**MINES AND WINES 2015**

**MINERAL EXPLORATION IN THE TASMANIDES**

CONTENTS

[**Preface iii**](#_Toc428258304)

[**ORGANISING COMMITTEE iv**](#_Toc428258305)

[**SIGNIFICANT RECENT DEVELOPMENTS AND RESEARCH AT THE MALLEE BULL DEPOSIT, COBAR BASIN, NSW. 1**](#_Toc428258306)

[Bob Brown1, 3, Paul Ashley1, Nancy Vickery1, 3, Rob Tyson2 and Michael Oates2. 1](#_Toc428258307)

[**The Thursday’s Gossan porphyry – It can’t run but it can hide 17**](#_Toc428258308)

[Chris Cairns (1), Doug Menzies (2), Greg Corbett (2), Hamish Forgan (1), Jennifer Murphy (1) 17](#_Toc428258309)

[**THE GIANT LACHLAN OROCLINE - A POWERFUL NEW PREDICTIVE TOOL FOR MINERAL EXPLORATION UNDER COVER ACROSS EASTERN AUSTRALIA 29**](#_Toc428258310)

[Ross Cayley 29](#_Toc428258311)

[**Intrusion-related mineral systems in north-east Queensland 39**](#_Toc428258312)

[Courteney Dhnaram and Vladimir Lisitsin 39](#_Toc428258313)

[**A GEOLOGICAL FRAMEWORK FOR THE NORTHERN MOLONG VOLCANIC BELT, EASTERN LACHLAN OROGEN: IMPLICATIONS FOR REGIONAL CORRELATIONS AND ALKALIC PORPHYRY GOLD-COPPER METALLOGENESIS 45**](#_Toc428258314)

[Peter Duerden 45](#_Toc428258315)

[**Paupong; a new gold-silver-copper field in the SE Lachlan 57**](#_Toc428258316)

[Russell Fountain 57](#_Toc428258317)

[**THE MCPHILLAMYS GOLD DEPOSIT, KINGS PLAINS, NSW. DISCOVERY HISTORY AND GEOLOGY OF THE MCPHILLAMYS GOLD DEPOSIT, LACHLAN FOLD BELT, NSW. 69**](#_Toc428258318)

[Tara French, Peter Duerden, Jeff Bigelow, Hugh Simmons, Paul Flitcroft. 69](#_Toc428258319)

[**MAPPING, MAGNETICS AND MICROSCOPES: UNDERSTAND THE SETTING OF VAMS MINERALISATION IN THE ORDOVICIAN GIRILAMBONE GROUP, WESTERN NSW 83**](#_Toc428258320)

[Phil Gilmore1, Garry Davidson2, Steven Trigg1 and Lorraine Campbell1. 83](#_Toc428258321)

[**A review of Metalliferous Basins in new south wales 93**](#_Toc428258322)

[John Greenfield, Phil Gilmore, Peter Downes, Joel Fitzherbert, Cameron Perks, Liann Deyssing, Lindsay Gilligan1 93](#_Toc428258323)

[**COPPER HILL PROJECT: INTEGRATION OF TRADITIONAL GEOLOGY AND NEW TECHNOLOGIES TO BUILD A DEPOSIT MODEL 111**](#_Toc428258324)

[Stuart Hayward (1), Glenn Coianiz (2), Bret Ferris (3), Greg Corbett (4) 111](#_Toc428258325)

[**The SOUTHERN THOMSON PROJECT – LOOKING INTO THE BASEMENT OF A NEW FRONTIER TERRANE 129**](#_Toc428258326)

[Rosemary Hegarty 129](#_Toc428258327)

[**GEOCHEMISTRY AND HYDROTHERMAL ALTERATION AT THE MOUNT RAWDON GOLD DEPOSIT 139**](#_Toc428258328)

[Ned Howard 139](#_Toc428258329)

[**THE SOUTH DARWIN CU-AU-FE-REE DISCOVERY IN THE MOUNT READ VOLCANICS, WEST COAST TASMANIA 147**](#_Toc428258330)

[Charles E. D. Hughes 147](#_Toc428258331)

[**Metallogenesis of the Lachlan Orocline: is the mineral wealth of southeast Australia due to the accretion of VanDieland? 153**](#_Toc428258332)

[David Huston1, Ross Cayley2 and David Champion1 153](#_Toc428258333)

[**Defining specific suites of diagnostic characteristics of some intrusion related gold sysytems in eastern australia 163**](#_Toc428258334)

[Michael Leu 163](#_Toc428258335)

[**UPdATE ON THE DARGUES REEF PROJECT AUGUST 2015 187**](#_Toc428258336)

[Angela Lorrigan 187](#_Toc428258337)

[**INTRUSION-RELATED GOLD SYSTEMS OF THE CHARTERS TOWERS PROVINCE, NORTH QUEENSLAND 193**](#_Toc428258338)

[Gregg Morrison and Simon Beams 193](#_Toc428258339)

[**The Zinc-rich skarn deposits in the Chillagoe District of north-east Queensland 199**](#_Toc428258340)

[Ian Morrison (Lantana Exploration Pty Ltd), Andrew Beaton (Atherton Resources Ltd) 199](#_Toc428258341)

[**CHILLAGOE DISTRICT MINERALISATION – A TECTONIC MODEL 209**](#_Toc428258342)

[J. E. Nethery 209](#_Toc428258343)

[**DISCOVERY OF THE EUREKA MASSIVE SULPHIDE LENS USING DOWNHOLE ELECTROMAGNETICS 221**](#_Toc428258344)

[Jacob Paggi and Daniel Macklin 221](#_Toc428258345)

[**UNCOVERING PORPHYRY POTENTIAL IN THE STAVELY AREA THROUGH PRE-COMPETITIVE STRATIGRAPHIC DRILLING 227**](#_Toc428258346)

[Anthony Schofield1, Ross Cayley2, David Taylor2, Tim Barton1, Evgeniy Bastrakov1, David Huston1, Chris Lewis1 and Matilda Thomas1 227](#_Toc428258347)

[**THE EXPLORATION FAIRWAY FOR CAMBRIAN MINERALISED COPPER PORPHYRIES IN THE STAVELY ARC OF WESTERN VICTORIA 233**](#_Toc428258348)

[David Taylor1, Ross Cayley1, Phil Skladzien1, Robert Duncan1, Jon Woodhead2, Greg Corbett3 233](#_Toc428258349)

[**PORPHYRY COPPER-GOLD MINERALISATION IN THE NEARA ARC: SPOTLIGHT ON THE BOOUBYJAN INTRUSIVE COMPLEX 241**](#_Toc428258350)

[Jose Veracruz1,2, Paul Ashley2, Nancy Vickery2 and Josh Leigh1 241](#_Toc428258351)