

REGIONAL UPDATES

December Quarter 2011

Central Queensland

EXPLORATION AND NEW DEVELOPMENTS

Minerals

Australian Bauxite Ltd has completed 187 holes totalling 700 m at the [Binjour](#) bauxite deposit. The 16.8 Mt bauxite deposit contains a 9.3 Mt high grade (43.2% available alumina and 2.7% reactive silica) resource at several sites that averages 3.7 m in thickness. Recent discoveries of bauxite outcrops suggest that several of the irregular resource outlines may coalesce into sizeable resource blocks with additional drilling.

Aussie Q Resources Ltd has completed 783 m of RC drilling at the [Greater Whitewash](#) molybdenum-copper-silver project near Monto. The infill drilling program is designed to test mineralised zones that have previously been identified but not drilled or alternatively, sparsely drilled. Hole 11WW220 intersected 53 m grading 0.21% copper, 0.056% molybdenum and 2g/t silver from 32 m depth. Some 681 m of RC drilling was also completed at the [Kiwi Carpet](#) molybdenum-copper-silver prospect about 10 km north of Whitewash. Significant mineralisation over several metres was observed in all holes drilled.

Belridge Enterprises Ltd has commenced work on the re-development of the [Goondicum](#) industrial minerals mine near Monto. The mine was acquired by the company in January 2009 for \$12.5 million. The new operation will initially produce ilmenite only, on a smaller scale (1.7 Mtpa run-of-mine ore) relative to the original mine, but with the capability to produce magnetite, apatite and feldspar products as the markets are developed. Re-opening of the mine will require a capital expenditure of about \$15 million and employ about 35 operational staff when production commences during the June quarter 2012.

DGR Global (previously known as **D'Aguiar Gold Ltd**) has completed 46 exploration holes totalling 1714 m at the [Monogorilby](#) titanium prospect (EPM 16260), located about 60 km south south-west of Mundubbera. A rutile-enriched laterite zone, 8 to 20 m thick has developed over mafic volcanic breccia rocks (Main Range Volcanics). The enriched laterite zone averages about 5% TiO₂ and 11 m in thickness.

Drummond Gold Ltd has completed three cored drill holes totalling 830 m at the [Mount Coolon](#) (Koala) gold mine to test for extensions and repetitions to known mineralisation. The drilling intersected alteration and veining at the expected intersection with the main lode structure. The Mount Coolon mineralisation is hosted within andesitic agglomerate which is not present at depth.

Eastern Iron Ltd has undertaken further metallurgical testwork on drilling samples from the [Eulogie Park](#) magnetite-titanium-vanadium deposit. Results have demonstrated that coarse cobbing of ground ore at 100% passing 500 micron can reject around 75% of the mass to a non-magnetic tailings fraction with no loss of iron recovery. Grinding of the magnetic fraction will then produce an acceptable product (61.5% Fe and 1% V₂O₅) at a final grind of 100% passing 150 micron leaving open the potential to produce either a pellet or sinter feed product. The Eulogie Park Mining Concept Study is expected to be completed in the March quarter.

Evolution Mining Ltd has completed 21 underground resource definition holes totalling 2479 m at Kilkenny Shoot and 17 holes totalling 2492 m at the Tipperary Shoot ([Cracow](#) gold mine) during the quarter. Significant true width intersections include: 13.7 m grading 14.22g/t from 94.8 m (Kilkenny K KU180) and 8.5 m grading 15.52g/t from 91 m (Tipperary K KU194). Exploration drill hole CBK317R has intersected several zones of gold-bearing epithermal quartz-carbonate veining approximately 250 m north of the Kilkenny North ore shoot.

Resource definition and extension drilling programs comprising seven drill holes for 2308 m were completed to upgrade Inferred Mineral Resources and to test down-dip extensions to mineralisation at [Mount Rawdon](#) gold mine. Significant true width intersections include: 17.14 m grading 1.89g/t gold and 3.48g/t silver from 226 m depth (hole MRRC203815-4) and 35.38 m grading 1.2g/t gold and 3.2g/t silver from 48 m depth (hole MRRC203815-3).

Fitzroy Resources Ltd has completed two RC drill holes about 200 m south of the [Develin Creek](#) copper zinc deposit (within the Rookwood project area). One of the holes (FRWC007) has intersected a broad zone of disseminated to semi-massive sulphides.

Invictus Gold Ltd has completed 14 RC holes totalling 2184 m at the [Scartwater](#) porphyry gold prospect (within EPM 14932), about 50 km north-west of Mount Coolon. Two sites (East Porphyry and West Porphyry) were drilled along two traverses 100 m apart. Assay results from two holes at the East Porphyry indicate anomalous gold (up to 2 m grading 0.7g/t) and arsenic (up to 2 m grading 0.2%), with lesser zinc, tellurium and silver within a 50 m thick alteration zone. Six RC holes totalling 870 m were completed at the nearby [Whiteglow](#) gold-silver prospect. Drill hole assay and lithological data are being interpreted.

Solomon Gold Plc has announced resource estimate increases for the *Crunchie* and *Kauffmans-Homestead* gold deposits within the [Rannes](#) gold-silver project north-west of Biloela. The new estimates have increased the Inferred mineral resources at the Rannes gold-silver project by 20% to 25.5 Mt grading 0.6g/t gold and 15.9g/t silver (see table below).

	Million tonnes	Gold g/t	Silver g/t	Gold oz	Silver Moz
Crunchie	6.9	0.5	42	106,066	9.28
Kauffmans-Hmstd	15.6	0.7	7.0	326,111	3.51
Brother	1.9	0.6	0.7	35,130	0.04
Crackin Rosie	1.1	0.6	5.0	19,630	0.18
TOTAL	25.5	0.6	15.9	~486,940	~13

The Inferred resource increase at *Kauffmans-Homestead* is associated with additional deeper resources from a number of good intersections at depth, with the gold mineralisation remaining open at depth, to the north, east and south. At the *Crunchie* deposit mineralisation remains open at depth and to the north.

Zamia Metals Ltd has extended another three existing shallow RC holes with cored tails to test the continuation of molybdenum mineralisation down to 550 m below the surface at the [Anthony](#) molybdenum deposit. Assays results for the five holes have been received and included a down-hole intersection of 54 m grading 353 ppm molybdenum from 352 m (hole RCD11A097). Assay results from the two large diameter (64 mm) cored holes were also received and included an intersection of 153.5 m grading 650 ppm molybdenum from 98 m depth (hole DD11A098).

Coal

Acacia Coal Ltd (previously known as **Newland Resources Ltd**) has commenced a Mining Concept Study for the **Comet Ridge** coal deposit. The company is considering a 1.5 Mtpa open-cut mine, targeting numerous coal plies within the Fair Hill Seam. Drilling in the first half of 2012 is required to raise the resource to Indicated JORC Code status prior to applying for a Mineral Development Licence.

Anglo American Metallurgical Coal Ltd has approved development for the \$1700 million **Grosvenor** coal project. The first phase of underground project will eventually produce up to 6 Mtpa hard coking coal for export from a single longwall unit. First development coal is expected in 2013 and commissioning of the first longwall mine in 2016. A pre-feasibility study is underway for a second longwall mine at the site that would double output to 12 Mtpa by 2017 if all necessary approvals were obtained.

Aquila Resources Ltd and **Vale Australia Ltd** have approved and commenced development work for the \$1.25 billion **Eagle Downs** underground coal project. Work completed during the quarter included drilling the vertical components of the lateral gas drainage wells and construction of mine access roads. It is expected that the commencement of the access to the underground drifts will be completed this financial year in preparation for the drift driveage in 2012 / 2013.

Australia Pacific Coal Ltd has completed six exploration drill holes (totalling 851 m) at the **German Creek West** (EPC 1548) coal prospect. Three seams (averaging < 1.5m in thickness) were identified as persistent across the area, are likely to be within the lower German Creek Formation and underlying Freitag Formation, not within the target German Creek Coal Measures. Infill resource definition drilling (up to 12 partially cored holes) and six line kilometers of 2D seismic is planned for the **Cooroorah** coal deposit (EPC 1827) for the June quarter.

Bandanna Energy Ltd has announced a 76% increase in Indicated coal resources and a 31% increase in Total coal resources at the **Springsure Creek** (EPC 891) underground coal project. The new Indicated resource estimate of 228 Mt (previously 129 Mt) follows the completion of drill holes targeting the Aries 2 and Castor seams within the Springton domain. Nine resource definition drill holes (totalling 2660 m) were completed during the quarter. Thirty nine partially cored resource definition holes totalling 5017 m were completed during the quarter at the **Dingo West** coal project. The Department of Environment and Resource Management (DERM) has decided that the coal project will require an EIS to proceed.

Bandanna Energy Ltd and **AMCI Ltd** have announced open cut Coal Reserve estimates for the **South Galilee** coal project. A Total Reserve of 274 Mt comprises a Proven Reserve of 132 Mt and a Probable Reserve of 142 Mt within the D1 and D2 seams. Nine resource definition holes totalling 1698 m were completed during the quarter and a further 75 drill holes are planned to support mine feasibility studies.

Bowen Energy Ltd has completed an 83.4 line-kilometre 2D reflection seismic survey over the **Katrina** coal prospect (EPC 1045). The results of this survey will be used to guide additional drilling of the prospective Aries 1 and Castor 1 seams. Four exploration holes totalling 600 m were completed at the **West Rolleston** coal prospect (EPCs 1002 and 1187). All four holes intersected minor thin coal seams, similar to previous nearby drilling in 2009.

Carabella Resources Ltd has completed a Mining Concept Study and 48 drill holes at the [Grosvenor West](#) coal deposit (EPC 1069). The Concept Study indicates potential to develop either an underground or open cut mine capable of producing 3.5 Mtpa (66% hard coking coal and 33% thermal coal) over 14 to 20 years. The Company will now progress the environmental approvals process and carry out final studies to select the optimal mining option by mid-2012.

Coalbank Ltd has completed 34 exploration holes (including four partly cored holes) within EPCs 1719 and 1993 south of Blackall. The holes are located along a 26 km north-south section of the Ravensbourne Road and a 7 km east-west section within [EPC 1993](#). Drilling has intersected three separate, very shallow dipping, coal-bearing units within the Winton Formation (Eromanga Basin). Continuity of coal seams has been established over a large area. Follow-up drilling is planned to enable a JORC Code compliant coal resource estimation to be undertaken. Six stratigraphic holes completed within EPCs 1415, 1481 and 1621 south-east of Tambo, have confirmed the presence of Walloon Coal Measures.

Cockatoo Coal Ltd has completed seventeen resource definition holes totalling 2318 m at the [Baralaba](#) coal mine. Some 31 resource definition and geotechnical holes were completed for the [Baralaba North](#) coal project. Fifteen resource definition drill holes totalling 2330 m were completed at the [Baralaba South](#) coal project. Exploration drilling continued at the [Dingo](#) coal prospect (**Boardwalk Resources Ltd** and **Cockatoo Coal Ltd**) with 23 open holes (totalling 6577 m) completed during the quarter.

Cockatoo Coal Ltd and **Mitsui Coal Holdings Ltd** have lodged a Mining Lease (ML 55006) application and announced initial open-cut Coal Reserves for the [Taroom](#) coal project. A Total Reserve of 203 Mt comprises a Proven Reserve of 124 Mt and a Probable Reserve of 79 Mt. Some 25 resource definition drill holes totalling 3458 m were completed; with cumulative down-hole coal intercepts averaging about 9.9 m. The Joint Venture Partners have submitted a Referral of Proposed Action to the Federal Government relating to development of an 8 Mtpa (product coal) open-cut mine over 25 years. A draft Pre-Feasibility Study has been submitted to the Joint Venture Partners for the project.

Initial resource definition drilling has been completed at the Alambi coal deposit (northern half of the [Blackall](#) coal project) by **East Energy Resources Ltd** with one chip and four partially cored drill holes completed during the quarter. Coal quality analyses from the drilling program indicate similar coal quality to other areas within EPC 1149. A further 14 partially cored holes infill resource definition holes were completed between the Alambi and Carlow coal deposits to support a new JORC Code compliant resource estimation over a 295 km² area. The company plans to continue negotiations with third parties to secure the port and rail access required to underpin a mine at Blackall producing up to 20 Mtpa of thermal coal.

Endocoal Ltd has commenced a Mining Concept Study for the [Rockwood](#) coal project. Fifteen infill resource drill holes totalling 2393 m were completed during the quarter. Results of coal quality analyses have confirmed a low volatile, PCI anthracite can be produced from coal washing. Three holes totalling 665 m were completed at the *Inderi* deposit (within the [Orion Downs](#) coal project). Mine feasibility studies progressed at the *Meteor Downs South* open cut project, including the design and costing of a suitable mine infrastructure area with equipment maintenance, workforce amenities, offices and other essential facilities to support the mining operations. One exploration hole, to a depth of 320 m was completed at the [Essex](#)

coal prospect (EPC 1515) located about 25 km north-east of Middlemount. The hole intersected several coal seams, possibly within the Moranbah Coal Measures.

Gullewa Ltd has completed an initial three-hole drilling program at the [Kilmain](#) coal prospect (EPCs 1298 and 1917), about 45 km east of Springsure. Drill holes KL001 and KL002 intersected a conjoined Castor / Pollux Seam 3.1 m thick, within the Rangal Coal Measures. The company has estimated an underground Exploration Target of 200 Mt of low-ash thermal coal for the prospect.

Linc Energy Ltd has completed eleven drill holes totalling 2728 m at the [Teresa](#) underground coal project, located about 17 km north of Emerald. The holes will provide useful coal quality samples and geotechnical data. Collection of base line environmental data continued during the quarter and the company expects to submit a draft EIS document to DERM in late 2012.

New Hope Corporation Ltd have completed 13,660 m of drilling comprising, 16 cored holes and 60 open holes at the [New Lenton](#) coal project. The additional data has identified a coal inventory of 320 Mt within the Girrah Seam. Sample testing and analysis of this coal is still underway. A seismic survey completed during the quarter has delineated the location of the Burton thrust fault. Work has commenced on the preparation of documents required for the project EIS.

Shenhua International Group Ltd has submitted a Referral of Proposed Action to the Federal Government in relation to the development of an open-cut and underground at [Taraborah](#). The eventual mining rate will be about 2.1 to 2.3 Mtpa run of mine (ROM) for the open-cut operation and 1.9 to 4.9 Mtpa ROM for the underground operation, depending upon the type of underground mining methods that are utilised. Open-cut mining is planned for the southern part of the project area over 12 years. Underground mining is planned for the northern portion of the project area over 27 years. The mining project will require a Coal Handling and Preparation Plant to produce thermal coal for export via Gladstone.

Stanmore Coal Ltd has established an Indicated coal resource of 26 Mt and a 45% increase in the Total coal resources at the [Mackenzie](#) coal deposit. The upgraded Total resource of 143 Mt (previously 99 Mt) is based on 80 drill holes within the Leo and Aquarius seams over a strike length of 27 km. The two coal seams lie at depths between 10 and 110 m. Coal product yield varies significantly across the deposit and between the various seams, with yields ranging from 11% to 71%. Work is continuing on alternative processing methods that may improve product ash and recovery.

Stanmore Coal Ltd has announced an initial Inferred coal resource of 95 Mt at the [Belview](#) coal deposit, along the western edge of EPC 1114. The estimate is based on three of the six drill-hole intersections of the Gemini Seam, which averages about 5.5 m in thickness. Preliminary coal quality test work from three holes tested indicates that the Gemini Seam is capable of producing a dual product comprising; a high quality hard coking and a low-ash, high energy thermal coal. Further drilling is planned to test potential for an Exploration Target of 205-345 Mt.

Wavenet International Ltd has completed fourteen open holes and three cored holes within [EPC 2044](#), near Gayndah. The drilling has intersected mid-Triassic age coal seams within several relatively narrow (1 km-wide) fault blocks west of Gayndah. Proximate analyses of

coal samples obtained from cored holes indicate relatively high raw ash contents (averaging 54.4%) and low fix carbon (averaging 34%).

Wesfarmers Ltd has submitted a Referral of Proposed Action to the Federal Government in relation to the development of a open-cut mine at [Curragh West](#) within the Mining Lease (ML 80171) application area. The open-cut will extract coal about 0.9 Mtpa (ROM) from the Burngrove Formation targeting the Aquarius, Libra, Leo and Scorpio seams. The processed coal will be used as a blended coking coal product to mix with coal from the Rangal Coal Measures. The \$286 million [Curragh](#) mine expansion project (currently under construction) is expected to be completed at the end of March 2012.

Petroleum and coal seam gas (CSG)

Arrow Energy Ltd has completed five CSG exploration wells within Tertiary-age sedimentary basins near Rockhampton. Two CSG exploration wells ([Styx River -5](#) and [6](#)) in the Styx Basin (ATP 700) and one well ([Herbert Creek-2](#)) within the Herbert Creek Basin (ATP 718) north of Rockhampton. A 730 m deep CSG exploration well ([Yaamba-2](#)) was completed within ATP 716 and a 501 m deep well ([Casuarina-1](#)) within the Casuarina Basin south of Rockhampton.

Blue Energy Ltd has announced 12% increase in 3C contingent resources; now 1451 PJ (previously 1295 PJ) for the [Monslatt](#) CSG project. The resource upgrade includes favourable results from the Monslatt-9 core and pilot production well, which intersected 16 seams within the Moranbah Coal Measures with gas contents from 8 to 25 cubic metres per tonne. A 92% increase in 3P reserves to 75 PJ (previously 39 PJ) and a 15% increase in 3C contingent resources to 326 PJ (previously 284 PJ) have been announced for the [Sapphire](#) CSG project. The reserve upgrade includes favourable results from the Sapphire-4 core and pilot production well. Sapphire-4 had intersected 62 m of net coal in the Rangal, Fort Cooper and Moranbah coal measures and flowed gas to surface from the Fort Cooper during an open-hole drill stem test.

During the quarter **Bow Energy Ltd** had ten pilot wells completed for production in the [Blackwater](#) CSG field, with three of the wells on pump. Of the three wells on pump; two are vertical fraced wells: BWP-23 (measured gas flows around 1840 cubic metres per day-m³/d) and BWP-26 (measured gas flows exceeding 5660 m³/d) and one is a lateral well: BWP-39 (measured gas flows exceeding 2830 m³/d). Bow Energy Ltd was acquired by **Arrow Energy Ltd** in January 2012.

Exoma Energy Ltd has completed one exploration well into the Galilee and Eromanga basins during the quarter. Seven exploration wells of the planned 13-well drilling program have now been completed. The [Hollowback-1](#) exploration well has intersected 9 m of net coal within the Betts Creek and Aramac coal measures. A 12 m section of Toolebuc Shale was also intersected and representative chip samples have been taken for geochemical analysis. Source Rock Analysis conducted on core samples from the Toolebuc Shale demonstrate that the shale has generated free oil and associated gas.

Log analysis from the [Katherine-1](#) exploration well shows two oil columns: a six metre column in the Hutton Sandstone and a four metre column in the overlying Adori Sandstone. Seismic mapping suggests the Katherine structure is divided into two prospect areas; Katherine West (in which oil was discovered by Katherine-1) and Katherine East. Exoma Energy has estimated (at the P50 level) about 48 million barrels of oil (MMBO) in place for

Katherine West and about 125 MMBO in place for Katherine East. The company plans to drill a follow-up core well on the Katherine West prospect (Katherine-2) in early 2012 to confirm the oil–water contacts and establish the quality of the two sandstone reservoirs.

The [Rodney Creek](#) CSG project (**AGL Energy Ltd** and **Galilee Energy Ltd**) Joint Venture partners have approved a 2012 calendar year work program of up to \$20 million. The program contains a mix of firm (e.g. continuation of the Glenaras Pilot and water management studies) and contingent (e.g. drilling and suspension of five wells for a 5-spot pilot north of Glenaras) expenditure. The contingent expenditure is subject to the outcomes of the Glenaras Pilot and the timing of a number of water management strategies.

Geo Resolve Ltd has completed two cored exploration CSG wells within ATP 780 (**Apiti Oil and Gas Exploration Ltd**) east of Barcaldine. The wells as part of a farm-in venture targeting up to 34 m of net coal within the Bandanna Formation and the Aramac Coal Measures. [Kyenton-1](#) was drilled to a depth of 1346 m while [Blendon-1](#) was drilled to 1159 m. Geo Resolve has estimated an Exploration Target of 8 TCF (or 226 billion cubic metres) of gas within the northern portion of the exploration permit.

QGC Ltd has completed four CSG exploration wells (Dingonose-2, 9, 14 and 18) between early September and early November 2011 at the [Dingonose](#) CSG field within ATP 804 east of Blackwater, and one exploration well ([Yarrabee-1](#)) to a depth of 820 m, about 33 km northeast of Blackwater.

Santos Ltd and **Origin Energy Ltd** have completed six appraisal CSG wells (Clematis Creek East-2, 2 DW1ST1, 3, 3 DW1, 4 and 5) at [Comet Ridge](#) CSG field and three appraisal wells (Fairview-123 OB2, Fairview-289 OB1 and Fairview-291 OB1) at the [Fairview](#) CSG field. Nineteen development wells were also completed at the Fairview field, which achieved average gas sales of 100 TJ/day. Two cored exploration CSG wells ([Fuggles-1](#) and [Tardrum-4](#)) were completed about 70 km south of Theodore.

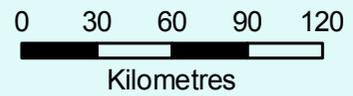
WestSide Corporation Ltd and **Mitsui E&P Australia Ltd** have drilled two up-dip lateral production wells; Meridian-35 and 36 at the [Meridian](#) CSG Field. These two wells will be completed during the March quarter. Production from the field averaged 8.1 TJ/day and eleven well workovers were successfully completed to increase base production levels. Planning for a four-well production pilot program in 2012 at the [Paranui](#) CSG field (**WestSide Corporation Ltd**, **Mitsui E&P** and **QGC Ltd**) commenced during the quarter involving an initial review of suitable well locations.

14th February 2011

Phil Ferenczi
Regional Geologist
Central Region

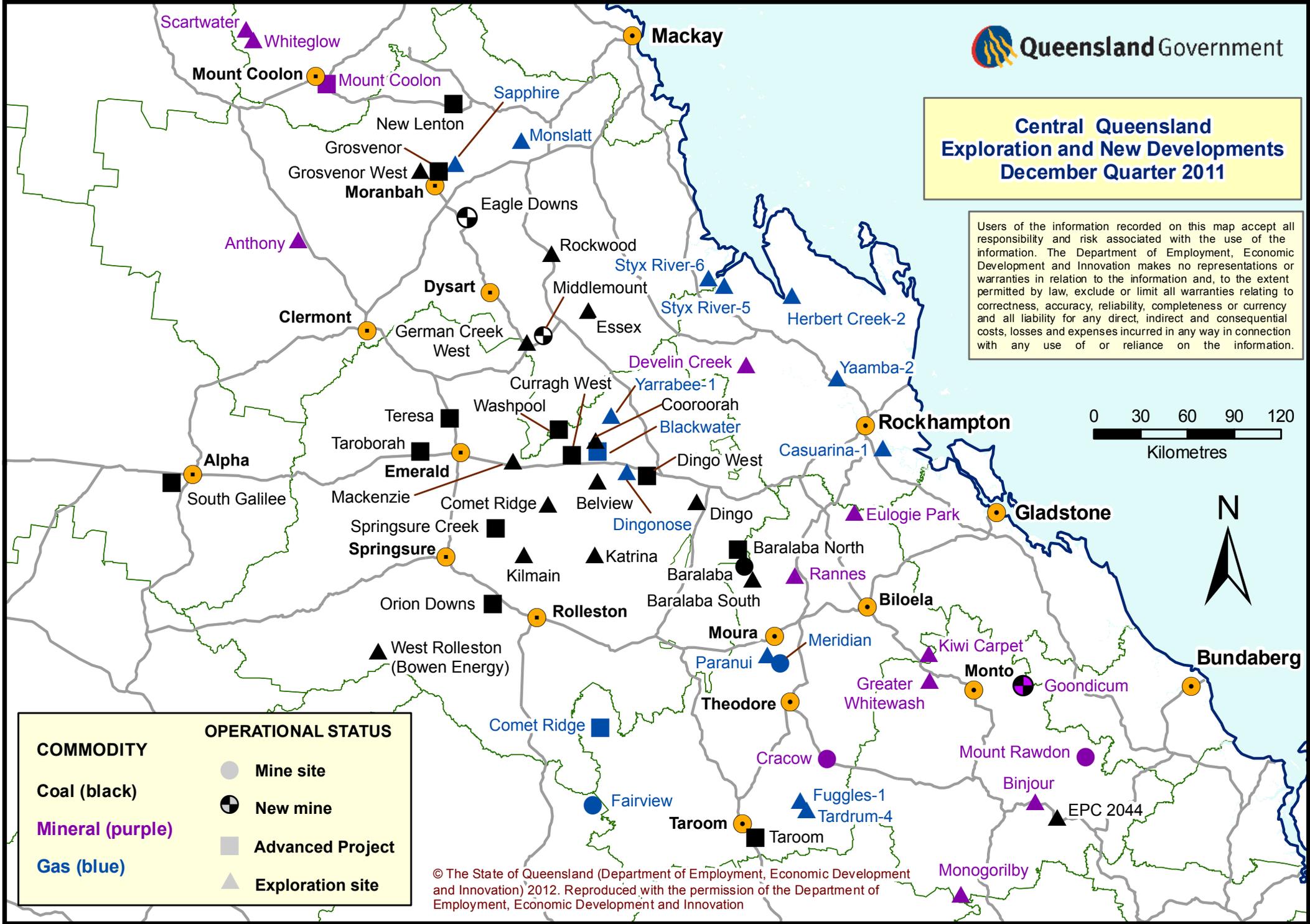
**Central Queensland
Exploration and New Developments
December Quarter 2011**

Users of the information recorded on this map accept all responsibility and risk associated with the use of the information. The Department of Employment, Economic Development and Innovation makes no representations or warranties in relation to the information and, to the extent permitted by law, exclude or limit all warranties relating to correctness, accuracy, reliability, completeness or currency and all liability for any direct, indirect and consequential costs, losses and expenses incurred in any way in connection with any use of or reliance on the information.



COMMODITY	OPERATIONAL STATUS
Coal (black)	● Mine site
Mineral (purple)	⊕ New mine
Gas (blue)	■ Advanced Project
	▲ Exploration site

© The State of Queensland (Department of Employment, Economic Development and Innovation) 2012. Reproduced with the permission of the Department of Employment, Economic Development and Innovation

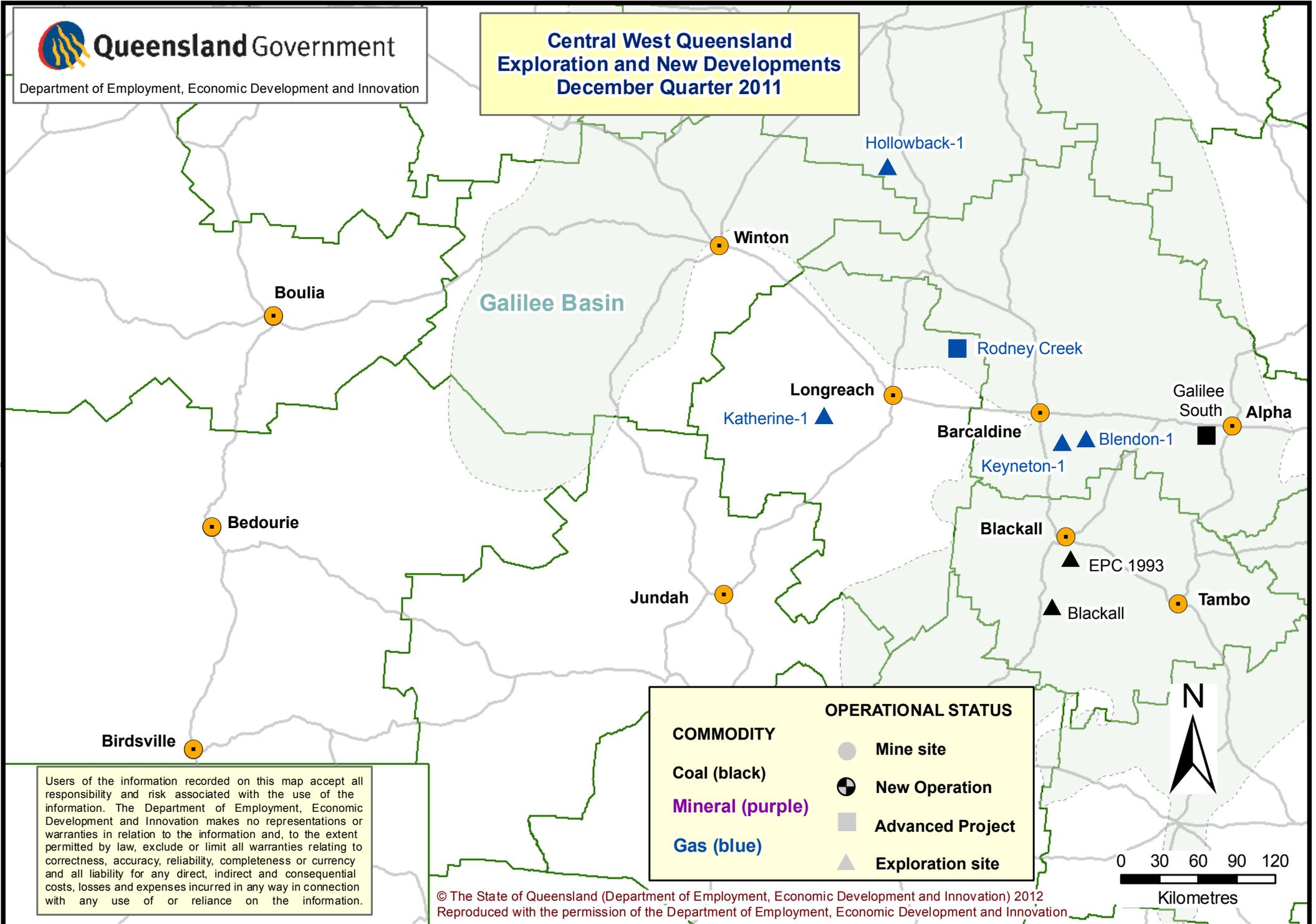




Queensland Government

Department of Employment, Economic Development and Innovation

**Central West Queensland
Exploration and New Developments
December Quarter 2011**



OPERATIONAL STATUS	
●	Mine site
⊕	New Operation
■	Advanced Project
▲	Exploration site

- COMMODITY**
- Coal (black)
 - Mineral (purple)
 - Gas (blue)



Users of the information recorded on this map accept all responsibility and risk associated with the use of the information. The Department of Employment, Economic Development and Innovation makes no representations or warranties in relation to the information and, to the extent permitted by law, exclude or limit all warranties relating to correctness, accuracy, reliability, completeness or currency and all liability for any direct, indirect and consequential costs, losses and expenses incurred in any way in connection with any use of or reliance on the information.