

FINAL REPORT
BELL BAY QUARRY PROJECT
EXPLORATION LICENCE 6/2009

For period from August 25, 2009 to February 14, 2014

Bell Bay, Tasmania, Australia

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February 14, 2014

ABSTRACT

Delta Materials Pty. Ltd. (Delta), which is owned 100% by Delta Minerals Corporation (Delta Minerals) conducted an extensive study looking for potential crushed stone quarry sites along the coast of Australia to supply the Sydney market with construction material. A potential dolerite quarry site in the Bell Bay area of the Tamar estuary, Tasmania, was selected on the basis of the following criteria:

- Good quality dolerite suitable for Sydney's construction material requirements.
- Closeness of the potential quarry to a protected deep water port.
- The potential quarry occurring within a designated industrial area.
- Excellent infrastructure supporting the Rio Tinto Alcan aluminum smelter, BHP Billiton Temco ferro-manganese alloy smelter and other significant industrial operations.
- An experienced industrial work force to draw upon from the immediate area and nearby mining operations.

Delta obtained a two part Exploration License, EL6/2009. The northern part of the license covers the proposed Bell Bay Quarry Project. The license was granted by Mineral Resources Tasmania (MRT) on August 25, 2009 for a five year tenure ending August 24, 2014. Land title is partly private freehold, owned by Rio Tinto Alcan, and partly State Forest, managed by Forestry Tasmania.

A small abandoned dolerite quarry is located on West Knob, 500 m east of Lauriston Reservoir and contiguous to EL6/2009. The quarry is owned by Tasmanian Ports Corporation Pty Ltd who hold tenure to a 1 hectare Mining Lease, 1117P/M. It is believed that the physical and chemical characteristics of the dolerite and the structural setting are representative of the dolerite within Delta's area-of-interest. A large composite grab sample was collected from the Tasmanian Ports Corporation Quarry. The analytical results were encouraging and the large hills to the east of the quarry, which are now referred to as the West, Central and East Resources are believed to be composed of similar dolerite.

An exploration program was conducted within the northern part of EL6/2009 from October 2009 to May 2010. The program consisted of geological mapping, surface rock sampling, a geophysical gravity and magnetic survey and a total of 2,460.9 metres of diamond drilling in 21 holes. The results from this exploration program produced sufficient geological and rock quality information to facilitate a Canadian National Instrument 43-101 compliant resource report. The 43-101 technical report dated September 10, 2010 and titled, "Bell Bay Quarry Project, Tasmania" was prepared on behalf of Delta by Troy Lowien of Coffey Mining Pty. The three volume hard copy of this report with appendices and an accompany CDROM with the digital information contained in the report and appendices was submitted to MRT in December 2010.

The dolerite located within the Bell Bay Quarry Project area is a coarse to fine grained, ophitic textured sill with an apparent dip of approximately 10° to 15° to the southwest. The dolerite sill is cut by steeply dipping NW-SE, E-W and NE-SW trending faults which separate and bound the drill tested West, Central and East Resources. In three-dimensional modeling the dolerite-sedimentary contact appears to have an elongated bowl like form

striking approximately 300-120 degrees. The true thickness of the pre-eroded sill is unknown, but exceeds 170 metres as defined by drilling.

Surface mapping and orientated core measurements indicate that there are five joint trends in the project area. Three of the joint trends parallel NW-SE, E-W and NE-SW striking faults. The N-S trending joints appear to be the dominant trend. The low angled E-W striking and south dipping joints are widely spaced but they could potentially have an impact on mine planning as could the shallowly southwest dipping dolerite-sedimentary rock contact.

The optimal blast hole pattern and explosive type will need to be determined in order to produce the best combination of feed to the primary crusher, reduce costs associated with secondary breakage and limit production fines. The relatively close spacing of the steeply dipping orthogonal joint sets may cause elongation of the fine and coarse fragments. Designing the commercial crushers specifically for the Bell Bay dolerite should maximize the production of cubic fragments.

The West and Central Resources are separated by the Central Fault Zone and the Central Resource is bounded on the northeast side by the East Fault Zone. These two major NW-SE trending, steeply dipping faults have been drill tested. Interpretation of drill core structures and aeromagnetic imagery suggests an apparent dextral strike slip displacement of approximately 450 metres on the Central Fault.

The Central and East Fault Zones are approximately 80 m wide and consist of weathered, sheared and brecciated dolerite containing predominantly clays, limonite, zeolites, chlorite and carbonate secondary minerals. The quality of the material within the fault zones does not normally meet the Australian Standards Specification Limit requirements for the Coarse Fraction Particle Density and Water Absorption, Sodium Sulphate Soundness Loss and Los Angeles Abrasion Loss tests and therefore the fault zones have been classified as waste.

The representative composite core samples were classified into the following four categories:

1. **Dolerite** – this material occurs within the resource and is good quality dolerite without any significant weathering or deleterious minerals.
2. **Weathered Dolerite** - this material occurs within the resource and represents the weathered dolerite in the near surface portions of the drill holes and the more strongly jointed dolerite adjacent to the fault zones.
3. **Fault Zone** – this material is considered waste because it contains deleterious minerals. However, there are weathered dolerite boulders and sections of good dolerite within the fault zone which may be separated by dry sieving and then utilized for crushed material or specialty stone.
4. **Sediment** - this material represents the Triassic age sediments underlying the dolerite and is considered to be waste.

Four of the vertical drill holes within the West and Central Resources that intersected Weathered Dolerite at surface were not sampled from surface to an arithmetic average depth of 4.25metres.

The Rock Quality Designation, Core Recovery and Point Load testing indicated that the Dolerite and Weathered Dolerite results for the West, Central and East Resources were as follows:

- Core Recovery averaged 98%, indicating competent rock within the resources.
- RQD averages 63%, which yielded a rating of 13. Together with the other criteria (Intact Rock Strength, Joint Spacing, Joint Condition and Groundwater) in the Rock Mass Rating Classification System, this produced a rating of between 60 and 80, which is described as Good on a five division scale ranging from Very Poor to Very Good.
- Point Load testing results indicate that 97% of the core tested has a strength classification of R4 High to R6 Extremely High.

The following analytical tests were determined to be critical parameters for evaluating the suitability of the composite drill core samples for construction material:

- Coarse Fraction Particle Density ($>2.5 \text{ t/m}^3$) and Water Absorption ($<2\%$)
- Sodium Sulphate Soundness Loss ($\leq 6\%$ for concrete exposure classification C and $\leq 9\%$ for concrete classification B1 and B2)
- Los Angeles Abrasion Loss ($<30\%$).

The Bell Bay Quarry Project dolerite has comparable properties to material presently being used in the Sydney region. The length weighted averages of the nineteen composites for the Dolerite and Weathered Dolerite Results from the West, Central and East Resources appear to be:

- Hard and strong, (Wet Strength $\sim 266\text{kN}$)
- Dense and fine grained, (Coarse Fraction Apparent Particle Density 2.93 t/m^3 and Water Absorption 1.13%)
- Dense and fine grained, (Coarse Fraction Particle Density (SSD) 2.87 t/m^3 and Water Absorption 1.13%)
- Sound crushed fines, (Fine Fraction Apparent Particle Density 2.85 t/m^3 and Water Absorption 2.59%)
- Sound crushed fines, (Fine Fraction Particle Density (SSD) 2.79 t/m^3 and Water Absorption 2.59%)
- Durable, (Wet/Dry Variation 15.04%, Los Angeles Abrasion Loss 13.89%, Sodium Sulphate Loss 4.12%)
- Good resistance to polishing, (Polished Aggregate Friction Value 48.50)
- Low Acid Soluble Chloride, ($<0.001\%$)

- Low Acid Soluble Sulphate, (reported >0.01%)
- Low percentage of crushed fines, (<75µm, 2.25%)

Dolerite, with the exception of one composite, yielded test results that exceed the Australian Standards Specification Limit requirements for use in the concrete and road construction industries. The composite exception, from BB10-20, was sampled from a zone of closely spaced joints adjacent to the Central Fault Zone and contains weathering and alteration minerals.

Six composites within the West and Central Resources are classified as Weathered Dolerite. Weathered Dolerite occurs close to the surface or in areas containing a higher frequency of closely spaced joints.

Three of the six composites were sampled from approximately the upper 30 m of the drill core and yielded results that did not meet Australian Standards Specification Limit requirements for at least one of the critical parameters.

- One of the six composites was collected from a zone of closely spaced joints adjacent to the Central Fault Zone. The composite contains weathering and alteration minerals and yielded results that did not meet Australian Standards Specification Limit requirements for at least one of the critical parameters.
- Two of the six composites exceeded the Australian Standards Specification Limit requirements for the critical parameters.

Testing of the Dolerite and Weathered Dolerite from the West, Central and East Resources indicated that the arithmetic and length weighted averages for all tests, with the exception of the Fine Fraction Water Absorption, exceed the Australian Standards Limit requirements for construction material. A commercial processing plant was planned to have wet classification to remove a large portion of the < 75µm material and it is projected that this would improve the water absorption result for the -4.75 mm fraction. Therefore, it is believed that the Dolerite and Weathered Dolerite can be blended during mining and processed to produce a product that would meet the requirements for construction material in the Sydney market.

The Measured, Indicated and Inferred Resources (43-101 Technical Report, Coffey Mining, Troy Lowien) is estimated as follows:

| Class | Volume (Mm ³) | Tonnage (Mt) |
|--|---------------------------|--------------|
| Measured Mineral Resource | 78.2 | 229 |
| Indicated Mineral Resource | 34.6 | 101 |
| Measured and Indicated Mineral Resource | 112.9 | 331 |
| | | |
| Inferred Mineral Resource | 3.6 | 10 |
| | | |
| Note: Average Length Weighted Coarse Fraction Apparent Particle Density = 2.93 t/m ³ ; Mineral Resource calculated to dolerite-sedimentary contact and bounding faults | | |

No further work is recommended until an Australian construction material market has been identified and secured for the Bell Bay dolerite.

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1.0 INTRODUCTION

Exploration Rational

Delta Materials Pty. Ltd. (Delta), which is owned 100% by Delta Minerals Corporation (Delta Minerals) has conducted an extensive study looking for potential crushed stone quarry sites along the coast of Australia to supply the Sydney market with construction material. A potential dolerite quarry site in the Bell Bay area of the Tamar estuary was selected on the basis of the following criteria:

- Good quality dolerite suitable for Sydney's construction material requirements.
- The potential quarry occurring within an industrial designated area.
- A protected deep-water harbour along the north coast of Tasmania.
- Closeness of the quarry to a potential deep-sea port.
- Excellent infrastructure supporting the Rio Tinto Alcan aluminum smelter, BHP Billiton Temco ferro-manganese alloy smelter and other significant industrial operations.
- An experienced industrial work force to draw upon from the immediate area and nearby mining operations.

Regional and Local Geological Setting

Middle Jurassic dolerite with K-Ar dates averaging 175± 8 Ma (Calver and Seymour, 1998) outcrops over approximately 30,000 km² of central-southeastern Tasmania. About 15,000 km³ of dolerite is estimated to have intruded into post orogenic, flat lying Carboniferous-Triassic sedimentary rocks which comprise the Parmeener Super Group stratigraphy of the Tasmania Basin (Banks et al, 1989). The Tasmanian dolerite represents a minor fraction of the total magma volume injected into the upper crust as a precursor to the breakup of Gondwana Land, including the separation of Tasmania from Antarctica, which JOIDES (Joint Oceanographic Institutions for Deep Earth Sampling) deep sea drilling indicates was completed during the Eocene.

Gondwana Mesozoic dolerites and extrusive equivalents have a tholeiitic continental geochemical and isotopic signature and tectonic setting, comparable to major basaltic provinces such as the Karoo of southern Africa and the Deccan Traps in India (Hergt and McDougall (1989). In the Tasmania Basin the large majority of dolerite occurs as stratiform or slightly discordant sills and cone sheets, sometimes with stacked interstratified sills connected by feeder dykes (Leaman, 2002). Only one occurrence of lava is recorded, near Lune River in southern Tasmania, but it is likely that extrusive rocks have been eroded during unroofing of the sills to create the current outcrop distribution (Sutherland, 1977). Leaman (1975) and Leaman and Richardson (1981) studied feeder distribution from detailed gravity surveys over two regions. They estimated that feeder spacing averaged 4-8 km and that feeder axial trends showed a strong approximately north-south alignment.

The Bell Bay Quarry Project dolerite is a coarse to fine grained, ophitic textured sill with an apparent dip of approximately 10° to 15° to the southwest. The dolerite sill is cut by steeply dipping NW-SE, E-W and NE-SW trending faults which separate and bound the drill tested West, Central and East Resources. In three-dimensional modeling the dolerite-sedimentary contact appears to have an elongated bowl like form striking approximately 300-120 degrees.

The true thickness of the pre-eroded sill is unknown, but exceeds 170 metres as defined by drilling.

Surface mapping and orientated core measurements indicate that there are five joint trends in the project area. Three of the joint trends parallel NW-SE, E-W and NE-SW striking faults. The N-S trending joints appear to be the dominant trend.

Refer to NI43-101 Technical Report for more detail.

License, Tenure and Location

Exploration License 6/2009 is a northern and southern part license with a total area of 17 km², located on the Tippogoree Hills in the northeastern Tamar Valley, Tasmania, Australia. The license was granted to Delta Materials Pty. Ltd. by Mineral Resources Tasmania, on August 25, 2009, for a five year tenure ending on August 24, 2014. This Annual Report covers this five year tenure period.

The Bell Bay Quarry Project is entirely within the northern part of EL6/2009. Land title is partly privately owned freehold and partly State Forest, managed by Forestry Tasmania. The freehold land is owned by Rio Tinto Alcan, who operate the Bell Bay aluminum smelter located approximately 3km to the west, and the State Forest portion falls within the Tippogoree Hills Forest Reserve and is managed by Forestry Tasmania.

2.0 REVIEW OF PREVIOUS WORK

Prior to Current Work

No evidence of previous mineral exploration activities or results relating to the area covered by EL 6/2009 is known to Delta Materials. The ground was previously held under Exploration License by another company, Tasmanian Hardrock Pty Ltd, between 1990 and 1997 as part of their construction materials Exploration License 10/1990, but no exploration results for the area exist in the Mineral Resources Tasmania archives. In 1997 two portions of the expired EL 10/1990 were converted to Retention Licenses 2/1997 and 3/1997 and subsequently title to RL 3/1997, located between the north and south parts of Delta's EL 6/2009, was transferred to B3-(Bell Bay Bluestone) Pty Ltd. In March 2012, Retention License 3/1997 converted to an Exploration Release Area 887. Subsequently, Delta applied for the ERA and was granted EL4/2012.

Tasmanian Ports Corporation Pty Ltd acquired a 100 m x 100 m, Mining Lease 1117P/M to cover the West Knob dolerite (Figure 3). West Knob is located approximately 500 m east of Lauriston Reservoir and adjacent to Delta's EL 6/2009. The mining tenement was a source of armour rock for the Bell Bay port development.

3.0 EXPLORATION COMPLETED DURING THE REPORT PERIOD

Delta developed an exploration program to define the continuity and physical and chemical characteristics of the Bell Bay dolerite within the proposed quarry area. The exploration program consisted of the following elements:

- Detailed mapping of outcrops.
- Materials testing of a composite grab sample from the TasPort quarry.
- Drilling 21 HQ3 and NQ2 sized diamond drill holes totaling 2,460.9 metres. The 10 inclined and 11 vertical diamond drill holes were drilled to the dolerite-sedimentary contact.
- Detailed geological and geotechnical logging of core.
- Materials testing of composite representative core samples.
- Thin-section petrographic studies.
- Geochemical analysis of selected surface and core samples.

Refer to NI43-101 Technical Report for more detail.

4.0 DISCUSSION OF RESULTS

- The Bell Bay Quarry Project dolerite is a coarse to fine grained, ophitic textured sill with an apparent dip of approximately 10° to 15° to the southwest. The dolerite sill is cut by steeply dipping NW-SE, E-W and NE-SW trending faults which bound the drill tested West, Central and East Resources. In three-dimensional modelling the dolerite-sedimentary contact appears to have an elongated bowl like form striking approximately 300-120 degrees. The true thickness of the pre-eroded sill is unknown, but known to exceed 170 m as defined by drilling.
- Surface mapping and orientated core measurements indicate that there are five joint trends in the project area. Three of the joint trends parallel NW-SE, E-W and NE-SW striking faults. The N-S trending joints appear to be the dominant trend. The low angled E-W striking and south dipping joints are widely spaced and potentially have an impact on mine planning as could the shallowly southwest dipping dolerite-sedimentary contact
- The optimal blast hole pattern and explosive type will need to be determined in order to produce the best combination of feed to the primary crusher, reduce costs associated with secondary breakage and limit production fines. The relatively close spacing of the steeply dipping orthogonal joint sets may cause elongation of fine and coarse fragments. Designing the commercial crushers specifically for the Bell Bay dolerite should maximize the production of cubic fragments.
- The West and Central Resources are separated by the Central Fault Zone and the Central Resource is bounded on the northeast side by the East Fault Zone. These two major NW-SE trending, steeply dipping faults have been drill tested. Interpretation of drill core structures and aeromagnetic imagery suggests an apparent dextral strike slip displacement of approximately 450 metres on the Central Fault.
- The Central and East Fault Zones are approximately 80 m wide and consist of weathered, sheared and brecciated dolerite containing predominantly clays, limonite, zeolites, chlorite and carbonate secondary minerals. The quality of the material within the fault zones does not normally meet the Australian Standards Specification Limit requirements for the Coarse Fraction Particle Density and Water Absorption,

Sodium Sulphate Soundness Loss and Los Angeles Abrasion Loss tests and therefore the fault zones have been classified as waste.

- The representative composite samples were classified into the following four categories:
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Four of the vertical drill holes within the West and Central Resources that intersected Weathered dolerite at surface were not sampled from surface to an arithmetic average depth of 4.25 metres.

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- Point Load testing results indicate that 97% of the core tested has a strength classification of R4 High to R6 Extremely High.
- The following analytical tests were determined to be critical parameters for evaluating the suitability of the composite drill core samples for construction material:
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 - Sodium Sulphate Soundness Loss ($\leq 6\%$ for concrete exposure classification C and $\leq 9\%$ for concrete classification B1 and B2)
 - Los Angeles Abrasion Loss ($<30\%$).

- Six composites within the West and Central Resources are classified as Weathered Dolerite. Weathered Dolerite occurs close to the surface or in areas containing a higher frequency of closely spaced joints.
 - Three of the six composites are contained within the upper portions of the drill holes and yield results that did not meet Australian Standards Specification Limit requirements for at least one of the critical parameters.
 - One of the six composites was collected from a zone of closely spaced joints adjacent to the Central Fault. The composite contains weathering and alteration minerals and yielded results that did not meet Australian Standards Specification Limit requirements for at least one of the critical parameters.
 - Two of the six composites exceeded the Australian Standards Specification Limit requirements for the critical parameters
- Dolerite, with the exception of one composite, yielded test results that exceeded the Australian Standards Specification Limit requirements for use in the concrete and road construction industries. The composite exception, from BB10-20, was sampled from a zone of closely spaced joints adjacent to the Central Fault and contains weathering and alteration minerals, which yielded results that did not meet the Australian Standards Specification Limits.
- Testing of the Dolerite and Weathered Dolerite from the West, Central and East Resources indicated that the arithmetic and length weighted averages for all tests, with the exception of the Fine Fraction Water Absorption, exceed the Australian Standards Limit requirements for construction material. It is believed that the Fine Fraction Water Absorption values will be improved during crushing and processing as a result of designing the equipment specifically for the material being mined and by using wet processing methods. Therefore, it is believed that the Dolerite and Weathered Dolerite can be blended during mining and processed to produce a product that would exceed the requirements for construction material in the Sydney market.
- The Bell Bay Quarry Project dolerite has comparable and in some case better properties to material presently being used in the Sydney region. The length weighted averages of the nineteen composites for the Dolerite and Weathered Dolerite Results from the West, Central and East Resources appear to be:
 - Hard and strong, (Wet Strength ~ 266kN)
 - Dense and fine grained, (Coarse Fraction Apparent Particle Density 2.93 t/m³ and Water Absorption 1.13%)
 - Dense and fine grained, (Coarse Fraction Particle Density (SSD) 2.87 t/m³ and Water Absorption 1.13%)
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 - Sound crushed fines, (Fine Fraction Particle Density (SSD) 2.79 t/m³ and Water Absorption 2.59%)

- Durable, (Wet/Dry Variation 15.04%, Los Angeles Abrasion Loss 13.89%, Sodium Sulphate Loss 4.12%)
- Good resistance to polishing, (Polished Aggregate Friction Value 48.50)
- Low Acid Soluble Chloride, (<0.001%)
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- Low percentage of crushed fines, (<75µm, 2.25%)
- The Measured, Indicated and Inferred Resources (43-101 Technical Report, Coffey Mining, Troy Lowien) is estimated as follows:

| Class | Volume (Mm³) | Tonnage (Mt) |
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- In addition to evaluating the length weighted averages of the key analytical criteria, a useful tool for gaining an overview of rock quality has proven to be the use of core box photos to classify lengths of core in each hole into three categories; pervasively weathered dolerite (Waste), structurally contained weathered dolerite (Weathered Dolerite) and fresh dolerite (Dolerite).
- The Phase 1 drilling program was modified during the program which resulted in more vertical holes being drilled than was originally designed. The consequence of this change was that the vertical holes parallel the steeply dipping joint sets which contain weathering and alteration products. The test results may not represent the area of influence around the drill hole because the frequency and intensity of the joint sets away from the vertical hole is unknown. Therefore, angled holes should yield a better understanding of the distribution and characteristics of the jointing. A geophysical resistivity survey may be useful in defining conductive clay within zones of weathered dolerite.

5.0 CONCLUSIONS

The Bell Bay Project contains a Measured and Indicated Resource of 331 Million tonnes of dolerite. The dolerite has comparable properties to material being used in the Sydney region for construction material. Testing of the dolerite yielded results that normally met or exceeded Australian Standards Specification Limit requirements for concrete and asphalt aggregates.

The major Sydney suppliers of aggregate sand and crushed stone for the construction industries appear to have sufficient sources of material to supply the Sydney market and are not expecting deficiencies in the near or long term future.

No further work is recommended until an Australian market for the dolerite is identified and a contract to supply crushed stone is secured.

6.0 ENVIRONMENT

Overview and Studies

The Tippogoree Hills are located within the Tamar Valley. The Tamar Valley extends some 60 km from the coast at Low Head inland in a south-east direction, and the city of Launceston is located near the head of the Tamar River estuary. The topography underlying the proposed quarry site ranges from approximately 30 metres to 250 metres elevation above sea level.

On the east flank of the estuary, the valley walls are defined by the Tippogoree Hills, Dismal Range and Boomer Hills. The west flank is less abrupt, with the valley walls defined by the Asbestos Range, Dazzler Range, Bold Tier and Grassy Hut Tier.

The Tippogoree Hills and in particular the proposed quarry location is formed by dolerite, a relatively dense intrusive rock.

Watercourses within the project footprint are ephemeral and seem to only flow during periods of very high rainfall. The creeks, streams and drainage lines within and around the impact area are highly modified and have a low to moderate Conservation Freshwater Ecosystem Value (CFEV).

The northeast corner of the resource area drains via a small creek (with low conservation value) north to Curries River. Lauriston Creek (also known as Four Mile Creek) flows west along Bridport Rd, and then turns south and flows into the Lauriston Reservoir which discharges into the Tamar River during wetter months. The Howell Reservoir and associated drainage lines are also located in this catchment.

A desktop natural values search of the area has identified that no threatened aquatic species listed under the *Threatened Species Protection Act 1995* have been recorded within the proposed development area. Three threatened aquatic species, listed under the commonwealth *EPBC Act*, are noted as potentially occurring within the exploration areas, or nearby, based on habitat, but presence has not been confirmed.

An initial desktop review of groundwater conditions on surrounding sites indicates that groundwater at the site occurs in fracture zones within Dolerite, particularly the faults and major joint planes. Discharges from these deeper rock aquifers are likely to be into the Tamar River via the major fracture systems associated with faults (Gunns Pulp Mill IIS, Pitt and Sherry, 2006a).

Groundwater is also likely to occur as seasonally perched water within the sandy and gravelly layers in the colluvium and as unconfined aquifers in hydrologic connection with associated drainage lines in the Quaternary alluvium and colluvium.

Initial findings from two rounds of groundwater sampling have indicated that groundwater is located within 50 m of the surface and analysis shows elevated metals with several exceeding discharge guidelines. The construction and operation of the quarry will intercept groundwater and impacts will need to be understood.

The marine habitat features at the proposed ship loader location are likely to be similar to those in other bays along the Tamar Estuary. Donovan's Bay has been extensively studied for both the proposed Gunns Pulp Mill and the AETV Power gas fired power station. These studies have described the ecological health of Donovan's Bay as low to moderate. No threatened fauna species were identified throughout the studies and are unlikely to occur at the proposed ship loader site.

The Tippogoree hills are covered by fragmented, regenerating forest and woodland interspersed with firebreaks, roads and easements. The vegetation within the quarry footprint is predominantly *Eucalyptus amygdalina* forest on dolerite interspersed with *Eucalyptus viminalis* wet forest, *Allocasuarina verticillata* forest and *Eucalyptus obliqua* dry forest. There is limited topsoil and in many places weathered dolerite rock is visible. The site is adjacent to an aluminium smelter (operating for approximately 50 years) and ferroalloy smelter. The hills have been impacted by air emissions from these operations for an extended period of time.

A preliminary flora and fauna assessment has identified the presence of some flora species listed on the *Threatened Species Protection Act 1995* and the *Nature Conservation Act 2002*. These species are *Pimelea flava* (yellow rice flower) and *Hypoxis vaginata* (Seathing yellowstar). No threatened flora species of national significance have been identified within the area of impact. Threatened Fauna species listed on the *Environmental Protection and Biodiversity Conservation Act 1999* have been identified within and near the proposed quarry footprint. Wedge-Tailed Eagle (*Aquila audax*) nests have been identified within the adjacent forest reserve, and the site has been identified as potentially providing suitable habitat for Spotted Tailed Quoll (*Dasyurus maculates ssp. Maculates*) and the Tasmanian Devil (*Sarcophilus harrisii*).

Aboriginal cultural heritage surveys have been undertaken by Stuart Huy and Vernon Graham. The first survey focused on the proposed resource area and the associated drill sites. No Aboriginal Heritage features or areas of potential archaeological sensitivity were identified. The second survey focused on 6 new drill sites that were not originally surveyed. An artifact was identified at drill site L. The artifact is a brown/grey quartzite flake measuring 37 mm x 32 mm x 14 mm. It is situated on the southern edge of the spine of a prominent NE-SW trending ridge line. The drill site was subsequently re-located in order to preserve the artifact. If the project is to proceed, Delta will require a permit from Aboriginal Heritage Tasmania (AHT). This permit will either allow the artifact to be destroyed or require it to be salvaged by a qualified Aboriginal heritage Officer (AHO). The site was determined to have low archaeological sensitivity so it is unlikely that Aboriginal heritage will present any limitations for the project.

The proposed crushing plant and overland conveyor route have not yet been surveyed. A search of the Tasmanian Aboriginal Site Index (TASI) has indicated there may be some aboriginal heritage features closer to the Tamar River which may be relevant to the conveyor and ship loader facility.

A European heritage survey has not been completed to date and it is unlikely that any heritage features will be identified within the proposed project footprint.

Approved/Conducted Work Plans and Rehabilitation

WPA09/35 - Work Program Submitted September 7th 2009.

Work conducted included geological mapping, collecting hand samples and marking out drill sites and access tracks.

Delta abided by the requirements of the Mineral Exploration Code of Practice and complied with the Site Specific Conditions as outlined by David Gatehouse, Environmental Field Officer, in the Approved Work Program (WPA09/35).

No surface disturbance was created.

WPA09/54 - Work Program Submitted December 4th 2009.

Work conducted included 15 drill site preparations and the drilling of 21 holes totaling 2,460.9 metres, approximately 2.6 km of new access track construction, minor rehabilitation of old roads and a 4 line reconnaissance gravity-magnetics survey.

Excavator earthworks were required for the drill site preparation and establishing new vehicle access tracks. The existing road system required minor rehabilitation with the excavator. Drill sites were located along existing roads and along newly constructed access routes. Geophysical survey lines utilized a GPS for survey point locations; no lines were cut or ground disturbed during the survey.

Delta abided by the requirements of the Mineral Exploration Code of Practice and complied with the Site Specific Conditions as outlined by David Gatehouse, Environmental Field Officer, in the Approved Work Program (WPA09/54).

All drill sites and access tracks were rehabilitated in accordance with land owner, Rio Tinto Ltd's requirements and the requirements as indicated in the Mineral Exploration Code of Practice. Field examinations during the exploration program and after rehabilitation were conducted by Rio Tinto supervisors and government representatives.

EXPENDITURES

The Mineral Exploration Report, Quarter Ended 31-Dec-2013 showed a total of \$1,437,877 were spent on exploration between August 25, 2009 and December 31, 2013.

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KEYWORDS

EL 6/2009, Bell Bay, dolerite, aggregate, crushed stone, quarry, sea-bulk, gravity-magnetic survey, diamond drilling, Australian Standards Specification Limits, material testing, geotechnical, Measured and Indicated Resource.