-999	<0.01	<0.03	-999	40.4172	0	100.04198
ML112_172.0	0.071436	23.433	-999	-999	-999	<0.01	<0.03	-999	40.2933	0	100.354338
ML112_172.0	0.073397	23.695	-999	-999	-999	<0.01	<0.03	-999	39.8129	0	99.814491
ML112_172.0	0.054968	23.2037	-999	-999	-999	<0.01	0.037075	-999	40.0005	0	99.612426
ML112_172.0	0.073437	23.3305	-999	-999	-999	<0.01	0.038963	-999	39.9237	0	99.464544
ML112_172.0	0.064455	24.1898	-999	-999	-999	<0.01	<0.03	-999	39.7642	0	99.802687
ML112_172.0	0.063663	23.561	-999	-999	-999	<0.01	<0.03	-999	40.4625	0	100.157314
ML112_172.0	0.040623	23.9974	-999	-999	-999	<0.01	<0.03	-999	39.4736	0	99.173114
ML112_172.0	0.059476	24.1357	-999	-999	-999	0.01249	<0.03	-999	39.5418	0	99.410343
ML112_172.0	0.052255	23.9979	-999	-999	-999	<0.01	<0.03	-999	39.8126	0	99.828425
PH001_308.1	0.025119	25.4823	-999	-999	-999	<0.01	<0.03	-999	40.8949	0	100.236479
PH001_308.1	0.049795	25.4966	-999	-999	-999	<0.01	<0.03	-999	41.1754	0	100.481344
PH001_308.1	0.063984	25.9736	-999	-999	-999	<0.01	0.031711	-999	40.7461	0	100.202891
PH001_308.1	0.084654	25.7783	-999	-999	-999	<0.01	0.041452	-999	41.0523	0	100.516972
PH001_308.1	0.024046	25.292	-999	-999	-999	<0.01	<0.02	-999	40.6006	0	99.744573
PH001_308.1	0.072865	25.5509	-999	-999	-999	<0.01	<0.03	-999	40.2582	0	99.917737
PH001_308.1	0.040025	25.5236	-999	-999	-999	<0.01	0.031497	-999	40.0438	0	100.143088
PH001_308.1	0.044697	25.4563	-999	-999	-999	<0.01	<0.03	-999	40.2424	0	99.770706
PH001_308.1	0.058773	25.5575	-999	-999	-999	<0.01	<0.03	-999	40.2707	0	100.211668
PH001_308.1	0.039465	25.59	-999	-999	-999	<0.01	<0.03	-999	40.4479	0	100.273606
ML109_112.0	0.1066	24.2367	-999	-999	-999	<0.01	<0.03	-999	36.7791	0	98.672011
ML109_112.0	0.146269	24.2066	-999	-999	-999	<0.01	<0.03	-999	36.5773	0	98.421518
ML109_112.0	0.130832	24.348	-999	-999	-999	<0.01	0.041921	-999	36.5227	0	98.255417
ML109_112.0	0.12114	24.3728	-999	-999	-999	<0.01	<0.03	-999	36.6826	0	98.421203
ML109_112.0	0.146723	24.442	-999	-999	-999	<0.01	<0.03	-999	36.5563	0	98.487851
ML109_112.0	0.129581	24.3236	-999	-999	-999	<0.01	0.051567	-999	36.7436	0	98.456257
ML109_112.0	0.134502	24.2332	-999	-999	-999	<0.01	<0.03	-999	36.8684	0	98.470562
ML109_112.0	0.096334	24.0606	-999	-999	-999	<0.01	<0.03	-999	37.2303	0	98.643594
ML109_112.0	0.117013	24.1724	-999	-999	-999	0.016353	<0.03	-999	36.9303	0	98.399613
ML109_112.0	0.132214	24.1515	-999	-999	-999	<0.01	<0.03	-999	36.8117	0	98.045614
ML265_185.3	0.313326	25.3388	-999	-999	-999	<0.01	0.162235	-999	41.2528	0	100.182183
ML265_185.3	0.307025	24.9694	-999	-999	-999	<0.01	0.07679	-999	41.12	0	99.951848
ML265_185.3	0.262727	25.1143	-999	-999	-999	<0.01	<0.03	-999	41.413	0	100.642534
ML265_185.3	0.33211	25.3605	-999	-999	-999	<0.01	0.096714	-999	41.242	0	100.231344
ML265_185.3	0.328243	25.4837	-999	-999	-999	<0.01	0.174062	-999	41.1946	0	100.562469
ML265_185.3	0.237962	25.1265	-999	-999	-999	<0.01	0.076202	-999	41.0102	0	99.928421
ML265_185.3	0.299339	25.0641	-999	-999	-999	<0.01	0.0921	-999	41.0791	0	99.97356

Appendix E: Microprobe analyses (garnets)

Sample	Mg	Ca	Na	K	P	Cl	F	C	O	H	Total
	%	%	%	%	%	%	%	%	%	%	%
ML265_185.3	0.264903	25.193	-999	-999	-999	<0.01	<0.03	-999	41.1855	0	100.277359
ML265_185.3	0.222545	25.1537	-999	-999	-999	<0.01	0.053418	-999	41.3635	0	100.708569
ML243_143.7	0.126279	24.949	-999	-999	-999	0.015296	<0.03	-999	39.1156	0	99.5595
ML243_143.7	0.110372	24.8034	-999	-999	-999	<0.01	<0.03	-999	39.0357	0	99.392415
ML243_143.7	0.120687	24.8506	-999	-999	-999	<0.01	<0.03	-999	39.0755	0	99.800007
ML243_143.7	0.125707	25.1313	-999	-999	-999	<0.01	0.042038	-999	39.3143	0	99.618223
ML243_143.7	0.12654	24.8056	-999	-999	-999	<0.01	<0.03	-999	38.9613	0	99.264414
ML243_143.7	0.137958	24.9978	-999	-999	-999	<0.01	<0.03	-999	39.4734	0	100.008186
ML243_143.7	0.153853	25.11	-999	-999	-999	<0.01	<0.03	-999	39.2913	0	99.522492
ML243_143.7	0.13987	25.0162	-999	-999	-999	<0.01	0.031466	-999	38.9331	0	99.281072
ML243_143.7	0.110412	25.3544	-999	-999	-999	<0.01	0.088379	-999	40.6976	0	100.213175
ML243_143.7	0.108235	24.7943	-999	-999	-999	<0.01	0.078288	-999	39.1624	0	99.621117
ML258_199.2	0.131369	25.4418	-999	-999	-999	<0.01	<0.02	-999	40.7999	0	100.30978
ML258_199.2	0.141569	25.4217	-999	-999	-999	0.084326	0.056886	-999	40.736	0	100.504574
ML258_199.2	0.118469	25.3374	-999	-999	-999	<0.01	<0.02	-999	40.78	0	100.298777
ML258_199.2	0.133622	25.3893	-999	-999	-999	<0.01	<0.03	-999	40.6265	0	100.057358
ML258_199.2	0.047742	25.1275	-999	-999	-999	<0.01	<0.03	-999	40.7863	0	100.27232
ML258_199.2	0.039598	25.1326	-999	-999	-999	<0.01	<0.03	-999	40.8723	0	100.031079
ML258_199.2	0.100393	25.4448	-999	-999	-999	0.228705	<0.03	-999	40.6192	0	100.383569
ML258_199.2	0.084346	25.2428	-999	-999	-999	0.143585	<0.03	-999	40.4147	0	100.069961
ML258_199.2	0.119018	25.1823	-999	-999	-999	<0.01	<0.03	-999	40.5917	0	100.239948
ML258_199.2	0.05384	25.1004	-999	-999	-999	<0.01	<0.03	-999	41.1272	0	100.565187
PH003_349.5	0.260104	24.6783	-999	-999	-999	<0.015	0.038231		40.4909	-999	99.727279
PH003_349.5	0.26258	24.8845	-999	-999	-999	<0.014	<0.024		40.558	-999	99.983677
PH003_349.5	0.255511	24.6264	-999	-999	-999	<0.014	<0.024		39.7008	-999	99.295222
PH003_349.5	0.293735	24.5088	-999	-999	-999	<0.014	<0.024		40.6347	-999	99.900253
PH003_349.5	0.297697	25.2968	-999	-999	-999	<0.015	0.042587		41.1738	-999	100.480265
PH003_349.5	0.247361	25.2847	-999	-999	-999	<0.013	<0.024		41.0602	-999	100.42875
PH003_349.5	0.209601	25.1336	-999	-999	-999	<0.014	<0.024		40.6858	-999	100.182998
PH003_349.5	0.29955	25.0712	-999	-999	-999	<0.013	0.026106		40.768	-999	100.04549
PH003_349.5	0.212645	25.0525	-999	-999	-999	<0.014	<0.024		40.2506	-999	99.905773
PH003_349.5	0.323318	24.9011	-999	-999	-999	<0.015	0.028509		40.3228	-999	99.976394